

TRANSPORTATION & TRANSIT

Transportation Improvement Program (TIP) Approved FY 2022 – FY 2031 Sources and Uses

In FY 2012, City Council approved funding equal to 2.2 cents on the base real estate tax rate and additional General Fund cash capital to create a Transportation Improvement Program (TIP) for the purpose of expanding transportation infrastructure and transit options throughout the City. As part of the FY 2015 budget process, as the City realized new revenue from NVT A 70% and 30% sources, the definition of the TIP was expanded for any transportation related expenditure. Expanding this definition has allowed the City to direct TIP resources toward the maintenance of its existing transportation infrastructure while using the new NVT A funding, private development contributions, and the continued use of TIP proceeds to advance expanded transportation and transit infrastructure and services throughout the City. The TIP funds capital improvements, operating costs, and debt service on General Obligation Bonds issued in FY 2013. Details of the fund revenues, operating expenditures and capital projects are included below.

Revenues	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Total
	Approved	Approved										FY 22-FY31
TIP Reserved Real Estate Tax Rate	\$9,231,765	\$9,511,807	\$9,702,043	\$9,896,084	\$10,094,006	\$10,295,886	\$10,501,804	\$10,711,840	\$10,926,076	\$11,144,598	\$11,367,490	\$92,784,143
Total TIP Revenues	\$9,231,765	\$9,511,807	\$9,702,043	\$9,896,084	\$10,094,006	\$10,295,886	\$10,501,804	\$10,711,840	\$10,926,076	\$11,144,598	\$11,367,490	\$92,784,143

Summary of Operating Expenditures, Debt Service and Capital Projects

Expenditure Overview	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Total
	Updated											FY 22-FY31
TIP Operating	\$5,754,398	\$5,913,160	\$6,088,588	\$6,217,440	\$6,351,649	\$6,489,221	\$6,630,166	\$6,775,489	\$6,924,199	\$7,078,303	\$7,236,809	\$65,705,024
TIP Operating - WMAT A	\$1,125,501	\$2,231,107	\$1,177,786	\$1,574,500	\$1,537,896	\$1,863,712	\$1,693,109	\$1,737,917	\$1,625,922	\$1,623,964	\$1,626,720	\$16,692,634
TIP Capital Projects	\$1,747,104	\$865,967	\$1,785,300	\$1,456,000	\$1,810,500	\$1,653,000	\$1,897,500	\$1,863,500	\$2,034,800	\$2,112,300	\$2,248,100	\$17,726,967
TIP Debt Service (2013 \$6.75M Bond Issuance)	\$604,762	\$501,573	\$650,369	\$648,144	\$393,961	\$289,952	\$281,029	\$334,933	\$341,155	\$330,031	\$255,861	\$4,027,008
Total TIP Expenditures	\$9,231,765	\$9,511,807	\$9,702,043	\$9,896,084	\$10,094,006	\$10,295,886	\$10,501,804	\$10,711,840	\$10,926,076	\$11,144,598	\$11,367,490	\$104,151,633

Transportation Improvement Program (TIP)
Approved FY 2022 – FY 2031 Sources and Uses

	FY 2021 Approved	FY 2022 Approved	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Total FY 22-FY31
Details of Operating Expenditures												
Non-motorized Transportation												
Capital Bikeshare	\$670,000	\$703,500	\$739,000	\$776,000	\$815,000	\$856,000	\$899,000	\$944,000	\$991,000	\$1,041,000	\$1,093,000	\$8,857,500
Public Transit												
DASH Operating	\$2,423,801	\$2,460,158	\$2,497,000	\$2,534,000	\$2,572,000	\$2,611,000	\$2,650,000	\$2,690,000	\$2,730,000	\$2,771,000	\$2,813,000	\$26,328,158
Supplemental Trolley Operations	\$216,372	\$219,618	\$223,000	\$226,000	\$229,000	\$232,000	\$235,000	\$239,000	\$243,000	\$247,000	\$251,000	\$2,344,618
Maintenance												
Metroway Maintenance	\$61,814	\$83,000	\$84,000	\$85,000	\$86,000	\$87,000	\$88,000	\$89,000	\$90,000	\$91,000	\$92,000	\$875,000
Bus Shelter Maintenance	\$100,799	\$102,000	\$104,000	\$106,000	\$108,000	\$110,000	\$112,000	\$114,000	\$116,000	\$118,000	\$120,000	\$1,110,000
Street Repair Budget	\$868,254	\$881,000	\$894,000	\$907,000	\$921,000	\$935,000	\$949,000	\$963,000	\$977,000	\$992,000	\$1,007,000	\$9,426,000
Trail Maintenance	\$20,000	\$20,400	\$21,000	\$21,000	\$21,000	\$21,000	\$21,000	\$21,000	\$21,000	\$21,000	\$21,000	\$209,400
King Street Station Operations	\$65,000	\$66,000	\$67,000	\$68,000	\$69,000	\$70,000	\$71,000	\$72,000	\$73,000	\$74,000	\$75,000	\$705,000
Other Costs												
Transportation Implementation Staff - T&ES Posit	\$466,791	\$502,398	\$567,000	\$584,000	\$602,000	\$620,000	\$639,000	\$658,000	\$678,000	\$698,000	\$719,000	\$6,267,398
Indirect Costs to General Fund	\$861,567	\$875,086	\$892,588	\$910,440	\$928,649	\$947,221	\$966,166	\$985,489	\$1,005,199	\$1,025,303	\$1,045,809	\$9,581,950
TIP Operating Costs	\$5,754,398	\$5,913,160	\$6,088,588	\$6,217,440	\$6,351,649	\$6,489,221	\$6,630,166	\$6,775,489	\$6,924,199	\$7,078,303	\$7,236,809	\$65,705,024

Transportation Improvement Program (TIP) Projects Capital Subsection	FY 2021 Updated	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Total FY 22-FY31
Public Transit												
WMATA Capital Contributions (TIP Cash)	\$1,100,000	\$452,967	\$385,000	\$0	\$50,000	\$150,000	\$70,000		\$135,000	\$175,000	\$270,000	\$1,687,967
DASH Bus Fleet Replacements (TIP Cash)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Streets & Bridges												
Street Reconstruction & Resurfacing/Major Rd. (T	\$0	\$0	\$700,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$8,700,000
Smart Mobility												
Transportation Technologies (TIP Cash)	\$250,000	-	\$265,300	-	\$281,500	-	\$298,500	\$309,500	\$316,800	\$326,300	\$336,100	\$2,134,000
Capitalized Positions												
Sustainability Coordinator (through Environmental	\$53,880	\$53,000	\$57,000	\$59,000	\$62,000	\$65,000	\$69,000	\$71,000	\$76,000	\$79,000	\$83,000	\$674,000
Transportation Implementation Staff - DPI Positior	\$343,224	\$360,000	\$378,000	\$397,000	\$417,000	\$438,000	\$460,000	\$483,000	\$507,000	\$532,000	\$559,000	\$4,531,000
Total CIP Transportation Improvement Program	\$1,747,104	\$865,967	\$1,785,300	\$1,456,000	\$1,810,500	\$1,653,000	\$1,897,500	\$1,863,500	\$2,034,800	\$2,112,300	\$2,248,100	\$17,726,967

Northern Virginia Transportation Authority (NVTA) – 30% Funds
 Approved FY 2022 – FY 2031 Sources and Uses
 Revenues, Operating Expenditures, and Capital Projects

Revenues/Expenditures	Approved FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Total FY 22 - 31
Revenues												
NVTA 30%	\$ 5,056,000	\$ 7,140,000	\$ 7,340,000	\$ 7,546,000	\$ 7,757,000	\$ 7,974,000	\$ 8,197,000	\$ 8,427,000	\$ 8,663,000	\$ 8,906,000	\$ 9,155,000	\$ 81,105,000
Appropriated Revenue	\$ 5,056,000	\$ 7,140,000	\$ 7,340,000	\$ 7,546,000	\$ 7,757,000	\$ 7,974,000	\$ 8,197,000	\$ 8,427,000	\$ 8,663,000	\$ 8,906,000	\$ 9,155,000	
Capital Details												
DASH Bus Fleet Replacements	\$ -	\$ -	\$ 1,500,000	\$ 1,500,000	\$ -	\$ 1,500,000	\$ 1,500,000	\$ -	\$ 1,500,000	\$ 1,500,000	\$ -	\$ 9,000,000
Transit Staffing Contingency	\$ -	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 1,500,000
Transit Strategic Plan in Alexandria	\$ -	\$ 75,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 75,000
WMATA Capital Contributions	\$ 3,483,000	\$ 4,725,000	\$ 3,400,000	\$ 3,580,000	\$ 5,270,000	\$ 1,560,000	\$ 1,685,000	\$ 3,315,000	\$ 1,945,000	\$ 2,080,000	\$ 2,310,000	\$ 29,870,000
Subtotal, Capital Projects	\$ 3,483,000	\$ 4,950,000	\$ 5,050,000	\$ 5,230,000	\$ 5,420,000	\$ 3,210,000	\$ 3,335,000	\$ 3,465,000	\$ 3,595,000	\$ 3,730,000	\$ 2,460,000	\$ 40,445,000
Operating Details												
WMATA Subsidy	\$ 1,573,000	\$ 1,573,000	\$ 1,573,000	\$ 1,573,000	\$ 1,573,000	\$ 1,573,000	\$ 1,573,000	\$ 1,573,000	\$ 1,573,000	\$ 1,573,000	\$ 2,983,780	\$ 17,140,780
DASH Service Expansion Contingency	\$ -	\$ 615,000	\$ 615,000	\$ 615,000	\$ 615,000	\$ 615,000	\$ 615,000	\$ 615,000	\$ 615,000	\$ 615,000	\$ 615,000	\$ 6,150,000
Transit Corridor "C" - West End Transitway Operations	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,400,000	\$ 2,472,000	\$ 2,546,000	\$ 2,622,000	\$ 2,701,000	\$ 2,782,000	\$ 15,523,000
Subtotal, Operating	\$ 1,573,000	\$ 2,188,000	\$ 2,188,000	\$ 2,188,000	\$ 2,188,000	\$ 4,588,000	\$ 4,660,000	\$ 4,734,000	\$ 4,810,000	\$ 4,889,000	\$ 6,380,780	\$ 38,813,780
Total, Operating & Capital	\$ 5,056,000	\$ 7,138,000	\$ 7,238,000	\$ 7,418,000	\$ 7,608,000	\$ 7,798,000	\$ 7,995,000	\$ 8,199,000	\$ 8,405,000	\$ 8,619,000	\$ 8,840,780	\$ 79,258,780

Note: Projects with a \$0 total funding are active capital projects funded in prior CIPs that do not require additional resources.

	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2022 - FY 2031
Transportation											
High Capacity Transit Corridors											
Transit Corridor "B" - Duke Street	0	0	14,200,000	20,800,000	40,000,000	0	0	0	0	0	75,000,000
Transit Corridor "C" - West End Transitway	8,171,388	4,028,612	23,610,244	33,589,753	0	0	0	0	0	0	69,399,997
Transitway Enhancements	0	0	0	0	0	0	0	0	0	0	0
High Capacity Transit Corridors Total	8,171,388	4,028,612	37,810,244	54,389,753	40,000,000	0	0	0	0	0	144,399,997
Non-Motorized Transportation											
Access Improvements at Landmark	0	0	3,950,230	2,384,400	0	0	0	0	0	0	6,334,630
Alexandria Mobility Plan	0	0	0	0	0	0	0	0	0	0	0
Capital Bikeshare	400,000	250,000	250,000	0	0	0	0	0	0	0	900,000
CMAQ Contingency from Cancelled Backlick Run Multi-Use Paths	2,210,003	2,100,648	300,000	0	0	0	0	0	0	0	4,610,651
Complete Streets	1,511,000	761,000	773,000	786,000	800,000	814,000	829,000	844,000	861,000	878,000	8,857,000
Duke Street and West Taylor Run Safety Improvements	0	0	3,905,460	0	0	0	0	0	0	0	3,905,460
King Street-Bradlee Roadway Improvements	0	1,000,000	1,000,000	0	0	0	0	0	0	0	2,000,000
Old Cameron Run Trail	0	1,646,273	1,122,727	2,045,000	0	0	0	0	0	0	4,814,000
Sidewalk Capital Maintenance	309,000	636,600	327,900	675,400	347,800	716,500	369,000	760,100	391,500	780,000	5,313,800
Non-Motorized Transportation Total	4,430,003	6,394,521	11,629,317	5,890,800	1,147,800	1,530,500	1,198,000	1,604,100	1,252,500	1,658,000	36,735,541
Public Transit											
DASH Bus Fleet Replacements	0	12,465,600	9,288,200	0	9,332,200	19,343,700	0	8,740,800	21,006,900	31,510,000	111,687,400
DASH Facility and Fleet Expansion	3,421,000	2,928,000	6,241,000	7,040,000	0	0	0	0	0	0	19,630,000
DASH Hybrid Bus and Trolley Powertrain Replacement	0	371,400	382,500	394,000	347,800	298,600	184,500	0	0	0	1,978,800
Transit Access & Amenities	500,000	400,000	0	0	0	0	0	0	0	0	900,000
Transit Staffing Contingency	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	1,500,000
Transit Strategic Plan in Alexandria	150,000	0	0	0	0	0	0	0	0	0	150,000
WMATA Capital Contributions	11,950,000	16,260,000	16,655,000	17,065,000	17,485,000	17,920,000	18,365,000	18,825,000	19,300,000	19,790,000	173,615,000
Public Transit Total	16,171,000	32,575,000	32,716,700	24,649,000	27,315,000	37,712,300	18,699,500	27,715,800	40,456,900	51,450,000	309,461,200
Smart Mobility											
Citywide Parking - Parking Technologies	206,804	250,000	0	0	0	0	0	0	0	0	456,804
Citywide Trans. Mgmt. Tech. - Intelligent Transportation Systems (ITS) Integration	1,000,000	400,000	600,000	3,084,550	0	0	0	0	0	0	5,084,550
Citywide Trans. Mgmt. Tech. - Traffic Control Upgrade	103,000	138,200	175,200	202,800	208,800	215,000	221,400	228,200	235,100	242,200	1,969,900
Citywide Trans. Mgmt. Tech. - Transportation Technologies	0	265,300	0	281,500	0	298,500	309,500	316,800	326,300	336,100	2,134,000
DASH Electronic Fare Payment	0	0	0	0	0	0	0	0	0	0	0
DASH Scheduling Software	0	0	0	0	0	0	0	0	0	0	0
DASH Technologies	0	600,000	255,745	0	0	0	0	0	0	0	855,745
Traffic Adaptive Signal Control	5,266,347	2,409,553	0	0	0	0	0	0	0	0	7,675,900
Smart Mobility Total	6,576,151	4,063,053	1,030,945	3,568,850	208,800	513,500	530,900	545,000	561,400	578,300	18,176,899
Streets and Bridges											
Bridge Repairs	2,151,000	2,373,000	2,583,000	2,775,000	2,977,000	3,167,000	3,660,000	4,572,000	3,670,000	4,600,000	32,528,000
Fixed Transportation Equipment	875,500	2,493,400	956,300	985,000	1,043,500	1,074,800	1,107,000	1,140,300	1,207,100	1,243,100	12,126,000
Four Mile Run Bridge Program	7,000,000	7,000,000	0	0	0	0	0	0	0	10,000,000	24,000,000
Seminary Road at Beauregard Street Ellipse	0	3,500,000	16,200,000	16,700,000	100,000	0	0	0	0	0	36,500,000
Street Reconstruction & Resurfacing of Major Roads	6,394,000	5,835,000	5,436,400	5,599,500	4,984,900	6,328,500	6,149,400	6,333,900	6,523,900	6,719,600	60,305,100
Streets and Bridges Total	16,420,500	21,201,400	25,175,700	26,059,500	9,105,400	10,570,300	10,916,400	12,046,200	11,401,000	22,562,700	165,459,100
Transportation Total	51,769,042	68,262,586	108,362,906	114,557,903	77,777,000	50,326,600	31,344,800	41,911,100	53,671,800	76,249,000	674,232,737

DASH BUS FLEET REPLACEMENTS

DOCUMENT SUBSECTION: Public Transit
 MANAGING DEPARTMENT: Department of Transportation and Environmental Services

PROJECT LOCATION: Citywide
 REPORTING AREA: Citywide

PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation

PROJECT CATEGORY: 1
 ESTIMATE USEFUL LIFE: 11 - 15 Years

DASH Bus Fleet Replacements													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Through 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Total FY 2022 - FY 2031
Expenditure Budget	136,050,128	24,362,728	0	12,465,600	9,288,200	0	9,332,200	19,343,700	0	8,740,800	21,006,900	31,510,000	111,687,400
Financing Plan													
Cash Capital	2,167,006	2,167,006	0	0	0	0	0	0	0	0	0	0	0
GO Bonds	44,187,600	810,000	0	4,732,800	3,144,100	0	3,166,100	8,171,850	0	2,870,400	9,003,450	12,288,900	43,377,600
NVTA 30% Funds	29,589,100	17,123,000	0	1,500,000	1,500,000	0	1,500,000	1,500,000	0	1,500,000	1,500,000	3,466,100	12,466,100
Sale of Property Revenue	500,000	500,000	0	0	0	0	0	0	0	0	0	0	0
State/Federal Grants	3,154,728	3,154,728	0	0	0	0	0	0	0	0	0	0	0
State/Federal Grants (Unsecured)	55,843,700	0	0	6,232,800	4,644,100	0	4,666,100	9,671,850	0	4,370,400	10,503,450	15,755,000	55,843,700
TIP	607,994	607,994	0	0	0	0	0	0	0	0	0	0	0
Financing Plan Total	136,050,128	24,362,728	0	12,465,600	9,288,200	0	9,332,200	19,343,700	0	8,740,800	21,006,900	31,510,000	111,687,400
Operating Impact	0	0	0	0	0	0	0	0	0	0	0	0	0

CHANGES FROM PRIOR YEAR CIP

Funding added to project for FY 2031.

PROJECT DESCRIPTION & JUSTIFICATION

This project provides for the replacement of buses and Trolleys in the DASH fleet. DASH develops an annual Transit Development Program which indicates the number of buses needed to replace aging vehicles in the fleet and maintain an adequate spare ratio.

Beginning in FY 2018, DASH began purchasing clean diesel rather than hybrid buses to reduce costs and improve fleet reliability. With the switch to clean diesel buses, DASH has been able to pursue a more aggressive fleet replacement schedule to meet its State Of Good-Repair (SOGR) requirements and reduce the number of older, more heavily polluting vehicles that were operated beyond their 12-year useful life.

This change to clean diesel buses will remain consistent with the City's Eco-City Action Plan to reduce vehicle emissions – as newer clean diesel buses have far fewer emissions than the older vehicles they are replacing - and reducing the overall cost per bus. The clean diesel buses will also provide a more reliable fleet as DASH begins its next transition towards using electric buses.

DASH is pursuing a transition (depending on cost feasibility, range progress, and reliability) from clean diesel to to a 100% electric bus fleet over the next 15 years. DASH took delivery of its first three electric buses in September 2020 and the next three in January 2021, funded by the Virginia VW Environmental Mitigation Trust. DASH is the first transit agency in Northern Virginia to deploy electric buses. The City and DASH have begun a Zero Emission Bus Implementation Study which will provide a detailed, strategic roadmap to transition the entire fleet by approximately FY 2037.

While no buses are scheduled for replacement in FY 2022, 15 replacement buses will be ordered in FY 2023 with delivery in early FY 2024. Of these 15, DASH is planning that 10 will be clean diesel and 5 will be electric. In FY 2024, 10 more replacement buses will be ordered, 5 of which would be electric and the final 5 clean diesel buses of the fleet, which will be in service through FY 2037. All bus replacements after FY 2024 are planned to be electric buses.

Funding is the most significant constraint on the pace of transition. Since the up-front cost of an electric bus is nearly twice that of a clean diesel, these buses will require a higher up-front capital investment. Significant state, federal, or regional grant support will need to be identified and secured to fully fund electrification of the DASH bus fleet in the next 15 years. While it is possible that some of the increased up-front investment may be recovered through lower lifecycle maintenance costs, this cannot yet be accurately determined.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

Eco-City Charter

ADDITIONAL OPERATING IMPACTS

The Zero Emission Bus Implementation Study will help determine the cost of related operating impacts such as the transition from diesel fuel to electricity as the primary energy source for the DASH fleet.

DASH FACILITY AND FLEET EXPANSION

DOCUMENT SUBSECTION: Public Transit
 MANAGING DEPARTMENT: Department of Transportation and Environmental Services

PROJECT LOCATION: 3000 Business Center Drive
 REPORTING AREA: Citywide

PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation

PROJECT CATEGORY: 3
 ESTIMATE USEFUL LIFE: 30-40 Years

DASH Facility and Fleet Expansion													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Through 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Total FY 2022 - FY 2031
Expenditure Budget	35,067,161	15,437,161	3,421,000	2,928,000	6,241,000	7,040,000	0	0	0	0	0	0	19,630,000
Financing Plan													
NVTA 70% Funds	9,933,161	9,933,161	0	0	0	0	0	0	0	0	0	0	0
State/Federal Grants	25,134,000	5,504,000	3,421,000	2,928,000	6,241,000	7,040,000	0	0	0	0	0	0	19,630,000
Financing Plan Total	35,067,161	15,437,161	3,421,000	2,928,000	6,241,000	7,040,000	0	0	0	0	0	0	19,630,000
Operating Impact	79,995,400	0	0	5,334,300	5,546,300	8,751,600	9,103,200	9,462,200	9,843,700	10,240,100	10,644,000	11,070,000	79,995,400

CHANGES FROM PRIOR YEAR CIP

Funding plan updated to align with state/regional grant schedule.

PROJECT DESCRIPTION & JUSTIFICATION

The DASH Facility and Fleet Expansion project consists of two components:

1. The expansion of bus parking and storage facilities on the west side of the existing DASH garage to support up to an additional 45 buses in the fleet for increased service levels in key development areas, maintain adequate spare ratio to accommodate new technology, and to provide adequate space for simultaneously receiving new bus orders and decommissioning the vehicles that are being replaced. DASH is also planning to include new utility infrastructure and electric bus charging equipment as a component of this project to support a transition of the fleet to electric buses.
2. The addition of twenty-six (26) new buses, twenty (20) of which will be electric, to improve service frequency along key City transit corridors. These buses will be used to implement service improvements in key development areas, consistent with the Alexandria Transit Vision Plan network as approved by the ATC Board of Directors.

The Facility and Fleet Expansion project provides for the necessary capital and infrastructure improvements to enable the City to improve transit service as outlined in the City's strategic plan and the Alexandria Transit Vision Plan, which will be implemented via the New DASH Network launching in FY 2022. The new DASH Network will provide more useful service for the City of Alexandria by introducing frequent, all-day bus service to areas where more people will be able to use it. The new city-wide, high frequency network will have buses running every 15 minutes or sooner, throughout the day, seven days a week in the West End, Landmark, Arlandria, Potomac Yard, and Old Town. With the expansion facility and fleet, the City will be well-positioned to implement the short- and long-term recommendations from the Alexandria Transit Vision Plan over the next decade.

The facility expansion will include provisions for electric buses, including upgraded electric bus charging infrastructure and charging equipment. These investments will be guided by the City and DASH's Zero Emission Bus Implementation Study, which will be complete by FY 2022.

In FY 2022, design and engineering work for the facility expansion will be largely completed and procurement of a construction contractor will begin. DASH will also receive eight (8) electric buses, which will expand the fleet to provide enhanced service in the West End, Arlandria and Potomac Yard. Construction of the facility expansion will begin in FY 2023. Additional electric bus charging infrastructure deployments will be coordinated with construction of the facility expansion.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

N/A

ADDITIONAL OPERATING IMPACTS

Estimated operating cost increase of DASH service expansion provided by grant-funded bus fleet expansion.

DASH HYBRID BUS AND TROLLEY POWERTRAIN REPLACEMENT

DOCUMENT SUBSECTION: Public Transit
 MANAGING DEPARTMENT: Department of Transportation and Environmental Services

PROJECT LOCATION: Citywide
 REPORTING AREA: Citywide

PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation

PROJECT CATEGORY: 1
 ESTIMATE USEFUL LIFE: 0 - 5 Years

DASH Hybrid Bus and Trolley Powertrain Replacement													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing 2021	Through 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Total FY 2022 - FY 2031
Expenditure Budget	3,628,800	1,650,000	0	371,400	382,500	394,000	347,800	298,600	184,500	0	0	0	1,978,800
Financing Plan													
Cash Capital	3,011,800	1,033,000	0	371,400	382,500	394,000	347,800	298,600	184,500	0	0	0	1,978,800
NVTA 30% Funds	617,000	617,000	0	0	0	0	0	0	0	0	0	0	0
Financing Plan Total	3,628,800	1,650,000	0	371,400	382,500	394,000	347,800	298,600	184,500	0	0	0	1,978,800
Operating Impact	0	0	0	0	0	0	0	0	0	0	0	0	0

CHANGES FROM PRIOR YEAR CIP

Funding removed from FY 2022, based on current project needs and timing.

PROJECT DESCRIPTION & JUSTIFICATION

From FY 2011 through FY 2017, DASH purchased buses and trolleys with hybrid technology for all replacement and expansion needs. Hybrid-propulsion buses have both vehicle battery packs and smaller diesel engines that work together to power the bus. As with any bus, these components of the powertrain can fail and sometimes need to be rebuilt or replaced during the vehicle’s 12 year expected life. The battery packs cost approximately \$50,000 each. Diesel engine rehabilitation or replacement costs about \$25,000 each. In FY 2022 and FY 2023, DASH will continue repairing or replacing hybrid powertrain components as needed to ensure each bus reaches its 12-year expected lifespan.

Based on a recommendation by the Alexandria Transit Company (DASH) Board of Directors, however, the City no longer purchases hybrid vehicles and instead purchases clean diesel buses to meet near-term fleet replacement requirements. This decision has improved fleet reliability, reduced costs, and accelerated the replacement of older, more heavily polluting diesel models. The City and DASH are working together to develop a transition plan from clean diesel to electric buses over the next 15 years. Staff anticipates that this need for battery replacement will continue and expand as DASH transitions its fleet to battery electric buses. DASH started purchasing electric buses in FY 2020 and has taken delivery of its first six electric buses as of January 2021. DASH will retire its oldest hybrid buses in FY 2024 and its newest hybrids will remain in service through FY 2030.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

Eco-City Charter

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

EISENHOWER AVENUE METRORAIL STATION IMPROVEMENTS

DOCUMENT SUBSECTION: Public Transit	PROJECT LOCATION: 2400 Eisenhower Ave. (Eisenhower Avenue Metro)
MANAGING DEPARTMENT: Department of Transportation and Environmental Services	REPORTING AREA: Eisenhower East
PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation	PROJECT CATEGORY: 2 ESTIMATE USEFUL LIFE: 30+ Years

Eisenhower Metrorail Station Improvements													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Through 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Total FY 2022 - FY 2031
Expenditure Budget	6,794,840	6,794,840	0	0	0	0	0	0	0	0	0	0	0
Financing Plan													
Cash Capital	42,000	42,000	0	0	0	0	0	0	0	0	0	0	0
Private Capital Contributions	350,000	350,000	0	0	0	0	0	0	0	0	0	0	0
State/Federal Grants	6,152,840	6,152,840	0	0	0	0	0	0	0	0	0	0	0
TIP	250,000	250,000	0	0	0	0	0	0	0	0	0	0	0
Financing Plan Total	6,794,840	6,794,840	0	0	0	0	0	0	0	0	0	0	0
Operating Impact	0	0	0	0	0	0	0	0	0	0	0	0	0

CHANGES FROM PRIOR YEAR CIP

No changes from previous CIP.

PROJECT DESCRIPTION & JUSTIFICATION

In the spring of 2003, the City of Alexandria approved a small area plan which guides development in East Eisenhower, and the plan was updated in 2020. The plan calls for significant amounts of high-density development within a short distance of the Eisenhower Avenue Metrorail station. To permit large mixed-use development in this area, a new street grid must be built, and utilities relocated. The existing Eisenhower Avenue Metrorail station entrance is approved to be modified to accommodate the development.

Overall improvements include renovation of the bus loop into a realigned street grid to serve future adjacent development, relocation of transit services and kiss and ride for improved efficiency, design and construction of an attractive pedestrian plaza in front of the station, bus shelters for rider comfort, and real-time bus information displays. The project also includes near and longer term pedestrian improvements across Eisenhower to improve safety and access between the station and existing and future development to the north of Eisenhower Avenue.

The City of Alexandria has a Memorandum of Understanding (MOU) with adjacent developers and WMATA that addresses improvements and maintenance at the Eisenhower Avenue Metrorail station and the release of land for development. However, implementation of City-funded improvements is contingent on the redevelopment of adjacent parcels. The MOU is being updated to reflect the changes to Anchor Street as a result of the Small Area Plan, developer successors, and updated ownership and maintenance responsibilities.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

Eisenhower East Small Area Plan

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

KING STREET METRORAIL STATION AREA IMPROVEMENTS

DOCUMENT SUBSECTION: Public Transit	PROJECT LOCATION: 1900 King St. (King Street Metro)
MANAGING DEPARTMENT: Department of Transportation and Environmental Services	REPORTING AREA: King Street Metro/Eisenhower Ave.
PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation	PROJECT CATEGORY: 3 ESTIMATE USEFUL LIFE: 30+ Years

King Street Metrorail Station Area Improvements													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Through 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Total FY 2022 - FY 2031
Expenditure Budget	17,406,242	17,406,242	0	0	0	0	0	0	0	0	0	0	0
Financing Plan													
Cash Capital	215,000	215,000	0	0	0	0	0	0	0	0	0	0	0
GO Bond Interest Earnings	250,000	250,000	0	0	0	0	0	0	0	0	0	0	0
GO Bonds	1,225,000	1,225,000	0	0	0	0	0	0	0	0	0	0	0
Prior Capital Funding	3,392,536	3,392,536	0	0	0	0	0	0	0	0	0	0	0
State/Federal Grants	9,398,706	9,398,706	0	0	0	0	0	0	0	0	0	0	0
TIP	2,925,000	2,925,000	0	0	0	0	0	0	0	0	0	0	0
Financing Plan Total	17,406,242	17,406,242	0	0	0	0	0	0	0	0	0	0	0
Operating Impact	0	0	0	0	0	0	0	0	0	0	0	0	0

CHANGES FROM PRIOR YEAR CIP

Prior year TIP funding in the amount of \$300,000 transferred from the Van Dorn Multimodal Bridge project to the King Street Metrorail Station project to cover a budget shortfall due to the extended construction duration resulting from the Contractor’s productivity rate.

PROJECT DESCRIPTION & JUSTIFICATION

The purpose of this project is to enhance the King Street Metrorail station area. The King Street Metrorail station is the largest transit hub in the City. The project will include:

- Accommodating increased bus service and meeting additional ridership demand;
- Improving the pedestrian environment at the station; and
- Providing better connections to the surrounding area for all modes of transit.

The planned reconfiguration of the station will include three additional bus bays, for a total of ten (10) bus bays, separate modes to enhance safety, widen the walkways around and through the facility, provide space for short- and long-term bicycle facilities, and modify the Kiss and Ride to a one-way loop.

This project provides critical infrastructure upgrades needed to provide more efficient mass transit services. Once completed, the improvements will also enhance the pedestrian experience by separating modes of transportation to reduce vehicle and pedestrian conflicts.

The project has been approved by the Transportation Commission, City Council, and Planning Commission. Construction is anticipated to be completed in FY 2022.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

Transportation Master Plan, Vision Zero, Complete Streets, Eco-City Charter

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

POTOMAC YARD METRORAIL STATION

DOCUMENT SUBSECTION: Public Transit
 MANAGING DEPARTMENT: Department of Project Implementation

PROJECT LOCATION: Potomac Yard
 REPORTING AREA: Potomac Yard/Potomac Greens, North Potomac Yard

PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation

PROJECT CATEGORY: 3
 ESTIMATE USEFUL LIFE: 30+ Years

Potomac Yard Metrorail Station													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Through 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Total FY 2022 - FY 2031
Expenditure Budget	384,725,000	384,725,000	0	0	0	0	0	0	0	0	0	0	0
Financing Plan													
GO Bonds (PYM)	164,000,000	164,000,000	0	0	0	0	0	0	0	0	0	0	0
NVTA 70% Funds	69,500,000	69,500,000	0	0	0	0	0	0	0	0	0	0	0
PY Special Tax District Revenue	50,225,000	50,225,000	0	0	0	0	0	0	0	0	0	0	0
State/Federal Grants	51,000,000	51,000,000	0	0	0	0	0	0	0	0	0	0	0
VTIB State Loan	50,000,000	50,000,000	0	0	0	0	0	0	0	0	0	0	0
Financing Plan Total	384,725,000	384,725,000	0	0	0	0	0	0	0	0	0	0	0
Operating Impact	30,069,700	0	0	2,959,900	3,048,700	3,140,200	3,234,400	3,331,400	3,431,300	3,534,200	3,640,200	3,749,400	30,069,700

CHANGES FROM PRIOR YEAR CIP

No changes from previous CIP.

PROJECT DESCRIPTION & JUSTIFICATION

This project provides for studies, planning, and construction of a new Metrorail infill station at Potomac Yard. The City of Alexandria is the project sponsor, with design and construction managed by WMATA. The Potomac Yard Metrorail Station Concept Development Study was completed in 2010. A new Metrorail station was included as part of the North Potomac Yard Small Area Plan, approved in 2010 and amended in 2017. Construction was initiated in 2019 and is expected to be completed in 2022.

Project development was subject to the requirements of the National Environmental Policy Act (NEPA) and Section 4(f) of the Department of Transportation Act. The Federal Transit Administration and the National Park Service issued their Records of Decision for the Potomac Yard Metrorail Station in 2016. WMATA procured a contractor for the design-build contract in the summer of 2018. The City received the Virginia Water Protection Permit in September 2019, and the Clean Water Act (CWA) Section 404 permit from the US Army Corps of Engineers in November 2019. Ground breaking for the project occurred in December 2019, and project completion is anticipated in spring 2022.

The original budget for the project was \$270.0 million, including the planning phase, preliminary engineering, and preparation of the design-build bid package. In 2018, City Council authorized an increase of \$50 million in the Potomac Yard Metrorail Station project budget to \$320 million based on changes in labor, materials, and the bidding climate. In late 2018, as part of the decision to construct an Amazon headquarters at National Landing, the State committed an additional \$50 million to Alexandria to enhance the southwest access to the station. WMATA formally added the southwest access enhancements to the Contractor’s contract in early 2021. The total project construction costs are expected to equal \$370 million.

The funding sources include \$69.5 million from Northern Virginia Transportation Authority (NVTA) that has already been awarded and spent and a \$50 million loan from the Virginia Transportation Infrastructure Bank (VTIB) that has also been secured. The project budget also includes \$200 million to be comprised of a combination of Potomac Yard funded cash capital and long-term General Obligation (GO) bonds. Both the VTIB loan and the GO Bonds are planned to be structured to best align the repayment with the tax revenue growth associated with the Potomac Yard area, included the use of “capitalized interest”. Potomac Yard generated tax revenues and developer contributions will repay 100% of the VTIB and GO Bonds. As part of the Amazon HQ2/Virginia Tech Innovation campus funding, the City was awarded \$50 million (\$20 million federal CMAQ and \$30 million state funding) to enhance the station access from East Glebe Road.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

Potomac Yard Coordinated Development District (CDD) approved by City Council, October 1999; Transportation Master Plan approved by City Council, April 2008; North Potomac Yard Small Area Plan adopted by City Council, May 2010; City Council Resolution No. 2676, Adoption of Alternative B as the Locally Preferred Alternative for the Potomac Yard Metrorail Station, May 20, 2015.

ADDITIONAL OPERATING IMPACTS

Per the Final EIS (Environmental Impact Statement), the new Metrorail station will increase the City's operating subsidy to WMATA by approximately \$3 million per year. The Potomac Yard Station fund revenues are projected to fund this cost.

TRANSIT ACCESS & AMENITIES

DOCUMENT SUBSECTION: Public Transit
 MANAGING DEPARTMENT: Department of Transportation and Environmental Services

PROJECT LOCATION: Citywide
 REPORTING AREA: Citywide

PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation

PROJECT CATEGORY: 3
 ESTIMATE USEFUL LIFE: Varies

Transit Access & Amenities													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Through 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Total FY 2022 - FY 2031
Expenditure Budget	5,495,772	4,595,772	500,000	400,000	0	0	0	0	0	0	0	0	900,000
Financing Plan													
Cash Capital	255,223	255,223	0	0	0	0	0	0	0	0	0	0	0
NVTA 30% Funds	1,100,000	1,100,000	0	0	0	0	0	0	0	0	0	0	0
NVTA 70% Funds	450,000	450,000	0	0	0	0	0	0	0	0	0	0	0
Private Capital Contributions	60,000	60,000	0	0	0	0	0	0	0	0	0	0	0
State/Federal Grants	3,630,549	2,730,549	500,000	400,000	0	0	0	0	0	0	0	0	900,000
Financing Plan Total	5,495,772	4,595,772	500,000	400,000	0	0	0	0	0	0	0	0	900,000
Operating Impact	0	0	0	0	0	0	0	0	0	0	0	0	0

CHANGES FROM PRIOR YEAR CIP

No changes from previous CIP.

PROJECT DESCRIPTION & JUSTIFICATION

This project provides funding to add and replace existing bus shelters with new shelters that provide enhanced infrastructure and passenger amenities. The new bus shelters feature amenities such as benches, trash cans, bike racks and improved lighting, these features are important to attract riders to transit. Many bus stops around the City do not have bus shelters or are several decades old and have exceeded their useful life. New Shelters offer transit riders a more attractive and comfortable environment, which is directly related to customers’ satisfaction with public transportation.

This project also funds improvements at existing bus stops that will bring them into compliance with ADA standards, including future funding for real-time information signs at key, high-ridership stops throughout the City. Real-time information has been shown to increase ridership. The project is primarily funded by federal and state grants for the procurement and installation of bus shelters and site work such as concrete pads. A first phase of the project installed 28 new shelters, which were completed in FY 2020. In FY 2022, the City anticipates selecting the bus shelter model and beginning site design for a second phase. In FY 2023 and FY 2024, the design of the initial 20 bus shelter sites and procurement of a site contractor will occur. Construction will commence in FY 2025. Approximately 10 more sites are being planned for future implementation of this project. Funds provided by the FHWA and VDOT will be used to implement this project. This work is important to increase the comfort for bus passengers and to increase the visibility of the bus system, both of which have been shown to increase ridership, potentially reducing the City’s transit subsidy. Staff is coordinating with the implementation of the Transit Vision Plan and the Bike Parking at Transit project. Shelter locations have yet to be determined, but staff will prioritize equity and ridership when selecting locations citywide.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

City of Alexandria Transit Development Plan
 Alexandria Transit Vision Plan

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

TRANSIT STRATEGIC PLAN IN ALEXANDRIA

DOCUMENT SUBSECTION: Public Transit
 MANAGING DEPARTMENT: Department of Transportation and Environmental Services

PROJECT LOCATION: Citywide
 REPORTING AREA: Citywide

PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation

PROJECT CATEGORY: 3
 ESTIMATE USEFUL LIFE: Varies

Transit Strategic Plan in Alexandria													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Through 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Total FY 2022 - FY 2031
Expenditure Budget	150,000	0	150,000	0	0	0	0	0	0	0	0	0	150,000
Financing Plan													
NVTA 30% Funds	75,000	0	75,000	0	0	0	0	0	0	0	0	0	75,000
State/Federal Grants	75,000	0	75,000	0	0	0	0	0	0	0	0	0	75,000
Financing Plan Total	150,000	0	150,000	0	0	0	0	0	0	0	0	0	150,000

CHANGES FROM PRIOR YEAR CIP

New project added to FY 2022 - FY 2031 CIP.

PROJECT DESCRIPTION & JUSTIFICATION

The Virginia General Assembly passed legislation in 2018 that requires transit agencies operating in urbanized areas to develop a Transit Strategic Plan (TSP) to ensure that transit services are planned in a way that better meets the mobility needs of their communities. This gives those agencies an opportunity to evaluate and update their services and networks to respond to changes in demand. The main goal of a TSP is to create a strategic blueprint outlining desired changes that will improve the provision of transit services throughout each agency’s service area within existing funding structures. This is an opportunity for each agency to look at their system as a blank slate, re-examine the priorities of stakeholders and riders, and make difficult choices concerning where and how to provide services in an efficient and cost effective manner.

The purposes of a TSP are as follows:

1. To serve as a strategic planning, management, and policy document for transit operators in urbanized areas;
2. To identify areas for improved operational efficiency;
3. To assess the type of operating services for different service areas and needs;
4. To review and assess the performance of routes, route design standards, and schedule standards;
5. To examine transit needs in order to identify ways to improve access for underserved areas;
6. To inform DRPT of transit operators’ capital, operating and maintenance needs;
7. To provide the basis for inclusion of an operator’s capital and operating programs in planning and programming documents such as: the Six Year Improvement Program (SYIP), Statewide Transportation Improvement Program (STIP), Transportation Improvement Program (TIP) and Constrained Long Range Plan (CLRP);
8. To provide a clear understanding of unmet or unfunded needs;
9. To develop and track the progress of short-, mid- and long-term goals for transit in the region; and,
10. To continually aim to improve efficiency and effectiveness of public transportation services.

The Alexandria Transit Vision, adopted by the Alexandria Transit Company (ATC) board in December of 2019, DASH’s own annual Transit Development Plan (TDP), and the Transit Chapter of the draft Alexandria Mobility Plan addresses many of the elements of the TSP. The City, in coordination with DASH, will work with a consultant to build off what has already been undertaken and address any gaps to meet the state requirements.

The City applied for a grant in January 2020 to support the completion of the project. The grant was awarded in December 2020 and is included in the Fiscal Year 2021 Six Year Improvement Program. The grant pays for 50% of the project (up to \$75,000). Staff estimates a total project cost of \$150,000.

This project is expected to begin in the fall of 2021 and will be completed by June 30, 2023.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

N/A

ADDITIONAL OPERATING IMPACTS

N/A

WMATA CAPITAL CONTRIBUTIONS

DOCUMENT SUBSECTION: Public Transit
 MANAGING DEPARTMENT: Department of Transportation and Environmental Services

PROJECT LOCATION: Citywide
 REPORTING AREA: Citywide

PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation

PROJECT CATEGORY: 1
 ESTIMATE USEFUL LIFE: Varies

WMATA Capital Contributions													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Through 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Total FY 2022 - FY 2031
Expenditure Budget	339,716,034	166,101,034	11,950,000	16,260,000	16,655,000	17,065,000	17,485,000	17,920,000	18,365,000	18,825,000	19,300,000	19,790,000	173,615,000
Financing Plan													
Cash Capital	28,720,713	28,720,713	0	0	0	0	0	0	0	0	0	0	0
GO Bond Interest Earnings	2,296,433	2,296,433	0	0	0	0	0	0	0	0	0	0	0
GO Bonds	250,228,778	108,171,745	6,772,033	12,475,000	13,075,000	11,745,000	15,775,000	16,165,000	15,050,000	16,745,000	17,045,000	17,210,000	142,057,033
NVTA 30% Funds	37,966,911	8,096,911	4,725,000	3,400,000	3,580,000	5,270,000	1,560,000	1,685,000	3,315,000	1,945,000	2,080,000	2,310,000	29,870,000
Prior Capital Funding	2,506,025	2,506,025	0	0	0	0	0	0	0	0	0	0	0
Private Capital Contributions	5,000	5,000	0	0	0	0	0	0	0	0	0	0	0
State/Federal Grants	3,250,000	3,250,000	0	0	0	0	0	0	0	0	0	0	0
TIP	5,061,967	3,374,000	452,967	385,000	0	50,000	150,000	70,000	0	135,000	175,000	270,000	1,687,967
Use of CIP Designated Fund Balance	1,700,000	1,700,000	0	0	0	0	0	0	0	0	0	0	0
GO Bonds (NRB)	7,980,207	7,980,207	0	0	0	0	0	0	0	0	0	0	0
Financing Plan Total	339,716,034	166,101,034	11,950,000	16,260,000	16,655,000	17,065,000	17,485,000	17,920,000	18,365,000	18,825,000	19,300,000	19,790,000	173,615,000
Operating Impact	0	0	0	0	0	0	0	0	0	0	0	0	0

CHANGES FROM PRIOR YEAR CIP

Funding plan updated to reflect WMATA's Proposed FY 2022 - FY 2027 CIP, and availability of prior year balances and NVTC trust funds to fund FY 2022 capital subsidy. See table on next page.

PROJECT DESCRIPTION & JUSTIFICATION

This project funds capital infrastructure improvements by participating governments including the City of Alexandria for the Washington Area Metropolitan Transit Authority (WMATA). In addition, this project also funds the newly mandated local match for the dedicated funding source created by the Virginia General Assembly to support the WMATA Capital Program.

WMATA has proposed a 6-year Capital Improvement Program of \$13.7 billion for FY 2022 - FY 2027. For FY 2022, WMATA's capital improvement budget is \$2.8 billion, of which Alexandria's portion is \$16.9 million, which is comprised of a \$12.8 million direct subsidy and a \$4.1 million match of state funds.

In 2018, the Virginia General Assembly, along with the Maryland General Assembly and the Washington D.C. City Council, passed legislation to create a dedicated funding stream to support WMATA's capital program. This dedicated funding source impacts both the City's contribution to the WMATA Capital subsidy, and the availability of regional transportation funds (i.e. NVTA 30%). The FY 2021 - FY 2030 CIP reflects the impact of the dedicated funding legislation.

The legislation passed by the General Assembly in 2018 also stipulated that the participating jurisdictions provide a local match to the dedicated funding. The local match for Virginia jurisdictions totals \$27.12 million annually, of which each jurisdiction's share of the match is calculated annually based on their portion of the annual capital contribution to WMATA. For FY 2022, the City's local match is estimated to be \$4.1 million.

The City also assumes the use of state funds received through and held in trust by NVTC to support WMATA Capital Contributions for FY 2022 - FY 2030. This funding source is not appropriated by the City as NVTC pays these funds to WMATA on the City's behalf.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

N/A

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

WMATA Capital Contributions (continued)

FY 2022 Sources and Uses	FY 2022 Amount
Uses	
WMATA Capital Subsidy Estimate	\$ 12,775,000
DRPT Local Match Estimate	\$ 4,100,000
Total Uses	\$ 16,875,000
Sources	
Appropriated Sources	
TIP	\$ 452,967
NVTA 30% Funds	\$ 4,725,000
GO Bonds	\$ 6,772,033
<i>Subtotal</i>	<i>\$ 11,950,000</i>
Prior Year Balances Appropriated for WMATA Subsidy	
TIP	\$ 150,000
NVTA 30% Funds	\$ 1,275,000
<i>Subtotal</i>	<i>\$ 1,425,000</i>
Non-Appropriated Sources	
NVTC Trust Fund	\$ 3,500,000
<i>Subtotal</i>	<i>\$ 3,500,000</i>
Total Sources	\$ 16,875,000

Calculation of FY 2022 CIP Amount	FY 2022 Amount
Total Uses	\$ 16,875,000
Less NVTC Trust Fund	\$ (3,500,000)
Less Prior Year Balances	\$ (1,425,000)
Total Sources	\$ 11,950,000

TRANSIT CORRIDOR A - ROUTE 1

DOCUMENT SUBSECTION: High Capacity Transit Corridors	PROJECT LOCATION: Route 1 between Potomac Ave. & East Glebe Rd.
MANAGING DEPARTMENT: Department of Transportation and Environmental Services	REPORTING AREA: Potomac Yard/Potomac Greens
PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation	PROJECT CATEGORY: 3 ESTIMATE USEFUL LIFE: 30+ Years

Transit Corridor "A" - Route 1													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Through 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Total FY 2022 - FY 2031
Expenditure Budget	29,853,743	29,853,743	0	0	0	0	0	0	0	0	0	0	0
Financing Plan													
GO Bonds	1,325,000	1,325,000	0	0	0	0	0	0	0	0	0	0	0
NVTA 70% Funds	660,000	660,000	0	0	0	0	0	0	0	0	0	0	0
State/Federal Grants	23,673,743	23,673,743	0	0	0	0	0	0	0	0	0	0	0
TIP	4,195,000	4,195,000	0	0	0	0	0	0	0	0	0	0	0
Financing Plan Total	29,853,743	29,853,743	0	0	0	0	0	0	0	0	0	0	0
Operating Impact	0	0	0	0	0	0	0	0	0	0	0	0	0

CHANGES FROM PRIOR YEAR CIP

No changes from previous CIP.

PROJECT DESCRIPTION & JUSTIFICATION

The Route 1 Transitway is the first segment of a 5-mile high capacity transit corridor connecting the Pentagon City and Braddock Road Metrorail stations. The initial segment of the corridor was completed in the summer of 2014. The project is 0.8 miles along Route 1 between Potomac Avenue and East Glebe Road. While the project ultimately calls for dedicated lanes for transit along the majority of the Crystal City/Potomac Yard corridor, in the interim, vehicles will operate in mixed traffic between East Glebe and Four Mile Run and between Potomac Avenue and the Braddock Road Metrorail station.

Remaining funding from the original construction project will be used in FY 2022 and into early FY 2023 to design the final extension of the dedicated transit lanes on Richmond Highway between East Glebe Road and Evans Lane and provide the environmental analysis required for this project. In FY 2020, \$5 million of funding was added as part of the Amazon Incentive Package to help complete the planning and design, as well as the right-of-way acquisition and construction of the Transitway north of East Glebe Road to Evans Lane. Timing of project construction and right-of-way acquisition will depend on the timing and phasing of phase two of the North Potomac Yard development project.

The transitway provides residents, workers, and visitors with a fast, convenient, and comfortable connection to the regional Metrorail network, Potomac Yard development, and key employment nodes. Improved lighting and enhanced pedestrian crosswalks across Route 1 will also provide for safer non-motorized travel in the corridor.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

N/A

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

TRANSIT CORRIDOR "B" - DUKE STREET

DOCUMENT SUBSECTION: High Capacity Transit Corridors	PROJECT LOCATION: Duke St. between City Limits and King St. Metro
MANAGING DEPARTMENT: Department of Transportation and Environmental Services	REPORTING AREA: Landmark/Van Dorn/Beauregard
PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation	PROJECT CATEGORY: 3 ESTIMATE USEFUL LIFE: 30+ Years

Transit Corridor "B" - Duke Street													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Through 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Total FY 2022 - FY 2031
Expenditure Budget	87,190,000	12,190,000	0	0	14,200,000	20,800,000	40,000,000	0	0	0	0	0	75,000,000
Financing Plan													
NVTA 70% Funds	87,190,000	12,190,000	0	0	14,200,000	20,800,000	40,000,000	0	0	0	0	0	75,000,000
Financing Plan Total	87,190,000	12,190,000	0	0	14,200,000	20,800,000	40,000,000	0	0	0	0	0	75,000,000
Operating Impact	0	0	0	0	0	0	0	0	0	0	0	0	0

CHANGES FROM PRIOR YEAR CIP

Funding schedule updated to reflect \$75 million NVTA 70% grant approved in June 2020, as part of the NVTA FY 2020 – FY 2025 six-year funding program. This is in addition to the \$12 million awarded in the FY 2018- FY 2023 program.

PROJECT DESCRIPTION & JUSTIFICATION

Consistent with the City’s adopted Transportation Master Plan and subsequent City Council actions, this project will construct a 4.5-mile segment of high-capacity transitway along Duke Street between the former Landmark Mall and the King Street – Old Town Metrorail Station. In 2012, the Planning Commission and City Council adopted Master Plan Amendments from the High Capacity Transit Corridor Work Group for the planned Corridor B cross section and a phased implementation of the transitway along Duke Street. Corridor B was the third priority transitway in the City, behind Corridors A and C, and therefore saw later implementation of recommendations. Based on the Council actions, staff sought and obtained \$75 million of regional transportation funding (FY 2020 - 2025 NVTA 70% funds) in June 2020 that can be used for planning, design, right-of-way, construction, and asset acquisition such as buses and shelters.

In FY 2022, a community engagement process will update the community’s vision and needs for the corridor. The result of this process will be the development of an updated concept plan and implementation/construction schedule for the plan. Upon completion and City Council approval of the conceptual plan, the project will move into the design phase, environmental analysis, and right-of-way tasks in FY 2023, followed by construction in approximately FY 2025. Construction will likely be phased depending on the results of the outreach findings as well as adjacent private redevelopment projects.

As part of the Northern Virginia Transportation Authority (NVTA) 70% Regional project funding, the City received \$12 million in FY 2018 - FY 2023 funds to be used toward environmental and design work associated with this project.

Once completed, this project will support development approved in the Eisenhower West, Eisenhower East and Landmark/Van Dorn Small Area Plans (including the to-be-redeveloped Landmark Mall), while increasing transit options for local and through trips emphasizing inter-jurisdictional coordination.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

Transportation Master Plan; High Capacity Transitway Corridor Work Group recommendations, Landmark/Van Dorn Small Area Plan, Alexandria Transit Vision Plan, Complete Streets Policy

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

TRANSIT CORRIDOR "C" - WEST END TRANSITWAY

DOCUMENT SUBSECTION: High Capacity Transit Corridors
 MANAGING DEPARTMENT: Department of Transportation and Environmental Services

PROJECT LOCATION: Van Dorn/Beauregard Corridor
 REPORTING AREA: Beauregard

PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation

PROJECT CATEGORY: 3
 ESTIMATE USEFUL LIFE: 30+ Years

Transit Corridor "C" - West End Transitway													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Through 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Total FY 2022 - FY 2031
Expenditure Budget	74,799,997	5,400,000	8,171,388	4,028,612	23,610,244	33,589,753	0	0	0	0	0	0	69,399,997
Financing Plan													
NVA 70% Funds	4,600,000	2,400,000	2,200,000	0	0	0	0	0	0	0	0	0	2,200,000
State/Federal Grants	68,099,997	900,000	5,971,388	4,028,612	23,610,244	33,589,753	0	0	0	0	0	0	67,199,997
TIP	2,100,000	2,100,000	0	0	0	0	0	0	0	0	0	0	0
Financing Plan Total	74,799,997	5,400,000	8,171,388	4,028,612	23,610,244	33,589,753	0	0	0	0	0	0	69,399,997
Operating Impact	15,434,100	0	0	0	0	0	2,400,000	2,472,000	2,456,200	2,622,500	2,701,200	2,782,200	15,434,100

CHANGES FROM PRIOR YEAR CIP

No changes from previous CIP.

PROJECT DESCRIPTION & JUSTIFICATION

Consistent with the City's 2008 Transportation Master Plan and the recommendations of the High Capacity Transit Corridor Work Group, (approved by Council in September 2011), this project will take a phased approach toward construction of a high-capacity Transitway between the Van Dorn Metrorail station and the Pentagon. This investment will support the development approved in the Landmark/Van Dorn Small Area Plan (SAP) and the Beauregard Corridor SAP.

The preliminary cost estimate for the full project is approximately \$140 million which includes design, Right-of-way acquisition, utility relocation, construction, and rolling stock for the full build alternative, including dedicated lanes. The overall cost of the project has increased due to changes related to right of way acquisition. Under the Beauregard SAP (2012), it was anticipated that redevelopment of multiple parcels along the North Beauregard corridor would provide right of way to the City at no cost. However, the redevelopment along the corridor has not occurred at the rate which was anticipated at that time.

In 2017, the City was awarded \$10 million in SMART SCALE funding for the design, right-of-way and construction of project improvements specifically within Southern Towers. The City began planning in FY 2021. Coordination with the new property owners on the design of a new transit center in Southern Towers will continue throughout FY 2022 and possibly into FY 2023. The construction schedule will be determined in coordination with Southern Towers.

The City was awarded \$57.2 million in FY 2024 - FY 2025 SMART SCALE funds for design, right-of-way, construction and buses for a first phase focused on Transportation Systems Management (TSM) improvements, such as Transit Signal Priority, queue jump lanes, stations, pedestrian and bicycle improvements and intersection improvements.

Design of the Phase I (TSM) plan will begin in FY 2022 and is anticipated to be completed in FY 2023. West End Transitway service is anticipated to begin operation by FY 2025. Right -of-way acquisition is anticipated to be begin in FY 2022. Phase II of this project aligns with the full build alternative that includes dedicated transit lanes on portions of Van Dorn Street and Beauregard Street. Additional funding and right-of-way will be required to implement the Phase II plan, and the City will continue to work with private developers for the additional right-of-way and seek other funding sources including federal funds.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

Landmark / Van Dorn Corridor Study; Beauregard Small Area Plan; Eisenhower West Small Area Plan; Alexandria Transit Vision Plan

ADDITIONAL OPERATING IMPACTS

The operating costs are a preliminary estimate based on the proposed service patterns.

TRANSITWAY ENHANCEMENTS

DOCUMENT SUBSECTION: High Capacity Transit Corridors

PROJECT LOCATIONS: US 1 Corridor between Braddock Road metro station and Alexandria/Arlington border, Van Dorn/ Beauregard from Van Dorn Metro Station to The Pentagon, and Duke Street between Landmark Mall and King Street Metrorail Station

MANAGING DEPARTMENT: Department of Transportation and Environmental Services

REPORTING AREA: Regional

PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation

PROJECT CATEGORY: 3
ESTIMATE USEFUL LIFE: 11 - 15 Years

Transitway Enhancements													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Through 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Total FY 2022 - FY 2031
Expenditure Budget	1,454,491	1,454,491	0	0	0	0	0	0	0	0	0	0	0
Financing Plan													
CMAQ/RSTP	1,454,491	1,454,491	0	0	0	0	0	0	0	0	0	0	0
Financing Plan Total	1,454,491	1,454,491	0	0	0	0	0	0	0	0	0	0	0
Operating Impact	0	0	0	0	0	0	0	0	0	0	0	0	0

CHANGES FROM PRIOR YEAR CIP

No changes from previous CIP.

PROJECT DESCRIPTION & JUSTIFICATION

This project funds safety, comfort, and operation enhancements along segments of the City’s three planned transitway corridors, which may include items such as median islands with pedestrian refuges, new crossings bicycle access improvements, signal technology to improve safety at intersections, and other potential Smart Mobility technologies. The \$1.45 million in RSTP and CMAQ funds may also be used for operational planning for the West End Transitway and Duke Street Transitway.

The City’s 2008 Transportation Master Plan recommends three transitways within the City, including Corridor A (Route 1 Metroway), Corridor B (Duke Street Transitway), and Corridor C (West End Transitway). These three corridors were further evaluated in the Transitway Corridors Feasibility Study (approved by Council in September 2011). The Route 1 Metroway has been operating since 2014, and additional expansion of the dedicated lanes are currently being planned. The Duke Street Transitway began the community engagement, planning, and environmental review in 2021, which will be followed by design, right-of-way acquisition (if necessary), and construction. Environmental review for the West End Transitway is complete, and design for a first phase began in 2021, followed by right-of-way acquisition and construction, and is currently anticipated to begin service in 2025. These funds can be used for capital improvements on any of these corridors, including potential expansion of the Mark Center transit center on the West End Transitway route.

Specific project(s) scopes and schedules will be identified, and planning/design will start in FY 2022.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

Transportation Master Plan; WMATA Momentum; Alexandria Transit Vision Plan

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

ACCESS IMPROVEMENTS AT LANDMARK

DOCUMENT SUBSECTION: Non-Motorized Transportation

PROJECT LOCATION: Duke Street between S Van Dorn Street and I-395, and S Van Dorn Street between Duke Street and Holmes Run Parkway

MANAGING DEPARTMENT: Department of Transportation and Environmental Services

REPORTING AREA: Landmark/Van Dorn

PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation

PROJECT CATEGORY: 3
ESTIMATE USEFUL LIFE: 21 - 25 Years

Access Improvements at Landmark													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Through 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Total FY 2022 - FY 2031
Expenditure Budget	6,334,630	0	0	0	3,950,230	2,384,400	0	0	0	0	0	0	6,334,630
Financing Plan													
State/Federal Grants	6,334,630	0	0	0	3,950,230	2,384,400	0	0	0	0	0	0	6,334,630
Financing Plan Total	6,334,630	0	0	0	3,950,230	2,384,400	0	0	0	0	0	0	6,334,630
Operating Impact	39,000	0	0	0	0	0	3,000	3,100	3,200	3,300	21,400	5,000	39,000

CHANGES FROM PRIOR YEAR CIP

No changes from previous CIP.

PROJECT DESCRIPTION & JUSTIFICATION

This project will improve critical infrastructure access and connectivity improvements to a future transit hub in the redeveloped Landmark Mall. The transit hub will feature transit service provided by the West End Transitway, Duke Street Transitway, and other local and regional bus services. Access improvements from this project would be located along South Van Dorn Street and Duke Street. This project would construct new or improved infrastructures such as sidewalks, crosswalks, pedestrian refuge islands for safer crossings and other enhancements to increase safety, access and accessibility to bus rapid transit services.

As recommended in the Landmark/Van Dorn Small Area Plan, the redevelopment of the Landmark Mall site is envisioned as a high-density, mixed-use environment, residential units, commercial uses, medical care facilities, and onsite amenities planned for full buildout. This project is funded with VDOT Smart Scale funds, which will be available for design and construction in FY 2024 and FY 2025. Construction timing will be coordinated with the Landmark Mall redevelopment project.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

Landmark Small Area Plan; Vision Zero; Complete Streets; Alexandria Transit Vision Plan

ADDITIONAL OPERATING IMPACTS

Additional funding for occasional concrete or asphalt repair work, and repainting of crosswalks will be necessary to maintain improvements in this area.

BEAUREGARD STREET MULTI-USE TRAIL

DOCUMENT SUBSECTION: Non-Motorized Transportation

PROJECT LOCATION: North Beauregard Street
between Fillmore Avenue and
King Street

MANAGING DEPARTMENT: Department of Transportation
and Environmental Services

REPORTING AREA: Landmark/Van Dorn/Seminary
Hill/Beauregard

PRIMARY STRATEGIC THEME: Theme 10: Multimodal
Transportation

PROJECT CATEGORY: 3
ESTIMATE USEFUL LIFE: 21 - 25 Years

Beauregard Street Multi-Use Trail													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Through 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Total FY 2022 - FY 2031
Expenditure Budget	1,458,869	1,458,869	0	0	0	0	0	0	0	0	0	0	0
Financing Plan													
State/Federal Grants	1,458,869	1,458,869	0	0	0	0	0	0	0	0	0	0	0
Financing Plan Total	1,458,869	1,458,869	0	0	0	0	0	0	0	0	0	0	0
Operating Impact	0	0	0	0	0	0	0	0	0	0	0	0	0

CHANGES FROM PRIOR YEAR CIP

Previous titles for this project were “Van Dorn/Beauregard Bicycle Facilities” and “Van Dorn Street – Beauregard Street Multi-Use Trail”. The project title is updated here to “Beauregard Street Multi-Use Trail”.

PROJECT DESCRIPTION & JUSTIFICATION

The purpose of this project is to design and construct a shared-use bicycle and pedestrian path along Beauregard Street between Fillmore Avenue and King Street, as recommended in the Transportation Master Plan. This facility would provide connections to the Mark Center, Northern Virginia Community College, and Four Mile Run Trail in Arlington. This project will also help meet sustainability goals established in the City’s Environmental Action Plan by increasing mobility, access, safety, and convenience for people walking and biking. This Shared Use path will also complement the future West End Transitway by providing enhanced access to BRT stations along Beauregard Street.

Segments of the shared-use path may be designed and constructed by private developers as parcels are redeveloped, and trail design will be coordinated with adjacent redevelopment projects and the City’s West End Transitway project. Design and community outreach are anticipated to begin in FY 2021. Right-of-way acquisition is expected to begin in FY 2022, and construction is anticipated to start in FY 2023.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

Beauregard Small Area Plan; Landmark Van Dorn Corridor Plan; Transportation Master Plan

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

BICYCLE PARKING AT TRANSIT

DOCUMENT SUBSECTION: Non-Motorized Transportation
 MANAGING DEPARTMENT: Department of Transportation and Environmental Services

PROJECT LOCATION: Citywide
 REPORTING AREA: Citywide

PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation

PROJECT CATEGORY: 3
 ESTIMATE USEFUL LIFE: 11 - 15 Years

Bicycle Parking at Transit													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Through 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Total FY 2022 - FY 2031
Expenditure Budget	505,000	505,000	0	0	0	0	0	0	0	0	0	0	0
Financing Plan													
State/Federal Grants	505,000	505,000	0	0	0	0	0	0	0	0	0	0	0
Financing Plan Total	505,000	505,000	0	0	0	0	0	0	0	0	0	0	0
Operating Impact	0	0	0	0	0	0	0	0	0	0	0	0	0

CHANGES FROM PRIOR YEAR CIP

No changes from previous CIP.

PROJECT DESCRIPTION & JUSTIFICATION

Use of bicycles continues to grow as a viable option for people traveling within, to, and through Alexandria. This is in large part due to on and off-street bicycle network improvements, both in the City and the region at large. To enhance mobility options and transportation management, the City will further improve the viability of using a bicycle through the provision of bicycle parking facilities at transit stops, locations with demand proximate to transit and public facilities.

The majority of improvements funded through this project include racks, concrete pads and associated fix-it stations. This project also provides for the implementation of bicycle shelters at transit-proximate demand points.

The project is funded fully through CMAQ and RSTP funds, and no City match is required. Installation of these improvements is scheduled for FY 2022.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

T&ES Strategic Plan; Transportation Master Plan; Pedestrian and Bicycle Master Plan

ADDITIONAL OPERATING IMPACTS

Additional operating impacts will be minimal and limited to repairing and replacing equipment.

CAPITAL BIKESHARE

DOCUMENT SUBSECTION: Non-Motorized Transportation
 MANAGING DEPARTMENT: Department of Transportation and Environmental Services

PROJECT LOCATION: Citywide
 REPORTING AREA: Citywide

PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation

PROJECT CATEGORY: 3
 ESTIMATE USEFUL LIFE: 6 - 10 Years

Capital Bikeshare													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Through 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Total FY 2022 - FY 2031
Expenditure Budget	6,249,748	5,349,748	400,000	250,000	250,000	0	0	0	0	0	0	0	900,000
Financing Plan													
CMAQ/RSTP	1,652,196	752,196	400,000	250,000	250,000	0	0	0	0	0	0	0	900,000
State/Federal Grants	3,905,561	3,905,561	0	0	0	0	0	0	0	0	0	0	0
TIP	691,991	691,991	0	0	0	0	0	0	0	0	0	0	0
Financing Plan Total	6,249,748	5,349,748	400,000	250,000	250,000	0	0	0	0	0	0	0	900,000
Operating Impact	0	0	0	0	0	0	0	0	0	0	0	0	0

CHANGES FROM PRIOR YEAR CIP

No changes from previous CIP.

PROJECT DESCRIPTION & JUSTIFICATION

Bike sharing is a service where public bicycles are made available for shared use. Users can pick up and drop off bikes at designated stations by registering online, by phone, or at a station. Successful bike sharing programs tend to have stations that are tightly clustered, spaced approximately a quarter mile from one another, and are near Metrorail stations, commercial centers, tourist destinations, or mixed-use development.

Capital Bikeshare is a regional system with stations in the District of Columbia, Arlington County, VA, Fairfax County, VA, Falls Church, VA, Prince George’s County, MD, and Montgomery County, MD. Alexandria joined the Capital Bikeshare network in 2012 and began implementation with eight bike share stations as a pilot program in Old Town, using CMAQ/RSTP grant funding. The program expanded to Del Ray and Carlyle in 2014 through the addition of eight stations. Fifteen more stations were added in spring and summer 2016 using grant funding as well as private capital contributions, for a total of 31 stations in Alexandria. In 2021, the City added seven stations purchased from Arlington County and six stations funded with private capital contributions, for a total of 44 stations, focusing installations in the West End.

In FY 2022 and FY 2023, the City anticipates installing 26 stations in coordination with VDOT and five additional privately funded stations. New station placement will work toward completing the bikeshare network in Alexandria by installing a number of stations in the West End. In FY 2023, funds will be used to begin replacing or upgrading existing stations that have reached their useful life or need new technology, such as electric bike charging infrastructure. Developer funded stations will continue to be added to the network as new buildings come online.

Stations are located in areas identified in the Transportation Master Plan through a demand model and with input from the community. Capital costs for stations and bicycles are dependent on size of the station and number of docks.

Bikeshare provides access to transit and other activity centers and supports the well-being of residents and families by allowing more transportation choices that help to provide flexibility and mobility to residents. Bikeshare provides expanded connections to transit, thereby helping to reduce carbon emissions and improving health.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

Pedestrian and Bicycle Master Plan

ADDITIONAL OPERATING IMPACTS

Annual contractor operating costs are offset by user fees and differ annually depending on the size of the system and contract prices and rates.

COMPLETE STREETS

DOCUMENT SUBSECTION: Non-Motorized Transportation
 MANAGING DEPARTMENT: Department of Transportation and Environmental Services

PROJECT LOCATION: Citywide
 REPORTING AREA: Citywide

PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation

PROJECT CATEGORY: 3
 ESTIMATE USEFUL LIFE: Varies

Complete Streets													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Through 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Total FY 2022 - FY 2031
Expenditure Budget	17,977,168	9,120,168	1,511,000	761,000	773,000	786,000	800,000	814,000	829,000	844,000	861,000	878,000	8,857,000
Financing Plan													
Cash Capital	12,553,092	5,988,092	1,469,000	511,000	523,000	536,000	550,000	564,000	579,000	594,000	611,000	628,000	6,565,000
GO Bond Interest Earnings	75,000	75,000	0	0	0	0	0	0	0	0	0	0	0
GO Bonds	5,013,310	2,721,310	42,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	2,292,000
Other City Sources	9,766	9,766	0	0	0	0	0	0	0	0	0	0	0
TIP	326,000	326,000	0	0	0	0	0	0	0	0	0	0	0
Financing Plan Total	17,977,168	9,120,168	1,511,000	761,000	773,000	786,000	800,000	814,000	829,000	844,000	861,000	878,000	8,857,000
Operating Impact	0	0	0	0	0	0	0	0	0	0	0	0	0

CHANGES FROM PRIOR YEAR CIP

In FY 2021, \$500,000 in funding was deferred to FY2022 in response to the COVID-19 public health emergency. In FY 2022 - 2031 CIP funding in the amount of \$138,000 has been reduced from FY 2022 based on current project needs. Funding added to project for FY 2031.

PROJECT DESCRIPTION & JUSTIFICATION

This program funds capital infrastructure improvements that enhance the safety, accessibility, mobility, comfort, and convenience of all street users including people walking, biking, using transit, and driving. These improvements shall be planned and implemented in accordance with the 2014 Complete Streets Policy, the 2017 Vision Zero Action Plan, and the 2021 Alexandria Mobility Plan. These projects will ensure compliance with federal regulations that mandate accessibility improvements in all street alteration projects (i.e. the Americans with Disabilities Act) and allows the city to comply with the Commonwealth Transportation Board adopted "Policy for Integrating Bicycle and Pedestrian Accommodations."

This program addresses gaps in multimodal infrastructure and projects that could require engineering, design, and construction funding to meet the goals of the various guiding plans. Non-motorized transportation network improvements include repairs, upgrades, or the installation of new sidewalks, pedestrian crossings, on-street bicycle facilities, bicycle parking, and access ramps throughout the City. Motorized transportation network improvements include upgrades or the installation of adjustments to intersections, street segments, and travel lanes. The implementation of these improvements is primarily coordinated with the City's annual street resurfacing programs, however improvements are not limited to the resurfacing program.

Through FY 2022, efforts will focus on priority projects defined as high crash locations, equity areas and recommendations from Safe Routes to Schools Walk Audits, Vision Zero Engineering Priority Items, by prioritizing design, striping, signal timing, and smaller-scale construction projects. Efforts will also focus on securing funding, outreach, and design for larger projects to be implemented in later years.

In FY 2022, one Urban Planner III and one Principal Planner position will be funded from this capital project, providing direct support to implement the aforementioned plans and policies as well as capital projects associated with the Vision Zero and Complete Streets programs.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

Transportation Master Plan; Complete Streets Policy; Complete Streets Design Guidelines; Eco-City Charter; Citywide Park Improvement Plans; Neighborhood Park Improvement Plans; Vision Zero Action Plan; Small Area Plans

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

Complete Streets (continued)

Complete Streets FY 2022 – FY 2024 Project List

Fiscal Year 2022	
Description	Amount
<i>Subtotal: Complete Streets Staffing</i>	\$234,000
<u>Complete Streets Projects planned, designed, and implemented in accordance with repaving (ADA upgrades, crosswalks, pedestrian signals, data collection, etc.)</u>	
Braddock Rd, Gordon St, Montrose Ave, Howard St, Luray Ave, Allison St, Stewart Ave, Richenbacher Ave, Venable Ave, Monticello Ave, Underwood Pl	\$280,000
<i>Subtotal: Complete Streets Projects Planned, Designed, & Implemented In Accordance with Repaving</i>	\$330,000
<u>Safe Routes to Schools Improvements (not associated with repaving projects)</u>	
Implementation of Walk Audit Recommendations	\$100,000
Cora Kelly Curb Extensions (Reed/Edison)	\$75,000
Polk Ave Sidewalk	\$100,000
Walk Audits Round 2 (Middle and High School Campuses)	\$60,000
<i>Subtotal: Safe Route to Schools</i>	\$335,000
<u>Vision Zero Safety Improvements (Planning, Design, and Implementation Outside of Repaving Projects)</u>	
High Crash intersection audits and design	\$200,000
Neighborhood Slow Zone	\$125,000
Uncontrolled crossing improvements (RRFB's, Signals, Signage, Striping, etc.)	\$75,000
Controlled crossing improvements (Pedestrian Signals, Striping, Signage, etc.)	\$50,000
<i>Subtotal: Vision Zero Safety Improvements</i>	\$450,000
<u>Pedestrian and Bicycle Master Plan Priority Projects (not associated with repaving)</u>	
Upper King Street Multimodal Feasibility & Community Engagement	\$75,000
<i>Subtotal: Pedestrian & Bicycle Master Plan Priority Projects</i>	\$75,000
<u>Other Projects</u>	
Residential Traffic Calming Projects	\$40,000
Bicycle Education Classes	\$20,000
Citizen requests for improvements (prioritized from previous year)	\$27,000
<i>Subtotal: Other Projects</i>	\$87,000
Total Fiscal Year 2022	\$1,511,000

Fiscal Year 2023	
Description	Amount
Complete Streets Staffing	\$246,000
Complete Streets Projects planned, designed, and implemented in accordance with repaving (ADA upgrades, crosswalks, pedestrian signals, data collection, etc.)	\$150,000
Safe Routes to Schools Improvements not associated with paving projects	\$50,000
Complete Streets Projects planned, designed, and implemented outside of repaving (ADA upgrades, crosswalks, pedestrian signals, data collection, etc.)	\$100,000
Vision Zero Safety Improvements (planning, design, and implementation outside of repaving)	\$150,000
Other Projects (Citizen Requests, Residential Traffic Calming, Bicycle Education)	\$65,000
Total Fiscal Year 2023	\$761,000

Fiscal Year 2024	
Description	Amount
Complete Streets Staffing	\$258,000
Complete Streets Projects planned, designed, and implemented in accordance with repaving (ADA upgrades, crosswalks, pedestrian signals, data collection, etc.)	\$150,000
Safe Routes to Schools Improvements not associated with paving projects	\$80,000
Complete Streets Projects planned, designed, and implemented outside of repaving (ADA upgrades, crosswalks, pedestrian signals, data collection, etc.)	\$75,000
Vision Zero Safety Improvements (planning, design, and implementation outside of repaving)	\$150,000
Other Projects (Citizen Requests, Residential Traffic Calming, Bicycle Education)	\$60,000
Total Fiscal Year 2024	\$773,000

DUKE STREET AND WEST TAYLOR RUN SAFETY IMPROVEMENTS

DOCUMENT SUBSECTION: Non-Motorized Transportation

PROJECT LOCATION: Duke Street at West Taylor Run Parkway and the Telegraph Road Ramp

MANAGING DEPARTMENT: Transportation and Environmental Services/ Department of Project Implementation

REPORTING AREA: Central Alexandria

PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation

PROJECT CATEGORY: 3
ESTIMATE USEFUL LIFE: 15-20 years

Duke Street and West Taylor Run Safety Improvements													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Through 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Total FY 2022 - FY 2031
Expenditure Budget	6,760,460	2,855,000	0	0	3,905,460	0	0	0	0	0	0	0	3,905,460
Financing Plan													
Cash Capital	310,000	310,000	0	0	0	0	0	0	0	0	0	0	0
State/Federal Grants	6,450,460	2,545,000	0	0	3,905,460	0	0	0	0	0	0	0	3,905,460
Financing Plan Total	6,760,460	2,855,000	0	0	3,905,460	0	0	0	0	0	0	0	3,905,460
Operating Impact	0	0	0	0	0	0	0	0	0	0	0	0	0

CHANGES FROM PRIOR YEAR CIP

No changes from previous CIP.

PROJECT DESCRIPTION & JUSTIFICATION

The Duke Street and West Taylor Run Parkway Intersection Improvement project consists of design modifications to improve signal operation and enhance multimodal safety. In addition, this project will possibly include a new connection from eastbound Duke Street to southbound Telegraph Road.

A key recommendation of the Central Alexandria Traffic Study Task Force was to pursue short and long-term improvements for the Duke Street and West Taylor Run Parkway intersection and evaluate potential impacts to the surrounding network. Duke Street is a high-volume roadway that was identified as a high crash corridor. The Duke Street at West Taylor Run intersection is the fifth highest crash location in the City based on the Police Department’s crash database. This project will improve safety and reduce peak hour queuing and merging maneuvers on Duke Street by constructing a new connection to Telegraph Road. In addition, updated crosswalks and potential relocation of bus stops would lead to better multimodal connection and enhanced safety. Project design will be coordinated with the Duke Street Transitway project and the Smart Mobility Program enhancements along the Duke Street corridor.

The traffic analysis is anticipated to be completed in FY 2022, and community engagement and design to begin in FY 2022.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

N/A

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

HOLMES RUN TRAIL CONNECTOR

DOCUMENT SUBSECTION: Non-Motorized Transportation

PROJECT LOCATION: Holmes Run Parkway between Ripley Street and North Pickett Street

MANAGING DEPARTMENT: Department of Transportation and Environmental Services

REPORTING AREA: Seminary Hill/Landmark/Van Dorn

PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation

PROJECT CATEGORY: 3
ESTIMATE USEFUL LIFE: 21 – 25 Years

Holmes Run Trail Connector													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Through 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Total FY 2022 - FY 2031
Expenditure Budget	1,286,218	1,286,218	0	0	0	0	0	0	0	0	0	0	0
Financing Plan													
GO Bonds	115,676	115,676	0	0	0	0	0	0	0	0	0	0	0
State/Federal Grants	1,170,542	1,170,542	0	0	0	0	0	0	0	0	0	0	0
Financing Plan Total	1,286,218	1,286,218	0	0	0	0	0	0	0	0	0	0	0
Operating Impact	0	0	0	0	0	0	0	0	0	0	0	0	0

CHANGES FROM PRIOR YEAR CIP

No changes from previous CIP.

PROJECT DESCRIPTION & JUSTIFICATION

This project will provide a shared-use path on the south side of Holmes Run between Ripley Street and North Pickett Street. This will increase mobility, access, and convenience for people walking and biking on Holmes Run Parkway, since there is currently no infrastructure to serve people walking or biking on the north side of the street. The trail will provide new multimodal connections to transit, parks, and the regional trail network for users of all abilities.

The Holmes Run Trail Connector was identified as a priority project in the Transportation Master Plan. This project also supports the sustainability goals outlined in the City’s Environmental Action Plan by making sustainable modes of transportation easier and more attractive.

In FY 2022, staff will assess the feasibility of various improvements and evaluate design options along the trail corridor, including environmental requirements and ADA accessibility needs.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

Transportation Master Plan; Citywide Park Plan; Eco-City Charter; Environmental Action Plan

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

KING STREET- BRADLEE ROADWAY IMPROVEMENTS

DOCUMENT SUBSECTION: Non-Motorized Transportation	PROJECT LOCATION: King Street btw Quaker Lane and Menokin Drive
MANAGING DEPARTMENT: Department of Transportation and Environmental Services	REPORTING AREA: King Street btw Quaker Lane and Menokin Drive
PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation	PROJECT CATEGORY: 2 ESTIMATE USEFUL LIFE: 40 years

King Street-Bradlee Roadway Improvements													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Through 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Total FY 2022 - FY 2031
Expenditure Budget	2,000,000	0	0	1,000,000	1,000,000	0	0	0	0	0	0	0	2,000,000
Financing Plan													
CMAQ/RSTP	2,000,000	0	0	1,000,000	1,000,000	0	0	0	0	0	0	0	2,000,000
Financing Plan Total	2,000,000	0	0	1,000,000	1,000,000	0	0	0	0	0	0	0	2,000,000

CHANGES FROM PRIOR YEAR CIP

New project added to FY 2022 – FY 2031 CIP.

PROJECT DESCRIPTION & JUSTIFICATION

This project focuses multimodal and drainage/stormwater improvements on the portion of King Street between Quaker Lane and Menokin Drive. The purpose of the project is to enhance access and safety for people walking, biking, taking transit, and driving in and around the Bradlee and Fairlington areas of King Street, and improve stormwater management. Part of the funding for this project will include drainage and detention facilities to better manage stormwater in this watershed. Each of these elements meets the goals, policies, or planned projects outlined in approved planning documents.

Grant Funding will be used to conduct preliminary engineering and advance concept design plans for the street. Staff have applied for further funding through the SMART SCALE process for FY 2026 - 2027 to finalize design and construct the project.

The projected benefits of the project are increased transportation options, enhanced multimodal traffic safety and connectivity, and environmental benefits related to stormwater management.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

City Strategic Plan; Transportation Master Plan/Alexandria Mobility Plan; Environmental Action Plan; Alexandria Transit Vision; Vision Zero; Complete Streets; WMATA Momentum

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

MT. VERNON AVENUE NORTH COMPLETE STREETS

DOCUMENT SUBSECTION: Non-Motorized Transportation

PROJECT LOCATION: Mt. Vernon Ave corridor, from W Glebe Rd to northern City Limit

MANAGING DEPARTMENT: Department of Transportation and Environmental Services

REPORTING AREA: Potomac West

PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation

PROJECT CATEGORY: 3
ESTIMATE USEFUL LIFE: 21 - 25 Years

Mt. Vernon Avenue North Complete Streets													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Through 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Total FY 2022 - FY 2031
Expenditure Budget	1,000,000	1,000,000	0	0	0	0	0	0	0	0	0	0	0
Financing Plan													
Cash Capital	180,000	180,000	0	0	0	0	0	0	0	0	0	0	0
State/Federal Grants	520,000	520,000	0	0	0	0	0	0	0	0	0	0	0
TIP	300,000	300,000	0	0	0	0	0	0	0	0	0	0	0
Financing Plan Total	1,000,000	1,000,000	0	0	0	0	0	0	0	0	0	0	0
Operating Impact	0	0	0	0	0	0	0	0	0	0	0	0	0

CHANGES FROM PRIOR YEAR CIP

No changes from previous CIP. Prior year budget transfers and partitioning of state grants from parent project increased appropriated to date project funding from \$520,000 to \$1,000,000.

PROJECT DESCRIPTION & JUSTIFICATION

This project will design and construct traffic safety and accessibility improvements on Mount Vernon Avenue from the northern City boundary south to West Glebe Road. Many improvements for this corridor were identified in the Transportation Master Plan Chapter’s Pedestrian Case Study for the Mount Vernon Avenue corridor. Improvements were also identified during prior outreach efforts conducted with the community and through outreach associated with the Arlandria Small Area Plan update.

This project addresses multiple issues including a high crash history, complicated intersections with challenging geometry, right-of-way issues, and frequent, uncontrolled pedestrian crossings in a high-activity area for residents of the Arlandria neighborhood. Elements of the project could include intersection improvements, bus stop upgrades, repairs or enhancements to sidewalks and pedestrian crossings, ADA accessible ramps and bicycle facilities and parking throughout the corridor. Community engagement to determine specific improvements will continue in FY 2022.

This project is of regional interest because it is occurring in an Equity Emphasis Area as identified by the Metropolitan Council of Government’s Transportation Planning Board.

This project is funded through a combination of state, federal, CMAQ, and local/TIP funding. The improvements funded must follow the original requirements of the funds, such as addressing Congestion Mitigation and Air Quality, etc.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

Pedestrian and Bicycle Master Plan; Vision Zero; Transportation Master Plan; MWCOG TPB Equity Emphasis Areas for TPB Enhanced Environmental Justice Analysis

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

MT. VERNON TRAIL AT EAST ABINGDON

DOCUMENT SUBSECTION: Non-Motorized Transportation	PROJECT LOCATION: Mt. Vernon Trail at E. Abingdon Drive
MANAGING DEPARTMENT: Department of Project Implementation	REPORTING AREA: Old Town North
PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation	PROJECT CATEGORY: 2 ESTIMATE USEFUL LIFE: 21 - 25 Years

Mt. Vernon Trail @ East Abingdon													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Through 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Total FY 2022 - FY 2031
Expenditure Budget	850,000	850,000	0	0	0	0	0	0	0	0	0	0	0
Financing Plan													
GO Bond Interest Earnings	85,000	85,000	0	0	0	0	0	0	0	0	0	0	0
State/Federal Grants	750,000	750,000	0	0	0	0	0	0	0	0	0	0	0
TIP	15,000	15,000	0	0	0	0	0	0	0	0	0	0	0
Financing Plan Total	850,000	850,000	0	0	0	0	0	0	0	0	0	0	0
Operating Impact	0	0	0	0	0	0	0	0	0	0	0	0	0

CHANGES FROM PRIOR YEAR CIP

No changes from previous CIP.

PROJECT DESCRIPTION & JUSTIFICATION

This project will construct mobility, safety, and access improvements at the intersection of the Mount Vernon Trail, East Abingdon Drive, Slater’s Lane, and George Washington Parkway where the trail and sidewalk width make walking and biking in this area challenging.

This project will improve safety and enhance connections to transit and to the Mount Vernon Trail, which is a critical component of the regional trail network. This project supports the sustainability goals in the City’s Environmental Action Plan by making healthy modes of transportation safer, more convenient, and more attractive. The Mount Vernon Trail is necessary in supporting a multi-modal environment and providing local and regional connectivity necessary to support local tourism and businesses.

Design is expected to be completed in FY 2021 and right of way acquisition is anticipated to begin in FY 2022. Because coordination with the National Park Service is required as part of this project, construction is expected to begin in FY 2023.

The total project funding is \$850,000, including \$750,000 in SAFETEA-LU funding that is administered through the Northern Virginia Regional Commission (NVRC) and \$100,000 in Transportation Improvement Program (TIP) funding.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

T&ES Strategic Plan; Transportation Master Plan; Pedestrian and Bicycle Master Plan; Environmental Action Plan

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

OLD CAMERON RUN TRAIL

DOCUMENT SUBSECTION: Non-Motorized Transportation

PROJECT LOCATION: Old Cameron Run at South Payne Street to Hooffs Run Drive

MANAGING DEPARTMENT: Department of Project Implementation

REPORTING AREA: Eisenhower East

PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation

PROJECT CATEGORY: 3
ESTIMATE USEFUL LIFE: 21 - 25 Years

Old Cameron Run Trail													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Through 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Total FY 2022 - FY 2031
Expenditure Budget	8,359,000	3,545,000	0	1,646,273	1,122,727	2,045,000	0	0	0	0	0	0	4,814,000
Financing Plan													
GO Bonds	100,000	100,000	0	0	0	0	0	0	0	0	0	0	0
State/Federal Grants	8,259,000	3,445,000	0	1,646,273	1,122,727	2,045,000	0	0	0	0	0	0	4,814,000
Financing Plan Total	8,359,000	3,545,000	0	1,646,273	1,122,727	2,045,000	0	0	0	0	0	0	4,814,000
Operating Impact	88,400	0	0	0	0	9,100	9,400	9,700	13,000	13,400	16,800	17,000	88,400

CHANGES FROM PRIOR YEAR CIP

No changes from previous CIP.

PROJECT DESCRIPTION & JUSTIFICATION

This project will construct a 0.5 mile shared-use path between Hooffs Run Drive and South Payne Street, which includes milling and repaving the existing off-street trail east of Hooffs Run. This project will address a major gap in the City’s trail network and provide a key link in the bicycle and pedestrian multimodal transportation system.

This project will support a multi-modal environment by providing a safe, off-street connection for people walking and biking between Eisenhower East with the Southwest Quadrant. The trail will increase access to key destinations, including Eisenhower Avenue Metro Station, the Mount Vernon Trail, Alexandria National Cemetery, the Lee Center, as well as retail and entertainment destinations. This will encourage more walking, biking, and transit use, thereby helping to reduce carbon emissions and improve health. This project was identified as one of the top 3 priority trail projects in the Transportation Master Plan.

Design is expected to continue through FY 2023. Because this project requires coordination with AlexRenew’s RiverRenew project, construction is anticipated to begin after the RiverRenew project is completed.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

Transportation Master Plan, Eisenhower East Small Area Plan

ADDITIONAL OPERATING IMPACTS

Trail clearing and snow removal. Trail resurfacing and periodic signage replacement will also be necessary.

SEMINARY / HOWARD SAFETY IMPROVEMENTS

DOCUMENT SUBSECTION: Non-Motorized Transportation	PROJECT LOCATION: Seminary Road at North Howard Street
MANAGING DEPARTMENT: Department of Transportation and Environmental Services	REPORTING AREA: Seminary Hill
PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation	PROJECT CATEGORY: 3 ESTIMATE USEFUL LIFE: 21 - 25 Years

Seminary / Howard Safety Improvements													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Through 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Total FY 2022 - FY 2031
Expenditure Budget	377,990	377,990	0	0	0	0	0	0	0	0	0	0	0
Financing Plan													
State/Federal Grants	377,990	377,990	0	0	0	0	0	0	0	0	0	0	0
Financing Plan Total	377,990	377,990	0	0	0	0	0	0	0	0	0	0	0
Operating Impact	0	0	0	0	0	0	0	0	0	0	0	0	0

CHANGES FROM PRIOR YEAR CIP

No changes from previous CIP.

PROJECT DESCRIPTION & JUSTIFICATION

This project will provide safety upgrades for motorists and pedestrians walking in the intersection of Seminary Road and North Howard Street. These improvements were identified in the Seminary Road/Hammond Middle School Pedestrian Case Study in the Transportation Master Plan, adopted in 2016. This project was funded through the state’s Highway Safety Improvement Program in FY 2020.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

Pedestrian and Bicycle Master Plan

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

SIDEWALK CAPITAL MAINTENANCE

DOCUMENT SUBSECTION: Non-Motorized Transportation
 MANAGING DEPARTMENT: Department of Transportation and Environmental Services

PROJECT LOCATION: Citywide
 REPORTING AREA: Citywide

PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation

PROJECT CATEGORY: 1
 ESTIMATE USEFUL LIFE: 30+ Years

Sidewalk Capital Maintenance													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Through 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Total FY 2022 - FY 2031
Expenditure Budget	10,303,269	4,989,469	309,000	636,600	327,900	675,400	347,800	716,500	369,000	760,100	391,500	780,000	5,313,800
Financing Plan													
Cash Capital	3,689,469	3,689,469	0	0	0	0	0	0	0	0	0	0	0
GO Bond Interest Earnings	600,000	600,000	0	0	0	0	0	0	0	0	0	0	0
GO Bonds	6,013,800	700,000	309,000	636,600	327,900	675,400	347,800	716,500	369,000	760,100	391,500	780,000	5,313,800
Financing Plan Total	10,303,269	4,989,469	309,000	636,600	327,900	675,400	347,800	716,500	369,000	760,100	391,500	780,000	5,313,800
Operating Impact	0	0	0	0	0	0	0	0	0	0	0	0	0

CHANGES FROM PRIOR YEAR CIP

Funding added to project for FY 2031.

PROJECT DESCRIPTION & JUSTIFICATION

This project supports Capital Sidewalk Maintenance which supplements existing operating funds used for sidewalk repairs. Capital Maintenance is typically more substantial in nature and may include sidewalk reconstruction and widening. The City makes every attempt to align sidewalk capital maintenance with planned roadway resurfacing projects. Operating funds used for sidewalk maintenance are typically spot repairs to concrete and brick as a result of damage from tree roots, freeze/thaw cycles and other minor maintenance requests through the Call.Click.Connect. system.

Sidewalk maintenance is required by the federal Americans with Disabilities Act. The Department of Justice in 1991 required that all new and altered facilities, including sidewalks, street crossings and related pedestrian facilities, be accessible to and usable by people with disabilities. By federal law, the City is required to make sidewalks and adjacent curb ramps accessible when doing any alterations (i.e. repaving) to the streets. Thus, the sidewalk maintenance account must be funded proportionately to the street resurfacing budget.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

Transportation Master Plan; Pedestrian and Bicycle Mobility Plan;

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

Sidewalk Capital Maintenance (continued)

Sidewalk Capital Maintenance FY 2022 – FY 2024 Project List

Fiscal Year 2022
Description
Eisenhower Avenue from Mill Road to Holland Lane
West Braddock Road from King Street to Russell Road
North and South Washington Street from First Street to Church Street
North Howard Street from North Jordan Street to Raleigh Avenue
Executive Avenue from Kentucky Avenue to Mount Vernon Avenue
Kentucky Avenue from Old Dominion Boulevard to Russell Road
Alabama Avenue from Kentucky Avenue to Carolina Place
East and West Luray Avenue from West Braddock Avenue to Leslie Avenue
Monticello Blvd from Cameron Mills to Russell Road
Allison Street from Valley Drive to Old Dominion Boulevard
Echols Avenue from Seminary Road to North Stevens Street
Burgess Avenue Entire Length (Exclude Service Road)
Aspen Street from Landover Street to Russell Road (Exclude Service Road)
Guthrie Avenue from Landover Street to Mosby Street (Exclude Service Road)
Holly Street from Aspen Street to West Mt Ida Avenue
Birch Street from Holly Street to Russell Road
Pine Street from Holly Street to Russell Road
Evans Lane from Richmond Highway to East Reed Avenue
Lynhaven Drive from Wilson Avenue to End
Diagonal Road from Dangerfield Road to King Street
Montrose Avenue from East Raymond Avenue to Richmond Highway
Stewart Avenue from Mount Vernon Avenue to East Randolph Avenue
Anderson Lane from West Windsor Avenue to Richards Lane
Richards Lane from Anderson Lane to West Windsor Avenue
North Garland Street from Fort Worth Avenue to End
Richenbacher Avenue from North Van Dorn Street to North Pickett Street
South Gordon Street from Duke Street to Wheeler Avenue
Venable Avenue from South Jordan Street to South Iris Street
Underwood Place from South Ingram Street to End
Cathedral Drive from Trinity Drive to End
Benning Court from North Chambliss Street to End
South Ingram Street from Duke Street to Vermont Avenue
Greenwood Place from Seminary Road to End
Knox Place Entire Length
Rutland Place from North Pickett Street to End
East and West Nelson Avenue from Russell Road to Leslie Avenue
George Mason Place from Monticello Boulevard to End
Westminster Place from Monticello Boulevard to End
Terrett Avenue from East Mt Ida to East Randolph Avenue
Usher Avenue from South Floyd Street to South Early Street
Colfax Avenue from Seminary Road to North Rosser Street
North Beauregard Street from Seminary Road to King Street
King James Place from Seminary Road to End
Dulaney Street from Duke Street to End
North Early Street from West Braddock Road to End

Sidewalk Capital Maintenance (continued)

Sidewalk Capital Maintenance FY 2022 – FY 2024 Project List (continued)

Fiscal Year 2023
Description
Eisenhower Ave Concrete from 1000' W of Cameron Park Place to Lake Cook Entrance
Gibbon St from South Payne Street to South Union Street
Griffith Place from Fort Williams to end
John Carlyle Street from Eisenhower Avenue to Duke Street
North Dearing Street from King Street to end
Sanger Avenue from South Van Dorn to end
Quantrell Lane from Lincolnia Road to Beauregard Street
Templeton Place from Fort Williams Parkway to end
Bennett Street from Saylor Place to End
Sterling Avenue from North Quaker Lane End
Earl Street from Oronoco Street to Princess Street
Tower Court from South Whiting Street End
Florence Drive from West Glebe Road to End
Four Mile Road from Mount Vernon to Florence Drive
West Caton Avenue from Sanford Avenue to Commonwealth Avenue
Reinekens Lane from Diagonal Road to Duke Street
Albany Avenue from King Street to End
Arell Court from Duke Street to End
Calhoun Avenue from North Rosser Street to End
Chelsea Court from Fort Williams to End
Clermont Avenue from Eisenhower Avenue to End
Cockrell Court from Duke Street to End
Coventry Lane from Gibbons to End
East and West Oak Street from Mount Vernon Avenue to Russell Road
East Uhler from Mount Avenue Commonwealth Avenue
Englehardt Lane from Jamieson Avenue to End
Farrington Avenue to South Van Dorn to the City Limits
Saylor Place Entire Length
Garden Drive from Usher Avenue to Vermont Avenue
South 28th Street from King Street to End
North Stevenson from Fillmore to End
Palmer Place from Polk Avenue End
Pender Court from Palmar Place to End
Hancock Avenue from West Braddock Road to End
Key Drive from Francis Hammond Parkway to End
Jackson Place from Woodland Terrace to Tyler Place

(FY 2023 Continued on next page)

Sidewalk Capital Maintenance (continued)

Sidewalk Capital Maintenance FY 2022 – FY 2024 Project List (continued)

Fiscal Year 2023 (Cont.)
Description
Jackson Place from Woodland Terrace to Tyler Place
Valley Drive from Preston Road to West Braddock Road
Lasalle avenue from North Pickett to Juliana Place
Longview Drive from Duke Street to End
Loyola Avenue from North Howard Street to Stonebridge Road
Mark Center Drive from Seminary Road to North Beauregard Street
Maris Avenue from North Van Dorn Street
Beverly Drive from Valley Drive Washington Circle
Moss Place from Fort Worth Avenue to End
Notabane Drive from Old Dominion Boulevard to Four Mile Road
North Quaker Lane from Duke Street to West Braddock Road
Pommander Walk Street from Franklin Street to South Union Street
North Frost Street from Lawrence Street to Seminary Road
Potomac Greens Drive from Slaters Lane
Pine Street from Russell Road to Holly Street
Queen Street from North West Street to North Union Street
Raleigh Avenue Entire Length
Richmarr Place from North Latham Street to End
Rosecrest Avenue from West Custis Avenue to Russell Road
South Floyd from Duke Street to Wheeler Avenue
Sunset Drive from King Street to Commonwealth Avenue
Surry Place from North Latham Street to End
Suter Street from Earl Street to End
Sweeley Street from Duke Street to Colvin Street
Talbort Place from North Pegram Street to Prospect Place
Edsall Road from South Van Dorn to Cameron Station Road
Jamieson Avenue from Anderson Lane to End
Vasser Road from Cambridge to End (Vasser Place)

Sidewalk Capital Maintenance (continued)

Sidewalk Capital Maintenance FY 2022 – FY 2024 Project List (continued)

Fiscal Year 2024
Description
Duke Street from Dulany St to Route 1
S Washington Street from I-395 to Duke
N Washington Street from Cameron Street to First Street
King Street from Janneys Lane to Dangerfield Rd
Cloverway Drive from Dartmouth Road to Janneys Lane
Holland Street from Duke to Eisenhower Avenue
Dale Stret from Edison Street to End
Oakley Place from East timber Brach Parkway to end
Orleans Place from N Gailand Street to end
Ormond Avenue from North Gailand Street to North Howard
Sylvan Court from Trinty Drive to end
Edison Street from West Reed Avenue to end
North Clarens Street from Trinity Drive to end
North Breckinridge Place from Lincolnia Road to end
Murray Avenue from Swann Avenue to Calvert Avenue
Oakville Street from Swann Ave to Fannon Street
Fannon Street from Richmond Highway End
Juliana Place from North Picket St to End
North Breckinridge Place from Lincolnia Road to end

CITYWIDE PARKING - PARKING TECHNOLOGIES

DOCUMENT SUBSECTION: Smart Mobility
 MANAGING DEPARTMENT: Department of Transportation and Environmental Services

PROJECT LOCATION: Citywide
 REPORTING AREA: Citywide

PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation

PROJECT CATEGORY: 3
 ESTIMATE USEFUL LIFE: 6 - 10 Years

Citywide Parking - Parking Technologies													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Through 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Total FY 2022 - FY 2031
Expenditure Budget	1,860,169	1,403,365	206,804	250,000	0	0	0	0	0	0	0	0	456,804
Financing Plan													
CMAQ/RSTP	623,629	623,629	0	0	0	0	0	0	0	0	0	0	0
State/Federal Grants	1,236,540	779,736	206,804	250,000	0	0	0	0	0	0	0	0	456,804
Financing Plan Total	1,860,169	1,403,365	206,804	250,000	0	0	0	0	0	0	0	0	456,804
Operating Impact	0	0	0	0	0	0	0	0	0	0	0	0	0

CHANGES FROM PRIOR YEAR CIP

Funding in the amount of \$243,196 reduced in FY 2022 via a Technical Adjustment. Subsequent to the presentation of the Proposed FY 2022 – FY 2031 CIP, staff was informed that the Virginia Department of Transportation (VDOT) had made updates to its CMAQ/RSTP plan and the revenue growth assumptions in that plan have resulted in a reduced availability of funds for jurisdictional projects. To address the \$243,196 gap that results in FY 2022, Council approved reducing the Parking Technologies project to correspond with the grant reduction.

PROJECT DESCRIPTION & JUSTIFICATION

Parking and curbside management is high priority for the City. By using parking technology, the City can more efficiently manage on and off-street parking resources and help provide more information about parking options to the community and visitors. This project provides funding for an analysis of potential parking technologies for the City, development of an implementation plan, and the deployment of new parking technologies. These technologies could include real time parking occupancy systems for on-street spaces and parking garages/lots, and web-based interactive maps, dynamic signage that illustrates real-time parking availability in city-owned garages, and other parking technologies. These technologies will mostly be off-the-shelf solutions requiring minimal design and engineering.

This project is fully funded with CMAQ/RSTP funds each year from FY 2018 – 2023. In FY 2021, the City completed a framework plan for implementation of parking technologies, including prioritizing specific categories of technologies to purchase and implement. The City will focus on user experience and payment technologies as well as data collection and management systems.

Procurement of short-term parking technology installations began in FY 2021 and will continue each year thereafter as funding is available. In FY 2022, staff will continue procurement and implementation of specific technology in City garages and in on-street parking areas that improves the user’s experience, such as real time signage, online parking maps, and enhanced payment options. This program will include evaluations of new parking technologies being installed as well as research on best practices for future technology applications that will help the City better manage parking, curbside uses and traffic. Funding is available annually through FY 2023.

Depending on the readily changing types of and uses for parking and curbside management technology, additional funding may be needed to complete this project or maintain installed equipment or software, or the project’s scope may need to be narrowed.

Once implemented, these technologies will support economic development by providing more efficient parking strategies for residents, employees, and visitors and will allow the City to manage parking and traffic assets more efficiently.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

T&ES Strategic Plan; Old Town Area Parking Study; Del Ray Parking Study

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

EISENHOWER BROADBAND COMMUNICATIONS LINK

DOCUMENT SUBSECTION: Smart Mobility
 MANAGING DEPARTMENT: Department of Transportation and Environmental Services

PROJECT LOCATION: 4600 - 5700 Eisenhower Ave
 REPORTING AREA: Eisenhower West

PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation

PROJECT CATEGORY: 3
 ESTIMATE USEFUL LIFE: Varies

Citywide Trans. Mgmt. Tech. - Broadband Communications Link													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Through 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Total FY 2022 - FY 2031
Expenditure Budget	1,000,000	1,000,000	0	0	0	0	0	0	0	0	0	0	0
Financing Plan													
State/Federal Grants	1,000,000	1,000,000	0	0	0	0	0	0	0	0	0	0	0
Financing Plan Total	1,000,000	1,000,000	0	0	0	0	0	0	0	0	0	0	0
Operating Impact	0	0	0	0	0	0	0	0	0	0	0	0	0

CHANGES FROM PRIOR YEAR CIP

No changes from previous CIP.

PROJECT DESCRIPTION & JUSTIFICATION

The Eisenhower Broadband Communications Link project designs and constructs the expansion of the Smart Mobility fiber optic communications (broadband) network onto Eisenhower Avenue, between Van Dorn Street and Clermont Avenue. This will allow the City to better synchronize traffic signals along Eisenhower Avenue, install traffic surveillance cameras, and provide the platform to install future smart technology. This project is being coordinated with the Information Technology Services Department to align with the City’s Municipal Fiber project to reduce costs.

With the proposed development in the Eisenhower West area, new smart infrastructure including traffic signals, is needed to manage the anticipated increase in traffic volume. This project aims to mitigate the impacts of proposed development along Eisenhower Avenue with the installation of communications conduit and fiber optic cable, and surveillance cameras at key locations for real time traffic monitoring and a communications network that will connect the new and existing traffic signals to provide synchronization along this corridor.

This project will build onto the infrastructure installed with the ITS Integration project, which has already begun. It could also possibly serve as a segment of the potential citywide broadband initiative. Design is underway and will continue through FY 2022. Design is expected to be completed in FY 2023 with construction beginning in FY 2024.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

N/A

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

INTELLIGENT TRANSPORTATION SYSTEMS (ITS) INTEGRATION

DOCUMENT SUBSECTION: Smart Mobility
 MANAGING DEPARTMENT: Department of Transportation and Environmental Services

PROJECT LOCATION: Citywide
 REPORTING AREA: Citywide

PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation

PROJECT CATEGORY: 3
 ESTIMATE USEFUL LIFE: Varies

Citywide Trans. Mgmt. Tech. - Intelligent Transportation Systems (ITS) Integration													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Through 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Total FY 2022 - FY 2031
Expenditure Budget	20,975,658	15,891,108	1,000,000	400,000	600,000	3,084,550	0	0	0	0	0	0	5,084,550
Financing Plan													
Cash Capital	37,629	37,629	0	0	0	0	0	0	0	0	0	0	0
CMAQ/RSTP	3,084,550	0	0	0	0	3,084,550	0	0	0	0	0	0	3,084,550
State/Federal Grants	15,498,892	13,498,892	1,000,000	400,000	600,000	0	0	0	0	0	0	0	2,000,000
TIP	2,354,587	2,354,587	0	0	0	0	0	0	0	0	0	0	0
Financing Plan Total	20,975,658	15,891,108	1,000,000	400,000	600,000	3,084,550	0	0	0	0	0	0	5,084,550
Operating Impact	3,811,300	0	0	363,100	376,500	390,600	405,400	420,900	437,200	454,300	472,200	491,100	3,811,300

CHANGES FROM PRIOR YEAR CIP

No changes from previous CIP.

PROJECT DESCRIPTION & JUSTIFICATION

This project provides funding for the design and installation of upgrades to the City's Smart Mobility initiative, which keeps City streets safe and running smoothly, while also laying the groundwork for emerging technologies that will shape transportation over the next five, ten, twenty years and beyond. Completion of this project will replace much of the City's 30-year old traffic signal communications and allow public safety departments to monitor real time conditions on the City's roadway network. Staff is working with the ITS Department to determine if cost savings can be achieved by coordinating construction of this project with the Municipal Fiber project.

This project has five phases that largely focus on the design and installation of the City's fiber optic communications (broadband) network, which is the laying of cable that allows regional transportation agencies to communicate faster and more efficiently to manage traffic and respond to emergencies. The project also includes the installation of field devices such as traffic cameras, weather stations, flood monitoring equipment and pavement temperature sensors which capture data that can be used to reduce congestion and better manage the City's roadways.

The five phases are as follows:

- Phase I (Complete): Installed a broadband fiber optic communications network, 11 traffic surveillance cameras, and a traffic management center.
- Phase II (Complete): Supplemented the first phase, expanded the broadband network and installed additional traffic surveillance cameras.
- The design for Phase III began in FY 2019 and construction will begin in FY 2022. This phase includes the installation of 10 new traffic surveillance cameras, upgrading the control center video wall, connecting 50 traffic signals to the fiber optic backbone and running fiber optic cable along parts of Van Dorn Street and the western end of Duke Street. Funding from this grant will also provide staff support for this project and coordinate with the ITS Department regarding technology aspects of this project.
- The design for Phase IV will occur during FY 2022 and construction is scheduled to begin in FY 2023. This phase will add 10 more traffic surveillance cameras and connect 46 traffic signals to the fiber optic backbone.
- The funding for Phase V becomes available in FY 2025 and design will begin at that time. Phase V will focus mainly on installing a fiber optic backbone to the Mount Vernon Avenue corridor and connecting approximately 20 traffic signals to the fiber optic backbone and installation of approximately 5 traffic surveillance cameras. This project may be constructed in coordination with the Municipal Fiber project to reduce costs and limit disturbance to the community.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

N/A

ADDITIONAL OPERATING IMPACTS

Full implementation of the project will likely require additional staffing at the Traffic Operations Center and funding for ongoing software support/maintenance contract.

TRAFFIC CONTROL UPGRADE

DOCUMENT SUBSECTION: Smart Mobility
 MANAGING DEPARTMENT: Department of Transportation and Environmental Services

PROJECT LOCATION: Citywide
 REPORTING AREA: Citywide

PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation

PROJECT CATEGORY: 1
 ESTIMATE USEFUL LIFE: Varies

Citywide Trans. Mgmt. Tech. - Traffic Control Upgrade													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Through 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Total FY 2022 - FY 2031
Expenditure Budget	2,519,900	550,000	103,000	138,200	175,200	202,800	208,800	215,000	221,400	228,200	235,100	242,200	1,969,900
Financing Plan													
Cash Capital	2,469,900	500,000	103,000	138,200	175,200	202,800	208,800	215,000	221,400	228,200	235,100	242,200	1,969,900
Private Capital Contributions	50,000	50,000	0	0	0	0	0	0	0	0	0	0	0
Financing Plan Total	2,519,900	550,000	103,000	138,200	175,200	202,800	208,800	215,000	221,400	228,200	235,100	242,200	1,969,900
Operating Impact	0	0	0	0	0	0	0	0	0	0	0	0	0

CHANGES FROM PRIOR YEAR CIP

Funding added to project for FY 2031.

PROJECT DESCRIPTION & JUSTIFICATION

The Traffic Control Upgrade project funds ongoing capital maintenance, support and required hardware upgrades associated with implementation of the City's Smart Mobility initiative.

The project supports necessary technology upgrades and software/system support contracts associated with the City's traffic surveillance cameras, broadband fiber optic communications network and hardware/systems in the management center. Additionally, this project provides funding for emergency repairs and replacement in cases of equipment failure of the existing traffic control system.

FY 2022 funding will be used to upgrade the Duke Street Digital Subscriber Line (DSL) communication system. This system is 10 years old and has reached its useful life. The Duke Street DSL system is important because it allows video to be broadcast from the traffic cameras along Van Dorn Street. This segment of Duke Street does not have fiber optic cable and the DSL system allows the City to leverage the existing copper communications cable to the greatest extent possible.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

N/A

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

TRANSPORTATION TECHNOLOGIES

DOCUMENT SUBSECTION: Smart Mobility
 MANAGING DEPARTMENT: Department of Transportation and Environmental Services

PROJECT LOCATION: Citywide
 REPORTING AREA: Citywide

PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation

PROJECT CATEGORY: 3
 ESTIMATE USEFUL LIFE: Varies

Citywide Trans. Mgmt. Tech. - Transportation Technologies													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Through 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Total FY 2022 - FY 2031
Expenditure Budget	3,754,312	1,620,312	0	265,300	0	281,500	0	298,500	309,500	316,800	326,300	336,100	2,134,000
Financing Plan													
GO Bonds	115,000	115,000	0	0	0	0	0	0	0	0	0	0	0
Reprogrammed TIP Bonds	95,312	95,312	0	0	0	0	0	0	0	0	0	0	0
TIP	3,544,000	1,410,000	0	265,300	0	281,500	0	298,500	309,500	316,800	326,300	336,100	2,134,000
Financing Plan Total	3,754,312	1,620,312	0	265,300	0	281,500	0	298,500	309,500	316,800	326,300	336,100	2,134,000
Operating Impact	26,300	0	0	2,600	2,700	2,700	2,800	2,900	3,000	3,100	3,200	3,300	26,300

CHANGES FROM PRIOR YEAR CIP

Funding added to project for FY 2031.

PROJECT DESCRIPTION & JUSTIFICATION

This project funds the deployment of small-scale transportation technology projects to improve efficiency of the transportation infrastructure including parking technology, traffic signals and signs. This technology will improve the reliability and integrity of future transportation studies and informed decision making. These technologies will also contribute to the engineering improvements being implemented as part of the City's Vision Zero and Complete Streets Programs as well as parking technologies to better manage on-street and garage parking.

Prior year funding has been used to upgrade city parking meter modems from 2G to 3G to ensure continued operation and reliability as cellular providers phase out 2G service. It has also been used to install data collection, signal detection, parking technologies, and the City's first pavement sensors were installed to assist in snow removal operations.

In FY 2022, funding will be used to deploy additional pavement sensors, parking garage technology and data collection that will enable better analysis of traffic trends and real time decision making. Funds are also used to pilot signal detection technology to evaluate various systems. The possibility of connecting some of the City's remote traffic signals to the traffic center using wireless communications is being evaluated for FY 2022.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

N/A

ADDITIONAL OPERATING IMPACTS

Annual licensing agreements will increase in cost as new sensors and monitoring systems come online.

DASH ELECTRONIC FARE PAYMENT

DOCUMENT SUBSECTION: Smart Mobility
 MANAGING DEPARTMENT: Department of Transportation and Environmental Services

PROJECT LOCATION: Citywide
 REPORTING AREA: Citywide

PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation

PROJECT CATEGORY: 3
 ESTIMATE USEFUL LIFE: 16 - 20 Years

DASH Electronic Fare Payment													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Through 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Total FY 2022 - FY 2031
Expenditure Budget	1,200,000	1,200,000	0	0	0	0	0	0	0	0	0	0	0
Financing Plan													
CMAQ/RSTP	1,200,000	1,200,000	0	0	0	0	0	0	0	0	0	0	0
Financing Plan Total	1,200,000	1,200,000	0	0	0	0	0	0	0	0	0	0	0
Operating Impact	627,900	0	0	61,800	63,700	65,600	67,500	69,600	71,600	73,800	76,000	78,300	627,900

CHANGES FROM PRIOR YEAR CIP

RSTP funding in the amount of \$350,000 was included for FY 2022 in the FY 2022 - 2031 Proposed Budget, but removed for the Approved budget. No change from previous CIP (FY 2021 - 2030).

PROJECT DESCRIPTION & JUSTIFICATION

This project will fund the next generation of fare payment hardware in the DASH bus fleet. DASH is pursuing a dual approach with regard to fare payment technology, maintaining full interoperability with the regional SmarTrip system while also continuing to develop and evaluate the *DASH Bus* mobile ticketing app.

The Washington Metropolitan Area Transit Authority (WMATA) has recently made key investments to extend the life of the SmarTrip system, including launching virtual SmarTrip cards in Apple Wallet (Android coming soon), the SmarTrip mobile app, an upcoming overhaul of the back-end system, and new next-generation fareboxes. These additions allow customers to add funds to their cards in real-time instead of waiting 24-48 hours as they did in the old system. Virtual SmarTrip cards using NFC technology also allow for contactless fare payment upon boarding. This project will fund the acquisition of WMATA's new SmarTrip-compatible fareboxes.

At the same time, the *DASH Bus* mobile app provides additional capabilities beyond the SmarTrip system. These include special fare partnerships for groups such as Alexandria's high school students and the ability to add funds using cash at a variety of local convenience and drug stores. This project will also fund electronic validation hardware for the *DASH Bus* mobile app, or a potential regionally-integrated successor mobile app.

This project is funded by an allocation of Regional Surface Transportation Program (RSTP) funds. Procurement is expected to proceed in FY 2022, following WMATA's completion of its next-generation farebox contract and further regional consensus regarding fare payment strategy. DASH and the City are coordinating investments closely with the Northern Virginia Transportation Commission (NVTC), WMATA and other regional partners.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

N/A

ADDITIONAL OPERATING IMPACTS

Additional annual fees in DASH's contract with the mobile app vendor to support electronic validators. DASH estimates that the annual fee will be roughly \$500-600 per bus, which would be roughly \$50,000-\$60,000 per year. This additional ongoing cost is not included as part of this project application.

DASH SCHEDULING SOFTWARE

DOCUMENT SUBSECTION: Smart Mobility
 MANAGING DEPARTMENT: Department of Transportation
 and Environmental Services

PROJECT LOCATION: Citywide
 REPORTING AREA: Citywide

PRIMARY STRATEGIC THEME: Theme 10: Multimodal
 Transportation

PROJECT CATEGORY: 3
 ESTIMATE USEFUL LIFE:

DASH Scheduling Software													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Through 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Total FY 2022 - FY 2031
Expenditure Budget	477,568	477,568	0	0	0	0	0	0	0	0	0	0	0
Financing Plan													
State/Federal Grants	477,568	477,568	0	0	0	0	0	0	0	0	0	0	0
Financing Plan Total	477,568	477,568	0	0	0	0	0	0	0	0	0	0	0

CHANGES FROM PRIOR YEAR CIP

New project added to FY 2022 - FY 2031 CIP. This project received CMAQ funding in FY 2021 via the December 2020 Supplemental Appropriation Ordinance.

PROJECT DESCRIPTION & JUSTIFICATION

This project will upgrade the scheduling and routing software platform for Alexandria Transit Company (DASH). Scheduling software is the heart of any fixed-route transit operation. It creates the basic schedules, timetable, and bus/operator assignments, which feed into several downstream functions and other systems, including employee scheduling, vehicle dispatching, payroll, and all customer information from paper Ride Guides to real-time bus arrival screens, websites, and mobile apps. DASH currently uses software that is over two decades old and was designed for much smaller agencies. This upgrade will result in better roster optimizations, easier compliance with labor rules from the new Collective Bargaining Agreement (CBA), fewer software bugs, electronic bidding for bus operators, and more accurate reporting of operating statistics. Critically, this project will also enable DASH to more efficiently design, optimize, and implement the New DASH Network launch, which is expected to significantly increase bus ridership in the City more efficiently.

Implementation of the new software is expected to be complete in FY 2022. The project is funded by an allocation of Congestion Mitigation / Air Quality (CMAQ) funds.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

Alexandria Transit Vision Plan

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

DASH TECHNOLOGIES

DOCUMENT SUBSECTION: Smart Mobility
 MANAGING DEPARTMENT: Department of Transportation and Environmental Services

PROJECT LOCATION: Citywide
 REPORTING AREA: Citywide

PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation

PROJECT CATEGORY: 3
 ESTIMATE USEFUL LIFE: 16 - 20 Years

DASH Technologies													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Through 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Total FY 2022 - FY 2031
Expenditure Budget	1,005,745	150,000	0	600,000	255,745	0	0	0	0	0	0	0	855,745
Financing Plan													
CMAQ/RSTP	855,745	0	0	600,000	255,745	0	0	0	0	0	0	0	855,745
NVTA 70% Funds	150,000	150,000	0	0	0	0	0	0	0	0	0	0	0
Financing Plan Total	1,005,745	150,000	0	600,000	255,745	0	0	0	0	0	0	0	855,745
Operating Impact	444,500	0	0	0	50,000	51,500	53,000	54,600	56,300	58,000	59,700	61,400	444,500

CHANGES FROM PRIOR YEAR CIP

No changes from previous CIP.

PROJECT DESCRIPTION & JUSTIFICATION

This project will fund DASH technology initiatives which will provide better operational data to both customers and planners. This project will also allow DASH to operate more efficiently and help to improve the overall DASH customer experience.

Phase I of this project funded the purchase of automated passenger counters (APC's), which will greatly improve the quality of ridership reporting and any service planning decisions that result from that data, and improved real-time prediction software that feeds to customers via digital bus information stop signs, DASH Tracker, WMATA's BusETA, and third-party apps.

This project is being coordinated with the City's Smart Mobility Program and other transit and street technology enhancement projects. The project is funded by an allocation of Regional Surface Transportation Program (RSTP) funding with funds becoming available in FY 2023

For FY 2023, DASH is pursuing additional technological enhancements that may include: real-time bus capacity information for customers, business analytic tools, onboard passenger information displays, additional real-time information displays at stops, smart charge management systems for new electric buses, and the expansion of existing transit signal prioritization equipment and pedestrian detection systems to the entire DASH fleet.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

Smart Mobility Program

ADDITIONAL OPERATING IMPACTS

Annual fee for licensing and support of data systems implemented by this project.

TRAFFIC ADAPTIVE SIGNAL CONTROL

DOCUMENT SUBSECTION: Smart Mobility
 MANAGING DEPARTMENT: Department of Transportation and Environmental Services

PROJECT LOCATION: Citywide
 REPORTING AREA: Citywide

PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation

PROJECT CATEGORY: 3
 ESTIMATE USEFUL LIFE: Varies

Traffic Adaptive Signal Control													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Through 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Total FY 2022 - FY 2031
Expenditure Budget	7,675,900	0	5,266,347	2,409,553	0	0	0	0	0	0	0	0	7,675,900
Financing Plan													
State/Federal Grants	7,675,900	0	5,266,347	2,409,553	0	0	0	0	0	0	0	0	7,675,900
Financing Plan Total	7,675,900	0	5,266,347	2,409,553	0	0	0	0	0	0	0	0	7,675,900
Operating Impact	330,800	0	0	30,000	31,500	33,100	34,700	36,500	38,300	40,200	42,200	44,300	330,800

CHANGES FROM PRIOR YEAR CIP

No changes from previous CIP.

PROJECT DESCRIPTION & JUSTIFICATION

This two-phase project will install new control software, hardware, and traffic sensors to monitor traffic in real-time. It also funds the design and installation of traffic adaptive signal control systems. This project will allow the City’s traffic signals to adjust in real-time to changing traffic, helping to eliminate delays and reduce the incentive to cut through neighborhoods. Traffic adaptive signal control is a traffic management strategy in which traffic signals automatically adjust operations to adapt to changes in traffic. These changes are based on real-time traffic demand. This allows traffic signals to adjust to actual traffic demand and flow rather than variables that are less effective predictors, and continuously synchronize with each other to optimize traffic flow throughout a network to better manage traffic flow on the City’s roadways.

- Phase I began in FY 2021 and will be finalized in FY 2022. Construction is anticipated to start in FY 2022.
- Phase II design is anticipated to begin in FY 2023.

Traffic Adaptive Signal Control is a key project in the Smart Mobility program. Traffic navigation apps have rendered traditional time of day traffic signal control obsolete. Everyday navigation apps alter traffic behavior depending on regional traffic conditions. Traffic Adaptive Control will help take the City into the future. This project will utilize many of the features installed by previous Smart Mobility projects as well as seek to integrate with navigation apps and other data sources as well as incorporate artificial intelligence.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

Smart Mobility Framework Plan

ADDITIONAL OPERATING IMPACTS

A software support/maintenance agreement costing approximately \$30,000/year will be needed to maintain this asset.

TRANSIT SIGNAL PRIORITY

DOCUMENT SUBSECTION: Smart Mobility
 MANAGING DEPARTMENT: Department of Transportation and Environmental Services

PROJECT LOCATION: Citywide
 REPORTING AREA: Citywide

PRIMARY STRATEGIC THEME: Themes 4 & 10

PROJECT CATEGORY: 3
 ESTIMATE USEFUL LIFE: Varies

Transit Signal Priority													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Through 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Total FY 2022 - FY 2031
Expenditure Budget	1,255,491	1,255,491	0	0	0	0	0	0	0	0	0	0	0
Financing Plan													
NVTA 30% Funds	60,000	60,000	0	0	0	0	0	0	0	0	0	0	0
NVTA 70% Funds	1,195,491	1,195,491	0	0	0	0	0	0	0	0	0	0	0
Financing Plan Total	1,255,491	1,255,491	0	0	0	0	0	0	0	0	0	0	0
Operating Impact	0	0	0	0	0	0	0	0	0	0	0	0	0

CHANGES FROM PRIOR YEAR CIP

No changes from previous CIP.

PROJECT DESCRIPTION & JUSTIFICATION

This project will install Transit Signal Priority (TSP) on priority transit corridors throughout the City. Transit Signal Priority allows buses to request priority at intersections, thereby reducing wait time for passengers. This also allows transit vehicles to bypass congestion and offer more reliable services, making transit faster, easier and more appealing as a travel option. The existing bus fleet will be retrofitted with TSP equipment as the City upgrades traffic signals with TSP on corridors throughout the City, starting with Duke Street, Route 1 and King Street. New buses will be equipped with TSP technology.

TSP has been installed at 56 traffic signals within the City. These signals are on major transit corridors including Seminary Road, King Street, Duke Street, Van Dorn Street and Beauregard Street. The City is coordinating TSP implementation with WMATA and DASH and considering future technology to further enhance performance of the transit system.

An additional benefit of installing TSP infrastructure is that emergency vehicles can utilize this equipment to request preemption at intersections. Technology is being installed in emergency vehicles to allow them to respond to emergencies faster using the installed TSP.

TSP was installed on both Duke Street and King Street in FY 2021. In future phases of this project, TSP will also be installed along the high capacity transit corridors when those projects are constructed. Future funding is anticipated to be requested to install additional TSP equipment at intersections in key transit corridors across the City, including King Street, Duke Street, Van Dorn Street, Seminary Road and Beauregard Street. This funding would also support installing retrofitted TSP equipment on any remaining DASH buses that are not outfitted with TSP technology.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

Smart Mobility Framework Plan, Alexandria Transit Vision Plan

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

BRIDGE REPAIRS

DOCUMENT SUBSECTION: Streets & Bridges
 MANAGING DEPARTMENT: Department of Transportation and Environmental Services

PROJECT LOCATION: Citywide
 REPORTING AREA: Citywide

PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation

PROJECT CATEGORY: 1
 ESTIMATE USEFUL LIFE: 11 - 15 Years

Bridge Repairs													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Through 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Total FY 2022 - FY 2031
Expenditure Budget	43,517,975	10,989,975	2,151,000	2,373,000	2,583,000	2,775,000	2,977,000	3,167,000	3,660,000	4,572,000	3,670,000	4,600,000	32,528,000
Financing Plan													
Cash Capital	2,942,975	2,942,975	0	0	0	0	0	0	0	0	0	0	0
GO Bond Interest Earnings	14,000	14,000	0	0	0	0	0	0	0	0	0	0	0
GO Bonds	39,911,000	7,383,000	2,151,000	2,373,000	2,583,000	2,775,000	2,977,000	3,167,000	3,660,000	4,572,000	3,670,000	4,600,000	32,528,000
TIP	650,000	650,000	0	0	0	0	0	0	0	0	0	0	0
Financing Plan Total	43,517,975	10,989,975	2,151,000	2,373,000	2,583,000	2,775,000	2,977,000	3,167,000	3,660,000	4,572,000	3,670,000	4,600,000	32,528,000
Operating Impact	0	0	0	0	0	0	0	0	0	0	0	0	0

CHANGES FROM PRIOR YEAR CIP

Funding plan updated to reflect current project schedule and timing. Funding schedule also updated to reflect addition of bridge inventory within City parks into program.

PROJECT DESCRIPTION & JUSTIFICATION

This project provides funding for the maintenance, repair, and painting of steel structures, joint sealing, bearing repairs, and the rehabilitation of bridge decks and structures. The City conducts a federally mandated bridge inspection program for in-service bridges and designates safety ratings to the bridges inspected. All bridges in the City are inspected at a minimum of every two years, and the results are reported to the State. Industry standards indicate that bridges need to be repainted every 10 to 15 years, while bridge deck reconstruction and rehabilitation may be required every 20 to 25 years.

In FY 2019, staff developed a long-term maintenance plan for the preventive maintenance, corrective maintenance, and repair of all bridges inspected and maintained by the City. This plan identified all major and minor repair work needed for all City bridges and identifies a regular maintenance interval for each bridge. In FY 2021, using new funding, work began on the long-term maintenance plan to repair City bridges based on the priority identified in the plan. Once the major work is completed for each bridge, the bridge will be placed in a regular maintenance interval and will be maintained based on the schedule as identified using industry standards. Routine maintenance will be handled by internal and contractor maintenance teams, depending on the complexity and scope of work.

This is an ongoing maintenance project and is always in the planning, design and construction phases. As bridge inspection reports are received, maintenance items are reviewed and either completed by the Maintenance Division or a bid package is issued for the repairs. A reprioritization schedule that focuses on the inspection schedule is continuously updated to address the needs. Changes to regulations with Federal Procurement (Environmental, Administration and Inspection Costs) and increases and construction labor and material costs are both significant drivers of cost increases in this project.

This project supports the implementation of asset management efforts that prioritize maintenance of critical infrastructure, increase the value obtained from infrastructure expenditures, and achieve a progressively higher level of service for Alexandria.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

N/A

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

Bridge Repairs (continued)

Bridge Repairs FY 2022 – FY 2031 Project List

Fiscal Year 2022	
Description	Amount
Van Dorn Street over Holmes Run	\$1,500,000
Routine Inspection and Consulting Services	\$200,000
Routine Bridge Maintenance	\$451,000
Total Fiscal Year 2022	\$2,151,000

Fiscal Year 2023	
Description	Amount
Cameron Station Overpass over Duke Street	\$1,000,000
Van Dorn Street over Duke Street	\$740,000
Routine Inspection and Consulting Services	\$210,000
Routine Bridge Maintenance	\$423,000
Total Fiscal Year 2023	\$2,373,000

Fiscal Year 2024	
Description	Amount
Duke Street Over Holmes Run	\$700,000
Ben Brenman Bridge	\$1,270,000
Routine Inspection and Consulting Services	\$220,000
Routine Bridge Maintenance	\$393,000
Total Fiscal Year 2024	\$2,583,000

NOTE: Identified bridge maintenance projects based on current inspection records which are subject to change based on future inspection and program prioritization efforts.

CITY STANDARD CONSTRUCTION SPECIFICATIONS

DOCUMENT SUBSECTION: Streets & Bridges
 MANAGING DEPARTMENT: Department of Project Implementation

PROJECT LOCATION: Citywide
 REPORTING AREA: Citywide

PRIMARY STRATEGIC THEME: Theme 3: Well-Managed Government

PROJECT CATEGORY: 3
 ESTIMATE USEFUL LIFE: 6 - 10 Years

City Standard Construction Specifications													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Through 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Total FY 2022 - FY 2031
Expenditure Budget	200,000	200,000	0	0	0	0	0	0	0	0	0	0	0
Financing Plan													
Cash Capital	100,000	100,000	0	0	0	0	0	0	0	0	0	0	0
TIP	100,000	100,000	0	0	0	0	0	0	0	0	0	0	0
Financing Plan Total	200,000	200,000	0	0	0	0	0	0	0	0	0	0	0
Operating Impact	0	0	0	0	0	0	0	0	0	0	0	0	0

CHANGES FROM PRIOR YEAR CIP

No changes from previous CIP.

PROJECT DESCRIPTION & JUSTIFICATION

The Department of Project Implementation (DPI) is developing standard City of Alexandria construction specifications to reference and include in contracts for CIP projects. Currently, the City pays consultants to develop specifications on a project by project basis. Creating standard specifications allows consultants to only have to write special provisions, reducing consultant fees. This will result in savings of tens of thousands of dollars per year and more consistency in documents. By having standard specifications, DPI can streamline and improve the procurement process while saving money over time by not having to pay contractors to develop specifications for each project. In addition to the savings, providing contractors with standard specifications documents provides greater clarity in the bidding process and will allow contractors to develop more familiarity with the City's requirements. This will likely reduce the frequency and number for change orders during the construction process.

The preparation of City Standard construction Specification is underway and is anticipated to be completed Summer of 2021.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

N/A

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

EAST GLEBE & ROUTE 1

DOCUMENT SUBSECTION: Streets & Bridges
 MANAGING DEPARTMENT: Department of Transportation and Environmental Services

PROJECT LOCATION: Route 1 at E. Glebe Road
 REPORTING AREA: Potomac Yard/Potomac Greens

PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation

PROJECT CATEGORY: 3
 ESTIMATE USEFUL LIFE: Varies

East Glebe & Route 1													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Through 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Total FY 2022 - FY 2031
Expenditure Budget	4,600,000	4,600,000	0	0	0	0	0	0	0	0	0	0	0
Financing Plan													
Private Capital Contributions	4,600,000	4,600,000	0	0	0	0	0	0	0	0	0	0	0
Financing Plan Total	4,600,000	4,600,000	0	0	0	0	0	0	0	0	0	0	0
Operating Impact	0	0	0	0	0	0	0	0	0	0	0	0	0

CHANGES FROM PRIOR YEAR CIP

No changes from prior year CIP.

PROJECT DESCRIPTION & JUSTIFICATION

The East Glebe Road & Route 1 Intersection Improvement project consists of constructing an exclusive left-turn lane, through lane, and right-turn lane in the eastbound direction. This project is needed to accommodate the increase in traffic through the existing intersection generated by the surrounding new development, including Potomac Yard and Oakville Triangle. The project will also include improved sidewalks and bike lanes, consistent with the Transportation Master Plan recommendations.

Completion of this project will allow traffic to move through the intersection in a safe and efficient manner. This project is being funded primarily through developer contributions. As such, the timing of this project is dependent on when the contributing developer projects reach the milestones associated with contributions toward this project.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

North Potomac Yard Small Area Plan; Route 1 / Oakville Triangle Corridor Plan

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

EISENHOWER AVENUE ROADWAY IMPROVEMENTS

DOCUMENT SUBSECTION: Streets & Bridges

PROJECT LOCATION: Eisenhower Ave. from Mill Road to Holland Lane

MANAGING DEPARTMENT: Department of Transportation and Environmental Services

REPORTING AREA: Eisenhower East

PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation

PROJECT CATEGORY: 3
ESTIMATE USEFUL LIFE: 21 - 25 Years

Eisenhower Avenue Roadway Improvements													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Through 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Total FY 2022 - FY 2031
Expenditure Budget	11,560,837	11,560,837	0	0	0	0	0	0	0	0	0	0	0
Financing Plan													
Cash Capital	660,652	660,652	0	0	0	0	0	0	0	0	0	0	0
GO Bond Interest Earnings	1,338,554	1,338,554	0	0	0	0	0	0	0	0	0	0	0
GO Bonds	550,000	550,000	0	0	0	0	0	0	0	0	0	0	0
Private Capital Contributions	37,829	37,829	0	0	0	0	0	0	0	0	0	0	0
State/Federal Grants	7,873,802	7,873,802	0	0	0	0	0	0	0	0	0	0	0
TIP	1,100,000	1,100,000	0	0	0	0	0	0	0	0	0	0	0
Financing Plan Total	11,560,837	11,560,837	0	0	0	0	0	0	0	0	0	0	0
Operating Impact	0	0	0	0	0	0	0	0	0	0	0	0	0

CHANGES FROM PRIOR YEAR CIP

Funding in the amount of \$2.2 million was transferred to this project budget to address a construction cost shortfall in FY 2020 via a supplemental appropriation ordinance. This included funds transferred from the Van Dorn Metrorail Station Improvements and Montgomery Street Reconstruction projects, and available Bond Interest Earnings.

PROJECT DESCRIPTION & JUSTIFICATION

This project includes the construction of an additional westbound left turn lane and sidewalk/streetscape improvements from Mill Road to Elizabeth Lane, revising the Mill Road receiving lanes to accept the dual left turns from Eisenhower Avenue, converting the traffic circle at Eisenhower and Holland to a "T" intersection, and repaving the roadway between Holland Lane and Mill Road.

There have been a number of alternatives evaluated in the concept phase of the project. The original alternative was to construct the complete project from Stovall Street to Holland Lane. Due to the changing development projections and current traffic conditions, the project was rescoped in 2011, following a community engagement process, to the interim improvement described above, and the project limits were reduced to Mill Road and Holland Lane. Full build-out will be constructed by developers as the parcels along the corridor are developed. The Project redesign was approved in 2013, followed by Right-of-way acquisition and utility relocations. Project construction will occur in FY 2022 through FY 2023.

Once completed, this project will better align with the City's complete street guidelines, ensuring safe and efficient travel for motorists, bicyclists, and pedestrians.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

Transportation Master Plan; Eisenhower East Small Area Plan

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

FIXED TRANSPORTATION EQUIPMENT

DOCUMENT SUBSECTION: Streets and Bridges
 MANAGING DEPARTMENT: Department of Transportation and Environmental Services

PROJECT LOCATION: Citywide
 REPORTING AREA: Citywide

PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation

PROJECT CATEGORY: 1
 ESTIMATE USEFUL LIFE: Varies

Fixed Transportation Equipment													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Through 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Total FY 2022 - FY 2031
Expenditure Budget	36,322,701	24,196,701	875,500	2,493,400	956,300	985,000	1,043,500	1,074,800	1,107,000	1,140,300	1,207,100	1,243,100	12,126,000
Financing Plan													
Cash Capital	10,181,877	10,181,877	0	0	0	0	0	0	0	0	0	0	0
GO Bond Interest Earnings	1,250,000	1,250,000	0	0	0	0	0	0	0	0	0	0	0
GO Bonds	19,308,953	7,182,953	875,500	2,493,400	956,300	985,000	1,043,500	1,074,800	1,107,000	1,140,300	1,207,100	1,243,100	12,126,000
Prior Capital Funding	3,701,070	3,701,070	0	0	0	0	0	0	0	0	0	0	0
Private Capital Contributions	593,372	593,372	0	0	0	0	0	0	0	0	0	0	0
TIP	1,287,429	1,287,429	0	0	0	0	0	0	0	0	0	0	0
Financing Plan Total	36,322,701	24,196,701	875,500	2,493,400	956,300	985,000	1,043,500	1,074,800	1,107,000	1,140,300	1,207,100	1,243,100	12,126,000
Operating Impact	0	0	0	0	0	0	0	0	0	0	0	0	0

CHANGES FROM PRIOR YEAR CIP

No changes from previous CIP.

PROJECT DESCRIPTION & JUSTIFICATION

This project provides annual funding for the upgrade, maintenance and replacement of traffic control and parking equipment, as well as the installation of new traffic signals. Of particular importance is the replacement of traffic signal poles. Traffic signal poles have a design life of 25 to 30 years. With more than 250 signalized intersections in operation, numerous traffic signal poles throughout the City are approaching the end of their design life and will require replacement.

Funding is also provided for replacement of the multi-space parking meters in Old Town in FY 2023 (\$1.5 million), which will have reached the end of their useful life and will be replaced with newer style pay by license plate parking meters. All funding will be used for the procurement of equipment and construction service.

Annual funding maintains the value of the City's physical assets through the maintenance of critical traffic control infrastructure. Additionally, public safety concerns are addressed by installing new traffic signals to improve the safety at dangerous intersections.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

T&ES Strategic Plan

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

Fixed Transportation Equipment (continued)

Fixed Transportation Equipment FY 2022 – FY 2024 Project List

Fiscal Year 2022	
Description	Amount
Reconstruct signal at Stevenson & Walker	\$130,000
Reconstruct signal at Stevenson & Whiting	\$150,000
Reconstruct signal at Stevenson & BJs	\$140,000
Reconstruct signal at King & N Hampton	\$150,000
Reconstruct signal at Seminary & Pickett	\$135,000
New Signal (Undermined Location)	\$150,000
Repair knockdowns from accidents	\$20,500
Total Fiscal Year 2022	\$875,500

Fiscal Year 2023	
Description	Amount
New Parking Meters in Old Town	\$1,500,000
Reconstruct signal at Patrick & Cameron	\$150,000
Reconstruct signal at Henry & Cameron	\$150,000
Reconstruct signal at Duke & Holland/Reinekers	\$175,000
Reconstruct signal at West & Pendleton	\$135,000
Reconstruct signal at West & Braddock/Wythe	\$175,000
Reconstruct signal at Braddock & Beauregard	\$150,000
Repair knockdowns from accidents	\$28,400
Repair and upgrade of traffic signal vehicle detection	\$30,000
Total Fiscal Year 2023	\$2,493,400

Fiscal Year 2024	
Description	Amount
Reconstruct Signal at King & Hampton	\$160,000
Reconstruct Signal at Braddock & Howard	\$150,000
Reconstruct Signal at Seminary & Howard	\$160,000
Reconstruct Signal at Duke & Henry	\$150,000
Reconstruct Signal at Duke & Patrick	\$150,000
Reconstruct Signal at Braddock & Marlee Way	\$130,000
Repair knockdowns from accidents	\$26,300
Repair and upgrade of traffic signal vehicle detection	\$30,000
Total Fiscal Year 2024	\$956,300

FOUR MILE RUN BRIDGE PROGRAM

DOCUMENT SUBSECTION: Streets & Bridges
 MANAGING DEPARTMENT: Department of Transportation and Environmental Services

PROJECT LOCATION: Citywide
 REPORTING AREA: Citywide

PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation

PROJECT CATEGORY: 1
 ESTIMATE USEFUL LIFE: Varies

Four Mile Run Bridge Program													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Through 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Total FY 2022 - FY 2031
Expenditure Budget	30,000,000	6,000,000	7,000,000	7,000,000	0	0	0	0	0	0	0	10,000,000	24,000,000
Financing Plan													
GO Bonds	30,000,000	6,000,000	7,000,000	7,000,000	0	0	0	0	0	0	0	10,000,000	24,000,000
Financing Plan Total	30,000,000	6,000,000	7,000,000	7,000,000	0	0	0	0	0	0	0	10,000,000	24,000,000
Operating Impact	0	0	0	0	0	0	0	0	0	0	0	0	0

CHANGES FROM PRIOR YEAR CIP

Funding added to project for FY 2031.

PROJECT DESCRIPTION & JUSTIFICATION

In September 2020, City Council and the Arlington County Board jointly adopted a Comprehensive Intergovernmental Agreement for the maintenance, inspection and rehabilitation or replacement of the five Four Mile Run Bridges. The West Glebe Road and Arlington Ridge Road bridges are in a deteriorated condition (rated at serious and poor condition, respectively), and need to be rebuilt and/or replaced. Currently, the Shirlington Road, Route 1, and Potomac Avenue bridges are in satisfactory condition and major capital investments are not contemplated in the short or medium terms.

A joint city-county remediation plan began in 2019 and work is anticipated for completion in 2023. In FY 2022, Arlington County and the City of Alexandria will begin working on the Mt. Vernon / Arlington Ridge Road Bridge between the two jurisdictions.

There are an additional three (3) bridges over Four Mile Run (Shirlington/Arlington, Richmond Highway/Alexandria, and Potomac Avenue/Alexandria) that will require rehabilitation and/or reconstruction due deteriorating bridge conditions in the distant future.

In the long-term, cost sharing obligations for city-county arrangement will be programmed into future capital improvement programs. At this time, no additional investments are planned in the current 10-year CIP. The jurisdictions also intend to jointly apply for future state and federal critical infrastructure grant programs.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

N/A

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

KING & BEAUREGARD INTERSECTION IMPROVEMENTS

DOCUMENT SUBSECTION: Streets & Bridges
 MANAGING DEPARTMENT: Department of Transportation and Environmental Services

PROJECT LOCATION: King Street / North Beauregard Street / Walter Reed Drive
 REPORTING AREA: Alexandria West
 PROJECT CATEGORY: 2

PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation

ESTIMATE USEFUL LIFE: 21 - 25 Years

King & Beauregard Intersection Improvements													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Through 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Total FY 2022 - FY 2031
Expenditure Budget	17,977,862	17,977,862	0	0	0	0	0	0	0	0	0	0	0
Financing Plan													
Cash Capital	133,700	133,700	0	0	0	0	0	0	0	0	0	0	0
GO Bond Interest Earnings	1,371,300	1,371,300	0	0	0	0	0	0	0	0	0	0	0
GO Bonds	460,562	460,562	0	0	0	0	0	0	0	0	0	0	0
Prior Capital Funding	19,600	19,600	0	0	0	0	0	0	0	0	0	0	0
State/Federal Grants	15,992,700	15,992,700	0	0	0	0	0	0	0	0	0	0	0
Financing Plan Total	17,977,862	17,977,862	0	0	0	0	0	0	0	0	0	0	0
Operating Impact	0	0	0	0	0	0	0	0	0	0	0	0	0

CHANGES FROM PRIOR YEAR CIP

No changes from previous CIP.

PROJECT DESCRIPTION & JUSTIFICATION

This project provides for traffic flow improvements at King Street and Beauregard Street. The project limits include King Street from Chesterfield Road to North Hampton Drive and on North Beauregard Street from Branch Avenue to King Street. The approved at grade improvements will add an additional left turn lane in each direction on King Street, medians, and a 10' shared use path on portions of King Street and North Beauregard Street. The improvements will increase capacity and safety through the corridor.

Engineering design and right-of-way (ROW) acquisition is completed. Utility relocation coordination continues, and a consultant is working on final bid documents (plans and specifications). The construction will be phased to facilitate the utility relocation.

Construction on Phase I is complete. The utility relocation is underway and is anticipated to be complete in winter of 2021. Phase II construction is anticipated to begin in winter of 2022 with an estimated completion date of early 2025.

Once completed, this project will provide for a safer intersection, with additional transportation infrastructure for bicyclists and pedestrians. Completion of this project will also help mitigate some of the BRAC-133 impacts.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

Transportation Master Plan; Approved by City Council in March 2010.

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

SEMINARY ROAD AT BEAUREGARD STREET ELLIPSE

DOCUMENT SUBSECTION: Streets & Bridges
 MANAGING DEPARTMENT: Department of Project Implementation

PROJECT LOCATION: Seminary Rd. at Beauregard St.
 REPORTING AREA: Seminary Hill

PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation

PROJECT CATEGORY: 3
 ESTIMATE USEFUL LIFE: 21 - 25 Years

Seminary Road at Beauregard Street Ellipse													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Through 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Total FY 2022 - FY 2031
Expenditure Budget	36,825,000	325,000	0	3,500,000	16,200,000	16,700,000	100,000	0	0	0	0	0	36,500,000
Financing Plan													
Private Capital Contributions	36,500,000	0	0	3,500,000	16,200,000	16,700,000	100,000	0	0	0	0	0	36,500,000
TIP	325,000	325,000	0	0	0	0	0	0	0	0	0	0	0
Financing Plan Total	36,825,000	325,000	0	3,500,000	16,200,000	16,700,000	100,000	0	0	0	0	0	36,500,000
Operating Impact	0	0	0	0	0	0	0	0	0	0	0	0	0

CHANGES FROM PRIOR YEAR CIP

No changes from previous CIP.

PROJECT DESCRIPTION & JUSTIFICATION

The redesign and construction of the Beauregard Street and Seminary Road intersection was recommended as a project in the 2012 adopted Beauregard Small Area Plan. The intersection was planned to be reconfigured in the form of an at-grade intersection, referred to as an “ellipse” due to its geometric layout. The primary benefit of the elliptical configuration is the reduction of potential vehicle conflict points due to the elimination of the left turn movements along Seminary Road by eliminating left turns from both directions and redirecting those movements as right turns.

Due to reduced expectancy in development and updated travel patterns and data, the city plans to conduct an updated traffic study, reevaluate the ellipse concept and explore alternatives to address existing and projected traffic conditions while also considering multi-modal accommodations.

The study will not only identify the preferred alternative intersection improvement and concept-level design, but also include a cost estimate of the preferred alternative which will assist in determining a plan to obtain additional funding to finalize design and construct the project. The traffic analysis and study will occur during FY 2022. Community engagement will begin in FY 2022 and a complete concept design will be determined by FY 2023.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

Beauregard Small Area Plan

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

STREET RECONSTRUCTION & RESURFACING OF MAJOR ROADS

DOCUMENT SUBSECTION: Streets & Bridges
 MANAGING DEPARTMENT: Department of Transportation and Environmental Services

PROJECT LOCATION: Citywide
 REPORTING AREA: Citywide

PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation

PROJECT CATEGORY: 1
 ESTIMATE USEFUL LIFE: 11 - 15 Years

Street Reconstruction & Resurfacing of Major Roads													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Through 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Total FY 2022 - FY 2031
Expenditure Budget	106,009,676	45,704,576	6,394,000	5,835,000	5,436,400	5,599,500	4,984,900	6,328,500	6,149,400	6,333,900	6,523,900	6,719,600	60,305,100
Financing Plan													
Cash Capital	5,995,679	5,995,679	0	0	0	0	0	0	0	0	0	0	0
GO Bonds	58,917,034	24,008,934	3,197,000	3,635,000	2,936,400	3,099,500	2,484,900	3,828,500	3,649,400	3,833,900	4,023,900	4,219,600	34,908,100
State/Federal Grants	11,749,963	11,749,963	0	0	0	0	0	0	0	0	0	0	0
TIP	12,650,000	3,950,000	0	700,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	8,700,000
VDOT State Revenue Sharing	16,697,000	0	3,197,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	16,697,000
Financing Plan Total	106,009,676	45,704,576	6,394,000	5,835,000	5,436,400	5,599,500	4,984,900	6,328,500	6,149,400	6,333,900	6,523,900	6,719,600	60,305,100
Operating Impact	0	0	0	0	0	0	0	0	0	0	0	0	0

CHANGES FROM PRIOR YEAR CIP

Funding plan updated to align with state grant schedule.

PROJECT DESCRIPTION & JUSTIFICATION

The City of Alexandria maintains and manages more than 561 lane miles of paved streets to ensure the safe and efficient movement of people, goods and services. T&ES completed a pavement condition index survey (PCI) in early 2019. Details from the survey, which is completed every three years, are used to rank and prioritize the resurfacing of City streets and produce a multi-year resurfacing plan. A list of planned resurfacing projects planned for FY 2022 - 2024 can be found on the next page. Due to the possibility of unexpected or emergency repairs, utility and/or development coordination, or if efficiencies can be achieved by staging projects together, the list is subject to change.

Beginning in FY 2015, staff consolidated the City's entire pavement management program (alley reconstruction/resurfacing and street resurfacing/reconstruction) into one CIP project. This became the City's multi-year pavement management program. Where applicable, Complete Streets and Vision Zero infrastructure will be incorporated into street resurfacing projects. Similar to previous years, staff intends to apply for additional VDOT Primary Extension grant funding.

The project list below is a draft and will be finalized before final budget adoption in May based on VDOT Revenue Sharing and Primary Extension agreement, utility and development coordination.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

Pavement management inventory updated in 2019

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

Street Reconstruction & Resurfacing of Major Roads (continued)

Street Reconstruction & Resurfacing of Major Roads FY 2021 – FY 2023 Project List

Fiscal Year 2022		
Street(s)	Avg. PCI Score	Estimated Cost
Daingerfield Road from Duke Street to Diagonal Road	23	\$ 65,000
Diagonal Road from Dangerfield Road to King Street	15	\$ 85,000
Hume Avenue from Commonwealth Avenue to Richmond Highway	48	\$ 130,000
Farm Road from Beverley Drive to Circle Drive	38	\$ 220,000
Fillmore Avenue from Seminary Road to End	22	\$ 150,000
Callahan Drive from King Street to Duke Street	53	\$ 60,000
Wellington Road from Beverley Drive to Chalfonte Drive	37	\$ 95,000
North and South Alfred Street from First Street to Church Road	42	\$ 280,000
North and South Washington Street from Duke to Cameron Street	42	\$ 600,000
North Howard Street from North Jordan Street to Raleigh Avenue	30	\$ 250,000
Executive Avenue from Kentucky Avenue to Mount Vernon Avenue	12	\$ 70,000
Kentucky Avenue from Old Dominion Boulevard to Russell Road	16	\$ 60,000
Alabama Avenue from Kentucky Avenue to Carolina Place	34	\$ 95,000
East and West Luray Avenue from West Braddock Avenue to Leslie Avenue	38	\$ 180,000
Monticello Boulevard from Cameron Mills to Russell Road	34	\$ 95,000
Cameron Mills Road from Allison Street Virginia Avenue	28	\$ 85,000
Allison Street from Valley Drive to Old Dominion Boulevard	27	\$ 200,000
Echols Avenue from Seminary Road to North Stevens Street	29	\$ 50,000
Burgess Avenue Entire Length (Exclude Service Road)	29	\$ 76,000
Aspen Street from Landover Street to Russell Road (Exclude Service Road)	24	\$ 40,000
Guthrie Avenue from Landover Street to Mosby Street (Exclude Service Road)	23	\$ 30,000
Holly Street from Aspen Street to West Mt Ida Avenue	48	\$ 100,000
Birch Street from Holly Street to Russell Road	39	\$ 45,000
Pine Street from Holly Street to Russell Road	23	\$ 45,000
Evans Lane from Richmond Highway (Route 1) to East Reed Avenue	33	\$ 80,000
Lynhaven Drive from Wilson Avenue to End	33	\$ 50,000
Montrose Avenue from East Raymond Avenue to Richmond Highway (Route 1)	30	\$ 105,000
Stewart Avenue from Mount Vernon Avenue to East Randolph Avenue	18	\$ 55,000
Anderson Lane from West Windsor Avenue to Richards Lane	32	\$ 45,000
Richards Lane from Anderson Lane to West Windsor Avenue	34	\$ 50,000
North Garland Street from Fort Worth Avenue to End	19	\$ 70,000
Richenbacher Avenue from North Van Dorn Street to North Pickett Street	25	\$ 125,000
South Gordon Street from Duke Street to Wheeler Avenue	39	\$ 85,000
Venable Avenue from South Jordan Street to South Iris Street	37	\$ 33,000
Underwood Place from South Ingram Street to End	29	\$ 50,000
Cathedral Drive from Trinity Drive to End	25	\$ 50,000
Benning Court from North Chambliss Street to End	64	\$ 35,000
South Ingram Street from Duke Street to Vermont Avenue	53	\$ 60,000
Greenwood Place from Seminary Road to End	11	\$ 40,000
Knox Place Entire Length	26	\$ 50,000
Rutland Place from North Pickett Street to End	27	\$ 45,000
East and West Nelson Avenue from Russell Road to Leslie Avenue	35	\$ 200,000
George Mason Place from Monticello Boulevard to End	33	\$ 45,000
Westminster Place from Monticello Boulevard to End	34	\$ 45,000
Terrett Avenue from East Mt Ida to East Randolph Avenue	67	\$ 50,000
Usher Avenue from South Floyd Street to South Early Street	36	\$ 52,000
Colfax Avenue from Seminary Road to North Rosser Street	43	\$ 50,000
North Beauregard Street from Seminary Road to King Street	30	\$ 360,000
King James Place from Seminary Road to End	29	\$ 45,000
Dulaney Street from Duke Street to End	30	\$ 75,000
East and West Abingdon Drive from First Street to End	26	\$ 299,000
West Braddock Road from King Street to Russell Road	32	\$ 550,000
North Early Street from West Braddock Road to End	35	\$ 120,000
Eisenhower Avenue from Mill Road to Holland Lane	30	\$ 550,000
Citywide Alley Resurfacing / Concrete Panel Repair		\$ 200,000
Pavement Markings		\$ 250,000
Additional Costs and Contingency		\$ 454,000
Total Fiscal Year 2022	32	\$ 6,394,000

Street Reconstruction & Resurfacing of Major Roads (continued)

Street Reconstruction & Resurfacing of Major Roads FY 2021 – FY 2023 Project List

Fiscal Year 2023		
Street(s)	Avg. PCI Score	Estimated Cost
Eisenhower Avenue Concrete from 1000' W of Cameron Park Place to Lake Cook En	40	\$ 536,000
Gibbon Street from South Payne Street to South Union Street	40	\$ 260,000
Griffith Place from Fort Williams to End	18	\$ 50,000
John Carlyle Street from Eisenhower Avenue to Duke Street	40	\$ 300,000
North Dearing Street from King Street to End	31	\$ 40,000
Sanger Avenue from South Van Dorn to End	22	\$ 200,000
Quantrell Lane from Lincolnia Road to Beauregard Street	20	\$ 75,000
Templeton Place from Fort Williams Parkway to End	17	\$ 35,000
Bennett Street from Saylor Place to End	19	\$ 60,000
Sterling Avenue from North Quaker Lane to End	24	\$ 43,000
Earl Street from Oronoco Street to Princess Street	19	\$ 25,000
Tower Court from South Whiting Street to End	19	\$ 20,000
Florence Drive from West Glebe Road to End	30	\$ 18,000
Four Mile Road from Mount Vernon to Florence Drive	40	\$ 70,000
West Caton Avenue from Sanford Avenue to Commonwealth Avenue	20	\$ 50,000
Reinekers Lane from Diagonal Road to Duke Street	25	\$ 35,000
Albany Avenue from King Street to End	32	\$ 19,000
Arell Court from Duke Street to End	36	\$ 40,000
Calhoun Avenue from North Rosser Street to End	21	\$ 45,000
Chelsea Court from Fort Williams to End	23	\$ 34,000
Clermont Avenue from Eisenhower Avenue to End	20	\$ 35,000
Cockrell Court from Duke Street to End	23	\$ 40,000
Coventry Lane from Gibbons Street to End	24	\$ 50,000
East and West Oak Street from Mount Vernon Avenue to Russell Road	23	\$ 160,000
East Uhler Avenue from Mount Vernon Avenue to Commonwealth Avenue	24	\$ 30,000
Englehardt Lane from Jamieson Avenue to End	21	\$ 25,000
Farrington Avenue from South Van Dorn to the City Limits	20	\$ 55,000
Saylor Place Entire Length	12	\$ 125,000
Garden Drive from Usher Avenue to Vermont Avenue	26	\$ 20,000
South 28th Street from King Street to End	35	\$ 30,000
North Stevenson Avenue from Fillmore Avenue to End	21	\$ 30,000
Palmer Place from Polk Avenue to End	22	\$ 40,000
Pender Court from Palmer Place to End	22	\$ 20,000
Hancock Avenue from West Braddock Road to End	39	\$ 40,000
Key Drive from Francis Hammond Parkway to End	21	\$ 50,000
Jackson Place from Woodland Terrace to Tyler Place	26	\$ 50,000
Valley Drive from Preston Road to West Braddock Road	27	\$ 325,000
Lasalle Avenue from North Pickett Street to Juliana Place	26	\$ 22,000
Longview Drive from Duke Street to End	37	\$ 55,000
Loyola Avenue from North Howard Street to Stonebridge Road	26	\$ 60,000
Mark Center Drive from Seminary Road to North Beauregard Street	20	\$ 291,000
Maris Avenue from North Van Dorn Street to End	39	\$ 35,000
Beverly Drive from Valley Drive to Washington Circle	25	\$ 90,000.00
Moss Place from Fort Worth Avenue to End	24	\$ 48,000
Notabene Drive from Old Dominion Boulevard to Four Mile Road	26	\$ 37,000
North Quaker Lane from Duke Street to West Braddock Road	52	\$ 300,000
Pommander Walk Street from Franklin Street to South Union Street	22	\$ 30,000
North Frost Street from Lawrence Street to Seminary Road	23	\$ 50,000
Potomac Greens Drive from Slaters Lane to End	41	\$ 200,000
Pine Street from Russell Road to Holly Street	23	\$ 29,000
Queen Street from North West Street to North Union Street	25	\$ 90,000
Raleigh Avenue Entire Length	40	\$ 130,000
Richmarr Place from North Latham Street to End	25	\$ 30,000
Rosecrest Avenue from West Custis Avenue to Russell Road	23	\$ 35,000
South Floyd Street from Duke Street to Wheeler Avenue	32	\$ 35,000
Sunset Drive from King Street to Commonwealth Avenue	33	\$ 40,000
Surry Place from North Latham Street to End	24	\$ 20,000
Suter Street from Earl Street to End	39	\$ 26,000
Sweeley Street from Duke Street to Colvin Street	33	\$ 27,000
Talbot Place from North Pegram Street to Prospect Place	22	\$ 30,000
Edsall Road from South Van Dorn to Cameron Station Road	31	\$ 150,000
Jamieson Avenue from Anderson Lane to End	38	\$ 325,000
Vasser Road from Cambridge Road to End (Vasser Place)	19	\$ 170,000
Citywide Alley Resurfacing		\$ 200,000
Additional Costs and Contingency		\$ 200,000
Total Fiscal Year 2023	27	\$ 5,835,000

Street Reconstruction & Resurfacing of Major Roads (continued)

Street Reconstruction & Resurfacing of Major Roads FY 2021 – FY 2023 Project List

Fiscal Year 2024		
Street(s)	Avg. PCI Score	Estimated Cost
Duke Street from Dulany Street to South Patrick Street	36	\$605,000
South Washington Street from I-395 to Duke Street	35	\$750,000
North Washington Street from Cameron Street to First Street	36	\$700,000
King Street from Janneys Lane to Dangerfield Road	20	\$1,200,000
Cloverway Drive from Dartmouth Road to Janneys Lane	32	\$100,000
Holland Street from Duke Street to Eisenhower Avenue	29	\$90,000
Dale Street from Edison Street to End	19	\$128,000
Oakley Place from East Timber Branch Parkway to End	15	\$50,000
Orleans Place from North Gaillard Street to End	16	\$50,000
Ormond Avenue from North Gaillard Street to North Howard Street	15	\$50,000
Sylvan Court from Trinity Drive to End	17	\$40,000
Edison Street from West Reed Avenue to End	38	\$75,000
North Clarens Street from Trinity Drive to End	14	\$50,000
North and South Abingdon Drive from First Street to End	29	\$300,000
North Breckinridge Place from Lincolnia Road to End	10	\$90,000
Murray Avenue from Swann Avenue to Calvert Avenue	22	\$50,000
Oakville Street from Swann Avenue to Fannon Street	30	\$53,000
Fannon Street from Richmond Highway (Route 1) to End	31	\$35,400
Juliana Place from North Pickett Street to End	16	\$160,000
Citywide Alley Resurfacing / Concrete Panel Repair		\$400,000
Additional Costs and Contingency		\$300,000
PCI Analysis		\$160,000
Total Fiscal Year 2024	24	\$ 5,436,400

NOTE: During FY 2024, the PCI scores will be reevaluated and projects will be reprioritized. Costs are estimated at this time and are subject to change.