TRANSPORTATION & TRANSIT

Transportation Improvement Program (TIP)
Proposed FY 2021 – FY 2030 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 NVTA 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 NVTA 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.

Details of Revenues

Revenues	FY 2020 Approved	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	Total FY 21-FY30
TIP Reserved Real Estate Tax Rate	$8,970,966	$9,364,854	$9,552,151	$9,743,194	$9,938,058	$10,136,819	$10,339,556	$10,546,347	$10,757,274	$10,972,419	$11,191,867	$102,542,539
Use of Fund Balance	$0	$0	$33,803	$0	$0	$0	$0	$0	$0	$0	$0	$33,803
Total TIP Revenues	$8,970,966	$9,364,854	$9,585,954	$9,743,194	$9,938,058	$10,136,819	$10,339,556	$10,546,347	$10,757,274	$10,972,419	$11,191,867	$102,576,342

Summary of Operating Expenditures, Debt Service and Capital Projects

Expenditure Overview	FY 2020 Approved	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	Total FY 21-FY30
TIP Operating	$5,475,720	$5,887,489	$6,032,257	$6,180,425	$6,313,913	$6,451,099	$6,592,115	$6,737,096	$6,886,187	$7,039,534	$7,197,294	$65,317,411
TIP Operating - WMATA	$1,878,169	$1,125,500	$2,231,107	$1,173,829	$1,712,254	$1,538,546	$1,864,617	$1,692,004	$1,770,585	$1,623,592	$1,623,592	$16,355,625
TIP Capital Projects	$1,030,566	$1,747,104	$667,000	$1,903,300	$1,460,000	$1,765,500	$1,509,000	$1,833,500	$1,871,500	$1,906,800	$1,946,300	$16,610,004
TIP Debt Service (2013 $6.75M Bond Issuance)	$586,511	$604,761	$535,088	$357,154	$333,662	$323,474	$314,604	$305,642	$296,738	$514,587	$499,688	$4,085,398
Total TIP Expenditures	$8,970,966	$9,364,854	$9,465,452	$9,614,709	$9,819,830	$10,078,619	$10,280,336	$10,568,242	$10,825,009	$11,084,513	$11,266,874	$102,368,438

Transportation Improvement Program (TIP)
Proposed FY 2021 – FY 2030 Sources and Uses

Details of Operating Expenditures

Non-motorized Transportation												
Capital Bikeshare	$443,908	$670,000	$703,500	$738,675	$775,609	$814,389	$855,109	$897,864	$942,757	$989,895	$1,039,390	$8,427,188
Public Transit												
DASH Operating	$2,391,132	$2,423,801	$2,460,158	$2,497,060	$2,534,516	$2,572,534	$2,611,122	$2,650,289	$2,690,043	$2,730,394	$2,771,350	$25,941,265
Supplemental Trolley Operations	$210,025	$216,372	$219,618	$222,912	$226,256	$229,650	$233,095	$236,591	$240,140	$243,742	$247,398	$2,315,774
Maintenance												
Bus Shelter Maintenance	$97,841	$100,799	$102,311	$103,845	$105,403	$106,984	$108,589	$110,218	$111,871	$113,549	$115,252	$1,078,820
Metroway Maintenance	$60,000	$61,814	$62,741	$63,682	$64,637	$65,607	$66,591	$67,590	$68,603	$69,632	$70,677	$661,573
Street Repair Budget	$801,360	$868,254	$881,278	$894,497	$907,915	$921,534	$935,357	$949,387	$963,628	$978,082	$992,753	$9,292,684
Trail Maintenance	$10,000	$20,000	$40,000	$60,000	$61,800	$63,654	$65,564	$67,531	$69,556	$71,643	$73,792	$593,540
King Street Station Operations	$0	$65,000	$65,975	$66,965	$67,969	$68,989	$70,023	$71,074	$72,140	$73,222	$74,320	$695,677
Other Costs												
Transportation Implementation Staff - T&ES Positions	$636,125	$599,882	$617,878	$636,415	$655,507	$675,172	$695,428	$716,290	$737,779	$759,913	$782,710	$6,876,975
Indirect Costs to General Fund	$825,329	$861,567	$878,798	$896,374	$914,301	$932,587	$951,239	$970,264	$989,669	$1,009,463	$1,029,652	$9,433,914
TIP Operating Costs	$5,475,720	$5,887,489	$6,032,257	$6,180,425	$6,313,913	$6,451,099	$6,592,115	$6,737,096	$6,886,187	$7,039,534	$7,197,294	$65,317,411

Details of Capital Projects

Transportation Improvement Program (TIP) Projects Capital Subsection	FY 2020 Approved	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	Total FY 21-FY30
Public Transit												
WMATA Capital Contributions (TIP Cash)	$0	$1,100,000	$250,000	$500,000	$0	$0	$0	$0	$0	$0	$0	$1,850,000
DASH Bus Fleet Replacements (TIP Cash)	$607,994	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Streets & Bridges												
Street Reconstruction & Resurfacing/Major Rd. (TIP Cash)	$0	$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	$7,700,000
Smart Mobility												
Transportation Technologies (TIP Cash)	$0	$250,000	$0	$265,300	$0	$281,500	$0	$298,500	$309,500	$316,800	$326,300	$2,047,900
Capitalized Positions												
Sustainability Coordinator (through Environmental Restoration	$51,324	$53,880	$57,000	$60,000	$63,000	$67,000	$71,000	$75,000	$79,000	$83,000	$88,000	$696,880
Transportation Implementation Staff - DPI Positions	$371,248	$343,224	$360,000	$378,000	$397,000	$417,000	$438,000	$460,000	$483,000	$507,000	$532,000	$4,315,224
Total CIP Transportation Improvement Program	$1,030,566	$1,747,104	$667,000	$1,903,300	$1,460,000	$1,765,500	$1,509,000	$1,833,500	$1,871,500	$1,906,800	$1,946,300	$16,610,004

Northern Virginia Transportation Authority (NVTA) – 30% Funds
Proposed FY 2021 – FY 2030 Sources and Uses
Revenues, Operating Expenditures, and Capital Projects

Revenues/Expenditures	Approved FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	Total FY 21 - 30
Revenues												
NVTA 30%	$ 4,611,911	$ 5,056,000	$ 5,198,000	$ 5,344,000	$ 5,494,000	$ 5,648,000	$ 5,806,000	$ 5,969,000	$ 6,136,000	$ 6,308,000	$ 6,485,000	$ 57,444,000
Appropriated Revenue	**$ 4,611,911**	**$ 5,056,000**	**$ 5,198,000**	**$ 5,344,000**	**$ 5,494,000**	**$ 5,648,000**	**$ 5,806,000**	**$ 5,969,000**	**$ 6,136,000**	**$ 6,308,000**	**$ 6,485,000**	
Capital Details												
DASH Bus Fleet Replacements	$ 2,154,000	$ -	$ -	$ 1,500,000	$ 1,500,000	$ -	$ 1,500,000	$ 1,500,000	$ -	$ 1,500,000	$ 1,500,000	$ 9,000,000
DASH Hybrid Bus and Trolley Battery Pack Replacement	$ 521,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
WMATA Capital Contributions	$ 363,911	$ 3,483,000	$ 3,625,000	$ 2,271,000	$ 2,421,000	$ 4,075,000	$ 333,000	$ 424,000	$ 2,017,000	$ 613,000	$ 711,000	$ 19,973,000
Subtotal, Capital Projects	**$ 3,038,911**	**$ 3,483,000**	**$ 3,625,000**	**$ 3,771,000**	**$ 3,921,000**	**$ 4,075,000**	**$ 1,833,000**	**$ 1,924,000**	**$ 2,017,000**	**$ 2,113,000**	**$ 2,211,000**	**$ 28,973,000**
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	$ 1,573,000	$ 15,730,000
Transit Corridor "C" - West End Transitway Operations	$ -	$ -	$ -	$ -	$ -	$ -	$ 2,400,000	$ 2,472,000	$ 2,546,000	$ 2,622,000	$ 2,701,000	$ 12,741,000
Subtotal, Operating	**$ 1,573,000**	**$ 1,573,000**	**$ 1,573,000**	**$ 1,573,000**	**$ 1,573,000**	**$ 1,573,000**	**$ 3,973,000**	**$ 4,045,000**	**$ 4,119,000**	**$ 4,195,000**	**$ 4,274,000**	**$ 28,471,000**
Total, Operating & Capital	**$ 4,611,911**	**$ 5,056,000**	**$ 5,198,000**	**$ 5,344,000**	**$ 5,494,000**	**$ 5,648,000**	**$ 5,806,000**	**$ 5,969,000**	**$ 6,136,000**	**$ 6,308,000**	**$ 6,485,000**	**$ 57,444,000**
Total Planned Revenue Sources less Expenditures	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

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

	FY 2020 and Before	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2021 - FY 2030
Transportation												
Public Transit												
DASH Bus Fleet Replacements	20,929,000	0	0	12,465,600	9,288,200	0	9,332,200	19,343,700	0	8,740,800	21,006,900	80,177,400
DASH Facility and Fleet Expansion	11,933,161	0	6,422,147	2,688,317	7,648,551	9,063,302	0	0	0	0	0	25,822,317
DASH Hybrid Bus and Trolley Powertrain Replacement	1,650,000	0	412,000	371,400	382,500	394,000	347,800	298,600	184,500	0	0	2,390,800
Eisenhower Metrorail Station Improvements	6,794,840	0	0	0	0	0	0	0	0	0	0	0
King Street Metrorail Station Area Improvements	16,781,242	0	0	0	0	0	0	0	0	0	0	0
Potomac Yard Metrorail Station	384,725,000	0	0	0	0	0	0	0	0	0	0	0
Transit Access & Amenities	4,002,649	823,123	500,000	400,000	0	0	0	0	0	0	0	1,723,123
Van Dorn Metrorail Station Area Improvements	1,331,000	0	0	0	0	0	0	0	0	0	0	0
WMATA Capital Contributions	148,501,034	17,600,000	15,425,000	16,021,000	16,421,000	16,875,000	15,600,000	16,100,000	16,600,000	17,100,000	17,600,000	165,342,000
Public Transit Total	596,647,926	18,423,123	22,759,147	31,946,317	33,740,251	26,332,302	25,280,000	35,742,300	16,784,500	25,840,800	38,606,900	275,455,640
High Capacity Transit Corridors												
Transit Corridor "A" - Route 1	29,853,743	0	0	0	0	0	0	0	0	0	0	0
Transit Corridor "B" - Duke Street	12,190,000	0	0	0	0	0	0	0	0	0	0	0
Transit Corridor "C" - West End Transitway	5,400,000	0	8,171,388	4,028,612	23,610,244	33,589,753	0	0	0	0	0	69,399,997
Transitway Enhancements	1,000,000	454,491	0	0	0	0	0	0	0	0	0	454,491
High Capacity Transit Corridors Total	48,443,743	454,491	8,171,388	4,028,612	23,610,244	33,589,753	0	0	0	0	0	69,854,488
Non-Motorized Transportation												
Access Improvements at Landmark	0	0	0	0	3,950,230	2,384,400	0	0	0	0	0	6,334,630
Backlick Run Multi-Use Paths	2,851,894	0	2,210,003	2,100,648	300,000	0	0	0	0	0	0	4,610,651
Bicycle Parking at Transit	505,000	0	0	0	0	0	0	0	0	0	0	0
BRAC & Central City Neighborhood Protection Plan	335,000	0	0	0	0	0	0	0	0	0	0	0
Cameron & Prince Bicycle & Pedestrian Facilities	240,000	0	0	0	0	0	0	0	0	0	0	0
Capital Bikeshare	4,307,757	350,000	400,000	250,000	250,000	0	0	0	0	0	0	1,250,000
Complete Streets	9,229,888	860,280	1,073,000	786,000	800,000	814,000	829,000	845,000	862,000	879,000	897,000	8,645,280
Duke Street and West Taylor Run Safety Improvements	2,545,000	0	0	0	3,905,460	0	0	0	0	0	0	3,905,460
Holmes Run Trail Connector	1,286,218	0	0	0	0	0	0	0	0	0	0	0
Mt. Vernon Avenue North Complete Streets	520,000	0	0	0	0	0	0	0	0	0	0	0
Mt. Vernon Trail @ East Abingdon	850,000	0	0	0	0	0	0	0	0	0	0	0
Old Cameron Run Trail	3,545,000	0	0	1,646,273	1,122,727	2,045,000	0	0	0	0	0	4,814,000
Seminary / Howard Safety Improvements	378,000	0	0	0	0	0	0	0	0	0	0	0
Shared-Use Paths	1,041,357	0	150,000	0	150,000	0	150,000	0	0	0	0	450,000
Sidewalk Capital Maintenance	4,389,469	600,000	309,000	636,600	327,900	675,400	347,800	716,500	369,000	760,100	391,500	5,133,800
Van Dorn/Beauregard Bicycle Facilities	1,458,869	0	0	0	0	0	0	0	0	0	0	0
Alexandria Mobility Plan	840,000	0	0	0	0	0	0	0	0	0	0	0
Non-Motorized Transportation Total	34,323,452	1,810,280	4,142,003	5,419,521	10,806,317	5,918,800	1,326,800	1,561,500	1,231,000	1,639,100	1,288,500	35,143,821

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

	FY 2020 and Before	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2021 - FY 2030
Smart Mobility												
Citywide Parking - Parking Study	150,000	0	0	0	0	0	0	0	0	0	0	0
Citywide Parking - Parking Technologies	773,629	629,736	450,000	250,000	0	0	0	0	0	0	0	1,329,736
Citywide Trans. Mgmt. Tech. - Broadband Communications Link	1,000,000	0	0	0	0	0	0	0	0	0	0	0
Citywide Trans. Mgmt. Tech. - Intelligent Transportation Systems (ITS) Integration	15,009,804	223,123	1,000,000	400,000	600,000	3,084,550	0	0	0	0	0	5,307,673
Citywide Trans. Mgmt. Tech. - Traffic Control Upgrade	450,000	100,000	103,000	138,200	175,200	202,800	208,800	215,000	221,400	228,200	235,100	1,827,700
Citywide Trans. Mgmt. Tech. - Transportation Technologies	1,370,312	250,000	0	265,300	0	281,500	0	298,500	309,500	316,800	326,300	2,047,900
DASH Electronic Fare Payment	450,000	750,000	0	0	0	0	0	0	0	0	0	750,000
DASH Technologies	0	0	0	600,000	255,745	0	0	0	0	0	0	855,745
Traffic Adaptive Signal Control	0	0	7,000,000	0	0	0	0	0	0	0	0	7,000,000
Transit Signal Priority	1,255,491	0	0	0	0	0	0	0	0	0	0	0
Smart Mobility Total	20,459,236	1,952,859	8,553,000	1,653,500	1,030,945	3,568,850	208,800	513,500	530,900	545,000	561,400	19,118,754
Streets and Bridges												
Bridge Repairs	9,544,975	1,445,000	1,844,700	1,758,900	1,800,600	2,178,500	2,369,300	2,583,200	3,433,600	4,159,400	3,314,000	24,887,200
City Standard Construction Specifications	200,000	0	0	0	0	0	0	0	0	0	0	0
East Glebe & Route 1	4,600,000	0	0	0	0	0	0	0	0	0	0	0
Eisenhower Avenue Roadway Improvements	9,365,631	0	0	0	0	0	0	0	0	0	0	0
Fixed Transportation Equipment	23,290,971	850,000	875,500	2,493,400	956,300	985,000	1,043,500	1,074,800	1,107,000	1,140,300	1,207,100	11,732,900
Four Mile Run Bridge Program	0	6,000,000	7,000,000	7,000,000	0	0	0	0	0	0	0	20,000,000
King & Beauregard Intersection Improvements	17,902,862	0	0	0	0	0	0	0	0	0	0	0
Seminary Road at Beauregard Street Ellipse	425,000	0	0	3,500,000	16,200,000	16,700,000	0	0	0	0	0	36,400,000
Street Reconstruction & Resurfacing of Major Roads	40,204,576	5,500,000	5,665,000	5,835,000	5,436,400	5,599,500	4,984,900	6,328,500	6,149,400	6,333,900	6,523,900	58,356,500
Van Dorn Metro Multimodal Bridge (w/ Eisenhower West)	500,000	0	0	0	0	0	0	0	0	0	0	0
Streets and Bridges Total	106,034,015	13,795,000	15,385,200	20,587,300	24,393,300	25,463,000	8,397,700	9,986,500	10,690,000	11,633,600	11,045,000	151,376,600
Grand Total	**805,908,371**	**36,435,753**	**59,010,738**	**63,635,250**	**93,581,057**	**94,872,705**	**35,213,300**	**47,803,800**	**29,236,400**	**39,658,500**	**51,501,800**	**550,949,303**

TRANSIT ACCESS & AMENITIES

DOCUMENT SUBSECTION:	Public Transit	PROJECT LOCATION:	Citywide
MANAGING DEPARTMENT:	Department of Transportation and Environmental Services	REPORTING AREA:	Citywide
		PROJECT CATEGORY:	3
PRIMARY STRATEGIC THEME:	Theme 10: Multimodal Transportation	ESTIMATE USEFUL LIFE:	Varies

Transit Access & Amenities

	A (B + M) Total Budget & Financing	B Through 2020	C FY 2021	D FY 2022	E FY 2023	F FY 2024	G FY 2025	H FY 2026	I FY 2027	J FY 2028	K FY 2029	L FY 2030	M (C:L) Total FY 2021 - FY 2030
Expenditure Budget	5,725,772	4,002,649	823,123	500,000	400,000	0	0	0	0	0	0	0	1,723,123
Financing Plan													
Cash Capital	435,223	435,223	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	1,907,426	823,123	500,000	400,000	0	0	0	0	0	0	0	1,723,123
TIP	50,000	50,000	0	0	0	0	0	0	0	0	0	0	0
Financing Plan Total	5,725,772	4,002,649	823,123	500,000	400,000	0	0	0	0	0	0	0	1,723,123
Additional 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 and passenger fare revenue.

The project is primarily funded by federal and state grants for the manufacture and installation of bus shelters and site work such as concrete pads. The City is planning to adopt an updated bus shelter design in Spring 2020 with installation beginning in Fall 2020. Depending on the cost of shelters, these funds could pay for up to sixty bus shelters.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

City of Alexandria Transit Development Plan

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

DASH BUS FLEET REPLACEMENTS

DOCUMENT SUBSECTION:	Public Transit	PROJECT LOCATION:	Citywide
MANAGING DEPARTMENT:	Department of Transportation and Environmental Services	REPORTING AREA:	Citywide
		PROJECT CATEGORY:	1
PRIMARY STRATEGIC THEME:	Theme 10: Multimodal Transportation	ESTIMATE USEFUL LIFE:	11 - 15 Years

DASH Bus Fleet Replacements

	A (B + M) Total Budget & Financing	B Through 2020	C FY 2021	D FY 2022	E FY 2023	F FY 2024	G FY 2025	H FY 2026	I FY 2027	J FY 2028	K FY 2029	L FY 2030	M (C:L) Total FY 2021 - FY 2030
Expenditure Budget	101,106,400	20,929,000	0	0	12,465,600	9,288,200	0	9,332,200	19,343,700	0	8,740,800	21,006,900	80,177,400
Financing Plan													
Cash Capital	1,400,000	1,400,000	0	0	0	0	0	0	0	0	0	0	0
GO Bonds	31,898,700	810,000	0	0	4,732,800	3,144,100	0	3,166,100	8,171,850	0	2,870,400	9,003,450	31,088,700
NVTA 30% Funds	27,219,000	18,219,000	0	0	1,500,000	1,500,000	0	1,500,000	1,500,000	0	1,500,000	1,500,000	9,000,000
Sale of Property Revenue	500,000	500,000	0	0	0	0	0	0	0	0	0	0	0
State/Federal Grants (Unsecured	40,088,700	0	0	0	6,232,800	4,644,100	0	4,666,100	9,671,850	0	4,370,400	10,503,450	40,088,700
Financing Plan Total	101,106,400	20,929,000	0	0	12,465,600	9,288,200	0	9,332,200	19,343,700	0	8,740,800	21,006,900	80,177,400
Additional Operating Impact	0	0	0	0	0	0	0	0	0	0	0	0	0

CHANGES FROM PRIOR YEAR CIP

Project recosted as part of the development of the Proposed FY 2021 - FY 2030 CIP.

PROJECT DESCRIPTION & JUSTIFICATION

This project provides for the replacement of buses 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. Based on a recent recommendation by the ATC Board of Directors, DASH has discontinued its previous practice of purchasing hybrid-propulsion buses to fulfill its fleet replacement needs. Beginning in FY 2018, DASH began purchasing clean diesel 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 vehicles that are 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 electric buses over the next 10-15 years. The first six electric buses in the DASH fleet will arrive in the summer of 2020, funded by grants from the Virginia VW Environmental Mitigation Trust. Staff is currently working with consultants on a transition study to assess life-cycle costs and other needs associated with moving to an all-electric fleet by approximately FY 2035. Since the up-front cost of an electric bus much is higher ($1,150,000/bus) than a clean diesel ($550,000/bus), these buses will also 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 10-15 years.

It is possible that maintenance costs for electric buses may be less than clean diesel buses over the full lifespan of the bus, however this cannot yet be accurately determined at this time. As with hybrid buses, electric buses can require a mid-life battery pack replacement. Although the near-term battery pack replacement costs will be reduced due to the discontinuation of hybrids, DASH anticipates that some of the future CIP funds that had previously been assumed for hybrid battery pack replacement will now be used for electric battery replacement.

In conjunction with the Facility & Fleet Expansion project and several regional- and state-sponsored grants, DASH has secured funds to upgrade the planned garage expansion and existing bus facility to include electric infrastructure and equipment to accommodate new electric vehicles.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

Eco-City Charter

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

DASH FACILITY AND FLEET EXPANSION

DOCUMENT SUBSECTION:	Public Transit	PROJECT LOCATION:	3000 Business Center Drive
MANAGING DEPARTMENT:	Department of Transportation and Environmental Services	REPORTING AREA:	Citywide
		PROJECT CATEGORY:	3
PRIMARY STRATEGIC THEME:	Theme 10: Multimodal Transportation	ESTIMATE USEFUL LIFE:	30-40 Years

DASH Facility and Fleet Expansion

	A (B + M) Total Budget & Financing	B Through 2020	C FY 2021	D FY 2022	E FY 2023	F FY 2024	G FY 2025	H FY 2026	I FY 2027	J FY 2028	K FY 2029	L FY 2030	M (C:L) Total FY 2021 - FY 2030
Expenditure Budget	37,755,478	11,933,161	0	6,422,147	2,688,317	7,648,551	9,063,302	0	0	0	0	0	25,822,317
Financing Plan													
NVTA 70% Funds	775,000	775,000	0	0	0	0	0	0	0	0	0	0	0
State/Federal Grants	36,980,478	11,158,161	0	6,422,147	2,688,317	7,648,551	9,063,302	0	0	0	0	0	25,822,317
Financing Plan Total	37,755,478	11,933,161	0	6,422,147	2,688,317	7,648,551	9,063,302	0	0	0	0	0	25,822,317
Additional Operating Impact	68,925,400	0	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	68,925,400

CHANGES FROM PRIOR YEAR CIP

Funding plan updated to align with state 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 de-commissioning 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. The new bus 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.

The facility expansion will include provisions for electric buses, including upgraded electric infrastructure and charging equipment. The Facility Expansion will also optimize the City's capacities to retire old buses and intake new buses in efforts to maintain State of Good Repair. During bus retirement, there is a three-month period of overlap where outgoing and incoming buses must both be housed and maintained in the facility. The current capacity of the facility limits the throughput and maximum capacity of this process.

This project is currently funded by three funding sources. DASH has been awarded two grants from Virginia's SMART SCALE program, which are included in the VDOT FY 2020- FY 2025 Six-Year Improvement Program (SYIP) and has been awarded NVTA 70% project funds and is included in NVTA's FY 2018-FY 2023 Six Year Program (SYP).

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	PROJECT LOCATION:	Citywide
MANAGING DEPARTMENT:	Department of Transportation and Environmental Services	REPORTING AREA:	Citywide
		PROJECT CATEGORY:	1
PRIMARY STRATEGIC THEME:	Theme 10: Multimodal Transportation	ESTIMATE USEFUL LIFE:	0 - 5 Years

DASH Hybrid Bus and Trolley Powertrain Replacement

	A (B + M) Total Budget & Financing	B Through 2020	C FY 2021	D FY 2022	E FY 2023	F FY 2024	G FY 2025	H FY 2026	I FY 2027	J FY 2028	K FY 2029	L FY 2030	M (C:L) Total FY 2021 - FY 2030
Expenditure Budget	4,040,800	1,650,000	0	412,000	371,400	382,500	394,000	347,800	298,600	184,500	0	0	2,390,800
Financing Plan													
Cash Capital	3,423,800	1,033,000	0	412,000	371,400	382,500	394,000	347,800	298,600	184,500	0	0	2,390,800
NVTA 30% Funds	617,000	617,000	0	0	0	0	0	0	0	0	0	0	0
Financing Plan Total	4,040,800	1,650,000	0	412,000	371,400	382,500	394,000	347,800	298,600	184,500	0	0	2,390,800
Additional Operating Impact	0	0	0	0	0	0	0	0	0	0	0	0	0

CHANGES FROM PRIOR YEAR CIP

Project recosted as part of the development of the Proposed FY 2021 - FY 2030 CIP.

PROJECT DESCRIPTION & JUSTIFICATION

From FY 2011 to 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. Battery packs and hybrid diesel engines will be replaced on an as-needed basis to ensure each bus reaches its 12-year expected life.

Based on a recent recommendation by the Alexandria Transit Company (DASH) Board of Directors, however, the City will no longer purchase hybrid vehicles and will instead purchase clean diesel buses to meet the near-term fleet replacement requirements. This decision is intended to improve fleet reliability, reduce costs, and accelerate the replacement of older diesel models. The City and DASH are working together to develop a transition plan from clean diesel to electric buses over the next 10-15 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 Battery Electric Buses in FY 2020 with delivery expected by late Summer of 2020.

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
		PROJECT CATEGORY:	2
PRIMARY STRATEGIC THEME:	Theme 10: Multimodal Transportation	ESTIMATE USEFUL LIFE:	30+ Years

Eisenhower Metrorail Station Improvements

	A (B + M) Total Budget & Financing	B Through 2020	C FY 2021	D FY 2022	E FY 2023	F FY 2024	G FY 2025	H FY 2026	I FY 2027	J FY 2028	K FY 2029	L FY 2030	M (C:L) Total FY 2021 - FY 2030
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
Additional 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. 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, new streets must be built, and utilities relocated. The existing Eisenhower Avenue Metrorail station entrance is approved to be modified to accommodate the development. This Small Area Plan was updated in 2020 and continues to plan for high density within the vicinity of the station.

The City of Alexandria has an agreement with adjacent developers and WMATA that addresses improvements and maintenance at the Eisenhower Avenue Metrorail station and the release of land for development. Overall improvements include renovation of the bus loop, relocation of transit services, 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 City, WMATA, and the developers finalized the Memorandum of Understanding (MOU) in late 2015. However, implementation of City-funded improvements is contingent on the redevelopment of adjacent parcels. The City is in the process of updating the agreement in 2020, to reflect the changes to Anchor Street as a result of the Small Area Plan, developer successors, and updated ownership and maintenance responsibilities.

Once complete, the level of service at the Eisenhower Avenue Metrorail Station will be enhanced by providing pedestrian friendly facilities and improving transportation infrastructure for more efficient transit operations.

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.
		PROJECT CATEGORY:	3
PRIMARY STRATEGIC THEME:	Theme 10: Multimodal Transportation	ESTIMATE USEFUL LIFE:	30+ Years

King Street Metrorail Station Area Improvements

	A (B + M) Total Budget & Financing	B Through 2020	C FY 2021	D FY 2022	E FY 2023	F FY 2024	G FY 2025	H FY 2026	I FY 2027	J FY 2028	K FY 2029	L FY 2030	M (C:L) Total FY 2021 - FY 2030
Expenditure Budget	16,781,242	16,781,242	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 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
Private Capital Contributions	0	0	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	2,550,000	2,550,000	0	0	0	0	0	0	0	0	0	0	0
Financing Plan Total	16,781,242	16,781,242	0	0	0	0	0	0	0	0	0	0	0
Additional 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 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 late 2020.

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	PROJECT LOCATION:	Potomac Yard
MANAGING DEPARTMENT:	Department of Project Implementation	REPORTING AREA:	Potomac Yard/Potomac Greens, North Potomac Yard
		PROJECT CATEGORY:	3
PRIMARY STRATEGIC THEME:	Theme 10: Multimodal Transportation	ESTIMATE USEFUL LIFE:	30+ Years

Potomac Yard Metrorail Station

	A (B + M) Total Budget & Financing	B Through 2020	C FY 2021	D FY 2022	E FY 2023	F FY 2024	G FY 2025	H FY 2026	I FY 2027	J FY 2028	K FY 2029	L FY 2030	M (C:L) Total FY 2021 - FY 2030
Expenditure Budget	384,725,000	384,725,000	0	0	0	0	0	0	0	0	0	0	0
Financing Plan													
GO Bonds (Potomac Yard Metrora	154,000,000	154,000,000	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	60,225,000	60,225,000	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
Additional Operating Impact	27,715,300	0	0	1,395,000	2,959,900	3,048,700	3,140,200	3,234,400	3,331,400	3,431,300	3,534,200	3,640,200	27,715,300

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. A new Metrorail station was included as part of the North Potomac Yard Small Area Plan, approved in June 2010 and amended in 2017. The Potomac Yard Metrorail Station Concept Development Study was completed in February 2010. In December 2010, City Council approved the Tier I Special Services Tax District for Land Bay F, G, H, and the multi-family portion of Land Bay I. In 2011, City Council approved a Tier I tax rate of 20-cents to be levied starting in 2011 and approved a Tier II Tax District (Land Bays I and J) with a 10-cent levy to be initiated in the calendar year after the Metrorail station opens. In December 2018, City Council amended the City Code to terminate the Tier II Special Tax District, due to projected real estate tax revenues due to Amazon HQ2 planned location in nearby section of Arlington.

Project development was subject to the requirements of the National Environmental Policy Act (NEPA) and Section 4(f) of the Department of Transportation Act. City Council chose Alternative B as the Locally Preferred Alternative on May 20, 2015. On June 16, 2016, City Council unanimously approved the Master Plan Amendment, Map Amendment (rezoning), and Development Special Use Permit with site plan and associated Special Use Permits to construct a Metrorail station and associated facilities in Potomac Yard. The Federal Transit Administration and the National Park Service issued their Records of Decision for the Potomac Yard Metrorail Station on October 31, 2016 and November 1, 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. Construction began in December 2019.

Alternative B was originally budgeted at $270.0 million, including the planning phase, preliminary engineering, and preparation of the design-build bid package. In April 2018 based on changes in labor, materials, and the bidding climate, City Council authorized an increase of $50 million in the Potomac Yard Metrorail Station project budget to $320 million. The City prepared an updated financial feasibility analysis in Spring 2018 that evaluated the City's ability to finance the station using only local shares. In November 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 access to the southwest from the station in a to be determined manner. The City anticipates finalizing the procurement process for the enhancements in 2020. The total project construction costs are expected to equal $370 million. The funding sources include $70 million from Northern Virginia Transportation Authority (NVTA) that has already been awarded, 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. Federal TIFIA loan funding is no longer planned to be utilized. 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". As part of the Amazon HQ2/Virginia Tech Innovation campus funding, the City will receive $50 million ($20 million federal CMAQ and $30 million state funding) to enhance the station entrance from East Glebe Road to the northern Potomac Yard Station entrance.

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 $2.9 million per year. A half year cost is assumed for FY 2022 and full-year (plus inflation) is assumed for FY 2023 onward. The Potomac Yard Station fund revenues are projected to fund this cost.

WMATA CAPITAL CONTRIBUTIONS

DOCUMENT SUBSECTION:	Public Transit	PROJECT LOCATION:	Citywide
MANAGING DEPARTMENT:	Department of Transportation and Environmental Services	REPORTING AREA:	Citywide
		PROJECT CATEGORY:	1
PRIMARY STRATEGIC THEME:	Theme 10: Multimodal Transportation	ESTIMATE USEFUL LIFE:	Varies

WMATA Capital Contributions

	A (B + M) Total Budget & Financing	B Through 2020	C FY 2021	D FY 2022	E FY 2023	F FY 2024	G FY 2025	H FY 2026	I FY 2027	J FY 2028	K FY 2029	L FY 2030	M (C:L) Total FY 2021 - FY 2030
Expenditure Budget	313,843,034	148,501,034	17,600,000	15,425,000	16,021,000	16,421,000	16,875,000	15,600,000	16,100,000	16,600,000	17,100,000	17,600,000	165,342,000
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	246,653,952	103,134,952	13,017,000	11,550,000	13,250,000	14,000,000	12,800,000	15,267,000	15,676,000	14,583,000	16,487,000	16,889,000	143,519,000
NVTA 30% Funds	26,286,911	6,313,911	3,483,000	3,625,000	2,271,000	2,421,000	4,075,000	333,000	424,000	2,017,000	613,000	711,000	19,973,000
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	4,124,000	2,274,000	1,100,000	250,000	500,000	0	0	0	0	0	0	0	1,850,000
Financing Plan Total	313,843,034	148,501,034	17,600,000	15,425,000	16,021,000	16,421,000	16,875,000	15,600,000	16,100,000	16,600,000	17,100,000	17,600,000	165,342,000
Additional 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 2021 – FY 2026 CIP and the latest estimate of the local contribution total state dedicated funding to WMATA.

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 $9.7 billion for FY 2021 – FY 2026. For FY 2021, WMATA's capital improvement budget is $1.9 billion, of which Alexandria's portion is $12.9 million. The CIP fully funds this request in FY 2021.

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 2021, the City's local match is estimated to be $4.6 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.

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
		PROJECT CATEGORY:	3
PRIMARY STRATEGIC THEME:	Theme 10: Multimodal Transportation	ESTIMATE USEFUL LIFE:	30+ Years

Transit Corridor "A" - Route 1

	A (B + M) Total Budget & Financing	B Through 2020	C FY 2021	D FY 2022	E FY 2023	F FY 2024	G FY 2025	H FY 2026	I FY 2027	J FY 2028	K FY 2029	L FY 2030	M (C:L) Total FY 2021 - FY 2030
Expenditure Budget	29,853,743	29,853,743	0	0	0	0	0	0	0	0	0	0	0
Financing Plan													
Cash Capital	0	0	0	0	0	0	0	0	0	0	0	0	0
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
Private Capital Contributions	0	0	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
Additional 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 to provide safer pedestrian access to the Metroway between Slaters Lane and First Street. This will include a limited scope project of pedestrian crossings and a wider median where possible. The goal will be to improve motorist safety and conditions for people walking to Metroway and Metrorail. In FY 2020, $5 million of funding was added as part of the Amazon Incentive Package to help fund the planning, design and construction of the Transitway north of East Glebe Road to Evans Lane. Timing of project implementation will depend on the timing and phasing 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
		PROJECT CATEGORY:	3
PRIMARY STRATEGIC THEME:	Theme 10: Multimodal Transportation	ESTIMATE USEFUL LIFE:	30+ Years

Transit Corridor "B" - Duke Street

	A (B + M) Total Budget & Financing	B Through 2020	C FY 2021	D FY 2022	E FY 2023	F FY 2024	G FY 2025	H FY 2026	I FY 2027	J FY 2028	K FY 2029	L FY 2030	M (C:L) Total FY 2021 - FY 2030
Expenditure Budget	12,190,000	12,190,000	0	0	0	0	0	0	0	0	0	0	0
Financing Plan													
NVTA 70% Funds	12,190,000	12,190,000	0	0	0	0	0	0	0	0	0	0	0
State/Federal Grants	0	0	0	0	0	0	0	0	0	0	0	0	0
Financing Plan Total	12,190,000	12,190,000	0	0	0	0	0	0	0	0	0	0	0
Additional 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

Consistent with the 2008 Transportation Master Plan, this project will construct a 4-mile segment of the high-capacity Transitway along the Duke Street corridor between Landmark Mall and the King Street – Old Town Metrorail Station. In 2011, Council adopted the High Capacity Transit Corridor Work Group recommendation for a phased implementation of the Transitway along Duke Street. The first phase would focus on Transportation Systems Management (TSM) improvements, such as Transit Signal Priority, transit queue jump lanes, new bus shelters, new transit rolling stock, pedestrian and bicycle access improvements, and dedicated transit lanes on portions of the corridor where six travel lanes exist today. The second phase recommended dedicated transit lanes along the entire corridor, where there are four travel lanes. The design would allow for a dedicated transit lane in either direction during peak travel/traffic times.

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. The City will begin the Alternatives Analysis and Environmental Study in FY 2020. Based on a refined concept design for the project, the current cost estimate is $116 million for the full build design (Phase 2), which includes planning, environmental, design, right-of-way acquisition, utility relocation, construction, and buses. Significant private (development) capital contributions, regional funding sources and/or other State/Federal funds will likely be required to move this project to the construction phase in future years. The City is currently seeking additional state funding (FY24-25 NVTA 70% funds, and FY26-27 Smart Scale funds) for the first phase of construction, and the determination of funding will be made in June 2020 (NVTA) and June 2021 (Smart Scale).

Once completed, this project will support development approved in the Eisenhower West, Eisenhower East and Landmark/Van Dorn Small Area Plans, 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	PROJECT LOCATION:	Van Dorn/Beauregard Corridor
MANAGING DEPARTMENT:	Department of Transportation and Environmental Services	REPORTING AREA:	Beauregard
		PROJECT CATEGORY:	3
PRIMARY STRATEGIC THEME:	Theme 10: Multimodal Transportation	ESTIMATE USEFUL LIFE:	30+ Years

Transit Corridor "C" - West End Transitway

	A (B + M) Total Budget & Financing	B Through 2020	C FY 2021	D FY 2022	E FY 2023	F FY 2024	G FY 2025	H FY 2026	I FY 2027	J FY 2028	K FY 2029	L FY 2030	M (C:L) Total FY 2021 - FY 2030
Expenditure Budget	74,799,997	5,400,000	0	8,171,388	4,028,612	23,610,244	33,589,753	0	0	0	0	0	69,399,997
Financing Plan													
Cash Capital	0	0	0	0	0	0	0	0	0	0	0	0	0
NVTA 70% Funds	4,600,000	2,400,000	0	2,200,000	0	0	0	0	0	0	0	0	2,200,000
State/Federal Grants	68,099,997	900,000	0	5,971,388	4,028,612	23,610,244	33,589,753	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	0	8,171,388	4,028,612	23,610,244	33,589,753	0	0	0	0	0	69,399,997
Additional Operating Impact	12,651,900	0	0	0	0	0	0	2,400,000	2,472,000	2,456,200	2,622,500	2,701,200	12,651,900

CHANGES FROM PRIOR YEAR CIP

Funding plan updated to align with state grant schedule.

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 this 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 will begin planning in FY 2020, followed by design and construction. The City anticipates these improvements to be completed prior to the BRT operations, beginning in FY 2028. In 2018, the City was awarded an additional $2.2 million in NVTA 70% funding, anticipated to become available in FY 2021. The City was also 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.

In FY 2020-21, the City will begin the procurement for the Phase 1 (TSM) design. The first phase is anticipated to begin operation by FY 2028. The City still intends to construct 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 full build alternative, 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 LOCATION:	US 1 Corridor between Braddock Road metro station and Alexandria/Arlington border
MANAGING DEPARTMENT:	Department of Transportation and Environmental Services	REPORTING AREA:	Regional
		PROJECT CATEGORY:	3
PRIMARY STRATEGIC THEME:	Theme 10: Multimodal Transportation	ESTIMATE USEFUL LIFE:	11 - 15 Years

Transitway Enhancements

	A (B + M) Total Budget & Financing	B Through 2020	C FY 2021	D FY 2022	E FY 2023	F FY 2024	G FY 2025	H FY 2026	I FY 2027	J FY 2028	K FY 2029	L FY 2030	M (C:L) Total FY 2021 - FY 2030
Expenditure Budget	1,454,491	1,000,000	454,491	0	0	0	0	0	0	0	0	0	454,491
Financing Plan													
CMAQ/RSTP	1,454,491	1,000,000	454,491	0	0	0	0	0	0	0	0	0	454,491
Financing Plan Total	1,454,491	1,000,000	454,491	0	0	0	0	0	0	0	0	0	454,491
Additional 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 enhancements along segments of the City's three planned transitway corridors, including items such as median islands with pedestrian refuges, new crossings and other safety enhancements for pedestrians, bicycle access improvements, signal technology to improve safety at intersections, and other potential Smart Mobility technologies. The 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 will begin the planning and environmental review in 2020, followed by design, Right-of-way acquisition, and construction. The West End Transitway has completed environmental review, and design for a first phase begins in 2020, followed by Right-of-Way acquisition and construction, and is currently anticipated to be operating by FY 2028.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

Transportation Master Plan; WMATA Momentum

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
		PROJECT CATEGORY:	3
PRIMARY STRATEGIC THEME:	Theme 10: Multimodal Transportation	ESTIMATE USEFUL LIFE:	21 - 25 Years

Access Improvements at Landmark

	A (B + M) Total Budget & Financing	B Through 2020	C FY 2021	D FY 2022	E FY 2023	F FY 2024	G FY 2025	H FY 2026	I FY 2027	J FY 2028	K FY 2029	L FY 2030	M (C:L) Total FY 2021 - FY 2030
Expenditure Budget	6,334,630	0	0	0	0	3,950,230	2,384,400	0	0	0	0	0	6,334,630
Financing Plan													
State/Federal Grants	6,334,630	0	0	0	0	3,950,230	2,384,400	0	0	0	0	0	6,334,630
Financing Plan Total	6,334,630	0	0	0	0	3,950,230	2,384,400	0	0	0	0	0	6,334,630
Additional Operating Impact	34,000	0	0	0	0	0	0	3,000	3,100	3,200	3,300	21,400	34,000

CHANGES FROM PRIOR YEAR CIP

New project added to FY 2021 – FY 2030 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 several local bus routes. Access improvements from this project would be located along South Van Dorn Street and Duke Street. This project would construct new or improved infrastructure such as sidewalks, crosswalks, pedestrian refuge islands for safer crossings and other enhancements to support increased 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, with over 3,500 residential units, 350,000 sq.ft. of retail space, 1,000,000 sq.ft. of employment uses, and onsite amenities planned for full buildout.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

Landmark Small Area Plan; Vision Zero; Complete Streets

ADDITIONAL OPERATING IMPACTS

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

ALEXANDRIA MOBILITY PLAN

DOCUMENT SUBSECTION:	Non-Motorized Transportation	PROJECT LOCATION:	Citywide
MANAGING DEPARTMENT:	Department of Transportation and Environmental Services	REPORTING AREA:	Citywide
		PROJECT CATEGORY:	2
PRIMARY STRATEGIC THEME:	Theme 10: Multimodal Transportation	ESTIMATE USEFUL LIFE:	6 - 10 Years

Alexandria Mobility Plan

	A (B + M) Total Budget & Financing	B Through 2020	C FY 2021	D FY 2022	E FY 2023	F FY 2024	G FY 2025	H FY 2026	I FY 2027	J FY 2028	K FY 2029	L FY 2030	M (C:L) Total FY 2021 - FY 2030
Expenditure Budget	840,000	840,000	0	0	0	0	0	0	0	0	0	0	0
Financing Plan													
State/Federal Grants	840,000	840,000	0	0	0	0	0	0	0	0	0	0	0
Financing Plan Total	840,000	840,000	0	0	0	0	0	0	0	0	0	0	0
Additional 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 $500,000 was moved from FY 2021 to FY 2020 and appropriated in the Fall 2019 Supplemental Appropriation Ordinance.

PROJECT DESCRIPTION & JUSTIFICATION

This project provides funding for a comprehensive update to the sections of the 2008 Transportation Master Plan not completed with the Pedestrian and Bicycle Master Plan Update, including an update to the Streets, Curbside Management, Smart Mobility, Transportation Demand Management and Transit chapters.

This strategic update will reflect the significant changes to the City's transportation network and the general framework to improve mobility and accessibility in a sustainable and equitable manner. The Transportation Master Plan update will be strategically aligned to other City-led policies and plans such as the Environmental Action Plan, Vision Zero Action Plan and the Complete Streets Program, among other City Policies and Programs.

Funding is provided for a master plan update only, and this project does not include implementation funding. Anticipated completion will be in 2021.

Updating the 2008 Transportation Master Plan will provide for opportunities to increase the livability of neighborhoods, improve and increase mobility, and access to social and economic activities for residents, and provide residents additional transportation options.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

T&ES Strategic Plan, Complete Streets Policy, Vision Zero, Alexandria Transit Vision, Environmental Action Plan 2040

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

BACKLICK RUN MULTI-USE PATHS PHASE I

DOCUMENT SUBSECTION:	Non-Motorized Transportation	PROJECT LOCATION:	Backlick Run Trail Phase I - from Armistead Boothe Park to South Van Dorn St.
MANAGING DEPARTMENT:	Department of Transportation and Environmental Services	REPORTING AREA:	Landmark/Van Dorn
		PROJECT CATEGORY:	3
PRIMARY STRATEGIC THEME:	Theme 10: Multimodal Transportation	ESTIMATE USEFUL LIFE:	21 - 25 Years

Backlick Run Multi-Use Paths

	A (B + M) Total Budget & Financing	B Through 2020	C FY 2021	D FY 2022	E FY 2023	F FY 2024	G FY 2025	H FY 2026	I FY 2027	J FY 2028	K FY 2029	L FY 2030	M (C:L) Total FY 2021 - FY 2030
Expenditure Budget	7,462,545	2,851,894	0	2,210,003	2,100,648	300,000	0	0	0	0	0	0	4,610,651
Financing Plan													
CMAQ/RSTP	1,918,000	1,918,000	0	0	0	0	0	0	0	0	0	0	0
State/Federal Grants	5,544,545	933,894	0	2,210,003	2,100,648	300,000	0	0	0	0	0	0	4,610,651
Financing Plan Total	7,462,545	2,851,894	0	2,210,003	2,100,648	300,000	0	0	0	0	0	0	4,610,651
Additional 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 purpose of this project is to extend Backlick Run Trail westward between Armistead Boothe Park and South Van Dorn Street. This is the first of a two-phase project to extend Backlick Run Trail west to the Fairfax County Line.

This project was identified as a high priority project in the Transportation Master Plan and was also a recommendation of the Eisenhower West and Landmark/Van Dorn Small Area Plans. This project supports the City's sustainability goals outlined in the Environmental Action Plan by increasing mobility, access, and convenience for healthy modes of transportation, such as walking and biking. This project will also increase access to transit by improving multimodal connections around the Van Dorn Street Metro Station and to the future West End Transitway. Once completed, the trail will help better connect the far west side of the City with the east side and beyond via the existing regional trail network. Completion of this trail project is dependent upon the redevelopment of the adjacent commercial flex warehouse/retail buildings which face Pickett Street.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

Eisenhower West Small Area Plan; Landmark Van Dorn Corridor Plan; Transportation Master Plan (Pedestrian and Bicycle Chapter)

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

BICYCLE PARKING AT TRANSIT

DOCUMENT SUBSECTION:	Non-Motorized Transportation	PROJECT LOCATION:	Citywide
MANAGING DEPARTMENT:	Department of Transportation and Environmental Services	REPORTING AREA:	Citywide
		PROJECT CATEGORY:	3
PRIMARY STRATEGIC THEME:	Theme 10: Multimodal Transportation	ESTIMATE USEFUL LIFE:	11 - 15 Years

Bicycle Parking at Transit

	A (B + M) Total Budget & Financing	B Through 2020	C FY 2021	D FY 2022	E FY 2023	F FY 2024	G FY 2025	H FY 2026	I FY 2027	J FY 2028	K FY 2029	L FY 2030	M (C:L) Total FY 2021 - FY 2030
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
Additional 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

Using a bicycle 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 in full through CMAQ and RSTP funds, and no City match is required. Installation of these improvements is scheduled for FY 2021.

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.

CAMERON & PRINCE BICYCLE & PEDESTRIAN FACILITIES

DOCUMENT SUBSECTION:	Non-Motorized Transportation	PROJECT LOCATION:	Cameron St. and Prince St.
MANAGING DEPARTMENT:	Department of Transportation and Environmental Services	REPORTING AREA:	Old Town
		PROJECT CATEGORY:	3
PRIMARY STRATEGIC THEME:	Theme 10: Multimodal Transportation	ESTIMATE USEFUL LIFE:	11 - 15 Years

Cameron & Prince Bicycle & Pedestrian Facilities

	A (B + M) Total Budget & Financing	B Through 2020	C FY 2021	D FY 2022	E FY 2023	F FY 2024	G FY 2025	H FY 2026	I FY 2027	J FY 2028	K FY 2029	L FY 2030	M (C:L) Total FY 2021 - FY 2030
Expenditure Budget	240,000	240,000	0	0	0	0	0	0	0	0	0	0	0
Financing Plan													
NVTA 30% Funds	240,000	240,000	0	0	0	0	0	0	0	0	0	0	0
Financing Plan Total	240,000	240,000	0	0	0	0	0	0	0	0	0	0	0
Additional 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 has improved the non-motorized transportation network with the installation of bicycle facilities and pedestrian improvements from the King Street Metro Station and Union Station to the Waterfront along Cameron and Prince Streets. This project helps to promote multiple transportation choices through improved pedestrian accessibility, dedicated bicycle facilities, and access to transit, thereby helping to reduce carbon emissions and improving health. Bicycle and pedestrian facilities were recommended in the Transportation Master Plan and provide important connectivity between two major transit hubs and the Mount Vernon Trail as well as through one of Alexandria's major activity centers.

Pedestrian improvements implemented with this project included crossings enhanced with upgraded markings and curb ramp improvements. Pedestrian count-down signals were installed in FY 2016 as part of this project. The existing bicycle facilities were improved by providing bicycle lanes and bicycle parking along the corridor with no loss of traffic capacity or traffic lanes.

Funding was provided in FY 2016 through NVTA 30% funds. Construction of the bicycle facilities were implemented in FY 2017, however implementation on Daingerfield Road and Diagonal Road remain on hold pending the completion of the King Street Metrorail Station Area Improvements project which includes repaving these two roads. The final improvements, including bicycle counters are expected to be made in FY 2021.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

Transportation Master Plan, Pedestrian and Bicycle Master Plan, Strategic Plan, Vision Zero

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

CAPITAL BIKESHARE

DOCUMENT SUBSECTION:	Non-Motorized Transportation	PROJECT LOCATION:	Citywide
MANAGING DEPARTMENT:	Department of Transportation and Environmental Services	REPORTING AREA:	Citywide
		PROJECT CATEGORY:	3
PRIMARY STRATEGIC THEME:	Theme 10: Multimodal Transportation	ESTIMATE USEFUL LIFE:	6 - 10 Years

Capital Bikeshare

	A (B + M) Total Budget & Financing	B Through 2020	C FY 2021	D FY 2022	E FY 2023	F FY 2024	G FY 2025	H FY 2026	I FY 2027	J FY 2028	K FY 2029	L FY 2030	M (C:L) Total FY 2021 - FY 2030
Expenditure Budget	5,557,757	4,307,757	350,000	400,000	250,000	250,000	0	0	0	0	0	0	1,250,000
Financing Plan													
CMAQ/RSTP	1,652,196	402,196	350,000	400,000	250,000	250,000	0	0	0	0	0	0	1,250,000
GO Bond Interest Earnings	0	0	0	0	0	0	0	0	0	0	0	0	0
GO Bonds	0	0	0	0	0	0	0	0	0	0	0	0	0
Private Capital Contributions	0	0	0	0	0	0	0	0	0	0	0	0	0
State/Federal Grants	3,905,561	3,905,561	0	0	0	0	0	0	0	0	0	0	0
TIP	0	0	0	0	0	0	0	0	0	0	0	0	0
Financing Plan Total	5,557,757	4,307,757	350,000	400,000	250,000	250,000	0	0	0	0	0	0	1,250,000
Additional 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. The City is currently completing the review process with VDOT to add ten more stations to the system for a total of 41 stations the City anticipates these will be installed in FY 2021.

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	PROJECT LOCATION:	Citywide
MANAGING DEPARTMENT:	Department of Transportation and Environmental Services	REPORTING AREA:	Citywide
		PROJECT CATEGORY:	3
PRIMARY STRATEGIC THEME:	Theme 10: Multimodal Transportation	ESTIMATE USEFUL LIFE:	Varies

Complete Streets

	A (B + M) Total Budget & Financing	B Through 2020	C FY 2021	D FY 2022	E FY 2023	F FY 2024	G FY 2025	H FY 2026	I FY 2027	J FY 2028	K FY 2029	L FY 2030	M (C:L) Total FY 2021 - FY 2030
Expenditure Budget	17,875,168	9,229,888	860,280	1,073,000	786,000	800,000	814,000	829,000	845,000	862,000	879,000	897,000	8,645,280
Financing Plan													
Cash Capital	12,493,092	6,097,812	860,280	823,000	536,000	550,000	564,000	579,000	595,000	612,000	629,000	647,000	6,395,280
GO Bond Interest Earnings	75,000	75,000	0	0	0	0	0	0	0	0	0	0	0
GO Bonds	4,971,310	2,721,310	0	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	2,250,000
Prior Capital Funding	9,766	9,766	0	0	0	0	0	0	0	0	0	0	0
Private Capital Contributions	0	0	0	0	0	0	0	0	0	0	0	0	0
State/Federal Grants	0	0	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	17,875,168	9,229,888	860,280	1,073,000	786,000	800,000	814,000	829,000	845,000	862,000	879,000	897,000	8,645,280
Additional Operating Impact	0	0	0	0	0	0	0	0	0	0	0	0	0

CHANGES FROM PRIOR YEAR CIP

Project recosted as part of the development of the Proposed FY 2021 - FY 2030 CIP.

PROJECT DESCRIPTION & JUSTIFICATION

This program funds capital infrastructure improvements that enhance the safety, accessibility, mobility, comfort, and convenience of people driving, using transit, and those walking and biking. These improvements shall be planned and implemented in accordance with the 2014 Complete Streets Policy, the 2016 update to the Pedestrian and Bicycle Chapter of the Alexandria Transportation Master Plan, and the 2017 Vision Zero Action Plan, and 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 project addresses missing 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.

Planned FY 2021 funding includes $300,000 for priority engineering improvement projects in the recently-adopted Vision Zero Action Plan that focus on both high crash locations and systematic safety improvements for people driving, walking or wheeling, using public transit, and bicycling as well as vulnerable road users like seniors and children. These projects may include intersection re-design and construction, intersection operational changes, infrastructure upgrades like pedestrian walk signals, improved crosswalks, curb ramps, and multi-departmental efforts. Through FY 2021, efforts will focus on short-term recommendations, 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 2021, 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

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

Complete Streets (continued)

Complete Streets FY 2021 – FY 2023 Project List

Fiscal Year 2021	
Description	**Amount**
Complete Streets Staffing*	$45,280
Complete Streets Projects planned, designed, and implemented in accordance with repaving (ADA upgrades, crosswalks, pedestrian signals, data collection, etc.)	$250,000
Safe Routes to Schools improvements not associated with repaving projects	$50,000
Vision Zero Safety Improvement planning, design, and implementation outside of repaving projects	$300,000
Pedestrian signals program (not assoicated with repaving)	$40,000
Pedestrian and Bicycle Master Plan priority projects not associated with repaving	$100,000
Residential sidewalk projects	$50,000
Citizen requests for improvements	$25,000
Total Fiscal Year 2021	**$860,280**

*Note: FY 2021 will utilize $200,000 of accumulated vacancy savings in the Complete Streets project for FY 2021 staffing.

Fiscal Year 2022	
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 repaving projects	$50,000
Vision Zero Safety Improvement planning, design, and implementation outside of repaving projects	$300,000
Complete Streets Projects planned, designed, and implemented outside of repaving (ADA upgrades, crosswalks, pedestrian signals, data collection, etc.)	$100,000
Pedestrian signals program (not assoicated with repaving)	$40,000
Pedestrian and Bicycle Master Plan priority projects not associated with repaving	$100,000
Residential sidewalk projects	$50,000
Citizen requests for improvements	$25,000
Total Fiscal Year 2022	**$ 1,073,000**

Fiscal Year 2023	
Description	**Amount**
Complete Streets Staffing	$271,000
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
Pedestrian signals program (not assoicated with repaving)	$40,000
Pedestrian and Bicycle Master Plan priority projects not associated with repaving	$100,000
Residential sidewalk projects	$50,000
Citizen requests for improvements	$25,000
Total Fiscal Year 2023	**$ 786,000**

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
		PROJECT CATEGORY:	3
PRIMARY STRATEGIC THEME:	Theme 10: Multimodal Transportation	ESTIMATE USEFUL LIFE:	15-20 years

Duke Street and West Taylor Run Safety Improvements

	A (B + M) Total Budget & Financing	B Through 2020	C FY 2021	D FY 2022	E FY 2023	F FY 2024	G FY 2025	H FY 2026	I FY 2027	J FY 2028	K FY 2029	L FY 2030	M (C:L) Total FY 2021 - FY 2030
Expenditure Budget	6,450,460	2,545,000	0	0	0	3,905,460	0	0	0	0	0	0	3,905,460
Financing Plan													
Cash Capital	0	0	0	0	0	0	0	0	0	0	0	0	0
State/Federal Grants	6,450,460	2,545,000	0	0	0	3,905,460	0	0	0	0	0	0	3,905,460
Financing Plan Total	6,450,460	2,545,000	0	0	0	3,905,460	0	0	0	0	0	0	3,905,460
Additional Operating Impact	0	0	0	0	0	0	0	0	0	0	0	0	0

CHANGES FROM PRIOR YEAR CIP

New project added to FY 2021 – FY 2030 CIP. During FY 2020, state grants in the amount of $2,545,000 were transferred from the Old Cameron Run Trail and BRAC Neighborhood Protection Plan projects to Duke Street and West Taylor Run Safety Improvements.

PROJECT DESCRIPTION & JUSTIFICATION

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

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.

The traffic analysis will occur in FY 2021 and FY 2022, and community engagement will begin in FY 2021.

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
		PROJECT CATEGORY:	3
PRIMARY STRATEGIC THEME:	Theme 10: Multimodal Transportation	ESTIMATE USEFUL LIFE:	21 – 25 Years

Holmes Run Trail Connector

	A (B + M) Total Budget & Financing	B Through 2020	C FY 2021	D FY 2022	E FY 2023	F FY 2024	G FY 2025	H FY 2026	I FY 2027	J FY 2028	K FY 2029	L FY 2030	M (C:L) Total FY 2021 - FY 2030
Expenditure Budget	1,286,218	1,286,218	0	0	0	0	0	0	0	0	0	0	0
Financing Plan													
Cash Capital	0	0	0	0	0	0	0	0	0	0	0	0	0
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
Additional 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.

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.

MT. VERNON AVENUE NORTH COMPLETE STREETS

DOCUMENT SUBSECTION:	Non-Motorized Transportation	PROJECT LOCATION:	Mt. Vernon Ave corridor, from E Glebe Road to City Limit
MANAGING DEPARTMENT:	Department of Transportation and Environmental Services	REPORTING AREA:	Potomac West
		PROJECT CATEGORY:	3
PRIMARY STRATEGIC THEME:	Theme 10: Multimodal Transportation	ESTIMATE USEFUL LIFE:	21 - 25 Years

Mt. Vernon Avenue North Complete Streets

	A (B + M) Total Budget & Financing	B Through 2020	C FY 2021	D FY 2022	E FY 2023	F FY 2024	G FY 2025	H FY 2026	I FY 2027	J FY 2028	K FY 2029	L FY 2030	M (C:L) Total FY 2021 - FY 2030
Expenditure Budget	520,000	520,000	0	0	0	0	0	0	0	0	0	0	0
Financing Plan													
CMAQ/RSTP	520,000	520,000	0	0	0	0	0	0	0	0	0	0	0
Financing Plan Total	520,000	520,000	0	0	0	0	0	0	0	0	0	0	0
Additional 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 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 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 and 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.

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
		PROJECT CATEGORY:	2
PRIMARY STRATEGIC THEME:	Theme 10: Multimodal Transportation	ESTIMATE USEFUL LIFE:	21 - 25 Years

Mt. Vernon Trail @ East Abingdon

	A (B + M) Total Budget & Financing	B Through 2020	C FY 2021	D FY 2022	E FY 2023	F FY 2024	G FY 2025	H FY 2026	I FY 2027	J FY 2028	K FY 2029	L FY 2030	M (C:L) Total FY 2021 - FY 2030
Expenditure Budget	850,000	850,000	0	0	0	0	0	0	0	0	0	0	0
Financing Plan													
Reprogrammed TIP Bonds	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
Additional 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 conflicts with vehicular traffic making pedestrian travel challenging.

This project will improve safety by enhancing 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.

The current total project funding is $850,000 and is funded by SAFETEA-LU funding ($750,000) that is administered through the Northern Virginia Regional Commission (NVRC) and $100,000 in Transportation Improvement Program (TIP) funding. It is anticipated that the cost of this project may increase due to the need for additional right of way.

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
		PROJECT CATEGORY:	3
PRIMARY STRATEGIC THEME:	Theme 10: Multimodal Transportation	ESTIMATE USEFUL LIFE:	21 - 25 Years

Old Cameron Run Trail

	A (B + M) Total Budget & Financing	B Through 2020	C FY 2021	D FY 2022	E FY 2023	F FY 2024	G FY 2025	H FY 2026	I FY 2027	J FY 2028	K FY 2029	L FY 2030	M (C:L) Total FY 2021 - FY 2030
Expenditure Budget	8,359,000	3,545,000	0	0	1,646,273	1,122,727	2,045,000	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	0	1,646,273	1,122,727	2,045,000	0	0	0	0	0	4,814,000
Financing Plan Total	8,359,000	3,545,000	0	0	1,646,273	1,122,727	2,045,000	0	0	0	0	0	4,814,000
Additional Operating Impact	71,400	0	0	0	0	0	9,100	9,400	9,700	13,000	13,400	16,800	71,400

CHANGES FROM PRIOR YEAR CIP

State grant funding moved to FY 2023 – FY 2025 timeframe. During FY 2020, state grant funding was transferred between this project and the Duke Street and West Taylor Run project to better align Old Cameron Run Trail project with the completion of AlexRenew's combined sewer outfall mitigation work in this area.

PROJECT DESCRIPTION & JUSTIFICATION

This project will construct a 0.5 mile shared-use path between Hooffs Run Drive and the existing off-street trail east of Hooffs Run, addressing a major gap in the City's approved "Green Crescent" trail system and ultimately providing a key link in the bicycle and pedestrian multimodal transportation system.

Completion of this trail is necessary to support a multi-modal environment by providing local and regional connectivity to the Mount Vernon Trail and connecting the Eisenhower East area with South Old Town. Additionally, the trail will encourage more walking, biking, and transit use, thereby helping to reduce carbon emissions and improve health. This trail project was identified as a top 3 priority project in the Transportation Master Plan.

The City began initial trail design in FY 2019. Construction is anticipated to begin in FY 2025 after the completion of AlexRenew's Project; which is adjacent to the trail, and a portion of the trail passes through AlexRenew's property.

The project is funded using VDOT Smart Scale and Local Funds.

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
		PROJECT CATEGORY:	3
PRIMARY STRATEGIC THEME:	Theme 10: Multimodal Transportation	ESTIMATE USEFUL LIFE:	21 - 25 Years

Seminary / Howard Safety Improvements

	A (B + M) Total Budget & Financing	B Through 2020	C FY 2021	D FY 2022	E FY 2023	F FY 2024	G FY 2025	H FY 2026	I FY 2027	J FY 2028	K FY 2029	L FY 2030	M (C:L) Total FY 2021 - FY 2030
Expenditure Budget	378,000	378,000	0	0	0	0	0	0	0	0	0	0	0
Financing Plan													
State/Federal Grants	378,000	378,000	0	0	0	0	0	0	0	0	0	0	0
Financing Plan Total	378,000	378,000	0	0	0	0	0	0	0	0	0	0	0
Additional 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 people who walk at 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 is funded through the state's Highway Safety Improvement Program. Funds became available 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.

SHARED-USE PATHS

DOCUMENT SUBSECTION:	Non-Motorized Transportation	PROJECT LOCATION:	Citywide
MANAGING DEPARTMENT:	Department of Transportation and Environmental Services	REPORTING AREA:	Citywide
		PROJECT CATEGORY:	1
PRIMARY STRATEGIC THEME:	Theme 10: Multimodal Transportation	ESTIMATE USEFUL LIFE:	30+ Years

Shared-Use Paths

	A (B + M) Total Budget & Financing	B Through 2020	C FY 2021	D FY 2022	E FY 2023	F FY 2024	G FY 2025	H FY 2026	I FY 2027	J FY 2028	K FY 2029	L FY 2030	M (C:L) Total FY 2021 - FY 2030
Expenditure Budget	1,491,357	1,041,357	0	150,000	0	150,000	0	150,000	0	0	0	0	450,000
Financing Plan													
Cash Capital	1,096,000	646,000	0	150,000	0	150,000	0	150,000	0	0	0	0	450,000
GO Bonds	395,357	395,357	0	0	0	0	0	0	0	0	0	0	0
State/Federal Grants	0	0	0	0	0	0	0	0	0	0	0	0	0
Financing Plan Total	1,491,357	1,041,357	0	150,000	0	150,000	0	150,000	0	0	0	0	450,000
Additional Operating Impact	0	0	0	0	0	0	0	0	0	0	0	0	0

CHANGES FROM PRIOR YEAR CIP

Project funding reduced by $750,000 based on current identified shared-use path repair needs.

PROJECT DESCRIPTION & JUSTIFICATION

The 2011, 2013, 2015 and 2017 Parks and Recreation Needs Assessment Survey found that walking and biking trails were the two most important improvements needed for parks, recreation, and cultural amenities in Alexandria. This project funds reconstruction of existing paths and shared-use paths as required.

Funding is provided for the reconstruction, repaving, or other maintenance needs of existing paths, and implementation of new paths in conjunction with larger capital projects. Projects may also include enhancements for safety and collection of data along existing paths.

The trails provide pedestrian and bicycle connections throughout the City, improving walkability and encouraging healthy lifestyles, and promoting environmental responsibility and ecological awareness through increased opportunities for exposure to outdoor environments and natural resources. Annual maintenance funding also enhances the level of service currently provided to the public, while maintaining the value of the City's capital infrastructure.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

Consistent with the T&ES Strategic Plan; Pedestrian and Bicycle Master Plan, Four Mile Run Implementation Plan

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

SIDEWALK CAPITAL MAINTENANCE

DOCUMENT SUBSECTION:	Non-Motorized Transportation	PROJECT LOCATION:	Citywide
MANAGING DEPARTMENT:	Department of Transportation and Environmental Services	REPORTING AREA:	Citywide
		PROJECT CATEGORY:	1
PRIMARY STRATEGIC THEME:	Theme 10: Multimodal Transportation	ESTIMATE USEFUL LIFE:	30+ Years

Sidewalk Capital Maintenance

	A (B + M) Total Budget & Financing	B Through 2020	C FY 2021	D FY 2022	E FY 2023	F FY 2024	G FY 2025	H FY 2026	I FY 2027	J FY 2028	K FY 2029	L FY 2030	M (C:L) Total FY 2021 - FY 2030
Expenditure Budget	9,523,269	4,389,469	600,000	309,000	636,600	327,900	675,400	347,800	716,500	369,000	760,100	391,500	5,133,800
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	0	0	0	0	0	0	0	0	0	0	0	0	0
GO Bonds	5,833,800	700,000	600,000	309,000	636,600	327,900	675,400	347,800	716,500	369,000	760,100	391,500	5,133,800
Financing Plan Total	9,523,269	4,389,469	600,000	309,000	636,600	327,900	675,400	347,800	716,500	369,000	760,100	391,500	5,133,800
Additional 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 application of cost escalation to out years of project.

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 2021 – FY 2023 Project List

Fiscal Year 2021
Description
Callahan Drive from King Street to Duke Street
North Pitt Street from Oronoco Street to King Street
King Street from Callahan Street Dangerfield Street
North and South Union Street from Pendleton Street to Franklin Street
North and South Fairfax Street from Jefferson Street to Third Street
South Walker Street from Duke Street to Stevenson Avenue
West Taylor Run Parkway from Janneys Lane to Duke Street
East Abingdon Drive from Second Street to Slaters Lane
Commonwealth Avenue from East Braddock Road to King Street
Duke Street from South Patrick Street to Strand Street
Hume Avenue from Commonwealth Avenue to Richmond Highway
North Floyd Street from Duke Street to North French Street
Fendall Avenue from Duke Street to South Floyd Street
Wellington Road from Beverley Drive to Chalfonte Drive
Fillmore Avenue from Seminary Road to End
Farm Road from Beverley Drive to Circle Terrace
North Gladden Street from Uline Avenue North Grayson Street
North Grayson Street from North Gladden Street to Uline Avenue
Tulsa Place from North Gordon to End
Uline Avenue from North Gordon Street to Taney Avenue
North and South West Street from Duke Street to Wythe Street
Skyhill Road from Janneys Lane to End
Daingerfield from King Street to Duke Street
North Morgan Street from North Chambliss Street to End
North and South Alfred Street from First Street to Church Street
Reading Avenue from North Beauregard Street to End
Rayburn Avenue from North Beauregard Street to Reading Avenue
South Iris Street from Venable Avenue to Vermont Avenue
Cameron Mills Road from Virginia Avenue to Allison Street
Marlboro Drive from West Braddock Road to End
Fort Ward Place from Ellicott Street
Ellicott Street from Marlboro Drive to End
Crown View Drive from Clover Way to Dartmouth Road
Moncure Dr from S View Terr to Hilton St (Base Repairs)
Jewell Court from North Chambliss Street to End
Anderson Court from Jewell Court to End
North and South Saint Asaph Street from First Street to End
CityWide Alley Resurfacing

Sidewalk Capital Maintenance (continued)

Sidewalk Capital Maintenance FY 2021 – FY 2023 Project List (continued)

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
Beverley Drive from Valley Drive Washington Circle
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)
Lomack Court Entire Length
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 King Street to Duke 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
Lowell Avenue from North Chambliss Street to End
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
Dulany Street from Duke Street to End
North Early Street from West Braddock Road to End
CityWide Alley Resurfacing

Sidewalk Capital Maintenance (continued)

Sidewalk Capital Maintenance FY 2021 – FY 2023 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 Carlye 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 Qauker 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
Reinekers 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 Avenue Commonwealth Avenue
Englehardt Lane from Jamieson Avenue to End
Farrington Avenue to South Van Dorn to the City Limits
Fendall Avenue from Duke Street to South Floyd Street
Furman Avenue from Taney Avnenue to Uline Avenue
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 Palmare Place to End
Hancock Avenue from West Braddcok to End
Key Drive from Francis Hammond Parkway to End
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
Monticello Blvd from Cameron Mills to Russell Road
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 Lawreance 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)
CityWide Alley Resurfacing

VAN DORN STREET - BEAUREGARD STREET MULTI-USE TRAIL

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

Van Dorn/Beauregard Bicycle Facilities

	A (B + M) Total Budget & Financing	B Through 2020	C FY 2021	D FY 2022	E FY 2023	F FY 2024	G FY 2025	H FY 2026	I FY 2027	J FY 2028	K FY 2029	L FY 2030	M (C:L) Total FY 2021 - FY 2030
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
Additional 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 purpose of this project is to design and construct a Shared-Use bicycle and pedestrian path along Beauregard Street between Seminary Road and King Street, as recommended in the Transportation Master Plan. This facility would provide connections to the Mark Center 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 West End Transitway by providing enhanced access to BRT stations along Beauregard Street.

Segments of the Shared-Used Path may be designed and construction performed by private developers as parcels are redeveloped.

This project will be fully funded through restricted funding sources/grants and will require additional City funding. State and federal grants were secured for design in FY 2019 and for construction in FY 2020.

Construction is anticipated to begin 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.

BRIDGE REPAIRS

DOCUMENT SUBSECTION:	Streets & Bridges	PROJECT LOCATION:	Citywide
MANAGING DEPARTMENT:	Department of Transportation and Environmental Services	REPORTING AREA:	Citywide
		PROJECT CATEGORY:	1
PRIMARY STRATEGIC THEME:	Theme 10: Multimodal Transportation	ESTIMATE USEFUL LIFE:	11 - 15 Years

Bridge Repairs

	A (B + M) Total Budget & Financing	B Through 2020	C FY 2021	D FY 2022	E FY 2023	F FY 2024	G FY 2025	H FY 2026	I FY 2027	J FY 2028	K FY 2029	L FY 2030	M (C:L) Total FY 2021 - FY 2030
Expenditure Budget	34,432,175	9,544,975	1,445,000	1,844,700	1,758,900	1,800,600	2,178,500	2,369,300	2,583,200	3,433,600	4,159,400	3,314,000	24,887,200
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	30,825,200	5,938,000	1,445,000	1,844,700	1,758,900	1,800,600	2,178,500	2,369,300	2,583,200	3,433,600	4,159,400	3,314,000	24,887,200
TIP	650,000	650,000	0	0	0	0	0	0	0	0	0	0	0
Financing Plan Total	34,432,175	9,544,975	1,445,000	1,844,700	1,758,900	1,800,600	2,178,500	2,369,300	2,583,200	3,433,600	4,159,400	3,314,000	24,887,200
Additional Operating Impact	0	0	0	0	0	0	0	0	0	0	0	0	0

CHANGES FROM PRIOR YEAR CIP

Project recosted as part of the development of the Proposed FY 2021 - FY 2030 CIP. The funding plan now reflects the investments needed for the City's long-term maintenance plan for bridges and is based upon a recent survey of bridge conditions.

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 identifies all major and minor repair work needed for all City bridges and identifies a regular maintenance interval for each bridge. In FY 2020, $300,000 was added to include repairs to the bridge on Eisenhower Ave. over Cameron Run. These repairs will allow the removal of the current weight restriction that was instituted in the summer of 2018.

In FY 2021, work will begin 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.

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.

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.

CITY STANDARD CONSTRUCTION SPECIFICATIONS

DOCUMENT SUBSECTION:	Streets & Bridges	PROJECT LOCATION:	Citywide
MANAGING DEPARTMENT:	Department of Project Implementation	REPORTING AREA:	Citywide
		PROJECT CATEGORY:	3
PRIMARY STRATEGIC THEME:	Theme 3: Well-Managed Government	ESTIMATE USEFUL LIFE:	6 - 10 Years

City Standard Construction Specifications

	A (B + M) Total Budget & Financing	B Through 2020	C FY 2021	D FY 2022	E FY 2023	F FY 2024	G FY 2025	H FY 2026	I FY 2027	J FY 2028	K FY 2029	L FY 2030	M (C:L) Total FY 2021 - FY 2030
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
Additional 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.

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	PROJECT LOCATION:	Route 1 at E. Glebe Road
MANAGING DEPARTMENT:	Department of Transportation and Environmental Services	REPORTING AREA:	Potomac Yard/Potomac Greens
		PROJECT CATEGORY:	3
PRIMARY STRATEGIC THEME:	Theme 10: Multimodal Transportation	ESTIMATE USEFUL LIFE:	Varies

East Glebe & Route 1

	A (B + M) Total Budget & Financing	B Through 2020	C FY 2021	D FY 2022	E FY 2023	F FY 2024	G FY 2025	H FY 2026	I FY 2027	J FY 2028	K FY 2029	L FY 2030	M (C:L) Total FY 2021 - FY 2030
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
Additional Operating Impact	0	0	0	0	0	0	0	0	0	0	0	0	0

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. Annual operating 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

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
		PROJECT CATEGORY:	3
PRIMARY STRATEGIC THEME:	Theme 10: Multimodal Transportation	ESTIMATE USEFUL LIFE:	21 - 25 Years

Eisenhower Avenue Roadway Improvements

	A (B + M) Total Budget & Financing	B Through 2020	C FY 2021	D FY 2022	E FY 2023	F FY 2024	G FY 2025	H FY 2026	I FY 2027	J FY 2028	K FY 2029	L FY 2030	M (C:L) Total FY 2021 - FY 2030
Expenditure Budget	9,365,631	9,365,631	0	0	0	0	0	0	0	0	0	0	0
Financing Plan													
Cash Capital	404,000	404,000	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	500,000	500,000	0	0	0	0	0	0	0	0	0	0	0
Financing Plan Total	9,365,631	9,365,631	0	0	0	0	0	0	0	0	0	0	0
Additional Operating Impact	0	0	0	0	0	0	0	0	0	0	0	0	0

CHANGES FROM PRIOR YEAR CIP

In January 2020, City Council was informed that this project required an additional $2.2 million due to increases in the construction and construction management services cost. Funding this increase included $1.3 million that was added to the project as part of the January 2020 Supplemental Appropriation Ordinance, and a transfer of $0.9 million from the completed Montgomery Street Improvement Project. This brings the project total to $11.6 million.

PROJECT DESCRIPTION & JUSTIFICATION

This project involves 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. Due to the changing development projections and FHWA lane width determinations, the original project scope has been revised, and an interim plan will be constructed. The new project limits are from Mill Road to Holland Lane.

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 scaled back to an interim improvement described above. Full build-out will be constructed by developers as the parcels along the corridor are developed

Project redesign based on the new project limits began in early 2011. The project is in the construction procurement phase and is anticipated to go to construction in spring 2020.

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	PROJECT LOCATION:	Citywide
MANAGING DEPARTMENT:	Department of Transportation and Environmental Services	REPORTING AREA:	Citywide
		PROJECT CATEGORY:	1
PRIMARY STRATEGIC THEME:	Theme 10: Multimodal Transportation	ESTIMATE USEFUL LIFE:	Varies

Fixed Transportation Equipment

	A (B + M) Total Budget & Financing	B Through 2020	C FY 2021	D FY 2022	E FY 2023	F FY 2024	G FY 2025	H FY 2026	I FY 2027	J FY 2028	K FY 2029	L FY 2030	M (C:L) Total FY 2021 - FY 2030
Expenditure Budget	35,023,871	23,290,971	850,000	875,500	2,493,400	956,300	985,000	1,043,500	1,074,800	1,107,000	1,140,300	1,207,100	11,732,900
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	400,000	400,000	0	0	0	0	0	0	0	0	0	0	0
GO Bonds	18,915,853	7,182,953	850,000	875,500	2,493,400	956,300	985,000	1,043,500	1,074,800	1,107,000	1,140,300	1,207,100	11,732,900
Prior Capital Funding	3,701,070	3,701,070	0	0	0	0	0	0	0	0	0	0	0
Private Capital Contributions	537,642	537,642	0	0	0	0	0	0	0	0	0	0	0
State/Federal Grants	0	0	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	35,023,871	23,290,971	850,000	875,500	2,493,400	956,300	985,000	1,043,500	1,074,800	1,107,000	1,140,300	1,207,100	11,732,900
Additional 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 application of cost escalation to out years of project.

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 meters in Old Town in FY 2023 ($1.5 milion), which will have reached the end of their useful life and will need to be replaced. 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 2021 – FY 2023 Project List

Fiscal Year 2021	
Description	Amount
Reconstruct signal at St. Asaph & Montgomery	$120,000
Reconstruct signal at Columbus & Montgomery	$120,000
Reconstruct signal at Seminary & Jordan	$130,000
Reconstruct signal at Quaker & Seminary/Janney's	$150,000
Reconstruct signal at Cameron & West	$130,000
Reconstruct signal at Van Dorn & Holmes Run Pkwy	$120,000
Repair and upgrade of traffic signal vehicle detection	$50,000
Repair knockdowns from accidents	$30,000
Total Fiscal Year 2021	**$850,000**

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**

FOUR MILE RUN BRIDGE PROGRAM

DOCUMENT SUBSECTION:	Streets & Bridges	PROJECT LOCATION:	Citywide
MANAGING DEPARTMENT:	Department of Transportation and Environmental Services	REPORTING AREA:	Citywide
		PROJECT CATEGORY:	1
PRIMARY STRATEGIC THEME:	Theme 10: Multimodal Transportation	ESTIMATE USEFUL LIFE:	Varies

Four Mile Run Bridge Program

	A (B + M) Total Budget & Financing	B Through 2020	C FY 2021	D FY 2022	E FY 2023	F FY 2024	G FY 2025	H FY 2026	I FY 2027	J FY 2028	K FY 2029	L FY 2030	M (C:L) Total FY 2021 - FY 2030
Expenditure Budget	20,000,000	0	6,000,000	7,000,000	7,000,000	0	0	0	0	0	0	0	20,000,000
Financing Plan													
GO Bonds	20,000,000	0	6,000,000	7,000,000	7,000,000	0	0	0	0	0	0	0	20,000,000
Financing Plan Total	20,000,000	0	6,000,000	7,000,000	7,000,000	0	0	0	0	0	0	0	20,000,000
Additional Operating Impact	0	0	0	0	0	0	0	0	0	0	0	0	0

CHANGES FROM PRIOR YEAR CIP

New project added to FY 2021 – FY 2030 CIP based on needs identified by Arlington County which owns and maintains those two bridges.

PROJECT DESCRIPTION & JUSTIFICATION

In 2018, West Glebe Road Bridge over Four Mile Run was inspected by Arlington County. As a result of the inspection and in an abundance of caution, bridge traffic was restricted (weight restrictions, lane reductions, pedestrian movements). A joint remediation plan between Arlington County and the City of Alexandria began in 2019 and work is anticipated for completion in 2023. The City has committed to a reimbursement of one half of the cost of the rehabilitation work contingent on the execution of a multi-bridge equitable cost sharing agreement with Arlington.

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. The City and the County are currently in negotiations on a cost sharing agreement for each structure. Funding is set aside in FY 2021 – FY 2023 in anticipation of this cost-sharing agreement.

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	PROJECT LOCATION:	King Street / North Beauregard Street / Walter Reed Drive
MANAGING DEPARTMENT:	Department of Transportation and Environmental Services	REPORTING AREA:	Alexandria West
		PROJECT CATEGORY:	3
PRIMARY STRATEGIC THEME:	Theme 10: Multimodal Transportation	ESTIMATE USEFUL LIFE:	21 - 25 Years

King & Beauregard Intersection Improvements

	A (B + M) Total Budget & Financing	B Through 2020	C FY 2021	D FY 2022	E FY 2023	F FY 2024	G FY 2025	H FY 2026	I FY 2027	J FY 2028	K FY 2029	L FY 2030	M (C:L) Total FY 2021 - FY 2030
Expenditure Budget	17,902,862	17,902,862	0	0	0	0	0	0	0	0	0	0	0
Financing Plan													
Cash Capital	58,700	58,700	0	0	0	0	0	0	0	0	0	0	0
GO Bonds	1,831,862	1,831,862	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
Private Capital Contributions	0	0	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	17,902,862	17,902,862	0	0	0	0	0	0	0	0	0	0	0
Additional 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 spring of 2020. Phase II construction is anticipated to begin in summer 2020 with an estimated completion date of early 2022.

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	PROJECT LOCATION:	Seminary Rd. at Beauregard St.
MANAGING DEPARTMENT:	Department of Project Implementation	REPORTING AREA:	Seminary Hill
		PROJECT CATEGORY:	3
PRIMARY STRATEGIC THEME:	Theme 10: Multimodal Transportation	ESTIMATE USEFUL LIFE:	21 - 25 Years

Seminary Road at Beauregard Street Ellipse

	A (B + M) Total Budget & Financing	B Through 2020	C FY 2021	D FY 2022	E FY 2023	F FY 2024	G FY 2025	H FY 2026	I FY 2027	J FY 2028	K FY 2029	L FY 2030	M (C:L) Total FY 2021 - FY 2030
Expenditure Budget	36,825,000	425,000	0	0	3,500,000	16,200,000	16,700,000	0	0	0	0	0	36,400,000
Financing Plan													
Cash Capital	100,000	100,000	0	0	0	0	0	0	0	0	0	0	0
GO Bond Interest Earnings	0	0	0	0	0	0	0	0	0	0	0	0	0
GO Bonds	0	0	0	0	0	0	0	0	0	0	0	0	0
Private Capital Contributions	36,400,000	0	0	0	3,500,000	16,200,000	16,700,000	0	0	0	0	0	36,400,000
TIP	325,000	325,000	0	0	0	0	0	0	0	0	0	0	0
Financing Plan Total	36,825,000	425,000	0	0	3,500,000	16,200,000	16,700,000	0	0	0	0	0	36,400,000
Additional Operating Impact	0	0	0	0	0	0	0	0	0	0	0	0	0

CHANGES FROM PRIOR YEAR CIP

Funding moved from FY 2021 – FY 2023 to FY 2023 – FY 2025 to reflect current pace of development in this area.

PROJECT DESCRIPTION & JUSTIFICATION

The intersection of Beauregard Street and Seminary Road was planned in the 2012 adopted Beauregard Small Area Plan to be eventually reconfigured in the form of an at-grade intersection, referred to as an “ellipse” due to its geometric layout. The approved ellipse would eliminate left turns from both directions along Seminary Road and redirect those movements as right turns, which would subsequently circulate around part of the ellipse to continue in the desired direction. Although the traffic circulation pattern of the ellipse would be very similar to that of a modern roundabout, through traffic movements along Seminary Road would be allowed to pass straight through the center island of the ellipse. Therefore, several traffic signals would be required around the ellipse to alternate the right-of-way among the various movements. The current design concept for the ellipse shows the approved intersection of Beauregard Street at Main Street (from Southern Towers) located at the northern end of the ellipse.

A conceptual design has been prepared for the ellipse as part of the Beauregard Small Area Plan. It was originally planned that each redevelopment site adjacent to the Ellipse would dedicate all the necessary right-of-way for the ellipse at the intersection of Seminary Road and Beauregard Street. The amount, size, and location of the right-of-way would be determined during the next phase of design. Due to delays in development activity as well as changes in proposed development use and density, the City is reevaluating the ellipse concept. A study evaluating revised traffic projections resulting from the new expected redevelopment will be initiated in late FY 2020 to guide the design of this intersection. It is anticipated that the study will recommend significant changes to the original design due to lower traffic projections and to improve pedestrian safety at this intersection.

Funding is estimated at $36.4 million for full project design, engineering and construction. Construction was originally planned from FY 2019 – 2021, to be funded primarily with private (development) capital contributions. However, since the rate of development has slowed and the type of development has changed, the design of the ellipse has been placed on hold until the new study is complete.

The ellipse was recommended as a needed project in the Beauregard Small Area Plan to support future development in the Beauregard area. 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.

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	PROJECT LOCATION:	Citywide
MANAGING DEPARTMENT:	Department of Transportation and Environmental Services	REPORTING AREA:	Citywide
		PROJECT CATEGORY:	1
PRIMARY STRATEGIC THEME:	Theme 10: Multimodal Transportation	ESTIMATE USEFUL LIFE:	11 - 15 Years

Street Reconstruction & Resurfacing of Major Roads

	A (B + M) Total Budget & Financing	B Through 2020	C FY 2021	D FY 2022	E FY 2023	F FY 2024	G FY 2025	H FY 2026	I FY 2027	J FY 2028	K FY 2029	L FY 2030	M (C:L) Total FY 2021 - FY 2030
Expenditure Budget	98,561,076	40,204,576	5,500,000	5,665,000	5,835,000	5,436,400	5,599,500	4,984,900	6,328,500	6,149,400	6,333,900	6,523,900	58,356,500
Financing Plan													
Cash Capital	5,995,679	5,995,679	0	0	0	0	0	0	0	0	0	0	0
GO Bond Interest Earnings	0	0	0	0	0	0	0	0	0	0	0	0	0
GO Bonds	55,665,434	19,140,985	4,867,949	4,165,000	3,635,000	2,936,400	3,099,500	2,484,900	3,828,500	3,649,400	3,833,900	4,023,900	36,524,449
State/Federal Grants	11,117,912	11,117,912	0	0	0	0	0	0	0	0	0	0	0
TIP	11,650,000	3,950,000	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	7,700,000
VDOT State Revenue Sharing	14,132,051	0	632,051	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	14,132,051
Financing Plan Total	98,561,076	40,204,576	5,500,000	5,665,000	5,835,000	5,436,400	5,599,500	4,984,900	6,328,500	6,149,400	6,333,900	6,523,900	58,356,500
Additional 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 approved resurfacing projects planned for FY 2021 - 2023 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.

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 2021		
Street(s)	Avg. PCI Score	Estimated Cost
Callahan Drive from King Street to Duke Street	55	$ 70,000
North Pitt Street from Oronoco Street to King Street	29	$ 135,000
King Street from Callahan Street Dangerfield Street	28	$ 82,000
North and South Union Street from Pendleton Street to Franklin Street	42	$ 320,000
North and South Fairfax Street from Jefferson Street to Third Street	48	$ 525,000
South Walker Street from Duke Street to Stevenson Avenue	27	$ 70,000
West Taylor Run Parkway from Janneys Lane to Duke Street	38	$ 75,000
East Abingdon Drive from Second Street to Slaters Lane	31	$ 350,000
Commonwealth Avenue from East Braddock Road to King Street	28	$ 375,000
Duke Street from South Patrick Street to Strand Street	27	$ 265,000
Hume Avenue from Commonwealth Avenue to Richmond Highway	48	$ 130,000
North Floyd Street from Duke Street to North French Street	36	$ 34,000
Fendall Avenue from Duke Street to South Floyd Street	25	$ 50,000
Wellington Road from Beverley Drive to Chalfonte Drive	41	$ 85,000
Fillmore Avenue from Seminary Road to End	22	$ 260,000
Farm Road from Beverley Drive to Circle Terrace	38	$ 80,000
North Gladden Street from Uline Avenue North Grayson Street	27	$ 65,000
North Grayson Street from North Gladden Street to Uline Avenue	41	$ 65,000
Tulsa Place from North Gordon to End	34	$ 40,000
Uline Avenue from North Gordon Street to Taney Avenue	28	$ 120,000
North and South West Street from Duke Street to Wythe Street	38	$ 275,000
Skyhill Road from Janneys Lane to End	29	$ 116,000
Daingerfield from King Street to Duke Street	28	$ 98,000
North Morgan Street from North Chambliss Street to End	24	$ 20,000
North and South Alfred Street from First Street to Church Street	35	$ 300,000
Reading Avenue from North Beauregard Street to End	12	$ 125,000
Rayburn Avenue from North Beauregard Street to Reading Avenue	9	$ 86,000
South Iris Street from Venable Avenue to Vermont Avenue	36	$ 28,000
Cameron Mills Road from Virginia Avenue to Allison Street	28	$ 84,000
Marlboro Drive from West Braddock Road to End	33	$ 69,000
Fort Ward Place from Ellicott Street	33	$ 35,000
Ellicott Street from Marlboro Drive to End	32	$ 100,000
Moncure Dr from S View Terr to Hilton St (Base Repairs)	48	$ 50,000
Crown View Drive from Clover Way to Dartmouth Road	35	$ 65,000
Jewell Court from North Chambliss Street to End	25	$ 25,000
Anderson Court from Jewell Court to End	18	$ 40,000
North and South Saint Asaph Street from First Street to End	46	$ 400,000
CityWide Alley Resurfacing	<35	$ 200,000
Additional Costs and Contingency	N/A	$ 188,000
Total Fiscal Year 2021	**32**	**$ 5,500,000**

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
Eisenhower Avenue from Mill Road to Holland Lane	30	$ 425,000.00
West Braddock Road from King Street to Russell Road	32	$ 625,000.00
North and South Washington Street from First Street to Church Street	42	$ 665,000.00
North Howard Street from North Jordan Street to Raleigh Avenue	30	$ 250,000.00
Executive Avenue from Kentucky Avenue to Mount Vernon Avenue	12	$ 70,000.00
Kentucky Avenue from Old Dominion Boulevard to Russell Road	16	$ 60,000.00
Alabama Avenue from Kentucky Avenue to Carolina Place	34	$ 95,000.00
East and West Luray Avenue from West Braddock Avenue to Leslie Avenue	38	$ 180,000.00
Beverley Drive from Valley Drive Washington Circle	25	$ 95,000.00
Allison Street from Valley Drive to Old Dominion Boulevard	27	$ 200,000.00
Echols Avenue from Seminary Road to North Stevens Street	29	$ 45,000.00
Burgess Avenue Entire Length (Exclude Service Road)	29	$ 76,000.00
Aspen Street from Landover Street to Russell Road (Exclude Service Road)	24	$ 40,000.00
Guthrie Avenue from Landover Street to Mosby Street (Exclude Service Road)	23	$ 30,000.00
Lomack Court Entire Length	41	$ 43,000
Holly Street from Aspen Street to West Mt Ida Avenue	48	$ 110,000.00
Birch Street from Holly Street to Russell Road	39	$ 15,000.00
Pine Street from Holly Street to Russell Road	23	$ 15,000.00
Evans Lane from Richmond Highway to East Reed Avenue	33	$ 80,000.00
Lynhaven Drive from Wilson Avenue to End	33	$ 36,000.00
Diagonal Road from King Street to Duke Street	15	$ 130,000
Montrose Avenue from East Raymond Avenue to Richmond Highway	30	$ 105,000.00
Stewart Avenue from Mount Vernon Avenue to East Randolph Avenue	18	$ 55,000.00
Anderson Lane from West Windsor Avenue to Richards Lane	32	$ 32,000.00
Richards Lane from Anderson Lane to West Windsor Avenue	34	$ 18,000.00
North Garland Street from Fort Worth Avenue to End	19	$ 70,000.00
Richenbacher Avenue from North Van Dorn Street to North Pickett Street	25	$ 125,000.00
Lowell Avenue from North Chambliss Street to End	15	$ 70,000.00
South Gordon Street from Duke Street to Wheeler Avenue	39	$ 85,000.00
Venable Avenue from South Jordan Street to South Iris Street	37	$ 33,000.00
Underwood Place from South Ingram Street to End	29	$ 50,000.00
Cathedral Drive from Trinity Drive to End	25	$ 50,000.00
Benning Court from North Chambliss Street to End	64	$ 33,000.00
South Ingram Street from Duke Street to Vermont Avenue	53	$ 60,000.00
Greenwood Place from Seminary Road to End	11	$ 25,000.00
Knox Place Entire Length	26	$ 20,000.00
Rutland Place from North Pickett Street to End	27	$ 20,000.00
East and West Nelson Avenue from Russell Road to Leslie Avenue	35	$ 205,000.00
George Mason Place from Monticello Boulevard to End	33	$ 25,000.00
Westminster Place from Monticello Boulevard to End	34	$ 35,000.00
Terrett Avenue from East Mt Ida to East Randolph Avenue	67	$ 30,000.00
Usher Avenue from South Floyd Street to South Early Street	36	$ 32,000.00
Colfax Avenue from Seminary Road to North Rosser Street	43	$ 30,000.00
North Beauregard Street from Seminary Road to King Street	30	$ 425,000.00
King James Place from Seminary Road to End	29	$ 45,000.00
Dulany Street from Duke Street to End	30	$ 75,000.00
North Early Street from West Braddock Road to End	35	$ 77,000.00
CityWide Alley Resurfacing		$ 250,000.00
Additional Costs and Contingency		$ 300,000.00
Total Fiscal Year 2022	**31**	**$ 5,665,000.00**

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 Ave Concrete from 1000' W of Cameron Park Place to Lake Cook Entrance	40	$ 536,000
Gibbon St 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 End	24	$ 43,000
Earl Street from Oronoco Street to Princess Street	19	$ 25,000
Tower Court from South Whiting Street 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 to End	24	$ 50,000
East and West Oak Street from Mount Vernon Avenue to Russell Road	23	$ 160,000
East Uhler from Mount Avenue Commonwealth Avenue	24	$ 30,000
Englehardt Lane from Jamieson Avenue to End	21	$ 25,000
Farrington Avenue to South Van Dorn to the City Limits	20	$ 55,000
Fendall Avenue from Duke Street to South Floyd Street	25	$ 60,000
Furman Avenue from Taney Avenue to Uline Avenue	25	$ 65,000
Garden Drive from Usher Avenue to Vermont Avenue	26	$ 20,000
South 28th Street from King Street to End	35	$ 30,000
North Stevenson from Fillmore to End	21	$ 30,000
Palmer Place from Polk Avenue End	22	$ 40,000
Pender Court from Palmar 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 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	39	$ 35,000
Monticello Blvd from Cameron Mills to Russell Road	34	$ 90,000
Moss Place from Fort Worth Avenue to End	24	$ 48,000
Notabane 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	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 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
Talbort 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 to End (Vasser Place)	19	$ 170,000
CityWide Alley Resurfacing		$ 200,000.00
Additional Costs and Contingency		$ 200,000.00
Total Fiscal Year 2023	**27**	**$ 5,835,000**

VAN DORN METRO MULTIMODAL BRIDGE (W/ EISENHOWER WEST)

DOCUMENT SUBSECTION:	Streets & Bridges	PROJECT LOCATION:	Van Dorn Metro to Pickett St.
MANAGING DEPARTMENT:	Department of Transportation and Environmental Services	REPORTING AREA:	Eisenhower West
		PROJECT CATEGORY:	3
PRIMARY STRATEGIC THEME:	Theme 10: Multimodal Transportation	ESTIMATE USEFUL LIFE:	21 - 25 Years

Van Dorn Metro Multimodal Bridge (w/ Eisenhower West)

	A (B + M) Total Budget & Financing	B Through 2020	C FY 2021	D FY 2022	E FY 2023	F FY 2024	G FY 2025	H FY 2026	I FY 2027	J FY 2028	K FY 2029	L FY 2030	M (C:L) Total FY 2021 - FY 2030
Expenditure Budget	500,000	500,000	0	0	0	0	0	0	0	0	0	0	0
Financing Plan													
TIP	500,000	500,000	0	0	0	0	0	0	0	0	0	0	0
Financing Plan Total	500,000	500,000	0	0	0	0	0	0	0	0	0	0	0
Additional 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 preliminary design and engineering funding for the proposed multimodal bridge from the Van Dorn Metro Station to South Pickett Street. This project was identified in the Landmark/Van Dorn Small Area Plan, and further analyzed as part of the Eisenhower West Small Area Plan and would provide improved access for motorists and transit as well as people who walk and ride bicycles from South Pickett Street to the Van Dorn Metro Station.

Funding was provided for initial design and engineering in FY 2018 and FY 2019 through the Transportation Improvement Program (TIP). Currently, the City, with consultants, completed a concept design of the bridge to estimate costs. The total estimated cost for this bridge is currently approximately at least $151 million.

Completion of the bridge is contingent on coordination with Norfolk Southern railroad and substantial private (development) capital contributions. Additionally, substantial state or federal grants will be needed to undertake this project.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

Landmark Van Dorn Corridor Plan, Eisenhower West Small Area Plan, Transportation Master Plan

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

CITYWIDE PARKING - PARKING TECHNOLOGIES

DOCUMENT SUBSECTION:	Smart Mobility	PROJECT LOCATION:	Citywide
MANAGING DEPARTMENT:	Department of Transportation and Environmental Services	REPORTING AREA:	Citywide
		PROJECT CATEGORY:	3
PRIMARY STRATEGIC THEME:	Theme 10: Multimodal Transportation	ESTIMATE USEFUL LIFE:	6 - 10 Years

Citywide Parking - Parking Technologies

	A (B + M) Total Budget & Financing	B Through 2020	C FY 2021	D FY 2022	E FY 2023	F FY 2024	G FY 2025	H FY 2026	I FY 2027	J FY 2028	K FY 2029	L FY 2030	M (C:L) Total FY 2021 - FY 2030
Expenditure Budget	2,103,365	773,629	629,736	450,000	250,000	0	0	0	0	0	0	0	1,329,736
Financing Plan													
CMAQ/RSTP	623,629	623,629	0	0	0	0	0	0	0	0	0	0	0
State/Federal Grants	1,479,736	150,000	629,736	450,000	250,000	0	0	0	0	0	0	0	1,329,736
Financing Plan Total	2,103,365	773,629	629,736	450,000	250,000	0	0	0	0	0	0	0	1,329,736
Additional 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

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 2020, the City assessed solutions and developed a framework plan for implementation of parking technologies, including prioritizing specific technologies to purchase and implement. Procurement of short-term parking technology installations began in FY 2020 and will continue each year thereafter as funding is available. 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	PROJECT LOCATION:	4600 - 5700 Eisenhower Ave
MANAGING DEPARTMENT:	Department of Transportation and Environmental Services	REPORTING AREA:	Eisenhower West
		PROJECT CATEGORY:	3
PRIMARY STRATEGIC THEME:	Theme 10: Multimodal Transportation	ESTIMATE USEFUL LIFE:	Varies

Citywide Trans. Mgmt. Tech. - Broadband Communications Link

	A (B + M) Total Budget & Financing	B Through 2020	C FY 2021	D FY 2022	E FY 2023	F FY 2024	G FY 2025	H FY 2026	I FY 2027	J FY 2028	K FY 2029	L FY 2030	M (C:L) Total FY 2021 - FY 2030
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
Additional 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. The traffic signals along Eisenhower Avenue operate independently and are not synchronized. There is no communications infrastructure to connect any existing or new traffic signals to the central control system. Staff is currently working with the ITS Department to coordinate this project with the City's Municipal Fiber project to reduce costs.

With the proposed development in the Eisenhower West area, a 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, 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 serve as a segment of the potential citywide broadband initiative.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

N/A

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

TRAFFIC CONTROL UPGRADE

DOCUMENT SUBSECTION:	Smart Mobility	PROJECT LOCATION:	Citywide
MANAGING DEPARTMENT:	Department of Transportation and Environmental Services	REPORTING AREA:	Citywide
		PROJECT CATEGORY:	1
PRIMARY STRATEGIC THEME:	Theme 10: Multimodal Transportation	ESTIMATE USEFUL LIFE:	Varies

Citywide Trans. Mgmt. Tech. - Traffic Control Upgrade

	A (B + M) Total Budget & Financing	B Through 2020	C FY 2021	D FY 2022	E FY 2023	F FY 2024	G FY 2025	H FY 2026	I FY 2027	J FY 2028	K FY 2029	L FY 2030	M (C:L) Total FY 2021 - FY 2030
Expenditure Budget	2,277,700	450,000	100,000	103,000	138,200	175,200	202,800	208,800	215,000	221,400	228,200	235,100	1,827,700
Financing Plan													
Cash Capital	2,227,700	400,000	100,000	103,000	138,200	175,200	202,800	208,800	215,000	221,400	228,200	235,100	1,827,700
Private Capital Contributions	50,000	50,000	0	0	0	0	0	0	0	0	0	0	0
Financing Plan Total	2,277,700	450,000	100,000	103,000	138,200	175,200	202,800	208,800	215,000	221,400	228,200	235,100	1,827,700
Additional 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 application of cost escalation to out years of project.

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.

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	PROJECT LOCATION:	Citywide
MANAGING DEPARTMENT:	Department of Transportation and Environmental Services	REPORTING AREA:	Citywide
		PROJECT CATEGORY:	3
PRIMARY STRATEGIC THEME:	Theme 10: Multimodal Transportation	ESTIMATE USEFUL LIFE:	Varies

Citywide Trans. Mgmt. Tech. - Intelligent Transportation Systems (ITS) Integration

	A (B + M) Total Budget & Financing	B Through 2020	C FY 2021	D FY 2022	E FY 2023	F FY 2024	G FY 2025	H FY 2026	I FY 2027	J FY 2028	K FY 2029	L FY 2030	M (C:L) Total FY 2021 - FY 2030
Expenditure Budget	20,317,477	15,009,804	223,123	1,000,000	400,000	600,000	3,084,550	0	0	0	0	0	5,307,673
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	0	3,084,550	0	0	0	0	0	3,084,550
State/Federal Grants	7,840,711	5,617,588	223,123	1,000,000	400,000	600,000	0	0	0	0	0	0	2,223,123
TIP	2,354,587	2,354,587	0	0	0	0	0	0	0	0	0	0	0
Financing Plan Total	13,317,477	8,009,804	223,123	1,000,000	400,000	600,000	3,084,550	0	0	0	0	0	5,307,673
Additional Operating Impact	3,670,500	0	0	350,300	363,100	376,500	390,600	405,400	420,900	437,200	454,300	472,200	3,670,500

CHANGES FROM PRIOR YEAR CIP

Funding plan updated to align with state grant schedule.

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 Muncipal 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): Which supplemented the first phase, expanded the broadband network and installed additional traffic surveillance cameras.
- The design for Phase III began in FY 2019 with construction scheduled to begin in FY 2021. 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 provde staff support for this project and coordiante with the ITS Department regarding technology aspects of this project.
- The design for Phase IV is expected to begin in FY 2021 and construction 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 approxiamtely 20 traffic signals to the fiber optic backbone and installation of approximately 5 traffic survaillence cameras. This project may be constructed in coordination with the Municpal 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.

TRANSPORTATION TECHNOLOGIES

DOCUMENT SUBSECTION:	Smart Mobility	PROJECT LOCATION:	Citywide
MANAGING DEPARTMENT:	Department of Transportation and Environmental Services	REPORTING AREA:	Citywide
		PROJECT CATEGORY:	3
PRIMARY STRATEGIC THEME:	Theme 10: Multimodal Transportation	ESTIMATE USEFUL LIFE:	Varies

Citywide Trans. Mgmt. Tech. - Transportation Technologies

	A (B + M) Total Budget & Financing	B Through 2020	C FY 2021	D FY 2022	E FY 2023	F FY 2024	G FY 2025	H FY 2026	I FY 2027	J FY 2028	K FY 2029	L FY 2030	M (C:L) Total FY 2021 - FY 2030
Expenditure Budget	3,418,212	1,370,312	250,000	0	265,300	0	281,500	0	298,500	309,500	316,800	326,300	2,047,900
Financing Plan													
Cash Capital	0	0	0	0	0	0	0	0	0	0	0	0	0
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	3,207,900	1,160,000	250,000	0	265,300	0	281,500	0	298,500	309,500	316,800	326,300	2,047,900
Financing Plan Total	3,418,212	1,370,312	250,000	0	265,300	0	281,500	0	298,500	309,500	316,800	326,300	2,047,900
Additional Operating Impact	25,500	0	0	2,500	2,600	2,700	2,700	2,800	2,900	3,000	3,100	3,200	25,500

CHANGES FROM PRIOR YEAR CIP

Funding plan updated to reflect application of cost escalation to out years of project.

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. In FY 2021 the City will continue deployment of bluetooth and traffic counting technology which provides information on the movement of people in, around and through the City and assist the City in making decisions on how to better manage traffic. Pavement sensors are also being installed with this funding to help snow removal and de-icing operations. 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 and parking technologies.

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	PROJECT LOCATION:	Citywide
MANAGING DEPARTMENT:	Department of Transportation and Environmental Services	REPORTING AREA:	Citywide
		PROJECT CATEGORY:	3
PRIMARY STRATEGIC THEME:	Theme 10: Multimodal Transportation	ESTIMATE USEFUL LIFE:	16 - 20 Years

DASH Electronic Fare Payment

	A (B + M) Total Budget & Financing	B Through 2020	C FY 2021	D FY 2022	E FY 2023	F FY 2024	G FY 2025	H FY 2026	I FY 2027	J FY 2028	K FY 2029	L FY 2030	M (C:L) Total FY 2021 - FY 2030
Expenditure Budget	1,200,000	450,000	750,000	0	0	0	0	0	0	0	0	0	750,000
Financing Plan													
CMAQ/RSTP	1,200,000	450,000	750,000	0	0	0	0	0	0	0	0	0	750,000
Financing Plan Total	1,200,000	450,000	750,000	0	0	0	0	0	0	0	0	0	750,000
Additional Operating Impact	609,600	0	0	60,000	61,800	63,700	65,600	67,500	69,600	71,600	73,800	76,000	609,600

CHANGES FROM PRIOR YEAR CIP

No changes from previous CIP. The Norther Virginia Transportation Commission (NVTC) has recently made a grant available to DASH to fund portions of the scope of this project. It is anticipated that this grant will be brought forward during the Winter 2019 Supplemental Appropriation Ordinance (SAO).

PROJECT DESCRIPTION & JUSTIFICATION

The current regional SmarTrip program is nearing the end of its useful life. DASH, along with the rest of the regional transit partners, are working towards the development of a new fare payment system. This project will allow users to pay and validate simultaneously using a bank card or mobile device for trips on multiple modes, and to add value to their accounts immediately instead of waiting 24-48 hours as they do under the current SmarTrip system. The project could include hardware/software costs associated with onboard fare validation equipment and offboard TVM's (Ticket Vending Machines) to expedite the boarding process on high-ridership transit corridors.

Until a new system is identified and implemented, the region will continue to procure hardware and software to upgrade the current SmarTrip system to extend its useful life. Improvements to the existing SmarTrip system are funded by state grants awarded through the Northern Virginia Transportation Commission (NVTC).

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 per year. This additional ongoing cost is not included as part of this project application.

DASH TECHNOLOGY

DOCUMENT SUBSECTION:	Smart Mobility	PROJECT LOCATION:	Citywide
MANAGING DEPARTMENT:	Department of Transportation and Environmental Services	REPORTING AREA:	Citywide
		PROJECT CATEGORY:	3
PRIMARY STRATEGIC THEME:	Theme 10: Multimodal Transportation	ESTIMATE USEFUL LIFE:	16 - 20 Years

DASH Technologies

	A (B + M) Total Budget & Financing	B Through 2020	C FY 2021	D FY 2022	E FY 2023	F FY 2024	G FY 2025	H FY 2026	I FY 2027	J FY 2028	K FY 2029	L FY 2030	M (C:L) Total FY 2021 - FY 2030
Expenditure Budget	855,745	0	0	0	600,000	255,745	0	0	0	0	0	0	855,745
Financing Plan													
CMAQ/RSTP	855,745	0	0	0	600,000	255,745	0	0	0	0	0	0	855,745
Financing Plan Total	855,745	0	0	0	600,000	255,745	0	0	0	0	0	0	855,745
Additional Operating Impact	383,100	0	0	0	0	50,000	51,500	53,000	54,600	56,300	58,000	59,700	383,100

CHANGES FROM PRIOR YEAR CIP

No changes from previous CIP.

PROJECT DESCRIPTION & JUSTIFICATION

This project will fund DASH technology initiatives which provide more detailed and accurate information to both customers and planners. DASH has funded projects such as automated passenger counting, which greatly improves the quality of ridership reporting, and improved real-time prediction software that feeds to customers via digital bus information stop signs, DASH Tracker, WMATA's BusETA, and a variety of third-party mobile apps.

This project will also fund transportation scheduling software which allows the transit agency to better design and schedule bus routes in a more data-driven manner.

This project is being coordinated with the City's Smart Mobility Program and other transit and street technology enhancement projects. Funding sources include Northern Virginia Transportation Authority (NVTA) 70% project funds and an allocation of Congestion Mitigation and Air Quality Improvement (CMAQ) and Regional Surface Transportation Program (RSTP) funding.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

Smart Mobility Program

ADDITIONAL OPERATING IMPACTS

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

TRAFFIC ADAPTIVE SIGNAL CONTROL

DOCUMENT SUBSECTION:	Smart Mobility	PROJECT LOCATION:	Citywide
MANAGING DEPARTMENT:	Department of Transportation and Environmental Services	REPORTING AREA:	Citywide
		PROJECT CATEGORY:	3
PRIMARY STRATEGIC THEME:	Theme 10: Multimodal Transportation	ESTIMATE USEFUL LIFE:	Varies

Traffic Adaptive Signal Control

	A (B + M) Total Budget & Financing	B Through 2020	C FY 2021	D FY 2022	E FY 2023	F FY 2024	G FY 2025	H FY 2026	I FY 2027	J FY 2028	K FY 2029	L FY 2030	M (C:L) Total FY 2021 - FY 2030
Expenditure Budget	7,000,000	0	0	7,000,000	0	0	0	0	0	0	0	0	7,000,000
Financing Plan													
State/Federal Grants	14,000,000	7,000,000	0	7,000,000	0	0	0	0	0	0	0	0	7,000,000
Financing Plan Total	14,000,000	7,000,000	0	7,000,000	0	0	0	0	0	0	0	0	7,000,000
Additional Operating Impact	286,500	0	0	0	30,000	31,500	33,100	34,700	36,500	38,300	40,200	42,200	286,500

CHANGES FROM PRIOR YEAR CIP

Funding plan updated to align with state grant schedule.

PROJECT DESCRIPTION & JUSTIFICATION

This project will install new control software and hardware as well as traffic sensors to monitor traffic in real-time. It also funds the design and installation of traffic adaptive signal control systems. Traffic adaptive signal control is a traffic management strategy in which traffic signal timing changes, or adapts, based on actual traffic demand. It allows traffic signals to adjust to actual traffic demand and flow rather than variables that are less effective predictors of traffic patterns, such as time of day, and continuously synchronize with each other to optimize traffic flow throughout a network to better manage traffic flow on the City's roadways.

Traffic Adaptive Signal Control will begin design in FY 2022 when funding becomes available. Construction would likely begin on the two key corridors in FY 2024.

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

N/A

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	PROJECT LOCATION:	Citywide
MANAGING DEPARTMENT:	Department of Transportation and Environmental Services	REPORTING AREA:	Citywide
		PROJECT CATEGORY:	3
PRIMARY STRATEGIC THEME:	Themes 4 & 10	ESTIMATE USEFUL LIFE:	

Transit Signal Priority

	A (B + M) Total Budget & Financing	B Through 2020	C FY 2021	D FY 2022	E FY 2023	F FY 2024	G FY 2025	H FY 2026	I FY 2027	J FY 2028	K FY 2029	L FY 2030	M (C:L) Total FY 2021 - FY 2030
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
Additional 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.

An additional benefit of installing TSP infrastructure at traffic signals is that emergency vehicles can utilize this equipment to allow an emergency vehicle to request preemption at intersections. Technology is being installed on emergency vehicles to allow the vehicle to infrastructure communication necessary to capitalize on this equipment and provide faster emergency response times.

These corridor projects, which fall under the Smart Mobility Program, are funded through NVTA 70% funds through FY 2020. Starting in late FY 2020/early FY 2021, TSP will be installed on both Duke Street and King Street. This project will also enable first responders to use emergency vehicle preemption at these signals.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

N/A

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.