

# TRANSPORTATION & TRANSIT

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

	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2020 - FY 2029
<b>Transportation</b>											
Public Transit											
DASH Bus Fleet Replacements	3,529,000	2,800,000	3,375,000	2,100,000	2,100,000	1,400,000	1,400,000	1,400,000	1,400,000	1,400,000	20,904,000
DASH Bus Fleet Replacements (Fleet Electrification)	0	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	-
DASH Facility and Fleet Expansion	0	15,639,161	5,332,000	2,096,000	0	0	0	0	0	0	23,067,161
DASH Hybrid Bus and Trolley Powertrain Replacement	900,000	350,000	400,000	500,000	550,000	450,000	450,000	450,000	450,000	450,000	4,950,000
Transit Access & Amenities	203,125	823,123	500,000	400,000	0	0	0	0	0	0	1,926,248
WMATA Capital Contributions	9,700,000	15,350,000	14,500,000	13,750,000	14,000,000	14,300,000	14,800,000	15,200,000	15,600,000	16,100,000	143,300,000
<b>Public Transit Total</b>	<b>14,332,125</b>	<b>34,962,284</b>	<b>24,107,000</b>	<b>18,846,000</b>	<b>16,650,000</b>	<b>16,150,000</b>	<b>16,650,000</b>	<b>17,050,000</b>	<b>17,450,000</b>	<b>17,950,000</b>	<b>194,147,409</b>
High Capacity Transit Corridors											
Transit Corridor "A" - Route 1	5,000,000	0	0	0	0	0	0	0	0	0	5,000,000
Transit Corridor "B" - Duke Street	12,000,000	0	0	0	0	0	0	0	0	0	12,000,000
Transit Corridor "C" - West End Transitway	0	3,167,000	3,055,000	5,979,000	0	0	0	0	0	0	12,201,000
Transitway Enhancements	500,000	454,491	0	0	0	0	0	0	0	0	954,491
<b>High Capacity Transit Corridors Total</b>	<b>17,500,000</b>	<b>3,621,491</b>	<b>3,055,000</b>	<b>5,979,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>30,155,491</b>
Non-Motorized Transportation											
Backlick Run Multi-Use Paths	0	0	2,210,003	2,100,648	300,000	0	0	0	0	0	4,610,651
Capital Bikeshare	402,196	350,000	400,000	250,000	250,000	0	0	0	0	0	1,652,196
Complete Streets	1,130,000	1,130,000	830,000	830,000	830,000	830,000	680,000	830,000	830,000	830,000	8,750,000
Mt. Vernon Avenue North Complete Streets	520,000	0	0	0	0	0	0	0	0	0	520,000
Old Cameron Run Trail	1,409,000	1,360,000	0	0	0	0	0	0	0	0	2,769,000
Shared-Use Paths	300,000	0	300,000	0	300,000	0	300,000	0	0	0	1,200,000
Sidewalk Capital Maintenance	600,000	600,000	300,000	600,000	300,000	600,000	300,000	600,000	327,000	600,000	4,827,000
Transportation Master Plan Update	0	500,000	0	0	0	0	0	0	0	0	500,000
Van Dorn/Beauregard Bicycle Facilities	1,208,869	0	0	0	0	0	0	0	0	0	1,208,869
<b>Non-Motorized Transportation Total</b>	<b>5,570,065</b>	<b>3,940,000</b>	<b>4,040,003</b>	<b>3,780,648</b>	<b>1,980,000</b>	<b>1,430,000</b>	<b>1,280,000</b>	<b>1,430,000</b>	<b>1,157,000</b>	<b>1,430,000</b>	<b>26,037,716</b>
Streets & Bridges											
Fixed Transportation Equipment	850,000	850,000	850,000	2,350,000	875,000	875,000	900,000	900,000	900,000	900,000	10,250,000
Bridge Repairs	1,000,000	300,000	700,000	300,000	1,700,000	1,300,000	1,400,000	2,300,000	2,500,000	2,500,000	14,000,000
EW & LVD Implementation - High Street Design/Engineering	0	0	0	500,000	0	0	0	0	0	0	500,000
Farrington Connector	0	0	0	0	500,000	0	0	0	0	0	500,000
Seminary Road at Beauregard Street Ellipse	0	3,500,000	16,200,000	16,700,000	0	0	0	0	0	0	36,400,000
Street Reconstruction & Resurfacing of Major Roads	5,500,000	5,500,000	5,500,000	5,000,000	4,975,000	4,975,000	4,300,000	5,300,000	5,000,000	5,000,000	51,050,000
<b>Streets &amp; Bridges Total</b>	<b>7,350,000</b>	<b>10,150,000</b>	<b>23,250,000</b>	<b>24,850,000</b>	<b>8,050,000</b>	<b>7,150,000</b>	<b>6,600,000</b>	<b>8,500,000</b>	<b>8,400,000</b>	<b>8,400,000</b>	<b>112,700,000</b>
Smart Mobility											
Citywide Parking - Parking Technologies	203,079	629,736	450,000	250,000	0	0	0	0	0	0	1,532,815
Citywide Trans. Mgmt. Tech. - Intelligent Transportation Systems (ITS) Integration	203,079	223,123	1,000,000	400,000	600,000	0	0	0	0	0	2,426,202
Citywide Trans. Mgmt. Tech. - Traffic Control Upgrade	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	1,000,000
Citywide Trans. Mgmt. Tech. - Transportation Technologies	0	250,000	0	250,000	0	250,000	0	250,000	250,000	250,000	1,500,000
DASH Electronic Fare Payment	450,000	750,000	0	0	0	0	0	0	0	0	1,200,000
DASH Technologies	0	0	0	600,000	255,745	0	0	0	0	0	855,745
Traffic Adaptive Signal Control	0	0	5,266,000	2,410,000	0	0	0	0	0	0	7,676,000
Transit Signal Priority	1,195,491	0	0	0	0	0	0	0	0	0	1,195,491
<b>Smart Mobility Total</b>	<b>2,151,649</b>	<b>1,952,859</b>	<b>6,816,000</b>	<b>4,010,000</b>	<b>955,745</b>	<b>350,000</b>	<b>100,000</b>	<b>350,000</b>	<b>350,000</b>	<b>350,000</b>	<b>17,386,253</b>
<b>Transportation Total</b>	<b>46,903,839</b>	<b>54,626,634</b>	<b>61,268,003</b>	<b>57,465,648</b>	<b>27,635,745</b>	<b>25,080,000</b>	<b>24,630,000</b>	<b>27,330,000</b>	<b>27,357,000</b>	<b>28,130,000</b>	<b>380,426,869</b>

### Transportation Improvement Program (TIP) Proposed FY 2020 – FY 2029 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.

Revenues	FY 2020											Total FY 20-FY29
	FY 2019	Proposed	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	
TIP Reserved Real Estate Tax Rate	\$8,684,780	\$8,970,966	\$9,035,645	\$9,216,358	\$9,400,685	\$9,588,699	\$9,780,473	\$9,976,082	\$10,175,604	\$10,379,116	\$10,586,698	\$97,110,327
TIP Bonds Reprogrammed from Prior Years	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TIP General Obligation Bonds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TIP General Obligation Bonds Reprogrammed from Prior Years	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Use of Fund Balance	\$0	\$0	\$134,212	\$80,748	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$214,960
Reimbursed TIP Funds (NVTA)	\$462,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$97,325,287
<b>Total TIP Revenues</b>	<b>\$9,146,780</b>	<b>\$8,970,966</b>	<b>\$9,169,857</b>	<b>\$9,297,106</b>	<b>\$9,400,685</b>	<b>\$9,588,699</b>	<b>\$9,780,473</b>	<b>\$9,976,082</b>	<b>\$10,175,604</b>	<b>\$10,379,116</b>	<b>\$10,586,698</b>	<b>\$97,325,287</b>

**Summary of Operating Expenditures, Debt Service and Capital Projects**

Transportation Improvement Program (TIP) Expenditure Overview	FY 2020											Total FY 20-FY29
	FY 2019	Proposed	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	
TIP Operating	\$5,130,864	\$5,475,720	\$5,707,465	\$5,830,711	\$5,956,002	\$6,065,183	\$6,176,553	\$6,290,161	\$6,406,058	\$6,524,293	\$6,644,920	\$61,077,066
TIP Operating - WMATA	\$1,740,612	\$1,878,169	\$1,070,531	\$2,231,107	\$1,173,829	\$1,712,254	\$1,538,546	\$1,864,617	\$1,692,004	\$1,770,585	\$1,623,592	\$16,555,233
TIP Capital Projects	\$1,711,955	\$1,030,566	\$1,787,100	\$700,200	\$1,913,700	\$1,477,600	\$1,741,900	\$1,506,700	\$1,771,900	\$1,787,500	\$1,803,600	\$15,520,766
TIP Debt Service (2013 \$6.75M Bond Issuance)	\$563,349	\$586,511	\$604,761	\$535,088	\$357,154	\$333,662	\$323,474	\$314,604	\$305,642	\$296,738	\$514,587	\$4,172,221
<b>Total TIP Expenditures</b>	<b>\$9,146,780</b>	<b>\$8,970,966</b>	<b>\$9,169,857</b>	<b>\$9,297,106</b>	<b>\$9,400,685</b>	<b>\$9,588,699</b>	<b>\$9,780,473</b>	<b>\$9,976,082</b>	<b>\$10,175,604</b>	<b>\$10,379,116</b>	<b>\$10,586,698</b>	<b>\$97,325,286</b>

### Transportation Improvement Program (TIP) Proposed FY 2020 – FY 2029 Sources and Uses

**Details of Operating Expenditures**

Transportation Improvement Program (TIP) Operating Projects	FY 2020											Total FY 20-FY29
	FY 2019	Proposed	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	
<b>Non-motorized Transportation</b>												
Capital Bikeshare (Phases I & II)	\$195,743	\$195,743	\$201,659	\$204,684	\$207,754	\$210,871	\$214,034	\$217,244	\$220,503	\$223,810	\$227,168	\$2,123,470
Capital Bikeshare Expansion Operations (Phase III and IV)	\$248,165	\$248,165	\$263,278	\$271,177	\$279,312	\$287,691	\$296,322	\$305,212	\$314,368	\$323,799	\$333,513	\$2,922,837
<b>Public Transit</b>												
DASH Expansion (AT 6, AT8, AT9 expansion implemented)	\$1,681,451	\$1,681,451	\$1,732,273	\$1,758,257	\$1,784,631	\$1,811,400	\$1,838,571	\$1,866,150	\$1,894,142	\$1,922,554	\$1,951,392	\$18,240,820
DASH Expansion (AT 1 peak improvements)	\$329,591	\$329,591	\$339,552	\$344,646	\$349,815	\$355,063	\$360,389	\$365,794	\$371,281	\$376,851	\$382,503	\$3,575,486
DASH Operating	0	\$380,090	\$351,976	\$357,255	\$362,614	\$368,053	\$373,574	\$379,178	\$384,865	\$390,638	\$396,498	\$3,744,742
Supplemental Trolley Operations	\$210,025	\$210,025	\$216,372	\$219,618	\$222,912	\$226,256	\$229,650	\$233,095	\$236,591	\$240,140	\$243,742	\$2,278,401
<b>Maintenance</b>												
Bus Shelter Maintenance	\$97,841	\$97,841	\$100,799	\$102,311	\$103,845	\$105,403	\$106,984	\$108,589	\$110,218	\$111,871	\$113,549	\$1,061,409
Metroway Maintenance	\$60,000	\$60,000	\$61,814	\$62,741	\$63,682	\$64,637	\$65,607	\$66,591	\$67,590	\$68,603	\$69,632	\$650,896
Street Repair Budget	\$842,781	\$801,360	\$868,254	\$881,278	\$894,497	\$907,915	\$921,534	\$935,357	\$949,387	\$963,628	\$978,082	\$9,101,291
Trail Maintenance	\$10,000	\$10,000	\$20,000	\$40,000	\$60,000	\$61,800	\$63,654	\$65,564	\$67,531	\$69,556	\$71,643	\$529,748
King Street Station Operations	\$0	\$0	\$65,000	\$65,975	\$66,965	\$67,969	\$68,989	\$70,023	\$71,074	\$72,140	\$73,222	\$621,357
<b>Other Costs</b>												
Transportation Implementation Staff - T&ES Positions	\$656,268	\$636,125	\$655,209	\$674,865	\$695,111	\$715,964	\$737,443	\$759,567	\$782,354	\$805,824	\$829,999	\$7,292,460
Indirect Costs to General Fund	\$799,000	\$825,329	\$831,279	\$847,905	\$864,863	\$882,160	\$899,804	\$917,800	\$936,156	\$954,879	\$973,976	\$8,934,150
<b>TIP Operating Costs</b>	<b>\$5,130,864</b>	<b>\$5,475,720</b>	<b>\$5,707,465</b>	<b>\$5,830,711</b>	<b>\$5,956,002</b>	<b>\$6,065,183</b>	<b>\$6,176,553</b>	<b>\$6,290,161</b>	<b>\$6,406,058</b>	<b>\$6,524,293</b>	<b>\$6,644,920</b>	<b>\$61,077,066</b>

**Details of Capital Projects**

Transportation Improvement Program (TIP) Projects Capital Subsection	FY 2020											Total FY 20-FY29
	FY 2019	Proposed	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	
<b>Public Transit</b>												
WMATA Capital Contributions (TIP Cash)	\$750,000	\$0	\$1,100,000	\$250,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,350,000
DASH Bus Fleet Replacements (TIP Cash)	\$0	\$607,994										\$607,994
<b>Streets &amp; Bridges</b>												
Street Reconstruction & Resurfacing/Major Rd. (TIP Cash)	\$0	\$0	\$0	\$0	\$700,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$6,700,000
High Street Construction (TIP Cash)	\$0	\$0	\$0	\$0	\$500,000	\$0	\$0	\$0	\$0	\$0	\$0	\$500,000
<b>Non-Motorized Transportation</b>												
Van Dorn Multimodal Bridge (TIP Cash)	\$300,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Fixed Transportation Equipment</b>												
Transportation Technologies (TIP Cash)	\$250,000	\$0	\$250,000	\$0	\$250,000	\$0	\$250,000	\$0	\$250,000	\$250,000	\$250,000	\$1,500,000
<b>Capitalized Positions</b>												
Sustainability Coordinator (through Environmental Restoration)	\$51,520	\$51,324	\$54,700	\$56,300	\$58,000	\$59,700	\$61,500	\$63,400	\$65,300	\$67,200	\$69,200	\$606,624
Transportation Implementation Staff - DPI Positions	\$360,435	\$371,248	\$382,400	\$393,900	\$405,700	\$417,900	\$430,400	\$443,300	\$456,600	\$470,300	\$484,400	\$4,256,148
<b>Total CIP Transportation Improvement Program</b>	<b>\$1,711,955</b>	<b>\$1,030,566</b>	<b>\$1,787,100</b>	<b>\$700,200</b>	<b>\$1,913,700</b>	<b>\$1,477,600</b>	<b>\$1,741,900</b>	<b>\$1,506,700</b>	<b>\$1,771,900</b>	<b>\$1,787,500</b>	<b>\$1,803,600</b>	<b>\$15,520,766</b>

Northern Virginia Transportation Authority (NVTA) – 30% Funds  
 Proposed FY 2020 – FY 2029 Sources and Uses  
 Revenues, Operating Expenditures, and Capital Projects

Revenues/Expenditures	Approved FY 2019	Proposed FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total FY 20-29
<b>Revenues</b>												
NVTA 30%	\$ 6,935,000	\$ 4,769,411	\$ 4,903,000	\$ 5,040,300	\$ 5,181,400	\$ 5,326,500	\$ 5,475,600	\$ 5,628,900	\$ 5,786,500	\$ 5,948,500	\$ 6,115,100	\$ 54,175,211
NVTA Administrative Costs	\$ (129,429)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Use of NVTA 30% Fund Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Appropriated Revenue</b>	<b>\$ 6,805,571</b>	<b>\$ 4,769,411</b>	<b>\$ 4,903,000</b>	<b>\$ 5,040,300</b>	<b>\$ 5,181,400</b>	<b>\$ 5,326,500</b>	<b>\$ 5,475,600</b>	<b>\$ 5,628,900</b>	<b>\$ 5,786,500</b>	<b>\$ 5,948,500</b>	<b>\$ 6,115,100</b>	<b>\$ 54,175,211</b>
<b>Capital Details</b>												
DASH Bus Fleet Replacements	\$ 3,954,000	\$ 2,154,000	\$ 2,125,000	\$ 2,700,000	\$ 1,400,000	\$ 2,100,000	\$ 1,400,000	\$ 1,400,000	\$ 1,400,000	\$ 1,400,000	\$ 1,400,000	\$ 17,479,000
DASH Hybrid Bus and Trolley Battery Pack Replacement	\$ 96,000	\$ 521,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 521,000
WMATA Capital Contributions	\$ 1,000,000	\$ 363,911	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 363,911
<b>Subtotal, Capital Projects</b>	<b>\$ 5,050,000</b>	<b>\$ 3,038,911</b>	<b>\$ 2,125,000</b>	<b>\$ 2,700,000</b>	<b>\$ 1,400,000</b>	<b>\$ 2,100,000</b>	<b>\$ 1,400,000</b>	<b>\$ 1,400,000</b>	<b>\$ 1,400,000</b>	<b>\$ 1,400,000</b>	<b>\$ 1,400,000</b>	<b>\$ 18,363,911</b>
<b>Operating Details</b>												
NVTA Administrative Costs	\$ -	\$ 157,500	\$ 162,200	\$ 167,100	\$ 172,100	\$ 177,300	\$ 182,600	\$ 188,100	\$ 193,700	\$ 199,500	\$ 205,500	\$ 1,805,600
WMATA Subsidy	\$ 1,573,000	\$ 1,573,000	\$ 1,573,000	\$ 1,573,000	\$ 1,573,000	\$ 1,573,000	\$ 1,573,000	\$ 1,413,000	\$ 1,473,000	\$ 1,563,000	\$ 1,573,000	\$ 15,460,000
Transit Corridor "C" - West End Transitway Operations	\$ -	\$ -	\$ -	\$ -	\$ 1,400,000	\$ 1,472,000	\$ 1,546,200	\$ 2,622,500	\$ 2,701,200	\$ 2,782,300	\$ 2,865,700	\$ 15,389,900
<b>Subtotal, Operating</b>	<b>\$ 1,573,000</b>	<b>\$ 1,730,500</b>	<b>\$ 1,735,200</b>	<b>\$ 1,740,100</b>	<b>\$ 3,145,100</b>	<b>\$ 3,222,300</b>	<b>\$ 3,301,800</b>	<b>\$ 4,223,600</b>	<b>\$ 4,367,900</b>	<b>\$ 4,544,800</b>	<b>\$ 4,644,200</b>	<b>\$ 32,655,500</b>
<b>Total, Operating &amp; Capital</b>	<b>\$ 6,623,000</b>	<b>\$ 4,769,411</b>	<b>\$ 3,860,200</b>	<b>\$ 4,440,100</b>	<b>\$ 4,545,100</b>	<b>\$ 5,322,300</b>	<b>\$ 4,701,800</b>	<b>\$ 5,623,600</b>	<b>\$ 5,767,900</b>	<b>\$ 5,944,800</b>	<b>\$ 6,044,200</b>	<b>\$ 51,019,411</b>

## TRANSIT ACCESS & AMENITIES

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

PROJECT LOCATION: Citywide  
 REPORTING AREA: Citywide

PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation

PROJECT CATEGORY: 3  
 ESTIMATE USEFUL LIFE: Varies

Transit Access & Amenities													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Through 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total FY 2020 - FY 2029
Expenditure Budget	5,675,726	3,749,478	203,125	823,123	500,000	400,000	0	0	0	0	0	0	1,926,248
Financing Plan													
Cash Capital	435,223	435,223	0	0	0	0	0	0	0	0	0	0	0
CMAQ/RSTP	1,926,248	0	203,125	823,123	500,000	400,000	0	0	0	0	0	0	1,926,248
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	1,654,255	1,654,255	0	0	0	0	0	0	0	0	0	0	0
TIP	50,000	50,000	0	0	0	0	0	0	0	0	0	0	0
Financing Plan Total	5,675,726	3,749,478	203,125	823,123	500,000	400,000	0	0	0	0	0	0	1,926,248
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 latest approved CMAQ/RSTP plan.

### PROJECT DESCRIPTION & JUSTIFICATION

This project replaces existing bus shelters and free standing bus stop benches with new, enhanced infrastructure and passenger amenities. Many bus shelters and bus stop benches throughout the City are several decades old and have exceeded their useful life. The redesigned City standard shelter offers 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 and new bus stops that bring the stops into compliance with ADA standards.

The project also includes future funding for real-time information signs at key, high-ridership shelters throughout the City. Real-time information has been shown to increase ridership, and the increase in passenger fare revenue is likely to offset the cost of enhancing the capital infrastructure. The project is primarily funded by federal and state grant funds that cover the manufacture and installation of the bus shelters, as well as the necessary concrete pad.

Once all the shelters have been completed, they will offer an enhanced environment for passengers. Additionally, the shelter design includes clear glass panels to improve line of sight and safety. The project will replace old wooden benches with new metal and/or composite benches which are easier to maintain.

### EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

City of Alexandria Transit Development Plan

### ADDITIONAL OPERATING IMPACTS

Additional operating impacts for bus shelters and benches include maintenance and cleaning of bus shelters and bus stop benches. Future real time information systems will require additional operating and maintenance funding.

## DASH BUS FLEET REPLACEMENTS

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

PROJECT LOCATION: Citywide  
 REPORTING AREA: Citywide

PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation

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

DASH Bus Fleet Replacements													
	A (B + M) Total Budget & Financing	B Through 2019	C FY 2020	D FY 2021	E FY 2022	F FY 2023	G FY 2024	H FY 2025	I FY 2026	J FY 2027	K FY 2028	L FY 2029	M (C:L) Total FY 2020 - FY 2029
Expenditure Budget	41,868,000	20,964,000	3,529,000	2,800,000	3,375,000	2,100,000	2,100,000	1,400,000	1,400,000	1,400,000	1,400,000	1,400,000	20,904,000
Financing Plan													
Cash Capital	4,017,006	1,400,000	567,006	675,000	675,000	700,000	0	0	0	0	0	0	2,617,006
GO Bond Interest Earnings	200,000	0	200,000	0	0	0	0	0	0	0	0	0	200,000
GO Bonds	810,000	810,000	0	0	0	0	0	0	0	0	0	0	0
NVTA 30% Funds	35,733,000	18,254,000	2,154,000	2,125,000	2,700,000	1,400,000	2,100,000	1,400,000	1,400,000	1,400,000	1,400,000	1,400,000	17,479,000
Sale of Property Revenue	500,000	500,000	0	0	0	0	0	0	0	0	0	0	0
TIP	607,994	0	607,994	0	0	0	0	0	0	0	0	0	607,994
Financing Plan Total	41,868,000	20,964,000	3,529,000	2,800,000	3,375,000	2,100,000	2,100,000	1,400,000	1,400,000	1,400,000	1,400,000	1,400,000	20,904,000
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

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 5-10 years, with a goal to begin as soon as FY 2020 if grant funding comes available. Staff is currently planning a transition study to assess life-cycle costs and other needs associated with moving to an all-electric fleet by approximately FY 2027. Future CIP funding requests can be expected from the transition since the up-front cost of an electric bus is higher than a clean diesel. 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 FY 2027 and beyond.

In conjunction with the Facility & Fleet Expansion project and several regional- and state-sponsored grants, DASH will seek additional 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  
 MANAGING DEPARTMENT: Department of Transportation and Environmental Services

PROJECT LOCATION: 3000 Business Center Drive  
 REPORTING AREA: Citywide

PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation

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

DASH Facility and Fleet Expansion													
	A (B + M) Total Budget & Financing	B Through 2019	C FY 2020	D FY 2021	E FY 2022	F FY 2023	G FY 2024	H FY 2025	I FY 2026	J FY 2027	K FY 2028	L FY 2029	M (C:L) Total FY 2020 - FY 2029
Expenditure Budget	23,067,161	0	0	15,639,161	5,332,000	2,096,000	0	0	0	0	0	0	23,067,161
Financing Plan													
NVTA 70% Funds	11,933,161	0	0	11,933,161	0	0	0	0	0	0	0	0	11,933,161
State/Federal Grants	11,134,000	0	0	3,706,000	5,332,000	2,096,000	0	0	0	0	0	0	11,134,000
Financing Plan Total	23,067,161	0	0	15,639,161	5,332,000	2,096,000	0	0	0	0	0	0	23,067,161
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 award of NVTA 70% funds and latest approved Virginia Department of Transportation (VDOT) Six-Year Improvement Plan (SYIP).

### PROJECT DESCRIPTION & JUSTIFICATION

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

1. The addition of a new bus parking and storage facility 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, 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 charging equipment in support of an electric bus fleet in this new section of the facility.
2. The addition of twelve new buses to improve service frequency along key City transit corridors. These twelve buses will be used to implement service improvements in key development areas such as the Van Dorn Street corridor, Eisenhower Avenue, and/or Potomac Yard, depending on the results of the upcoming Alexandria Transit Vision Plan and future budget deliberations.

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. Staff is also conducting the Alexandria Transit Vision Plan, which will reshape the transit network with the goal of increasing ridership, improving cost efficiency, and designing a new bus network that will better serve the current and future needs of the city and region. 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 new facility 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 has two funding sources. The first portion has been awarded through the FY 2018 SMART SCALE program and is included in the VDOT FY 2018- FY 2023 Six-Year Improvement Program (SYIP). The project has also 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

No additional operating impacts identified at this time.



## DASH HYBRID BUS AND TROLLEY POWERTRAIN REPLACEMENT

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

PROJECT LOCATION: Citywide  
 REPORTING AREA: Citywide

PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation

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

DASH Hybrid Bus and Trolley Powertrain Replacement													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Through 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total FY 2020 - FY 2029
Expenditure Budget	5,700,000	750,000	900,000	350,000	400,000	500,000	550,000	450,000	450,000	450,000	450,000	450,000	4,950,000
Financing Plan													
Cash Capital	5,083,000	654,000	379,000	350,000	400,000	500,000	550,000	450,000	450,000	450,000	450,000	450,000	4,429,000
NVTA 30% Funds	617,000	96,000	521,000	0	0	0	0	0	0	0	0	0	521,000
Financing Plan Total	5,700,000	750,000	900,000	350,000	400,000	500,000	550,000	450,000	450,000	450,000	450,000	450,000	4,950,000
Additional Operating Impact	0	0	0	0	0	0	0	0	0	0	0	0	0

### CHANGES FROM PRIOR YEAR CIP

Project was previously titled "DASH Hybrid Bus and Trolley Battery Pack Replacement".

### PROJECT DESCRIPTION & JUSTIFICATION

In FY 2010, the City began purchasing buses and trolleys with hybrid technology instead of diesel vehicles. 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 ATC 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. Over the long-term it is probable that the City will switch to electric powered buses once this new technology proves its reliability and its costs (now nearly twice the price of a clean diesel bus) drop significantly.

### EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

Eco-City Charter

### ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

## EISENHOWER METRO RAIL STATION IMPROVEMENTS

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

Eisenhower Metrorail Station Improvements													
	A (B + M) Total Budget & Financing	B Through 2019	C FY 2020	D FY 2021	E FY 2022	F FY 2023	G FY 2024	H FY 2025	I FY 2026	J FY 2027	K FY 2028	L FY 2029	M (C:L) Total FY 2020 - FY 2029
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	153,100	0	0	15,000	15,500	16,000	16,500	17,000	17,500	18,000	18,500	19,100	153,100

### 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 Metrorail station. To permit large mixed-use development in this area, new streets must be built and utilities relocated. The existing Eisenhower Metrorail station entrance is approved to be modified to accommodate the development.

The City of Alexandria has an agreement with adjacent developers and WMATA that addresses improvements at the Eisenhower 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.

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

Additional maintenance of the plaza adjacent to the Station entrance.

## KING STREET METRORAIL STATION AREA IMPROVEMENTS

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

King Street Metrorail Station Area Improvements													
	A (B + M) Total Budget & Financing	B Through 2019	C FY 2020	D FY 2021	E FY 2022	F FY 2023	G FY 2024	H FY 2025	I FY 2026	J FY 2027	K FY 2028	L FY 2029	M (C:L) Total FY 2020 - FY 2029
Expenditure Budget	15,931,242	15,931,242	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
State/Federal Grants	8,548,706	8,548,706	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	15,931,242	15,931,242	0	0	0	0	0	0	0	0	0	0	0
Additional Operating Impact	639,900	0	0	63,000	64,900	66,800	68,800	70,900	73,000	75,200	77,500	79,800	639,900

### 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, segregate 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.

The project has been approved by the Transportation Commission, City Council, and Planning Commission. The project is currently under construction and is anticipated to be completed in late 2020.

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.

### EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

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

### ADDITIONAL OPERATING IMPACTS

Funding for ongoing maintenance is identified in the TIP. City-led maintenance will begin following the completion of construction.

## POTOMAC YARD METRORAIL STATION

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

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

PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation

PROJECT CATEGORY: 3  
 ESTIMATE USEFUL LIFE: 30+ Years

Potomac Yard Metrorail Station													
	A (B + M) Total Budget & Financing	B Through 2019	C FY 2020	D FY 2021	E FY 2022	F FY 2023	G FY 2024	H FY 2025	I FY 2026	J FY 2027	K FY 2028	L FY 2029	M (C:L) Total FY 2020 - FY 2029
Expenditure Budget	334,725,000	334,725,000	0	0	0	0	0	0	0	0	0	0	0
Financing Plan													
GO Bonds (PYM)	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	1,000,000	1,000,000	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	334,725,000	334,725,000	0	0	0	0	0	0	0	0	0	0	0
Additional Operating Impact	26,948,800	0	0	1,395,000	2,873,700	2,959,900	3,048,700	3,140,200	3,234,400	3,331,400	3,431,300	3,534,200	26,948,800

### CHANGES FROM PRIOR YEAR CIP

The Amazon Incentive Package approved by the State includes \$50 million to go toward an enhanced Southwest entry at the Potomac Yard Metrorail Station. This funding increase will be included on the Spring 2019 Supplemental Appropriation Ordinance (SAO).

### 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.

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. This marked the last step in the review process under the National Environmental Policy Act. WMATA procured a contractor for the design-build contract in the summer of 2018., and construction is planned to commence in 2019.

Alternative B was originally budgeted at \$268.0 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. 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, long term General Obligation (GO) bonds, and a loan from the U.S. Department of Transportation (USDOT) Build America Bureau, formerly known as a Transportation Infrastructure Finance and Innovation Act "TIFIA" loan. Both the VTIB loan and the TIFIA loan will be structured to include about \$10 million in "capitalized interest." This enables the City to align the repayment more closely with the tax revenue growth associated with the Potomac Yard area. 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 the south entrance to the station, which the City anticipates receiving in FY 2020, bringing the total project budget to \$370 million.

### 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 \$2.87 million per year. A half year cost is assumed for FY 2021 and full-year (plus inflation) is assumed for FY 2022 onward. The Potomac Yard Station fund revenues are projected to fund this cost.

## VAN DORN METRO RAIL STATION AREA IMPROVEMENTS

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

PROJECT LOCATION: 5690 Eisenhower Ave.  
 REPORTING AREA: Eisenhower West

PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation

PROJECT CATEGORY: 2  
 ESTIMATE USEFUL LIFE: 30+ Years

Van Dorn Metrorail Station Area Improvements													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Through 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total FY 2020 - FY 2029
Expenditure Budget	2,181,000	2,181,000	0	0	0	0	0	0	0	0	0	0	0
Financing Plan													
GO Bonds	100,000	100,000	0	0	0	0	0	0	0	0	0	0	0
GO Bonds (TIP)	650,000	650,000	0	0	0	0	0	0	0	0	0	0	0
State/Federal Grants	1,356,000	1,356,000	0	0	0	0	0	0	0	0	0	0	0
TIP	75,000	75,000	0	0	0	0	0	0	0	0	0	0	0
Financing Plan Total	2,181,000	2,181,000	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 fund a set of low cost improvements to the existing Kiss-and-Ride and bus loading area at the Van Dorn Metrorail Station to enhance access to the station for all modes of transit. These improvements will focus on lower cost solutions such as restriping and minor physical improvements. Van Dorn Metro Station has one of the highest rates of shuttle usage within the City, with many people accessing the station through private shuttles.

The catalyst behind this is the activity from the private residential shuttles in addition to the DASH and WMATA services that occupy the stations during peak and non-peak hours. Based on the activity and the current configuration, the kiss-and-ride space of the station is no longer able to support the function of Kiss-and-Ride and the increased activity of private shuttle traffic. The lack of space is becoming a safety issue for vehicles and passengers/pedestrians.

The improvements to the Van Dorn Metrorail Station will redesign the Kiss-and-Ride area to better accommodate the large number of private shuttle buses serving the station. Since the station may undergo redevelopment associated with the Eisenhower West Small Area Plan, the City is focusing on lower cost improvements. A conceptual design began in December 2018, and the construction is anticipated to be completed in FY 2020.

### EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

West End Transitway Project

### ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

## WMATA CAPITAL CONTRIBUTIONS

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

PROJECT LOCATION: Citywide  
 REPORTING AREA: Citywide

PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation

PROJECT CATEGORY: 1  
 ESTIMATE USEFUL LIFE: Varies

WMATA Capital Contributions													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Through 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total FY 2020 - FY 2029
Expenditure Budget	282,101,034	138,801,034	9,700,000	15,350,000	14,500,000	13,750,000	14,000,000	14,300,000	14,800,000	15,200,000	15,600,000	16,100,000	143,300,000
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	4,324,510	2,024,510	50,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	2,300,000
GO Bonds	233,720,786	94,070,786	9,650,000	14,000,000	14,000,000	13,500,000	13,750,000	14,050,000	14,550,000	14,950,000	15,350,000	15,850,000	139,650,000
NVTA 30% Funds	5,950,000	5,950,000	0	0	0	0	0	0	0	0	0	0	0
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	3,624,000	2,274,000	0	1,100,000	250,000	0	0	0	0	0	0	0	1,350,000
Financing Plan Total	282,101,034	138,801,034	9,700,000	15,350,000	14,500,000	13,750,000	14,000,000	14,300,000	14,800,000	15,200,000	15,600,000	16,100,000	143,300,000
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 the impacts of the dedicated funding approved by the Virginia General Assembly in 2018.

### 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 \$9.3 billion for FY 2020 – FY 2025. For FY 2020, WMATA’s capital improvement budget is \$1.4 billion, of which Alexandria’s portion is \$12.3 million. The proposed CIP fully funds this request in FY 2020.

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 2020 – FY 2029 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 jurisdictions share of the match is calculated annually based on their portion of the annual capital contribution to WMATA. For FY 2020, the City’s local match is estimated to be \$4.3 million.

The City also assumes the use of NVTC fund balance to support WMATA Capital Contributions for FY 2021 – FY 2029. This funding source is not appropriated by the City. The table on the following page provides a more detailed overview of the City’s FY 2020 funding plan for its portion of the WMATA Capital subsidy.

### EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

N/A

### ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

WMATA Capital Contributions (continued)

Detailed FY 2020 Funding Plan (reflects the 2018 Virginia General Assembly WMATA capital dedicated funding decisions)

<b>Expenditure</b>	<b>FY 2020 Amount</b>
Alexandria Portion of WMATA Capital Subsidy Request	\$ 12,400,000
Estimated Portion of Local Match to Dedicated State Funding	\$ 4,300,000
<b>TOTAL Funding Request from WMATA and State</b>	<b>\$ 16,700,000</b>

  

<b>Funding Source</b>	<b>FY 2020 Amount</b>
<b>City Appropriated Sources</b>	
GO Bond Interest Earnings	\$ 50,000
GO Bonds	\$ 9,650,000
Subtotal	\$ 9,700,000
<b>Previously Appropriated Funding Sources</b>	
GO Bonds Planned for WMATA in FY 2019	\$ 7,000,000
Subtotal	\$ 7,000,000
<b>FY 2019 Funding Sources Grand Total</b>	<b>\$ 16,700,000</b>
Surplus/(Shortall)	\$ -

## TRANSIT CORRIDOR A - ROUTE 1

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

Transit Corridor "A" - Route 1													
	A (B + M) Total Budget & Financing	B Through 2019	C FY 2020	D FY 2021	E FY 2022	F FY 2023	G FY 2024	H FY 2025	I FY 2026	J FY 2027	K FY 2028	L FY 2029	M (C:L) Total FY 2020 - FY 2029
Expenditure Budget	27,340,911	22,340,911	5,000,000	0	0	0	0	0	0	0	0	0	5,000,000
Financing Plan													
GO Bonds	1,325,000	1,325,000	0	0	0	0	0	0	0	0	0	0	0
NVTA 70% Funds	660,000	660,000	0	0	0	0	0	0	0	0	0	0	0
State/Federal Grants	21,160,911	16,160,911	5,000,000	0	0	0	0	0	0	0	0	0	5,000,000
TIP	4,195,000	4,195,000	0	0	0	0	0	0	0	0	0	0	0
Financing Plan Total	27,340,911	22,340,911	5,000,000	0	0	0	0	0	0	0	0	0	5,000,000
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 the \$5 million approved by the state as part of the Amazon HQ2 incentive package.

### 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.

As part of their development obligations, the Potomac Yard Development widened Route 1 to add new northbound lanes. The transitway was constructed in the new median (former northbound lanes). Premium branded vehicles operate in the exclusive right-of-way along this segment. Other project elements include: enhanced shelters, transit signal priority, and real-time information signage.

In FY 2020, \$5 million of funding was added as part of the Amazon Incentive Package to help fund the design and construction of the Transitway north of East Glebe Road. Timing of project implementation will depend on the timing and phasing of the north Potomac Yard development.

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

#### EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

N/A

#### ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.



## TRANSIT CORRIDOR "B" - DUKE STREET

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

Transit Corridor "B" - Duke Street													
	A (B + M) Total Budget & Financing	B Through 2019	C FY 2020	D FY 2021	E FY 2022	F FY 2023	G FY 2024	H FY 2025	I FY 2026	J FY 2027	K FY 2028	L FY 2029	M (C:L) Total FY 2020 - FY 2029
Expenditure Budget	12,190,000	190,000	12,000,000	0	0	0	0	0	0	0	0	0	12,000,000
Financing Plan													
NVTA 70% Funds	12,190,000	190,000	12,000,000	0	0	0	0	0	0	0	0	0	12,000,000
Financing Plan Total	12,190,000	190,000	12,000,000	0	0	0	0	0	0	0	0	0	12,000,000
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 latest approved grant amounts and timing.

### 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/Eisenhower Avenue corridor between the western City limit and Old Town.

On Sept 17, 2011, Council adopted the High Capacity Transit Corridor Work Group recommendation for a phased implementation of the Transitway.

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 environmental work in FY 2020. Based on a refined concept design for the project, the current cost estimate is \$116 million which includes planning, environmental, design, right-of-way acquisition, utility relocation, construction, and rolling stock. Significant private (development) capital contributions, regional funding sources and/or Federal funds will likely be required to move this project to the construction phase in future years.

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

#### ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

## TRANSIT CORRIDOR "C" - WEST END TRANSITWAY

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

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

PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation

PROJECT CATEGORY: 3  
 ESTIMATE USEFUL LIFE: 30+ Years

Transit Corridor "C" - West End Transitway													
	A (B + M) Total Budget & Financing	B Through 2019	C FY 2020	D FY 2021	E FY 2022	F FY 2023	G FY 2024	H FY 2025	I FY 2026	J FY 2027	K FY 2028	L FY 2029	M (C:L) Total FY 2020 - FY 2029
Expenditure Budget	17,851,000	5,650,000	0	3,167,000	3,055,000	5,979,000	0	0	0	0	0	0	12,201,000
Financing Plan													
NVTA 70% Funds	4,850,000	2,650,000	0	2,200,000	0	0	0	0	0	0	0	0	2,200,000
State/Federal Grants	10,901,000	900,000	0	967,000	3,055,000	5,979,000	0	0	0	0	0	0	10,001,000
TIP	2,100,000	2,100,000	0	0	0	0	0	0	0	0	0	0	0
Financing Plan Total	17,851,000	5,650,000	0	3,167,000	3,055,000	5,979,000	0	0	0	0	0	0	12,201,000
Additional Operating Impact	18,300,300	0	0	0	0	2,400,000	2,472,000	2,456,200	2,622,500	2,701,200	2,782,700	2,865,700	18,300,300

### CHANGES FROM PRIOR YEAR CIP

Funding plan updated to reflect latest approved grant amounts and timing.

### 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 construct a high-capacity Transitway in dedicated lanes along portions of the corridor between the Van Dorn Metrorail station and the border with Arlington. This investment will support the development approved in the Landmark/Van Dorn Small Area Plan (SAP) and the Beauregard Corridor SAP by providing increased transit options for local, regional, and commuter trips.

On March 29, 2016, City Council passed a motion to re-concur with the project LPA (Locally Preferred Alternative) and advance the project into the design phase. The City received \$2.4 million from NVTA in FY 2016 to initiate the design phase.

A preliminary cost estimate was developed during the Transitway Corridors Feasibility Study; the cost estimate is approximately \$120 - \$140 million which includes design, right-of-way acquisition, utility relocation, construction, and rolling stock. The overall project has increased due to changes related to right of way acquisition. Under the Beauregard SAP, it was anticipated that redevelopment of multiple parcels along the North Beauregard corridor would provide right of way to the City at no cost.

The City was awarded \$2.2 million in NVTA 70% funding which is anticipated to be available in FY 2021. The City is seeking approximately \$61 million in FY 2024-FY 2025 SMART SCALE funds, and will also seek federal funding (including, but not limited to, FTA Small Starts, TIGER, or TIFIA). NVTA 70% funds and Federal funds are highly competitive and are not guaranteed. Without these substantial Federal funds and development contributions, construction will be unable to commence, or will have to be phased.

In June 2017, the Commonwealth Transportation Board (CTB) awarded the City \$10 million in SMART SCALE funding in FY 2021 - FY 2023 for the West End Transitway improvements within Southern Towers. These funds will be used to leverage applications for NVTA 70% and FTA funds. The City applied for additional SMART SCALE funding as part of the FY 2024 - FY 2025 program, and the funding amount will be determined in Spring 2019.

### EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

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

### ADDITIONAL OPERATING IMPACTS

The operating costs are a preliminary estimate based on the proposed service patterns. Other cost factors will include span of service and operator. FY 2023 funds include \$1 million in CMAQ funds for operating costs.

## 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

PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation

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

Transitway Enhancements													
	A (B + M) Total Budget & Financing	B Through 2019	C FY 2020	D FY 2021	E FY 2022	F FY 2023	G FY 2024	H FY 2025	I FY 2026	J FY 2027	K FY 2028	L FY 2029	M (C:L) Total FY 2020 - FY 2029
Expenditure Budget	1,454,491	500,000	500,000	454,491	0	0	0	0	0	0	0	0	954,491
Financing Plan													
CMAQ/RSTP	954,491	0	500,000	454,491	0	0	0	0	0	0	0	0	954,491
State/Federal Grants	500,000	500,000	0	0	0	0	0	0	0	0	0	0	0
Financing Plan Total	1,454,491	500,000	500,000	454,491	0	0	0	0	0	0	0	0	954,491
Additional Operating Impact	0	0	0	0	0	0	0	0	0	0	0	0	0

### CHANGES FROM PRIOR YEAR CIP

Project was previously titled "Route 1 Fare Payment Technology"

### PROJECT DESCRIPTION & JUSTIFICATION

This project funds safety enhancements along segments of the City's transit corridors, including items such as median islands with pedestrian refuges, new crossings for pedestrians and signal technology to improve safety at these crossings.

#### EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

Transportation Master Plan; WMATA Momentum

#### ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

## BACKLICK RUN MULTI-USE PATHS

DOCUMENT SUBSECTION: Non-Motorized Transportation

PROJECT LOCATION: Backlick Run Trail Phase I - from Boothe Park to Van Dorn St.

MANAGING DEPARTMENT: Department of Transportation and Environmental Services

REPORTING AREA: Landmark/Van Dorn

PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation

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

Backlick Run Multi-Use Paths													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Through 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total FY 2020 - FY 2029
Expenditure Budget	7,462,545	2,851,894	0	0	2,210,003	2,100,648	300,000	0	0	0	0	0	4,610,651
Financing Plan													
State/Federal Grants	7,462,545	2,851,894	0	0	2,210,003	2,100,648	300,000	0	0	0	0	0	4,610,651
Financing Plan Total	7,462,545	2,851,894	0	0	2,210,003	2,100,648	300,000	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

This project provides funding to design and construct the first phase of a shared-use path along Backlick Run from Boothe Park, west to Van Dorn Street. This project is a high priority project in the Transportation Master Plan, the Pedestrian and Bicycle Master Plan, and is also a recommendation of the Eisenhower West Small Area Plan. Once complete, the trail will help better connect the far west side of the City with the Mount Vernon Trail and the existing trail network in the Ben Brennan Park and Eisenhower Valley. Phase II of the Backlick Run Trail will run from the Van Dorn Street bridge west to Fairfax County Line.

Funding for phase I of this project was secured through a CMAQ/RSTP grant. Design and construction is funded through \$2.12 million in CMAQ/RSTP grant funds, and \$5.04 million from Smart Scale funds for a total of \$7.462 million.

Completion of this project will provide increased multimodal connectivity, because it links the City's trail network to the Van Dorn Metro Station. Helping to fulfill the Eco-City initiative, this project will provide options for non-motorized transportation as well as improve access to transit. The trail will encourage more walking, biking, and transit use, thereby helping to reduce carbon emissions and improving health.

### 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  
 MANAGING DEPARTMENT: Department of Transportation and Environmental Services

PROJECT LOCATION: Citywide  
 REPORTING AREA: Citywide

PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation

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

Bicycle Parking at Transit													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Through 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total FY 2020 - FY 2029
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

Bicycle commuting has grown as a viable option 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 bicycle commuting through the provision of bicycle parking facilities at transit stops and demand locations proximate to transit.

The majority of improvements funded through this project are 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. Previously, the title for this project was "Bicycle Parking at Metro Stations". Over the past year the project absorbed funds from a separate bicycle parking project entitled "Bicycle Parking Citywide". The project consolidation was performed in order to expedite the implementation of facilities. Staff has coordinated with the Virginia Department of Transportation for the approval of a Programmatic Categorical Exclusion. The City anticipates the project will be advertised in FY 2019, with construction in FY 2020.

#### EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

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

#### ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

## BRAC & CENTRAL CITY NEIGHBORHOOD PROTECTION PLAN

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

PROJECT LOCATION: BRAC-133 Vicinity  
 REPORTING AREA: Beauregard

PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation

PROJECT CATEGORY: 3  
 ESTIMATE USEFUL LIFE: Varies

BRAC & Central City Neighborhood Protection Plan													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Through 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total FY 2020 - FY 2029
Expenditure Budget	835,000	835,000	0	0	0	0	0	0	0	0	0	0	0
Financing Plan													
Cash Capital	160,000	160,000	0	0	0	0	0	0	0	0	0	0	0
State/Federal Grants	500,000	500,000	0	0	0	0	0	0	0	0	0	0	0
TIP	175,000	175,000	0	0	0	0	0	0	0	0	0	0	0
Financing Plan Total	835,000	835,000	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 federal Department of Defense BRAC-133 facility opened at the Mark Center in the fall of 2011 and was constructed to house 6,100 employees. Funding for this project was set aside by City Council to address any traffic issues resulting from commuter travel to the BRAC 133 facility.

Beginning in 2015, and using funding from this project, the City undertook the Central Alexandria Traffic Study to analyze the impacts of regional cut through traffic (including BRAC-related traffic) on the City’s residential roadways. This study was completed, and mitigation recommendations were provided in FY 2019. Remaining funding from this project will go toward Central Alexandria Traffic Study short-term (low-cost) mitigation recommendations. Implementation of mitigation measures began in summer 2019 and are expected to continue through FY 2019 and possibly beyond depending on scope.

Staff expects that future mitigation (long-term capital improvements) will be required and projects considered in a planned update of the City's Transportation Master Plan. Funding for mid- and long-term mitigation projects not currently within the City's transportation plan may need to be incorporated in City and/or regional plans before consideration in future budget processes.

### EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

N/A

### ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

## CAMERON & PRINCE BICYCLE & PEDESTRIAN FACILITIES

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

PROJECT LOCATION: Cameron St. and Prince St.  
 REPORTING AREA: Old Town

PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation

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

Cameron & Prince Bicycle & Pedestrian Facilities													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Through 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total FY 2020 - FY 2029
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 improves the non-motorized transportation network with the installation of bicycle facilities and pedestrian improvements from the King Street Metro Station to the Waterfront along Cameron and Prince Streets. 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.

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 designated space on the roadway for cyclists as well as additional bicycle parking opportunities along the corridor.

Funding was provided in FY 2016 through NVTA 30% funds. Concepts for enhanced pedestrian and bicycle safety were developed in FY 2016. Construction of the bicycle facilities were implemented in FY 2017. Improvements to Daingerfield Road and Diagonal Road remain pending the King Street Metrorail Station Area Improvements project. The improvements are expected to be made in FY 2021 after the completion of the King Street Metrorail construction project.

This project helps to promote pedestrian, bicycling, and transit use, thereby helping to reduce carbon emissions and improving health.

### EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

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  
 MANAGING DEPARTMENT: Department of Transportation and Environmental Services

PROJECT LOCATION: Citywide  
 REPORTING AREA: Citywide

PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation

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

Capital Bikeshare													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Through 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total FY 2020 - FY 2029
Expenditure Budget	4,931,537	3,279,341	402,196	350,000	400,000	250,000	250,000	0	0	0	0	0	1,652,196
Financing Plan													
CMAQ/RSTP	1,652,196	0	402,196	350,000	400,000	250,000	250,000	0	0	0	0	0	1,652,196
State/Federal Grants	3,279,341	3,279,341	0	0	0	0	0	0	0	0	0	0	0
Financing Plan Total	4,931,537	3,279,341	402,196	350,000	400,000	250,000	250,000	0	0	0	0	0	1,652,196
Additional Operating Impact	8,643,400	0	0	850,800	876,300	902,600	929,700	957,600	986,300	1,015,900	1,046,400	1,077,800	8,643,400

### CHANGES FROM PRIOR YEAR CIP

No changes from previous CIP.

### PROJECT DESCRIPTION & JUSTIFICATION

Public bicycle transit or "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 either registering online, by phone, or at a station. Successful bike share 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, and mixed use development.

Capital Bikeshare is a regional system with stations in the District of Columbia, Arlington County, VA, Fairfax County, VA, Prince George's County, MD, and Montgomery County, MD. Alexandria joined the Capital Bikeshare network in 2012 and began implementation with eight bike share stations as a pilot program in Old Town, using CMAQ/RSTP grant funding. The program expanded to Del Ray and Carlyle in 2014 through the addition of eight stations. Fifteen more stations were added in spring and summer 2016 using grant funding as well as private capital contributions, for a total of 31 stations in Alexandria. In Summer 2019, eleven more stations will be added to the system for a total of 42 stations.

Stations are located in areas suggested by the public, mixed-use activity centers, near major transit stops and are typically spaced one quarter mile apart. Capital costs for stations and bicycles range depending on size of station and number of docks.

Bikeshare access to transit and other activity centers support the well-being of families by allowing more transportation choices that help to provide flexibility to residents. It will encourage more transit use, thereby helping to reduce carbon emissions and improving health.

#### EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

Pedestrian and Bicycle Master Plan

#### ADDITIONAL OPERATING IMPACTS

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



## COMPLETE STREETS

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

PROJECT LOCATION: Citywide  
 REPORTING AREA: Citywide

PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation

PROJECT CATEGORY: 3  
 ESTIMATE USEFUL LIFE: Varies

Complete Streets													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Through 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total FY 2020 - FY 2029
Expenditure Budget	16,926,091	8,176,091	1,130,000	1,130,000	830,000	830,000	830,000	830,000	680,000	830,000	830,000	830,000	8,750,000
Financing Plan													
Cash Capital	12,178,339	5,428,339	630,000	630,000	630,000	630,000	630,000	830,000	480,000	630,000	830,000	830,000	6,750,000
GO Bond Interest Earnings	75,000	75,000	0	0	0	0	0	0	0	0	0	0	0
GO Bonds	4,336,986	2,336,986	500,000	500,000	200,000	200,000	200,000	0	200,000	200,000	0	0	2,000,000
Prior Capital Funding	9,766	9,766	0	0	0	0	0	0	0	0	0	0	0
TIP	326,000	326,000	0	0	0	0	0	0	0	0	0	0	0
Financing Plan Total	16,926,091	8,176,091	1,130,000	1,130,000	830,000	830,000	830,000	830,000	680,000	830,000	830,000	830,000	8,750,000
Additional Operating Impact	647,400	0	0	63,700	65,600	67,600	69,600	71,700	73,900	76,100	78,400	80,800	647,400

### CHANGES FROM PRIOR YEAR CIP

No changes from previous CIP.

### PROJECT DESCRIPTION & JUSTIFICATION

This program funds capital infrastructure improvements to the non-motorized transportation network, including sidewalks, curbs, pedestrian crossings, on-street bicycle facilities, bicycle parking, and access ramps throughout the City. The implementation of these improvements is coordinated with the City's annual street resurfacing programs. These improvements also ensure compliance with federal regulations that mandate accessibility improvements in all street alteration projects and allows the city to comply with the Commonwealth Transportation Board adopted "Policy for Integrating Bicycle and Pedestrian Accommodations."

Planned FY 2020 funding includes \$300,000 for priority engineering improvement projects in the recently-adopted Vision Zero Action Plan. These projects may include intersection re-design and construction, infrastructure upgrades like pedestrian walk signals, improved crosswalks, curb ramps and other accessibility improvements, 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.

This project addresses missing multimodal infrastructure and requires engineering and design, in addition to construction funding for many of the initiatives to be completed.

In FY 2020, one Urban Planner III and one Principal Planner position will be funded from this capital project, providing direct support to the implementation of capital projects associated with Vision Zero and Complete Streets initiatives.

#### EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

Transportation Master Plan; Pedestrian and Bicycle 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

Operating impact includes sidewalk maintenance, pavement marking re-striping for crosswalks and on-street bicycle facilities, access ramp maintenance, signs, and signal maintenance.

## Complete Streets (continued)

## Complete Streets FY 2020 – FY 2022 Project List

<b>Fiscal Year 2020</b>	
Description	Amount
Complete Street staffing	\$288,000
Safe Routes to Schools	\$50,000
Speed Cushion Program for Qualifying Streets	\$22,000
Pedestrian Case Study Area Recommendations in Pedestrian / Bicycle Master Plan	\$80,000
Data Collection and Technology	\$15,000
Roadway Resurfacing Complete Streets Projects - Design / Construction	\$90,000
Pedestrian Signals and Technology Citywide	\$40,000
Residential Sidewalk Program for Qualifying Streets	\$50,000
Pedestrian Case Study Area Recommendations in Pedestrian / Bicycle Master Plan	\$60,000
Roadway Resurfacing Sidewalk Projects	\$50,000
Annual ADA Sidewalk curbs and ramp and bus stop improvements	\$40,000
Ongoing Crosswalk and Marking upgrades	\$40,000
Citywide Bicycle Rack Installation	\$5,000
Vision Zero Safety Improvement Implementation and Design	\$300,000
<b>Total Fiscal Year 2020</b>	<b>\$1,130,000</b>

<b>Fiscal Year 2021</b>	
Description	Amount
Complete Street Staffing	\$ 288,000
Safe Routes to Schools - Project Implementation	\$ 50,000
Speed Cushion Program for qualifying streets	\$ 22,000
Pedestrian Case Study Area Recommendations in Pedestrian & Bicycle Master Plan	\$ 80,000
Data Collection and Technology	\$ 15,000
Roadway Resurfacing Complete Street Projects - Design & Construction	\$ 90,000
Pedestrian Signals & Technology Citywide	\$ 40,000
Priority Project Recommendations in Pedestrian & Bicycle Master Plan	\$ 60,000
Residential Sidewalk Program for Qualifying Streets	\$ 50,000
Roadway Resurfacing Sidewalk Projects	\$ 50,000
Annual ADA sidewalk, curb ramp and bus stop improvements - Citywide	\$ 40,000
Ongoing Crosswalk and Marking upgrades	\$ 40,000
Citywide Bicycle Rack installation	\$ 5,000
Vision Zero Safety Improvement Implementation and Design	\$300,000
<b>Total Fiscal Year 2021</b>	<b>\$1,130,000</b>

## Complete Streets (continued)

## Complete Streets FY 2020 – FY 2022 Project List (continued)

<b>Fiscal Year 2022</b>	
Description	Amount
Complete Street Staffing	\$ 288,000
Safe Routes to Schools - Project Implementation	\$ 50,000
Speed Cushion Program for qualifying streets	\$ 22,000
Pedestrian Case Study Area Recommendations in Pedestrian & Bicycle Master Plan	\$ 80,000
Data Collection and Technology	\$ 15,000
Roadway Resurfacing Complete Street Projects - Design & Construction	\$ 90,000
Pedestrian Signals & Technology Citywide	\$ 40,000
Priority Project Recommendations in Pedestrian & Bicycle Master Plan	\$ 60,000
Residential Sidewalk Program for Qualifying Streets	\$ 50,000
Roadway Resurfacing Sidewalk Projects	\$ 50,000
Annual ADA sidewalk, curb ramp and bus stop improvements - Citywide	\$ 40,000
Ongoing Crosswalk and Marking upgrades	\$ 40,000
Citywide Bicycle Rack installation	\$ 5,000
<b>Total Fiscal Year 2022</b>	<b>\$ 830,000</b>

## HOLMES RUN TRAIL CONNECTOR

DOCUMENT SUBSECTION: Non-Motorized Transportation

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

MANAGING DEPARTMENT: Department of Transportation and Environmental Services

REPORTING AREA: Seminary Hill/Landmark/Van Dorn

PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation

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

Holmes Run Trail Connector													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Through 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total FY 2020 - FY 2029
Expenditure Budget	800,000	800,000	0	0	0	0	0	0	0	0	0	0	0
Financing Plan													
State/Federal Grants	800,000	800,000	0	0	0	0	0	0	0	0	0	0	0
Financing Plan Total	800,000	800,000	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 Holmes Run Trail Connector will provide a multiuse path on the south side of Holmes Run between Ripley Street and North Pickett Street. This priority trail project will replace a dirt path with a multiuse trail constructed with pervious materials. The new trail will provide access for pedestrians and cyclists in Holmes Run Park and create new connections into the larger trail network.

#### EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

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

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

Mt. Vernon Avenue North Complete Streets													
	A (B + M) Total Budget & Financing	B Through 2019	C FY 2020	D FY 2021	E FY 2022	F FY 2023	G FY 2024	H FY 2025	I FY 2026	J FY 2027	K FY 2028	L FY 2029	M (C:L) Total FY 2020 - FY 2029
Expenditure Budget	520,000	0	520,000	0	0	0	0	0	0	0	0	0	520,000
Financing Plan CMAQ/RSTP	520,000	0	520,000	0	0	0	0	0	0	0	0	0	520,000
Financing Plan Total	520,000	0	520,000	0	0	0	0	0	0	0	0	0	520,000
Additional Operating Impact	0	0	0	0	0	0	0	0	0	0	0	0	0

### CHANGES FROM PRIOR YEAR CIP

This is a new project added to the CIP in FY 2020.

### PROJECT DESCRIPTION & JUSTIFICATION

This project will design, and construct safety and accessibility improvements identified in the Pedestrian and Bicycle Master Transportation Plan Chapter Pedestrian Case Study for the Mt. Vernon Avenue corridor, as well as improvements identified in prior outreach to the community. Specific improvements may include intersection geometry changes, bus stop enhancements, and improving pedestrian crossings.

#### EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

Pedestrian and Bicycle Master Plan

#### 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 Rd.
MANAGING DEPARTMENT: Department of Project Implementation	REPORTING AREA: Old Town North
PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation	PROJECT CATEGORY: 2 ESTIMATE USEFUL LIFE: 21 - 25 Years

Mt. Vernon Trail @ East Abingdon													
	A (B + M) Total Budget & Financing	B Through 2019	C FY 2020	D FY 2021	E FY 2022	F FY 2023	G FY 2024	H FY 2025	I FY 2026	J FY 2027	K FY 2028	L FY 2029	M (C:L) Total FY 2020 - FY 2029
Expenditure Budget	850,000	850,000	0	0	0	0	0	0	0	0	0	0	0
Financing Plan													
GO Bonds (TIP)	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 safety improvements on the Mount Vernon Trail where trail width and conflicts with vehicles make non-motorized travel unsafe.

Survey work and design for construction on a portion of this project started in CY 2017. Staff has completed traffic counts for streets paralleling the narrow trail section, and a detailed design is in progress. Additional traffic analysis has been conducted to determine traffic impacts. In order to begin construction, additional right-of-way and easement agreements are needed.

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.

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 safety improvements at the Mount Vernon Trail increase safety for pedestrians, bicyclists, and safe access to transit and other facilities.

### EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

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

### ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

### OLD CAMERON RUN TRAIL

DOCUMENT SUBSECTION: Non-Motorized Transportation	PROJECT LOCATION: Eisenhower Ave. at Mill Rd. to Mt. Vernon Trail
MANAGING DEPARTMENT: Department of Project Implementation	REPORTING AREA: Eisenhower East
PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation	PROJECT CATEGORY: 3 ESTIMATE USEFUL LIFE: 21 - 25 Years

Old Cameron Run Trail													
	A (B + M) Total Budget & Financing	B Through 2019	C FY 2020	D FY 2021	E FY 2022	F FY 2023	G FY 2024	H FY 2025	I FY 2026	J FY 2027	K FY 2028	L FY 2029	M (C:L) Total FY 2020 - FY 2029
Expenditure Budget	6,950,000	4,181,000	1,409,000	1,360,000	0	0	0	0	0	0	0	0	2,769,000
Financing Plan													
GO Bonds	100,000	100,000	0	0	0	0	0	0	0	0	0	0	0
State/Federal Grants	6,850,000	4,081,000	1,409,000	1,360,000	0	0	0	0	0	0	0	0	2,769,000
Financing Plan Total	6,950,000	4,181,000	1,409,000	1,360,000	0	0	0	0	0	0	0	0	2,769,000
Additional Operating Impact	26,100	0	0	2,500	2,600	2,700	2,800	2,900	3,000	3,100	3,200	3,300	26,100

#### CHANGES FROM PRIOR YEAR CIP

No changes from previous CIP.

#### PROJECT DESCRIPTION & JUSTIFICATION

This project will construct a shared-use path between Mill Road and the existing off-street trail east of Hooff’s 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. This project will enhance pedestrian and bicycle connectivity between Eisenhower Metro, Eisenhower East, Old Town Alexandria, and the Mount Vernon Trail.

This project is based off a feasibility study conducted in FY 2016. The City began initial trail design in FY 2019.

Completion of this trail is necessary to support a multi-modal environment and provide local and regional connectivity. Additionally, the trail will encourage more walking, biking, and transit use, thereby helping to reduce carbon emissions and improve health.

#### EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

Pedestrian and Bicycle Master Plan, Eisenhower East Small Area Plan

#### ADDITIONAL OPERATING IMPACTS

On going maintenance will be required to maintain the trail.

## SEMINARY / HOWARD SAFETY IMPROVEMENTS

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

Seminary / Howard Safety Improvements													
	A (B + M) Total Budget & Financing	B Through 2019	C FY 2020	D FY 2021	E FY 2022	F FY 2023	G FY 2024	H FY 2025	I FY 2026	J FY 2027	K FY 2028	L FY 2029	M (C:L) Total FY 2020 - FY 2029
Expenditure Budget	400,000	400,000	0	0	0	0	0	0	0	0	0	0	0
Financing Plan													
State/Federal Grants	400,000	400,000	0	0	0	0	0	0	0	0	0	0	0
Financing Plan Total	400,000	400,000	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 include pedestrian safety and ADA improvements 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 Pedestrian and Bicycle chapter of the Transportation Master Plan, adopted in 2016. The City was awarded a VDOT Bicycle and Pedestrian and Safety Program grant for this project. Outreach for this project has been undertaken in conjunction with the Seminary Road Complete Streets Project.

#### 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  
 MANAGING DEPARTMENT: Department of Transportation and Environmental Services

PROJECT LOCATION: Citywide  
 REPORTING AREA: Citywide

PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation

PROJECT CATEGORY: 1  
 ESTIMATE USEFUL LIFE: 30+ Years

Shared-Use Paths													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Through 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total FY 2020 - FY 2029
Expenditure Budget	1,941,357	741,357	300,000	0	300,000	0	300,000	0	300,000	0	0	0	1,200,000
Financing Plan													
Cash Capital	1,546,000	346,000	300,000	0	300,000	0	300,000	0	300,000	0	0	0	1,200,000
GO Bonds	395,357	395,357	0	0	0	0	0	0	0	0	0	0	0
Financing Plan Total	1,941,357	741,357	300,000	0	300,000	0	300,000	0	300,000	0	0	0	1,200,000
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

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  
 MANAGING DEPARTMENT: Department of Transportation and Environmental Services

PROJECT LOCATION: Citywide  
 REPORTING AREA: Citywide

PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation

PROJECT CATEGORY: 1  
 ESTIMATE USEFUL LIFE: 30+ Years

Sidewalk Capital Maintenance													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Through 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total FY 2020 - FY 2029
Expenditure Budget	8,616,469	3,789,469	600,000	600,000	300,000	600,000	300,000	600,000	300,000	600,000	327,000	600,000	4,827,000
Financing Plan													
Cash Capital	7,916,469	3,089,469	600,000	600,000	300,000	600,000	300,000	600,000	300,000	600,000	327,000	600,000	4,827,000
GO Bonds	700,000	700,000	0	0	0	0	0	0	0	0	0	0	0
Financing Plan Total	8,616,469	3,789,469	600,000	600,000	300,000	600,000	300,000	600,000	300,000	600,000	327,000	600,000	4,827,000
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

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.

Planned FY 2020 funding includes \$300,000 to support the priorities of Vision Zero. This additional funding will allow for pedestrian safety improvements on the streets included in the list on the following page.

#### 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 2020 – FY 2022 Project List

<b>Fiscal Year 2020</b>
Description
Taney Ave. from N. Early St. to N. Gordon St. (Edge Mill only)
N Donelson St from Duke St to Taft Ave (Edge Mill only)
Polk Ave from N Naylor St to N Pegram St
E/W Abingdon St. from First St. to Dead End
Commonwealth Ave from E Braddock Rd to King St
Bishop Lane from N Quaker to Circle
Mansion Dr. Entire Length
Vermont Ave from S Gordon St to S Jenkins St
S Jenkins St from Venable Ave to Holmes Run Pkwy
N & S Fairfax St from Jefferson St to Third St
Eisenhower Ave. from Mill Rd. to Holland Ln.
E&W Rosemont from King St to Commonwealth Ave
Mt Vernon Ave from Rosemont Ave to Dead-End
High Street from W Braddock Rd to Russell Rd
Virginia Ave. Entire Length
N & S Union St from Pendleton St to Franklin St
Dartmouth Rd. from Crown View to Dead End
Valley Dr from Martha Custis Dr to Gunston Rd
Powhatan St from Washington St to Slater Ln
W Reed Ave from JD HWY to Mt Vernon Ave
Mark Drive (entire length)
Stonewall Rd from W Braddock Rd to High St
Jasper Pl from S Jenkins St to cul-de-sac
King Street from Callahan to Daingerfield
N Pitt St from Oronoco St to King St
Norwood Pl from Cameron Mills Rd to cul-de-sac
W. Taylor Run Pkwy. From Janney's Ln. to Dead End
N Pegram St from Holmes Run Pkwy to N pickett St
Roth St - Entire Length from Duke St to Business Center Dr
Colvin St - Entire Length from Roth St to S Quaker Ln
Vison Zero Improvements

## Sidewalk Capital Maintenance (continued)

## Sidewalk Capital Maintenance FY 2020 - FY 2022 Project List (continued)

<b>Fiscal Year 2021</b>
Description
Duke St from S Patrick St to Strand St
Hume Ave. from Commonwealth Ave. to Jefferson Davis Hwy.
N Floyd St from Duke St to N French St
Fendall Ave from Duke St to S Floyd St
Wellington Rd from Beverley Dr to Chalfonte Dr
Bryan St. from W. Taylor Run Pkwy. To Dead End
Fillmore Ave. from Cul-de-sac to Seminary Rd
Farm Rd. from Beverley Dr to Circle Terr
N Gladden St & N Grayson St from Uline Ave to Uline Ave
Tulsa Place from N Gordon to cul-de-sac
Uline Ave from N Gordon St to N Furman St
West Street from Duke St to Wythe St
Skyhill Rd. from Janney's Ln. to Dead End
Daingerfield - Entire Length
Morgan St from N Chambliss St to Circular Parking space
N/S Alfred St. from First St. to Church St.
Reading Ave from Rayburn Ave To N Beauregard St
Rayburn Ave from N Beauregard St to Reading Ave
Lomack St from cul-de-sac to Dead-end
S Iris from Venable Ave to Vermont Ave
S French St from Duke St to cul-de-sac
Cameron Mills Rd from Virginia Ave to Allison St
Fort Ward Pl. - Entire Length
Ellicott St. - Entire Length
Moncure Dr from S View Terr to Hilton St (Base failure)
N Howard St from Raleigh Ave to W Braddock Rd
Crown View Dr. from Clover Way to Dartmouth Rd.
Jewell Court & Anderson Court from N Chambliss St to cul-de-sac
N & S Saint Asaph St from First St to Dead-end
Diagonal - Entire Length

## Sidewalk Capital Maintenance (continued)

## Sidewalk Capital Maintenance FY 2020 – FY 2022 Project List (continued)

<b>Fiscal Year 2022</b>
Description
Executive Ave from W Glebe Rd to Four mile Rd
Kentucky Ave from Old Dominion Bv to Russell Rd
Alabama Ave from Kentucky Ave to Carolina Pl
Beverly Drive from Russell Rd to Washington Circle
Allison St. Entire Length
Echols Ave from Seminary Rd to Dead-End
Burgess Ave (All of it)
Aspen Street from Landover St to Mosby St
Guthrie Ave from Landover St to Mosby St
Mosby Street from Aspen St to West Mt Ida Ave
Holly St from Aspen St to West Mt Ida Ave
Birch St from Holly St to Russell Rd
Pine Street from Holly St to Russell Rd
Evans Lane from JD HWY to Reed Ave
Lynhaven Drive from JD HWY TO Evans Ln
Montrose Ave from Raymond Ave to JD HWY
Stewart Ave from Mt Vernon Ave to Randolph Ave
Anderson Lane from Windsor Ave to Richards Ln
Richards Lane from Anderson Ln to W Windsor Ave
North Garland St from Ft Worth Ave to Cul De Sac
Richenbacher Ave. from N. Van Dorn St. to N. Pickett St.
Holmes Run Pkwy. From Van Dorn to Dead End
Lowell Ave from N Chambliss St to cul-de-sac
S Gordon from Duke St to Wheeler Ave
Venable Ave - Entire Length
Underwood Place from Ingram St to cul-de-sac
Cathedral Dr - Entire Length
Benning Ct from N Chambliss St to Dead-end
S Ingram St from Duke St to Vermont Ave
Holmes Run Pkwy from S Jordan St to S Jenkins St
South View Ter from E Taylor Run Pkwy to Hilltop Ter
N & S Washington Street from First St to Church St
Marlboro Dr. - Entire Length
Mt Vernon Ave from Hume Ave to East Braddock Rd
Jupiter Place from N Jordan St to Cul de sac
Greenwood Place from Seminary Rd to Circle
Knox Place (all of it) / Washington Gas has paved half the street
Rutland Place from N Pickett St to Cul de sac
Stonewall Rd from W Braddock Rd to High St
Reed Ave from JD Hwy to Mt Vernon Ave
E&W Nelson Ave from Russell Rd to Leslie Ave
George Mason Place from Monticello Bv to Cul de sac
Terrett Ave from E Mt Ida to E Randolph Ave
Usher Avenue
W. Taylor Run Pkwy from Duke St. to Janney's Lane
Colfax Ave from Seminary Rd to N Rosser St
North Early Street from W Braddock Rd to Cul-de-sac
Mt Vernom Ave from Rosemont Ave to dead-end

## TRANSPORTATION MASTER PLAN UPDATE

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

PROJECT LOCATION: Citywide  
 REPORTING AREA: Citywide

PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation

PROJECT CATEGORY: 2  
 ESTIMATE USEFUL LIFE: 6 - 10 Years

Transportation Master Plan Update													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Through 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total FY 2020 - FY 2029
Expenditure Budget	840,000	340,000	0	500,000	0	0	0	0	0	0	0	0	500,000
Financing Plan													
CMAQ/RSTP	500,000	0	0	500,000	0	0	0	0	0	0	0	0	500,000
State/Federal Grants	340,000	340,000	0	0	0	0	0	0	0	0	0	0	0
Financing Plan Total	840,000	340,000	0	500,000	0	0	0	0	0	0	0	0	500,000
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

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. The Transportation Commission has supported this project as a priority in the City. The chapter updates will be phased based on the availability of funding.

The 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 update brings significant changes to the Master Plan since it was last reviewed 10 years ago. The Plan will incorporate significant development in key areas of the City and features a sustainability approach to improve mobility for all. The Transportation Master Plan update will be strategically aligned to other City-led policies and plans such as the Environmental Action Plan, Action 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. The funding was awarded for FY 2019 and FY 2021, so the update is being phased to align with available funding timelines.

Updating the 2008 Transportation Master Plan will provide for opportunities to increase the livability of neighborhoods, improved and increased 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

### ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

## VAN DORN/BEAUREGARD BICYCLE FACILITIES

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

Van Dorn/Beauregard Bicycle Facilities													
	A (B + M) Total Budget & Financing	B Through 2019	C FY 2020	D FY 2021	E FY 2022	F FY 2023	G FY 2024	H FY 2025	I FY 2026	J FY 2027	K FY 2028	L FY 2029	M (C:L) Total FY 2020 - FY 2029
Expenditure Budget	1,458,869	250,000	1,208,869	0	0	0	0	0	0	0	0	0	1,208,869
Financing Plan													
State/Federal Grants	1,458,869	250,000	1,208,869	0	0	0	0	0	0	0	0	0	1,208,869
Financing Plan Total	1,458,869	250,000	1,208,869	0	0	0	0	0	0	0	0	0	1,208,869
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

A missing link in the City's bicycle network is a bicycle facility along Beauregard Street and Van Dorn Street. This facility would provide a north-south connection to the City's Holmes Run Trail, running east-west, and connecting bicycle users to Mark Center. This project will be coordinated with the implementation of the West End Transitway (Transit Corridor "C"), and private development along the corridor.

This project will be fully funded through restricted funding sources/grants and does not require City funding. State and federal grants were secured for design in FY 2019 and for construction in FY 2020.

This project helps to promote bicycling and transit use, thereby helping to reduce carbon emissions and improving health.

#### EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

Beauregard Small Area Plan; Landmark Van Dorn Corridor Plan; Pedestrian and Bicycle Master Plan

#### ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

## BRIDGE REPAIRS

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

PROJECT LOCATION: Citywide  
 REPORTING AREA: Citywide

PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation

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

Bridge Repairs													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Through 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total FY 2020 - FY 2029
Expenditure Budget	22,544,975	8,544,975	1,000,000	300,000	700,000	300,000	1,700,000	1,300,000	1,400,000	2,300,000	2,500,000	2,500,000	14,000,000
Financing Plan													
Cash Capital	15,642,975	2,942,975	600,000	200,000	600,000	200,000	1,600,000	1,200,000	1,300,000	2,200,000	2,400,000	2,400,000	12,700,000
GO Bond Interest Earnings	14,000	14,000	0	0	0	0	0	0	0	0	0	0	0
GO Bonds	6,238,000	4,938,000	400,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	1,300,000
TIP	650,000	650,000	0	0	0	0	0	0	0	0	0	0	0
Financing Plan Total	22,544,975	8,544,975	1,000,000	300,000	700,000	300,000	1,700,000	1,300,000	1,400,000	2,300,000	2,500,000	2,500,000	14,000,000
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 \$300,000 added in FY 2020 to conduct repairs to the bridge on Eisenhower Avenue over Cameron Run.

### 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.

Beginning 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  
 MANAGING DEPARTMENT: Department of Project Implementation

PROJECT LOCATION: Citywide  
 REPORTING AREA: Citywide

PRIMARY STRATEGIC THEME: Theme 3: Well-Managed Government

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

City Standard Construction Specifications													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Through 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total FY 2020 - FY 2029
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  
 MANAGING DEPARTMENT: Department of Transportation and Environmental Services

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

PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation

PROJECT CATEGORY: 3  
 ESTIMATE USEFUL LIFE: Varies

East Glebe & Route 1													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Through 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total FY 2020 - FY 2029
Expenditure Budget	4,600,000	4,600,000	0	0	0	0	0	0	0	0	0	0	0
Financing Plan													
Developer Contribution	1,400,000	1,400,000	0	0	0	0	0	0	0	0	0	0	0
Private Capital Contributions	3,200,000	3,200,000	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

No changes from previous 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 Pedestrian and Bicycle Master Plan.

Completion of this project will allow traffic to move through the intersection in a safe and efficient manner. 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

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

#### ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

## EISENHOWER AVENUE ROADWAY IMPROVEMENTS

DOCUMENT SUBSECTION: Streets & Bridges	PROJECT LOCATION: Eisenhower Ave. from Mill Road to Holland Lane
MANAGING DEPARTMENT: Department of Transportation and Environmental Services	REPORTING AREA: Eisenhower East
PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation	PROJECT CATEGORY: 3 ESTIMATE USEFUL LIFE: 21 - 25 Years

Eisenhower Avenue Roadway Improvements													
	A (B + M) Total Budget & Financing	B Through 2019	C FY 2020	D FY 2021	E FY 2022	F FY 2023	G FY 2024	H FY 2025	I FY 2026	J FY 2027	K FY 2028	L FY 2029	M (C:L) Total FY 2020 - FY 2029
Expenditure Budget	9,491,829	9,491,829	0	0	0	0	0	0	0	0	0	0	0
Financing Plan													
Cash Capital	534,000	534,000	0	0	0	0	0	0	0	0	0	0	0
GO Bonds	420,000	420,000	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	8,000,000	8,000,000	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	9,491,829	9,491,829	0	0	0	0	0	0	0	0	0	0	0
Additional Operating Impact	153,100	0	0	15,000	15,500	16,000	16,500	17,000	17,500	18,000	18,500	19,100	153,100

### CHANGES FROM PRIOR YEAR CIP

No changes from previous CIP.

### 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 late 2019.

The additional funding is for construction and construction management services.

Once completed, this project will be consistent 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

The initial operating impacts of this project will be approximately \$15,000 annual maintenance costs of the traffic signals, lights, BMP's and trees beginning in FY 2021.

## EW & LVD IMPLEMENTATION - HIGH STREET DESIGN/ENGINEERING

DOCUMENT SUBSECTION: Streets & Bridges	PROJECT LOCATION: High St. (West of and Parallel to Van Dorn St.)
MANAGING DEPARTMENT: Department of Transportation and Environmental Services	REPORTING AREA: Eisenhower West/Landmark/Van Dorn
PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation	PROJECT CATEGORY: 3 ESTIMATE USEFUL LIFE: N/A

EW & LVD Implementation - High Street Design/Engineering													
	A (B + M) Total Budget & Financing	B Through 2019	C FY 2020	D FY 2021	E FY 2022	F FY 2023	G FY 2024	H FY 2025	I FY 2026	J FY 2027	K FY 2028	L FY 2029	M (C:L) Total FY 2020 - FY 2029
Expenditure Budget	500,000	0	0	0	0	500,000	0	0	0	0	0	0	500,000
Financing Plan TIP	500,000	0	0	0	0	500,000	0	0	0	0	0	0	500,000
Financing Plan Total	500,000	0	0	0	0	500,000	0	0	0	0	0	0	500,000
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

This project provides preliminary design and engineering funding for the construction of a new High Street west of, and parallel to, Van Dorn Street from West End Town Center to Pickett Street, including a Duke Street grade separated crossing. This project was identified in the Landmark/Van Dorn Small Area Plan and would be completed as part of the phased redevelopment of Landmark Mall.

Funding is provided for initial design and engineering in FY 2023 through the Transportation Improvement Program (TIP). Funding may be recommended to be accelerated in future Capital Improvement Programs based on future development planning. The timing of construction is not known at this time. The total estimated cost of this project as of 2009 was \$18.4 million and is contingent on the development of a funding plan.

The improvement is necessary to support future traffic associated with redevelopment of the Landmark/Van Dorn area. Improvements will improve mobility within the Landmark/Van Dorn area, support high capacity transit, and reduce impacts to the regional transportation system.

#### EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

Landmark/Van Dorn Small Area Plan

#### ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

## FARRINGTON CONNECTOR

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

PROJECT LOCATION: Eisenhower West  
 REPORTING AREA: Eisenhower West

PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation

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

Farrington Connector													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Through 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total FY 2020 - FY 2029
Expenditure Budget	500,000	0	0	0	0	0	500,000	0	0	0	0	0	500,000
Financing Plan													
State/Federal Grants	500,000	0	0	0	0	0	500,000	0	0	0	0	0	500,000
Financing Plan Total	500,000	0	0	0	0	0	500,000	0	0	0	0	0	500,000
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

This project would go toward funding the design for a new road that would connect from Farrington Avenue to Edsall Road. This project was recommended in the Eisenhower West Small Area Plan and is a needed roadway to support additional development in the Eisenhower West area. The road would include one lane in each direction, and include enhanced bicycle and pedestrian facilities. Funding sources for this new connection between Alexandria and Fairfax County will need to be determined with jurisdictional cost sharing, regional transportation funding, and state funding as candidates.

#### EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

Eisenhower West Small Area Plan, Pedestrian and Bicycle Master Plan

#### ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

## FIXED TRANSPORTATION EQUIPMENT

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

PROJECT LOCATION: Citywide  
 REPORTING AREA: Citywide

PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation

PROJECT CATEGORY: 1  
 ESTIMATE USEFUL LIFE: Varies

Fixed Transportation Equipment													
	A (B + M) Total Budget & Financing	B Through 2019	C FY 2020	D FY 2021	E FY 2022	F FY 2023	G FY 2024	H FY 2025	I FY 2026	J FY 2027	K FY 2028	L FY 2029	M (C:L) Total FY 2020 - FY 2029
Expenditure Budget	32,690,971	22,440,971	850,000	850,000	850,000	2,350,000	875,000	875,000	900,000	900,000	900,000	900,000	10,250,000
Financing Plan													
Cash Capital	12,861,877	10,031,877	150,000	150,000	150,000	150,000	175,000	175,000	150,000	565,000	565,000	600,000	2,830,000
GO Bond Interest Earnings	400,000	400,000	0	0	0	0	0	0	0	0	0	0	0
GO Bonds	13,902,953	6,482,953	700,000	700,000	700,000	2,200,000	700,000	700,000	750,000	335,000	335,000	300,000	7,420,000
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
TIP	1,287,429	1,287,429	0	0	0	0	0	0	0	0	0	0	0
Financing Plan Total	32,690,971	22,440,971	850,000	850,000	850,000	2,350,000	875,000	875,000	900,000	900,000	900,000	900,000	10,250,000
Additional Operating Impact	7,500	0	0	2,500	0	0	2,500	0	0	2,500	0	0	7,500

### CHANGES FROM PRIOR YEAR CIP

No financial changes from previous CIP. This project was moved to the Streets & Bridges subsection.

### 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 million), 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

The City typically installs a new traffic signal once every three years. The cost to maintain a traffic signal is \$2,500 per year, which includes the cost to provide power to the traffic signal, as well as ongoing preventative maintenance and malfunction troubleshooting.

## Fixed Transportation Equipment (continued)

## Fixed Transportation Equipment FY 2020 – FY 2022 Project List

<b>Fiscal Year 2020</b>	
Description	Amount
Reconstruct signal at Duke & Alfred	\$ 130,000
Reconstruct signal at Duke & Columbus	\$ 130,000
Reconstruct signal at Columbus & Wythe	\$ 130,000
Reconstruct signal at Alfred & Cameron	\$ 120,000
Reconstruct signal at Alfred & Prince	\$ 120,000
New signal at Beauregard & Branch	\$ 150,000
Repair and upgrade of traffic signal vehicle detection	\$ 40,000
Repair knockdowns from accidents	\$ 30,000
<b>Total Fiscal Year 2020</b>	<b>\$ 850,000</b>

<b>Fiscal Year 2021</b>	
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 & Preston	\$ 150,000
Reconstruct signal at Stevenson & Whiting	\$ 150,000
Reconstruct signal at Stevenson & Walker	\$ 130,000
Repair and upgrade of traffic signal vehicle detection	\$ 25,000
Repair knockdowns from accidents	\$ 25,000
<b>Total Fiscal Year 2021</b>	<b>\$ 850,000</b>

<b>Fiscal Year 2022</b>	
Description	Amount
Reconstruct signal at Quaker & Seminary/Janney's	\$ 150,000
Reconstruct signal at Cameron & West	\$ 130,000
Reconstruct signal at King & N Hampton	\$ 150,000
Reconstruct signal at Seminary & Pickett	\$ 150,000
New signal (undetermined location)	\$ 150,000
Repair and upgrade of traffic signal vehicle detection	\$ 60,000
Repair knockdowns from accidents	\$ 40,000
School Zone Flasher Upgrades	\$ 20,000
<b>Total Fiscal Year 2022</b>	<b>\$ 850,000</b>

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

King & Beauregard Intersection Improvements													
	A (B + M) Total Budget & Financing	B Through 2019	C FY 2020	D FY 2021	E FY 2022	F FY 2023	G FY 2024	H FY 2025	I FY 2026	J FY 2027	K FY 2028	L FY 2029	M (C:L) Total FY 2020 - FY 2029
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
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	153,100	0	0	15,000	15,500	16,000	16,500	17,000	17,500	18,000	18,500	19,100	153,100

### 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 late 2019. Phase II construction is anticipated to begin in summer 2020 with an estimated completion date of late-2021.

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

The initial operating impacts of this project will be approximately \$15,000 annual maintenance costs of the traffic signals, lights, BMP's and trees beginning in FY 2021.



## SEMINARY ROAD AT BEAUREGARD STREET ELLIPSE

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

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

PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation

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

Seminary Road at Beauregard Street Ellipse													
	A (B + M) Total Budget & Financing	B Through 2019	C FY 2020	D FY 2021	E FY 2022	F FY 2023	G FY 2024	H FY 2025	I FY 2026	J FY 2027	K FY 2028	L FY 2029	M (C:L) Total FY 2020 - FY 2029
Expenditure Budget	36,725,000	325,000	0	3,500,000	16,200,000	16,700,000	0	0	0	0	0	0	36,400,000
Financing Plan													
Developer Contribution	36,400,000	0	0	3,500,000	16,200,000	16,700,000	0	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	36,725,000	325,000	0	3,500,000	16,200,000	16,700,000	0	0	0	0	0	0	36,400,000
Additional Operating Impact	175,000	0	0	0	0	25,000	25,000	25,000	25,000	25,000	25,000	25,000	175,000

### CHANGES FROM PRIOR YEAR CIP

No changes from previous CIP.

### 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 will 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 is 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 shall be determined during the next phase of design. Due to significant delays in development activity, the City funding for design and engineering has been reallocated to higher priority projects.

Funding (currently estimated at \$36.4 million) for full project design and engineering. Construction was originally planned from FY 2019 – 2021, to be funded primarily with private (development) capital contributions. The design of the ellipse has been stopped due to the uncertainty of the future development in the Beauregard area. At this point, this project is on hold until development moves forward.

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

Annual maintenance costs are expected to be approximately \$25,000.

## STREET RECONSTRUCTION & RESURFACING OF MAJOR ROADS

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

PROJECT LOCATION: Citywide  
 REPORTING AREA: Citywide

PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation

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

Street Reconstruction & Resurfacing of Major Roads													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Through 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total FY 2020 - FY 2029
Expenditure Budget	84,754,576	33,704,576	5,500,000	5,500,000	5,500,000	5,000,000	4,975,000	4,975,000	4,300,000	5,300,000	5,000,000	5,000,000	51,050,000
Financing Plan													
Cash Capital	5,995,679	5,995,679	0	0	0	0	0	0	0	0	0	0	0
GO Bonds	45,358,934	14,935,000	4,205,985	4,867,949	4,000,000	2,800,000	2,475,000	2,475,000	1,800,000	2,800,000	2,500,000	2,500,000	30,423,934
State/Federal Grants	8,823,897	8,823,897	0	0	0	0	0	0	0	0	0	0	0
TIP	10,650,000	3,950,000	0	0	0	700,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	6,700,000
VDOT State Revenue Sharing	13,926,066	0	1,294,015	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	13,926,066
Financing Plan Total	84,754,576	33,704,576	5,500,000	5,500,000	5,500,000	5,000,000	4,975,000	4,975,000	4,300,000	5,300,000	5,000,000	5,000,000	51,050,000
Additional Operating Impact	0	0	0	0	0	0	0	0	0	0	0	0	0

### CHANGES FROM PRIOR YEAR CIP

City Funding (GO Bonds) in the amount of \$205,985 in FY 2020 and \$867,949 in FY 2021 added to the project to maintain the planned repaving schedule. Over FY 2020 - FY 2021, the amount of VDOT Revenue Sharing funds that was received by the City, was less than what was anticipated in the Approved FY 2019 - FY 2028 CIP.

### 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 2020 - 2022 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. This funding, if approved, will allow the City to resurface more streets. City staff applied for and received additional funding through the VDOT Revenue Sharing Grant Program in amounts of \$1,294,015 for FY 2020 and \$632,051 for FY 2021.

### EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

Pavement management inventory updated in 2013 and 2016 and Reviewed by City Council.

### ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

## Street Reconstruction &amp; Resurfacing of Major Roads (continued)

## Street Reconstruction &amp; Resurfacing of Major Roads FY 2020 – FY 2022 Project List

<b>Fiscal Year 2020</b>		
Street(s)	Avg. PCI Score	Estimated Cost
Taney Ave. from N. Early St. to N. Gordon St. (Edge Mill only)	31	\$ 180,000
N Donelson St from Duke St to Taft Ave (Edge Mill only)	22	\$ 30,000
Polk Ave from N Naylor St to N Pegram St	27	\$ 165,000
E/W Abingdon St. from First St. to Dead End	32	\$ 350,000
Commonwealth Ave from E Braddock Rd to King St	32	\$ 475,000
Bishop Lane from N Quaker to Circle	33	\$ 46,000
Mansion Dr. Entire Length	33	\$ 125,000
Vermont Ave from S Gordon St to S Jenkins St	33	\$ 62,000
S Jenkins St from Venable Ave to Holmes Run Pkwy	36	\$ 80,000
N & S Fairfax St from Jefferson St to Third St	34	\$ 600,000
Eisenhower Ave. from Mill Rd. to Holland Ln.	34	\$ 85,000
E&W Rosemont from King St to Commonwealth Ave	34	\$ 175,000
Mt Vernon Ave from Rosemont Ave to Dead-End	46	\$ 70,000
High Street from W Braddock Rd to Russell Rd	34	\$ 92,000
Virginia Ave. Entire Length	37	\$ 250,000
N & S Union St from Pendleton St to Franklin St	37	\$ 320,000
Dartmouth Rd. from Crown View to Dead End	37	\$ 125,000
Valley Dr from Martha Custis Dr to Gunston Rd	38	\$ 210,000
Powhatan St from Washington St to Slater Ln	38	\$ 180,000
W Reed Ave from JD HWY to Mt Vernon Ave	38	\$ 222,000
Mark Drive (entire length)	35	\$ 40,000
Stonewall Rd from W Braddock Rd to High St	19	\$ 30,000
Jasper Pl from S Jenkins St to cul-de-sac	40	\$ 28,000
King Street from Callahan to Daingerfield	40	\$ 82,000
N Pitt St from Oronoco St to King St	41	\$ 135,000
Norwood Pl from Cameron Mills Rd to cul-de-sac	42	\$ 35,000
W. Taylor Run Pkwy. From Janney's Ln. to Dead End	42	\$ 75,000
N Pegram St from Holmes Run Pkwy to N pickett St	43	\$ 300,000
Roth St - Entire Length from Duke St to Business Center Dr	16	\$ 40,000
Colvin St - Entire Length from Roth St to S Quaker Ln	10	\$ 115,000
CityWide Alley Resurfacing	<30	\$ 450,000
Additional Costs and Contingency	N/A	\$ 328,000
<b>Total Fiscal Year 2020</b>	<b>34</b>	<b>\$ 5,500,000</b>

## Street Reconstruction &amp; Resurfacing of Major Roads (continued)

## Street Reconstruction &amp; Resurfacing of Major Roads FY 2020 – FY 2022 Project List

<b>Fiscal Year 2021</b>		
Street(s)	Avg. PCI Score	Estimated Cost
Duke St from S Patrick St to Strand St	34	\$ 350,000
Hume Ave. from Commonwealth Ave. to Jefferson Davis Hwy.	36	\$ 150,000
N Floyd St from Duke St to N French St	37	\$ 34,000
Fendall Ave from Duke St to S Floyd St	39	\$ 50,000
Wellington Rd from Beverley Dr to Chalfonte Dr	39	\$ 85,000
Bryan St. from W. Taylor Run Pkwy. To Dead End	42	\$ 80,000
Fillmore Ave. from Cul-de-sac to Seminary Rd	42	\$ 275,000
Farm Rd. from Beverley Dr to Circle Terr	42	\$ 225,000
N Gladden St & N Grayson St from Uline Ave to Uline Ave	42	\$ 60,000
Tulsa Place from N Gordon to cul-de-sac	43	\$ 40,000
Uline Ave from N Gordon St to N Furman St	52	\$ 40,000
West Street from Duke St to Wythe St	43	\$ 350,000
Skyhill Rd. from Janney's Ln. to Dead End	44	\$ 125,000
Daingerfield - Entire Length	44	\$ 98,000
Morgan St from N Chambliss St to Circular Parking space	45	\$ 225,000
N/S Alfred St. from First St. to Church St.	42	\$ 475,000
Reading Ave from Rayburn Ave To N Beauregard St	27	\$ 125,000
Rayburn Ave from N Beauregard St to Reading Ave	22	\$ 125,000
Lomack St from cul-de-sac to Dead-end	46	\$ 43,000
S Iris from Venable Ave to Vermont Ave	48	\$ 29,000
S French St from Duke St to cul-de-sac	48	\$ 60,000
Cameron Mills Rd from Virginia Ave to Allison St	48	\$ 92,000
N Howard St from Raleigh Ave to W Braddock Rd	50	\$ 500,000
Moncure Dr from S View Terr to Hilton St (Base failure)	50	\$ 72,000
Marlboro Dr. - Entire Length	49	\$ 85,000
Diagonal - Entire Length	30	\$ 145,000
Mt Vernon Ave from Hume Ave to East Braddock Rd	45	\$ 750,000
CityWide Alley Resurfacing	<35	\$ 450,000
Additional Costs and Contingency	N/A	\$ 362,000
<b>Total Fiscal Year 2021</b>	<b>42</b>	<b>\$ 5,500,000</b>

## Street Reconstruction &amp; Resurfacing of Major Roads (continued)

## Street Reconstruction &amp; Resurfacing of Major Roads FY 2020 – FY 2022 Project List

<b>Fiscal Year 2022</b>		
Street(s)	Avg. PCI Score	Estimated Cost
Executive Ave from W Glebe Rd to Four mile Rd	39	\$ 70,000
Kentucky Ave from Old Dominion Bv to Russell Rd	30	\$ 60,000
Alabama Ave from Kentucky Ave to Carolina Pl	41	\$ 95,000
Beverley Drive from Russell Rd to Washington Circle	19	\$ 50,000
Allison St. Entire Length	40	\$ 150,000
Echols Ave from Seminary Rd to Dead-End	39	\$ 45,000
Burgess Ave (All of it)	29	\$ 70,000
Aspen Street from Landover St to Mosby St	18	\$ 30,000
Guthrie Ave from Landover St to Mosby St	24	\$ 30,000
Mosby Street from Aspen St to West Mt Ida Ave	36	\$ 120,000
Holly St from Aspen St to West Mt Ida Ave	40	\$ 110,000
Birch St from Holly St to Russell Rd	29	\$ 15,000
Pine Street from Holly St to Russell Rd	28	\$ 15,000
Evans Lane from JD HWY to Reed Ave	28	\$ 80,000
Lynhaven Drive from JD HWY TO Evans Ln	19	\$ 36,000
Montrose Ave from Raymond Ave to JD HWY	38	\$ 105,000
Stewart Ave from Mt Vernon Ave to Randolph Ave	28	\$ 55,000
Anderson Lane from Windsor Ave to Richards Ln	21	\$ 12,000
Richards Lane from Anderson Ln to W Windsor Ave	38	\$ 18,000
North Garland St from Ft Worth Ave to Cul De Sac	36	\$ 70,000
Richenbacher Ave. from N. Van Dorn St. to N. Pickett St.	56	\$ 100,000
Holmes Run Pkwy. From Van Dorn to Dead End	47	\$ 150,000
Lowell Ave from N Chambliss St to cul-de-sac	49	\$ 70,000
S Gordon from Duke St to Wheeler Ave	51	\$ 85,000
Venable Ave - Entire Length	52	\$ 33,000
Underwood Place from Ingram St to cul-de-sac	54	\$ 50,000
Cathedral Dr - Entire Length	56	\$ 50,000
Benning Ct from N Chambliss St to Dead-end	56	\$ 33,000
S Ingram St from Duke St to Vermont Ave	57	\$ 60,000
Holmes Run Pkwy from S Jordan St to S Jenkins St	63	\$ 34,000
South View Ter from E Taylor Run Pkwy to Hilltop Ter	56	\$ 75,000
N & S Washington Street from First St to Church St	39	\$ 750,000
Jupiter Place from N Jordan St to Cul de sac	78	\$ 35,000
Greenwood Place from Seminary Rd to Circle	30	\$ 25,000

## Street Reconstruction &amp; Resurfacing of Major Roads (continued)

## Street Reconstruction &amp; Resurfacing of Major Roads FY 2020 – FY 2022 Project List

<b>Fiscal Year 2022 (con't.)</b>		
Street(s)	Avg. PCI Score	Estimated Cost
Knox Place (all of it) / Washington Gas has paved half the street	51	\$ 20,000
Rutland Place from N Pickett St to Cul de sac	58	\$ 20,000
Reed Ave from JD Hwy to Mt Vernon Ave	41	\$ 200,000
E&W Nelson Ave from Russell Rd to Leslie Ave	31	\$ 180,000
George Mason Place from Monticello Bv to Cul de sac	59	\$ 25,000
Terrett Ave from E Mt Ida to E Randolph Ave	45	\$ 30,000
Usher Avenue	45	\$ 32,000
W. Taylor Run Pkwy from Duke St. to Janney's Lane	60	\$ 190,000
Colfax Ave from Seminary Rd to N Rosser St	68	\$ 30,000
North Early Street from W Braddock Rd to Cul-de-sac	21	\$ 70,000
Fort Ward Pl. - Entire Length	58	\$ 35,000
Ellicott St. - Entire Length	51	\$ 100,000
Jewell Court & Anderson Court from N Chambliss St to cul-de-sac	62	\$ 52,000
N & S Saint Asaph St from First St to Dead-end	45	\$ 500,000
Crown View Dr. from Clover Way to Dartmouth Rd.	51	\$ 75,000
CityWide Alley Resurfacing	<35	\$ 500,000
Additional Costs and Contingency	N/A	\$ 655,000
<b>Total Fiscal Year 2022</b>	<b>43</b>	<b>\$ 5,500,000.00</b>

## VAN DORN METRO MULTIMODAL BRIDGE (w/ EISENHOWER WEST)

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

PROJECT LOCATION: Van Dorn Metro to Pickett St.  
 REPORTING AREA: Eisenhower West

PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation

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

Van Dorn Metro Multimodal Bridge (w/ Eisenhower West)													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Through 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total FY 2020 - FY 2029
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 will 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 has been working with consultants to complete a 10% design of the bridge. 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.

The improvement is necessary to support future traffic associated with redevelopment of the Landmark/Van Dorn and Eisenhower West areas. Improvements will improve access and mobility within the Landmark/Van Dorn area, support high capacity transit, and reduce impacts to the regional transportation system.

### 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  
 MANAGING DEPARTMENT: Department of Transportation and Environmental Services

PROJECT LOCATION: Citywide  
 REPORTING AREA: Citywide

PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation

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

Citywide Parking - Parking Technologies													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Through 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total FY 2020 - FY 2029
Expenditure Budget	2,103,365	570,550	203,079	629,736	450,000	250,000	0	0	0	0	0	0	1,532,815
Financing Plan													
CMAQ/RSTP	1,532,815	0	203,079	629,736	450,000	250,000	0	0	0	0	0	0	1,532,815
State/Federal Grants	570,550	570,550	0	0	0	0	0	0	0	0	0	0	0
Financing Plan Total	2,103,365	570,550	203,079	629,736	450,000	250,000	0	0	0	0	0	0	1,532,815
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 latest approved grant funding amounts and timing.

#### PROJECT DESCRIPTION & JUSTIFICATION

This project provides funding for the deployment of new parking technologies, such as real time parking occupancy systems for on-street spaces and parking garages/lots, web-based interactive parking map, 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 2019, the City assessed solutions and developed a framework for implementation of parking technology program, which can include installing sensors in all City owned garages; developing a web-based application to provide real-time occupancy information; and installing dynamic directional signage that would indicate real-time parking availability and direct parkers to available parking spaces. Short term technology installations will occur in FY 2020 and each year thereafter. This program will include evaluations of new technology being installed as well as research on best practices for future technology applications that will help the City better manage parking and traffic. Funding is available annually through FY 2023.

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

Once implemented, these technologies will support economic development by providing more efficient parking strategies for residents, employees, and visitors, and 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.



## CITYWIDE TRANS. MGMT. TECH. - BROADBAND COMMUNICATIONS LINK

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

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

PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation

PROJECT CATEGORY: 3  
 ESTIMATE USEFUL LIFE: Varies

Citywide Trans. Mgmt. Tech. - Broadband Communications Link													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Through 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total FY 2020 - FY 2029
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 Broadband Communications Link project includes the design and expansion of the City's fiber optic communications (broadband) network onto Eisenhower Avenue between Van Dorn Street and Clermont Avenue. Currently, the traffic signals along Eisenhower Avenue operate independently of one another and are not synchronized. There is no communications infrastructure in place to connect any existing or new traffic signals to this system. Staff is working with the ITS Department to coordinate this project with the City's Municipal Fiber project to reduce costs.

With the proposed development in Eisenhower West, new smart infrastructure, including traffic signals, to manage the anticipated increase in traffic will be required. 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.

## CITYWIDE TRANS. MGMT. TECH. - INTELLIGENT TRANSPORTATION SYSTEMS (ITS) INTEGRATION

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

PROJECT LOCATION: Citywide  
REPORTING AREA: Citywide

PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation

PROJECT CATEGORY: 3  
ESTIMATE USEFUL LIFE: Varies

Citywide Trans. Mgmt. Tech. - Intelligent Transportation Systems (ITS) Integration													
	A (B + M) Total Budget & Financing	B Through 2019	C FY 2020	D FY 2021	E FY 2022	F FY 2023	G FY 2024	H FY 2025	I FY 2026	J FY 2027	K FY 2028	L FY 2029	M (C:L) Total FY 2020 - FY 2029
Expenditure Budget	18,293,727	15,867,525	203,079	223,123	1,000,000	400,000	600,000	0	0	0	0	0	2,426,202
Financing Plan													
Cash Capital	37,629	37,629	0	0	0	0	0	0	0	0	0	0	0
State/Federal Grants	15,901,511	13,475,309	203,079	223,123	1,000,000	400,000	600,000	0	0	0	0	0	2,426,202
TIP	2,354,587	2,354,587	0	0	0	0	0	0	0	0	0	0	0
Financing Plan Total	18,293,727	15,867,525	203,079	223,123	1,000,000	400,000	600,000	0	0	0	0	0	2,426,202
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 for the design and installation of upgrades to the City's Intelligent Transportation System (ITS) initiative, which keeps City streets safe and running smoothly, while also laying the groundwork for emerging technologies that will shape transportation over the next five, ten, twenty years and beyond. Completion of this project will replace much of the City's 30-year old traffic signal communications and allow public safety departments to monitor real time conditions on the City's roadway network. Staff is working with the ITS Department to determine if cost savings can be achieved by coordinating construction of this project with the Municipal Fiber project.

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

The five phases are as follows:

- Phase I, which is complete, installed a broadband fiber optic communications network, 11 traffic surveillance cameras, and a management center at Business Center Drive.
- Phase II, which supplements the first phase, expands the broadband network and installs additional traffic surveillance cameras. It is scheduled to be complete in 2019.
- The design for Phase III is expected to begin in FY 2019 with construction beginning in late FY 2020. This phase includes the installation of traffic surveillance cameras, upgrading the control center video wall and connecting about 50 traffic signals to the fiber backbone. Funding from this grant will also provide staff support to this project and coordinate with the ITS Department on the technology aspects of this project.
- The design for Phase IV is expected to begin in FY 2021 and construction in FY 2022. This phase will add more traffic surveillance cameras and connect another group of about 50 traffic signals to the fiber backbone.
- The funding for Phase V becomes available in FY 2025 and design will begin at that time. Phase V will focus mainly on bringing fiber optic communications to the Mount Vernon Avenue corridor. This project may be constructed in coordination with the Municipal Fiber project to reduce costs and limit disturbance to the community.

Funding for Traffic Adaptive Signal Control, which was previously included with this project, has been separated into a new CIP project of the same title.

### EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

N/A

### ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

## CITYWIDE TRANS. MGMT. TECH. - TRAFFIC CONTROL UPGRADE

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

PROJECT LOCATION: Citywide  
 REPORTING AREA: Citywide

PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation

PROJECT CATEGORY: 1  
 ESTIMATE USEFUL LIFE: Varies

Citywide Trans. Mgmt. Tech. - Traffic Control Upgrade													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Through 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total FY 2020 - FY 2029
Expenditure Budget	1,350,000	350,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	1,000,000
Financing Plan													
Cash Capital	1,300,000	300,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	1,000,000
Private Capital Contributions	50,000	50,000	0	0	0	0	0	0	0	0	0	0	0
Financing Plan Total	1,350,000	350,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	1,000,000
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

The Traffic Control Upgrade project funds ongoing capital maintenance and required traffic control hardware upgrades associated with implementation of the Citywide Transportation Management and ITS Integration project.

The project supports necessary technology upgrades associated with the City's new traffic surveillance cameras, broadband fiber optic communications network and hardware/systems in the management center used to monitor real-time traffic conditions. 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.

## CITYWIDE TRANS. MGMT. TECH. - TRANSPORTATION TECHNOLOGIES

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

PROJECT LOCATION: Citywide  
 REPORTING AREA: Citywide

PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation

PROJECT CATEGORY: 3  
 ESTIMATE USEFUL LIFE: Varies

Citywide Trans. Mgmt. Tech. - Transportation Technologies													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Through 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total FY 2020 - FY 2029
Expenditure Budget	2,870,312	1,370,312	0	250,000	0	250,000	0	250,000	0	250,000	250,000	250,000	1,500,000
Financing Plan													
GO Bonds	115,000	115,000	0	0	0	0	0	0	0	0	0	0	0
GO Bonds (TIP)	95,312	95,312	0	0	0	0	0	0	0	0	0	0	0
TIP	2,660,000	1,160,000	0	250,000	0	250,000	0	250,000	0	250,000	250,000	250,000	1,500,000
Financing Plan Total	2,870,312	1,370,312	0	250,000	0	250,000	0	250,000	0	250,000	250,000	250,000	1,500,000
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

This project funds the deployment of small-scale transportation technology projects to improve efficiency of transportation infrastructure including parking technology, traffic signals and signs. In FY 2020, the City will continue deployment of bluetooth technology to collect safety data associated with Vision Zero and which will also measure the movement of people in and around the City. 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.

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

No additional operating impacts identified at this time.

## DASH ELECTRONIC FARE PAYMENT

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

PROJECT LOCATION: Citywide  
 REPORTING AREA: Citywide

PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation

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

DASH Electronic Fare Payment													
	A (B + M) Total Budget & Financing	B Through 2019	C FY 2020	D FY 2021	E FY 2022	F FY 2023	G FY 2024	H FY 2025	I FY 2026	J FY 2027	K FY 2028	L FY 2029	M (C:L) Total FY 2020 - FY 2029
Expenditure Budget	1,200,000	0	450,000	750,000	0	0	0	0	0	0	0	0	1,200,000
Financing Plan CMAQ/RSTP	1,200,000	0	450,000	750,000	0	0	0	0	0	0	0	0	1,200,000
Financing Plan Total	1,200,000	0	450,000	750,000	0	0	0	0	0	0	0	0	1,200,000
Additional Operating Impact	0	0	0	0	0	0	0	0	0	0	0	0	0

### CHANGES FROM PRIOR YEAR CIP

No financial changes from previous CIP.

### 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.

### EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

N/A

### ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

## DASH TECHNOLOGY

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

PROJECT LOCATION: Citywide  
 REPORTING AREA: Citywide

PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation

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

DASH Technologies													
	A (B + M) Total Budget & Financing	B Through 2019	C FY 2020	D FY 2021	E FY 2022	F FY 2023	G FY 2024	H FY 2025	I FY 2026	J FY 2027	K FY 2028	L FY 2029	M (C:L) Total FY 2020 - FY 2029
Expenditure Budget	855,745	0	0	0	0	600,000	255,745	0	0	0	0	0	855,745
Financing Plan CMAQ/RSTP	855,745	0	0	0	0	600,000	255,745	0	0	0	0	0	855,745
Financing Plan Total	855,745	0	0	0	0	600,000	255,745	0	0	0	0	0	855,745
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 project will fund DASH technology initiatives such as automated passenger counting and transportation scheduling software which allows the transit agency to better design and schedule bus routes, in a more data-driven manner.

Other initiatives include design and infrastructure preparation for the DASH facility for compatibility of new technology systems. This project is being coordinated with the City's Smart Mobility Program and other transit and street technology enhancement projects.

#### EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

Smart Mobility Program

#### ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

## TRAFFIC ADAPTIVE SIGNAL CONTROL

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

PROJECT LOCATION: Citywide  
 REPORTING AREA: Citywide

PRIMARY STRATEGIC THEME: Theme 10: Multimodal Transportation

PROJECT CATEGORY: 3  
 ESTIMATE USEFUL LIFE: Varies

Traffic Adaptive Signal Control													
	A (B + M) Total Budget & Financing	B Through 2019	C FY 2020	D FY 2021	E FY 2022	F FY 2023	G FY 2024	H FY 2025	I FY 2026	J FY 2027	K FY 2028	L FY 2029	M (C:L) Total FY 2020 - FY 2029
Expenditure Budget	7,676,000	0	0	0	5,266,000	2,410,000	0	0	0	0	0	0	7,676,000
Financing Plan													
State/Federal Grants	7,676,000	0	0	0	5,266,000	2,410,000	0	0	0	0	0	0	7,676,000
Financing Plan Total	7,676,000	0	0	0	5,266,000	2,410,000	0	0	0	0	0	0	7,676,000
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

This project provides funding for 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. This project will install new control software and hardware as well as traffic sensors to monitor traffic in real-time.

This funding was originally included with the ITS Integration parent project but is now a standalone project.

### EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

N/A

### ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time

## TRANSIT SIGNAL PRIORITY

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

PROJECT LOCATION: Citywide  
 REPORTING AREA: Citywide

PRIMARY STRATEGIC THEME: Themes 4 & 10

PROJECT CATEGORY: 3  
 ESTIMATE USEFUL LIFE:

Transit Signal Priority													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Through 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total FY 2020 - FY 2029
Expenditure Budget	1,195,491	0	1,195,491	0	0	0	0	0	0	0	0	0	1,195,491
Financing Plan													
NVTA 70% Funds	1,195,491	0	1,195,491	0	0	0	0	0	0	0	0	0	1,195,491
Financing Plan Total	1,195,491	0	1,195,491	0	0	0	0	0	0	0	0	0	1,195,491
Additional Operating Impact	0	0	0	0	0	0	0	0	0	0	0	0	0

### CHANGES FROM PRIOR YEAR CIP

This is a new project added to the CIP in FY 2020.

### 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.

### EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

N/A

### ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified.