Five-Year Capital Improvement Program - Summary (Dollars in Thousands)

	Total Project Budget	FY 2019 and Prior Years	Five-Year CIP FY 2020-24	FY 2025 and Future Years
Program Area:				
General Government Projects	2,869	2,519	350	-
Culture & Recreation Projects	35,386	2,801	8,385	24,200
Public Safety Projects	80,851	40,851	22,500	17,500
Transportation Projects	76,333	45,301	14,412	16,620
Sewer Projects	6,775	1,855	4,920	-
Water Projects	62,305	34,970	20,435	6,900
Electric Projects	19,600	6,670	10,280	2,650
Stormwater Projects	20,512	237	839	19,436
Airport Projects	31,105	317	14,188	16,600
School Projects	94,424	-	17,747	76,677
Total	**430,160**	**135,521**	**114,056**	**180,583**
Funding Source:				
General Fund	5,940	5,520	420	-
Sewer Fund	9,402	3,552	4,810	1,040
Water Fund	31,053	16,318	7,815	6,920
Electric Fund	25,006	9,886	11,420	3,700
Stormwater Fund	1,372	137	839	396
Airport Fund	1,361	30	589	742
School Fund	16,089	33	15,606	450
Bonds	248,656	65,738	46,341	136,577
State	18,626	14,542	2,551	1,533
Federal	42,670	5,655	18,890	18,125
NVTA 30%	17,712	11,012	3,600	3,100
Other Source	12,273	3,098	1,175	8,000
Project Cost Total:	**430,160**	**135,521**	**114,056**	**180,583**

Five-Year Capital Improvement Program - Project Listing (Dollars in Thousands)

	Total Project Budget	FY 2019 and Prior Years	Five-Year CIP FY 2020-24	FY 2025 and Future Years
General Government Projects				
City Hall Improvements/Renovations	1,159	1,159	-	-
Public Works & Utilities Facility Improvements	1,460	1,360	100	-
Manassas Customer Service	250	-	250	-
Program Total	**2,869**	**2,519**	**350**	**-**
Culture & Recreation Projects				
Manassas Museum	3,760	260	3,500	-
Dean Park	3,164	264	2,900	-
Stonewall Park/Pool	3,601	601	-	3,000
E.G. Smith Baseball Complex	7,976	376	1,600	6,000
Annaburg Manor	6,335	1,300	35	5,000
Jennie Dean Memorial	350	-	350	-
Manassas Library	10,200	-	-	10,200
Program Total	**35,386**	**2,801**	**8,385**	**24,200**
Public Safety Projects				
Public Safety Facility	49,185	26,685	22,500	-
Fire/Rescue Station 21	14,166	14,166	-	-
Fire/Rescue Station 1	17,500	-	-	17,500
Program Total	**80,851**	**40,851**	**22,500**	**17,500**
Transportation Projects				
Sudley Road Third Lane	7,400	7,400	-	-
Land Acquisition (Downtown Parking Lot)	1,200	-	-	1,200
Prince William St (Grant Ave to Wellington Rd)	9,740	9,740	-	-
Grant Ave (Lee Ave to Wellington Rd)	8,191	6,496	1,695	-
Dean Drive Extended	3,654	3,654	-	-
Dean Drive (Animal Shelter to Wellington Rd)	6,920	-	-	6,920
Route 28 / Nokesville Rd Widening	11,681	11,681	-	-
Liberia Avenue Improvements	500	-	500	-
Stonewall Park Trail Extension	2,000	-	-	2,000
Sidewalk and Bicycle Infill Initiative	3,832	1,732	2,100	-
Godwin Drive Bike Trail	1,653	1,653	-	-
Commercial Corridor Streetscapes	2,875	250	2,625	-
Centreville Road Improvements	450	300	150	-
Fairview Avenue / Tudor Lane Signal	1,130	1,130	-	-

	Total Project Budget	FY 2019 and Prior Years	Five-Year CIP FY 2020-24	FY 2025 and Future Years
North Side Downtown Parking Garage	6,500	-	-	6,500
Traffic Signal Span Wire to Mast Arms	750	-	750	-
Wakeman Drive Bike Lane	500	500		-
Gateway Boulevard Sidewalk/Trail	340	340	-	-
Roundabout Sudley/Centreville	3,825	425	3,400	-
Mathis Avenue Improvements	3,192	-	3,192	-
Program Total	**76,333**	**45,301**	**14,412**	**16,620**
Sewer Projects				
Upper Flat Branch Interceptor Replacement	3,415	1,770	1,645	-
Buckner Road Sewer Main Replacement	1,225	-	1,225	-
Ellicott Lane Sewer Main Replacement	585	85	500	-
Sewer Main Replacement	1,550	-	1,550	-
Program Total	**6,775**	**1,855**	**4,920**	**-**
Water Projects				
24" Transmission Main Replacement	37,261	16,761	17,700	2,800
Finished Water Capacity Increases	3,000	3,000	-	-
Main Replacement/Looping	7,444	2,534	2,010	2,900
Clear-Well Addition and Roof Renovation	2,400	2,400	-	-
Nokesville Road Upgrade	1,000	-	-	1,000
Interconnecting Meter Vaults	280	30	50	200
Water Plant Improvements	920	245	675	-
Dean Storage Tank	10,000	10,000	-	-
Program Total	**62,305**	**34,970**	**20,435**	**6,900**
Electric Projects				
Underground Cable and Termination Replaceme	5,340	3,340	2,000	-
Alternative Generation Initiatives	2,950	1,450	1,500	-
New Fiber Optic Loop/Ring	355	355	-	-
Place Overhead Lines Underground	3,705	1,275	2,430	-
LED Streetlight Replacement	750	250	500	-
Manassas Airport Distribution Improvements	1,675	-	1,675	-
Point of Woods Substation Circuit Tie-Point	500	-	500	-
Substation Capacity and Reliability Improvements	4,325	-	1,675	2,650
Program Total	**19,600**	**6,670**	**10,280**	**2,650**

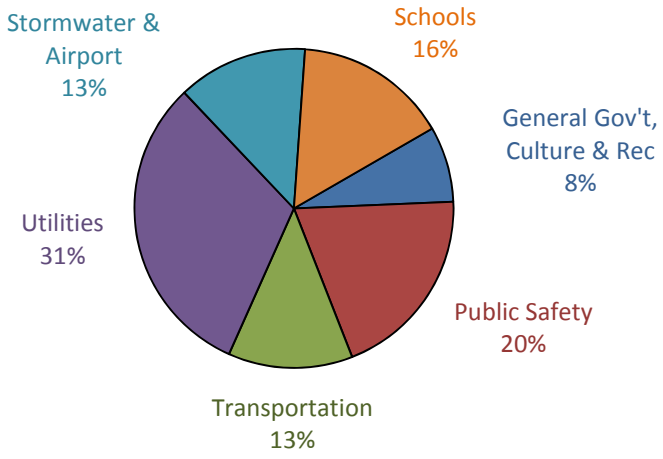
Five-Year Capital Improvement Program - Project Listing (Dollars in Thousands)

	Total Project Budget	FY 2019 and Prior Years	Five-Year CIP FY 2020-24	FY 2025 and Future Years
Stormwater Projects				
Sills Pond	396	-	-	396
Peabody St / Early St Drainage	405	-	405	-
Cockrell Branch SWM Pond Restoration/Dredgin	434	-	434	-
Jackson Avenue Drainage Improvements	1,940	-	-	1,940
Hazel Drive Channel Improvements	35	35	-	-
School Street Drainage Improvements	202	202	-	-
Winter's Branch Stream Restoration	8,250	-	-	8,250
Flat Branch Stream Restoration	4,100	-	-	4,100
Sumner Lake Stream Restoration	4,750	-	-	4,750
Program Total	**20,512**	**237**	**839**	**19,436**
Airport Projects				
Air Traffic Control Tower	7,600	-	-	7,600
Upgrade Runway 16R/34 Lighting & PAPIs	400	-	400	-
Realignment of Wakeman Dr & Observation Rd	3,850	-	-	3,850
Land Acquisition Southwest Side of Airport	3,000	-	-	3,000
Fuel Farm Update	550	-	-	550
Taxiway A Rehabilitation	2,500	-	2,500	-
Runway 16R/34L Rehabilitation	3,000	-	3,000	-
North East Apron Expansion	1,300	-	-	1,300
Rehabilitate and Widen Taxiway B	3,300	-	3,300	-
Terminal Parking Lot Expansion	550	-	550	-
Terminal Building Roof Replacement	100	-	100	-
Upgrade Taxiway A Lighting System	300	-	300	-
Installation of Security Fiberline	164	24	140	-
Installation of Backup Generators	550	-	250	300
Taxiway G and Taxilane Y Construction	2,941	293	2,648	-
West Corporate Development Site / Drainage	1,000	-	1,000	-
Program Total	**31,105**	**317**	**14,188**	**16,600**
School Projects				
District Wide - Classroom Trailers	700	-	700	-
District Wide - Technology Upgrades	1,025	-	1,025	-
District Wide - School Bus Replacements	2,486	-	2,486	-
District Wide - School Bus Additions	496	-	496	-
District Wide - Restroom Refurbishment	400	-	100	300

Five-Year Capital Improvement Program - Project Listing (Dollars in Thousands)

	Total Project Budget	FY 2019 and Prior Years	Five-Year CIP FY 2020-24	FY 2025 and Future Years
Central Office - Replacement	6,334	-	6,334	-
Osbourn - Parking Lot Improvements	250	-	250	-
Osbourn - Hallway Floor Replacement	500	-	500	-
Osbourn - Cooling Tower & Chiller Replacement	1,000	-	1,000	-
Osbourn - Restroom Refurbishment	94	-	94	-
Metz - Classroom Flooring Replacement	275	-	275	-
Mayfield - Roof Replacement	2,000	-	2,000	-
Haydon - Parking Lot Improvements	250	-	100	150
Round - Phased BAS/HVAC	2,200	-	2,200	-
Weems - Parking Lot Improvements	40	-	40	-
Weems - Partial Maintenance Roof	84	-	84	-
Weems - Interior Paint	63	-	63	-
New Dean - Building Replacement	76,227	-	-	76,227
Program Total	**94,424**	**-**	**17,747**	**76,677**
TOTAL	**430,160**	**135,521**	**114,056**	**180,583**
	(88,029)			

FY 2020 Five-Year CIP by Program



Most capital improvement projects generate future operating budget costs in one or more of three ways: debt service; PAYGO (both to offset the need to issue debt and to fund projects not eligible for debt); and changes to the Operating Budget to support new or renovated facilities. Debt service and annual PAYGO are the most **significant** financial impacts of the City's five-year capital improvement program.

DEBT SERVICE

Bonds are used to spread the cost of construction over time, so that those who benefit from the project over time also assist in the funding of the project. General Obligation Bonds are issued for a wide variety of functions such as transportation, public schools, public safety, and utility infrastructure. These bonds are legally-binding general obligations of the City and constitute an irrevocable pledge of its full faith and credit and unlimited taxing power. Tax-supported debt (for purposes of this discussion) includes debt to be repaid by the General Fund, Fire and Rescue Fund, and School Fund. Debt repaid by the enterprise funds (Sewer, Water, Electric, Airport, and Stormwater) is supported by the revenues of those funds. Future debt service is funded through a combination of debt roll-off, reduced expenditures, and increased taxes and fees.

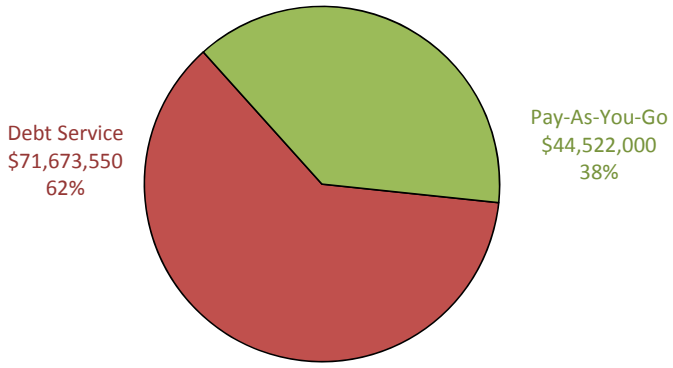
PAYGO

Certain capital projects are funded directly with current revenues of the City in order to avoid the cost of borrowing (PAYGO). These amounts for the first year of the Adopted CIP are included in the operating budget as specific transfers to the respective capital project funds. PAYGO is often split between capital projects, which are in the CIP, and maintenance capital projects which are not considered part of the CIP. For this analysis both are included.

OPERATING BUDGET IMPACTS

The construction of government buildings and facilities usually results in new annual costs for maintenance, utilities, and additional staffing required for facility management and operation. Whenever a new or expanded facility involves program expansion, the required staffing and equipment represent additional operating budget expenditures. Many of these facilities will serve as replacements for existing facilities as opposed to additional facilities.

Impact of Five-Year CIP on Operating Budget



Five Year Capital Improvement Program - Impact on Operating Budget (All Funds)

Supporting Fund / Project	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
Debt Service					
General Fund		-	2,340,500	2,340,500	2,340,500
Fire and Rescue Fund	-	-	-	-	-
Sewer Fund	-	-	-	-	-
Water Fund	-	-	930,000	930,000	1,085,000
Electric Fund	-	-	-	-	-
Stormwater Fund	-	-	-	-	-
Airport Fund	-	-	-	-	-
School Fund	-	-	-	165,928	165,928
Debt Service	-	-	3,270,500	3,436,428	3,591,428
PAYGO					
General Fund	870,000	360,000	500,000	360,000	500,000
Fire and Rescue Fund	-	-	-	-	-
Sewer Fund	1,360,000	1,350,000	1,200,000	450,000	450,000
Water Fund	2,840,000	1,815,000	1,460,000	1,300,000	400,000
Electric Fund	2,640,000	2,575,000	1,825,000	2,280,000	2,100,000
Stormwater Fund	110,000	549,000	480,000	100,000	100,000
Airport Fund	356,000	217,000	150,000	104,000	44,000
School Fund	3,000,000	3,617,000	3,000,000	3,060,000	3,000,000
PAYGO	11,176,000	10,483,000	8,615,000	7,654,000	6,594,000
Other Operating Costs (Savings)					
General Fund	(20,000)	(20,000)	(20,000)	(20,000)	(20,000)
Fire and Rescue Fund	-	-	-	-	-
Sewer Fund	-	-	-	-	-
Water Fund	-	-	-	-	-
Electric Fund	-	-	-	-	-
Stormwater Fund	-	-	-	-	-
Airport Fund	-	-	(2,000)	-	-
School Fund	-	-	-	-	-
Other Operating Costs (Savings)	(20,000)	(20,000)	(22,000)	(20,000)	(20,000)
Total Operating Impacts	**11,156,000**	**10,463,000**	**11,863,500**	**11,070,428**	**10,165,428**

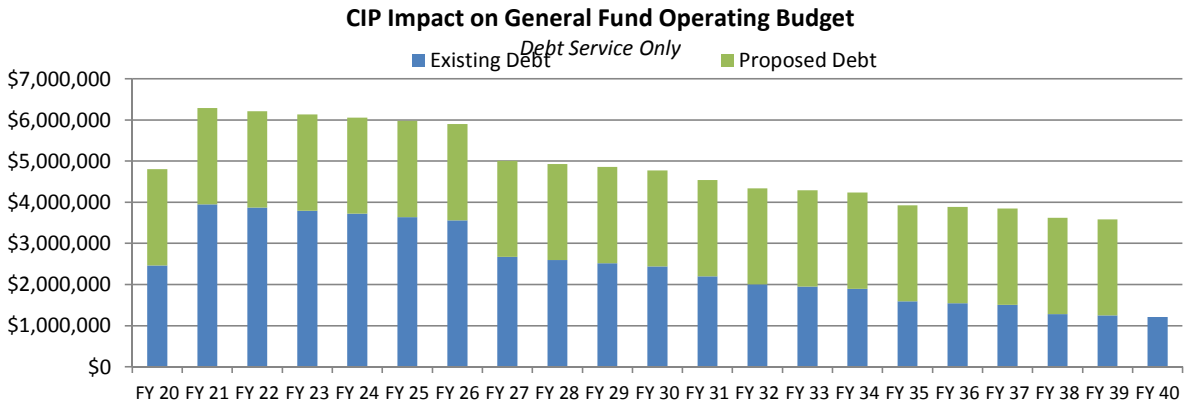
Five Year Capital Improvement Program - Impact on General Fund Operating Budget

Supporting Fund / Project		FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
General Fund						
Debt Service						
P-015	Public Safety Facility	-	-	1,743,750	1,743,750	1,743,750
C-017	Dean Park	-	-	186,000	186,000	186,000
T-070	Commercial Corridor Streetscap	-	-	93,000	93,000	93,000
C-006	Manassas Museum	-	-	193,750	193,750	193,750
C-037	E.G. Smith Baseball Complex	-	-	124,000	124,000	124,000
	Proposed Debt	-	-	2,340,500	2,340,500	2,340,500
	PAYGO (Capital & Maint.)	870,000	360,000	500,000	360,000	500,000
	Other Operating Costs (Savings)	-	-	-	-	-
	Total Operating Impacts	**$ 870,000**	**$ 360,000**	**$ 2,840,500**	**$ 2,700,500**	**$ 2,840,500**

General Fund debt service is funded with tax revenues raised in the General Fund and transferred to the Debt Service Fund. This transfer is based on the budget as opposed to actual debt service costs to build future debt capacity.

Proposed bond issues in the Five-Year CIP include $22.5 million for the public safety facility and $1.2 million for transportation improvements in FY 2021; $2.4 million for Dean Park and $1.6 million for E.G. Smith Baseball Complex in FY 2021; and $2.5 million for the Manassas Museum in FY 2021. The estimated annual debt service is shown above.

The proposed public safety facility would replace the current Police Headquarters.

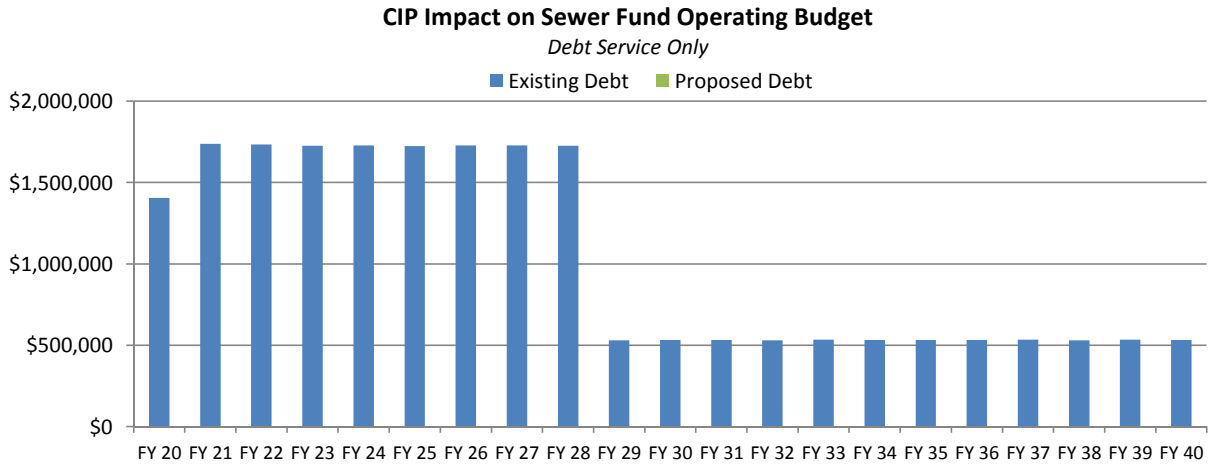


Five Year Capital Improvement Program - Impact on Sewer Fund Operating Budget

Supporting Fund / Project	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
Sewer Fund					
Debt Service					
n/a No Bond Projects	-	-	-	-	-
Proposed Debt	-	-	-	-	-
PAYGO (Capital & Maint.)	1,360,000	1,350,000	1,200,000	450,000	450,000
Other Operating Costs (Savings)	-	-	-	-	-
Total Operating Impacts	**$ 1,360,000**	**$ 1,350,000**	**$ 1,200,000**	**$ 450,000**	**$ 450,000**

Sewer Fund debt service is supported by sewer utility rates and paid out of the Sewer Fund.

There are no proposed bond issues for the Sewer program in the Five-Year Capital Improvement Program. The only impact of the Five-Year CIP is the annual PAYGO contribution.

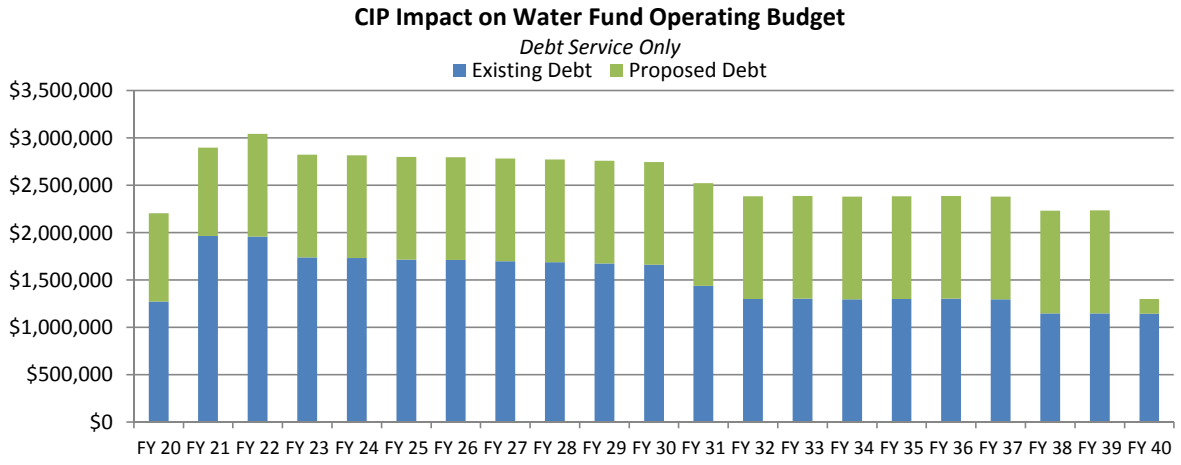


Five Year Capital Improvement Program - Impact on Water Fund Operating Budget

Supporting Fund / Project	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
Water Fund					
Debt Service					
W-042 24" Transmission Main Replace	-	-	930,000	930,000	1,085,000
Proposed Debt	-	-	930,000	930,000	1,085,000
PAYGO (Capital & Maint.)	2,840,000	1,815,000	1,460,000	1,300,000	400,000
Other Operating Costs (Savings)	-	-	-	-	-
Total Operating Impacts	**$ 2,840,000**	**$ 1,815,000**	**$ 2,390,000**	**$ 2,230,000**	**$ 1,485,000**

Water Fund debt service is supported by water utility rates and paid out of the Water Fund.

Proposed bond issues in the Five-Year CIP include $14 million for the 24" Transmission Main Replacement Project ($12 million in FY 2021, and $2 million in FY 2023). The estimated debt service associated with these bond issues is shown above.

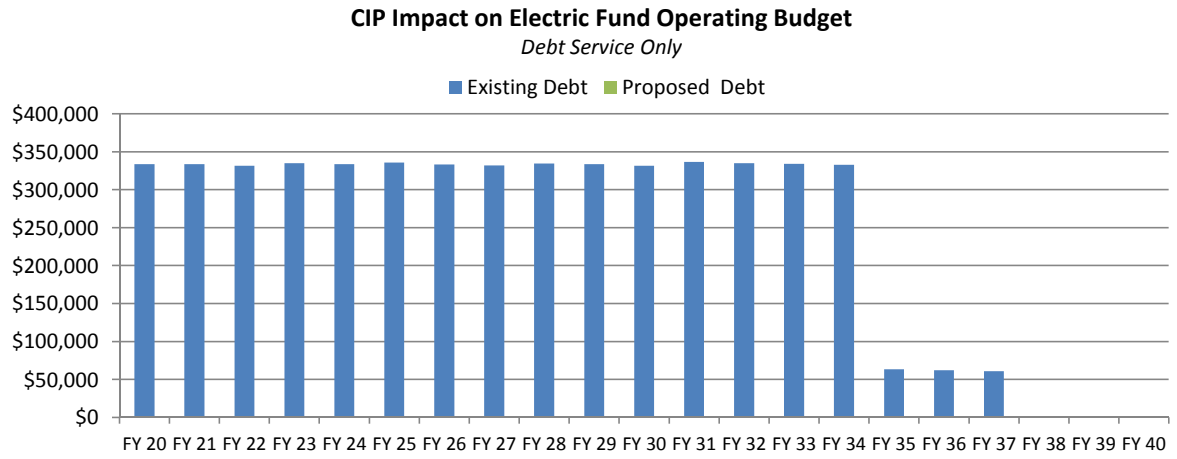


Five Year Capital Improvement Program - Impact on Electric Fund Operating Budget

Supporting Fund / Project	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
Electric Fund					
n/a No Bond Projects	-	-	-	-	-
Proposed Debt	-	-	-	-	-
PAYGO (Capital & Maint.)	2,640,000	2,575,000	1,825,000	2,280,000	2,100,000
Other Operating Costs (Savings)	-	-	-	-	-
Total Operating Impacts	**$ 2,640,000**	**$ 2,575,000**	**$ 1,825,000**	**$ 2,280,000**	**$ 2,100,000**

Electric Fund debt service is supported by electric utility rates and paid out of the Electric Fund.

There are no bond issues for the Electric program in the Five-Year Capital Improvement Program. The only impact of the Five-Year CIP is the annual PAYGO contribution.

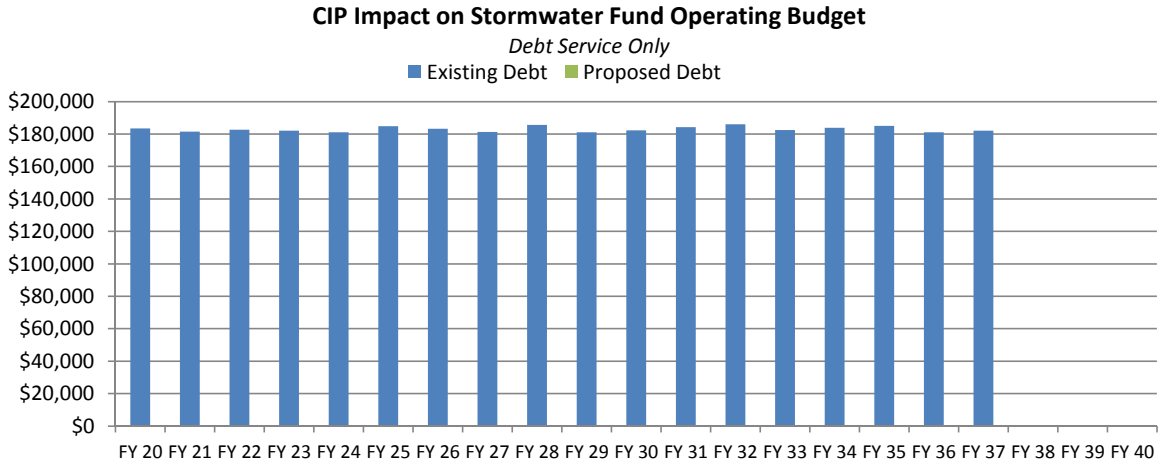


Five Year Capital Improvement Program - Impact on Stormwater Fund Operating Budget

Supporting Fund / Project	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
Stormwater Fund					
n/a No Bond Projects	-	-	-	-	-
Proposed Debt	-	-	-	-	-
PAYGO (Capital & Maint.)	110,000	549,000	480,000	100,000	100,000
Other Operating Costs (Savings)	-	-	-	-	-
Total Operating Impacts	**$ 110,000**	**$ 549,000**	**$ 480,000**	**$ 100,000**	**$ 100,000**

Stormwater Fund debt service is supported by stormwater management fees and paid out of the Stormwater Fund.

There are no bond issues for the Stormwater program in the Five-Year Capital Improvement Program. The only impact of the Five-Year CIP is the annual PAYGO contribution.

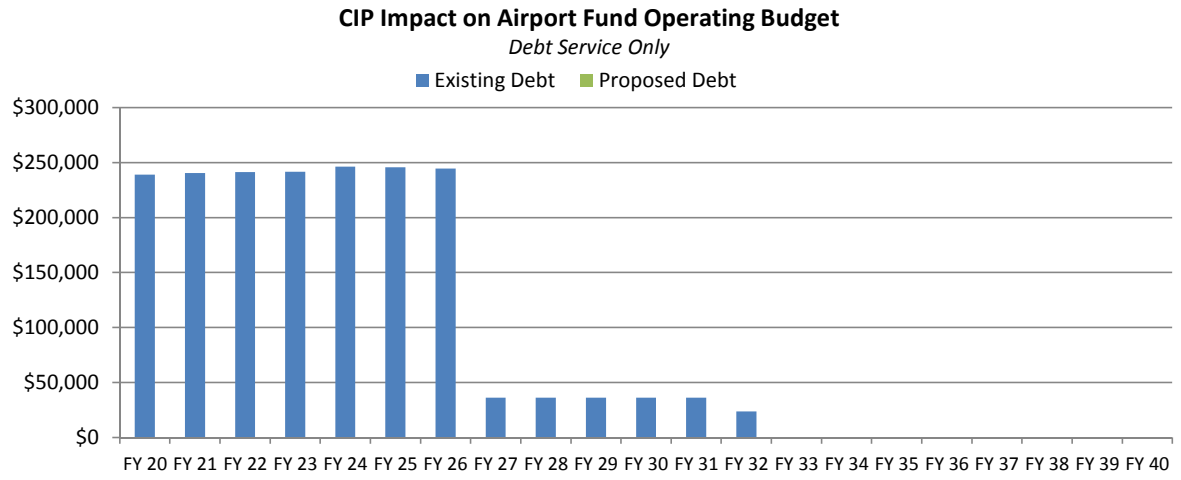


Five Year Capital Improvement Program - Impact on Airport Fund Operating Budget

Supporting Fund / Project	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
Airport Fund					
Debt Service					
n/a No Bond Projects	-	-	-	-	-
Proposed Debt	-	-	-	-	-
PAYGO (Capital & Maint.)	356,000	217,000	150,000	104,000	44,000
Other Operating Costs (Savings)	-	-	(2,000)	-	-
Total Operating Impacts	**$ 356,000**	**$ 217,000**	**$ 148,000**	**$ 104,000**	**$ 44,000**

Airport Fund debt service is supported by airport rentals and leases and is paid out of the Airport Fund.

There are no bond issues for the Airport program in the Five-Year Capital Improvement Program. The only impact of the Five-Year CIP is the annual PAYGO contribution. The annual contribution fluctuates from year-to-year based on the timing of federal and state grant opportunities. These grant opportunities are the main drivers behind the timing of the projects since the Airport Fund generally only funds 2% for federally supported projects and 20% for state supported projects.



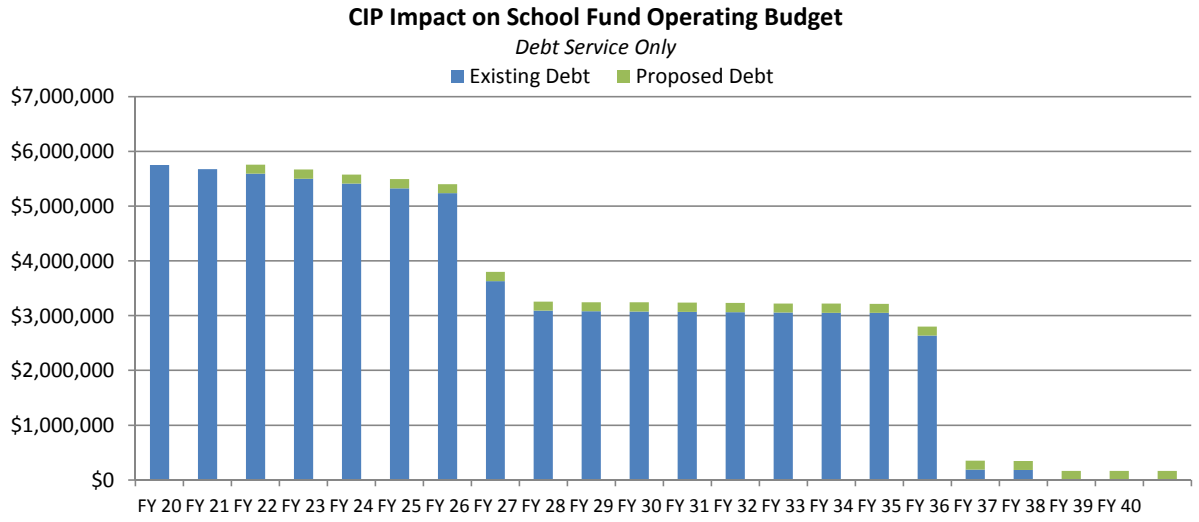
Five Year Capital Improvement Program - Impact on School Fund Operating Budget

Supporting Fund / Project	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
School Funds					
0201 Central Office Replacement	-	-	-	165,928	165,928
Proposed Debt	-	-	-	165,928	165,928
PAYGO (Capital & Maint.)	3,000,000	3,617,000	3,000,000	3,060,000	3,000,000
Other Operating Costs (Savings)	-	-	-	-	-
Total Operating Impacts	**$ 3,000,000**	**$ 3,617,000**	**$ 3,000,000**	**$ 3,225,928**	**$ 3,165,928**

School debt service is supported by tax revenue raised in the General Fund. Debt service payments are paid out of the Debt Service Fund and funded by a transfer from the School Funds.

Proposed bond issues in the Five-Year CIP includes $2.14 million in FY 2022 for Central Office Replacement. The estimated debt service associated with this bond issue is shown above.

In addition to debt service costs, the Schools Program includes an annual PAYGO contribution. The annual amount is typically $3 million.



FY 2020 Capital Projects (Dollars in Thousands)

Capital Projects are identified as projects with a cost greater than $100,000 and a useful life exceeding 10 years. Projects that do not meet these criteria, but are capital in nature, are considered Maintenance Capital Projects. While not part of the Five-Year CIP, these projects are included in the CIP in summary schedules for informational purposes.

	Proj. #	FY 2020
General Government		
Public Works & Utilities Facility Improvements	G-020	100
Manassas Customer Service Center	G-022	250
		350
Culture & Recreation		
Annaburg Manor	C-041	35
Jennie Dean Memorial	C-042	350
		385
Transportation		
Grant Avenue (Lee Avenue to Wellington Road)	T-021	1,445
Sidewalk & Bicycle Infill Initiative	T-058	700
Commercial Corridor Streetscapes	T-070	250
Centreville Road Improvements	T-074	150
Roundabout Sudley / Centreville	T-085	3,400
		5,945
Sewer		
Upper Flat Branch Interceptor Replacement	S-016	1,210
Buckner Road Sewer Main Replacement	S-020	60
Ellicott Lane Sewer Main Replacement	S-021	100
Sewer Main Replacement	S-023	10
		1,380
Water		
24" Transmission Main Replacement	W-042	1,000
Main Replacement / Looping	W-050	200
Interconnecting Meter Vaults	W-068	50
Water Plant Improvements	W-070	475
		1,725
Electric		
Underground Cable and Termination Replacement	E-030	400
Aternative Generation Initiatives	E-031	300
Place Overhead Lines Underground (Non-Transportation)	E-033	450
LED Streetlight Replacement	E-034	100
Manassas Airport Distribution Improvements	E-035	175

Capital Projects are identified as projects with a cost greater than $100,000 and a useful life exceeding 10 years. Projects that do not meet these criteria, but are capital in nature, are considered Maintenance Capital Projects. While not part of the Five-Year CIP, these projects are included in the CIP in summary schedules for informational purposes.

	Proj. #	FY 2020
Point of Woods Substation Circuit Tie-Point	E-036	300
Substation Capacity and Reliability Improvements	E-037	225
		1,950
Stormwater		
Cockrell Branch SWM Pond Restoration / Dredging	D-018	10
		10
Airport		
Upgrade Runway 16R / 34L Lighting System and PAPIs	A-032	400
Taxiway A Rehabilitation	A-069	250
Runway 16R / 34L Rehabilitation	A-070	3,000
Terminal Building Roof Replacement	A-077	100
Installation of Security Fiberline	A-080	140
Taxiway G and Taxilane Y Construction	A-086	2,648
West Corporate Development Site / Drainage Improvements	A-087	1,000
.		**7,538**
Schools		
District Wide - Technology Upgrades	0102	175
District Wide - School Bus Replacements	0103	500
District Wide - School Bus Additions	0105	125
Round - Phased BAS / HVAC Replacement	1004	2,200
		3,000
	TOTAL	**22,283**

		FY 2020
Funding Sources		
General Fund		420
Sewer Fund		1,360
Water Fund		2,840
Electric Fund		2,640
Stormwater Fund		10
Airport Fund		312
School Fund		3,000
Bonds		-
State		1,293
Federal		9,333
NVTA		900
Other Sources		175
	TOTAL	**22,283**

G-020 Public Works & Utilities Facility Improvements

Year Introduced: 2014
Change: No change
Associated Proj: N/A
Program Area: General Government
Managing Dept: Public Works
Manager: T. Fitzwater
Plan Conformance:
Comprehensive Plan 7.11

Est. Start: 7/1/2013
Est. Complete: 12/31/2020

Description:

FY18-FY19: Renovate and expand buildings "A" & "B" as well as renovations to the water/sewer shop.
FY20: Upgrade perimeter fencing.39.+6

Cost Estimate: ($ in 1,000s)	Prior Years	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	Total Project
Planning	-	-	-	-	-	-	-	-
Land	-	-	-	-	-	-	-	-
Construction	1,360	100	-	-	-	-	-	1,460
Total Cost	**1,360**	**100**	**-**	**-**	**-**	**-**	**-**	**1,460**
Funding Sources: ($ in 1,000s)								
General Fund	230	50	-	-	-	-	-	280
Sewer Fund	232	50	-	-	-	-	-	282
Water Fund	168	-	-	-	-	-	-	168
Electric Fund	730	-	-	-	-	-	-	730
Stormwater Fund	-	-	-	-	-	-	-	-
Airport Fund	-	-	-	-	-	-	-	-
School Fund	-	-	-	-	-	-	-	-
Bonds	-	-	-	-	-	-	-	-
State	-	-	-	-	-	-	-	-
Federal	-	-	-	-	-	-	-	-
NVTA	-	-	-	-	-	-	-	-
Other Sources	-	-	-	-	-	-	-	-
Total Funding	**1,360**	**100**	**-**	**-**	**-**	**-**	**-**	**1,460**
Operating Impacts: ($ in 1,000s)								
Revenue	-	-	-	-	-	-	-	-
Staffing (Costs) Savings	-	-	-	-	-	-	-	-
Facility (Costs) Savings	-	-	-	-	-	-	-	-
Program (Costs) Savings	-	-	-	-	-	-	-	-
Debt Service	-	-	-	-	-	-	-	-
Net Revenue	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

G-022 Manassas Customer Service Center

Year Introduced: 2020
Change: New Project
Associated Proj: G-016
Program Area: General Government
Managing Dept: Public Works
Manager: T. Fitzwater
Plan Conformance:
Comprehensive Plan 7.11

Est. Start: 6/3/2019
Est. Complete: 12/31/2020

Description:

Prepare existing City-owned DMV facility for use as a Manassas Customer Service Center after DMV moves to new building in August of 2019.

Cost Estimate: ($ in 1,000s)	Prior Years	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	Total Project
Planning	-	-	-	-	-	-	-	-
Land	-	-	-	-	-	-	-	-
Construction	-	250	-	-	-	-	-	250
Total Cost	**-**	**250**	**-**	**-**	**-**	**-**	**-**	**250**
Funding Sources: ($ in 1,000s)								
General Fund	-	160	-	-	-	-	-	160
Sewer Fund	-	-	-	-	-	-	-	-
Water Fund	-	-	-	-	-	-	-	-
Electric Fund	-	90	-	-	-	-	-	90
Stormwater Fund	-	-	-	-	-	-	-	-
Airport Fund	-	-	-	-	-	-	-	-
School Fund	-	-	-	-	-	-	-	-
Bonds	-	-	-	-	-	-	-	-
State	-	-	-	-	-	-	-	-
Federal	-	-	-	-	-	-	-	-
NVTA	-	-	-	-	-	-	-	-
Other Sources	-	-	-	-	-	-	-	-
Total Funding	**-**	**250**	**-**	**-**	**-**	**-**	**-**	**250**
Operating Impacts: ($ in 1,000s)								
Revenue	-	-	-	-	-	-	-	-
Staffing (Costs) Savings	-	-	-	-	-	-	-	-
Facility (Costs) Savings	-	-	-	-	-	-	-	-
Program (Costs) Savings	-	-	-	-	-	-	-	-
Debt Service	-	-	-	-	-	-	-	-
Net Revenue	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

C-041 Annaburg Manor

Year Introduced: 2019
Change: No change
Associated Proj: N/A
Program Area: Culture & Recreation
Managing Dept: Community Development
Manager: L. Via-Gossman
Plan Conformance:
Comprehensive Plan 9.1

Est. Start: 11/1/2018
Est. Complete: 12/31/2020

Description:

Purchase 3.65 acres of land and the structure on it known as Annaburg Manor for a public park. This purchase will provide parkland for City residents and an opportunity for an interested non-profit or the City to restore Annaburg Manor. Manassas currently has a deficit of 104 acres of park land. It is estimated that this park will serve more than 884 households, or 2,280 residents, within a 10 minute walk of the proposed park. Funds in FY20 will initiate community master planning. A future project would provide park improvements and potentially restore portions of the building for public use.

Cost Estimate: ($ in 1,000s)	Prior Years	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	Total Project
Planning	-	35	-	-	-	-	-	35
Land	846	-	-	-	-	-	-	846
Construction	454	-	-	-	-	-	5,000	5,454
Total Cost	**1,300**	**35**	**-**	**-**	**-**	**-**	**5,000**	**6,335**
Funding Sources: ($ in 1,000s)								
General Fund	-	35	-	-	-	-	-	35
Sewer Fund	-	-	-	-	-	-	-	-
Water Fund	-	-	-	-	-	-	-	-
Electric Fund	-	-	-	-	-	-	-	-
Stormwater Fund	-	-	-	-	-	-	-	-
Airport Fund	-	-	-	-	-	-	-	-
School Fund	-	-	-	-	-	-	-	-
Bonds	-	-	-	-	-	-	-	-
State	-	-	-	-	-	-	-	-
Federal	-	-	-	-	-	-	-	-
NVTA	-	-	-	-	-	-	-	-
Other Sources	1,300	-	-	-	-	-	5,000	6,300
Total Funding	**1,300**	**35**	**-**	**-**	**-**	**-**	**5,000**	**6,335**
Operating Impacts: ($ in 1,000s)								
Revenue	-	-	-	-	-	-	-	-
Staffing (Costs) Savings	-	-	-	-	-	-	-	-
Facility (Costs) Savings	-	(20)	(20)	(20)	(20)	(20)	-	(100)
Program (Costs) Savings	-	-	-	-	-	-	-	-
Debt Service	-	-	-	-	-	-	-	-
Net Revenue	**-**	**(20)**	**(20)**	**(20)**	**(20)**	**(20)**	**-**	**(100)**

C-042 Jennie Dean Memorial

Year Introduced: 2020
Change: New Project
Associated Proj: C-017
Program Area: Culture & Recreation
Managing Dept: Community Development
Manager: L. Via-Gossman
Plan Conformance:
Comprehensive Plan 9.2

Est. Start: 7/1/2019
Est. Complete: 11/1/2020

Description:

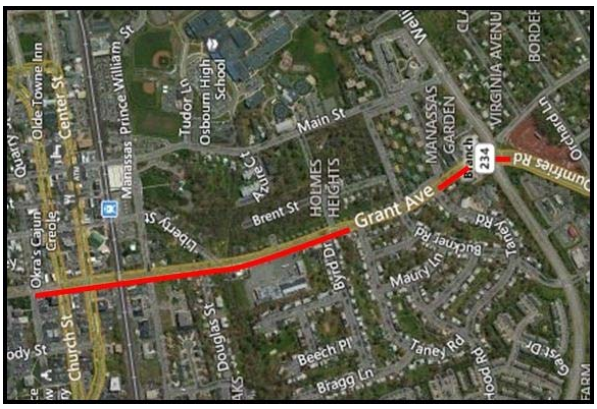
This project would install a bronze statue of Ms. Jennie Dean with an accessible plaza and walkway. The site had fallen into a state of disrepair during the recession and with the strong support of the community, the City has been steadily improving the conditions of the site. With those improvements, there is renewed interest from the community to install a bronze statue that has been proposed since 1995 when the memorial was first dedicated. This project would match community fundraising for the project.

Cost Estimate: ($ in 1,000s)	**Prior Years**	**FY 2020**	**FY 2021**	**FY 2022**	**FY 2023**	**FY 2024**	**Future**	**Total Project**
Planning	-	-	-	-	-	-	-	-
Land	-	-	-	-	-	-	-	-
Construction	-	350	-	-	-	-	-	350
Total Cost	**-**	**350**	**-**	**-**	**-**	**-**	**-**	**350**
Funding Sources: ($ in 1,000s)								
General Fund	-	175	-	-	-	-	-	175
Sewer Fund	-	-	-	-	-	-	-	-
Water Fund	-	-	-	-	-	-	-	-
Electric Fund	-	-	-	-	-	-	-	-
Stormwater Fund	-	-	-	-	-	-	-	-
Airport Fund	-	-	-	-	-	-	-	-
School Fund	-	-	-	-	-	-	-	-
Bonds	-	-	-	-	-	-	-	-
State	-	-	-	-	-	-	-	-
Federal	-	-	-	-	-	-	-	-
NVTA	-	-	-	-	-	-	-	-
Other Sources	-	175	-	-	-	-	-	175
Total Funding	**-**	**350**	**-**	**-**	**-**	**-**	**-**	**350**
Operating Impacts: ($ in 1,000s)								
Revenue	-	-	-	-	-	-	-	-
Staffing (Costs) Savings	-	-	-	-	-	-	-	-
Facility (Costs) Savings	-	-	-	-	-	-	-	-
Program (Costs) Savings	-	-	-	-	-	-	-	-
Debt Service	-	-	-	-	-	-	-	-
Net Revenue	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

T-021 Grant Avenue (Lee Avenue to Wellington Road)

Year Introduced: 2000
Change: Increased Estimate
Associated Proj: P-015
Program Area: Transportation
Managing Dept: Engineering
Manager: M. Brickner
Plan Conformance:
Comprehensive Plan 6.2
Old Town Sector Plan

Est. Start: 12/1/2015
Est. Complete: 6/30/2021



Description:

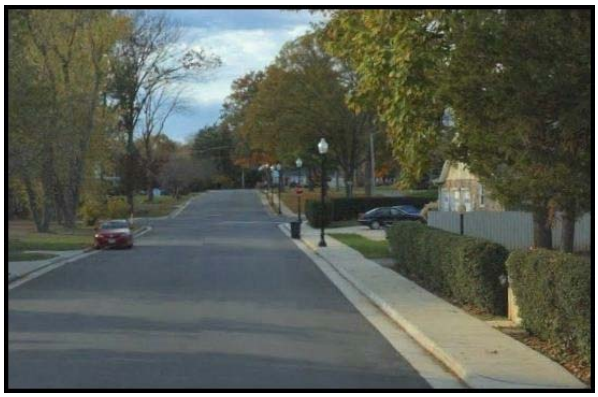
Reconstruct Grant Avenue between Lee Avenue and Wellington Road as a 2-lane facility with dedicated turn lanes and median control within the existing right-of-way. The project will add utility, pedestrian, and streetscape improvements and a shared use path from Wellington Road to Prince William Street. The increased estimate reflects additional electric improvements funded in FY21.
Status: Design
Estimated Construction Start: Spring 2020

Cost Estimate: ($ in 1,000s)	Prior Years	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	Total Project
Planning	750	-	-	-	-	-	-	750
Land	-	-	-	-	-	-	-	-
Construction	5,746	1,445	250	-	-	-	-	7,441
Total Cost	**6,496**	**1,445**	**250**	**-**	**-**	**-**	**-**	**8,191**
Funding Sources: ($ in 1,000s)								
General Fund	-	-	-	-	-	-	-	-
Sewer Fund	530	150	-	-	-	-	-	680
Water Fund	640	895	-	-	-	-	-	1,535
Electric Fund	300	400	250	-	-	-	-	950
Stormwater Fund	-	-	-	-	-	-	-	-
Airport Fund	-	-	-	-	-	-	-	-
School Fund	-	-	-	-	-	-	-	-
Bonds	4,000	-	-	-	-	-	-	4,000
State	-	-	-	-	-	-	-	-
Federal	-	-	-	-	-	-	-	-
NVTA	900	-	-	-	-	-	-	900
Other Sources	126	-	-	-	-	-	-	126
Total Funding	**6,496**	**1,445**	**250**	**-**	**-**	**-**	**-**	**8,191**
Operating Impacts: ($ in 1,000s)								
Revenue	-	-	-	-	-	-	-	-
Staffing (Costs) Savings	-	-	-	-	-	-	-	-
Facility (Costs) Savings	-	-	-	-	-	-	-	-
Program (Costs) Savings	-	-	-	-	-	-	-	-
Debt Service	-	(298)	(298)	(298)	(298)	(298)	(4,470)	(5,960)
Net Revenue	**-**	**(298)**	**(298)**	**(298)**	**(298)**	**(298)**	**(4,470)**	**(5,960)**

T-058 Sidewalk & Bicycle Infill Initiative

Year Introduced: 2011
Change: Increased Estimate
Associated Proj: P-022
Program Area: Transportation
Managing Dept: Engineering
Manager: M. Brickner
Plan Conformance:
Comprehensive Plan 6.2
Comprehensive Plan 9.1
Bike & Ped. Master Plan

Est. Start: 4/1/2014
Est. Complete: 6/30/2024



Description:

Citywide installation of trails, sidewalks, and bike facilities or other pedestrian and bicycle improvements.
•FY20 - Complete FY18 and FY19 projects: Portner Avenue from Sudley Road to Longstreet Drive, Quarry Street from the Messenger Place development to Main Street, and Dumfries Road from Hastings Drive to Donner Drive/Milic Street (shared use path and sidewalk). Additional NVTA funding is included for design costs.
•FY21 - Projects to be determined based on the Transportation Master Plan recommendations.

Cost Estimate: ($ in 1,000s)	Prior Years	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	Total Project
Planning	17	200	-	-	-	-	-	217
Land	-	-	-	-	-	-	-	-
Construction	1,715	500	500	300	300	300	-	3,615
Total Cost	**1,732**	**700**	**500**	**300**	**300**	**300**	**-**	**3,832**
Funding Sources: ($ in 1,000s)								
General Fund	67	-	-	-	-	-	-	67
Sewer Fund	-	-	-	-	-	-	-	-
Water Fund	-	-	-	-	-	-	-	-
Electric Fund	-	200	200	-	-	-	-	400
Stormwater Fund	-	-	-	-	-	-	-	-
Airport Fund	-	-	-	-	-	-	-	-
School Fund	-	-	-	-	-	-	-	-
Bonds	-	-	-	-	-	-	-	-
State	446	-	-	-	-	-	-	446
Federal	-	-	-	-	-	-	-	-
NVTA	1,091	500	300	300	300	300	-	2,791
Other Sources	128	-	-	-	-	-	-	128
Total Funding	**1,732**	**700**	**500**	**300**	**300**	**300**	**-**	**3,832**
Operating Impacts: ($ in 1,000s)								
Revenue	-	-	-	-	-	-	-	-
Staffing (Costs) Savings	-	-	-	-	-	-	-	-
Facility (Costs) Savings	-	-	-	-	-	-	-	-
Program (Costs) Savings	-	-	-	-	-	-	-	-
Debt Service	-	-	-	-	-	-	-	-
Net Revenue	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

T-070 Commercial Corridor Streetscapes

Year Introduced: 2019
Change: No change
Associated Proj: T-086
Program Area: Transportation
Managing Dept: Community Development
Manager: L. Via-Gossman
Plan Conformance:
Mathis Avenue Sector Plan
Old Town Sector Plan

Est. Start: 7/1/2018
Est. Complete: 6/30/2024

Description:

Commercial Corridor Streetscape Enhancements. Plan, design, and construct streetscape enhancements within the Route 28, Mathis Avenue, and Sudley Road commercial corridors as well as within the Historic Downtown.

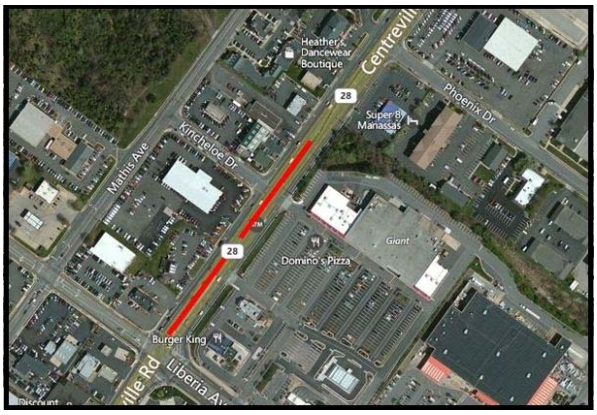
• FY20 and FY21 projects include funding for streetscape improvements to West Street, the sidewalk between City Hall and Main Street, and other projects identified based on the recommendations of the Transportation Master Plan.

Cost Estimate: ($ in 1,000s)	**Prior Years**	**FY 2020**	**FY 2021**	**FY 2022**	**FY 2023**	**FY 2024**	**Future**	**Total Project**
Planning	100	100	100	-	-	-	-	300
Land	-	-	-	-	-	-	-	-
Construction	150	150	1,525	250	250	250	-	2,575
Total Cost	**250**	**250**	**1,625**	**250**	**250**	**250**	**-**	**2,875**
Funding Sources: ($ in 1,000s)								
General Fund	-	-	-	-	-	-	-	-
Sewer Fund	-	-	25	-	-	-	-	25
Water Fund	-	-	150	-	-	-	-	150
Electric Fund	-	-	-	-	-	-	-	-
Stormwater Fund	-	-	-	-	-	-	-	-
Airport Fund	-	-	-	-	-	-	-	-
School Fund	-	-	-	-	-	-	-	-
Bonds	-	-	1,200	-	-	-	-	1,200
State	-	-	-	-	-	-	-	-
Federal	-	-	-	-	-	-	-	-
NVTA	250	250	250	250	250	250	-	1,500
Other Sources	-	-	-	-	-	-	-	-
Total Funding	**250**	**250**	**1,625**	**250**	**250**	**250**	**-**	**2,875**
Operating Impacts: ($ in 1,000s)								
Revenue	-	-	-	-	-	-	-	-
Staffing (Costs) Savings	-	-	-	-	-	-	-	-
Facility (Costs) Savings	-	-	-	-	-	-	-	-
Program (Costs) Savings	-	-	-	-	-	-	-	-
Debt Service	-	-	-	(93)	(93)	(93)	(1,581)	(1,860)
Net Revenue	**-**	**-**	**-**	**(93)**	**(93)**	**(93)**	**(1,581)**	**(1,860)**

T-074 Centreville Road Improvements

Year Introduced: 2015
Change: Increased Estimate
Associated Proj: N/A
Program Area: Transportation
Managing Dept: Engineering
Manager: M. Brickner
Plan Conformance:
Comprehensive Plan 6.3

Est. Start: 12/1/2015
Est. Complete: 6/30/2020



Description:

Add dual left turn lanes on Centreville Road at Liberia Avenue, restripe the northbound lane on Route 28 between Liberia Avenue and Manassas Drive to create a combined northbound through/right turn lane, and make pedestrian improvements to the intersection. Additional NVTA funding is included for design costs.

Status: Design
Estimated Construction Start: Fall 2019

Cost Estimate: ($ in 1,000s)	**Prior Years**	**FY 2020**	**FY 2021**	**FY 2022**	**FY 2023**	**FY 2024**	**Future**	**Total Project**
Planning	40	150	-	-	-	-	-	190
Land	-	-	-	-	-	-	-	-
Construction	260	-	-	-	-	-	-	260
Total Cost	**300**	**150**	**-**	**-**	**-**	**-**	**-**	**450**
Funding Sources: ($ in 1,000s)								
General Fund	-	-	-	-	-	-	-	-
Sewer Fund	-	-	-	-	-	-	-	-
Water Fund	-	-	-	-	-	-	-	-
Electric Fund	-	-	-	-	-	-	-	-
Stormwater Fund	-	-	-	-	-	-	-	-
Airport Fund	-	-	-	-	-	-	-	-
School Fund	-	-	-	-	-	-	-	-
Bonds	-	-	-	-	-	-	-	-
State	-	-	-	-	-	-	-	-
Federal	-	-	-	-	-	-	-	-
NVTA	300	150	-	-	-	-	-	450
Other Sources	-	-	-	-	-	-	-	-
Total Funding	**300**	**150**	**-**	**-**	**-**	**-**	**-**	**450**
Operating Impacts: ($ in 1,000s)								
Revenue	-	-	-	-	-	-	-	-
Staffing (Costs) Savings	-	-	-	-	-	-	-	-
Facility (Costs) Savings	-	-	-	-	-	-	-	-
Program (Costs) Savings	-	-	-	-	-	-	-	-
Debt Service	-	-	-	-	-	-	-	-
Net Revenue	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

T-085 Roundabout Sudley/Centreville

Year Introduced: 2019
Change: No change
Associated Proj: N/A
Program Area: Transportation
Managing Dept: Engineering
Manager: M. Brickner
Plan Conformance:
Mathis Avenue Sector Plan
Comprehensive Plan 6.3

Est. Start: 12/1/2017
Est. Complete: 12/31/2024

Description:

Following a traffic collision, temporary traffic controls have been installed at the intersection. In compliance with the Mathis Sector Plan, the City will evaluate a two-lane roundabout intersection to determine if sufficient right-of-way, traffic volumes, cost, and constructability promote a roundabout at this location. If feasible, federal (RSTP) funding is available to fund this project or a Better Utilizing Investments to Leverage Development (BUILD) grant application may be submitted.
Status: Planning

Cost Estimate: ($ in 1,000s)	Prior Years	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	Total Project
Planning	425	150	-	-	-	-	-	575
Land	-	350	-	-	-	-	-	350
Construction	-	2,900	-	-	-	-	-	2,900
Total Cost	**425**	**3,400**	**-**	**-**	**-**	**-**	**-**	**3,825**
Funding Sources: ($ in 1,000s)								
General Fund	-	-	-	-	-	-	-	-
Sewer Fund	-	-	-	-	-	-	-	-
Water Fund	-	-	-	-	-	-	-	-
Electric Fund	-	-	-	-	-	-	-	-
Stormwater Fund	-	-	-	-	-	-	-	-
Airport Fund	-	-	-	-	-	-	-	-
School Fund	-	-	-	-	-	-	-	-
Bonds	-	-	-	-	-	-	-	-
State	-	-	-	-	-	-	-	-
Federal	-	3,400	-	-	-	-	-	3,400
NVTA	425	-	-	-	-	-	-	425
Other Sources	-	-	-	-	-	-	-	-
Total Funding	**425**	**3,400**	**-**	**-**	**-**	**-**	**-**	**3,825**
Operating Impacts: ($ in 1,000s)								
Revenue	-	-	-	-	-	-	-	-
Staffing (Costs) Savings	-	-	-	-	-	-	-	-
Facility (Costs) Savings	-	-	-	-	-	-	-	-
Program (Costs) Savings	-	-	-	-	-	-	-	-
Debt Service	-	-	-	-	-	-	-	-
Net Revenue	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

S-016 Upper Flat Branch Interceptor Replacement

Year Introduced: 2009
Change: Increased Estimate
Associated Proj: D-021
Program Area: Sewer
Managing Dept: Utilities
Manager: T. Dawood
Plan Conformance:
Comprehensive Plan 7.7

Est. Start: 7/1/2010
Est. Complete: 6/30/2023

Description:

Replace sections of gravity sewer main along the Upper Flat Branch Interceptor which is currently deficient in capacity. Undersized sanitary sewer will be upsized to meet current standards, future growth, and preclude overflows.

Cost Estimate: ($ in 1,000s)	Prior Years	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	Total Project
Planning	342	-	-	-	-	-	-	342
Land	-	-	-	-	-	-	-	-
Construction	1,428	1,210	435	-	-	-	-	3,073
Total Cost	**1,770**	**1,210**	**435**	**-**	**-**	**-**	**-**	**3,415**
Funding Sources: ($ in 1,000s)								
General Fund	-	-	-	-	-	-	-	-
Sewer Fund	1,735	1,000	435	-	-	-	-	3,170
Water Fund	-	210	-	-	-	-	-	210
Electric Fund	-	-	-	-	-	-	-	-
Stormwater Fund	-	-	-	-	-	-	-	-
Airport Fund	-	-	-	-	-	-	-	-
School Fund	-	-	-	-	-	-	-	-
Bonds	-	-	-	-	-	-	-	-
State	-	-	-	-	-	-	-	-
Federal	-	-	-	-	-	-	-	-
NVTA	-	-	-	-	-	-	-	-
Other Sources	35	-	-	-	-	-	-	35
Total Funding	**1,770**	**1,210**	**435**	**-**	**-**	**-**	**-**	**3,415**
Operating Impacts: ($ in 1,000s)								
Revenue	-	-	-	-	-	-	-	-
Staffing (Costs) Savings	-	-	-	-	-	-	-	-
Facility (Costs) Savings	-	-	-	-	-	-	-	-
Program (Costs) Savings	-	-	-	-	-	-	-	-
Debt Service	-	-	-	-	-	-	-	-
Net Revenue	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

S-020 Buckner Road Sewer Main Replacement

Year Introduced: 2016
Change: Timeline
Associated Proj: N/A
Program Area: Sewer
Managing Dept: Utilities
Manager: T. Dawood
Plan Conformance:
Comprehensive Plan 7.7

Est. Start: 7/1/2020
Est. Complete: 6/30/2022

Description:

Install, repair, or replace the sewer and water main along Buckner Road from Maury Lane to Taney Road. This project will require the replacement of approximately 625 feet of sewer main and 50 laterals, which will increase reliability of service by reducing blockages and defects. Pipe material has outlasted its recommended life span.

Cost Estimate: ($ in 1,000s)	Prior Years	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	Total Project
Planning	-	60	-	-	-	-	-	60
Land	-	-	-	-	-	-	-	-
Construction	-		520	645	-	-	-	
Total Cost	**-**	**60**	**520**	**645**	**-**	**-**	**-**	**1,225**
Funding Sources: ($ in 1,000s)								
General Fund	-	-	-	-	-	-	-	-
Sewer Fund	-	50	450	600	-	-	-	1,100
Water Fund	-	10	70	45	-	-	-	125
Electric Fund	-	-	-	-	-	-	-	-
Stormwater Fund	-	-	-	-	-	-	-	-
Airport Fund	-	-	-	-	-	-	-	-
School Fund	-	-	-	-	-	-	-	-
Bonds	-	-	-	-	-	-	-	-
State	-	-	-	-	-	-	-	-
Federal	-	-	-	-	-	-	-	-
NVTA	-	-	-	-	-	-	-	-
Other Sources	-	-	-	-	-	-	-	-
Total Funding	**-**	**60**	**520**	**645**	**-**	**-**	**-**	**1,225**
Operating Impacts: ($ in 1,000s)								
Revenue	-	-	-	-	-	-	-	-
Staffing (Costs) Savings	-	-	-	-	-	-	-	-
Facility (Costs) Savings	-	-	-	-	-	-	-	-
Program (Costs) Savings	-	-	-	-	-	-	-	-
Debt Service	-	-	-	-	-	-	-	-
Net Revenue	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

S-021 Ellicott Lane Sewer Main Replacement

Year Introduced: 2016
Change: Timeline
Associated Proj: N/A
Program Area: Sewer
Managing Dept: Utilities
Manager: T. Dawood
Plan Conformance:
Comprehensive Plan 7.7

Est. Start: 7/1/2019
Est. Complete: 6/30/2021

Description:

Install, repair, or rehabilitate the sewer main in Ellicott Lane from Wesley Avenue to Wellington Road. This project will require the replacement of approximately 770 feet of sewer main and 13 laterals, which will increase reliability of service by reducing blockages and defects. Pipe material has outlasted its recommended life span.

Cost Estimate: ($ in 1,000s)	Prior Years	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	Total Project
Planning	85	-	-	-	-	-	-	85
Land	-	-	-	-	-	-	-	-
Construction	-	100	400	-	-	-	-	500
Total Cost	**85**	**100**	**400**	**-**	**-**	**-**	**-**	**585**
Funding Sources: ($ in 1,000s)								
General Fund	-	-	-	-	-	-	-	-
Sewer Fund	85	100	400	-	-	-	-	585
Water Fund	-	-	-	-	-	-	-	-
Electric Fund	-	-	-	-	-	-	-	-
Stormwater Fund	-	-	-	-	-	-	-	-
Airport Fund	-	-	-	-	-	-	-	-
School Fund	-	-	-	-	-	-	-	-
Bonds	-	-	-	-	-	-	-	-
State	-	-	-	-	-	-	-	-
Federal	-	-	-	-	-	-	-	-
NVTA	-	-	-	-	-	-	-	-
Other Sources	-	-	-	-	-	-	-	-
Total Funding	**85**	**100**	**400**	**-**	**-**	**-**	**-**	**585**
Operating Impacts: ($ in 1,000s)								
Revenue	-	-	-	-	-	-	-	-
Staffing (Costs) Savings	-	-	-	-	-	-	-	-
Facility (Costs) Savings	-	-	-	-	-	-	-	-
Program (Costs) Savings	-	-	-	-	-	-	-	-
Debt Service	-	-	-	-	-	-	-	-
Net Revenue	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

S-023 Sewer Main Replacement

Year Introduced: 2018
Change: No change
Associated Proj: N/A
Program Area: Sewer
Managing Dept: Utilities
Manager: T. Dawood
Plan Conformance:
Comprehensive Plan 7.7

Est. Start:
Est. Complete:

Description:

Open-cut replacement of sewer mains that are beyond available service life and cannot be lined.
FY22: Parts of Beauregard Avenue, Madison Avenue, and Nelson Lane
FY23 & FY24: Parts of Maple Street, Peabody Street, and Robson Avenue

Cost Estimate: ($ in 1,000s)	Prior Years	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	Total Project
Planning	-	10	40	50	-	-	-	100
Land	-	-	-	-	-	-	-	-
Construction	-	-	-	550	450	450	-	1,450
Total Cost	**-**	**10**	**40**	**600**	**450**	**450**	**-**	**1,550**
Funding Sources: ($ in 1,000s)								
General Fund	-	-	-	-	-	-	-	-
Sewer Fund	-	10	40	600	450	450	-	1,550
Water Fund	-	-	-	-	-	-	-	-
Electric Fund	-	-	-	-	-	-	-	-
Stormwater Fund	-	-	-	-	-	-	-	-
Airport Fund	-	-	-	-	-	-	-	-
School Fund	-	-	-	-	-	-	-	-
Bonds	-	-	-	-	-	-	-	-
State	-	-	-	-	-	-	-	-
Federal	-	-	-	-	-	-	-	-
NVTA	-	-	-	-	-	-	-	-
Other Sources	-	-	-	-	-	-	-	-
Total Funding	**-**	**10**	**40**	**600**	**450**	**450**	**-**	**1,550**
Operating Impacts: ($ in 1,000s)								
Revenue	-	-	-	-	-	-	-	-
Staffing (Costs) Savings	-	-	-	-	-	-	-	-
Facility (Costs) Savings	-	-	-	-	-	-	-	-
Program (Costs) Savings	-	-	-	-	-	-	-	-
Debt Service	-	-	-	-	-	-	-	-
Net Revenue	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

W-042 24" Transmission Main Replacement

Year Introduced: 2007
Change: Increased Estimate
Associated Proj: T-042
Program Area: Water
Managing Dept: Utilities
Manager: T. Dawood
Plan Conformance:
Comprehensive Plan 7.7

Est. Start: 7/1/2012
Est. Complete: 6/30/2025

Description:

Replace the existing 45-year old water transmission main with a 36" water transmission main in order to increase reliability and water transmission capacity from the Water Treatment Plant to the City. The main is approaching the ends of its useful life and experiences unacceptable hydraulic conditions during peak demand periods. Two phases have already been completed, one phase is in construction and half completed, three more phases are in design, and the last is being planned out. The project will be coordinated with both City roadway improvements and Prince William Country roadway improvements.

Cost Estimate: ($ in 1,000s)	Prior Years	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	Total Project
Planning	1,225	-	-	-	-	-	125	1,350
Land	-	-	-	-	-	-	-	-
Construction	15,536	1,000	12,900	900	2,900	-	2,675	35,911
Total Cost	**16,761**	**1,000**	**12,900**	**900**	**2,900**	**-**	**2,800**	**37,261**
Funding Sources: ($ in 1,000s)								
General Fund	-	-	-	-	-	-	-	-
Sewer Fund	-	-	-	-	-	-	-	-
Water Fund	7,761	1,000	900	900	900	-	900	12,361
Electric Fund	-	-	-	-	-	-	-	-
Stormwater Fund	-	-	-	-	-	-	-	-
Airport Fund	-	-	-	-	-	-	-	-
School Fund	-	-	-	-	-	-	-	-
Bonds	9,000	-	12,000	-	2,000	-	1,900	24,900
State	-	-	-	-	-	-	-	-
Federal	-	-	-	-	-	-	-	-
NVTA	-	-	-	-	-	-	-	-
Other Sources	-	-	-	-	-	-	-	-
Total Funding	**16,761**	**1,000**	**12,900**	**900**	**2,900**	**-**	**2,800**	**37,261**
Operating Impacts: ($ in 1,000s)								
Revenue	-	-	-	-	-	-	-	-
Staffing (Costs) Savings	-	-	-	-	-	-	-	-
Facility (Costs) Savings	-	-	-	-	-	-	-	-
Program (Costs) Savings	-	-	-	-	-	-	-	-
Debt Service	-			(930)	(930)	(1,085)	(18,755)	
Net Revenue	**-**	**-**	**-**	**(930)**	**(930)**	**(1,085)**	**(18,755)**	**(21,700)**

W-050 Main Replacement / Looping

Year Introduced: 2009
Change: Increased Estimate
Associated Proj: T-030
Program Area: Water
Managing Dept: Utilities
Manager: T. Dawood
Plan Conformance:
Comprehensive Plan 7.7

Est. Start: 7/1/2008
Est. Complete: 6/30/2025

Description:

Replace undersized and aging/failing water mains and loop existing dead-ends.
FY19: Peabody Street (Stonewall Road to Hazel Drive) and Hazel Drive (Peabody Street to Peabody Street)
FY20: Jackson Avenue (Sudley Road to Longstreet Drive) and Weems Road (Sudley Road to Longstreet Drive)
FY20: Longstreet Drive from Jackson Avenue to Weems Road
FY21: To Be Determined

Cost Estimate: ($ in 1,000s)	**Prior Years**	**FY 2020**	**FY 2021**	**FY 2022**	**FY 2023**	**FY 2024**	**Future**	**Total Project**
Planning	100	60	60	60	60	60	340	740
Land	-	-	-	-	-	-	-	-
Construction	2,434	140	435	455	340	340	2,560	6,704
Total Cost	**2,534**	**200**	**495**	**515**	**400**	**400**	**2,900**	**7,444**
Funding Sources: ($ in 1,000s)								
General Fund	-	-	-	-	-	-	-	-
Sewer Fund	-	-	-	-	-	-	-	-
Water Fund	2,534	200	495	515	400	400	2,900	7,444
Electric Fund	-	-	-	-	-	-	-	-
Stormwater Fund	-	-	-	-	-	-	-	-
Airport Fund	-	-	-	-	-	-	-	-
School Fund	-	-	-	-	-	-	-	-
Bonds	-	-	-	-	-	-	-	-
State	-	-	-	-	-	-	-	-
Federal	-	-	-	-	-	-	-	-
NVTA	-	-	-	-	-	-	-	-
Other Sources	-	-	-	-	-	-	-	-
Total Funding	**2,534**	**200**	**495**	**515**	**400**	**400**	**2,900**	**7,444**
Operating Impacts: ($ in 1,000s)								
Revenue	-	-	-	-	-	-	-	-
Staffing (Costs) Savings	-	-	-	-	-	-	-	-
Facility (Costs) Savings	-	-	-	-	-	-	-	-
Program (Costs) Savings	-	-	-	-	-	-	-	-
Debt Service	-	-	-	-	-	-	-	-
Net Revenue	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

W-068 Interconnecting Meter Vaults

Year Introduced: 2017
Change: No change
Associated Proj: N/A
Program Area: Water
Managing Dept: Utilities
Manager: T. Dawood
Plan Conformance:
Comprehensive Plan 7.7

Est. Start: 12/17/2012
Est. Complete: 6/30/2023

Description:

The City plans to upgrade or install three meter vaults that interconnect with the Service Authority. These connections will improve the City's ability to utilize emergency capacity that was purchased and allocated in the agreement of 8/12/1996 and reaffirmed on 12/17/2012.

Cost Estimate: ($ in 1,000s)	Prior Years	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	Total Project
Planning	30	-	-	-	-	-	-	30
Land	-	-	-	-	-	-	-	-
Construction	-	50	-	-	-	-	200	250
Total Cost	**30**	**50**	**-**	**-**	**-**	**-**	**200**	**280**
Funding Sources: ($ in 1,000s)								
General Fund	-	-	-	-	-	-	-	-
Sewer Fund	-	-	-	-	-	-	-	-
Water Fund	30	50	-	-	-	-	200	280
Electric Fund	-	-	-	-	-	-	-	-
Stormwater Fund	-	-	-	-	-	-	-	-
Airport Fund	-	-	-	-	-	-	-	-
School Fund	-	-	-	-	-	-	-	-
Bonds	-	-	-	-	-	-	-	-
State	-	-	-	-	-	-	-	-
Federal	-	-	-	-	-	-	-	-
NVTA	-	-	-	-	-	-	-	-
Other Sources	-	-	-	-	-	-	-	-
Total Funding	**30**	**50**	**-**	**-**	**-**	**-**	**200**	**280**
Operating Impacts: ($ in 1,000s)								
Revenue	-	-	-	-	-	-	-	-
Staffing (Costs) Savings	-	-	-	-	-	-	-	-
Facility (Costs) Savings	-	-	-	-	-	-	-	-
Program (Costs) Savings	-	-	-	-	-	-	-	-
Debt Service	-	-	-	-	-	-	-	-
Net Revenue	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

W-070 Water Plant Improvements

Year Introduced: 2018
Change: Increased Estimate
Associated Proj: N/A
Program Area: Water
Managing Dept: Utilities
Manager: T. Dawood
Plan Conformance:
Comprehensive Plan 7.7.3

Est. Start: 7/1/2018
Est. Complete: 6/30/2024

Description:

Replace and refurbish critical components of the Water Treatment Plant related to both age and increased capacity requirements.
FY21: Install sludge de-watering screw/bolt press cartridge.

Cost Estimate: ($ in 1,000s)	Prior Years	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	Total Project
Planning	-	-	-	-	-	-	-	-
Land	-	-	-	-	-	-	-	-
Construction	245	475	200	-	-	-	-	920
Total Cost	**245**	**475**	**200**	**-**	**-**	**-**	**-**	**920**
Funding Sources: ($ in 1,000s)								
General Fund	-	-	-	-	-	-	-	-
Sewer Fund	-	-	-	-	-	-	-	-
Water Fund	245	475	200	-	-	-	-	920
Electric Fund	-	-	-	-	-	-	-	-
Stormwater Fund	-	-	-	-	-	-	-	-
Airport Fund	-	-	-	-	-	-	-	-
School Fund	-	-	-	-	-	-	-	-
Bonds	-	-	-	-	-	-	-	-
State	-	-	-	-	-	-	-	-
Federal	-	-	-	-	-	-	-	-
NVTA	-	-	-	-	-	-	-	-
Other Sources	-	-	-	-	-	-	-	-
Total Funding	**245**	**475**	**200**	**-**	**-**	**-**	**-**	**920**
Operating Impacts: ($ in 1,000s)								
Revenue	-	-	-	-	-	-	-	-
Staffing (Costs) Savings	-	-	-	-	-	-	-	-
Facility (Costs) Savings	-	-	-	-	-	-	-	-
Program (Costs) Savings	-	-	-	-	-	-	-	-
Debt Service	-	-	-	-	-	-	-	-
Net Revenue	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

E-030 Underground Cable and Termination Replacement

Year Introduced: 2010
Change: No change
Associated Proj: N/A
Program Area: Electric
Managing Dept: Utilities
Manager: D. Jones
Plan Conformance:
Comprehensive Plan 7.7

Est. Start:
Est. Complete:

Description:

The utility has experienced an above average number of failures on the 15KV main feeder circuits because cables have been in use long past their expected service life. This is a formal program for replacing cables and terminations based on test results, age, and the number of faults experienced.
FY20: Liberia Avenue
FY21 : Georgetown South Tie Point Phase I; FY22: Georgetown South Tie Point Phase II
FY23: Acer Lane Circuit Tie Point 103/302; FY24: Park Avenue/Park Street Neighborhood

Cost Estimate: ($ in 1,000s)	**Prior Years**	**FY 2020**	**FY 2021**	**FY 2022**	**FY 2023**	**FY 2024**	**Future**	**Total Project**
Planning	220	10	10	10	10	10	-	270
Land	-	-	-	-	-	-	-	-
Construction	3,120	390	390	390	390	390	-	5,070
Total Cost	**3,340**	**400**	**400**	**400**	**400**	**400**	**-**	**5,340**
Funding Sources: ($ in 1,000s)								
General Fund	-	-	-	-	-	-	-	-
Sewer Fund	-	-	-	-	-	-	-	-
Water Fund	-	-	-	-	-	-	-	-
Electric Fund	3,340	400	400	400	400	400	-	5,340
Stormwater Fund	-	-	-	-	-	-	-	-
Airport Fund	-	-	-	-	-	-	-	-
School Fund	-	-	-	-	-	-	-	-
Bonds	-	-	-	-	-	-	-	-
State	-	-	-	-	-	-	-	-
Federal	-	-	-	-	-	-	-	-
NVTA	-	-	-	-	-	-	-	-
Other Sources	-	-	-	-	-	-	-	-
Total Funding	**3,340**	**400**	**400**	**400**	**400**	**400**	**-**	**5,340**
Operating Impacts: ($ in 1,000s)								
Revenue	-	-	-	-	-	-	-	-
Staffing (Costs) Savings	-	-	-	-	-	-	-	-
Facility (Costs) Savings	-	-	-	-	-	-	-	-
Program (Costs) Savings	-	-	-	-	-	-	-	-
Debt Service	-	-	-	-	-	-	-	-
Net Revenue	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

E-031 Alternative Generation Initiatives

Year Introduced: 2011
Change: Expanded Scope
Associated Proj: N/A
Program Area: Electric
Managing Dept: Utilities
Manager: D. Jones
Plan Conformance:
Comprehensive Plan 7.7
Comprehensive Plan 8.3

Est. Start:
Est. Complete:

Description:

Maintain and upgrade the diesel generation assets to meet changing emissions requirements and investigate new technologies to provide alternative peak-shaving methods.
Projects in development: Gas turbine tie to Prince William Substation; Dean Park generators relocation; study generators for peaking; Osbourn HS generator replacement.

Cost Estimate: ($ in 1,000s)	**Prior Years**	**FY 2020**	**FY 2021**	**FY 2022**	**FY 2023**	**FY 2024**	**Future**	**Total Project**
Planning	150	-	-	-	-	-	-	150
Land	-	-	-	-	-	-	-	-
Construction	1,300	300	300	300	300	300	-	2,800
Total Cost	**1,450**	**300**	**300**	**300**	**300**	**300**	**-**	**2,950**
Funding Sources: ($ in 1,000s)								
General Fund	-	-	-	-	-	-	-	-
Sewer Fund	-	-	-	-	-	-	-	-
Water Fund	-	-	-	-	-	-	-	-
Electric Fund	1,450	300	300	300	300	300	-	2,950
Stormwater Fund	-	-	-	-	-	-	-	-
Airport Fund	-	-	-	-	-	-	-	-
School Fund	-	-	-	-	-	-	-	-
Bonds	-	-	-	-	-	-	-	-
State	-	-	-	-	-	-	-	-
Federal	-	-	-	-	-	-	-	-
NVTA	-	-	-	-	-	-	-	-
Other Sources	-	-	-	-	-	-	-	-
Total Funding	**1,450**	**300**	**300**	**300**	**300**	**300**	**-**	**2,950**
Operating Impacts: ($ in 1,000s)								
Revenue	-	-	-	-	-	-	-	-
Staffing (Costs) Savings	-	-	-	-	-	-	-	-
Facility (Costs) Savings	-	-	-	-	-	-	-	-
Program (Costs) Savings	-	-	-	-	-	-	-	-
Debt Service	-	-	-	-	-	-	-	-
Net Revenue	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

E-033 Place Overhead Lines Underground (Non-Transportation)

Year Introduced: 2016
Change: Increased Estimate
Associated Proj: N/A
Program Area: Electric
Managing Dept: Utilities
Manager: D. Jones
Plan Conformance:
Comprehensive Plan 7.6.2

Est. Start:
Est. Complete:

Description:

Place overhead electric, telephone, cable, and fiber lines underground, improving reliability and aesthetics, and lowering maintenance costs. 86% of lines are underground and approximately 3,900 feet are undergrounded annually.
FY20: Foster Drive Phase II (Technology Drive to Dean Drive); FY21: Jefferson Avenue/Lincoln Avenue/School Stree
FY22: Sudley Road (Southside; Digges Road to Godwin Drive); FY23: Sudley Road (Southside; Stonewall Road to Digges Road)
FY24: Portner Avenue (Main Street to Sudley Road Tie Point 404/104)

Cost Estimate: ($ in 1,000s)	**Prior Years**	**FY 2020**	**FY 2021**	**FY 2022**	**FY 2023**	**FY 2024**	**Future**	**Total Project**
Planning	-	-	-	-	-	-	-	-
Land	-	-	-	-	-	-	-	-
Construction	1,275	450	500	400	580	500	-	3,705
Total Cost	**1,275**	**450**	**500**	**400**	**580**	**500**	**-**	**3,705**
Funding Sources: ($ in 1,000s)								
General Fund	-	-	-	-	-	-	-	-
Sewer Fund	-	-	-	-	-	-	-	-
Water Fund	-	-	-	-	-	-	-	-
Electric Fund	1,275	450	500	400	580	500	-	3,705
Stormwater Fund	-	-	-	-	-	-	-	-
Airport Fund	-	-	-	-	-	-	-	-
School Fund	-	-	-	-	-	-	-	-
Bonds	-	-	-	-	-	-	-	-
State	-	-	-	-	-	-	-	-
NVTA	-	-	-	-	-	-	-	-
Other Sources	-	-	-	-	-	-	-	-
Total Funding	**1,275**	**450**	**500**	**400**	**580**	**500**	**-**	**3,705**
Operating Impacts: ($ in 1,000s)								
Revenue	-	-	-	-	-	-	-	-
Staffing (Costs) Savings	-	-	-	-	-	-	-	-
Facility (Costs) Savings	-	-	-	-	-	-	-	-
Program (Costs) Savings	-	-	-	-	-	-	-	-
Debt Service	-	-	-	-	-	-	-	-
Net Revenue	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

E-034 LED Streetlight Replacement

Year Introduced: 2017
Change: No change
Associated Proj: N/A
Program Area: Electric
Managing Dept: Utilities
Manager: D. Jones
Plan Conformance:
Comprehensive Plan 8.3

Est. Start: 7/1/2016
Est. Complete: 6/30/2024

Description:

Upgrade all Manassas City streetlights (approx. 2,800) to LED over seven years. First year activities include planning, design, and specifications of fixtures including public input and investigation of other local municipalities that have changed to LED.

Cost Estimate: ($ in 1,000s)	Prior Years	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	Total Project
Planning	50	-	-	-	-	-	-	50
Land	-	-	-	-	-	-	-	-
Construction	200	100	100	100	100	100	-	700
Total Cost	**250**	**100**	**100**	**100**	**100**	**100**	**-**	**750**
Funding Sources: ($ in 1,000s)								
General Fund	-	-	-	-	-	-	-	-
Sewer Fund	-	-	-	-	-	-	-	-
Water Fund	-	-	-	-	-	-	-	-
Electric Fund	250	100	100	100	100	100	-	750
Stormwater Fund	-	-	-	-	-	-	-	-
Airport Fund	-	-	-	-	-	-	-	-
School Fund	-	-	-	-	-	-	-	-
Bonds	-	-	-	-	-	-	-	-
State	-	-	-	-	-	-	-	-
Federal	-	-	-	-	-	-	-	-
NVTA	-	-	-	-	-	-	-	-
Other Sources	-	-	-	-	-	-	-	-
Total Funding	**250**	**100**	**100**	**100**	**100**	**100**	**-**	**750**
Operating Impacts: ($ in 1,000s)								
Revenue	-	-	-	-	-	-	-	-
Staffing (Costs) Savings	-	-	-	-	-	-	-	-
Facility (Costs) Savings	-	-	-	-	-	-	-	-
Program (Costs) Savings	-	-	-	-	-	-	-	-
Debt Service	-	-	-	-	-	-	-	-
Net Revenue	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

E-035 Manassas Airport Distribution Improvements

Year Introduced: 2020
Change: New Project
Associated Proj: N/A
Program Area: Electric
Managing Dept: Utilities
Manager: D. Jones
Plan Conformance:
Comprehensive Plan 7.7.9

Est. Start: 7/1/2019
Est. Complete: 6/30/2024

Description:

The electrical distribution system at Manassas Municipal Airport has been installed over time without a coordinated plan for redundancy and reliability. This project will study the new loads planned at the Airport and develop a replacement and upgrade plan for the electrical infrastructure. This will include adding switching options for redundancy and a review and upgrade of the backup generation. The design will also include adding renewable energy utility-level battery storage and a study of solar options to tie to the battery system (2023-2024).

Cost Estimate: ($ in 1,000s)	Prior Years	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	Total Project
Planning	-	75	-	-	-	-	-	75
Land	-	-	-	-	-	-	-	-
Construction	-	100	300	300	450	450	-	1,600
Total Cost	**-**	**175**	**300**	**300**	**450**	**450**	**-**	**1,675**
Funding Sources: ($ in 1,000s)								
General Fund	-	-	-	-	-	-	-	-
Sewer Fund	-	-	-	-	-	-	-	-
Water Fund	-	-	-	-	-	-	-	-
Electric Fund	-	175	300	300	450	450	-	1,675
Stormwater Fund	-	-	-	-	-	-	-	-
Airport Fund	-	-	-	-	-	-	-	-
School Fund	-	-	-	-	-	-	-	-
Bonds	-	-	-	-	-	-	-	-
State	-	-	-	-	-	-	-	-
Federal	-	-	-	-	-	-	-	-
NVTA	-	-	-	-	-	-	-	-
Other Sources	-	-	-	-	-	-	-	-
Total Funding	**-**	**175**	**300**	**300**	**450**	**450**	**-**	**1,675**
Operating Impacts: ($ in 1,000s)								
Revenue	-	-	-	-	-	-	-	-
Staffing (Costs) Savings	-	-	-	-	-	-	-	-
Facility (Costs) Savings	-	-	-	-	-	-	-	-
Debt Service	-	-	-	-	-	-	-	-
Net Revenue	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

E-036 Point of Woods Substation Circuit Tie-Point

Year Introduced: 2020
Change: New Project
Associated Proj: N/A
Program Area: Electric
Managing Dept: Utilities
Manager: D. Jones
Plan Conformance:
Comprehensive Plan 7.7.9

Est. Start: 7/1/2019
Est. Complete: 6/30/2021

Description:

The Point of Woods substation has no alternate feed for Circuit 203 to enable offloading the substation for maintenance. Currently, three feeders must be daisy-chained together in order to perform major maintenance at the substation. This project will design and build an alternate tie to the Airport Substation Circuit 306 to increase operational flexibility and allow maintenance at the substation without lowering reliability for customers.

Cost Estimate: ($ in 1,000s)	Prior Years	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	Total Project
Planning	-	50	-	-	-	-	-	50
Land	-	-	-	-	-	-	-	-
Construction	-	250	200	-	-	-	-	450
Total Cost	**-**	**300**	**200**	**-**	**-**	**-**	**-**	**500**
Funding Sources: ($ in 1,000s)								
General Fund	-	-	-	-	-	-	-	-
Sewer Fund	-	-	-	-	-	-	-	-
Water Fund	-	-	-	-	-	-	-	-
Electric Fund	-	300	200	-	-	-	-	500
Stormwater Fund	-	-	-	-	-	-	-	-
Airport Fund	-	-	-	-	-	-	-	-
School Fund	-	-	-	-	-	-	-	-
Bonds	-	-	-	-	-	-	-	-
State	-	-	-	-	-	-	-	-
Federal	-	-	-	-	-	-	-	-
NVTA	-	-	-	-	-	-	-	-
Other Sources	-	-	-	-	-	-	-	-
Total Funding	**-**	**300**	**200**	**-**	**-**	**-**	**-**	**500**
Operating Impacts: ($ in 1,000s)								
Revenue	-	-	-	-	-	-	-	-
Staffing (Costs) Savings	-	-	-	-	-	-	-	-
Facility (Costs) Savings	-	-	-	-	-	-	-	-
Program (Costs) Savings	-	-	-	-	-	-	-	-
Debt Service	-	-	-	-	-	-	-	-
Net Revenue	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

E-037 Substation Capacity and Reliability Improvements

Year Introduced: 2020
Change: New Project
Associated Proj: N/A
Program Area: Electric
Managing Dept: Utilities
Manager: D. Jones
Plan Conformance:
Comprehensive Plan 7.6.1

Est. Start: 7/1/2019
Est. Complete: 6/30/2025

Description:

This project is designed to evaluate and construct substation capacity improvements to the four City-owned distribution substations and also develop and construct a new substation to serve continued growth and future loads.
FY20: Perform major maintenance of the transformer and bus at Battery Heights. This includes de-energizing, draining, and testing the transformer. It also includes high-voltage busing replacements and bus upgrades.
FY21: Design and build a new feeder circuit from Battery Heights Substation. This project will install a new breaker and relaying in the existing empty feeder bay to serve increasing loads towards Wellington Road.

Cost Estimate: ($ in 1,000s)	Prior Years	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	Total Project
Planning	-	50	75	175	-	-	150	450
Land	-	-	-	-	-	-	-	-
Construction	-	175	250	150	450	350	2,500	3,875
Total Cost	**-**	**225**	**325**	**325**	**450**	**350**	**2,650**	**4,325**
Funding Sources: ($ in 1,000s)								
General Fund	-	-	-	-	-	-	-	-
Sewer Fund	-	-	-	-	-	-	-	-
Water Fund	-	-	-	-	-	-	-	-
Electric Fund	-	225	325	325	450	350	2,650	4,325
Stormwater Fund	-	-	-	-	-	-	-	-
Airport Fund	-	-	-	-	-	-	-	-
School Fund	-	-	-	-	-	-	-	-
Bonds	-	-	-	-	-	-	-	-
State	-	-	-	-	-	-	-	-
Federal	-	-	-	-	-	-	-	-
NVTA	-	-	-	-	-	-	-	-
Other Sources	-	-	-	-	-	-	-	-
Total Funding	**-**	**225**	**325**	**325**	**450**	**350**	**2,650**	**4,325**
Operating Impacts: ($ in 1,000s)								
Revenue	-	-	-	-	-	-	-	-
Staffing (Costs) Savings	-	-	-	-	-	-	-	-
Facility (Costs) Savings	-	-	-	-	-	-	-	-
Program (Costs) Savings	-	-	-	-	-	-	-	-
Debt Service	-	-	-	-	-	-	-	-
Net Revenue	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

D-018 Cockrell Branch SWM Pond Restoration / Dredging

Year Introduced: 2008
Change: No change
Associated Proj: N/A
Program Area: Stormwater
Managing Dept: Utilities
Manager: T. Dawood
Plan Conformance:
Comprehensive Plan 7.7

Est. Start: 7/1/2019
Est. Complete: 6/30/2021

Description:

Restore and dredge the Cockrell Branch Storm Water Management Pond. This will restore capacity and functionality to the pond and improve aesthetics. This project may be eligible for Total Maximum Daily Load (TMDL) credit.

Cost Estimate: ($ in 1,000s)	Prior Years	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	Total Project
Planning	-	10	-	-	-	-	-	10
Land	-	-	-	-	-	-	-	-
Construction	-	-	424	-	-	-	-	424
Total Cost	**-**	**10**	**424**	**-**	**-**	**-**	**-**	**434**
Funding Sources: ($ in 1,000s)								
General Fund	-	-	-	-	-	-	-	-
Sewer Fund	-	-	-	-	-	-	-	-
Water Fund	-	-	-	-	-	-	-	-
Electric Fund	-	-	-	-	-	-	-	-
Stormwater Fund	-	10	424	-	-	-	-	434
Airport Fund	-	-	-	-	-	-	-	-
School Fund	-	-	-	-	-	-	-	-
Bonds	-	-	-	-	-	-	-	-
State	-	-	-	-	-	-	-	-
Federal	-	-	-	-	-	-	-	-
NVTA	-	-	-	-	-	-	-	-
Other Sources	-	-	-	-	-	-	-	-
Total Funding	**-**	**10**	**424**	**-**	**-**	**-**	**-**	**434**
Operating Impacts: ($ in 1,000s)								
Revenue	-	-	-	-	-	-	-	-
Staffing (Costs) Savings	-	-	-	-	-	-	-	-
Facility (Costs) Savings	-	-	-	-	-	-	-	-
Program (Costs) Savings	-	-	-	-	-	-	-	-
Debt Service	-	-	-	-	-	-	-	-
Net Revenue	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

A-032 Upgrade Runway 16R/34L Lighting System and PAPIs

Year Introduced: 2003
Change: No change
Associated Proj: A-070
Program Area: Airport
Managing Dept: Airport
Manager: J. Rivera
Plan Conformance:
Comprehensive Plan 6.1.4
Airport Master Plan

Est. Start: 4/1/2020
Est. Complete: 12/30/2020

Description:

Replace the Precision Approach Path Indicators (PAPIs) for Runway 16R-34L during the next major rehabilitation of the runway. Over time, the PAPIs are exposed to harsh weather conditions and their reliability is reduced. As part of this project the runway lighting system will be upgraded to LED lights. This would include replacing the regulators and light fixtures. The transformers would no longer be needed.

Cost Estimate: ($ in 1,000s)	Prior Years	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	Total Project
Planning	-	-	-	-	-	-	-	-
Land	-	-	-	-	-	-	-	-
Construction	-	400	-	-	-	-	-	400
Total Cost	**-**	**400**	**-**	**-**	**-**	**-**	**-**	**400**
Funding Sources: ($ in 1,000s)								
General Fund	-	-	-	-	-	-	-	-
Sewer Fund	-	-	-	-	-	-	-	-
Water Fund	-	-	-	-	-	-	-	-
Electric Fund	-	-	-	-	-	-	-	-
Stormwater Fund	-	-	-	-	-	-	-	-
Airport Fund	-	8	-	-	-	-	-	8
School Fund	-	-	-	-	-	-	-	-
Bonds	-	-	-	-	-	-	-	-
State	-	32	-	-	-	-	-	32
Federal	-	360	-	-	-	-	-	360
NVTA	-	-	-	-	-	-	-	-
Other Sources	-	-	-	-	-	-	-	-
Total Funding	**-**	**400**	**-**	**-**	**-**	**-**	**-**	**400**
Operating Impacts: ($ in 1,000s)								
Revenue	-	-	-	-	-	-	-	-
Staffing (Costs) Savings	-	-	-	-	-	-	-	-
Facility (Costs) Savings	-	-	-	1	-	-	-	1
Program (Costs) Savings	-	-	-	-	-	-	-	-
Debt Service	-	-	-	-	-	-	-	-
Net Revenue	**-**	**-**	**-**	**1**	**-**	**-**	**-**	**1**

A-069 Taxiway A Rehabilitation

Year Introduced: 2015
Change: No change
Associated Proj: A-079
Program Area: Airport
Managing Dept: Airport
Manager: J. Rivera
Plan Conformance:
Comprehensive Plan 6.1.4
Airport Master Plan
Airport Strategic Plan

Est. Start: 9/1/2020
Est. Complete: 10/30/2022

Description:

Rehabilitate Taxiway A located on the west side of the airport. Taxiway A is the parallel taxiway for runway 16R/34L and serves design Group II aircraft. The taxiway is reaching the end of its useful life and is showing signs of wear and sub-grade issues. This project includes the rehabilitation of the pavement, restriping, and the installation of LED taxiway lights. This project will only move forward if grant funds are approved by the State and/or FAA.

Cost Estimate: ($ in 1,000s)	Prior Years	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	Total Project
Planning	-	250	-	-	-	-	-	250
Land	-	-	-	-	-	-	-	-
Construction	-	-	2,250	-	-	-	-	2,250
Total Cost	**-**	**250**	**2,250**	**-**	**-**	**-**	**-**	**2,500**
Funding Sources: ($ in 1,000s)								
General Fund	-	-	-	-	-	-	-	-
Sewer Fund	-	-	-	-	-	-	-	-
Water Fund	-	-	-	-	-	-	-	-
Electric Fund	-	-	-	-	-	-	-	-
Stormwater Fund	-	-	-	-	-	-	-	-
Airport Fund	-	5	45	-	-	-	-	50
School Fund	-	-	-	-	-	-	-	-
Bonds	-	-	-	-	-	-	-	-
State	-	20	180	-	-	-	-	200
Federal	-	225	2,025	-	-	-	-	2,250
NVTA	-	-	-	-	-	-	-	-
Other Sources	-	-	-	-	-	-	-	-
Total Funding	**-**	**250**	**2,250**	**-**	**-**	**-**	**-**	**2,500**
Operating Impacts: ($ in 1,000s)								
Revenue	-	-	-	-	-	-	-	-
Staffing (Costs) Savings	-	-	-	-	-	-	-	-
Facility (Costs) Savings	-	-	-	-	-	-	-	-
Program (Costs) Savings	-	-	-	-	-	-	-	-
Debt Service	-	-	-	-	-	-	-	-
Net Revenue	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

A-070 Runway 16R/34L Rehabilitation

Year Introduced: 2015
Change: No change
Associated Proj: N/A
Program Area: Airport
Managing Dept: Airport
Manager: J. Rivera
Plan Conformance:
Comprehensive Plan 6.1.4
Airport Master Plan
Airport Strategic Plan

Est. Start: 9/1/2019
Est. Complete: 10/30/2021

Description:

Runway 16R/34L (west side of the Airport) is a parallel runway that is 3,700 feet long and serving design Group II Aircraft. The runway is reaching the end of its useful life and is showing signs of wear and sub-grade issues. This project includes the rehabilitation of the pavement, restriping, and the installation of new LED runway lights and PAPIs. This project will only move forward if grant funds are approved by the State and/or FAA.

Cost Estimate: ($ in 1,000s)	Prior Years	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	Total Project
Planning	-	-	-	-	-	-	-	-
Land	-	-	-	-	-	-	-	-
Construction	-	3,000	-	-	-	-	-	3,000
Total Cost	**-**	**3,000**	**-**	**-**	**-**	**-**	**-**	**3,000**
Funding Sources: ($ in 1,000s)								
General Fund	-	-	-	-	-	-	-	-
Sewer Fund	-	-	-	-	-	-	-	-
Water Fund	-	-	-	-	-	-	-	-
Electric Fund	-	-	-	-	-	-	-	-
Stormwater Fund	-	-	-	-	-	-	-	-
Airport Fund	-	60	-	-	-	-	-	60
School Fund	-	-	-	-	-	-	-	-
Bonds	-	-	-	-	-	-	-	-
State	-	240	-	-	-	-	-	240
Federal	-	2,700	-	-	-	-	-	2,700
NVTA	-	-	-	-	-	-	-	-
Other Sources	-	-	-	-	-	-	-	-
Total Funding	**-**	**3,000**	**-**	**-**	**-**	**-**	**-**	**3,000**
Operating Impacts: ($ in 1,000s)								
Revenue	-	-	-	-	-	-	-	-
Staffing (Costs) Savings	-	-	-	-	-	-	-	-
Facility (Costs) Savings	-	-	-	-	-	-	-	-
Program (Costs) Savings	-	-	-	-	-	-	-	-
Debt Service	-	-	-	-	-	-	-	-
Net Revenue	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

A-077 Terminal Building Roof Replacement

Year Introduced: 2020
Change: New Project
Associated Proj: N/A
Program Area: Airport
Managing Dept: Airport
Manager: J. Rivera
Plan Conformance:
Airport Strategic Plan
Airport Master Plan

Est. Start: 7/1/2019
Est. Complete: 6/30/2020

Description:

The roof on the airport terminal building is over twenty years old and has reached its useful life. There have been multiple repairs conducted on the roof over the past ten years. This project will consist of replacing the flat rubber membrane roof with a new modern roof system with an anticipated useful life of twenty years.

Cost Estimate: ($ in 1,000s)	Prior Years	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	Total Project
Planning	-	-	-	-	-	-	-	-
Land	-	-	-	-	-	-	-	-
Construction	-	100	-	-	-	-	-	100
Total Cost	**-**	**100**	**-**	**-**	**-**	**-**	**-**	**100**
Funding Sources: ($ in 1,000s)								
General Fund	-	-	-	-	-	-	-	-
Sewer Fund	-	-	-	-	-	-	-	-
Water Fund	-	-	-	-	-	-	-	-
Electric Fund	-	-	-	-	-	-	-	-
Stormwater Fund	-	-	-	-	-	-	-	-
Airport Fund	-	30	-	-	-	-	-	30
School Fund	-	-	-	-	-	-	-	-
Bonds	-	-	-	-	-	-	-	-
State	-	70	-	-	-	-	-	70
Federal	-	-	-	-	-	-	-	-
NVTA	-	-	-	-	-	-	-	-
Other Sources	-	-	-	-	-	-	-	-
Total Funding	**-**	**100**	**-**	**-**	**-**	**-**	**-**	**100**
Operating Impacts: ($ in 1,000s)								
Revenue	-	-	-	-	-	-	-	-
Staffing (Costs) Savings	-	-	-	-	-	-	-	-
Facility (Costs) Savings	-	-	-	-	-	-	-	-
Program (Costs) Savings	-	-	-	-	-	-	-	-
Debt Service	-	-	-	-	-	-	-	-
Net Revenue	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

A-080 Installation of Security Fiberline

Year Introduced: 2018
Change: No change
Associated Proj: N/A
Program Area: Airport
Managing Dept: Airport
Manager: J. Rivera
Plan Conformance:
Comprehensive Plan 6.1.4
Airport Strategic Plan - Obj. 3
Airport Master Plan

Est. Start: 7/1/2018
Est. Complete: 6/30/2019

Description:

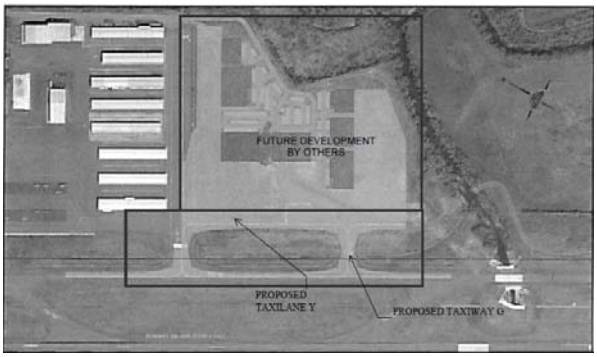
Installation of fiber lines throughout the airport. This will expand and enhance the existing network infrastructure throughout the airport. This project will allow current and future access control components to be hardwired, improving the sustainability and longevity of the system.

Cost Estimate: ($ in 1,000s)	Prior Years	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	Total Project
Planning	-	-	-	-	-	-	-	-
Land	-	-	-	-	-	-	-	-
Construction	24	140	-	-	-	-	-	164
Total Cost	**24**	**140**	**-**	**-**	**-**	**-**	**-**	**164**
Funding Sources: ($ in 1,000s)								
General Fund	-	-	-	-	-	-	-	-
Sewer Fund	-	-	-	-	-	-	-	-
Water Fund	-	-	-	-	-	-	-	-
Electric Fund	-	-	-	-	-	-	-	-
Stormwater Fund	-	-	-	-	-	-	-	-
Airport Fund	24	9	-	-	-	-	-	33
School Fund	-	-	-	-	-	-	-	-
Bonds	-	-	-	-	-	-	-	-
State	-	131	-	-	-	-	-	131
Federal	-	-	-	-	-	-	-	-
NVTA	-	-	-	-	-	-	-	-
Other Sources	-	-	-	-	-	-	-	-
Total Funding	**24**	**140**	**-**	**-**	**-**	**-**	**-**	**164**
Operating Impacts: ($ in 1,000s)								
Revenue	-	-	-	-	-	-	-	-
Staffing (Costs) Savings	-	-	-	-	-	-	-	-
Facility (Costs) Savings	-	-	-	-	-	-	-	-
Program (Costs) Savings	-	-	-	-	-	-	-	-
Debt Service	-	-	-	-	-	-	-	-
Net Revenue	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

A-086 Taxiway G and Taxilane Y Construction

Year Introduced: 2019
Change: No change
Associated Proj: N/A
Program Area: Airport
Managing Dept: Airport
Manager: J. Rivera
Plan Conformance:
Comprehensive Plan 6.1.4
Airport Master Plan
Airport Strategic Plan

Est. Start: 11/1/2018
Est. Complete: 11/1/2019



Description:

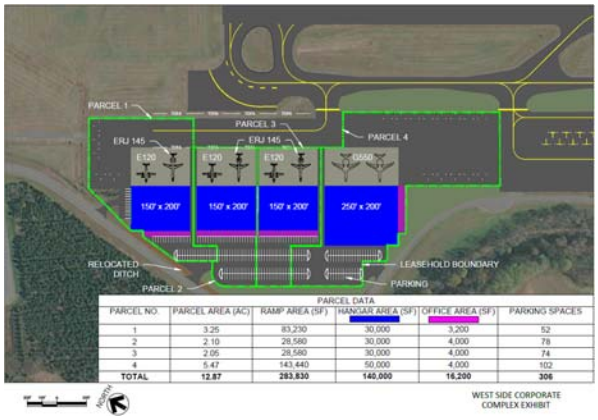
This project projects includes the design and construction of Taxiway G and Taxilane Y that will serve the South East Corporate pad site. This project will provide a circular traffic pattern from Taxiway B and open the southernmost portion of the site to develop additional corporate hangars. This projects includes new pavements, signs, stormwater BMPs, and drainage structures.

Cost Estimate: ($ in 1,000s)	Prior Years	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	Total Project
Planning	233	-	-	-	-	-	-	233
Land	-	-	-	-	-	-	-	-
Construction	60	2,648	-	-	-	-	-	2,708
Total Cost	**293**	**2,648**	**-**	**-**	**-**	**-**	**-**	**2,941**
Funding Sources: ($ in 1,000s)								
General Fund	-	-	-	-	-	-	-	-
Sewer Fund	-	-	-	-	-	-	-	-
Water Fund	-	-	-	-	-	-	-	-
Electric Fund	-	-	-	-	-	-	-	-
Stormwater Fund	-	-	-	-	-	-	-	-
Airport Fund	6	-	-	-	-	-	-	6
School Fund	-	-	-	-	-	-	-	-
Bonds	-	-	-	-	-	-	-	-
State	23	-	-	-	-	-	-	23
Federal	264	2,648	-	-	-	-	-	2,912
NVTA	-	-	-	-	-	-	-	-
Other Sources	-	-	-	-	-	-	-	-
Total Funding	**293**	**2,648**	**-**	**-**	**-**	**-**	**-**	**2,941**
Operating Impacts: ($ in 1,000s)								
Revenue	-	-	-	-	-	-	-	-
Staffing (Costs) Savings	-	-	-	-	-	-	-	-
Facility (Costs) Savings	-	-	-	-	-	-	-	-
Program (Costs) Savings	-	-	-	-	-	-	-	-
Debt Service	-	-	-	-	-	-	-	-
Net Revenue	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

A-087 West Corporate Development Site / Drainage Improvements

Year Introduced: 2020
Change: New Project
Associated Proj: A-087
Program Area: Airport
Managing Dept: Airport
Manager: J. Rivera
Plan Conformance:
Comprehensive Plan 6.1.4
Airport Master Plan
Airport Strategic Plan

Est. Start: 9/1/2019
Est. Complete: 6/30/2020



PARCEL NO.	PARCEL AREA (AC)	RAMP AREA (SF)	HANGAR AREA (SF)	OFFICE AREA (SF)	PARKING SPACES
1	3.25	83,230	30,000	3,200	52
2	2.10	28,580	30,000	4,000	78
3	2.05	28,580	30,000	4,000	74
4	5.47	143,440	50,000	4,000	102
TOTAL	**12.87**	**283,830**	**140,000**	**16,200**	**306**

Description:

This project would include the demolition of hangars and building facilities, draining, stormwater and grading improvements on 10 acres located on the North West side of the Airport for future development of corporate hangar facilities.

Cost Estimate: ($ in 1,000s)	Prior Years	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	Total Project
Planning	-	-	-	-	-	-	-	-
Land	-	-	-	-	-	-	-	-
Construction	-	1,000	-	-	-	-	-	1,000
Total Cost	**-**	**1,000**	**-**	**-**	**-**	**-**	**-**	**1,000**
Funding Sources: ($ in 1,000s)								
General Fund	-	-	-	-	-	-	-	-
Sewer Fund	-	-	-	-	-	-	-	-
Water Fund	-	-	-	-	-	-	-	-
Electric Fund	-	-	-	-	-	-	-	-
Stormwater Fund	-	-	-	-	-	-	-	-
Airport Fund	-	200	-	-	-	-	-	200
School Fund	-	-	-	-	-	-	-	-
Bonds	-	-	-	-	-	-	-	-
State	-	800	-	-	-	-	-	800
Federal	-	-	-	-	-	-	-	-
NVTA	-	-	-	-	-	-	-	-
Other Sources	-	-	-	-	-	-	-	-
Total Funding	**-**	**1,000**	**-**	**-**	**-**	**-**	**-**	**1,000**
Operating Impacts: ($ in 1,000s)								
Revenue	-	-	-	-	-	-	-	-
Staffing (Costs) Savings	-	-	-	-	-	-	-	-
Facility (Costs) Savings	-	-	-	-	-	-	-	-
Program (Costs) Savings	-	-	-	-	-	-	-	-
Debt Service	-	-	-	-	-	-	-	-
Net Revenue	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

0102 District Wide - Technology Upgrades

Year Introduced: 2013
Change: No change
Associated Proj: N/A
Program Area: Schools
Managing Dept: Schools
Manager: Schools
Plan Conformance:
Comprehensive Plan 7.1

Est. Start: 7/1/2015
Est. Complete: 6/30/2024

Description:

Information technology infrastructure upgrades based on technology planning. The systematic replacement of network infrastructure is necessary as devices reach the end of their useful lives and become obsolete. This project will encompass the refresh of routers, switches, wireless access points, and data center major systems and components.

Cost Estimate: ($ in 1,000s)	**Prior Years**	**FY 2020**	**FY 2021**	**FY 2022**	**FY 2023**	**FY 2024**	**Future**	**Total Project**
Planning	-	-	-	-	-	-	-	-
Land	-	-	-	-	-	-	-	-
Construction	-	175	250	200	200	200	-	1,025
Total Cost	**-**	**175**	**250**	**200**	**200**	**200**	**-**	**1,025**
Funding Sources: ($ in 1,000s)								
General Fund	-	-	-	-	-	-	-	-
Sewer Fund	-	-	-	-	-	-	-	-
Water Fund	-	-	-	-	-	-	-	-
Electric Fund	-	-	-	-	-	-	-	-
Stormwater Fund	-	-	-	-	-	-	-	-
Airport Fund	-	-	-	-	-	-	-	-
School Fund	-	175	250	200	200	200	-	1,025
Bonds	-	-	-	-	-	-	-	-
State	-	-	-	-	-	-	-	-
Federal	-	-	-	-	-	-	-	-
NVTA	-	-	-	-	-	-	-	-
Other Sources	-	-	-	-	-	-	-	-
Total Funding	**-**	**175**	**250**	**200**	**200**	**200**	**-**	**1,025**
Operating Impacts: ($ in 1,000s)								
Revenue	-	-	-	-	-	-	-	-
Staffing (Costs) Savings	-	-	-	-	-	-	-	-
Facility (Costs) Savings	-	-	-	-	-	-	-	-
Program (Costs) Savings	-	-	-	-	-	-	-	-
Debt Service	-	-	-	-	-	-	-	-
Net Revenue	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

0103 District Wide - School Bus Replacements

Year Introduced: 2013
Change: No change
Associated Proj: N/A
Program Area: Schools
Managing Dept: Schools
Manager: Schools
Plan Conformance:
Comprehensive Plan 7.1

Est. Start: 7/1/2016
Est. Complete: 6/30/2024

Description:
Five-year replacement cycle of existing school buses as recommended by the Transportation Director.

Cost Estimate: ($ in 1,000s)	Prior Years	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	Total Project
Planning	-	-	-	-	-	-	-	-
Land	-	-	-	-	-	-	-	-
Construction	-	500	486	500	500	500	-	2,486
Total Cost	**-**	**500**	**486**	**500**	**500**	**500**	**-**	**2,486**
Funding Sources: ($ in 1,000s)								
General Fund	-	-	-	-	-	-	-	-
Sewer Fund	-	-	-	-	-	-	-	-
Water Fund	-	-	-	-	-	-	-	-
Electric Fund	-	-	-	-	-	-	-	-
Stormwater Fund	-	-	-	-	-	-	-	-
Airport Fund	-	-	-	-	-	-	-	-
School Fund	-	500	486	500	500	500	-	2,486
Bonds	-	-	-	-	-	-	-	-
State	-	-	-	-	-	-	-	-
Federal	-	-	-	-	-	-	-	-
NVTA	-	-	-	-	-	-	-	-
Other Sources	-	-	-	-	-	-	-	-
Total Funding	**-**	**500**	**486**	**500**	**500**	**500**	**-**	**2,486**
Operating Impacts: ($ in 1,000s)								
Revenue	-	-	-	-	-	-	-	-
Staffing (Costs) Savings	-	-	-	-	-	-	-	-
Facility (Costs) Savings	-	-	-	-	-	-	-	-
Program (Costs) Savings	-	-	-	-	-	-	-	-
Debt Service	-	-	-	-	-	-	-	-
Net Revenue	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

0105 District Wide - School Bus Additions

Year Introduced: 2017
Change: Increased Estimate
Associated Proj: N/A
Program Area: Schools
Managing Dept: Schools
Manager: Schools
Plan Conformance:
Comprehensive Plan 7.1

Est. Start: 7/1/2017
Est. Complete: 6/30/2024

Description:
Add school buses to the existing fleet due to local population growth and enrollment projections.

Cost Estimate: ($ in 1,000s)	Prior Years	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	Total Project
Planning	-	-	-	-	-	-	-	-
Land	-	-	-	-	-	-	-	-
Construction	-	125	121	-	125	125	-	496
Total Cost	**-**	**125**	**121**	**-**	**125**	**125**	**-**	**496**
Funding Sources: ($ in 1,000s)								
General Fund	-	-	-	-	-	-	-	-
Sewer Fund	-	-	-	-	-	-	-	-
Water Fund	-	-	-	-	-	-	-	-
Electric Fund	-	-	-	-	-	-	-	-
Stormwater Fund	-	-	-	-	-	-	-	-
Airport Fund	-	-	-	-	-	-	-	-
School Fund	-	125	121	-	125	125	-	496
Bonds	-	-	-	-	-	-	-	-
State	-	-	-	-	-	-	-	-
Federal	-	-	-	-	-	-	-	-
NVTA	-	-	-	-	-	-	-	-
Other Sources	-	-	-	-	-	-	-	-
Total Funding	**-**	**125**	**121**	**-**	**125**	**125**	**-**	**496**
Operating Impacts: ($ in 1,000s)								
Revenue	-	-	-	-	-	-	-	-
Staffing (Costs) Savings	-	-	-	-	-	-	-	-
Facility (Costs) Savings	-	-	-	-	-	-	-	-
Program (Costs) Savings	-	-	-	-	-	-	-	-
Debt Service	-	-	-	-	-	-	-	-
Net Revenue	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

1004 Round - Phased BAS/HVAC Replacement

Year Introduced: 2019
Change: No change
Associated Proj: N/A
Program Area: Schools
Managing Dept: Schools
Manager: Schools
Plan Conformance:

Est. Start: 7/1/2019
Est. Complete: 6/30/2020

Description:
Replace phased BAS/HVAC at Round Elementary School.

Cost Estimate: ($ in 1,000s)	Prior Years	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future	Total Project
Planning	-	-	-	-	-	-	-	-
Land	-	-	-	-	-	-	-	-
Construction	-	2,200	-	-	-	-	-	2,200
Total Cost	**-**	**2,200**	**-**	**-**	**-**	**-**	**-**	**2,200**
Funding Sources: ($ in 1,000s)								
General Fund	-	-	-	-	-	-	-	-
Sewer Fund	-	-	-	-	-	-	-	-
Water Fund	-	-	-	-	-	-	-	-
Electric Fund	-	-	-	-	-	-	-	-
Stormwater Fund	-	-	-	-	-	-	-	-
Airport Fund	-	-	-	-	-	-	-	-
School Fund	-	2,200	-	-	-	-	-	2,200
Bonds	-	-	-	-	-	-	-	-
State	-	-	-	-	-	-	-	-
Federal	-	-	-	-	-	-	-	-
NVTA	-	-	-	-	-	-	-	-
Other Sources	-	-	-	-	-	-	-	-
Total Funding	**-**	**2,200**	**-**	**-**	**-**	**-**	**-**	**2,200**
Operating Impacts: ($ in 1,000s)								
Revenue	-	-	-	-	-	-	-	-
Staffing (Costs) Savings	-	-	-	-	-	-	-	-
Facility (Costs) Savings	-	-	-	-	-	-	-	-
Program (Costs) Savings	-	-	-	-	-	-	-	-
Debt Service	-	-	-	-	-	-	-	-
Net Revenue	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

FY 2020 Maintenance Capital Projects (Dollars in Thousands)

Capital Projects are identified as projects with a cost greater than $100,000 and a useful life exceeding 10 years. Projects that do not meet these criteria, but are capital in nature, are considered Maintenance Capital Projects. While not part of the Five-Year CIP, these projects are included in the CIP in summary schedules for informational purposes.

	Proj. #	FY 2020
Culture & Recreation		
Museum Improvements	C-008	162
		162
Transportation		
Traffic Signal Coordination & Upgrades	T-064	336
Supplemental Street Paving	T-066	100
		436
Electric		
Circuit Automation	E-038	110
		110
Stormwater		
Stormwater / Drainage Maintenance Program	D-029	35
Floodplain Mapping Update Program	D-030	65
		100
Airport		
Airport Paving Program (outside Airfield)	A-058	120
Airfield Paving Program	A-084	100
		220
	TOTAL	**1,028**

FY 2020 Maintenance Capital Projects (Dollars in Thousands)

		FY 2020
Funding Sources		
General Fund		450
Sewer Fund		-
Water Fund		-
Electric Fund		110
Stormwater Fund		100
Airport Fund		44
School Fund		-
Bonds		-
State		176
Federal		-
NVTA		100
Other Sources		48
	TOTAL	**1,028**

The Five-Year Capital Improvement program includes projects that the City has identified that meet the definition of a capital project. A capital project is a project with a total cost in excess of $100,000 **and** a useful life of at least 10 years. Projects that are capital in nature but do not meet this criteria are considered maintenance capital projects.

Fund / Project	CIP #	Amount
General Fund		
Public Works & Utilities Facility Improvements	G-020	50,000
Manassas Customer Service Center	G-022	160,000
Annaburg Manor	C-041	35,000
Jennie Dean Memorial	C-042	175,000
Total General Fund		**420,000**
Sewer Fund		
Public Works & Utilities Facility Improvements	G-020	50,000
Grant Avenue (Lee Avenue to Wellington Road)	T-021	150,000
Upper Flat Branch Interceptor Replacement	S-016	1,000,000
Buckner Road Sewer Main Replacement	S-020	50,000
Ellicott Lane Sewer Main Replacement	S-021	100,000
Sewer Main Replacement	S-023	10,000
Total Sewer Fund		**1,360,000**
Water Fund		
Grant Avenue (Lee Avenue to Wellington Road)	T-021	895,000
Upper Flat Branch Interceptor Replacement	S-016	210,000
Buckner Road Sewer Main Replacement	S-020	10,000
24" Transmission Main Replacement	W-042	1,000,000
Main Replacement / Looping	W-050	200,000
Interconnecting Meter Vaults	W-068	50,000
Water Plant Improvements	W-070	475,000
Total Water Fund		**2,840,000**

The Five-Year Capital Improvement program includes projects that the City has identified that meet the definition of a capital project. A capital project is a project with a total cost in excess of $100,000 **and** a useful life of at least 10 years. Projects that are capital in nature but do not meet this criteria are considered maintenance capital projects.

Fund / Project	CIP #	Amount
Electric Fund		
Manassas Customer Service Center	G-022	90,000
Grant Avenue (Lee Avenue to Wellington Road)	T-021	400,000
Sidewalk & Bicycle Infill Initiative	T-058	200,000
Underground Cable and Termination Replacement	E-030	400,000
Alternative Generation Initiatives	E-031	300,000
Place Overhead Lines Underground (Non-Transportation)	E-033	450,000
LED Streetlight Replacement	E-034	100,000
Manassas Airport Distribution Improvements	E-035	175,000
Point of Woods Substation Circuit Tie-Point	E-036	300,000
Substation Capacity and Reliability Improvements	E-037	225,000
Total Electric Fund		**2,640,000**
Stormwater Fund		
Cockrell Branch SWM Pond Restoration / Dredging	D-018	10,000
Total Stormwater Fund		**10,000**
Airport Fund		
Upgrade Runway 16R/34L Lighting System and PAPIs	A-032	8,000
Taxiway A Rehabilitation	A-069	5,000
Runway 16R/34L Rehabilitation	A-070	60,000
Terminal Roof Replacement	A-077	30,000
Installation of Security Fiber Line	A-080	9,000
West Corporate Development Site and Drainage Improvements	A-087	200,000
Total Airport Fund		**312,000**
School Funds		
Division Wide - Technology Upgrades	0102	175,000
District Wide - School Bus Replacements	0103	500,000
Division Wide - School Bus Additions	0105	125,000
Round - Phased BAS/HVAC Replacement	1004	2,200,000
Total School Funds		**3,000,000**
Total Local Share - FY 2020 Capital Projects Pay-Go		**10,582,000**

FY 2020 Maintenance Capital Projects Pay-Go

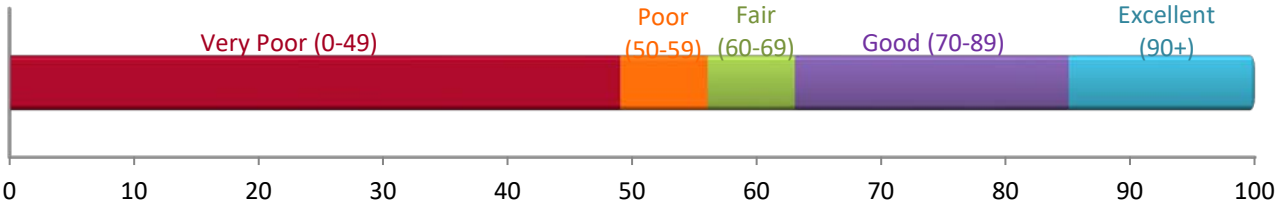
A capital project is a project with a total cost in excess of $100,000 **and** a useful life of at least 10 years. Projects that are capital in nature but do not meet this criteria are considered maintenance capital projects. While not part of the Five-Year Capital Improvement Program (CIP), summary schedules of these projects are included in the CIP for informational purposes.

Fund / Project	CIP #	Amount
General Fund		
Park Improvements	C-031	150,000
Supplemental Street Paving	T-066	300,000
Total General Fund		**450,000**
Electric Fund		
Circuit Automation	E-038	110,000
Total Electric Fund		**110,000**
Stormwater Fund		
Stormwater / Drainage Maintenance Program	D-029	35,000
Floodplain Mapping Update Program	D-030	65,000
Total Stormwater Fund		**100,000**
Airport Fund		
Airport Paving Program (Outside Airfield)	A-058	24,000
Airfield Paving Program	A-084	20,000
Total Airport Fund		**44,000**
Total Local Share - FY 2020 Maintenance Capital Projects Pay-Go		**704,000**

The industry standard for paving roads is every 15-20 years. The City has advanced its efforts to achieve a targeted 16.2 year paving cycle goal. The City aims to achieve an average paving rate of 60. Several factors are taken into consideration when scheduling paving including pavement ratings as determined by the CCI (Critical Condition Index).

Street Name and Section	Rating	Sq. Yards	Amount
Jackson Avenue (Stonewall Avenue to Sudley Road)	15	19,911	245,366
Linden Court (Jackson Avenue to Cul-de-sac)	15	1,689	24,913
Grant Avenue (Sudley Road to Byrd Park)	15	10,667	133,530
Longstreet Drive (Grant Avenue to Portner Avenue)	15	11,200	139,979
Stonewall Road (Liberia Avenue to Stonewall Park)	23	8,000	101,265
Stonewall Road (Liberia Avenue to Jackson Avenue)	23	8,000	101,265
Portner Avenue (Liberia Avenue to Sudley Road)	32	10,667	133,526
Portner Avenue (Public Works Drive to Liberia Avenue)	35	7,467	94,813
Longstreet Court (Longstreet Drive to Cul-de-sac)	57	1,724	25,343
Total Local Share - FY 2020 Street Paving Program			**1,000,000**

VDOT PAVEMENT RATINGS - CCI INDEX



The City has $1.336 million in funding for street paving/resurfacing including $1 million (shown above) in the General Fund Operating Budget (Public Works) and $336,000 in the Supplemental Street Paving maintenance capital project ($300,000 local share and $36,000 in street restoration funds).

The Vehicle Maintenance Fund purchases all vehicles for the City of Manassas **with the exception of fire engines and ambulances (apparatus)**. Factors taken into consideration for determining replacement are age, mileage, and general vehicle condition. Utility and Airport funds reimburse the Vehicle Maintenance Fund for vehicle replacements directly whereas other departments pay higher support costs to fund future vehicle replacements. The Fire and Rescue Fund fully funds the replacement of apparatus.

Description (Vehicle #)	Quantity	Unit Cost	Amount
6 - Ford Utility (PD29,PD31,PD77,PD88, PD92, PD60)	6	42,000	252,000
BMW Motorcycle (PD58)	1	30,000	30,000
Chevy Tahoe SSV (FS2)	1	45,000	45,000
Mauldin M413XT Grader/Loader (S23)	1	150,000	150,000
Freightliner 108SD/Godwin (S35)	1	125,000	125,000
F150 4x4 ext cab (R8)	1	30,000	30,000
F250 4x4 4 door (R15)	1	35,000	35,000
Mower (R30)	1	9,500	9,500
F150 4x4 ext cab (I10)	1	30,000	30,000
Cargo Van (A4)	1	25,000	25,000
F150 4x4 ext cab bed cap (A3)	1	32,000	32,000
Total Vehicle Maintenance Fund	**16**		**763,500**
F250 4x4 (W5)	1	41,000	41,000
Ford F150 (W32)	1	40,000	40,000
GMC Aerial Bucket (E4)	1	250,000	250,000
Chevrolet S10 (E16)	1	30,000	30,000
Total Utility Funds	**4**		**361,000**
Total Local Share - FY 2020 Vehicles	**20**		**1,124,500**

Description (Vehicle #)	Quantity	Unit Cost	Amount
Ambulance/Medic Unit (501 C)	1	275,000	275,000
Tower Ladder Unit (501)	1	1,500,000	1,500,000
	2		1,775,000
Total Fire and Rescue - FY 2020 Apparatus	**2**		**1,775,000**

The City identifies a capital asset as a tangible or intangible asset that has an initial useful life of more than one year and has an initial cost of $5,000 or more. The cost of a capital asset includes all necessary charges incurred to acquire or construct an asset. In the case of computers, these devices are not capitalized individually; instead the entire computer system is treated as a single capital asset.

Fund / Equipment Description	Amount
Fire and Rescue Fund	
SCBA Replacement (grant match)	350,000
Total Fire and Rescue Fund	**350,000**
PEG Fund	
Equipment for PEG Channel Broadcasting	165,000
Total PEG Fund	**165,000**
Water Fund	
Autosampler with wand	5,000
Total Water Fund	**5,000**
Electric Fund	
Vehicle Charging Station Upgrades (2)	15,000
Breaker Overhaul at Pr Wm Substation	18,000
Cisco Firewall	20,000
Generation Engine Controllers (2): VMEA C9 & C10	80,000
Total Electric Fund	**133,000**
Airport Fund	
Bobcat Replacement	85,000
Total Airport Fund	**85,000**
Solid Waste Fund	
Leaf Box Replacement	7,000
Total Solid Waste Fund	**7,000**

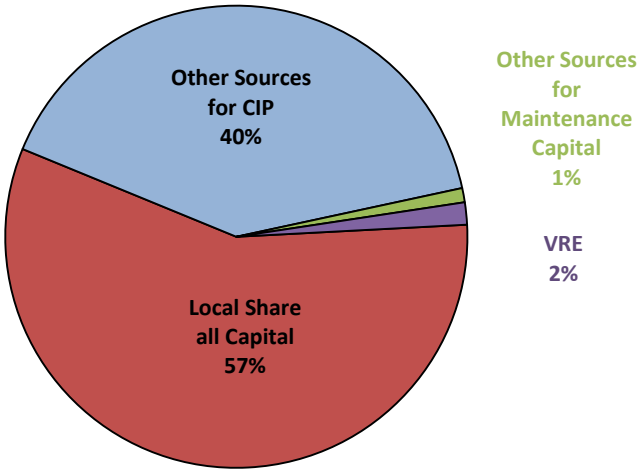
The City identifies a capital asset as a tangible or intangible asset that has an initial useful life of more than one year and has an initial cost of $5,000 or more. The cost of a capital asset includes all necessary charges incurred to acquire or construct an asset. In the case of computers, these devices are not capitalized individually; instead the entire computer system is treated as a single capital asset.

Fund / Equipment Description	Amount
Building Maintenance Fund	
KEYSCAN Upgrade	40,000
City Hall HVAC (1st and 3rd Floor)	30,000
Public Works HVAC	20,000
Harris Pavilion Roof and Kiosk	10,000
Total Building Maintenance Fund	**100,000**
Vehicle Maintenance Fund	
Truck Dump Bed	20,000
Interior Shelving for Van	15,000
Total Vehicle Maintenance Fund	**35,000**
Information Technology Fund	
Servers	30,000
Remainder of Windows 10 Rollout	40,000
Firewall Replacement	20,000
Anticipated Mid-Year Purchase Requests	50,000
Utility Billing Hardware	40,000
MUNIS Upgrade to Version 2019	170,000
Total Information Technology Fund	**350,000**
Total Local Share - FY 2020 Capital Equipment (Purchases)	**1,230,000**

There are instances when it is in the best interest of the City to lease capital equipment instead of purchasing it outright. All leases are non-cancelable, however, they are contingent upon the City Council appropriating funds for each year's payments.

Fund / Equipment Description	Amount
Vehicle Maintenance Fund	
Street Sweeper	60,000
Total Vehicle Maintenance Fund	**60,000**
Total Local Share - FY 2020 Capital Equipment (Leases)	**60,000**

FY 2020 Capital Program Expenditure Summary	
Capital Projects Pay-Go	10,582,000
Maintenance Capital Projects Pay-Go	404,000
Street Paving	1,336,000
Vehicles	1,124,500
Fire and Rescue Apparatus	1,775,000
Equipment Purchases	1,230,000
Equipment Leases	60,000
Total Local Share	**16,511,500**
Other Sources for Capital Projects	11,701,000
Other Sources for Maintenance Capital Projects	288,000
Virginia Railway Express	450,000
Total Other Sources	**12,439,000**
TOTAL	**28,950,500**



The City's General Obligation Debt ratings with Moody's Investors Service and Standard and Poor's Rating Services are **Aa1 (Moody's Investor Services)** and **AAA (Standard & Poor's)**.

The ratings were affirmed in April 2019. Remarks from the ratings include:

- Strong economy, with access to a broad and diverse metropolitan statistical area
- Very strong management, with strong financial policies and practices
- Strong budgetary performance, with operating surpluses in the general fund and at the total governmental fund level in fiscal 2018
- Very strong budgetary flexibility, with an available fund balance in fiscal 2018 of 29% of operating expenditures
- Very strong liquidity, with total government available cash at 96.5% of total governmental fund expenditures and 12.4% governmental debt service, and access to external liquidity considered strong
- Very strong institutional framework score
- Ongoing economic expansion driving moderate growth in taxable values
- Improving financial position supported by formal fiscal policies and improved revenue growth trends

Moody's Investor Services Rating Scales

Aaa	• Obligations rated Aaa are judged to be of the highest quality, subject to the lowest level of credit risk
Aa	• Obligations rated Aa are judged to be of high quality and are subject to very low credit risk
A	• Obligations rated A are judged to be upper-medium grade and are subject to low credit risk
Baa	• Obligations rated Baa are judged to be medium-grade and subject to moderate credit risk and as such may possess certain speculative characteristics
Ba	• Obligations rated Ba are judged to be speculative and are subject to substantial credit risk
B	• Obligations rated B are considered speculative and are subject to high credit risk
Caa	• Obligations rated Caa are judged to be speculative of poor standing and are subject to very high credit risk
Ca	• Obligations rated Ca are highly speculative and are likely in, or very near, default, with some prospect of recovery of principal and interest
C	• Obligations rated C are the lowest rated and are typically in default, with little prospect for recovery of principal or interest

Moody's appends numerical modifiers 1, 2, and 3 to each generic rating classification from Aa through Caa. Modifier 1 indicates that the obligation ranks in the higher end of its generic rating category.

City's S&P Rating AAA

City's Moody's Rating Aa1

Standard & Poor's Rating Scale

AAA	• Extremely strong capacity to meet financial commitments. Highest Rating
AA	• Very strong capacity to meet financial commitments
A	• Strong capacity to meet financial commitments, but somewhat susceptible to adverse economic conditions and changes in circumstance
BBB	• Adequate capacity to meet financial commitments, but more subject to adverse economic conditions
BB	• Less vulnerable in the near-term but faces major ongoing uncertainties to adverse business, financial and economic conditions
CCC	• Currently vulnerable and dependent on favorable business, financial and economic conditions to meet financial commitments
CC	• Highly vulnerable; default has not yet occurred, but it is expected to be a virtual certainty
C	• Currently highly vulnerable to non-payment, and ultimate recovery is expected to be lower than that of higher rates obligations

S& P ratings may be modified by the addition of a plus (+) or minus (-) sign to show relative standing within the major category rating.

STATE DEBT LIMITS

Pursuant to the Constitution of Virginia and the Public Finance Act of 1991, a City in Virginia is authorized to issue bonds and notes secured by the pledge of its full faith and credit. The Constitution and the Public Finance Act limit the indebtedness which may be incurred by cities to 10% of the assessed valuation of real estate subject to local taxation.

Legal Debt Margin Calculation for June 30, 2019

Assessed value of taxable real property as of January 1, 2018	$	4,889,020,400
Debt Limit - 10% of assessed valuation		488,902,040
Direct Debt outstanding chargeable to debt limit at June 30, 2019		145,202,355
Legal Debt Margin Remaining	$	343,699,685

Total Net Debt Applicable to Limit as a Percent of Debt Limit

2013	2014	2015	2016	2017	2018	2019
18.51%	19.19%	24.26%	21.54%	23.97%	21.60%	29.70%

CITY DEBT LIMITS (PER POLICY)

The City's Debt Policy is outlined as part of it's Financial Policies.

• Net debt as a percentage of estimated market value of taxable real property shall not exceed 3.0%. Net debt is defined as any and all debt that is tax-supported. Should this ratio exceed 3%, staff must request an exception from the City Council stating the justification and expected duration of the policy exemption.

As of August 31, 2016, this ratio was 1.90%, which is within the policy limit.

• Debt service expenditures a percentage of total governmental fund expenditures shall not exceed 15.0%. Should this ratio exceed 15%, staff must request an exception from the City Council stating the justification and expected duration of the policy exception.

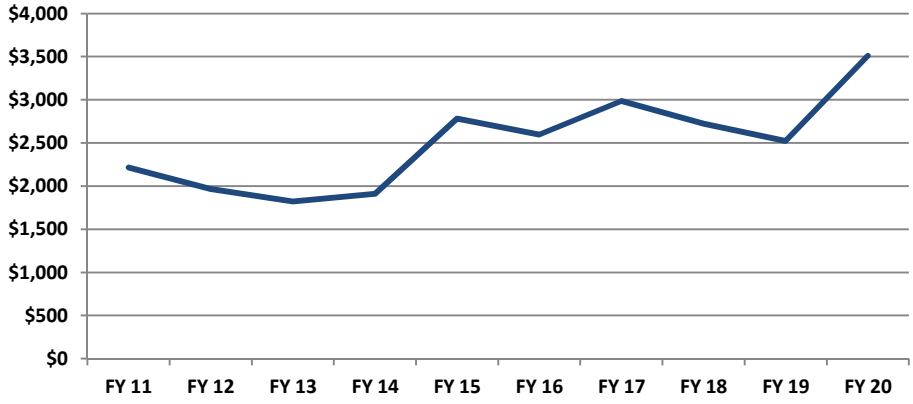
As of August 31, 2016, this ratio was 7.0%, which is within the policy limit.

• Payout of aggregate outstanding tax-supported debt principal shall be no less than 50% repaid in 10 years. Should this ratio fall below 50%, staff must request an exception from the City Council stating the justification and expected duration of the policy exception.

As of August 31, 2016, the 10-year payout ratio was 62.1%, which is within the policy limit.

OUTSTANDING DEBT SUPPORTED BY TAXPAYERS PER CAPITA

Year Begin.	Amount
FY 11	$ 2,216
FY 12	$ 1,967
FY 13	$ 1,821
FY 14	$ 1,909
FY 15	$ 2,783
FY 16	$ 2,595
FY 17	$ 2,986
FY 18	$ 2,724
FY 19	$ 2,523
FY 20	$ 3,509



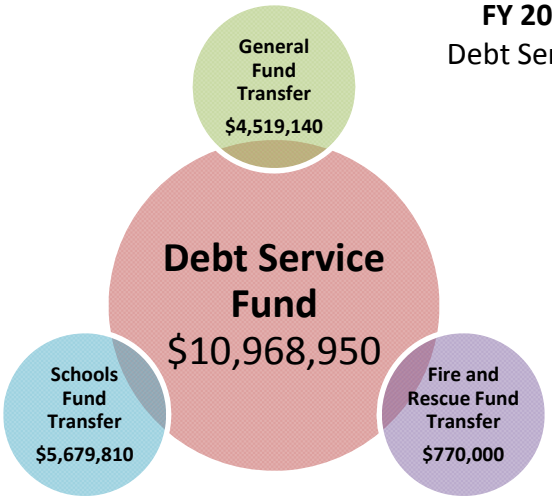
Source: 2018 Comprehensive Annual Financial Report (FY10-16)
Estimated by Budget Office (FY18-20)

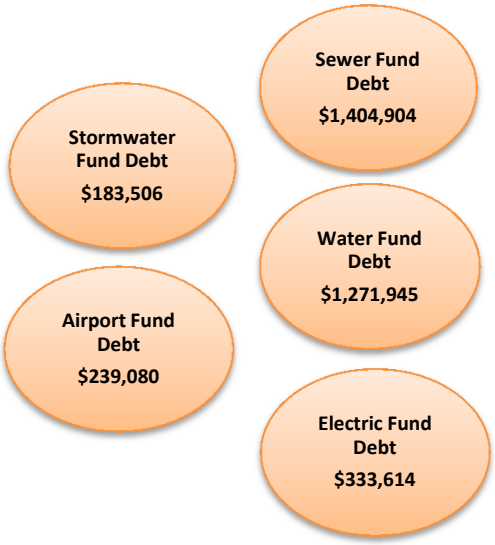
Debt per capita above reflects all general obligation bonds, both tax-supported and enterprise fund supported in accordance with the reporting requirements of the Comprehensive Annual Financial Report (CAFR).

DEBT OVERVIEW

The City will have $145,202,355 (principal only) of outstanding bonded debt as of June 30, 2019. The Enterprise Funds (Sewer, Water, Electric, Airport, and Stormwater) pay the debt service on the bonds related to their function. Of the total debt principal, $47,060,035, or 32%, is enterprise debt. The remaining debt principal of $98,142,320 is supported by the taxpayers via the General Fund, Fire and Rescue Fund and School Funds. This tax-supported debt is paid out of the Debt Service Fund through transfers from the respective governmental funds and enterprise debt is paid directly from the appropriate enterprise funds. The per capita outstanding bond principal supported by taxpayers as of June 30, 2019 will be $3,509 - of this only $2,372 is related to the tax-supported debt of governmental funds.

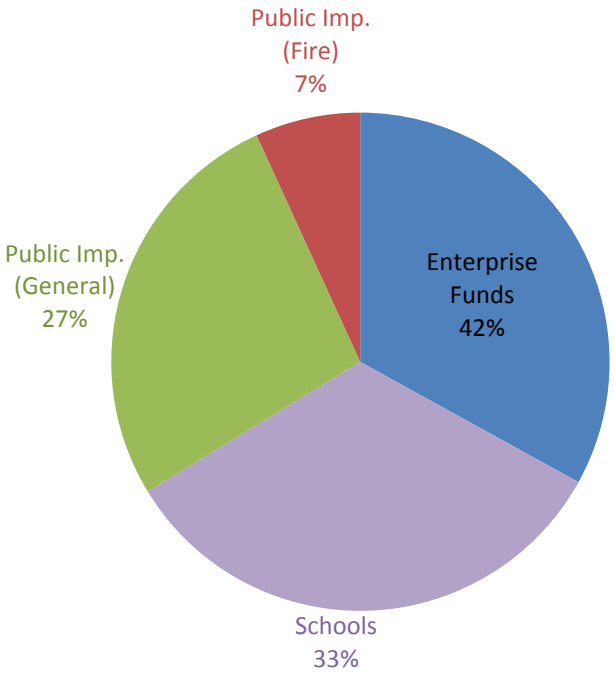
FY 2020 Budget
Debt Service by Fund





OUTSTANDING DEBT

	Principal	Interest	Total
FY 2020	7,055,384	5,114,927	12,170,311
FY 2021	9,260,558	5,509,641	14,770,199
FY 2022	9,481,029	5,100,958	14,581,987
FY 2023	9,546,507	4,634,146	14,180,653
FY 2024	9,851,992	4,158,270	14,010,262
FY 2025	10,157,485	3,662,352	13,819,837
FY 2026	8,922,985	3,203,310	12,126,295
FY 2027	7,653,493	2,803,601	10,457,094
FY 2028	7,924,009	2,438,367	10,362,376
FY 2029	6,944,533	2,113,476	9,058,009
FY 2030	7,125,065	1,826,384	8,951,449
FY 2031	6,955,605	1,536,386	8,491,991
FY 2032	6,843,710	1,278,582	8,122,292
FY 2033	7,000,000	1,042,328	8,042,328
FY 2034	7,165,000	810,031	7,975,031
FY 2035	6,395,000	583,925	6,978,925
FY 2036	4,040,000	438,463	4,478,463
FY 2037	4,100,000	327,537	4,427,537
FY 2038	2,875,000	227,657	3,102,657
FY 2039	2,930,000	138,750	3,068,750
FY 2040	2,975,000	46,484	3,021,484
	$145,202,355	**$46,995,577**	**$192,197,932**

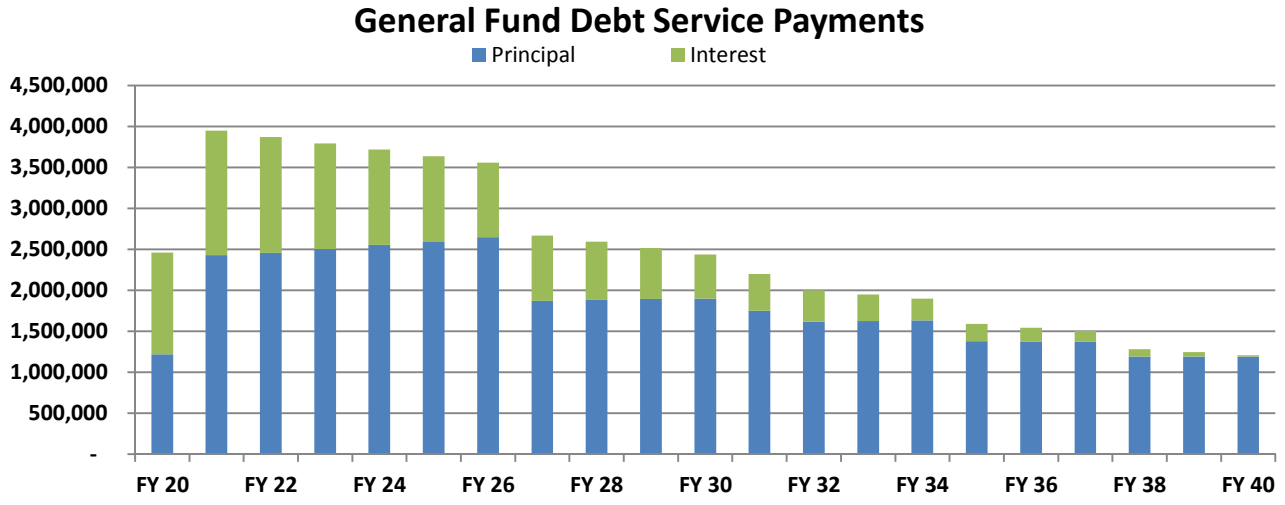


Public Improvement Bonds - General Fund Debt Service

The General Fund Debt Service for FY 2020 will be $2,462,640 reflecting an increase of $678,215 or 38% from prior year debt service. This increase is due to the start of payments on the May, 2019 Series 2019 bond issue. General Fund debt service is tax-supported debt. The General Fund will transfer $4,519,140 to the Debt Service Fund in FY 2020, $2 million above current debt service to build future debt capacity. FY 2020 General Fund debt issue payments are as follows:

	Amount	Pay Off Year
Series 2010 D	$ 182,070	FY 2025
Series 2016 Refunding	$ 812,940	FY 2026
Series 2010 VML/VACO	$ 188,024	FY 2030
Series 2014 C Refunding	$ 41,138	FY 2031
Series 2014 A	$ 267,662	FY 2034
Series 2016	$ 293,881	FY 2037
Series 2019	$ 676,925	FY 2040

Year	Principal	Interest	Total	Year	Principal	Interest	Total
FY 2020	1,217,920	1,244,720	2,462,640	FY 2031	1,750,720	450,713	2,201,433
FY 2021	2,429,860	1,520,675	3,950,535	FY 2032	1,617,520	383,005	2,000,525
FY 2022	2,458,250	1,413,581	3,871,831	FY 2033	1,625,980	323,404	1,949,384
FY 2023	2,504,010	1,290,908	3,794,918	FY 2034	1,634,440	263,287	1,897,727
FY 2024	2,554,180	1,165,910	3,720,090	FY 2035	1,380,000	208,319	1,588,319
FY 2025	2,599,940	1,036,561	3,636,501	FY 2036	1,375,000	169,125	1,544,125
FY 2026	2,648,880	908,706	3,557,586	FY 2037	1,375,000	130,006	1,505,006
FY 2027	1,871,230	798,439	2,669,669	FY 2038	1,190,000	92,225	1,282,225
FY 2028	1,883,320	709,270	2,592,590	FY 2039	1,190,000	55,781	1,245,781
FY 2029	1,894,670	622,099	2,516,769	FY 2040	1,190,000	18,594	1,208,594
FY 2030	1,900,160	536,214	2,436,374				
	23,962,420	**11,247,083**	**35,209,503**		**14,328,660**	**2,094,458**	**16,423,118**
				Total	**$ 38,291,080**	**$ 13,341,541**	**$ 51,632,621**

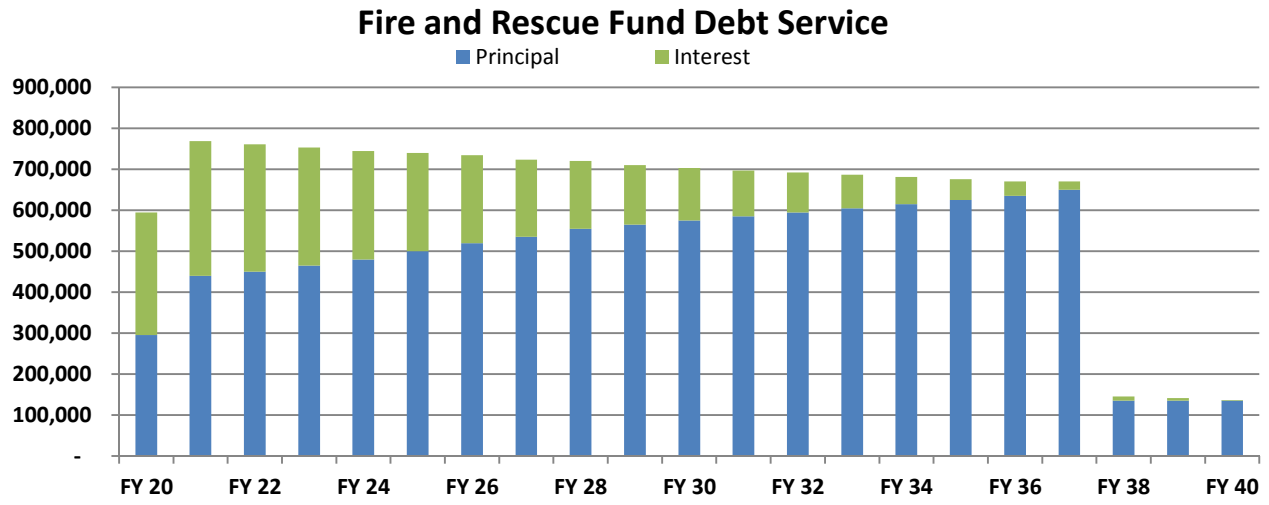


Public Improvement Bonds - Fire and Rescue Fund Debt Service

The Fire and Rescue Fund Debt Service for FY 2020 will be $594,813, reflecting an increase of $75,763 or 12.7% from prior year debt service. This increase is due to the start of payments on the May, 2019 Series 2019 bond issue. Fire and Rescue Fund debt service is tax-supported debt. FY 2020 Fire and Rescue Fund debt issue payments are as follows:

	Amount	Pay Off Year
Series 2016	$ 518,200	FY 2037
Series 2019	$ 76,613	FY 2040

Year	Principal	Interest	Total	Year	Principal	Interest	Total
FY 2020	295,000	299,813	594,813	FY 2031	585,000	112,394	697,394
FY 2021	440,000	328,744	768,744	FY 2032	595,000	97,219	692,219
FY 2022	450,000	311,069	761,069	FY 2033	605,000	82,225	687,225
FY 2023	465,000	288,194	753,194	FY 2034	615,000	66,431	681,431
FY 2024	480,000	264,569	744,569	FY 2035	625,000	50,794	675,794
FY 2025	500,000	240,069	740,069	FY 2036	635,000	35,691	670,691
FY 2026	520,000	214,569	734,569	FY 2037	650,000	20,306	670,306
FY 2027	535,000	188,194	723,194	FY 2038	135,000	10,463	145,463
FY 2028	555,000	165,144	720,144	FY 2039	135,000	6,328	141,328
FY 2029	565,000	145,644	710,644	FY 2040	135,000	2,109	137,109
FY 2030	575,000	128,044	703,044				
	5,380,000	**2,574,053**	**7,954,053**		**4,715,000**	**483,960**	**5,198,960**
				Total	**$ 10,095,000**	**$ 3,058,013**	**$ 13,153,013**

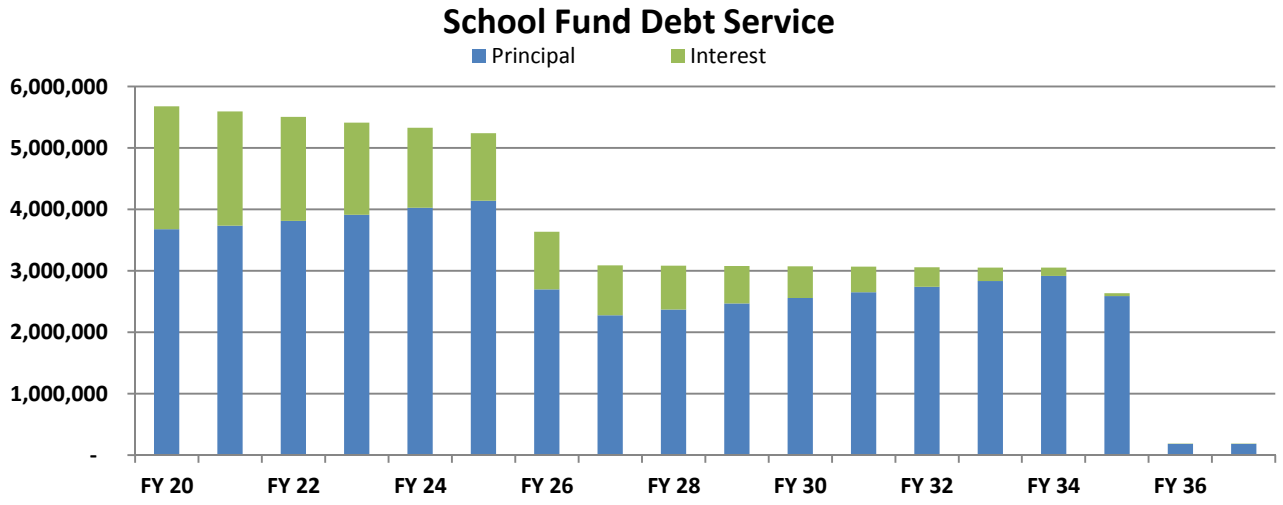


School Bonds - Schools Funds

The Schools Debt Service for FY 2020 will be $5,679,809, reflecting a decrease of $73,032 or 1.3% from prior year debt service. This decrease is due to the final payment of the Series 2014 C Refunding bond issue being made in the prior year. Schools debt service is tax-supported debt. FY 2020 Schools debt issue payments are as follows:

		Amount	Pay Off Year
Series 2010 D - Refunding	$	1,993,375	FY 2025
Series 2016 - Refunding	$	541,960	FY 2026
Series 2014 A	$	409,086	FY 2034
Series 2014 C	$	2,447,213	FY 2035
Series 2016	$	288,175	FY 2037

Year	Principal	Interest	Total	Year	Principal	Interest	Total
FY 2020	3,676,360	2,003,449	5,679,809	FY 2029	2,468,335	608,123	3,076,458
FY 2021	3,732,980	1,860,691	5,593,671	FY 2030	2,556,955	513,948	3,070,903
FY 2022	3,810,600	1,693,761	5,504,361	FY 2031	2,649,885	416,805	3,066,690
FY 2023	3,910,530	1,501,056	5,411,586	FY 2032	2,740,660	315,559	3,056,219
FY 2024	4,024,615	1,303,055	5,327,670	FY 2033	2,833,590	221,487	3,055,077
FY 2025	4,139,545	1,099,274	5,238,819	FY 2034	2,916,520	135,453	3,051,973
FY 2026	2,699,165	934,513	3,633,678	FY 2035	2,590,000	46,275	2,636,275
FY 2027	2,273,940	816,618	3,090,558	FY 2036	180,000	6,075	186,075
FY 2028	2,372,560	708,900	3,081,460	FY 2037	180,000	2,025	182,025
	30,640,295	**11,921,317**	**42,561,612**		**19,115,945**	**2,265,750**	**21,381,695**
				Total	**$ 49,756,240**	**$ 14,187,067**	**$ 63,943,307**

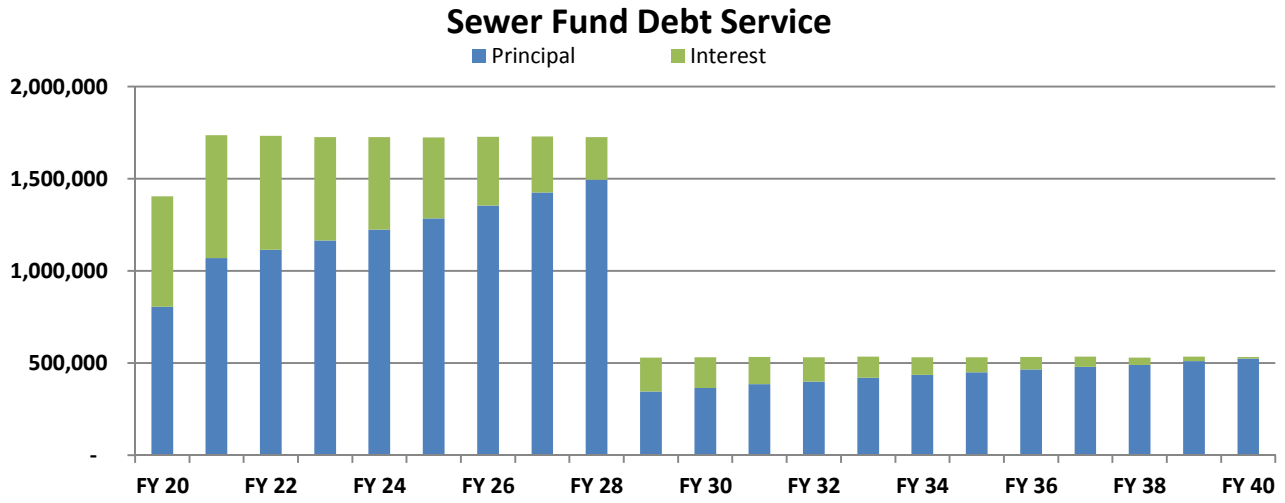


Sewer Bonds - Sewer Fund Debt Service

The Sewer Fund Debt Service for FY 2020 will be $1,404,904, reflecting an increase of $200,604 or 16.7% from prior year debt service. This increase is due to the start of payments on the May, 2019 Series 2019 bond issue. Sewer Fund debt service is supported by sewer utility rates. The debt service schedule for the Sewer Fund does not include UOSA Debt. FY 2020 Sewer Fund debt issue payments are as follows:

		Amount	Pay Off Year
Series 2014 C - Refunding	$	1,201,563	FY 2028
Series 2019	$	203,342	FY 2040

Year	Principal	Interest	Total	Year	Principal	Interest	Total
FY 2020	805,000	599,904	1,404,904	FY 2031	385,000	148,138	533,138
FY 2021	1,070,000	667,000	1,737,000	FY 2032	400,000	130,513	530,513
FY 2022	1,115,000	618,638	1,733,638	FY 2033	420,000	114,113	534,113
FY 2023	1,165,000	561,638	1,726,638	FY 2034	435,000	97,013	532,013
FY 2024	1,225,000	501,888	1,726,888	FY 2035	450,000	81,563	531,563
FY 2025	1,285,000	439,138	1,724,138	FY 2036	465,000	68,128	533,128
FY 2026	1,355,000	373,138	1,728,138	FY 2037	480,000	54,244	534,244
FY 2027	1,425,000	303,638	1,728,638	FY 2038	490,000	39,694	529,694
FY 2028	1,495,000	230,638	1,725,638	FY 2039	510,000	24,375	534,375
FY 2029	345,000	184,638	529,638	FY 2040	525,000	8,203	533,203
FY 2030	365,000	166,888	531,888				
	11,650,000	**4,647,142**	**16,297,142**		**4,560,000**	**765,981**	**5,325,981**
				Total	**$ 16,210,000**	**$ 5,413,123**	**$ 21,623,123**

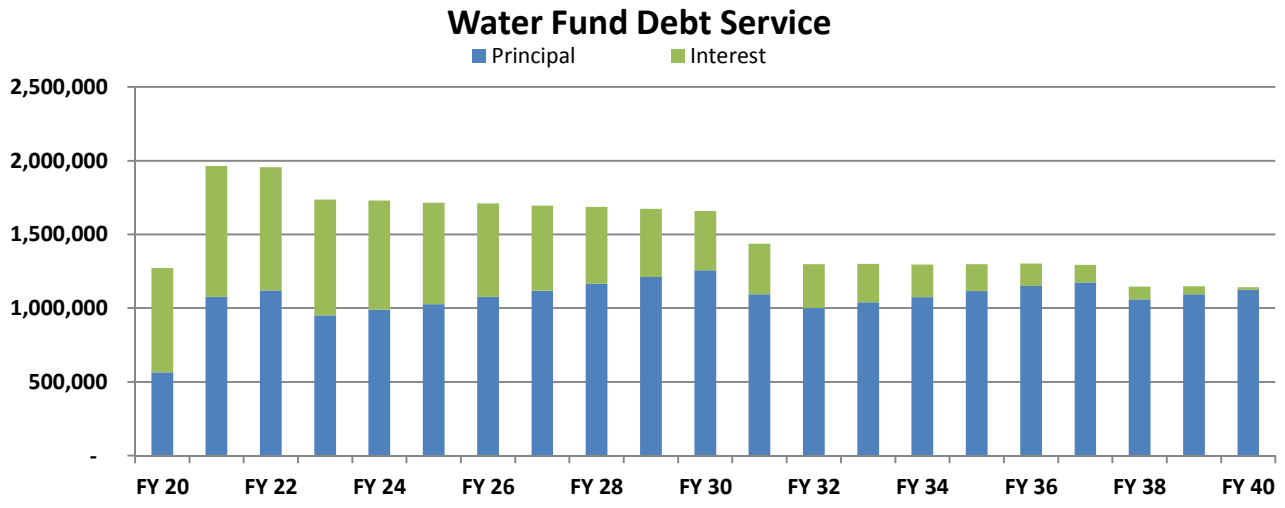


Water Bonds - Water Fund Debt Service

The Water Fund Debt Service for FY 2020 will be $1,271,945, reflecting an increase of $436,133 or 52.2% from prior year debt service. This increase is due to the start of payments on the May, 2019 Series 2019 bond issue. Water Fund debt service is supported by water utility rates. FY 2020 Water Fund debt issue payments are as follows:

		Amount	Pay Off Year
Series 2009 VRA - Refunding	$	215,325	FY 2022
Series 2010 D	$	174,930	FY 2025
Series 2010 VML/VACO	$	249,241	FY 2030
Series 2014 C - Refunding	$	39,524	FY 2031
Series 2016	$	155,475	FY 2037
Series 2019	$	437,450	FY 2040

Year	Principal	Interest	Total	Year	Principal	Interest	Total
FY 2020	565,000	706,945	1,271,945	FY 2031	1,094,750	341,320	1,436,070
FY 2021	1,075,700	888,900	1,964,600	FY 2032	1,000,000	298,000	1,298,000
FY 2022	1,118,950	836,651	1,955,601	FY 2033	1,040,000	259,863	1,299,863
FY 2023	949,650	786,358	1,736,008	FY 2034	1,075,000	220,100	1,295,100
FY 2024	990,350	739,462	1,729,812	FY 2035	1,115,000	183,644	1,298,644
FY 2025	1,026,050	688,114	1,714,164	FY 2036	1,150,000	151,400	1,301,400
FY 2026	1,076,750	634,623	1,711,373	FY 2037	1,175,000	118,256	1,293,256
FY 2027	1,117,450	577,815	1,695,265	FY 2038	1,060,000	85,275	1,145,275
FY 2028	1,166,000	520,030	1,686,030	FY 2039	1,095,000	52,266	1,147,266
FY 2029	1,211,700	461,655	1,673,355	FY 2040	1,125,000	17,578	1,142,578
FY 2030	1,256,850	402,314	1,659,164				
	11,554,450	**7,242,866**	**18,797,316**		**10,929,750**	**1,727,701**	**12,657,451**
				Total	**$ 22,484,200**	**$ 8,970,567**	**$ 31,454,767**

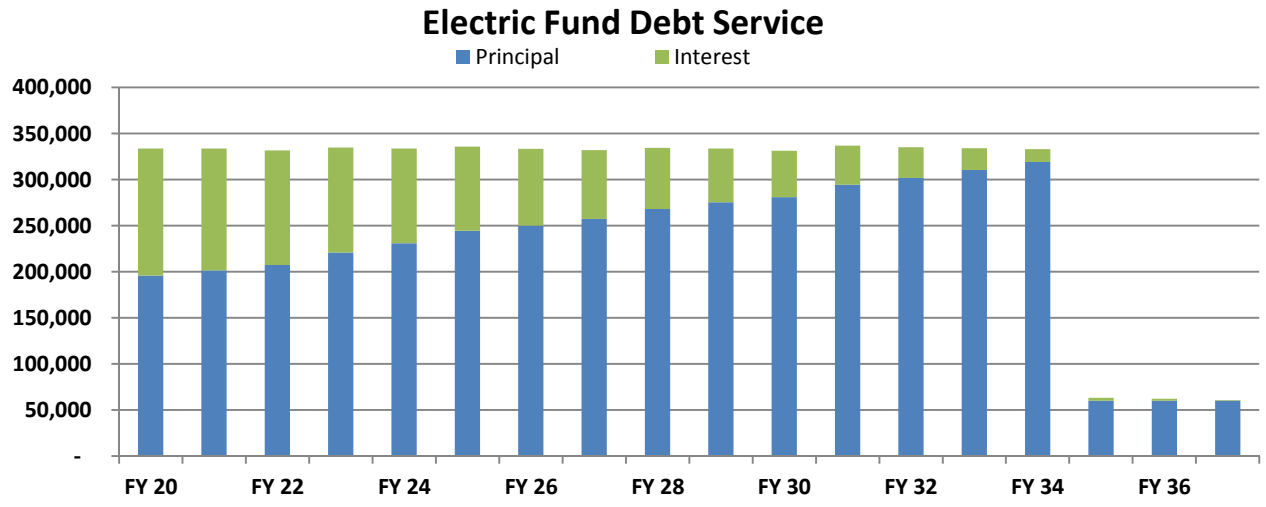


Electric Bonds - Electric Fund Debt Service

The Electric Fund Debt Service for FY 2020 will be $333,614, reflecting a minor decrease of $1,202 or 0.4% from the prior year debt service. Electric Fund debt service is supported by electric utility rates. FY 2020 Electric Fund debt issue payments are as follows:

	Amount	Pay Off Year
Series 2014 A	$ 272,408	FY 2034
Series 2016	$ 61,206	FY 2037

Year	Principal	Interest	Total	Year	Principal	Interest	Total
FY 2020	195,720	137,894	333,614	FY 2029	275,295	58,366	333,661
FY 2021	201,460	132,373	333,833	FY 2030	281,035	50,357	331,392
FY 2022	207,200	124,489	331,689	FY 2031	294,645	42,087	336,732
FY 2023	220,810	114,004	334,814	FY 2032	301,820	33,199	335,019
FY 2024	230,855	102,964	333,819	FY 2033	310,430	23,734	334,164
FY 2025	244,465	91,296	335,761	FY 2034	319,040	13,910	332,950
FY 2026	250,205	83,062	333,267	FY 2035	60,000	3,375	63,375
FY 2027	257,380	74,656	332,036	FY 2036	60,000	2,025	62,025
FY 2028	268,120	66,409	334,529	FY 2037	60,000	675	60,675
	2,076,215	**927,147**	**3,003,362**		**1,962,265**	**227,728**	**2,189,993**
				Total	**$ 4,038,480**	**$ 1,154,875**	**$ 5,193,355**

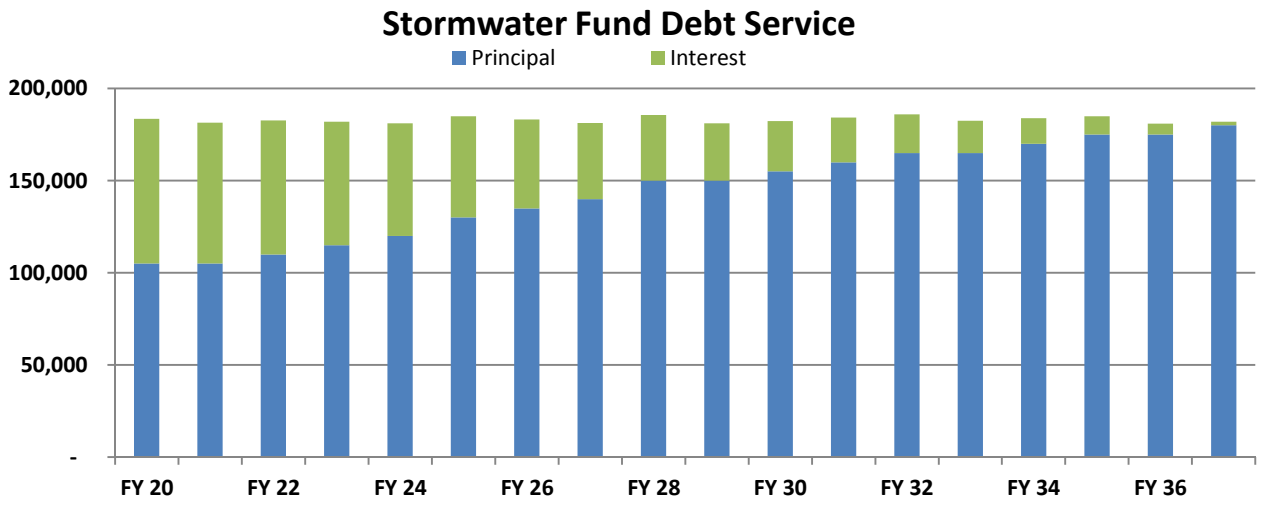


Stormwater Bonds - Stormwater Fund Debt Service

The Stormwater Fund Debt Service for FY 2020 will be $183,506, reflecting an a minor decrease of $2,100 or 1.1% from prior year debt service. Stormwater Fund debt service is supported by stormwater utility fees. FY 2020 Stormwater Fund debt issue payments are as follows:

	Amount	Pay Off Year
Series 2016	$ 183,506	FY 2037

Year	Principal	Interest	Total	Year	Principal	Interest	Total
FY 2020	105,000	78,506	183,506	FY 2029	150,000	31,106	181,106
FY 2021	105,000	76,406	181,406	FY 2030	155,000	27,306	182,306
FY 2022	110,000	72,606	182,606	FY 2031	160,000	24,156	184,156
FY 2023	115,000	66,981	181,981	FY 2032	165,000	20,906	185,906
FY 2024	120,000	61,106	181,106	FY 2033	165,000	17,503	182,503
FY 2025	130,000	54,856	184,856	FY 2034	170,000	13,838	183,838
FY 2026	135,000	48,231	183,231	FY 2035	175,000	9,956	184,956
FY 2027	140,000	41,356	181,356	FY 2036	175,000	6,019	181,019
FY 2028	150,000	35,606	185,606	FY 2037	180,000	2,025	182,025
	1,110,000	**535,654**	**1,645,654**		**1,495,000**	**152,815**	**1,647,815**
				Total	**$ 2,605,000**	**$ 688,469**	**$ 3,293,469**

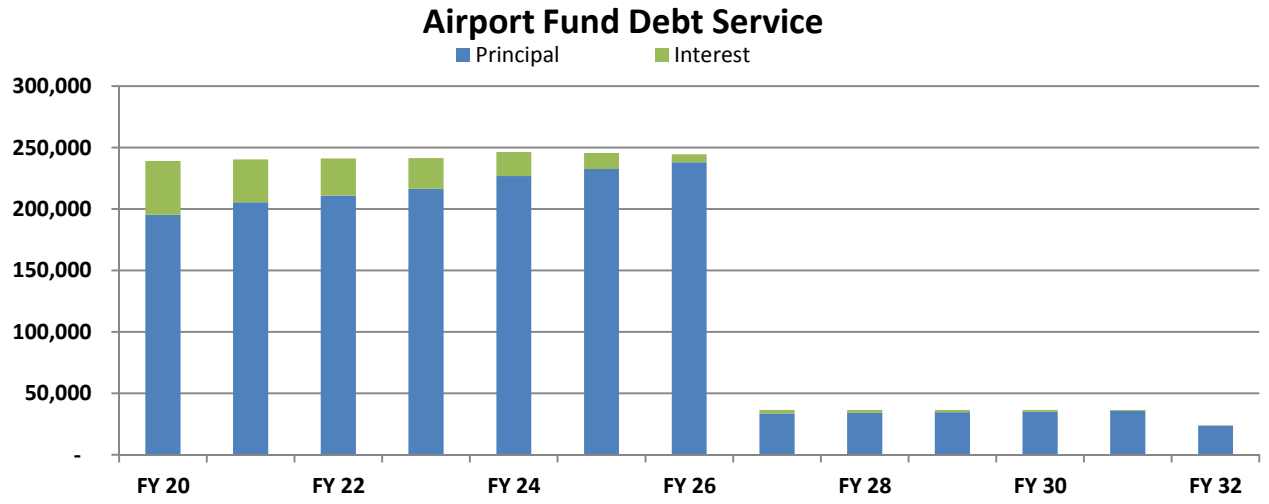


Airport Bonds - Airport Fund Debt Service

The Airport Fund Debt Service for FY 2020 will be $239,080, reflecting a decrease of $214,330 or 47.3% from prior year debt service. This decrease is due to the payoff of the Series 2004 VRA bond issue and the paydown of the Series 2016 VRA bond issue. Airport Fund debt services is supported by Airport rentals and leases. FY 2020 Airport Fund debt issue payments are as follows:

		Amount	Pay Off Year
Series 2014 D - Refunding	$	202,701	FY 2026
Series 2016 VRA	$	36,379	FY 2032

Year	Principal	Interest	Total	Year	Principal	Interest	Total
FY 2020	195,384	43,696	239,080	FY 2027	33,493	2,886	36,379
FY 2021	205,558	34,853	240,411	FY 2028	34,009	2,370	36,379
FY 2022	211,029	30,164	241,193	FY 2029	34,533	1,846	36,379
FY 2023	216,507	25,008	241,515	FY 2030	35,065	1,314	36,379
FY 2024	226,992	19,316	246,308	FY 2031	35,605	774	36,379
FY 2025	232,485	13,044	245,529	FY 2032	23,710	182	23,892
FY 2026	237,985	6,469	244,454				
	1,525,940	**172,550**	**1,698,490**		**196,415**	**9,372**	**205,787**
				Total	**$ 1,722,355**	**$ 181,922**	**$ 1,904,277**



BOND SERIES 2009 VRA REFUNDING - RATE: 4.13 – 5.13%; ISSUED: $1,850,000

General Obligation Bonds - the proceeds were issued to refund the Bond Series 2002 VRA obligations of the City.

BOND SERIES 2010 VML/VACO - RATE: 2.00 – 6.067%; ISSUED: $5,115,000

General Obligation Recovery Zone Economic Development Bonds - the proceeds were issued to finance transportation projects including the VRE Parking Garage and Wellington Road; General Obligation Build America Bonds - the proceeds were issued to finance improvements to the Water Treatment Plant; General Obligation Bonds - the proceeds were issued to finance improvements to the Water Treatment Plant.

BOND SERIES 2010 D & D REFUNDING - RATE: 2.00 – 5.00%; ISSUED: $21,545,000

General Obligation Bonds – the proceeds were issued to finance improvements of roads, public safety, and the City's Water System and to refund the Bond Series 2004 obligations of the City.

BOND SERIES 2014 A - RATE: 3.00 – 5.00%; ISSUED: $13,525,000

General Obligation Bonds – the proceeds were issued to finance capital improvements for the City including transportation and drainage projects, School capital improvements, and Electric capital improvements including expansion of the Airport substation.

BOND SERIES 2014 C & C REFUNDING - RATE: 2.00 - 5.00%; ISSUED: $46,895,000

General Obligation Bonds – the proceeds were issued to finance the construction of a new elementary school and to refund a portion of the Bond Series 2005 B, 2007 VML/VACO, and 2010 D obligations of the City.

BOND SERIES 2014 D REFUNDING - RATE: 0.50 – 3.00%; ISSUED: $1,700,000

Taxable General Obligation Bonds – the proceeds were issued to refund a portion of the Bond Series 2005 C obligations of the City.

BOND SERIES 2016 & REFUNDING - RATE: 2.00 - 5.00%; ISSUED: $29,495,000

General Obligation Bonds – the proceeds were issued to finance the acquisition, construction, extension, renovation and equipping of public school, public safety, utility and general governmental improvements and to refund a portion of the Bond Series 2014 A and 2014 B.

BOND SERIES 2016 VRA - RATE: 1.5344%; ISSUED: $2,010,000

General Obligation Bonds – the proceeds were issued to finance improvements at the City's Airport.

BOND SERIES 2019 - RATE: 2.875 - 5.00%; ISSUED: $50,200,000

General Obligation Bonds – the proceeds were issued to finance the acquisition, construction, extension, replacement, renovation and equipping of public safety, parks, culture and recreation, transportation, utility and general governmental improvements.