

30-230: Advanced Right-of-Way Acquisition Program

Department: **Transportation Capital Projects**
 Project Type: Addition or Expansion
 Year Identified: 2019
 Start Date: 7/1/2018
 Est. Completion Date: 6/30/2023

Description:

This project will provide funding to acquire key properties in support of future transportation and stormwater improvement projects.

Justification:

The advanced right-of-way acquisition of key properties will result in significant savings and preserve strategic corridors for future improvements. For example, when City Council authorized advanced right-of-way acquisition funds for the Deep Creek Bridge, the Public Works Dept. was able to purchase eight properties at a significant savings for the project. Accordingly, this new Citywide project was established beginning in FY 2019 to expand this program for various future transportation and stormwater improvement projects.

Comments:

Typically, right-of-way costs are included in the overall funding for capital projects and follow the preliminary engineering phase. However, this typical structure does not allow flexibility for the City's Public Works Dept. to respond to offers to acquire property in advance of development. This project will allow for that flexibility.

Project Forecast:

Year	Total Expense	Total Revenue	Difference
2021	200,000	200,000	0
2022	200,000	200,000	0
2023	200,000	200,000	0
	600,000	600,000	0

Project Details 2021:

	Prior Years	2021	2022 - 25	Future Years	Total Amount
Revenue					
Fund Balance - General Fund	900,000	200,000	400,000		1,500,000
Total Revenue	900,000	200,000	400,000		1,500,000
Expense					
Other	900,000	200,000	400,000		1,500,000
Total Expense	900,000	200,000	400,000		1,500,000

62-250: Battlefield Blvd. at Volvo Pkwy. - Intersection Improvements Phase II

Department: **Transportation Capital Projects**
 Project Type: Addition or Expansion
 Year Identified: 2021
 Start Date: 7/1/2023
 Est. Completion Date: 12/31/2030

Description:

This project will provide for Phase II of a two-phase project to improve the intersection of Battlefield Blvd. at Volvo Parkway. Phase II will widen the westbound Volvo Parkway approach to Battlefield Blvd. and will add a second right-turn lane to create dual right-turn lanes for the high volume of traffic turning right from Volvo Parkway to northbound Battlefield Blvd. and I-64. (For Phase I details, please see project # 40-230).

Justification:

This project will improve the capacity of the Volvo Parkway and Battlefield Boulevard intersection.

Comments:

This project was awarded SmartScale funding through VDOT.

Project Forecast:

Year	Total Expense	Total Revenue	Difference
2024	282,500	282,500	0
2025	1,192,500	1,192,500	0
	1,475,000	1,475,000	0

Project Details 2021:

	Prior Years	2021	2022 - 25	Future Years	Total Amount
Revenue					
VDOT Reimbursements			1,475,000		1,475,000
Total Revenue			1,475,000		1,475,000
Expense					
Design & Engineering			282,500		282,500
Construction			1,003,500		1,003,500
Land Acquisition			189,000		189,000
Total Expense			1,475,000		1,475,000

57-250: Cedar Road Widening

Department: **Transportation Capital Projects**
 Project Type: Addition or Expansion
 Year Identified: 2021
 Start Date:
 Est. Completion Date:

Description:

This project will widen Cedar Road to provide a center lane and an additional eastbound through lane on Cedar Road from Holt Drive to Battlefield Blvd.

Justification:

This project will widen Cedar Rd to match the roadway cross section west of Holt Rd., which will reduce traffic congestion and improve safety for the corridor.

Comments:

Cedar Rd east of Holt Rd is currently three lanes wide. The roadway west of Holt Rd has been widened in the past to five lanes.

Project Forecast:

Year	Total Expense	Total Revenue	Difference
2023			0
2024			0
2025	400,000	400,000	0
	400,000	400,000	0

Project Details 2021:

	Prior Years	2021	2022 - 25	Future Years	Total Amount
Revenue					
Fund Balance - General Fund				1,978,500	1,978,500
Cash - Lockbox City			400,000		400,000
VDOT Reimbursements				2,378,500	2,378,500
Total Revenue			400,000	4,357,000	4,757,000
Expense					
Design & Engineering			400,000	193,000	593,000
Construction				1,800,000	1,800,000
Land Acquisition				1,464,000	1,464,000
Equipment				400,000	400,000
Other				500,000	500,000
Total Expense			400,000	4,357,000	4,757,000

03-190: Centerville Turnpike Bridge Rehabilitation

Department: **Transportation Capital Projects**
 Project Type: Renovation or Rehabilitation
 Year Identified: 2015
 Start Date: 9/3/2014
 Est. Completion Date: 6/30/2023

Description:

This project will provide for major repairs to the bridge's superstructure and fender system. Repairs will include removing lead paint and re-painting of the entire bridge structure, replacing electrical and mechanical systems, and installing a new computerized control system.

Justification:

The 2013 bridge inspection revealed that the structure is no longer adequate to carry Virginia legal loads; therefore, weight restrictions have been imposed. The repairs will allow the weight restrictions to be removed and will extend the service life of the bridge by 15-20 years.

Comments:

On June 12, 2018 - City Council revised the funding schedule to align with the Virginia Dept. of Transportation (VDOT) six-year plan. The following adjustments were made:

- FY 2019: Increased budgeted VDOT funding by \$1,311,266 to total \$5,848,266 (VDOT awards through FY 2019 total \$6,917,000),
- FY 2020: Increased planned VDOT funding to \$300,000, and
- FY 2021: Increased planned VDOT funding to \$86,000.

Cost estimates received in FY 2017 to repaint the bridge were more than initially estimated due to the complexity of the work. In FY 2019 the City received funding under VDOT's State of Good Repair (SGR) program which ensures completion of the bridge rehab, including costs to remove the existing lead paint and re-paint the bridge structure.

This project was previously scheduled to start in FY 2016. However, the north fender of the bridge was damaged by a barge during FY 2016. Due to the accident, an additional \$396,000 from the City's General Fund balance was added to complete the accident repair work. Future recoveries of damages from the responsible parties will be credited back to the General Fund.

Project Forecast:

Year	Total Expense	Total Revenue	Difference
2021	86,000	86,000	0
	86,000	86,000	0

Project Details 2021:

	Prior Years	2021	2022 - 25	Future Years	Total Amount
Revenue					
Fund Balance - General Fund	896,000				896,000
Fund Balance - Capital Projects Fund	3,972,844				3,972,844
VDOT Reimbursements	5,405,209	86,000			5,491,209
VDOT Revenue Share	500,000				500,000
Total Revenue	10,774,053	86,000			10,860,053
Expense					
Design & Engineering	1,900,000				1,900,000
Construction	8,874,053	86,000			8,960,053
Total Expense	10,774,053	86,000			10,860,053

25-220: Citywide Guardrail Installation & Replacement

Department: **Transportation Capital Projects**
 Project Type: Addition or Expansion
 Year Identified: 2018
 Start Date: 7/1/2017
 Est. Completion Date: 12/30/2022

Description:

The project will replace the existing guardrail along the Route 168 Bypass/ Chesapeake Expressway from the interchange at Mt. Pleasant Road to the Hillcrest Parkway interchange (approx. 5 miles). High-Tension Cable Guardrail will be installed to replace the old guardrail along both sides of the roadway. This program will also include guardrail replacement in other locations in the City as needed.

Justification:

This guardrail has been in service for over 40 years and the current condition warrants replacement.

Comments:

This project will replace approx. 14,000 linear ft. of guardrail along the Chesapeake Expressway/ Rte. 168 Bypass. The guardrail runs along the segment between the small bridge over Poplar Branch and goes northbound to the bridges over Battlefield Boulevard, and is located along the north and southbound lanes. The guardrail has been in service since around 1970-1980, and is constructed with timber posts and timber spacer blocks. The guardrails need to be replaced because the posts are necking down at the ground level and have splits and checks. Funding will be provided by the annual state road maintenance funding provided by the Virginia Dept. of Transportation (VDOT).

Project Forecast:

Year	Total Expense	Total Revenue	Difference
2021	100,000	100,000	0
2022	100,000	100,000	0
	200,000	200,000	0

Project Details 2021:

	Prior Years	2021	2022 - 25	Future Years	Total Amount
Revenue					
VDOT Reimbursements	1,100,000	100,000	100,000		1,300,000
Total Revenue	1,100,000	100,000	100,000		1,300,000
Expense					
Design & Engineering	50,000				50,000
Construction	900,000	50,000	50,000		1,000,000
Equipment	150,000	50,000	50,000		250,000
Total Expense	1,100,000	100,000	100,000		1,300,000

26-220: Citywide Sidewalk Installation

Department: **Transportation Capital Projects**
 Project Type: Addition or Expansion
 Year Identified: 2018
 Start Date: 7/1/2017
 Est. Completion Date: 7/30/2025

Description:

The project will provide for installation of sidewalks in different parts of the City where sidewalks will improve the safety of the general public. Locations identified for this project include the sidewalks along Etheridge Manor Boulevard.

Justification:

Pedestrian activities in certain parts of the City can be enhanced with improved safety by providing sidewalk for the public use. This project will install sidewalks to enhance those areas.

Comments:

For the FY 2024-CIP, the project plan was updated and the budget was revised for requirements through FY 2024.

The May 2020 amendments to the FY 2021 CIB suspended this project for one year and resumes funding in FY 2022.

Project Forecast:

Year	Total Expense	Total Revenue	Difference
2021			0
2022	300,000	300,000	0
2023	300,000	300,000	0
2024	300,000	300,000	0
2025	300,000	300,000	0
	1,200,000	1,200,000	0

Project Details 2021:

	Prior Years	2021	2022 - 25	Future Years	Total Amount
Revenue					
Fund Balance - General Fund		700,000			700,000
Cash - Lockbox City		300,000	1,200,000		1,500,000
Total Revenue		1,000,000	1,200,000		2,200,000
Expense					
Design & Engineering		50,000			50,000
Construction		900,000	1,200,000		2,100,000
Land Acquisition		50,000			50,000
Total Expense		1,000,000	1,200,000		2,200,000

31-220: Citywide Traffic Signal Retiming - Phase I

Department: **Transportation Capital Projects**
 Project Type: Renovation or Rehabilitation
 Year Identified: 2018
 Start Date: 8/28/2017
 Est. Completion Date: 6/30/2021

Description:

This project will provide for the retiming of specific traffic signals in the City of Chesapeake, which will be completed in phases. Phase I(A) started in FY 2018 and will provide for the retiming of fourteen traffic signals that will including five signals on Military Highway between the I-64 W off-ramp and Shell Road, and nine signals on George Washington Highway between Wintergreen Drive and Mill Creek Parkway. Phase I(B) is scheduled to start in FY 2021 with the specific signals to be defined.

Justification:

The City was awarded \$140,000 in federal Congestion Mitigation and Air Quality (CMAQ) program grant funds that are reimbursable through the Virginia Dept. of Transportation (VDOT). The City entered into an agreement with VDOT to complete this traffic signal retiming project "Chesapeake Signal Retiming Phase I" (phase I(A) in FY 2018 and I(B) in FY 2021).

For FY 2018, VDOT budgeted \$30,000 in federal CMAQ program funds for the City to complete phase I(A). On September 12, 2017, City Council approved an amendment to the FY 2018 Capital Budget to accept the FY 2018 grant allocation and fully fund Phase I(A) of this project.

For FY 2021, VDOT has programmed \$110,000 in federal CMAQ program funds for the City to complete phase I(B) of this project. Phase I(B) is currently estimated to cost \$115,000. Some local funding is required for phase I(B) costs that exceed VDOT's reimbursable allocation.

Comments:

September 12, 2017 - City Council added this project to CIP and appropriated \$30,000 in federal CMAQ program funds awarded through VDOT for phase I(A) and approved a transfer of \$6,696 from the department's operating budget. While local matches are not required, CMAQ funding was less than the project.

Project Forecast:

Year	Total Expense	Total Revenue	Difference
2021	115,000	115,000	0
	115,000	115,000	0

Project Details 2021:

	Prior Years	2021	2022 - 25	Future Years	Total Amount
Revenue					
Fund Balance - General Fund	6,696	5,000			11,696
VDOT Reimbursements	30,000	110,000			140,000
Total Revenue	36,696	115,000			151,696
Expense					
Design & Engineering	36,696	115,000			151,696
Total Expense	36,696	115,000			151,696

62-230: Citywide Traffic Signal Retiming - Phase II

Department: **Transportation Capital Projects**
 Project Type: System Acquisition or Upgrade
 Year Identified: 2019
 Start Date: 7/1/2018
 Est. Completion Date: 6/30/2023

Description:

This project will provide for signal retiming of specific traffic signals throughout the City of Chesapeake.

Comments:

On June 12, 2018, City Council approved an amendment to the FY 2019-23 CIP that added this as a new project for FY 2019. VDOT grant funding totaling \$450,000 was awarded to complete this project (\$35,000 in FY 2019 and \$415,000 in FY 2021).

Project Forecast:

Year	Total Expense	Total Revenue	Difference
2021	415,000	415,000	0
	415,000	415,000	0

Project Details 2021:

	Prior Years	2021	2022 - 25	Future Years	Total Amount
Revenue					
VDOT Reimbursements	35,000	415,000			450,000
Total Revenue	35,000	415,000			450,000
Expense					
Design & Engineering	35,000				35,000
Construction		415,000			415,000
Total Expense	35,000	415,000			450,000

58-250: Citywide Trails and Open Space Connectivity Plan

Department: **Transportation Capital Projects**
 Project Type: Study
 Year Identified: 2021
 Start Date: 7/1/2021
 Est. Completion Date: 6/30/2024

Description:

This project will provide for the development of a Citywide Trails and Open Space Connectivity Plan. Chesapeake needs to develop a formal stand-alone plan focused on open space and trail connectivity to include blue and green infrastructure. It also needs to identify strategies for protecting, conserving, and enhancing these vital assets. Currently, the City relies on the Comprehensive Plan and its 2050 Master Trails component to inform planning efforts related to bicycle and pedestrian improvements, development of new trails, and blue/green connections. The Trails and Open Space Connectivity Plan expands on this portion of the Comprehensive Plan and generates a separate planning document outlining goals and objectives the City can implement to support a robust and integrated active transportation network. This plan will serve as the framework for executing identified infrastructure improvements and instituting policy recommendations in the City to create a dynamic multi-modal open space and trail network for all users.

Justification:

The Trails and Open Space Connectivity Plan will become the guiding document in managing the development of bicycle and pedestrian facilities, as well as enhancing waterborne recreational activities noted in the Comprehensive Plan. The combination of off-road natural paths (greenways) and watercourses (blueways) will provide residents and visitors a unique blend of routes for active transportation and recreation. Where natural paths are not feasible, on-road facilities will be established to provide linkages that enable travel throughout the City by foot, bike, or other supported modes. The naturally flat terrain and favorable environmental conditions support an expansion of citywide trails and open space networks, integrated with blueways and greenways. City Council prioritized capitalizing on the City's natural and cultural assets through the linking of waterways, open spaces, and important landmarks. Enhancement of blueways and greenways could also help address flooding and resiliency.

Comments:

The current planning initiatives for bikeways and trails consist of the 2050 Master Trails Plan component of the City's 2035 Comprehensive Plan. The Plan also contains broad policy references to "blueway" and "greenway" assets, but no integrated strategy for protecting and enhancing these assets. No effort has been undertaken thus far to create a citywide planning and policy document dedicated solely to the future of biking, walking, and other forms of active transportation and recreational mobility.

Project Forecast:

Year	Total Expense	Total Revenue	Difference
2022	187,500	187,500	0
2023	187,500	187,500	0
	375,000	375,000	0

Project Details 2021:

	Prior Years	2021	2022 - 25	Future Years	Total Amount
Revenue					
Fund Balance - General Fund			375,000		375,000
Total Revenue			375,000		375,000
Expense					
Design & Engineering			375,000		375,000
Total Expense			375,000		375,000

32-230: CTS - Chesapeake Expressway Renewals - Phase III - Variable Message Boards

Department: **Transportation Capital Projects**
 Project Type: Renovation or Rehabilitation
 Year Identified: 2019
 Start Date: 7/1/2021
 Est. Completion Date: 6/30/2023

Description:

This project will provide for the replacement of the four variable message boards on the Chesapeake Expressway, as identified in the most recent engineer's report on the Expressway's renewal and replacement needs.

Justification:

The Chesapeake Expressway originally opened to traffic in May 2001. The bond indenture for the funding issued to build the facility requires the facility to be kept in good repair. An annual engineer's inspection report is prepared to identify the renewal and replacement work required. This project will ensure those requirements are met by addressing the renewal and replacement work that needs to be handled through the capital budget. This is the third phase of renewals, which will replace the message boards on the Expressway.

Comments:

- June 12, 2018 - City Council changed project title and description to provide for the replacement of the variable message boards.
- Replacement of variable message boards appeared on the FY 2018 engineer's report for maintenance of the Chesapeake Expressway.

Project Forecast:

Year	Total Expense	Total Revenue	Difference
2021			0
2022	720,000	720,000	0
2023			0
	720,000	720,000	0

Project Details 2021:

	Prior Years	2021	2022 - 25	Future Years	Total Amount
Revenue					
Fund Balance - CTS			720,000		720,000
Total Revenue			720,000		720,000
Expense					
Equipment			720,000		720,000
Total Expense			720,000		720,000

28-240: CTS - Chesapeake Expressway Repaving

Department: **Transportation Capital Projects**
 Project Type: **Renovation or Rehabilitation**
 Year Identified: **2020**
 Start Date: **7/1/2021**
 Est. Completion Date: **6/30/2022**

Description:

This project will provide for necessary repaving of Chesapeake Expressway over several years. Repaving is planned as recommended by the Annual Inspection Report that is prepared by an independent Engineer.

Justification:

The Chesapeake Expressway originally opened to traffic in May 2001. The bond indenture requires the facility to be kept in good repair. This project will ensure those requirements are met.

Comments:

FY 2022 - 2.4 mile section from Hanbury Road to Hillcrest Parkway.
 FY 2023 - 3.0 mile section from Galbush Road to NC State line.
 FY 2024 - 4.6 mile section from Hillcrest Parkway to Galbush Road.

Project Forecast:

Year	Total Expense	Total Revenue	Difference
2022	2,950,000	2,950,000	0
2023	3,300,000	3,300,000	0
2024	4,600,000	4,600,000	0
	10,850,000	10,850,000	0

Project Details 2021:

	Prior Years	2021	2022 - 25	Future Years	Total Amount
Revenue					
Fund Balance - CTS			10,850,000		10,850,000
Total Revenue			10,850,000		10,850,000
Expense					
Design & Engineering			250,000		250,000
Construction			10,600,000		10,600,000
Total Expense			10,850,000		10,850,000

34-230: CTS - Dominion Blvd. Veterans Bridge - Closed Circuit Television (CCTV)

Department: **Transportation Capital Projects**
 Project Type: Addition or Expansion
 Year Identified: 2019
 Start Date: 7/1/2019
 Est. Completion Date: 6/30/2022

Description:

This project will provide for the installation of closed-circuit television (CCTV) cameras along the Dominion Boulevard Veterans Bridge toll road.

Justification:

Dominion Boulevard currently carries approximately 26,000 vehicles per day with expected growth to 30,000+ vehicles per day within the next few years. Deployment of a CCTV system will allow video surveillance monitoring of the traffic conditions in the facility. CCTV surveillance will be particularly beneficial during emergency conditions, such as hurricane evacuation and snow/freezing rain events.

Comments:

The Dominion Boulevard Veterans Bridge began toll operations in February 2017. This is a high speed, limited access facility that is a primary commuter route between Southern Chesapeake, Northeastern North Carolina, and the Hampton Roads interstate network.

Project Forecast:

Year	Total Expense	Total Revenue	Difference
2021	140,000	140,000	0
	140,000	140,000	0

Project Details 2021:

	Prior Years	2021	2022 - 25	Future Years	Total Amount
Revenue					
Fund Balance - CTS	200,000	140,000			340,000
Total Revenue	200,000	140,000			340,000
Expense					
Design & Engineering	55,000				55,000
Construction	145,000	40,000			185,000
Equipment		100,000			100,000
Total Expense	200,000	140,000			340,000

56-250: CTS - Dominion Blvd. Veterans Bridge Toll System Upgrades

Department: **Transportation Capital Projects**
 Project Type: System Acquisition or Upgrade
 Year Identified: 2021
 Start Date: 7/1/2022
 Est. Completion Date: 6/30/2024

Description:

This project will provide needed upgrades to the Dominion Blvd. Veterans Bridge Toll System. Specifically, the gantry mounted toll cameras system will be enhanced to provide additional cameras (redundancy) and an enhanced image processor will be deployed for enhanced CCTV images. The Digital Video Audit System will have increase storage capacity installed and toll transaction logic will be improved.

Justification:

The Dominion Blvd. Veterans Bridge Toll System provides the means for repaying the bonds and loans secured by the City to build this facility which replaced a 2-lane roadway and drawbridge with the 4-lane divided highway and high-rise fixed span bridge. The project will further enhance the toll system by enhancing the camera system and image quality as well as providing additional storage and improved toll transaction processing.

Comments:

The Dominion Blvd. Veterans Bridge Toll System started operation in February 2017.

Project Forecast:

Year	Total Expense	Total Revenue	Difference
2023	330,000	330,000	0
	330,000	330,000	0

Project Details 2021:

	Prior Years	2021	2022 - 25	Future Years	Total Amount
Revenue					
Fund Balance - CTS			330,000		330,000
Total Revenue			330,000		330,000
Expense					
Design & Engineering			30,000		30,000
Construction			300,000		300,000
Total Expense			330,000		330,000

29-240: Edwin Drive Improvements

Department: **Transportation Capital Projects**
 Project Type: Renovation or Rehabilitation
 Year Identified: 2020
 Start Date: 9/1/2019
 Est. Completion Date: 6/30/2021

Description:

This project will change Edwin Drive from a one-way operation to a two-way operation from Hillcrest Parkway to Edinbrough Lane. The project will include re-striping the roadway to reflect the two-way movement and modifying the existing signal at Hillcrest and Edinbrough. The intersection of Edwin Drive and the south bound ramp to the 168 Bypass will also be modified.

Justification:

The one-way movement along Edwin Drive has proven to be confusing for motorists in the area. This project addresses a potential safety concern by changing the roadway to two-way operation.

Comments:

This project will address concerns with the one-way section of Edwin Road, which can appear to be a valid connection for drivers that are exiting businesses in the area and traveling towards Hillcrest Parkway. Despite the current prohibitive signing, there have been several instances of wrong way travel.

The May 2020 amendments to the FY 2021 CIB changed \$724,000 of the FY 2021 funding for this project from cash to general obligation bonds.

Project Forecast:

Year	Total Expense	Total Revenue	Difference
2021	1,282,000	1,282,000	0
	1,282,000	1,282,000	0

Project Details 2021:

	Prior Years	2021	2022 - 25	Future Years	Total Amount
Revenue					
Fund Balance - General Fund	518,000	558,000			1,076,000
G.O. Debt - City		724,000			724,000
Total Revenue	518,000	1,282,000			1,800,000
Expense					
Design & Engineering	335,000				335,000
Construction		1,032,000			1,032,000
Equipment		250,000			250,000
Other	183,000				183,000
Total Expense	518,000	1,282,000			1,800,000

38-240: Elbow Road Bridge Replacement

Department: **Transportation Capital Projects**
 Project Type: Replacement
 Year Identified: 2020
 Start Date: 7/23/2019
 Est. Completion Date: 7/30/2025

Description:

This project will replace the existing Elbow Road bridge with a 130-ft. long by 48-ft. wide bridge structure. The bridge replacement design and construction will be coordinated with the Elbow Road roadway improvements project # 35-230.

Justification:

The Virginia Dept. of Transportation's (VDOT) has allocated \$6,499,000 in "State of Good Repair" program funds for this bridge replacement project. City Council appropriated \$600,000 in FY 2020 for the design phase. Subsequent project work will be funded in the FY 2021-25 CIP.

Comments:

On July 23, 2019, City Council approved an FY 2020 Capital Budget amendment that added this as a new project and appropriated \$600,000 in funding awarded by VDOT's State of Good Repair Program for the design phase in FY 2020. See also City Council Agenda Item CM-5.

Project Forecast:

Year	Total Expense	Total Revenue	Difference
2021	213,000	213,000	0
2022	5,186,000	5,186,000	0
2023	536,000	536,000	0
	5,935,000	5,935,000	0

Project Details 2021:

	Prior Years	2021	2022 - 25	Future Years	Total Amount
Revenue					
VDOT Reimbursements	600,000	213,000	5,722,000		6,535,000
Total Revenue	600,000	213,000	5,722,000		6,535,000
Expense					
Design & Engineering	600,000				600,000
Construction		141,000	5,722,000		5,863,000
Land Acquisition		72,000			72,000
Total Expense	600,000	213,000	5,722,000		6,535,000

59-250: Elbow Road Center Lane Addition

Department: **Transportation Capital Projects**
 Project Type: Addition or Expansion
 Year Identified: 2021
 Start Date:
 Est. Completion Date:

Description:

This project will add a center lane to Elbow Road from Butts Station Road to Centerville Turnpike.

Justification:

Residential development and traffic are increasing along the Elbow Road corridor. A center lane will help improve safety and traffic flow.

Comments:

Elbow Road is currently a two-lane roadway with minimal shoulder widths and open ditches.

Project Forecast:

Year	Total Expense	Total Revenue	Difference
2023			0
2024			0
2025	250,000	250,000	0
	250,000	250,000	0

Project Details 2021:

	Prior Years	2021	2022 - 25	Future Years	Total Amount
Revenue					
Fund Balance - General Fund			250,000	1,282,500	1,532,500
VDOT Reimbursements				1,532,500	1,532,500
Total Revenue			250,000	2,815,000	3,065,000
Expense					
Design & Engineering			250,000	350,000	600,000
Construction				1,900,000	1,900,000
Land Acquisition				415,000	415,000
Other				150,000	150,000
Total Expense			250,000	2,815,000	3,065,000

35-230: Elbow Road Widening - Phase II

Department: **Transportation Capital Projects**
 Project Type: Addition or Expansion
 Year Identified: 2019
 Start Date: 7/1/2018
 Est. Completion Date: 6/30/2023

Description:

This project will provide for right-of-way acquisition to allow for widening a portion of the existing roadway into a four-lane section. This project will also provide for construction of two 12 ft. lanes with 4 ft. paved shoulders as well as stormwater (ditch) improvements from the eastern end point of the Phase I widening project (approx. 3/4 miles east of Centerville Turnpike) to the Virginia Beach city line.

Justification:

The existing roadway is narrow, with little to no usable shoulders, and the roadside ditches frequently overflow onto the roadway during storm conditions. The improvements provided with this project will correct the roadway deficiencies and provide the needed safety improvements. This project is a continuation of the Elbow Road - Phase I improvement project that was completed in 2016.

Comments:

On June 12, 2018, City Council approved an amendment to the FY 2019-23 CIP that changed this project's funding schedule to align with the updated grant award notice from the Virginia Dept. of Transportation (VDOT). The total estimated project cost is \$20.2 million. VDOT awarded \$8.67 million over two years under the Revenue Sharing Program, which required an equal local match. This project is eligible for future Revenue Sharing awards, and an additional award of \$1.33 million from VDOT is anticipated.

Thus, the following adjustments were made to the funding schedule to match the latest grant award:

FY 2019: Increased budget from \$2,000,000 to \$9,670,000,

FY 2020: Increased plan from \$5,000,000 to \$7,670,000, and

FY 2021: Decreased plan from \$13,200,000 to \$2,860,000 (Note: If VDOT approves the anticipated award, the grant portion will be \$1.33 million and the local portion will be \$1.53 million for the match plus \$200,000). See also City Council Agenda Item CM-8(J-9).

Project Forecast:

Year	Total Expense	Total Revenue	Difference
2021	2,860,000	2,860,000	0
	2,860,000	2,860,000	0

Project Details 2021:

	Prior Years	2021	2022 - 25	Future Years	Total Amount
Revenue					
G.O. Debt - City	8,670,000	1,530,000			10,200,000
VDOT Reimbursements	8,670,000	1,330,000			10,000,000
Total Revenue	17,340,000	2,860,000			20,200,000
Expense					
Design & Engineering	2,000,000				2,000,000
Construction	15,340,000	2,860,000			18,200,000
Total Expense	17,340,000	2,860,000			20,200,000

40-240: Emergency Vehicle Pre-Emption Device Upgrades - Phase II

Department: **Transportation Capital Projects**
 Project Type: System Acquisition or Upgrade
 Year Identified: 2020
 Start Date: 7/9/2019
 Est. Completion Date: 7/30/2024

Description:

This project will install 53 emergency vehicle pre-emption upgrades at various locations throughout the City. These upgrades will enhance the City's public safety capabilities because the devices turn traffic lights green when emergency vehicles are responding to incidents.

Justification:

This project was awarded \$180,000 in reimbursable grant funds from the federal Congestion Mitigation and Air Quality (CMAQ) Program through the Virginia Dept. of Transportation (VDOT). This project will expand the City's current system, which facilitates safe passage of Fire and EMS vehicles through busy intersections and corridors by giving emergency vehicles a green traffic signal indication while displaying a red traffic signal indication to all other approaches at that intersection.

Comments:

On July 9, 2019, City Council approved an FY 2020 Capital Budget amendment that added this as a new project and appropriated the \$180,000 grant awarded to the project.

Project Forecast:

Year	Total Expense	Total Revenue	Difference
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Project Details 2021:

	Prior Years	2021	2022 - 25	Future Years	Total Amount
Revenue					
VDOT Reimbursements	180,000				180,000
Total Revenue	180,000				180,000
Expense					
Other	180,000				180,000
Total Expense	180,000				180,000

61-230: Flashing Yellow Arrow (FYA) Installation - Providence Rd./Mt. Pleasant Rd.

Department: **Transportation Capital Projects**
 Project Type: Replacement
 Year Identified: 2019
 Start Date: 7/1/2018
 Est. Completion Date: 6/30/2023

Description:

This project will convert existing traffic signals at Providence Road and Mount Pleasant Road to flashing yellow arrow traffic signals. This will include the replacement of existing signal heads and upgrade for signal controllers to provide Flashing Yellow Arrow (FYA) operations.

Comments:

On June 12, 2018, City Council approved an amendment to the FY 2019-23 CIP that added this as a new project for FY 2019. VDOT grant funding totaling \$467,000 was awarded to complete this project over a three year period, beginning in FY 2019 and ending in FY 2021.

Project Forecast:

Year	Total Expense	Total Revenue	Difference
2021	162,000	162,000	0
	162,000	162,000	0

Project Details 2021:

	Prior Years	2021	2022 - 25	Future Years	Total Amount
Revenue					
VDOT Reimbursements	305,000	162,000			467,000
Total Revenue	305,000	162,000			467,000
Expense					
Design & Engineering	5,000				5,000
Construction	300,000	162,000			462,000
Total Expense	305,000	162,000			467,000

82-250: Flashing Yellow Arrow (FYA) Installation - S. Military Hwy & George Washington Hwy.

Department: **Transportation Capital Projects**
 Project Type: Replacement
 Year Identified: 2019
 Start Date: 7/1/2018
 Est. Completion Date: 6/30/2023

Description:

This project will convert existing traffic signals on S. Military Hwy & George Washington Hwy. to flashing yellow arrow traffic signals. This project will include the replacement of existing signal heads and upgrade for signal controllers to provide Flashing Yellow Arrow (FYA) operations.

Comments:

On June 9, 2020, City Council approved an amendment to the Adopted FY 2021-2025 CIP that added this as a new project for FY 2021. Federal Highway Safety Improvement Program (HSIP) grant funding of \$305,000 is anticipated for FY 2021; an additional \$16,000 was transferred from the Traffic Signal/Intersection Improvement Project #67-120; since this was a prior allocation, the project has been created in FY 19-20 to make that transfer. The remaining amount of \$277,500 is anticipated to be funded by VDOT; the authorization will be included in a future CIP.

Project Forecast:

Year	Total Expense	Total Revenue	Difference
2021	305,000	305,000	0
	305,000	305,000	0

Project Details 2021:

	Prior Years	2021	2022 - 25	Future Years	Total Amount
Revenue					
VDOT Reimbursements		305,000			305,000
Proffers	16,000				16,000
Total Revenue	16,000	305,000			321,000
Expense					
Construction	16,000	305,000			321,000
Total Expense	16,000	305,000			321,000

09-180: Freeman Ave. Railroad Overpass Bridge

Department: **Transportation Capital Projects**
 Project Type: Addition or Expansion
 Year Identified: 2014
 Start Date: 2/2/2015
 Est. Completion Date: 7/30/2023

Description:

This project will design and construct a bridge on Freeman Avenue over the railroad crossing at the Norfolk-Portsmouth belt-line.

Justification:

As freight-rail activities continue to increase, the need for grade-separated highway-rail crossings is becoming critical to ensure emergency access to the industrial areas along the Elizabeth River. Freeman Avenue serves as the sole roadway access to the Money Point industrial area. Blockages of the existing at-grade railroad crossing create significant logistical challenges when responding to emergencies on the west side of the railroad tracks. An overpass crossing (grade-separated crossing) will provide unimpeded access to and from this industrial area, which will eliminate conflicts between roadway and rail traffic.

Comments:

On June 12, 2018, City Council approved an amendment to the FY 2019-23 CIP that changed this project's funding schedule to FY 2021 and FY 2022 (instead of FY 2019 and FY 2020). See also City Council Agenda Item CM-8(J-13). This project was funded through a state grant award from the Virginia Dept. of Transportation (VDOT) with a local match financed by the South Norfolk TIF.

On December 10, 2019, City Council approved an additional appropriation of \$2.25 million from South Norfolk TIF General Obligation Debt to complete National Environmental Policy Act (NEPA) work so that the Federal Railroad Association (FRA) can begin its award in FY 2021.

Project Forecast:

Year	Total Expense	Total Revenue	Difference
2021	1,500,000	1,500,000	0
2022	23,925,000	23,925,000	0
	25,425,000	25,425,000	0

Project Details 2021:

	Prior Years	2021	2022 - 25	Future Years	Total Amount
Revenue					
Fund Balance - General Fund	71,640				71,640
Cash - South Norfolk TIF		1,500,000	6,000,000		7,500,000
G.O. Debt - South Norfolk TIF	2,250,000		2,670,000		4,920,000
VDOT Reimbursements			15,255,000		15,255,000
Total Revenue	2,321,640	1,500,000	23,925,000		27,746,640
Expense					
Design & Engineering	2,325,000	500,000			2,825,000
Construction	(3,360)	1,000,000	23,925,000		24,921,640
Total Expense	2,321,640	1,500,000	23,925,000		27,746,640

37-230: George Washington Hwy. (US Route 17) Widening

Department: **Transportation Capital Projects**
 Project Type: Addition or Expansion
 Year Identified: 2019
 Start Date: 7/1/2019
 Est. Completion Date: 6/30/2031

Description:

This project will provide for improvements to George Washington Highway (US Route 17) by widening the existing two lane undivided roadway to a four lane divided roadway from Yadkin Road to Canal Drive. This project will also include improvements at three signalized intersections, new pedestrian facilities, and address other safety and access management issues along the corridor.

Justification:

This project will address the existing insufficient transportation capacity and correct deficiencies from Military Highway (Route 13) and Canal Drive. Route 17 is a critical corridor in the region that provides alternate routing for the High Rise Bridge and functions as a key emergency evacuation route.

Comments:

Plans for this project were initiated in 1997 (as part of the 1994 Road Bond Referendum). The preliminary engineering phase was completed and all right-of-way for the project was purchased, but this project never progressed beyond the 60% design phase. Project was scheduled to start in FY 2020, but has since been delayed to FY 2025.

Project Forecast:

Year	Total Expense	Total Revenue	Difference
2021			0
2022			0
2025	2,000,000	2,000,000	0
	2,000,000	2,000,000	0

Project Details 2021:

	Prior Years	2021	2022 - 25	Future Years	Total Amount
Revenue					
G.O. Debt - City	2,500,000		2,000,000	5,800,000	10,300,000
VDOT Reimbursements				17,200,000	17,200,000
Total Revenue	2,500,000		2,000,000	23,000,000	27,500,000
Expense					
Design & Engineering	2,500,000		500,000	2,828,000	5,828,000
Construction				18,045,000	18,045,000
Land Acquisition			1,500,000	2,127,000	3,627,000
Total Expense	2,500,000		2,000,000	23,000,000	27,500,000

35-220: George Washington Hwy. Milling & Paving

Department: **Transportation Capital Projects**
 Project Type: **Renovation or Rehabilitation**
 Year Identified: **2018**
 Start Date: **12/12/2017**
 Est. Completion Date: **7/30/2024**

Description:

This project will provide for the resurfacing of George Washington Highway, which will include milling and paving the roadway.

Justification:

The Virginia Dept. of Transportation's (VDOT) State of Good Repair (SGR) Funding Program is a process that allows municipalities having locally maintained roads and bridges with primary route numbers to apply for state grant funding to rehabilitate eligible infrastructure. Section 33.2-369 of the Code of Virginia establishes the SGR Program and authorizes the Commonwealth Transportation Board to use funds allocated in § 33.2-358 and § 58.1-1741 to provide for state of good repair purposes for the reconstruction and replacement of structurally deficient state and locally owned bridges, and the reconstruction and rehabilitation of pavement on the Interstate System and primary state highway system determined to be deteriorated by the Board, including municipality-maintained primary roadways.

Comments:

On December 12, 2017, City Council approved an FY 2018 Capital Budget amendment that added this as a new project and appropriated \$1 million in funding awarded by VDOT's State of Good Repair Program for use in FY 2018.

Project Forecast:

Year	Total Expense	Total Revenue	Difference
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Project Details 2021:

	Prior Years	2021	2022 - 25	Future Years	Total Amount
Revenue					
VDOT Reimbursements		1,000,000			1,000,000
Total Revenue		1,000,000			1,000,000
Expense					
Construction		1,000,000			1,000,000
Total Expense		1,000,000			1,000,000

60-250: Greentree Road Extension

Department: **Transportation Capital Projects**
 Project Type: Addition or Expansion
 Year Identified: 2021
 Start Date:
 Est. Completion Date:

Description:

This project will extend Greentree Rd. It will include the acquisition of a new 90 ft. Right-of-Way (ROW) section and a four-lane divided roadway extension of Greentree Rd. for approximately 0.5 miles between Kempsville Rd. at Greentree Rd. to Clearfield Ave. at Discovery Drive. The new roadway will include new traffic signals at the intersection to Clearfield Ave., a right turn lane on Clearfield Ave. westbound, a no-signal connection at Ian Way, a traffic signal modification at Kempsville Rd., a right turn lane on Kempsville Rd. eastbound, public utilities, street lighting, stormwater structures, and longitudinal stormwater BMPs.

Project Forecast:

Year	Total Expense	Total Revenue	Difference
2023			0
2024			0
2025	500,000	500,000	0
	500,000	500,000	0

Project Details 2021:

	Prior Years	2021	2022 - 25	Future Years	Total Amount
Revenue					
Fund Balance - General Fund			500,000	5,550,000	6,050,000
VDOT Reimbursements				6,050,000	6,050,000
Total Revenue			500,000	11,600,000	12,100,000
Expense					
Design & Engineering			500,000	500,000	1,000,000
Construction				8,600,000	8,600,000
Land Acquisition				2,500,000	2,500,000
Total Expense			500,000	11,600,000	12,100,000

67-250: Johnstown Road at Battlefield Blvd - Right Turn Lane

Department: **Transportation Capital Projects**
 Project Type: Addition or Expansion
 Year Identified: 2021
 Start Date: 7/1/2020
 Est. Completion Date: 6/30/2027

Description:

This project will provide a dedicated right turn lane on eastbound Johnstown Rd to southbound Battlefield Blvd. S.

Justification:

Adding a dedicated Right Turn Lane on Johnstown Road at Battlefield Boulevard will remove much of the backup traffic caused by the current inadequate lane configuration at the intersection.

Comments:

Johnstown Rd at Battlefield Blvd currently has a combined through and right turn lane at the intersection and a dedicated left-turn lane.

Project Forecast:

Year	Total Expense	Total Revenue	Difference
2021	750,000	750,000	0
2022			0
2025	300,000	300,000	0
	1,050,000	1,050,000	0

Project Details 2021:

	Prior Years	2021	2022 - 25	Future Years	Total Amount
Revenue					
Fund Balance - General Fund		750,000		600,000	1,350,000
Cash - Lockbox City			300,000		300,000
Total Revenue		750,000	300,000	600,000	1,650,000
Expense					
Design & Engineering			300,000		300,000
Construction				600,000	600,000
Land Acquisition		750,000			750,000
Total Expense		750,000	300,000	600,000	1,650,000

30-240: Johnstown Road Ditch and Shoulder Improvements

Department: **Transportation Capital Projects**
 Project Type: Addition or Expansion
 Year Identified: 2020
 Start Date: 10/1/2020
 Est. Completion Date: 12/30/2024

Description:

This project will provide for roadway shoulder and ditch improvements on Johnstown Road. This project will provide 90 ft. right-of-way (ROW) section on Johnstown Road, at approximately 3.5 miles from Buskey Road and Benefit Road to beyond Elaine Street. Project improvements will include 12 feet of paved travel lanes, 12 feet of paved shoulders, and relocated ditches. Some utility relocation and street lighting will also be required.

Justification:

Traffic volume has increased on this rural type roadway increasing safety concerns due to the narrow pavement width and deep ditches on both sides of the road with no shoulders.

Comments:

This project was originally part of the City's 1994 plan. Design was completed, and land acquisition was completed in 1999. However, the project had to be put on hold due to funding limitations.

The May 2020 amendments to the FY 2021 CIB changed \$5.0 million of the FY 2021 funding for this project from cash to general obligation bonds.

Project Forecast:

Year	Total Expense	Total Revenue	Difference
2021	5,000,000	5,000,000	0
2022	5,000,000	5,000,000	0
2023	12,500,000	12,500,000	0
	22,500,000	22,500,000	0

Project Details 2021:

	Prior Years	2021	2022 - 25	Future Years	Total Amount
Revenue					
Fund Balance - General Fund			7,500,000		7,500,000
G.O. Debt - City		5,000,000			5,000,000
VDOT Revenue Share			10,000,000		10,000,000
Total Revenue		5,000,000	17,500,000		22,500,000
Expense					
Design & Engineering		4,500,000			4,500,000
Construction			17,500,000		17,500,000
Other		500,000			500,000
Total Expense		5,000,000	17,500,000		22,500,000

63-250: Master Transportation Plan Update

Department: **Transportation Capital Projects**
 Project Type: Study
 Year Identified: 2021
 Start Date: 7/1/2021
 Est. Completion Date: 6/30/2023

Description:

This project will provide for transportation modeling and analysis in support of the City's Comprehensive Plan update. The Master Transportation Plan will serve as a companion document to the Comprehensive Land Use Plan and will identify supporting roadway networks based on future land development patterns.

Justification:

Update of the Master Transportation Plan is necessary to identify the transportation network and policies that support the land use scenarios and assumptions identified in the Land Use Plan update.

Comments:

The Comprehensive Plan is required to be updated every 5 years. The Planning Department will commence with an update of the Comprehensive Plan in the Fall of 2019.

Project Forecast:

Year	Total Expense	Total Revenue	Difference
2021	250,000	250,000	0
	250,000	250,000	0

Project Details 2021:

	Prior Years	2021	2022 - 25	Future Years	Total Amount
Revenue					
Fund Balance - General Fund		250,000			250,000
Total Revenue		250,000			250,000
Expense					
Design & Engineering		250,000			250,000
Total Expense		250,000			250,000

42-230: Mt. Pleasant Rd. Widening - Phase II

Department: **Transportation Capital Projects**
 Project Type: Addition or Expansion
 Year Identified: 2019
 Start Date: 7/1/2019
 Est. Completion Date: 6/30/2023

Description:

This project will provide for the widening of Mt. Pleasant Road by constructing a third lane, which will be a center lane for left turning movements, between the Coopers Ditch Bridge at the eastern end point of phase I improvements and Centerville Turnpike.

Justification:

The heavy traffic volumes and high demand for left-turns along this segment of Mt. Pleasant Road create safety and congestion issues in this area. The addition of the center lane will accommodate left-turning traffic and reduce congestion along this corridor.

Comments:

This project was prioritized under the assumption that state funding may be available. If state funding is not available, then this project will need to be re-evaluated to determine if it is still feasible and re-prioritized based on the feasibility findings.

Phase I of the Mt. Pleasant Road Widening project was funded in FY 2018. Phase II will be a continuation of those improvements.

The May 2020 amendments to the FY 2021 CIB changed \$500,000 of the FY 2021 funding for this project from cash to general obligation bonds.

Project Forecast:

Year	Total Expense	Total Revenue	Difference
2021	2,800,000	2,800,000	0
2022	5,950,000	5,950,000	0
	8,750,000	8,750,000	0

Project Details 2021:

	Prior Years	2021	2022 - 25	Future Years	Total Amount
Revenue					
Fund Balance - General Fund	950,000	425,000	2,975,000		4,350,000
G.O. Debt - City		500,000			500,000
VDOT Reimbursements		1,875,000	2,975,000		4,850,000
Total Revenue	950,000	2,800,000	5,950,000		9,700,000
Expense					
Design & Engineering	950,000				950,000
Construction			5,950,000		5,950,000
Other		2,800,000			2,800,000
Total Expense	950,000	2,800,000	5,950,000		9,700,000

61-250: Mt. Pleasant Road at Great Bridge Bypass - Interchange Improvement

Department: **Transportation Capital Projects**
 Project Type: Addition or Expansion
 Year Identified: 2021
 Start Date: 7/1/2023
 Est. Completion Date: 12/31/2027

Description:

This project will re-construct the Chesapeake Expressway (Route 168) to facilitate better traffic flow and ease congestion along Mt. Pleasant Road (Route 165). This project will also provide the needed interchange/ramp improvements to support the future widening of Mt. Pleasant Road to a four lane divided highway. The cross section through the project area will include two through travel lanes in each direction, an eastbound displaced left turn lane, a westbound conventional left turn lane, bicycle lanes (6 ft. wide) in each direction, and sidewalks (5 ft. wide) on both sides of the roadway. A new traffic signal will also be installed at the location where the displaced left turn crosses the opposing through lanes.

Justification:

This project will implement the displaced left turn alternative design as recommended in the planning study and will address congestion and safety concerns in the area.

Comments:

This project was selected to receive SmartScale funding through VDOT starting in FY24. A planning study was completed for this interchange using City funds in 2018.

Project Forecast:

Year	Total Expense	Total Revenue	Difference
2024	617,000	617,000	0
2025	5,384,000	5,384,000	0
	6,001,000	6,001,000	0

Project Details 2021:

	Prior Years	2021	2022 - 25	Future Years	Total Amount
Revenue					
VDOT Reimbursements			6,001,000		6,001,000
Total Revenue			6,001,000		6,001,000
Expense					
Design & Engineering			617,000		617,000
Construction			5,384,000		5,384,000
Total Expense			6,001,000		6,001,000

69-250: Mt. Pleasant Road. Widening - Right-of-Way Acquisition

Department: **Transportation Capital Projects**
 Project Type: Addition or Expansion
 Year Identified: 2021
 Start Date: 7/1/2024
 Est. Completion Date: 6/30/2028

Description:

This project will provide for the purchase and acquisition of approximately 330,000 square feet of Right-of-Way (ROW) to construct a standard two lane road section for Mt. Pleasant Rd. from Fall Ridge Rd. to NALF Fentress.

Justification:

Additional ROW is needed to bring this transportation corridor up to the current standard.

Comments:

In coordination with Public Utilities project to construct a water distribution main serving NALF Fentress, Public Works will acquire ROW for a future standard two lane road section with shoulders and ditches.

Project Forecast:

Year	Total Expense	Total Revenue	Difference
2021			0
2025	600,000	600,000	0
	600,000	600,000	0

Project Details 2021:

	Prior Years	2021	2022 - 25	Future Years	Total Amount
Revenue					
Fund Balance - General Fund			600,000		600,000
Total Revenue			600,000		600,000
Expense					
Land Acquisition			500,000		500,000
Other			100,000		100,000
Total Expense			600,000		600,000

07-190: Non-Arterial Street Repaving

Department: **Transportation Capital Projects**
 Project Type: **Renovation or Rehabilitation**
 Year Identified: **2015**
 Start Date: **9/1/2014**
 Est. Completion Date: **7/30/2025**

Description:

This project will provide funding to address residential street resurfacing. Project funds may also be used to pave non-arterial streets in non-residential areas.

Justification:

State maintenance funds allocated for Citywide re-paving efforts totaled \$3.5 million per year on average through FY 2016, and then \$2 million per year was anticipated going forward starting in FY 2017. The City has provided matching funds (1:1 match). Due to this funding level, the City has been able to keep arterial and collector streets on a regular re-surfacing schedule and the condition of those pavements is generally acceptable. However, additional resources would be needed to address the increasing number of subdivision streets in poor condition.

Comments:

For the FY 2020-24 CIP, the project plan was updated to add requirements for FY 2024. The project budget was reduced in the FY 2018-22 CIP because the previously anticipated future VDOT Revenue Share funding will not be available for FY 2019 - FY 2022.

Project Forecast:

Year	Total Expense	Total Revenue	Difference
2021	2,000,000	2,000,000	0
2024			0
	2,000,000	2,000,000	0

Project Details 2021:

	Prior Years	2021	2022 - 25	Future Years	Total Amount
Revenue					
Fund Balance - General Fund	8,150,000	2,000,000			10,150,000
Cash - Lockbox City	2,000,000				2,000,000
VDOT Revenue Share	1,000,000				1,000,000
Total Revenue	11,150,000	2,000,000			13,150,000
Expense					
Construction	11,150,000	2,000,000			13,150,000
Total Expense	11,150,000	2,000,000			13,150,000

58-230: Number 10 Lane Bridge - Replacement/Repairs

Department: **Transportation Capital Projects**
 Project Type: Replacement
 Year Identified: 2019
 Start Date: 7/1/2018
 Est. Completion Date: 6/30/2023

Description:

This project will provide for the replacement of the bridge (culvert) on Number 10 Lane at the Lindsey Drainage Canal as part of the VDOT State of Good Repair Program.

Comments:

On June 12, 2018, City Council approved an amendment to the FY 2019-23 CIP that added this as a new project for FY 2019. VDOT grant funding of \$1,251,000 was awarded to complete this project, with design completed in FY 2019 and construction completed during FY 2022.

Project Forecast:

Year	Total Expense	Total Revenue	Difference
2022	1,090,000	1,090,000	0
	1,090,000	1,090,000	0

Project Details 2021:

	Prior Years	2021	2022 - 25	Future Years	Total Amount
Revenue					
VDOT Reimbursements	161,000		1,090,000		1,251,000
Total Revenue	161,000		1,090,000		1,251,000
Expense					
Design & Engineering	161,000				161,000
Construction			1,090,000		1,090,000
Total Expense	161,000		1,090,000		1,251,000

56-230: Oaklette Bridge (Indian River Road) - Replacement/Repairs

Department: **Transportation Capital Projects**
 Project Type: Replacement
 Year Identified: 2019
 Start Date: 7/1/2018
 Est. Completion Date: 6/30/2023

Description:

This project will provide for replacement/repairs of the Oaklette Bridge on Indian River Road as part of the VDOT State of Good Repair Program.

Comments:

On June 12, 2018, City Council approved an amendment to the FY 2019-23 CIP that added this as a new project for FY 2019. VDOT grant funding totaling \$5,128,000 was awarded to complete this project over a four year period, beginning in FY 2019 and ending in FY 2022. (VDOT awarded \$482,000 in FY 2019, \$1,200,000 in FY 2021, and \$3,446,000 in FY 2022).

Project Forecast:

Year	Total Expense	Total Revenue	Difference
2021	1,200,000	1,200,000	0
2022	3,446,000	3,446,000	0
	4,646,000	4,646,000	0

Project Details 2021:

	Prior Years	2021	2022 - 25	Future Years	Total Amount
Revenue					
VDOT Reimbursements	482,000	1,200,000	3,446,000		5,128,000
Total Revenue	482,000	1,200,000	3,446,000		5,128,000
Expense					
Design & Engineering	482,000				482,000
Construction		1,200,000	3,446,000		4,646,000
Total Expense	482,000	1,200,000	3,446,000		5,128,000

57-230: Old Mill Rd. Bridge - Replacement/Repairs

Department: **Transportation Capital Projects**
 Project Type: Replacement
 Year Identified: 2019
 Start Date: 7/1/2018
 Est. Completion Date: 6/30/2023

Description:

This project will provide for the replacement of the bridge (culvert) on Old Mill Road Bridge as part of the VDOT State of Good Repair Program.

Comments:

On June 12, 2018, City Council approved an amendment to the FY 2019-23 CIP that added this as a new project for FY 2019. VDOT grant funding totaling \$1,153,000 was awarded to complete this project over a three year period, beginning in FY 2019 and ending in FY 2021. (VDOT awarded \$39,000 in FY 2019, \$98,000 in FY 2020, and \$1,016,000 in 2021).

Project Forecast:

Year	Total Expense	Total Revenue	Difference
2021	1,016,000	1,016,000	0
	1,016,000	1,016,000	0

Project Details 2021:

	Prior Years	2021	2022 - 25	Future Years	Total Amount
Revenue					
VDOT Reimbursements	137,000	1,016,000			1,153,000
Total Revenue	137,000	1,016,000			1,153,000
Expense					
Design & Engineering	39,000				39,000
Construction	98,000	1,016,000			1,114,000
Total Expense	137,000	1,016,000			1,153,000

65-250: Pavement Condition Study

Department: **Transportation Capital Projects**
 Project Type: Study
 Year Identified: 2021
 Start Date: 7/1/2020
 Est. Completion Date: 8/31/2022

Description:

This project will provide for retesting Chesapeake's street inventory. This will include a Surface Condition Survey, a Deflection Testing, and an update to the GIS and Pavement Management interface applications.

Justification:

A continued Pavement Condition Data Collection program ensures the integrity of the information/data in the City's Pavement Management System to identify, forecast, and plan the maintenance and rehabilitation of the City's pavement/street network.

Comments:

The IMS/PavePro - Pavement Management System has been in service for over 15 years. The last pavement condition data collection was performed in FY 2014. This renewal project is needed to ensure the information/data in our Pavement Management System accurately reflects the current physical condition of our City of Chesapeake pavement/street network.

Project Forecast:

Year	Total Expense	Total Revenue	Difference
2021	300,000	300,000	0
	300,000	300,000	0

Project Details 2021:

	Prior Years	2021	2022 - 25	Future Years	Total Amount
Revenue					
Fund Balance - General Fund		300,000			300,000
Total Revenue		300,000			300,000
Expense					
Design & Engineering		300,000			300,000
Total Expense		300,000			300,000

37-210: Repair & Maintenance Roads and Bridges - Phase IV

Department: **Transportation Capital Projects**
 Project Type: Renovation or Rehabilitation
 Year Identified: 2017
 Start Date: 7/1/2016
 Est. Completion Date: 12/30/2022

Description:

This project will provide for design and rehabilitation of several deficient bridges to extend their service life. This project will include Oaklette Bridge, Route 168 Bypass over Battlefield Boulevard, Number Ten Lane Bridge, New Mathues Bridge, and Silverton Road Bridge.

Justification:

Annual inspection reports show significant deterioration in the bridge structures that will require major bridge repairs/rehabilitation in order to maintain the structural integrity and extend the service life of the bridges identified in the project description above.

Comments:

On May 28, 2019, City Council approved an FY 2019 Capital Budget amendment that transferred \$819,427 from this project (# 37-210) to the "Gilmerton Auxiliary Counterweights Bridge Repairs" project # 38-230 in order to fund the long-term repair solution for the Gilmerton Bridge.

The funding source for this project will be from the collection of overweight citation fees.

Project Forecast:

Year	Total Expense	Total Revenue	Difference
2021	500,000	500,000	0
2022	500,000	500,000	0
	1,000,000	1,000,000	0

Project Details 2021:

	Prior Years	2021	2022 - 25	Future Years	Total Amount
Revenue					
Fund Balance - General Fund	1,140,573	500,000	500,000		2,140,573
Total Revenue	1,140,573	500,000	500,000		2,140,573
Expense					
Design & Engineering	460,000				460,000
Construction	680,573	500,000	500,000		1,680,573
Total Expense	1,140,573	500,000	500,000		2,140,573

41-210: Rural Roads Safety Improvement Program

Department: **Transportation Capital Projects**
 Project Type: Renovation or Rehabilitation
 Year Identified: 2017
 Start Date: 7/1/2016
 Est. Completion Date: 6/30/2021

Description:

This program will provide funding to address existing deficiencies along the City's rural roads. Potential improvements include realignment of curves, relocation of ditches, pavement widening, and various other measures to improve safety. This program will require owner dedication of Right-of-Way (ROW). Thus, it will include the legal and filing costs related to ROW acquisition.

Justification:

The City of Chesapeake has over 100 miles of rural roads that do not meet today's design standards. This program will provide a means to systematically address safety issues as they are identified.

Comments:

This is a new program that was implemented as a pilot project for FY 2017. Future year appropriations are subject to change depending on the success of the pilot.

Project Forecast:

Year	Total Expense	Total Revenue	Difference
2021	500,000	500,000	0
	500,000	500,000	0

Project Details 2021:

	Prior Years	2021	2022 - 25	Future Years	Total Amount
Revenue					
Fund Balance - General Fund	2,050,000	500,000			2,550,000
Total Revenue	2,050,000	500,000			2,550,000
Expense					
Design & Engineering	102,500	25,000			127,500
Construction	1,742,500	425,000			2,167,500
Land Acquisition	205,000	50,000			255,000
Total Expense	2,050,000	500,000			2,550,000

70-250: Traffic Signal Reconstruction Project

Department: **Transportation Capital Projects**
 Project Type: Renovation or Rehabilitation
 Year Identified: 2021
 Start Date: 7/1/2020
 Est. Completion Date: 6/30/2023

Description:

This project will replace the existing traffic signal foundations, poles, and mast arms at the following locations: Mt. Pleasant Road and Huron Drive; Airline Blvd. and Ahoy Drive; and Edinburgh Parkway and Hillcrest Parkway. The existing signal heads, cabinets, and auxiliary equipment will be re-used where practical.

Justification:

A comprehensive structural analysis of the referenced signals is underway and preliminary findings have indicated full replacement of the signal foundations is necessary.

Comments:

These three locations are currently signalized; however, a recent inspection of the signal pole foundations noted significant deterioration that must be addressed in order to ensure the structural integrity of the signal structure.

Project Forecast:

Year	Total Expense	Total Revenue	Difference
2021	1,155,000	1,155,000	0
	1,155,000	1,155,000	0

Project Details 2021:

	Prior Years	2021	2022 - 25	Future Years	Total Amount
Revenue					
Fund Balance - General Fund		577,500			577,500
Cash - Lockbox City		577,500			577,500
Total Revenue		1,155,000			1,155,000
Expense					
Design & Engineering		110,000			110,000
Construction		950,000			950,000
Land Acquisition		45,000			45,000
Equipment		50,000			50,000
Total Expense		1,155,000			1,155,000

28-220: Traffic Signals and Intersection Improvements - Phase III

Department: **Transportation Capital Projects**
 Project Type: **Renovation or Rehabilitation**
 Year Identified: **2018**
 Start Date: **7/1/2017**
 Est. Completion Date: **12/30/2022**

Description:

This project will provide for installation of traffic signals, intersection improvements, upgrades, and/or replacements at various locations based upon traffic volumes, accident history, and technology improvements. This project will also include repairs to and/or replacement of the concrete foundation at two signal locations identified as being in need of repair.

Justification:

Traffic signal installations, repairs, and upgrades are necessary to provide for safe and efficient traffic flow through major intersections. This will be Phase III of an ongoing improvement project.

Comments:

Funding will be provided by the annual state road maintenance funding provided by the Virginia Dept. of Transportation (VDOT).

Project Forecast:

Year	Total Expense	Total Revenue	Difference
2021	100,000	100,000	0
2022	100,000	100,000	0
	200,000	200,000	0

Project Details 2021:

	Prior Years	2021	2022 - 25	Future Years	Total Amount
Revenue					
VDOT Reimbursements	800,000	100,000	100,000		1,000,000
Total Revenue	800,000	100,000	100,000		1,000,000
Expense					
Design & Engineering	50,000				50,000
Construction	720,000	90,000	90,000		900,000
Equipment	30,000	10,000	10,000		50,000
Total Expense	800,000	100,000	100,000		1,000,000

46-170: Triple Decker Bridge Rehabilitation

Department: **Transportation Capital Projects**
 Project Type: Renovation or Rehabilitation
 Year Identified: 2013
 Start Date: 7/1/2012
 Est. Completion Date: 6/30/2023

Description:

This project will provide for the rehabilitation of the existing bridge structure in order to extend the service life of the Triple Decker Bridge.

Justification:

Rehabilitation is necessary to avoid implementation of a weight restriction on the existing bridge structure.

Comments:

On June 12, 2018, City Council approved an amendment to the FY 2019-23 CIP that changed this project's funding and schedule to align with the most recent grant award notice from the Virginia Department of Transportation (VDOT). The changes are now reflected in the project summary. See also City Council Agenda Item CM-8(J-11).

During FY 2017, the City's Public Works Dept. applied for grant funding from the VDOT's State of Good Repair (SGR) grant funding program for bridges for the additional \$40 million needed to complete this project. This project was initially funded at \$1.12 million in the FY 2016 CIP budget. However, that funding level would only allow for patching issues, and this bridge requires either a replacement or a major rehabilitation. The VDOT SGR grant was awarded for funding in the amount of \$6.83 million beginning in FY 2019.

Project Forecast:

Year	Total Expense	Total Revenue	Difference
2021	5,766,000	5,766,000	0
	5,766,000	5,766,000	0

Project Details 2021:

	Prior Years	2021	2022 - 25	Future Years	Total Amount
Revenue					
Fund Balance - Other Funds	470,000				470,000
Fund Balance - Capital Projects Fund	650,000				650,000
VDOT Reimbursements	2,015,000	5,766,000			7,781,000
Total Revenue	3,135,000	5,766,000			8,901,000
Expense					
Design & Engineering	1,500,000				1,500,000
Construction	1,635,000	5,766,000			7,401,000
Total Expense	3,135,000	5,766,000			8,901,000

71-250: Weiss Lane Widening

Department: **Transportation Capital Projects**
 Project Type: Addition or Expansion
 Year Identified: 2021
 Start Date: 7/1/2021
 Est. Completion Date: 6/30/2026

Description:

This project will widen Weiss Lane. The project work will provide for larger radius curves and wider pavement in two locations: at Doyle Property and at Whites Nursery closer to Bertram Street. It will provide 24 ft. pavement and 5ft. gravel shoulders for 2,400 lane ft. of the roadway. It will also relocate the power poles and realign drainage. The improvements will make Weiss Lane perpendicular to Old Mill, and will provide turn lanes from Old Mill.

Justification:

Residential development and traffic are increasing along the Weiss lane corridor. Road widening will help improve safety and traffic flow.

Comments:

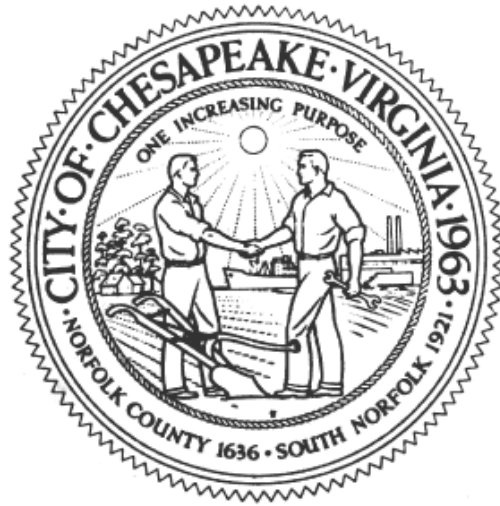
Weiss Lane is currently a two-lane narrow roadway with minimal shoulder widths and open ditches.

Project Forecast:

Year	Total Expense	Total Revenue	Difference
2021			0
2022	500,000	500,000	0
2025	400,000	400,000	0
	900,000	900,000	0

Project Details 2021:

	Prior Years	2021	2022 - 25	Future Years	Total Amount
Revenue					
Fund Balance - General Fund				1,450,000	1,450,000
Cash - Lockbox City			400,000		400,000
VDOT Reimbursements				2,350,000	2,350,000
Proffers			500,000		500,000
Total Revenue			900,000	3,800,000	4,700,000
Expense					
Design & Engineering			400,000	400,000	800,000
Construction				3,250,000	3,250,000
Land Acquisition			500,000	150,000	650,000
Total Expense			900,000	3,800,000	4,700,000



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