



Traffic Signals

(P507154)

Category	Transportation	Date Last Modified	01/11/22
SubCategory	Traffic Improvements	Administering Agency	Transportation
Planning Area	Countywide	Status	Ongoing

EXPENDITURE SCHEDULE (\$000s)

Cost Elements	Total	Thru FY21	Est FY22	Total 6 Years	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	Beyond 6 Years
Planning, Design and Supervision	19,952	15,002	-	4,950	825	825	825	825	825	825	-
Land	19	19	-	-	-	-	-	-	-	-	-
Site Improvements and Utilities	55,473	20,365	6,048	29,060	4,510	4,510	5,010	5,010	5,010	5,010	-
Construction	76	76	-	-	-	-	-	-	-	-	-
Other	1,273	1,273	-	-	-	-	-	-	-	-	-
TOTAL EXPENDITURES	76,793	36,735	6,048	34,010	5,335	5,335	5,835	5,835	5,835	5,835	-

FUNDING SCHEDULE (\$000s)

Funding Source	Total	Thru FY21	Est FY22	Total 6 Years	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	Beyond 6 Years
G.O. Bonds	68,507	28,449	6,048	34,010	5,335	5,335	5,835	5,835	5,835	5,835	-
Recordation Tax Premium (MCG)	8,286	8,286	-	-	-	-	-	-	-	-	-
TOTAL FUNDING SOURCES	76,793	36,735	6,048	34,010	5,335	5,335	5,835	5,835	5,835	5,835	-

OPERATING BUDGET IMPACT (\$000s)

Impact Type	Total 6 Years	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28
Maintenance	252	12	24	36	48	60	72
Energy	504	24	48	72	96	120	144
Program-Staff	450	50	50	50	100	100	100
NET IMPACT	1,206	86	122	158	244	280	316
FULL TIME EQUIVALENT (FTE)		1	1	1	2	2	2

APPROPRIATION AND EXPENDITURE DATA (\$000s)

Appropriation FY 23 Request	5,335	Year First Appropriation	FY71
Appropriation FY 24 Request	5,335	Last FY's Cost Estimate	64,123
Cumulative Appropriation	42,783		
Expenditure / Encumbrances	37,507		
Unencumbered Balance	5,276		

PROJECT DESCRIPTION

This project provides for the design, construction, and maintenance of vehicular and pedestrian traffic signals and signal systems including: new and existing signals, reconstruction/replacement of aged and obsolete signals and components, auxiliary signs; Accessible Pedestrian Signals (APS), upgrades of the County's centrally-controlled computerized traffic signal system, and communications and interconnect into the signal system. \$150,000 is included each fiscal year for the installation of accessible pedestrian signals at five intersections to improve pedestrian safety for persons with disabilities. This will provide more easily accessible, raised buttons to press when crossing the road. Also, this effort provides audio cues to indicate when it is safe to cross.

COST CHANGE

Cost increase due to a \$500,000 increase in FY25 to FY28 and the addition of FY27 and FY28 to this ongoing project.

PROJECT JUSTIFICATION

The growth in County population and vehicular registrations continues to produce increasing traffic volumes. Additionally, population growth results in the need for goods and services, contributing to higher vehicle volumes. The resulting increases raise traffic congestion levels and contribute to the increase in the number of vehicle crashes. Managing traffic growth and operations on the County transportation network requires a continued investment in the traffic signal system to increase intersection safety; accommodate changes in traffic patterns and roadway geometry; reduce intersection delays, energy consumption, and air pollution; and provide coordinated movement on arterial routes through effective traffic management and control, by utilizing modern traffic signal technologies. Studies include the Traffic Signal Inspection and Assessment Program (2016), the Infrastructure Maintenance Task Force (2010), and the Pedestrian Safety Initiative (2007), which all identified traffic signals in need of life-cycle replacement as funding is available.

OTHER

Approximately 40 projects are completed annually by a combination of contractual and County work crews. One aspect of this project focuses on improving pedestrian walkability by creating a safe walking environment, utilizing selected engineering technologies, and ensuring Americans with Disabilities Act (ADA) compliance. All new and reconstructed traffic signals are designed and constructed to include appropriate pedestrian features - crosswalks, curb ramps, countdown pedestrian signals, APS, and applicable signing. A significant portion of the traffic signal work will continue to be in the central business districts and other commercial areas, where costs are higher due to more underground utilities and congested work areas. Likewise, new signals in outlying, developing areas are more expensive due to longer runs of communication cable. Since FY97, the fiber optic interconnection of traffic signals has been funded through the Fibernet project. This project will help the County achieve its Vision Zero goals to reduce deaths and serious injuries on County roadways to zero by 2030.

DISCLOSURES

A pedestrian impact analysis will be performed during design or is in progress. Expenditures will continue indefinitely.

COORDINATION

Advanced Transportation Management System, Verizon, FiberNet CIP (No. 509651), Maryland State Highway Administration, Potomac Electric Power Company, Washington Gas and Light, Washington Suburban Sanitary Commission, Montgomery County Pedestrian Safety Advisory Committee, and Citizens Advisory Boards, and Maryland-National Capital Park and Planning Commission.