



Traffic Signals

(P507154)

Category	Transportation	Date Last Modified	01/08/24
SubCategory	Traffic Improvements	Administering Agency	Transportation
Planning Area	Countywide	Status	Ongoing

EXPENDITURE SCHEDULE (\$000s)

Cost Elements	Total	Thru FY23	Est FY24	Total 6 Years	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	Beyond 6 Years
Planning, Design and Supervision	28,001	22,407	644	4,950	825	825	825	825	825	825	-
Land	19	19	-	-	-	-	-	-	-	-	-
Site Improvements and Utilities	58,306	22,194	6,544	29,568	4,928	4,928	4,928	4,928	4,928	4,928	-
Construction	78	78	-	-	-	-	-	-	-	-	-
Other	3,112	1,912	1,200	-	-	-	-	-	-	-	-
TOTAL EXPENDITURES	89,516	46,610	8,388	34,518	5,753	5,753	5,753	5,753	5,753	5,753	-

FUNDING SCHEDULE (\$000s)

Funding Source	Total	Thru FY23	Est FY24	Total 6 Years	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	Beyond 6 Years
Current Revenue: General	185	-	185	-	-	-	-	-	-	-	-
G.O. Bond Premium	186	186	-	-	-	-	-	-	-	-	-
G.O. Bonds	79,499	38,138	6,843	34,518	5,753	5,753	5,753	5,753	5,753	5,753	-
Recordation Tax Premium (MCG)	8,286	8,286	-	-	-	-	-	-	-	-	-
State Aid	1,360	-	1,360	-	-	-	-	-	-	-	-
TOTAL FUNDING SOURCES	89,516	46,610	8,388	34,518	5,753	5,753	5,753	5,753	5,753	5,753	-

OPERATING BUDGET IMPACT (\$000s)

Impact Type	Total 6 Years	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30
Maintenance	270	15	27	39	51	63	75
Energy	516	26	50	74	98	122	146
Program-Staff	810	90	90	90	180	180	180
NET IMPACT	1,596	131	167	203	329	365	401
FULL TIME EQUIVALENT (FTE)		1	1	1	2	2	2

APPROPRIATION AND EXPENDITURE DATA (\$000s)

Appropriation FY 25 Request	5,753	Year First Appropriation	FY71
Appropriation FY 26 Request	5,753	Last FY's Cost Estimate	77,338
Cumulative Appropriation	54,998		
Expenditure / Encumbrances	47,956		

APPROPRIATION AND EXPENDITURE DATA (\$000s)

Unencumbered Balance

7,042

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 and audio cues to indicate when it is safe to cross. The planning, design and construction of school beacons will provide a remote connection for the beacons that enhances communication so that equipment monitoring and programming changes for the flashers may be accomplished faster and remotely without having to physically access the devices.

COST CHANGE

Cost increase due to inflation and the addition of FY29 and FY30.

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

This project will help the County achieve its Vision Zero goals to reduce deaths and serious injuries on County roadways resulting from vehicle crashes to zero by 2030. Approximately 60 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, accessible pedestrian/countdown pedestrian signals (APS/CPS), and applicable signing. Additionally, pedestrian hybrid beacons (PHB) are employed at midblock pedestrian crossings or designated intersections to provide a safe, protected crossing. 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.

FISCAL NOTE

FY24 supplemental in State Aid for the amount of \$1,200,000. FY24 supplemental in CR: General for \$184,788.

DISCLOSURES

A pedestrian impact analysis will be performed during design or is in progress. Expenditures will continue indefinitely. The County Executive asserts that this project conforms to the requirement of relevant local plans, as required by the Maryland Economic Growth, Resource Protection and Planning Act.

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.