



# Traffic Signals

(P507154)

Category	Transportation	Date Last Modified	04/13/23
SubCategory	Traffic Improvements	Administering Agency	Transportation
Planning Area	Countywide	Status	Ongoing

## EXPENDITURE SCHEDULE (\$000s)

Cost Elements	Total	Thru FY22	Rem FY22	Total 6 Years	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	Beyond 6 Years
Planning, Design and Supervision	23,061	18,111	-	4,950	825	825	825	825	825	825	-
Land	19	19	-	-	-	-	-	-	-	-	-
Site Improvements and Utilities	50,947	21,906	821	28,220	4,510	4,670	4,760	4,760	4,760	4,760	-
Construction	76	76	-	-	-	-	-	-	-	-	-
Other	1,850	1,850	-	-	-	-	-	-	-	-	-
<b>TOTAL EXPENDITURES</b>	<b>75,953</b>	<b>41,962</b>	<b>821</b>	<b>33,170</b>	<b>5,335</b>	<b>5,495</b>	<b>5,585</b>	<b>5,585</b>	<b>5,585</b>	<b>5,585</b>	<b>-</b>

## FUNDING SCHEDULE (\$000s)

Funding Source	Total	Thru FY22	Rem FY22	Total 6 Years	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	Beyond 6 Years
G.O. Bond Premium	186	186	-	-	-	-	-	-	-	-	-
G.O. Bonds	67,321	33,490	821	33,010	5,335	5,335	5,585	5,585	5,585	5,585	-
Recordation Tax Premium (MCG)	8,286	8,286	-	-	-	-	-	-	-	-	-
State Aid	160	-	-	160	-	160	-	-	-	-	-
<b>TOTAL FUNDING SOURCES</b>	<b>75,953</b>	<b>41,962</b>	<b>821</b>	<b>33,170</b>	<b>5,335</b>	<b>5,495</b>	<b>5,585</b>	<b>5,585</b>	<b>5,585</b>	<b>5,585</b>	<b>-</b>

## 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
<b>NET IMPACT</b>	<b>1,206</b>	<b>86</b>	<b>122</b>	<b>158</b>	<b>244</b>	<b>280</b>	<b>316</b>
<b>FULL TIME EQUIVALENT (FTE)</b>		<b>1</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>2</b>

## APPROPRIATION AND EXPENDITURE DATA (\$000s)

Appropriation FY 24 Approp. Request	5,495	Year First Appropriation	FY71
Cumulative Appropriation	48,118	Last FY's Cost Estimate	75,793
Expenditure / Encumbrances	43,015		
Unencumbered Balance	5,103		

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## 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. 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 of \$160,000 in FY24 is for the planning, design and construction of 12 school flashing beacons.

## 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.

## FISCAL NOTE

\$160,000 in state aid reflects State grants for capital projects in Montgomery County awarded during the 2023 Maryland General Assembly session.

## DISCLOSURES

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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.