



# Traffic Signals

(P507154)

Category	Transportation	Date Last Modified	01/06/20
SubCategory	Traffic Improvements	Administering Agency	Transportation
Planning Area	Countywide	Status	Ongoing

## EXPENDITURE SCHEDULE (\$000s)

Cost Elements	Total	Thru FY19	Est FY20	Total 6 Years	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Beyond 6 Years
Planning, Design and Supervision	16,343	10,654	739	4,950	825	825	825	825	825	825	-
Land	19	19	-	-	-	-	-	-	-	-	-
Site Improvements and Utilities	47,080	12,802	7,218	27,060	4,510	4,510	4,510	4,510	4,510	4,510	-
Construction	71	71	-	-	-	-	-	-	-	-	-
Other	610	610	-	-	-	-	-	-	-	-	-
<b>TOTAL EXPENDITURES</b>	<b>64,123</b>	<b>24,156</b>	<b>7,957</b>	<b>32,010</b>	<b>5,335</b>	<b>5,335</b>	<b>5,335</b>	<b>5,335</b>	<b>5,335</b>	<b>5,335</b>	<b>-</b>

## FUNDING SCHEDULE (\$000s)

Funding Source	Total	Thru FY19	Est FY20	Total 6 Years	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Beyond 6 Years
G.O. Bonds	55,837	16,822	7,005	32,010	5,335	5,335	5,335	5,335	5,335	5,335	-
Recordation Tax Premium (MCG)	8,286	7,334	952	-	-	-	-	-	-	-	-
<b>TOTAL FUNDING SOURCES</b>	<b>64,123</b>	<b>24,156</b>	<b>7,957</b>	<b>32,010</b>	<b>5,335</b>	<b>5,335</b>	<b>5,335</b>	<b>5,335</b>	<b>5,335</b>	<b>5,335</b>	<b>-</b>

## OPERATING BUDGET IMPACT (\$000s)

Impact Type	Total 6 Years	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26
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 21 Request	5,335	Year First Appropriation	FY71
Appropriation FY 22 Request	5,335	Last FY's Cost Estimate	53,453
Cumulative Appropriation	32,113		
Expenditure / Encumbrances	25,368		
Unencumbered Balance	6,745		

## PROJECT DESCRIPTION

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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 the addition of FY25 and FY26 to this ongoing level-of-effort 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.