Traffic Signals
(P507154)

Category	Transportation	Date Last Modified	12/22/17
SubCategory	Traffic Improvements	Administering Agency	Transportation
Planning Area	Countywide	Status	Ongoing

EXPENDITURE SCHEDULE ($000s)

Cost Elements	Total	Thru FY17	Est FY18	Total 6 Years	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Beyond 6 Years
Planning, Design and Supervision	12,098	7,148	-	4,950	825	825	825	825	825	825	-
Land	10	10	-	-	-	-	-	-	-	-	-
Site Improvements and Utilities	40,695	8,136	5,499	27,060	4,510	4,510	4,510	4,510	4,510	4,510	-
Construction	54	54	-	-	-	-	-	-	-	-	-
Other	596	596	-	-	-	-	-	-	-	-	-
TOTAL EXPENDITURES	53,453	15,944	5,499	32,010	5,335	5,335	5,335	5,335	5,335	5,335	-

FUNDING SCHEDULE ($000s)

Funding Source	Total	Thru FY17	Est FY18	Total 6 Years	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Beyond 6 Years
G.O. Bonds	43,842	13,418	290	30,134	4,411	4,383	5,335	5,335	5,335	5,335	-
Recordation Tax Premium (MCG)	9,611	2,526	5,209	1,876	924	952	-	-	-	-	-
TOTAL FUNDING SOURCES	53,453	15,944	5,499	32,010	5,335	5,335	5,335	5,335	5,335	5,335	-

OPERATING BUDGET IMPACT ($000s)

Impact Type		Total 6 Years	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24
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 19 Request	5,335	Year First Appropriation	FY71
Appropriation FY 20 Request	5,335	Last FY's Cost Estimate	40,783
Cumulative Appropriation	21,443		
Expenditure / Encumbrances	16,652		
Unencumbered Balance	4,791		

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 enhanced level of effort funding to address major structural deterioration at many county owned traffic signals to support the Vision Zero initiative, and the addition of FY23 and FY24 to this ongoing project.

Project Justification

The growth in County population and vehicular registrations continues to produce increasing traffic volumes. As a result, congestion levels and the number of accidents increase. This 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, utilizing modern traffic signal technologies. Studies include: The December 2007 Pedestrian Safety Initiative and the March 2010 Report of the Infrastructure Maintenance Task Force which identified traffic signals in need of life-cycle replacement.

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 also supports the County Executive's Vision Zero initiative which aims to reduce injuries and fatalities on all roads.

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, Citizens Advisory Boards, Maryland-National Capital Park and Planning Commission