Transportation

Traffic Improvements

Advanced Transportation Management System
(P509399)

Category	Transportation	Date Last Modified	05/16/20
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	16,260	15,172	26	1,062	177	177	177	177	177	177	-
Land	1	1	-	-	-	-	-	-	-	-	-
Site Improvements and Utilities	41,505	31,989	1,530	7,986	1,331	1,331	1,331	1,331	1,331	1,331	-
Construction	194	194	-	-	-	-	-	-	-	-	-
Other	7,555	7,063	492	-	-	-	-	-	-	-	-
TOTAL EXPENDITURES	65,515	54,419	2,048	9,048	1,508	1,508	1,508	1,508	1,508	1,508	-

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
Contributions	95	95	-	-	-	-	-	-	-	-	-
Current Revenue: Cable TV	2,241	2,241	-	-	-	-	-	-	-	-	-
Current Revenue: General	24,316	17,696	572	6,048	1,008	1,008	1,008	1,008	1,008	1,008	-
Current Revenue: Mass Transit	8,564	8,564	-	-	-	-	-	-	-	-	-
Federal Aid	2,504	2,504	-	-	-	-	-	-	-	-	-
G.O. Bonds	8,396	8,396	-	-	-	-	-	-	-	-	-
PAYGO	2,226	2,226	-	-	-	-	-	-	-	-	-
Recordation Tax Premium (MCG)	5,800	1,324	1,476	3,000	500	500	500	500	500	500	-
State Aid	10,873	10,873	-	-	-	-	-	-	-	-	-
Transportation Improvement Credit	500	500	-	-	-	-	-	-	-	-	-
TOTAL FUNDING SOURCES	65,515	54,419	2,048	9,048	1,508	1,508	1,508	1,508	1,508	1,508	-

OPERATING BUDGET IMPACT ($000s)

Impact Type		Total 6 Years	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26
Maintenance		549	25	50	81	106	131	156
Energy		105	5	10	15	20	25	30
Program-Staff		600	50	50	100	100	150	150
Program-Other		36	3	3	6	6	9	9
NET IMPACT		1,290	83	113	202	232	315	345
FULL TIME EQUIVALENT (FTE)			1	1	2	2	3	3

APPROPRIATION AND EXPENDITURE DATA ($000s)

Appropriation FY 21 Request	1,442	Year First Appropriation	FY93
Appropriation FY 22 Request	1,508	Last FY's Cost Estimate	62,565
Cumulative Appropriation	56,533		
Expenditure / Encumbrances	54,959		
Unencumbered Balance	1,574		

PROJECT DESCRIPTION

This project provides for the Advanced Transportation Management System (ATMS) in the County. The ATMS deploys the infrastructure elements to conduct real-time management and operations of the County's transportation system. Twenty-two National Intelligent Transportation Architecture market packages have been identified for deployment of the ATMS. Each of these market packages is considered a subsystem of the ATMS program and may include several elements. These subsystems are identified in the ATMS Strategic Deployment Plan dated February 2001, revised July 2011. One aspect of this project will focus on improving pedestrian walkability by creating a safer walking environment, utilizing selected technologies, and ensuring Americans with Disabilities Act (ADA) compliance.

COST CHANGE

Cost increase due to the addition of FY25 and FY26 to this ongoing level-of-effort project partially offset by FY20 affordability adjustments.

PROJECT JUSTIFICATION

ATMS provides real-time monitoring, control, and traveler information in an effort to reduce traffic congestion and travel time, improve safety, and defer the need to construct new roads. ATMS emphasizes safety and efficiency of mobility to include mode, route, and travel time choices. ATMS supports public safety and directly impacts the movement of people and goods throughout the County's transportation system. This project was initiated in response to a growing demand to enhance options and amenities within the County's transportation network.

OTHER

This project includes the traffic element that focuses on reducing traffic congestion and travel time and improving safety. 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

Funding switch in FY21 between Current Revenue: General and Recordation Tax Premium for $500,000,

DISCLOSURES

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

Developers, Department of Technology Services, Department of Police, Federal Transit Administration (FTA), Federal Highway Administration (FHWA), Fibernet, Maryland State Highway Administration, Virginia Department of Transportation, Other Local Governments, Other Private Entities, Traffic Signals project, Traffic Signal System Modernization Project, Montgomery County Pedestrian Safety Advisory Committee, Citizen's Advisory Boards, and Montgomery County Planning Board.

Guardrail Projects
(P508113)

Category	Transportation	Date Last Modified	01/04/20
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	885	84	327	474	79	79	79	79	79	79	-
Site Improvements and Utilities	2,924	1,469	39	1,416	236	236	236	236	236	236	-
Construction	4	4	-	-	-	-	-	-	-	-	-
TOTAL EXPENDITURES	3,813	1,557	366	1,890	315	315	315	315	315	315	-

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	3,813	1,557	366	1,890	315	315	315	315	315	315	-
TOTAL FUNDING SOURCES	3,813	1,557	366	1,890	315	315	315	315	315	315	-

APPROPRIATION AND EXPENDITURE DATA ($000s)

Appropriation FY 21 Request	315	Year First Appropriation	FY81
Appropriation FY 22 Request	315	Last FY's Cost Estimate	3,183
Cumulative Appropriation	1,923		
Expenditure / Encumbrances	1,591		
Unencumbered Balance	332		

PROJECT DESCRIPTION

This project provides for: 1) installation of guardrail where they are determined to be required; 2) upgrading identified deficient and/or non-compliant end treatments to meet current Maryland State Highway Administration (MSHA) standards; 3) establishment of a 25-year life-cycle replacement program; and 4) replacement of guardrail damaged beyond repair in crashes.

COST CHANGE

Cost increase due to the addition of FY25 and FY26 to this ongoing level-of-effort project.

PROJECT JUSTIFICATION

Guardrails reduce the severity of run-off-the-road accidents, prevent collisions with fixed objects, and protect embankments. Damaged or missing guardrails and deficient end treatments present a hazard to motorists, cyclists, and pedestrians. Guardrails have a finite

service life and must be replaced at the end of this service life or when damaged in order to continue to provide safety benefits for all users. The March 2010, Report of the Infrastructure Maintenance Task Force, confirmed this and identified the need for guardrail life-cycle replacement. The existing tapered and buried guardrail end treatments provide a ramp for errant vehicles and do not meet current MSHA standards. A study was completed to identify these substandard or deficient end treatments and to replace them to meet modern crash attenuation standards.

DISCLOSURES

Expenditures will continue indefinitely.

COORDINATION

Federal Highway Administration, Maryland State Highway Administration, and Montgomery County Public Schools.

Intersection and Spot Improvements
(P507017)

Category	Transportation	Date Last Modified	05/15/20
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	7,598	3,468	-	3,390	500	500	630	600	580	580	740
Land	870	23	27	680	100	100	120	120	120	120	140
Site Improvements and Utilities	4,894	3,088	36	1,350	200	200	250	240	230	230	420
Construction	13,434	120	3,158	8,232	1,200	1,200	1,544	1,450	1,414	1,424	1,924
Other	996	996	-	-	-	-	-	-	-	-	-
TOTAL EXPENDITURES	27,792	7,695	3,221	13,652	2,000	2,000	2,544	2,410	2,344	2,354	3,224

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
Contributions	482	482	-	-	-	-	-	-	-	-	-
Current Revenue: General	1,841	1,701	140	-	-	-	-	-	-	-	-
G.O. Bonds	25,446	5,512	3,058	13,652	2,000	2,000	2,544	2,410	2,344	2,354	3,224
Intergovernmental	23	-	23	-	-	-	-	-	-	-	-
TOTAL FUNDING SOURCES	27,792	7,695	3,221	13,652	2,000	2,000	2,544	2,410	2,344	2,354	3,224

APPROPRIATION AND EXPENDITURE DATA ($000s)

Appropriation FY 21 Request	2,000	Year First Appropriation	FY70
Appropriation FY 22 Request	2,000	Last FY's Cost Estimate	19,604
Cumulative Appropriation	10,916		
Expenditure / Encumbrances	8,972		
Unencumbered Balance	1,944		

PROJECT DESCRIPTION

This project provides for planning and reconstructing various existing intersections in Montgomery County and for an annual congestion study to identify locations where there is a need for congestion mitigation. The project also includes the identification and implementation of corridor modifications and traffic calming treatments to enhance pedestrian safety. At these identified locations either construction begins immediately, or detailed design plans are prepared and developed into future projects. The projects listed below reflect their current status.

COST CHANGE

Cost increase due the the addition of FY25 and FY26 to this ongoing level-of-effort project and increases in FY23 and beyond to support Vision Zero initiatives.

PROJECT JUSTIFICATION

Ongoing studies conducted by the Division of Traffic Engineering and Operations indicate that many corridors and intersections need traffic calming modifications as well as capacity and/or vehicular and pedestrian safety improvements.

OTHER

Examples of recently completed and soon to be completed projects: Riffle Ford Road at Darnestown Road, Seven Locks Road at Tuckerman Lane, Clarendon Road at Fairfax Road, Bradmoor Drive at Roosevelt Street, and MacArthur Boulevard at Oberlin Avenue. Projects scheduled for completion in FY19 and beyond include Democracy Boulevard at Westlake Drive, Cheshire Drive at Old Georgetown Road, Great Seneca Highway at Muddy Branch Road, Judson Road at Henderson Avenue, Randolph Road at Parklawn Drive, Brink Road at Wildcat Road, Montgomery Village Avenue at Lake Shore Drive, Bradley Boulevard at Wilson Lane, and several other sites. 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

Expenditures include $500,000 per year for corridor and intersection modifications in support of Strategy No. 4 of the County Executive's Pedestrian Safety Initiative. Acceleration of $1,213,000 in GO Bonds from FY19 into FY18 and an offsetting funding schedule switch with Current Revenue General. Funding switch in FY19 of $1,713,000 between Current Revenue: General and GO Bonds (Bond Premium).

DISCLOSURES

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

COORDINATION

Maryland-National Capital Park and Planning Commission, Maryland State Highway Administration, U.S. Army Corps of Engineers, Washington Metropolitan Area Transit Authority, Developers, Montgomery County Pedestrian Safety Advisory Committee, and Citizen's Advisory Boards.

Neighborhood Traffic Calming
(P509523)

Category	Transportation	Date Last Modified	01/04/20
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	839	218	177	444	74	74	74	74	74	74	-
Site Improvements and Utilities	2,719	808	495	1,416	236	236	236	236	236	236	-
Construction	6	6	-	-	-	-	-	-	-	-	-
Other	307	307	-	-	-	-	-	-	-	-	-
TOTAL EXPENDITURES	3,871	1,339	672	1,860	310	310	310	310	310	310	-

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	3,871	1,339	672	1,860	310	310	310	310	310	310	-
TOTAL FUNDING SOURCES	3,871	1,339	672	1,860	310	310	310	310	310	310	-

APPROPRIATION AND EXPENDITURE DATA ($000s)

Appropriation FY 21 Request	310	Year First Appropriation	FY95
Appropriation FY 22 Request	310	Last FY's Cost Estimate	3,251
Cumulative Appropriation	2,011		
Expenditure / Encumbrances	1,405		
Unencumbered Balance	606		

PROJECT DESCRIPTION

This project provides for the planning, design, and construction of physical traffic control features in residential neighborhoods. Traffic calming features such as traffic circles and islands, curb extensions, speed humps, physical and painted lane narrowing devices, etc., are used to maintain and improve the safety and livability of residential neighborhoods by addressing issues of aggressive driving and excessive speeds and volumes.

COST CHANGE

Cost increase due to the addition of FY25 and FY26 to this ongoing level-of-effort project.

PROJECT JUSTIFICATION

Montgomery County has developed justification criteria, implementation procedures, and construction standards for administering traffic calming improvements along neighborhood streets that are consistent with those recommended and/or adopted by the Federal Highway Administration, the Institute of Transportation Engineers, and the Maryland Traffic Engineers Council. Neighborhood traffic control has received steadily increasing emphasis, and the speeding and unsafe driving practices by motorists on residential streets in our neighborhoods continue to generate numerous requests for traffic calming measures by residents. The neighborhood traffic calming project enables the Department of Transportation (DOT) to evaluate requests for traffic calming actions, develop and design appropriate traffic calming measures, and fund the implementation of a variety of physical as well as control type traffic calming tools to encourage safer driving behavior in neighborhoods. These measures include the installation of speed humps, traffic circles, etc. Engineering investigations and the analysis of community support are conducted on a per-request basis to determine if the installation of traffic calming features on a street is warranted and appropriate.

OTHER

Projects originate with requests from citizens' associations, other neighborhood organizations, and/or public officials. Projects are constructed primarily by the Traffic Engineering and Operations Division, using contractors and/or in-house crews. Approximately 50 streets or neighborhoods are under study/review for future traffic calming projects each year. 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

Expenditures will continue indefinitely.

COORDINATION

Citizens' Associations, Fire and Rescue Service, Intersection and Spot Improvements Project, Montgomery County Pedestrian Safety Advisory Committee, and Maryland-National Capital Park and Planning Commission.

Pedestrian Safety Program
(P500333)

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	10,498	7,698	-	2,800	350	400	350	500	400	800	-
Site Improvements and Utilities	8,819	6,769	-	2,050	200	300	250	400	300	600	-
Construction	22,566	1,001	3,365	18,200	2,200	2,800	2,900	2,700	2,400	5,200	-
Other	2,079	2,079	-	-	-	-	-	-	-	-	-
TOTAL EXPENDITURES	43,962	17,547	3,365	23,050	2,750	3,500	3,500	3,600	3,100	6,600	-

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
Current Revenue: General	12,416	6,466	850	5,100	850	850	850	850	850	850	-
G.O. Bonds	26,455	6,104	2,401	17,950	1,900	2,650	2,650	2,750	2,250	5,750	-
PAYGO	2,782	2,782	-	-	-	-	-	-	-	-	-
Recordation Tax Premium (MCG)	2,209	2,095	114	-	-	-	-	-	-	-	-
State Aid	100	100	-	-	-	-	-	-	-	-	-
TOTAL FUNDING SOURCES	43,962	17,547	3,365	23,050	2,750	3,500	3,500	3,600	3,100	6,600	-

APPROPRIATION AND EXPENDITURE DATA ($000s)

Appropriation FY 21 Request	2,750	Year First Appropriation	FY03
Appropriation FY 22 Request	3,500	Last FY's Cost Estimate	29,512
Cumulative Appropriation	20,912		
Expenditure / Encumbrances	18,366		
Unencumbered Balance	2,546		

PROJECT DESCRIPTION

This project provides for the review and analysis of existing physical structures and traffic controls in order to make modifications aimed at improving safety and infrastructure for pedestrians and bicycles. This project provides for the construction of physical structures and/or installation of traffic control devices which include, but are not limited to: new crosswalks; High-Intensity Activated crossWalK (HAWK) signals; pedestrian refuge islands; sidewalks; bus pull-off areas; fencing to channel pedestrians to safer crossing locations; bicycle signings and markings; relocating, adding, or eliminating bus stops; accessible pedestrian signals (countdown) or warning beacons; improving signage, etc. The improvements will be made in compliance with the requirements of the Americans with Disabilities Act (ADA). This project is data driven and supports the construction of improvements at and around schools identified in

the Safe Routes to School program. The project also includes performing pedestrian safety audits at High Incidence Areas and implementing identified physical improvements, education and outreach.

COST CHANGE

Cost increase due to the addition of FY25 and FY26 to the ongoing level-of- effort project, and increases within FY21 through FY26 to further support Vision Zero initiatives.

PROJECT JUSTIFICATION

Montgomery County's history of pedestrian and bicyclist safety includes the 2002 Blue Ribbon Panel, 2007 Pedestrian Safety Initiative, and most recently the 2017 Vision Zero Two-Year Action Plan. This project seeks to improve the walkability along Montgomery County roadways and, in particular, in the Central Business Districts (CBD) where there is a high concentration of pedestrians and mass transit ridership. The improvements proposed under this project will enhance and/or add to the County's existing infrastructure to increase the safety and comfort level for pedestrians, which in turn will encourage pedestrian activity and safer access to schools and mass transit. This project is intended to support the strategies for enhancing pedestrian safety by piloting new and innovative techniques for improving traffic control device compliance by pedestrians, cyclists, and motorists. Various studies for improvements will be done under this project with an emphasis on pedestrian safety and traffic circulation. Safe Routes to Schools walkability audits for Montgomery County schools are completed through this program, and studies identify needs and prioritize schools based on the need for signage, pavement markings, circulation, and pedestrian accessibility.

OTHER

This project is intended to address the Engineering aspect of the Three E's concept (Engineering, Education, and Enforcement), which is one of the recommendations included in the final Blue Ribbon Panel on Pedestrian and Traffic Safety Report. Additional efforts to improve pedestrian walkability by creating a safer walking environment, utilizing selected technologies, and ensuring ADA compliance will be addressed under the following projects: Annual Sidewalk Program; Bus Stop Improvements; Intersection and Spot Improvements; Neighborhood Traffic Calming; Transportation Improvements for Schools; ADA Compliance; Transportation; Resurfacing; Primary/Arterial; Sidewalk and Infrastructure Revitalization; Streetlighting; Traffic Signals; and Advanced Transportation Management System. 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. 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

Washington Metropolitan Area Transit Authority, Maryland-National Capital Park and Planning Commission, Mass Transit Administration, Maryland State Highway Administration, Wheaton Central Business District, Wheaton Regional Services Center, Commission on Aging, Commission on People with Disabilities , Montgomery County Pedestrian Safety Advisory Committee, and Citizen's Advisory Boards, and various CIP Projects.

Streetlight Enhancements-CBD/Town Center
(P500512)

Category	Transportation	Date Last Modified	01/04/20
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	1,189	855	34	300	50	50	50	50	50	50	-
Site Improvements and Utilities	4,228	2,221	807	1,200	200	200	200	200	200	200	-
Other	13	13	-	-	-	-	-	-	-	-	-
TOTAL EXPENDITURES	5,430	3,089	841	1,500	250	250	250	250	250	250	-

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
Current Revenue: Urban District Bethesda	435	243	192	-	-	-	-	-	-	-	-
G.O. Bonds	4,995	2,846	649	1,500	250	250	250	250	250	250	-
TOTAL FUNDING SOURCES	5,430	3,089	841	1,500	250	250	250	250	250	250	-

OPERATING BUDGET IMPACT ($000s)

Impact Type		Total 6 Years	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26
Maintenance		63	3	6	9	12	15	18
Energy		33	2	3	5	6	8	9
NET IMPACT		96	5	9	14	18	23	27

APPROPRIATION AND EXPENDITURE DATA ($000s)

Appropriation FY 21 Request	250	Year First Appropriation	FY05
Appropriation FY 22 Request	250	Last FY's Cost Estimate	4,930
Cumulative Appropriation	3,930		
Expenditure / Encumbrances	3,671		
Unencumbered Balance	259		

PROJECT DESCRIPTION

This project provides for the evaluation and enhancement of streetlighting within and around Central Business Districts (CBD) and town centers where current lighting does not meet minimum Illuminating Engineering Society of North America (IESNA) standards. This project will fill in streetlighting; standardize streetlighting types; and replace sodium vapor lights with light-emitting diode (LED)

lights.

COST CHANGE

Cost increase due to the addition of FY25 and FY26 to this ongoing level-of-effort project.

PROJECT JUSTIFICATION

This project is needed to provide visibility and safety improvements in areas where there is a high concentration of pedestrians, bicyclists, and vehicles. Streetlighting to promote pedestrian safety is one of the items requested each year by the Citizens' Advisory Boards (CABs).

OTHER

Streetlighting in CBD's and town centers will also support the Montgomery County Planning Board (MCPB) priorities for County-wide pedestrian safety improvements and area specific lighting enhancements. Completed projects include: Bethesda CBD - Phase I completed Summer 2007; Long Branch (commercial area) - completed in FY10; Wheaton CBD - completed in FY11; Langley Park - completed in FY12; Odenthal Avenue - completed in FY13; Damascus Town Center - completed in FY14; Glenmont Metro Area - completed in FY15; Olney Town Center - completed in FY17; Bethesda Phase II - FY18-26 is currently underway. 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

Expenditures will continue indefinitely.

COORDINATION

Potomac Electric Power Company, Baltimore Gas and Electric Company, Potomac Edison, Montgomery County Police Department, Community Associations, Urban Districts, Citizens' Advisory Boards, and Maryland-National Capital Park and Planning Commission.

Streetlighting
(P507055)

Category	Transportation	Date Last Modified	01/04/20
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	4,064	1,010	954	2,100	350	350	350	350	350	350	-
Land	50	-	50	-	-	-	-	-	-	-	-
Site Improvements and Utilities	16,528	10,331	77	6,120	1,020	1,020	1,020	1,020	1,020	1,020	-
Other	8,390	-	8,390	-	-	-	-	-	-	-	-
TOTAL EXPENDITURES	29,032	11,341	9,471	8,220	1,370	1,370	1,370	1,370	1,370	1,370	-

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	15,578	4,341	3,017	8,220	1,370	1,370	1,370	1,370	1,370	1,370	-
Long-Term Financing	8,977	5,210	3,767	-	-	-	-	-	-	-	-
Utility Incentives	4,477	1,790	2,687	-	-	-	-	-	-	-	-
TOTAL FUNDING SOURCES	29,032	11,341	9,471	8,220	1,370	1,370	1,370	1,370	1,370	1,370	-

OPERATING BUDGET IMPACT ($000s)

Impact Type		Total 6 Years	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26
Maintenance		147	7	14	21	28	35	42
Energy		63	3	6	9	12	15	18
NET IMPACT		210	10	20	30	40	50	60

APPROPRIATION AND EXPENDITURE DATA ($000s)

Appropriation FY 21 Request	1,370	Year First Appropriation	FY70
Appropriation FY 22 Request	1,370	Last FY's Cost Estimate	26,292
Cumulative Appropriation	20,812		
Expenditure / Encumbrances	12,985		
Unencumbered Balance	7,827		

PROJECT DESCRIPTION

This project provides for the installation and upgrading of streetlights countywide with an emphasis on residential fill in areas, high

crime areas, pedestrian generator locations, and high accident locations, as well as the conversion of existing streetlights to a more energy-efficient technology. This project also provides for the replacement of streetlights that are knocked down, damaged, or have reached the end of service life. The March 2010 Report of the Infrastructure Maintenance Task Force, identified streetlights in need of lifecycle replacement. Streetlights that pose safety concerns and are no longer functioning to the specifications of original installation are also replaced under this project. In FY20, the County will complete the upgrading of approximately 25,000 streetlight fixtures to light-emitting diodes (LED) through an energy savings performance contract.

COST CHANGE

Cost increase due to the addition of FY25 and FY26 to this ongoing level-of-effort project.

PROJECT JUSTIFICATION

A County Council resolution dated June 25, 1968, requires Montgomery County to provide for the installation of streetlights in those subdivisions that were platted prior to February 1, 1969, when the installation of streetlights was not a requirement of subdivision development. This project provides funds for these streetlight installations, as well as for lighting of the public right-of-way when the existing lighting is substandard to the extent that public safety is compromised. County residents regularly ask for the addition of streetlights to help improve safety and reduce crime within their communities. New streetlight plans are developed in conformance with established County streetlight standards and are normally implemented under contract with the pertinent local utility company.

OTHER

The 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

Baltimore Gas and Electric Company, Potomac Edison, Verizon, Cable TV Montgomery, Maryland State Highway Administration, PEPCO, Washington Gas and Light, Washington Suburban Sanitary Commission, Pedestrian Safety Advisory Committee, Citizen's Advisory Boards, Maryland-National Capital Park and Planning Commission, and Department of General Services.

Traffic Signal System Modernization
(P500704)

Category	Transportation	Date Last Modified	05/07/20
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	17,968	16,768	-	1,200	200	200	200	200	200	200	-
Site Improvements and Utilities	29,088	21,091	1,769	6,228	1,038	1,038	1,038	1,038	1,038	1,038	-
Construction	919	919	-	-	-	-	-	-	-	-	-
Other	967	558	409	-	-	-	-	-	-	-	-
TOTAL EXPENDITURES	48,942	39,336	2,178	7,428	1,238	1,238	1,238	1,238	1,238	1,238	-

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
Contributions	295	295	-	-	-	-	-	-	-	-	-
Current Revenue: General	10,438	832	2,178	7,428	1,238	1,238	1,238	1,238	1,238	1,238	-
G.O. Bonds	15,494	15,494	-	-	-	-	-	-	-	-	-
Recordation Tax Premium (MCG)	10,715	10,715	-	-	-	-	-	-	-	-	-
State Aid	12,000	12,000	-	-	-	-	-	-	-	-	-
TOTAL FUNDING SOURCES	48,942	39,336	2,178	7,428	1,238	1,238	1,238	1,238	1,238	1,238	-

OPERATING BUDGET IMPACT ($000s)

Impact Type		Total 6 Years	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26
Maintenance		53	3	5	7	10	13	15
Program-Staff		600	50	50	100	100	150	150
Program-Other		36	3	3	6	6	9	9
NET IMPACT		689	56	58	113	116	172	174
FULL TIME EQUIVALENT (FTE)			1	1	2	2	3	3

APPROPRIATION AND EXPENDITURE DATA ($000s)

Appropriation FY 21 Request	1,238	Year First Appropriation	FY07
Appropriation FY 22 Request	1,238	Last FY's Cost Estimate	46,466
Cumulative Appropriation	41,514		
Expenditure / Encumbrances	40,270		
Unencumbered Balance	1,244		

PROJECT DESCRIPTION

This project provides for the modernization of the County's aged traffic signal system. Phase I consisted of planning, requirements development, systems engineering, and testing. Phase II consists of acquisition of central system hardware and software, acquisition, and implementation of control equipment and communications for intersections, as well as reconfiguration of the communications cable plant. Phase II implementation commenced in FY09. As a result of the November 2009 failure of the existing system, Phase II was refined into two sub-phases, A and B, so that replacement of the existing system could be accelerated. Phase IIA encompassed critical work that was necessary to deactivate the existing system. Phase IIB includes all other work that is not critical to replacement of the existing system.

ESTIMATED SCHEDULE

Phase I - completed FY07-08; Phase IIA - completed FY12; Phase IIB - FY13-16; ongoing Life Cycle Upgrades - FY17 and beyond.

COST CHANGE

Cost increase due to the addition of FY25 and FY26 to this ongoing level-of-effort project.

PROJECT JUSTIFICATION

The existing traffic signal control system, though it has been highly reliable, is an aging system dependent on dated technology. Central and field communications devices are obsolete and problematic to maintain. As the technologies employed in the Advanced Transportation Management System (ATMS) have advanced, it has become increasingly difficult to interface with the existing traffic signal control system (COMTRAC). Because of the limited functionality of COMTRAC, the system is not able to take advantage of the capabilities of the current generation of local intersection controllers. These capabilities provide a greater level of flexibility to manage traffic demands. In November 2009, the existing traffic signal system experienced a failure that caused significant congestion and delays throughout the County for nearly two days. This event led to an acceleration of the schedule to replace the existing system. The following reports were developed as part of the research, planning, and system engineering work on this project. These reports documented the existing condition and need to modernize the existing signal control system, as well as the evaluation and engineering of specific components of the replacement system: White paper on the Status and Future of the Traffic Control System in Montgomery County, March 2001; Concept of Operations (rev 1.4), October 2007; TSSM Requirements (rev g), October 2007; TSSM Communications Master Plan (rev c), February 2009; TSSM Risk Assessment and Analysis (rev e), April 2009. Given the effort to modernize the signal system and its infrastructure, it is important and prudent to take steps to prevent the system from becoming outdated. A proactive program to replace equipment by its "life cycle" usefulness is required given the dependency on technology driven devices and software to maintain traffic control capabilities and full redundancy fail-over systems. This project was designated a level-of-effort (LOE) in FY17.

DISCLOSURES

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, Fibernet, State Transportation Participation, Traffic Signals Project, Department of Technology Services, and Maryland State Highway Administration.

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	-	-	-	-	-	-	-	-	-
TOTAL EXPENDITURES	64,123	24,156	7,957	32,010	5,335	5,335	5,335	5,335	5,335	5,335	-

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	-	-	-	-	-	-	-	-
TOTAL FUNDING SOURCES	64,123	24,156	7,957	32,010	5,335	5,335	5,335	5,335	5,335	5,335	-

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
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 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

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.

White Flint Traffic Analysis and Mitigation
(P501202)

Category	Transportation	Date Last Modified	05/13/20
SubCategory	Traffic Improvements	Administering Agency	Transportation
Planning Area	North Bethesda-Garrett Park	Status	Planning Stage

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	1,537	651	400	486	81	81	81	81	81	81	-
Site Improvements and Utilities	196	196	-	-	-	-	-	-	-	-	-
TOTAL EXPENDITURES	1,733	847	400	486	81	81	81	81	81	81	-

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
Current Revenue: General	1,048	162	400	486	81	81	81	81	81	81	-
Impact Tax	685	685	-	-	-	-	-	-	-	-	-
TOTAL FUNDING SOURCES	1,733	847	400	486	81	81	81	81	81	81	-

APPROPRIATION AND EXPENDITURE DATA ($000s)

Appropriation FY 21 Request	41	Year First Appropriation	FY12
Appropriation FY 22 Request	81	Last FY's Cost Estimate	1,949
Cumulative Appropriation	1,287		
Expenditure / Encumbrances	1,090		
Unencumbered Balance	197		

PROJECT DESCRIPTION

This project is in direct response to requirements of the approved White Flint Sector Plan. It is composed of three components with the overall goal of mitigating the traffic impacts on communities and major intersections outside of and surrounding the White Flint Sector Plan area that will occur as a result of redevelopment densities approved under the new White Flint Sector Plan. These components include: (A) Cut-through traffic monitoring and mitigation; (B) Capacity improvements to address congested intersections; and (C) A study of strategies and implementation techniques to achieve the Sector Plan's modal split goals. The modal split study will plan and implement specific infrastructure projects to create an improved transit, pedestrian, and biking infrastructure, and programs needed to accomplish the mode share goals; determine funding sources for these strategies; and determine the scope and cost of project components.

ESTIMATED SCHEDULE

Component A-access restrictions: ongoing bi-annual data collection: site specific studies are conducted when traffic data indicates need.

Component B- Intersection Mitigation: site specific preliminary engineering and concept plan development commenced in FY12 based on M-NCPPC Comprehensive Local Area Transportation Review (CLATR) evaluation. Component C- Modal Split Activities: transit, pedestrian, bicycle access, and safety studies in FY 12; data collection and updating Transportation Demand Management (TDM) information in FY12-13.

COST CHANGE

Cost decrease reflects traffic count and analysis schedule adjustments. Funding reduced in FY20 for fiscal capacity.

PROJECT JUSTIFICATION

Component A: The new White Flint Sector Plan area was approved on March 23, 2010. The plan allows for significantly higher density than the existing development. As a result neighborhoods surrounding the Sector Plan area could be potentially impacted by an increase in cut-through traffic. The approved Sector Plan states: Before any additional development can be approved, the following actions must be taken: Initiate development of plans for through-traffic access restrictions for the residential neighborhoods abutting the Sector Plan area, including traffic from future development in White Flint, and implement these plans if sufficient neighborhood consensus is attained. Component B: The approved plan did not address the possible negative impact on the roads/intersections outside of the Sector Plan boundary but the plan recognized that those impacts could occur. Therefore, major intersections along primary corridors leading into the Sector Plan area need to be evaluated and appropriate safety and capacity improvements identified and implemented to fulfill the vision of the plan. This component is not part of the phasing process but needs to be addressed to mitigate impacts from the Sector Plan. Component C: The plan also recognized that capacity improvements alone would not be sufficient to manage the increased traffic resulting from the higher densities within the Sector Plan area. The Sector Plan states: The following prerequisites must be met during Phase 1 before moving to Phase 2: Achieve thirty-four percent non-auto mode share for the Sector Plan area. Increasing the modal split within the White Flint Sector Plan boundary is an integral component to the overall success of the Plan's vision. Transit, pedestrian, bicycle access, safety improvements, and TDM planning and implementation efforts are required to facilitate White Flint's transition from a highly automobile oriented environment to a more transit, pedestrian, and bicycle friendly environment. A monitoring mechanism for the modal split will also be developed.

FISCAL NOTE

Programmed impact taxes have already been collected from the White Flint Metro Station Policy Area (MSPA).

DISCLOSURES

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

COORDINATION

Maryland-National Capital Park and Planning Commission, Maryland State Highway Administration, U.S. Army Corps of Engineers, Montgomery County Department of Permitting Services, Montgomery County Department of Environmental Protection, Montgomery County Pedestrian and Traffic Safety Advisory Committee, Citizen's Advisory Boards, Neighborhood Homeowner's Associations, Utility Companies, Civic Associations, White Flint Transportation Management District (TMD)

White Oak Local Area Transportation Improvement Program
(P501540)

Category	Transportation	Date Last Modified	06/15/20
SubCategory	Traffic Improvements	Administering Agency	Transportation
Planning Area	Colesville-White Oak and Vicinity	Status	Planning Stage

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	1,356	162	38	1,156	100	-	528	528	-	-	-
TOTAL EXPENDITURES	1,356	162	38	1,156	100	-	528	528	-	-	-

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
Current Revenue: General	200	162	38	-	-	-	-	-	-	-	-
Local Area Transportation Impr Program (LATIP)	1,156	-	-	1,156	100	-	528	528	-	-	-
TOTAL FUNDING SOURCES	1,356	162	38	1,156	100	-	528	528	-	-	-

APPROPRIATION AND EXPENDITURE DATA ($000s)

Appropriation FY 21 Request	100	Year First Appropriation	FY16
Appropriation FY 22 Request	-	Last FY's Cost Estimate	1,256
Cumulative Appropriation	200		
Expenditure / Encumbrances	200		
Unencumbered Balance	-		

PROJECT DESCRIPTION

This project provides for the design and construction of facilities included in the Local Area Transportation Improvement Program (LATIP). The LATIP includes a variety of roadway, bikeway, pedestrian, and transit projects within the White Oak policy area, in addition to recurring cost updates and program reanalysis. The timing of implementation of the different elements will be coordinated in the future with specific proposed subdivision activity and the communities adjacent to and affected by the new development. The LATIP provides a funding source in the form of a per-trip fee levied upon new development within the policy area.

LOCATION

White Oak Planning Area.

ESTIMATED SCHEDULE

The LATIP is anticipated to last through the lifetime of the associated master plan (2040). Schedule is dependent on the rate at which LATIP fees are collected, as well as the rate at which forward funding is provided to advance projects.

COST CHANGE

Cost increase due to the need to evaluate additional developer proposed improvements.

PROJECT JUSTIFICATION

The 2014 White Oak Science Gateway Master Plan called for the development of one or more options that could fund the full buildout of the Plan's transportation infrastructure within the 24 months following adoption of the Plan. This project will fund the activities necessary to to comply with the Council's Resolution. Additionally, a new proposal for Local Area Transportation Review (LATR) has been introduced at Council; this study will identify the necessary local intersection improvements needed, conceptual solutions, and preliminary cost estimates for those improvements, as well as the cost associated with independent sidewalks, bikeways, and the provision of bus service in the area. These studies provide the basis for future strategies to fund detailed engineering design and construction costs.

DISCLOSURES

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

COORDINATION

Maryland State Highway Administration (MSHA), Maryland Mass Transit Administration (MTA), and Maryland National-Capital Park and Planning Commission.