



# Traffic Signal System Modernization

(P500704)

Category	Transportation	Date Last Modified	02/29/24
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	21,524	20,156	168	1,200	200	200	200	200	200	200	-
Site Improvements and Utilities	29,643	21,407	1,402	6,834	1,139	1,139	1,139	1,139	1,139	1,139	-
Construction	1,281	1,281	-	-	-	-	-	-	-	-	-
Other	1,752	1,752	-	-	-	-	-	-	-	-	-
<b>TOTAL EXPENDITURES</b>	<b>54,200</b>	<b>44,596</b>	<b>1,570</b>	<b>8,034</b>	<b>1,339</b>	<b>1,339</b>	<b>1,339</b>	<b>1,339</b>	<b>1,339</b>	<b>1,339</b>	<b>-</b>

## 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
Contributions	295	295	-	-	-	-	-	-	-	-	-
Current Revenue: General	14,658	5,054	1,570	8,034	1,339	1,339	1,339	1,339	1,339	1,339	-
G.O. Bond Premium	852	852	-	-	-	-	-	-	-	-	-
G.O. Bonds	15,680	15,680	-	-	-	-	-	-	-	-	-
Recordation Tax Premium (MCG)	10,715	10,715	-	-	-	-	-	-	-	-	-
State Aid	12,000	12,000	-	-	-	-	-	-	-	-	-
<b>TOTAL FUNDING SOURCES</b>	<b>54,200</b>	<b>44,596</b>	<b>1,570</b>	<b>8,034</b>	<b>1,339</b>	<b>1,339</b>	<b>1,339</b>	<b>1,339</b>	<b>1,339</b>	<b>1,339</b>	<b>-</b>

## OPERATING BUDGET IMPACT (\$000s)

Impact Type	Total 6 Years	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30
Maintenance	76	6	8	11	14	17	20
Program-Staff	1,080	90	90	180	180	270	270
Program-Other	36	3	3	6	6	9	9
<b>NET IMPACT</b>	<b>1,192</b>	<b>99</b>	<b>101</b>	<b>197</b>	<b>200</b>	<b>296</b>	<b>299</b>
<b>FULL TIME EQUIVALENT (FTE)</b>		<b>1</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>3</b>

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

Appropriation FY 25 Request	1,339	Year First Appropriation	FY07
Appropriation FY 26 Request	1,339	Last FY's Cost Estimate	51,118
Cumulative Appropriation	46,166		
Expenditure / Encumbrances	44,665		

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

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Unencumbered Balance	1,501
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### PROJECT DESCRIPTION

The Traffic Signal System Modernization (TSSM) program provides on-going, life-cycle replacement and maintenance of critical subsystems and equipment from the network communication paths throughout the County and is relayed to both Transportation Management Center (TMC) and traffic control equipment in the field. The life-cycle replacement plan ensures the transportation network system, communication network, and the hardware in the TMC (servers, workstations) remains up to date with industry and national standards and, new technologies employed by the Traffic Division.

### ESTIMATED SCHEDULE

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

### COST CHANGE

FY25-30 adjusted for inflation. Funding for FY29 and FY30 was added.

### PROJECT JUSTIFICATION

The transportation systems remain highly reliable, but we must keep the system up to date through life cycle replacement. The technologies in the industry have advanced over the years which necessitates the modernization of equipment such as (aggregators, communication cables and modems, software, and servers) to interface with the current transportation control system. The life cycle replacement will provide stability and greater level flexibility to manage the transportation demands as well as take advantage of the newer technology that is being introduced to the industry.

### 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 and Enterprise Business Solutions, and Maryland State Highway Administration.