

AGENDA ITEM #6  
February 23, 2010  
**Public Hearing/Action**

**MEMORANDUM**

February 23, 2010

TO: County Council

FROM: <sup>60</sup> Glenn Orlin, Deputy Council Staff Director

SUBJECT: **Public Hearing/Action**—supplemental appropriation and amendment to the FY09-14 CIP, Traffic Signal System Modernization: \$1,000,000 (G.O. Bonds)

**Transportation, Infrastructure, Energy and Environment Committee (and Council staff) recommendation (3-0): Approve the Executive's request.**

\* \* \*

The Executive forwarded this appropriation and CIP amendment request on January 19. In response to the November failure of the traffic signal control system, he recommends accelerating the completion of the most critical elements of this CIP project so that the control system can be replaced two years earlier: by FY12 rather than FY14. (The less critical elements would be deferred to FYs13-16, so the full effort would be completed two years later than in the Approved CIP.) To begin this acceleration, \$1 million more is needed in FY10. The G.O. Bond reserve for FY10 is currently over \$13 million, so there is sufficient fiscal capacity to absorb the \$6 million requested between this request and the resurfacing requests (Agenda Item #7).

The Executive's transmittal memo is on ©1, and a draft adoption resolution, including the revised project description form, is on ©2-5.



OFFICES OF THE COUNTY EXECUTIVE

Isiah Leggett  
County Executive

Timothy L. Firestine  
Chief Administrative Officer

MEMORANDUM

January 19, 2010

TO: Nancy Floreen, President, County Council

FROM: Isiah Leggett, County Executive 

SUBJECT: Amendment to the FY09-14 Capital Improvements Program and Supplemental Appropriation #10-S10-CMCG-5 to the FY10 Capital Budget  
Montgomery County Government  
Department of Transportation  
Traffic Signal System Modernization (No. 500704), \$1,000,000

I am recommending an amendment to the FY09-14 Capital Improvements Program and a supplemental appropriation to the FY10 Capital Budget in the amount of \$1,000,000 for the Traffic Signal System Modernization (No. 500704). Appropriation for this project will accelerate the replacement of the existing traffic signal control system.

This increase is needed due to the November 2009 failure of the existing aged traffic signal control system which is reliant on dated technology and urgently requires upgrading. Funds will be used to accelerate this modernization effort by two years so we can more expeditiously upgrade and replace the system. The recommended amendment is consistent with the criteria for amending the CIP because the project is needed to address a safety concern.

I recommend that the County Council approve this supplemental appropriation and amendment to the FY09-14 Capital Improvements Program in the amount of \$1,000,000 and specify the source of funds as G.O. Bonds.

I appreciate your prompt consideration of this action.

IL:jb

Attachment: Amendment to the FY09-14 Capital Improvements Program and Supplemental Appropriation #10-S10-CMCG-5

c: Arthur Holmes, Jr., Director, Department of Transportation  
Joseph Beach, Director, Office of Management & Budget

①

Resolution: \_\_\_\_\_  
Introduced: \_\_\_\_\_  
Adopted: \_\_\_\_\_

COUNTY COUNCIL  
FOR MONTGOMERY COUNTY, MARYLAND

By: Council President at the Request of the County Executive

SUBJECT: Amendment to the FY09-14 Capital Improvements Program and Supplemental Appropriation #10-S10-CMCG-5 to the FY10 Capital Budget  
Montgomery County Government  
Department of Transportation  
Traffic Signal System Modernization (No. 500704), \$1,000,000

Background

1. Section 307 of the Montgomery County Charter provides that any supplemental appropriation shall be recommended by the County Executive who shall specify the source of funds to finance it. The Council shall hold a public hearing on each proposed supplemental appropriation after at least one week's notice. A supplemental appropriation that would comply with, avail the County of, or put into effect a grant or a Federal, State, or County law or regulation, or one that is approved after January 1 of any fiscal year, requires an affirmative vote of five Councilmembers. A supplemental appropriation for any other purpose that is approved before January 1 of any fiscal year requires an affirmative vote of six Councilmembers. The Council may, in a single action, approve more than one supplemental appropriation. The Executive may disapprove or reduce a supplemental appropriation, and the Council may reapprove the appropriation, as if it were an item in the annual budget.
2. Section 302 of the Montgomery County Charter provides that the Council may amend an approved capital improvements program at any time by an affirmative vote of no fewer than six members of the Council.
3. The County Executive recommends the following capital project appropriation acceleration:

<u>Project Name</u>	<u>Project Number</u>	<u>Cost Element</u>	<u>Amount</u>	<u>Source of Funds</u>
Traffic Signal System Modernization	500704	Site Improvements & Utilities	<u>\$1,000,000</u>	G.O. Bonds
TOTAL			\$1,000,000	G.O. Bonds

Supplemental Appropriation #10-S10-CMCG-5 and Amendment to the FY09-14 Capital Improvements Program  
Page Two

4. This increase is needed due to the November 2009 failure of the existing aged traffic signal control system which is reliant on dated technology and urgently requires upgrading. Funds will be used to accelerate this modernization effort by two years so we can more expeditiously upgrade and replace the system. The recommended amendment is consistent with the criteria for amending the CIP because the project is needed to address a safety concern.
5. The County Executive has requested an amendment to the FY09-14 Capital Improvements Program and a supplemental appropriation in the amount of \$1,000,000 for the Traffic Signal System Modernization (No. 500704) and specifies that the source of funds will be G.O. Bonds.
6. Notice of public hearing was given and a public hearing was held.

Action

The County Council for Montgomery County, Maryland, approves the following action:

The FY09-14 Capital Improvements Program of the Montgomery County Government is amended as reflected on the attached project description form and a supplemental appropriation is approved as follows:

<u>Project Name</u>	<u>Project Number</u>	<u>Cost Element</u>	<u>Amount</u>	<u>Source of Funds</u>
Traffic Signal System Modernization	500704	Site Improvements & Utilities	<u>\$1,000,000</u>	G.O. Bonds
TOTAL			\$1,000,000	G.O. Bonds

This is a correct copy of Council action.

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Linda M. Lauer, Clerk of the Council

## Traffic Signal System Modernization -- No. 500704

Category  
Subcategory  
Administering Agency  
Planning Area

Transportation  
Traffic Improvements  
Transportation  
Countywide

Date Last Modified  
Required Adequate Public Facility  
Relocation Impact  
Status

January 14, 2010  
No  
None.  
Preliminary Design Stage

### EXPENDITURE SCHEDULE (\$000)

Cost Element	Total	Thru FY08	Rem. FY08	Total 6 Years	FY09	FY10	FY11	FY12	FY13	FY14	Beyond 6 Years
Planning, Design, and Supervision	5,731	904	1,539	3,288	548	548	548	548	548	548	0
Land	0	0	0	0	0	0	0	0	0	0	0
Site Improvements and Utilities	29,289	51	0	25,197	2,652	3,652	5,266	4,980	4,502	4,145	4,041
Construction	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>35,020</b>	<b>955</b>	<b>1,539</b>	<b>28,485</b>	<b>3,200</b>	<b>4,200</b>	<b>5,814</b>	<b>5,528</b>	<b>5,050</b>	<b>4,693</b>	<b>4,041</b>

### FUNDING SCHEDULE (\$000)

	Total	FY08	FY09	FY10	FY11	FY12	FY13	FY14	Beyond 6 Years
Current Revenue: General	1,625	355	1,270	0	0	0	0	0	0
Federal Aid	269	0	269	0	0	0	0	0	0
G.O. Bonds	7,673	600	0	7,073	856	1,353	410	1,117	1,459
Recordation Tax Premium	13,325	0	0	13,325	2,344	2,847	3,081	2,281	1,660
State Aid	12,128	0	0	8,087	0	0	2,323	2,130	1,931
<b>Total</b>	<b>35,020</b>	<b>955</b>	<b>1,539</b>	<b>28,485</b>	<b>3,200</b>	<b>4,200</b>	<b>5,814</b>	<b>5,528</b>	<b>5,050</b>

#### DESCRIPTION

This project provided for Phase I which consisted of requirements development, systems engineering, and testing to modernize the County's traffic signal system. The addition of Phase II entails acquisition and implementation of a state-of-the-art replacement of the current central traffic signal control system. Key elements of the modernization include system central hardware and software and communications system cable plant re-configuration.

Anticipated phases of this project include: Phase I - FY07-08. Phase II - FY09-14 - implementation and quality assurance.

#### COST CHANGE

FY10 supplemental of \$1,000,000. Funding increase is needed to deploy controllers, communication equipment, and other hardware associated with the acceleration of this project resulting from the November 2009 failure of the existing system. Reduced State aid programmed in FY09-10.

#### JUSTIFICATION

The existing traffic signal control system, though it has been highly reliable, is an aging system reliant 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 the 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.

The following reports focus on the condition of the current traffic signal control system and document the need to begin the process of system modernization: White Paper on the Status and Future of the Traffic Signal System in Montgomery County, Maryland, March 2001; and Traffic Signal Replacement White Paper, January 2002. The following new reports have been developed in Phase I: Concept of Operations, Revision 1.0 February 2007; Traffic Signal System Modernization (TSSM) Requirements, Draft Revision F, May 2007. These two reports further existing systems analysis and replacement systems functional requirements development. Working in conjunction with the Department of Technology Services (DTS), a comprehensive communications master plan is underway to review the existing communications subsystem and development of state-of-the-art communication systems architecture.

#### OTHER

Phase I Status (As of August 2007)

Concept of Operations - 100% complete/configuration control

System Requirements - 100% complete/configuration control

Communications Master Plan - 65% complete

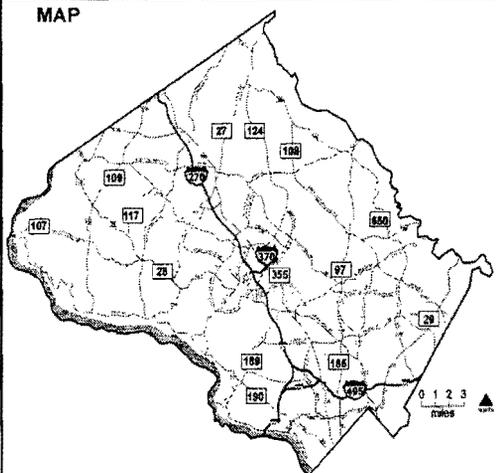
Field Inventory - 90% complete

Risk Analyses and Contingency Planning - 5% complete

Cost Estimate and Implementation Plan - 25% complete

#### FISCAL NOTE

The County's traffic signal system supports over 800 traffic signal locations, of which more than 550 belong to the State but are maintained by the County on a reimbursement basis. The State aid displayed in the funding schedule for FY09-10 has been eliminated due to State fiscal constraints.

APPROPRIATION AND EXPENDITURE DATA	COORDINATION	MAP												
<table border="1"> <tr> <td>Date First Appropriation</td> <td>FY07</td> <td>(\$000)</td> </tr> <tr> <td>First Cost Estimate</td> <td>FY09</td> <td>34,020</td> </tr> <tr> <td>Current Scope</td> <td></td> <td></td> </tr> <tr> <td>Last FY's Cost Estimate</td> <td></td> <td>34,020</td> </tr> </table>	Date First Appropriation	FY07	(\$000)	First Cost Estimate	FY09	34,020	Current Scope			Last FY's Cost Estimate		34,020	Traffic Signals Project Advanced Transportation Management System Maryland State Highway Administration Department of Technology Services	
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Total Partial Closeout		0												

## Traffic Signal System Modernization -- No. 500704 (continued)

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Based on Phase I findings, Phase II (full implementation of the system) is added to the project. The total project cost for the new system, which includes replacement of the existing functionality and addition of expanded capabilities is \$44M. The expenditure display has been updated to reflect a six-year implementation scenario. The expenditures displayed in FY09-14 (\$31.5M) do not include those costs of the total \$44M system estimate that are associated with the project team's recommendations that will be implemented/expended directly by the Maryland State Highway Administration.

Operating Budget Impacts are expected as a result of this project and will be identified as the project continues to develop.

### OTHER DISCLOSURES

- The Executive asserts that this project conforms to the requirements of relevant local plans, as required by the Maryland Economic Growth, Resource Protection and Planning Act.