

MEMORANDUM

February 9, 2012

TO: Transportation, Infrastructure, Energy and Environment Committee

FROM: Susan J. Farag, Legislative Analyst 

SUBJECT: **FY13-18 Capital Improvements Program**
Fuel Management (Department of General Services, Division of Fleet Management Services)

Those expected for this worksession:

David Dise, Department of General Services
Keith Stickley, Acting Chief, Division of Fleet Management Services
Bruce Meier, Office of Management and Budget

FUEL MANAGEMENT SYSTEM:

(FY13-18 Recommended PDF © 1; FY11-16 Approved PDF © 2)

This project establishes a County-wide fuel management system for fleet vehicles. The fuel management system will allow all County vehicles to fuel at any County fueling location. The project will be implemented in two phases, initially focusing on Montgomery County Fire and Rescue Service (MCFRS) vehicles and fuel sites. Later, it will later be expanded to meet all County fleet needs. According to the recommended PDF, the new fuel management system will be installed at the majority of fire station fuel sites and vehicles in FY12. The second phase will be performed in FY13 and FY14, providing fuel management and taking monitoring systems on the remaining fire service sites, and other County fuel sites and vehicles.

Background: Initially, MCFRS identified a need for a centralized fuel management system for both its County and volunteer fire stations. A uniform system across all stations would allow any vehicle to fuel at any fuel site. Fuel management systems also record mileage, and this feature will help optimize fuel management and vehicle maintenance (which is based on both mileage and time). The Executive determined that the efficiencies and cost savings provided by a new fuel management system would be beneficial for the entire County, and will

implement the system County-wide. Both the Montgomery County Public Schools (MCPS) and Maryland-National Capital Park and Planning Commission (M-NCPPC) use the same fuel management system selected by the County. Once implemented, it is estimated the new system will create savings due to fuel loss control, more efficient maintenance scheduling, and less driver time. Further, County fuel may be purchased through one vendor once the system is fully implemented. The system will provide fuel for approximately 3,600 vehicles at 30 different fueling sites.

QUESTIONS: Council staff also asked a series of questions about the proposed project. If Executive staff provide written answers before the meeting, Council staff will issue an addendum. If not, Executive staff will be prepared to answer these questions at the Committee meeting.

- 1) The project initially called for a two-phase approach. The first phase would provide fuel dispensing, tank monitoring, and fuel management system for fire stations (County and volunteer). What is the status of this phase of the project?
- 2) Please describe the 2nd phase of this project. What County fueling stations will be improved?
- 3) The Expenditure Schedule for (Est. FY12) shows a slight increase over what was approved in the FY10-16 CIP, from \$1,125,000 to \$1,550,000. Is this an increase in site improvements and utilities? Please describe.
- 4) Please describe the interrelation of this new fuel management system, if any, with the MCPS and Park & Planning systems, which are compatible with the County's new system.
- 5) What are the assumptions used to calculate cost savings each year? Please provide a description of how you derived estimated savings.
- 6) Please describe the short-term financing used to fund this project, i.e., term of loan, interest rate, etc. What is the average life expectancy of the different components of the fuel management system?

DISCUSSION ITEMS:

Short-Term Financing: This project was initially proposed within MCFRS to address some of its operational inefficiencies and to meet best practice standards for its own fleet management. Council staff agrees that modernization of the fuel management system for MCFRS would lead to operational savings and other efficiencies; however, Council staff is concerned with the use of short-term financing to fund the project. The Committee should understand what the terms of repayment are for the loan (i.e., percentage rate, length of loan, annual payment amounts) and how this relates to expected operational savings (about \$110,000 annual net savings in each of the out years). Is this project eligible for G.O. Bond funding? Is it more appropriately funded through current revenues?

Advantages of using same Fuel Management System as MCPS and M-NCPPC: The PDF indicates that the fuel management system is the same technology as that used by MCPS and M-NCPPC. What efficiencies will be realized using the same technology? Will County vehicles be able to fuel at MCPS and M-NCPPC locations? Will there be any savings from fuel purchases?

This packet contains the following attachments:

Executive's Recommended FY13-18 Fuel Management PDF	<u>1</u>
Executive's Approved FY11-16 Fuel Management PDF	2

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Fuel Management -- No. 361112

Category
Subcategory
Administering Agency
Planning Area

General Government
Other General Government
General Services
Countywide

Date Last Modified
Required Adequate Public Facility
Relocation Impact
Status

January 10, 2012
No
None.
Planning Stage

EXPENDITURE SCHEDULE (\$000)

Cost Element	Total	Thru FY11	Est. FY12	Total 6 Years	FY13	FY14	FY15	FY16	FY17	FY18	Beyond 6 Years
Planning, Design, and Supervision	102	0	36	66	46	20	0	0	0	0	0
Land	0	0	0	0	0	0	0	0	0	0	0
Site Improvements and Utilities	1,406	0	310	1,096	803	293	0	0	0	0	0
Construction	460	0	0	460	350	110	0	0	0	0	0
Other	2,503	0	1,204	1,299	1,049	250	0	0	0	0	0
Total	4,471	0	1,550	2,921	2,248	673	0	0	0	0	0

FUNDING SCHEDULE (\$000)

Short-Term Financing	4,471	0	1,550	2,921	2,248	673	0	0	0	0	0
Total	4,471	0	1,550	2,921	2,248	673	0	0	0	0	0

OPERATING BUDGET IMPACT (\$000)

Maintenance				341	31	62	62	62	62	62
Program-Staff				121	11	22	22	22	22	22
Cost Savings				-1,067	-97	-194	-194	-194	-194	-194
Net Impact				-605	-55	-110	-110	-110	-110	-110

DESCRIPTION

This is a two-phase project implementing a broad, county-wide enterprise fuel management system. This project provides for a fuel dispensing, tank monitoring, and fuel management system for county and volunteer fire stations in the first phase and the fuel sites operated by the Department of General Services (DGS) in the second phase. After installation of the system, all county vehicles will be capable of sharing fuel infrastructure while maintaining fuel security. Currently both Montgomery County Public Schools and Maryland-National Capital Park and Planning Commission utilize this fuel management technology. Once fully implemented, it is estimated that a fuel management system will create savings due to fuel loss control, more efficient scheduling, identification of potential maintenance problems before the problems occur, and less driver time. In addition, there can be additional cost savings if the fuel is purchased through one vendor once the system is fully implemented.

CAPACITY

The system will provide for approximately 3,600 vehicles at 30 sites.

ESTIMATED SCHEDULE

For FY12, the fuel management and tank monitoring system will be installed on the majority of the fire station fuel sites and vehicles. In FY13 and FY14, the system will be installed on remaining fire service sites, county fuel sites and vehicles.

JUSTIFICATION

The project will replace an aging fuel management system that is no longer able to reliably extract useful fleet data from newer vehicles due to changes in technology. Additionally, the old system is no longer supported by the manufacturer and used parts, which are difficult to obtain, must be found in order to keep the system operational.

In April 2004, the Montgomery County Fire and Rescue Service (MCFRS) "Apparatus Management Plan" was accepted by the County Council and, within that plan, fuel management was identified as a fleet management best practice. A fuel monitoring and distribution system and a fuel tanker are also identified under Section 5 of the MCFRS Master Plan ("Apparatus and Equipment" and "Environmentally-Compatible Facilities and Equipment"), adopted by the County Council in October 2005. A MCFRS fleet fueling report was prepared by Mercury Associates, Inc. in October 2008. The Department of Technology Services reviewed the project in September 2009. Finally, while many of the fire-rescue stations have fueling sites, only apparatus assigned to those stations can obtain fuel. After installation of the system, all fire apparatus will be able to fuel at any fire station-based fuel site.

OTHER

The expenditures reflect a turnkey project to install fuel dispensing and monitoring equipment at each fuel site and to install fuel rings.

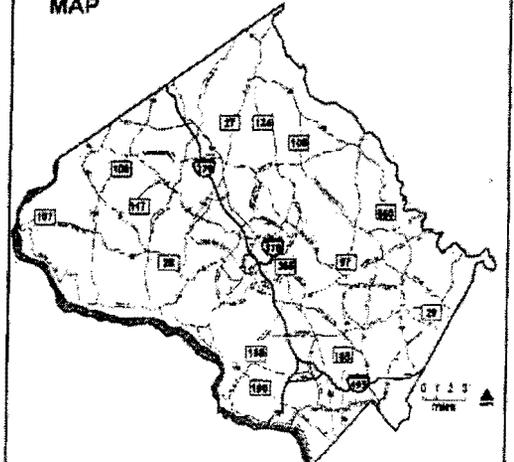
APPROPRIATION AND EXPENDITURE DATA

Date First Appropriation	FY11	(\$000)
First Cost Estimate	FY12	4,471
Current Scope		2,487
Last FY's Cost Estimate		
Appropriation Request	FY13	1,984
Appropriation Request Est.	FY14	0
Supplemental Appropriation Request		0
Transfer		0
Cumulative Appropriation		2,487
Expenditures / Encumbrances		0
Unencumbered Balance		2,487
Partial Closeout Thru	FY10	0
New Partial Closeout	FY11	0
Total Partial Closeout		0

COORDINATION

Department of General Services
Montgomery County Fire and Rescue Service
Department of Technology Services
Local Volunteer Fire and Rescue Departments
Montgomery County Public Schools
Maryland-National Capital Park and Planning Commission
Montgomery College

MAP



Fuel Management -- No. 361112

Category
Subcategory
Administering Agency
Planning Area

General Government
Other General Government
General Services
Countywide

Date Last Modified
Required Adequate Public Facility
Relocation Impact
Status

January 08, 2010
No
None
Planning Stage

EXPENDITURE SCHEDULE (\$000)

Cost Element	Total	Thru FY09	Est. FY10	Total 6 Years	FY11	FY12	FY13	FY14	FY15	FY16	Beyond 6 Years
Planning, Design, and Supervision	72	0	0	72	36	36	0	0	0	0	0
Land	0	0	0	0	0	0	0	0	0	0	0
Site Improvements and Utilities	244	0	0	244	122	122	0	0	0	0	0
Construction	0	0	0	0	0	0	0	0	0	0	0
Other	2,171	0	0	2,171	1,204	967	0	0	0	0	0
Total	2,487	0	0	2,487	1,362	1,125	0	0	0	0	0

FUNDING SCHEDULE (\$000)

Short-Term Financing	2,487	0	0	2,487	1,362	1,125	0	0	0	0	0
Total	2,487	0	0	2,487	1,362	1,125	0	0	0	0	0

OPERATING BUDGET IMPACT (\$000)

Maintenance				279	0	31	62	62	62	62
Program-Staff				99	0	11	22	22	22	22
Cost Savings				-776	0	0	-194	-194	-194	-194
Net Impact				-398	0	42	-110	-110	-110	-110

DESCRIPTION

This project will be the first phase of a broader, County-wide enterprise fuel management system. This project provides for a fuel dispensing, tank monitoring, and fuel management system for County and volunteer fire stations. After installation of the system, all fire apparatus will be able to fuel at any fire station-based fuel site. Once fully implemented, it is estimated that a fuel management system will create savings due to fuel loss control, more efficient scheduling, identification of potential maintenance problems before the problems occur, and less driver time. In addition, there can be additional cost savings if the fuel is purchased through one vendor, once the system is fully implemented.

CAPACITY

The first phase of this project will fund a fuel management system for approximately 400 Montgomery County Fire and Rescue Service (MCFRS) vehicles as well as approximately 20 fuel sites located at individual fire stations.

ESTIMATED SCHEDULE

For FY11, the tank monitoring system will be installed and approximately fifty percent of the fleet will have the system installed. In FY 12 the Fire Service fleet will be near to completion and work will begin on the next phase.

JUSTIFICATION

In April 2004 the Montgomery County Fire and rescue Service (MCFRS) "Apparatus Management Plan" was accepted by the County Council and within that plan fuel management was identified as a fleet management best practice. A fuel monitoring and distribution system and a fuel tanker are also identified under Section 5 of the MCFRS Master Plan ("Apparatus and Equipment" and "Environmentally-Compatible Facilities and Equipment"), adopted by the County Council in October 2005. A MCFRS fleet fueling report was prepared by Mercury Associates, Inc. in October 2008. The Department of Technology Services reviewed the project in September 2009. Finally, while many of the fire-rescue stations have fueling sites, only apparatus assigned to those stations can obtain fuel. After installation of the system, all fire apparatus will be able to fuel at any fire station-based fuel site.

OTHER

The expenditures reflect a turnkey project to install fuel dispensing and monitoring equipment at each fuel site, and install fuel rings on the majority of the fire apparatus in the County. MCFRS' mechanic technicians will install the fuel rings on the remainder of the fire apparatus.

APPROPRIATION AND EXPENDITURE DATA		
Date First Appropriation	FY11	(\$000)
First Cost Estimate		
Current Scope	FY11	2,487
Last FY's Cost Estimate		0
Appropriation Request	FY11	1,362
Appropriation Request Est.	FY12	1,125
Supplemental Appropriation Request		0
Transfer		0
Cumulative Appropriation		0
Expenditures / Encumbrances		0
Unencumbered Balance		0
Partial Closeout Thru	FY08	0
New Partial Closeout	FY09	0
Total Partial Closeout		0

COORDINATION
Department of General Services
Montgomery County Fire and Rescue Service
Department of Technology Services
Local Volunteer Fire and Rescue Departments

