

T&E COMMITTEE #1  
February 27, 2014

Worksession

**MEMORANDUM**

February 25, 2014

TO: Transportation, Infrastructure, Energy and Environment Committee

FROM: Susan J. Farag, Legislative Analyst *SJF*

SUBJECT: **FY15-20 Capital Improvements Program**  
Fuel Management (Department of General Services, Division of Fleet Management Services)

Those expected for this worksession:

Bill Griffiths, Chief, Division of Fleet Management Services (DFMS)  
Corey Orlosky, Office of Management and Budget (OMB)

**FUEL MANAGEMENT SYSTEM:**

(FY15-20 Recommended PDF © 1-2; FY13-18 Approved PDF © 3)

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 is being implemented in two phases, initially focusing on Montgomery County Fire and Rescue Service (MCFRS) vehicles and fuel sites. Later, it will be expanded to meet all County fleet needs.

**OVERVIEW**

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.

## **CURRENT ISSUES**

Of the 30 County fueling sites, 14 have had the new system installed. The majority of the remaining sites will be installed in FY14, and four will be installed in FY15. All work is projected to be completed by the end of FY15. This timeline is somewhat delayed from original projections, due to some access restrictions at volunteer fire station fuel sites. ***There is no overall cost change for the project***, although some of the funding has been pushed out from FY14 to FY15 to reflect construction delays. According to Executive staff, these access issues have been resolved. All volunteer fire stations that currently have fuel tanks or who are planned to have on-site fueling capability will be included, with the exception of the Damascus Fire Station. Since it is very close to the Damascus Highway Depot, DFMS is currently assessing the feasibility of combined fueling.

***Partnering with Outside Agencies:*** One of the goals of the new fuel system is to potentially partner with the Montgomery County Public Schools (MCPS) and Maryland-National Capital Park and Planning Commission (M-NCPPC). Both agencies use the same fuel management system technology. DFMS has had discussions with both agencies about shared site use, site accessibility, and a charge-back process. Once the County's new fuel management system is fully-operational, DFMS will meet with both agencies again to merge vehicle databases and target the appropriate cost centers. Shared use among all agencies potentially will also provide more cost savings by purchasing fuel through one vendor.

***Next Steps:*** DFMS is beginning to monitor transactions at one fueling location in order to configure the fuel transactions to interface with the County's billing system and fleet management information system. Once the sites are fully operational, it will begin to monitor fuel on a consistent basis.

## **COUNCIL STAFF RECOMMENDATION**

Recommend approval as submitted by the Executive. The Committee may wish to have DFMS provide a progress report in Fall 2014 to identify any new operational issues that may need to be addressed during the next budget cycle.

**This packet contains the following attachments:**

Executive's Recommended FY15-20 Fuel Management PDF	1-2
Executive's Approved FY13-18 Fuel Management PDF	3
DFMS Responses	4
Project Timeline	5

F:\Frag\\_FY15 CIP Budget\Fuel Management CIP Committee 22714.doc

# Fuel Management (P361112) RECOMMEND FY15-20

Category	General Government	Date Last Modified	1/6/14
Sub Category	Other General Government	Required Adequate Public Facility	No
Administering Agency	General Services (AAGE29)	Relocation Impact	None
Planning Area	Countywide	Status	Planning Stage

	Total	Thru FY13	Est FY14	Total 6 Years	FY 15	FY 16	FY 17	FY 18	FY 19	FY 20	Beyond 6 Yrs
<b>EXPENDITURE SCHEDULE (\$000s)</b>											
Planning, Design and Supervision	102	0	102	0	0	0	0	0	0	0	0
Land	0	0	0	0	0	0	0	0	0	0	0
Site Improvements and Utilities	1,406	474	932	0	0	0	0	0	0	0	0
Construction	460	0	460	0	0	0	0	0	0	0	0
Other	2,503	105	1,798	600	600	0	0	0	0	0	0
<b>Total</b>	<b>4,471</b>	<b>579</b>	<b>3,292</b>	<b>600</b>	<b>600</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

<b>FUNDING SCHEDULE (\$000s)</b>											
Short-Term Financing	4,471	579	3,292	600	600	0	0	0	0	0	0
<b>Total</b>	<b>4,471</b>	<b>579</b>	<b>3,292</b>	<b>600</b>	<b>600</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

<b>OPERATING BUDGET IMPACT (\$000s)</b>											
Cost Savings				-1,164	-194	-194	-194	-194	-194	-194	-194
Maintenance				372	62	62	62	62	62	62	62
Program-Staff				132	22	22	22	22	22	22	22
<b>Net Impact</b>				<b>-660</b>	<b>-110</b>						

### APPROPRIATION AND EXPENDITURE DATA (000s)

Appropriation Request	FY 15	0
Appropriation Request Est.	FY 16	0
Supplemental Appropriation Request		0
Transfer		0
Cumulative Appropriation		4,471
Expenditure / Encumbrances		886
Unencumbered Balance		3,585

Date First Appropriation	FY 11	
First Cost Estimate		
Current Scope	FY 14	4,471
Last FY's Cost Estimate		4,471

### 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

In FY12 and FY13, the fuel management and tank monitoring system was installed on the majority of the fire station fuel sites and vehicles. In FY14 and FY15, the system will be installed on remaining fire service sites, County fuel sites and vehicles. Project delayed due to access restrictions to volunteer fire station fuel sites.

### 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 to keep the system operational are difficult to obtain. 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.

### Coordination

## Fuel Management (P361112)

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

APPROVED FY 13-18

### Fuel Management -- No. 361112

Category	General Government	Date Last Modified	January 10, 2012
Subcategory	Other General Government	Required Adequate Public Facility	No
Administering Agency	General Services	Relocation Impact	None
Planning Area	Countywide	Status	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
<b>Total</b>	<b>4,471</b>	<b>0</b>	<b>1,550</b>	<b>2,921</b>	<b>2,248</b>	<b>673</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

#### FUNDING SCHEDULE (\$000)

Short-Term Financing	4,471	0	1,550	2,921	2,248	673	0	0	0	0	0
<b>Total</b>	<b>4,471</b>	<b>0</b>	<b>1,550</b>	<b>2,921</b>	<b>2,248</b>	<b>673</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

#### OPERATING BUDGET IMPACT (\$000)

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

#### 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.

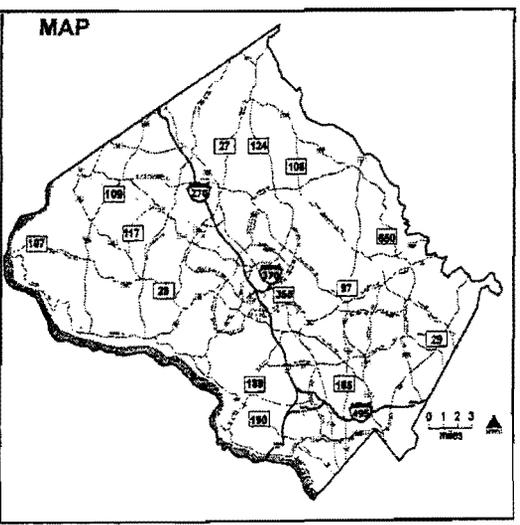
In April 2004, the Montgomery County Fire and Rescue Service (MCFRS) "Apparatus Management Plan" was accepted by the County Council and, within that plan, fuel management was identified as a fleet management best practice. A fuel monitoring and distribution system and a fuel tanker are also identified 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		
Last FY's Cost Estimate		2,487
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



3

## Fuel Management System CIP Questions

1). The PDF indicates that the fuel management system will be installed at 30 sites. Installation has been pushed out another year due to difficulty accessing some volunteer fire station fuel sites.

a. How many sites have had the new system installed?

14 Installed

b. What is the projected timeframe for installing the remaining ones?

The Majority of the remaining sites will be installed in FY14; 4 sites are projected to be installed in FY15.

c. The PDF indicates that there were access restrictions to volunteer fire station fuel sites. Has this been resolved? Will all volunteer fire station fuel sites be included?

Access issues have been resolved. Volunteer Fire Stations that currently have fuel tanks or currently planned to have fueling capabilities on-site will be included with the exception of the Damascus Fire Station. Due to its proximity to the Damascus Highway Depot we're currently assessing the feasibility of combining fueling.

2) Please provide a status update on any collaboration with M-NCPPC and MCPS.

DFMS has initiated conversations with M-NCPPC and MCPS about shared site use, site accessibility, and charge back processes. Once the new fuel management system is operational and the old system phased out DFMS will need to meet with both agencies to add/merge vehicle databases and target the appropriate cost centers.

3) Has DGS started to monitor fuel use at any of the newly installed sites yet, or will that wait until all sites are operational?

DGS is beginning to pilot transactions at one location in order to configure the fuel transactions in a manner that will properly interface with the county's billing system and fleet management information system. DGS will wait until the sites are operational before beginning the process of monitoring FRS fuel on a consistent basis.

Task	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Comments	Legend
Purchase Order for last 4 FRS Sites																		Damascus FS13 not included	Procurement
Install Fuel Management System for next 6 FRS Sites		■	■															Damascus FS13 not included	Work/ Construction
Get Purchase Order for 1st Round of Fleet Sites																		Seven Locks, EMTOC, Kensington, Poolesville, Damascus and Germantown	IT
Install Fuel Management System at 1st Round of FMS Sites		■	■															Seven Locks, EMTOC, Kensington, Poolesville, Damascus and Germantown	Vehicles
Static IP Addresses For Existing Sites	■																	Work with DTS to get 2 Static IP Addresses at each site on the DGS network	Fuel Cards
Connect existing Systems to the network	■	■	■															Connect to fuel server Static IP address 172.29.17.20	
Install System on Vehicles			■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	Will run continuous throughout the remainder of the project	
Replace Fuel Cards				■	■	■	■	■	■	■	■	■	■	■	■	■	■	A fuel card Audit will occur in April. At the conclusion of the Audit all agencies that have a fuel card will be issued a prokee. Fuel cards will be phased out when the new system is brought online.	
Get POs for last site*																		Provided we are not able to combine Damascus FRS and Highway Fueling.	
Install Fuel Management System at last FRS 1 Sites*				■														Provided we are not able to combine Damascus FRS and Highway Fueling.	
Get POs for next FMS sites																		Depending on the available funding in FY14 and the number of vehicles left to have system installed	
Install Fuel Management System at next FMS Sites				■	■													Depending on the available funding in FY14 and the number of vehicles left to have system installed	
Get POs for Sites approved for FY15																			
Install Fuel Management System for Last FMS Sites						■	■	■	■	■									