PS COMMITTEE #1
December 5, 2013
Discussion

MEMORANDUM

December 3, 2013

TO: Public Safety Committee

FROM: Essie McGuire, Senior Legislative Analyst

SUBJECT: **Discussion – Montgomery County Fire and Rescue Service Apparatus Acquisition and Replacement**

Today the Public Safety Committee will discuss apparatus acquisition and replacement for the Montgomery County Fire and Rescue Service (MCFRS). The following individuals are expected to participate:

- Fire Chief Steve Lohr
- Division Chief Scott Goldstein, Operations, MCFRS
- Assistant Chief Eric Houston, MCFRS
- Steve Lamphier, Fleet Manager, MCFRS
- Dominic Del Pozzo, Budget Manager, MCFRS
- Amy Wilson, Office of Management, Budget, and Planning

Apparatus acquisition and replacement is a topic of critical importance in MCFRS. The Committee most recently discussed apparatus purchases in the context of the new revenue becoming available through the Emergency Medical Services (EMS) Reimbursement Program. At that time, full information was not available on FY13 and FY14 purchases or on the plan for apparatus purchases going forward. The Committee requested further discussion on the status of the fleet, FY13 and FY14 apparatus purchases, maintenance trends, and plans for apparatus purchasing going forward. MCFRS prepared the presentation attached on circles 1-6 for today's discussion.

BACKGROUND: FUNDING HISTORY

The Apparatus Management Plan was developed in 2004 following a report from the Office of Legislative Oversight (OLO) on MCFRS vehicle maintenance and repair. The plan included recommended steps to improve fleet maintenance through system processes, safety and performance standards, information and reporting systems, training, facilities, and maintenance and replacement schedules.

Most of the recommended strategies of the apparatus plan have been addressed and implemented, particularly in the areas of reporting and information systems, performance policies and procedures, facilities, and training. **The primary area which has not been fully implemented, largely due to lack of funding, is vehicle acquisition and replacement.**

- From FY05-FY07, much of the funding for the apparatus plan was approved through supplemental appropriations to the operating budget. The elements of the plan funded in this time period included increased maintenance staff and contractual services, some funds for training and information systems, and significant funding for tools and equipment for apparatus. These appropriations did not include funds for vehicle purchase or replacement.

- In May 2006 the Council approved $30.8 million for a large apparatus purchase of approximately 71 vehicles. This purchase was funded through Certificates of Participation (COPs), a form of short-term debt financing.

- In FY10, the Council approved funding in the operating budget for master lease purchase of 14 EMS units. The original request had been for 30 units.

- Apparatus purchases related to the opening of new stations have typically been included in the capital budget projects for that station.

- **In FY13**, EMS reimbursement revenues funded 2 engines and tools and equipment for multiple vehicles (circle 5). This purchase is estimated to total $1.4 million.

- **In FY14**, MCFRS anticipates that EMS reimbursement revenues will be used to fund 2 tractor drawn aerials and between 10-12 EMS units (circle 5). This purchase is estimated to total $5.4 million.

- Apparatus associated with opening the **new Travilah FS #32** will also be purchased in FY14, part of the CIP funding for that project. This is expected to be one engine and one EMS unit.

FLEET UPDATE

Fleet status: Circle 5 shows the age and mileage of the fleet by apparatus type. The older and higher mileage units are used for reserve duty as much as possible, as indicated by the chart. Aerials are the oldest units on average both in front line and reserve units.

Maintenance issues: As stated on circle 2, as the fleet ages the operating costs, maintenance, and downtime for repair all increase. The table on circle 4 shows the fleet work orders by apparatus type for FY12 and FY13. As noted, this table provides an overview of workload only.

Workload appears to be very steady across the time period for all apparatus types. However, the proportion of work orders per type of vehicle varies. For engines, the average

number of work orders is 55 per month for 68 vehicles; for EMS units 50 per month for 74 vehicles; for rescue squads 7 per month for 9 vehicles; and for aerials 29 per month for 24 vehicles. It appears that the number of repairs is much greater for aerials relative to the number of vehicles. EMS units have the lowest number of work orders on average relative to the number of vehicles.

The slide on circle 3 shows the trends in vehicle expenses FY11-14. It shows that vehicle maintenance and repair costs in particular have been increasing and for FY14 are projected to be well above budgeted levels.

The slide on circle 4 highlights the current and anticipated efforts to increase capacity in fleet maintenance. MCFRS has increased its "road service" to try to repair vehicles out in the field and reduce down time where possible. Fleet has also initiated a standby program on weekends and holidays to increase capacity.

DISCUSSION ISSUES

Maintenance capacity

- The Committee may want to ask FRS to comment further on what may be causing the recent increase in costs for vehicle maintenance and repair as well as how expenses have been accommodated in recent budgets.

- In the past, MCFRS and the Committee have discussed the possibility of adding additional shifts to increase maintenance capacity. The Committee may want to discuss with MCFRS whether Fleet has sufficient capacity under the current structure, and what factors need to be considered in adding additional shifts or otherwise increasing maintenance capacity.

Replacement cycle

- For many years the apparatus master plan called for a regular replacement cycle of 2 aerial units, 5 engines, and 10 EMS units per year as a method to even out purchasing and keep up with maintenance and replacement standards. This cycle has not been funded, and at this point only episodic purchases have been made since 2006. It may be useful to discuss this replacement cycle as a framework for planning going forward. To what extent would that cycle still represent a useful annual framework? To what extent would additional "catch up" purchases be needed before that 2/5/10 cycle would work? To what extent could a 2/5/10 cycle be funded by EMS reimbursement revenues?

- It would appear from the fleet age and maintenance information provided that the aerial units are the apparatus type in most critical need of attention. Council staff notes that aerial units are also the most expensive to purchase. The Committee may want MCFRS to comment on whether that observation is accurate and if so, what steps can be taken to address this need.

Funding approaches

- The County Executive is currently determining his recommendations for the capital and operating budgets, and presumably apparatus purchases will be considered as part of these

deliberations. The Committee will have a fuller discussion of specific budget allocation issues during budget deliberations this spring. At this time however, it may be useful to discuss the range of approaches and issues involved. The slide on circle 6 from the Office of Management and Budget discusses some of the factors for consideration in how to finance apparatus acquisition and replacement. The Committee may want to ask OMB and FRS to comment further on the pros and cons of outright purchases and debt service options.

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MCFRS Fleet Update

Montgomery County Council
Public Safety Committee
November 7, 2013

Fire Chief Steven Lohr

Assistant Chief Eric Houston

Fleet Manager Steve Lamphier

FY14 Goals and Accomplishments

- Filled three Mechanic Technician positions for a total of nine and implemented a formal training program for all new employees
- Assisted the KVFD and RVFD with apparatus acquisitions; anticipate that other LFRDs have planned acquisition projects
- Continue fire fuel management and UST replacement projects in cooperation with DGS
- Implement an Oracle ERP-based inventory control system for tools, equipment, hose, and appliances
- Collaborate with the Division of Operations to develop the next generation of command vehicles

FY14 Goals and Accomplishments

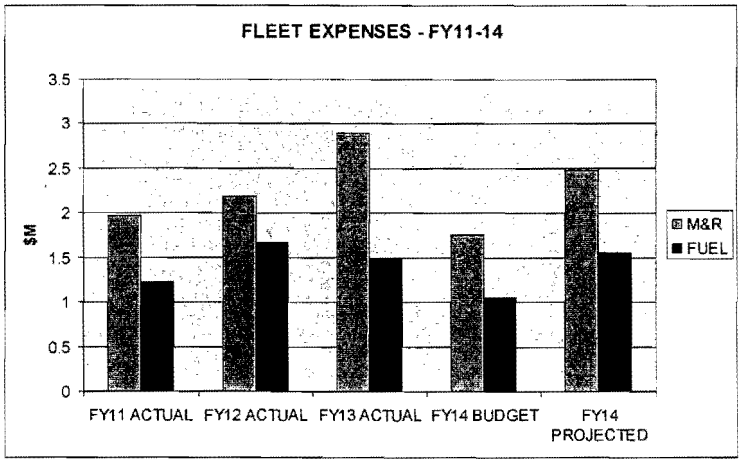
- Continuous improvement, especially with regards to data driven decisions using basic fleet performance measures
- Purchase replacement apparatus as funded in the FY14 approved PSP/Operating and/or Capital Improvements Program budget(s)
- Take delivery of apparatus programmed for the Travilah fire station
- Implementation of a standby program for weekends

FY14 Challenges

- Vehicles continue to age and repair frequency and expense is increasing
- Minimal funding for vehicle replacement, FY07-FY13
- Optimizing workflow with new employees in order to "build depth on the bench"
- Downtime is not optimal: apparatus age, vendor workloads, parts availability, and staff availability
- Efficient and timely communications with customers
- Parts timeliness: 1 full-time Senior Supply Technician serves 14 Equipment Maintenance Crew Chiefs and Mechanic Technicians

Vehicle Expenses – FY11-14

*exclusive of the BCCRS



MCFRS Fleet Section Staffing

- Asst. Fire/Rescue Chief
- Fleet Manager
- Equipment Services Coordinator
- (5) Equipment Maintenance Crew Chiefs*
- (9) Mechanic Technicians*
- (1) Program Specialist II
- (1) Administrative Specialist I
- (1) Senior Supply Technician (Parts)
- (1) Firefighter/Rescuer
- All positions are filled
- *Various levels of ASE and EVT certifications are required within each grade

MCFRS Fleet Section Staffing

- Classification study of the Equipment Maintenance Crew Chiefs and the Mechanic Technicians is in process
- Enhanced service and quality:
  - Equipment Maintenance Crew Chiefs moved to (4) 10-hour days
  - Road service
  - Standby program on weekends and holidays to address emergent issues
- Anticipated staffing needs:
  - Supply Technician for parts. Currently one Senior Supply Technician serves 14 Equipment Maintenance Crew Chiefs and Mechanic Technicians
  - Program Manager for contract administration, warranty administration, and data quality and analysis

FRS Fleet Work Orders by Apparatus Type

This provides an idea of workload. With the exception of road service, this does not identify any discernable trending as data is continued to be refined.

MCFRS FLEET - NUMBER OF WORK ORDERS FY12 AND FY13

*WORK ORDERS MAY INCLUDE MULTIPLE DEFECTS

	ENGINES /TANKERS	AERIALS	EMS	RESCUE SQUADS
TOTAL VEHICLES	(68*)	(24)	(74)	(9)
July 2011	62	34	60	7
August 2011	67	33	62	10
September 2011	55	36	51	6
October 2011	56	34	52	7
November 2011	44	27	51	6
December 2011	46	29	50	7
January 2012	45	25	48	10
February 2012	47	26	57	6
March 2012	70	34	60	11
April 2012	68	22	59	6
May 2012	41	22	66	7
June 2012	71	31	48	10
July 2012	70	36	54	5
August 2012	63	37	48	7
September 2012	63	21	45	9
October 2012	54	33	54	8
November 2012	56	28	39	7
December 2012	51	24	45	6
January 2013	48	26	41	8
February 2013	31	27	37	6
March 2013	40	32	48	10
April 2013	57	24	43	7
May 2013	58	27	48	7
June 2013	60	30	54	8

MCFRS Fleet – Age & Mileage

INCL. LFRD-owned	AGE				MILEAGE		
	0-5	6-10	>10	AVERAGE	<50,000	50,000-100,000	>100,000
AERIALS							
Front-line (16)	1	12	3	8	7	7	2
Reserve (8)		1	7	16		5	3
ENGINES							
Front-line (34)		34		6	17	17	
Reserve (26)	2	15	9	12	9	8	9
EMS							
Front-line (50)	24	25	1	7.25	13	18	19
Reserve (24)		4	20	11.5		2	22
RESCUE SQUADS							
Front-line (6)	1	4	1	7	3	3	
Reserve (3)			3	13		2	1
TANKERS (8)	2	1	5	11	6	2	

FY13 & FY14 Apparatus Acquisition Activity

- FY13 EMST Funds
  - (2) engines – due March 2014
  - Tools and equipment for (1) tractor-drawn aerial, 2 pumpers, and 4 EMS units
- FY14 EMST Funds
  - (2) tractor-drawn aerials ($2.4M)
  - (10-12) EMS units ($3.0M)

Why is Regular Fleet Replacement Important?

- As the fleet ages:
  - Operating costs increase
  - Reliability decreases and downtime increases
  - Obsolescence – parts availability and technological
- Steady capital outlays on a regular basis vs. a large infusion of capital on a one-time basis
- Possible reduction of reserve fleet; thus further lowering operating costs
- For FRS, fleet replacement must include replacement of the tools and equipment associated with fire apparatus, i.e. hose, thermal imagers, advanced medical equipment, SCBA, vehicle extrication equipment, etc.

Apparatus Replacement Funding

***provided by the Office of Management and Budget**

- Collaborative effort between FRS, OMB, and FIN to determine best method of obtaining replacement apparatus; consideration of:
  - Master lease
  - Certificates of Participation (COP)
  - Revenue bonds
  - Cash, and
  - Stability and predictability of annual revenues
- Dependent on debt capacity, interest rates, life expectancy, and EMST revenue
- Financing allows for more apparatus to be purchased sooner, but creates fixed debt payment obligations and limits flexibility to respond to changed circumstances