

# Fire and Emergency Medical Services Department (FEMS) FY2016 Performance Accountability Report (PAR)

## Introduction

The Performance Accountability Report (PAR) measures each agency's performance for the fiscal year against the agency's performance plan and includes major accomplishments, updates on initiatives' progress and key performance indicators (KPIs).

#### Mission

The mission of the Fire and Emergency Medical Services Department (FEMS) is to promote safety and health through excellent pre-hospital medical care, fire suppression, hazardous materials response, technical rescue, homeland security preparedness and fire prevention and education in the District of Columbia.

## **Summary of Services**

FEMS provides emergency medical services (EMS), fire suppression, homeland security and special operations response for the District of Columbia, including planned events and activities unique to the nation's capital. The Department is responsible for fire and life safety code enforcement, along with community based education and prevention programs. FEMS is the lead first-response agency for managing consequences resulting from natural disasters or other catastrophic events impacting the national capital region.

## Overview – Agency Performance

The following section provides a summary of FEMS performance in FY 2016 by listing FEMS's top accomplishments, and a summary of its progress achieving its initiatives and progress on key performance indicators.

## Top Agency Accomplishments

Accomplishment	Impact on Agency	Impact on Residents
The Department's Initiative to perform 'High Risk Building Pre-incident Planning in each Engine Company area to strengthened the knowledge of our first responders and provide better familiarity with buildings to which they have to respond.	This effort positively impacted inspections and operations personnel and illustrated the importance of both Prevention and Operations working together to accomplish a common goals.	Ensured safer buildings for residents, visitors, and patrons who live in and/ or visit the District of Columbia.
CPR 'Hands On Hearts' Training for District Resident and Visitors. In total,10,994 people were trained by the end of the Fiscal Year 2016, more than twice the goal of 5,000 or more.	The Department's objective to "improve health safety awareness through public education" is supported through these efforts. This initiative positively impacted the Department's public image. Preliminary data shows that the District's rate of bystander CPR during cardiac arrests is increasing, which in the long-term will hopefully increase the District's cardiac arrest survival rate.	The American Heart Association (AHA) has recommended to evaluate community participation in reducing the risk of death caused by sudden cardiac arrest. Fulfills the Department's objective to "improve health safety awareness through public education."
Prioritizing the purchase of EMS vehicles to improve sustainability of the vehicle fleet commonly used for responding to emergency medical services (EMS) incidents. In FY16 the Department has put into service the following new or refurbished vehicles: 16 transport units, 2 engines, 7 ladder trucks and 7 supervisor vehicles. Since Mayor Bowser came into office, the Department has put into service the following new or refurbished vehicles: 16 transport units, 2 engines, 7 ladder trucks and 10 supervisor vehicles. The US Glenn Fire Boat One was also refurbished and put back into service in April 2015, and the Department put into service a new Fire Boat Two. The Department's capital budget fully funds a regular replacement schedule for these vehicles.	Agency vehicles are in better condition and the Department has a reserve ambulance fleet for the first time in years.	This effort supports fleet sustainability and improved reliability of emergency vehicles.

In FY 2016, FEMS had 40 Key Performance Indicators. Of those, 0 were neutral, and another 6 were not able to be reported by the end of the fiscal year. Of the remaining measures, 42% (17 KPIs) were met, 5% (2 KPIs) were nearly met, and 38% (15 KPIs) were unmet. In FY 2016, FEMS had 23 Initiatives. Of those, 57% (13) were completed and 26% (6) were nearly completed, and 17% (4) were not completed. The next sections provide greater detail on the specific metrics and initiatives for FEMS in FY 2016.

# FY16 Objectives

Division	Objective
Emergency Medical Services Administration	Improve the quality of emergency medical care provided by Department personnel.
Division	improve the quanty of emergency medical care provided by Department personner.
Emergency Medical Services Administration	Improve health safety awareness through public education.
Division	improve hearth safety awareness through public education.
Emergency Medical Services Administration	Identify alternatives for national who neutinals use EMC to access healthcore
Division	Identify alternatives for patients who routinely use EMS to access healthcare.
Emergency Medical Services Operations Division	Compassionately care for sick and injured patients.
Emergency Medical Services Operations Division	Improve emergency medical care for patients with time sensitive illnesses or injuries.
Fire Prevention Division	Improve fire safety awareness through public education.
Fire Prevention Division	Reduce threats to lives and property by preventing fires.
Fire Prevention Division	Determine the origin and cause of fires by investigation.
Office of the Fire and EMS Chief	Communicate information to the public and media.
Office of the Fire and EMS Chief	Strengthen the labor/management partnership.
Office of the Fire and EMS Chief	Plan and prepare for the future.
Operations Bureau	Quickly control and extinguish fires.
Operations Bureau	Be prepared for natural disasters or other catastrophic events.
Services Bureau	Develop a safe and technically competent workforce.
Services Bureau	Improve employee safety and wellness.
Services Bureau	Improve living and working conditions in fire stations.
Services Bureau	Improve the reliability of emergency vehicles.
Technical Services Bureau	Use information technology to improve business processes.

## ${\bf FY16~KPIs}$

Objective: Communicate information to the public and media.

Measure	Target	Freq	Q1	Q2	Q3	Q4	Total	KPI Status	KPI Barriers
Number of times the FEMS web site was visited to access service, program or performance measurement content	0	Q	45,592	45,592	40,076		131,260	Met	
Number of community group meetings scheduled and attended by executive managers	100	Q	8	24	5	4	41	Unmet	In FY 2016, the Department did attend a significant number of community meetings, particularly during the rollout of the third party provider initiative, but not enough to achieve what is probably too ambitious a goal. In addition to regular community group meetings with District residents, neighborhood groups, interest groups and community stakeholders the Department began holding employee forums at the Training Academy with an expanded format for soliciting employee feedback and facilitating productive discussions between Department Leadership and personnel. These were attended by the Fire and EMS Chief, other Assistant Fire Chiefs, the Department Medical Director or the Department Chief of Staff.

## Objective: Compassionately care for sick and injured patients.

Measure	Target	Freq	Q1	Q2	Q3	Q4	Total	KPI Status	KPI Barriers
NA	90	Q	91.35	91.44	92.37	90.7	91.5	Met	
NĀ	90	$\overline{Q}$	90.53	92.36	92.09	88.63	91.2	Met	

## Objective: Determine the origin and cause of fires by investigation.

Measure	Target	Freq	Q1	Q2	Q3	Q4	Total	KPI Status	KPI Barriers
Percentage of "structural" arson fires cleared by arrest or exceptional means	0.25	A					16.7	Met	

## Objective: Identify alternatives for patients who routinely use EMS to access healthcare.

Measure	Target	Freq	Q1	Q2	Q3	Q4	Total	KPI Status	KPI Barriers
Number of patient transports for individually identified patients who were transported 10 or more times during a 12 month period by an FEMS transport unit	12,000	A					10,790	Met	
Number of individually identified patients who were transported 10 or more times during a 12 month period by an FEMS transport unit	500	A					559	Unmet	FY 2016 was the first year the Department used this measure for reporting and the goal value was close to being met. During FY 2017 and beyond, the Department will continue to focus on reducing high volume use of EMS by a smaller group of patients through partnership with the District's Integrated Healthcare Collaborative (IHC) and other healthcare and social service agencies.

Percentage of all patients who were individually identified as being transported 10 or more times during a 12 month period by an FEMS transport unit	1	A	1.2	Unmet	FY 2016 was the first year the Department used this measure for reporting and the goal value was close to being met. During FY 2017 and beyond, the Department will continue to focus on reducing high volume use of EMS by a smaller group of patients through partnership with the District's Integrated Healthcare Collaborative (IHC) and other healthcare and social service agencies.
Percentage of all patient transports for patients individually identified as being transported 10 or more times during a 12 month period by an FEMS transport unit	12	A	13.5	Unmet	FY 2016 was the first year the Department used this measure for reporting and the goal value was close to being met. During FY 2017 and beyond, the Department will continue to focus on reducing high volume use of EMS by a smaller group of patients through partnership with the District's Integrated Healthcare Collaborative (IHC) and other healthcare and social service agencies.

Objective: Improve emergency medical care for patients with time sensitive illnesses or injuries.

Measure	Target	Freq	Q1	Q2	Q3	Q4	Total	KPI Status	KPI Barriers
Percentage of Level 1 Criteria Trauma									
patients transported in 10 minutes or less after a first responding EMT or Paramedic	95	Q							
arrived at an EMS call									

Percentage of patients who survived to hospital discharge after experiencing a sudden cardiac arrest witnessed by a bystander	15	Q	Currently, the Department is waiting on regional hospitals to finish data reporting in the Cardiac Arrest to Enhance Survival (CARES) registry for FY 2016 patient cases. At the end of FY 2016 (10/1/2016), there were more than 70 incomplete records in the system that did not indicate hospital patient outcome. Accordingly, the Department could not accurately calculate the percentage of patients who survived cardiac arrest during FY 2016. When hospital data entry is completed, the Department will publish updated survival information to the performance website.
Percentage of patients with suspected cardiac etiology who survived to hospital discharge after experiencing a sudden cardiac arrest witnessed by a bystander with an initial rhythm of ventricular fibrillation	3	Q	Currently, the Department is waiting on regional hospitals to finish data reporting in the Cardiac Arrest to Enhance Survival (CARES) registry for FY 2016 patient cases. At the end of FY 2016 (10/1/2016), there were more than 70 incomplete records in the system that did not indicate hospital patient outcome. Accordingly, the Department could not accurately calculate the percentage of patients who survived cardiac arrest during FY 2016. When hospital data entry is completed, the Department will publish updated survival information to the performance website.

Percentage of EMS patient transport calls when a FEMS transport unit returned to service in 30 minutes or less after arriving at a hospital with a patient	50	Q	11.64	12.6	14.64	16.48	13.5	${ m Unmet}$	Transport unit drop time, or the time transport units spend at hospitals at arriving with a patient, marginally improved during FY 2016 (from 12.6% in Q1 to 16.5% in Q4). Although a number of factors contribute to drop time delays, the Department has determined the best path forward is to refocus extensive management effort on elimination of delays. This includes working more closely with hospitals to identify and reduce emergency department delays (if they occur) and an individual focus on transport unit crew performance to meet the 30 minute benchmark time. A revision to transfer of care procedures was issued to Department personnel on 11/30/2016, detailing the new process.
Percentage of higher priority EMS calls when a first responding EMT arrived in 5 minutes or less	90	Q	62.14	60.4	62.36	65.49	62.7	${ m Unmet}$	- 11/30/2016, detailing the new process FY 2016 was the first year the  Department used NFPA Standard 1710 bench mark response times (for this measure, 5 minutes) for reporting. The 90% goal is the national standard.  During FY 2016, month-to-month performance (excluding January, 2016) remained consistently in the low 60% range. Because of the volume of EMS calls, especially during peak or surge periods, achieving the 90% goal for this standard may be unrealistic with the resources available to the Department.  Accordingly, during FY 2017 and beyond, the Department will continue to focus on reducing non-emergent EMS calls through partnership with the District's Integrated Healthcare  Collaborative (IHC) and the Office of Unified Communications (OUC).

Percentage of higher priority EMS calls when a first responding EMT arrived in 5 minutes or less and a Paramedic arrived in 9 minutes or less	90	Q	53.89	52.63	51.13	50.94	52.1	Unmet	FY 2016 was the first year the Department used NFPA Standard 1710 bench mark response times (for this measure, 5 and 9 minutes) for reporting. The 90% goal is the national standard. During FY 2016, month-to-month performance remained consistently in the low 50% range. Because of the volume of EMS calls, especially during peak or surge periods, achieving the 90% goal for this standard may be unrealistic with the resources available to the Department. Accordingly, during FY 2017 and beyond, the Department will continue to focus on reducing non-emergent EMS calls through partnership with the District's Integrated Healthcare Collaborative (IHC) and the Office of
									Collaborative (IHC) and the Office of Unified Communications (OUC).

Percentage of highest priority EMS calls when a first responding EMT arrived in 5 minutes or less and two Paramedics arrived in 9 minutes or less	90	Q	63.65	62.97	58.53	56.18	60.2	Unmet	FY 2016 was the first year the Department used NFPA Standard 1710 bench mark response times (for this measure, 5 and 9 minutes) for reporting. The 90% goal is the national standard. During FY 2016, month-to-month performance varied from a low of 50% to a high of 70%. Because of the volume of EMS calls, especially during peak or surge periods, achieving the 90% goal for this standard may be unrealistic with the resources available to the Department. Accordingly, during FY 2017 and beyond, the Department will continue to focus on reducing non-emergent EMS calls through partnership with the District's Integrated Healthcare Collaborative (IHC) and the Office of Unified Communications (OUC). In addition, the Department's deployment model, which includes paramedic engine companies where a single paramedic rides on a fire engine and transports patients in a Basic Life Support ambulance, frequently results in scenes where there is only one paramedic dispatched and transported with a patient. This model also makes it less likely for the Department to reach this NFPA standard.

Percentage of higher priority EMS calls when a FEMS transport unit arrived in 9 minutes or less	90	Q	71.07	70.63	75.47	77.9	73.9	Unmet	FY 2016 was the first year the Department used this measure for reporting (the previous measure was 12 minutes). The current 9 minute measure and 90% goal was used to match NFPA Standard 1710 bench mark response times in related measures. During FY 2016, month-to-month performance varied from a low of 68%, to a high of 79%, with consistent improvement beginning in April, 2016 after implementation of a contract with AMR to assist with patient transports. During FY 2017 and beyond, the Department will continue to focus on reducing non-emergent EMS calls through partnership with the District's Integrated Healthcare Collaborative (IHC) and the Office of Unified Communications (OUC). By reducing total patient transports, thereby increasing availability of FEMS transport units, achieving the 90% goal for this measure is possible.
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Objective: Improve employee safety and wellness.

Measure	Target	Freq	Q1	Q2	Q3	Q4	Total	KPI Status	KPI Barriers
Number of FEMS operated vehicles involved in	500	0	79	89	88	Q1	337	Met	
accidents						81	997		

Objective: Improve fire safety awareness through public education.

Measure	Target	Freq	Q1	Q2	Q3	Q4	Total	KPI Status	KPI Barriers
Number home fire safety/smoke alarm	750	0	89	160	263	676	1,188	Mot	
installation visits completed for District residents	190	Q	09	100	203	070	1,100	Met	

Beginning in October 2015 the Department began following the NFPA Standard 1730 recommendations to evaluate the number of fire safety education presentations completed for pre-school/kindergarten age children. With this change the Department feels it set an aggressive goal for this KPI, because the NFPA Number of fire safety education presentations completed for pre-school/kindergarten age Q recommendations increased 150 2 17 36 Unmet children educational requirements and added additional topics for teaching fire safety classes. Organizational changes also led to the primary responsibility for these presentations being shifted from the PIO Office to the Fire Prevention Division. In FY 2017, the Fire Prevention Division will refocus its efforts in this area.

## Objective: Improve health safety awareness through public education.

Measure	Target	Freq	Q1	Q2	Q3	Q4	Total	KPI Status	KPI Barriers
NA	5,000	Q	2,098	3,066	1,655	4,141	10,960	Met	
Number of AEDs actively registered and available for public use in the District of Columbia	1,000	Q	894	878	901	997	3,670	Met	
Percentage of patients who experienced a sudden cardiac arrest, witnessed by a bystander, with an AED applied by a bystander	5	Q	6	4.35	8.47	8.77	7.1	Met	

Percentage of patients who experienced a sudden									
cardiac arrest, witnessed by a bystander, with CPR performed by a bystander	40	Q	34	32.61	49.15	43.86	40.6	Met	
er it performed by a bystander									

Objective: Improve the quality of emergency medical care provided by Department personnel.

Measure	Target	Freq	Q1	Q2	Q3	Q4	Total	KPI Status	KPI Barriers
Percentage of EMS CQI cases reviewed indicating timely, appropriate and successful treatment for cardiac arrest patients	95	Q							Currently, the Department's Medical Director and EMS CQI staff are developing a template for this measure, as one had not previously been developed. When the new template is completed, the Department will publish updated information to the performance website.
Percentage of EMS CQI cases reviewed indicating timely, appropriate and successful treatment for suspected STEMI patients	95	Q	98.33	92.31	98.77	88.89	95.3	Met	
Percentage of EMS CQI cases reviewed indicating timely, appropriate and successful treatment for suspected stroke patients	95	Q	100	99.52	99.49	97.72	99.2	Met	

Percentage of EMS CQI cases reviewed indicating timely, appropriate and successful treatment for Level 1 Criteria Trauma patients	95	Q	81.53	89.36	87.14	86.35	86.4	Nearly Met	In calculating our Multi System Trauma measures, 2 variables were combined as Transport with Pre-notification. In practice, what happens is that providers were transporting to the correct trauma center 100% of the time but hospitals were not receiving notification 100% of the time. The effect of Pre-notification failure' is the reason why we didn't meet our target. Both variables are calculated separately in FY17.
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Objective: Improve the reliability of emergency vehicles.

Measure	Target	Freq	Q1	Q2	Q3	Q4	Total	KPI Status	KPI Barriers
Percentage of time ambulances in the FEMS emergency vehicle fleet were unavailable for daily operation because of maintenance or repair work	25	Q	28.13	34.36	37.37	37.1	33.4	Unmet	The value for this KPI measure is higher than usual and above the target because more vehicles are undergoing maintenance and repairs than were in previous years. It is important to note that before the third party ambulance service was implemented and before refurbished ambulances were put back into the fleet, a large number of the department's in-service fleet apparatus and vehicles were consistently in need of repair, but only the most critical needs were being targeted. At that time there was also a lack of proper preventative maintenance being performed. The increased level of work now being performed has made the out-of-service time higher for fleet equipment; yet in this case that is a positive development because it is allowing for appropriate repairs and critical preventative maintenance to be accomplished. In addition, increased downtime occurred for ambulances during the third quarter for inspection and service of air conditioning systems. With this work underway, the Department should be able to achieve this goal in FY 2017; indeed, it has approached the goal during the first quarter of FY 2017.

Percentage of time fire engines in the FEMS emergency vehicle fleet were unavailable for daily operation because of maintenance or repair work	25	Q	39.54	32.08	42.84	38	38.2	Unmet

The value for this KPI measure is higher than usual and above the target because more vehicles are undergoing maintenance and repairs than were in previous years. It is important to note that before the third party ambulance service was implemented and before refurbished ambulances were put back into the fleet, a large number of the department's in-service fleet apparatus and vehicles were consistently in need of repair, but only the most critical needs were being targeted. At that time there was also a lack of proper preventative maintenance being performed. The increased level of work now being performed has made the out-of-service time higher for fleet equipment; yet in this case that is a positive development because it is allowing for appropriate repairs and critical preventative maintenance to be accomplished. In addition, warranty repair work has also contributed to the decrease in the availability of apparatus going back in service. With this work underway and with additional new fire engines being purchased, the Department should be able to achieve this goal in FY 2017; indeed, it has approached the goal during the first quarter of FY 2017.

Percentage of time fire ladder trucks in the FEMS emergency vehicle fleet were unavailable for daily operation because of maintenance or repair work	25	Q	24.79	21.78	41.06	31	29.8	Unmet

The value for this KPI measure is higher than usual and above the target because more vehicles are undergoing maintenance and repairs than were in previous years. It is important to note that before the third party ambulance service was implemented and before refurbished ambulances were put back into the fleet, a large number of the department's in-service fleet apparatus and vehicles were consistently in need of repair, but only the most critical needs were being targeted. At that time there was also a lack of proper preventative maintenance being performed. The increased level of work now being performed has made the out-of-service time higher for fleet equipment; yet in this case that is a positive development because it is allowing for appropriate repairs and critical preventative maintenance to be accomplished. In addition, warranty repair work and the availability of Seagrave authorized repair venders has contributed to the decrease in the availability of apparatus going back in service. With this work underway and with additional new ladder trucks being purchased, the Department should be able to achieve this goal in FY 2017; indeed, it has approached the goal during the first quarter of FY 2017.

Objective: Quickly control and extinguish fires.

Measure	Target	Freq	Q1	Q2	Q3	Q4	Total	KPI Status	KPI Barriers
Percentage of high-rise structure fire calls when a first alarm assignment arrived in 11 minutes 30 seconds or less	90	Q							FY 2016 was the first year the Department used NFPA Standard 1710 bench mark response times (for this measure, 11 minutes 30 seconds) for reporting. The 90% goal is the national standard. Currently, the Department is working with the District's GIS Data Warehouse to identify and associate building heights with building addresses. Only building heights of 75 feet or more can be used for reporting this measure and this data was not available at the time of reporting. When the geospatial association is completed, the Department will publish updated response time data to the performance website.
Percentage of structure fire calls when a first responding fire engine arrived in 5 minutes 20 seconds or less	90	Q	96.56	93.12	96.09	96.24	95.4	Met	
Percentage of residential structure fires where flame spread was confined to the room or structure of origin	95	Q	98.64	96.55	96.4	97.25	97.3	Met	
Percentage of residential structure fires where flame spread was confined to the room of origin	80	Q	86.39	71.03	81.98	80.73	79.9	Nearly Met	

Objective: Reduce threats to lives and property by preventing fires.

Measure	Target	Freq	Q1	Q2	Q3	Q4	Total	KPI Status	KPI Barriers
Percentage of residential structure fires without a working smoke alarm									The Department's data for
									this measure was
									incomplete due to
	0.2	Q							inconsistencies in reporting.
									It is currently evaluating
									how to consistently report
									this measure in FY 2017
									utilizing the National Fire
									Incident Reporting System
									(NFIRS).
Number of civilian fire fatalities	10	$\overline{Q}$	-0	$-\frac{1}{2}$	-0-	- 0 -		- $        -$	

Objective: Strengthen the labor/management partnership.

Measure	Target	Freq	Q1	Q2	Q3	Q4	Total	KPI Status	KPI Barriers
Number of labor/management partnership meetings scheduled and attended by executive	12	Q	6	4	8	4	22	$\operatorname{Met}$	
managers	12	•	Ü	1	Ü	-		11100	

## FY16 Workload Measures

Measure	Freq	Q1	Q2	Q3	Q4	Total
Number of emergency incidents	Q	49,317	48,534	52,060	56,077	205,988
Number of EMS incidents	$-\bar{\mathrm{Q}}$	-40,575	40,046	43,700	-46,827	171,148
Number of 'lower priority' (not time-sensitive) EMS incidents.	$-\bar{\mathrm{Q}}$	19,635	18,786	20,982	$-2\overline{2},\overline{0}6\overline{6}$	81,469
Number of 'higher priority' (time-sensitive) EMS incidents	$-\bar{\mathrm{Q}}$	19,706	20,011	21,295	23,246	84,258
Number of 'highest priority' (very time-sensitive) EMS incidents	$-\bar{\mathrm{Q}}$	1,234	$1,\overline{249}$	1,423		5,421
Number of FEMS patient transports	$-\bar{\mathrm{Q}}$	28,464	$\frac{1}{28},027$	18,806	$-77,\overline{3}$	92,695
EMS patient transport revenue	$-\bar{\mathrm{Q}}$	6,456,694.60	7,195,910.70	4,851,374	-4,838,774	23,342,752.80
Number of fire incidents	$-\bar{\mathrm{Q}}$	8,425	$-\frac{1}{8}, \overline{175}$	8,024	$\bar{8},\bar{9}7\bar{3}$	$\bar{33,597}$
Number of 'structure fire' incidents	$-\bar{\mathrm{Q}}$	-646	-687	563	536	2,432
Number of 'structure fires' extinguished	$-\bar{\mathrm{Q}}$	193	178	166	150	687
Number of 'residential structure fires' extinguished	$-\bar{\mathrm{Q}}$	147	145	111	109	$51\bar{2}$
Number of 'other fires' extinguished	$-\bar{\mathrm{Q}}$	181	158	202		831
Number of occupancies inspected	$-\bar{\mathrm{Q}}$	2,581	3,032	3,495	$\bar{3},\bar{1}1\bar{2}$	$12,\overline{220}$
Number of fire code violations observed	$-\bar{\mathrm{Q}}$	3,418	$-4,\bar{2}2\bar{7}$	3,865	3,038	14,548
Number of fire code complaints investigated	$-\bar{\mathrm{Q}}$	129	83	100	108	$\frac{1}{420}$
Number of fires classified as 'arson.'	$-\bar{\mathrm{Q}}$	55	43	55	51	$\frac{1}{204}$
Number of 'arson' arrests	$-\bar{\mathrm{Q}}$	<u>-</u> 5	4	5		17
Fire Prevention fee and permit revenue	$\bar{\mathrm{Q}}$	147,194	127,990	120,450	132,905	528,539

## FY16 Initiatives

#### Title: Improve the quality of emergency medical care provided for time sensitive illnesses and injuries.

Description: During FY 2016, the Department will focus EMS Continuous Quality Improvement (CQI) efforts on improving the quality of emergency medical care provided for time sensitive illnesses and injuries including cardiac arrest, ST segment Elevation Myocardial Infarction (STEMI), stroke and life threatening traumatic injuries. This includes reviewing electronic patient care reports (ePCRs) and hospital records to determine if a patient received timely, appropriate and successful treatment, followed by providing informative and supportive feedback to Department personnel involved in such cases. Improving the quality of care for time sensitive illnesses and injuries supports improved quality of emergency medical care provided by Department personnel.

Complete to Date: Complete

Status Update: Through utilization of the electronic alert function in SafetyPad - automatic messages are sent to the Department's CQI Team when related performance indicators are expressed as a provider impression. CQI is then able to review this information. Through engaging hospitals at monthly Emergency Department Leaders Meetings organized and facilitated by the Medical Director, getting patient outcomes or feedback has improved

#### Title: Expand Citizen CPR participation during sudden cardiac arrest (SCA) events.

**Description**: During FY 2016, and as part of a priority goal to transform EMS in the District into a premier system, the Department will provide CPR training to at least 5,000 District residents, employees and work day commuters. This includes scheduling hands only CPR and automatic external defibrillator (AED) familiarization training for participants at locations across the District, promoting such events using the Department webpage, social media and community outreach, along with conducting such training by involving Department personnel. Expanding Citizen CPR participation during sudden cardiac arrest (SCA) events supports improved health safety awareness through public education.

Complete to Date: Complete

Status Update: 10,994 were trained by the end of FY 2016. The Department's webpage, social media and community partner networks were used to increase awareness and recruit trainees. Processes to standardize correlation of citizen participation in CPR and Hands On Hearts training are being evaluated.

## Title: Work with healthcare insurance programs to reduce non-emergency use of EMS.

Description: During FY 2016, and in cooperation with District partnership healthcare agencies, the Department will work with healthcare insurance programs to reduce non-emergency use of EMS. This includes identifying patients with ten (10) or more ambulance transports during the period of one (1) year, reviewing electronic patient care reports (ePCRs) and insurance claim records to identify reasons why such patients use EMS and, with the cooperation of insurance programs, identifying alternatives other than EMS to reduce non-emergency use by such patients. Working with healthcare insurance programs to reduce non-emergency use of EMS supports identifying alternatives for patients who routinely use EMS to access healthcare.

Complete to Date: Complete

Status Update: The major Managed Care Corporations participated with the Integrated Healthcare Collaborative (IHC) to make recommendations for potential alternative transport and destination, modification to patient Bill of rights, Pathway for a Nurse Triage Line, and a proposed approach for marketing and education. Also, High Volume Users were identified and mapped to their respective MCO's (Managed Care Orgs) for better comprehensive care. Recommendations need to be implemented in FY 17 in order to have an impact on reducing non-emergency use of EMS

## Title: Improve on-scene management of sudden cardiac arrest (SCA).

**Description**: During FY 2016, and as part of a priority goal to transform EMS in the District into a premier system, the Department will improve on-scene management of sudden cardiac arrest (SCA) by implementing revised cardiac arrest medical protocols and completing training to improve SCA patient care. This

includes revising on scene cardiac arrest work flow requirements, conducting high performance CPR training for Firefighters, EMTs and Paramedics, along with expanding follow-up contact at receiving hospitals after transfer of patient care. Improving on-scene management of SCA supports compassionate care for sick and injured patients.

Complete to Date: 75-99%

**Status Update**: To improve "on-seen" management of SCA, the Department's first approach was on training. High performance CPR training was completed as part of the first module given to all providers.

If Incomplete, Explanation: The department continues to expand follow-up contact at receiving hospitals after transfer of patient care to better determine outcomes.

#### Title: Improve 9-1-1 call taker recognition and management of sudden cardiac arrest (SCA).

**Description**: During FY 2016, and as part of a a priority goal to transform EMS in the District into a premier system, the Department will work closely with the OUC in training 9-1-1 call takers to better recognize and quickly manage reported cardiac arrests. This includes training OUC call takers to quickly assess, recognize and process sudden cardiac arrest (SCA) calls, provide CPR instructions to 9-1-1 callers by phone and to identify the closest available public automatic external defibrillator (AED) for use during each event. Improving 9-1-1 call taker recognition and management of SCA supports improved emergency medical care for patients with time sensitive illnesses or injuries.

Complete to Date: Complete

**Status Update**: 911 Call Takers were trained on recognizing and providing proper instructions to perform high quality compressions for cardiac arrest patients. This was the priority so they can have a more realistic and visual understanding of the process and to improve their knowledge base when assisting the public.

#### Title: Increase public access to fire safety education programs.

Description: During FY 2016, and in cooperation with the Office of the Chief Technology Officer (OCTO), the Department will increase public access to daycare, preschool and pre-kindergarten fire safety education programs by publishing program content and scheduling information to the Department website. This includes creating a fire safety education program web page, publishing daycare, preschool and pre-kindergarten fire safety education program content, along with creating and publishing web forms for identifying customer interest and scheduling on-site classes. Increasing public accessibility to fire safety education programs supports improved fire safety awareness through public education.

Complete to Date: Complete

Status Update: Created new Fire Safety Education Webpage including daycare, preschool and pre-kindergarten fire safety education program content. Includes web-enabled request forms that interested customers can use to schedule on-site fire safety presentations on general fire safety, workplace safety, fire evacuation, fire extinguisher training and fire safety for children

## Title: Complete pre-incident planning for higher risk buildings and structures.

Description: During FY 2016, and as part of a Department-wide strategy to improve first responder safety, the Department will complete higher risk building or structure pre-incident planning within each Engine Company district. This includes identification of at least one (1) higher risk building or structure within each Engine Company district by the Fire Prevention Division, scheduling an on-site informative inspection involving Fire Inspectors, Department of Consumer and Regulatory Affairs (DCRA) Building Inspectors and on-duty company personnel, along with completing a pre-incident plan for each identified higher risk building or structure incorporating NFPA Standard 1620 (Standard for Pre-Incident Planning) and Department informative inspection requirements. Completing pre-incident planning for higher risk buildings and structures supports reduced threats to lives and property by preventing fires.

Complete to Date: 75-99%

Status Update: 49 companies (33 Engines and 16 Trucks) participated in this initiative

If Incomplete, Explanation: One engine company failed to submit "High Risk" building documentation that was required, although all 4 shifts of the company did participate in the inspection and informative walk through with the inspection teams.

## Title: Complete origin and cause training for fire investigation personnel.

**Description:** During FY 2016, the Department will complete origin and cause determination training for fire investigation personnel to assist with identifying and prosecuting criminal offenses associated with fires. This includes classroom and practical instruction focusing on follow-up and case closure requirements incorporating recommendations described by NFPA Guide 921 (Guide for Fire and Explosion Investigations), while following Department fire investigation procedures. Completing origin and cause training for fire investigation personnel supports determination of the origin and cause of fires by investigation.

Complete to Date: Complete

Status Update: The ATF Advance Fire Investigations Training Course took place at the Training Academy. Instruction was given in the following areas (among others): The Scientific Method and Fire Investigations NFPA 921 A More Detailed Look, NFPA 1033 - Review Standard for the Professional Qualifications of Fire Investigator, Fire Growth and Development and Origin Fire Pattern Persistence. The course was certified by the Virginia State Fire Marshals Academy for all participating members to receive 24 hours of Continuing Education (CEU's)

#### Title: Campaign to survive cardiac arrest.

Description: During FY 2016, and as part of a priority goal to transform EMS in the District into a premier system, the Department will conduct a communications campaign to promote public recognition of cardiac arrest, activation of 9-1-1, use of hands only CPR and use of automated external defibrillators (AEDs) to reduce the risk of sudden death caused by cardiac arrest and improve survival. This includes branding, earned media and community outreach for each campaign activity. All campaign activities are links in the American Heart Association chain of survival for cardiac arrest. Campaigning to survive cardiac arrest supports communication of information to the public and media.

Complete to Date: Complete

Status Update: We made national news when an NYC subway worker who read the Washington Post article saved his co-worker's life using hands only CPR. We then highlighted our first known case of one of our trainees saving a life with an event with the Mayor – that story was covered by all of the DC TV stations and the Washington Post. We also continued to keep the initiative visible by using social media to highlight trainings

### Title: Improve the Department website.

**Description**: During FY 2016, and in cooperation with OCTO, the Department will improve the agency website by making it more accessible, user friendly and up-to-date. This includes expanding available information while making it more accessible and intuitive to locate, creating and publishing web forms for submission of customer service requests and regularly updating content to reflect more timely information and enhance agency image. Improving the Department website supports communication of information to the public and media.

Complete to Date: Complete

Status Update: Nothing to add. We will soon add an updated org chart for the agency, an updated FAQ section and bios of our senior leaders

## Title: Formulate and publish a leadership development plan.

**Description**: During FY 2016, and working in cooperation with organized labor unions, the Department will formulate and publish a leadership development plan. This includes surveying both labor and management to assess need, working with labor organizations to identify standards and training programs for

promotion, along with describing organizational goals and objectives for developing strong, innovative and diverse leaders. Formulating and publishing a leadership development plan supports a strengthened labor/management partnership.

Complete to Date: 75-99%

Status Update: We completed a final draft of the report and shared it with the labor unions before Sept 30.

If Incomplete, Explanation: There were delays in getting feedback from the unions so the plan will be published during the first quarter of FY 2017.

#### Title: Align organizational structure with budget program and activity codes.

**Description:** During FY 2016, and working collaboratively with the Office of the Chief Financial Officer (OCFO), the Department will align organizational structure with budget program and activity codes for FY 2017 budget formulation. This includes evaluating organizational structure by major division, identifying responsibilities or programs and associating budget and activity codes with major Department divisions and programs. This will allow for greater transparency and evaluation of funding decisions. Aligning organizational structure with budget program and activity codes supports planning and preparing for the future.

Complete to Date: 50-74%

Status Update: This project has been completed in time for the FY 18 budget development process

If Incomplete, Explanation: This project is done but is not listed as 100% because the work was not compledted in time for the FY 17 budget process.

#### Title: Formulate a comprehensive process for developing a Department level strategic plan.

**Description**: During FY 2016, the Department will formulate and describe a comprehensive process for developing a five (5) year Department level strategic plan. This includes assessing and defining the scope of the strategic planning process, engaging collectively with labor and other internal and external agency stakeholders and determining information requirements needed to support a strategic planning effort. Formulating a comprehensive process for developing a Department level strategic plan supports planning and preparing for the future.

Complete to Date: Complete

Status Update: The Department completed an outline for a proposed process and shared it with the two labor unions by Sept. 30

## Title: Improve fire suppression operational preparedness.

Description: During FY 2016, the Department will improve fire suppression operational preparedness by implementing revised minimum equipment standards, updating fire ground standard operating procedures and revising fire response dispatch protocols. This includes implementing revised minimum equipment standards for front line and ready reserve fire apparatus, reviewing and updating fire ground standard operating procedures incorporating recommendations described by National Fire Protection Association (NFPA) Guide 1700 (Guide for Structural Fire Fighting) and, in cooperation with the Office of Unified Communications (OUC), revising fire response protocols used by the computer aided dispatch (CAD) system. Improving fire suppression operational preparedness supports quick control and extinguishment of fires.

Complete to Date: 75-99%

Status Update: Fire Priority Dispatching System review is complete and response plans have been revised. Fire ground Standard Operating Guidelines (SOG) revision has been completed by committee and will be implemented after review and approval by Executive Staff. Revision of minimum equipment standards is incomplete and drafts not finalized for several equipment types. Expect to finalize in 2nd quarter of FY-17

If Incomplete, Explanation: Revision of minimum equipment standards are not yet completed for several equipment types but are expected to be finalized in the 2nd quarter of Fiscal Year 2017.

Title: Assess marine rescue and firefighting (MRFF) operational preparedness.

Description: During FY 2016, the Department will improve marine rescue and firefighting (MRFF) operational preparedness by evaluating growth and development occurring along the District's southwest waterfront and incorporating such changes into the MRFF response plan. This includes assessing buildings and structures accessible by waterways, evaluating marine rescue operations in major waterways and comparing perceived operational requirements with National Fire Protection Association (NFPA) Standard 1925 (Standard on Marine Fire-Fighting Vessels) to better identify future needs. Assessing MRFF operational preparedness supports preparedness for natural disasters or other catastrophic events.

Complete to Date: 75-99%

**Status Update**: A contract was awarded to BDA Global to conduct the Port Assessment. All steps in the assessment process have been completed. The final assessment and recommendations report is now due to FEMS by October 31, 2017.

If Incomplete, Explanation: All assessment has been performed, but final report still due from BDA Global.

#### Title: Improve radiological and nuclear threat detection capacity.

Description: During FY 2016, and in cooperation with the Department of Homeland Security's Securing the Cities program, the Department will improve radiological and nuclear threat detection capacity. This includes deploying new radiological and nuclear threat detection equipment and completing specialized training for select operational personnel incorporating recommendations described by NFPA Proposed Standard 475 (Recommended Practice for Responding to Hazardous Materials Incidents/Weapons of Mass Destruction). Improving radiological and nuclear threat detection capacity supports preparedness for natural disasters or other catastrophic events.

Complete to Date: Complete

Status Update: Detectors have been purchased and 450 members of the Department were trained in their use during the 4th quarter.

#### Title: Complete driver safety awareness training for operational personnel.

**Description**: During FY 2016, and as part of a Department-wide strategy to improve first responder safety, the Department will complete driver safety awareness training for operational personnel. This includes classroom and practical training incorporating requirements described by NFPA Standard 1451 (Standard for a Fire and Emergency Service Vehicle Operations Training Program), while following Department emergency apparatus operating procedures focusing on safe vehicle operation and accident avoidance. Completing driver safety awareness training for operational personnel supports development of a safe and technically competent workforce.

Complete to Date: 50-74%

Status Update: 100% on curriculum and 64% on participants from June through September. Anticipated goal was to reach 493 drivers per quarter. Actual participant data - June 92, July 143, August 51, September 28: Total 31

## Title: Implement an emergency incident rehabilitation and medical monitoring program.

Description: During FY 2016, and as part of a Department-wide strategy to improve first responder safety in partnership with the International Association of Firefighters (IAFF), the Department will implement an emergency incident rehabilitation and medical monitoring program to assess the health of operational personnel during emergency incidents. This includes training for operational personnel incorporating the rehabilitation and monitoring requirements described by NFPA Standard 1584 (Standard on the Rehabilitation Process for Members During Emergency Operations and Training Exercises) and implementing the same requirements during emergency incidents. Implementing an emergency incident rehabilitation and medical monitoring program supports improved employee safety and wellness.

Complete to Date: Complete

Status Update: A trial and documentation period utilizing incident surveys was completed. Information was collected to assist with evaluating how the

Department's operational procedures should be modified to allow for improved employee safety and wellness. The process has been outlined in accordance with NFPA 1584 in EMS Bulletin 4.

#### Title: Formulate and publish a LEED certification plan for maintaining and renovating fire stations.

**Description**: During FY 2016, and in cooperation with the Department of General Services, the Department will formulate and publish a leadership in energy and environmental design (LEED) certification plan for maintaining and renovating fire stations. This includes identifying the benefits of reduced energy and water consumption as requirements for project planning and incorporating the use of smart grid technology into environmental control systems when completing fire station maintenance and capital improvement project design. Formulating and publishing a LEED certification plan for maintaining and renovating fire stations supports improved living and working conditions in fire stations.

Complete to Date: Complete

**Status Update**: All buildings constructed or renovated under the LEED certification program or purchases made under the sustainable purchasing program were adhered to during FY 16.

#### Title: Expand capacity for preventive vehicle maintenance by improving productivity of Emergency Apparatus Division mechanics.

Description: During FY 2016, and as part of a priority goal to transform EMS in the District into a premier system, the Department will expand capacity for performing preventive emergency vehicle maintenance by increasing the productivity of Emergency Apparatus Division shop floor mechanics through additional supervisory and logistics staffing, improving utilization of FASTER (a fleet management software application) during maintenance and repair work and completing more preventive maintenance for emergency vehicles. This includes hiring an additional foreman and inventory management specialist to better cover work shifts, training shop floor mechanics to continuously use FASTER when completing vehicle maintenance and repairs, along with using FASTER to monitor and improve overall work productivity. Increasing productivity expands capacity for performing daily preventive vehicle maintenance and supports improved reliability of emergency vehicles.

Complete to Date: 50-74%

Status Update: DCFEMS has reached it's goal 100% as it relates to adding a supervisor, program support assistant (part section) and increasing productivity with personnel in their use of Faster

If Incomplete, Explanation: The support asst. was hired the first week of Oct - FY 17, so is not credited in the goal percentage.

## Title: Prioritize ordering of additional vehicles commonly used for responding to EMS incidents.

**Description**: During FY 2016, the Department will prioritize the ordering of additional emergency vehicles to improve sustainability of the vehicle fleet commonly used for responding to emergency medical services (EMS) incidents. This includes ordering sixteen (16) new ambulances, two (2) refurbished ambulances, three (3) EMS Supervisor vehicles and seven (7) fire engines, accounting for \$10.7 million (or 67%) of the Department's \$16 million FY 2016 Capital Spending Plan. Prioritizing the ordering of additional vehicles commonly used for responding to EMS incidents supports fleet sustainability and improved reliability of emergency vehicles.

Complete to Date: Complete

Status Update: Prioritizing the purchase of EMS vehicles to improve sustainability of the vehicle fleet commonly used for responding to emergency medical services (EMS) incidents. Actual purchases included: Total to date: 18 pumpers, 18 new ambulances and 3 EMS supervisor buggies. Specifically in FY16, the Department has put into service the following new or refurbished vehicles: 16 transport units, 2 engines, 7 ladder trucks and 7 supervisor vehicles.

Title: Replace the existing FRMS software application.

Description: During FY 2016, the Department will replace the existing Fire Records Management System (FRMS) software application required by the National Fire Incident Reporting System (NFIRS). This includes procuring a more robust and user friendly application offering better integration with the Department's electronic patient care reporting (ePCR) software, expanding the use of reporting modules to replace paper or supplemental electronic reporting applications currently in use and incorporating mobile use of the product by Fire Inspectors and other field personnel when performing occupancy safety inspections. Replacing the existing FRMS software application supports using information technology to improve business processes.

Complete to Date: 25-49%

**Status Update**: The procurment has been the most time consuming part of this project. Once we have the contract in place, it will take just a few months to implement.

If Incomplete, Explanation: The procurement was competitively bid, but it came in much higher than budgeted. We had to close the bid and wait for the new fiscal year to rebid.

#### Title: Replace outdated electronic forms.

**Description**: During FY 2016, the Department will replace outdated electronic forms used for day-to-day information management. This includes updating or redesigning more than 200 electronic forms currently in use, linking the information collected using such forms into a single enterprise structured database and making such forms available to Department users both inside and outside of the secure network environment. Replacing outdated electronic forms supports improved business processes by using information technology.

Complete to Date: 75-99%

Status Update: Approximately 200 forms have been created so far. Forms are in daily use, and at least 3 new form requests are received per month since the project started

If Incomplete, Explanation: Yet to be done is a final test of the forms, deletion of the old forms, and a final announcement to the agency to start using the new forms.