

FIRE / EMS DEPARTMENT

MISSION AND SERVICES

Mission - The Fire and Emergency Medical Services (EMS) Department provides emergency medical, fire, rescue, specialized and prevention services to our community in order to protect lives, property and the environment.

The agency's mission supports accomplishing the countywide vision by:

- Working for safe communities
- Working for economic vibrancy
- Working for healthy citizens and residents
- Working for a clean environment

The agency is responsible for –

- Emergency medical services including basic and advanced life support
- Emergency fire services
- Emergency rescue, specialized and investigative services which include technical and water rescue, hazardous material management, arson and incidents involving explosive devices
- Prevention services includes fire inspections and public education programs

SERVICE DELIVERY PLAN AND PERFORMANCE

GOAL 1 –To provide emergency medical services to county citizens, residents and visitors in order to ensure the protection of lives, property and the environment from fire and medical emergencies.

Objective 1.1 - Increase the percent of advanced life support responses arriving within 10 minutes from 65% in FY 2008.

Targets	Long Term Target Compared with Performance					
<ul style="list-style-type: none"> ▪ Short term: By FY 2010- 70% ▪ Intermediate term: By FY 2013- 80% ▪ Long term: By FY 2016- 90% 	Long term target (FY 16): 90%	64%	65%	68%	68%	68%
		FY 2007 Actual	FY 2008 Actual	FY 2009 Actual	FY 2010 Estimated	FY 2011 Projected

Performance Measures –

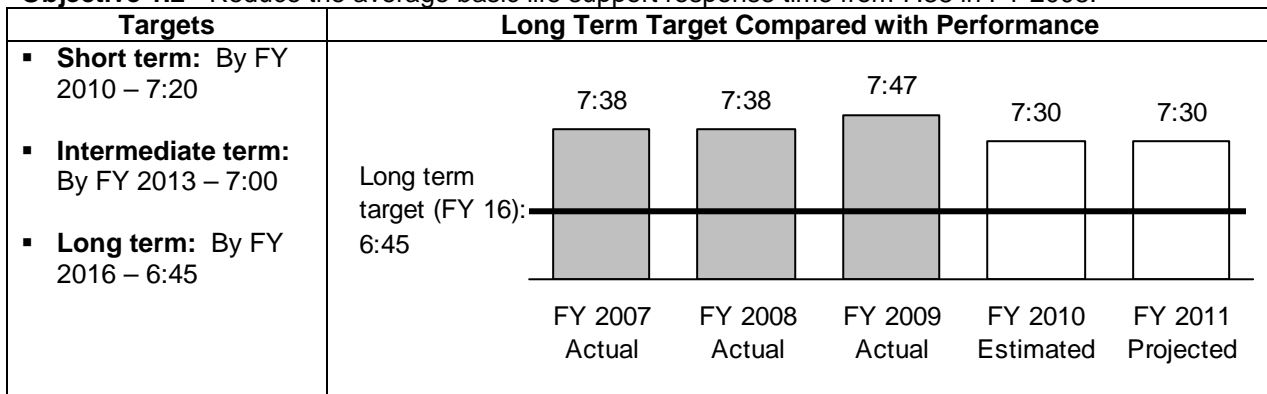
Measure Name	FY 2007 Actual	FY 2008 Actual	FY 2009 Actual	FY 2010 Estimated	FY 2011 Projected
Resources (input)					
Number of advanced life support (ALS) capable ambulances available for response	13	14	14	14	14
Number of ALS capable fire engines available for response	2	3	3	3	4
Number of ALS ambulances and ALS capable fire engines	15	17	17	17	18
Workload, Demand and Production (output)					
Number of ALS calls for service	41,524	43,400	43,558	45,500	46,000
Efficiency and Quality					
Average number of ALS calls for service per ALS ambulance and ALS capable fire engine	2,768.3	2,552.9	2,562.2	2,676.5	2,555.6
Impact (outcome)					
Average ALS response time	9:14	9:09	8:37	8:35	8:35
Percent of ALS ambulance responses arriving within 10 minutes	64%	65%	68%	68%	68%

Performance Measures Explanation – An advanced life support unit is capable of performing complex medical procedures due to its equipment and personnel trained onboard and are deployed accordingly. Improving the response time of a medical unit is considered an indication of patient survivability by several sources. Depending on the nature of the emergency and the availability and proximity of an ambulance, a fire engine may be dispatched to initiate patient care. Both response time measures include both urban and rural responses, which results in slower response time because stations in rural areas inherently are serving larger geographical areas compared to an urban station. In addition, calls for service do not fully indicate the workload of the department as the number of units required to respond can be higher, because one call for service may require multiple ALS units to respond.

Strategies to Accomplish the Objective –

- **Strategy 1.1.1** – Respond to all 911 calls for ALS service
- **Strategy 1.1.2** – Have one ALS ambulance available for every 1,700 ALS calls for service
- **Strategy 1.1.3** - Deploy ALS resources geographically based on demand for ALS service
- **Strategy 1.1.4** – Utilize volunteer ALS providers for ALS service delivery
- **Strategy 1.1.5** – Ensure personnel are trained and certified
- **Strategy 1.1.6** – Maintain a paramedic training program to train and certify employees

Objective 1.2 - Reduce the average basic life support response time from 7:38 in FY 2008.



Performance Measures –

Measure Name	FY 2007 Actual	FY 2008 Actual	FY 2009 Actual	FY 2010 Estimated	FY 2011 Projected
Resources (input)					
Number of basic life support (BLS) capable ambulances available for response	41	42	42	43	43
Workload, Demand and Production (output)					
Number of BLS calls for service	52,133	52,623	57,114	55,500	56,000
Efficiency and Quality					
Average number of BLS calls for service per BLS ambulance	1,271.5	1,252.9	1,359.9	1,290.7	1,302.3
Impact (outcome)					
Percent of BLS ambulance responses arriving within 6 minutes	36%	36%	33%	30%	30%
Average BLS response time	7:38	7:38	7:47	7:30	7:30

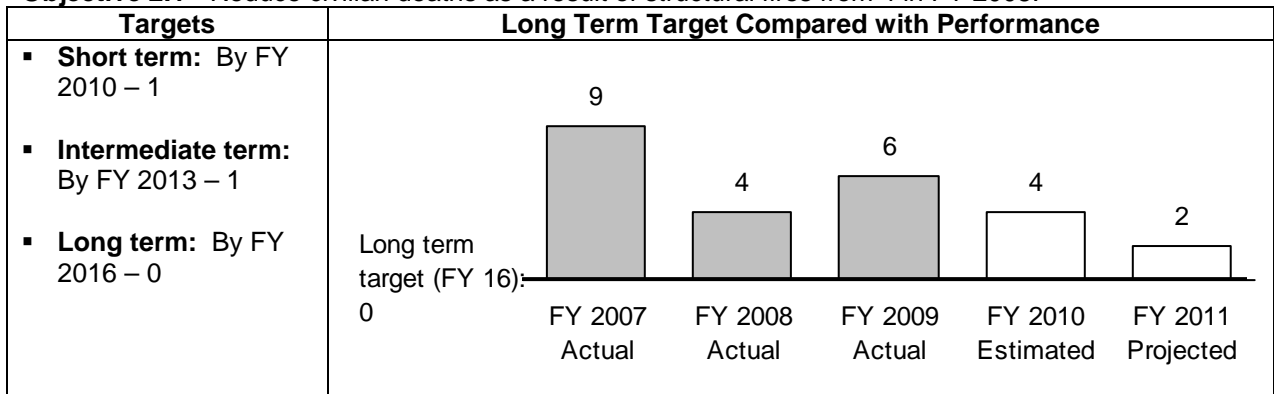
Performance Measures Explanation – Basic life support units are capable to save lives in most medical emergencies, however, are limited to less complex emergencies than ALS units respond to. Improving the response time of a medical unit is considered an indication of patient survivability by several sources. Depending on the nature of the emergency and the availability and proximity of an ambulance, a fire engine may be dispatched to initiate patient care. Of note, both response time measures include both urban and rural responses, which results in slower response time because stations in rural areas inherently are serving larger geographical areas compared to an urban station. Volunteers provide staffing for some BLS ambulances and are included in this dataset.

Strategies to Accomplish the Objective –

- **Strategy 1.2.1** – Respond to all 911 calls for BLS service
- **Strategy 1.2.2** – Have one dedicated staffed BLS ambulance available for every 2,700 medical calls for service
- **Strategy 1.2.3** – Deploy BLS resources geographically based on demand for BLS service demonstrated by call volume
- **Strategy 1.2.4** – Utilize volunteer BLS providers for BLS service delivery
- **Strategy 1.2.5** – Ensure staff are trained and certified

GOAL 2 –To provide fire suppression services to the citizens, residents and visitors of the County in order to ensure the protection of lives, property and the environment from fire and related medical emergencies.

Objective 2.1 - Reduce civilian deaths as a result of structural fires from 4 in FY 2008.



Performance Measures –

Measure Name	FY 2007 Actual	FY 2008 Actual	FY 2009 Actual	FY 2010 Estimated	FY 2011 Projected
Resources (input)					
Number of fire engines	43	43	43	44	44
Workload, Demand and Production (output)					
Number of structure fires	2,870	2,271	2,120	2,056	2,000
Number of fire calls for service	25,988	25,252	24,625	24,132	24,000
Efficiency and Quality					
Average number of fire calls for service per fire engine	604.4	587.3	572.7	548.5	545.5
Average fire engine response time	6:33	6:43	6:39	6:33	6:30
Percent of fire engine responses arriving within 6 minutes	52%	50%	47%	54%	55%
Impact (outcome)					
Number of civilian injuries as the result of a structural fire	19	26	10	12	12
Number of civilian deaths as the result of a structural fire	9	4	6	4	2
Number of firefighter injuries	427	374	281	275	260
Number of firefighter deaths	0	0	0	0	0

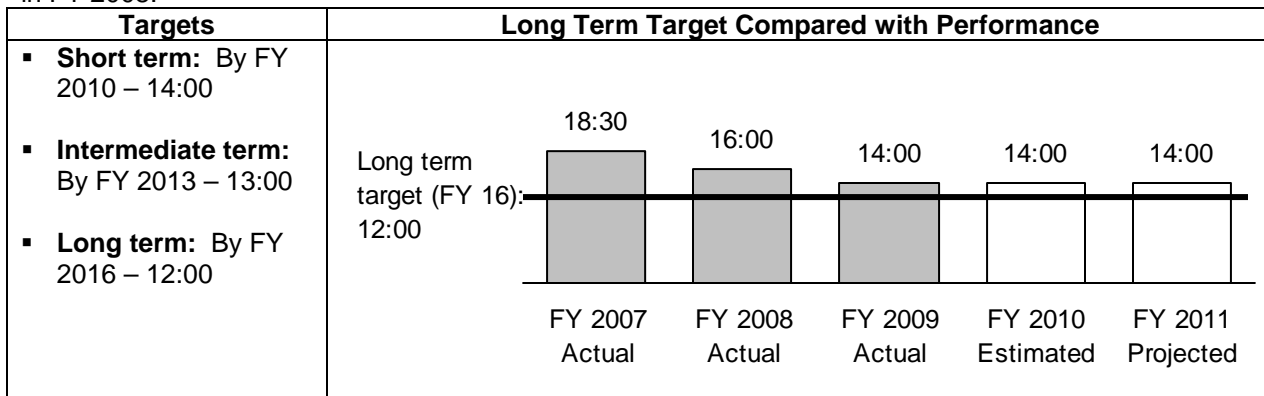
Performance Measures Explanation – The department, in partnership with the volunteers, attempts to minimize the number of civilian deaths caused by fire emergencies. There are many contributing factors that affect civilian deaths that are beyond the control of the fire service such as timeliness of reporting incidents to 911, absence of smoke detectors and sprinklers and other factors.

Strategies to Accomplish the Objective –

- **Strategy 2.1.1** – Provide smoke detectors to residential occupancies upon request
- **Strategy 2.1.2** – Utilize and schedule volunteer personnel to provide comprehensive service delivery
- **Strategy 2.1.3** – Deploy personnel and equipment to match the demand for services
- **Strategy 2.1.4** – Ensure personnel are trained and certified
- **Strategy 2.1.5** – Promote the use of sprinkler systems and smoke detectors by the public

GOAL 3 – To provide rescue and specialized services (technical rescue, hazardous materials, explosives and fire investigation) to all those in the County in order to ensure lives, property and the environment are protected from fires, medical and other emergencies.

Objective 3.1 - Reduce the average response time of the first responding special service unit from 16:00 in FY 2008.



Performance Measures –

Measure Name	FY 2007 Actual	FY 2008 Actual	FY 2009 Actual	FY 2010 Estimated	FY 2011 Projected
Resources (input)					
Number of special service trained personnel	79	98	99	95	90
Workload, Demand and Production (output)					
Number of special services calls for service	690	700	634	700	700
Efficiency and Quality					
Average number of specially calls for service per special service trained personnel	8.7	7.1	6.4	7.4	7.8
Impact (outcome)					
Average response time for first arriving special services unit	18:30	16:00	14:00	14:00	14:00

Performance Measures Explanation – The department has improved training capacity for technical rescue and has implemented a deployment strategy to improve the response time for technical rescue, hazardous materials and explosives mitigation. Many of the specialized team members are certified in multiple disciplines and in most cases are firefighters. The control of fires, hazardous materials and explosives during an emergency has a direct impact on the protection of the environment.

Strategies to Accomplish the Objective –

- **Strategy 3.1.1** – Respond to all 911 calls for rescues and specialized services
- **Strategy 3.1.2** – Deploy personnel and equipment geographically to match the demand for specialty services
- **Strategy 3.1.3** – Train and certify personnel to mitigate rescue and specialized incidents
- **Strategy 3.1.4** – Have specialty response teams staffed by certified career and volunteer personnel
- **Strategy 3.1.5** – Utilize and maintain specialized equipment to mitigate rescue and specialized incidents

Objective 3.2 - Increase the percent of arson cases closed from 45.9% in FY 2008.

Targets –

- **Short term:** By FY 2010 – 55.0%
- **Intermediate term:** By FY 2013 – 60.0%
- **Long term:** By FY 2016 – 65.0%

Performance Measures –

Measure Name	FY 2007 Actual	FY 2008 Actual	FY 2009 Actual	FY 2010 Estimated	FY 2011 Projected
Workload, Demand and Production (output)					
Number of special services calls for service	690	700	634	700	700
Efficiency and Quality					
Average number of specially calls for service per special service trained personnel	8.7	7.1	6.4	7.4	7.8
Impact (outcome)					
Average response time for first arriving special services unit	18:30	16:00	14:00	14:00	14:00

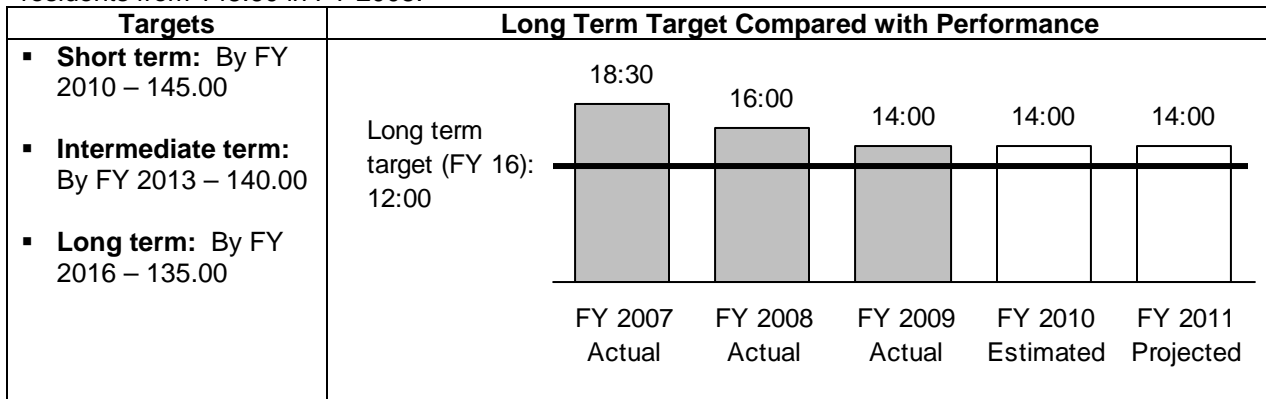
Performance Measures Explanation – The department focuses on closing arson cases to ultimately reduce the number of arsons. Currently, the department has a better arson case closure rate than the national average of 16.5%. In several cases this year, there were multiple fires related to a single arrest reflecting lower arrests versus the number of case closures. Case closures are documented in year of closure, which may not be the year the incident occurred.

Strategies to Accomplish the Objective -

- **Strategy 3.2.1** – Investigate all fires
- **Strategy 3.2.2** – Arrest arson suspects
- **Strategy 3.2.3** – Ensure investigators are trained and certified appropriately
- **Strategy 3.2.4** – Coordinate with the Bureau of Alcohol Tobacco and Firearms, State Fire Marshal’s Office and other Federal, State and county law enforcement agencies to close cases and prosecute arsonists

GOAL 4 - To provide fire prevention activities to the citizens and residents of the County in order to reduce the occurrence of medical emergencies, fire and rescue incidents that could result in death, injuries or property damage.

Objective 4.1 - Reduce the average number of fire and medical calls for service in the County per 1,000 residents from 148.60 in FY 2008.



Performance Measures –

Measure Name	FY 2007 Actual	FY 2008 Actual	FY 2009 Actual	FY 2010 Estimated	FY 2011 Projected
Workload, Demand and Production (output)					
Number of awareness events			243	237	175
Number of smoke detectors issued	1,088	1,142	633	700	700
Average number of staff hours expended per awareness event			3.6	3.0	3.4
Impact (outcome)					
Average number of fire and specialty calls for service per 1,000 residents	32.32	31.62	30.92	30.54	30.53
Average number of medical calls for service per 1,000 residents	113.48	116.98	123.22	124.23	126.08
Average number of fire, specialty and medical calls for service per 1,000 residents	145.80	148.60	154.14	154.77	156.61

Performance Measures Explanation – Public awareness programs are designed to prevent emergency incidents. One such program is the PINUP program which focuses on providing education and free fire detectors to a community that has suffered a fire related death. The above data illustrates that the County’s overall fire and specialties call volume has remained relatively steady since FY 2007 while medical calls have increased during that same period.

Strategies to Accomplish the Objective –

- **Strategy 4.1.1** – Provide educational programs to the public targeted to the most vulnerable – seniors and children under the age of 14
- **Strategy 4.1.2** – Provide free smoke detectors upon request

- **Strategy 4.1.3** – Promote the installation of sprinklers and importance of smoke detectors at awareness events
- **Strategy 4.1.4** – Utilize PINUP program to educate communities that have suffered a fire related death
- **Strategy 4.1.5** – Partner with Health Department and Maryland State Fire Marshal’s Office