Response to Questions on the 2016 LOBs

Request By: Supervisor Storck **Relevant LOB(s):** LOBs #232, #233

Question: Explain the Fire and Rescue Department's response time standards, as well as the implications associated with each standard.

Response:

The Fire and Rescue Department (FRD) uses National Fire Protection Association (NFPA) metrics as benchmark standards, in conjunction with internal metrics, to evaluate response system performance. NFPA 1710, the Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments provides response time goals that fire departments should meet. This standard, developed by a technical committee comprised of Fire Service subject matter experts, provides definitions and objectives for fire departments to meet with 90 percent reliability, ensuring response time standards are consistently achieved. On an ongoing basis, FRD evaluates different components of this NFPA standard and evaluates internal metrics relevant to the efficiency and deployment of operational resources. The performance metrics specifically used as part of the budget process and throughout the LOBs are as follows:

Automated External Defibrillator (AED) response rate within 5 minutes

This metric assesses the ability of the department to respond to the scene of an Emergency Medical Services (EMS) incident with an AED within the NFPA objective of a 60 second turnout time and a 240 second (4-minute) travel time. This metric is an indicator of how well the department is able to meet the need for early defibrillation. Early defibrillation as specified by the American Heart Association's chain of survival is specifically linked to patient outcomes, and although not every EMS incident requires defibrillation, this metric acts as an EMS system performance indicator. The percent of time FRD met this NFPA metric for EMS incidents in the past five fiscal years is below:

Key Data Description	FY2011	FY2012	FY2013	FY2014	FY2015
AED Response rate within 5 minutes (National Standard 90%)	69.00%[1]	56.47%	57.00%	56.37%	54.57%

[1] It should be noted that the data collection methodology in FY 2011 is not consistent with subsequent years and the data shown in FY 2011 is estimated.

First Advanced Life Support (ALS) provider on the scene within 5 minutes

This is an internal metric that assesses the ability of the department to respond to the scene of an ALS incident with an ALS provider within a 60 second turnout time and a 240 second (4-minute) travel time. This is an agency specific standard based on the life-saving interventional capabilities an ALS provider can deliver for the critically-ill or injured patient population. An ALS

provider is trained to a higher level than an Emergency Medical Technician (EMT) and is equipped with the medical training and skills to recognize more serious medical situations. As a result, an ALS provider is able to quickly assess the patient and determine if additional resources and medical interventions are needed which can make a difference in the overall patient outcome. The percent of time FRD met this metric for ALS incidents in the past five fiscal years is below:

Key Data Description	FY2011	FY2012	FY2013	FY2014	FY2015
First ALS Provider within 5 minutes	56.60%[1]	57.60%	58.20%	58.89%	58.26%

[1] It should be noted that the data collection methodology in FY 2011 is not consistent with subsequent years and the data shown in FY 2011 is estimated.

ALS Transport unit on scene within 9 minutes

This metric assesses the ability of the department to get an ALS transport unit to the scene of an ALS emergency within the NFPA objective of a 60 second turnout time and a 480 second (8-minute) travel time. The ability to get an ALS provider on the scene of an incident quickly is important for initial life-saving interventions and assessments; however, the capability to achieve a transport unit on scene is also critical as it allows for the patient to be transported to a hospital where further care and treatment can be provided. The percent of time FRD met this metric for ALS incidents in the past five fiscal years is below:

Key Data Description	FY2011	FY2012	FY2013	FY2014	FY2015
ALS Transport Unit On Scene within 9 minutes (National Standard 90%)	88.00%[1]	85.04%	86.70%	89.10%	89.95%

[1] It should be noted that the data collection methodology in FY 2011 is not consistent with subsequent years and the data shown in FY 2011 is estimated.

First Engine Company on the scene of a structure fire in 5 minutes and 20 seconds

This metric assesses the ability of the department to have an Engine Company arrive on scene of a fire suppression incident within the NFPA objective of an 80 second turnout time and a 240 second (4-minute) travel time. This metric is an indicator of the fire department's ability to deploy the first engine which carries personnel, resources and equipment to the scene so loss of life and/or property damage can be minimized. Arriving on-scene and implementing fire suppression activities before flashover, a phenomena which poses high risk of injury and death for occupants and firefighters, is a critical capability. The percent of time FRD met this metric for suppression incidents in the past five fiscal years is below:

Key Data Description	FY2011	FY2012	FY2013	FY2014	FY2015
Engine Company on a structure Fire within 5 minutes, 20 seconds (National Standard 90%)	60.00%[1]	56.02%	52.40%	53.00%	51.90%

[1] It should be noted that the data collection methodology in FY 2011 is not consistent with subsequent years and the data shown in FY 2011 is estimated.

Deployment of a full effective firefighting force (15 operational personnel) on the scene of a structure fire within 9 minutes and 20 seconds

This metric assesses the ability of the department to assemble the personnel and equipment comprising an effective firefighting force to the scene of a structure fire within the NFPA objective of an 80 second turnout time and a 480 second (8-minute) travel time. This metric is an indicator of the fire department's ability to deploy critical functions needed to mitigate typical residential structure fires. This includes the ability to accomplish critical tasks including: establishing an uninterrupted water supply, incident command, fire suppression attack and back up, search and rescue, ventilation, and a rapid intervention team. Meeting this metric is an important component of the Insurance Services Office (ISO) rating of fire department capabilities. Not only does achieving the best rating possible ensure the public they are receiving quality fire protection, the rating a jurisdiction receives is utilized by insurance companies to establish insurance rates within the community. ISO has given Fairfax County a Public Protection Classification of 01/1Y, the highest rating in the Commonwealth of Virginia. The percent of time FRD met this metric for structure fire incidents in the past five fiscal years is below:

Key Data Description	FY2011	FY2012	FY2013	FY2014	FY2015
15 Operational Personnel on a structure fire within 9 minutes, 20 seconds (National Standard 90%)	45.00%[1]	81.72%	83.90%	87.20%	83.18%

[1] It should be noted that the data collection methodology in FY 2011 is not consistent with subsequent years and the data shown in FY 2011 is estimated.