

Fire and Rescue Department

FY 2019 Advertised Budget Plan: Performance Measures

Business Service Bureau and Fire Chief

Goal

To provide management, administrative and public information and educational services to department personnel and to the general public to ensure the efficient daily operations of the Fire and Rescue Department.

Objective

To present life safety education programs to members of risk populations, including 25,000 or more preschool and kindergarten students, 16,000 students enrolled in the Fairfax County School-Age Child Care program, and 10,000 or more senior citizens, in order to approach a fire death rate of zero and a burn injury total of 3 or less.

Performance Indicators

Indicator	Prior Year Actuals			Current Estimate	Future Estimate
	FY 2015 Actual	FY 2016 Actual	FY 2017 Estimate/Actual	FY 2018	FY 2019
Output					
Preschool and kindergarten students served	23,260	23,746	25,000 / 25,024	25,000	25,000
Senior citizens served	7,810	9,028	8,000 / 11,763	10,000	10,000
School age child care students (SACC) served	9,166	19,832	15,000 / 18,585	16,000	16,000
Efficiency					
Cost per high risk citizen served	\$7.60	\$6.47	\$7.14 / \$6.46	\$7.27	\$7.30
Service Quality					
Percent of respondents satisfied with life safety program	100%	100%	100% / 100%	100%	100%
Outcome					
Children (5 years and under) deaths due to fire	0	0	0 / 1	0	0
Children (5 years and under) burn injuries	0	0	1 / 3	1	1
Senior citizen (over age 60) deaths due to fire	0	2	0 / 1	1	1
Senior citizen (over age 60) burn injuries	1	4	2 / 3	2	2

In FY 2017, the total number of SACC students served remained higher than estimated due to additional programs offered to children in the summer and after school day-care programs as well as leveraging partnerships in the region to participate in more education events. Likewise, the number of senior citizens served was higher than estimated as a result of additional programs for senior citizens.

Fire and Rescue Department

FY 2019 Advertised Budget Plan: Performance Measures

Fire Prevention

Objective

To conduct investigations so that at least 95 percent of the fire cases and hazardous materials cases are peer reviewed by Case Managers, with a closure rate of 85 percent of fire investigation cases, 95 percent of hazardous materials cases and 60 percent of arson cases within a year.

Performance Indicators

Indicator	Prior Year Actuals			Current Estimate	Future Estimate
	FY 2015 Actual	FY 2016 Actual	FY 2017 Estimate/Actual	FY 2018	FY 2019
Output					
Fire investigations conducted (including arson cases)	386	350	375 / 335	380	380
Arson investigations conducted	37	60	50 / 58	60	60
Hazardous materials cases investigated	258	259	225 / 103	125	125
Efficiency					
Average fire and hazardous materials cases per investigator	56.0	75.0	75.0 / 78.0	75.0	75.0
Service Quality					
Percent of cases that peer reviewed by a Case Manager	95.0%	95.0%	95.0% / 95.0%	95.0%	95.0%
Outcome					
Percent total fire investigation cases closed (fires, bombings, threats and arson)	89.4%	87.1%	85.0% / 85.0%	85.0%	85.0%
Percent arson cases closed	64.8%	85.0%	60.0% / 61.0%	60.0%	60.0%
Percent hazardous materials cases closed	91.8%	85.0%	85.0% / 94.0%	95.0%	95.0%

Fire and Rescue Department

FY 2019 Advertised Budget Plan: Performance Measures

Objective

To maintain the fire loss rate for commercial structures at no greater than \$2.0 million by conducting effective and comprehensive inspections that enforce all applicable codes, with a service delivery target of recovering at least 94.6 percent of all fire prevention services costs per year.

Performance Indicators

Indicator	Prior Year Actuals			Current Estimate	Future Estimate
	FY 2015 Actual	FY 2016 Actual	FY 2017 Estimate/Actual	FY 2018	FY 2019
Output					
Fire inspection activities conducted	20,942	20,520	21,500 / 19,981	21,500	21,500
Systems testing activities conducted	15,954	11,936	11,000 / 9,905	11,000	11,000
Revenue generated for all inspection activities	\$4,996,109	\$5,252,496	\$5,365,000 / \$5,042,863	\$5,158,559	\$5,200,000
Efficiency					
Net cost per inspection (revenues in excess of average cost)	(\$0.40)	\$11.93	\$16.92 / \$9.87	\$8.97	\$9.23
Average revenue generated per inspection/systems testing activity	\$135.41	\$161.83	\$165.08 / \$168.74	\$158.72	\$160.00
Service Quality					
Percent of fire prevention services cost recovered	100.0%	93.0%	90.7% / 94.4%	94.7%	94.6%
Outcome					
Total fire loss for commercial structures	\$3,922,538	\$1,813,000	\$2,000,000 / \$2,639,547	\$2,000,000	\$2,000,000

Fire Marshal Fees were raised mid-FY 2015 by approximately 20 percent. FY 2017 and FY 2018 revenue projections for the inspections service area (not including engineering plans review) have been revised to reflect current staffing models, position vacancy rates and workload indicators.

In FY 2017, the total number of inspections was down due to vacancies and inspection complexity. Shell construction of new buildings will bill a commensurate number of hours, however, fewer inspections are performed because they are more complicated, require two inspectors and take more time to perform. The workload has been adjusted in FY 2017 and FY 2018 to reflect the switch in construction demand from tenant work to shell construction of new buildings. In FY 2018, two additional cost centers were added (acceptance testing and re-testing) to more accurately track expenses and revenue. Revenue estimates based on projection models are higher for FY 2018 and FY 2019 which impact the efficiency measures.

In FY 2017, the number of hazardous materials cases investigated was lower than estimated. This is primarily due to increased education and information from the County regarding MS4 permits and federal, County, and state regulations for hazardous materials. The projections for FY 2018 and FY 2019 have been adjusted.

Fire and Rescue Department

FY 2019 Advertised Budget Plan: Performance Measures

Operations Division

Objective

For Emergency Medical Services (EMS) to provide on-scene Advanced Life Support (ALS) capability within 9 minutes and a first responder with an Automatic External Defibrillator (AED) within 5 minutes, so that at least 40 percent of patients with witnessed non-traumatic cardiac arrest and present with a shockable rhythm arrive at a hospital with a pulse.

Performance Indicators

Indicator	Prior Year Actuals			Current Estimate	Future Estimate
	FY 2015 Actual	FY 2016 Actual	FY 2017 Estimate/Actual	FY 2018	FY 2019
Output					
Patients transported	51,425	52,415	53,000 / 54,375	53,500	53,500
Service Quality					
ALS transport units on scene within 9 minutes (National Standard 90%)	89.95%	89.63%	90.00% / 89.42%	90.00%	90.00%
AED response rate within 5 minutes (National Standard 90%)	54.57%	54.17%	60.00% / 56.06%	60.00%	60.00%
Outcome					
Cardiac arrest patients arriving at the Emergency Department with a pulse (National Average 21%)	58.5%	40.2%	40.0% / 38.7%	40.0%	40.0%

Fire and Rescue Department

FY 2019 Advertised Budget Plan: Performance Measures

Objective

To deploy suppression resources to a structure fire so that the first engine company arrives within 5 minutes, 20 seconds of dispatch and for 15 personnel to arrive within 9 minutes, 20 seconds in order to prevent civilian deaths and burn injuries, while striving to limit fire loss to \$16 million or less than 0.01 percent of the property value.

Performance Indicators

Indicator	Prior Year Actuals			Current Estimate	Future Estimate
	FY 2015 Actual	FY 2016 Actual	FY 2017 Estimate/Actual	FY 2018	FY 2019
Output					
Total incidents responded to	95,364	97,204	97,000 / 101,326	100,000	101,000
Efficiency					
Cost per suppression and EMS incident	\$2,296	\$2,345	\$2,511 / \$2,342	\$2,460	\$2,537
Service Quality					
Fire suppression response rate for arrival of an engine company within 5 minutes, 20 seconds (National Standard 90%)	51.90%	50.69%	52.00% / 50.88%	52.00%	52.00%
Fire suppression response rate for 15 personnel within 9 minutes, 20 seconds (National Standard 90%)	83.18%	81.40%	85.00% / 82.18%	85.00%	85.00%
Outcome					
Fire loss (millions)	\$15.9	\$14.9	\$16.0 / \$14.7	\$16.0	\$16.0
Fire loss as percent of total property valuation	0.01%	0.01%	0.01% / 0.01%	0.01%	0.01%
Total civilian fire deaths	2	3	5 / 2	2	2
Civilian fire deaths per 100,000 population	0.18	0.26	0.50 / 0.18	0.18	0.18
Civilian fire-related burn injuries	18	22	25 / 6	15	15
Civilian fire-related burn injuries per 100,000 population	1.6	1.9	2.5 / 0.5	1.3	1.3

Fire and Rescue Department

FY 2019 Advertised Budget Plan: Performance Measures

Objective

A community outreach program titled "Safety in Our Community" (SIOC) and "Wellness in Our Community" (WIOC) where fire station personnel canvas neighborhoods to ensure that single family homes and residences in Fairfax County have at least one working smoke alarm while providing fire and life safety information including File of Life Forms.

Performance Indicators

Indicator	Prior Year Actuals			Current Estimate	Future Estimate
	FY 2015 Actual	FY 2016 Actual	FY 2017 Estimate/Actual	FY 2018	FY 2019
Output					
Time spent on SIOC/WIOC activities	45,256	35,125	50,000 / 13,986	15,000	15,000
Efficiency					
Cost of SIOC materials per single family home reached	\$3.25	\$1.26	\$0.93 / \$0.34	\$0.29	\$0.30
Service Quality					
Fire & Life Safety Information door hangers distributed to homes	34,076	30,418	35,000 / 12,484	12,000	12,000
File of Life (FOLs) distributed.	3,655	2,534	4,500 / 668	1,000	1,000
Outcome					
Number of smoke alarms distributed and installed.	5,711	3,908	6,000 / 1,870	1,800	1,800
No. of FOLs used as resource in patient encounters.	1,543	1,354	1,000 / 1,335	1,300	1,300

In FY 2017, the number of residential single family homes reached is lower than estimated since SIOC/WIOC activities were reduced to one Saturday per month per shift. This resulted in fewer Fire & Life Safety door hangers and FOLs distributed as well as fewer smoke alarms installed. The cost of SIOC/WIOC materials per single family home reached decreased due to a large number of smoke alarms purchased through grant funding. However, the number of FOLs used as a resource in patient encounters remained constant.

Fire and Rescue Department

FY 2019 Advertised Budget Plan: Performance Measures

Volunteer Liaison

Objective

To obtain an amount of 90,000 direct volunteer service hours, achieving sufficient volunteer staffing so that volunteer-staffed emergency vehicles can be placed in service at least 1,784 times annually.

Performance Indicators

Indicator	Prior Year Actuals			Current Estimate	Future Estimate
	FY 2015 Actual	FY 2016 Actual	FY 2017 Estimate/Actual	FY 2018	FY 2019
Output					
Volunteer operational hours	87,768	94,257	95,000 / 84,695	89,000	90,000
Volunteer emergency vehicles available for staffing	23	24	24 / 24	24	24
Efficiency					
Average operational service hours per volunteer	275.0	255.0	271.0 / 282.5	280.0	280.0
Average number of volunteer-staffed emergency vehicles in service per day	4.2	4.2	4.6 / 4.7	4.8	4.9
Service Quality					
Percent of volunteer candidates who complete firefighter training	88%	85%	85% / 85%	85%	85%
Percent of new volunteers who are active in VFD at end of one year	84%	78%	80% / 74%	80%	80%
Outcome					
Times volunteer-staffed emergency vehicles are placed in service annually	1,520	1,525	1,678 / 1,719	1,750	1,784
Percent change in volunteer operational service hours	(10%)	7%	2% / (10%)	6%	4%

Fire and Rescue Department

FY 2019 Advertised Budget Plan: Performance Measures

Training Division

Objective

To train career FF/EMT and FF/Medic recruits, in compliance with local, state and federal standards, with a 91 percent graduation rate, adding qualified personnel as required to meet current and future operational staffing requirements.

Performance Indicators

Indicator	Prior Year Actuals			Current Estimate	Future Estimate
	FY 2015 Actual	FY 2016 Actual	FY 2017 Estimate/Actual	FY 2018	FY 2019
Output					
Recruit schools started	2	2	2 / 2	2	2
Career recruits enrolled	93	78	95 / 80	85	90
Efficiency					
Operating cost per career recruit	\$62,444	\$73,491	\$71,837 / \$61,085	\$59,142	\$74,346
Service Quality					
Percent of recruit firefighters graduating	87%	89%	91% / 95%	91%	91%
Outcome					
Trained career firefighters added to workforce	81	78	90 / 76	85	85

The Training Division continues consecutive schools which overlap the fiscal years, with each school being 24 - 26 weeks in length.

Fire and Rescue Department

FY 2019 Advertised Budget Plan: Performance Measures

Fiscal Services Division

Objective

To maximize revenues from the Emergency Medical Services (EMS) transport billing program under a compassionate billing philosophy by collecting an anticipated \$20.2 million.

Performance Indicators

Indicator	Prior Year Actuals			Current Estimate	Future Estimate
	FY 2015 Actual	FY 2016 Actual	FY 2017 Estimate/Actual	FY 2018	FY 2019
Output					
Bills processed	50,692	52,962	52,962 / 53,341	53,341	53,341
Efficiency					
Program costs as a percentage of revenue	5.5%	7.0%	7.0% / 6.4%	7.1%	7.1%
Service Quality					
Percent of complaints resolved to the complainant's satisfaction	100%	100%	100% / 100%	100%	100%
Outcome					
Annual transport revenue billing (in millions)	\$17.6	\$19.9	\$19.9 / \$21.2	\$20.2	\$20.2