FIRE DEPARTMENT Daniel A. Nigro, Commissioner



WHAT WE DO

The Fire Department (FDNY) responds to fires, public safety and medical emergencies, natural disasters and terrorist acts to protect the lives and property of City residents and visitors. The Department advances fire safety through its fire prevention, investigation and education programs, and contributes to the City's homeland security efforts. The Department responds to more than 305,000 fires and non-fire related emergencies and more than 1.4 million medical emergencies a year and maintains approximately 250 firehouses and ambulance stations.

FOCUS ON EQUITY

As first responders to more than 1.7 million fires, medical emergencies and myriad other incidents that impact and threaten public safety, FDNY equitably protects the lives and property of all New York City residents and visitors. The Department also advances public safety through its fire prevention, investigation and education programs, focusing on communities most vulnerable to fire and its devastating impact on life and property. The delivery of these emergency and public service initiatives enables FDNY to make significant contributions to the safety of all New Yorkers. Operational success combined with public education have helped reduce to record lows the number of serious fires and fire-related deaths, which historically have had a disproportionately higher impact on low income neighborhoods and communities of color. To address higher response times to life-threatening medical emergencies in certain parts of the Bronx and Queens, the Department recently developed strategies and provided additional resources that resulted in faster response times in those communities. FDNY is also committed to cultivating and sustaining a diverse and inclusive workplace for all its employees, as outlined in its Diversity and Inclusion Vision, Mission and Goals Statement. These objectives were strengthened in 2017 with the issuance of new Equal Employment Opportunity and Anti-Hazing/Anti-Bullying policies. While continuing to educate employees regarding the laws that protect the rights of everyone, FDNY also provides training to help employees understand their differences and implicit biases, improving their knowledge of our City's diverse populations and cultures, as well. Achieving greater diversity was a key objective in the recent firefighter recruitment campaign, which attracted a record 72,000 applicants, more than half of whom are men and women of color.

OUR SERVICES AND GOALS

- **SERVICE 1** Protect lives and property from fire hazards and other emergency conditions.
 - Goal 1a Reduce the risk associated with fire incidents.
 - Goal 1b Promptly respond to fires and other emergencies.
 - Goal 1c Minimize damage to persons and property.
- **SERVICE 2** Respond to medical emergencies.
 - Goal 2a Promptly respond to medical emergencies.
 - Goal 2b Provide high quality emergency medical care.

HOW WE PERFORMED IN FISCAL 2017

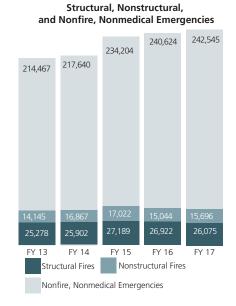
SERVICE 1 Protect lives and property from fire hazards and other emergency conditions.

Goal 1a

Reduce the risk associated with fire incidents.

In Fiscal 2017 the number of structural fires and the number of structural fires per 100,000 people both decreased by three percent compared to Fiscal 2016. The decrease in structural fires is primarily attributed to a decrease in residential fires. The number of non-structural fires increased four percent compared to Fiscal 2016, partly due to an increase in manhole fires this past winter. Icy streets treated with sodium chloride result in the degradation of wiring in manholes, which leads to fires.

FDNY reduces the risk associated with fires through its inspection, education and investigation programs. Fire inspections are designed to reduce the loss of life and property from fires through two separate and distinct inspection programs, one carried out by FDNY civilian inspectors, the other carried out by firefighters and fire officers. In Fiscal 2017 FDNY civilian fire inspectors completed 225,025 fire prevention inspections of premises and locations to ensure compliance with the City's fire code, an increase of nine percent compared to Fiscal 2016. The Department's fire risk reduction efforts also include regularly scheduled time for firefighters and fire officers to inspect buildings within designated



areas. In Fiscal 2017 firefighters and fire officers completed five percent more risk-based inspections and nine percent more mandatory inspections compared to Fiscal 2016. Both risk-based and mandatory inspections are performed during the fire companies' weekly Building Inspection Safety Program periods.

The Department's ongoing development of a Risk-Based Inspection System (RBIS) improves its ability to target and track fire safety inspections more effectively, by balancing mandatory inspections (required by code) with risk-based inspections that focus on buildings at higher risk of fire and fire-related damage. In Fiscal 2017 the Department evaluated and enhanced the RBIS scheduling algorithm. The algorithm uses building characteristics and historical data to identify buildings that pose the highest risk for a future emergency. FDNY updated the model by adding a greater breadth of data sets and utilizing predictive techniques with an emphasis on recent emergencies. Fire companies will participate in a pilot program to evaluate the new algorithm during Fiscal 2018.

In Fiscal 2017 FDNY continued to develop the Fire Inspection Revenue Enforcement System (FIRES), which will automate the full inspection life-cycle, including scheduling and enforcement processes, and provide a public-facing web portal and hand-held mobile devices for field personnel. The first phase of FIRES is scheduled to go live in 2018, with subsequent phases over two years. The Department continues to collaborate with the Department of Small Business Services and 311 to provide a single point of contact for public and business users to obtain support with FIRES. Call center metrics will be used to improve FIRES to optimize customer experience and ensure successful adoption.

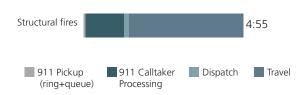
FDNY fire marshals reduce the risk of fires by investigating the causes and origins of fires and other fire-related offenses. Investigations by fire marshals into the causes and origins of fires and other fire-related offenses increased two percent during the reporting period.

		Actual						Trend	
Performance Indicators	FY13	FY14	FY15	FY16	FY17	FY17	FY18	5-Year	Desired Direction
★ Structural fires	25,278	25,902	27,189	26,922	26,075	Û	Û	Neutral	Down
Structural fires per 100,000 people	307	314	330	327	316	*	*	Neutral	Down
★ Non-structural fires	14,145	16,867	17,022	15,044	15,696	Û	Û	Neutral	Down
Completed inspections performed by civilian fire prevention personnel	184,749	190,346	195,223	206,959	225,025	187,000	187,000	Up	Up
Violation orders issued	40,946	44,860	43,542	44,376	56,001	*	*	Up	*
Violation orders corrected	30,377	40,953	37,390	38,109	50,245	*	*	Up	*
Violation orders corrected (%)	74%	91%	86%	86%	90%	*	*	Up	Up
Summonses issued	1,268	8,207	7,975	6,404	9,336	*	*	Up	*
★ Hazard complaints resolved within one day (%)	65%	59%	79%	85%	87%	85%	85%	Up	Up
Completed risk-based inspections performed by uniformed personnel	NA	42,603	43,537	41,671	43,619	*	*	NA	*
Completed mandatory inspections performed by uniformed personnel	NA	50,224	47,282	55,856	60,795	*	*	NA	*
Investigations	7,028	7,210	7,679	7,664	7,837	*	*	Up	Up
Arson fires	1,831	1,766	1,719	1,605	1,653	*	*	Down	Down
Fire safety education presentations	8,184	8,612	9,497	9,876	9,295	*	*	Up	*

Goal 1b Promptly respond to fires and other emergencies.

In Fiscal 2017 end-to-end average response time to structural fire incidents called into 911 remained the same compared to Fiscal 2016 at 4:55. Response time to incidents that do not go through 911, such as private fire alarms, are not included in end-to-end time but are included in FDNY-calculated dispatch plus travel time. Structural fires called into 911 represented just 57 percent of the total structural fire incidents in Fiscal 2017. For this reason the Mayor's Management Report continues to present average response time calculated by FDNY for the dispatch and travel portions of the response, starting from the point when the FDNY dispatcher joins the call. In Fiscal 2017 structural fire dispatch and travel time increased by two seconds compared to Fiscal 2016. Travel time increases may be partly attributed to population growth, with more vehicles on the road and more construction.

End-to-End Average Response Time (minutes:seconds)



			Actual			Target		Trend	
Performance Indicators	FY13	FY14	FY15	FY16	FY17	FY17	FY18	5-Year	Desired Direction
End-to-end average response time to structural fires (minutes:seconds)	4:47	4:49	4:51	4:55	4:55	*	*	Neutral	Down
★ Average response time to structural fires (FDNY dispatch and travel time only) (minutes:seconds)	4:06	4:08	4:11	4:11	4:13	4:12	4:14	Neutral	Down
Average response time to all emergencies by fire companies (FDNY dispatch and travel time only) (minutes:seconds)	4:46	4:46	4:50	4:52	4:56	*	*	Neutral	Down
Total fire company runs	983,615	1,054,752	1,138,509	1,175,114	1,164,940	*	*	Up	*
★ Critical Indicator "NA" Not Available	〕 ↓ Directiona	l Target	* None						

Minimize damage to persons and property.

FDNY leverages its inspections, investigations, fire and life safety education, and quick response to attain its goal of decreasing serious fires, injuries and loss of life. Serious fires per 1,000 structural fires decreased by two percent during the reporting period. Serious fires reaching second alarm or higher remained the same at eight percent during this period. In Fiscal 2017, 43 civilians died from injuries sustained in fires, representing a 33 percent decrease compared to Fiscal 2016.

During Fiscal 2017 firefighter burns decreased seven percent and firefighter injuries other than burns increased two percent compared to Fiscal 2016. In the same period, fire apparatus collisions increased by one collision, and ambulance collisions decreased three percent. The Department continues to focus on firefighter injury reduction, as well as on preventing collisions involving FDNY vehicles, by instilling the safety message through its ranks, starting with safety education in probationary firefighter school, lieutenant's First Line Supervisor Training Program, captains and chief officers development courses and continuing with presentations given by chiefs during annual company medical exams and annual education day. In Fiscal 2017 the use of analytic tools, such as dashboards and management reports, have contributed to enhanced monitoring of injuries and collisions.

		Actual	Target		Trend			
FY13	FY14	FY15	FY16	FY17	FY17	FY18	5-Year	Desired Direction
103	97	93	88	86	Û	Û	Down	Down
7%	8%	8%	8%	8%	Û	Û	Up	Down
47	81	55	64	43	Û	Û	Down	Down
0.6	1.0	0.7	0.8	0.5	*	*	Down	Down
233	186	215	218	203	Û	Û	Neutral	Down
9,273	8,663	8,926	9,416	9,643	Û	Û	Neutral	Down
	103 7% 47 0.6 233	103 97 7% 8% 47 81 0.6 1.0 233 186	FY13 FY14 FY15 103 97 93 7% 8% 8% 47 81 55 0.6 1.0 0.7 233 186 215	FY13 FY14 FY15 FY16 103 97 93 88 7% 8% 8% 8% 47 81 55 64 0.6 1.0 0.7 0.8 233 186 215 218	FY13 FY14 FY15 FY16 FY17 103 97 93 88 86 7% 8% 8% 8% 8% 47 81 55 64 43 0.6 1.0 0.7 0.8 0.5 233 186 215 218 203	FY13 FY14 FY15 FY16 FY17 FY17 103 97 93 88 86 ♣ 7% 8% 8% 8% ♣ ♣ 47 81 55 64 43 ♣ 0.6 1.0 0.7 0.8 0.5 * 233 186 215 218 203 ♣	FY13 FY14 FY15 FY16 FY17 FY17 FY18 103 97 93 88 86 \$\mathref{J}\$ 7% 8% 8% 8% \$\mathref{J}\$ 47 81 55 64 43 \$\mathref{J}\$ 0.6 1.0 0.7 0.8 0.5 * * 233 186 215 218 203 \$\mathref{J}\$ \$\mathref{J}\$	FY13 FY14 FY15 FY16 FY17 FY17 FY18 5-Year 103 97 93 88 86 ♣ ♣ Down 7% 8% 8% 8% ♣ ♣ ↓ Up 47 81 55 64 43 ♣ ♣ Down 0.6 1.0 0.7 0.8 0.5 * * Down 233 186 215 218 203 ♣ ♣ Neutral

SERVICE 2 Respond to medical emergencies.

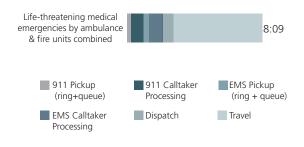
Goal 2a

Promptly respond to medical emergencies.

In Fiscal 2017 end-to-end combined average response time to life-threatening medical emergencies was eight seconds faster compared to Fiscal 2016. The end-to-end average response time to life-threatening medical emergencies by ambulances decreased 13 seconds compared to Fiscal 2016. The Mayor's Management Report also continues to present response time calculated by FDNY for the dispatch and travel portions of the response to life-threatening medical emergencies. In Fiscal 2017 dispatch and travel time to life-threatening medical emergencies for ambulances and fire companies combined decreased by 13 seconds compared to Fiscal 2016. Dispatch and travel time by ambulances to life-threatening medical emergency incidents in Fiscal 2017, representing a one percent decrease from Fiscal 2016.

FDNY launched several initiatives to improve service delivery and reduce response time in Fiscal 2017, including streamlining its dispatch process. FDNY implemented a computerized triage program to automate the

End-to-End Combined Average Response Time (minutes:seconds)



questions that the Department's medically-trained dispatchers ask callers to determine the severity of a medical emergency, eliminating the need to rely on paper cards. FDNY also deployed an additional 50 basic life support (BLS) ambulance tours, strategically assigning them to the areas with the highest response times in tactical response groups (TRG) across the City. TRGs operate in two shifts covering the 12-hour period from 9am to 9pm, providing four hours of overlapping BLS coverage

during the busiest hours of the day. In addition to the increase in ambulance tours, the Department implemented several cost-neutral initiatives to maximize ambulance availability. This included re-aligning ambulance shifts to better match call volume, as well as optimizing ambulance street corner locations with the use of historical incident data. FDNY also deployed two dedicated ambulances to Rikers Island, improving its ability to provide emergency medical care and transport from the island, without the need to pull ambulances from northwest Queens.

The Department also introduced a pilot in the Bronx to test a dynamic new model for delivering advanced life support (ALS) care, aimed at enhancing ALS care and reducing response time to life-threatening medical emergencies. The pilot tested the use of fly cars—non-transport ALS response vehicles staffed with one paramedic officer and one paramedic each—responding along with BLS ambulances staffed by two emergency medical technicians each. In the pilot, fly car responders were able to reach patients quickly to make assessments about patient condition. When they determined that a patient's condition did not require ALS care they turned responsibility over to the BLS team for hospital transport, freeing them up to respond to the next potentially life-threatening incident. During this pilot in the Bronx the Department found that by dispatching a BLS ambulance and a fly car, compared to dispatching a single ALS ambulance as is done outside the pilot area, responders were able to reach patients a full minute faster on average.

			Actual			Target		Trend	
Performance Indicators	FY13	FY14	FY15	FY16	FY17	FY17	FY18	5-Year	Desired Direction
End-to-end combined average response time to life-threat- ening medical emergencies by ambulances & fire companies (minutes:seconds)	NA	NA	8:18	8:17	8:09	*	*	NA	Down
End-to-end average response time to life-threatening medical emergencies by ambulances (minutes:seconds)	9:22	9:31	9:13	9:09	8:56	*	*	Neutral	Down
End-to-end average response time to life-threatening medical emergencies by fire companies (minutes:seconds)	6:51	7:02	7:11	7:20	7:27	*	*	Neutral	Down
★ Combined average response time to life-threatening medical emergencies by ambulances & fire companies (FDNY dispatch and travel time only) (minutes:seconds)	5:47	5:49	6:05	6:05	5:52	6:03	6:00	Neutral	Down
★ Average response time to life-threatening medical emergencies by ambulances (FDNY dispatch and travel time only) (minutes:seconds)	6:45	6:46	7:04	7:03	6:46	7:00	6:58	Neutral	Down
★ Average response time to life-threatening medical emergencies by fire companies (FDNY dispatch and travel time only) (minutes:seconds)	4:16	4:21	4:27	4:32	4:35	4:35	4:38	Neutral	Down
Life-threatening medical emergency incidents	450,423	461,339	526,904	570,594	563,594	*	*	Up	*
★ Critical Indicator "NA" Not Available ① Ū Direction	nal Target	* None	<u>.</u>						

Goal 2b Provide high quality emergency medical care.

In Fiscal 2017 FDNY responded to 32,261 segment one incidents—reports of patients in cardiac arrest or choking—representing a three percent decrease from Fiscal 2016. Overall, the Department attempted to resuscitate 8,327 confirmed cardiac arrest patients in Fiscal 2017. A subset of these arrests are classified as witnessed cardiac arrest, which occur when someone is with the patient who can recognize that the patient is in cardiac arrest, call for help and possibly perform cardiopulmonary resuscitation (CPR), often resulting in better outcomes. Witnessed cardiac arrest resuscitations increased from 46 percent to 47 percent during the reporting period. However, the percentage of all confirmed cardiac arrest patients that were revived decreased from 24 percent to 22 percent.

			Actual			Target		Trend	
Performance Indicators	FY13	FY14	FY15	FY16	FY17	FY17	FY18	5-Year	Desired Direction
Segment one incidents (cardiac arrest and choking)	23,538	24,985	29,719	33,096	32,261	*	*	Up	*
★ Cardiac arrest patients revived (%)	26%	25%	26%	24%	22%	Û	Û	Down	Up
★ – Witnessed cardiac arrest patients revived (%)	45%	45%	45%	46%	47%	仓	û	Neutral	Up
Peak number of ambulances in service per day	381	392	405	426	457	*	*	Up	*
Average ambulance tours per day	993	1,025	1,057	1,105	1,145	*	*	Up	*
Average cost of ambulance tour per day (\$)	\$1,809	\$1,876	\$1,901	\$1,937	\$1,997	*	*	Neutral	*
★ Critical Indicator "NA" Not Available ① Ū Direction	nal Target	* None	2						

AGENCY-WIDE MANAGEMENT

			Actual			Tai	Target		Trend	
Performance Indicators	FY13	FY14	FY15	FY16	FY17	FY17	FY18	5-Year	Desired Direction	
Apparatus collisions (fire companies)	447	451	480	464	465	*	*	Neutral	Down	
Ambulance collisions	793	730	806	1,056	1,023	*	*	Up	Down	
Apparatus collision rate (per 10,000 runs)	4.5	4.3	4.2	3.9	4.0	*	*	Down	Down	
Ambulance collision rate (per 10,000 runs)	8.3	7.6	7.7	9.3	8.8	*	*	Up	Down	
Firefighter injury rate (per 10,000 runs)	94.3	82.1	78.4	80.1	82.8	*	*	Down	Down	
Fire workplace injuries reported (uniform and civilian)	8,447	7,655	7,850	8,113	8,406	*	*	Neutral	Down	
EMS workplace injuries reported	1,313	1,663	1,651	1,601	1,532	*	*	Up	Down	
Average annual cost of an engine company (\$000,000)	\$6.7	\$6.9	\$6.8	\$7.1	\$7.2	*	*	Neutral	*	
Average annual cost of a ladder company (\$000,000)	\$8.4	\$8.6	\$8.6	\$8.8	\$8.9	*	*	Neutral	*	
Average annual cost of an ambulance (\$000,000)	\$2.0	\$2.1	\$2.1	\$2.1	\$2.2	*	*	Neutral	*	
Average time from inspection request until inspection (days) - Fire alarm inspections	32	32	32	45	60	*	*	Up	Down	
Average time from inspection request until inspection (days) - Rangehood inspections	5	5	5	5	5	*	*	Neutral	Down	
Violations admitted to or upheld at the Environmental Control Board (%)	91%	91%	93%	93%	92%	*	*	Neutral	*	
Violations admitted to or upheld at the Environmental Control Board (%)		_	93%			*	*			

AGENCY CUSTOMER SERVICE

			Actual			Target		Trend	
Performance Indicators	FY13	FY14	FY15	FY16	FY17	FY17	FY18	5-Year	Desired Direction
Completed requests for interpretation	2,891	3,721	4,501	5,484	5,098	*	*	Up	*
Letters responded to in 14 days (%)	66%	95%	92%	97%	97%	*	*	Up	Up
E-mails responded to in 14 days (%)	85%	97%	37%	54%	48%	*	*	Down	Up
Average wait time to speak with a customer service agent (minutes)	12:14	13:14	11:22	13:53	17:32	*	*	Up	Down
CORE facility rating	96	99	91	98	100	*	*	Neutral	Up
★ Critical Indicator "NA" Not Available ① Ū Direct	ional Target	* None	e						

AGENCY RESOURCES

Resource Indicators			Pl					
	FY13	FY14	FY15	FY16	FY17	FY17	FY18	5yr Trend
Expenditures (\$000,000)3	\$1,833.3	\$1,879.5	\$1,893.7	\$1,974.5	\$2,069.8	\$2,058.8	\$2,040.7	Up
Revenues (\$000,000)	\$90.4	\$92.5	\$95.4	\$98.4	\$104.9	\$92.1	\$96.9	Up
Personnel (uniformed)	10,180	10,318	10,777	10,945	11,090	10,884	10,914	Neutral
Personnel (civilian)	5,332	5,247	5,524	5,900	6,373	6,027	6,207	Up
Overtime paid (\$000,000)	\$324.5	\$342.5	\$337.0	\$338.7	\$331.5	\$331.0	\$284.7	Neutral
Capital commitments (\$000,000)	\$157.0	\$62.9	\$70.6	\$133.5	\$121.1	\$288.2	\$256.7	Neutral

¹Actual financial amounts for the most current fiscal year are not yet final. Final fiscal year actuals, from the Comptroller's Comprehensive Annual Financial Report, will be reported in the next PMMR. Refer to the "Indicator Definitions" at nyc.gov/mmr for details.

²Authorized Budget Level

³Expenditures include all funds

"NA" - Not Available

*None

SPENDING AND BUDGET INFORMATION

Where possible, the relationship between an agency's goals and its expenditures and planned resources, by budgetary unit of appropriation (UA), is shown in the 'Applicable MMR Goals' column. Each relationship is not necessarily exhaustive or exclusive. Any one goal may be connected to multiple UAs, and any UA may be connected to multiple goals.

Unit of Appropriation	Expenditures FY16 ¹ (\$000,000)	Modified Budget FY17² (\$000,000)	Applicable MMR Goals ³
Personal Services - Total	\$1,748.7	\$1,809.2	
001 -Executive Administrative	\$97.0	\$111.7	All
002 -Fire Extinguishment & Emergency Response	\$1,340.0	\$1,360.5	All
003 -Fire Investigation	\$18.9	\$23.3	1a
004 -Fire Prevention	\$39.0	\$43.5	1a, 1c
009 -Emergency Medical Service	\$253.8	\$270.3	2a
Other Than Personal Services - Total	\$225.8	\$260.6	
005 -Executive Administrative	\$171.5	\$194.9	All
006 -Fire Extinguishment & Emergency Response	\$23.5	\$30.3	All
007 -Fire Investigation	\$0.1	\$0.2	1a
008 -Fire Prevention	\$0.6	\$1.8	1a, 1c
010 -Emergency Medical Service	\$30.0	\$33.5	2a
Agency Total	\$1,974.5	\$2,069.8	

¹Comprehensive Annual Financial Report (CAFR) for the Fiscal Year ended June 30, 2016. Includes all funds.
²City of New York Adopted Budget for Fiscal 2017, as of June 3017. Includes all funds.
³Refer to agency goals listed at front of chapter.

NOTEWORTHY CHANGES, ADDITIONS OR DELETIONS

- The Department added an indicator 'Peak number of ambulances in service per day' to report the highest number of ambulances that are on duty per day during peak staffing periods to replace 'average ambulance tours per day.'
- The Department added rates per 10,000 runs for firefighter injuries and for apparatus and ambulance collisions to better measure changes over time, separate from changes in the raw number of incidents.
- The Department added the annual cost of an ambulance to align with the existing indicators for the annual costs of an engine or ladder and to replace 'average cost of ambulance tour per day.'
- Fiscal 2017 data for Customers Observing and Reporting Experiences (CORE) is based on the inspection results of all the agency's service centers. In Fiscal 2016, as an exception, the rating was based on inspections of targeted facilities.

ADDITIONAL RESOURCES

For additional information go to:

• Citywide and by borough monthly statistics: http://www1.nyc.gov/site/fdny/about/resources/data-and-analytics/citywide-statistics.page

For more information on the agency, please visit: www.nyc.gov/fdny.