

Pompano Beach Fire Rescue

PERFORMANCE

BRIEF

**1ST QUARTER REPORT
FY 2015**

Pompano Beach Fire Rescue

NOTES

This report highlights the Pompano Beach Fire Rescue’s emergency response activities for the first quarter of fiscal year 2015. Data for the period are compared with previous periods to monitor trends in an effort to gain insight into organizational performance and variances. In this respect, two questions are addressed: **What was the level of service demand in the first quarter of FY 2015? And how did the fire department perform?**

All years referred to in this document are fiscal years. Numbers in the text, tables or charts may not add up to totals because of rounding. The sum of zone totals may not add up to total incident because of computer data input errors and/or the exclusion of Mutual Aid data incidents from zone totals. The sum of dispatch time, turnout time, and travel time may not add up to total response time since there are instances where dispatch time, turnout time, or travel time data are not available to be included in the calculation of response time.

The Broward Sheriff Office runs and operates the Communications Dispatch Center.

From an emergency response strand point, geographically, the city is divided into six *zones*; each with a dedicated fire station. The *zones* are not necessarily divided equally, with similar demographics and population density. For instance, of the six fire stations, only one is located west of I-95 where most of the population growth has occurred in the last 20 years. The fire department also provides emergency coverage for the contract service area of the Village of Sea Ranch Lakes, referred to as Zone 12C in the document. [Sea Ranch Lakes](#) is located about one mile south of Pompano Beach’s city limits along AIA.¹

In addition to Sea Ranch Lakes, the City of Pompano Beach has an Automatic-Aid agreement with the City of Lighthouse Point, calling for Lighthouse Point Fire Rescue to commit an aerial ladder truck automatically to all Pompano Beach commercial fires while Pompano would respond to all of Light House Point’s structure fires.²

Incidents data are spread over 24 hours and divided among 14 fire/rescue units, including a rescue van³ that operates 12 hours a day to help provide coverage primarily to Zone 52. See the incidents response map in Page 6.

Since data for earlier years or periods may have been updated or corrected, readers are always encouraged to use the data from the most recent Performance Brief publication. Put differently, the information released in the current publication is based on preliminary data subject to change in the future.

Thank you for your interest in the organization; your comments and suggestions for how to improve this document are always welcome. This report is also available on the fire department [webpage](#).

¹ The service contract between the City and the Village of Sea Ranch Lakes generates \$194,000 annually; it primarily pays for the cost of staffing the third paramedic on the beach rescue vehicle.

² There is no monetary obligation for either party.

³ Staffing expenses for this unit average \$0.5 million per year.

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Mission

The mission of Pompano Beach Fire Rescue (PBFR) is to preserve life and property, promote public safety and respond to all calls for emergency assistance within the community. This mission is performed around the clock with all due regard for the dignity of each person we serve. In terms of priority, we want to help Pompano Beach enhance its reputation as a safe place in the region and deepen our connection with the community.

We serve a wide range of individuals on a daily basis: local residents, visitors from the United States and abroad, property owners, business interests, building design professionals, and contractors. The calls for assistance include – but are not limited to – medical and fire incidents, high-rise rescues, hazardous material incidents, and vehicle accidents. When they are not responding to requests for assistance, firefighters are conducting training drills and/or helping to maintain the fire station facilities as well as the apparatus equipment necessary to do their job.

More broadly, PBFR is defined by the collective efforts of 217 full-time employees⁴ committed to providing quality service even in a time of anxiety and budget constraint. One way to understand how the department is organized is to itemize it into major functions or divisions. The organization comprises six operating divisions that work in concert to administer its programs and carry out a multitude of activities.⁵ The number of full-time employees per division is as follows

○ Fire Administration	4
○ Logistics	3
○ Fire Operations	98
○ Emergency Medical Services	85
○ Fire Prevention	10
○ Ocean Rescue	17

The Bureau of Fire Prevention – considered the fire safety enforcement arm of the organization - is required to perform annual inspection on all commercial and multi-residential properties in Pompano Beach. These inspections are intended to eliminate or reduce the number of hazards at these properties, which contribute to the increased risk of fire within the city. They also review building construction plans for fire safety.

In addition to its regular functions, Ocean Rescue has implemented a successful effort for raising awareness in water safety in Pompano Beach with the Junior Lifeguard Program, which enrolls an average of 250 young adults per year through the summer camp. The program develops individuals from the ages of 9 through 17 in ocean water safety and generates about \$45,000 annually.

Service Cost - The FY 2014 Budget total \$32.7 million, including \$1.7 million for Ocean Rescue. Forty three percent of the Department’s funding is raised through property tax while 40% is generated through the fire assessment program.⁶ EMS transports, fire inspection fees and other revenue sources account for 16% of the department’s total funding composition.

⁴ And 32 part time employees: 31 lifeguards and one secretary.

⁵ From a budget allocation standpoint, while the Logistics Division is part of Fire Operations, two of its assigned employees’ costs (one secretary and one material handling specialist) are funded through the EMS budget.

⁶ The fire assessment program history goes back to 1996 and has been updated four times since

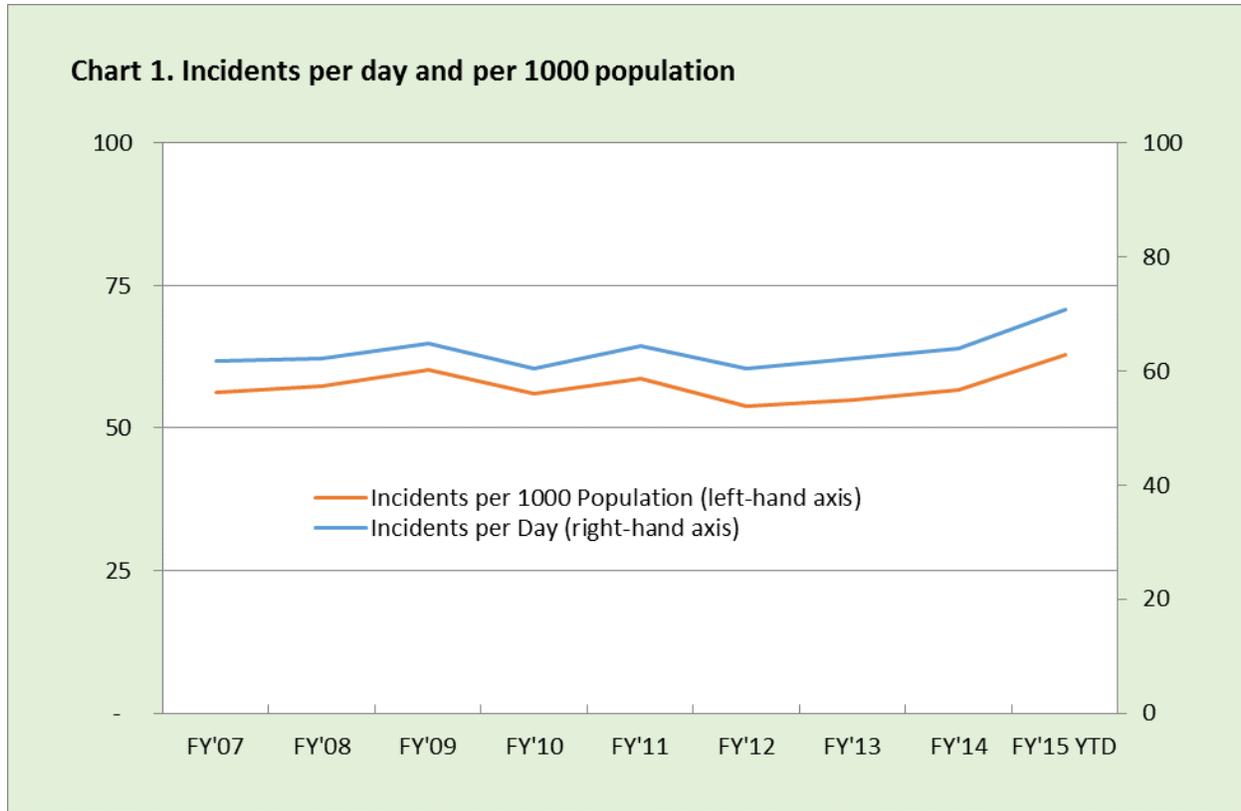
Emergency Response

Trends against the performance indicators reviewed below are shown in the “movement” column, using the following symbols: ▽ (down from previous period), ⇔ (steady or no movement), or Δ (up). The symbol color indicates whether the movement is favorable or unfavorable to the fire department or is ultimately in the interest of the community in general.

- **Red = Unfavorable**
- **Green = Favorable**

Indicator	Movement	Comment
Incidents	Δ	<p>In the first quarter of fiscal year 2015 (October-December), the fire department responded to 6,522 request for emergency assistance, representing an unusually steep increase in call volume (10.7%) over the same period last year. This also means that during that time period call volume averaged 71 per day or a total of 63 incidents per 1000 population.⁷ As a share of the total, the impact was mostly on Zone 24 which accounted for 16% of the calls; its share was 13.7% during the comparable period last year (See Chart 1 and Table).</p> <p>62.3% of the calls – or 44 people per day - were transported to a local hospital to receive additional care. The daily average is 39 people/day from FY 2007 to FY 2014.</p> <p>63.1% of the calls occurred during the hours of 8:00am and 8:00pm - or a little over 3 calls per hour during that time segment. This is consistent with historical average.</p> <ul style="list-style-type: none"> • EMS incidents continued to account for the vast majority of the calls: 80.2%. Those incidents include medical/rescue type calls (74.3%) and vehicle accidents (5.9%). • False Alarms accounted for 5.3% of the calls. A relatively high number (25.1%) of those false alarms came from Zone 52 - which include Palm Aire and surrounding communities – followed by Zone 11 with 18.4%, Zone 61 (17.5%), Zone 63 (16.9%), Zone 24 (14.0%), Zone 103 (7.3%), and Zone 12C with less than 1%. <i>(See the incidents response map on Page 6. Note that Zone 12C is not captured on the map as it refers to the Village of Sea Ranch Lakes, located approximately one mile south of the Pompano Beach city limits on AIA.)</i> • The share of fire incidents computed to 1.1% of the total, an estimated \$.5 million loss in property value. No fire fatalities occurred. However, we unfortunately suffered one fire related death in fiscal year 2014, the first in the city since fiscal year 2011. This brings the total to seven fatalities since fiscal year 2007, including two in FY2007, one in FY2008, one in FY2009, one in FY2010, one in FY2011, and one in FY2014. • Hazmat calls account for 2.0% of the incidents. • Oher categories (i.e., service calls, Good Intent, Bad Weather, etc.) combined for 11.4% of the incidents.

⁷ Call Volume by Population Size can be misleading with respect to areas that experience vastly different day and night population levels. The city of Orlando is an example where the night and day populations differ vastly. There appears to be no evidence however that there is a significant variance in the day and night Pompano Beach population levels. Note also that Pompano Beach population has been relatively stable for many years, hovering around 101,000 from 2007 to 2014.

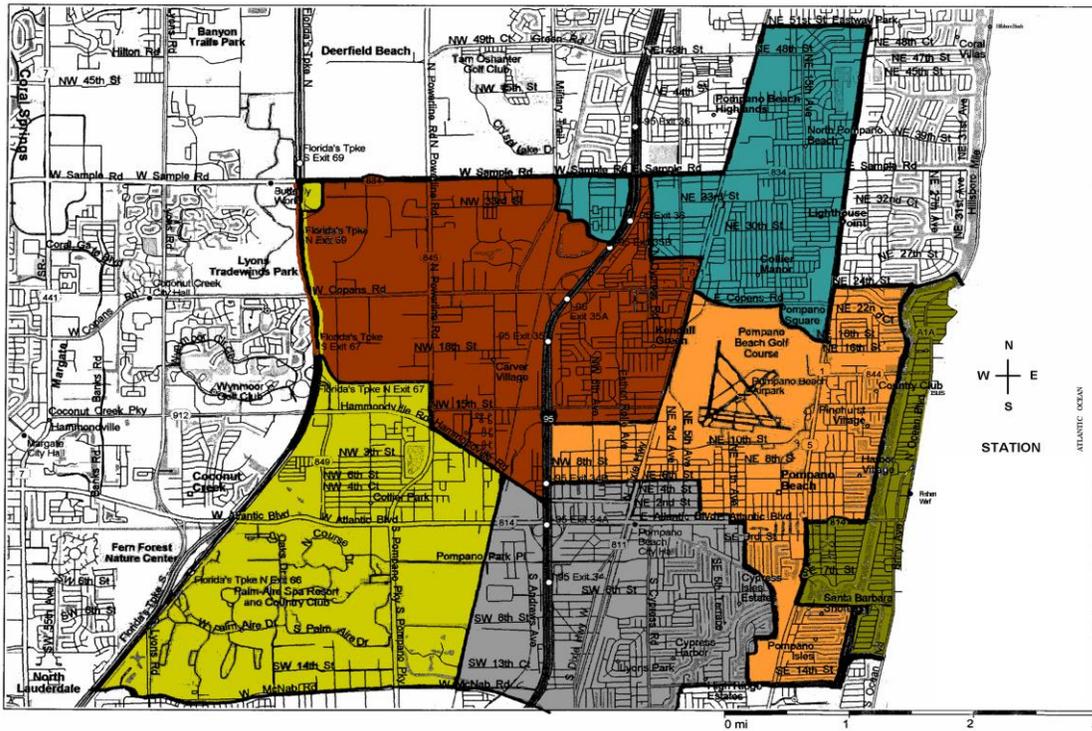


For the purpose of this report, population estimates for FY 2013 and FY 2014 total 103,859. This includes an estimated City population of 103,189 plus 670 for Sea Ranch Lakes. Source: US Census and City of Pompano Beach Comprehensive Annual Financial Report (CAFR), FY2013.

Table 1. Incidents per Zone

Zone	FY2007 YR END	FY2008 YR END	FY2009 YR END	FY2010 YR END	FY2011 YR END	FY2012 YR END	FY2013 YR END	FY2014 YR END	FY2014 OCT-DEC	FY2015 OCT-DEC
Zone 11	7	7	7	7	7	7	7	7	7	7
Zone 24	9	9	9	10	9	10	9	10	9	12
Zone 52	17	16	15	15	16	17	17	17	17	18
Zone 61	11	11	11	10	10	10	11	11	11	11
Zone 63	13	13	13	13	13	13	12	13	12	14
Zone 103	8	8	8	8	8	8	8	6	8	9
Zone 12C	n/a	n/a	0.2	0.2	0.2	0.2	0.2	0	0	0
Share of all Incidents										
Zone 11	10.5%	11.3%	11.4%	11.4%	11.0%	11.3%	11.2%	10.5%	10.4%	9.9%
Zone 24	13.9%	14.4%	14.5%	15.1%	14.7%	15.2%	14.7%	15.2%	13.7%	16.6%
Zone 52	26.2%	25.2%	24.1%	24.5%	25.5%	25.9%	26.1%	26.3%	26.4%	24.8%
Zone 61	17.1%	16.8%	16.8%	16.2%	15.8%	15.6%	16.8%	17.6%	16.9%	16.1%
Zone 63	20.4%	20.5%	20.6%	20.0%	20.1%	19.7%	19.0%	20.2%	18.9%	19.8%
Zone 103	11.9%	11.8%	12.3%	12.3%	12.5%	12.1%	11.9%	9.9%	13.2%	12.5%
Zone 12C	n/a	n/a	0.4%	0.4%	0.4%	0.3%	0.3%	0.3%	0.5%	0.3%

Chart 2. Incidents Response Map



Incidents location and distribution for Oct - Dec

-  Zone 52: 24.8% of the calls
-  Zone 63: 19.8%
-  Zone 61: 16.1%
-  Zone 24: 16.6%
-  Zone 103: 12.5%
-  Zone 11: 9.9%

Response Time

Trends against the performance indicators reviewed below are shown in the “movement” column, using the following symbols: ▽ (down from previous period), ⇔ (steady or no movement), or Δ (up). The symbol color indicates whether the movement is favorable or unfavorable to the fire department or is ultimately in the interest of the community in general.

- Red = Unfavorable
- Green = Favorable

Indicator	Movement	Comment
Response time ⁸	Δ	<p>Average response time to incidents in the first quarter of the fiscal year was 5:31 minutes.</p> <p>When broken down by components we continue to struggle to meet NFPA standards with respect to fractile time, as shown below.</p>
Turnout time (Fire)	▽	<p>% of time in the first quarter of FY 2015 Turnout Time to Fire calls was 80 seconds or less: 76.5%.</p> <ul style="list-style-type: none"> • NFPA Standards (80 seconds or less - 90% of the time): not met • But turnout time to fire incidents improved over the same period last year when the NFPA standard was reached 72.0% of the time.
Turnout time (EMS)	▽	<p>% of time in the first quarter of FY 2015 Turnout Time to EMS calls was 60 seconds or less: 80.0%</p> <ul style="list-style-type: none"> • NFPA Standards (60 seconds or less - 90% of the time): not met • But turnout time to EMS incidents improved over the same period last year when the NFPA standard was reached 75.1% of the time.
Travel time (Fire)	Δ	<p>% of time in the first quarter of FY 2015 Travel Time to Fire calls was 4 minutes or less: 57.4%</p> <ul style="list-style-type: none"> • NFPA Standards (240 seconds or less - 90% of the time): not met • When compared to the same period a year ago (65.3%), travel time to fire incidents increased.
Travel time (EMS)	Δ	<p>% of time in the first quarter of FY 2015 Travel Time to EMS calls was 4 minutes or less: 53.3%</p> <ul style="list-style-type: none"> • NFPA Standards (240 seconds or less - 90% of the time): not met • When compared to the same period a year ago (55.7%), travel time to EMS incidents increased.

⁸ There are no established NFPA standards for average response time in NFPA 1710. The standard states that “the department shall establish a performance objective of not less than 90 percent for the achievement of each turnout time and travel time objective” (NFPA 1710 4.1.2.4). In other words, responses to at least 90% of incidents should be at or below the target response time. This approach – whereby a certain percent of a population meets a given criterion - is called “fractile time” measurement.

Fire-rescue agencies use average response time, arguing that the average response approach is as effective as using fractile time – because, they suggest, the average computation takes into account the outliers. NFPA recommends against using averages as a measure of response time however and instead promotes fractile measurement. They point out that in reality a few isolated extreme outliers can severely skew the average – giving therefore an inaccurate picture of the organization’s overall response time.

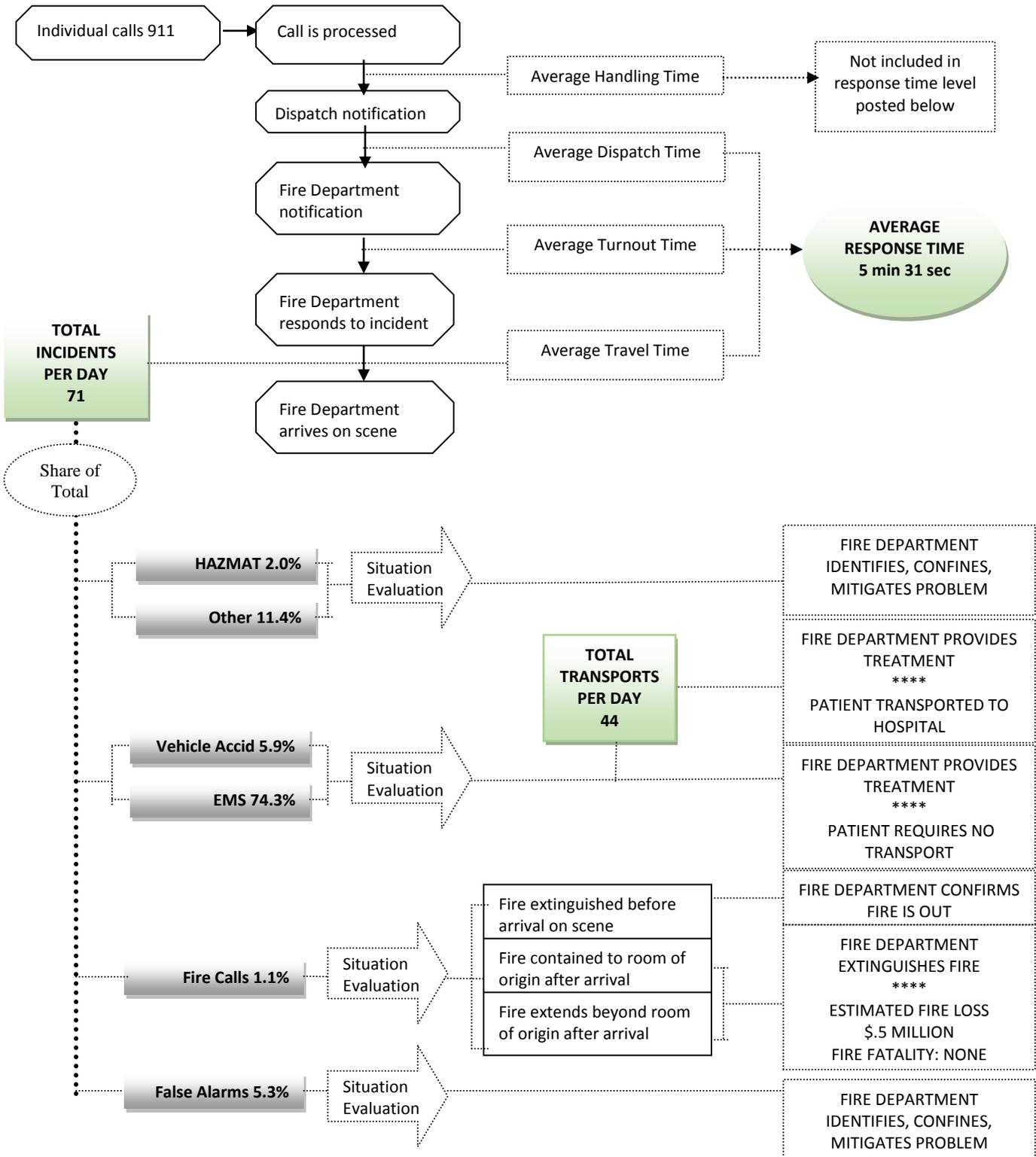
Table 2. Fractile Response Time to EMS and Fire Calls

NFPA Standards	Pompano Beach Performance									
	FY2007 YR END	FY2008 YR END	FY2009 YR END	FY2010 YR END	FY2011 YR END	FY2012 YR END	FY2013 YR END	FY2014 YR END	FY2014 OCT-DEC	FY2015 OCT-DEC
TURNOUT TIME										
Fire										
80 seconds or less - 90% of the time	43.2%	53.8%	71.9%	72.5%	70.4%	66.7%	70.6%	75.5%	72.0%	76.5%
EMS										
60 seconds or less - 90% of the time	38.4%	46.5%	59.3%	62.5%	65.3%	68.0%	73.1%	77.3%	75.1%	80.0%
TRAVEL TIME										
Fire										
240 seconds or less - 90% of the time	73.0%	69.3%	65.6%	59.8%	58.3%	55.3%	57.1%	57.4%	65.3%	57.4%
EMS										
240 seconds or less - 90% of the time	64.2%	65.4%	62.4%	59.8%	57.8%	56.1%	56.2%	53.3%	55.7%	53.3%

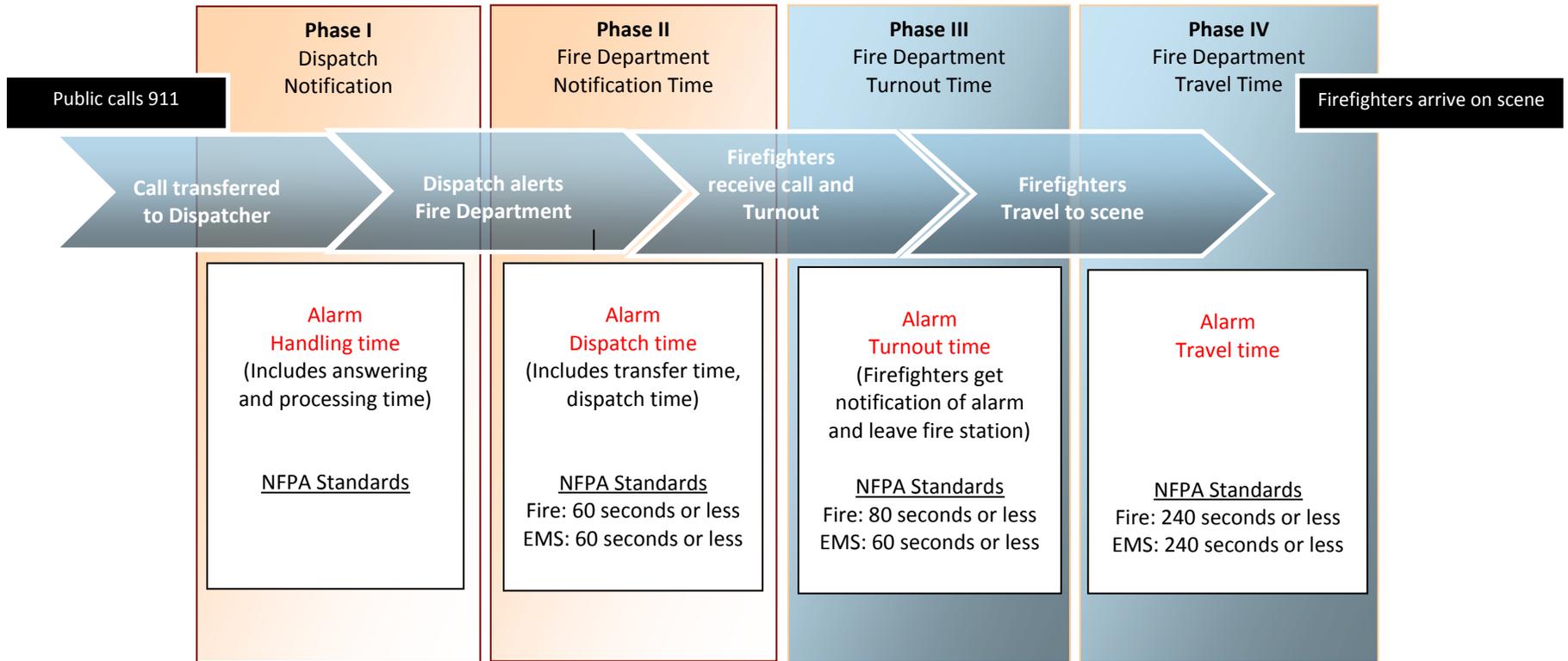
Turnout Time: NFPA 1710 3.3.53.8 defines turnout time as: “the time interval that begins when the emergency response facilities (ERFs) and emergency response units (ERUs) notification process begins by either an audible alarm or visual annunciation or both and ends at the beginning point of travel time.”

Travel Time: NFPA 1710 3.3.53.7 defines Travel Time as “the time interval that begins when a unit is en-route to the emergency incident and ends when the unit arrives at the scene.”

Appendix A. Incidents and Response Time Flow Chart, FY 2015: Oct-Dec



Appendix B. Incident Response Phases and NFPA Standards



Note: In 2001, subsequently revised in 2004, the National Fire Protection Association (NFPA) established standards for fire and emergency medical responses known as NFPA Standard 1710 (“NFPA 1710”). Among others, NFPA 1710 includes response time goals for various stages of response to an emergency incident. See National Fire Protection Association. (2004). *Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments*, 2004 Ed. (Standard 1710) Quincy, MA: Author.

Keep in mind, this is not a legal mandate. These are recommended guidelines that the National Fire Protection Association is encouraging municipalities to follow based on volume of studies from reputable institutions.

Appendix C. Authorized Positions and Organizations		2000	2001	2002-2003	2004	2005-2006	2007-2009	2009-2010	2011-2013	2014	2015
ADMINISTRATION	Fire Chief	1	1	1	1	1	1	1	1	1	1
	Assistant Fire Chief	1	1	1	1	1	1	1	1	1	1
	Admin. Services Manager									1	1
	Administrative Coord.	1	1	1	1	1	1	1	1		
	Depart. Head Secretary	1	1	1	1	1	1	1	1	1	1
	Subtotal	4									
TRAINING	Training Commander	1	1	1	1	1	1	1	1	1	1
	Training Officer	2	2	2	2	2	2	2	2	2	2
	Subtotal	3									
PREVENTION	Fire Marshal	1	1	1	1	1	1	1	1	1	1
	Fire Inspector	6	7	7	7	8	8	8	8	8	8
	Secretary	1	1	1	1	1	1	1	1	1	1
	Subtotal	8	9	9	9	10	10	10	10	10	10
OPERATIONS	Logistics Manager							1	1	1	1
	Emergency Manager						1	1	1	1	1
	Division Chief				1	1	1	1	1	1	1
	Battalion Chief			3	3	3	3	3	3	3	6
	Captain	3	3								
	Fire Lieutenant/Captain	15	17	17	15	15	15	15	15	15	15
	Driver Engineer	16	18	18	18	18	18	18	18	18	18
	Firefighter	40	50	50	57	57	57	57	57	57	57
Subtotal	74	88	88	94	94	95	96	96	96	99	
EMS	Division Chief	1	1	1	1	1	1	1	1	1	1
	EMS Captain				3	3	3	3	3	3	
	Fire Lieutenant/Captain	13	15	15	14	14	14	14	14	14	14
	Driver Engineer	10	12	12	12	12	12	12	12	12	12
	Firefighter	38	44	44	50	50	54	54	54	54	54
	Secretary	2	2	2	2	2	2	2	2	2	2
	Material Handling Spec.	1	1	1	1	1	1	1	1	1	1
Subtotal	65	75	75	83	83	87	87	87	84	81	
FIRE/EMS	TOTAL	154	179	179	193	194	199	200	200	200	200
OCEAN RESCUE	Lifeguard							14	14	14	14
	Lifeguard Lieutenant							2	2	2	2
	Lifeguard Captain							1	1	1	1
	Manager							1			
	Full Time							18	17	17	17
Part Time							21	31	31	31	

