

PALM BEACH COUNTY  
BOARD OF COUNTY COMMISSIONERS

W/REVISED BACKUP

WORKSHOP SUMMARY

---

**Meeting Date:** November 29, 2016

**Department:** Fire Rescue

---

I. EXECUTIVE BRIEF

**Title:** Fire Rescue FY2017 Staffing Presentation

**Summary:** In response to Board direction, staff has prepared a brief summary presentation illustrating how the Department determines the appropriate level of staffing for its 49 fire stations. This presentation will include station-specific information regarding the staffing models recommended for FY2017. Countywide (SB)

**Background and Policy Issues:** Fire Rescue management analyzes and reviews emergency data to assist in making decisions on staffing, apparatus placement, and new station locations. The deployment of staffing is accomplished through the use of several alternative strategies intended to contain costs and improve efficiency. While some fire stations are staffed with 3-person engine companies and 2-person rescue companies, some facilities may have one group of employees performing several functions. For example, "Advanced Life Support (ALS) Engines" perform pumper operations as well as ALS emergency medical services, and Aerials incorporate ladder capabilities along with pumper operations. In some cases, two separate vehicles are housed at the station and the on-duty personnel determine which apparatus is more appropriate to respond to the scene, depending on the nature of the call. These "combination" or "either/or" stations are typically in areas with relatively low alarm activity. Fire-Rescue continuously reviews staffing in order to provide a quality, cost-effective level of service to the citizens and visitors of the County.

**Attachment:** Staffing PowerPoint Presentation

---

**Recommended by:** John Tolent 11/7/16  
Fire Rescue Administrator Date

**Approved by:** Nancy L. Bolton 11/21/16  
County Administration Date

**II. FISCAL IMPACT ANALYSIS**

**A. Five Year Summary of Fiscal Impact:**

Fiscal Years	2017	2018	2019	2020	2021
Capital Expenditures	_____	_____	_____	_____	_____
Operating Costs	_____	_____	_____	_____	_____
External Revenues	_____	_____	_____	_____	_____
Program Income (County)	_____	_____	_____	_____	_____
In-Kind Match (County)	_____	_____	_____	_____	_____
<b>NET FISCAL IMPACT</b>	<b>*see below</b>	_____	_____	_____	_____
<b># ADDITIONAL FTE POSITIONS (Cumulative)</b>	<b>0</b>	_____	_____	_____	_____

Is Item Included in Proposed Budget? Yes \_\_\_ No \_\_\_

Budget Account No.: Fund \_\_\_\_\_ Dept \_\_\_\_\_ Unit \_\_\_\_\_  
 Revenue Source \_\_\_\_\_/Object \_\_\_\_\_

**B. Recommended Sources of Funds/Summary of Fiscal Impact:**

\* The purpose of this presentation is to provide a summary of Fire Rescue's staffing. The presentation is informational, and therefore does not have any fiscal impact.

C. Departmental Fiscal Review: *in-kind match*

**III. REVIEW COMMENTS**

**A. OFMB Fiscal and/or Contract Development and Control Comments:**

*[Signature]* 11/8/16  
 OFMB ET 11/7 JS 11/7

*[Signature]* 11/8/16  
 Contract Development and Control

**B. Legal Sufficiency**

*[Signature]* 11/9/16  
 Assistant County Attorney

**C. Other Department Review:**

\_\_\_\_\_  
 Department Director

REVISED 9/03  
 ADM FORM 01

(THIS SUMMARY IS NOT TO BE USED AS A BASIS FOR PAYMENT.)



**Fire Rescue Staffing Workshop**  
**November 29, 2016**

# Palm Beach County Fire Rescue 2016

**Services Provided:** Fire Protection, Emergency Medical Services, ALS/BLS Transport, Hazardous Materials Mitigation, Special Operations, Aircraft Firefighting, 9-1-1 Dispatching, Public Education, Inspections, Investigations, Plans Review, Community Assistance

**Area Served:** Unincorporated County & 19 Municipalities

**Dispatch For:** Additional 13 Municipalities

**# of in-service units:** 43 Engines, 6 Aerials, 54 Rescues, 2 Special Operations Units, 4 Tenders, 19 Brush Trucks, 1 Light/Air Unit, 5 ARFF Vehicles

**Budget:** \$402 million (3.4581 mils)



# Palm Beach County Fire Rescue 2016

<b>Population Served:</b>	892,680 (PBCFR Jurisdiction) + 326,122 additional dispatched
<b>Area Served:</b>	1,762 square miles
<b># of Fire Stations:</b>	49 (PBCFR Jurisdiction) + 29 additional dispatched
<b># of Personnel:</b>	1,510 budgeted positions
<b>Daily Staffing:</b>	285 minimum
<b># of PBCFR calls/yr:</b>	132,716
<b>Total # of dispatched calls/yr:</b>	199,421



# Comp Plan Unit Staffing

**Policy 1.2-c: The County shall staff all in-service emergency response units with a minimum of the following:**

<b>APPARATUS</b>	<b>EMPLOYEES</b>
Fire Pumpers	3
Quints	3
Rescue/Engines	3
Rescue Vehicles	2
Ladder Trucks	2
Crash Fire Rescue	1
Special Operations	2
Tankers	1



# Unit Staffing



Engine/Aerial – 3 people



# Unit Staffing



Rescue – 2 or 3 people



# Unit Staffing



Crash Fire Rescue – 1 person



# Unit Staffing



Special Operations Unit – 2 people



# Unit Staffing



Tender – 1 person



# Unit Staffing



Either/Or Stations – 3 people



# Unit Staffing



Brush Truck – cross staffed with Engine



# Unit Staffing



Battalion Chief - EMS Captain  
1 Person



# How does the system work?

- Why does a Rescue Truck respond to a Fire Call?
- Why does a Fire Engine respond to a Medical Call?
- Why would a Rescue and an Engine respond together?



# Rescue Truck Staffing

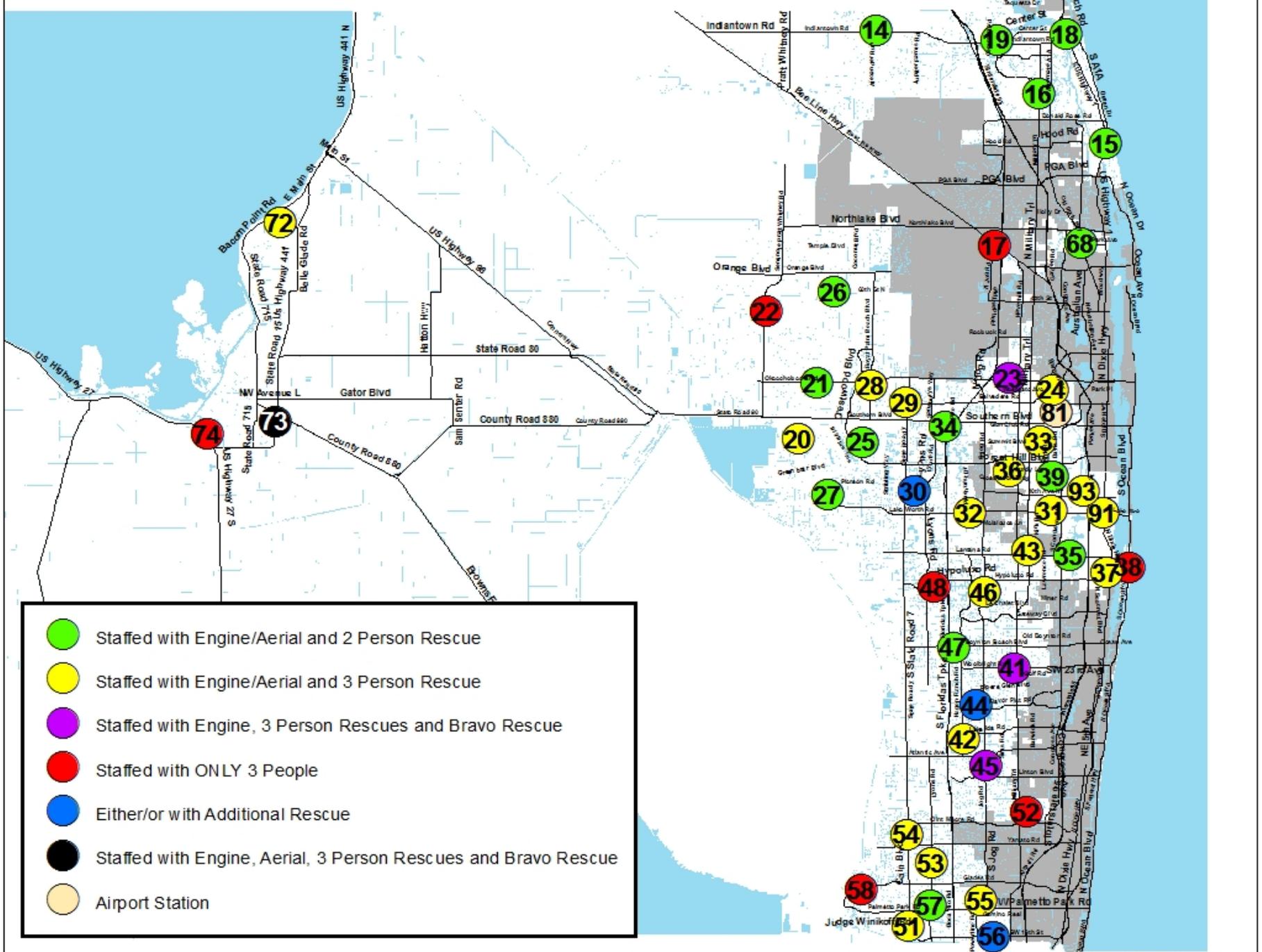
21 – Rescues with 2 People

24 – Rescues with 3 People

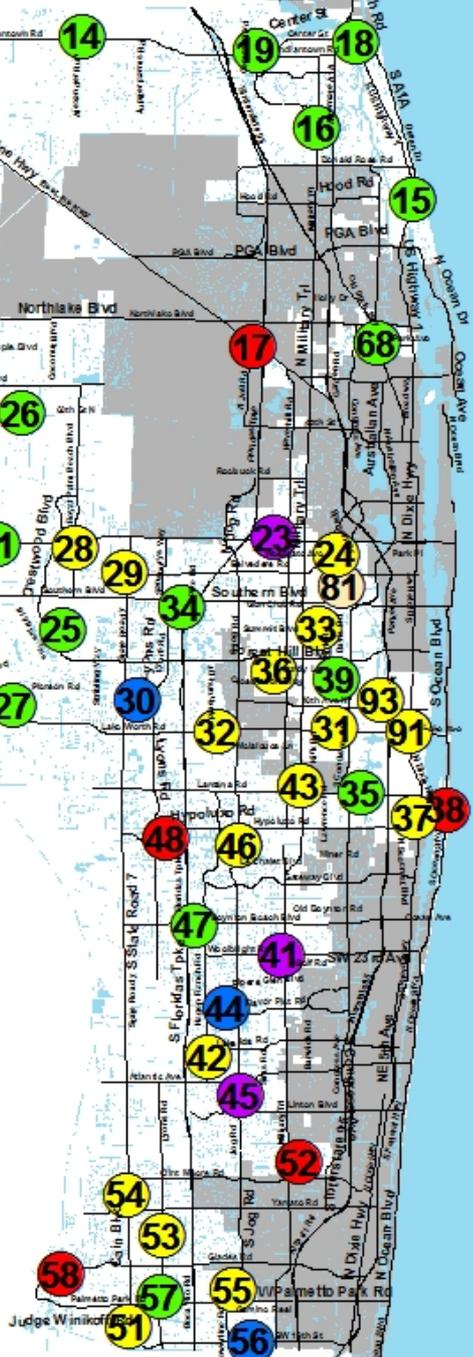
8 – Either/Or (Cross Staffed Rescues)

1 – Airport Rescue





- Staffed with Engine/Aerial and 2 Person Rescue
- Staffed with Engine/Aerial and 3 Person Rescue
- Staffed with Engine, 3 Person Rescues and Bravo Rescue
- Staffed with ONLY 3 People
- Either/or with Additional Rescue
- Staffed with Engine, Aerial, 3 Person Rescues and Bravo Rescue
- Airport Station



# Annual Calls per Station Zone

<u>Station</u>	<u>Current Staffing</u>	<u># Calls</u>
23	Engine/Aerial, 3 Person Rescue and Bravo Rescue	6,412
41	Engine/Aerial, 3 Person Rescue and Bravo Rescue	6,153
45	Engine/Aerial, 3 Person Rescue and Bravo Rescue	6,021
91	Engine/Aerial, 3 Person Rescue	5,436
33	Engine/Aerial, 3 Person Rescue	5,036
42	Engine/Aerial, 3 Person Rescue	5,024
31	Engine/Aerial, 3 Person Rescue	4,002
32	Engine/Aerial, 3 Person Rescue	3,768
36	Engine/Aerial, 3 Person Rescue	3,726
53	Engine/Aerial, 3 Person Rescue	3,711
47	Engine/Aerial, 2 Person Rescue	3,372
73	2-Engine/Aerials, 3 Person Rescue and Bravo Rescue	3,351
37	Engine/Aerial, 3 Person Rescue	3,318
44	Either/or with Additional Rescue	3,267
16	Engine/Aerial, 2 Person Rescue	3,207
46	Engine/Aerial, 3 Person Rescue	3,144
54	Engine/Aerial, 3 Person Rescue	3,108
19	Engine/Aerial, 2 Person Rescue	3,078
56	Either/or with Additional Rescue	3,057



# Annual Calls per Station Zone

<u>Station</u>	<u>Current Staffing</u>	<u># Calls</u>
24	Engine/Aerial, 3 Person Rescue	3,011
93	Engine/Aerial, 3 Person Rescue	2,967
51	Engine/Aerial, 3 Person Rescue	2,914
55	Engine/Aerial, 3 Person Rescue	2,824
30	Either/or with Additional Rescue	2,769
28	Engine/Aerial, 3 Person Rescue	2,685
43	Engine/Aerial, 3 Person Rescue	2,684
35	Engine/Aerial, 2 Person Rescue	2,426
57	Engine/Aerial, 2 Person Rescue	2,259
39	Engine/Aerial, 2 Person Rescue	2,107
48	3 People Only	1,976
68	Engine/Aerial, 2 Person Rescue	1,953
18	Engine/Aerial, 2 Person Rescue	1,923
52	3 People Only	1,775
72	Engine/Aerial, 3 Person Rescue	1,731
15	Engine/Aerial, 2 Person Rescue	1,628
34	Engine/Aerial, 2 Person Rescue	1,573
25	Engine/Aerial, 2 Person Rescue	1,528
29	Engine/Aerial, 3 Person Rescue	1,473



# Annual Calls per Station Zone

<u>Station</u>	<u>Current Staffing</u>	<u># Calls</u>
81	Airport	1,449
20	Engine/Aerial, 3 Person Rescue	1,279
22	3 People Only	1,205
26	Engine/Aerial, 2 Person Rescue	1,174
38	3 People Only	1,043
14	Engine/Aerial, 2 Person Rescue	1,003
58	3 People Only	755
74	3 People Only	733
27	Engine/Aerial, 2 Person Rescue	693
17	3 People Only	518
21	Engine/Aerial, 2 Person Rescue	491





# Staffing History

**1999: First year staffing any rescue truck with 3 people, also started creating more ALS Engines**

**2000: Established Original Staffing Criteria**

**2002 – 2007: Began adding 3<sup>rd</sup> to more rescue trucks**

**2008: Tax Reform and Downturn of the Economy**

**2011: BLS Transport throughout entire County**

**(4 – 3 person rescues were down-staffed in order to add 2 new transport units to Southern part of County to assist with increased workload)**



# Staffing Committee

**Originally created in 1998 to:**

Conduct annual analysis of emergency data and make recommendations on increased staffing, new apparatus, and alternative deployment techniques



# Staffing Committee Criteria

## CRITERIA FOR OPENING NEW STATION (3 person):

- 3 calls/day
- escalating workload & travel times from adjoining areas
- high development activity in an area not covered in 5 min travel time
- high # of over 8 minute calls
- area not projected for immediate annexation



# Staffing Committee Criteria

## CRITERIA FOR MULTI-UNIT STATION (5 people):

- 5 calls/day
- 3 transports/day
- less than 90% availability
- excessive # of over 8 minute calls
- geographic barriers (rural, inadequate road network, bridges, traffic congestion)
- back-up to other station jurisdictions (3 or more/day)



# Staffing Committee Criteria

## CRITERIA FOR 3-PERSON RESCUE UNIT:

- 1,000-1,500 transports/year
- call volume in station area over 4,000/year
- availability of engine is less than 90%
- high # of over 8 minute calls



# Staffing Committee Criteria

## CRITERIA FOR ADDITIONAL RESCUE UNIT:

- 1,500 transports/year
- total call volume over 5,000 calls/year
- availability of engine is less than 90%



# Staffing additional position on a Rescue Truck

Increase in min daily staffing 1

3 shifts x 3

Coverage factor x 1.5

New Personnel 4.5

**Cost: \$432,102**



# Estimated Costs of adding 3<sup>rd</sup> Person to 1 - Rescue

FY2018	\$452,678
FY2019	\$485,652
FY2020	\$521,160
FY2021	\$559,533



# Impact of adding 3<sup>rd</sup> Person to all Rescues (21)

	<u>Cost Increase</u>	<u>Millage</u>
FY2017	\$9,074,142	3.5935
FY2018	\$9,506,238	3.5919
FY2019	\$10,198,692	3.5948
FY2020	\$10,944,360	3.5979
FY2021	\$11,750,193	3.6010





# Capital Improvement Plan 2017 - 2021

## 1 Replacement Station

- Station #22

## 5 New Future Stations

- Station North of Station #41
  - 20 Mile Bend Station
- 3 Stations in Ag Reserve (North, Central & South)

Costs: Land, Building, Apparatus & Personnel



# 2 Person Rescue Stats

<u>Unit</u>	<u>Type</u>	<u># of Calls</u>	<u># of transports</u>
R35	2 PERSON	2,761	1,824
R39	2 PERSON	2,658	1,762
R16	2 PERSON	2,499	1,690
R47	2 PERSON	2,464	1,538
R19	2 PERSON	2,439	1,687
R57	2 PERSON	2,258	1,375
R68	2 PERSON	1,881	1,256
R34	2 PERSON	1,805	998
R18	2 PERSON	1,642	1,123
R15	2 PERSON	1,353	940
R25	2 PERSON	1,294	852
R26	2 PERSON	1,089	652
R14	2 PERSON	900	517
R21	2 PERSON	776	507



