

Study Session

Fire Department Operational Analysis

Background/Timeline

In 2016, City Council was provided a Deployment Report by Fire staff that identified deficiencies in emergency response and recommendations to improve the current paramedic deployment.

On 3/22/2018, OCFA presented a Fire Service Proposal for complete fire services to City Council.

The OCFA proposal included many of the recommendations found in the GGFD 2016 Deployment Report.

Following the City Staff presentation on 7/10/2018, City Council directed City & Fire Department staff to provide more comparable data for a future study session

Garden Grove Fire Services General Needs Assessment

Background

Key Operational Issues Garden Grove Fire Department is Facing

1. **Paramedic Response Times**
2. **Retention & Recruitment**
3. **Public Safety Infrastructure**

Community Risk

The City of Garden Grove's major risk are similar to any city in the urban area (center of the County).

General Daily Risk:

- Building fires
- Medical emergencies
- Transportation emergencies
- Hazardous materials incidents
- Human events

Natural Hazard Risk:

- Flooding
- Earthquakes
- Storms

Comparison Analysis

In an effort to provide comparative data, the following deployment models were evaluated for:

- Operational Effectiveness
- Risk & Benefit

The Deployment models evaluated :

- Current GGFD Deployment
- Comparable to OCFA Deployment (applies to apples)
- OCFA/FSP

The key goal is to achieve improved paramedic response times.

Apples to Apples Comparison

- When comparing the OCFA/FSP to an equal GGFD Deployment, it is important to understand that several factors need to be considered:
- Deployment of Resources
 - Similar/Same deployment of Engines, Trucks, or Quints
- Retention & Recruitment
 - Retention steps that will ensure that firefighter/paramedics are competitively compensated within the job market
 - Recruitment steps that will ensure we can hire the best entry-level Firefighter/Paramedics

Data Points

- 6-Minute-Total Paramedic Response Time Breakdown
 - Dispatch Time (Target 105 Seconds) (April-June 67 Seconds)
 - Turn-Out Time (60 Seconds)
 - Drive Time (195 Seconds) or 3.25 minutes
- *4 Minutes is used for drive time analysis (6:11)

Fractal Measurement Goal: Achieve response times 90% of the time

Data from Metro Net Communications

Performance Standards NFPA 1710

- **First Unit On Scene (FUOS)**
 - 6 Minutes Total or 4 Minutes Drive Time
 - 90 % Fractal Measurement NOT Average
- **Effective EMS Force (EEMSF)**
 - 8 Minutes Total
 - 90% Fractal Measurement NOT Average
- **Effective Fire Force (EFF)**
 - 8 Minutes Total
 - 90% Fractal Measurement NOT Average
- **Paramedic Override Tax (POT)**
 - 5 Minute Average

Daily Staffing Comparison

All Models (29 On-Duty)

<u>#1 Current GGFD</u>	
7 Fire Stations	
9 Pieces of Equipment	
• 7 Engines	
• 1 Truck	
• 1 PM Squad	
• 1 Battalion Chief	
• 8 Captains	
• 8 Engineers	
• 12 Firefighters	
10 Certified Paramedics	
FUOS 65%	Average 3:47
EEMS 28.20%	Average 4:29
EFF 30%	Average 8:05
POT	Average 4:22

<u>#2 Comparable GGFD</u>	
7 Fire Stations	
7 Pieces of Equipment	
• 5 Engines	
• 2 Quints	
• 1 Battalion Chief	
• 7 Captains	
• 7 Engineers	
• 14 Firefighters	
14 Certified Paramedics	
FUOS 63%	Average 3:50
EEMS 63%	Average 3:50
EFF 90%	Average 6:09
POT	Average 3:50

<u>#3 OCFA FSP</u>	
7 Fire Stations	
7 Pieces of Equipment	
• 5 Engines	
• 2 Quints	
• 1 Battalion Chief	
• 7 Captains	
• 7 Engineers	
• 14 Firefighters	
14 Certified Paramedics	
FUOS 63%	Average 3:50
EEMS 63%	Average 3:50
EFF 90%	Average 6:09
POT	Average 3:50

Apples to Apples Daily Equipment & Staffing

#2 GGFD (29/FF)

7 Fire Stations

7 Pieces of Equipment

- 5 Engines
- 2 Quints
- 1 Battalion Chief
- 7 Captains
- 7 Engineers
- 14 Firefighters

- *14 Certified Paramedics

FUOS (2PM) EEMS 63% Average 3:50

#3 OCFA/FSP (29/FF)

7 Fire Stations

7 Pieces of Equipment

- 5 Engines
- 2 Quints
- 1 Battalion Chief
- 7 Captains
- 7 Engineers
- 14 Firefighters

- *14 Certified Paramedics

FUOS (2PM) EEMS 63% Average 3:50

Apples To Apples Equipment & Paramedic Daily Staffing

<u>STATION</u>	<u>#2 GGFD *14/PM</u>	<u>#3 OCFA/FSP*14/PM</u>
1	1 BC (1.0) 1 Quint (4.0)*2pm	1 BC (1.0) 1 Quint (4.0)*2pm
2	1 Engine (4.0)*2PM	1 Engine (4.0)*2PM
3	1 Engine (4.0)*2PM	1 Engine (4.0)*2PM
4	1 Engine (4.0)*2PM	1 Engine (4.0)*2PM
5	1 Quint (4.0)*2PM	1 Quint (4.0)*2PM
6	1 Engine (4.0)*2PM	1 Engine (4.0)*2PM
7	1 Engine (4.0)*2PM	1 Engine (4.0)*2PM

Regional Integration & Common Approach

For decades, the Orange County Fire Services (local Fire & OCFA) have worked together to provide the best fire service to all the citizens in the county.

Examples of this Collaboration;

- AVL Dispatch
- Cad-to-Cad Integration
- Criteria Based Dispatch (CBD)
- Regional Annexes and Operational Plans
- Auto Aid (No jurisdiction boundary approach)
- Station Move Ups

Paramedic Oversight

#2 GGFD Comparable Deployment

Paramedic Coordinator

- Reclassification of Captain Training Officer to Battalion Chief Training/EMS

Nurse Educator/CQI

- Nurse Coordinator provided by CARE Ambulance, by contract agreement.

#3 OCFA/FSP Deployment

Paramedic Coordinator

- Included in FSP
- ### Nurse Educator/CQI
- Included in FSP

Risk Benefit Analysis

#1 Current GGFD Deployment (Risk/Benefit)

Benefits
<u>Response Times</u>
<ul style="list-style-type: none">• No Improvement
<u>Retention / Recruitment</u>
<ul style="list-style-type: none">• No Improvement
<u>Infrastructure</u>
<ul style="list-style-type: none">• No Improvement

Risk
<u>Response Times</u>
<ul style="list-style-type: none">• Continued Poor Response Times<ul style="list-style-type: none">• FUOS 65%• EEMS 28.20%• EFF 30%
<u>Retention / Recruitment</u>
<ul style="list-style-type: none">• Challenges recruiting best entry-level employees due to entry compensation• Challenges of losing work force experience due to employees leaving for other better paying fire departments
<u>Infrastructure</u>
<ul style="list-style-type: none">• Ongoing compensation issues affecting employee moral• Challenges with aging infrastructure continues

#2 Comparable GGFD (Risk/Benefit)

Benefits
<u>Response Times</u>
<ul style="list-style-type: none">Improved Response Times (6 Minutes)<ul style="list-style-type: none">FUOS 63%EEMS 63%EFF 90%All 7 Fire Stations will have 2 ParamedicsImproved Effective Fire Force TimesEngine company 5 upgraded to quint
<u>Retention / Recruitment</u>
<ul style="list-style-type: none">Increased entry-level compensation will assist in recruiting the best new firefighter/paramedicsCompetitive compensation will assure firefighter/paramedics stay with department
<u>Infrastructure</u>

Risk
<u>Response Times</u>
<ul style="list-style-type: none">None
<u>Retention / Recruitment</u>
<ul style="list-style-type: none">Exact compensation cost increase is unknown. Will require negotiation process with labor.
<u>Infrastructure</u>
<ul style="list-style-type: none">Challenges with funding for aging infrastructure

#3 OCFA/FSP (Risk/Benefit)

Benefits

Response Times

- Improved Response Times
 - **FUOS 63%**
 - **EEMS 63%**
 - **EFF 90%**
- All 7 Fire Stations will have 2 Paramedics
- Improvement in Effective Fire Force Times
- Engine company 5 upgraded to Quint

Retention / Recruitment

Recruitment and Retention not an issue

Infrastructure

Risk

Response Times

- None

Retention / Recruitment

- None

Infrastructure

- Challenges with funding for aging infrastructure

Stand Alone Truck Company

- Both the GGFD & OCFA/FSP Deployment plans eliminate the stand-alone truck company at fire station 1.
- Both the GGFD & OCFA/FSP deployment will not affect paramedic response times
- Both the GGFD & OCFA/FSP deployment may cause delays in truck-specific functions at emergency incidents such as:
 - Technical Rescues
 - Vehicle Extrications
 - Ventilation & Rescue Operations (Structure Fires)

Questions