DISCUSSION AND CONSIDERATION OF THE ORANGE COUNTY FIRE SERVICES PROPOSAL AND RELATED ANALYSIS AS REQUESTED BY CITY MANAGER STILES (F: 61.1)

City Manager Stiles stated that the purpose of bringing this matter before the City Council is to provide information and to open discussion on the next steps. Since the Study Session that was held August 28, 2018, there was a meeting held with the City staff, Fire Association representatives and OCFA representatives to discuss any issues, which included Council Members Bui, K. Nguyen, and Klopfenstein. He announced that tonight's PowerPoint presentations on the analysis are provided by the Finance Department staff, Fire Chief Schultz, and Eric Thorson representing the Firefighters Association Local 2005.

Following City Council discussion, including questions for representatives speaking on behalf of the Orange County Fire Authority, it was moved by Council Member Bui, seconded by Council Member O'Neill that:

Staff be directed to meet and collaboratively work on providing a comprehensive spreadsheet to include variable scenarios to determine risk assessments and to bring this matter back as a discussion and an action item.

The motion carried by a 7-0 vote as follows:

Ayes:	(7)	Beard, O'Neill, T. Nguyen, Bui, Klopfenstein, K. Nguyen, Jones
Noes:	(0)	None

City of Garden Grove

INTER-DEPARTMENT MEMORANDUM

To:	Scott C. Stiles	From:	Maria Stipe
Dept.:	City Manager	Dept.:	City Manager
Subject:	Discussion and consideration of the Orange County Fire Authority Fire Services Proposal and related analysis as requested by City Manager Stiles. (*Action Item*)	Date:	9/25/2018

Attached is the Orange County Fire Authority (OCFA) Fire Services Proposal that was presented to the City Council on March 27, 2018, and the analysis of the OCFA proposal provided by the Finance Department and Fire Chief at the Study Session held on August 28, 2018. On September 19, a collaborative review meeting was conducted with representatives from OCFA, the Fire Association, Fire Management Association, the City Council sub-committee and staff in accordance with direction provided at the Study Session. The presentation provided by the Fire Association at the September 19 meeting is also attached. Follow-up discussion meetings are continuing with all parties.

It is recommended that the City Council consider the attached documents and provide further direction to staff.

ATTACHMENTS:

Description	Upload Date	Type	File Name
OCFA Proposal	9/20/2018	Backup Material	OCFA_3-27-18.pdf
OCFA Proposal Review	9/20/2018	Backup Material	9-25-18_ocfa-proposal-review-presentation.pdf
Fire Department Operational Analysis	9/20/2018	Backup Material	9-25-18_Fire_Department_Operational_Analysis.pdf
GGFD Local 2005 Presentation	9/21/2018	Backup Material	9-25-18_GGFD_Local_2005_Presentation.pdf

OCFA Fire Services Proposal to Garden Grove City Council

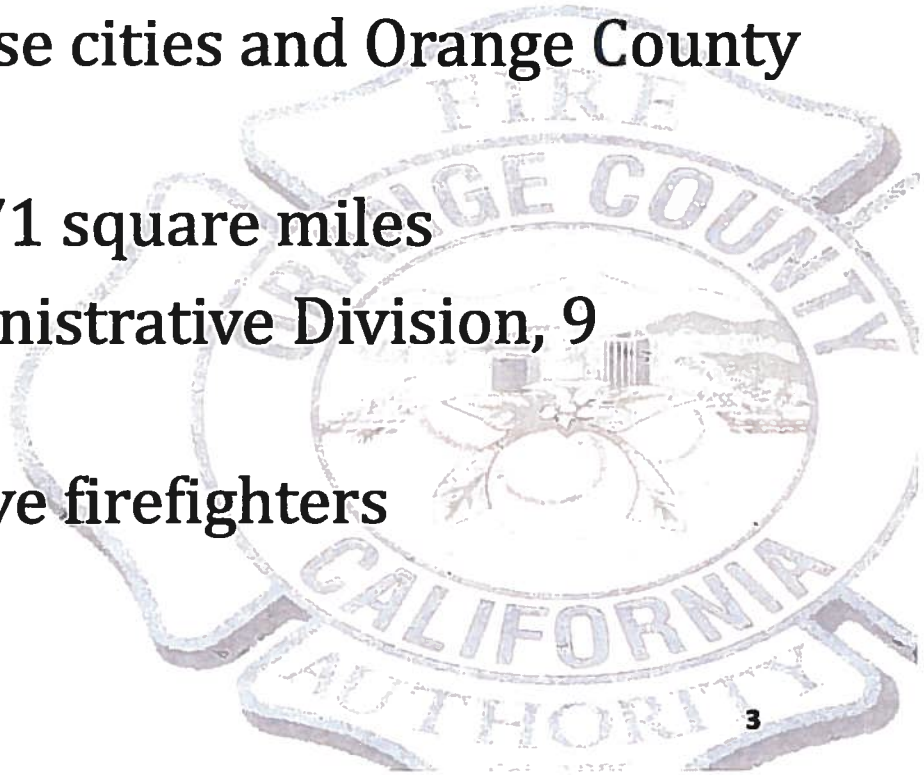
March 27, 2018

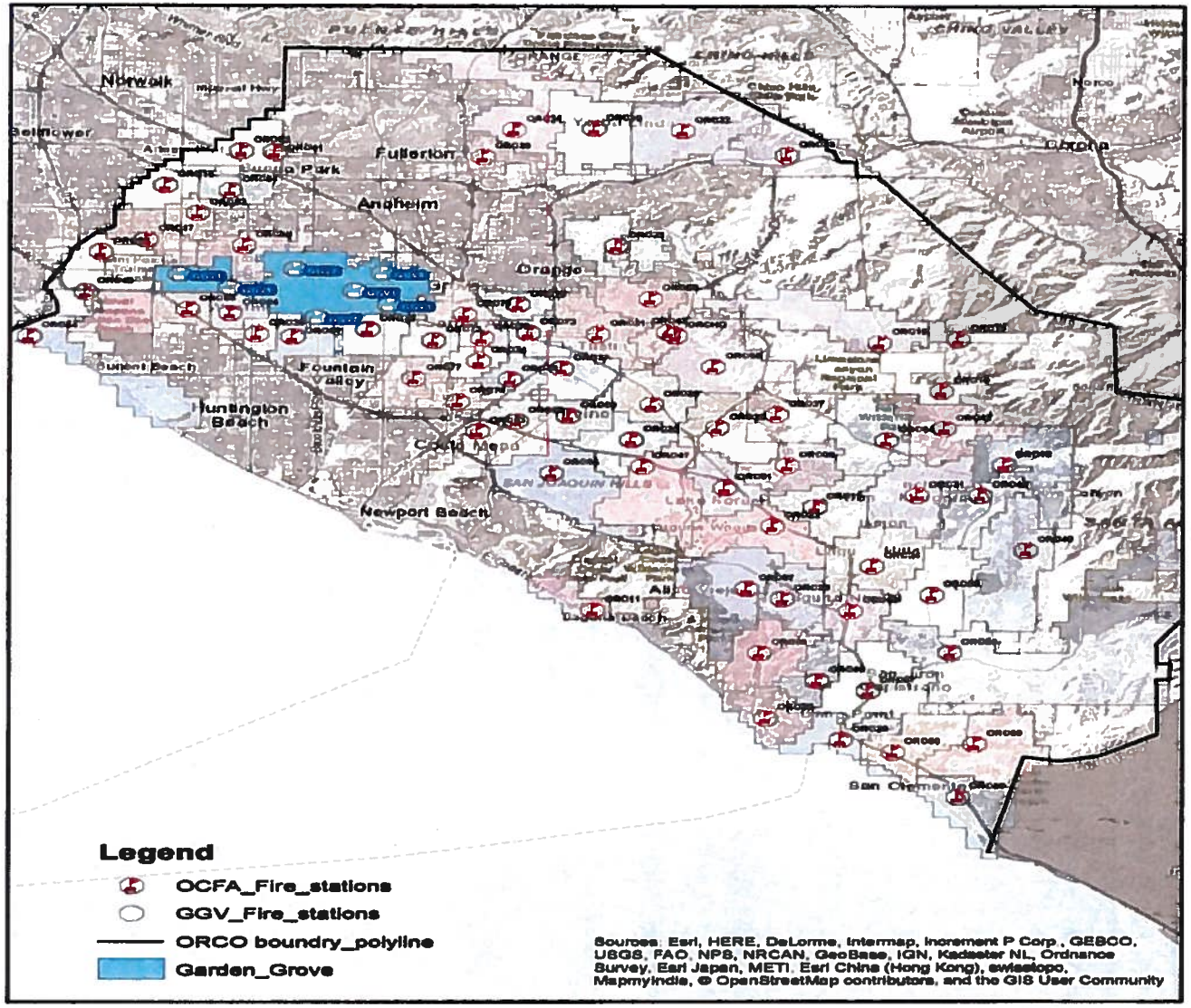
Proposal History

- OCFA received request for proposal September 22
- OCFA Board approved Staff to proceed September 28
- First meeting with City staff October 17
- OCFA Board unanimously approved the Fire Service Proposal (FSP) March 22

The OCFA

- Fiscally Strong Organization
- Serves 23 demographically diverse cities and Orange County unincorporated areas
- Serves 1.8 million residents in 571 square miles
- 7 Geographical Divisions, 1 Administrative Division, 9 Battalions
- 1,019 Firefighters and 172 reserve firefighters
- 297 non-safety personnel



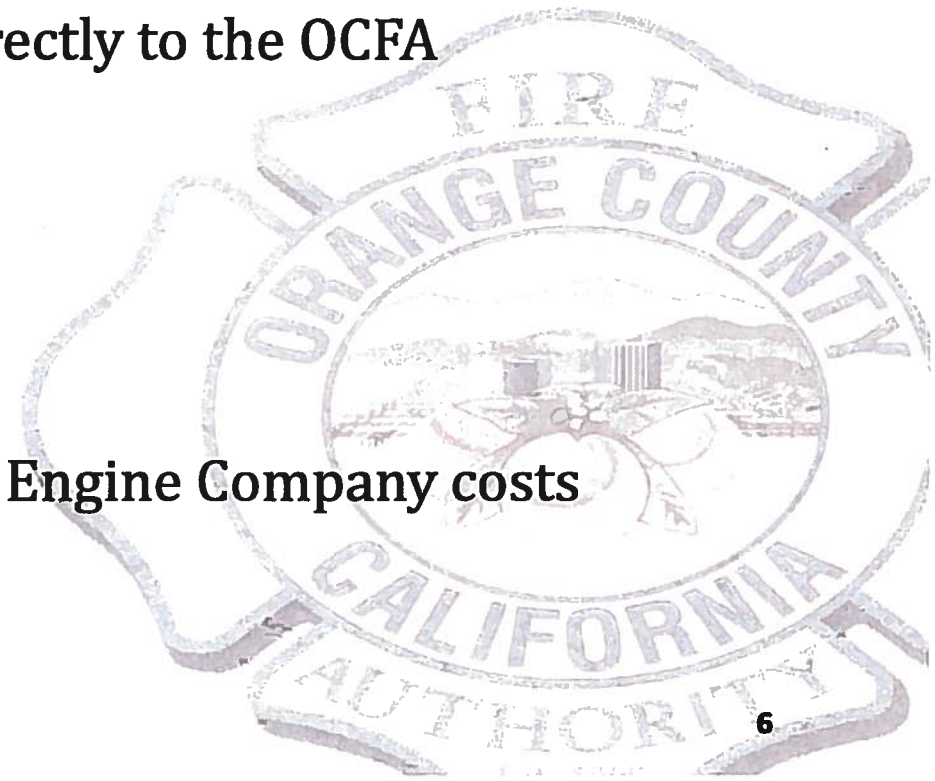

Norwalk
Fullerton
Anaheim
Orange
Fountain Valley
Huntington Beach
Newport Beach
Legend
OCFA_Fire_stations
GGV_Fire_stations
ORCO boundry_polyline
Garden_Grove
Sources: Esri, HERE, DeLorme, Intermap, Increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Governance

- Board of Directors
  - One council member from each city
  - Two members from OC Board of Supervisors
- Executive Committee
- Budget and Finance Committee
- Human Resources Committee
- City Managers' Technical Advisory Committee
- City Managers' Budget and Finance Committee

Types of City Membership

- Structural Fire Fund Members (16)
  - Funded through property taxes directly to the OCFA
- Cash Contract Cities (8)
  - Had previous fire department
  - Funded by individual cities
  - Contract costs based on Truck and Engine Company costs



Benefits to Garden Grove

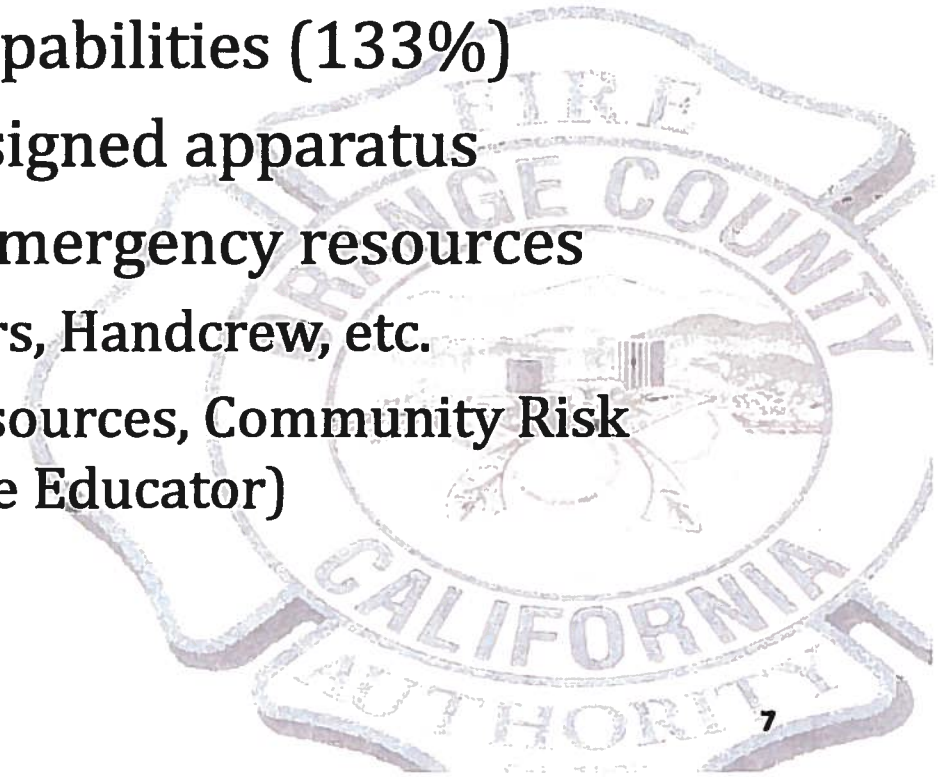
Reduced cost for fire service in City

Increase in Paramedic response capabilities (133%)

Four-person staffing on all City assigned apparatus

Use of OCFA emergency and non-emergency resources

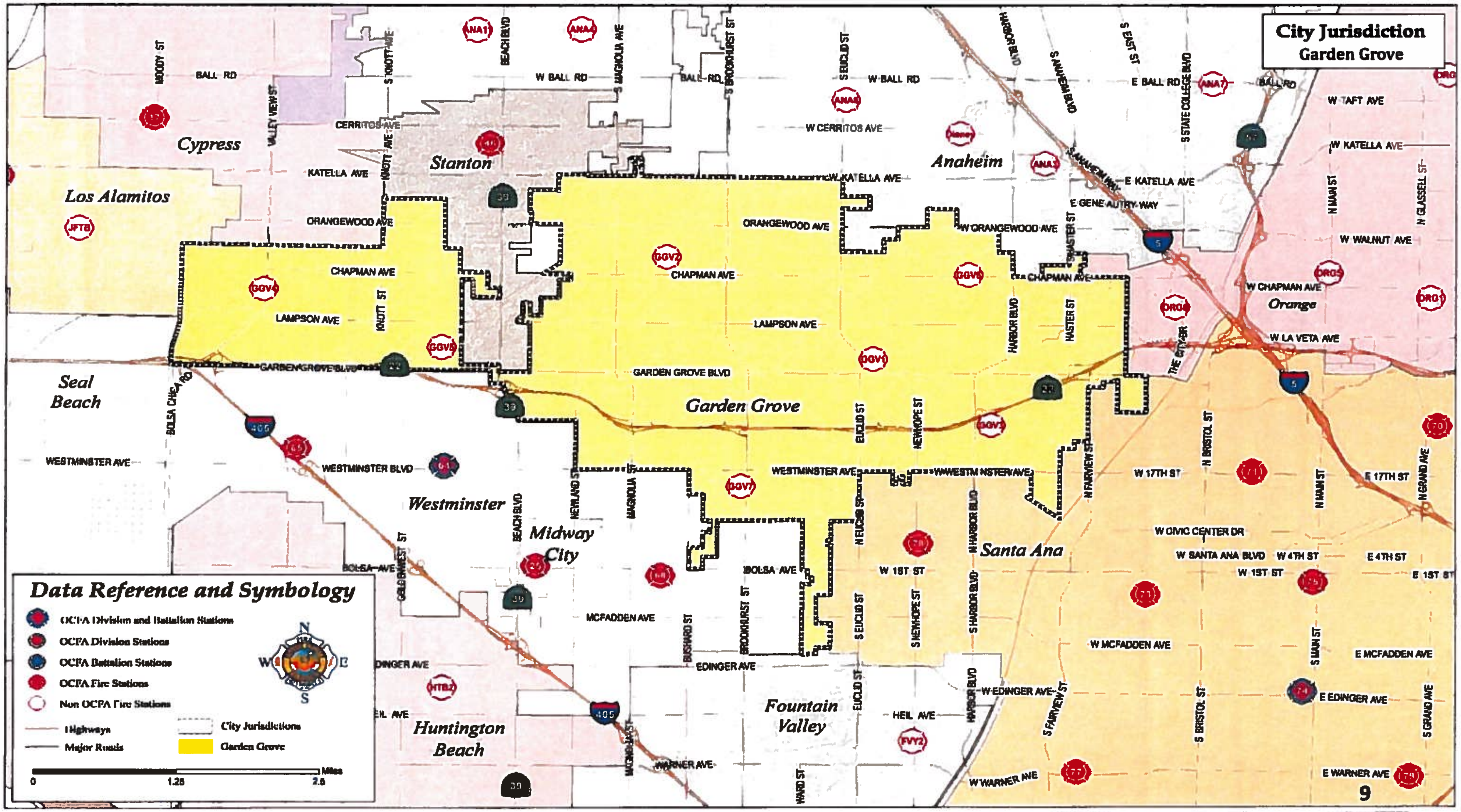
- Haz-Mat, US&R, Helicopters, Dozers, Handcrew, etc.
- Community Education, Human Resources, Community Risk Reduction, Purchasing, EMS (Nurse Educator)



Benefits to OCFA

Strengthens Organization

- Garden Grove borders 6 OCFA service areas
  - More OCFA emergency resource response capabilities
  - Enhances regional services


City Jurisdiction
Garden Grove
Garden Grove
Cypress
Los Alamitos
Stanton
Anaheim
Orange
Seal Beach
Westminster
Midway City
Santa Ana
Huntington Beach
Fountain Valley
Data Reference and Symbology
OCFA Division and Battalion Stations
OCFA Division Stations
OCFA Battalion Stations
OCFA Fire Stations
Non OCFA Fire Stations
Highways
Major Roads
City Jurisdictions
Garden Grove
0
1.25
2.5
Miles
N
S
E
W
9

Proposal Cost to Garden Grove

OCFA Proposal Cost Budget Comparison with annual increases

	2018/19	2019/20	2020/21	2021/22
OCFA Service Charge (A)	$22,592,221	$23,608,870	$24,671,258	$25,781,464
OCFA % Inc. Maximum	Included in cost	4.50%	4.50%	4.50%
2018/19 GGFD Budget Total (B)	$25,122,000	$25,912,000	$26,816,000	$27,339,000
% Increase		3.14%	3.49%	1.95%
Annual Savings (B-A)	$2,529,779	$2,303,130	$2,144,730	$1,557,523
Cumulative Savings		$8,535,161		

Summary of Start-Up costs	
Communications	$293,146
Facilities	$156,500
Personnel	$152,650
Service Center	$309,661
Fleet Services	$20,800
EMS	$203,468
Total	$1,136,225

Yearly Savings Comparison
Using 10 year average increases

	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33	FY 2033/34
OCFA Contract	$ 30,993,512	$ 31,897,283	$ 32,827,408	$ 33,784,655	$ 34,769,816
	2.92%	2.92%	2.92%	2.92%	2.92%
GGFD Budget	$ 31,900,394	$ 32,600,715	$ 33,316,410	$ 34,047,817	$ 34,795,281
	2.20%	2.20%	2.20%	2.20%	2.20%
Savings	$ 906,882	$ 703,432	$ 489,002	$ 263,162	$ 25,465
Accumulated Savings	$ 21,560,119	$ 22,263,551	$ 22,752,553	$ 23,015,715	$ 23,041,180

Start Up Costs

Based on 84 Sworn		
Service Center $309,661	Helmet Shields Station Equipment Brush Helmets Wildland PPE Fire Shelters Wildland T-shirts	Goggles Rain Gear Apparatus Complement Uniforms Dress Uniforms Apparatus Decaling
Personnel Costs $152,650	Physicals Insurance (Risk Management) Livescan	
Fleet Services $20,800	Apparatus Repairs	
Comm/IT $293,146	Station Alarms Station Phones (Office & Fax) Tablets for Engines/Trucks Radios (Station & Mobile) Pagers OCFA Computer Programs	Station Network Station Computers Printers/Copiers Radio Pacset MDC's Vehicle Tech Upgrades
Facilities $156,500	Gear Grids Air Compressors New Refrigerators	Station Locks Safety on Gates New mattresses
EMS $203,468	Nurse Education Equipment	Standardize Equipment
Total Start-Up Costs: $1,136,225		

Paramedic Deployment

Paramedic Assessment Unit (PAU)
One Paramedic

Paramedic Engine (PME)
Two Paramedics

- Orange County EMSA – Requires a paramedic response to have at least two paramedics
- Whenever a PAU is dispatched to a paramedic level call a PME is also dispatched – impacting coverage
- Two-in Two-out (OSHA requirement for rescue)

13

Deployment Comparison

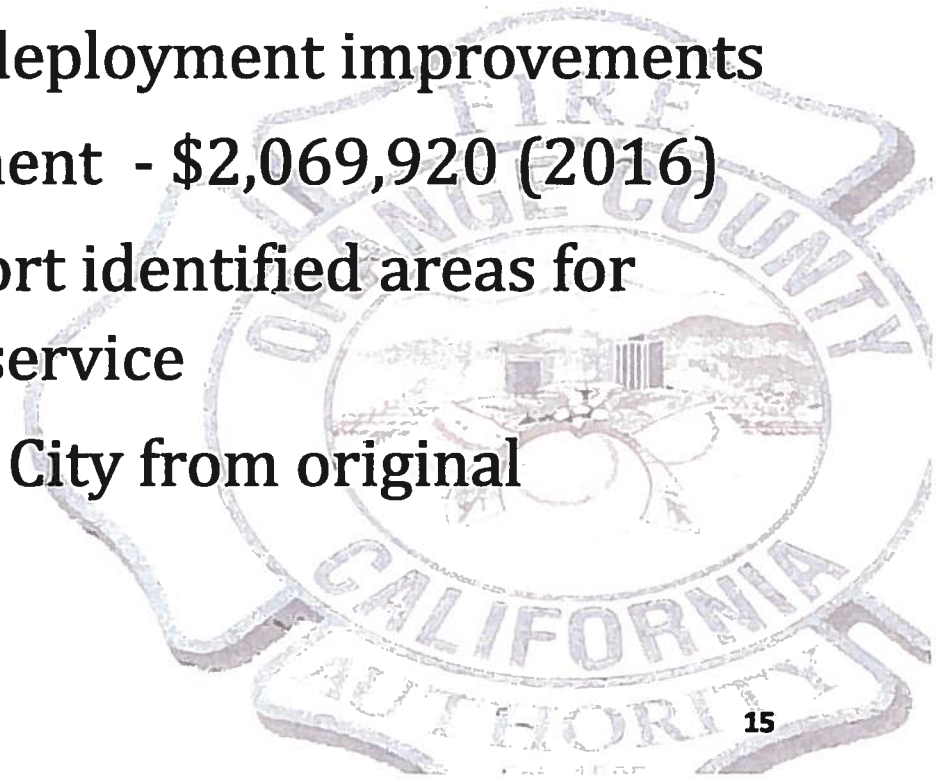
OCFA Proposal comparison with current Garden Grove deployment

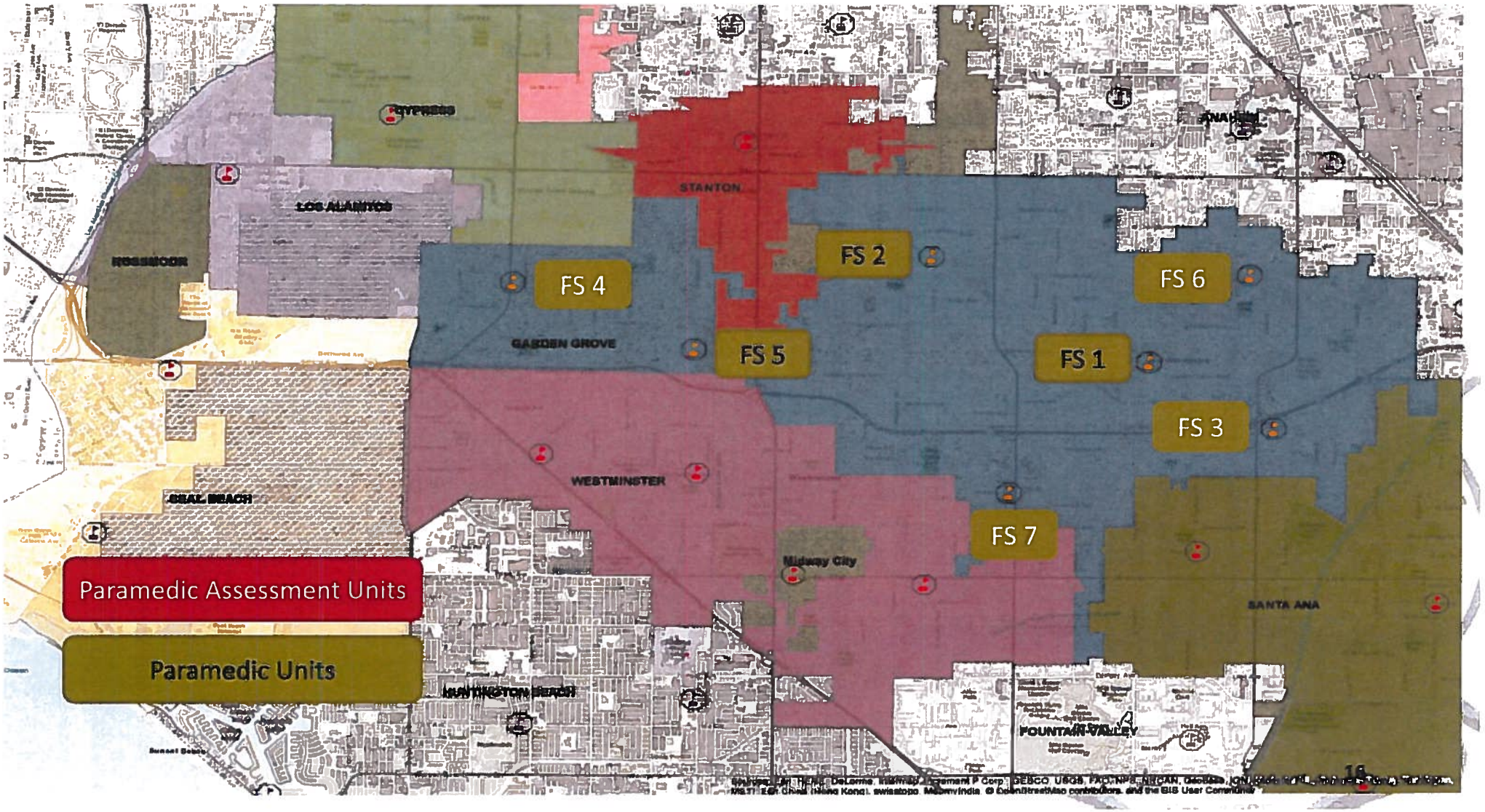
	Station 1	Station 2	Station 3	Station 4	Station 5	Station 6	Station 7	Daily Staffing
GGFD Current Deployment	Truck BLS Eng. PM Squad BC	PME	PAU	PAU	PME	PAU	PAU	29
OCFA	PMT BC	PME	PME	PME	PMT	PME	PME	29

1. **PME = Paramedic Engine, PMT = Paramedic Truck, PAU = Paramedic Assessment Unit**
2. **Indicates conversion to ALS capability**
3. **OCFA T64 is relocated to Garden Grove Station 5**

2016 GGFD Deployment Report

- Identified areas for improvement
- 3 phases over 3 years for GGFD deployment improvements
- Estimated Cost to City to implement - $2,069,920 (2016)
- OCFA FSP meets or exceeds Report identified areas for improvement on Day 1 of OCFA service
- 4 year savings of $16,814,841 to City from original projected cost




FS 4
FS 2
FS 6
FS 5
FS 1
FS 3
FS 7
STANTON
GARDEN GROVE
WESTMINSTER
Midway City
SANTA ANA
Paramedic Assessment Units
Paramedic Units

Personnel/Transition

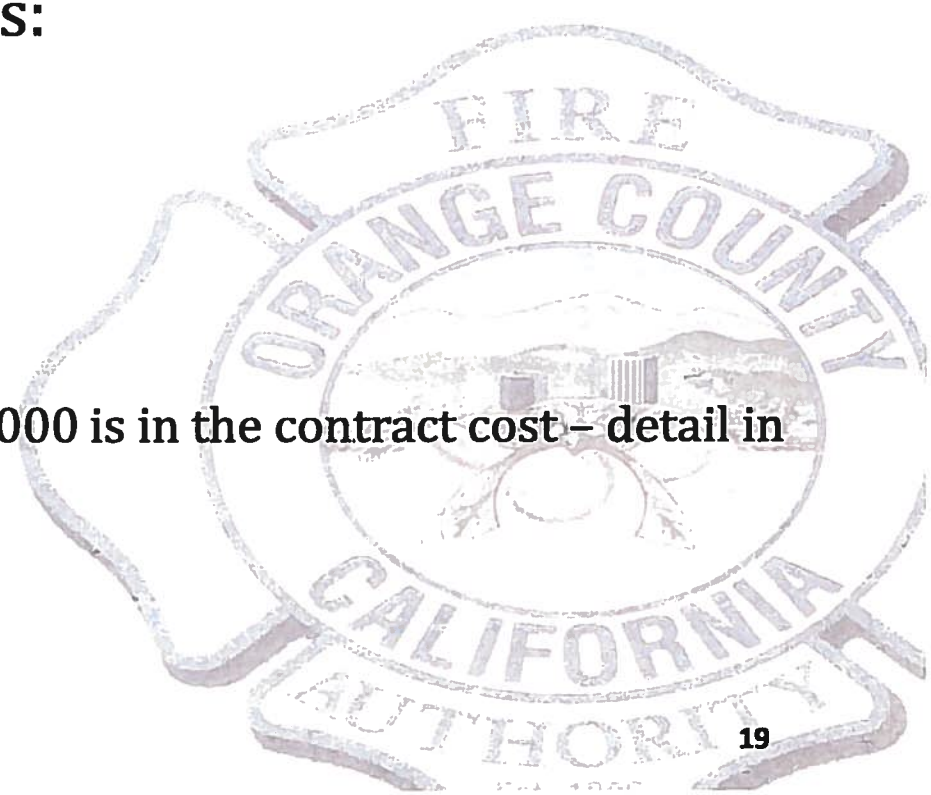
- Minimum 120 day timeline
- All GGFD sworn employees to transition, conditional on criminal record/DMV check and pre-employment medical
- Non-sworn personnel hired based on vacancies and OCFA needs

Retirement

- Four Options
  - Retire from Fire Service
  - Retire from PERS, join OCFA and enter under PEPRA
  - Utilize reciprocity as a PEPRA employee (hired after 2012)
  - Utilize reciprocity with OCERS into 3% at 55 formula

Facilities

- Ownership of fire stations remain with City of Garden Grove
- Expenses divided into 3 categories:
  - Start up costs -$156,500
  - Capital Improvements
    - Project costs that exceed $15,000
  - Yearly Maintenance
    - $15,000 per station for a total of $105,000 is in the contract cost – detail in FSP



Apparatus

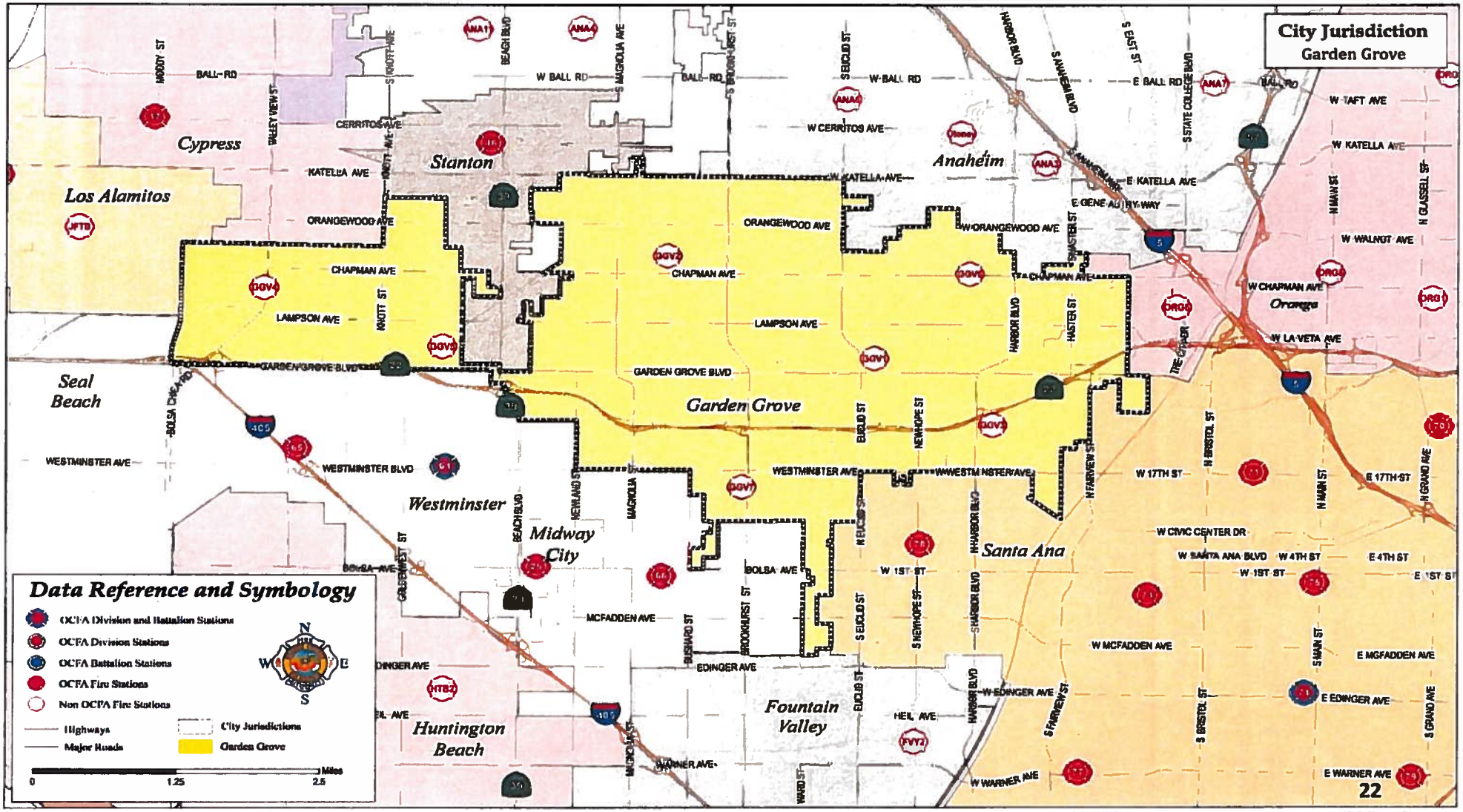
Proposal includes 10 Vehicles to OCFA from GGFD

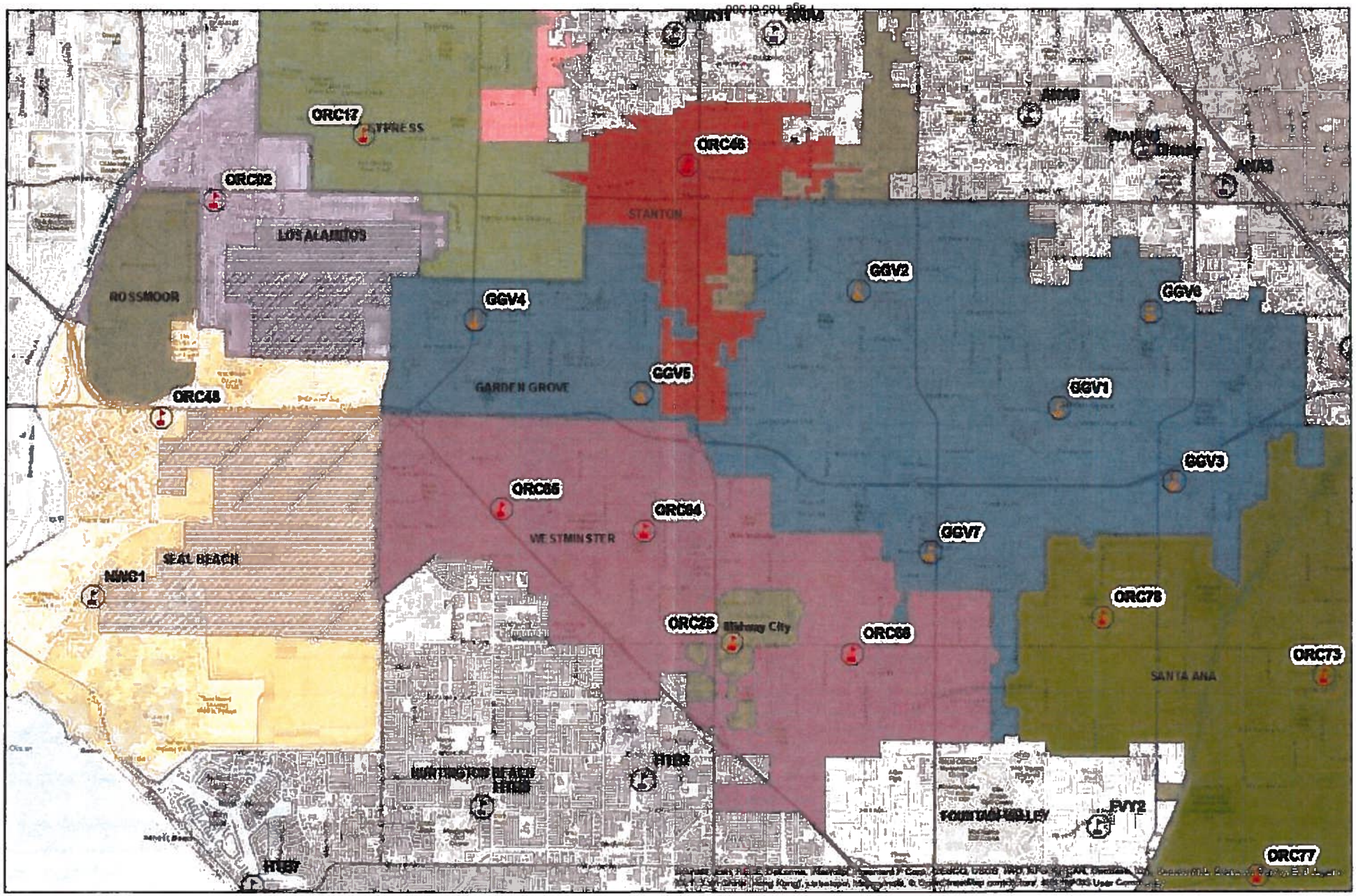
- 6 Type 1 engines
- 1 Truck Company – Will be replaced with OCFA Truck
- 3 Small Vehicles

Options to City with other Fire Department vehicles

- Keep vehicles
- Sell on their own
- OCFA assistance with selling

Questions ?


City Jurisdiction
Garden Grove
Data Reference and Symbology
OCFA Division and Battalion Stations
OCFA Division Stations
OCFA Battalion Stations
OCFA Fire Stations
Non OCFA Fire Stations
Highways
Major Roads
City Jurisdictions
Garden Grove
Miles
0
1.25
2.5
Cypress
Los Alamitos
Stanton
Anaheim
Seal Beach
Garden Grove
Westminster
Midway City
Santa Ana
Fountain Valley
Huntington Beach
Orange
22


ORC17
CYPRESS
ORC45
ORC02
STANTON
LOS ALAMITOS
ROSSMOOR
GGV2
GGV6
GGV4
GGV5
GARDEN GROVE
ORC48
GGV1
GGV3
ORC85
ORC84
WESTMINSTER
GGV7
SEAL BEACH
NWG1
ORC76
ORC25
Midway City
ORC86
ORC73
SANTA ANA
HTB2
HUNTINGTON BEACH
FVY2
HTB7
ORC77

Orange County Fire Authority

Emergency Command Center

Work Schedule Analysis

March 8, 2018

Purpose

This white paper intends to overview the current work environment in the Emergency Command Center (ECC) and compare 24-hour and 12-hour shift schedules for dispatchers.

Section 1. - Introduction

The ECC is an essential component of every OCFA emergency response. Although less visible to the community than firefighters, dispatchers are first to make contact with the public, obtain information about the emergency, and initiate a response. To support the critical and time-sensitive role of the ECC, adequate staffing is needed 24-hours a day and 7-days a week. Without sufficient staffing, there may be delays in rapidly answering 9-1-1 calls, initiating emergency response, and coordinating resources; all having the potential to impact public and firefighter safety.

Although ***staffing*** and ***scheduling*** are often used interchangeably, it is essential to clarify the distinction between the two terms. Staffing concerns *"the number of employees needed to do the job"* while scheduling assigns *"employees to specific time blocks to match the need"* (APCO, 2005, p. 67). That is, staffing is of critical importance because it determines the number of dispatchers on-hand to address phone and radio traffic. Decisions about shift lengths, meal and break times, and day on/off patterns are scheduling considerations and don't speak to staffing needs.

Section 1.1 - ECC Overview

The ECC is located at the Regional Fire Operations and Training Center (RFOTC) in Irvine, California, and operated by 27 shift dispatchers, three shift supervisors, and six administrators (Attachment 1). The ECC provides service to 1.8 million residents of Orange County who live in the 23 cities served and unincorporated areas of Orange County. In coordination with 9-1-1 centers throughout the county and state, emergency calls are answered, call nature and location identified, and resources dispatched. All dispatchers are Emergency Medical Dispatcher (EMD) certified to provide medical advice and treatment instruction to callers before the arrival of first-responders. Examples of instructions include

clearing airway obstructions, bleeding control, CPR, and childbirth procedures. Dispatchers also answer non-emergency phone lines to receive complaints and service-related requests.

The ECC serves as the Operational Area Coordinator for all Orange County fire service agencies, which provides mutual aid fire and rescue resources throughout the state. This responsibility includes handling requests from California's Statewide Fire and Rescue Mutual Aid system, dispatching and tracking of fire and rescue mutual aid resources, and coordinating asset movement.

Section 1.2 - Dispatcher Roles/Responsibilities

The ECC has four key positions that are staffed throughout the workday. Fire Communications Dispatchers (FCD) fill the roles of call-taker, primary dispatcher, and tactical radio operator, and one Fire Communications Supervisor (FCS) oversees and coordinates activities.

- Call-Takers obtain relevant information and inputs into Computer Aided Dispatch; sorts calls using medical criteria; provides pre-arrival instructions; calms emotional callers.
- Primary Dispatcher determines and dispatches appropriate personnel and apparatus; maintains the status of equipment, personnel, and apparatus as to location, availability, and ensures optimum coverage; serves as a liaison with the public and other public officials for inquiries and customer complaints.
- Tactical Radio Operators receive and process requests from field personnel over multiple radio frequencies; track incident and unit statuses; make notifications to assisting partner agencies.
- Shift Supervisors oversee the operations and employees, which includes: prioritizing and assigning work; conducting performance evaluations; ensuring staff is trained; administrative and disciplinary actions; supervises the disposition of emergency calls and the dispatching of fire suppression and EMS units.

Section 1.3 - Emergency Activity and Staffing Levels

Like fire departments across the nation, the OCFA is experiencing a steady annual increase in emergency activity and calls for service (National Fire Protection Agency, 2017). In the last five years, emergency activity has increased 24% (See Table 1); the expanding call volume directly affects the dispatchers as each call requires entry, dispatch, and tracking. In 2012, the ECC was staffed each day with seven dispatchers and one supervisor on a 24-hour period. After partnering with the City of Santa Ana, a part-time 12-hour position was added. As call volume continued to grow, one full-time dispatcher was added in 2016 and the part-time position converted to full-time in 2017. Today's daily staffing of the ECC includes nine dispatchers and one dispatch supervisor on a 24-hour shift schedule. Forced backfill is utilized to maintain daily staffing of eight dispatchers and one supervisor as agreed upon through the ECC Joint Labor-Management group.

Table 1 – Incident and Phone Activity

	2013	2014	2015	2016	2017
9-1-1 Calls Received	80,977	84,028 3.8% increase	93,005 10.7% increase	102,171 9.9% increase	106,452 4.2% increase
9-1-1 Answered within 15-seconds	99.87%	99.77%	99.72%	99.66%	99.54%
Incidents Dispatched	114,354	117,105 2.4% increase	130,713 11% increase	136,934 4.7% increase	141,858[1] 3.6% increases
Dispatchers per 24-hour shift	7 full-time 1 part-time	7 full-time 1 part-time	7 full-time 1 part-time	8 full-time 1 part-time	9 full-time
Supervisors per 24-hour shift	1 full-time	1 full-time	1 full-time	1 full-time	1 full-time
[1] Incident totals for 2017 are under final review by Strategic Services and should be considered preliminary					

In 2017, the ECC dispatched on average 389 incidents and answered 292 9-1-1 calls each day. The number of incidents per hour was highest between 8 AM and 9 PM (averaging over 16 calls per hour) and lowest between 1 AM and 6 AM (Attachment 5). Weekdays were roughly 5% busier than weekends, and

Friday's statistically had the highest volume of emergency responses (Attachment 6). Seasonally, January and December were the most active months with on average over 400 responses each day (Attachment 7).

Section 2. - Analysis

While the focus of this paper is on scheduling differences between 24-hour and 12-hour shift schedules, it is first necessary to calculate 'how many' dispatchers are needed in the ECC at any one time – also known as the staffing level. Having an adequate number of dispatchers at their consoles ensures 9-1-1 calls are answered rapidly, units are dispatched, and radio traffic answered. When there is inadequate staffing, performance is negatively affected.

Section 2.1 - Staffing Level Standards

The goal of determining staffing levels is to figure out "the number of positions needed to comfortably handle the workload" (APCO, 2005, p. 2). As workload increases so do the needed number of dispatch personnel. A variety of public safety agencies and associations provide formulas and calculations for staffing levels although no single formula can be applied to all organizations.

Adequate staffing has its benefits to employees. In a 2005 study, up to one-third of dispatch centers were chronically understaffed, which was correlated to excessive overtime, employee burnout, high turnover rates, and empathy fatigue (APCO, 2005; Gendron, 2015). Understaffing and information overload contribute to stress, lower job satisfaction, and higher tolerance for errors (Pendleton, 2008).

The following bullet points identify a variety of approaches to calculating staffing levels. Part art and part science, staffing needs are often based on management experience, judgment, and performance measures. While staffing formulas often focus on the concept of workload to determine needed personnel, an important caveat requires attention. As a dispatch center approaches maximal efficiency, the margin to take on additional work diminishes. It is vital for dispatch centers to plan for unanticipated surges in call activity due to severe weather, natural disasters, and internal disruption. During peak

activity, every member of the dispatch center contributes and helps maintain critical 9-1-1 answering times and dispatch center performance.

- California Office of Emergency Services (Cal OES) – Under California's Governor of Emergency Services, serves "the public through effective collaboration in preparing for, protecting against, responding to, recovering from, and mitigating the impacts of all hazards and threats."
    - CalOES does not have a standard for 9-1-1 center minimum staffing.
    - 9-1-1 Calls: Ninety-five (95) percent of incoming 9-1-1 calls shall be answered within fifteen (15) seconds
- Emergency Call Tracking System (ECaTS) – Provided by the state of California, ECaTS *"is a statewide 9-1-1 call related data gathering system"* which gathers and analyzes data, and generates reports.
    - Based on 2017 phone data, two (2) to three (3) call takers are needed (based on time of day) to answer 90% of 9-1-1 calls within 10 seconds; two (2) to four (4) call takers are needed (based on time of day) to answer both 9-1-1 calls and administrative lines within 10 seconds (Attachments 12 & 13).
- International Association of Fire Chiefs (IAFC) – Mission "to provide leadership to current and future career, volunteer, fire-rescue and EMS chiefs, chief fire officers, company officers and managers of emergency service organizations throughout the international community through vision, information, education, services and representation to enhance their professionalism and capabilities."
    - IAFC does not have a standard for 9-1-1 center minimum staffing.
- International Organization of Standardization (ISO) – *"an independent, non-governmental international organization with a membership of 161 national standards bodies. Through its members, it brings together experts to share knowledge and develop voluntary, consensus-based,*

market-relevant International Standards that support innovation and provide solutions to global challenges."

- ISO points to NFPA 1221 to assess communications center performance

- National Emergency Number Association (NENA) – *"As The Voice of 9-1-1™, NENA is on the forefront of all emergency communications issues. The association serves its members and the greater public safety community as the only professional organization solely focused on 9-1-1 policy, technology, operations, and education issues. With more than 12,000 members in 48 chapters across the United States and around the globe, NENA promotes the implementation and awareness of 9-1-1, as well as international three-digit emergency communications systems."*
  - NENA offers a staffing calculator based on 9-1-1 calls and 10-digit emergency call volume (Attachment 3). The formulas, dating back to 2003, was designed for dispatch centers much smaller than the OCFA's; the calculated results of 33.4 needed dispatchers should be interpreted with the formula's limitation in mind.
- National Fire Protection Agency (NFPA) – *"The National Fire Protection Association (NFPA) is a global nonprofit organization, established in 1896, devoted to eliminating death, injury, property and economic loss due to fire, electrical and related hazards."*
  - "There shall be a minimum of two telecommunicators on duty and present in the communications center at all times."
  - "The Authority Having Jurisdiction (AHJ) shall ensure that there are sufficient telecommunicators available to effect the prompt receipt and processing of alarms needed to meet the requirements of section 7.4."
  - 9-1-1 Calls: Ninety-five (95) percent of incoming 9-1-1 calls shall be answered within fifteen (15) seconds, and ninety-five (99) percent of incoming 9-1-1 calls shall be answered within fifteen (40) seconds

- Alarm Processing: Ninety (90) percent of emergency alarm processing shall be completed within 64 seconds, and ninety-five (95) percent shall be completed within 106 seconds.

Section 2.2 - Shift Schedules

Shift work is a fact of life in dispatch centers. According to APCO, "the shift assignment is the most critical contributor to employees' feelings of control over their lives" (2005, p. 20). Most police and fire communications centers across the nation use 8-hour shifts (49%) with 10-hour shifts (10%) and 12-hour shifts (3%) less prevalent. The remainder of dispatch centers (38%) utilize combinations of 8, 10, 12, and 24-hour shifts or unique configurations that meet employee or agency needs. Table 2 displays a small sample of work schedules used by Orange County fire agencies, surrounding counties, agencies previously recognized in OCEA documents, and like-function centers; the number of entries in each column is not intended to infer how frequently each schedule is used throughout the state.

Table 2 – Survey of 9-1-1 Center Shift Schedules

12-hour		12/24-hour	24-hour	48-hour
CalFire/Riverside	Laguna Police/Fire	North County Fire	City of Montecito Fire	Marin County Fire
CalFire/San Diego	MetroNet Fire JPA		City of Stockton Fire	
San Diego City	Sacramento Regional		LA City (sworn FF's)	
Heartland (San Diego)	Ventura County Fire		Contra Costa Fire	
Costa Mesa Police/Fire	Verdugo Fire		San Ramon Valley FPD	
LA County			OCFA	

In Table 3, a side-by-side comparison of 24-hour and 12-hour schedules are listed, which show required personnel, costs, schedules, and strengths and weaknesses.

Table 3 – 24-hour schedule vs. 12-hour schedule

		24-hour shift schedule (current)	12-hour shift schedule (proposed)
Total Supervisors Required		3	4
Total Dispatchers Required		27	28
Total Salaries & Employee Benefits		$4,816,098	$5,347,544 (11.03% increase)
Start Time		7 AM	7 AM Day Shift 9 AM (1 dispatcher added) 1 PM (1 dispatcher added) 7 PM Night Shift
Shift Cycle		XOXOOXOXOOOO (X = work day)	XXOOXXXOOXXOOO (X = work day)
Shift Length		24-hours	12-hours
Hours Work at Console		15-hours	11-hours
Average Shifts per Month		10	15
Maximum Shift Duration		48-hours forced overtime 72-hours voluntary overtime	16-hours voluntary/forced overtime
Dispatchers	At RFOTC	Day = 9 dispatchers Night = 9 dispatchers	Day = 7 to 9 dispatchers Night = 5 to 7 dispatchers
Dispatchers	At ECC Console	Day = 5 to 9 dispatchers Night = 3 to 6 dispatchers	Day = 7 to 9 dispatchers Night = 5 to 7 dispatchers
Supervisors	At RFOTC	1	1
Supervisors	At ECC Console	All hours except 2 PM – 5 PM (3 hours) & 1 AM to 7 AM (6 hours)	All hours except 1 PM to 2 PM (1 hour) & 1 AM to 2 AM (1 hour)
Strengths		• Cost-effective • Nine (9) dispatchers on-site at all times for unforeseen surges in activity • Meets Staffing Level Standards (Sect. 2.1)	• Improved supervisor coverage and ratio of incidents per dispatcher (Attachment 9) • Replenished dispatchers every 12-hours • Meets Staffing Level Standards (Sect. 2.1)
Weaknesses		• Supervisors away from ECC for nine (9) hours of shift • Challenging to add 24-hour positions as center operations grow since all start at 7 AM • 15-hours of focused work per shift	• Call-back of additional dispatchers may be necessary for unforeseen surges in emergency activity (Attachment 2) • Requires two additional full-time positions (one FCD and one FCS) • 11-hours of focused work per shift

Section 2.3 - Financial Considerations (Attachment 4)

Position	Shift Schedule	Salary & Employee Benefits	Positions required	Total
Fire Communications Dispatcher	12-hour (proposed)	$165,513	28	$4,634,364
	24-hour (current)	$158,850	27	$4,288,950
Fire Communications Supervisor	12-hour (proposed)	$182,795	4	$713,180
	24-hour (current)	$175,716	3	$527,148
Annual Salaries & Benefits/12-hour schedule				$5,347,544
Annual Salaries & Benefits/24-hour schedule				$4,816,098
Cost increase to move from 24-hour to 12-hour schedule				$531,446

Section 2.4 - Lessons learned from Ventura County Fire Department

The ECC Chief from Ventura County Fire Department (VCFD) was interviewed regarding their recent transition from 24-hour to 12-hour shifts. The following was shared with OCFA leadership.

Approximately one year ago, Ventura County Fire Department transitioned their ECC from 24-hour to 12-hour shifts. The decision to evaluate shift schedules originally came at the request of ECC staff who pointed to fatigue and extended shifts. There was also a monetary reason for looking at an alternate schedule due to employees being paid for all hours worked and attended training. Although the decision to look at the staffing options outside of 24-hour shifts was initiated by dispatch staff, the decision to change to a 24-hour shift was vigorously opposed. After a substantial review period, the Fire Chief decided to transition the ECC to 12-hour shifts. Some of the deciding factors were the addition of a Shift Supervisor in the center at all times, reduction of the extended 36 and 48-hour shifts, and elimination the pay issues related to 24-hour schedules.

A common argument made by dispatch staff when considering moving away from 24-hour shifts was the loss of constant staffing in the ECC for a significant event. This was a factor that was considered when evaluating data for the transition, and it was determined that the surge capacity was very rarely

used. Since the transition, there have been no issues with staffing and ability to handle incidents. An example provided by the VCFD ECC Chief was their staffing for the Thomas Fire (California's largest wildfire) earlier this year. Because the ECC was already up-staffed for predicted fire weather, and the event started around shift change, there was plenty of staff to work through the Initial Attack of what was described as a once in a lifetime incident.

One additional note the ECC Chief shared is that their shifts are 12.5-hours. The extra half hour is intended to be a briefing/training period followed by relief. The extra half hour makes shifts feel longer, but VCFD modeled the practice after the Ventura County Sheriff's Department who also works 12.5-hour shifts.

The ECC Chief advised that this was not a popular decision with the ECC staff, and 1-year later is still not positively viewed by dispatch staff. The most common complaint that the ECC staff has expressed since the transition is the 12-hour shifts extended to 16-hour shifts. The ECC Chief advised that this is a result of dispatchers not answering the call when there is last minute overtime available. Per the ECC Chief, this may be avoidable if there were better coordination between dispatchers. The center has a minimum staffing level established, and they will force employees to extend their hours after they are scheduled to go home up to 16-hours or force them to come back for their next shift early.

Finally, there was a lot of discussions that staff would be leaving if the change was made because some of the staff lives two to three hours away from the ECC. Ventura County Fire Department retained their dorms and allowed staff to sleep on site if they are working extended days, and at this point, the ECC has not lost any of their dispatch staff following the change. The ECC Chief recommends that significant notice is given to the employees if a change in schedule was implemented. Ventura County Fire provided dispatchers a 6-month notice, which provided sufficient time for all employees to prepare for the transition.

Section 2.5 – Safety Risk?

In open session presentations, the statement has been made that moving from 24-hour to 12-hour shifts is a public safety risk since there would be fewer dispatchers available to answer sudden surges in 9-1-1 calls. The assertion is based on the point that with 24-hour shifts, there are nine (9) dispatchers on duty at all times and that during sleep hours when only three (3) dispatchers are at consoles, the other six (6) can be awoken from adjacent dorms in a moment's notice. While having nine (9) dispatchers on-duty is advantageous, data from 2016 and 2017 suggests (Attachment 2) that assistance was required on few occasions; when help was needed, it was for short durations and involved one or two dispatchers. During the early morning hours, the proposed 12-hour shift would provide a minimum of five (5) dispatchers and one (1) supervisor at all times, and call-back would be required for instances where unexpected workload exceeded capacity. Based on this information, the statement that a 12-hour shift for dispatchers creates a safety risk for the citizens protected by the OCFA is not supported by call volume or the number of dispatchers who will be on duty.

Section 2.6 - Dispatcher Perspectives

In December of 2017, OCFA management received 25 letters from dispatchers and supervisors in opposition to changing shift schedules; a copy of each letter was provided to Board members at the December 2017, meeting. Letters detailed the negative impressions of a schedule change, which impacted personal lives and ECC operations. Personal impacts included an increased commute (frequency, safety, costs), negative financial impacts, and changes to lifestyle (routine, childcare, happiness). Professional concerns included dispatcher recruitment and retention, impacts to dispatcher capacity during unforeseen surges in activity, decreased service delivery, and firefighter safety. Three dispatchers indicated they would likely leave OCFA if a schedule change were to occur.

Section 3. - Summary

The ECC plays a critical role in the delivery of fire, rescue, and medical services. In an environment where seconds count, adequate daily staffing is needed to handle the workload. In addition to operational benefits, adequate staffing can improve employee health by reducing excessive overtime and dispatcher burnout.

In comparing the 24-hour (current) and 12-hour (proposed) work schedules, each meets the tenets of staffing level standards as identified in section 2.1. The 24-hour shift schedule is desired by current dispatchers and has the benefit of cost-effectiveness and nine (9) dispatchers continuously on duty for unforeseen surges in activity. The limitation of the 24-hour shift schedule is the lack of consistent supervision throughout the 24-hour period. The proposed 12-hour shift schedule replenishes dispatch staff every 12-hours, has a supervisor and dispatchers at consoles for a greater number of hours of the workday. The 12-hour shift schedule is opposed by existing dispatchers, requires two additional positions, and raises salary costs 11.03%.

Although not addressed in this whitepaper, future research should consider methods to enhance continuous ECC supervisorial oversight and the potential benefits of mixed shift schedules (8, 10, 12, and 24) to address rising call volume and peak activity during the day.

References

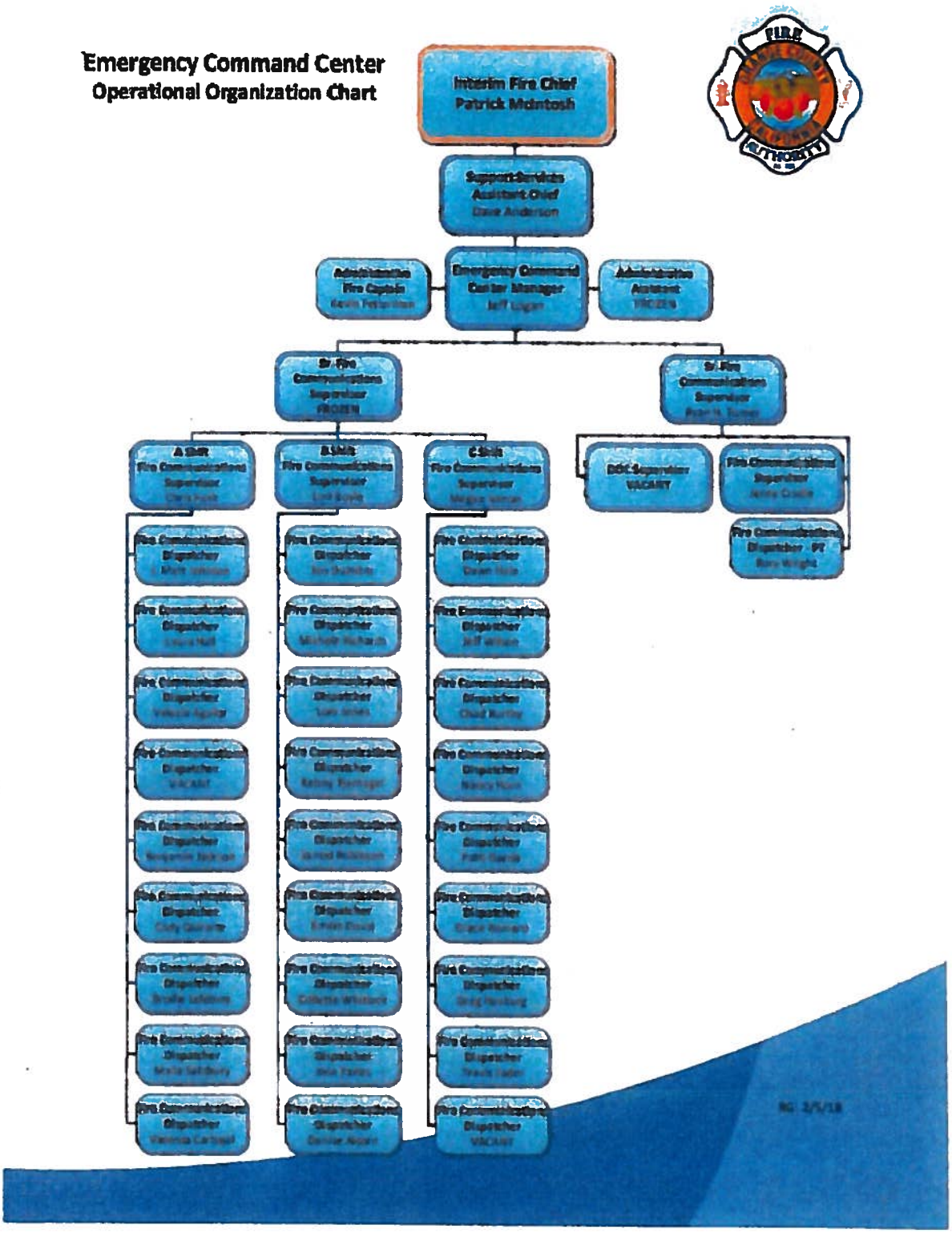
Association of Public-Safety Communications Officials (APCO). (2005, August). STAFFING AND RETENTION IN PUBLIC SAFETY COMMUNICATION CENTERS. Retrieved from https://www.apcointl.org/doc/conference-documents/personnel-human-factor/283-project-retains-effective-practices-guide-2005/file.html

Gendron, R. (2015, March 11). 9-1-1 Magazine: The Stress at Both Ends of the Phone: Burn Out and Empathy Fatigue. Retrieved from http://www.9-1-1magazine.com/Gendron-Stress-Both-Ends-Phone

National Fire Protection Agency. (2017, June). Fire department calls. Retrieved from https://www.nfpa.org/News-and-Research/Fire-statistics-and-reports/Fire-statistics/The-fire-service/Fire-department-calls/Fire-department-calls

Pendleton, S. (2008, April). Information Overload and the 9-1-1 Dispatcher. Retrieved from http://www.9-1-1magazine.com/Information-Overload-and-the-9-1-1-Dispatcher/

Attachment 1
ECC Organization Chart



Attachment 2
24-hour Shift Schedule
Interrupted Sleep Analysis

Below is a synopsis of "Interrupted Sleep" from 2016 and 2017 where dispatchers (on 24-hour shifts) were required to return from sleep/break to help with center workload.

2016

Dispatchers re-called from sleep break between 7 PM – 1 AM for unanticipated surge of activity (six dispatchers were on the floor under the current 24-hour schedule)

- 11 Instances of recalled dispatchers
  - Most entries indicate one to two dispatchers recalled
  - Duration of time spend on ECC Floor (1.25 to 1.5 hours)
  - Three (3) Instances when there was more than seven (7) dispatchers used on ECC floor
  - High occurrences between 7 PM at 8:30 PM

Dispatchers re-called from sleep break between 1 AM and 7 AM for unanticipated surge of activity (three dispatchers were on the floor under the current 24-hour schedule)

- 12 instances of recalled dispatchers
  - Most entries indicate one to two dispatchers recalled
  - Duration spent on ECC floor (1.5 to 2.5 hours)
  - One occurrence (Holy Jim Fire) where seven (7) dispatchers where on the floor 4:30 AM to 7:00 AM

2017

Dispatchers re-called from sleep break between 7 PM – 1 AM for unanticipated surge of activity (six dispatchers were on the floor under the current 24-hour schedule)

- Eight (8) Instances of recalled dispatchers
  - Most entries indicate one to two dispatchers recalled
  - Duration of time spend on ECC Floor (0.5 to 2 hours)
  - Brea Fire – nine (9) dispatchers 7:15 PM to 7:45 PM

Dispatchers re-called from sleep break between 1 AM – 7 AM for unanticipated surge of activity (due to (three dispatchers were on the floor under the current 24-hour schedule)

- Seventeen (17) Instances
  - Most entries indicate one to two dispatchers recalled
  - Duration of time spend on ECC floor (.5 to 3 hours)
  - Three (3) Instance when there was more than five (5) dispatchers on ECC floor
    - Cristianitos Fire - seven (7) dispatchers working 1:00 AM to 2:15 AM
    - Gypsum Fire - eight (8) dispatchers 1 AM to 2:30 AM
    - Fire Baker Canyon – seven (7) dispatchers working 2:45 AM to 4:00 AM

Attachment 3

National Emergency Number Association (NENA)– Staffing Calculator

Call Volume Category	Call Volume: Busy Hour Shift	Call Volume: Normal Shift	Call Duration in Seconds
9-1-1 calls	16	5.7	108.9
7-/10-digit emergency #	12.5	5.7	84.5

The above calls equate to approximately . . 149,796 calls per year

Determine Hours of Work Per Year to be Obtained from Each Call Taker

Enter number of days off per category in table below (highlighted cells)

It is realized that you may have telecommunicators with different numbers for each category.
Use the average numbers for your PSAP

Days in year	365
Less Days Off:	
Weekends (i.e., 2 days per 52 weeks)	182
Paid Holidays Off	0
Vacation	18
Personal Days off	7
Training	1
Conference	1
Sick	3
Total Days off per Year	212
Days available to work	153
If work eight hours per day	12
Hours available to work	1836
Staffing Ratio* (Hours in Year/Hours Available)	4.77

*Staffing Ratio - How many persons must be hired to keep on position manned 24 x 7. It is calculated by dividing the number of hours in a year by the number of hours a call taker is available to work at a position.

Calculations for Staff based on above inputs and P.01 Grade of Service

	Shift: Busy Hour	Shift: Normal
9-1-1 calls in Erlangs	0.484	0.172
7-/10-digit emerg # calls in Erlangs	0.224	0.102
Total Erlangs per Shift . .	0.708	0.275
Call takers required per shift .	4	3
Number of shifts per day . .	1	1
Total Call Takers on watch in typical day		7
Staffing Ratio		4.77
Telecommunicators required for 24 x 7		**33.4**

Staffing options that the PSAP Manager should consider include:

1. Full time employees
2. Overtime (But recommended only to cover rare high-volume times or personnal absences owing to illness or other emergency)
3. Part time employees (Consider as a option for experienced telecommunicators who want to reduce working time but still want income and/or enjoy the work)

Orange County Fire Authority
Fire Communications Dispatcher Cost Calculation

		Fire Communication Dispatcher				Fire Communication Supervisor			
	Includes 1 Hour Lunch->	24-Hr	12-Hr	10-Hr (4/10)	9-Hr (9/80)	24-Hr	12-Hr	10-Hr (4/10)	9-Hr (9/80)
KEY ASSUMPTIONS									
Base Hourly Rate (Top Step)		37.41	37.41	37.41	37.41	41.71	41.71	41.71	41.71
Annual Hours		2,080	2,184	2,080	2,080	2,080	2,184	2,080	2,080
Night Assignment Hours [i]		-	1,456	1,387	1,387	-	1,456	1,387	1,387
Annual Built-In Overtime/FLSA Hours [ii]		189.60	104.00	-	-	189.60	104.00	-	-
Retirement Rate [iv]		34.08%	34.08%	34.08%	34.08%	34.08%	34.08%	34.08%	34.08%
Workers Comp Costs		9413	9410	9410	9410	9410	9410	9410	9410
Workers Comp Rate [v]		4.258%	4.258%	4.258%	4.258%	4.258%	4.258%	4.258%	4.258%
Holiday Hours [vi]		118.00	118.00	108.00	108.00	118.00	118.00	108.00	108.00
Sick Hours for Backfill Overtime		96.00	96.00	96.00	96.00	96.00	96.00	96.00	96.00
Vacation/PAL Hours for Backfill Overtime [vii]		156.02	162.02	156.02	156.02	156.02	162.02	156.02	156.02
SALARY									
Regular Salary		$ 77,813	$ 81,703	$ 77,813	$ 77,813	$ 86,757	$ 91,095	$ 86,757	$ 86,757
Holiday Pay	Hourly rate * Holiday Hrs	4,452	4,452	3,995	3,995	4,963	4,963	4,421	4,421
Annual Built-In Overtime	Hourly rate * Built-In Overtime Hrs * 0.5	3,550	1,945	-	-	3,958	2,169	-	-
Night Assignment Pay	Hourly rate * Night Assignment Hrs	-	2,184	2,080	2,080	-	2,184	2,080	2,080
VT/Sick Leave Backfill OT [viii]	Hourly rate * (Sick + Vacation) * 1.5	14,142	14,478	14,142	14,142	15,767	16,143	15,767	15,767
EMD Bonus [ix]	5.00%	4,717	4,702	4,302	4,302	5,259	5,310	4,863	4,863
Educational Incentive [x]	5.00%	3,891	3,891	3,891	3,891	4,338	4,338	4,338	4,338
Total Salary		$ 108,586	$ 113,416	$ 106,263	$ 106,263	$ 121,043	$ 126,202	$ 118,227	$ 118,227
BENEFITS									
Retirement		$ 32,179	$ 33,718	$ 31,391	$ 31,391	$ 35,878	$ 37,508	$ 34,918	$ 34,918
Workers' Compensation		4,422	4,624	4,324	4,324	4,930	5,145	4,811	4,811
Health Insurance [xi]		12,110	12,110	12,110	12,110	12,110	12,110	12,110	12,110
Medicare	1.45%	1,574	1,645	1,541	1,541	1,755	1,830	1,714	1,714
Total Benefits		$ 50,285	$ 52,097	$ 49,366	$ 49,366	$ 54,673	$ 56,593	$ 53,553	$ 53,553
TOTAL SALARY & BENEFITS		$ 158,869	$ 165,513	$ 155,629	$ 155,629	$ 175,716	$ 182,795	$ 171,780	$ 171,780

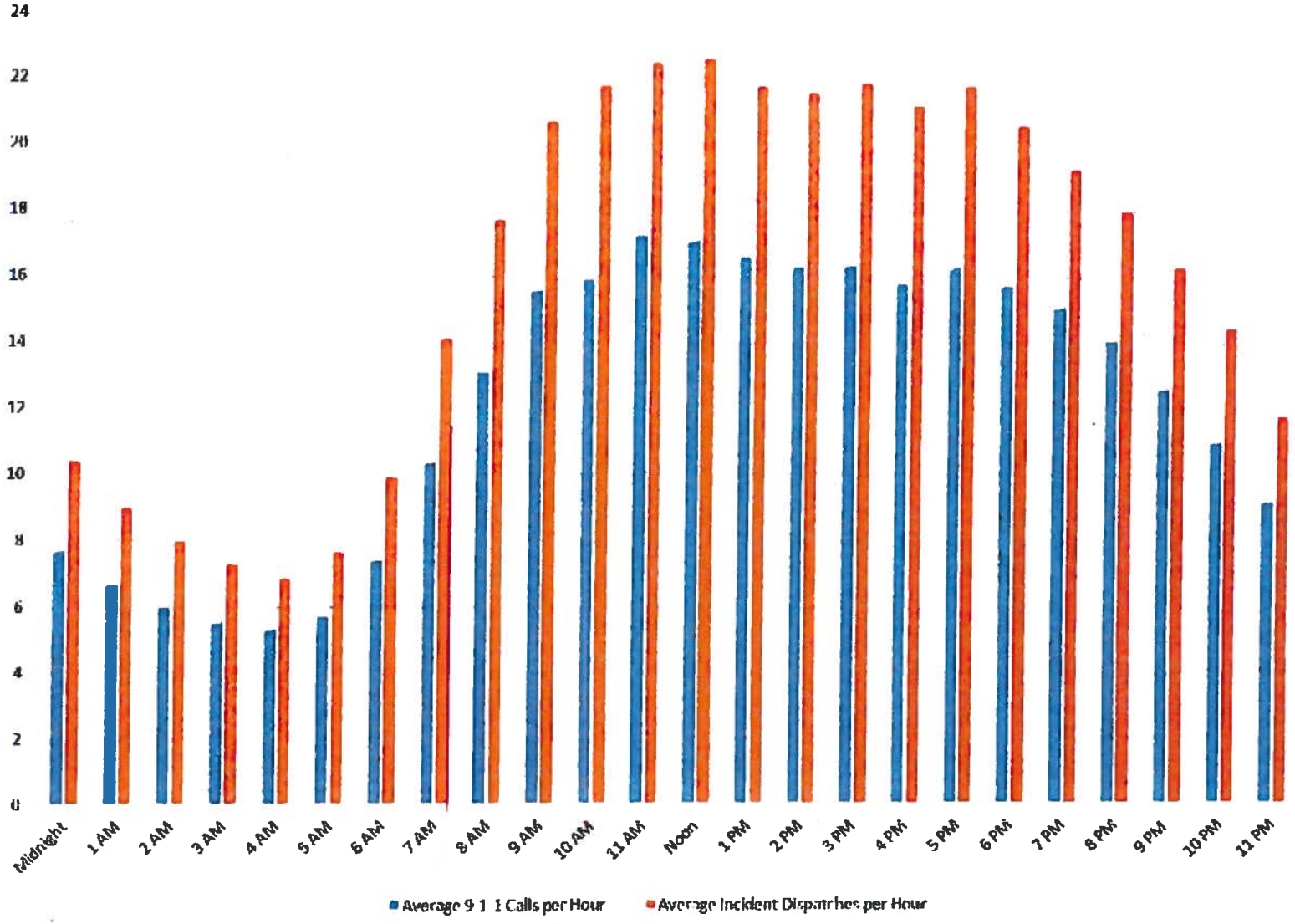
Notes:
[i] Not applicable to 24-hr shifts. Per hour rate for "Night Diff Pay" = 5% of base salary/number of paid hours in the year, capped at $1.6/hour. Only hours worked between 4 pm and 8 am are entitled to Night Diff Pay.
[ii] Per timekeeping department, dispatchers qualify for FLSA overtime that affects retirement.
Assumes 24-Hr dispatchers have 7.3 hours of OT every pay period as a result of working their normal schedule.
Assumes 12-Hr dispatchers have 4.0 hours of OT every pay period as a result of working their normal schedule.
[iii] Not used.
[iv] Retirement rate based on 18/19 estimated rates for 2.7%@55 plan for employees hired prior to 1/1/2011.
[v] Based on FY 2018/19 Worker's Comp projections
[vi] 13 Holidays per year. 9-Hrs per Holiday for 24-Hr Shift and 12-Hr shift Employees per MOU + 2 Hrs. Spring Holiday. 8 Hrs per holiday for 9hr & 10 hr shift employees.
[vii] Assumes 120 hours vacation and 36 hours PAL time.
[viii] Backfill for Vac and Sick Leave are included due to constantly staffed position.
[ix] EMD bonus is 5% and applies to overtime hours
[x] Assumes 5%. Does not apply to overtime hours.
[xi] Based on FY 2018/19 health insurance amounts.

filename: ECC Dispatcher Calc, 3-7-18.xlsx

Print date: 3/7/2018

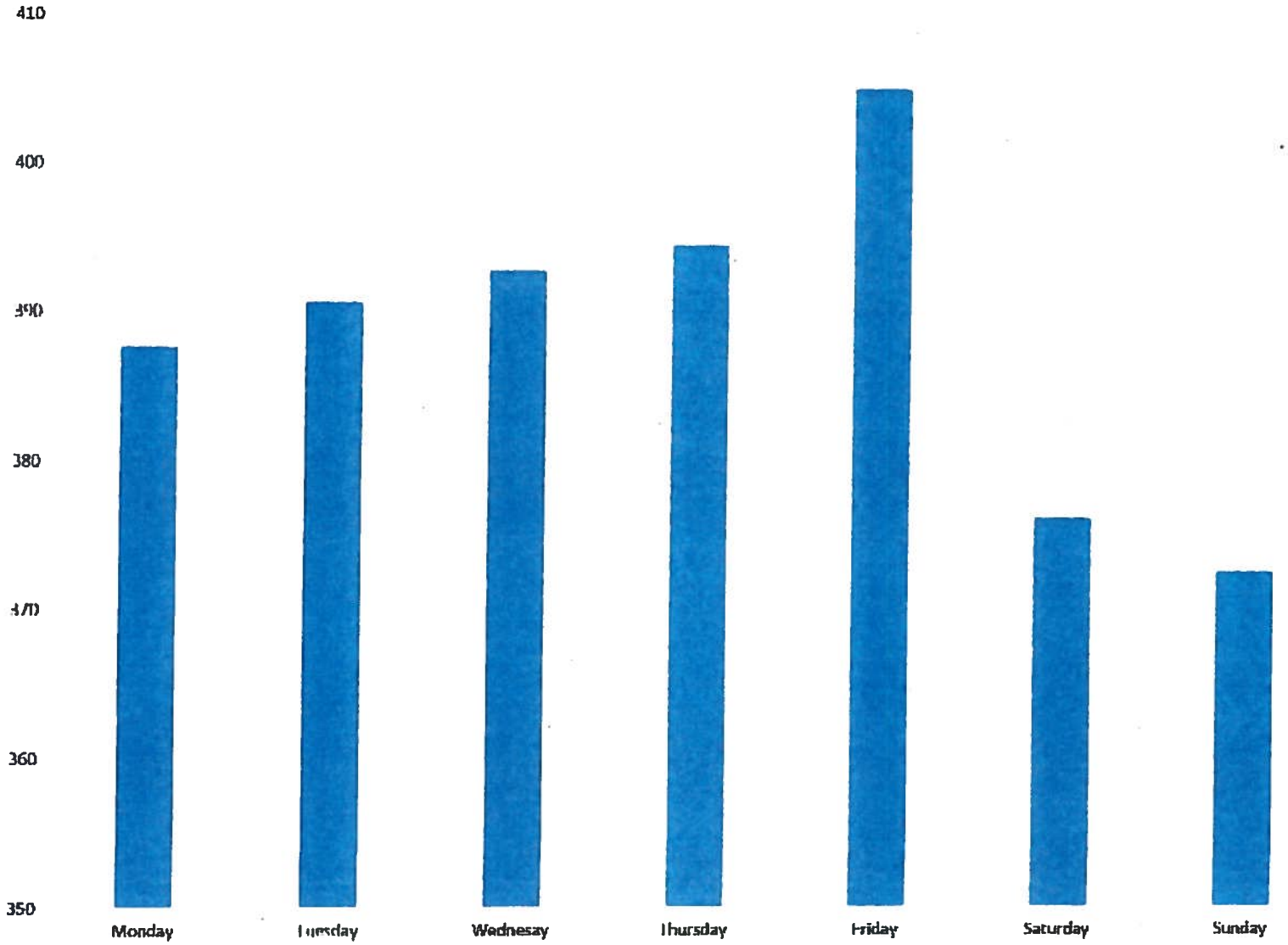
Attachment 5

Average 9-1-1 Calls and Incidents Dispatched by Hour (from 2017 data)



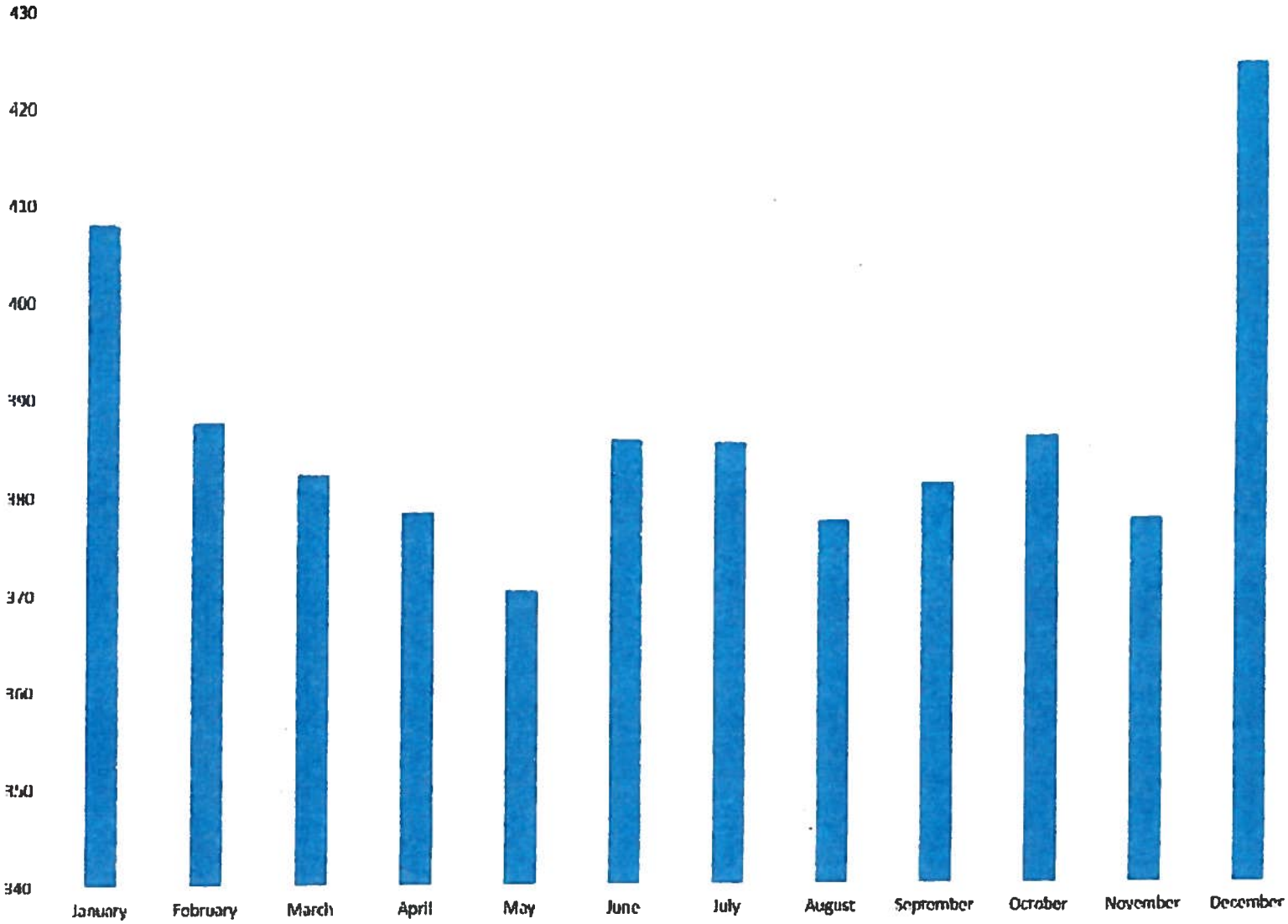
Attachment 6

Average Incidents Dispatched by Day of Week (from 2017 data)



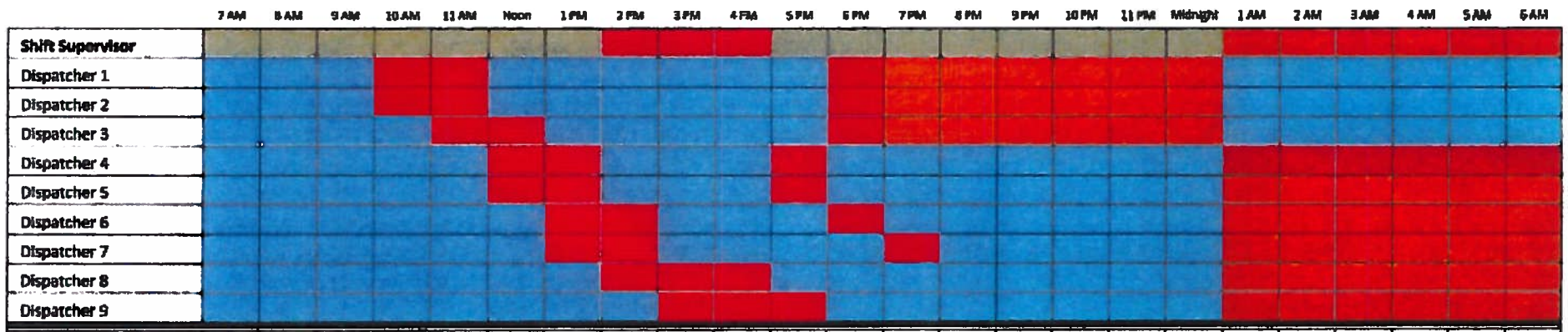
Attachment 7

Average Incidents Dispatched each Day by Month (from 2017 data)



Attachment 8

24-hour work schedule (Current work schedule)



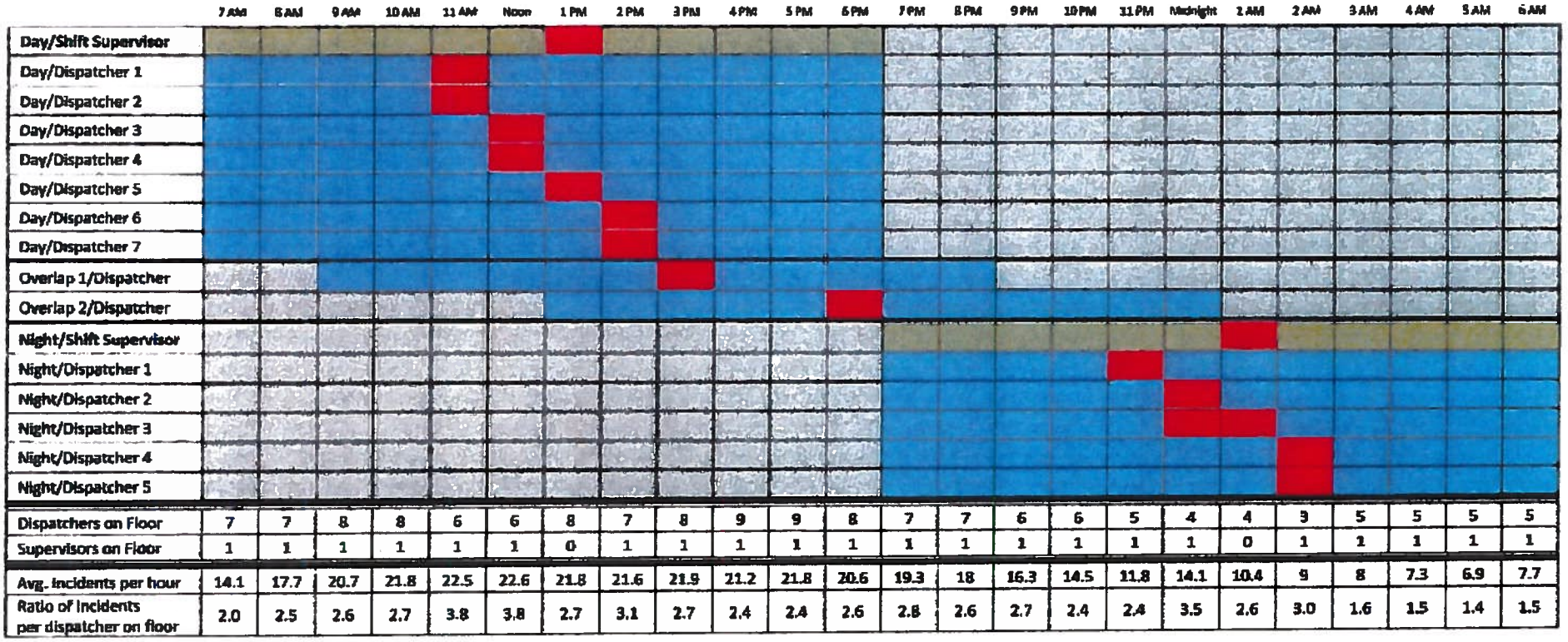
	7 AM	8 AM	9 AM	10 AM	11 AM	Noon	1 PM	2 PM	3 PM	4 PM	5 PM	6 PM	7 PM	8 PM	9 PM	10 PM	11 PM	Midnight	1 AM	2 AM	3 AM	4 AM	5 AM	6 AM
Shift Supervisor																								
Dispatcher 1																								
Dispatcher 2																								
Dispatcher 3																								
Dispatcher 4																								
Dispatcher 5																								
Dispatcher 6																								
Dispatcher 7																								
Dispatcher 8																								
Dispatcher 9																								
Dispatchers on Floor	9	9	9	7	6	6	5	6	7	7	6	5	5	6	6	6	6	6	3	3	3	3	3	3
Supervisors on Floor	1	1	1	1	1	1	1	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0
Avg. incidents per hour	14.1	17.7	20.7	21.8	22.5	22.6	21.8	21.6	21.9	21.2	21.8	20.6	19.3	18	16.3	14.5	11.8	14.1	10.4	9	8	7.3	6.9	7.7
Ratio of incidents per dispatcher on floor	1.6	2.0	2.3	3.1	3.8	3.8	4.4	3.6	3.1	3.0	3.6	4.1	3.9	3.0	2.7	2.4	2.0	2.4	3.5	3.0	2.7	2.4	2.3	2.6

	Dispatcher on Dispatch Floor
	Supervisor on Dispatch Floor
	Break Hour (subject to immediate recall)
	Sleep/Unpaid (subject to immediate recall)

The ratio of incidents per hour and dispatchers on floor each hour is calculated in the last row of the table. The average for the 24-hour period is 3 incidents per dispatcher per hour.

Attachment 9

12-hour work schedule (Proposed/Draft work schedule)



	7 AM	8 AM	9 AM	10 AM	11 AM	Noon	1 PM	2 PM	3 PM	4 PM	5 PM	6 PM	7 PM	8 PM	9 PM	10 PM	11 PM	Midnight	1 AM	2 AM	3 AM	4 AM	5 AM	6 AM
Day/Shift Supervisor																								
Day/Dispatcher 1																								
Day/Dispatcher 2																								
Day/Dispatcher 3																								
Day/Dispatcher 4																								
Day/Dispatcher 5																								
Day/Dispatcher 6																								
Day/Dispatcher 7																								
Overlap 1/Dispatcher																								
Overlap 2/Dispatcher																								
Night/Shift Supervisor																								
Night/Dispatcher 1																								
Night/Dispatcher 2																								
Night/Dispatcher 3																								
Night/Dispatcher 4																								
Night/Dispatcher 5																								

	7 AM	8 AM	9 AM	10 AM	11 AM	Noon	1 PM	2 PM	3 PM	4 PM	5 PM	6 PM	7 PM	8 PM	9 PM	10 PM	11 PM	Midnight	1 AM	2 AM	3 AM	4 AM	5 AM	6 AM
Dispatchers on Floor	7	7	8	8	6	6	8	7	8	9	9	8	7	7	6	6	5	4	4	3	5	5	5	5
Supervisors on Floor	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1
Avg. incidents per hour	14.1	17.7	20.7	21.8	22.5	22.6	21.8	21.6	21.9	21.2	21.8	20.6	19.3	18	16.3	14.5	11.8	14.1	10.4	9	8	7.3	6.9	7.7
Ratio of incidents per dispatcher on floor	2.0	2.5	2.6	2.7	3.8	3.8	2.7	3.1	2.7	2.4	2.4	2.6	2.8	2.6	2.7	2.4	2.4	3.5	2.6	3.0	1.6	1.5	1.4	1.5

	Dispatcher on Dispatch Floor
	Supervisor on Dispatch Floor
	Not on Duty
	Break Hour (subject to immediate recall)

The ratio of incidents per hour and dispatchers on floor each hour is calculated in the last row of the table. The average for the 24-hour period is 2.5 incidents per dispatcher per hour. This is a 16.7% decrease as compared to 24-hour schedule.

The proposed 12-hour schedule is for seven (7) day shift dispatchers, two (2) overlapping dispatchers, and five (5) night shift dispatchers. The number of night shift dispatchers may need to be reassessed in the future as workload is lowest between the hours of 1 AM and 7 AM. It may prove beneficial to reassign night shift positions to an earlier portion of the day where workload is higher.

Attachment 10

Schedule Comparison – 24-hour vs. 12-hour schedule

Dispatchers/Supervisors Working at Consoles

Dispatchers	7 AM	8 AM	9 AM	10 AM	11 AM	Noon	1 PM	2 PM	3 PM	4 PM	5 PM	6 PM	7 PM	8 PM	9 PM	10 PM	11 PM	Midnight	1 AM	2 AM	3 AM	4 AM	5 AM	6 AM
24-hour schedule	9	9	9	7	6	6	5	6	7	7	6	5	5	6	6	6	6	6	3	3	3	3	3	3
12-hour schedule	7	7	8	8	6	6	8	7	8	9	9	8	7	7	6	6	5	4	4	3	5	5	5	5
Net Difference	-2	-2	-1	+1			+3	+1	+1	+2	+3	+3	+2	+1			-1	-2	+1		+2	+2	+2	+2

Supervisors	7 AM	8 AM	9 AM	10 AM	11 AM	Noon	1 PM	2 PM	3 PM	4 PM	5 PM	6 PM	7 PM	8 PM	9 PM	10 PM	11 PM	Midnight	1 AM	2 AM	3 AM	4 AM	5 AM	6 AM
24-hour schedule	1	1	1	1	1	1	1	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0
12-hour schedule	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1
Net Difference							1	+1	+1	+1										+1	+1	+1	+1	+1

The numbers in RED indicate less personnel on the ECC floor when comparing 24-hour schedule (existing) vs. 12-hour scheduling. The numbers in GREEN indicate where 12-hour personnel working at consoles to address workload.

Work Production

Dispatchers			
24-hour schedule	9 dispatchers	15-hours of work on ECC floor by each	135 man-hours each 24-hour period
12-hour schedule	14 dispatchers	11-hours of work on ECC floor by each	154 man-hours each 24-hour period

Supervisors			
24-hour schedule	1 supervisor	15-hours of work on ECC floor	15 man-hours each 24-hour period
12-hour schedule	2 supervisors	11-hours of work on ECC floor by each	22 man-hours each 24-hour period

The number in GREEN indicate a greater number of dispatchers at consoles to address workload.

Attachment 11

Schedule Comparison – 24-hour vs. 12-hour schedule
Dispatchers and Supervisors at RFOTC

Dispatchers	7 AM	8 AM	9 AM	10 AM	11 AM	Noon	1 PM	2 PM	3 PM	4 PM	5 PM	6 PM	7 PM	8 PM	9 PM	10 PM	11 PM	Midnight	1 AM	2 AM	3 AM	4 AM	5 AM	6 AM
24-hour shift	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
12-hour shift	7	7	8	8	8	8	9	9	9	9	9	9	7	7	6	6	6	6	5	5	5	5	5	5
Net Difference	-2	-2	-1	-1	-1	-1							-2	-2	-3	-3	-3	-3	-4	-4	-4	-4	-4	-4

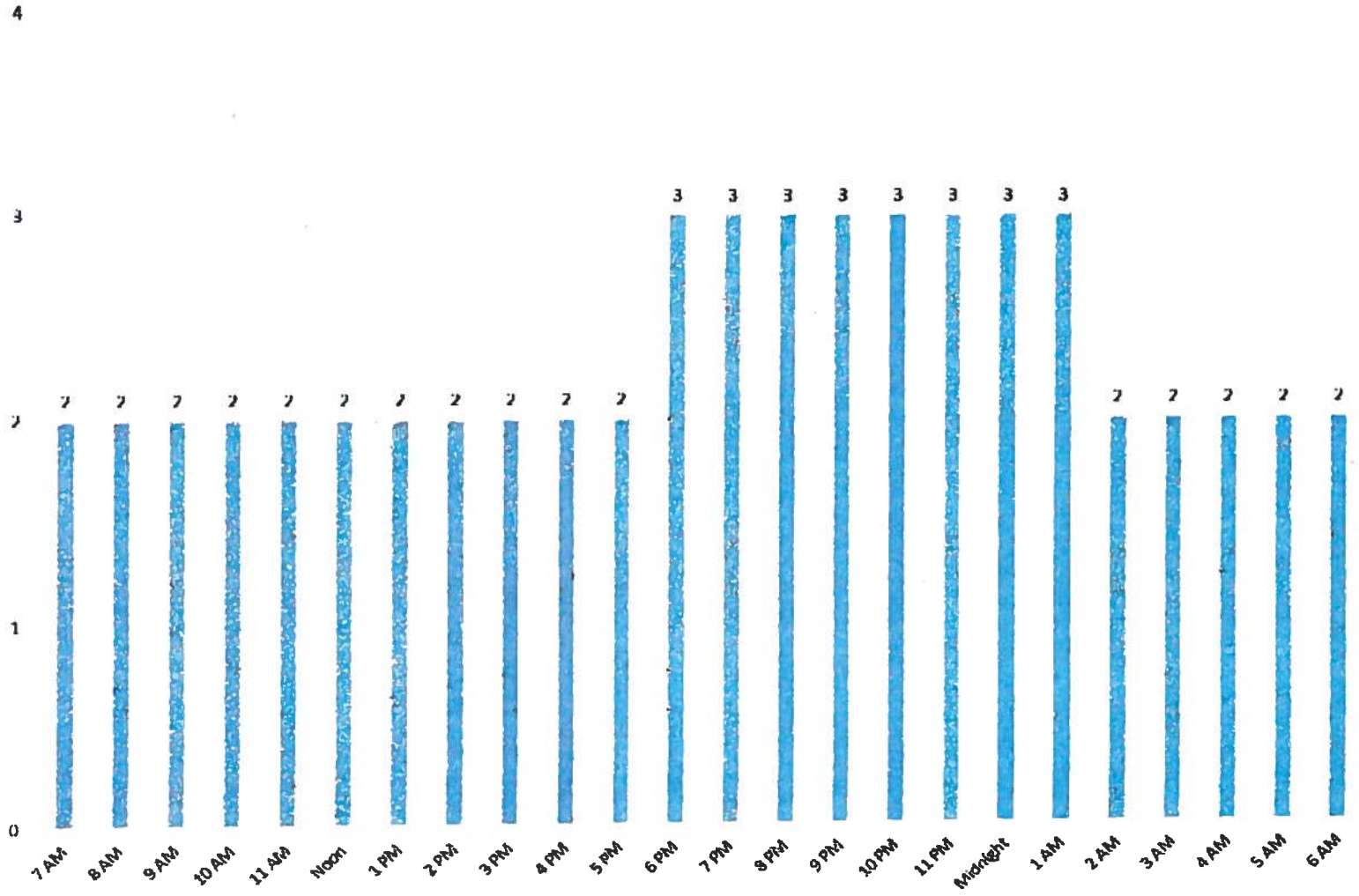
Dispatch Supervisors	7 AM	8 AM	9 AM	10 AM	11 AM	Noon	1 PM	2 PM	3 PM	4 PM	5 PM	6 PM	7 PM	8 PM	9 PM	10 PM	11 PM	Midnight	1 AM	2 AM	3 AM	4 AM	5 AM	6 AM
24-hour shift	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
12-hour shift	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Net Difference																								

The numbers in RED indicate less total dispatchers at the RFOTC when comparing 24-hour schedule (existing) vs. 12-hour scheduling; the number indicates a decreased capability to address unforeseen surges in workload and may require call-back.

Attachment 12

Emergency Call Tracking System (ECaTS)

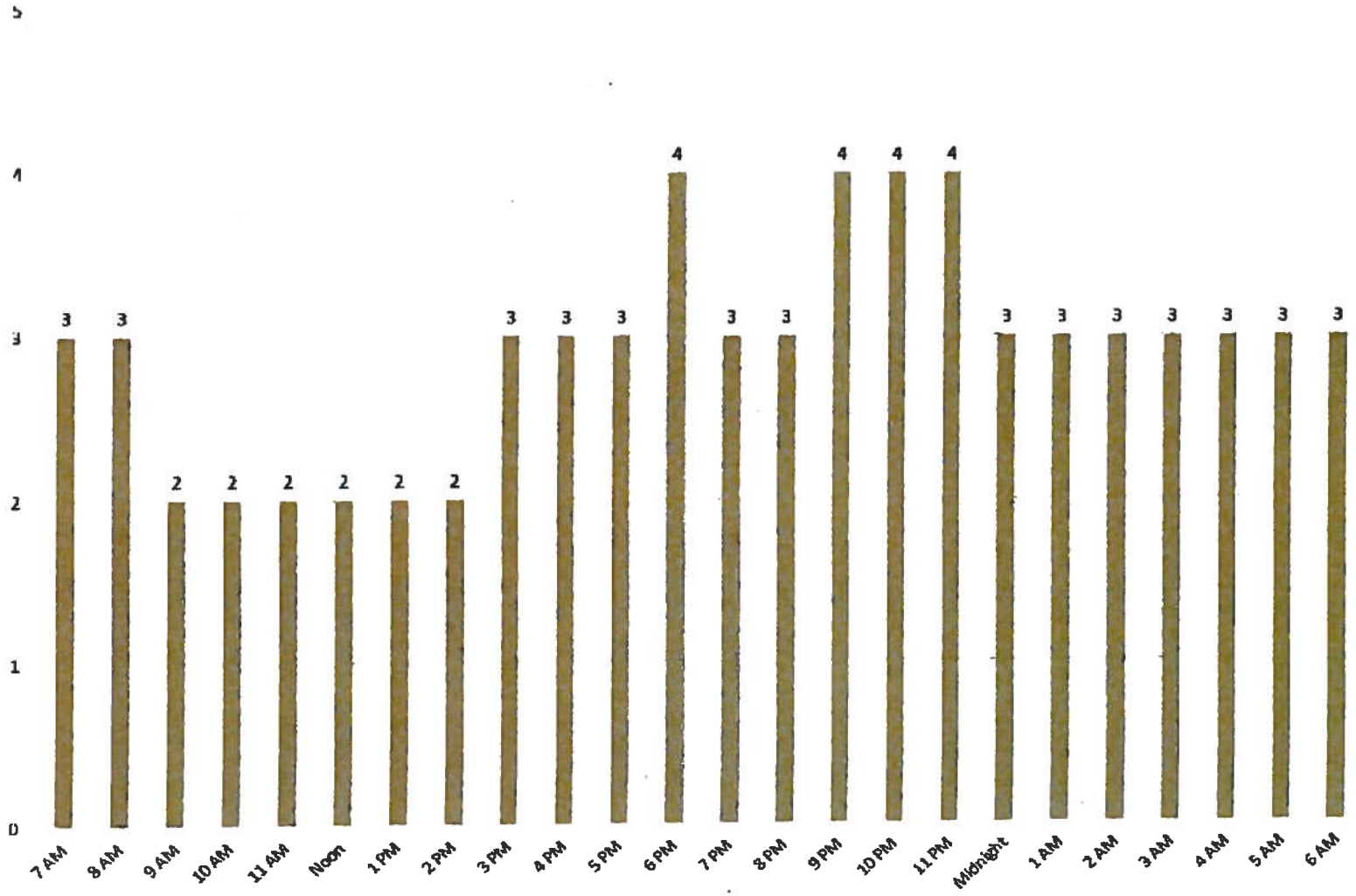
Needed call takers to answer 9-1-1 calls within 10 seconds (90th percentile) - based on 2017 data



Attachment 13

Emergency Call Tracking System (ECaTS)

Needed call takers to answer 9-1-1 AND administrative phone calls with 10 seconds (90th percentile) - based on 2017 data



Response to

Orange County Fire Authority

Emergency Command Center

Work Schedule Analysis March 8, 2018

Purpose

This paper is a response to the white paper published by the Orange County Fire Authority titled Orange County Fire Authority Emergency Command Center Work Schedule Analysis March 8, 2018. The purpose is to identify portions of the initial report that have left out key information or are presenting information that is not completely accurate. Each section, table and/or attachment will be addressed individually. Where a section, table or attachment is skipped, there appears to be no issue with any statements or data within that item.

Section 1.- Introduction- The acknowledgement of the Emergency Command Center as "an essential component of every OCFA emergency response" (Orange County Fire Authority (OCFA), 2018, p. 2) is appreciated and fully supported. It is also agreed that any failure to adequately staff the Emergency Command Center can result in "delays in rapidly answering 9-1-1 calls, initiating emergency response, and coordinating resources" (p. 2).

Serving as the Operational Area Coordinator for the state's mutual aid system brings an additional workload not required of other dispatch centers. During periods of moderate to heavy fire activity within the State of California (and often out-of-state), the ECC is tasked with "handling requests from (the) California Statewide Fire and Rescue Mutual Aid System, dispatching and tracking of fire and rescue mutual aid resources, and coordinating asset movement" (Orange County Fire Authority (OCFA), 2018, p. 3) A number of these resources are not a part of OCFA, placing additional responsibilities on ECC supervisors and dispatch staff during an already active time of the year. ECC staff performs additional work in the Resource Ordering and Status System (ROSS) to process requests for resources and personnel to respond to incidents throughout the state.

Section 1.3- Emergency Activity and Staffing Levels- This section states that "emergency activity has increased 24%" over the past five years. The data in Table 1- Incident and Phone Activity to support this statistic includes only 9-1-1 calls. According to the ECC Statistical Summary issued monthly by OCFA staff, total 9-1-1 calls for 2017 stood at 106,533 versus 106,452 as stated in the white paper. In addition, there were approximately 77,869[1] calls received via the 10-digit emergency lines. When both methods of receiving emergency calls is calculated, the increase in emergency activity over the last five years is closer to 26.5 percent. As noted in Table 1, OCFA ECC dispatchers have consistently answered over 99 percent of 9-1-1 calls within 15 seconds (Orange County Fire Authority (OCFA), 2018, p. 4). Also of importance is an understanding that even though there is a delineation between 9-1-1 lines, 10-digit emergency lines and business,

[1] Approximate number of calls in 2017. 10-digit emergency calls and business line calls were combined for January 2017. Numbers approximated using average of following 11 months percent of 10-digit emergency calls received.

or administrative, lines, requests for assistance can come in to ECC through any of those three methods. It is not unusual to receive an emergency call on a business line.

The part-time position that is identified as having been converted to full-time in 2017 was not actually converted to full-time until 2018. The staffing of the position was not reflected in the OCFA Staffing program until February 1, 2018. Until that time, the position remained a part-time position, staffed for 12 hours only.

Incidents Dispatched presented in Table 1 represent only emergency activity. In terms of incident numbers issued (which represent calls that were entered and had a unit assigned) the numbers are slightly higher. One possible explanation for this could be the difference between CAD's issuance of incident numbers (triggered by a dispatcher entering a call location and incident type) and incidents entered and completed in the Orange County Fire Incident Reporting System (OCFIRS). For 2015-2017, there were also a number of ADVISED calls entered. These include such things as street repairs or utility work that affect emergency response routes and incidents where an inspector is on-site testing an alarm system or OCFA has been advised that a system is being worked on and will be offline for a period of time. Each of these incidents requires a dispatcher to enter a call just as if it were an emergency, so that an active call is in the Computer-Aided Dispatch (CAD) system. This may also contribute to the difference in numbers in that if an ADVISED call was inadvertently entered as an incident, an incident number would be generated instead of an ADVISED call notice. Entering ADVISED calls is done to prevent the inadvertent dispatching of resources to these incidents causing an unnecessary "code three" response, placing responding units and the public at risk and exposing OCFA to potential liability. The table below includes the amount of incident numbers issued and the ADVISED call types in the total number of incidents per year.

Table 1- Incidents per Year

	2013	2014	2015	2016	2017
Incidents Dispatched- OCFA Report	114,354	117,105 3.8% Increase	130,713 11% Increase	136,934 9.9% Increase	141,858 4.2% Increase
Incident Numbers Issued			133,821	139,723	144,610
ADVISED Incidents Entered			10,336	10,596	10,711
Total Incidents			144,157 23.1% Increase	150,319 4.27% Increase	155,321 3.32% Increase
Difference			10.28%	9.77%	9.49%

Recalculating the daily statistics based on the numbers shown for 2017 brings the total incidents dispatched per day to 425 (vs. 389 as stated). In addition to the average 292 9-1-1 calls answered daily, OCFA dispatchers answered an average of another 213 10-digit emergency calls per day and answered or placed an average of 330 business line calls per day. This is a total average of 835 phone calls answered or placed during a 24-hour period.

Section 2.1- Staffing Level Standards- The bullet point for the Emergency Call Tracking System (ECaTS) notes the number of call takers required to meet certain benchmarks. It is important to note that ECaTS is a statistical reporting tool. It is <u>not</u> a standard based on any recommendations of any professional fire service or telecommunications industry organization. The stated benchmark 90% of calls answered within 10 seconds is not consistent with the NFPA 1221 standard "Ninety-five (95) percent of incoming 9-1-1 calls shall be answered within fifteen (15) seconds, and ninety-(nine) (99) percent of incoming 9-1-1 calls shall be answered within (forty) (40) seconds" noted later in the section (Orange County Fire Authority (OCFA), 2018, pp. 6-7).

Section 2.2- Shift Schedules- Table 3 shows a side-by-side comparison of the current 24-hour schedule and one potential schedule for 12-hour shifts. It is important to note that no schedule rotation outlining shift hours, start times, staggered schedules, break times, number of dispatchers per shift, floor coverage, etc. was ever presented to the employee group. There are a number of options and this is a meet-and-confer item. Any information presented in Table 3 regarding the 12-hour shift is preliminary and subject to change.

Hours Work at Console- For 24-hour shift, all current break time is included when calculating hours spent at the console. With 12-hour shifts, additional break time beyond the meal hour needs to be considered. Allowing for a fifteen-minute break for each block of time on either side of the meal hour, hours at the console is closer to 10.5.

Supervisors- For 24-hour shifts, it is noted in the table, and discussed in other portions of the document, that the supervisor is away from the console from 2 pm to 5 pm daily. During this time, the ECC staff is supervised by either one of the day staff (Fire Communications Supervisor or Senior Fire Communications Supervisor) or an identified move-up (or "acting") supervisor, which is an experienced dispatcher who is responsible for handling the duties of the supervisor in his/her absence. If need, the supervisor is immediately available to be recalled to the floor. During the supervisor's sleep hours (0100-0700), there is a move-up supervisor identified. Again, the supervisor can be recalled immediately to the floor, if necessary.

Strengths- For the 24-hour shift option, it is noted that "Nine (9) dispatchers are available at all times for unforeseen surges in activity" (Orange County Fire Authority (OCFA), 2018, p. 9). While the timing and frequency of this surge in activity cannot be determined, they are hardly "unforeseen." As an emergency service provider, OCFA is well-aware of the increased activity during certain periods. Whether it is holiday weekends or wildland fire season, we prepare annually for these occurrences. One example: based on our Fire Danger Operating Plan and Annual Operating Agreement with CALFIRE, OCFA increases resource staffing during times of high fire danger. This has included additional ECC staff. With 24-hour staffing, two-thirds of the ECC staff is off-duty during these times and can be used to augment staffing or be placed on-call to respond if activity warrants. With the 12-hour option, only one-half of the staff is available

to provide full coverage of any needed positions. One-quarter of the staff is already working and one-quarter is schedule to cover the next twelve hours and is only available to cover the first four hours or the last four hours of the overlap (based on a maximum shift length of sixteen hours).

For the 12-hour shift option, one strength identified is the replenishment of dispatchers every 12 hours. Later in the report, in the interview with the Ventura County ECC chief, it is stated that a "common complaint that the ECC staff has expressed since the transition is the 12-hour shifts is extended to 16-hour shifts" (Orange County Fire Authority (OCFA), 2018, p. 11). This contradicts the statement regarding replenishing staff every 12-hours.

A weakness identified for the 24-hour shift option is the challenge "to add 24-hour positions as center operations grow since all start at 7 AM" (Orange County Fire Authority (OCFA), 2018, p. 9). There is no documentation to support this claim. In fact, there have been two full-time positions added since 2015 with little difficulty. No discussions with the labor group have occurred to discuss staggering shift start times for staff on the 24-hour shift schedule. The previous part-time position was a twelve-hour shift from 0800 to 2100 (one unpaid meal hour break).

One weakness stated for the 12-hour shift is that calling back additional staff "may be necessary for unforeseen surges in emergency activity" (Orange County Fire Authority (OCFA), 2018, p. 9). Again, these are hardly entirely unforeseen and it <u>will</u> be necessary to callback additional personnel to ensure effective ECC operations and service to the public. Please see the discussion regarding surge capacity later in this document.

One item not addressed in the original report is the consequences of a dispatcher (or dispatchers) calling in sick, becoming sick during the shift, or suffering an injury. In such a case it would likely be necessary to force one or more dispatchers to cover the vacancy. With a maximum shift length of sixteen hour as identified in the report, one dispatcher would be forced to cover the first four hours of the shift and then another dispatcher forced to come in early and cover the last four hours of the shift. Depending on what day of the shift cycle this occurs on, the only option might be to force two dispatchers on the relieving shift. The result is a four-hour coverage gap. If this happens for both the "day" shift and the "night" shift, the result is eight hours of missed coverage in ECC in that 24-hour period. The current 24-hour schedule provides the ability to cover the entire 24-hour period with one or two dispatchers, depending on the shift cycle. There are no gaps in coverage and no floor coverage gaps.

Section 2.4- Lessons learned from Ventura County Fire Department- In this section, it is stated that the Ventura County Fire Department had "plenty of staff" to handle the Thomas Fire. The fire is one of the largest fires to-date in California history. It is noted that the fire started "around shift change", which is significant to note. Had it not happened at shift change, there would not have been any additional staff to holdover. This quite probably would have had a negative effect on the ability to handle the incident, even in the "Initial Attack" phase. It is impossible to count

on any major incident starting "around shift change" (Orange County Fire Authority (OCFA), 2018, pp. 10-11) In fact, the Canyon Fire started in the afternoon, and the Canyon 2 fire at approximately 9:45 am. Neither of these times are current (or proposed) shift change times.

Contact with representatives from the employee group at Ventura County Fire Department has discovered that one supervisor and four dispatchers have left their employment with the agency. According to a Service Employees International Union representative, the employee representation group recently surveyed the dispatchers (the group that had originally proposed and supported the schedule change to 12-hours), and 100 percent desire to return to the 24-hour shift schedule (Personal conversation, March 2018). Also, Ventura County Fire Department has staffed their ECC with 30 dispatchers (budgeted for 40). Table 2 below presents a comparison of demographics between Ventura County Fire and OCFA.

Table 2- Comparison of Ventura County Fire Department and OCFA Demographics

Agency	Ventura Co.[2]	OCFA	Difference
Data			
Population	480,000	1,800,000	275%
Stations	32	72	125%
2015 Incidents	40,142	133,821	233%
2016 Incidents	41,611	139,723	236%
Budgeted Staff	40	27	-33%
Actual Staff	32	25	-22%
Incidents per Actual Dispatcher			
	Ventura Co.	OCFA	Difference
2015	1,254.44	5,146.96	310%
2016	1,300.34	5,373.96	313%

Research has indicated that the number of interrupted sleep hours for 2016 was 73 versus the stated 23 and in 2017 was 130 versus the stated 25. These hours included those from the Canyon Fire and Canyon 2 Fire, which are not addressed in the original report. It is important to note here that these numbers are limited to interrupted sleep hours (7 pm to 7 am). While emergency activity can certainly surge during these hours and create the need to bring additional staff to the floor, two of the primary incidents that often require immediate assistance from additional staff are Remote Rescues and Vegetation Fires. Both of these incidents have much higher occurrences rates during daylight hours. There is no mention of interrupted meal hours, which are during the day, and would provide a better snapshot of surges in activity that included these two types of incidents.

[2] Ventura County Fire Department 2016 Annual Report (Ventura County Fire Department, 2017)

Surge capacity-

Day-to-day- For day-to-day operations in ECC, the ability to have additional staff available immediately should not be underestimated. During times of high emergency incident or emergency call volume, staff needs to be available to respond and assist in answering phone calls, handling radio traffic, ensuring adequate move-up and cover of vacant stations, or other support activities. There have been numerous occasions when ECC staff were delayed going, or were needed to be called back from, meal breaks during hours of the shift. Many of these instances were not captured in Staffing. When emergency call volume exceeds the capacity of ECC staff on the floor, help is needed immediately. The statistics provided in the study indicate that, when staff was recalled from sleep, the duration ranged from 1.25 to 2.5 hours. This indicates the urgency of the need for assistance. It is not practical to callback staff that may be, at best 30 to 45 minutes away, and wait for them to arrive to handle incident or phone traffic. 9-1-1 calls and emergencies will not wait that long. It is also reasonable that during times of high call or incident volume, staff will not be available to place a number of phone calls to contact and confirm the response of off-duty staff.

During incidents that have multiple units assigned (structure fires, vegetation fires, remote rescues, etc.), the assigned tactical dispatcher for that division is dedicated to the incident. Another tactical dispatcher will assume the duties of monitoring the "routine" tactical frequency(ies) for the division(s) that tactical dispatcher was assigned. In the event of more than one such incident, it is often necessary to have another dispatcher assist in monitoring the impacted tactical frequencies. These incidents result in a significant amount of radio traffic and support needs (calling utility companies, land management agencies, etc.). The ability to recall staff from breaks provides the capacity to support these incidents.

Extended incidents- Following the Santiago and Freeway Complex fires in 2007 and 2008 respectively, a great deal of research and effort went into the development of the Rapid Attack and Mobilization Plan (RAMP) for OCFA. Identified after the fires was the need to develop a plan and process to provide for "surge" capacity for the OCFA to handle a large emergency or emergencies and continue handling the day-to-day service to our citizens. Apparatus were inventoried, equipment complements adjusted, staffing policies updated and an organizational structure based on ICS principles established to stand-up the Department Operations Center (DOC). A key component in handling a large emergency, or multiple large emergencies, is the staffing of Expanded Dispatch in ECC. While the study noted the times and incidents where additional staff was on the ECC floor for local incidents, two major incidents and the impact on staffing were left out. During the Canyon Fire and Canyon 2 Fire, ECC staff were committed to Expanded Dispatch in support of these incidents. The number of additional staff needed to handle the incidents ranged from a low of two to as many as eleven dispatchers and supervisors. Expanded Dispatch was staffed around the clock for both of these incidents. The 24-hour shift

schedule allowed additional positions to be staffed and personnel rotated through appropriate sleep breaks.

While switching to a 12-hour shift schedule provides a consistent level of staff on the ECC floor, it eliminates the surge capacity for the inevitable times when additional staff are needed. These times are during critical incidents and volumes. The inability to support surge capacity will result in delays in answering phone lines (quite probably including 9-1-1 lines), missed radio traffic, and an inability to provide the necessary support to Operations staff at the scene of critical incidents and the normal day-to-day incidents.

The study identifies the number of call takers needed to answer 9-1-1 calls within 10 seconds ninety percent of the time and also the number of call takers needed to answer 9-1-1 and administrative lines within 10 seconds ninety percent of the time. While seeming to make sense and demonstrate the benefits of 12-hour shifts, a few pieces of information provide a better picture. The first lies in the performance measure itself. In Table 1 of the report, it is stated that current staffing is answering over ninety-nine percent of 9-1-1 calls within fifteen seconds. NFPA 1221 uses a fifteen second time benchmark as well. The only mention of a ten-second benchmark is in the ECaTS discussion. As previously noted, ECaTS is reporting software only and is not any sort of standard supported by a recognized public safety organization (Orange County Fire Authority (OCFA), 2018, pp. 4-6, 26-27). This appears to be accepting a lower level of performance than is currently being provided. Another key point is identifying a "call taker." To properly handle incident radio traffic volume, ECC staffing from 0700 to 0100 is a minimum of one primary dispatcher, three tactical dispatchers, and one supervisor. The primary dispatcher and tactical dispatchers do not have answering 9-1-1 or 10-digit emergency line calls as their primary responsibility. They are support to the call takers. Additional staff above four dispatchers are assigned as call takers. In a situation where staff is recalled from sleep or breaks, there are additional personnel that can be assigned as call takers to handle the increased call volume and ensure meeting the call-answering standard. Current staffing of nine dispatchers means the availability of two dispatchers more than if ECC were staffed with seven dispatchers. This means two additional call takers available under the 24-hour shift schedule than would be available during significant time periods of the 12-hour staffing scenario. As a reminder, the schedule and coverage presented in the report is only one possible scenario and no conversations regarding the establishment of a schedule have occurred. Without additional support, tactical dispatchers will likely be placed in a position of choosing whether to answer the radio or answer the phone. If the primary dispatcher must be engaged in answering phone calls, errors or delays in resource assignment to incidents become more probable.

It may seem reasonable to make the statement that answering 9-1-1 or 10-digit emergency lines should be a priority for all dispatchers and anything else can wait. However, if the missed radio traffic from a field unit is related to the safety of the crews at an incident (request for law enforcement immediately; lost, missing or trapped firefighter; wires down; etc.), the result could be catastrophic. While few of these incidents have occurred within OCFA, the fact is that this is a

risky business and there are times when unexpected things happen. In these instances, not only is it imperative to have a dispatcher that can be dedicated to that incident until the situation is resolved. A lack of available personnel to recall jeopardizes the ability to do so.

Whether discussing day-to-day operations or extended incident operations, the consequences of a coverage gap due to illness or injury are exacerbated. In addition to an increase in activity, there would be fewer personnel to handle the call volume and breaking away to try to call staff back would be nearly impossible in any rapid or beneficial time frame.

The Standards of Cover adopted by the OCFA Board of Directors delineates a Total Response Time standard of 7 minutes and 22 seconds eighty (80) percent of the time and 8 minutes and 30 seconds ninety (90) percent of the time. Included in the Total Response Time is call processing time by ECC (Orange County Fire Authority (OCFA), 2006, p. 49). The lack of additional immediately available staff to assist in answering 9-1-1 and 10-digit emergency line calls has significant potential to impact the OCFA's ability to meet the standards set forth by the Board of Directors. In the scenario of a coverage gap due to illness or injury of one or more dispatchers, there is almost certain to be a negative impact to this performance standard.

Summary

It is vitally important that OCFA's Emergency Command Center be staffed adequately and effectively. The number of incidents dispatched by ECC continues to increase year after year. As to be expected, there is a correlated increase in 9-1-1 and 10-digit emergency line calls. It must be ensured that sufficient staff are available to cover the day-to-day operations and the to-be-expected surges in activity. OCFA's ECC serves as more than just a dispatch center for the OCFA. As Operational Area Coordinator for the California Statewide Fire and Rescue Mutual Aid System, it supports local, regional, statewide and national emergencies. It also functions as the communications hub for major incidents within Orange County, often regardless of jurisdiction. These responsibilities place additional workload on ECC staff and require staffing considerations for managing such incidents.

The professionally-trained men and women of OCFA's ECC provide a vital link between first responders and those in need of emergency assistance. As Emergency Medical Dispatchers, they provide critical instructions to patients and callers prior to the arrival of emergency medical personnel. As skilled radio operators, they provide vital support to the Operations Section during emergency incidents. They proudly serve the OCFA and the citizens who rely on them to be there in their time of need.

The current ECC work schedule of 24-hour shifts provides significant benefit to the OCFA in the ability to respond to increased emergency activity, support extended incident operations through Expanded Dispatch, and ensure full coverage of the shift and full effectiveness in serving the citizens and supporting the organization. In addition to providing staff needed handle the day-to-day operations of ECC, a surge capacity is maintained that provides the ability to immediately meet any increased staffing needs in ECC. A change to a 12-hour shift schedule would remove the surge capacity and potentially provide less coverage of ECC on a daily basis.

The potential addition of the City of Garden Grove as a Cash Contract City member of the OCFA brings seven more fire stations (for a total of 79), a new battalion, several additional apparatus, and between 14,000 and 15,000 more incidents per year. Initial reviews of the proposal being considered by the OCFA Board of Directors for submittal to the City of Garden Grove do not indicate adding any additional ECC staff (Orange County Fire Authority (OCFA), 2018). The potential increase in phone calls, incidents dispatched and other added workload on current ECC staff further underscores the need for surge capacity.

One final note, had the employee group come forward at the beginning of negotiations and proposed a change in staffing ECC that resulted in the need to promote and hire additional staff, could result in a decreased level of staffing in ECC, removed the surge capacity currently maintained at no additional cost and required an increase in salary and benefit costs that exceeded half a million dollars, would it still be so vigorously supported by the OCFA and the Board of Directors?

References

Orange County Fire Authority (OCFA). (2006). *Standards of Cover.* Irvine, CA. p. 49.

Orange County Fire Authority (OCFA). (2018). *City of Garden Grove Fire Service Proposal.* Irvine, CA.

Orange County Fire Authority (OCFA). (2018). *Emergency Command Center Work Schedule Analysis.* Irvine, CA. pp. 1-27.

Ventura County Fire Department. (2017). *2016 Annual Report.* Camarillo, CA.

OCFA PROPOSAL REVIEW

AUGUST 28, 2018

OCFA CONTRACT PROPOSAL

- Contract Proposal Cost - $22,191,928
  - Capped at 4.5% Annually
  - Recapture Clause
  - Average increase 2.92%
- Option to Withdraw Every 10 Years (Year 2030)
- Personnel
- Equipment Maintenance & Replacement
- Routine Station Maintenance
- Plan Check Services
- Administration
- 1 Member on the OCFA Board of Directors

PERSONNEL

- All 84 Sworn Employees Will Be Offered Positions
  - Pre-employment Check
    - Medical/Physical Examination
    - Livescan
    - CA DMV Check
    - City Responsible for Employees Who Do Not Pass Pre-Employment
  - 6 Fire Management Demotions (may have some flexibility with OCFA)
- 5 Non-Sworn Employees
  - Requires Application through OCFA if Positions Available (may have some flexibility with OCFA)
- 4 Part-Time Employees
  - Requires Application through OCFA if Positions Available

Facilities

- OCFA Leasing of Facilities
  - 7 Stations
  - $1.00 Per Year for Each Facility
  - Normal Daily Maintenance Operations
  - Utilities
- City Remains Responsible For:
  - Revolving Facility Account $15,000 Per Station ($105,000)
    - Repairs Over $1,000
    - To Be Replenished Annually
  - Capital Improvements
    - Repairs Over $15,000
  - Hazard Issues (i.e. fuel tanks)
  - Property Insurance

Equipment

- Equipment Will Be Leased to OCFA At No Cost
  - 6 Type 1 Engines
  - 1 Battalion Chief Vehicle
  - 1 Battalion Utility
  - 1 Truck Company
  - 1 Air Light Unit
- OCFA Will Provide Maintenance of Vehicles
- Contract Cost Includes Vehicle Replacement
- Remaining City Equipment May Be Sold (Est. Value $190,000)

Additional Costs

- Asbestos Certification $20,740
- Start-Up Costs $1,136,225
  - Payment Over 10 Years

Description	Start-Up Cost
Service Center (Equipment/Uniforms)	$309,661
Personnel Costs	$152,650
Fleet Services	$20,800
Communications/IT	$293,146
Facilities	$156,500
EMS	$203,468
Total	**$1,136,225**
Amortized Over 10 Years	**$113,623**

Ongoing City Costs

- Pension Obligation (Pre-OCFA Unfunded Liability)
- Retiree Medical Premium Contribution
- Workers' Compensation Claims
- Records Management
- Weed Abatement
- Potential Need for 1 Additional Full-Time Staff:
  - Emergency Operations Coordination
  - Training/Compliance
  - Management of Ambulance Contract
  - Records Requests Before Transition

Other Savings

- Daily Facility Maintenance
  - Utilities
- Insurance Premiums
  - General Liability - $30,000
  - Workers' Compensation - $70,000

Impact on City Services

- Risks Include Loss of Budgetary Control
- Building/Plan Check Services
- Increase in Fees for Plan Check, Permits, and Fire Inspections
- Emergency Coordination (EOC Planning, Training, etc. if Position is not funded)
- Tactical Emergency Medical Support (TEMS)
- Citizen Emergency Response Team Program (CERT)
- Community Services
  - Special Events (Planning/Logistics)
  - Non Profit Event Sponsorships

OCFA Cap & Recapture Provision

- The annual cap is 4.5%
- When OCFA cost increases exceed the cap, the cash city is protected, but that means that OCFA is no longer recovering its full cost of service
- The recapture provision allows OCFA to eventually bring the annual charge up to a cost recovery level, but never allows OCFA to recover prior year costs that were less than full cost recovery
- The chart to the right demonstrates how this cap and recapture provision work

Recapture Bank			
Contract Year	Increase to OCFA Budget	Increase to Cash Contract Charge	Recapture Bank
1	3.25%	3.25%	
2	3.25%	3.25%	
3	5.50%	4.50%	+1.0%
4	3.50%	4.50%	-1.0%
5	4.00%	4.00%	

(Slide Provided by OCFA)

Changes in Assumptions

- City Budget Adjustment
  - Council Approved Amendment June 2018 (Includes Budget Reductions & Elimination of 1 Full-Time Department Secretary Position)
  - Itemizes Unfunded Liability, Labor, and Other Operating Costs
- Start-Up Costs
  - 5-Year to 10-Year Amortization
- Proposal Cost Offset ($75,000)
- Capital Improvement Costs
  - Not Required in 1st Year
  - Improvements Require Future Agreement with City
- Vehicle Replacement Savings
- Adjustment to Pension Obligation (Valuation Report - August 2018)
- Assumes Additional Labor & Operating Cost Increases
- Comparison of Costs to OCFA's Deployment Model

Deployment Cost Comparisons

COST COMPARISONS (8.28.18)			Scenario #1 Current GG		Scenario #2 Comparable GGFD		Scenario #3 Contract with OCFA
	Description:	FY 18-19 Avg. Tot Comp	Current GG Auth Pos List	Total GG Current Costs	Number of Positions (OCFA Proposal Deployment)	Estimated Cost Using OCFA Model	TOTAL COST OF FIRE SERVICES IF CONTRACTED WITH OCFA
ADMIN	Department Secretary	102,675	1	102,675	1	102,675	
	Public Safety Fiscal Analyst	112,135	1	112,135	1	112,135	
	Sr. Fire Protection Specialist	140,610	2	281,220	2	281,220	
	Fire Chief	394,767	1	394,767	1	394,767	
	Fire Division Chief	280,668	2	561,336	2	561,336	
	Fire Battalion Chief	248,782	0	-	1	248,782	
	Fire Captain	217,311	2	434,622	1	217,311	
FRONT-LINE	Fire Battalion Chief	248,782	3	746,346	3	746,346	
	Fire Captain	217,311	24	5,215,464	21	4,563,531	
	Fire Engineer	185,770	24	4,458,480	21	3,901,170	
	Firefighter (Constant Manning)	120,191	4	480,764	4	480,764	
	Firefighter	133,595	6	801,570	0	-	
	Firefighter/Paramedic	161,086	30	4,832,580	42	6,765,612	
	Total Full-Time Labor Cost		100	18,421,959	100	18,375,649	N/A
OTHER OPERATING COSTS	Part-Time			58,281		58,281	
	Over-Time			2,439,977		2,439,977	
	Other Costs						
	Contractuals			1,222,407		1,222,407	
	Commodities			438,910		438,910	
	Tel/Beeper			82,701		82,701	
	Equip Pool Rental			1,772,611		1,772,611	
	Stores-Non Stock			16,211		16,211	
	Info Systems			130,166		130,166	
	Insurance-Liab/Prop			99,934		99,934	
	Capital Outlay			178,200		178,200	
	Subtotal			6,439,398		6,439,398	
	Labor & Other Operating Costs			24,861,357		24,815,047	22,296,928
ADDITIONAL EQUIPMENT	Addition of a Quint			N/A		134,272	
	Equip Rental Rate for Quint			N/A		165,000	
	Less 1 Squad (#880 Annual Rate)			N/A		(45,228)	
	Less 2 Engines (#555, 556 Annual Rate)			N/A		(225,510)	
	Additional Equipment Subtotal			N/A		28,534	295,293
	Total Costs			24,861,357		24,843,581	22,592,221
	Revenue Offset			(150,000)		(150,000)	N/A
	Additional Services			-		-	270,718
	Pension Obligation			Included		Included	3,545,268
	Retired Medical Premium			Included		Included	83,928
	Additional Savings (Excl. One-Time)			-		-	(293,012)
	TOTAL COST FOR FIRE SERVICES			24,711,357		24,693,581	26,199,123

10-Year Forecast – (2.92% Increase)

		FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	Total
CITY COSTS WITH OCFA	Annual Contract (2.92%)	22,191,928	22,839,932	23,506,858	24,193,259	24,899,702	25,626,773	26,375,075	27,145,227	27,937,868	28,753,653	253,470,275
	Annual Facility Revolving Fund ($15,000 x 7)	105,000	105,000	105,000	105,000	105,000	105,000	105,000	105,000	105,000	105,000	1,050,000
	Equipment Replacement (3% Per OCFA)	295,293	304,152	313,276	322,675	332,355	342,326	352,595	363,173	374,068	385,290	3,385,203
	Start -Up (0%, 10 Years, $1,136,225)	113,623	113,623	113,623	113,623	113,623	113,623	113,623	113,623	113,623	113,623	1,136,225
	Capital Improvements Required	0	0	0	0	0	0	0	0	0	0	0
	Asbestos Certification	20,740	0	0	0	0	0	0	0	0	0	20,740
	Proposal Cost Reimbursement	(75,000)	0	0	0	0	0	0	0	0	0	(75,000)
	Total OCFA Estimated Contract Costs	**22,651,584**	**23,362,707**	**24,038,757**	**24,734,556**	**25,450,679**	**26,187,721**	**26,946,293**	**27,727,023**	**28,530,558**	**29,357,566**	**258,987,443**
	City Continuation of Services Not Included In OCFA											
	Add Position for EOC Management	175,000	178,500	182,070	185,711	189,426	193,214	197,078	201,020	205,040	209,141	1,916,201
	Hazmat Clean Up (Ocean Blue)	57,000	57,000	57,000	57,000	57,000	57,000	57,000	57,000	57,000	57,000	570,000
	Records Management	38,718	13,718	13,718	13,718	13,718	13,718	0	0	0	0	107,308
	Total Additional Services	**270,718**	**249,218**	**252,788**	**256,429**	**260,144**	**263,932**	**254,078**	**258,020**	**262,040**	**266,141**	**2,593,509**
	Pension Obligation (Pre-OCFA Unfunded Liability)	**3,545,268**	**4,132,425**	**4,570,860**	**5,085,056**	**5,510,997**	**5,773,377**	**6,056,543**	**6,029,900**	**6,210,798**	**6,397,122**	**53,312,346**
	Retired Medical Premium Contribution	**83,928**	**86,026**	**88,177**	**90,381**	**92,641**	**94,957**	**97,331**	**99,764**	**102,258**	**104,815**	**940,277**
	Total Projected Costs	26,551,498	27,830,376	28,950,582	30,166,422	31,314,461	32,319,987	33,354,245	34,114,707	35,105,655	36,125,644	315,833,574
	Additional Savings: Insurance Premiums	(100,000)	(110,000)	(121,000)	(133,100)	(146,410)	(161,051)	(177,156)	(194,872)	(214,359)	(235,795)	(1,593,742)
	Annual Facility Maintenance Savings	(105,000)	(105,000)	(105,000)	(105,000)	(105,000)	(105,000)	(105,000)	(105,000)	(105,000)	(105,000)	(1,050,000)
	Utilities	(88,012)	(90,652)	(93,372)	(96,173)	(99,058)	(102,030)	(105,091)	(108,244)	(111,491)	(114,836)	(1,008,960)
	One time Sell Off of Fire Equipment	*(190,000)*	0	0	0	0	0	0	0	0	0	(190,000)
	One-time Fleet Management Cash Availability	*(2,549,414)*	0	0	0	0	0	0	0	0	0	(2,549,414)
	Total Cost for Fire Services with OCFA	23,519,072	27,524,723	28,631,210	29,832,149	30,963,992	31,951,906	32,966,998	33,706,591	34,674,805	35,670,013	309,441,460
CITY COSTS GG FIRE	**Pension Obligation (Pre-OCFA Unfunded Liability)**	**3,545,268**	**4,132,425**	**4,570,860**	**5,085,056**	**5,510,997**	**5,773,377**	**6,056,543**	**6,029,900**	**6,210,798**	**6,397,122**	**53,312,346**
	Retired Medical Premium Contribution	**83,928**	**86,026**	**88,177**	**90,381**	**92,641**	**94,957**	**97,331**	**99,764**	**102,258**	**104,815**	**940,277**
	Labor (2.92%)	17,244,711	17,748,257	18,266,506	18,799,888	19,348,844	19,913,831	20,495,314	21,093,778	21,709,716	22,343,640	196,964,483
	Other Operating Costs (2.92%)	3,969,674	4,085,588	4,204,888	4,327,670	4,454,038	4,584,096	4,717,952	4,855,716	4,997,503	5,143,430	45,340,556
	Total Fire Budget	**24,843,581**	**26,052,296**	**27,130,430**	**28,302,995**	**29,406,521**	**30,366,261**	**31,367,140**	**32,079,158**	**33,020,275**	**33,989,006**	**296,557,664**
	Fire Dept Revenue Offset	(150,000)	(153,000)	(156,060)	(159,181)	(162,365)	(165,612)	(168,924)	(172,303)	(175,749)	(179,264)	(1,642,458)
	Net Cost of Fire Dept with City	**24,693,581**	**25,899,296**	**26,974,370**	**28,143,814**	**29,244,156**	**30,200,649**	**31,198,216**	**31,906,855**	**32,844,527**	**33,809,742**	**294,915,205**
	Estimated Projected Savings/(Additional Cost)	**1,174,509**	**(1,625,427)**	**(1,656,840)**	**(1,688,335)**	**(1,719,837)**	**(1,751,257)**	**(1,768,782)**	**(1,799,736)**	**(1,830,279)**	**(1,860,271)**	**(14,526,255)**

10-Year Forecast – (4.5% Increase)

		FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	Total
CITY COSTS WITH OCFA	Annual Contract (4.5%)	22,191,928	23,190,565	24,234,140	25,324,676	26,464,287	27,655,180	28,899,663	30,200,148	31,559,154	32,979,316	272,699,058
	Annual Facility Revolving Fund ($15,000 x 7)	105,000	105,000	105,000	105,000	105,000	105,000	105,000	105,000	105,000	105,000	1,050,000
	Equipment Replacement (3% Per OCFA)	295,293	304,152	313,276	322,675	332,355	342,326	352,595	363,173	374,068	385,290	3,385,203
	Start -Up (0%, 10 Years, $1,136,225)	113,623	113,623	113,623	113,623	113,623	113,623	113,623	113,623	113,623	113,623	1,136,225
	Capital Improvements Required	0	0	0	0	0	0	0	0	0	0	0
	Asbestos Certification	20,740	0	0	0	0	0	0	0	0	0	20,740
	Proposal Cost Reimbursement	(75,000)	0	0	0	0	0	0	0	0	0	(75,000)
	Total OCFA Estimated Contract Costs	**22,651,584**	**23,713,339**	**24,766,039**	**25,865,974**	**27,015,264**	**28,216,128**	**29,470,881**	**30,781,943**	**32,151,845**	**33,583,229**	**278,216,226**
	City Continuation of Services Not Included In OCFA											
	Add Position for EOC Management	175,000	178,500	182,070	185,711	189,426	193,214	197,078	201,020	205,040	209,141	1,916,201
	Hazmat Clean Up (Ocean Blue)	57,000	57,000	57,000	57,000	57,000	57,000	57,000	57,000	57,000	57,000	570,000
	Records Management	38,718	13,718	13,718	13,718	13,718	13,718	0	0	0	0	107,308
	Total Additional Services	**270,718**	**249,218**	**252,788**	**256,429**	**260,144**	**263,932**	**254,078**	**258,020**	**262,040**	**266,141**	**2,593,509**
	Pension Obligation (Pre-OCFA Unfunded Liability)	**3,545,268**	**4,132,425**	**4,570,860**	**5,085,056**	**5,510,997**	**5,773,377**	**6,056,543**	**6,029,900**	**6,210,798**	**6,397,122**	**53,312,346**
	Retired Medical Premium Contribution	**83,928**	**86,026**	**88,177**	**90,381**	**92,641**	**94,957**	**97,331**	**99,764**	**102,258**	**104,815**	**940,277**
	Total Projected Costs	26,551,498	28,181,005	29,677,864	31,297,840	32,879,046	34,348,394	35,878,833	37,169,628	38,726,942	40,351,307	335,062,359
	Additional Savings: Insurance Premiums	(100,000)	(110,000)	(121,000)	(133,100)	(146,410)	(161,051)	(177,156)	(194,872)	(214,359)	(235,795)	(1,593,742)
	Annual Facility Maintenance Savings	(105,000)	(105,000)	(105,000)	(105,000)	(105,000)	(105,000)	(105,000)	(105,000)	(105,000)	(105,000)	(1,050,000)
	Utilities	(88,012)	(90,652)	(93,372)	(96,173)	(99,058)	(102,030)	(105,091)	(108,244)	(111,491)	(114,836)	(1,008,960)
	One time Sell Off of Fire Equipment	*(190,000)*	0	0	0	0	0	0	0	0	0	(190,000)
	One-time Fleet Management Cash Availability	*(2,549,414)*	0	0	0	0	0	0	0	0	0	(2,549,414)
	Total Cost for Fire Services with OCFA	23,519,072	27,875,353	29,358,492	30,963,567	32,528,577	33,980,313	35,491,586	36,761,512	38,296,092	39,895,676	328,670,243
CITY COSTS GG FINE	**Pension Obligation (Pre-OCFA Unfunded Liability)**	**3,545,268**	**4,132,425**	**4,570,860**	**5,085,056**	**5,510,997**	**5,773,377**	**6,056,543**	**6,029,900**	**6,210,798**	**6,397,122**	**53,312,346**
	Retired Medical Premium Contribution	**83,928**	**86,026**	**88,177**	**90,381**	**92,641**	**94,957**	**97,331**	**99,764**	**102,258**	**104,815**	**940,277**
	Labor (4.5%)	17,244,711	18,020,723	18,831,656	19,679,080	20,564,639	21,490,047	22,457,099	23,467,669	24,523,714	25,627,281	211,906,619
	Other Operating Costs (4.5%)	3,969,674	4,148,309	4,334,983	4,530,057	4,733,910	4,946,936	5,169,548	5,402,178	5,645,276	5,899,313	48,780,185
	Total Fire Budget	**24,843,581**	**26,387,484**	**27,825,676**	**29,384,575**	**30,902,187**	**32,305,317**	**33,780,521**	**34,999,511**	**36,482,046**	**38,028,531**	**314,939,428**
	Fire Dept Revenue Offset	(150,000)	(153,000)	(156,060)	(159,181)	(162,365)	(165,612)	(168,924)	(172,303)	(175,749)	(179,264)	(1,642,458)
	Net Cost of Fire Dept with City	**24,693,581**	**26,234,484**	**27,669,616**	**29,225,394**	**30,739,822**	**32,139,705**	**33,611,597**	**34,827,208**	**36,306,298**	**37,849,267**	**313,296,970**
	Estimated Projected Savings/(Additional Cost)	**1,174,509**	**(1,640,872)**	**(1,688,876)**	**(1,738,174)**	**(1,788,756)**	**(1,840,608)**	**(1,879,989)**	**(1,934,304)**	**(1,989,795)**	**(2,046,409)**	**(15,373,273)**

Plan Check Fees – Planning & Development Section

- OCFA Achieves Full Cost Recovery
- Fees Directed Towards Businesses, Developers, Contractors, etc.

Plan Check and Construction Inspection Permit Cost Per Permit		
	Garden Grove	OCFA
NFPA 13D System	$125.00 plus $3.00 per head after 4 heads	$625.00
NFPA 13 and 13R Systems	$347.00 for 1-100 heads	$718.00
Underground Fire Service (Hydrants/DCDA/Risers/etc.)	$327.00	$575.00
Fire Alarm Systems Plan Check	$411.50 for 11-50 initiating/indicating devices	$591.00 for 6-15 initiating devices and/or ≤ 21-40 notification devices
Fire Alarm Systems Plan Check	$559.50 for 51-100 initiating/indicating devices	$999.00 for 16-30 initiating and/or 41-80 notification devices
Fire Alarm Systems Plan Check	$599.50+$1.75 per device	$1353.00 for more than 30 initiating devices and/or more than 80 notification devices
Fire Extinguishing Hood Systems	$264.50+$5.00/nozzle	$475.00
Commercial Tenant Improvements under 6,000 sqft.	15% of Building Permit Fee, Not to Exceed $50.00	$488.00
New Commercial or Office Buildings under 6,000 sqft.	2.5% of Building Permit Fee, Not to Exceed $200.00	$488.00

Permit Fees – Prevention Field Services Section

- Issuance of Annual Operational Permits
- Fees Paid by Local Businesses, Building Owners, and Special Event Contractors

Top 10 Operational Permit Cost Per Business/Permit

	Garden Grove	OCFA Issuance	OCFA Re-Issueance
Hazardous Materials - Use, Handling or Storage	$0.00	$152.00 to $234.00	$145.00 to $156.00
A-2 Assembly uses intended for food an/or drink consumption	$170.00	$557 for <300 occ. $856 for >300 occ.	$400 for <300 occ. $479 for >300 occ.
Welding and Cutting Operations.	$85.00	$184.00	$138.00
Garages/Motor Vehicle Repair	$125.00	$283.00	$225.00
High-Piled Combustible Stock	$340.00	$397.00	$243.00
Day Care Facilities, 7 or more occupants	$85.00	$168 Per annual inspection	No reissuance
ASSEMBLY A-3 50-300 occupant load	$170.00	$557 for <300 occ. $856 for >300 occ.	$400 for <300 occ. $479 for >300 occ.
SPRAYING/DIPPING - flammable/combustible liquids	$170.00	$381.00	$138.00
FLAMMABLE / COMBUSTIBLE LIQUID - more than 120 gallons storage / transport	$170.00	$234.00	$156.00
DUST PRODUCING IN F OCCUPANCIES	$85.00	$234.00	$173.00


17
QUESTIONS?

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 (apples 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)

#1 Current GGFD

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

#2 Comparable GGFD

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

#3 OCFA FSP

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

STATION	#2 GGFD *14/PM	#3 OCFA/FSP*14/PM
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.

<u>Examples of this Collaboration;</u>

- 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 Oversite

#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

Response Times

- No Improvement

Retention / Recruitment

- No Improvement

Infrastructure

- No Improvement

Risk

Response Times

- Continued Poor Response Times
  - **FUOS 65%**
  - **EEMS 28.20%**
  - **EFF 30%**

Retention / Recruitment

- 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
- Ongoing compensation issues affecting employee moral

Infrastructure

- Challenges with aging infrastructure continues

#2 Comparable GGFD (Risk/Benefit)

Benefits

Response Times

- Improved Response Times (6 Minutes)
  - **FUOS 63%**
  - **EEMS 63%**
  - **EFF 90%**
- All 7 Fire Stations will have 2 Paramedics
- Improved Effective Fire Force Times
- Engine company 5 upgraded to quint

Retention / Recruitment

- Increased entry-level compensation will assist in recruiting the best new firefighter/paramedics
- Competitive compensation will assure firefighter/paramedics stay with department

Infrastructure

Risk

Response Times

- None

Retention / Recruitment

- Exact compensation cost increase is unknown. Will require negotiation process with labor.

Infrastructure

- 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

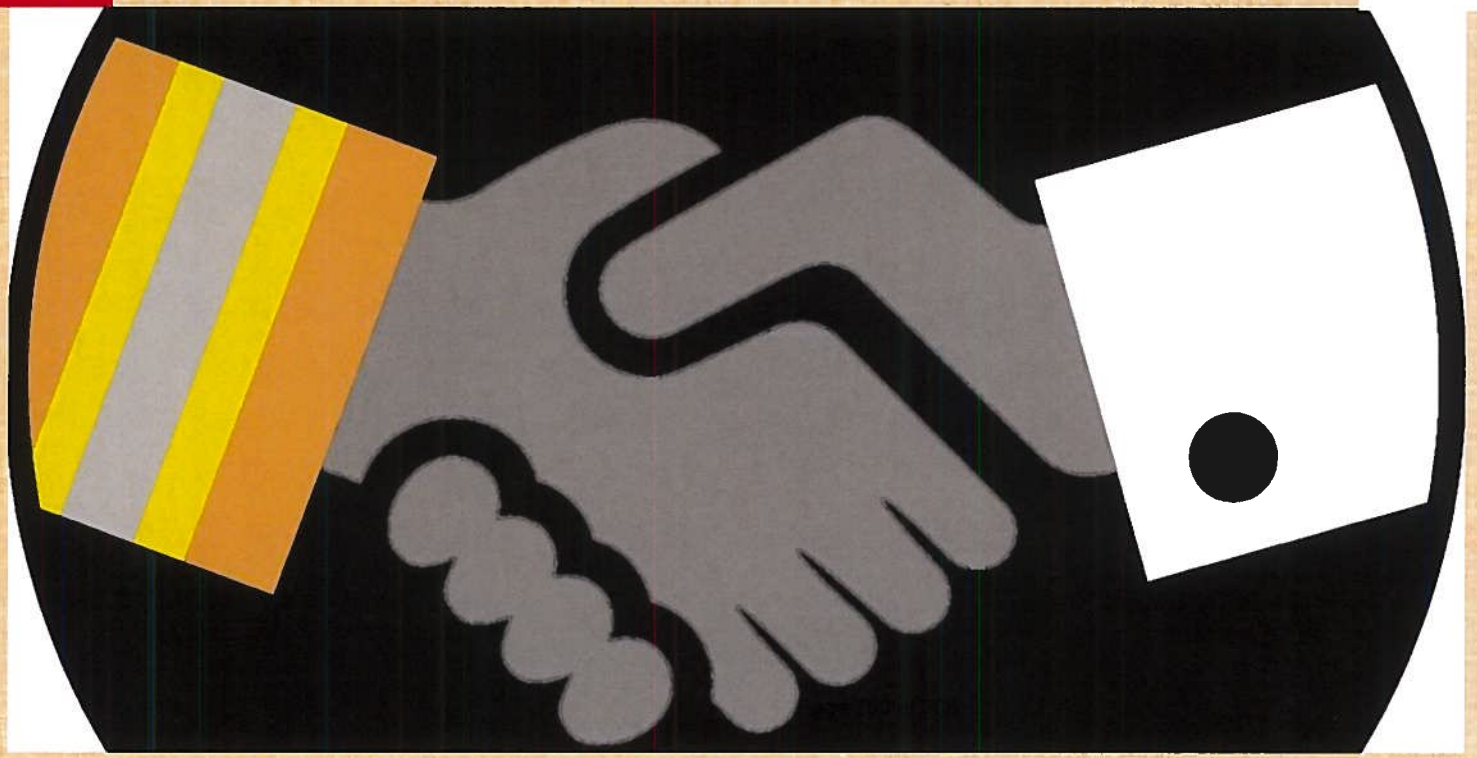
Stand Alone Truck Company

- 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

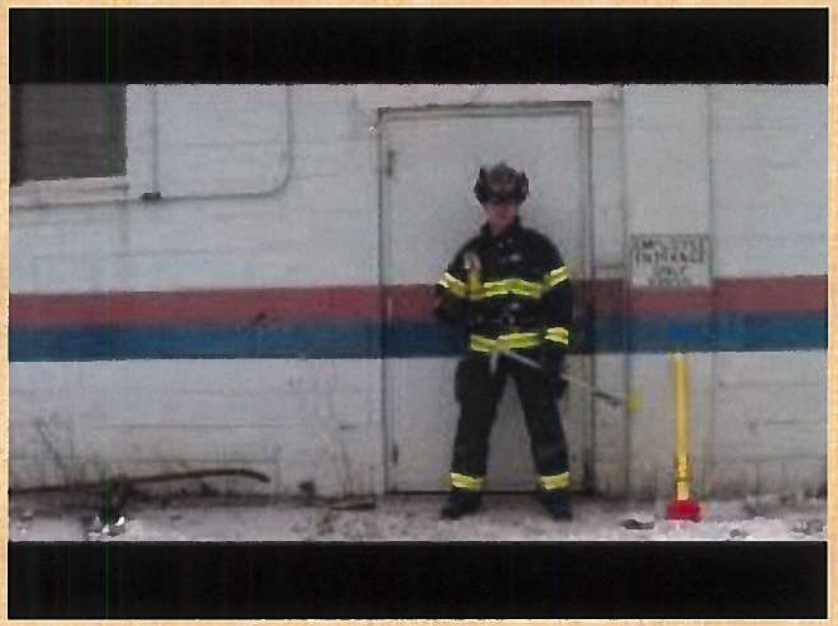
FIRE
ORANGE COUNTY
CALIFORNIA
AUTHORITY

GARDEN GROVE



2018 Workshops

- At NO time have the Garden Grove Firefighter's been invited to meetings discussing the OCFA FSP



Why are we HERE today ?

2016 City Budget Workshop

- Rising Pension Costs

Actor John Heard found dead in local hotel room

Actor John Heard, whose many roles included the father in the "Home Alone" series and a corrupt detective in "The Sopranos," died in a Palo Alto hotel room following surgery at Stanford Hospital. He was 71.

Heard was found dead Friday by a maid at the Sheraton Hotel at 625 El Camino Real. A representative for Heard said the actor had "minor back surgery" earlier in the

[See HEARD, page 18]

Daily Post

Locally owned. Independent

City's pension costs to jump

BY ELAINE GOODMAN

As shortfall increases to $52 million

The city of Burlingame's employee pension shortfall has swelled to an estimated $51.9 million — up 5.3% from two years ago — but that's not the only bad news the city is facing when it comes to pensions.

In addition to the total shortfall, the amount that the city is required to pay each year toward employee pensions is expected to grow to $13.5 million in the next 10 years — more than double the current $5.7 million. That's a sizeable amount for a city that is expecting general fund revenues of $69 million this year.

City officials are looking at a variety of strategies to get ahead of the rapidly rising payments, such as setting aside money in a dedicated fund to use when the increased payments kick in. The City Council heard a brief presentation on the issue on July 3 and is expected to have a more in-depth discussion in two or three months.

"More than likely, we'll hit a recession again," said councilwoman Ann Keighran. "And so we have to make

[See PENSION, page 19]

THE UPDATE

In the past five sessions

Dow -67.67	Nasdaq +78.39	QS -0.77
21,580.07	6,387.75	45.77

Gold 1,254.30 +27.70

courtesy of Mish Int'l (650) 324-8110

National Debt: $19,968,006,349,473

Developer tries again

To push big office project to replace Malibu Grand Prix

BY EMILY MIBACH

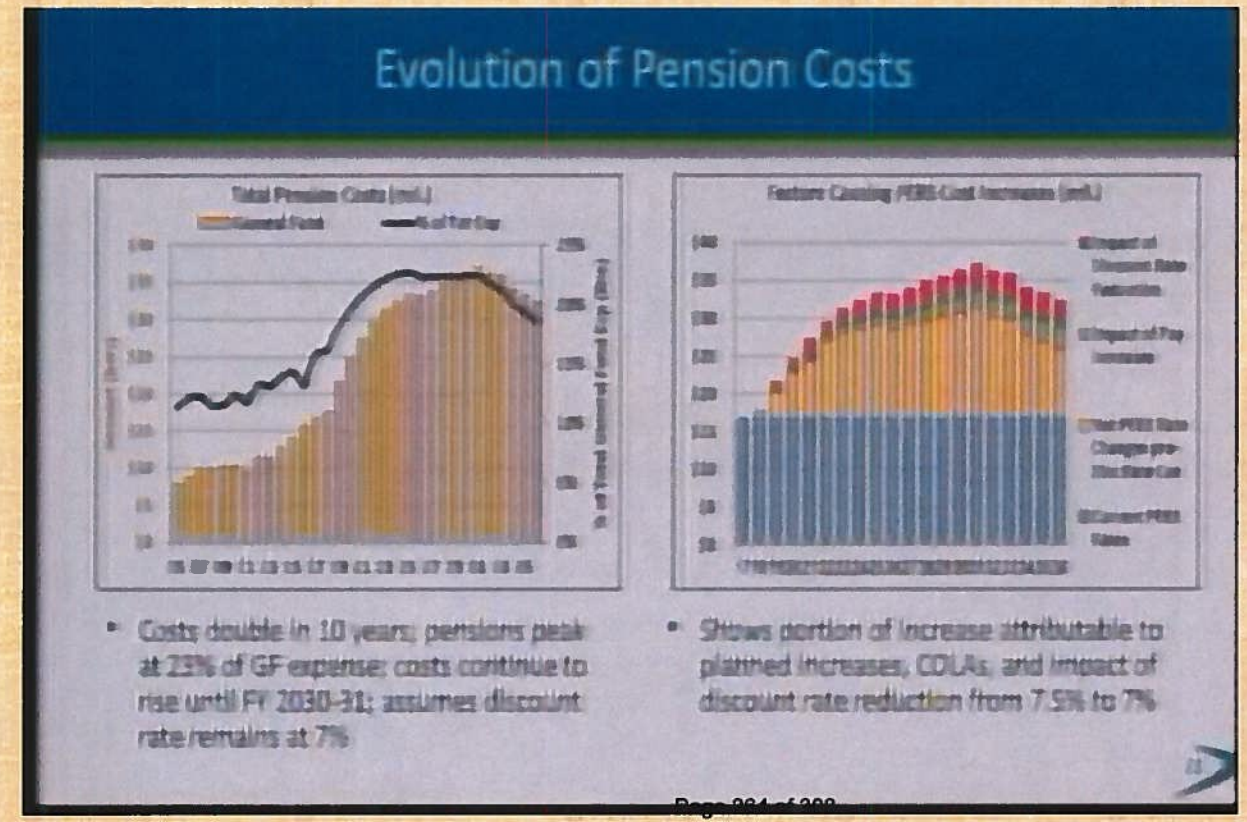
2017 Negotiations

- City unable to address Recruitment and Retention Issue
- City states Increasing Pension Debt
- City states Increasing Health Insurance Cost
- City states Unable to pay Bills

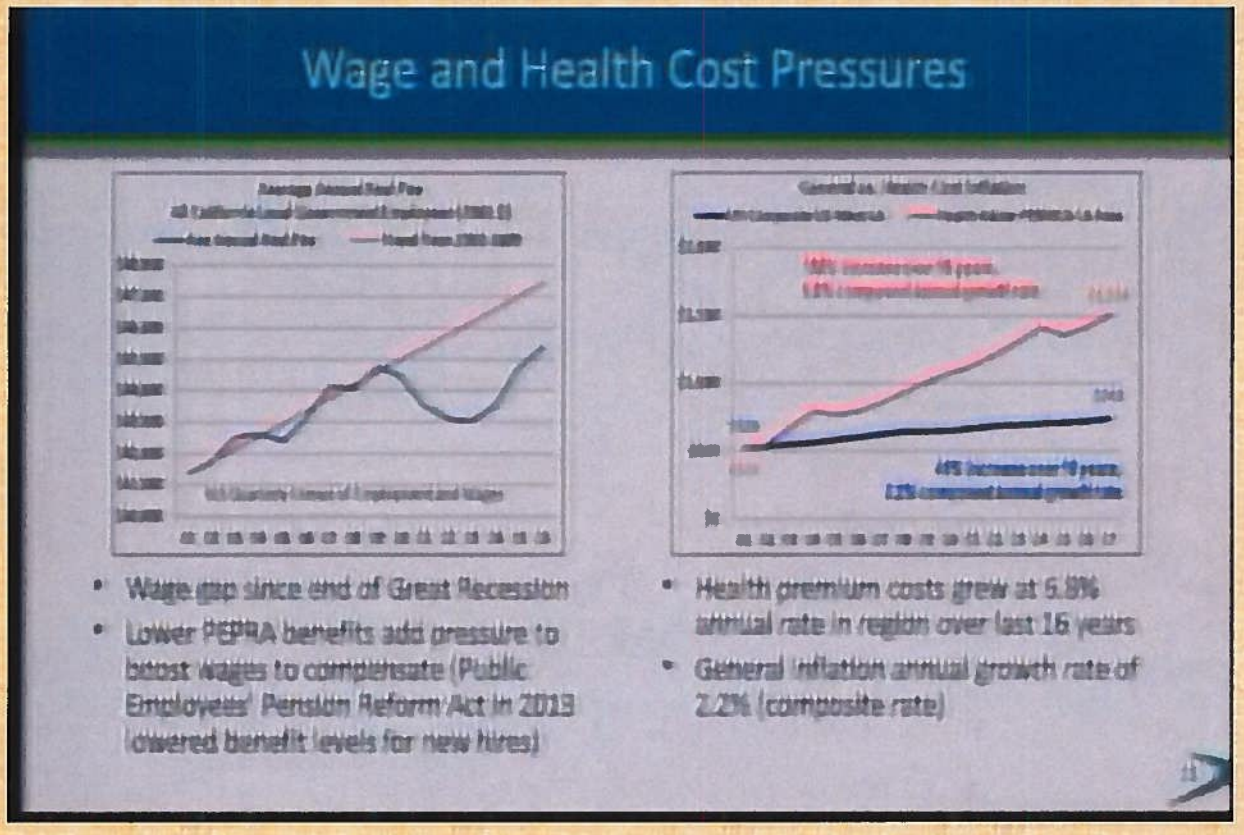
Garden Grove Firefighters ask to look at a consolidation model

City spends $ 75,000 dollars to get a bid from OCFA

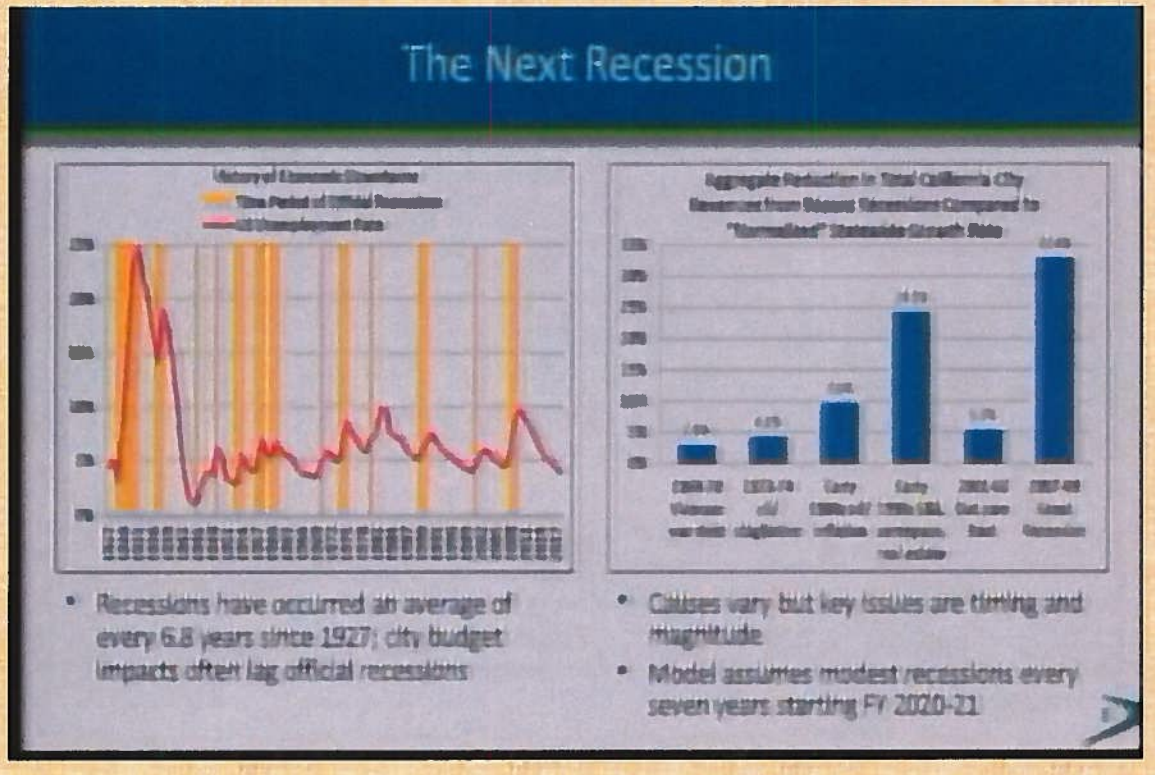
Pension Costs/ Pension Debt



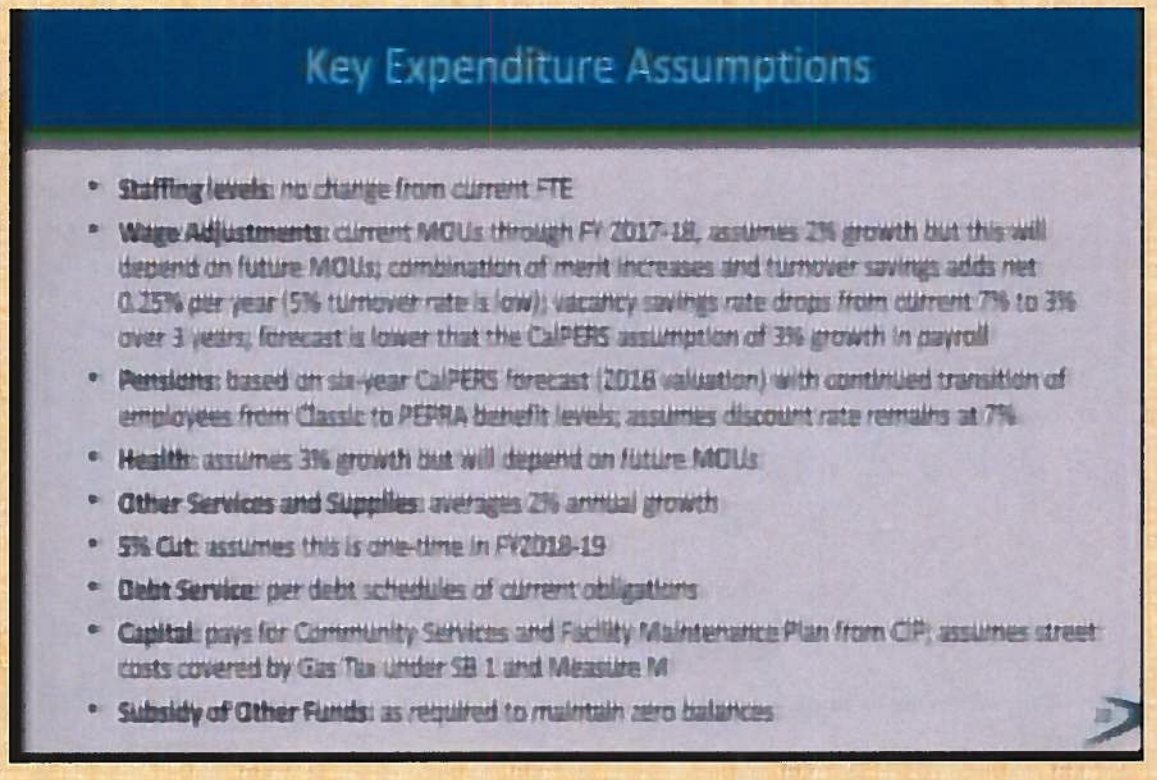
Health Care Costs



Staffing Levels/Calls for Service



Staffing Levels/Calls for Service



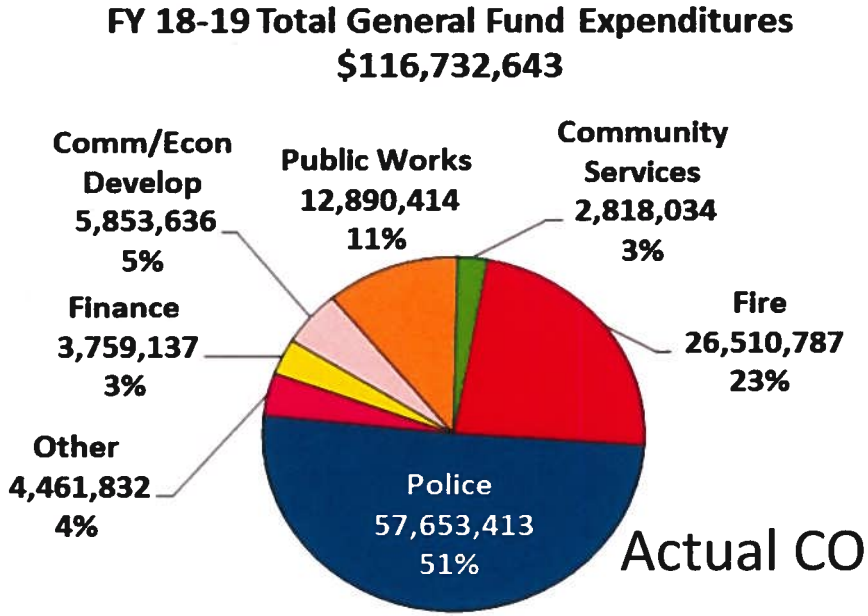
Staffing Levels/Calls for Service

GG Budget

Management Partners

DEPARTMENTS	FY 16-17 02	FY 17-18 03	FY 18-19 04
Fire	$ 23,000.8	$ 24,060.1	$ 25,122.7

BUDGET



Actual COST

Call Load in Last Five Years 40% Increase

2014 Calls for Service	11,200
2015 Calls for Service	14,627
2016 Calls for Service	14,901
2017 Calls for Service	15,093
2018 Calls for Service on Target	15,700

GG Fire Service Issues

- 40% increase in Call Load in 5 years
- Poor Response Times
- Recruitment
- Retention
- Low Morale
- Pension Debt

3 Deployment Models

#1 Current Plan

#2 2016 GG Fire Deployment Plan

#3 OCFA Deployment Plan

Apples to Apples Cost Comparison

Deployment Model # 1 – GG Current Plan

Current Deployment Model Issues

- 35-40% Increase in calls for service

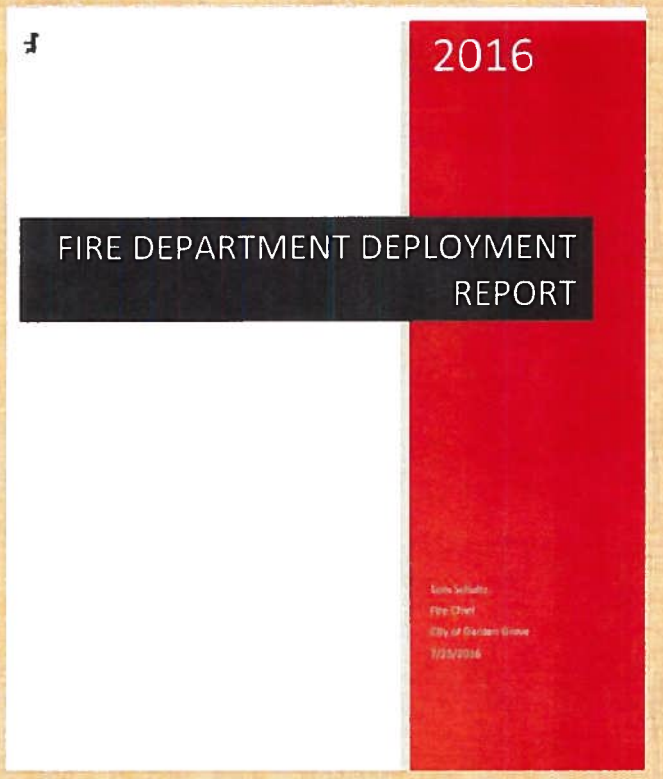
Current Deployment DOES NOT meet Model NFPA 1710

- EEMS 28.20%
- EFF 30%

Responses that meet the minimum Standard

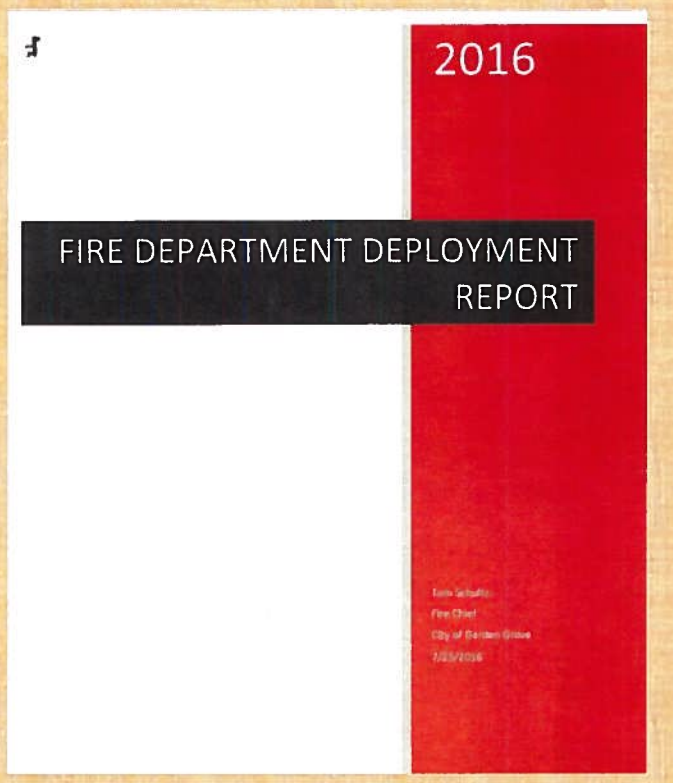
- Recruitment and Retention
- Infrastructure
- Low Morale
- Further Increasing Pension Debt

Deployment Model # 2



Submitted to the City in July 2016

Deployment Model # 2



2016 GGFD New Deployment Report

Addresses response times ONLY

<u>DOSE NOT FIX</u>

Recruitment

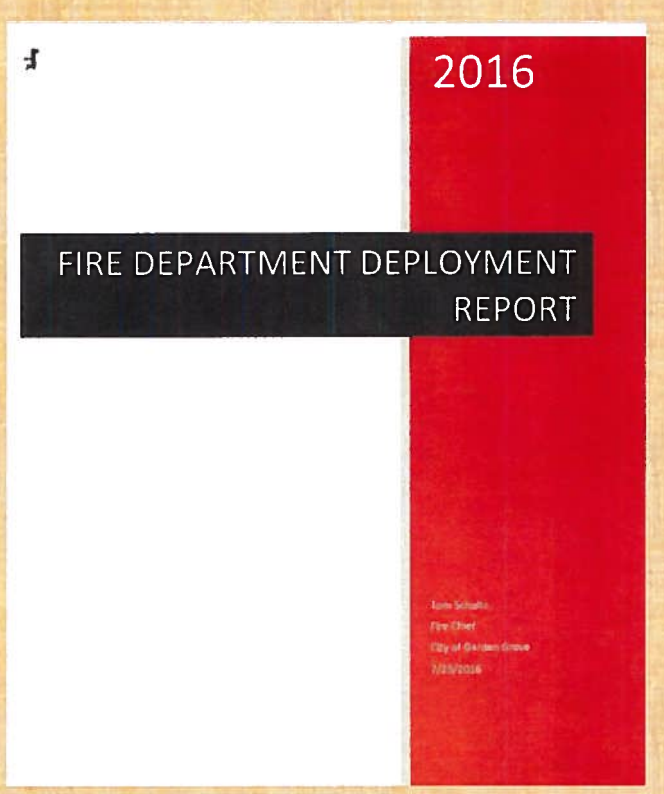
Retention

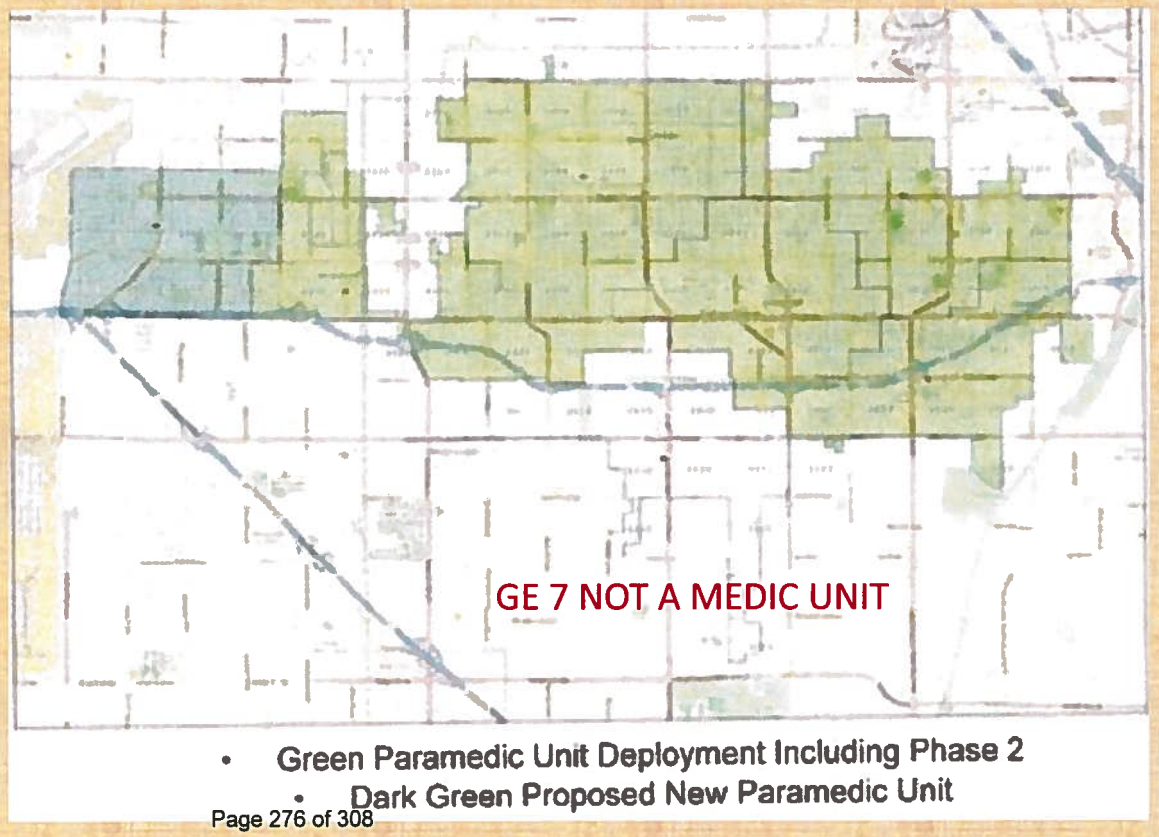
Low Morale

ADDS to Increasing Pension Debt

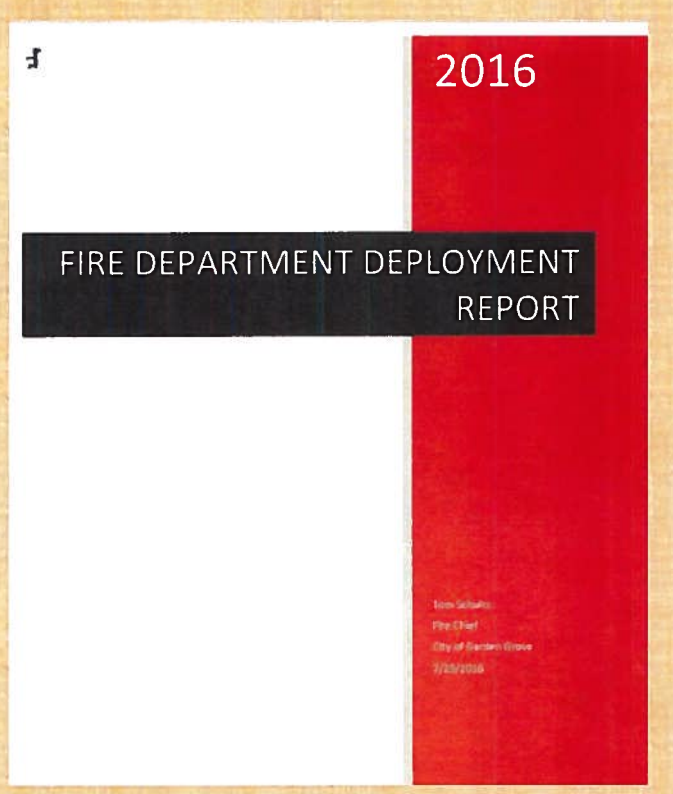
Health Care Cost Increasing

Fire Station 7 NOT a Paramedic Unit





2 – 2.6 Million added to Budget



Phase 1

Paramedic Assessment Funding Impact
Engine 6 Paramedic Upgrade $605,235

Phase 2

Paramedic Assessment Funding Impact
Engine 3 Paramedic Upgrade $605,235
Nurse/Paramedic Coordinator $254,215
Cost From Phase 1 $605,235
Total Cost: $1,464.685

Phase 3

Paramedic Assessment Funding Impact
Engine 4 Paramedic Upgrade $605,235
Cost From (Phase 1 & 2) $1,464.685
Total Cost: $2,069.920

OCFA Deployment Model # 3

Can Manage Todays and Tomorrows Increased Calls for Service

Eliminates Recruitment and Retention Issues Immediately

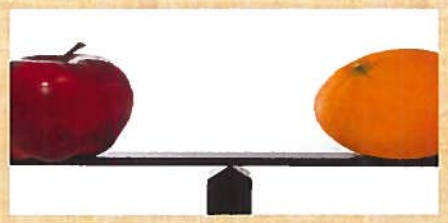
Addresses Infrastructure Issues

Eliminates ANY FURTHER accrual of
Pension Debt
Health Care Costs
Workers Comp

Apples to Apples

- Same deployment but not same level of service
- Loss of 4 Captains Position
- Loss of 3 Engineers Positions
- Stagnation with Promotion (further decreases morale)
- 2-4 Years to deploy
- Does NOT address Recruitment
- Does NOT address Retention ONLY ADDS
- Loss of 6 FF Positions, may have to terminate 4 existing FFs
- 350K to train 4 FF's to become Paramedics
- More Apparatus to purchase and maintain
- INCREASES FURTHER PENSION DEBT

Apples to Apple



OCFA

GG Fire INFRASTRUTRE

<u>Yard</u>

Currently NO truck can fit into yard.

Have to ADD 3 Quints.

<u>MECHANIC</u>

Currently only 1 for 17-20 pieces of fire equipment.

Need to add X 1 additional mechanic. $125K

24 Fleet Service Personnel

Modern Maintenance Service Area

24 hr Mobile Mechanic

Parts Department on Site

Quints

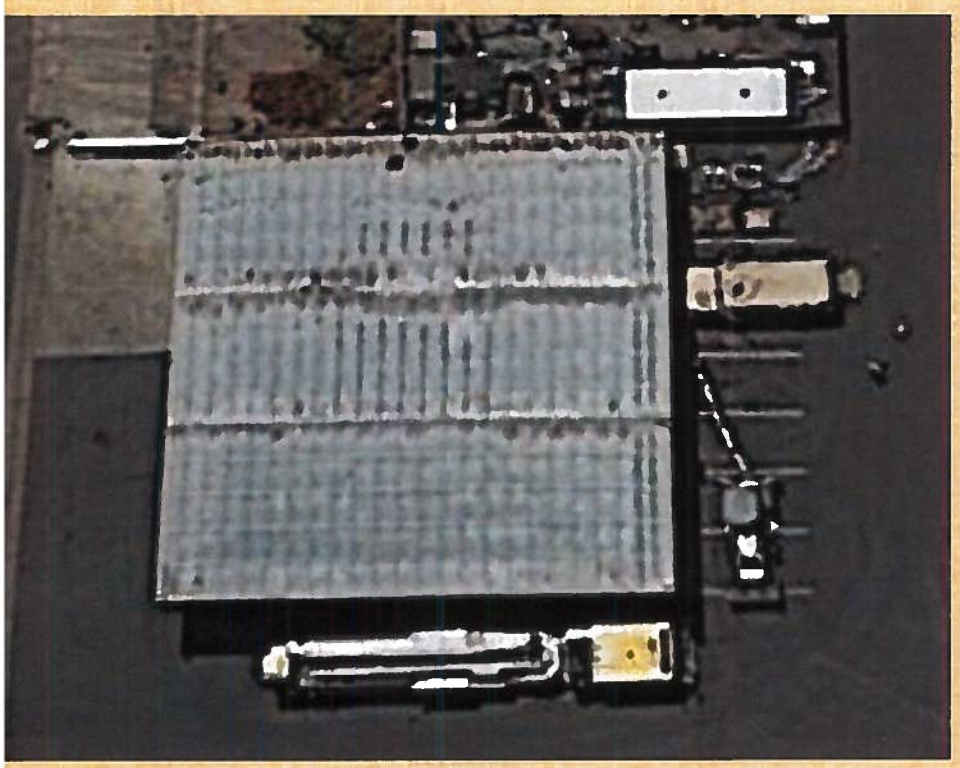
1.4 million Station 1

1.4 million Station 5

1.4 million Reserve Unit

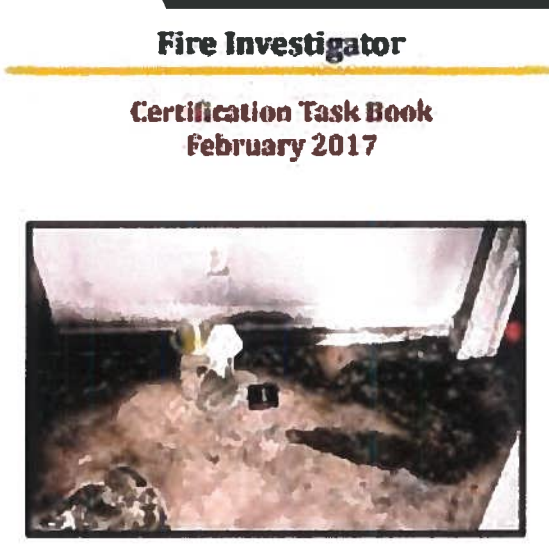
250K to Equip Reserve Quint

City Yard Fire Maintenance



OCFA Infrastructure

Garden Grove Full Time Fire Investigator



- Full Time Investigator position cut in 2005
- Was a Temporary Cost Saving Measure
- Shift Investigator Program created as a stop gap

Apples to Apples Need to Add Full Time Fire Investigator

Full Time Fire Investigator

Anaheim Fire Department

40 hr and Shift Investigators

Orange Fire Department

40 hr and Shift Investigators

Garden Grove

NO 40 hr Fire Investigator ONLY Shift Investigators

OCFA Fire Investigation UNIT

40 hr Fire Investigator

40 hr Police Officer

Shift Fire Investigators

Recruitment Issue

Entry Level Pay Currently 17% below 5th in County

Fire Chief Stated it was a serious issue

Labor has also recognized it

GG Fire Fighter Starting Pay $20.52

GG Paramedic Starting Pay $ 23.60

Average Starting pay for Firefighters $23-$24.05

Average Starting pay for Paramedics $26.36-$27.66

FIREFIGHTER PARAMEDIC

Salary	$7,072.00 - $8,760.27 Monthly	Location	Huntington Beach, CA
Job Type	Full-Time $29.14 hr	Department	Fire Department
Job Number	0226-0818		
Closing	10/6/2018 11:59 PM Pacific		

Recruitment Fix – Drop first 2 steps
Now 7 years to top step

Paramedic Steps		Paramedic Steps		New Paramedic Steps	
A Step	$23.60	A Step	$23.60		
B Step	$24.78	B Step	$24.78		
C step	$26.01	C step	$26.01	A	$26.01
D Step		D Step		B	
E Step	$161,086	E Step		C	
F Step		F Step		D	$177,194
G Step		G Step		E	
H Step		H Step		F	
I Step		I Step		G	

Total Cost of a Paramedic

2016 Plan

Paramedic Assessment Funding Impact	
Engine 6 Paramedic Upgrade	
$605,235	$201,745

Apples to Apples $177,000

Retention- Competitive Wage

- Currently 10.19% below 5th in County
- We have never asked to be in the top three
- We have had several paramedics leave

Retention Solution – Competitive Wage

- 5% FY 18-19
- 4% FY 19-20
- 2% FY 20-21

Labor Cost – Labor Inflator

Labor (2.92%)	17,244,711
Other Operating Costs (2.92%)	3,969,674

2.92 % Labor Inflator INCLUDES

Future PERS Cost 2.75%
Medical 1.45%
Worker Comp Expenses
Health Care Cost Increases
PEMHCA – Public Employees Medical & Hospital Care Act
Step Increases
Promotions

10-Year Forecast - (2.92% Increase)

	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	Total
Annual Contract (2.9%)	22,191,928	22,839,932	23,506,858	24,193,259	24,899,702	25,626,773	26,375,075	27,145,227	27,937,868	28,753,653	253,470,275
Annual Facility Revolving Fund ($15,000 x 7)	105,000	105,000	105,000	105,000	105,000	105,000	105,000	105,000	105,000	105,000	1,050,000
Equipment Replacement (3% Per OCFA)	295,293	304,152	313,276	322,675	332,355	342,326	352,595	363,173	374,068	385,290	3,385,203
Start - Up (0%, 10 Years, $1,136,225)	113,623	113,623	113,623	113,623	113,623	113,623	113,623	113,623	113,623	113,623	1,136,225
Capital Improvements Required	-	-	-	-	-	-	-	-	-	-	-
Asbestos Certification	20,740	-	-	-	-	-	-	-	-	-	20,740
Proposal Cost Reimbursement	(75,000)	-	-	-	-	-	-	-	-	-	(75,000)
Total OCFA Estimated Contract Costs	**22,651,584**	**23,362,707**	**24,038,757**	**24,734,556**	**25,450,679**	**26,187,721**	**26,946,293**	**27,727,023**	**28,530,558**	**29,357,566**	**258,987,443**
City Continuation of Services Not Included in OCFA											
Add Position for EOC Management	175,000	178,500	182,070	185,711	189,426	193,214	197,078	201,020	205,040	209,141	1,916,201
Hazmat Clean Up (Ocean Blue)	57,000	57,000	57,000	57,000	57,000	57,000	57,000	57,000	57,000	57,000	570,000
Records Management	38,718	13,718	13,718	13,718	13,718	13,718	-	-	-	-	107,308
Total Additional Services	**270,718**	**249,218**	**252,788**	**256,429**	**260,144**	**263,932**	**254,078**	**258,020**	**262,040**	**266,141**	**2,593,509**
Pension Obligation (Pre-OCFA Unfunded Liability)	**3,545,268**	**4,132,425**	**4,570,860**	**5,085,056**	**5,510,997**	**5,773,377**	**6,056,543**	**6,029,900**	**6,210,798**	**6,397,122**	**53,312,346**
Retiree Medical Premium Contribution	**83,928**	**86,026**	**88,177**	**90,381**	**92,641**	**94,957**	**97,331**	**99,764**	**102,258**	**104,815**	**940,277**
Total Projected Costs	**26,551,498**	**27,830,376**	**28,950,582**	**30,166,422**	**31,314,461**	**32,319,987**	**33,354,245**	**34,114,707**	**35,105,655**	**36,125,644**	**315,833,576**
Additional Savings: Insurance Premiums	(100,000)	(110,000)	(121,000)	(133,100)	(146,410)	(161,051)	(177,156)	(194,872)	(214,359)	(235,795)	(1,593,742)
Annual Facility Maintenance Savings	(105,000)	(105,000)	(105,000)	(105,000)	(105,000)	(105,000)	(105,000)	(105,000)	(105,000)	(105,000)	(1,050,000)
Utilities	(88,012)	(90,652)	(93,372)	(96,173)	(99,058)	(102,030)	(105,091)	(108,244)	(111,491)	(114,836)	(1,008,959)
One time Sell Off of Fire Equipment	(190,000)	-	-	-	-	-	-	-	-	-	(190,000)
One-time Fleet Management Cash Availability	(2,549,414)	-	-	-	-	-	-	-	-	-	(2,549,414)
Total Cost for Fire Services with OCFA	**23,519,072**	**27,524,723**	**28,631,210**	**29,832,149**	**30,963,992**	**31,951,906**	**32,966,998**	**33,706,591**	**34,674,805**	**35,670,014**	**309,441,460**
Pension Obligation (Pre-OCFA Unfunded Liability)	**3,545,268**	**4,132,425**	**4,570,860**	**5,085,056**	**5,510,997**	**5,773,377**	**6,056,543**	**6,029,900**	**6,210,798**	**6,397,122**	**53,312,346**
Retiree Medical Premium Contribution	**83,928**	**86,026**	**88,177**	**90,381**	**92,641**	**94,957**	**97,331**	**99,764**	**102,258**	**104,815**	**940,277**
Labor (2.92%)	17,244,711	17,748,257	18,266,506	18,799,888	19,348,844	19,913,831	20,495,314	21,093,778	21,709,716	22,343,640	196,964,483
Other Operating Costs (2.92%)	3,969,674	4,085,588	4,204,888	4,327,670	4,454,038	4,584,096	4,717,952	4,855,716	4,997,503	5,143,430	45,340,556
Total Fire Budget	**24,843,581**	**26,052,296**	**27,130,430**	**28,302,995**	**29,406,521**	**30,366,261**	**31,367,140**	**32,079,158**	**33,020,275**	**33,989,006**	**296,557,663**
Fire Dept Revenue Offset	(150,000)	(153,000)	(156,060)	(159,181)	(162,365)	(165,612)	(168,924)	(172,303)	(175,749)	(179,264)	(1,642,458)
Net Cost of Fire Dept with City	**24,693,581**	**25,899,296**	**26,974,370**	**28,143,814**	**29,244,156**	**30,200,649**	**31,198,216**	**31,906,855**	**32,844,526**	**33,809,742**	**294,915,205**
Estimated Projected Savings/(Additional Cost)	**1,174,510**	**(1,625,427)**	**(1,656,840)**	**(1,688,335)**	**(1,719,837)**	**(1,751,257)**	**(1,768,782)**	**(1,799,736)**	**(1,830,279)**	**(1,860,271)**	**(14,526,255)**

Apples to Apples Cost Analysis

1 Time Cost 4 FF's trained to Paramedic $350K

1 Time Cost –Equip the Reserve Quint $250K

EOC- Bonus Only not a full time position -$11,000

Cost to add adequate Equipment/Apparatus support

X1 Mechanic $125k

Cost to return Fire investigation to 2005 Staffing Levels

X1 Full Time Fire investigator $217K

Cost of X3 Quints to provide sustainable service levels

1.1 million $136K

Annual maintenance $165K

Recruitment Solution -Drop first 2 steps

Increase Top step achievement from 9 to 7 years

Retention Solution-5% FY 18-19-4% FY 19-20-2% FY 20-21

1 Time Cost of Paramedic Training and Equipment for Reserve Quint

10-Year Forecast - (2.92% Increase)

	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	Total
Annual Contract (2.9%)	22,191,928	22,839,932	23,506,858	24,193,259	24,899,702	25,626,773	26,375,075	27,145,227	27,937,868	28,753,653	253,470,275
Annual Facility Revolving Fund ($15,000 x 7)	105,000	105,000	105,000	105,000	105,000	105,000	105,000	105,000	105,000	105,000	1,050,000
Equipment Replacement (3% Per OCFA)	295,293	304,152	313,276	322,675	332,355	342,326	352,595	363,173	374,068	385,290	3,385,203
Start - Up (0%, 10 Years, $1,136,225)	113,623	113,623	113,623	113,623	113,623	113,623	113,623	113,623	113,623	113,623	1,136,225
Capital Improvements Required	-	-	-	-	-	-	-	-	-	-	-
Asbestos Certification	20,740	-	-	-	-	-	-	-	-	-	20,740
Proposal Cost Reimbursement	(75,000)	-	-	-	-	-	-	-	-	-	(75,000)
Total OCFA Estimated Contract Costs	**22,651,584**	**23,362,707**	**24,038,757**	**24,734,556**	**25,450,679**	**26,187,721**	**26,946,293**	**27,727,023**	**28,530,558**	**29,357,566**	**258,987,443**
City Continuation of Services Not Included in OCFA											
Add Position for EOC Management	175,000	178,500	182,070	185,711	189,426	193,214	197,078	201,020	205,040	209,141	1,916,201
Hazmat Clean Up (Ocean Blue)	57,000	57,000	57,000	57,000	57,000	57,000	57,000	57,000	57,000	57,000	570,000
Records Management	38,718	13,718	13,718	13,718	13,718	13,718	-	-	-	-	107,308
Total Additional Services	**270,718**	**249,218**	**252,788**	**256,429**	**260,144**	**263,932**	**254,078**	**258,020**	**262,040**	**266,141**	**2,593,509**
Pension Obligation (Pre-OCFA Unfunded Liability)	**3,545,268**	**4,132,425**	**4,570,860**	**5,085,056**	**5,510,997**	**5,773,377**	**6,056,543**	**6,029,900**	**6,210,798**	**6,397,122**	**53,312,346**
Retiree Medical Premium Contribution	**83,928**	**86,026**	**88,177**	**90,381**	**92,641**	**94,957**	**97,331**	**99,764**	**102,258**	**104,815**	**940,277**
Total Projected Costs	**26,551,498**	**27,830,376**	**28,950,582**	**30,166,422**	**31,314,461**	**32,319,987**	**33,354,245**	**34,114,707**	**35,105,655**	**36,125,644**	**315,833,576**
Additional Savings: Insurance Premiums	(100,000)	(110,000)	(121,000)	(133,100)	(146,410)	(161,051)	(177,156)	(194,872)	(214,359)	(235,795)	(1,593,742)
Annual Facility Maintenance Savings	(105,000)	(105,000)	(105,000)	(105,000)	(105,000)	(105,000)	(105,000)	(105,000)	(105,000)	(105,000)	(1,050,000)
Utilities	(88,012)	(90,652)	(93,372)	(96,173)	(99,058)	(102,030)	(105,091)	(108,244)	(111,491)	(114,836)	(1,008,959)
One time Sell Off of Fire Equipment	(190,000)	-	-	-	-	-	-	-	-	-	(190,000)
One-time Fleet Management Cash Availability	(2,549,414)	-	-	-	-	-	-	-	-	-	(2,549,414)
Total Cost for Fire Services with OCFA	**23,519,072**	**27,524,723**	**28,631,210**	**29,832,149**	**30,963,992**	**31,951,906**	**32,966,998**	**33,706,591**	**34,674,805**	**35,670,014**	**309,441,460**
Pension Obligation (Pre-OCFA Unfunded Liability)	**3,545,268**	**4,132,425**	**4,570,860**	**5,085,056**	**5,510,997**	**5,773,377**	**6,056,543**	**6,029,900**	**6,210,798**	**6,397,122**	**53,312,346**
Retiree Medical Premium Contribution	**83,928**	**86,026**	**88,177**	**90,381**	**92,641**	**94,957**	**97,331**	**99,764**	**102,258**	**104,815**	**940,277**
Labor (2.92%)	17,244,711	17,748,257	18,266,506	18,799,888	19,348,844	19,913,831	20,495,314	21,093,778	21,709,716	22,343,640	196,964,483
Other Operating Costs (2.92%)	3,969,674	4,085,588	4,204,888	4,327,670	4,454,038	4,584,096	4,717,952	4,855,716	4,997,503	5,143,430	45,340,556
Total Fire Budget	**24,843,581**	**26,052,296**	**27,130,430**	**28,302,995**	**29,406,521**	**30,366,261**	**31,367,140**	**32,079,158**	**33,020,275**	**33,989,006**	**296,557,663**
Fire Dept Revenue Offset	(150,000)	(153,000)	(156,060)	(159,181)	(162,365)	(165,612)	(168,924)	(172,303)	(175,749)	(179,264)	(1,642,458)
Net Cost of Fire Dept with City	**24,693,581**	**25,899,296**	**26,974,370**	**28,143,814**	**29,244,156**	**30,200,649**	**31,198,216**	**31,906,855**	**32,844,526**	**33,809,742**	**294,915,205**
Estimated Projected Savings/(Additional Cost)	**1,174,510**	**(1,625,427)**	**(1,656,840)**	**(1,688,335)**	**(1,719,837)**	**(1,751,257)**	**(1,768,782)**	**(1,799,736)**	**(1,830,279)**	**(1,860,271)**	**(14,526,255)**

EOC- $11,000 Bonus

10-Year Forecast - (2.92% Increase)

	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	Total
Annual Contract (2.9%)	22,191,928	22,839,932	23,506,858	24,193,259	24,899,702	25,626,773	26,375,075	27,145,227	27,937,868	28,753,653	253,470,275
Annual Facility Revolving Fund ($15,000 x 7)	105,000	105,000	105,000	105,000	105,000	105,000	105,000	105,000	105,000	105,000	1,050,000
Equipment Replacement (3% Per OCFA)	295,293	304,152	313,276	322,675	332,355	342,326	352,595	363,173	374,068	385,290	3,385,203
Start - Up (0%, 10 Years, $1,136,225)	113,623	113,623	113,623	113,623	113,623	113,623	113,623	113,623	113,623	113,623	1,136,225
Capital Improvements Required	-	-	-	-	-	-	-	-	-	-	-
Asbestos Certification	20,740	-	-	-	-	-	-	-	-	-	20,740
Proposal Cost Reimbursement	(75,000)	-	-	-	-	-	-	-	-	-	(75,000)
Total OCFA Estimated Contract Costs	**22,651,584**	**23,362,707**	**24,038,757**	**24,734,556**	**25,450,679**	**26,187,721**	**26,946,293**	**27,727,023**	**28,530,558**	**29,357,566**	**258,987,443**
City Continuation of Services Not Included in OCFA											
Add Position for EOC Management	175,000	178,500	182,070	185,711	189,426	193,214	197,078	201,020	205,040	209,141	1,916,201
Hazmat Clean Up (Ocean Blue)	57,000	57,000	57,000	57,000	57,000	57,000	57,000	57,000	57,000	57,000	570,000
Records Management	38,718	13,718	13,718	13,718	13,718	13,718	-	-	-	-	107,308
Total Additional Services	**270,718**	**249,218**	**252,788**	**256,429**	**260,144**	**263,932**	**254,078**	**258,020**	**262,040**	**266,141**	**2,593,509**
Pension Obligation (Pre-OCFA Unfunded Liability)	**3,545,268**	**4,132,425**	**4,570,860**	**5,085,056**	**5,510,997**	**5,773,377**	**6,056,543**	**6,029,900**	**6,210,798**	**6,397,122**	**53,312,346**
Retiree Medical Premium Contribution	**83,928**	**86,026**	**88,177**	**90,381**	**92,641**	**94,957**	**97,331**	**99,764**	**102,258**	**104,815**	**940,277**
Total Projected Costs	**26,551,498**	**27,830,376**	**28,950,582**	**30,166,422**	**31,314,461**	**32,319,987**	**33,354,245**	**34,114,707**	**35,105,655**	**36,125,644**	**315,833,576**
Additional Savings: Insurance Premiums	(100,000)	(110,000)	(121,000)	(133,100)	(146,410)	(161,051)	(177,156)	(194,872)	(214,359)	(235,795)	(1,593,742)
Annual Facility Maintenance Savings	(105,000)	(105,000)	(105,000)	(105,000)	(105,000)	(105,000)	(105,000)	(105,000)	(105,000)	(105,000)	(1,050,000)
Utilities	(88,012)	(90,652)	(93,372)	(96,173)	(99,058)	(102,030)	(105,091)	(108,244)	(111,491)	(114,836)	(1,008,959)
One time Sell Off of Fire Equipment	(190,000)	-	-	-	-	-	-	-	-	-	(190,000)
One-time Fleet Management Cash Availability	(2,549,414)	-	-	-	-	-	-	-	-	-	(2,549,414)
Total Cost for Fire Services with OCFA	**23,519,072**	**27,524,723**	**28,631,210**	**29,832,149**	**30,963,992**	**31,951,906**	**32,966,998**	**33,706,591**	**34,674,805**	**35,670,014**	**309,441,460**
Pension Obligation (Pre-OCFA Unfunded Liability)	**3,545,268**	4,132,425	4,570,860	5,085,056	5,510,997	5,773,377	6,056,543	6,029,900	6,210,798	6,397,122	53,312,346
Retiree Medica											
Labor (2.92%)											
Other Operatin											
Total Fire Budg											
Fire Dept Reve											
Estimate											

City Continuation of Services Not Included in OCFA

Add Position for EOC Management

175,000

Add Mechanic and Quints

	Description:	FY 18-19 Avg. Tot Comp	Current GG Auth Pos List	Total GG Current Costs	Number of Positions (OCFA Proposal Deployment)	Estimated Cost Using OCFA Model	TOTAL COST OF FIRE SERVICES IF CONTRACTED WITH OCFA
ADMIN	Department Secretary	102,675	1	102,675	1	102,675	
	Public Safety Fiscal Analyst	112,135	1	112,135	1	112,135	
	Sr. Fire Protection Specialist	140,610	2	281,220	2	281,220	
	Fire Chief	394,767	1	394,767	1	394,767	
	Fire Division Chief	280,668	2	561,336	2	561,336	
	Fire Batalion Chief (Training)	248,782	0	-	1	248,782	
	Fire Captain (Deputy Fire Marshall)	217,311	2	434,622	1	217,311	
FRONT-LINE	Fire Battalian Chief	248,782	3	746,346	3	746,346	
	Fire Captain	217,311	24	5,215,464	21	4,563,531	
	Fire Engineer	185,770	24	4,458,480	21	3,901,170	
	Firefighter (Constant Manning)	120,191	4	480,764	4	480,764	
	Firefighter	133,595	6	801,570	0	-	
	Firefighter/Paramedic	161,086	30	4,832,580	42	6,765,612	
	Total Full-Time Labor Cost		100	18,421,959	100	18,375,649	N/A
OTHER OPERATING COSTS	Part-Time			58,281		58,281	
	Over-Time			2,439,977		2,439,977	
	Other Costs						
	Contractuals			1,222,407		1,222,407	
	Commodities			438,910		438,910	
	Tel/Beeper			82,701		82,701	
	Equip Pool Rental			1,772,611		1,772,611	
	Stores-Non Stock			16,211		16,211	
	Info Systems			130,166		130,166	
	Insurance-Liab/Prop			99,934		99,934	
	Capital Outlay			178,200		178,200	
	Subtotal			6,439,398		6,439,398	
	Labor & Other Operating Costs			24,861,357		24,815,047	22,296,928
EQUIPMENT	Addition of a Quint		N/A			134,272	
	Equip Rental Rate for Quint		N/A			165,000	
	Less 1 Squad (#880 Annual Rate)		N/A			(45,228)	
	Less 2 Engines (#555,556 Annual Rate)		N/A			(225,510)	
	Additional Equipment Subtotal		N/A			28,534	295,293
	Total Costs		24,861,357			24,843,581	22,592,221

ADDITIONAL EQUIPMENT	Addition of a Quint		N/A		134,272
	Equip Rental Rate for Quint		N/A		165,000
	Less 1 Squad (#880 Annual Rate)		N/A		(45,228)
	Less 2 Engines (#555,556 Annual Rate)		N/A		(225,510)
	Additional Equipment Subtotal		N/A		28,534
	Total Costs	**24,861,357**			**24,843,581**

Return Fire investigation Staffing Levels to 2005

	Description:	FY 18-19 Avg. Tot Comp	Current GG Auth Pos List	Total GG Current Costs	Number of Positions (OCFA Proposal Deployment)	Estimated Cost Using OCFA Model	TOTAL COST OF FIRE SERVICES IF CONTRACTED WITH OCFA
ADMIN	Department Secretary	102,675	1	102,675	1	102,675	
	Public Safety Fiscal Analyst	112,135	1	112,135	1	112,135	
	Sr. Fire Protection Specialist	140,610	2	281,220	2	281,220	
	Fire Chief	394,767	1	394,767	1	394,767	
	Fire Division Chief	280,668	2	561,336	2	561,336	
	Fire Batalion Chief (Training)	248,782	0	-	1	248,782	
	Fire Captain (Deputy Fire Marshall)	217,311	2	434,622	1	217,311	
FRONT-LINE	Fire Battalian Chief	248,782	3	746,346	3	746,346	
	Fire Captain	217,311	24	5,215,464	21	4,563,531	
	Fire Engineer	185,770	24	4,458,480	21	3,901,170	
	Firefighter (Constant Manning)	120,191	4	480,764	4	480,764	
	Firefighter	133,595	6	801,570	0	-	
	Firefighter/Paramedic	161,086	30	4,832,580	42	6,765,612	
	Total Full-Time Labor Cost		100	18,421,959	100	18,375,649	N/A
OTHER OPERATING COSTS	Part-Time			58,281		58,281	
	Over-Time			2,439,977		2,439,977	
	Other Costs						
	Contractuals			1,222,407		1,222,407	
	Commodities			438,910		438,910	
	Tel/Beeper			82,701		82,701	
	Equip Pool Rental						
	Stores-Non Stock						
	Info Systems						
	Insurance-Liab/Prop						
	Capital Outlay						
	Labor						
ADDITIONAL EQUIPMENT	Addition of a Quint						
	Equip Rental Rate for Quin						
	Less 1 Squad (#880 Annual						
	Less 2 Engines (#555,556 Ar						
	Additic						

10% Staff Adjustment

Fire Captain (Deputy Fire Marshall)	217,311	2	434,622	1	217,311
Fire Battalian Chief	248,782	3	746,346	3	746,346
Fire Captain	217,311	24	5,215,464	21	4,563,531
Fire Engineer	185,770	24	4,458,480	21	3,901,170
Firefighter (Constant Manning)	120,191	4	480,764	4	480,764
Firefighter	133,595	6	801,570	0	-
Firefighter/Paramedic	161,086	30	4,832,580	42	6,765,612
Total Full-Time Labor Cost		100	18,421,959	100	18,375,649

Recruitment Solution- Drop First 2 steps

Paramedic Cost = 177,194

	Description:	FY 18-19 Avg. Tot Comp	Current GG Auth Pos List	Total GG Current Costs	Number of Positions (OCFA Proposal Deployment)	Estimated Cost Using OCFA Model	TOTAL COST OF FIRE SERVICES IF CONTRACTED WITH OCFA
ADMIN	Department Secretary	102,675	1	102,675	1	102,675	
	Public Safety Fiscal Analyst	112,135	1	112,135	1	112,135	
	Sr. Fire Protection Specialist	140,610	2	281,220	2	281,220	
	Fire Chief	394,767	1	394,767	1	394,767	
	Fire Division Chief	280,668	2	561,336	2	561,336	
	Fire Battalion Chief (Training)	248,782	0	-	1	248,782	
	Fire Captain (Deputy Fire Marshall)	217,311	2	434,622	1	217,311	
FRONT-LINE	Fire Battalian Chief	248,782	3	746,346	3	746,346	
	Fire Captain	217,311	24	5,215,464	21	4,563,531	
	Fire Engineer	185,770	24	4,458,480	21	3,901,170	
	Firefighter (Constant Manning)	120,191	4	480,764	4	480,764	
	Firefighter	133,595	6	801,570	0	-	
	Firefighter/Paramedic	161,086	30	4,832,580	42	6,765,612	
	Total Full-Time Labor Cost		100	18,421,959	100	18,375,649	N/A
OTHER OPERATING COSTS	Part-Time			58,281		58,281	
	Over-Time			2,439,977		2,439,977	
	Other Costs						
	Contractuals			1,222,407		1,222,407	
	Commodities			438,910		438,910	
	Tel/Beeper			82,701		82,701	
	Equip Pool Rental						
	Stores-Non Stock						
	Info Systems						
	Insurance-Liab/Prop						
	Capital Outlay						
	Labor						
ADDITIONAL EQUIPMENT	Addition of a Quint						
	Equip Rental Rate for Quin						
	Less 1 Squad (#880 Annual						
	Less 2 Engines (#555,556 A						
	Additic						

Fire Captain (Deputy Fire Marshall)	217,311	2	434,622	1	217,311
Fire Battalian Chief	248,782	3	746,346	3	746,346
Fire Captain	217,311	24	5,215,464	21	4,563,531
Fire Engineer	185,770	24	4,458,480	21	3,901,170
Firefighter (Constant Manning)	120,191	4	480,764	4	480,764
Firefighter	133,595	6	801,570	0	-
Firefighter/Paramedic	161,086	30	4,832,580	42	6,765,612
Total Full-Time Labor Cost		100	18,421,959	100	18,375,649

Retention Solution- 5%,4%,2%

10-Year Forecast - (2.92% Increase)

	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	Total
Annual Contract (2.9%)	22,191,928	22,839,932	23,506,858	24,193,259	24,899,702	25,626,773	26,375,075	27,145,227	27,937,868	28,753,653	253,470,275
Annual Facility Revolving Fund ($15,000 x 7)	105,000	105,000	105,000	105,000	105,000	105,000	105,000	105,000	105,000	105,000	1,050,000
Equipment Replacement (3% Per OCFA)	295,293	304,152	313,276	322,675	332,355	342,326	352,595	363,173	374,068	385,290	3,385,203
Start - Up (0%, 10 Years, $1,136,225)	113,623	113,623	113,623	113,623	113,623	113,623	113,623	113,623	113,623	113,623	1,136,225
Capital Improvements Required	-	-	-	-	-	-	-	-	-	-	-
Asbestos Certification	20,740	-	-	-	-	-	-	-	-	-	20,740
Proposal Cost Reimbursement	(75,000)	-	-	-	-	-	-	-	-	-	(75,000)
Total OCFA Estimated Contract Costs	**22,651,584**	**23,362,707**	**24,038,757**	**24,734,556**	**25,450,679**	**26,187,721**	**26,946,293**	**27,727,023**	**28,530,558**	**29,357,566**	**258,987,443**
City Continuation of Services Not Included in OCFA											
Add Position for EOC Management	175,000	178,500	182,070	185,711	189,426	193,214	197,078	201,020	205,040	209,141	1,916,201
Hazmat Clean Up (Ocean Blue)	57,000	57,000	57,000	57,000	57,000	57,000	57,000	57,000	57,000	57,000	570,000
Records Management	38,718	13,718	13,718	13,718	13,718	13,718	-	-	-	-	107,308
Total Additional Services	**270,718**	**249,218**	**252,788**	**256,429**	**260,144**	**263,932**	**254,078**	**258,020**	**262,040**	**266,141**	**2,593,509**
Pension Obligation (Pre-OCFA Unfunded Liability)	3,545,268	4,132,425	4,570,860	5,085,056	5,510,997	5,773,377	6,056,543	6,029,900	6,210,798	6,397,122	53,312,346
Retiree Medical Premium Contribution	83,928	86,026	88,177	90,381	92,641	94,957	97,331	99,764	102,258	104,815	940,277
Total Projected Costs	**26,551,498**	**27,830,376**	**28,950,582**	**30,166,422**	**31,314,461**	**32,319,987**	**33,354,245**	**34,114,707**	**35,105,655**	**36,125,644**	**315,833,576**
Additional Savings: Insurance Premiums	(100,000)	(110,000)	(121,000)	(133,100)	(146,410)	(161,051)	(177,156)	(194,872)	(214,359)	(235,795)	(1,593,742)
Annual Facility Maintenance Savings	(105,000)	(105,000)	(105,000)	(105,000)	(105,000)	(105,000)	(105,000)	(105,000)	(105,000)	(105,000)	(1,050,000)
Utilities	(88,012)	(90,652)	(93,372)	(96,173)	(99,058)	(102,030)	(105,091)	(108,244)	(111,491)	(114,836)	(1,008,959)
One time Sell Off of Fire Equipment	(190,000)	-	-	-	-	-	-	-	-	-	(190,000)
One-time Fleet Management Cash Availability	(2,549,414)	-	-	-	-	-	-	-	-	-	(2,549,414)
Total Cost for Fire Services with OCFA	**23,519,072**	**27,524,723**	**28,631,210**	**29,832,149**	**30,963,992**	**31,951,906**	**32,966,998**	**33,706,591**	**34,674,805**	**35,670,014**	**309,441,460**
Pension Obligation (Pre-OCFA Unfunded Liability)	3,545,268	4,132,425	4,570,860	5,085,056	5,510,997	5,773,377	6,056,543	6,029,900	6,210,798	6,397,122	53,312,346
Retiree Medical Premium Contribution	83,928	86,026	88,177	90,381	92,641	94,957	97,331	99,764	102,258	104,815	940,277
Labor (2.92%)	17,244,711	17,748,257	18,266,506	18,799,888	19,348,844	19,913,831	20,495,314	21,093,778	21,709,716	22,343,640	196,964,483
Other Operating Costs (2.92%)	3,969,674	4,085,588	4,204,888	4,327,670	4,454,038	4,584,096	4,717,952	4,855,716	4,997,503	5,143,430	45,340,556
Total Fire Budget	24,843,581	26									
Fire Dept Revenue Offset	(150,000)										
Net Cost of Fire Dept with City	24,693,581	25									
Estimated Projected Savings/(Additional Cost)	1,174,510	(1									

Pension Obligation (Pre-OCFA Unfunded Liability)	3,545,268
Retiree Medical Premium Contribution	83,928
Labor (2.92%)	18,182,045
Other Operating Costs (2.92%)	4,368,674

Apples to Apples Cost Comparison

- OCFA more cost effective than GG Fire Deployment

Level of Service

- OCFA
- 2016 GG Fire Model
- Current GG Fire Model
- Apples to Apples

Recruitment and Retention

- OCFA
- 2016 GG Fire Model
- Current GG Fire Model
  Apples to Apples

Infrastructure- Fire Maintenance

OCFA
2016 GG Fire Model
Current GG Fire Model
Apples to Apples

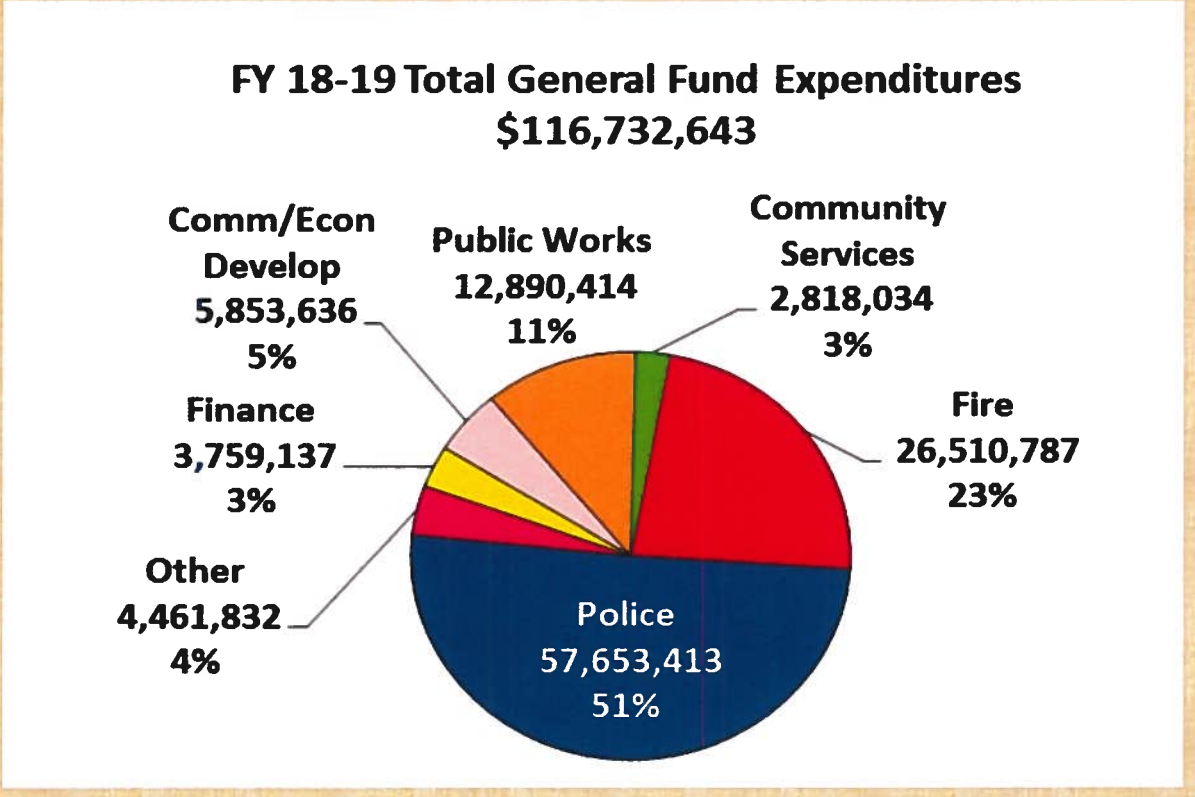
Future PENSION DEBT

- OCFA
- 2016 GG Fire Model ONLY ADDS
- Current GG Fire Model ONLY ADDS
- Apples to Apples ONLY ADDS

OCFA Costs

- July 10th, 2018 Cost of OCFA per GG City $27,097,120
  - Subtract $113,623 (moving start up costs over 10 years instead of 5)
  - Subtract $357,000 for capital improvement costs
    (Need to be addressed either way)
- New GG City Spread Sheet show OCFA Cost $26,551,498
  - Subtract EOC cost ($11,000 bonus instead) -$ 164,000
- New OCFA Cost = $26,387,498

GGFD Actual Cost



OCFA Cost Savings

GG Fire Cost = $26,510,787
OCFA Cost = $26,387,498

Savings =$123,289 per year to go OCFA

One Solution for all issues

CFA

IN CONNECTION WITH AGENDA ITEM NO. 6.a.

Item For Discussion	Garden Grove Fire Association	Staff
1. Add Training costs for 4 Firefighters (paramedic school)	City currently has 4 Firefighters. Based on the deployment model, these FF will need to attend paramedic school. The cost of over-time needed while 4 FF at school is estimated at: $350K	Training is approximately $3,500 for tuition and is already included in the Fire's budget. The overtime cost of sending two FF to paramedic school is already included in the FY 2018-19 budget and therefore already included in the cost analysis. If the City elects to send all four FF at the same time in FY 2018-19, an additional cost and appropriation is needed in the amount of $175K.
2. Add costs for Reserve Quint	Association believes a reserve quint is needed in case one goes in for service. The cost for equipment for the quint is estimated at: $250K	Staff recently received grant funding for miscellaneous fire equipment. Furthermore, $178K is already budgeted for capital outlay. Additional Cost: $0
3. Reduce City expense for EOC Coordinator	Association believes a full-time employee at the cost of $175K is not needed and instead an additional $11K for assignment pay can be provided to a Police Sergeant to assume EOC management duties.	Staff believes some level of EOC management is needed for the City. Additional research is needed as to what the appropriate level is, whether it is a part-time or full-time position. Staff is to request information from OCFA to find out how other contract cash cities manage their EOC. The cost of a part-time coordinator is estimated at $70K.

4. Add one Fire Mechanic position	Association believes one additional mechanic is needed to service Fire apparatus equipment in a timely manner. Cost is $125K	City currently has 1 Full-time mechanic assigned to all fire equipment. The City also has 7 other mechanics who are certified to work on fire equipment. Public safety equipment has top priority in Public Works. Staff believes that no additional mechanics are necessary at this time. Further analysis is needed to determine whether the additional equipment warrants additional staff levels.
5. Reinstate Arson Investigator, 40-hour staff Captain Position	Association believes one additional staff position is needed. Cost: $239K (Captain pay plus 10% specialty pay)	The current program currently has 6 shift Arson Investigators at a cost of approximately $75K annually in specialty pay. Staff is open to adding a 40-hour staff Arson Investigator and reducing the number of shift Arson Investigators. Further research is needed to determine the appropriate number of shift Arson Investigators. The reduction in the amount of shift Arson Investigators will offset the cost of the 40-hour investigator. In addition, investigator duties include background investigations which are currently contracted out. This may result in savings of approximately $14K-$63K annually. Additional Cost: $101 – 196K

6a. Add Additional Quint for Reserve	Association believes additional quint is needed for reserve. Cost: $136K for ten years	Additional cost analysis is needed.
6b. Add Quint Ongoing maintenance	Ongoing maintenance for additional reserve quint. Cost: $165K	Additional cost analysis is needed.
7. Implement recruitment solution (drop A&B):	Association believes dropping A&B steps is necessary for recruitment issues. They believe by doing this the new average cost of a paramedic should be increased to $170K for all 42 Paramedics.	Eliminating steps is a labor negotiated item. A paramedic starting at C step would cost an estimated $139K. The average cost used in the cost analysis for a paramedic is $161K.
8. Provide 5% increase to existing labor costs.	Association believes a 5% across the board raise is needed to stay competitive. Estimated Cost is $900K	Pay raises are a negotiated item. Further discussion needed as part of labor negotiations.

9. Management Partner's Estimate for Fire Budget $26.5 M	Association believes Management Partner's estimate of $26.5 for the Fire Department should be used in the analysis	Management Partners' provided the City with a long-term forecasting tool, using certain assumptions and data available at the time, including: • 2% COLA • 2% Inflation • OES expenses that are not included in the Fire's budget because it is reimbursed by the State • Did not include City's 5% budget reduction that was ultimately adopted • Inadvertently included City Attorney's Budget On June 26, 2018, Council adopted the amended FY 2018-19 budget for the Fire Department in the amount of $24.9M.