



# DISPATCH COMMITTEE REPORT

*Fort Bend County Dispatch Committee*

July 23, 2019



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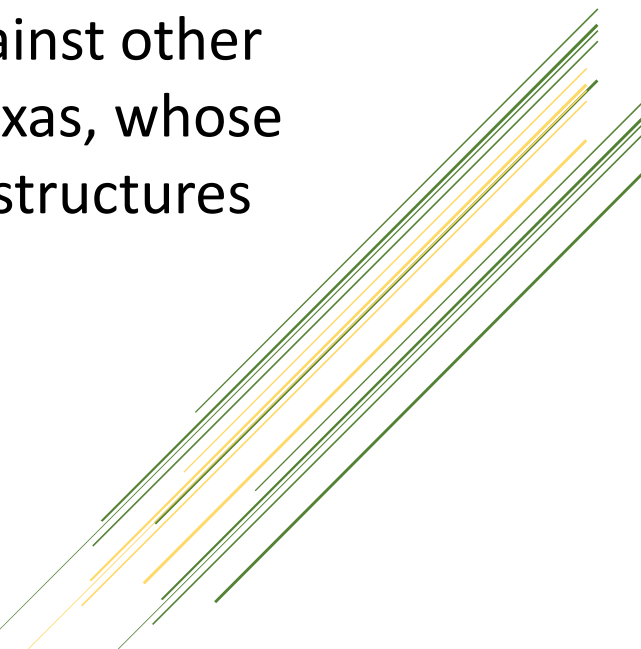
The Dispatch Committee members met throughout June and July 2019 to discuss the protocol, standards of operations, policies, and existing practices at FBCSO. Members facilitated open discussions to identify inefficiencies and unresolved concerns stated by Commissioners Court regarding dispatch operations at FBC Sherriff's Office. Fort Bend County Dispatch Committee members are as follows:

Mark Flathouse- *FBC, EMC/Fire Marshal*  
Clay Elliot- *FBC, IT Director*  
Roy L. Cordes/Marcus Spencer- *FBC, County Attorney*  
Graig Temple- *FBC, EMS Chief*  
Billy Wilson- *Willowfork, Fire Chief*  
David Marcaurele- *FBC, Deputy Chief Sherriff's Office*  
Robert Gracia - *Rosenberg, Retired Police Chief*  
Larry Di Camillo- *Stafford, Fire Chief*



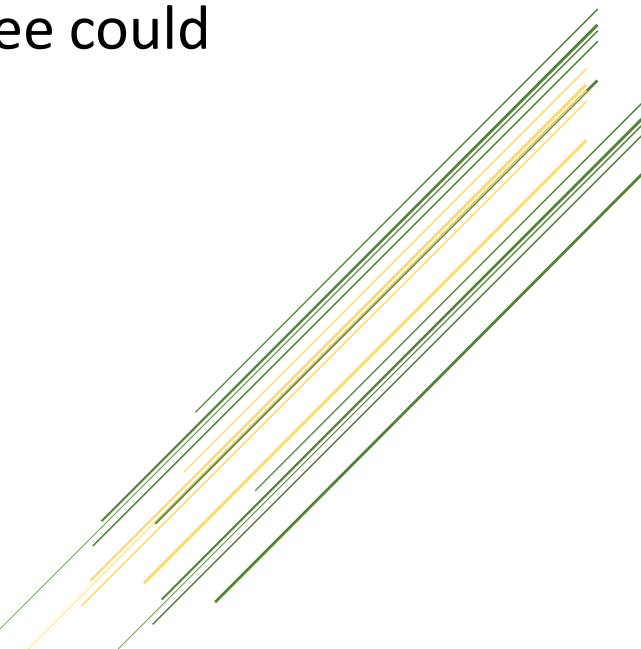


# Primary Research and Overview

1. What practices or elements define the effectiveness of a Dispatch Center's operational focus and management structure?
  2. How does Fort Bend County Sheriff's Office Dispatch Center operations and management structure measure against other emergency response agencies across the state of Texas, whose emergency management models have overlapping structures and responsibilities?
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# Methodological Approach

- Collaborated with Texas Department of Emergency Management (*TDEM*) and Texas Association of Counties (*TAC*) to build distribution list of First Responders.
  - Qualitative survey; N=70 Survey Responses
  - Survey results are framed to ensure the Dispatch Committee could fairly compare against Dispatch agencies with similar characteristics of Fort Bend County Dispatch
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# Characteristics of FBCSO Dispatch

**Services a Population Size of:** 750,000

**Who manages Dispatch?** FBC Sheriff's Office (FBCSO) manages Dispatch

## ***Computer Aid Characteristics***

**CAD Software:** Tiburon

**CAD Software is maintained by:** Vendor, County IT, and SO Personnel

**Are mobile Computers used for Dispatch?** Yes – Mainly Law Enforcement

**Responsibility for maintaining mobile computers:** Vendor, County IT, and SO

**Responsibility for Radio's / Programming:** Vendor and SO Personnel

**Does Dispatch Center maintain recordings of radio systems?** Yes

**Who Maintains recordings:** SO Personnel

## ***Staffing and Personnel Characteristics***

**Type of Dispatch personnel used (Civilian, Peace Officer, Both):** Civilian

**Are Dispatcher's specialized in a specific discipline or do they rotate to each Dispatch:** Trained in all disciplines and when needed rotate assignments

**Number of certified fire dispatchers assigned to dispatch center per shift:** Unknown

**Number of certified EMS dispatchers assigned to dispatch center per shift:** Unknown

**Number of certified law enforcement dispatchers assigned to dispatch center per shift:** Unknown

**Total number of call takers assigned to dispatch center per shift:** 5

**Does DC use a standardized set of questions to obtain information from the caller?** Yes for Law/EMS

**Total number of consoles within Dispatch Center:** 11 on call taker side, 8 on radio side, 1 supervisor, and 4 training

## ***Scope of Activity*** (since January 1, 2019)

**Number of dispatched calls for Fire Service:** 13,980

**Number of dispatched calls for EMS Service:** 32,332

**Number of dispatched calls for Law Enforcement Service:** 123,083

# ***Coding of the Data: FBC Dispatch Survey Results***

<b>Category Name</b>	<b>Group Description</b>	<b>Color Code</b>
<b>Group 1</b>	Dispatch Centers servicing all three Emergency Response organizations -Law Enforcement, Fire, and EMS.	
<b>Group 2</b>	Dispatch Centers servicing 2 Emergency Response organizations -Law Enforcement and Fire or Fire and EMS, or Law Enforcement and EMS	
<b>Group 3</b>	Dispatch Centers servicing only 1 Emergency Response organizations –Only Law Enforcement, Only Fire, and/or Only EMS	

## **Survey Results**

### **Categories:**

- *Population*
- *Computer Aided Design*
- *Staffing and Personnel Characteristics*
- *Call Volume Activity*

# Dispatch Survey Key Findings

- I. Population:** The populations serviced by this group of Dispatch Centers ranged widely from a low of 4,000 (Cochran County) to a high of 2,600,000 (Dallas County). Most of the others averaged < 100,000.
- II. Dispatch Management:** The Survey Participants' Dispatch Centers are managed primarily by Law Enforcement (72%).
- III. Computer Aided Characteristics -** Most Dispatch Centers utilized some type of CAD system to support dispatch operations. Although there are many different software packages used, FBCSO's Dispatch Center was the only one using Tiburon.
- IV. Dispatch Staffing and Personnel Characteristics –** Like FBCSO, the majority (84%) of Group 1 Dispatch Centers utilized civilian dispatchers only; in addition, there was almost universal use of dispatcher staff rotations to facilitate cross-training. The majority (60%) of Group 1 Dispatch Centers utilized a combination of Law Enforcement, Fire and EMS certified staff per shift; while FBCSO Dispatch Centers were unsure of the certifications acquired by its dispatch staff.

# Population

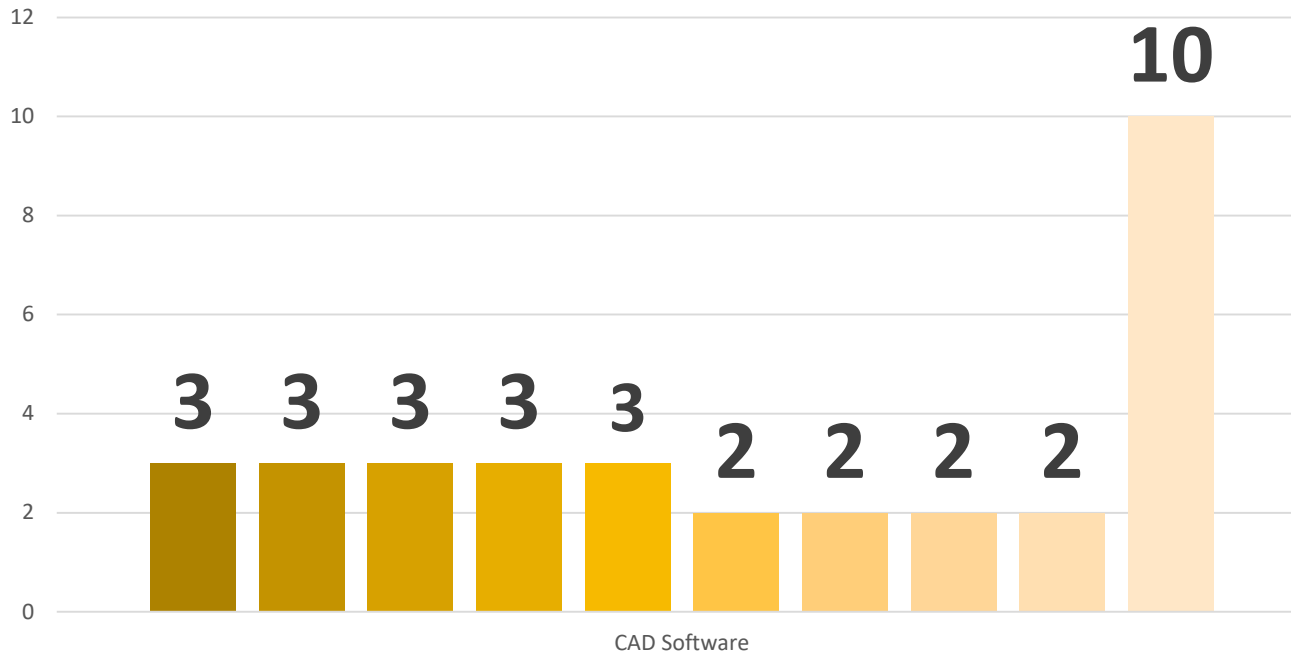


## 1.3MM

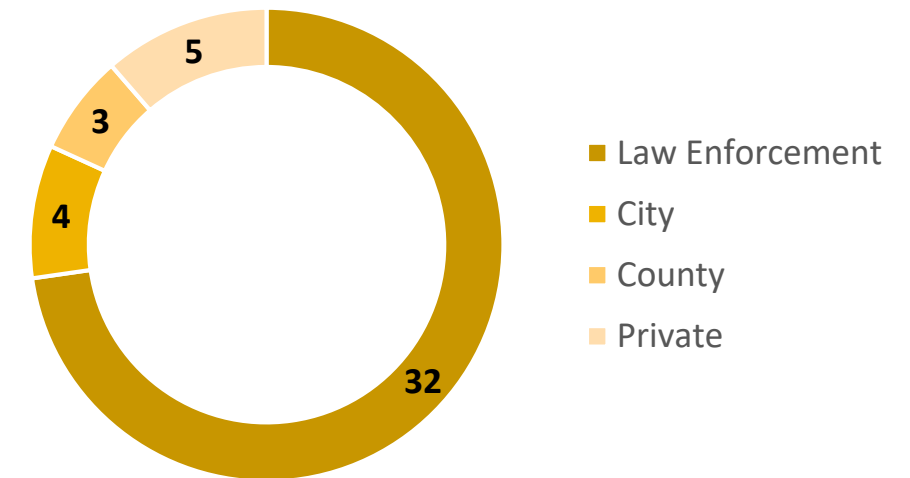
Total Average Serving Population for Dispatch Centers managing **Fire, EMS, and Law Enforcement Services**

# Group 1- Survey Results

## CAD Software

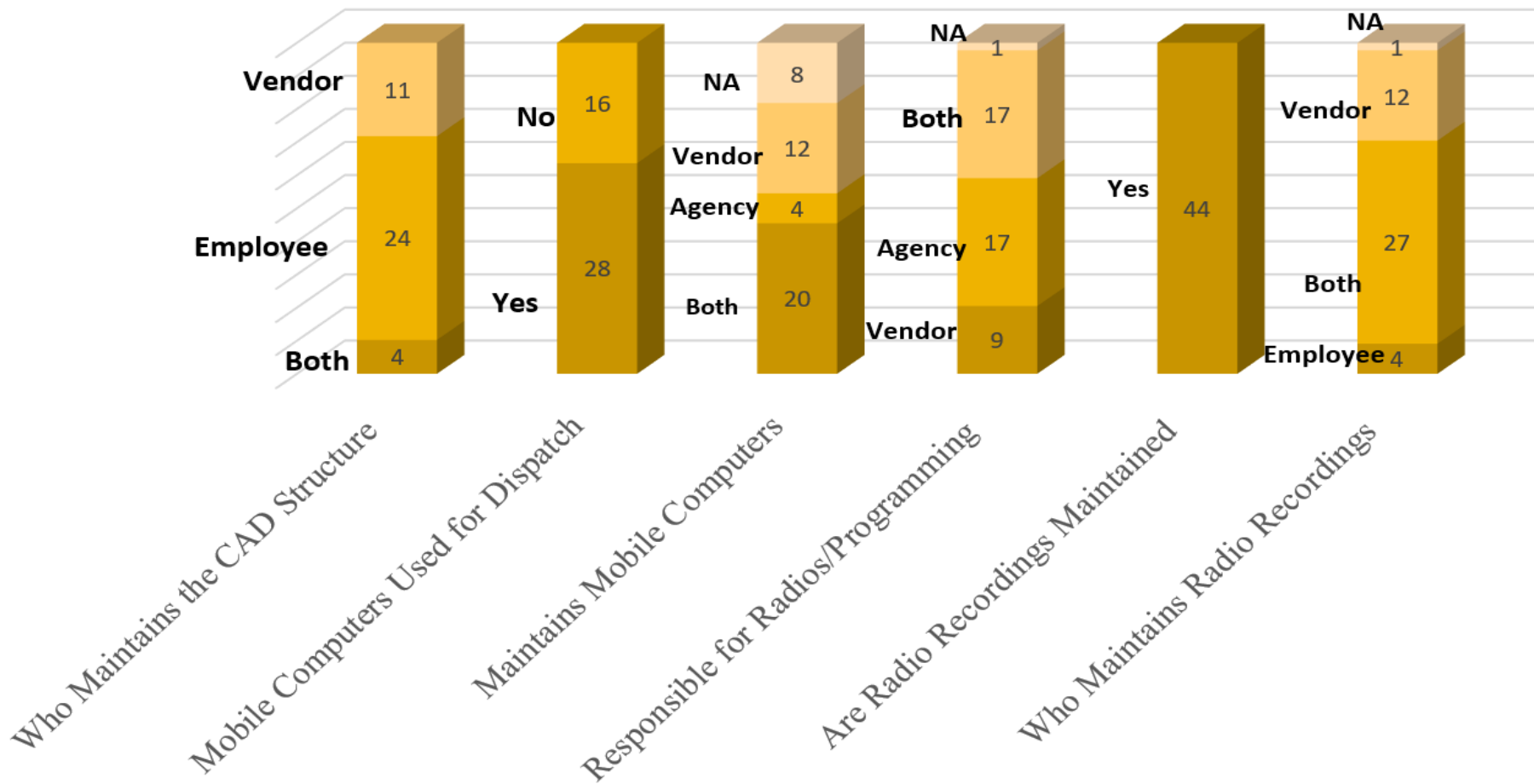


## Which Entity Manages Your Dispatch Center?



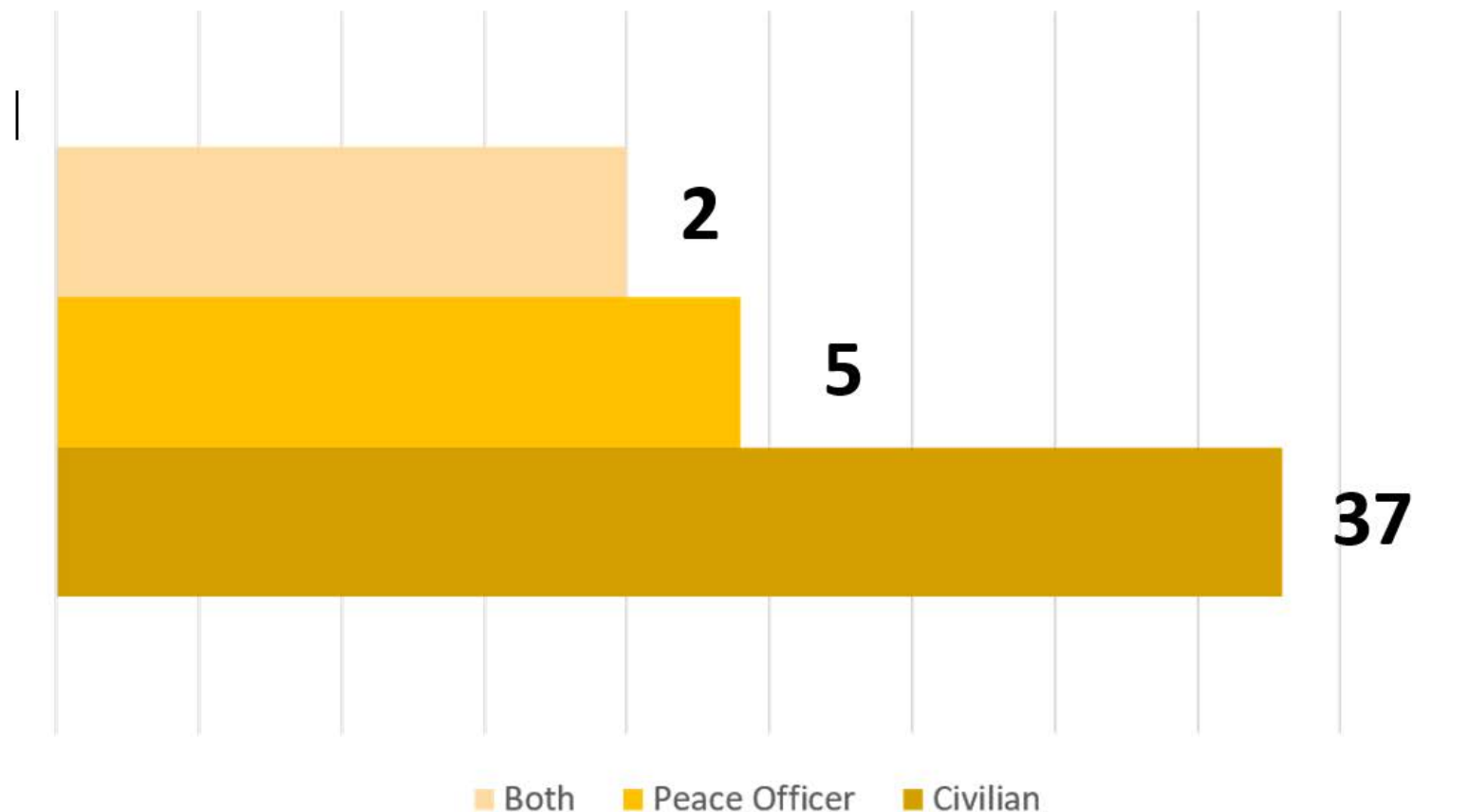
- Tyler
- Central Square
- Crimes
- Zaecher
- Kologic
- Sun-Guard
- ICS
- Net Data
- Spillman
- Misc.

## Records Management and Computer Aided Dispatch Server(s), & Radio Systems



## Staffing & Personnel Characteristics

*Are the Dispatch Personnel Civilian, Peace Officers, or Both?*





## 5 EMPLOYEES

*AVERAGE NUMBER OF CERTIFIED FIRE, EMS, AND LAW  
ENFORCEMENT PERSONNEL IN DISPATCH CENTERS for GROUP 1*

<b>Department</b>	<b>Average Call Volume Per Month</b>
Fire	1165 Calls Per Month
EMS	2694 Calls Per Month
Law Enforcement	10,256 Call Per Month

# Population

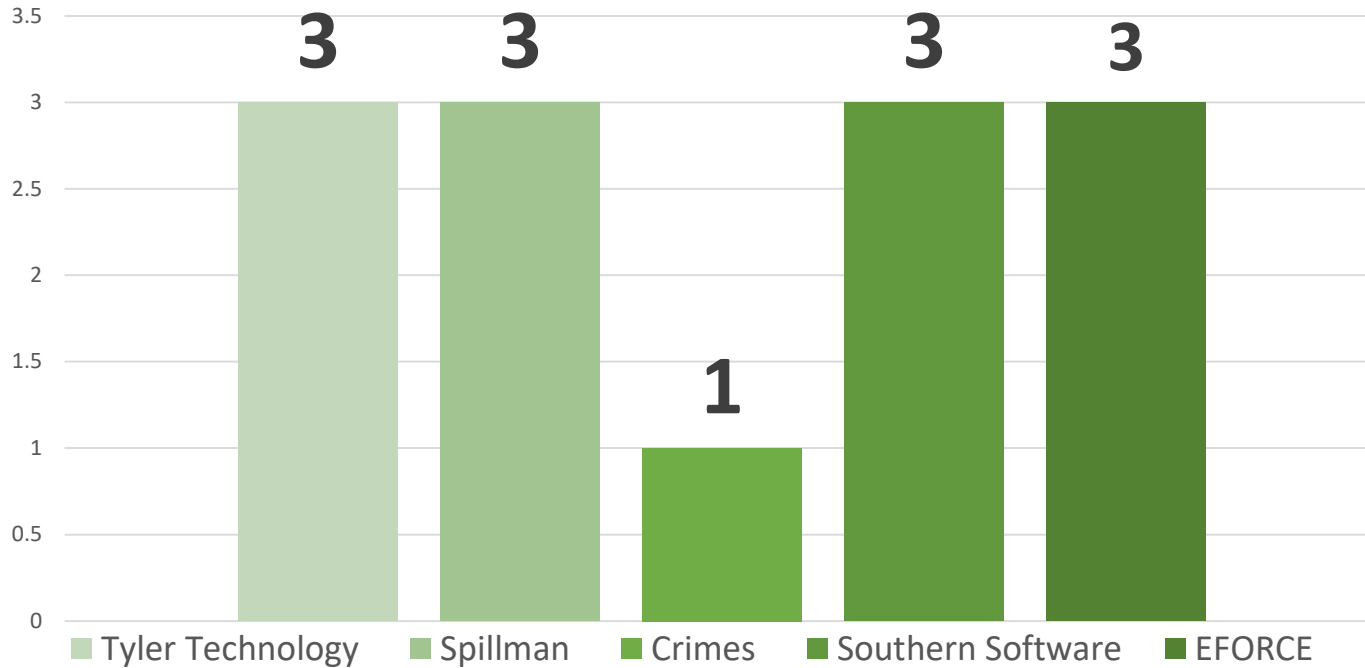


347,583

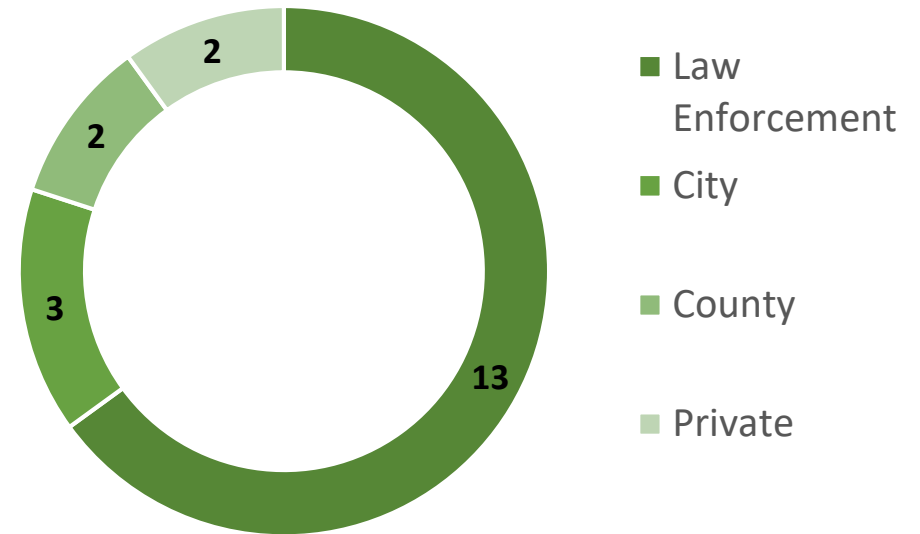
Total Average Serving Population for Dispatch Centers managing 2 out of 3 departments (Law Enforcement, Fire, and EMS)

Group 2- Survey Results

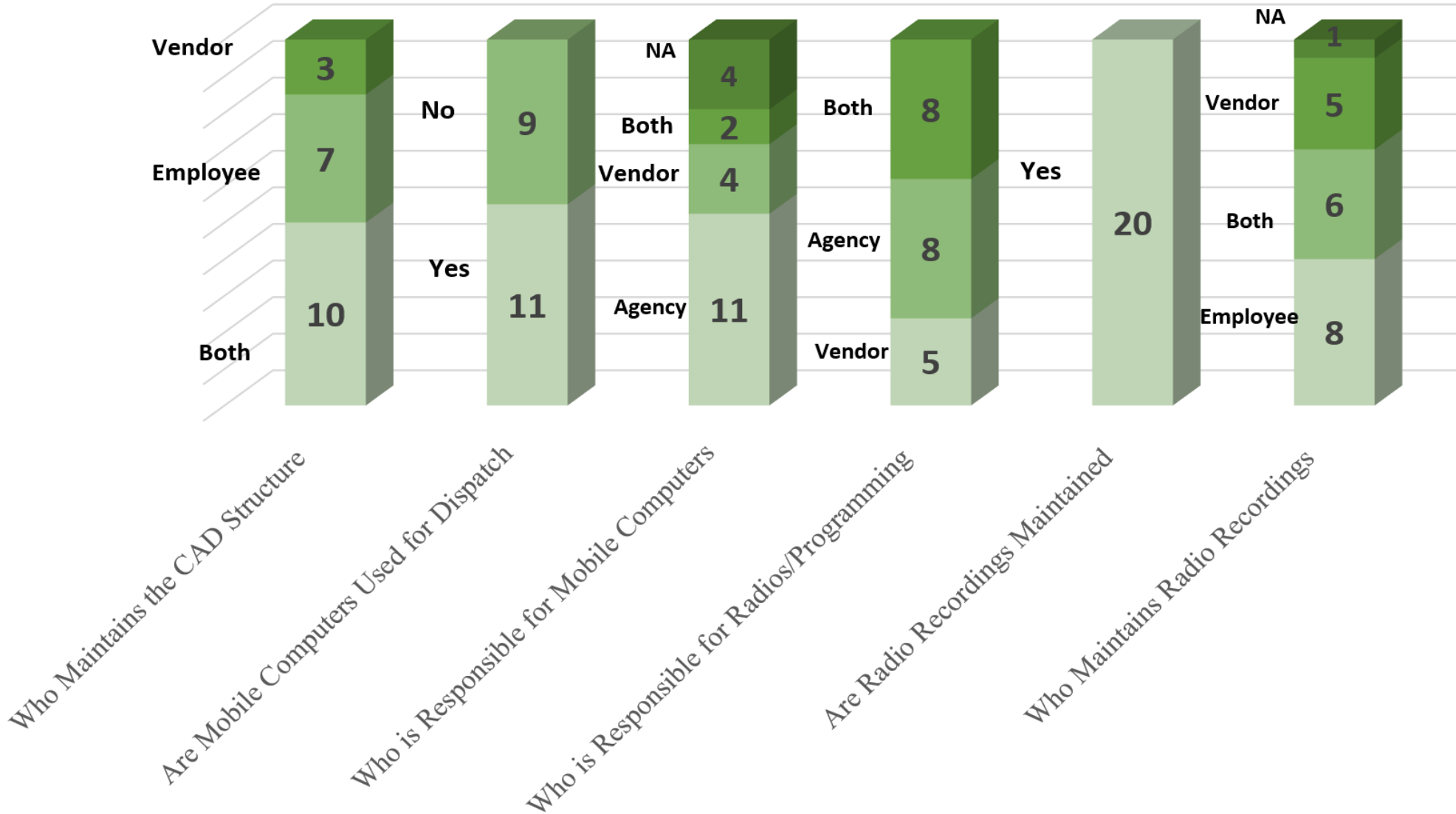
CAD Software



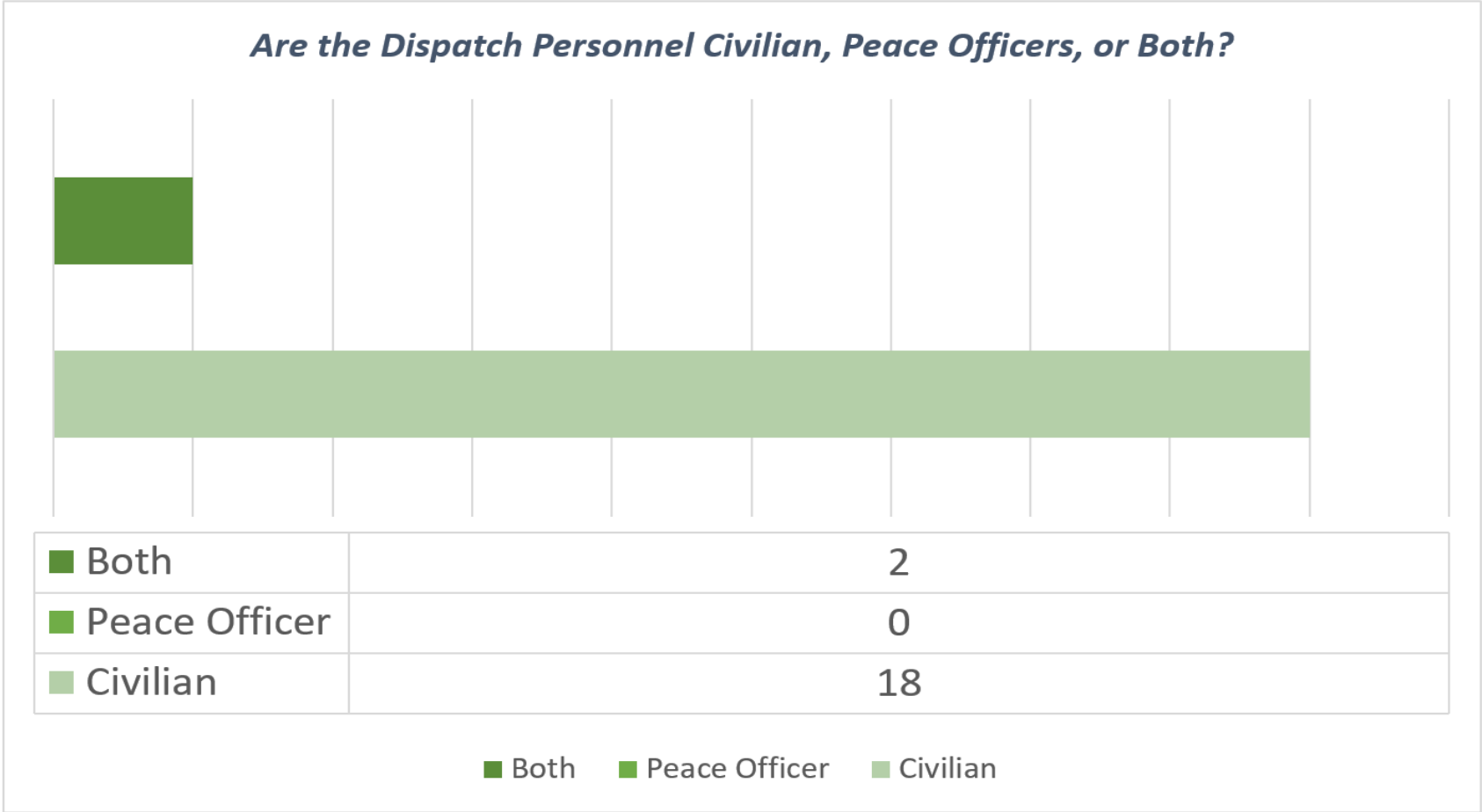
## Which Entity Manages Your Dispatch Center?



Records Management and Computer Aided Dispatch Server(s), & Radio Systems



### Staffing & Personnel Characteristics





# 3 EMPLOYEES

*AVERAGE NUMBER OF CERTIFIED FIRE, EMS, AND LAW ENFORCEMENT PERSONNEL IN DISPATCH CENTERS for GROUP 2*

## Call Volume Activity

Department	Average Call Volume Per Month
Fire	275.5 Calls Per Month
EMS	110 Calls Per Month
Law Enforcement	4360 Calls Per Month

## Group 3- Survey Results

No further analysis was warranted for this group due to:

1. The respondents' limited scope and complexity offering minimal insights for FBC's more comprehensive and complex dispatch operations;
2. The represent less than 10% of the respondent population.

## Overview From FBC Fire Chief/EMS Survey and Meeting

	FBCSO Dispatch Services Assessment Chart	Training/ Personnel	Financial	Technology	Organizational Emphasis
1	TCO lack of knowledge of CAD capabilities	•			
2	TCO lack of understanding of FD terminology	•			
3	No documentation of fire incident benchmarks	•			
4	Mistyping of dispatched incidents	•			
5	No automated PAR checks	•		•	
6	No run cards for standardized dispatch format	•		•	
7	No incident update information given	•		•	
8	Dispatching delays	•		•	
9	No use of Active 911 when requesting mutual-aid	•		•	
10	Unacknowledged radio traffic	•	•		
11	Lack of dedicated Fire/EMS only TCO's	•	•		•
12	Fire & EMS not receiving same information	•			•
13	Radio programming/configuration access		•		•
14	Lack of dedicated Fire/EMS dispatch supervisor		•		•
15	Not fully utilizing CAD capabilities		•		•
16	Non-NFPA dispatching practices		•		•
17	Staffing shortages of TCO personnel		•		
18	No regionalized main dispatch channels				•
19	No FD notification of radio/technology inoperability				•
20	Technology access by FD's (MDT's, Active 911, etc.)				•
21	SO disregarding FD				•
22	SO requesting EMS only; no FD dispatched				•
	TOTAL	12	7	7	11

**Training:** Additional TCO training believed necessary for corrective/improved service

**Financial:** Additional funding (personnel and/or technology) believed necessary for corrective/improved service

**Technology:** Additional, or better use of existing technology, believed necessary for corrective/improved service

**Organizational:** FBCSO Communications organizational change for FIRE/EMS believed necessary for corrective/improved service

# Review

- I. **Population:** The populations serviced by this Group of Dispatch Centers ranged widely from a low of 4,000 (Cochran County) to a high of 2,600,000 (Dallas County). Most of the others averaged < 100,000.
- II. **Dispatch Management:** Dispatch Centers are managed primarily by Law Enforcement (72%).
- III. **Computer Aided Characteristics** – Most Dispatch Centers utilized a type of CAD system to support dispatch operations. Although there are many different software packages used, FBCSO's Dispatch Center was the only one of three using Tiberon. *Based on this initial assessment, there may be opportunities to upgrade computer aided aspects of FBCSO's dispatch operations by further evaluating where the highest performance contributions are being realized and understanding the key drivers.*
- IV. **Dispatch Staffing and Personnel Characteristics** – Like FBCSO, the majority (84%) of Dispatch Centers utilized civilian dispatchers only; in addition, there was almost universal use of dispatcher staff rotations to facilitate cross-training. The majority (60%) of Dispatch Centers also utilized a combination of Law Enforcement, Fire and EMS certified staff per shift; while FBCSO Dispatch Centers were limited of the certifications acquired by its dispatch staff (fire and EMS). 80% of Dispatch Centers assigned one or more call takers per shift; however, FBCSO one of the three agencies that used over 5 call takers in their dispatch operations. Finally, 64% (including FBCSO) of Dispatch Centers utilized standard questions to obtain information from callers. (except Fire) *In summary, as was the case with the Computer Aided Design related questions, this initial assessment of Staffing and Personnel aspects also indicates possible opportunities to enhance FBCSO dispatch performance with more in-depth analysis of alternative staffing configurations, certifications and overall training with focus on the FIRE/EMS side of dispatch.*

# Recommendations & Suggestions:

## *Considerable factors for developing a Cost Benefit Analysis*

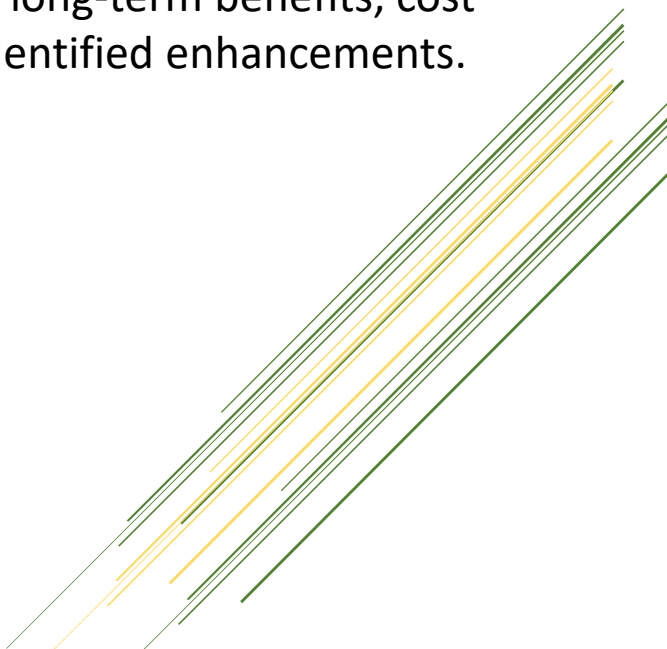
### Improving the Organizational and Operational Enhancements of the Existing Systems and Processes in Fort Bend County Dispatch

- *Organizational Development (Recommend a Consultant for expertise in the cost/benefit overview)*
- *Technology and Software Cost*
- *Personnel Cost – Additional Supervisor for Fire/EMS for training and oversight*
- *Professional Development (Training and Certifications)*
  - *Certified dispatchers for EMS/FIRE*
- *Providing department training for agencies being dispatched to maintain*
- *Agreements with each Jurisdiction or agency that is dispatched*
  - *Creating a consistency, impacting the efficiency of the overall dispatch and training*



# Recommendations & Suggestions:

The initial review with the survey and meetings with jurisdictions, an initial assessments indicate that further, more direct engagement with identified respondent **Group 1** Dispatch Centers may be warranted in order to better understand possible high-performance structures and approaches that may be beneficial to FBC's efforts to improve its Dispatch Center operations. The proposed cost benefit analysis scope of work should be undertaken in such a way as to facilitate intentions to compare and contrast the short and long-term benefits, cost and risks associated with instituting, maintaining and operationalizing a stand-alone Dispatch Center vs the short and long-term benefits, cost and associated risks related to maintaining the current FBCSO Dispatch structure with the identified enhancements.



# Recommendations & Suggestions:

1. Making organizational and operational enhancements to the existing systems and processes at FBCSO's Dispatch Center utilizing, in part, insights gained from the initial survey assessments and from proposed further engagements with selected respondent Dispatch Centers. Update and review all agreements or create agreements for each dispatch jurisdiction (with all agreements contain consistent procedures for efficiency) Additional include enhancements should include a plan-of-action to address the identified challenges related to Training/Personnel, Financial Capabilities, Technology Improvement, and Organizational Emphasis at FBCSO's Dispatch Center (in full report provided to Commissioners Court) **This action will also include hiring a consulting firm to provide a full outside prospective.**
  - Development for each discipline a Short, Medium and Long Range Strategic Plans including infrastructure, IT, software needs along with personnel requirements.
2. Option 1 plus the additional strategic plan to developing a separation of Fire/EMS, with priority of specializing the dispatchers for fire and EMS certifications. (APCO-ProQA) Maintain a supervisor for these employees that is separate from law enforcements and to provide the training and policies, creating a separation from law enforcement dispatchers. This would also require reviewing CAD procedures for the EMS/Fire side of the dispatch center.
  - \*\*\*another option proposed for review: Option 1 plus the additional review of the cost-benefit of having Fire (and/or EMS) dispatched by a third-party, saving on the staffing and structure within FBCSO.
3. Full cost-benefit analysis for a stand-alone Dispatch Center (run independently from FBC Law enforcement, Fire or EMS oversight) and including the structure and feasibility. - need consultant with subject-matter expert (SME) expert background.

# Immediate Needs:

The County has received the cost and input for the purchase of US Digital for the Fire and EMS system. This will automate the calls and speed up the process for the Fire/EMS Dispatcher. After reviewing the funding from FY2019, the following is the breakdown for enhancements for the Dispatch Center:

1) Cross Point Communications for Radio Re-Programming

PRICE IF IT TAKES 7 DAYS @ 2045.00 = \$14,315.00

8 DAYS = \$16,360.00

2) Motorola Solutions

Project Management, System Technologist, Engineering, and Equipment Move and Reinstallation of MCC  
7500 Console Operator Position

Cost: \$23,575.00

3) US Digital Designs:

Dispatch – Level Subtotal \$62,928.68 + Station – Level Subtotal \$47,277.00 = \$110,205.10

(This is already approved in the FY2019 CIP for approximately \$107,000)

\*\*\*all prices are quotes from March 2019\*\*\*

The image features a white background with decorative elements in the corners. In the top-left and bottom-right corners, there are clusters of thin, parallel diagonal lines. These lines are colored in shades of green and yellow, creating a modern, abstract aesthetic. The central focus of the image is the text "Questions?".

**Questions?**