

**AGENDA  
REGULAR MEETING  
YECA GOVERNING BOARD**

**Yolo Emergency Communications Agency, 35 N. Cottonwood Street, Woodland, CA 95695  
January 4, 2017  
2:00 P.M. Public Session**

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**ALL ITEMS ARE FOR ACTION UNLESS OTHERWISE NOTED WITH AN ASTERISK (\*).**

**1. Call to Order (2:00 PM)**

**2. Public Comment \***

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Speakers must state their name and city of residence for the record and limit their remarks to three minutes. Members of the public audience may address the Governing Board on any item not on today's agenda. No response is required and no action can be taken, however, the Governing Board may add the item to the agenda of a future meeting.

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**3. Announcements**

January Dispatch Academy for New Employees

**4. Approval of the Agenda**

**5. Consent Agenda**

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Consent Agenda items are considered to be routine and will be considered for adoption by one motion. There will be no separate discussion of these items unless a member of the Governing Board, member of the audience, or staff requests that the Governing Board remove an item. If an item is removed, it will be discussed in the order in which it appears on the Agenda.

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- a. Approval of the Minutes from the December 7, 2016, Regular Meeting
- b. Operations Division Report
- c. Current Year Budget Status Update
- d. Revision Alcohol & Drug Policy

**6. Old Business**

- a. After Hours Records Update
- b. Member Cost Formula Update

- 7. Consultant Engineer Presentation for Microwave Obsolete Equipment Replacement, CSI Telecommunications, Craig Trygstad**
  - a. CSI Recommendation Analysis Summary of Equipment
  
- 8. Project Planning for YECA Building Presentation – Information Only**
  - a. Executive Summary by Principal Architect Nick Docous from Lionakas
  
- 9. Staffing Plan & Costs for Second Fire Dispatcher**
  - a. Staffing Assessment Summary
  
- 10. Closed Session:**
  - a. Public Employee Performance Evaluation (GC54957)  
Position Title: Executive Director
  
- 11. Next Scheduled JPA Board Meeting TBD**
  
- 12. Items for Future Agenda**
  - a. FY18 Budget Proposal

**13. Adjournment**

I declare under penalty of perjury that the foregoing agenda was available for public review and posted on/or before December 29, 2016 on the bulletin board outside of the Yolo County Board of Supervisors Chambers, Erwin Meier Administration Center, 625 Court St., Woodland, California and on the agency website: <http://www.yeca911.org/BoardCalendar2016.html>

  
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Dena Humphrey, Executive Director

**\*\*The meeting room is wheelchair accessible and disabled parking is available. If you are a person with a disability and you need disability related accommodations to attend the meeting, please contact Corina Macias at (530) 666-8919 or (530) 666-8909 (fax). Requests for accommodations must be made at least two full business days before the start of the meeting. \*\***

**Agenda Item: 5.a**

**YOLO EMERGENCY COMMUNICATIONS AGENCY (YECA)  
GOVERNING BOARD  
December 7, 2016  
MINUTES**

The YECA Governing Board met on Wednesday, December 7, 2016 at the Yolo Emergency Communications Agency, 35 N Cottonwood Street, Woodland. Chair Tom McDonald called the meeting to order at 2:03 p.m.

**PRESENT:** Primary Board Members: Tom McDonald, City of West Sacramento, Tom Lopez, Yolo County, John Donlevy, City of Winters, Gary Fredericksen, Yocha Dehe Wintun Nation, Dena Humphrey, YECA Executive Director.

**ABSENT:** Dan Bellini, City of Woodland,

**Entry No.2**

**Minute Order No. 2016-28: Public Comment**

Chief Burns, Esparto Fire District addressed JPA Board the need for a second fire dispatcher. It is a Fire service concern of only being assigned one Fire Dispatcher to a community that is growing. Chief Burns verbally provided a timeline of the numerous times addressing this same issue and is requesting a second Fire Dispatcher to be implemented.

Chief John Heilmann- President of Yolo County Chief Association- is supporting Chief Burns, Esparto Fire District request for a second Fire Dispatcher. Chief Heilmann stated City of West Sacramento is also expanding and calls have doubled. Chief Heilmann offered his assistance to the JPA Board to make this implementation of a second Fire Dispatcher.

**MOTION: Lopez SECOND: Donlevy AYES: McDonald, Fredericksen, Donlevy, Lopez**

**Entry No. 3**

**Announcements**

None

**Entry No. 4**

**Minute Order No. 2016-29; Approval of Agenda**

The Agenda approved as presented.

**Entry No. 5**

**Minute Order No. 2016-30; Approval of Consent Agenda**

The Consent Agenda approved with comment.

**Comment:** 5.a correction October 5, 2016 minutes in “Discussion” paragraph corrected title to “Board Member” Tom Lopez instead of “Board Chair”

**Update:** *correction made to minutes and updated website.*

**MOTION: Lopez SECOND: Donlevy AYES: McDonald, Donlevy, Fredericksen, Lopez**

**Entry No. 6**

**Minute Order No. 2016-31; Old Business –**

**A. P25 Radio Updates – Update-Informational Only**

Charles Keasler presented a brief comment on the P25 project stated agencies are working together.

**B. After Hours Records Update –** Leah Goodwin presented -met with Records clerks from the various agencies with the exception of City of Winters was not able to attend. Sheriff’s Office requested additional data and in the process of reviewing.

**C. Member Cost Formula Update –** Dena Humphrey presented; met with City Manager of Woodland Paul Navazio & City Manager of Winters John Donlevy to discuss financial data requirements for member agencies cost formula. Making progress looking to meet again with both City Managers.

**Entry No. 7**

**Minute Order No. 2016-32 FY15/16 External Audit Presentation by Macias Gini & O’Connell LLP, Scott Brunner, CPA**

Presented by Scott Brunner – Presented Fiscal Audit Report – Asked the JPA Board if had any comments or needed a clarification on any of the reports provided.

**Comment:** Board Member John Donlevy commented on page 21 Note 5: Pension Plans; will go over formula with Executive Director Dena Humphrey & Woodland City Manager Paul Navazio as part of Budget cost formula project. However, overall very happy with the report.

Scott Brunner commented that all financial transactions of the Audit went very smoothly thanks to Corina Macias HR/Financial Manager who is very knowledgeable with Accounting Principles.

**Entry No. 8**

Board Chair Tom McDonald adjourned the meeting to Closed Session at 2:20pm

Open Session resumed 2:55pm

**Entry No. 8**

**Next Scheduled JPA Board Meeting TBD**

**Entry No. 9**

**Items for Future Agenda**

- a. Lionakis Building Assessment
- b. CSI Recommendations for Microwave Equipment
- c. Budget Cost add second Fire Dispatcher

**Meeting was Adjourned 3:00 p.m.**

**Minutes submitted by: Eloise Austin, Recording Secretary**

## STAFF REPORT

### Agenda Item: 5.b

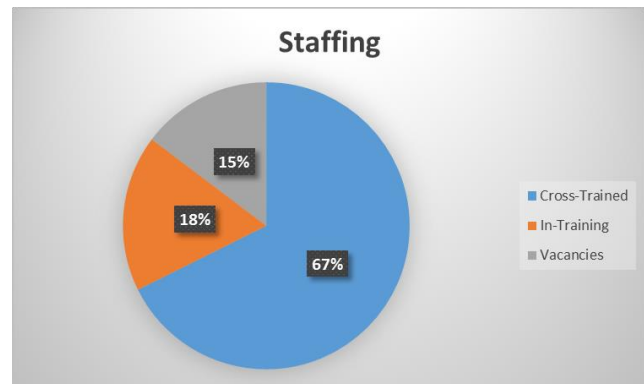
**Date:** January 4, 2017  
**To:** YECA Governing Board  
**Thru:** Dena Humphrey, Executive Director  
**From:** Leah Goodwin, Operations Manager  
**Subject:** November Operations Division Report  
**Recommendation:** No action required; information only.

**Summary:** Operations staff is currently engaged in the following:

### Staffing:

1. Out of 7 applicants sent to background, 5 have been moved forward to psychological testing (5 vacancies.) The successful applicants are scheduled for a start date of January 22, 2017.

2. Out of 32 funded dispatcher positions:
  - 27 are filled,
  - 21 are cross-trained, (67%),
  - 6 are in training, (18%)
  - 5 current vacancies (15%)
  - 1 anticipated loss in January



- a. Danny Barrera and Katie Gonzalez have completed their call taking training and are scheduled to begin their first radios in January.
- b. Jennifer Koch has begun training on the Yolo County Sheriff console and is scheduled to be released at the end of December (third radio.)
- c. Elaine Maher has been released to work independently on the Fire console (second radio).
- d. Melissa Romero has training on the West Sacramento Police (second radio.)
- e. Irina Kinda has been released to work independently on the Woodland Police console (first radio) and is scheduled to begin training on Yolo County Sheriff console at the end of December.

**Statistical Information:**

November Monthly Phone Statistics: (14.5% decrease from October)

Description	Totals for November 2016
WSP Incoming Non-Emerg	4,055
WDP Incoming Non-Emerg	4,192
YSO Incoming Non-Emerg	1,691
WNP Incoming Non-Emerg	423
COMM line Incoming Non-Emerg	3,271
9-1-1 Lines	3,811
7 Digit Emergency	567
Misc.	481
Outgoing Calls	5,311
Total Call Volume	<b>23,802</b>

November CAD Events: (11.6% decrease from October 2016)

CAD Calls Entered for Service				
Fire	Medical	Law	Other	Total
1,386	903	11,484	928	<b>14,701</b>
<i>7.5% decrease</i>	<i>2% decrease</i>	<i>12.2% decrease</i>	<i>2.6% decrease</i>	

Included in “Other” category is AMR, Animal Control, All Public Works, County Maintenance, Social Services, Environmental Health, and Public Guardian.

November Confidential Records Requests:

**137** (13.9% increase from October, 2016)

Recordings and CAD printout requests from public, member agencies and DA office.

November After-Hours Records Entries: (9.4% decrease from October, 2016)

After Hours Records Entries			
WSP	WDP	WNP	Total
164	201	13	<b>378</b>
<i>6.3% decrease</i>	<i>13.7% decrease</i>	<i>30% increase</i>	

November CLETS Inquires: (10.5% decrease from October 2016)

September 2016 CLETS Inquiries		
11/1-11/30/2016	CAD1- CAD9	<b>31,038</b>

**Gold Board Recognition:**

Our November winner is Danny Barrera; he was recognized for his support with the team, helping out Irina during a vehicle pursuit.

Also recognized for their contributions were: Nadia, Irina, Maria R., Chris Buck, Diana, Scott F., Amy, Dave, Chris Brewer, Amanda, Craig, Jenn, Maria B., Elaine H-S., Melissa, Tammy, Krista and Molly.

**Projects:**

- |  |  |
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| <ol style="list-style-type: none"> <li>1. Training Committee/ Training Officer Program</li> <li>2. Tactical Dispatcher Program</li> <li>3. EMD-QA Implementation             <ol style="list-style-type: none"> <li>a. Software installed at YEMSA</li> <li>b. Service Agreement drafted</li> </ol> </li> <li>4. IOP Review</li> <li>5. FY2016 Homeland Security Grant – Back-up batteries for Bald &amp; Winters Sites – EHP submitted</li> <li>6. Evacuation Plan (Continuity of Operations)</li> <li>7. Records After-Hours Responsibilities Group             <ol style="list-style-type: none"> <li>a. 10/17/2016: Met with Records Manager Group (excluding Winters PD, unable to attend)</li> <li>b. 10/25/2016: Data requested provided to Lorrie Marin, YSO for review.</li> <li>c. 11/10/2016: Additional data provided to Woodland &amp; Davis PD.</li> <li>d. 12/15/2016: Additional data provided to Lorrie Marin, YSO.</li> </ol> </li> <li>8. ENP</li> <li>9. Recruitment Plan</li> </ol> | <ol style="list-style-type: none"> <li>10. Staffing Study</li> <li>11. 2017 Training Plan</li> <li>12. NENA CMCP POST certification</li> <li>13. 2018 Schedules</li> </ol> |
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**Agenda Item:** 5.d

**Date:** January 4, 2017

**To:** YECA Governing Board

**From:** Dena Humphrey, Executive Director

**Subject:** YECA Alcohol & Drug Policy

**Recommendation:** Approve Proposed Revised YECA Alcohol & Drug Policy

**Summary:**

The proposed Drug & Alcohol policy is being submitted to the Board for approval. Back in November 2015, YECA submitted the old version of this policy to the Board for approval. As time progressed, later reviews found it necessary to go through a revision process as the origination of this policy derived from Yolo County. YECA has worked through County Counsel and the YCDA association through the meet and confer process with the proposed “revised” policy.

[YECA Alcohol and Drug Abuse Policy](#)

# CSI Telecommunications, Inc.

## Summary of Multiplex Project

Prepared by Craig Trygstad

### OVERVIEW

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CSI Telecommunications was requested by YECA (Yolo Emergency Communication Authority) to evaluate different options to replacing their existing multiplex equipment currently utilized by their system. CSI evaluated multiple products and manufacturers including the 7705-SAR II product proposed by Nokia (formerly Alcatel-Lucent) and the Fujitsu 4100ES. Though these multiplexers as well as other third party multiplexers were compatible with handling traffic, the ability to integrate the alarms of the multiplexers, responsibility of system issues, and service concerns compel CSI to recommend pursuing the Nokia solution.

### ALARM MONITORING COMPATIBILITY

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YECA currently employees a Nokia microwave system, including the TSM-8000 which monitors key components within the system as well as integration of environmental alarms. 7705-SAR II integrates easily with the TSM-8000 with no additional development required. For a third party multiplex to be integrated into the system, YECA would have to replace the alarm monitoring system with a third party system or press Nokia into developing an interface between the TSM-8000 and the multiplex. When asked for a quotation, the TSM-8000 product group would not commit to even a rough order magnitude cost and stated that they would most likely not develop an interface at any cost due to the unknowns in the interface requirements. The other option would be to replace the TSM-8000 with another alarm monitoring solution. There are good alarm monitoring products available, such as various Asentria Site Boss models and if this was the sole concern with utilizing a third product multiplexer, CSI would recommend costing out a new alarm monitoring solution to replace the TSM-8000 in conjunction with a third party multiplex solution. However, with the additional concerns below, it does not seem prudent to go to this effort at this time.

### RESPONSIBILITY

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Currently, YECA has a single vendor providing a relative turn-key microwave system. Should a third party product be introduced in the middle of the system, there could be conflict between Nokia and the third party as to who is the responsible party for the issue. Without a system integrator, YECA would need to mediate between the two parties should an issue occur and/or come up with an alternate solution.

## SERVICE

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The question of service parallels the question of responsibility, as Nokia will not quote service for a third party multiplexer. Should a problem occur, YECA would need to evaluate the issue and contact either the Nokia service provider or the service provider of the multiplexer depending on YECA's determination of which equipment is causing the issue. In addition to issue responsibility, the service provider may point to the other provider which could increase the time to fix the issue as well as potentially attract additional service costs for trips depending on the service contracts.

## COST

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Nokia's offers started at \$750,000 then was reduced to \$438,951. After further negotiations, the latest offer is at \$354,126 (dated November 3<sup>rd</sup>) which had further granularity requested during negotiation. CSI had multiple calls with Nokia regarding this proposal, questioning some of their assumptions regarding services, primarily how much time some of their efforts would take. Two ideas came from these calls:

- That Nokia would perform the initial site surveys on a separate contract. Information from these surveys would then be used to refine their subsequent quotation. This suggestion came from Nokia from CSI's questioning the time required per site to perform some of the tasks in the proposal.
- For expenses, Nokia's initial estimate of \$4,000 per week per person (includes airfare) would be used in the contract, but that actually expenses would be documented and used as the final cost with no margin. The difference would be given as a monetary credit at the end of the project.

Nokia has quoted \$7,317 for the initial site surveys, which reflects their WSCA/NAPSCO pricing. The additional "Management Adjustments" that were given on the full quotes would not be applied on the survey quotations, but the total cost of the project, including the survey costs, would be used in determining the "Management Adjustments" for the remaining quotation. That adjustment is at about 25% of the WSCA/NAPSCO pricing on the November 3<sup>rd</sup> quotation.

## OTHER ITEMS

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The question of performing this migration over a period of years was raised. Assuming the Nokia solution is selected, Nokia would need to provide guidance on any additional implementation costs associated with a phased approach, but CSI would anticipate that this cost would be significant as the system would need to be re-optimized for each phase and multiple mobilizations would need to be made.

The other question raised was whether the scenario of maintaining the existing multiplex over the next five years would be feasible. CSI could not find a reputable source for these parts and this approach could put the microwave system in jeopardy should a critical part fail, so CSI would be very cautious of this approach.

## Memo

To: Dena Humphrey  
From: Nick Docous, AIA  
Re: YECA Facility Assessment – Executive Summary  
Date: December 29, 2016

## EXECUTIVE SUMMARY

Lionakis was retained to assess the condition of YECA's existing facility located at 35 North Cottonwood Street in Woodland and provide a recommendation to remodel and expand it to meet current and projected demands for emergency monitoring and dispatch services. The facility's assessment and conceptual remodel/expansion recommendation provide a baseline for comparing other options such as relocation to another existing facility or construction of a new 911 Dispatch Center.

### Background

The existing facility and its systems are reaching – or have reached – their useful lives. In short, the building was designed and constructed in the early 1980s and was not planned for the types of technology YECA must employ to serve its subscribers *and* have the ability to meet future expectations. The building was not designed for the changes in technology that have exponentially increased demand on not only the building's systems and its physical plant, but on YECA's operational and staffing models as well, including quality of workplace and recruitment/retention.

Dependence and the reliability of existing systems will require improvements, upgrades, and, in some cases, full replacement. This work will trigger compliance with current codes and requirements for energy efficiency and accessibility, among others. YECA has done a commendable job keeping the existing facility in service, but it has reached the point of diminishing returns on future investments and, more importantly, it presents significant limitations in responding to future needs and changes.

### Limitations

#### Layout and Construction of the Existing Facility's

As noted above, the building was designed to house and facilitate the delivery of emergency monitoring and dispatch services under considerably different conditions than YECA must now operate. These conditions include meeting new security requirements, the flexibility to respond to changing technology, responding to an increasing number of reporting points, expanded and reliable telecommunications and IT infrastructure, and growth.

The facility's construction is essentially a concrete "box" at the first level. It was designed as such to provide security, including the exterior earth berms that extend up to a few feet below the roof eave line at the east, north and west sides of the building. This construction, however, significantly limits options to make the plan changes and revisions that are needed to accommodate growth and adapt to technological changes.

Additionally, the roof structure is of a dissimilar construction type (wood frame) than the concrete first level with a heavy clay tile roof. While the roof has been deemed structurally adequate for both vertical and seismic loads, it presents limitations and risks in the operation and maintenance of the facility. Specifically, space and height restrictions pose challenges to maintaining the HVAC and electrical distribution systems, which are located – essentially – in the attic of the building.

Further, these height and space constraints will hamper the ability to upgrade and replace HVAC and electrical distribution systems. Replacement of these critical systems as part of a remodel project will first require the installation of the new system and then a cutover from the old system in order to maintain 365x24x7 operation of the facility. Limited space and maneuvering clearances will make replacing these systems expensive.

Lastly, the existing, original clay tile roof represents an operational risk that should be addressed as part of a remodel project: continued protection of critical HVAC, electrical, IT, telecom, and radio dispatch systems are all located on the second level of the building. Clay tile is a very heavy roofing material and, as noted above, it is supported on a wood frame system that has been deemed to be structurally adequate.

However, because of its age and weight, the clay tile roof should be replaced with much lighter steel structure and metal roofing system. This will provide the opportunity to provide more space for the replacement of critical infrastructure and a longer term time frame for protection of these systems.

From a building maintenance standpoint, there are also areas which require further investigation in order to fully determine an appropriate approach for the repair and/or replacement of the following systems:

- Site Drainage and Storm Water System – during high rains the storm system backs up into the vehicle maintenance bay and into the IT/Telecom Room.
- Sewer and building plumbing systems – to determine, conclusively, that these systems are not the cause of water intrusions.
- Exterior wall systems where earth berms have been removed (or eroded) and have exposed underlying exterior concrete wall and insulation systems.

### Security

Both the site and the building require assessment from a risk and security response standpoint. Both were designed at a time when the public did not need to access the facility and fencing/security gate were considered sufficient security for the facility's perimeter. Today, access to records and recordings must be provided to the public. The site and the facility's current entry sequence, while monitored by cameras and controlled access, is in need of thorough assessment for compliance with applicable standards and regulations.

It is anticipated that such an assessment will recommend the redesign/remodel of the entry vestibule to provide a secure space where the public can access records but not enter the facility's operational theater. Any remodel of the building's entry and "public-facing" program spaces will trigger compliance with ADA accessibility requirements.

### Quality of Workplace

New and newer dispatch facilities incorporate daylight and exterior views into just about all parts of the workplace. This includes offices, conference rooms, staff break and exercise rooms, and even dispatch rooms (to a limited *and controllable* extent). In general, design of new facilities focuses on creating employee-centric workplace, much more so than was envisioned when YECA's current facility was designed.

In today's work environment, providing for a positive employee experience is an important design goal. This is because the quality of the workplace has been shown to have beneficial results on efficiency, well-being, and recruitment and retention (which are proven cost centers with measurable returns on investment).

Given the concrete construction of the first level of the facility, bringing daylight and exterior views into work and break areas can only be accommodated in a limited fashion, if at all. There are few, if any, economical and practical (i.e. security) options to do so. Other quality of workplace improvement strategies should be studied as part of the design to remodel the facility.

### Accessibility

Any remodel project will require that the facility be brought into full compliance with both ADA and California Building Code (CBC) accessibility requirements. Specifically, the building's entry vestibule is entirely out of compliance with current codes and regulations. Revising the building's entry to address the aforementioned security needs will trigger compliance with accessibility requirements, including access to the site (via pedestrian, auto, and public transit) and into the building. Additionally, the facility must provide accessible transaction counters, restroom(s), and drinking fountain(s) to all areas of the facility that are open to the public.

The building also needs improvements and corrective measures to satisfy the requirement to provide an accessible workplace for YECA employees. The improvements include restroom modifications, door hardware upgrades, and removal of barriers such as equipment and fixtures which protrude into accessible pathways (i.e. halls and corridors).

### Structural Systems

As noted above, the building's main structural system consists of poured in-place concrete at the first level with a wood-framed roof above. The concrete system provides strength but it also imposes limitations on expansion and flexibility, as well as ongoing maintenance and operations. Essentially the building was designed to provide a hardened exterior and perimeter protection. If there was a strategy for growth and adaptability it is hard to discern.

With regard to maintaining the building from a structural standpoint over the next several years, the following areas/items will need to be assessed in more detail to establish whether improvements and/or upgrades are required:

- Tier 1 Seismic Investigation to better model the building's performance during an earthquake. This is a voluntary process but is recommended for critical facilities such as YECA's facility at 35 North Cottonwood Street.
- Bracing for the suspended wood platform in the vehicle maintenance bay. Presently it is unbraced for seismic loads and should be mitigated.
- Replacement or removal of the wood trellis above the exterior mechanical enclosure. Existing trellis members show evidence of dry-rot and deterioration.



Mechanical (HVAC & Plumbing), Electrical (Power & Lighting), IT/Telecom & Fire Alarm Systems

Mechanical

HVAC

HVAC Systems serving dispatch, administrative spaces, and the radio/telecom room need to be replaced; they have reached the end of recommended expected efficient service timeframes. This provides the opportunity to rezone the building, especially for the administrative spaces.

Presently there is only one system serving this 4,100 square foot area, which is over-sized from a temperature control and thermal comfort standpoint. Further, it is not energy efficient to heat/cool such a large (4,100 sf) space with only one unit. Lastly, replacing and rebalancing these systems will deliver energy savings, compliance, and user comfort.

Overall, the recommended scope of HVAC improvements that will need to be undertaken is as follows:

- Replace *interior* units (e.g. air handlers, fan coils, etc.) of the HVAC systems serving dispatch, administrative spaces, and the radio/telecom room. Original units are circa 2002. This work will be paired with replacement of the exterior units (e.g. condensing units, etc.) last year.
- Clean/reuse existing ductwork.
- Remove/replace existing, inaccessible duct mounted fire damper access doors; replace with accessible, code compliant doors.
- Provide balancing dampers and rebalance the building's HVAC system. Balancing dampers were not detectable at existing ceiling and wall outlets.
- Provide new insulation for all refrigerant lines. Insulation covering on a significant number of refrigerant lines is deteriorating due to prolonged exposure to the weather.
- Existing building controls are outdated. Replacing the building controls system will result in better energy performance and reduced utility costs.
- Relocate existing thermostats and provide new thermostats to improve indoor thermal comfort. Indoor thermal comfort directly contributes to quality of workspace.

### Plumbing

The building's plumbing systems appear to be in good condition and many components can likely be retained in a remodel project. New plumbing fixtures will be required to comply with CALGreen water conservation as well as accessibility requirements. The recommended scope of plumbing improvements that will need to be undertaken is as follows:

- Provide a recirculation pump for quicker and consistent hot water flow throughout the building.
- Investigate all sanitary sewer lines for clogs and blockages.

### Electrical

#### Power

The building's power distribution system is generally adequate and meets current demands. However, much of the interior distribution system is original construction and many of the building's panels and sub-panels have little to no remaining space for new circuits. This presents a significant limitation with regard to accommodating even minor building modifications. A new interior distribution system with more panels and sub-panels will provide capacity and the additional spare circuits needed for adaptability and flexibility.

Looking ahead, any remodel project should consider increasing the main electrical service (presently at 1200 amperes, 120/208 volt, 3 phase) to accommodate future load requirements that will be precipitated by growth and technology. Recent investments made to the ATS and the main power center (i.e. switchboard) represent an investment upon which subsequent improvements will be based.

Overall, the recommended scope of systems-wide electrical improvements that will need to be undertaken is as follows:

- Test existing feeders serving the branch panelboards to determine the dielectric strength of the conductor insulation because the feeders are original construction.
- Panelboards, branch circuits, and receptacles are in fair condition. Future renovations or alterations will be difficult without the addition or replacement of some panelboards. Remodeling the interior of the facility will require all new circuiting and devices.
- Renovation/replacement of the electrical system will trigger the requirement to comply with Title 24 requirements for separate meeting of lighting, HVAC, and plug loads. This will require more panelboards and the separation of loads by type.

### Lighting

Interior lighting throughout the facility is provided by original fluorescent fixtures. Staff complains of inadequate control of the lighting systems, especially in the dispatch room. The recommended scope of building and site-wide lighting improvements that will need to be undertaken is as follows:

- Provide new lighting and controls; existing fixtures and controls have reached – or are reaching – the end of their expected serviceable timeframe. New fixtures employing LED light sources will provide better illumination while saving energy.
- New lighting and controls will, as noted above, typically involve LED light sources. Additionally, continuous dimming, vacancy sensors, and – in most cases – a digital lighting control system to comply with Title 24, will be required.
- While the existing pole mounted area lights in the parking areas have been retrofitted with LED modules, it is recommended that new LED luminaires designed specifically for the purpose be provided. This will ensure optimum lighting levels, spacing, and lighting cutoff to reduce/eliminate light pollution.

### Telecommunications

The IT/Telecom room is inadequately sized to meet growth and changes in technology. It is land-locked within the concrete perimeter, which significantly limits its adaptability. Further, current (and projected) design standards distribute cable to dispatch stations via overhead infrastructure for ease of installation of new platforms and technology, as well as reconfiguring existing systems. The existing Dispatch room is served via an outdated, underfloor distribution system from the IT/Telecom room.

Lastly, there is a floor drain in the IT/Telecom room which is connected to the storm drainage system. This represents a significant risk exposure in that the drain could potentially allow water into the room during heavy rain storms. This should be addressed by disconnecting the drain or installing a backflow preventer.

Overall, the recommended scope of systems-wide IT/Telecom improvements that will need to be undertaken is as follows:

- A larger, expanded data room is needed. Limited space prevents ease of movement around sensitive, critical electronic equipment. Power systems serving the data equipment should be evaluated for reconfiguration and/or replacement.
- Voice/data cabling should be updated throughout the facility to accommodate the higher bandwidth requirements of current and future telecommunications systems. All existing wiring should be removed and replaced.

### Fire Alarm

The facility is equipped with heat detection and alarm horn/strobes throughout. Heat detectors are rate-of-rise type but no smoke detectors were observed. Pull stations are provided at building exits. Overall, the recommended scope of systems-wide Fire Alarm improvements that will need to be undertaken is as follows:

- While the existing fire alarm appears to have additional capacity, it should be replaced with a fully addressable system utilizing addressable devices. This is required for compliance with current codes and provides better detection and coverage.
- Multi-function smoke detectors should be added throughout all spaces.
- Audibility of alarm notifications will improve detection and allow the source to be more readily identified.

### Hazardous Materials Survey

A full survey of the YECA facility for the presence of hazardous materials was added to the scope of this study by the YECA Board to identify the potential for added costs – for removal and abatement – in any remodel project. On October 18, 2016, Group Delta, a Vacaville-based hazardous materials testing firm, conducted a full survey for the presence of asbestos, lead-based paint, PCBs, mercury, and CFCs at the YECA facility.

Overall the building is surprisingly “clean” given its date of design and construction in the early 1980s. Generally, buildings constructed during this time period used several building components with asbestos containing materials (ACM). The use of asbestos in building materials was not outlawed until 1989. Group Delta’s survey found ACMs in the following areas. It should be noted that no lead-based paint was found in the building.

- Category I Non-friable ACM in floor tile in various rooms in the building. This type of hazardous material, approximately 2,150 square feet, can be removed economically because it is non-friable.
- Category II Non-friable ACM sink undercoating. This type of hazardous material, comprises 5 square feet and can be removed economically because it is non-friable.
- Category II Non-friable ACM mastic beneath wainscot in the toilet room in IT support area. This type of hazardous material, comprises 135 square feet and can be removed economically because it is non-friable.
- Elsewhere there are fluorescent lamps which contain mercury and the HVAC units use CFCs. These hazardous materials can economically be removed

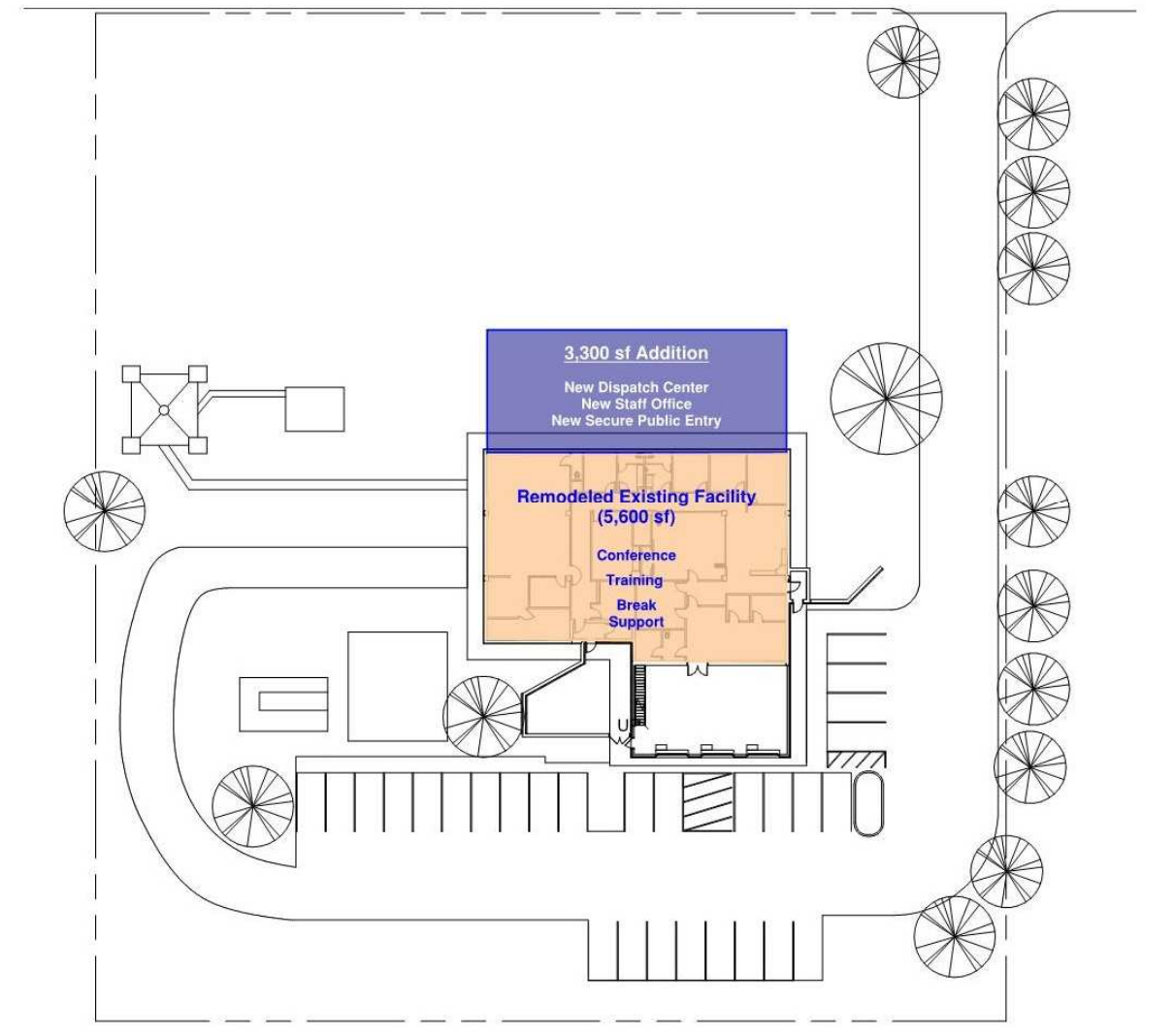
## Options

With full consideration given to the foregoing summary of required building improvements and upgrades, the following options for remodeling and expanding the YECA facility are as follows:

### Option A – Expand & Remodel Existing Facility

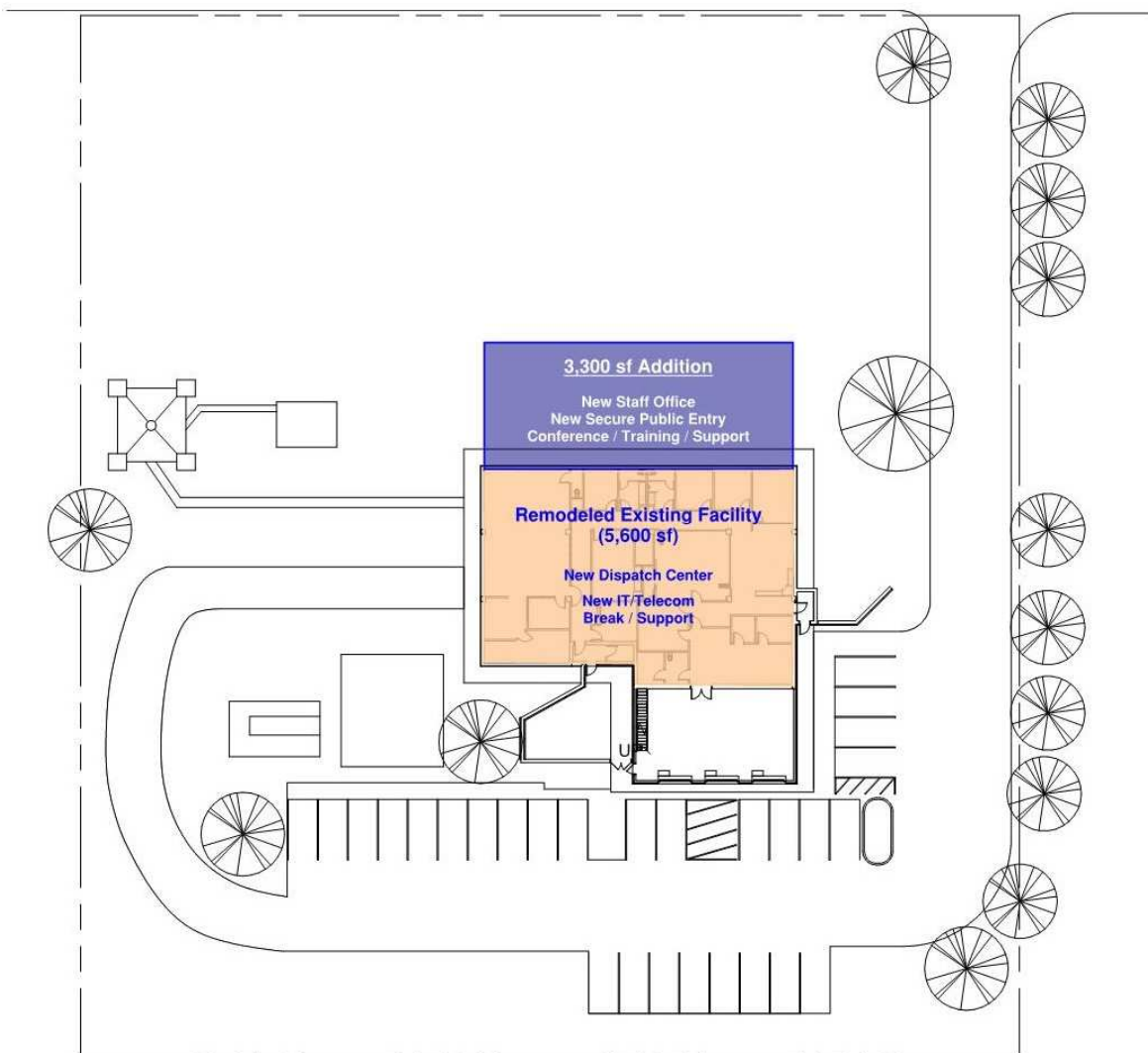
#### Option A.1

Expand to the north of the facility to create 3,300 square feet of new space (one story) for a new dispatch center sized for growth, new IT/Telcom room, and new staff office space, including a secure/separate public entry. Fully gut and remodel the existing building (5,600 square feet first floor) to provide conference, training, break area, and other support space. This option would include replacing the existing roof.



Option A.2

Expand to the north of the facility to create 3,300 square feet of new space (one story) for new conference and training rooms, support space, and staff office space, including a secure/separate public entry. Fully gut and remodel the existing building (5,600 square feet first floor) to create a new, larger dispatch room sized for growth within the first floor concrete structural “envelope” at the first level. This option would include a new, enlarged IT/Telecom room and replacing the existing roof.

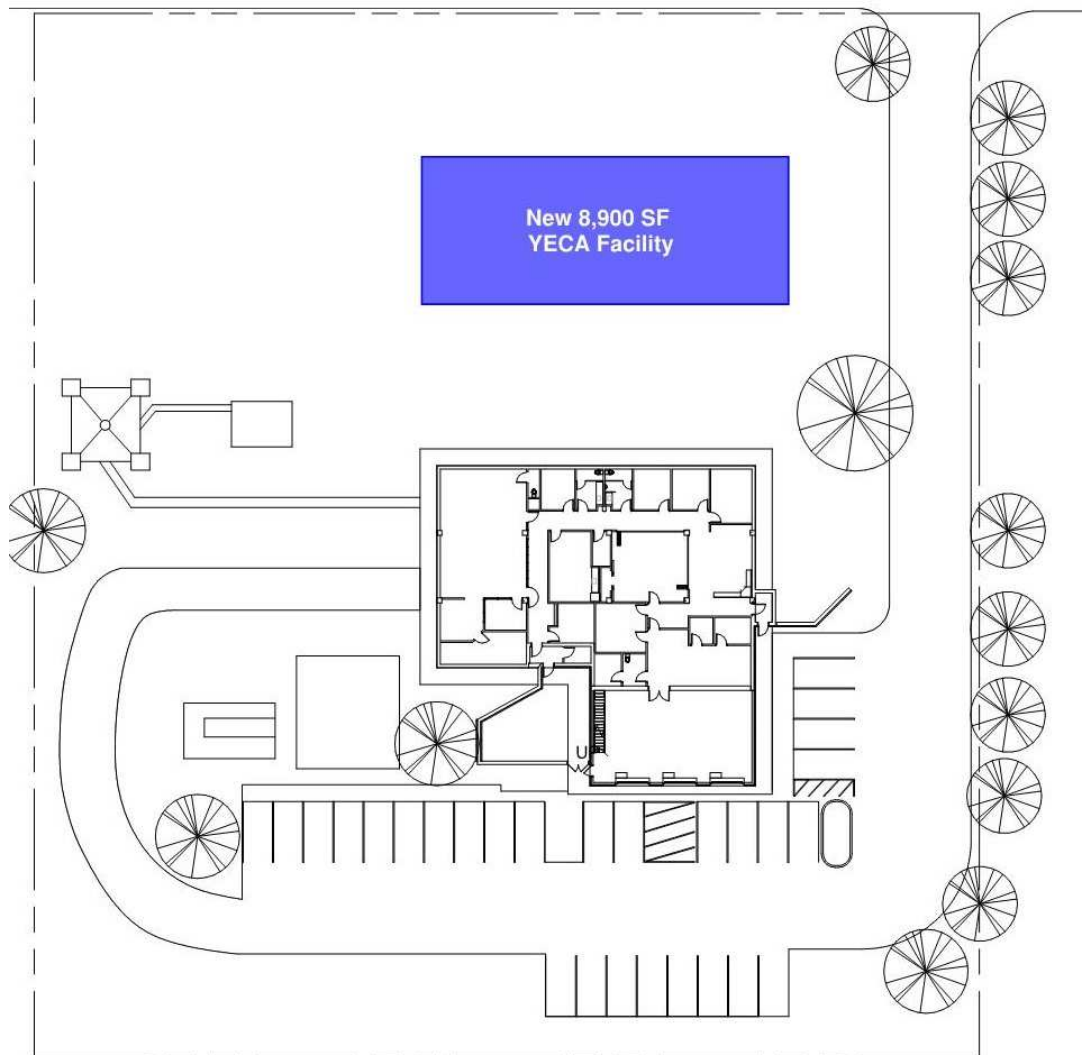


Option B – Construct a New Facility

Option B

Construct a new 8,900 square foot, two-story facility on the vacant property to the north of the YECA facility. Build-out and commission this facility and relocate existing systems (supplemented with new systems) from the existing facility prior to move-in and operation.

Decommissioning and demolishing the existing facility would be done under a separate project. This scope of this study does not include assessment of repurposing the existing facility, but it would have reuse value in our professional opinion.



Comparative Budget Models

The following comparative budget models provide a conceptual range – and comparison – for each option. Unit costs are based on current construction market conditions and no escalation is factored into the models; they are in today’s dollars to facilitate the comparative process and discussion.

Budget Models do not include expense allowances for equipment, move-out/move-in, IT systems upgrades, or costs for furniture, fixtures, and equipment. A comprehensive cost estimate would be developed based on a schematic design for the selected option.

<u>Option A.1</u>	<u>Area/SF</u>	<u>\$/SF</u>	<u>Total</u>	<u>say</u>
New Construction	3,300	600	1,980,000	2,000,000
Remodel YECA Facility	5,600	300	1,680,000	<u>1,750,000</u>
				3,750,000
Design Contingency		25%		<u>937,500</u>
				4,687,500
Soft Cost Allowance		20%		<u>937,500</u>
				<b>\$ 5,625,000</b>

<u>Option A.2</u>				<u>say</u>
New Construction	3,300	600	1,980,000	2,000,000
Remodel YECA Facility	5,600	400	2,240,000	<u>2,250,000</u>
				4,250,000
Design Contingency		25%		<u>1,062,500</u>
				5,312,500
Soft Cost Allowance		20%		<u>1,062,500</u>
				<b>\$ 6,375,000</b>

<u>Option B</u>				<u>say</u>
New Construction	8,900	600	5,340,000	<u>5,300,000</u>
				5,300,000
Design Contingency		20%		<u>1,060,000</u>
				6,360,000
Soft Cost Allowance		20%		<u>1,272,000</u>
				<b>\$ 7,632,000</b>



The cost to remodel the existing YECA facility is \$100 more per square foot for Option A.2 because this option would create a new dispatch room within the existing facility. This will be more expensive than if the new dispatch room were included in the new space proposed in Option A.1.

### Life Cycle Assessment

The planning horizon for this study was established at a 25 year timeframe, specifically for the remodel scope of the YECA facility. As an added option, the budget model for Option B - a new facility - was included. The timeframe for a new facility can be reasonably planned for 40 years. Based on this, the following life-cycle assessment is presented:

<u>Option</u>	Cost	Life of Building (years)	Annual Cost (straight-line)
Option A.1	5,625,000	25	\$ 225,000
Option A.2	6,375,000	25	\$ 255,000
Option B	7,632,000	40	\$ 190,800

This comparison is on a simple, straight-line basis and does not take the net present value of funds into consideration. What the comparison demonstrates, however, is that Option B, while being the more expensive of the options, has a lower annual cost. When considering, as well, that a new facility will have much less operational and long term maintenance costs than a project which has both new and remodeled space (i.e. either Options A.1 or A.2), constructing a new facility has value and deserves further in-depth analysis.

Additionally, Option B has a bigger advantage over either of the A options: Not having to deal with what is perhaps the most difficult to quantify cost sink of all – operating and working in the existing facility while new construction on either Option A.1 or A.2 occurs, then relocate, and then wait until the existing building is remodeled. The risk factor of interrupting operations is very real and, to address this, the cost of construction – in particular, establishing temporary redundant systems, backups, and safeguards will add considerably to the cost of either A options. In short, while Option B is more expensive on a construction cost comparative basis, it had qualitative advantages that reduce risk and have considerable value.

### Next Steps

We recommend that an option be selected, after vetting and discussion, and that a schematic design be developed for the selected option. This would develop a more detailed design, strategy, and approach than this study was commissioned to deliver. Additionally, a telecommunications study should be completed, ahead of a schematic design, to assist in selection of the best option.

During the interim, the recommendations from this study for facility upgrades, especially Accessibility Compliance, should be considered to provide an ADA compliant and accessible facility. Improvements – both cost and timing – should be considered within YECA's overall plan to proceed with either options so as not to make investments that will be demolished to accomplish longer term goals. While some improvements may have to be made and then removed based on the selected option, these can be managed and minimized with the development of an overall YECA facility strategic plan.

## STAFF REPORT

**Agenda Item:** 9.a

**Date:** January 4, 2017

**To:** YECA Governing Board

**From:** Dena Humphrey, Executive Director

**Subject:** Staffing Assessment & Costs for Second Fire Dispatcher – Informational Only

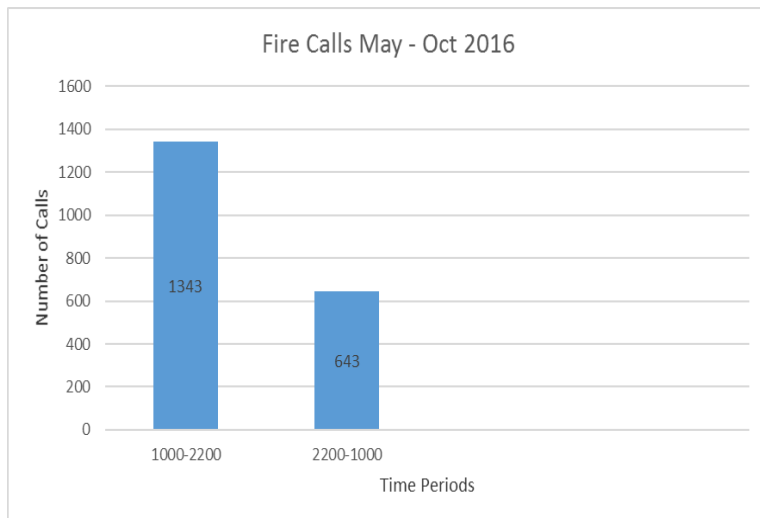
**Summary:**

In 2014, the JPA Board recognized the need to increase staffing levels to meet current operations. In doing so, 4 Dispatch positions were increased. The Board requested at a later time to return with an overall staffing goals that fully addressed the needs of the Agency. This was presented at the April 2016 Board meeting.

The current authorized Dispatch positions for FY16/17 is 32 FTE's. There are currently 6 Dispatchers in training, 3 new employees to start the Academy Jan 2017, leaving another 3 FTE's vacancies to be filled June 2017 from current authorizations. Once these 12 positions are trained, the 32 FTE's are expected to satisfy operational demands. Over the last five years, CAD calls for service have increased by 10% or 22,000 per year, and incoming phone calls have increased by 9% or 25,000 calls per year.

In support of staffing a second Fire Dispatcher the projected timeline to meet this objective would be Feb 2018. This projection includes time needed to train 9 Dispatcher's with an additional need to hire 2 more FTE's. These additional 2 FTE's would add an additional cost of \$130k. This would change the current authorized from 32 FTE's to 34 FTE's for Operations staffed 24/7 for the second Fire Dispatcher.

The Feb 2018 projected date would adequately staff a second Fire Dispatcher from 1000-2200. This is assuming the agency does not experience any significant losses with personnel. This covers 68% majority of all Fire calls during peak season. In order to cover 100%, staffing would need to be increased by a total of 4 FTE's with a cost of \$260k. However, the agency recommends only adding 2 FTE's to cover the 1000-2200.



The future staffing goals are presented in response to the priorities of ultimately meeting field service demands, staffing a second Fire Dispatcher, maintaining a high skilled workforce, and providing exceptional emergency service to the citizens.

<b>Proposed Dispatch Operations Staffing</b>				
<b>Year</b>	<b>Cost</b>	<b>Qty</b>	<b>Position</b>	<b>Notes</b>
<b>FY17/18</b>	\$130k	2 FTE	Second Fire Dispatcher	<i>Projected fill date Feb 2018</i>
<b>FY18/19</b>	\$36k	1 FTE	Training Coordinator	<i>Partial funding (33%) to fill in Feb 2019 full cost (\$110k) per year</i>
<b>FY19/20</b>	\$120k	2 FTE	Dispatch Assistants	<i>*if needed based on City &amp; County growth, NextGen Text to 911</i>