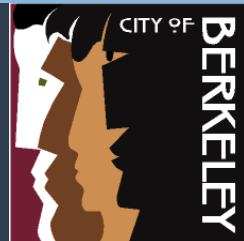03

City of Berkeley, CA Communication Center

Needs Assessment and Recommendations Presentation

May 15, 2023

Federal Engineering, Inc.
"Unleashing the Power of Technology"

Introductions

- Federal Engineering Core Team Members
  - Scott Strom, PMP, Project Manager
  - Cindy Sparrow, Fire Services/Public Health SME
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  - Eric Parry ENP, EMD SME
  - Chuck Berdan, PMP, Fire Dispatch SME

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Project Overview

- ## Project Overview
  - ### ECC Study for Prioritized Dispatch for medical and fire

- ## Additional Scope
  - ### Assess Dispatch Services for Albany and Piedmont Fire
  - ### Specialized Care Unit (SCU) Assessment

Project Methodology

- Methodology
  - Data Collection
  - On Site Interviews & Observation
  - Analysis
  - Report

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Areas of Focus:

1. ORGANIZATIONAL ANALYSIS

2. STAFFING AND WORKLOAD ANALYSIS

3. FACILITY ANALYSIS

4. CALL PROCESSING AND WORKFLOW ANALYSIS

5. CRISIS RESPONSE

6. TRAINING PRACTICES & QA REVIEW

7. TECHNOLOGY ANALYSIS

8. ASSUMING DISPATCH FOR PIEDMONT & ALBANY

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High Level Summary of Recommendations

IMMEDIATE PRIORITIES:

1. STAFFING
2. RECRUITING
3. FACILITY
4. TRAINING

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Staffing Recommendations

Immediately adopt staffing analysis recommendations

Comment – FE does not recommend implementing planned initiatives until staffing issues have been resolved.

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Recruiting Recommendations

Accelerate the recruiting process.

- Streamline the current process to reduce time to onboard

- Incentivize recruiting to attract quality candidates (both entry level and experienced)

  - Wages

  - Lateral Hire

Facility Recommendations

Expand the footprint of the ECC to accommodate the additional workstations required for full staffing.

- Create a back up site that doubles as a Training Facility

- Establish a fully functional Training room

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Training Recommendations

Implement a Training & QA Coordinator position to plan, coordinate and support recruitment and training initiatives.

- Candidate must be trained in Emergency Dispatch QA (ED-Q)

- Design and implement CTO Training

- Create and implement Supervisor Training

- Prioritize continuing education and professional development

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DETAILED OVERVIEW

CITY OF BERKELEY

A Deeper Dive into Scope Of Work
Observations & Recommendations

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Federal Engineering, Inc.
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1. ORGANIZATIONAL ANALYSIS

Observation:

- The ECC is located within police headquarters, and is managed and funded by Berkeley PD

- There is a perception that the ECC favors police call processing and dispatch operations

- Communications Center Manager position has now been staffed.

1. ORGANIZATIONAL ANALYSIS

Recommendations:

- Work towards an independent Communications Center with its own leadership and support model

- Require that ECC leadership have Emergency Communications Center experience

- Take steps to address and improve workplace culture

2. STAFFING & WORKLOAD ANALYSIS

Observation:

- There are currently fifteen vacant PSD positions in the ECC

- Minimum staffing requirements do not support current call volume and workload

- The "Horizontal" call processing model would be better suited to Berkeley ECC operations (i.e., dedicated call takers/dedicated dispatchers)

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2. STAFFING & WORKLOAD ANALYSIS

Recommended Staffing with Turnover – Berkeley ECC	
Position Title	**Total Number of Employees**
Shift Supervisors	9
Dispatchers	27
Call-Takers	23
Total PSAP Staff	**59**
Total with Center Manager	**60**

2. STAFFING & WORKLOAD ANALYSIS

			Berkeley ECC - Staffing Recommendations			
Hour	% Per Hour	Per Hour for Month	Call-Takers Needed	Dispatch Needed	Supervisor Needed	Total Positions
0:00	2.36%	15.7	3	4	1	8
1:00	2.28%	15.2	3	4	1	8
2:00	2.26%	15.0	3	4	1	8
3:00	1.67%	11.2	2	4	1	7
4:00	1.61%	10.7	2	4	1	7
5:00	1.71%	11.4	2	4	1	7
6:00	2.07%	13.8	2	4	1	7
7:00	3.34%	22.2	3	4	1	8
8:00	4.44%	29.6	4	4	2	10
9:00	5.37%	35.8	4	4	2	10
10:00	5.53%	36.9	4	4	2	10
11:00	6.33%	42.2	4	4	2	10
12:00	6.12%	40.8	4	4	2	10
13:00	5.89%	39.3	4	4	2	10
14:00	6.38%	42.5	4	4	2	10
15:00	6.89%	45.9	5	4	2	11
16:00	6.51%	43.4	5	4	2	11
17:00	5.28%	35.2	4	4	2	10
18:00	4.96%	33.1	4	4	2	10
19:00	4.79%	31.9	4	4	2	10
20:00	4.19%	27.9	4	4	2	10
21:00	3.44%	22.9	3	4	1	8
22:00	3.16%	21.0	3	4	1	8
23:00	3.41%	22.7	3	4	1	8
TOTAL	100.00%	666.4	3.46	4.00	1.54	9.00

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2. STAFFING & WORKLOAD ANALYSIS (cont'd)

Recommendations:

- Increase overall staffing from 32 currently authorized to 59 overall positions (60 with Center Manager)

- Implement recommended minimum staffing levels each shift

- Continue cross training staff

- Ensure dedicated Supervisor on duty who does not work frontline roles

- Span of control for Supervisors is 3 – 7 employees

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3. HIGH LEVEL FACILITY ANALYSIS

Observation:

- ECC has outgrown the current facility – no room for growth.

- There is no ECC back-up site

- There is a need for a structured evacuation plan

- There is a need for a functional training room

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3. HIGH LEVEL FACILITY ANALYSIS

Recommendations:

- Renovate and expand current ECC facility

- Establish a back-up site

- Define a structured evacuation plan

- Establish a functional training room

- Establish an ECC Manager's office

4. CALL PROCESSING & WORKFLOW ANALYSIS

Observation:

- ECC as Primary PSAP does not provide scripted Pre-Arrival Instructions (PAIs) for medical, fire or police calls for service

- Current call processing methodology requires redundant creation (duplication) of medical call for service in order to comply with response requirements

4. CALL PROCESSING & WORKFLOW ANALYSIS

Observation (continued):

- There are too many number based codes (with no type codes) that must be memorized by ECC staff

- There is no CAD to CAD interoperability between the ECC and the secondary PSAP (ACRECC)

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4. CALL PROCESSING & WORKFLOW ANALYSIS

Recommendations:

- Conduct a detailed call-taking and business process analysis to identify efficiencies/risks and streamline process

- Create an ECC/ACRECC CAD to CAD interface

- Implement EMD/EFD scripted protocol systems to increase efficiencies and provide real-time information and access to pre-arrival instructions

- Plan to phase-in EPD scripted protocols

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5. CRISIS RESPONSE ANALYSIS

Observations:

- There is no formalized process to identify, categorize, triage or dispatch calls that are appropriate for the Specialized Care Unit (SCU)

- Staff at the ECC have not been included in planning and feel disconnected from the program

- There is no understanding of how 988 transfers will be conducted from the ECC

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5. CRISIS RESPONSE ANALYSIS

Recommendations:

FE facilitate a workshop for all stakeholders to:

- Discuss the establishment of a protocol to enable a preliminary triage system, workflow, and process for SCU dispatch

- Improve understanding of the SCU Program

- Facilitate a working linkage between the practitioners and ECC dispatch personnel

6. TRAINING PRACTICES & QA REVIEW

Observation:

- There is no dedicated Training Coordinator position

- Training is conducted by ECC supervisory staff and designated CTOs

- Consists of a combination of classroom and 'at the workstation' training

- No simulation training in classroom (shadow-based)

- No formalized Supervisor or CTO Training

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6. TRAINING PRACTICES & QA REVIEW

Observation (continued):

- Mandatory POST training requires overtime

- No built-in training days on current schedule and minimum staffing levels

- Quality Assurance program has been developed, however there has been no staff to conduct reviews

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6. TRAINING PRACTICES & QA REVIEW

Training Practices Recommendations:

- Create and implement a Training and Quality Assurance Coordinator position as soon as possible in order to:

  - Plan, coordinate and support the recruitment and training of new personnel

  - Revamp current training manual

  - Develop and deliver a QA/QI program for the ECC

  - Strive for accreditation

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7. TECHNOLOGY ANALYSIS

Observation:

- Tyler CAD system has the capability to interface with EMD software

- Station alerting system is not automated

- Protocol system implementation will require additional IT resources

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7. TECHNOLOGY ANALYSIS

Recommendations:

- Establish a fully automated station-alerting system that is integrated with CAD

- Implement a two-way interface with ACRECC to receive medical call information and updates in both CAD and MDTs

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8. ASSUMING DISPATCH FOR PIEDMONT & ALBANY

Observation:

- 9-1-1 call taking and dispatch only for fire will be transitioned, not admin line call answer

- The daily call volume & workload for the agencies is not significant in comparison to Berkeley Fire call volume

- There will be delays in call processing due to the transfer time of 9-1-1 calls from the Primary 9-1-1 PSAP to Berkeley ECC

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8. ASSUMING DISPATCH FOR PIEDMONT & ALBANY

Observation (continued):

Technology Considerations

- Piedmont has the same CAD system (Tyler) as Berkeley, Albany has RIMS. All fire dispatch would occur on Berkeley ECC Tyler CAD.

- Interfaces needed for Fire RMS, ePCR, CAD to CAD with UC Berkeley PD, Oakland & ACRECC, and Fire Station Alerting

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8. ASSUMING DISPATCH FOR PIEDMONT & ALBANY

Observation (continued):

ECC Impacts

● Training for Dispatchers

- Area Familiarization

- Policies and Procedures

- Fire Department-specific Training

● Ensure streamlined procedure so fire call taking is the same process for all fire agencies, and not 3 different ways

8. ASSUMING DISPATCH FOR PIEDMONT & ALBANY

Recommendations:

- The addition of both Piedmont and Albany Fire Dispatch should be considered once staffing levels increase

- Consider onboarding the agencies after EMD implementation and improvements to the Berkeley training program have occurred

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QUESTIONS?