East Bay Regional Communications System Authority

Participating agencies include Alameda and Contra Costa Counties and the following cities and special districts: Alameda, Albany, Antioch, Berkeley, Brentwood, Clayton, Concord, Danville, Dublin, El Cerrito, Emeryville, Fremont, Hayward, Hercules, Lafayette, Livermore, Martinez, Moraga, Newark, Oakley, Pinole, Pittsburg, Pleasant Hill, Pleasanton, Richmond, San Leandro, San Pablo, San Ramon, Union City, Walnut Creek, East Bay Regional Park District, Kensington Police Community Services District, Livermore Amador Valley Transit Authority, Moraga-Orinda Fire District, Rodeo-Hercules Fire District, San Ramon Valley Fire District, California Department of Transportation, Ohlone Community College District, Contra Costa Community College District, Dublin-San Ramon Services District and University of California, Berkeley

OPERATIONS COMMITTEE MEETING

NOTICE OF REGULAR MEETING **DATE: February 21, 2020**

TIME: 9:30 a.m.

PLACE: Alameda County Office of Homeland Security and Emergency Services,
Room 1013
4985 Broder Blvd., Dublin, CA 94568

AGENDA

1. Call to Order/Roll Call

2. Public Comments (Meeting Open to the Public):
   At this time, the public is permitted to address the Committee on items within the Committee's subject matter jurisdiction that do not appear on the agenda. Please limit comments to a maximum of three (3) minutes. If you wish to comment on an item that is on the agenda, please wait until the item is read for consideration.

3. Approve the Minutes of the November 8, 2019, Regular Operations Committee Meeting

4. Provide Direction regarding the City of Vallejo Request to Join EBRCSA Made at the December 4, 2019, Board of Directors Meeting

5. Provide Direction on Contract with CSI for Capitol Replacement Project

6. Provide Direction on Simulcast Site Addition to Walton Lane

7. Provide Direction on Purchase of Consoles for Alameda and Contra Costa Radio shops

8. Provide Direction on Changing the Meeting Start Time of the Operations Committee Meeting

9. Receive an Update on EBRCSA Microwave Upgrade and Transition to Multiprotocol Label Switching (MPLS)

10. Receive an Update on the City of Benicia and Joint Powers Agreement

11. Discussion on New Police Building for the City of Newark

12. Agenda Items for Next Meeting

13. Adjournment

This AGENDA is posted in accordance with Government Code Section 54954.2(a)
If requested, pursuant to Government Code Section 54953.2, this agenda shall be made available in appropriate alternative formats to persons with a disability, as required by Section 202 of the Americans with Disabilities Act of 1990 (42 U.S.C. Section 12132), and the federal rules and regulations adopted in implementation thereof. To make a request for disability-related modification or accommodation, please contact the EBRCSA at (925) 803-7802 at least 72 hours in advance of the meeting.
I hereby certify that the attached agenda was posted 72 hours before the noted meeting.

Tom McCarthy, Executive Director
February 17, 2020

East Bay Regional Communications System Authority

ALAMEDA COUNTY

CONTRA COSTA COUNTY

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AGENDA ITEM NO. 3.

AGENDA STATEMENT
OPERATIONS COMMITTEE MEETING
MEETING DATE: February 21, 2020

TO: Operations Committee
East Bay Regional Communications System Authority (EBRCSA)

FROM: Tom McCarthy, Executive Director
East Bay Regional Communications System Authority

SUBJECT: Approval of Minutes of the November 8, 2019 Regular Operations Committee Meeting

RECOMMENDATIONS:

Approve the minutes of the November 8, 2019 Regular Operations Committee meeting.

SUMMARY/DISCUSSION:

The Operations Committee will consider approval of the minutes of the November 8, 2019 Regular Committee meeting.

RECOMMENDED ACTION:

Approve the minutes of the November 8, 2019, Regular Operations Committee meeting.

East Bay Regional Communications System Authority

Participating agencies include Alameda and Contra Costa Counties and the following cities and special districts: Alameda, Albany, Antioch, Berkeley, Brentwood, Clayton, Concord, Danville, Dublin, El Cerrito, Emeryville, Fremont, Hayward, Hercules, Lafayette, Livermore, Martinez, Moraga, Newark, Oakley, Pinole, Pittsburg, Pleasant Hill, Pleasanton, Richmond, San Leandro, San Pablo, San Ramon, Union City, Walnut Creek, East Bay Regional Park District, Kensington Police Community Services District, Livermore Amador Valley Transit Authority, Moraga-Orinda Fire District, Rodeo-Hercules Fire District, San Ramon Valley Fire District, California Department of Transportation, Ohlone Community College District, Contra Costa Community College District, Dublin-San Ramon Services District and University of California, Berkeley

OPERATIONS COMMITTEE MEETING

REGULAR MEETING **DATE: November 8, 2019**
TIME: 9:30 a.m.
PLACE: Alameda County Office of Homeland Security and Emergency Services, Room 1013
4985 Broder Blvd., Dublin, CA 94568

MINUTES

1. **Call to Order/Roll Call:** 9:43 a.m.

   Committee Members Present:
   G. Ahern, Sheriff, Alameda County Sheriff's Office
   C. Nice, Assistant Sheriff, Alameda County Sheriff's Office
   N. Luby, Deputy Chief, Oakland Fire Department
   J. Tudor, Police Chief, City of San Leandro
   C. Simmons, Assistant Sheriff, Contra Costa County Sheriff's Office

   Staff Present:
   T. McCarthy, Executive Director
   C. Soto, Administrative Assistant

   Public:
   S. Frew, Manager, Security and Emergency Preparedness, East Bay Municipal Utility District

2. **Public Comments (Meeting Open to the Public)**: None.

3. **Approve the Minutes of the February 22, 2019, April 5, 2019 and September 13, 2019 Regular Operations Committee Meetings**

   On motion of Bm. Nice, seconded by Bm. Tudor and by unanimous vote, the Operations Committee approved the minutes of the February 22, 2019, April 5, 2019 and September 13, 2019 Regular Operations Committee meetings.

DRAFT

4. Provide Direction regarding East Bay Municipal Utility District Request to Join EBRCSA

Director McCarthy presented the staff report and advised that East Bay Municipal Utility District (EBMUD) had requested to become a member of EBRCSA. They would be utilizing 40-45 radios for day-to-day operations and when they have to interact with public safety, especially Fire departments. Zone 7, a similar agency to EBMUD, is a member of EBRCSA, as are other special districts. There is discontent from some Authority Boardmembers with EBMUD recently charging the Authority for use of their land for System sites. Because they are not a member of public safety, it was needed to be discussed by the Operations and Finance Committees for recommendation to the full Board.

Director McCarthy asked Oakland Fire if it was beneficial to have EBMUD on the System.

Chief Luby stated he could see the added value but stressed there was a need to develop training and protocol for radio use on emergency radios.

Chair Ahern stated he recommended that EBMUD be allowed to join the Authority.

Bm. Nice asked if the EBMUD Board would need to approve joining the Authority.

S. Frew stated that he did not believe the EBMUD Board needed to authorize joining the Authority. Both the General Manager and the Manager of Operations and Maintenance were in support of this request.

Bm. Luby stated again, that if the Authority Board approved EBMUD joining, there be training for EBMUD, and an MOU about sharing channels.

On motion by Bm. Nice, seconded by Bm. Luby unanimous vote, the Operations Committee recommended East Bay Municipal Utility District become a member of EBRCSA, and this be to the Board of Directors on at its December 6, 2019 Board meeting.

5. Provide Direction on Request from AT&T to Lease Space on the Patterson Pass Tower

Director McCarthy presented the staff report and advised AT&T wanted to install 4G at the Authority's Patterson Pass site in Livermore. This was StopWaste land that the Authority leased from them. There was concern that if AT&T collocated equipment at the site, it could impact the Authority's ability for future growth of the System. He was seeking direction from the Committees' and full Board to continue discussions with AT&T. If approved, he would get an engineer to analyze the site, tower and space.

On motion of Bm. Nice, seconded by Bm. Tudor and by unanimous vote, the Operations Committee recommended to the full Board that the Executive Director speak to AT&T to determine the scope and capacity of their request.

6. 2020 EBRCSA Draft Calendar Committee and Board Meetings

The 2020 EBRCSA Draft Calendar Committee and Board meetings calendar was presented to the Committee, with the noted change of the March Board meeting to March 6, 2020.

DRAFT

7. Discussion of Nominations for the Board of Directors Chair and Vice Chair to be Voted on and Take Effect at the Close of the Meeting on December 6, 2019

Director McCarthy stated there would be an election for Chair and Vice Chair for a period of one year, with a call for nominations at the December 6, 2019 Board meeting. Chair Ahern had entered his name for nomination of Chair.

8. Receive Information on Public Safety Power Shutdowns and Impact to EBRCSA

Director McCarthy advised that with the first recent Public Safety Power Shutdown (PSPS), everyone was prepared but there was one site that needed a new generator. With the second PSPS, three generators did not work. Replacements were found but not without difficulty. Before the PSPS, all generators had been tested before the PSPS and were operating normally.

Committee members discussed the possibility of purchasing back-up generators, possibly with grant money.

9. Update on the Faria Preserve Project, City of San Ramon

Director McCarthy stated that the Faria Preserve Project in San Ramon had needed to have testing done to ensure there was radio coverage. The City of San Ramon had requirements in place for developers to keep radio coverage at 95%, and if the development caused coverage issues, it was up to the developer to pay to correct the problem. There are five levels to the Faria Project that need to be evaluated. They were looking to develop a site and have the developer pay for it, $1.5-2 million.

10. Update of Capitol Replacement Project Proposal

The Finance Committee selected CSI to move forward with the Capitol Replacement Project.

11. Update on Discussion of EBRCSA Microwave Upgrade and Transition to Multiprotocol Label Switching (MPLS)

Director McCarthy stated that some of the System's microwaves were pre-EBRCSA and needed to be upgraded. He received a proposal from Motorola who had partnered with Aviat. He then went to Aviat to get a separate quote. He would meet with CSI to help evaluate the proposals from AT&T and Aviat. This would upgrade the microwave to Ethernet and allow for faster flow of information. The microwave had to be on ethernet and Multiprotocol Label Switching to continue the System working.

12. Receive Information on City of Vallejo Speaking to EBRCSA Executive Director

Director McCarthy stated Vallejo had approached him with their radio issues. They have asked to be on the System. He asked why they were not going with Solano County. They said there were some issues there. He was waiting for a request from the Vallejo City Manager to continue, and then receive direction from the full Board.

13. Agenda Items for Next Meeting

DRAFT

Discuss GPS on Handheld Radios

14. Adjournment

With no further business coming before the Operations Committee, the meeting was adjourned at 10:28 a.m.

DRAFT

East Bay Regional Communications System Authority

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AGENDA ITEM NO. 4.

AGENDA STATEMENT
OPERATIONS COMMITTEE MEETING
MEETING DATE: February 21, 2020

TO: Operations Committee
East Bay Regional Communications System Authority (EBRCSA)

FROM: Tom McCarthy, Executive Director
East Bay Regional Communications System Authority

SUBJECT: Discuss and Provide Direction regarding the City of Vallejo Request to Join East Bay Regional Communication System Authority

RECOMMENDATION:

Provide direction regarding the request by the City of Vallejo to join East Bay Regional Communication System Authority (EBRCSA).

SUMMARY/DISCUSSION:

Shawny Williams, Police Chief City of Vallejo, and Members of the City of Vallejo Executive Team attended the December 6, 2019, East Bay Regional Communications System Authority (EBRCSA) Board of Directors Meeting. Chief Williams, during Public Comment, requested the East Bay Regional Communications System Authority consider a request by the City of Vallejo to join EBRCSA on a temporary basis.

The City of Vallejo operates its own radio system for Police and Fire utilizing its VHF radio system. The VHF radio system has reached the end of life and the radio system is unreliable for Public Safety. The VHF system is beyond repair and the City of would like to utilize the EBRCSA Radio system as they build infrastructure in the City of Vallejo to connect to the Solano County Radio Master Site. The County of Solano has built an "M" Core similar to the EBRCSA "M" Core, however, the infrastructure needed to connect the City Vallejo is in the planning and engineering stage right now. In addition, the County of Solano has not formulated the Joint Powers Agreement (JPA) necessary to develop its County Radio Group. On February 13, 2020, the Solano County Sheriff and Chiefs of Police voted, unanimously, to hire Mirror

Consulting to develop their JPA at the Solano County Law Enforcement Agencies (SCLEA) meeting. It is estimated that it will take approximately one year for the development and implementation of the JPA.

The City of Benicia is performing the engineering analysis to locate the best site and needed equipment to build to connect to the Solano County "M" Core. The City of Vallejo is requesting to become a user of the EBRCSA System as they engineer and build the necessary infrastructure to communicate with the Solano County "M" Core and become a member of the Solano County Radio Group.

The City of Vallejo has met with the Executive Director and we have discussed the need for the City of Vallejo to purchase and maintain all equipment needed to connect with the EBRCSA System. The City of Vallejo has purchased radios for the Vallejo Fire Department which can be used on the EBRCSA System. The City is waiting for the direction from the EBRCSA Board of Directors to the Board Chair concerning the temporary use of the EBRCSA System prior to purchasing the radios for the Police Department. The Executive Director, the City of Vallejo Assistant City Manager and Information Technology Department, Motorola and Day Wireless engineers and sales, all met on February 14, 2020 to determine what equipment the City of Vallejo must purchase. The City of Vallejo would purchase all equipment and radios necessary so that when it transitions to the Solano County Radio Group, the equipment would be its property. The City of Vallejo has purchased new Consoles which are compatible with EBRCSA Master Site.

The City of Vallejo performed drive testing and EBRCSA has coverage maps to show the coverage which EBRCSA can provide to the City of Vallejo. The North part of the City does not have the 95% on hip portable coverage. However, Motorola is investigating the possibility of technology which could boost the radio signal to improve radio transmissions.

The length of time that Vallejo will need to be on the EBRCSA System is estimated to be two years. The JPA will be developed while the City of Vallejo determines how many sites will need to be built. A new tower is being built at the Solano County Fairgrounds, in Vallejo, by AT&T, however, it is estimated that it will not be complete for one year. The tower could be used to provide the added connection to Solano County.

The Executive Director is seeking direction from the Operations Committee concerning the City of Vallejo joining EBRCSA as it develop its sites and joins the Solano County Radio Group's JPA. EBRCSA is the only viable radio system which can provide coverage to the City of Vallejo at this time. The County of Solano is aware of the situation and the Radio Manager was at the meeting on February 14, 2020.

FISCAL IMPACT:

EBRCSA does not have any fiscal impact if the City of Vallejo joins EBRCSA. The City of Vallejo will purchase all equipment and pay for all installation and optimization of the equipment to connect to EBRCSA. The consoles will be under warranty for the first year

through Motorola. It will be recommended to the City of Vallejo to have a maintenance contract for any repair or maintenance to its consoles and backroom infrastructure.

RECOMMENDED ACTION:

It is recommended that the Operations Committee discuss and provide direction, as needed, regarding the City of Vallejo becoming a member of EBRCSA as they build the infrastructure to connect to the Solano County Master Site, and whether this should or should not be brought to the Board of Directors Regular Meeting on March 6, 2020.

East Bay Regional Communications System Authority

Participating agencies include Alameda and Contra Costa Counties and the following cities and special districts: Alameda, Albany, Antioch, Berkeley, Brentwood, Clayton, Concord, Danville, Dublin, El Cerrito, Emeryville, Fremont, Hayward, Hercules, Lafayette, Livermore, Martinez, Moraga, Newark, Oakley, Pinole, Pittsburg, Pleasant Hill, Pleasanton, Richmond, San Leandro, San Pablo, San Ramon, Union City, Walnut Creek, East Bay Regional Park District, Kensington Police Community Services District, Livermore Amador Valley Transit Authority, Moraga-Orinda Fire District, Rodeo-Hercules Fire District, San Ramon Valley Fire District, California Department of Transportation, Ohlone Community College District, Contra Costa Community College District, Dublin-San Ramon Services District and University of California, Berkeley

AGENDA ITEM NO. 5.

AGENDA STATEMENT
OPERATIONS COMMITTEE
MEETING DATE: February 21, 2020

TO: Operations Committee
East Bay Regional Communications System Authority (EBRCSA)

FROM: Tom McCarthy, Executive Director
East Bay Regional Communications System Authority

SUBJECT: 10-Year Plan for East Bay Regional Communication System Authority

RECOMMENDATIONS:

Review the proposal provided to the East Bay Regional Communications System Authority (EBRCSA) by CSI and, if the Committee agrees, make a recommendation to the Executive Director on how to proceed.

SUMMARY/DISCUSSION:

CSI Telecommunications, Inc. is a team of Consulting Engineers who are subject matter experts in radio communication, microwave systems, and radio interference. CSI has assisted EBRCSA in securing Radio Frequencies from the FCC for EBRCSA for several years. CSI Engineers have also provided subject matter expertise in the transition to TDMA and other changes to the EBRCSA System.

CSI has listed the scope of work as visits to the Master Site and 32 simulcast sites of EBRCSA to evaluate the conditions and infrastructure that support the Motorola equipment. The inspection will include the emergency power, towers, cables, equipment, and shelters including the size/capacity of the shelter. CSI will review the findings of the site visits with current inventory records as well as the Motorola Service Update Agreement (SUA) to determine which equipment needs to be addressed over the next ten years based on projected lifespan and vendor support.

CSI will provide EBRCSA a report of projected action items and their associated estimated costs.

The attached proposal (Attachment "A") provided by CSI provides additional information as to the scope of work proposed.

CSI has estimated the cost of the 10-year plan to be $133,740.00 including expenses.

FISCAL IMPACT:

If the Operations Committee recommends entering into a contract with CSI, a Budget Change will be necessary. The approved EBRCSA Expenditure Detail for FY 2019/2020 does not include the work to be performed in developing the 10-Year Plan.

It is anticipated that a contract with CSI will be covered by operating revenue and will not require an increase in the user fees for EBRCSA members.

RECOMMENDED ACTION:

It is recommended that the Committee discuss and provide further direction to the Executive Director on how to proceed with the proposal for the 10-Year-Plan.

Attachments:

Attachment "A" – CSI Proposal

EBRCSA 10 Year Plan Scope of Work

CSI Responsibilities

1. Visit the Master Site and 32 simulcast sites of EBRCSA, evaluating site conditions and the infrastructure (power systems, tower, cables, etc.) which support the Motorola equipment.
    - Emergency power capacity (commercial service, generator sizing, DC power supply capacity, battery backup time, battery age)
    - Recommendations of tower analysis as needed
    - Shelter capacity for growth
    - Equipment associated with the P25 system not covered under the SUA (for example Trak frequency standards)
2. Review the findings of the site visits with current inventory records as well as the Motorola SUA to determine which equipment needs to be addressed over the next ten years based on projected life-span and vendor support.
3. Provide to EBRCSA a report of:
    a. Projected action items and their associated estimated costs.
    b. Site reports including a high-level description, summary of assets, and a tabular inventory of assets at the site including quantity, estimated year to replace, condition, etc. A report on one site will be performed; once the content and format are agreed upon by EBRCSA and CSI, the other sites will then be documented.

EBRCSA Responsibilities:

1. Provide escort to sites as needed.
2. Provide existing documentation.

Assumptions/Constraints

- Asset inventory to be based on “box level” detail, i.e. items with assets tags and not component parts
- Motorola items covered under the SUA will be noted and summarized in inventory as a single line item per site
- Microwave radio equipment will be noted and summarized in inventory as single line item per site assuming this will be addressed either by Motorola under an SUA or Aviat as an MUA.
- Tower Structural Analysis cost estimate based on the ready availability of previous tower engineering documentation.
- Eight tower structural analyses are included in our estimate based on general knowledge of most of the Contra Costa sites and may change based on the site visits. This analysis is for budgeting only with the understanding that loading may change over time due to other uses/users of the towers which may require an updated Tower Structural Analysis.

Estimated Costs

Task	Description	Hours	Labor	Expenses	Total
1	Site evaluations	194	$41,710	$696	$42,406
1a	Tower Structural Analysis (based on 8 towers requiring analysis)	188	$40,420	$0	$40,420
2	Compile and analyze evaluations, inventory records, etc.	120	$25,800	$0	$25,800
3	Create and present report, include costs estimates for each year	116	$24,940	$174	$25,114
Total		**618**	**$132,870**	**$870**	**$133,740**

East Bay Regional Communications System Authority

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AGENDA ITEM NO. 6.

AGENDA STATEMENT
OPERATIONS COMMITTEE
MEETING DATE: February 21, 2020

TO: Operations Committee
East Bay Regional Communications System Authority (EBRCSA)

FROM: Thomas McCarthy, Executive Director
East Bay Regional Communications System Authority

SUBJECT: Walton Lane Simulcast Site

RECOMMENDATIONS:

Provide direction regarding adding a Simulcast Site to Walton Lane in Antioch.

SUMMARY/DISCUSSION:

The Board of Directors, at its the March 1, 2019 meeting, directed the Executive Director to develop a plan to fill the radio gaps in the area of Walton Lane and James Donlon Blvd., in the City of Antioch. The Executive Director worked with CSI, Motorola, and the Contra Costa County Radio Shop to identify potential sites where the equipment and antenna could be built or added so that the area would have radio coverage. CSI was tasked with identifying four different sites with the priority to utilize existing sites rather than build a new site. CSI found that Twitchell Island in Sacramento County had a tower with adequate space on the tower and in the shelter. The Executive Director contacted the Radio Shop Manager for Sacramento County who was willing to allow EBRCSA to add the equipment to the Tower in August of 2019. The site was built by the Department of Water Ways and EBRCSA began analyzing the potential to utilize the tower. Several potential scenarios were run, and it was found that the site was not suitable for a Simulcast Network as it caused interference in the Cities of Oakley and Brentwood. CSI performed various tests in hope of developing an option to the Simulcast Network and were unable to find a solution, so CSI began to review the other potential sites. While reviewing Walton Lane, CSI and the Technicians from Contra Costa County returned to the site and found that one of the shelters that

was abandoned had been removed. The Executive Director confirmed with CSI that Walton Lane is still the best site and they confirmed it was. The problem at Walton Lane is that there was not enough space and inadequate power supply at the current Antioch Shelter. With the shelter removed we might be able to use that area where the shelter was removed and reconnect the electricity. The site must be surveyed and determine the cost of a shelter and electricity. It is recommended that this be performed by the City of Antioch. EBRCSA should provide only the equipment and the City of Antioch maintain the contract with the tower provider, connection to PG&E, and provide the shelter.

The Walton Lane site has optimal coverage, a tower in place, and PG&E. If a new site was to be built the cost would be considerably higher due to acquisition of land, installation of a tower, and installation of PG&E. Motorola has estimated the cost for the Simulcast Site, which includes a four-bay outdoor equipment cabinet, to be $1,065,845.00. CSI will assist with the application of any necessary FCC licenses and permits.

The Committee is being asked to provide the following direction on the Walton Lane Project:

1. EBRCSA will be responsible for the purchase of the necessary equipment and installation for the Simulcast Cell at Walton Lane
2. EBRCSA will be responsible for the FCC licensing and maintaining the Licenses
3. The City of Antioch will be responsible for any necessary permits, i.e.; building permits
4. The City of Antioch will be responsible for the negotiation and lease of the tower space
5. The City of Antioch will be responsible for the cost to connect to PG&E and ongoing cost of service
6. The City of Antioch will provide the land and shelter or cabinets for the equipment.

The Executive Director asks that direction be provided so that there is a clear understanding of the responsibility of EBRCSA and the City of Antioch.

FISCAL IMPACT:

The current quote from Motorola for the Walton Lane Site is $1,065,945.00 and will require a budget change. If the Operations Committee recommends the purchase of the equipment for the Walton Lane Project, the amount includes the purchase of cabinets for the equipment. The cost of the cabinets could change depending on the discussion with the City of Antioch and the possibility of using a shelter instead. A Budget Change will be necessary. The approved EBRCSA Budget Expenditure Detail for FY 2019/2020 does not include the purchase of the equipment for Walton Lane. The Executive Director did apply for a 2019 State Homeland Security Grant (SHSGP) to assist in offsetting the cost of the equipment, however, EBRCSA did not receive approval for the 2019 SHSGP Grant.

It is anticipated that the purchase of the Walton Lane Equipment can be covered by operating revenue and will not require an increase in the user fees for EBRCSA members.

RECOMMENDED ACTION:

It is requested that the Committee review the information provided and provide a recommendation to the Board of Directors concerning Walton Lane as a solution for the improved radio coverage of the James Donlon area of the City of Antioch. In addition, provide direction as to what is the responsibility of EBRCSA and responsibility of the City of Antioch.

Attachments:

"A" – Motorola Walton Lane Simulcast Site Add-On November 1, 2019

MOTOROLA SOLUTIONS

EAST BAY REGIONAL COMMUNICATIONS SYSTEM AUTHORITY

WALTON LANE SIMULCAST SITE ADD-ON **NOVEMBER 1, 2019**

The design, technical, pricing, and other information ("Information") furnished with this submission is proprietary and/or trade secret information of Motorola Solutions, Inc. ("Motorola Solutions") and is submitted with the restriction that it is to be used for evaluation purposes only. To the fullest extent allowed by applicable law, the Information is not to be disclosed publicly or in any manner to anyone other than those required to evaluate the Information without the express written permission of Motorola Solutions.

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Motorola Solutions
10680 Treena Street, Suite #200
San Diego, CA. 92131
USA

November 1, 2019

Mr. Tom McCarthy
East Bay Regional Communications System Authority
4985 Broder Blvd.
Dublin, CA 94568

Subject: Walton Lane Simulcast Site Add-On

Dear Tom:

Motorola Solutions Inc. ("Motorola Solutions") is pleased to provide the East Bay Regional Communications System Authority ("EBRCSA") the following Proposal to add a new 10 channel TDMA DDM Simulcast Site to the Contra Costa East Cell at Walton Lane.

Once again, the Motorola Solutions project team has taken great care to propose a solution that will meet your needs and provide unsurpassed value. To best meet EBRCSA's functional and operational specifications, Motorola Solutions includes a combination of hardware, software, and services specified in Section 1 of the Proposal.

- 1 – 10 Channel TDMA DDM Simulcast Site Add On
- 1 – 48V DC Battery Plant
- 1 – 4 Bay Climate Controlled Outdoor Cabinet

As you know, under Section 3.4 of the Communications System Agreement (CSA), dated July, 7, 2009, and extended to July 6, 2020, between EBRCSA and Motorola Solutions (the "CSA"), EBRCSA may purchase additional goods and services from the CSA. Motorola Solutions' proposal is based on the assumption that EBRCSA will use this right under Section 3.4 of the CSA for the proposed transaction. Therefore, as in the past, EBRCSA may accept the proposal by executing a Change Order to the current CSA that we have prepared for you. This proposal shall remain valid until December 14, 2019.

Motorola Solutions will be pleased to address any questions you may have regarding this proposal. Please direct any questions to your Motorola Solutions Senior Account Manager, Gordon Poole at (408) 306-5622. Motorola Solutions appreciates your continued confidence in our company, products, and services. We look forward to continuing our relationship and implementing this project with EBRCSA.

Thank you.

Sincerely,
Motorola Solutions, Inc.

Micah Applewhite
MSSSI Vice President

SECTION 1

SYSTEM OVERVIEW

1.1 SIMULCAST REMOTE SITE ADD-ON

In response to the East Bay Regional Communications System Authority (EBRCSA) request for improving coverage in the James Donlon corridor of Antioch in the Contra Costa East cell, Motorola Solutions has prepared this proposal. This proposal includes the necessary hardware, software, and services to implement a ten (10) channel 700MHz TDMA with Dynamic Dual Mode (DDM) simulcast remote site in the existing EBRCS 700MHz trunked system. This site will operate as an additional simulcast remote site in the Contra Costa East cell with existing three (3) sites including Kregor Peak (prime site), Shadybrook, and Los Vaqueros.

Motorola Solutions has refined its RF site design through its latest ASTRO releases and is pleased to offer our Expandable Site Sub-System (ESS) as our preferred Simulcast system platform. The ESS offers many features not found in other site solutions including:

- Integrated networking components:
  - Ethernet router(s).
- Shared power supplies among radio components:
  - -48V DC power.

The ESS (pictured on right) can support a total of six base radios which can support up to six (6) P25 Phase 1 (FDMA) channels, twelve (12) P25 Phase 2 (TDMA) talk-paths, or any combination in- between. Conventional channels can be supported within the ESS as well. This proposal includes support for the following channels:

The Walton Lane Simulcast remote site has been designed to operate in the 700MHz band, and therefore Motorola Solutions has included a TX combiner and an integrated multicoupler. In addition, Motorola Solutions has included the necessary networking equipment and software licenses for integrating this site into the ASTRO 25 network.

Use or disclosure of this proposal is subject to the restrictions on the cover page.

SECTION 2

SYSTEM DESCRIPTION

2.1 EBRCSA SYSTEM

The East Bay Regional Communications System Authority (EBRCSA) trunked infrastructure design currently consists of simulcast subsystems and ASTRO 25 standalone repeater sites. The simulcast subsystems also known as "cells' provide coverage and capacity to the various EBRCSA agencies based on the operational area and number of users in each cell.

The EBRCS Simulcast Site and Channel count for each cell.

- EBRCS P25 Simulcast Cells.
  - Four Site, 10 Channel 800 MHz Contra Costa West Cell.
  - Four Site, 10 Channel 700 MHz Alameda East Cell.
  - Four Site, 18 Channel 700 MHz Alameda Northwest Cell.
  - Seven Site, 12 Channel 700 MHz Alameda Southwest Cell.
  - Eight Site, 12 Channel 700 MHz Contra Costa Central Cell.
  - Three Site, 10 Channel 700 MHz Contra Costa East Cell.
  - One site, 6 Channel Stand-Alone 800 MHz repeater site for Crane Ridge.
  - One site, 4 Channel Stand-Alone 800 MHz repeater site for Marsh Creek.

2.2 CHANGES IN SCOPE FROM JAN 30, 2019 PROPOSAL

- Add 1 Redundant Aviat Microwave System Link to Kregor Peak.
- Add 4 Bay Climate Controlled Outdoor Cabinet at Walton Lane Site.

Use or disclosure of this proposal is subject to the restrictions on the cover page.

SECTION 3

SYSTEM COMPONENTS

3.1 WALTON LANE SIMULCAST REMOTE SITE

Our proposed simulcast remote site solution for EBRCSA includes the following summary of equipment:

- Two (2) Motorola Solutions ESS:
  - Supporting the following channels/talk-paths:
    - Ten P25 Phase II TDMA Channels/eighteen talkpaths.
    - Ten DDM Channels to support FDMA users.
- One (1) 1 Redundant Aviat Microwave System with Antennas and Lines.
- One (1) 4 Bay Climate Controlled Outdoor Cabinet.
- One (1) Transmit Antenna.
- One (1) Receive Antenna.
- Receive Tower Top Amplifier (TTA).
- 350 feet of 7/8" Coaxial TX/RX cable.
- RF Connectors.
- Required Lightning Arrestors.
- Two (2) Motorola Solutions SRX 345 Gateways.
- Two (2) HP Ethernet switches.
- Three (3) 7ft equipment racks.
- 48V DC Power System.
- 696 AH Battery Backup.
- Site Spares for the simulcast remote site.

The Walton Lane remote site is configured for ten 700MHz channels in the ESS configuration for use on the 7.19 system.

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SECTION 4

STATEMENT OF WORK

Motorola Solutions is proposing to East Bay Regional Communications System Authority (EBRCSA) the installation and configuration of the following equipment at the specified locations as shown in Table 4-1.

Table 4-1: Major Equipment by Site

Site Name	Major Equipment
Walton Lane Cell	Add Ten Channel Remote Site to the Contra Costa East Simulcast Cell.
Walton Lane Cell	1 Redundant Aviat Microwave System
Walton Lane Cell	4 Bay Climate Controlled Outdoor Cabinet

The document delineates the general responsibilities between Motorola Solutions and EBRCSA as agreed to by contract.

4.1 MOTOROLA SOLUTIONS RESPONSIBILITIES

Motorola Solutions' general responsibilities include the following:

- Schedule the optimization in agreement with EBRCSA.
- Perform the configuration and optimization of the Motorola Solutions supplied equipment described above.
- Coordinate the activities of all Motorola Solutions subcontractors under this contract.
- Administer safe work procedures for installation.
- Provide EBRCSA with the appropriate system interconnect specifications.

4.2 EBRCSA RESPONSIBILITIES

EBRCSA will assume responsibility for the installation and performance of all other equipment and work necessary for completion of this project that is not provided by Motorola Solutions. EBRCSA general responsibilities include the following:

- Provide all buildings, equipment shelters, and towers required for system installation that meet R56 standards.
- Insure communications sites meet space, grounding, power, and connectivity requirements for the installation of all equipment including 220VAC circuits required for 48V DC power system.
- Will install and configure all 48V DC equipment and be responsible for all electrical connectivity.
- Obtain all FCC and local licensing and updates for the Walton Lane site.
- Obtain frequencies for project as required.
- Will be responsible for site access, and permitting required for project implementation.
- Will provide the cold installation of all FNE equipment and P25 antenna system provided in this proposal.

Use or disclosure of this proposal is subject to the restrictions on the cover page.

- Provide required system interconnections into the Kregor Peak Contra Costa East Cell Prime Site.
- Will provide a dedicated delivery point, such as a warehouse, for receipt, inventory and storage of equipment prior to delivery to the site(s).
- Coordinate the activities of all EBRCSA's vendors or other contractors.

4.3 ASSUMPTIONS

Motorola Solutions has made several assumptions in preparing this proposal, which are noted below.

- All existing sites or equipment locations will have sufficient space available for the system described.
- Final system design and coverage analysis are based on FCC Licensing Information.
- All existing sites or equipment locations will have adequate electrical power and site grounding suitable to support the requirements of the system described.
- There is no more than 25’ wire distance between existing power system and new equipment terminals
- There is a site R56 compliant ground connection within 33’ of new equipment installation location.
- Existing tower will have adequate space and size to support the P25 and Microwave antenna networks requirements of the Walton Lane Site Add-on described.
- Any site/location upgrades or modifications are the responsibility of EBRCSA.
- Any tower stress analysis or tower upgrade requirements are the responsibility of EBRCSA.
- EBRCSA will be responsible for removal of equipment necessary to accommodate the new Motorola Solutions provided equipment.
- Approved FCC licensing will be provided by EBRCSA.
- Approved local, State, or Federal permits as may be required for the installation and operation of the proposed equipment, are the responsibility of EBRCSA.
- Any required system interconnections not specifically outlined here will be provided by EBRCSA, including but not limited to dedicated phone circuits.
- EBRCSA will provide the backhaul demarcation point within 10’ of the ESS rack location.
- EBRCSA will provide a dedicated delivery point for receipt, inventory, and storage of equipment prior to delivery to the site.
- Work will be completed during non-holidays Monday – Friday during normal business hours, 8:00 am – 5:00 pm.
- Training is not included in this proposal.
- There is no Frequency Planning, Fleetmapping, or Subscriber programming and installation content included in this scope.
- Coverage guarantee is not included or implied in this proposal.
- An Acceptance Test will be performed on the system upon cut over.
- Informational Coverage Map is developed based on the proposed design.
- Motorola Solutions is not responsible for interference caused or received by the Motorola Solutions provided equipment except for interference that is directly caused by the Motorola Solutions provided transmitter(s) to the Motorola Solutions provided receiver(s). Should the EBRCSA's system experience interference, Motorola Solutions can be contracted to investigate the source and recommend solutions to mitigate the issue.

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SECTION 5

EQUIPMENT LIST

This section lists the equipment necessary for the proposed solution.

5.1 WALTON LANE SIMULCAST REMOTE SITE EQUIPMENT

QTY	NOMENCLATURE	DESCRIPTION
1	SQM01SUM0323	ASTRO MASTER SITE
1	CA03517AB	ADD: CORE EXPANSION
1	UA00153AB	ADD: P25 FDMA TRUNKING OPERATION SITE
1	UA00159AB	ADD: P25 PHASE 2 TDMA TRKNG OP SITE LIC
1	UA00160AA	ADD: PHASE 2 DYNAMIC TG ASGNMT SITE LIC
10	UA00161AA	ADD: P25 PHASE 2 TDMA SW BASE RADIO LIC
10	UA00162AA	ADD: PHASE 2 DYNAMIC CH BASE RADIO LIC
1	T8547	SITE ROUTER & FIREWALL- DC
1	CA03445AA	ADD: MISSION CRITICAL HARDENING
1	CA03448AA	ADD: STATEFUL FIREWALL
1	T8547	SITE ROUTER & FIREWALL- DC
1	CA03445AA	ADD: MISSION CRITICAL HARDENING
1	CA03448AA	ADD: STATEFUL FIREWALL
2	CLN1868	2930F 24-PORT SWITCH
1	DSTRAK91009EDC	REMOTE SITE REDUNDANT MODULAR FREQUENCY TIMING SYSTEM DC
1	DSTRAK91071	FOUR PORT IRIG B TIME CODE FDM
3	DSTRAK91061	FOUR PORT DDM
100	L1700	FSJ1-50A CABLE: 1/4" SUPERFLEX POLY JKT PER FOOT
4	DDN9769	F1TNM-HC 1/4" TYPE N MALE CONNECTOR FOR FSJ1-50A CABLE
1	SQM01SUM7054	GTR 8000 EXPANDABLE SITE SUBSYSTEM
1	CA00719AA	ADD: ASTRO SYSTEM RELEASE 7.19
1	CA00855AA	ADD: 700/800 MHZ
1	X305AC	ADD: QTY (5) GTR 8000 BASE RADIOS
5	CA01193AA	ADD: IP BASED MULTISITE BASE RADIO SOFTWARE
5	CA01842AA	ADD: P25 TDMA SOFTWARE
5	CA01902AA	ADD: P25 DYNAMIC CHANNEL SOFTWARE
1	CA02686AA	ADD: AC DC POWER DISTRIBUTION
1	CA00862AA	ADD: SITE & CABINET RMC W/CAPABILITY OF 7-24 BRS

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1	CA00879AA	ADD: PRIMARY 6 PORT CAVITY COMBINER
1	CA00882AA	ADD: 700 MHZ TX FILTER W/PMU
2	CA00884AA	ADD: QTY (1) XHUB
1	CA01402AA	ADD: 7.0 FT OPEN RACK
1	T8343	GSERIES SOFTWARE LICENSING
5	UA00400AA	ADD: GSERIES BR-P25 TRNK MS IP
1	SQM01SUM7054	GTR 8000 EXPANDABLE SITE SUBSYSTEM
1	CA00719AA	ADD: ASTRO SYSTEM RELEASE 7.19
1	CA00855AA	ADD: 700/800 MHZ
1	X305AC	ADD: QTY (5) GTR 8000 BASE RADIOS
5	CA01193AA	ADD: IP BASED MULTISITE BASE RADIO SOFTWARE
5	CA01842AA	ADD: P25 TDMA SOFTWARE
5	CA01902AA	ADD: P25 DYNAMIC CHANNEL SOFTWARE
1	CA02686AA	ADD: AC DC POWER DISTRIBUTION
1	CA00877AA	ADD: CABINET RMC FOR EXPANSION RACK
1	CA00880AA	ADD: EXPANSION 6 PORT CAVITY COMBINER
1	CA01058AA	ADD: 700/800 PHASING HARNESS
2	CA00884AA	ADD: QTY (1) XHUB
1	CA01402AA	ADD: 7.0 FT OPEN RACK
1	T8343	GSERIES SOFTWARE LICENSING
5	UA00400AA	ADD: GSERIES BR-P25 TRNK MS IP
1	DS43783I01T	TTA, 796-824MHZ, SINGLE / DUAL NETW
1	DS43783I01MC48	MIGRATABLE CMU, 796-824MHZ, ETHERNE
1	DS8983N0106	FILTER, 798-824 MHZ, BP, BW 6 MHZ
1	DSTRAK91061	FOUR PORT DDM
1	DLN6895	FRU: PA 7/800 MHz
1	DLN6885	FRU: XCVR 7/800 MHZ V2
1	DLN6634	FRU: 700/800 MHZ SITE LNA
1	DLN1306	FRU: 700/800 MHZ CABINET RMC MODULE
1	DLN6781	FRU: POWER SUPPLY
1	DLN6898	FRU: FAN MODULE
1	T8547	SITE ROUTER & FIREWALL- DC
1	CA03445AA	ADD: MISSION CRITICAL HARDENING
1	CA03448AA	ADD: STATEFUL FIREWALL
1	CLN1868	2930F 24-PORT SWITCH
1	DLN6677	FRU: G-SERIES XHUB
1	DLN6455	CONFIGURATION/SERVICE SOFTWARE
1	DSCC80708T3	OMNI CORPORATE COLLINEAR 8DBD 746-870MHZ 3 DEG DT PIM & 25KW PIP RATED
15	L1705	LDF4-50A CABLE: 1/2" LDF HELIAX POLY JKT PER FOOT

Use or disclosure of this proposal is subject to the restrictions on the cover page.

2	DDN1090	L4TDM-PSA 7-16 DIN MALE PS FOR 1/2 IN CABLE
2	TDN9289	221213 CABLE WRAP WEATHERPROOFING
150	DSAVA550	AVA5-50, COAXIAL CABLE, CORRUGATED COPPER,7/8 IN, BLACK PE JACKET
2	DSA5DFD	D-CLASS 7-16 DIN FEMALE FOR AVA5-50 CABLE
4	DSSG7812B2U	SG78-12B2U SUREGROUND GROUNDING KIT FOR 7/8 IN COAXIAL CABLE
1	DSL5SGRIP	L5SGRIP 7/8" SUPPORT HOIST GRIP
5	MDN6817	42396A-5 7/8" CABLE HANGER STAINLESS, 10 PK
1	DSTSXDFMBF	RF SPD, 698-2700MHZ DC BLOCK HIGH PWR, DIN FEM/MALE BI-DIR W/ BRACKET
1	DSGSAKITD	GROUND STRAP KIT - DIN
25	L1705	LDF4-50A CABLE: 1/2" LDF HELIAX POLY JKT PER FOOT
2	DDN1090	L4TDM-PSA 7-16 DIN MALE PS FOR 1/2 IN CABLE
1	DSCC80708T3	OMNI CORPORATE COLLINEAR 8DBD 746-870MHZ 3 DEG DT PIM & 25KW PIP RATED
15	L1705	LDF4-50A CABLE: 1/2" LDF HELIAX POLY JKT PER FOOT
1	DDN1088	L4TNM-PSA TYPE N MALE PS FOR 1/2 IN CABLE
1	DDN1090	L4TDM-PSA 7-16 DIN MALE PS FOR 1/2 IN CABLE
5	TDN9289	221213 CABLE WRAP WEATHERPROOFING
5	L1705	LDF4-50A CABLE: 1/2" LDF HELIAX POLY JKT PER FOOT
2	DDN1088	L4TNM-PSA TYPE N MALE PS FOR 1/2 IN CABLE
200	DSAVA550	AVA5-50, COAXIAL CABLE, CORRUGATED COPPER,7/8 IN, BLACK PE JACKET
2	DSA5NFS	N FEMALE FOR AVA5-50 CABLE
5	DSSG7812B2U	SG78-12B2U SUREGROUND GROUNDING KIT FOR 7/8 IN COAXIAL CABLE
1	DSL5SGRIP	L5SGRIP 7/8" SUPPORT HOIST GRIP
200	L1705	LDF4-50A CABLE: 1/2" LDF HELIAX POLY JKT PER FOOT
1	DDN1088	L4TNM-PSA TYPE N MALE PS FOR 1/2 IN CABLE
1	DDN1089	L4TNF-PSA TYPE N FEMALE PS FOR 1/2 IN CABLE
5	DSSG1212B2U	SG12-12B2U, SUREGROUND 1/2", 48"
1	DSL4SGRIP	L4SGRIP SUPPORT HOIST GRIP 1/2" LDF
7	MDN6816	STD HANGERS FOR 1/2IN CABLE & EW180/EW220/EW-HANGER KIT STAINLESS-10PK
7	MDN6817	42396A-5 7/8" CABLE HANGER STAINLESS, 10 PK
1	DS1090501WA	RF SPD, 700-1000MHZ BROADBAND 15 VDC PASS NM ANT, NF EQUIP PIP, ASIG
1	DS1090501WA	RF SPD, 700-1000MHZ BROADBAND 15 VDC PASS NM ANT, NF EQUIP PIP, ASIG
25	L1700	FSJ1-50A CABLE: 1/4" SUPERFLEX POLY JKT PER FOOT
2	DDN9769	F1TNM-HC 1/4" TYPE N MALE CONNECTOR FOR FSJ1-50A CABLE
25	L1702	FSJ4-50B CABLE: 1/2" SUPERFLEX POLY JKT PER FOOT

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2	DDN9682	F4PNMV2-HC 1/2" TYPE N MALE PLATED CONNECTOR
1	DSLMHFX450ST	DC POWER SYS, 48V 450ADC, DIST MOD,
3	DSLMHF7548VZE1	RECTIFIER, 48V, 75AMP
1	DSIX4U23KKIT	INVERTER KIT, CONTROLLER, STATIC SW
1	DSWLBG696ST	BATTERY, 696AH 48VDC STRING CONSIST
1	DSBPV1948V14RC	48 VDC 19" SPLIT BUS BREAKER PANE W
2	DSSP4KHAM20B1A	BREAKER, 20 AMP
8	DSSP4KHAM10B1A	BREAKER, 10 AMP
4	DSSP4KHAM5B1A	5A CIRCUIT BREAKERS
5	DSSP4KCDPD100B1	100 AMP BREAKER FOR TYPE CDPD
2	DSSP4KCDPD70B1	BREAKER, 70 AMP
2	DSRMP615A	SPD, TYPE 3, 120V RACK MOUNT, 15A P
1	DQPEPROWalton	4 Bay Tall Microsite MSI
1	DQAviatWalton	DQAVIAT MW Link

Use or disclosure of this proposal is subject
to the restrictions on the cover page.

SECTION 6

ACCEPTANCE TEST PLAN

A mutually agreed upon Acceptance Test Plan will be developed with EBRCSA and Motorola Solutions during the Kick-Off Meeting. This will include functional testing of the proposed equipment.

SECTION 7

COVERAGE VERIFICATION

As part of the Walton Lane simulcast site add proposal, Motorola is including services to perform a coverage survey that includes the Somersville, James Donlan and Lone Tree Way areas of Antioch identified in the map below. The purpose of the coverage survey is to validate to EBRCSA and its end users that the coverage concerns in and around the James Donlan Blvd area of Antioch have been met with the addition of the Walton Lane site. The map below identifies the area in which Motorola will perform the coverage survey.

The coverage survey will use a Portable radio to simulate on hip-on Street coverage by sampling the inbound and outbound BER (Bit Error rate) information. Motorola will use Voyager℠ to record the BER values, which will take sample data every ¼ mile. This process will require that one channel will be reserved for the duration of the coverage survey. Voyager generates computer files that include the Reference Tile Levels for each sampled tile. A copy of this raw data will be provided to EBRCSA as part of the coverage survey report. Motorola will submit to EBRCSA a brief report of the coverage survey results.

7.1 INFORMATIONAL ONLY COVERAGE MAP

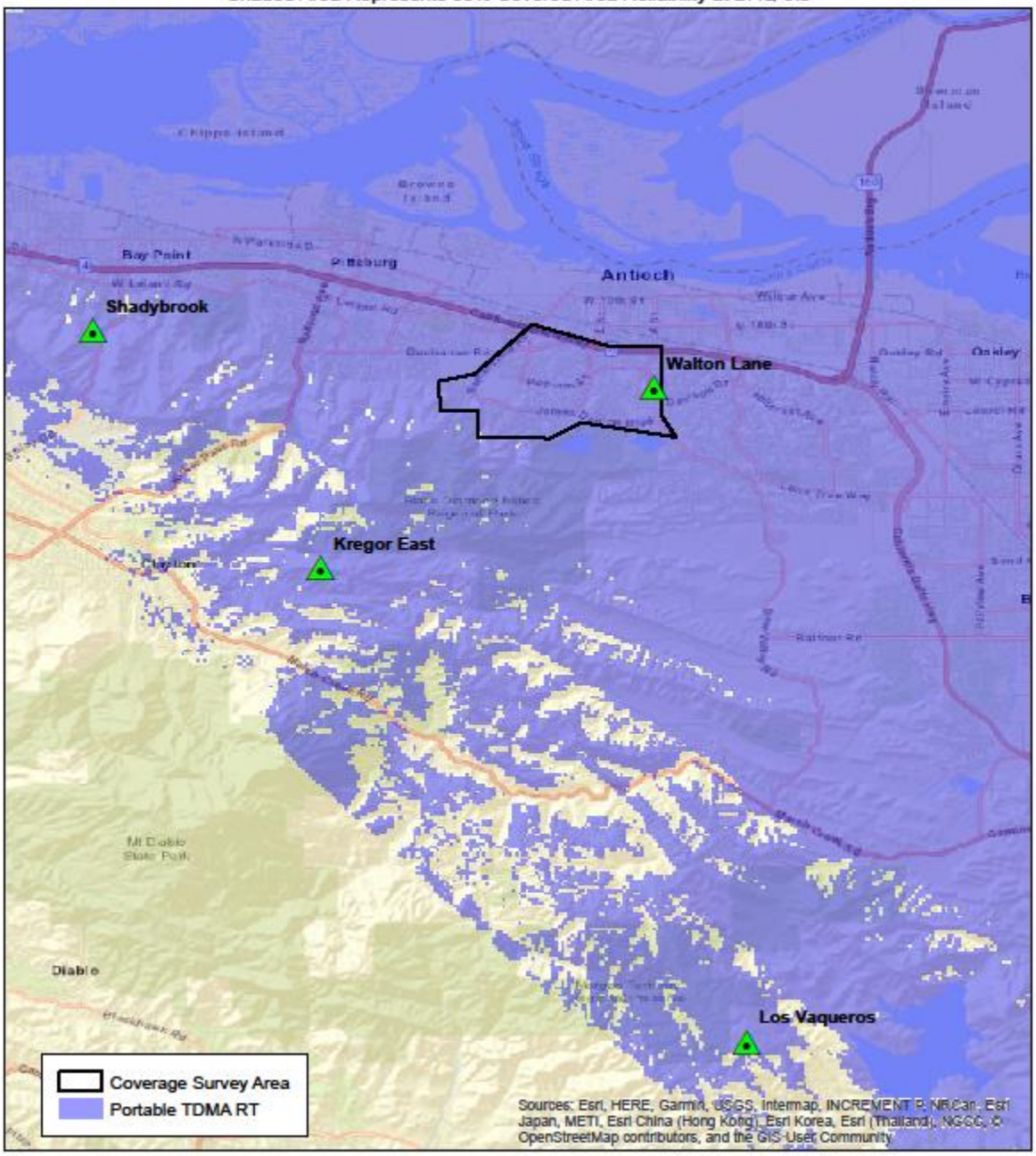
The following map is for informational purposes only and does not constitute any form of coverage guarantee. This map depicts the CoCoCo East Simulcast Cell with the addition of the new Walton Lane remote site.

MOTOROLA SOLUTIONS

This map is a coverage estimate based upon the information provided and should be used for informational purposes only. This coverage estimate in no way constitutes a coverage guarantee and Motorola is not responsible for any deviation between the estimated and actual system performance.

CA_EBRCS East Cell

4 Site 700 MHz ASTRO TDMA System
Shaded Area Represents 95% Covered Area Reliability at DAQ-3.0



0 0.5 1 2 Miles
1 in = 2 miles

Portable Config: APX 7000 Portable, 12.5 kHz, 2.5W
Tx/Rx at Hip with Belt Clip using RSM
Portable Antenna: Dual Band

CA_EBRCS
East Cell TDMA Walton
TBDH48
TBDH48-ZBK15G3

November 01, 2019

Design 36

7.2 INFORMATIONAL ONLY COVERAGE SURVEY MAP

The following map is for informational purposes only and does not constitute any form of coverage guarantee.

This map has been provided to indicate the predicted improved coverage in and around the James Donlan Blvd area in Antioch.

This map illustrates the coverage survey Motorola will use to validate to EBRCSA and its end users that the coverage concerns in and around the James Donlan Blvd area of Antioch.

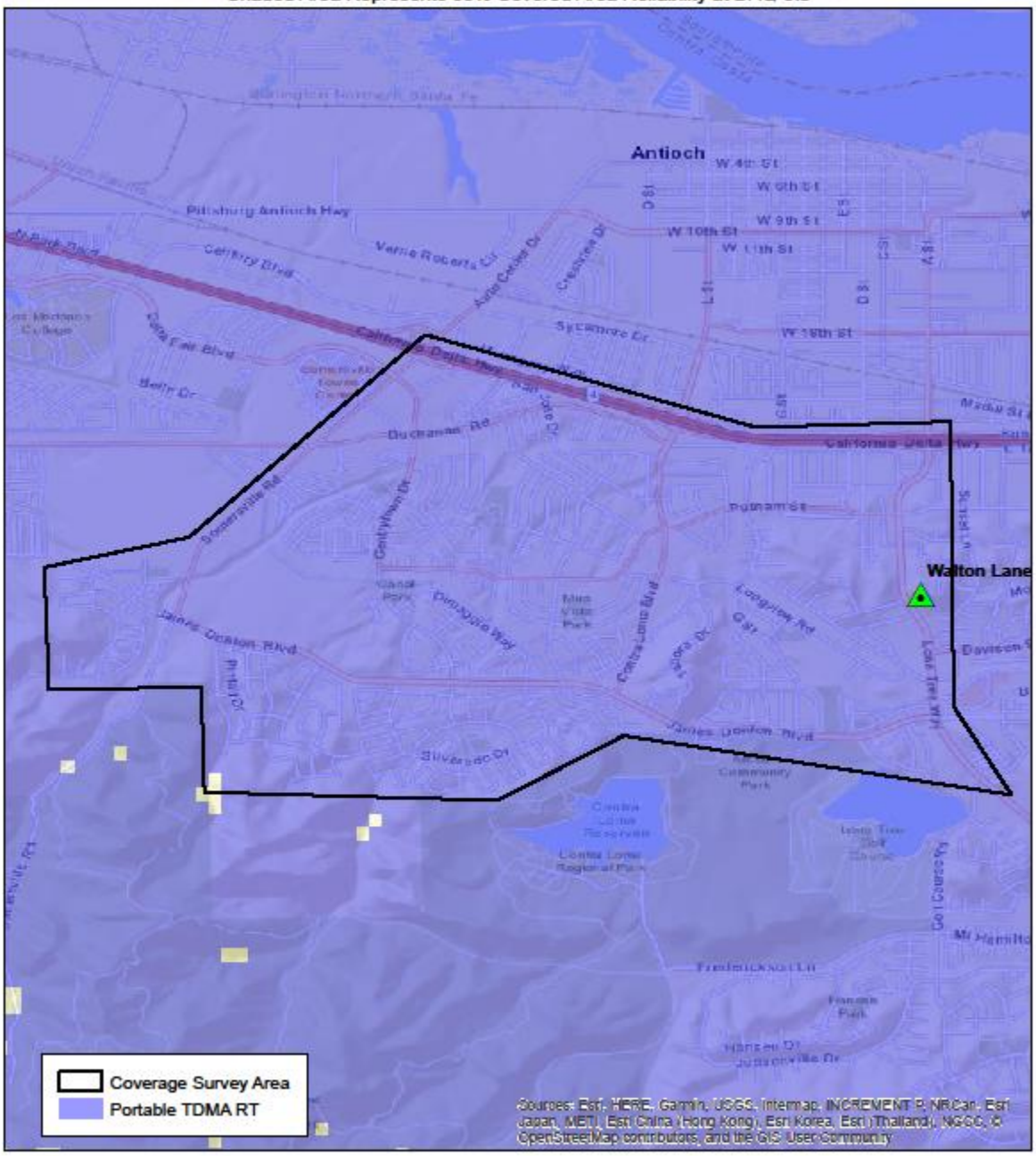
Use or disclosure of this proposal is subject to the restrictions on the cover page.

MOTOROLA SOLUTIONS

This map is a coverage estimate based upon the information provided and should be used for informational purposes only. This coverage estimate in no way constitutes a coverage guarantee and Motorola is not responsible for any deviation between the estimated and actual system performance.

CA_EBRCS East Cell

4 Site 700 MHz ASTRO TDMA System
Shaded Area Represents 95% Covered Area Reliability at DAQ-3.0



00.126.25 0.5 Miles
1 in = 1 miles

Portable Config: APX 7000 Portable, 12.5 kHz, 2.5W
Tx/Rx at Hip with Belt Clip using RSM
Portable Antenna: Dual Band

CA_EBRCS
East Cell TDMA Walton
TBDH48
TBDH48-ZBK15G3

November 01, 2019

Informational Only Coverage Survey Area
Portable Round-Trip BER

Design 36

SECTION 8

WARRANTY AND MAINTENANCE

8.1 WARRANTY SERVICES EBRCSA CHANNEL EXPANSIONS

Motorola Solutions will provide warranty services per our standard warranty terms and conditions as outlined within the Contract Documentation section within this proposal. In addition to the Standard Commercial Warranty, Post Warranty Services for this Channel Expansion project will be added to the current East Bay Regional Communications System Authority (EBRCSA) Maintenance and System Upgrade Agreements..

SECTION 9

PRICING

9.1 PRICING SUMMARY

Costs for equipment and optimization services for the Walton Lane Simulcast Remote Site Add-on.

Equipment and Services	Pricing
Equipment Cost Before Discount	$1,260,436
Equipment Discount	($167,456)
Equipment Cost After Discount	$1,092,980
8.75% Sales Tax on Equipment	$95,636
Total Equipment Cost	$1,188,616
System Integration Cost	$471,600
System Subtotal	**$1,660,216**
2019 Shipping Incentive	($594,271)
TOTAL COST	**$1,065,945**

9.2 PAYMENT TERMS

System Invoicing Milestones:

1. 25% of the Contract Price due upon contract execution.
2. 60% of the Contract Price due upon shipment of equipment.
3. 5% of the Contract Price due upon optimization of equipment.
4. 5% of the Contract Price upon system acceptance or start of beneficial use.
5. 5% of the Contract Price due upon Final Acceptance.

Overdue invoices will bear simple interest at the rate of ten percent (10%) per annum, unless such rate exceeds the maximum allowed by law, in which case it will be reduced to the maximum allowable rate.

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SECTION 10

CONTRACTUAL DOCUMENTATION

This proposal is subject to the terms and conditions of the Communications System Agreement, dated July, 7, 2009, and extended until July 6, 2020, between EBRCSA and Motorola Solutions (the "CSA"). Under Section 3.4 of the CSA, EBRCSA may purchase additional goods and services. Motorola Solutions' proposal is based on the assumption that EBRCSA will use this right under Section 3.4 of the CSA for the proposed transaction. Therefore, EBRCSA may accept the proposal by either issuing a Purchase Order that refers to the CSA and the Motorola Solutions proposal, or by executing a Change Order to the current CSA. If you prefer the latter method, Motorola Solutions will gladly prepare the Change Order document for execution.

East Bay Regional Communications System Authority

Participating agencies include Alameda and Contra Costa Counties and the following cities and special districts: Alameda, Albany, Antioch, Berkeley, Brentwood, Clayton, Concord, Danville, Dublin, El Cerrito, Emeryville, Fremont, Hayward, Hercules, Lafayette, Livermore, Martinez, Moraga, Newark, Oakley, Pinole, Pittsburg, Pleasant Hill, Pleasanton, Richmond, San Leandro, San Pablo, San Ramon, Union City, Walnut Creek, East Bay Regional Park District, Kensington Police Community Services District, Livermore Amador Valley Transit Authority, Moraga-Orinda Fire District, Rodeo-Hercules Fire District, San Ramon Valley Fire District, California Department of Transportation, Ohlone Community College District, Contra Costa Community College District, Dublin-San Ramon Services District and University of California, Berkeley

AGENDA ITEM NO. 7.

AGENDA STATEMENT
OPERATIONS COMMITTEE
MEETING DATE: February 21, 2020

TO: Operations Committee
East Bay Regional Communications System Authority (EBRCSA)

FROM: Thomas G. McCarthy, Executive Director
East Bay Regional Communications System Authority

SUBJECT: Dispatch Consoles for Alameda County and Contra Costa County Radio Shops

RECOMMENDATIONS:

Receive a report from the Executive Director concerning requests by the Alameda and Contra Costa County Radio Shops for East Bay Regional Communications System Authority (EBRCSA) to purchase one Dispatch Console for each shop.

SUMMARY/DISCUSSION:

The Alameda and Contra Costa County Radio Shops are responsible for updating, maintaining, and repairing the EBRCSA operating system. In order to make system changes, provide system updates, and maintain the system it requires a Technician to go to a dispatch center and ask to use one of the dispatch consoles for an undetermined amount of time depending on what is being done. The only way for the Technician to access the system is via a dispatch console connected to the network.

Alameda and Contra Costa County have approached the EBRCSA Executive Director asking that a console be purchased for each radio shop. The Executive Director approached the Bay Area Urban Area Security Initiative and was provided with $167,000.00 to pay for the purchase of the Dispatch Consoles for Alameda and Contra Costa County. Motorola has provided a quote for the two consoles, $142,778.00. In addition, the cost of the SUA II through year 2023 is

$8,574.00. The total cost of the consoles and the SUA II will be $151,352.00, which will be paid by EBRCSA out of operating funds and then EBRCSA will submit for reimbursement through the UASI 2018 Grant for the total purchase amount. EBRCSA has adequate funding to pay the cost and then be reimbursed by the UASI.

FISCAL IMPACT:

If the Operations Committee recommends the purchase of the consoles, a Budget Change will be prepared and provided with the Staff Report presented to the Board of Directors. The purchase of the consoles will be out of EBRCSA Operating Funds and reimbursement to the Operating Funds will be sought from the UASI. The purchase of the consoles will not require an increase in user fees for EBRCSA members.

RECOMMENDED ACTION:

It is recommended that the Committee discuss and provide a recommendation to the Executive Director concerning the purchase of the Dispatch Consoles for the two Radio Shops.

MOTOROLA SOLUTIONS

EAST BAY REGIONAL COMMUNICATIONS SYSTEM AUTHORITY

RADIO SHOPS DISPATCH CONSOLE ADD-ON **JANUARY 30, 2020**

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Motorola Solutions
10680 Treena Street, Suite #200
San Diego, CA. 92131
USA

January 30, 2020

Mr. Tom McCarthy
Executive Director
East Bay Regional Communications System Authority
4985 Broder Blvd.
Dublin, CA 94568

Subject: Radio Shops Dispatch Console Add-on

Dear Director McCarthy:

Motorola Solutions, Inc. ("Motorola") is pleased to provide the East Bay Regional Communications System Authority ("EBRCSA") the following Proposal for two additional MCC7500 console positions. The project will add one console position each to the existing consoles sites at Alameda County ITD radio shop in San Leandro and Contra Costa County DoIT radio shop in Martinez.

This Proposal is a firm offer, subject to the terms and conditions of the existing Communications System Agreement (CSA) between EBRCSA and Motorola, dated July 07, 2009, extended on July 6, 2012, and extended again on July 6, 2017 through July 6, 2020. Under Section 3.4 of the existing contract, EBRCSA may purchase additional goods and services from the CSA. Motorola's proposal is based on the assumption that EBRCSA will use this right under Section 3.4 of the CSA for the proposed transaction. Therefore, as in the past, EBRCSA may accept the proposal by executing a Change Order to the current CSA.

Any questions EBRCSA has regarding this proposal can be directed to Gordon Poole, Senior Account Manager at (408) 306-5622, (gordon.poole@motorolasolutions.com).

We thank you for the continued privilage of furnishing EBRCSA with "best in class" solutions that help protect your first responders and assist their efforts saving lives and property.

Sincerely,
Motorola Solutions, Inc.

Michael De Benedetti
Area Sales Manager

SECTION 1

SYSTEM OVERVIEW

1.1 MCC 7500 DISPATCH CONSOLE POSITION ADD-ON

Motorola is pleased to present the East Bay Regional Communications System Authority (EBRCSA) with a system design for an MCC 7500 dispatch console system add-on for the Alameda Radio Shop and the Contra Costa County Radio Shop. This will aid the users in improving safety and providing effective voice communications. Requirements for the system are described herein and are delineated throughout this system description.

This MCC 7500 IP-based console design interfaces with the existing trunking and conventional resources used by EBRCSA. This design ensures that the current and future migration strategies of EBRCSA are tied into one gradual transition while upholding the operations of the office.

This proposal includes one (1) additional MCC7500 Dispatch Console Position at the Alameda County Radio Shop and the one (1) additional MCC7500 Dispatch Console Position at the Contra Costa County Radio Shop.

Both radio console systems will be connected into the East Bay Regional Communications System Authority (EBRCSA) 700/800 MHz ASTRO P25® Trunked System via the existing EBRCSA transport network.

Use or disclosure of this proposal is subject to the restrictions on the cover page.

SECTION 2

SYSTEM DESCRIPTION

2.1 EBRCSA SYSTEM OVERVIEW

The MCC 7500 Dispatch Console is a mission critical IP command and control solution designed to ensure optimal quality audio and reliable communication. Console positions are connected directly to the EBRCSA transport network which supports communication with both trunked and conventional radios.

The MCC 7500 console delivers true wire-line capability including Console Priority to give dispatchers immediate access to a talkgroup or conventional channel.

The MCC 7500 voice processing hardware (VPM hardware) is used to perform dispatch operations. It supports end-to-end encryption.

This new MCC 7500 consists of a Dispatch Console PC, monitor, Voice Processor Module (VPM), two speakers, two headset jacks, and gooseneck microphone.

Table 2-1: MCC 7500 Configuration Summary

Dispatch Site	Alameda Co Radio Shop	CoCoCo Radio Shop
Version of OS	Windows 10	Windows 10
PC Model	HP Z2 Mini	HP Z2 Mini
Monitor	19" Non Touch	19" Non Touch
# Speaker per op	2	2
# Headset jack per op	2	2
# Gooseneck Microphone per op	1	1
# Footswitch per op	0	0
Encryption – Add Multi Key	ADP - AES	ADP - AES

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2.2 MCC 7500 DISPATCH CONSOLE COMPONENT DESCRIPTION

The proposed MCC 7500 Dispatch IP Console consists of the following elements:

- Operator position computer
- Voice Processing Module (VPM)

This section discusses the various components that make up the proposed MCC 7500 Dispatch Console system, Figure 2-1. These components are connected together and to the rest of the ASTRO 25 system on an IP network via console site routers and switches. The MCC 7500 Dispatch Console functions as an integrated component of the total radio system, fully participating in system level features such as end-to-end encryption and agency partitioning.

Since the network is IP-based, the system's interfaces and components can be distributed physically throughout the network.

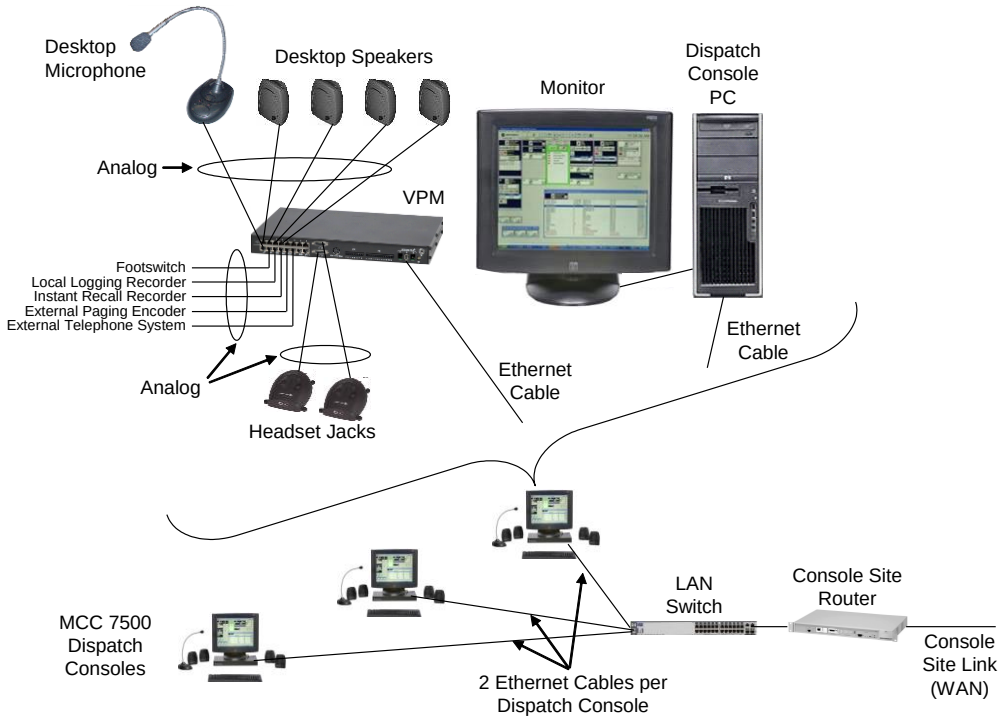

Figure 2-1: Motorola MCC 7500 Dispatch Console Hardware Architecture

2.2.1 Operator Position Components

MCC 7500 operator positions connect directly to the radio system's IP transport network without gateways or interface boxes. Audio processing, encryption, and switching intelligence for dispatch are performed within each software-based operator position, without additional centralized electronics.

Figure 2-2: MCC 7500 Operator Position

An MCC 7500 operator position consists of a computer, a Voice Processing Module (VPM), one select speaker, up to three unselect speakers, a desktop gooseneck microphone and/or headset jack box with in-line PTT amplifier and headset. (Figure 2-2).

Voice Processing Module (VPM)

The VPM provides vocoding and audio processing services for the dispatch console. It connects to the console site LAN switch and communicates with the dispatch console PC via Ethernet. Each operator position includes a PC and a dedicated VPM. The VPM also provides connections for analog devices to be connected to the digital console.

The VPM has connectors for the following devices:

- One desktop microphone
- Two headset jacks
- Two desktop speakers
- Logging recorder
- Radio instant recall recorder
- Telephone instant recall recorder

Desktop Speakers

Each dispatch console is capable of supporting up to eight audio speakers. In this design, 2 speakers are included per position. These speakers supply audio for select/unselect, as well as pre-determined audio sources to specific monitor speakers, each of which transmits unique audio—that is, an audio source cannot appear in multiple speakers at a single dispatch console. Monitor speakers can tie specific talkgroups to a certain speaker.

Each speaker has individual volume controls, and contains an amplifier that provides a maximum of 2 Watts of power output. Speakers are self-contained units, and can be placed on a desktop, mounted in a rack/furniture, mounted on a wall, or mounted on a computer monitor.

Headset Jack

Each dispatch console is capable of supporting up to two headset jacks. A headset jack allows a dispatch console user to use a headset while operating the dispatch console. Each headset can either be connected to the console for supervisory applications, or to a desk telephone. The equipment design proposed includes two headset jack(s) per operator.

The headset jack contains two volume controls: one for adjusting the level of received radio audio and one for adjusting the level of received telephone audio.

The headset jack supports headsets which use either PJ7 (6-wire) or PJ327 (4-wire) long frame connectors (6-wire headsets have a PTT button while 4-wire headsets do not have a PTT button).

Instant Recall Recorder Port (for Radio)

Short-term, console-specific audio recording is a mechanism used to record a portion of the inbound audio present on a specific dispatch console and make it readily available to the dispatch console user. This recorded audio is retained by the recording system for a short period (typically about 60 minutes) and is easily played back by the dispatch console user. This allows the dispatch console user to replay received audio that the user may have missed.

The instant recall recorder port (for radio) allows an instant recall recorder to be connected to a dispatch console. The port provides an output containing the receive radio audio on the selected channels. Transmit audio of any type (from either this dispatch console or a parallel dispatch console) as well as tones generated by the dispatch console (emergency tones, callback tones, busy tones) are not included in the audio output.

Dispatch console generated tones (e.g., emergency alarm tones, trunking busy tones, error tones, etc.) are not included in the audio appearing at the analog audio output. This is done so that they do not interfere with the dispatch console user's ability to understand the voice audio that was recorded.

Telephone/Headset Port

The telephone/headset port allows an external telephone set to be connected to the dispatch console. The dispatch console's headset can then be used to communicate on both the radio system and a telephone system (i.e. a 911 system).

When a telephone call occurs at a dispatch position, radio audio is directed from the headset to the appropriate console speaker. The headset microphone audio is routed to the telephone, allowing the dispatch console user to communicate hands-free on the telephone set. When the dispatch operator ends their call, the headset reverts back to full radio operation.

When the dispatch operator transmits on a radio resource during a telephone call, the headset microphone is re-routed to the radio system for the duration of the transmission. Once the transmission is completed, the headset microphone is routed back to the telephone. During the transmission, the dispatch operator continues to hear the telephone audio through the headset.

Personal Computer (PC)

The dispatch console uses an off-the-shelf shelf personal computer, running the Microsoft Windows operating system. The PCs have a minitower form factor and come with a keyboard and mouse. A variety of monitors are supported, including both touch and non-touch operation.

2.2.2 Additional MCC 7500 Console Dispatch System Features

The MCC 7500 is a feature-rich, modular platform that has been configured to maximize the utility of the system to your unique needs. The following sections provide discussion of the key MCC 7500 IP Dispatch Console features.

2.2.2.1 Integrated with the ASTRO 25 Network

The MCC 7500 IP Dispatch Console is seamlessly integrated into the ASTRO 25 Mission Critical Trunking Network. The console connects directly to the EBRCS Master Site via an IP backbone. This IP approach eliminates the need for space-consuming backroom electronics. All dispatch activity is performed over IP. The physical space needed to accommodate the MCC 7500 console position is no more than required for a personal computer.

Both trunked talk groups and conventional radio channels can be accessed and controlled from one MCC 7500 IP Dispatch Console over the same network, thus reducing overall transport costs. All conventional resources become shared resources within the ASTRO 25 network, reducing the need for duplicate fixed network equipment.

Inherent integration with the ASTRO 25 network means:

- Voice quality is optimized, eliminating the potential for audio degradation.
- Quality of service is maintained, regardless of the size of the system.
- IP network redundancy ensures call traffic delivery.
- Rapid call set up times that remain constant, regardless of the size of the system.
- Improved bandwidth efficiencies reduce transport costs.
- Flexibility in usage of the operator configuration – any operator can do their job from any position in the network.
- Inherent access to all system resources within the network by eliminating equipment and coverage constraints, providing dispatch priority to reach any user when needed.

2.2.2.2 Proven Graphical User Interface

The MCC 7500's intuitive graphical user interface (GUI) optimizes user efficiency. The MCC 7500 user interface is an enhanced version of Motorola's proven radio dispatch GUI. For new users, the graphical icons and unsurpassed flexibility make the MCC 7500 console GUI easy to learn and operate.

The MCC 7500 GUI is highly configurable and customizable by agency or user to meet dynamic needs and requirements. The MCC 7500 GUI makes the most use of monitor space, maximizing the number of resources a supervisor is able to easily view and control. Features include:

- Six (6) screen configurations (folders) for added resource capacity, for shift changes, or for differing radio dispatch scenarios and/or responsibilities.
- Sixteen different radio patch configurations per MCC 7500 IP Dispatch Console.
- Call history log for up to 1000 calls.

Use or disclosure of this proposal is subject to the restrictions on the cover page.

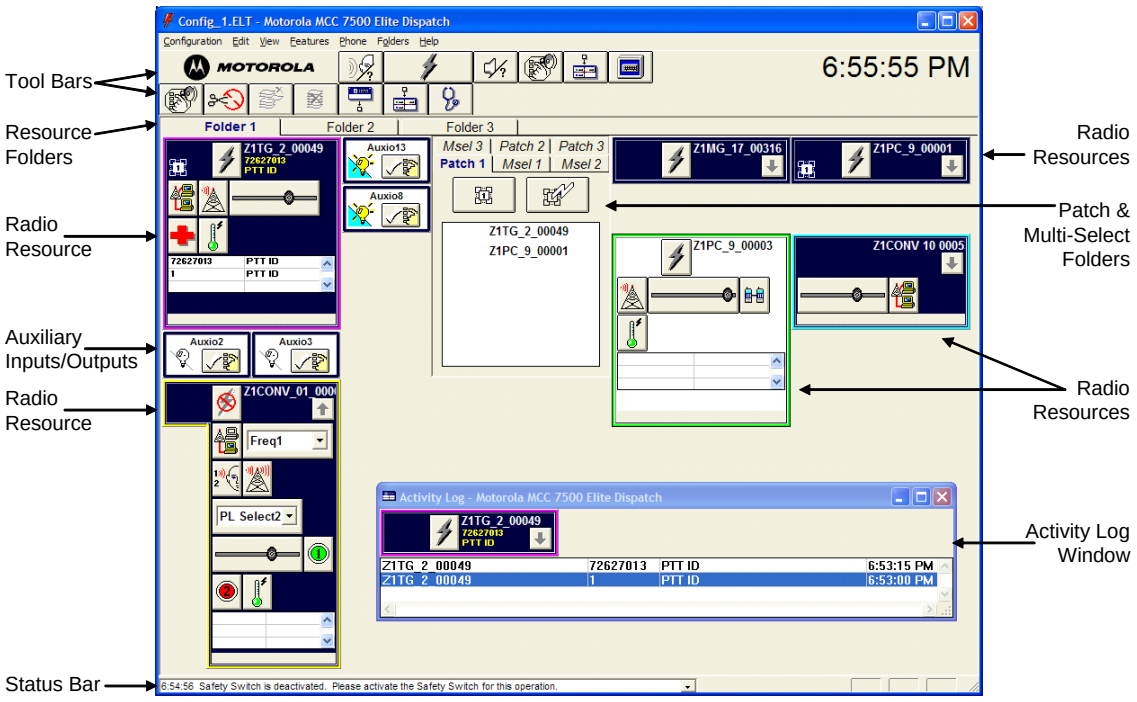

Figure 2-3: Radio Dispatch GUI

The radio console computer and software are the user interface to the ASTRO 25 IP network. Figure 2-3 (above) is a screenshot of the MCC 7500 IP Dispatch Console's Graphical User Interface (GUI).

2.2.2.3 Centralized Network Configuration and Fault Management

Centralized configuration is a unique MCC 7500 IP Dispatch Console feature that speeds console set up, enhancement, or expansion efforts and makes the most efficient use of resources.

- Configuration of the MCC 7500 IP Dispatch Console positions is accomplished via the User Configuration Manager (UCM).
- There is no need to separately maintain or manage configuration databases solely for the radio dispatch equipment.
- Redundancy and potential errors from entering radio IDs and other data at multiple locations are eliminated.
- Console configuration changes are immediately and automatically distributed to radio dispatch positions.
- Call traffic and performance reports for each console can be generated from the Network Manager.
- Historical reports can assist in making informed decisions regarding radio console changes for optimal effectiveness and efficiency.
- Centralized fault management allows reduced service times, and quicker resolution of issues.

The MCC 7500 IP Dispatch Console is designed to continuously monitor its application software and important hardware elements to make sure it is operating efficiently at all times. Network connections and control paths between the consoles and various elements are also monitored to make sure they are operating efficiently.

2.2.2.4 Mission Critical Audio and Tones

The MCC 7500 IP Dispatch Console is designed:

- To minimize the impact of any momentary glitches in IP audio packet delivery.
- With robust error mitigation methods in place so call audio is not degraded even when the system is heavily loaded in a crisis. This improves dispatcher accuracy to minimize communication errors and repeated transmissions.
- To optimize the quality of tones sent to the radio users to improve the accuracy of their interpretation and response. Special protocols are used in the MCC 7500 IP software to enhance the quality of Alert Tones and Channel Marker tones used in trunking, which can be subject to distortion from the Project 25 IMBE vocoder.

2.2.2.5 Reliability and Availability

The MCC 7500 IP Dispatch Console and services are optimized for real-time audio, essential for mission critical operations. The MCC 7500 is designed to prioritize emergency calls over other traffic. Queuing of voice is kept to a minimum and calls are transmitted in 450 milliseconds or less.

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to the restrictions on the cover page.

SECTION 3

STATEMENT OF WORK

Motorola Solutions is proposing to East Bay Regional Communications System Authority (EBRCSA) the installation and configuration of the following equipment at the specified locations as shown in Table 3-1.

Table 3-1: Major Equipment by Site

Site Name	Major Equipment
Alameda Co. Radio Shop	Implement (1) Position MCC 7500 Dispatch Console
Contra Costa Co. Radio Shop	Implement (1) Position MCC 7500 Dispatch Console
EBRCSA Master Site	Add Console Licenses to M Core and TNCT

The document delineates the general responsibilities between Motorola Solutions and EBRCSA as agreed to by contract.

3.1 MOTOROLA SOLUTIONS RESPONSIBILITIES

Motorola Solutions' general responsibilities include the following:

- Schedule the optimization in agreement with EBRCSA.
- Perform the configuration and optimization of the Motorola Solutions supplied equipment described above.
- Coordinate the activities of all Motorola Solutions subcontractors under this contract.
- Administer safe work procedures for installation.
- Provide EBRCSA with the appropriate system interconnect specifications.

3.2 EBRCSA RESPONSIBILITIES

EBRCSA will assume responsibility for the installation of all equipment and work necessary for completion of this project that is not provided by Motorola Solutions. EBRCSA general responsibilities include the following:

- Provide all buildings, equipment shelters, and towers required for system installation that meet R56 standards.
- Insure communications sites meet space, grounding, power, and connectivity requirements for the installation of all equipment.
- Assemble and install console equipment at the radio shop locations.
- Will be responsible for site access, and permitting required for project implementation.
- Will provide the cold installation of all MCC 7500 Dispatch Console equipment provided in this proposal.
- Provide required system interconnections and testing of Network Links to and from the EBRCSA Master Site and the Alameda Co. and Contra Costa Co. radio shops.
- Will provide a dedicated delivery point, such as a warehouse, for receipt, inventory and storage of equipment prior to delivery to the site(s).
- Coordinate the activities of all EBRCSA's vendors or other contractors

3.3 ASSUMPTIONS

Motorola Solutions has made several assumptions in preparing this proposal, which are noted below.

- All existing sites or equipment locations will have sufficient space available for the system described.
- All existing sites or equipment locations will have adequate electrical power and site grounding suitable to support the requirements of the system described.
- There is no more than 25’ wire distance between existing power system and new equipment terminals
- There is a site R56 compliant ground connection within 33’ of new equipment installation location.
- Any site/location upgrades or modifications are the responsibility of EBRCSA.
- EBRCSA will be responsible for removal of equipment necessary to accommodate the new Motorola Solutions provided equipment.
- Approved local, State, or Federal permits as may be required for the installation and operation of the proposed equipment, are the responsibility of EBRCSA.
- Any required system interconnections not specifically outlined here will be provided by EBRCSA, including but not limited to dedicated phone circuits.
- EBRCSA will provide the backhaul demarcation point within 10’ of the MCC 7500 Dispatch Console location.
- EBRCSA will provide a dedicated delivery point for receipt, inventory, and storage of equipment prior to delivery to the site.
- Work will be completed during non-holidays Monday – Friday during normal business hours, 8:00 am – 5:00 pm.
- Training is not included in this proposal.
- Foot switches and IRR have not been included in this proposal.
- There are spare Ethernet ports in the existing LAN at the radio shops to accommodate the additional MCC 7500 Operator Position.
- Motorola Solutions is not responsible for interference caused or received by the Motorola Solutions provided equipment except for interference that is directly caused by the Motorola Solutions provided transmitter(s) to the Motorola Solutions provided receiver(s). Should the EBRCSA's system experience interference, Motorola Solutions can be contracted to investigate the source and recommend solutions to mitigate the issue.

Use or disclosure of this proposal is subject to the restrictions on the cover page.

SECTION 4

EQUIPMENT LIST

This section lists the equipment necessary for the proposed solution.

EBRCSA Master Site Core

QTY	NOMENCLATURE	DESCRIPTION
1	SQM01SUM0323	MASTER SITE CONFIGURATION
1	CA03517AB	ADD: CORE EXPANSION
1	UA00156AA	ADD: MCC7500 CONSOLE LICENSES (QTY 5)

Alameda County Radio Shop

QTY	NOMENCLATURE	DESCRIPTION
1	B1905	MCC 7500 ASTRO 25 SOFTWARE
1	B1933	MOTOROLA VOICE PROCESSOR MODULE
1	CA01642AA	ADD: MCC 7500 BASIC CONSOLE FUNCTIONALITY SOFTWARE LICENSE
1	CA01644AA	ADD: MCC 7500 /MCC 7100 ADV CONVL OPERATION
1	CA01643AA	ADD: MCC 7500 / MCC 7100 TRUNKING OPERATION
1	CA00147AF	ADD: MCC 7500 SECURE OPERATION
1	CA00182AB	ADD: AES ALGORITHM
1	CA00245AA	ADD: ADP ALGORITHM
1	CA00140AA	ADD: AC LINE CORD, NORTH AMERICAN
1	DSTG191B	TECH GLOBAL EVOLUTION SERIES 19INCH NON TOUCH
1	TT3492	Z2 G4 MINI WORKSTATION NON RETURNAB
2	B1912	MCC SERIES DESKTOP SPEAKER
1	B1914	MCC SERIES DESKTOP GOOSENECK MICROPHONE
2	B1913	MCC SERIES HEADSET JACK
1	T7449	WINDOWS SUPPLEMENTAL TRANS CONFIG
1	T7885	MCAFEE WINDOWS AV CLIENT
1	DSRMP615A	SPD, TYPE 3, 120V RACK MOUNT, 15A PLUG-IN W/ (6) 15A NEMA 5-15 OUTLETS

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Contra Costa County Radio Shop

QTY	NOMENCLATURE	DESCRIPTION
1	B1905	MCC 7500 ASTRO 25 SOFTWARE
1	B1933	MOTOROLA VOICE PROCESSOR MODULE
1	CA01642AA	ADD: MCC 7500 BASIC CONSOLE FUNCTIONALITY SOFTWARE LICENSE
1	CA01644AA	ADD: MCC 7500 /MCC 7100 ADV CONVL OPERATION
1	CA01643AA	ADD: MCC 7500 / MCC 7100 TRUNKING OPERATION
1	CA00147AF	ADD: MCC 7500 SECURE OPERATION
1	CA00182AB	ADD: AES ALGORITHM
1	CA00245AA	ADD: ADP ALGORITHM
1	CA00140AA	ADD: AC LINE CORD, NORTH AMERICAN
1	DSTG191B	TECH GLOBAL EVOLUTION SERIES 19INCH NON TOUCH
1	TT3492	Z2 G4 MINI WORKSTATION NON RETURNAB
2	B1912	MCC SERIES DESKTOP SPEAKER
1	B1914	MCC SERIES DESKTOP GOOSENECK MICROPHONE
2	B1913	MCC SERIES HEADSET JACK
1	T7449	WINDOWS SUPPLEMENTAL TRANS CONFIG
1	T7885	MCAFEE WINDOWS AV CLIENT
1	DSRMP615A	SPD, TYPE 3, 120V RACK MOUNT, 15A PLUG-IN W/ (6) 15A NEMA 5-15 OUTLETS

Use or disclosure of this proposal is subject to the restrictions on the cover page.

SECTION 5

WARRANTY AND MAINTENANCE

5.1 WARRANTY SERVICES EBRCSA MCC 7500 CONSOLE ADD ONS

Motorola Solutions will provide warranty services per our standard warranty terms and conditions as outlined within the Contract Documentation section within this proposal. In addition to the Standard Commercial Warranty, Post Warranty Services for this MCC 7500 Console Add On project will be included to match the current East Bay Regional Communications System Authority (EBRCSA) Maintenance and System Upgrade Agreements.

5.2 POST WARRANTY MAINTENANCE SERVICES COSTS EBRCSA FOR ALAMEDA CO. AND CONTRA COSTA CO. MCC 7500 CONSOLE ADD ONS

Motorola Solutions will add maintenance services for each of the Alameda Co. and Contra Costa Co.radio shop MCC 7500 Dispatch Console Ops to the existing EBRCSA maintenance contrat for the following amounts.

EBRCSA Alameda Co. Radio Shop 1 Position MCC 7500 Dispatch Console Op Annual Maintenance

2020	2021	2022	2023
Included	$1,656	$1,706	$1,757

EBRCSA Contra Costa Co. Radio Shop 1 Position MCC 7500 Dispatch Console Op Annual Maintenance

2020	2021	2022	2023
Included	$1,656	$1,706	$1,757

Use or disclosure of this proposal is subject to the restrictions on the cover page.

5.3 POST WARRANTY SUA II ANNUAL COSTS SERVICES EBRCSA MCC 7500 CONSOLE ADD ONS

Motorola Solutions will add SUA II services for each of the Alameda Co. and Contra Costa Co. radio shop MCC 7500 Dispatch Console Ops to the existing EBRCSA SUA II contrat for the following amounts.

EBRCSA Alameda Co. 1 Position MCC 7500 Dispatch Console Op Post Warranty SUA II

2020	2021	2022	2023
Included	$1,387	$1,429	$1,471

EBRCSA Contra Costa Co. 1 Position MCC 7500 Dispatch Console Op Post Warranty SUA II

2020	2021	2022	2023
Included	$1,387	$1,429	$1,471

Use or disclosure of this proposal is subject to the restrictions on the cover page.

SECTION 6

PRICING

6.1 PRICING SUMMARY

Costs for equipment and optimization services for the Alameda Co. and Contra Costa Co. radio shop MCC 7500 Dispatch Console Add-ons.

Equipment and Services	Pricing
Equipment Cost Before Discount	**$100,630**
Equipment Discount	**($19,697)**
Equipment Cost After Discount	**$80,933**
9.25% Sales Tax on Equipment	**$7,486**
Total Equipment Cost	**$88,420**
System Integration Cost	**$54,358**
TOTAL COST	**$142,778**

6.2 PAYMENT TERMS

System Invoicing Milestones:

1. 50% of the Contract Price due upon contract execution.
2. 50% of the Contract Price due upon Final Acceptance.

Overdue invoices will bear simple interest at the rate of ten percent (10%) per annum, unless such rate exceeds the maximum allowed by law, in which case it will be reduced to the maximum allowable rate.

SECTION 7

CONTRACTUAL DOCUMENTATION

This proposal is subject to the terms and conditions of the Communications System Agreement, dated July, 7, 2009, and extended until July 6, 2020, between EBRCSA and Motorola Solutions (the “CSA”). Under Section 3.4 of the CSA, EBRCSA may purchase additional goods and services. Motorola Solutions’ proposal is based on the assumption that EBRCSA will use this right under Section 3.4 of the CSA for the proposed transaction. Therefore, EBRCSA may accept the proposal by either issuing a Purchase Order that refers to the CSA and the Motorola Solutions proposal, or by executing a Change Order to the current CSA. If you prefer the latter method, Motorola Solutions will gladly prepare the Change Order document for execution.

Bay Area UASI Grant Management System

Grant Details

Grant: 07137-TERA-EBRCSA - EBRCSA Two County Interoperability Upgrades - 2018

Status:	Underway
Program Area:	UASI Grant Program
Grantee Organization:	Alameda County Sheriff's Office of Emergency Services
Program Officer:	Mikyung Kim-Molina
Awarded Amount:	$167,000.00

Commonly Requested Items

Project Description

Select a goal:*	Goal 3 - Communications Please note: Your project must align with and available priority capability objective for this fiscal year. If your project aligns with an unavailable priority capability objective it may be deemed non-complaint. Please click here to review all of the Bay Area UASI Homeland Security Goals & Objectives
Select a Priority Capability Objective:*	Objective 3.1 Operational Communications **Objective**
Select the most applicable FEMA Core Capability for your project:*	Operational Communications FEMA Core Capabilities
Select a nexus to terrorism: This project will enhance regional capacity to:*	Prevent Terrorist Attacks, Protect Against Terrorist Attacks, Mitigate Effects of Terrorist Attacks, Respond to Terrorist Attacks, Recover from Terrorist Attacks Select all that apply
Describe the nexus to terrorism in detail:*	Enhanced communications ability for counter terrorism purposes. 300 Characters Maximum
Select all applicable outcomes:	Yes **a) During the first 24 hours following a no-notice incident, responders share mission critical voice information with each other and with responders from across the Bay Area region.**
	Yes **b) Ensure local or regional emergency communications systems are based on established governance, standard operating procedures, and technology.**
	Yes **c) During the first 72 hours following a catastrophic event, ensure that redundancies within state systems provide sufficient capability for continued communications, despite damage to regional systems (THIRA).**
	Yes **d) d) Within seven days following a catastrophic event, implement a plan to re-establish communications infrastructure throughout the Bay Area, especially commercial communication systems relying on cable (THIRA).**
	No **Other - Describe Below:**
Project Summary- Provide a brief description of	Upgrade two county interoperability switch for EBRSCA This field is limited to 750 characters.

your project: For planning projects include a final deliverable.*

For equipment projects, please provide an inventory of the requested item currently used in the county:

Bay Area UASI Grant Management System

Grant Details

Grant: 07137-TERA-EBRCSA - EBRCSA Two County Interoperability Upgrades - 2018

Status:	Underway
Program Area:	UASI Grant Program
Grantee Organization:	Alameda County Sheriff's Office of Emergency Services
Program Officer:	Mikyung Kim-Molina
Awarded Amount:	$167,000.00

Project Timeline

Project Dates*	04/01/2019 Project Start Date	06/30/2020 Project End Date

Please provide a compelling justification for an extended performance period.*

late award from the FY18 T&E Reallocation.

East Bay Regional Communications System Authority

Participating agencies include Alameda and Contra Costa Counties and the following cities and special districts: Alameda, Albany, Antioch, Berkeley, Brentwood, Clayton, Concord, Danville, Dublin, El Cerrito, Emeryville, Fremont, Hayward, Hercules, Lafayette, Livermore, Martinez, Moraga, Newark, Oakley, Pinole, Pittsburg, Pleasant Hill, Pleasanton, Richmond, San Leandro, San Pablo, San Ramon, Union City, Walnut Creek, East Bay Regional Park District, Kensington Police Community Services District, Livermore Amador Valley Transit Authority, Moraga-Orinda Fire District, Rodeo-Hercules Fire District, San Ramon Valley Fire District, California Department of Transportation, Ohlone Community College District, Contra Costa Community College District, Dublin-San Ramon Services District and University of California, Berkeley

AGENDA ITEM NO. 8.

AGENDA STATEMENT
OPERATIONS COMMITTEE
MEETING DATE: February 21, 2020

TO: Operations Committee
East Bay Regional Communications System Authority (EBRCSA)

FROM: Thomas G. McCarthy, Executive Director
East Bay Regional Communications System Authority

SUBJECT: Change Operations Committee Meeting Time to 10:00 AM

RECOMMENDATIONS:

Provide Direction to the Executive Director concerning a change to the Operations Committee meeting start time from 9:30 AM to 10:00 AM.

SUMMARY/DISCUSSION:

The East Bay Regional Communications System Authority (EBRCSA) Operations Committee meets at 9:30 AM. A request has been made by the Operations Committee Chair to move the meeting to 10:00 AM in order to reduce conflict with other meetings scheduled prior to the Operations Committee meetings on the Friday when the meeting is held.

FISCAL IMPACT:

No fiscal impact to EBRCSA.

RECOMMENDED ACTION:

It is recommended that the Committee discuss and provide a recommendation to the Executive Director concerning the Operations Committee meeting start time being changed to 10:00 AM.