Agenda
Benton County Emergency Services Executive Board
Thursday, January 25, 2024 ~ 7:30 AM
Richland City Hall ~ Council Chambers
625 Swift Boulevard

Benton County Emergency Services (BCES) Executive Board Meeting

Call to Order

Attendance

Approval of Agenda (Approved by Motion) Voting Members: All voting members except Benton Public Utility District

Public Comments: Public comments will be limited to 2 minutes per speaker.

Consent Calendar: Items on the Consent Calendar have been distributed to Benton County Emergency Services Executive Board members in advance for reading and study, are considered to be routine, and will be enacted by one motion of the Board with no discussion. Board members may transfer individual Items of Business for deliberation before voting. Voting Members: All voting members except Benton Public Utility District.

1. Approval of the DRAFT December 6, 2023 Benton County Emergency Services Executive Board Special Meeting Minutes
   - Jon Amundson, City Manager

2. Approval of the DRAFT January 18, 2024 Benton County Emergency Services Executive Board Special Meeting Minutes
   - Jon Amundson, City Manager

Director's Report:

3. Manager's Report
   - Jay Atwood, BCES Executive Director

Items of Business:

Benton County Emergency Services (BCES) (Approved by Motion): Voting Members: Cities of Kennewick, Pasco and Richland; Benton and Franklin County - 2 votes each. Benton County Fire District; Cities of Benton City, Prosser and West Richland - 1 vote each.

4. Election of 2024 Chair and Vice-Chair
   - Jon Amundson, City Manager

Benton County Emergency Management (BCEM) (Approved by Motion): Voting Members: Cities of Kennewick and Richland; Benton County - 2 votes each. Cities of West Richland, Prosser and Benton City - 1 vote each.

Southeast Communications Center (SECOMM) (Approved by Motion): Voting Members: Cities of Kennewick, Pasco and Richland; Benton and Franklin County - 2 votes each. Cities of Prosser and West Richland; Benton County Fire Districts - 1 vote each.

800MHz System (Approved by Motion): Voting Members: Cities of Kennewick and Richland; Benton County - 2 votes each.

5. VHF Radio System Project Recommendation - Discussion and Approval
   - Tom Huntington, Fire Chief

Benton County Microwave System (Approved by Motion): Voting Members: Cities of Kennewick and Richland; Benton County - 2 votes each. Benton Public Utility District - 1 vote each.

Strategic Advisory Team (SAT):

BCES/BiPIN Consolidation :

Discussion Items:

Adjournment

Richland City Hall is ADA accessible. Any individual who has difficulty attending the meeting in-person may request to provide comments remotely. (Ch. 42.30 RCW) Requests for sign interpreters, audio equipment, and/or other special services must be received 48 hours prior to the meeting by calling the City Clerk's Office at 509-942-7389.

BENTON COUNTY EMERGENCY SERVICES AGENDA ITEM COVERSHEET

Meeting Date: 1/25/2024 Agenda Category: Consent Calendar:

Prepared By: Jon Amundson, City Manager

Subject:
Approval of the DRAFT December 6, 2023 Benton County Emergency Services Executive Board Special Meeting Minutes

Recommended Motion:

Summary:
DRAFT minutes from the December 6, 2023 Benton County Emergency Services Executive Board Special Meeting are presented for the Board's consideration and approval.

Fiscal Impact:

Attachments:
1. 012524 December 6, 2023 DRAFT BCES Meeting Minutes

MINUTES – December 6, 2023 - 8:00 AM
BENTON COUNTY EMERGENCY SERVICES EXECUTIVE BOARD SPECIAL MEETING
Richland Public Library ~ 955 Northgate Drive
Richland, WA 99352

Call to Order

The meeting was called to order at 8:01 a.m. by Chair Jon Amundson.

Attendance

Members

Matt Rasmussen *(in for Michael Alvarez)*	Benton County (2 Votes)
Liz Cupples *(in for Mike Gonzalez)*	Franklin County (2 Votes)
Marie Mosley	City of Kennewick (2 Votes)
Adam Lincoln	City of Pasco (2 Votes)
Jon Amundson	City of Richland (2 Votes)
Rachel Shaw/Thomas Glover *(in for Jay King)*	City of Prosser (1 Vote)
Erin Gwinn *(in for Brent Gerry)*	City of West Richland (1 Vote)
Lonnie Click *(arrived after roll call)*	Benton County Fire Districts (1 Vote)

Absent

Michael Alvarez	Benton County (2 Votes)
Mike Gonzalez	Franklin County (2 Votes)
Jay King	City of Prosser (1 Vote)
Brent Gerry	City of West Richland (1 Vote)
Bill Reed	City of Benton City (1 Vote)
Duane Szendre	Benton PUD (1 Vote, Microwave Only)

Also Present: BCES Director Jay Atwood; SECOMM Manager Kim Lettrick; BCEM Manager Deanna Davis; BCES IS Manager Doug deGraaf; Accounting Specialist Jordan George; Administrative Assistant/Board Secretary Carole Cimrhakl

Other Attendees: Benton County Sheriff Ken Roske *(remote);* Benton County Sheriff Commander Mat Clarke); Connell Police Chief Chris Lee, Connell City Administrator Cathleen Koch, Kennewick Police Chief Chris Guerrero; Kennewick Interim City Manager/City Attorney Lisa Beaton; Kennewick Director of Management Services Kennewick BiPIN Implementation Administrator Tracy Troutman, Kennewick Assistant IT Manager Cody Lewis, Kennewick BiPIN Software Analyst Travis Amundson; Kennewick BiPIN System Administrator Bret Helms; Richland Assistant City Manager Drew Florence; Richland Finance Director Brandon Allen

Approval of Agenda

MARIE MOSLEY MOVED AND MATT RASMUSSEN SECONDED THE MOTION TO APPROVE THE AGENDA. ALL WERE IN FAVOR. MOTION CARRIED 13-0.

Public Comments

There were no public comments.

Approval of Consent Calendar

1. Approval of the DRAFT October 26, 2023, Benton County Emergency Services Executive Board Regular Meeting Minutes – Jon Amundson

MATT RASMUSSEN MOVED AND MARIE MOSLEY SECONDED THE MOTION TO APPROVE THE CONSENT CALENDAR. ALL WERE IN FAVOR. MOTION CARRIED 13-0.

Director's Report

2. Manager's Report – Jay Atwood BCES Executive Director

SECOMM has 12 full-time dispatch and 3 supervisor positions open. SECOMM Supervisor Aimee Fournier-Plante was promoted to Training and Employee Development Manager. Two of the supervisor positions are intended to be filled after the first of the year and are dependent on staffing levels and staff interest. The position will likely be advertised externally as well. A new dispatcher is scheduled to start Monday, January 8th, 2024. Three are in suitability assessment, two are in pre-hire screening and another 20 applicants have been invited to take CritiCall/typing tests.

The Red Mountain Memorandum of Agreement (MOA) was approved, and payment has been initiated to the Umatilla Tribes. We can now move forward with permitting. The road and utility easements have been signed. Surveying for the road is set to commence December 4th with construction to begin the week of December 11. The bid package for general contracting for the construction of the site will post on December 10th. We hope to award the bid after the first of the year with hopes that they can get on the mountaintop towards the end of January 2024. Labor & Industries (L&I) approved the shelter plans just prior to Thanksgiving. Sabre will begin construction December 7 and it is believed the shelter will be ready for inspection mid to late January.

Items of Business

Benton County Emergency Services (BCES)

Benton County Emergency Management (BCEM)

3. Homeland Security Grant Program (SHSP) Contract E24-134 – Approval

Contract E24-134 provides funding to implement investments that build, sustain, and deliver the core capabilities essential to achieving the National Preparedness Goal. Projects supported by this grant include the VHF engineering project, SWAT optics devices, the purchase of two small, unmanned aircraft systems (sUAS) and the renewal of regional public alert and warning system contracts.

MARIE MOSLEY MOVED AND RACHEL SHAW SECONDED THE MOTION TO ACCEPT HOMELAND SECURITY GRANT PROGRAM CONTRACT E24-134 IN THE AMOUNT OF $105,147 FROM THE WASHINGTON STATE MILITARY DIVISION AND AUTHORIZE STAFF TO MAKE THE NECESSARY BUDGET ADJUSTMENTS. ALL WERE IN FAVOR. MOTION CARRIED 8-0.

4. Emergency Management Performance Grant (EMPG) Contract E24-140 – Approval

This is the annual contract from Washington Emergency Management Division (WEMD)

for support of local comprehensive emergency management. Per requirement of the grant, it represents a non-federal match in emergency management funds. Funding supports up to .56 FTE position at Benton County Emergency Services and funds to help support local emergency management functions at the BCES facility as related to EMPG activities.

MARIE MOSLEY MOVED AND THOMAS GLOVER SECONDED THE MOTION TO ACCEPT EMERGENCY MANAGEMENT PERFORMANCE GRANT CONTRACT E24-140 IN THE AMOUNT OF $115,076 FROM THE WASHINGTON STATE EMERGENCY MANAGEMENT DIVISION AND AUTHORIZE STAFF TO MAKE THE NECESSARY BUDGET ADJUSTMENTS. ALL WERE IN FAVOR. MOTION CARRIED 8-0.

Southeast Communications Center (SECOMM)

800MHz System

Benton County Microwave System

5. Microwave Project – Discussion

   The Board previously approved the intent to move forward with the microwave contract with further discussion on how to pay for it. Motorola will honor the contract through the end of this year. A termination for convenience clause has been added should the process for funding fall through. Once the contract is executed, any milestones reached prior to activating the termination clause would be liable for payment.

   Richland City Attorney Heather Kintzley previously drafted an amendment to the Interlocal Agreement (ILA) that would allow a path to commit to capital funding. Jon Amundson stated he would not bring the Motorola contract before Richland's City Council without the ILA in place along with the amendment guaranteeing repayment. It appears we must enter into an amended ILA and then also establish some sort of document (MOU) that speaks to how it will be financed and how the expense will be split amongst the Big 5 to include repayment terms. Marie Mosley reminded each agency they should be requesting funds for the microwave system as a combined capital request to their state legislators as their top priority.

   Richland Finance Director Brandon Allen shared a spreadsheet showing the microwave expense split by county (Benton & Franklin) to show what the additional expense of incurring debt service might look like. Richland's preference would be to finance using cash reserves ($904,000 per each entity of the Big 5). The initial 15% that would be due upon contract execution could be paid out of the grant proceeds so we could start in 2024 with the amount needed from each entity to then be due in 2025. It was reminded that the grant must be used to pay for equipment only. Any additional funding received would be taken from the total expense with the remaining balance then split evenly. Marie Mosley suggested getting attorneys from each agency together to work through revising the interlocal and creating a MOU to save time. Richland will set up the meeting. The revised interlocal language should allow for future projects (800MHz) so that only a MOU would be needed rather than another revise of the interlocal. It was hoped this could be brought before individual councils by early February. Jay Atwood was unsure if Motorola would be amenable to holding the current quote.

Discussion Items

6. BCES & BiPIN – Discussion

   Discussion on the desire to consolidate BCES & BiPIN, given the overlap of members on both boards, increased capital costs, integrated systems of the two entities, and what the next steps might be.

   City of Kennewick staff charged with all aspects of the BiPIN System, introduced themselves. Travis Amundson, software Analyst for BiPIN; Cody Lewis, Assistant IT Manager; Bret Helms, BiPIN System Administrator; Christina Palmer, Director of Management Services/IT Manager, and Tracy Troutman, BiPIN Implementation Administrator. BiPIN roll call was taken by Christina Palmer.

   Tracy Troutman gave an overview of BiPIN beginning in 2016 with two known breaches of I-Leads data. A technology assessment took place in the second quarter of 2016 by Sciens who looked at the network, infrastructure, and technology. They recommended BiPIN replace I-Leads as it was no longer supported with no path forward for upgrade and was not Criminal Justice Information Services (CJIS) compliant. At the same time, the data center was originally owned by Benton PUD with none of the agencies owning, having oversight or control of it.

   In the fourth quarter of 2017, BiPIN came to their board with a recommendation and a Request for Proposal (RFP) to replace records and corrections for I-Leads.

   Demonstrations took place in 2018 with Tyler's product ultimately being selected. A formal recommendation was made in the third quarter and the project kicked off the following quarter with the infrastructure build to include a brand-new data center, brand-new hardware, and implementation of the selected software.

   The data center was completed September of 2019. The lab was set-up and configuration of the lab environment began. Interface planning began in the fourth quarter with configuration and interface builds beginning in 2020.

   The first quarter of 2021, project work in all areas (records, corrections, interface) is ongoing. The first functional test occurred in the second quarter where issues with Computer Aided Dispatch and the Records Management System (CAD/RMS) were identified. Executive level discussions resulted in the recommendation of potentially replacing CAD partially due to determining the older, generic Mobile Data Terminal (MDT) interface from Hexagon would not meet two-way requirement needs and Hexagon was unwilling to modify/custom develop the older technology. Law enforcement also desired the ability to self-dispatch.

   BIPIN continued their efforts, working through issues as they arose. Hexagon had a new product for the interface, but finishing the project was the focus. Additional development work was identified with some encryption authentication issues (challenges of getting a two-way interface to work). Both technology vendors needed to work together, however Hexagon was not sharing technology specifics well. Tyler invested some significant effort trying to get it to work but a recommendation was eventually made to go with a single interface. No payment was billed nor made to Tyler for this extra work.

In the 3rd quarter of 2021, options to meet CAD requirements desired by Law Enforcement were reviewed by BiPIN leadership and a recommendation was made to pursue replacement of CAD once the Tyler project was implemented. A decision was made to upgrade CAD to version 9.4, knowing it would need to be in a more current (healthy) state regardless of a CAD conversion. It was also agreed that no work would commence regarding the potential CAD conversion until RMS/JMS (Jail Management System) was live and that it would be considered a separate phase.

Tyler RMS/JMS went live April 19, 2022, with a one-way interface (CAD to RMS) with the sole purpose of providing Law Enforcement incident/calls for service data.

In the third and fourth quarters of 2022, the upgrade of Tyler Public Safety concluded. Initial discussions of Tyler CAD replacement began with demonstrations of the software held in June 2023. Debriefs occurred in July with Fire/EMS and Law Enforcement, followed by Chiefs and Deputies (Fire and EMS). Chief's & Sheriff's and the SAT meeting were held in August with the recommendation to remain status quo.

These past events have brought us to where we're currently at with the discussion of merging BCES and BiPIN, the future of the data centers (BiPIN's center is now 5 years old and aging), technology choices and the competing projects all teams have.

Joining BCES and BiPIN together would streamline administration, costs, and budgeting of capital projects. The easiest thing we could address first and foremost is governance. The Boards are fairly identical as they sit today. BCES currently has multiple funds with different voting members for each fund. This process could be streamlined in the future (Emergency Management would be the exception as it is specific to the county). The next step would be to look at the current ILA's and determine how capital expenses would be amended. If we decide to move forward with this, and if the timeline is the trajectory we want to set, then deadlines would need to be established. Maintaining status quo regarding budgets, billing, system administration, etc. due to where we're currently at with the lifespan of the data center for BiPIN, Tyler database and potential interfaces would give us time to consider alternate funding models and establish a full timeline for implementation. The public safety communications sales tax is a vehicle that could potentially pay for RMS as well as CAD functions. This would be step one for 2024/2025.

Capital needs moving forward - the BiPIN environment is going to be end of life in 2028 with BCES's main server environment on the same trajectory. CAD was upgraded this past spring with a 5-year recommended life cycle which would put that out to 2028-2029 as well so we should start looking at equipment needs. Today we have two separate environments. With the intent of a consolidation, it would bring all aspects under one roof with the ability to manage everything as one. This would probably be when we should start looking hard at the platforms - do we need/want to change them and what would that look like. What is the hardware impact? Many systems are going cloud-based which would change the physical cost for a data center. We would likely hire someone to do a needs analysis (infrastructure, space requirements, staff size, etc.).

Sometime in the first quarter of 2027, we would start the process for equipment procurement. If it looks like a functional consolidation is eminent, then we start the transition of staff or fill vacancies with a full implementation in 2028, get equipment stood-

up at the new or existing site(s) and decommission the old. Succession planning should also be considered.

It is recommended that all disciplines be looked at (Law, Fire/EMS, Dispatch and IT) as to their needs/wants/abilities before considering next moves to a fully integrated system. It is imperative that every voice of our public safety community comes together. The Strategic Advisory Team (SAT) meetings were suggested as a good place to start.

We also need to get the true cost of what our subscribers should be paying for the upgraded system(s) they will receive (microwave/radio). That will allow us to make decisions about how our user agencies will account for these improved systems.

Announcements

Jon Amundsen thanked Marie Mosley for her service on this board as she prepares for retirement. He added that her leadership has helped move a number of issues forward.

Adjournment

The meeting adjourned at 9:20 a.m.

APPROVED:

_____

Jon Amundson, BCES Executive Board Chair

Date Approved: _____

ATTEST:

_____

Carole Cimrhakl, BCES Board Secretary

Date Published: _____

BENTON COUNTY EMERGENCY SERVICES AGENDA ITEM COVERSHEET

Meeting Date: 1/25/2024 Agenda Category: Consent Calendar:

Prepared By: Jon Amundson, City Manager

Subject:
Approval of the DRAFT January 18, 2024 Benton County Emergency Services Executive Board Special Meeting Minutes

Recommended Motion:

Summary:
DRAFT Minutes from January 18, 2024, Benton County Emergency Services Executive Board Special Meeting are presented for the Board's consideration and approval.

Fiscal Impact:

Attachments:
1. 012524 January 18, 2024 DRAFT BCES Meeting Minutes

MINUTES – January 18, 2024 - 7:30 AM
BENTON COUNTY EMERGENCY SERVICES EXECUTIVE BOARD SPECIAL MEETING
Benton County Emergency Services ~ 651 Truman Avenue
Richland, WA 99352

Call to Order

The meeting was called to order at 7:30 a.m. by Chair Jon Amundson.

Attendance

Members

Michael Alvarez *Remote*	Benton County (2 Votes)
Mike Gonzalez *Remote*	Franklin County (2 Votes)
Lisa Beaton *Remote*	City of Kennewick (2 Votes)
Adam Lincoln *Remote*	City of Pasco (2 Votes)
Jon Amundson *Remote*	City of Richland (2 Votes)
Thomas Grego *(Remote in for Brent Gerry)*	City of West Richland (1 Vote)
Lonnie Click *(Arrived after roll)*	Benton County Fire Districts (1 Vote)

Absent

Thomas Glover/Jay King	City of Prosser (1 Vote)
Brent Gerry	City of West Richland (1 Vote)
Bill Reed	City of Benton City (1 Vote)
Duane Szendre	Benton PUD (1 Vote, Microwave Only)

Also Present: BCES Director Jay Atwood; SECOMM Manager Kim Lettrick; BCEM Manager Deanna Davis; BCES IS Manager Doug deGraaf; Accounting Specialist Jordan George; Administrative Assistant/Board Secretary Carole Cimrhakl

Other Attendees: Benton County Deputy Administrator Matt Rasmussen (*Remote*); Benton County Sheriff Commander Mat Clarke (*Remote*); Richland Assistant City Manager Drew Florence (*Remote*)

Approval of Agenda

Public Comments

There were no public comments.

Approval of Consent Calendar

Director's Report

Items of Business

Benton County Emergency Services (BCES)

1. Red Mountain Radio Site Contractor Bid Authorization – Approval
   Several bids for construction on top of Red Mountain were received. Construction includes the shelter installation, construction of the tower and installation of all equipment. The successful bid came from Summit Solutions Group, LLC. We are looking for the Board's

approval to award the contract and get construction started as soon as possible.

ADAM LINCOLN MOVED AND MICHAEL ALVAREZ SECONDED THE MOTION TO AUTHORIZE RICHLAND CITY MANAGER/BENTON COUNTY EMERGENCY SERVICES EXECUTIVE BOARD CHAIR JON AMUNDSON TO SIGN AND EXECUTE THE CONSTRUCTION CONTRACT WITH SUMMIT SOLUTIONS GROUP, LLC IN THE AMOUNT OF $940,121.19 INCLUDING CHANGE ORDERS NOT TO EXCEED 10% OF THE TOTAL CONTRACT AWARD AS NEEDED TO COMPLETE THE PROJECT. ALL WERE IN FAVOR. MOTION CARRIED 12-0.

Benton County Emergency Management (BCEM)

Southeast Communications Center (SECOMM)

800MHz System

Benton County Microwave System

Discussion Items

Announcements

Road construction is ongoing and remains on schedule even as work has been delayed recently due to weather conditions. Although not completed, the road is passible at this time. We hope to have the contractor on site by February 1st.

BCES IT Manager Doug deGraaf and Adcomm Engineer John Conley are traveling to Shreveport Louisiana next week to inspect the shelter. Once the inspection is complete, the shelter will be packaged and shipped to Richland. All site equipment has been received from Motorola.

Benton County Public Works Manager Robert Blain and BCES Executive Director Jay Atwood did a radio spot on KONA yesterday morning (January 17th) to inform the public about the project.

The regularly scheduled BCES Executive Board Meeting will be held next week in the Richland Council Chambers.

Adjournment

The meeting adjourned at 7:39 a.m.

APPROVED: ATTEST:

_____ _____

Jon Amundson, BCES Executive Board Chair Carole Cimrhakl, BCES Board Secretary

Date Approved: _____ Date Published: _____

BENTON COUNTY EMERGENCY SERVICES AGENDA ITEM COVERSHEET

Meeting Date: 1/25/2024 Agenda Category: Director's Report

Prepared By: Jay Atwood, BCES Executive Director

Subject:
Manager's Report

Recommended Motion:

Summary:
Monthly updates from Benton County Emergency Services Management

Fiscal Impact:

Attachments:
1. 012524 Management Report

BENTON COUNTY EMERGENCY SERVICES EXECUTIVE BOARD
MANAGER'S REPORT – Thursday, January 25, 2024

Southeast Communications (SECOMM) – Kim Lettrick/Gwen Stanley

November 2023 Statistical Information
9-1-1 Calls = 9,062
Text to 911 = 65 Sessions (637 messages back and forth between dispatch and text initiators)
Non-Emergency = 12,617
Law Enforcement Events = 23,959
Fire/EMS Events = 3,156

December 2023 Statistical Information
9-1-1 Calls = 9,919
Text to 911 = 79 Sessions (862 messages back and forth between dispatch and text initiators)
Non-Emergency = 12,075
Law Enforcement Events = 23,485
Fire/EMS Events = 3,156

Benton County Emergency Management (BCEM) – Deanna Davis

Exercise
February 6th and 7th will be the "practice" drill in preparation for the Columbia Generating Station Federal Emergency Management Agency (FEMA) evaluated Exercise that will take place March 26th and 27th. This two-day exercise happens once every 8 years with the first day of the drill/exercise focusing on the response phase of the incident, where we will assess the situation and initiate actions to immediately protect the health and safety of the public who live or work within 10 miles of the nuclear power plant. Moving into the second day of drill play will be focusing on what comes next in the intermediate or post plume phase. During this part of the drill/exercise we focus on identifying areas of contamination where radiation levels are greater than what would be allowable for sale and consumption of agricultural products, whether this means full embargo of our local agricultural products or potential remediation of food products. Another huge component of the second day of the drill is determining if previously evacuated areas can go home and if there are other areas of Richland or Benton County that will have to leave their residence because radiation levels make it unsafe for them to live there. During the second day we will work closely with Washington State Emergency Management, Washington State Department of Health, office of Radiation Protection and Washington State Department of Agriculture to ensure we are providing the best course of actions for our populations.

An incident of this nature would require a great deal of coordinated decision making for all jurisdictions involved. The impact of a nuclear power plant incident on the residents of the Tri-Cities and Washington State would be significant and City Managers, Commissioners and Mayors would play a key

role in the decision-making process. I invite all Benton County Emergency Services (BCES) executive board members to join us for both the drill and exercise in February and March (respectively).

Staffing

Emergency Management is down one position with the resignation of Emergency Planner Jordan Hanes. The recruitment process for this position is underway.

Planning

Over the last few years there has been an on-going project through the FEMA Risk-Map process to update the floodplain maps for Benton County. A Flood Risk Review (FRR) will be held **February 15th, 2024, from 2 PM to 4 PM PDT** at the **Benton County Administration Building Commissioner's Meeting Room – 303 (Third Floor), 7122 West Okanogan Place, Kennewick WA 99336.** If you did not receive an invitation to this meeting, please let me know and I will forward the calendar invite. The original invitation would have come from Anil Nampally, with STARRII (contractors for the project).

Training

Emergency Management will be hosting a Public Information Basics Course May 8-10th at BCES. For course information and registration details go to:
https://reg.learningstream.com/reg/event_page.aspx?ek=0038-0021-23e6ed049b99485b883ad7068a8a5bc9

Benton County Emergency Services Information Systems (BCES IS) – Doug deGraaf

GIS/SECOMM

GIS Technician Michael Mendez worked with dispatch staff to resolve mapping issues and reached out for improvement suggestions using ESRI for map creations. He also completed models to run data through ESRI for results to be submitted to the state for NG911.

Map roll 159 is in progress and set to go live no later than January 25, 2024.

Michael worked with Franklin County to get road name changes that will impact 27 intersections and will result in the matching of the cities schema which will reduce confusion and improve call times to emergencies at those intersections in the future. Franklin County's board approved the road name changes at the end of 2023 and will go into effect on the next map roll.

We continue to maintain 0 critical errors with NG911 data submitted to the state.

We have been assisting the Fire Agencies transition from ERS to ESO for Fire Records. ESO bought out ERS recently, which we are converting those agencies to use the new ESO services.

Technical Systems Coordinator Craig Hamilton ensured Computer Aided Dispatch (CAD) converted to the new year Case and Event numbers, this required manual conversion on the CAD database.

We implemented a new call tree for SECOMM Non-Emergency.

800MHz/P25/Microwave

Motorola is in the process of installing the new CCGW's for the Pasco Fire – Harris LTE project. Catalyst and AT&T FirstNet are expected to be onsite during the week of February 5th to implement their gateways and turn up the services. Harris is expecting to have a software upgrade available by the end of February that will enable/allow the Harris LTE radios to communicate with the AT&T FirstNet services. Once completed we can fully test this solution for production use.

Motorola has completed security updates to the core systems. They have also completed the System Upgrade Agreement (SUA) to version 2022.1 in December 2023. This upgrade went as planned without any issues.

Craig Hamilton assisted the Law Agencies to fully encrypt the SWAT talkgroup on the Astro Radio System. This was a fairly large effort to bring in all of the various portable and mobile radios that needed to be reprogrammed and tested.

The bid package for Red Mountain construction was released and the BCES Executive Board approved the low bidder, Summit Solutions Group, LLC on 1/18/2024. We are in the process of implementing the contract acceptance and issuing the PO. We will provide the details on scheduling and expectations soon.

Motorola has shipped the remaining equipment for Red Mountain, which has been received at BCES. This equipment will be staged in the BCES equipment room and await delivery to the Red Mountain communication site when it becomes available.

Doug deGraaf and Adcomm Engineer John Conley will be traveling to Shreveport, LA to perform the factory inspection of the Sabre Shelter. Following our inspection, Washington Labor & Industries (L&I) will be scheduled for their inspection after which the shelter will be shipped to the City of Richland Shops for storage. The General Contractor, Summit Solutions Group, will be required to obtain the Shelter and transport it to the Red Mountain site when it's ready.

BCES

Information Technology continues to work on implementing Cisco DUO Multi Factor Authentication (MFA).

BENTON COUNTY EMERGENCY SERVICES AGENDA ITEM COVERSHEET

Meeting Date: 1/25/2024

Agenda Category: Benton County Emergency Services (BCES) (Approved by Motion)

Prepared By: Jon Amundson, City Manager

Subject:
Election of 2024 Chair and Vice-Chair

Recommended Motion:

Summary:
At its first regularly convened meeting of each calendar year, the Executive Board shall select by majority vote from its membership a Chair and a Vice Chair to serve one-year terms.

Fiscal Impact:

Attachments:

BENTON COUNTY EMERGENCY SERVICES AGENDA ITEM COVERSHEET

Meeting Date: 1/25/2024

Agenda Category: 800MHz System (Approved by Motion)

Prepared By: Tom Huntington, Fire Chief

Subject:
VHF Radio System Project Recommendation - Discussion and Approval

Recommended Motion:

Summary:
Final recommendations from the VHF Radio System Technical Team are presented for the Board's review and consideration. The Team is looking for approval to move forward with the recommendation of expanding the 800MHz radio system and engaging Motorola on system design and estimated costs.

Fiscal Impact:

Attachments:
1. 2024 Technical Team VHF System Recommendation

CITY OF RICHLAND
FIRE & EMERGENCY SERVICES
1000 George Washington Way
Richland, WA 99352
(509) 942-7703

MEMORANDUM

TO: BCES Executive Board, Franklin County Sheriff's Office, Benton and Franklin County Fire Chiefs, Franklin County Hospital District #1, and VHF System Stakeholders

FROM: Tom Huntington, Fire Chief

DATE: January 10, 2023

SUBJECT: VHF Radio System Project Technical Team Recommendation

This document was prepared and reviewed by, and is submitted on behalf of, the VHF Radio System Project Technical Team including Liz Cupples and Michael Namchek from Franklin County IT; Scott Carmona and Robert Ramsey from City of Richland Radio Shops; Jay Atwood, BCES Executive Director; Doug deGraaf, BCES IT Manager; Captain Scott Clemenson and Chief Tom Huntington, City of Richland Project coordinators.

Executive Summary:

The Tri-Cities region is faced with a number of public safety infrastructure challenges, as identified through the BCES capital projects planning process. This report and recommendation relate to one of those primary infrastructure needs; the aging VHF radio system in both Benton and Franklin counties.

The VHF radio system is utilized by Fire and EMS in both counties, as well as Law Enforcement in Franklin County. The system is configured with components that, in some cases, date back to the late 1990's and ranging through the early 2000's. With an expected life cycle of 10-15 years in that era of technology, the system is well beyond expected life cycle. The original proposal in 2018 to stakeholders and the BCES board was to replace the existing VHF system with an Analog Simulcast over Internet Protocol (ASIP), a system which would effectively upgrade the current to newer technology but remain an analog VHF system.

After discussing viable options following Federal Engineering's system evaluation, the best path forward is to join the existing BCES 800 MHz trunked system. Due to this recommendation being a significant shift from the original plan that was developed and proposed locally, including project scope and stakeholder expectations, a full analysis is offered as to how the team arrived at this recommendation. The following high-level factors were considered, with a deeper analysis which follows this summary:

- The sunk cost of the original ASIP proposal, backed against a limited technology lifecycle and the inability of Federal Engineering to endorse the original plan as technically or financially prudent given those, and other, factors.
- Although the move to the BCES trunked system will likely cost more initially, it eliminates the redundant baseline spending for the ASIP solution, which would likely need to be replicated in five to seven years for the next technology iteration.
- Operational improvements resulting from a move to the BCES system would include the immediate and consistent interoperability between law enforcement and Fire/EMS agencies, therefor providing a single public safety radio system to fund, support, and enhance all agencies in both counties; it would also provide the ability to unify and streamline subscriber unit cost and deployments, ensures compliance with state and federal communication standards, and potentially providing improved grant opportunities.

The VHF system is now at a point that if there is a primary channel failure, the only viable option is to remove a lower priority channel from service and transition that equipment to the higher priority channel. Additionally, the component failure rate within the VHF infrastructure is escalating and there is real concern about the system's viability and whether it will last even to the end of the proposed replacement schedule for this project.

The final engineering report from Federal Engineering will follow, however, given that this is a critical and time-sensitive project and with the current system in a tenuous position for reliability and longevity, *the technical team is formalizing the recommendation to move to the existing BCES 800 MHz system*. This recommendation will be shared with all system stakeholders, including the BCES Executive Board, the Bi-County Fire Chiefs, the Franklin County Sheriff, and all others, to ensure that everyone receives the same information.

For additional, specific detail, please see the table and associated analysis below. I remain at your service and available for specific follow up on any of the content in this document or associated with the project.

Submitted Respectfully,

Tom Huntington, Fire Chief
Richland Fire and Emergency Services

Recommendation and Analysis

Technical Team Recommendation:

For this analysis, we have evaluated two potential paths- 1. Joining the BCES 800 MHz system, and 2. the original VHF ASIP approach, as a lower cost temporary solution.

Based upon the recommendations from the Federal Engineering engagement, the due diligence work, and stakeholder engagement/feedback, the technical team is recommending that the VHF system in both Benton and Franklin County and the westernmost portion of Walla Walla County, be transitioned from the current analog VHF infrastructure to the existing 800MHz trunked system at BCES, with geographic enhancements necessary to ensure similar coverage in Franklin County.

While outside of the technical team's specific scope, this recommendation includes movement to BCES owner-agency governance, ownership, oversight, and maintenance in alignment with the current system, based upon stakeholder engagement and the reality of joining the existing system, rather than establishing a separate governance and maintenance and operation (M&O) structure.

Project Background:

The work to replace the current VHF radio system in Benton and Franklin Counties began in 2017 with the coordinated efforts of the Richland Radio Shops Technicians, who support the Benton County VHF system, the Franklin County Information Technology team, who support the Franklin County VHF system, and a representative from the regional fire chiefs. In a combined effort to evaluate options, a VHF Analog Simulcast over Internet Protocol (ASIP) system was deemed the simplest and most cost-effective solution for replacement of the legacy VHF system used in part or whole by fire, EMS and law enforcement in both counties. Walla Walla County was concurrently moving to an ASIP system and there was still, at that time, discussion around potential value of the two systems being able to interoperate and potentially provide dispatching backup for fire agencies in the case of a failure in one county or the other. Historical financial projections for a buildout of the existing 800 MHz system at BCES, significantly higher subscriber unit costs, and time constraints based on VHF system support caused the technical teams to see a transition to the BCES trunked system in this iteration to be too early and too costly. Additionally, there remained a significant amount of skepticism regarding system performance based on previous engagement with the first generations of the trunked system among fire agency stakeholders.

With the recommendation to move as quickly and cost-effectively as possible to install an ASIP system replacement into the existing VHF infrastructure, the teams established rough order of magnitude financials for the project, and we began working on a financial plan to fund the project. The 2020 pandemic and time immediately following caused a significant delay of the project based upon impacts and capacity, and then supply chain and vendor impacts began to materialize. The ongoing capacity challenges, supply chain complexities, and cutover planning

caused the project team to recognize the need for additional help in evaluating current system performance, engineering a viable solution, and project management at the point of installation and system cutover.

With this in mind, the City of Richland facilitated a procurement process for engineering and project management in 2022, from which Federal Engineering was selected for support across all phases of this project. For the reasons outlined above, the project scope was built around a straightforward VHF ASIP installation and did not include evaluation of the existing 800 MHz system at BCES. The technical team did, however, ask Federal Engineering to provide recommendation(s) if there were better options than an ASIP system installation.

The recommendation that came back following the engineering study was that the VHF spectrum is full, noisy and geographically complex for a 'ground-up' system build, and that they would not recommend our initial approach of an ASIP installation, based upon industry best practices, technology life cycle, and long-term sustainability. In the end Federal Engineering provided a broad option for a digital VHF build with the caveat that they would not see this as the best option. Their recommended approach was to install a trunked 700MHz system that would operate very similarly to the existing 800 MHz system at BCES.

Following Federal Engineering's recommendation back to the technical team, we have calibrated to aligning the latter recommendation to the existing 800 MHz trunked system. This recommendation is viable in 2023 compared to 2017/2018 for several reasons.

1. The vendor/technology landscape has continued to evolve and the viability of getting 10 to 15 years out of an ASIP upgrade, and to be able to support it, is much less certain.
2. Subscriber unit cost gaps have closed. The ability to procure inexpensive public safety grade analog radio equipment for significantly less cost than the digital equipment is no longer a reality compared to just a few years ago.
3. System stakeholder stance towards the BCES trunked system have changed and current VHF system users are more open to a move to the newer existing technology at BCES, particularly on the law enforcement side.
4. Project costs for the ASIP solution have steadily increased over the past several years which makes the delta between the two solutions less imposing. The move to the BCES system eliminates a generational 'bridge' project, and associated sunk costs, by moving to a unified public safety radio system now rather than after the lifecycle of an ASIP, or other, system.
5. The technical expertise provided by Federal Engineering, who is regarded as an expert in this field for public safety across the nation, guided the direction of the project and provided confidence for current VHF stakeholders that the BCES system is a viable option.
6. The administrative/leadership expertise and credibility provided by Jay Atwood, who helped transition Spokane County from an analog system to a digital 800 MHz system

prior to his arrival at BCES provided critical industry insight and confidence for current VHF system users in a potential move to the trunked system.

The current phase of the project includes due-diligence testing, which has again been successful in large part due to Executive Director Jay Atwood's leadership, as well as adjustment to the project scope, schedule and approach with Federal Engineering based on this altered path.

Current VHF System Stakeholders:

Franklin County

Franklin County and Franklin County Sheriff's Office, City of Pasco, City of Connell, Franklin County Fire Districts 1, 2, 3, 4 and 5, and Franklin County Hospital District #1, Franklin County Public Works, Franklin County Corrections

Benton County

City of Kennewick, City of Richland, Benton County Fire Districts 1, 2, 4, 5 and 6, West Benton Fire and Rescue, Benton County Public Works, Benton County PUD, Columbia Basin Dive Rescue, Chaplain Services Network

Walla Walla County

Walla Walla County Fire District 5

Other Potentially Impacted Stakeholders/system users

AMR, Kadlec Regional Medical Center, Trios Hospital, Lourdes Medical Center, Prosser Memorial Hospital, Energy Northwest

Engineering Recommendations:

A formal engineering report from Federal Engineering will follow however, as noted above, the initial feedback from Federal Engineering was that the VHF spectrum was complex and noisy, to the point that a ground-up replacement was not their ideal solution to the replacement needs of the system. The VHF ASIP system was not seen as a viable long-term investment and was not proposed or endorsed by Federal Engineering, and their general direction/recommendation landed on a system similar in nature to the current 800 MHz trunked system at BCES. This allowed both the project team and the stakeholders to work through a transition in expectations, and project scope, from the ASIP system to joining the existing BCES system.

Side-by-side Comparison of the Modified Recommendations:

Dimension	BCES 800 Digital	VHF ASIP
System Cost	$6-8M + Subscriber Unit costs	$4-6M
New Subscriber Units/ Cost	~2100 units both counties – Unknown cost at this time	No change, no cost
Funding	Motorola Finance Possible	Lump Sum
Interop with LE	Single platform	Frequency Patches
Mutual Aid Interop	Dual Band/Dual Radio + Patches	Current Template, but LE is patched

P-25 Compliance	Fully Compliant	Digital-Capable Analog System
Ownership	BCES Owner Agencies	Multiple Agency
Governance	BCES Executive Board & ILA	Multiple Agency- separate systems by county
Replacement	SUAII agreement	5-7 years expected, lump sum replacement
Replacement Funding	SUAII agreement	Lump sum, or start capital fund for 2032-2037 replacement project
System M&O Cost	SUAII agreement	System Actuals
Subscriber unit costs	Unknown at this time	0
Other Stakeholder/User Impacts	CBDR, Chaplaincy, Public Works, PUD	none
Building Coverage & BDA Impacts	Known- see details BDA upgrade impacts	Known- see details BDA Existing infrastructure is current
Geographic Coverage	Known- see details	Known- see details
Project Timeline	Rolling implementation starting as early as Q4-2024	End of 2026 projected by FE

Project Dimension Detail

Cost

Actual project cost continues to be difficult to determine, due to the variables associated with the scope, continued supply chain impacts, and changes in vendor priorities and costs over the past five years for the VHF option. An important consideration for movement to the 800 MHz system is the need to replace all subscriber units in both counties, (see the next section for details.) With that said, we are closing in on estimates for starting points, that can be revised once a final system approach is decided upon.

800Mhz: The 800 MHz system infrastructure is already in place and no upgrades are anticipated for the existing system. Investments would need to be made in Franklin County, City of Connell, and City of Pasco to bring system performance into acceptable levels. The initial estimates from Motorola to do so are currently in the four-million-dollar range, with a contingency included the project range for an 800 MHz solution would likely be in the six-to-eight-million-dollar range ($6-8 Million). Additionally, the current VHF subscriber units would need to be replaced across the board, so an additional to-be-determined cost will be associated with this solution.

VHF ASIP: The anticipated overall project cost is anticipated to be in the four-to-six-million-dollar ($4-6 Million) range. This range is dependent upon vendor selection,

engineering, and additional sites that would need to be built out in Franklin County for effective coverage along transportation corridors and population centers for both law enforcement and fire/EMS users.

Subscriber Unit Impacts

One significant impact of an 800 MHz system build-out vs. a VHF system replacement is the impact related to field radios; base station radios, portable radios, and mobile radios in vehicles. From this point forward these units will be referred to as subscriber units for consistency in labeling, although there is currently no subscription fee on the VHF system. Several agencies, including Richland, Kennewick, Pasco and some of the Fire Districts have updated their subscriber units in the past three years. This is a significant sunk cost in the current system and only a fraction of the radios will be able to migrate to the trunked system, with a total of around 2000 subscriber units in both counties. The project team anticipates some kind of trade-in value for radios with a move to Motorola products, however t*his is an area of due diligence still being completed.*

800Mhz: The subscriber units in both counties would need to be upgraded or changed out, including mobiles, portables, pagers and station alerting radios in all geographic locations.

VHF ASIP: Currently all subscriber units are fully compatible with the current system and the conceptual VHF ASIP system. No changes or additions would be necessary.

Project Funding

Currently, both options are unfunded. This creates a significant project and infrastructure challenge, for both the current owners and users, as well as BCES as the designated future system manager. The project team continues to work towards appropriations, grant funding, and other sources, however nothing has come to fruition yet for external funding. The 800 MHz system does provide the additional option of financing through the existing Motorola partnership.

800Mhz: Similarly, the 800 MHz system build-out has no funding allocation, however the financing option, may allow for a faster project start with continued work for outside funding sources that could off-set this or the microwave upgrade alongside or after the VHF project.

VHF ASIP: This project approach would require 'lump-sum' payment up front, with no local funding currently allocated. This approach is currently entirely dependent on acquiring outside funding sources to complete the project, which will likely have a significant impact on the proposed project timeline and may take the system past the point of sustainability.

Fire/EMS and Law Enforcement Interoperability

Interoperability is a key system functionality that remains a long-term goal and that is currently only accomplished through a 'patch' between specific channels on the two systems. While this provides very basic communications capability, it does not provide a consistent platform for utilizing shared tactical channels on specific incidents. In addition to patching channels, some dual-band radios have been put in service in command vehicles to improve communications between incident commanders in the two disciplines.

> **800Mhz:** A move to the 800MHz system would open interoperability options immediately and would achieve the stated goal of a single public safety radio platform for police, fire and EMS in what would have been the next iteration of the system in seven to ten years.
>
> **VHF ASIP:** Channel patches would continue to be the approach for interoperability, although with limited application. Dual band radios would also remain in play as currently deployed.

Mutual Aid interoperability

The current VHF system and potential ASIP system allow local fire agencies to communicate with neighboring county resources, federal wildland firefighting agencies, state and federal air resources, and air ambulance providers. These interfaces would need to be accounted for, as an 'equal and opposite' balance to the law enforcement interoperability in the item above. Each system design has a benefit and detriment to collaborating with agencies on the opposite radio system.

> **800Mhz:** A move to the 800MHz system would require the addition of dual band radios in some applications (similar to the deployment of dual band radios for law enforcement interoperability in the current system) as well as likely adding, or maintaining, separate VHF radios on wildland units specifically for interoperability on regional and state-wide incident deployment, which is current practice for many agencies already. The fleet map configuration will account for the operational capability of mutual- aid VHF users on major incidents.
>
> **VHF ASIP:** The ASIP system would align seamlessly with mutual aid agencies as the current VHF system does, however does not provide consistent law enforcement interoperability for day-to-day joint operations.

P25 Compliance

"Project 25 (P25) is a standards development process for the design, manufacture, and evaluation of interoperable digital two-way land mobile radio (LMR) systems communications products created by and for public safety professionals. The P25 standard is a critical component to achieve interoperability among different suppliers' products." *DHS Office of Science and Technology*

This is important in that any federal funding, including grants, will likely require P25 capability at a minimum, with preference given to compliance with the standard. P25 compliance also assures users that compatible equipment will work, regardless of manufacturer. This allows agencies to exercise some control over price point and costs, rather than being confined to one vendor.

800Mhz: The 800MHz system is a P25 compliant digital LMR system.

VHF ASIP: The VHF project has the option to utilize a digital LMR platform (P25 capable) but would be installed at a baseline analog platform as a straight replacement for the current VHF infrastructure. The transition to digital channels would come at an additional per-channel cost. Even in the digital format, the Fire/EMS system would be disparate from the Law Enforcement system and would require patching or other methods to provide for interoperability as is currently the case.

Ownership

Ownership under either system would need to become streamlined. As has been noted throughout the project, the region has outgrown the current model of numerous owners and no formal agreements among the stakeholders. The current model makes grant applications and outside funding sources extremely challenging to secure. The proposed ASIP approach has also included moving to BCES for radio hardware/infrastructure with real estate and licensing remaining with current owner agencies as one option, and a simple move to the ownership structure of the BCES 800 MHz system in the other. Either option will require an update to the BCES interlocal agreement, which is already in progress, to include Franklin County and the City of Pasco in the ownership of the system.

800Mhz: The new infrastructure would be purchased and installed under the purview of BCES and would be owned by the member agencies as outlined in the interlocal agreement for the 800 MHz system, which is currently being updated. Any physical VHF or other infrastructure property currently owned by individual agencies would remain with those agencies for continued use, disposition, or transfer to BCES based on owner-agency discretion (examples include VHF radio equipment, towers and/or shelters, lease agreements, FCC licenses, etc.)

VHF ASIP: As noted above, one of the key challenges of the current configuration is the number of individual owners of the various components that make up a functional radio system. Physical sites, hardware components and FCC licensing ownership are spread across numerous agencies in both counties which makes repair, maintenance, funding, and replacement challenging to varying degrees. The replacement system would need to have a coherent consolidated ownership structure in order to pursue grant funding, which would likely transition to an updated, or additional, interlocal agreement with BCES to assume ownership of the new system components similar to the process outlined above for the 800 MHz system.

System Governance

The current state of the VHF system is that it is two separate systems, operated similarly, but independently. This is a key challenge to overcome in order to bring consistency, sustainability and interoperability to the bi-county system.

> **800Mhz:** One of the key advantages of moving the 800 MHz system is that the fire and EMS agencies can move to the existing governance structure with BCES.
>
> **VHF ASIP:** While the current stakeholder relationships are solid and there is a spirit of working together for the common good, the condition and future of the system warrants a more structured approach. Additionally, grant funding is challenging for a project with 19+ owners and has complicated the application process for even lower effort grants so far. The future of the VHF system, should the region stay on that platform, likely becomes governance under the BCES board which would require a new interlocal agreement (or revision of the current ILA) and the establishment of a VHF fund, cost share approach, and billing within the BCES administrative function.

System Replacement/Lifecycle and Funding

The two project options provide distinct approaches for lifecycle management and system upgrades/replacement.

> **800Mhz:** The BCES system is managed through a System Upgrade Agreement (SUA) which provides on-going support and infrastructure upgrades so that the system remains current. This agreement eliminates future up-front system change-out costs, so long as the region remains with the current vendor and technology path.
>
> **VHF ASIP:** As is currently the case, the replacement lifecycle becomes dependent upon front-end funding of replacement project costs. Federal Engineering projects ASIP technology to be on a 5-to-7-year lifecycle, although there is currently at least one vendor with stated hardware support of 10+ years. To ensure that the system could be upgraded in a timely fashion, a replacement budget would need to be established and funded. The stated goal of this project from inception has been to move to a single public safety radio system platform, which points to integration with the BCES system in the five-to-ten-year range, should ASIP be considered as an option.

Maintenance and Operations costs

This factor remains part of the due diligence work being conducted by the technical team. Specific costs are yet to be identified with the BCES system and M&O costs associated with an ASIP system are difficult to project, although would likely be very low for the first several years of operation. However, this does not include potential replacement funding, and would need to be considered as part of the operating costs in order to offer a true side-by-side comparison. The M&O costs for fire/EMS and law enforcement agencies who would move to the BCES system will be identified as the project detail comes into clarity.

800Mhz: M&O and replacement/upgrade costs are built into the SUAII agreement. Exact per agency costs are not known yet but remain on the due-diligence work list.

VHF ASIP: M&O costs are currently handled and billed separately by each county. The new system governance would identify a unified approach, and the expected costs for system operation. The actual M&O costs will be difficult to project, but Walla Walla County's ASIP system can provide actual experience as a gauge.

Signal Coverage: In-Building and BDA System Impacts

This remained a major concern for current VHF system stakeholders, based upon informal feedback and historical experience with the earlier 800 MHz System. During the early iterations of the system, there were major problems with in-building signal penetration, and digital audio quality. As part of the due diligence process the technical team facilitated a 110 building test across Benton and Franklin Counties which identified a solid basis for current system performance across both counties.

800Mhz: Based upon the in-building signal penetration tests in both counties, the BCES system is well positioned to mimic the VHF system's coverage and performance in Benton County, with signal modeling for Franklin County providing similar (or improved) coverage with the addition of identified infrastructure sites.

VHF ASIP: Consistent performance with current system deployment is expected under an ASIP transition, with the caveat that the same Franklin County infrastructure sites have been identified for additional coverage need of population centers and major transportation corridors.

Signal Coverage: Geographic

The signal coverage for both systems is well understood and documented in both counties. Benton County has the benefit of current infrastructure build-out, however reliable coverage expectations are being developed through a study conducted by Federal Engineering for the full bi-county system.

800Mhz: Initial coverage studies have demonstrated a very similar effective signal area with only minor variances. This comparable coverage is contingent upon additional site development in Franklin County. The project team continues to fine-tune the coverage configuration with Federal Engineering.

VHF ASIP: Existing coverage can likely be replicated in an upgrade to ASIP, but this approach would not address signal overlap, or frequency stacking and deployment. These issues could be addressed to some degree with additional engineering, and frequency re-deployment but this adds complexity to the system design and configuration as well as the cutover process from the existing system to ASIP.

User Group impacts

In addition to the primary stakeholders identified in the project, a number of small non-profit, or peripheral owner/operators will be impacted by a move to the new system.

800Mhz: Chaplaincy Services Network, Columbia Basin Dive Rescue, Benton PUD, and potentially Benton County Public Works will be impacted either financially or operationally by the move to the BCES system. This impact will be considered and mitigated to the extent possible as part of the project scope, and the technical team is in the process of notification to these non-fire/law enforcement, low-volume users and owners.

VHF ASIP: No changes to overall system users, subscriber units, or budget implications.

Project Timeline

The specific project timeline is in final stages of adjustment; however a high-level schedule has been developed by Federal Engineering which puts the project ready for implementation in mid-2024. A more specific timeline will be established as the due diligence work is completed and engineering studies are completed by Federal Engineering.

800Mhz: Two key advantages of a move to the BCES system are 1. The ability to do a rolling implementation, starting with the municipal departments, in the core area that has existing system overage. This would allow a 'head start' for the project and could provide capacity to keep the remaining system up for the 12-to-18-month infrastructure and cutover phase of the project in the more rural areas, and 2. The ability to start the project through Motorola financing while project funding is further pursued via grant funding and appropriations work.

VHF ASIP: The move to a VHF ASIP system is, in some ways, simpler and potentially even faster, however the project team, still has not identified funding for this approach, and the project grant writer recently resigned abruptly. This lack of project funding presents a major hurdle to keeping the implementation phase on schedule and the system updated within a timeframe that prevents the current system failing due to age and condition.