

# CLACKAMAS COUNTY BOARD OF COUNTY COMMISSIONERS

## Sitting/Acting as (if applicable) Policy Session Worksheet

**Presentation Date:** Sept 15, 2020 **Approx. Start Time:** 3:00PM **Approx. Length:** 30 mins

**Presentation Title:** C800 Public Safety Radio System Replacement Project Update

**Department:** Finance - on behalf of Clackamas 800 Radio Group

**Presenters:** John Hartssock, Manager C800 & Christa Wolfe, Deputy Finance Director

**Other Invitees:** Elizabeth Comfort, Finance Director; Brian Nava, Treasurer; Jeff Munns, County Counsel; Sue Scobert – Chair Lake Oswego; Chief Rick Huffman – 1<sup>st</sup> Vice Chair Gladstone Fire; Chief Bret Smith – 2<sup>nd</sup> Vice Chair Canby Police; Chief Don Johnson - Lake Oswego Fire; Chief Dale Jorgenson Lake Oswego Police; Acting Chief Peter Mahuna – West Linn Police; Chief Ernie Roberts – Sandy Police; Chief Jim Davis – Canby Fire

### WHAT ACTION ARE YOU REQUESTING FROM THE BOARD?

Informational update and consideration for a future approval of an amendment to the 2016 IGA and authorization for the use of bond premium dollars and interest income.

**EXECUTIVE SUMMARY:** In January of 2016 the Commissioners authorized Ballot Measure 3-476 to be placed on the May 2016 ballot. This ballot measure was to authorize general obligation bonds to fund the upgrade of the public safety radio system serving the County. The voters approved the issuance of the bonds. In December of 2016 the Commissioners authorized an Intergovernmental Agreement with Clackamas 800 Radio Group (C800) to execute and manage the radio system project. There have been various briefings provided to the Commissioners on the project. **This Policy session is a project update only and no action required at this time.**

### FINANCIAL IMPLICATIONS (current year and ongoing):

Is this item in your current budget?  YES  NO

What is the cost? \$ 66 million What is the funding source? 2016 General Obligation Bond

### STRATEGIC PLAN ALIGNMENT:

- How does this item align with your Department's Strategic Business Plan goals?

C800's strategic business plan is to provide and operate a comprehensive, cost effective and resilient public safety communication system serving the public safety needs for all first responders in Clackamas County. This project is fulfilling those goals.

- How does this item align with the County's Performance Clackamas goals?

The project aligns with the following strategic priorities:

Number 2 – Build a strong infrastructure – The project provides a public safety communications system to serve all areas of the County. This will enhance the provision of emergency services to the citizens and visitors to the County.

Number 3 – Ensure safe, healthy, and secure communities – This project will provide a robust redundant radio communication system to support first responders in their mission to ensure safe and secure communities.

Number 5 – Building trust through good government – The ballot measure was approved by a 71% margin showing the public's support of a quality public safety communications system. Project oversight by an independent citizen advisory committee. Completing project in budget.

**LEGAL/POLICY REQUIREMENTS:** N/A

**PUBLIC/GOVERNMENTAL PARTICIPATION:** Assistance by Clackamas County Resolution Services to facilitate a public forum to select two additional radio sites in the Lake Oswego/West Linn communities to finalize our system design.

**OPTIONS:** N/A

**RECOMMENDATION:** N/A

**ATTACHMENTS:** Emergency Communications System Upgrade Project Status Report – September 15, 2020

**SUBMITTED BY:**

Division Director/Head Approval: CBW 9-9-20

Department Director/Head Approval: EC 9-9-20

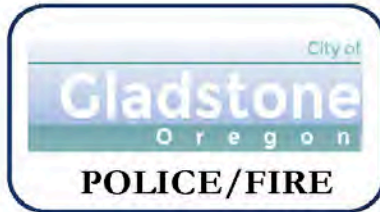
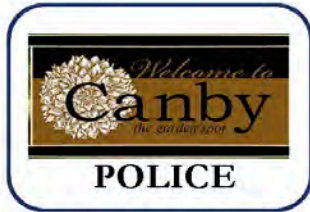
County Administrator Approval \_\_\_\_\_

<p>For information on this issue or copies of attachments, please contact: John Hartsock @ 503-7804806 / john.hartsock@c800.org</p>
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# EMERGENCY COMMUNICATION SYSTEM UPGRADE PROJECT STATUS REPORT



THE NINETEEN PUBLIC SAFETY AGENCIES THAT MAKE UP CLACKAMAS 800 RADIO GROUP



# Who Is Clackamas 800 Radio Group

Clackamas 800 Radio Group (C800) was formed as an ORS 190 cooperative intergovernmental agency in 2000.

***Goal: An effective public safety voice and data radio communications systems operating at maximum efficiency -- delivering quality service -- in the most cost-effective manner.***

C800's service area is 1,879 square miles and the service population is 412,821 (2019).

The organizational and governance format provides an effective approach to public safety communications. This benefits law enforcement, fire fighters, emergency medical service providers and the public they serve through cooperative, partner-managed, information sharing, and communication systems/operation.

C800 also serves other public agencies as "Members". These agencies are not involved in the governance of the organization and they pay a use fee for system access.

In 2000, Clackamas County on behalf of C800, constructed the initial 800MHz seven-site radio system. The system was completed in 2002 and subsequently added four sites.

The original funding, \$15.1M, consisted of grant dollars and short term borrowing by the County which the C800 Partners re-paid from operating funds..

In 2016, Clackamas County on behalf of C800, requested voter approval of a general obligation bond in the amount of \$59M to upgrade and expand the system.

Washington County Consolidated Communications Agency (WCCCA), a similar ORS 190 agency in Washington County, provides technical management and maintenance of the C800 radio system under an Intergovernmental Agreement. They too, through Washington County, obtained voter approval to upgrade and expand their system in 2016.

WCCCA and C800 have had an ongoing strong partnership to support public safety and citizens of Washington and Clackamas Counties.

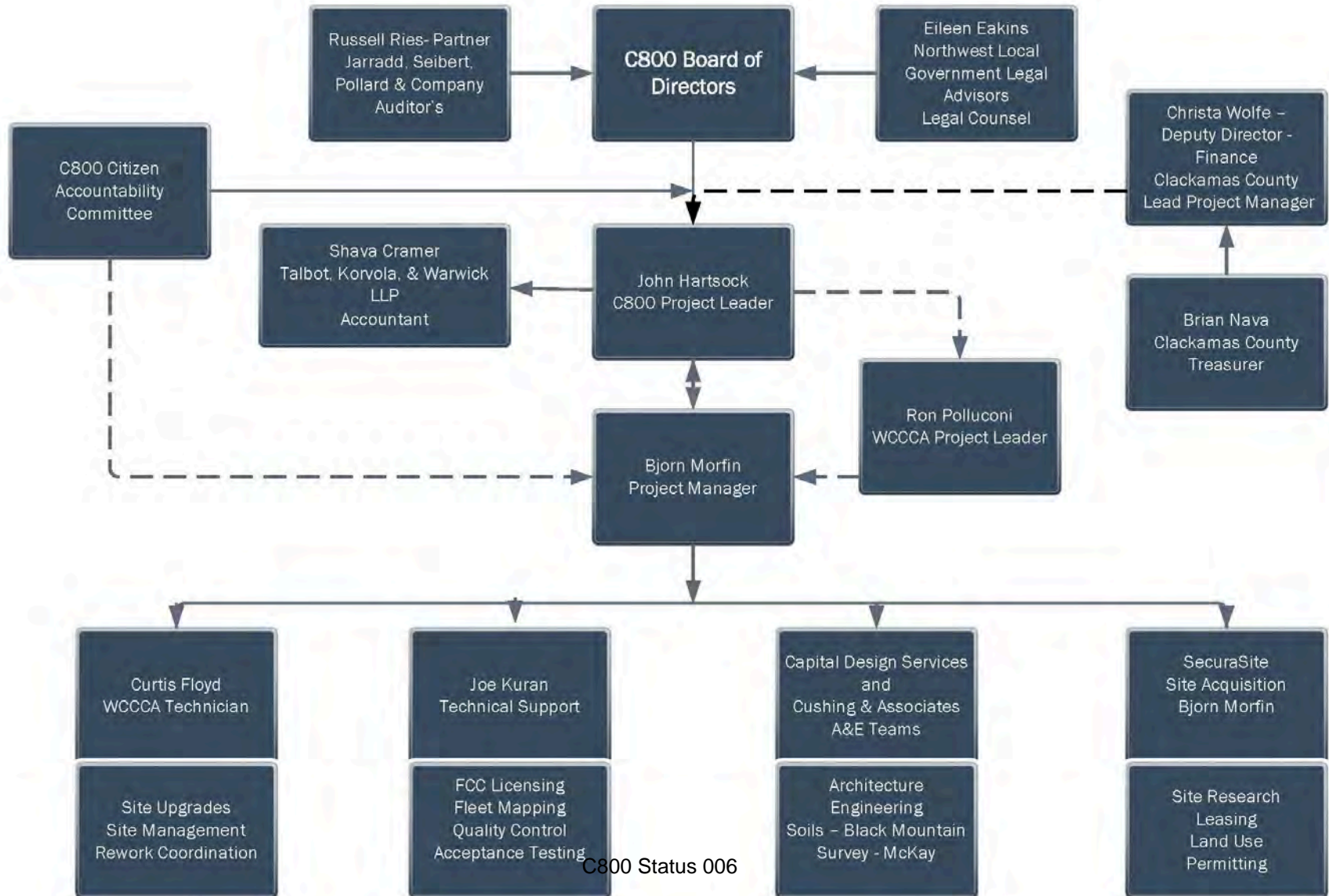
C800 is governed by a 19-member voting Board of Directors consisting of representatives from each of the Partner agencies. The Board meets monthly and is responsible for retaining C800's Manager, establishment of C800's strategic plans, program goals and objectives, service levels, adoption of the annual budget, financial audit, system expansion, and other major operating decisions.

C800 is funded by user fees from the participating jurisdictions.

## ***Mission:***

***Superiority In Emergency Communications – Because A Life Is Reason Enough***

# C800 Upgrade Project Team



# Up Grade Project - History

## Planning:

Due to an aging communications infrastructure serving the Portland Metro Area, conceptual planning began in 2008 for an upgrade of these various public safety radio systems

The planning team was a partnership of City of Portland, Clark County, Washington (CRESA), Washington County Consolidated Communications Agency (WCCCA) and Clackamas 800 Radio Group (C800). The planning team was assisted by the IXP Corporation funded by a \$1M Homeland Security Grant.

The goal was to develop an upgrade solution for public safety communications for the region.

City of Portland and CRESA chose to construct an independent system. C800/WCCCA chose to continue their partnership and build a joint system. All 4 systems interoperate with each other.

## Architectural –Engineering / Site Acquisition:

Months of pre-planning, starting in early 2012, including system design, determining potential sites, allowed site acquisition, and architectural /engineering services, for the 14 new sites to begin at once, as well as upgrade designs for existing sites.

## Equipment:

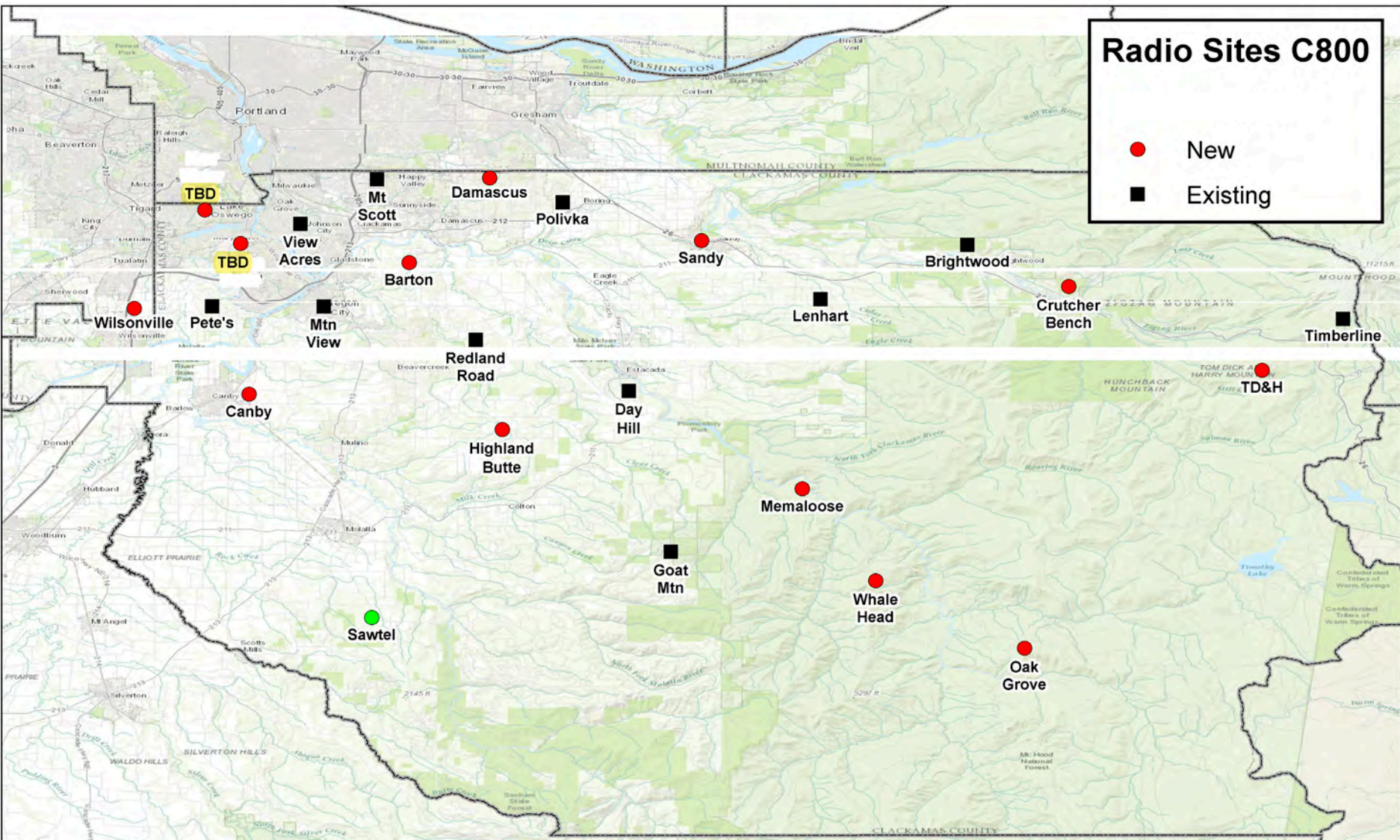
Procurement of major project elements began in earnest in December 2016. The contract to Motorola for the key components of the radio system and the portable and mobile radios for the public safety users was awarded in August 2017 in the amount of \$33.9M. The contract to Microwave Networks Inc, for site inter-connectivity, was awarded in November 2018 in the amount of \$3.1M. Contracts for radio site shelters \$1.6M; communication towers \$1.3M; 48Volt power systems \$1.4M all awarded in mid-2018.



# C800 Site Locations

**Radio Sites C800**

- New
- Existing



C800 Status 008



# Project Status Existing Sites Summary

## 13 Existing Sites Design / Construction and Dispatch Center Upgrades

- **Brightwood / Day Hill / Lenhart / Mt. Scott / Mt. View / Pete's / Polivka / Redland Rd / Sawtell / View Acres** : Complete
- **Goat Mtn /** : Tower structural upgrades / building foundation upgrades / 48V DC power system / new generator and 1,000-gal fuel tank / new HVAC units. Anticipate completion September 30, 2020
- **Timberline:** new generator and 1,000-gal fuel tank to be scheduled
- **CCOM:** New Uninterruptable Power System for Master Site Equipment / revisions to fire suppression system / new cable tray work complete. Replacement of consoles complete. Installation of dispatch floor ground ring to be completed by September 30. 2020
- **LOCOM:** New consoles when their new building is complete – February 2021



# Project Status New Sites Summary

14 New Sites  
Acquisition / Design  
/ Construction:

- **Barton / Canby / Crutcher Bench / Damascus / Highland Butte / Hoodland Fire / Sandy / Wilsonville**  
: Complete.
- **Tom Dick & Harry / Memaloose / Whale Head / Oak Grove (USFS):**  
Memaloose – Construction complete – turned over  
Whalehead – Construction 75% complete – turn over  
September 30  
Oak Grove – Construction 40% complete – turn over  
October 30  
TD&H - Awaiting USFS final approval / Ski Bowl  
easement anticipate construction start September
- **Two Sites in Lake Oswego / West Linn area - for in-  
building coverage - on hold for more research and  
public meeting**



# Radio Sites for Lake Oswego / West Linn to Enhance In-Building Coverage

**DESCRIPTION:** One of the goals of the project is to provide improved in-building radio coverage in areas that are within the Urban Growth Boundary. In the Lake Oswego / West Linn area the team has reviewed in excess of forty different sites to accomplish this goal. This area is bounded by I-5 on the West / the Clackamas County line on the North to the Willamette River then east along the river to I-205 on the South / then I-205 back to -5 – it incorporates the City of Lake Oswego / City of West Linn / and unincorporated portions of Clackamas County.

**HISTORY:** After an extensive engineering review the two initial sites were selected - one on Cooks Butte and one on Kerr Road in Lake Oswego. After a preliminary neighborhood meeting on the Kerr Road site, the City of Lake Oswego requested that we do additional study. The City of Lake Oswego granted us a lease for the Cooks Butte site. After considerable engineering and design work the City terminated the lease due to a deed restriction issue and considerable public outcry.

An alternative to the Cooks Butte site is a site located at the SE corner of Upper Cherry Lane/Bergis Rd/Skyland in unincorporated Clackamas County. The landlord has granted a lease for the property to C800. This land is zoned EFU and thus more challenging to obtain land use. As with the above sites this site too has strong neighborhood objections.

Another alternative to the Cooks Butte site is one located at 19676 Kapteyns St in West Linn. This site is owned by ODOT who has advised they are willing to lease the site to C800. Though surrounded by the City of West Linn this 2+ acre parcel is within unincorporated Clackamas County for land use and permitting. The property is zoned FU10 and in accordance with the Clackamas Zoning Ordinance a public safety communications facility is an allowed use. As we were completing the required Type 1 land use process the City of West Linn requested a presentation to their City Council. This resulted in another considerable public outcry.

**NEXT STEPS:** Based on discussion with the County Administrator, Gary Schmidt, and the West Linn City Manager, John Williams, the C800 Board agreed to stall the process of locating a site in this area for the time being.

Gary Schmidt, through the County Resolution Services Agency, will organize a town hall meeting in January 2021 to review and make recommendations for a solution. The meeting is intended to include elected officials from the City of West Linn / City of Lake Oswego / Clackamas County / Lake Oswego Police and Fire officials / West Linn Police officials / Clackamas County Sheriff officials / Tualatin Fire and Rescue officials, as well as Citizen representatives from the area.

# Project Status Schedule Summary

The initial schedule was for the Project to be completed by June 2019.

As with any complex multi-site project there have been delays relative to site acquisition, land use and permitting - therefor site construction.

We are currently projecting to begin use of the new radio system in late January to early February 2021.

The anticipated project completion date has been extended to June 2021.



# Project Status Funding

Ballot Measure 3-476 approved in May 2016 authorized \$59M in general obligation bonds to replace and upgrade the public safety radio communications system serving Clackamas County.

The measure was approved by a 71% margin.

Clackamas County entered into an Intergovernmental Agreement with Clackamas 800 Radio Group on December 19, 2016 to execute and manage the project.

There have been additional funds added to the project in the form of a bond premium, interest earnings and site use fees which total \$10.2M for a total budget of \$69.2M. These additional funds will be first used as needed for project contingency; the remainder as outlined on page 12.

\$55.5M has been expended.

# Future Actions by the Board of County Commissioners

## First Amendment to the Intergovernmental Agreement

- County Staff has recommended an amendment to the IGA executed in 2016 between Clackamas County and Clackamas 800 Radio Group (C800). This amendment defines costs which C800 will reimburse the County for administration and fiscal management of the Bond. Further it outlines clarification of terms.
- It is anticipated that this Amendment will be presented by the end of September 2020.

## Approval of the use of Bond Premium and Interest Dollars

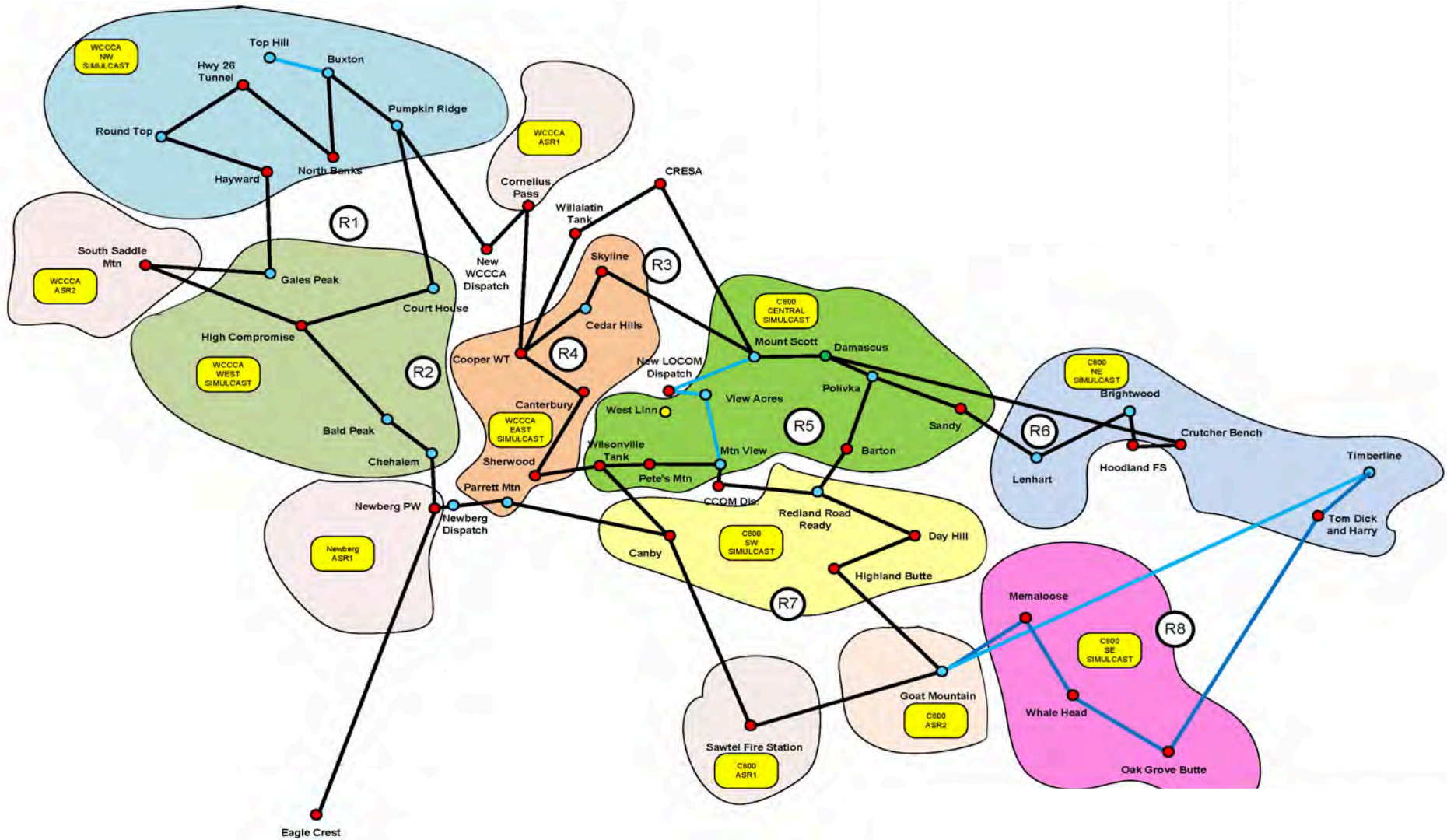
- In accordance with the IGA, C800 must obtain the Board of County Commissioners approval to utilize the Bond Premium and Interest dollars. As part of the approval process the Citizens Advisory Committee shall provide the Board with their recommendation estimated to be in November of 2020.
- The C800 Board has identified three items which they would like added to the project for these funds:
  1. Each agency was required to pay 50% of the cost of subscriber radios (mobiles/portables) in development of the project budget. The agencies would like to be reimbursed this 50%.
  2. Addition of 70 mobile in-vehicle repeaters to enhance in-building coverage. These would be installed in fire battalion chief and law enforcement sergeant vehicles.
  3. The County nor any of the agencies have a communications Command Vehicle. If acquired this vehicle would be shared between all agencies as needed.

# Resiliency:

## A Primary Objective of the Upgraded System Design

- **New Facilities and Towers - Designed to the Oregon Structural Specialty Code: “Essential Facilities” Risk Category IV:** i.e., Essential structures in this category are used for communications across non-redundant and hardened networks such as: rescue or disaster operations, and public safety facilities. They are to withstand a magnitude 9 earthquake and continue to operate.
- **Existing Facilities and Towers** - Upgraded to Meet the Current Essential Facilities Codes.
- **48V DC Power Systems Combined with Emergency Generators** - Having 1,000-gal propane fuel supply to provide up to 4 weeks of back up power.
- **Redundant HVAC units** - To maintain environmental control.
- **Loop Protected Microwave** – Site connectivity

# Microwave Network





# Damascus Site



# Radio Factory Staging



C800 Status 018



# Crutcher Bench Site



Crutcher 7/3



Crutcher

C800 Status 019