



TCOMM 911

POLICE | FIRE | MEDICAL
Your Emergency – Our Priority

ADCOMM Engineering LLC

TCOMM911 TOWN HALL

In-Building Emergency Responder Radio Coverage Systems

September 26, 2024

Brian Ackles, McApples / ADCOMM

Molly Kovaka, ADCOMM

Wendy Hill, TCOMM911

David Taylor, TCOMM911

For Starters

- ▶ This meeting is being **recorded**
- ▶ You can use the Chat for Q&A
- ▶ The presentation will be available for download



Agenda

- ▶ Welcome and Introductions
- ▶ Thurston County Emergency Radio Network (TCERN) Overview
- ▶ Emergency Responder Communication Enhancement Systems (ERCES) Overview
- ▶ Migration and Activation of ERCES to the new TCERN radio network
- ▶ Working with your local Fire Marshal
- ▶ Working with TCOMM911
- ▶ Q&A

Welcome and Introductions



Welcome and Introductions

- ▶ Wendy Hill – TCOMM911 Executive Director
- ▶ Jonnica Elkins – TCOMM911 Deputy Director
- ▶ David Taylor – TCOMM911 Radio Systems Manager
- ▶ Molly Kovaka – ADCOMM Engineering Project Manager
- ▶ Brian Ackles – In-building ERCES Consultant to TCOMM911

Attendees: please add your name, email, and affiliation in the meeting chat!

Thurston County Emergency Radio Network (TCERN) Overview



TCERN Project Overview

Voter-approved for funding in 2019 and the Motorola contract kicked off in 2020, the TCERN project benefits include:

- **unified** County-wide emergency responder radio system
- strategically enhanced **coverage**
- improved **interoperability** with partner systems
- modernized **subscriber fleet**
- industry-standard **P25 digital** radio system
- updated supporting **infrastructure** for long-term **reliability**

- 1,800 subscriber radios
- 18 dispatch consoles, +4 backup
- 18 radio sites
- 18 MW radio links
- new RF plan and licensing
- **cutover to operations Q4 2024**

The TCERN project is owned and managed by TCOMM911

Emergency Responder Communication Enhancement Systems (ERCES) Overview



Emergency Responder Communication Enhancement System – ERCES

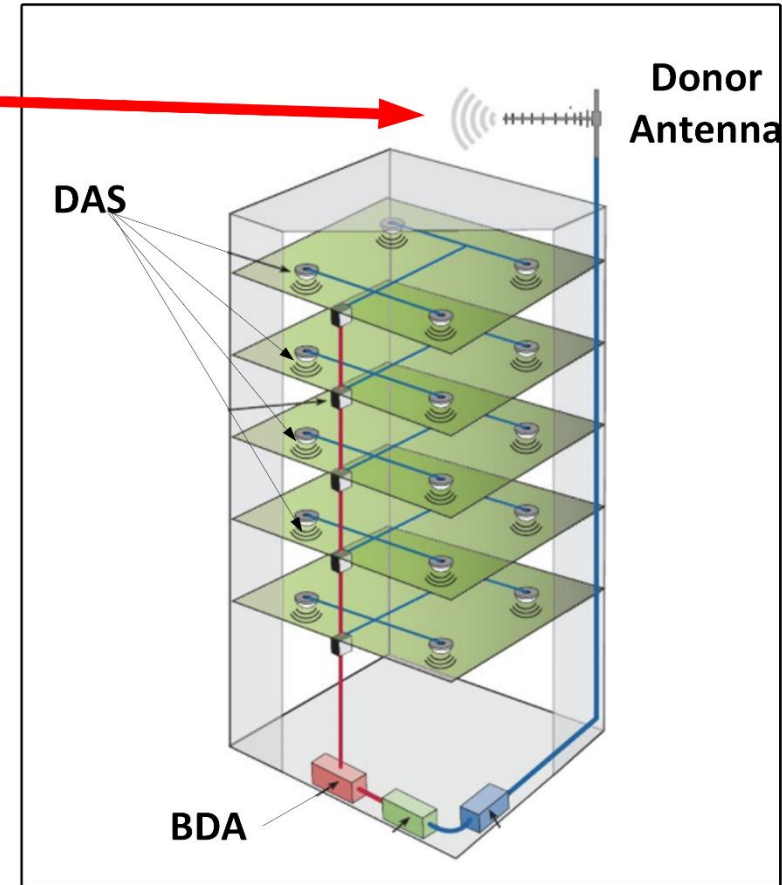
- ▶ Updated terminology in use by the FCC and the National Fire Protection Agency (NFPA)
- ▶ ERCES includes all components of public safety in-building communication systems
 - BDA – Bi-directional Amplifier
 - DAS – Distributed Antenna System
 - Fiber DAS
 - Fiber BDA
 - Donor Antenna
 - Etc.

In-Building ERCES – Overview

TCERN Radio



ERCES



Migration and Activation of In-Building ERCES



What's Changing?

- ▶ The primary change impacting in-building ERCES is the change from an outdated VHF radio system to a new P25 Phase 2 public safety radio system
- ▶ It is unlikely existing ERCES can be upgraded and they may have to be replaced if further testing on the new TCERN 700 MHz system shows that there is no radio coverage in that building



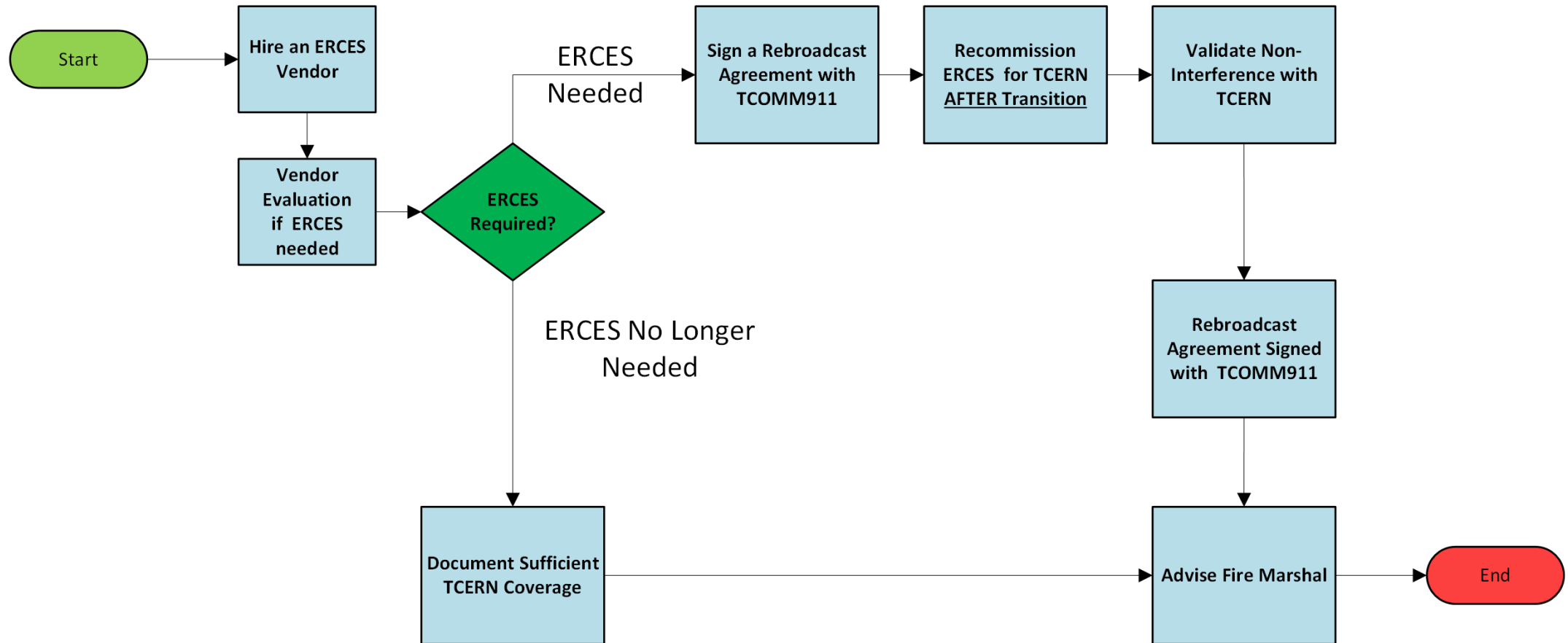
What's Changing?

- ▶ When users are transitioned to TCERN, existing VHF channels will no longer be monitored by TCOMM911
- ▶ As a result, all active in-building ERCES will not support communication on TCERN

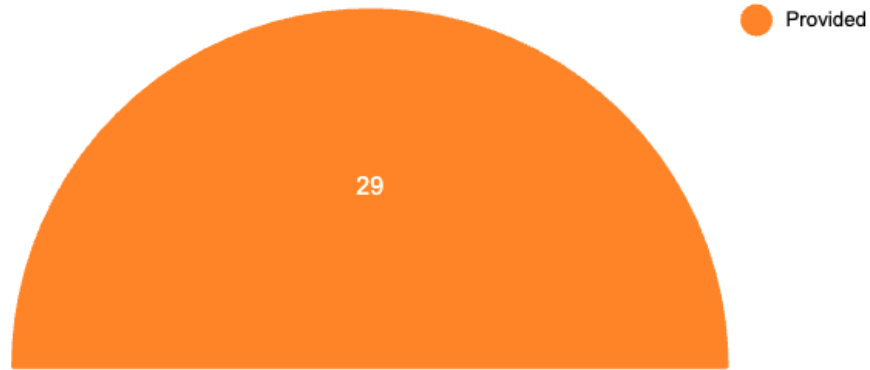
What's Changing?

- ▶ First responder agencies will need to adopt alternate communication strategies until required in-building ERCES are upgraded
- ▶ Fire Ground Simplex communications or 'Radio to Radio' will be the interim solution for Fire.
 - All TCERN Fire radios that have the final pre-cutover programming applied will have the designated Fire Ground simplex channel in their primary Zone and Channel/Talkgroup position 16.
- ▶ Similar workarounds need to be in place for Police and EMS

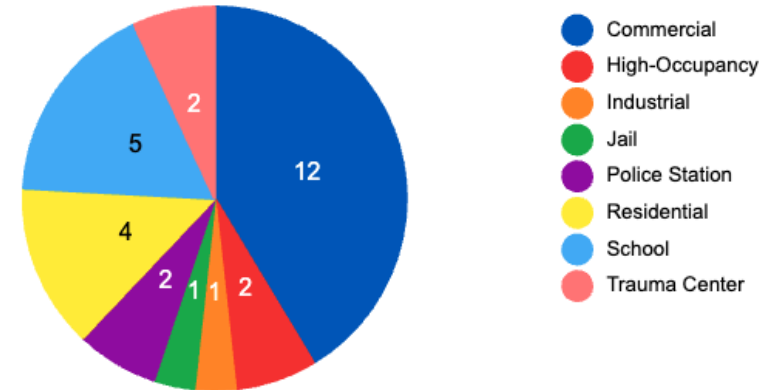
In-Building ERCES Migration and Activation Process



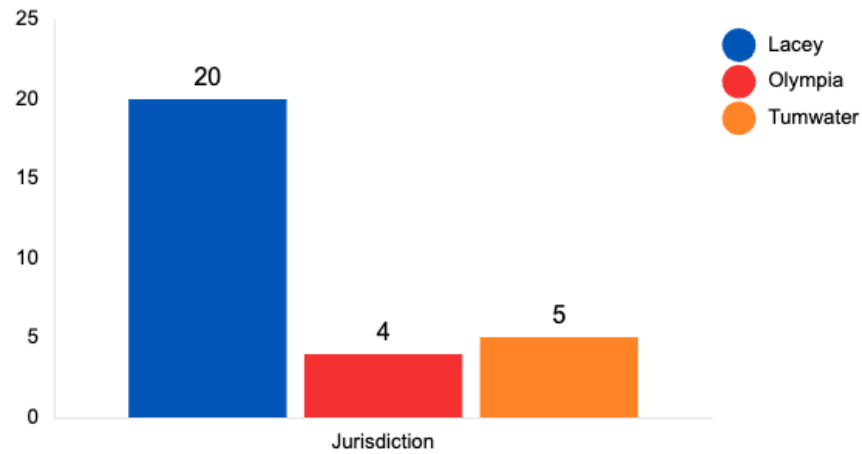
ERCES Site Report - Contacts



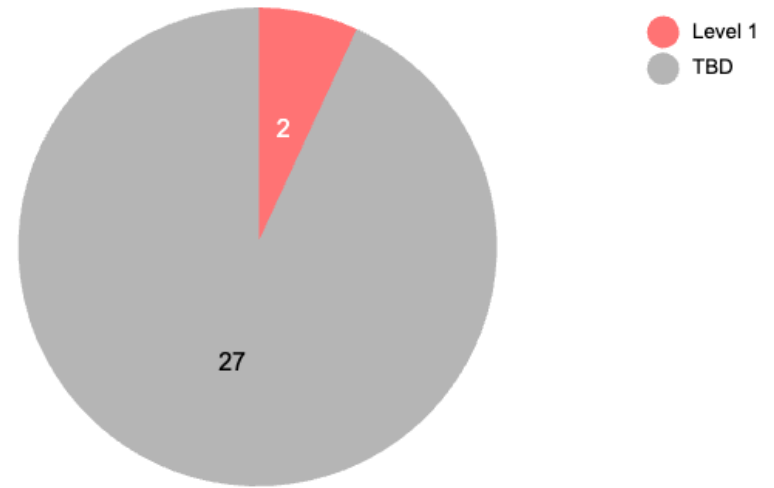
ERCES Site Report - By Facility Type



ERCES Site Report - AHJs



ERCES Site Report - By AHJ Priority



Working With Your Local Fire Marshal



In-Building Communication Testing

- ▶ Fire marshals and building code officials are currently testing coverage using TCERN in several existing facilities with in-building ERCES
- ▶ TCOMM911 is working with fire marshals in Thurston County to assign priorities to existing facilities with in-building ERCES for migration and activation

Property Priority

Priority	Type	Example Venues
1	Critical Infrastructure	Police Stations, Jails, Trauma Centers
2	High Occupancy	Convention Centers, Sports Arenas
3	New Construction	Properties obtaining Temporary Certificate of Occupancy (TCO) for the first time
4	All Others	All Others

Working With TCOMM911



Working with TCOMM911

- ▶ Refer to the [TCOMM911.org](https://tcomm911.org) website for:
 - ERCES migration and activation updates
 - New ERCES installation processes and documentation

<https://tcomm911.org/in-building-erces-resources/>

- ▶ Update your contact information:
 - Send and Email to RadioHelpDesk@tcomm911.org with:
 - Property Name
 - Property Address
 - Contact Name
 - Contact Phone Number
 - Contact Email Address

Working with TCOMM911

- ▶ When the update to your ERCES is completed, TCOMM911 radio technicians will work with your vendor of choice to verify that the system meets TCOMM911 requirements before it can be connected to the network.
- ▶ All properties with an in-building ERCES must also sign a re-broadcast agreement with TCOMM911 per FCC regulations.

Questions?



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Thank You!



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