DIGITAL MOBILE RADIO REQUEST FOR PROPOSAL

NEXT GENERATION OF RADIO TECHNOLOGY FOR RELIABLE COMMUNICATIONS

October 2, 2017

BOARD ACTION REQUESTED



WHY ARE WE HERE

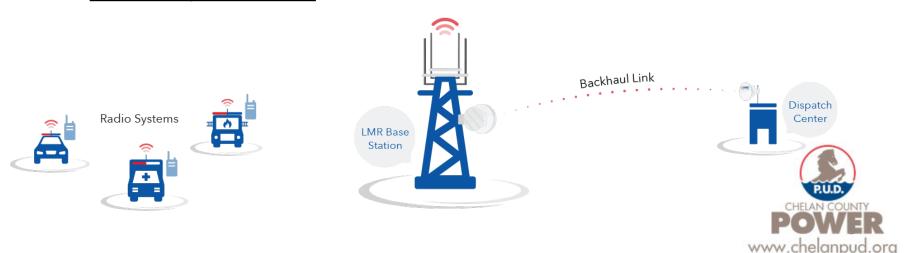
- Review the need to replace this critical communication system
- Summarize steps to replace the Land Mobile Radio system
- Request Board action to authorize Request for Proposal (RFP) for Digital Mobile Radio (DMR)



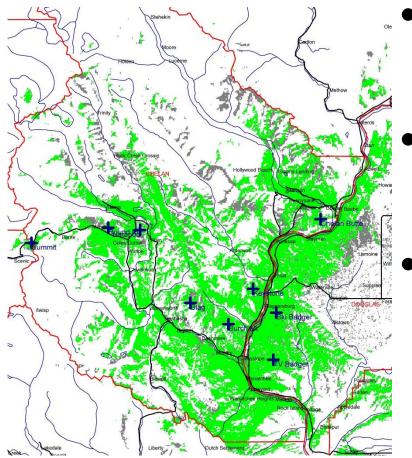
SYSTEM DESCRIPTION

- Land Mobile Radio
 System
 - Dedicated and purposebuilt radio system used to deliver critical <u>voice</u> <u>communication to</u> District personnel

- Microwave System
 - Highly reliable radiobased <u>transmission</u> <u>system</u> used to transport critical voice and data traffic



WHY SYSTEM NEEDS TO BE REPLACED



Predicted coverage map for Existing Radio System

- Important component of safe and efficient operations Districtwide
- System provides reliable communications for mobile crews
- It has exceeded its useful life
 - 20-year old equipment
 - No longer supported
 - Increasing risk of failure



PROJECT DEVELOPMENT

- Feasibility Study 2015
 - Recommended replacement with Digital Mobile Radio (DMR)
- Coverage Study 2016
 - Recommended replacement first, followed by coverage expansion
- Project Recommendation and Business Case
 - Replace Microwave and Radio systems



PROJECT APPROVAL

- Conducted extended outreach to radio users to validate core requirements, eliminating alternatives
- Confirmed Microwave and Radio systems are essential to District operations and safety
- Reinforced recommendation of original feasibility study
- Business Case approved by Senior Management Team
- Presented project to the Board on February 6



REPLACEMENT PROJECT

- Site and Power Improvements
 - Under construction
- Microwave Network Replacement
 - Finalizing scope of work with Nokia to use State Contract
 - Anticipate replacement 2018 Q2
- Land Mobile Radio Replacement
 - Digital Mobile Radio (DMR) standard selected
 - Ready to publish Request for Proposals (RFP)
 - Anticipate replacement starting 2018 Q3



DIGITAL MOBILE RADIO

- Benefits
 - Open Standard
 - Digital Audio Quality
 - Double Channel Capacity
 - Longer Battery Life
 - Advanced Features
 - Data applications
 - Caller ID
 - Enhanced Security





NEXT STEPS

- Request Commission approval of resolution to authorize advertisement of RFP 17-50 Digital Mobile Radio
- If approved, begin outreach to employees





Burch Mountain Microwave/Radio Tower

