



# Overview and Next Steps

<http://www.maine.gov/mscommnet>

10/6/2009



# Agenda

- What is the Maine State Communication Network Program (MSCommNet), and what is it designed to achieve?
- Timeline for developing MSCommNet project
- Next steps for implementing
- Your turn:
  - Feedback, question and answer session

# Introductions

- State of Maine Office of Information Technology
- State agency representatives
- Harris Public Safety and Professional Communications

# What is MSCommNet?

- MSCommNet - Objectives
  - Reliable voice communications (push-to-talk, 1 to many)
  - Geographical coverage
  - Interoperability
  - Replace and consolidate outdated (30+ year) infrastructure
  - Regulatory compliance
    - FCC VHF Narrowbanding Mandate: December 31, 2012
- MSCommNet - Priorities
  - Maximize state resources
  - Reduce development and operating costs
  - Long term technical scalability

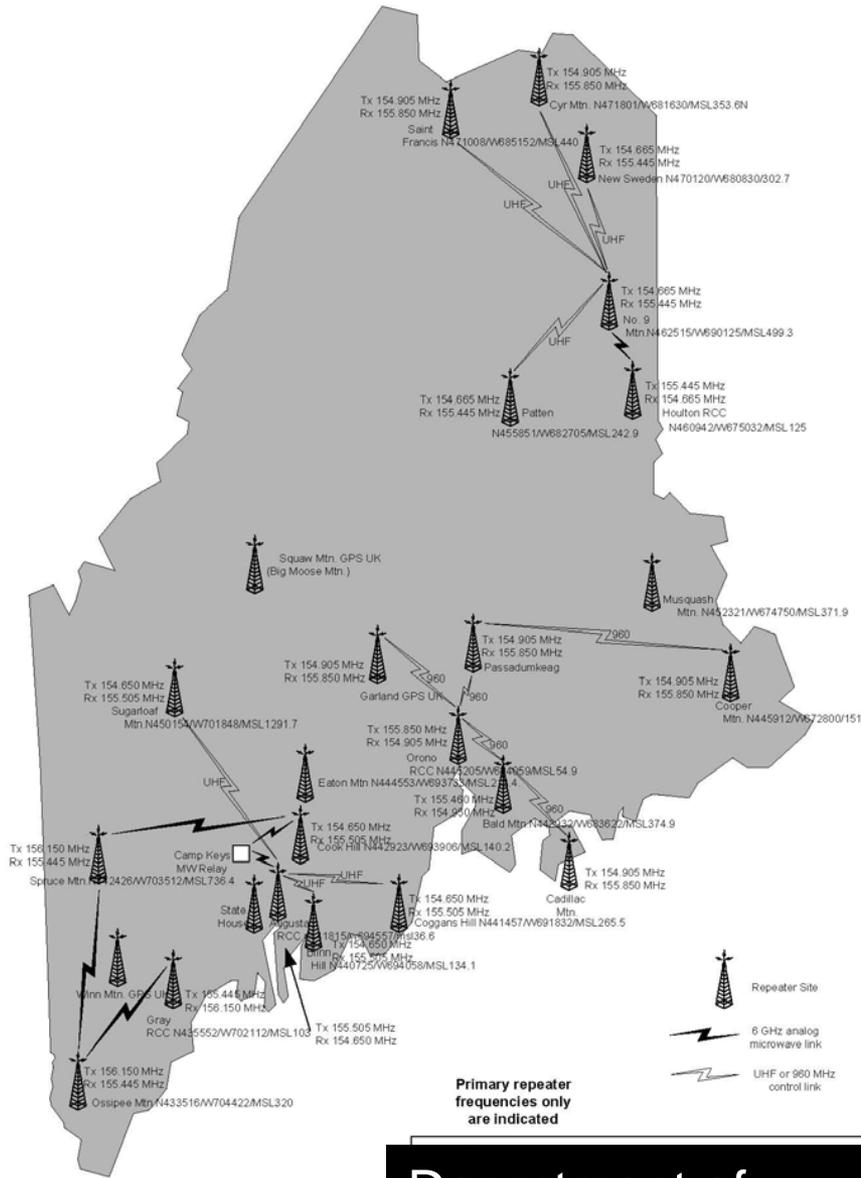
# State Agencies Served

- Department of Public Safety
  - Maine State Police
  - Bureau of Capitol Security
  - Office of the State Fire Marshal
  - Maine Drug Enforcement Agency (MDEA)
  - Maine Criminal Justice Academy
  - Emergency Medical Services (EMS)
- Department of Conservation
  - Forest Rangers
  - State Foresters
  - Park Rangers
  - Entomologists
- Department of Corrections
- Bureau of Motor Vehicles
- Department of Health and Human Services
- Bureau of General Services
- Office of the Attorney General
- Department of Inland Fisheries & Wildlife
  - Game Wardens
  - Biologists (Wildlife and Fisheries)
- Department of Marine Resources
  - Marine Patrol Officers
  - Fisheries Biologists
- Department of Defense, Veterans, & Emergency Management
- Department of Environmental Protection
  - HAZMAT Responders
- Department of Transportation
- Emergency Services Communication Bureau

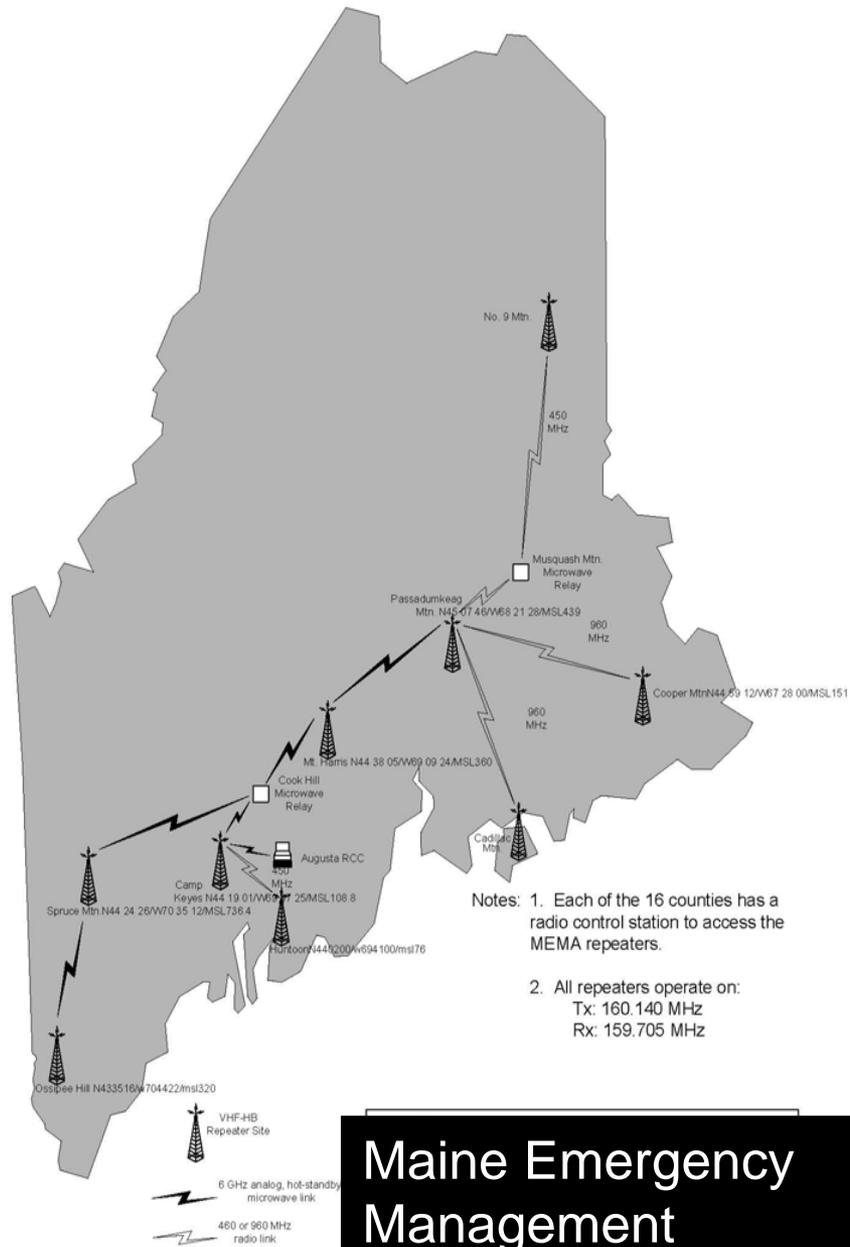
**Total radios – 4536**

- 2739 mobiles
- 1797 portables

# Existing Agency Infrastructure



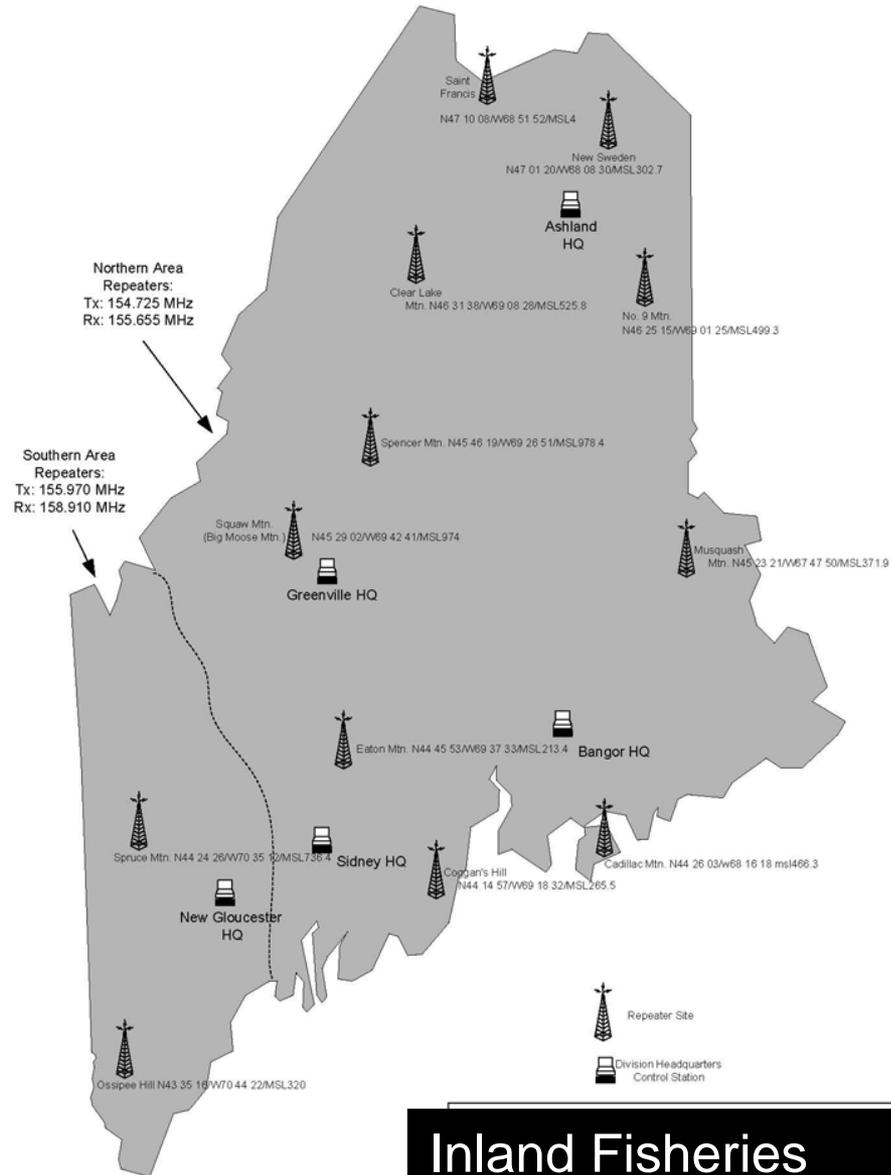
# Department of Public Safety



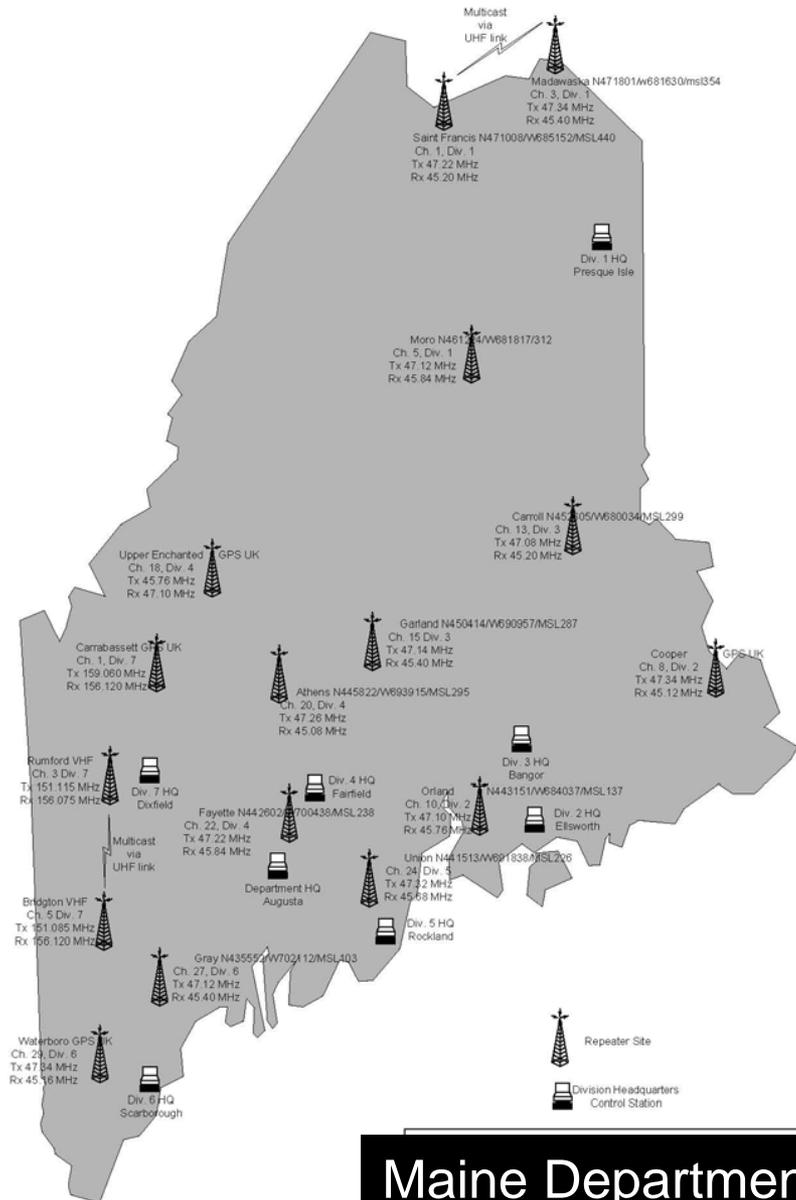
Notes: 1. Each of the 16 counties has a radio control station to access the MEMA repeaters.

2. All repeaters operate on:  
 Tx: 160.140 MHz  
 Rx: 159.705 MHz

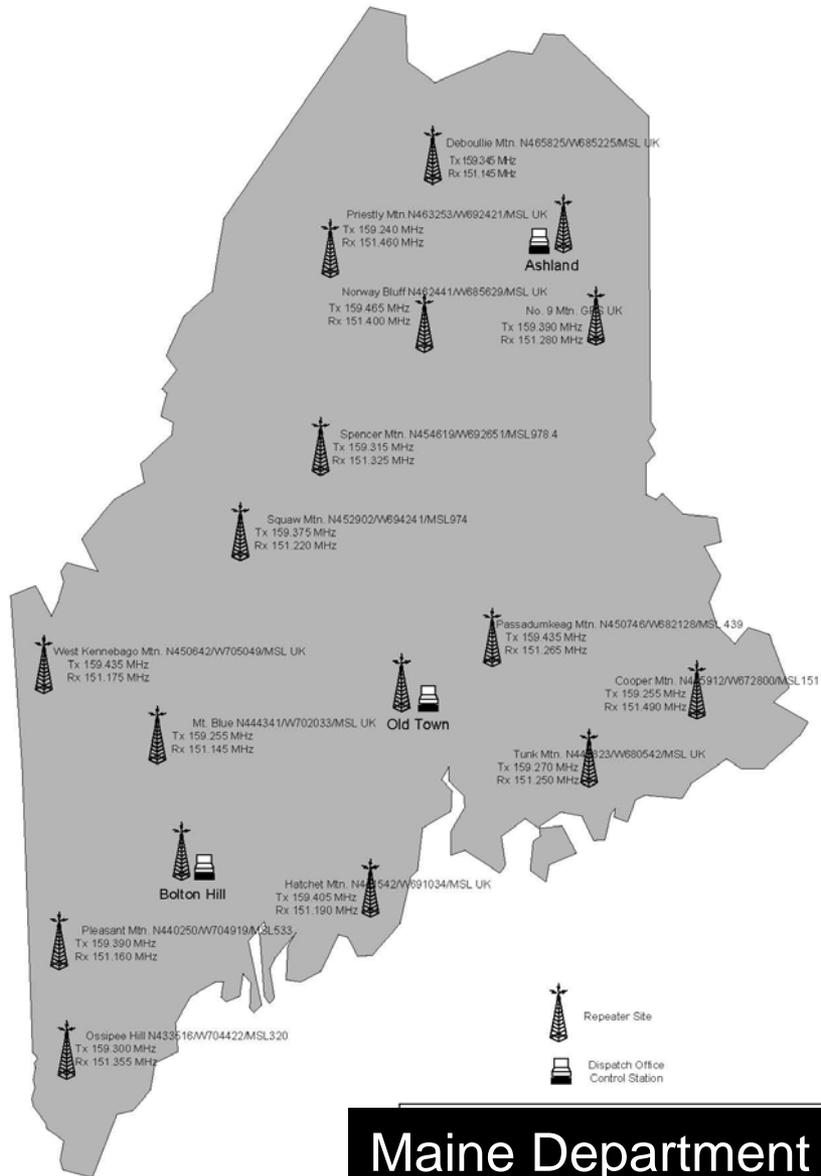
# Maine Emergency Management



# Inland Fisheries and Wildlife

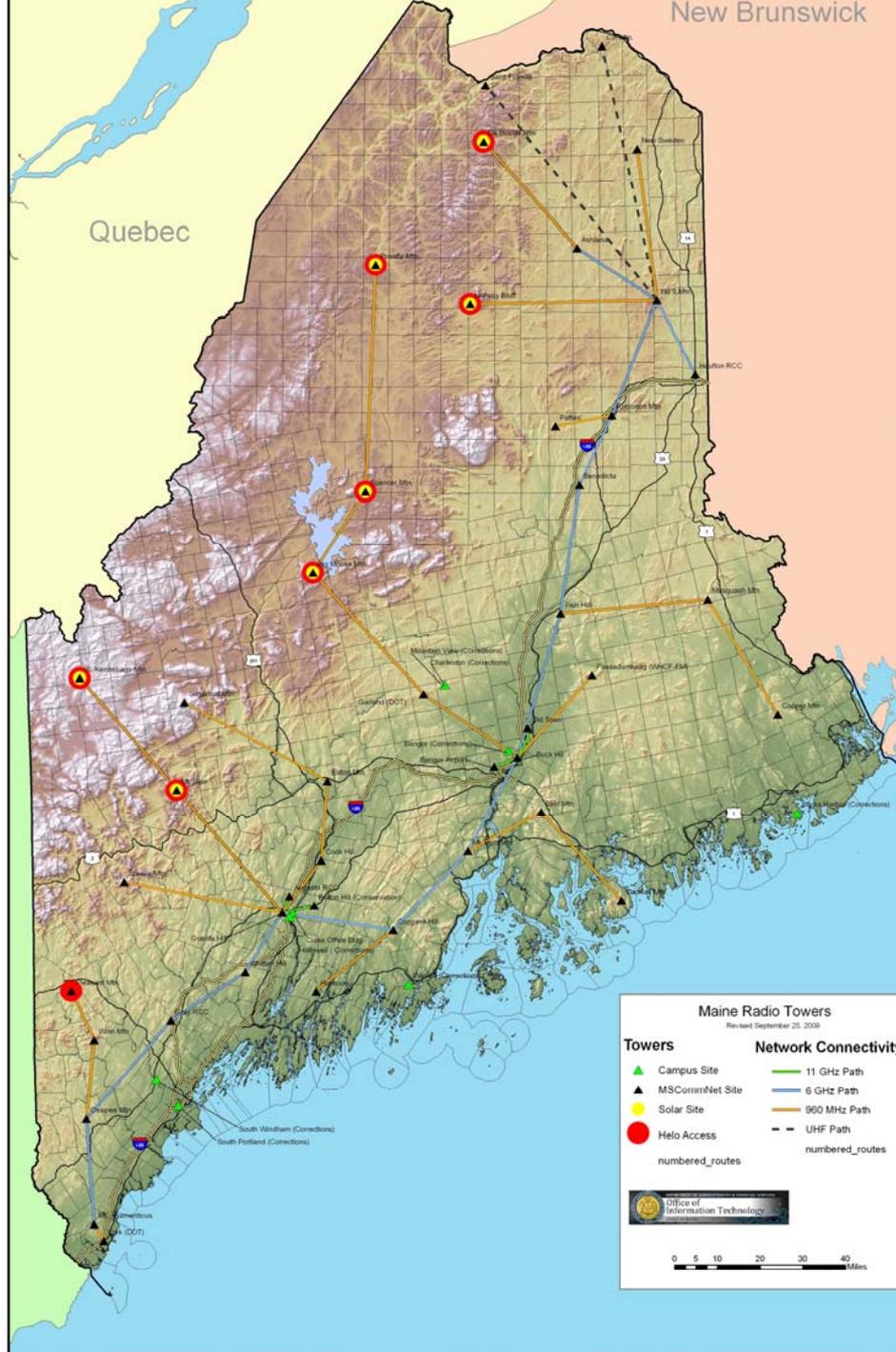


# Maine Department of Transportation



# Maine Department of Conservation

# Infrastructure MScCommNet



# Project History: Study Phase

- Macro Engineering, Project Study commissioned by Department of Public Safety in November 2002; completed in spring of 2003
  - Recommends 800 MHz system
  - Estimated cost \$207 million
- State Radio Board and State Radio Fund re-established by Statute in 2005
- Consolidation of Radio Services, begun 2004 and finalized July 2007
- Macro commissioned for second study in 2006 voice and data communication project
  - Re-engineer VHF digital narrowband system
  - Estimated cost \$50 million

# Project History: RFP Process

- Issued Original RFP in June 2007
- Awarded contract February 2008 to Harris (formerly Tyco Electronics M/A-COM), invalidated by State of Maine purchasing
- Re-bid project in August 2008, contract awarded to Harris in February 2009
- Signed official contract with Harris Public Safety and Professional Communications on June 11, 2009

# Implementation Timeline



# About MScCommNet partners

- Harris Public Safety & Professional Communications
  - Prime Contractor
- Jacobs Telecommunications
  - Site Engineering and Development
- Radio Communications Management (RCM)
  - Installation, warranty and maintenance
- Alcatel-Lucent
  - Microwave equipment
- Syracuse Research Corporation (SRC)
  - Frequency planning and coordination

# Project Cost

## Expenditures to date - \$6.8M

- Construction of 5 sites
- Land acquisition
- Integration contract acquisition

## Projected additional cost to implement - \$47.9M

- Integration contract
- Radio Project office

## Total projected cost - \$54.7M

## Sources of Funds

- Grants
- Partners
- Remainder to be financed to maximum of \$50M

# System Requirements

- Hybrid system (trunking and conventional technology)
- Site efficiency and modernization: started with 75 sites; 64 currently operational; 59 operational following cutover
- Improved reliability and coverage for State users
- APCO P25 (Project 25) compliant
- Interoperability at the radio and network level
- Connect analog and digital systems and radios
- Standards based infrastructure supports future technology
  - TIA, EIA, NFPA, R56, P25, IP

# What MSCommNet means to you

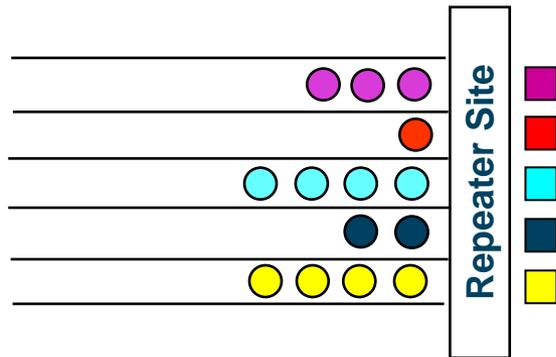


# Conventional versus Trunking?

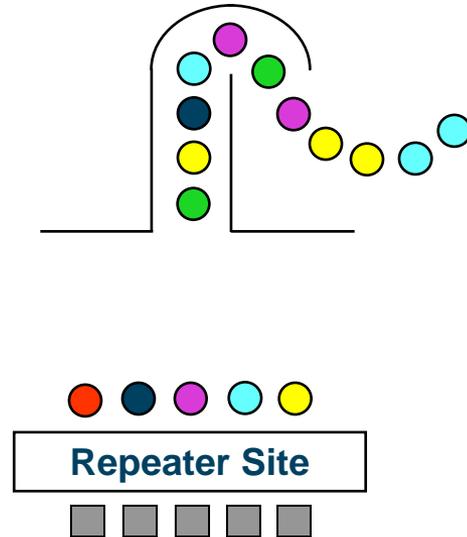
Trunking assures that the next call gets the next open channel regardless of who is calling



Conventional



Trunked



# Continued Communications with Non-trunked Users

- Ability to monitor MSP communications on a primary trunked channel can be achieved through the following:
  - MSP audio transmitted on RegionNet or another designated national interoperability channel
  - MSP audio transmitted to a local non-State channel
  - Installation of a P25 trunked capable control station at the local dispatch center. This would allow a dispatcher to have access to the MSP primary channel
  - Installation of a P25 mobile or portable capable of trunked operation
- Each solution will be analyzed working with local partners based upon operational, geographical, technical, and financial feasibility
- Final solutions determined during Final Design

# Frequently Asked Questions

- Is MSCommNet a proprietary system?
- Why did you choose a digital system and are there any benefits over the system used today?
- The prime dispatch channel for the State Police on the MSCommNet will be trunked. What impact will this have on non-state users?
- Did the state consider alternative technologies?
- Will I be required to buy new portable and/or mobile radios?
- Will existing radio equipment work on the new system?
- What impact will MSCommNet have on local police/fire departments?
- Will County and local responders lose the capability to communicate with State users; if so, will this capability be improved?
- **FAQs will be posted on the web at the conclusion of the 4 outreach sessions**

# Question & Answer Session