



# **PUBLIC SAFETY COMMUNICATIONS IN COLORADO 2013**

Your presenter today:

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Larimer County Technical  
Communications**

ASTRO® XTS™ 2500 Model II



## Public Safety Radio System Need



- **Interoperability**

- Columbine
- 9-11

- **SAFECOM**

- Through collaboration with emergency responders and policymakers across all levels of government, SAFECOM works to improve multi-jurisdictional and intergovernmental communications interoperability.

- **DTRS Meets Top Level on DHS SAFECOM Interoperability Continuum**

- Standards-Based Shared System
- Regional Committees Working within a Statewide Communications Interoperability Plan Framework
- Daily Use Throughout Region
- Regular Comprehensive Regionwide Training and Exercises



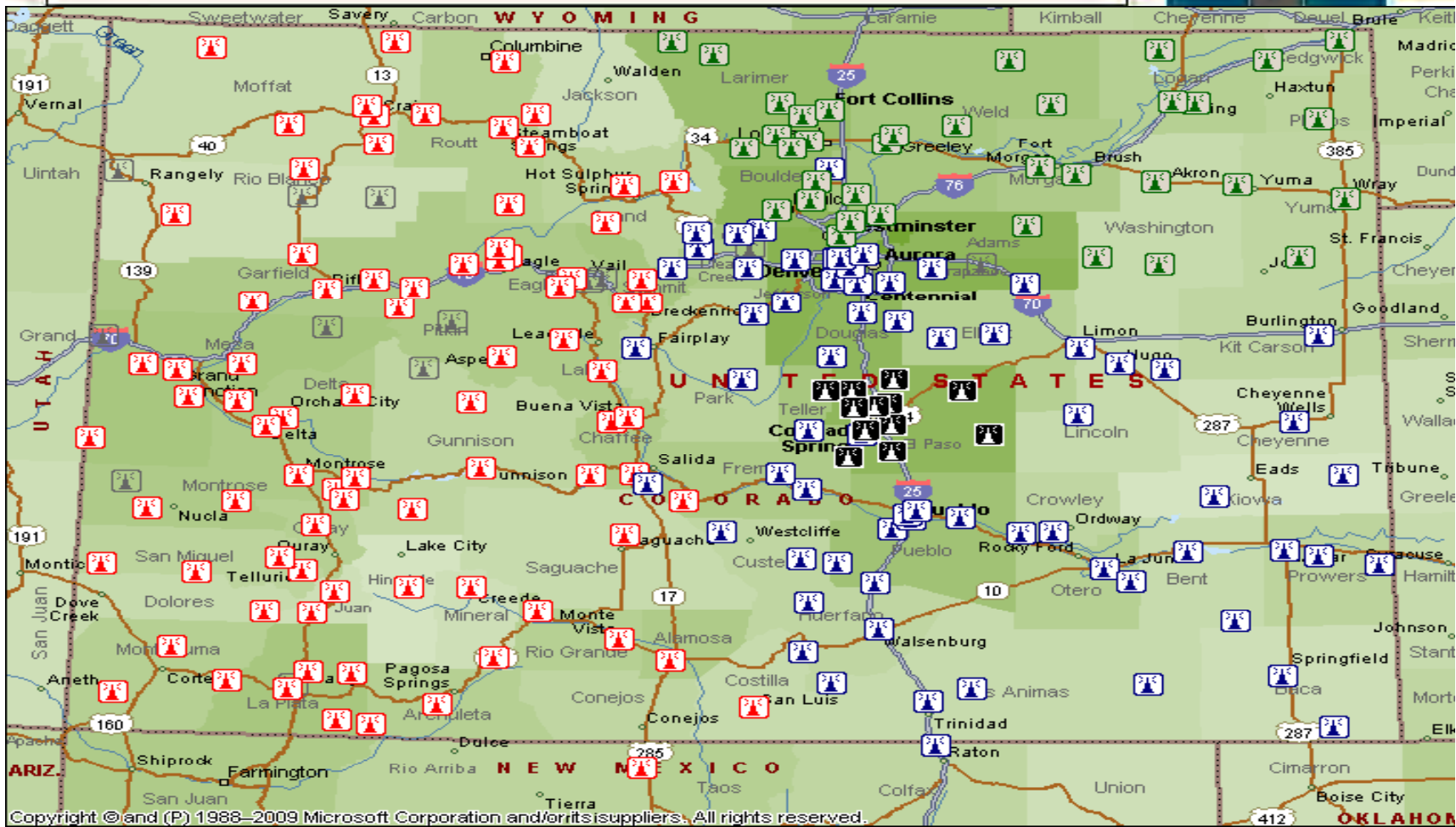
## DIGITAL TRUNKED RADIO SYSTEM (DTRS) TODAY



- **216 Radio Tower sites**
- **77 dispatch centers**
- **69,200 + user radios**
- **1,000 +user agencies**
- **User Agencies in all 64 Counties**
- **Average transmissions - 8 million monthly/257 thousand daily (2012)**



# DTRS SITES



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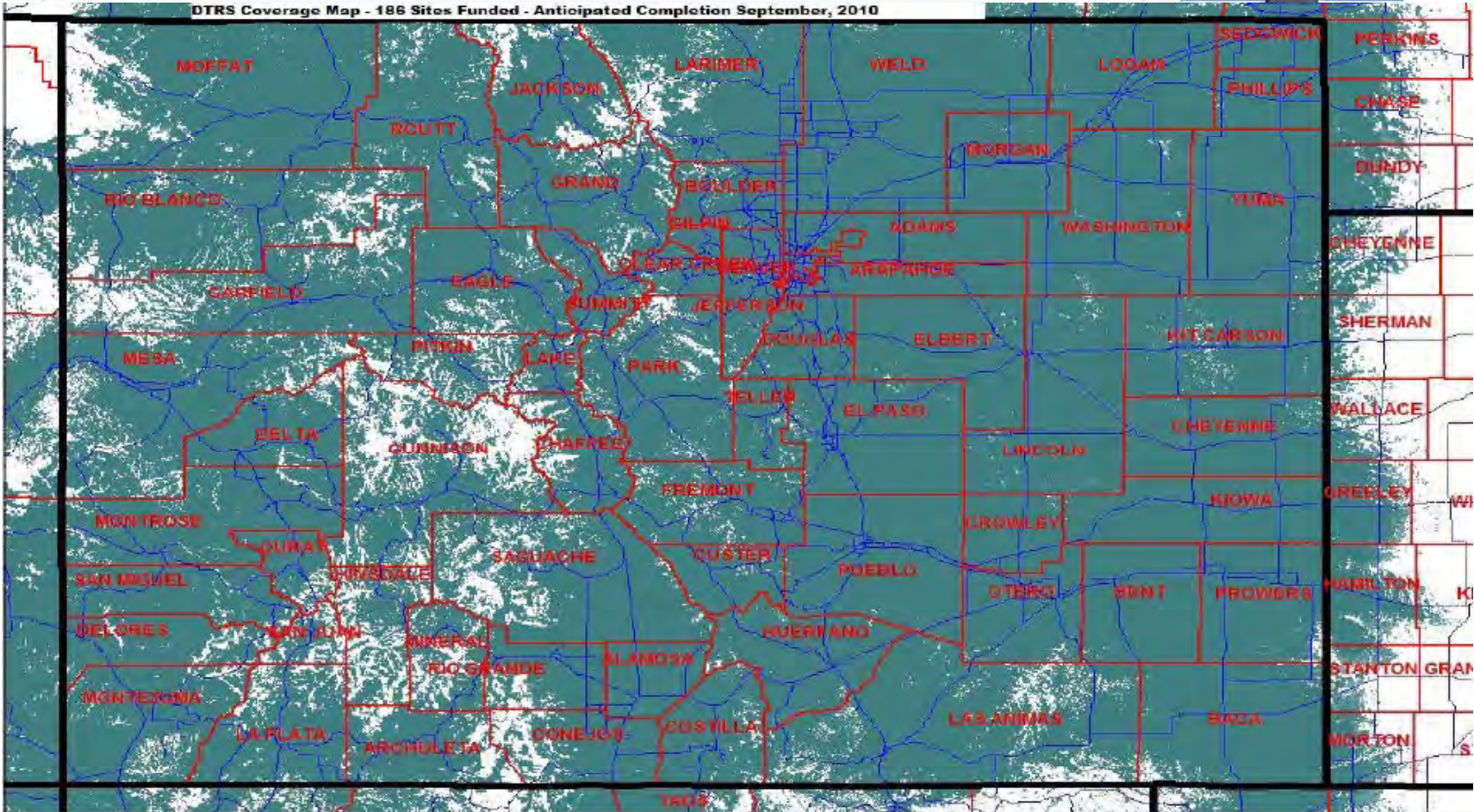




# DTRS COVERAGE



DTRS Coverage Map - 186 Sites Funded - Anticipated Completion September, 2010



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## Current System User Agencies



• There are now over 1,000 agencies on the system, with over 69,000 subscriber radios in operation.

Here is a breakdown of member agencies by category:

Combined Dispatch 27

Coroner's Office 8

Emergency Management 20

EMS Service 79

Federal Agency 34

Fire Service 278

General Government 60

Health Service 114

Judicial Service 10

Other Service (SAR, CAP, etc.) 55

Police Service 169

Public Works / Road and Bridge 48

School Districts 49

Sheriff's Office 59

State Agency 25

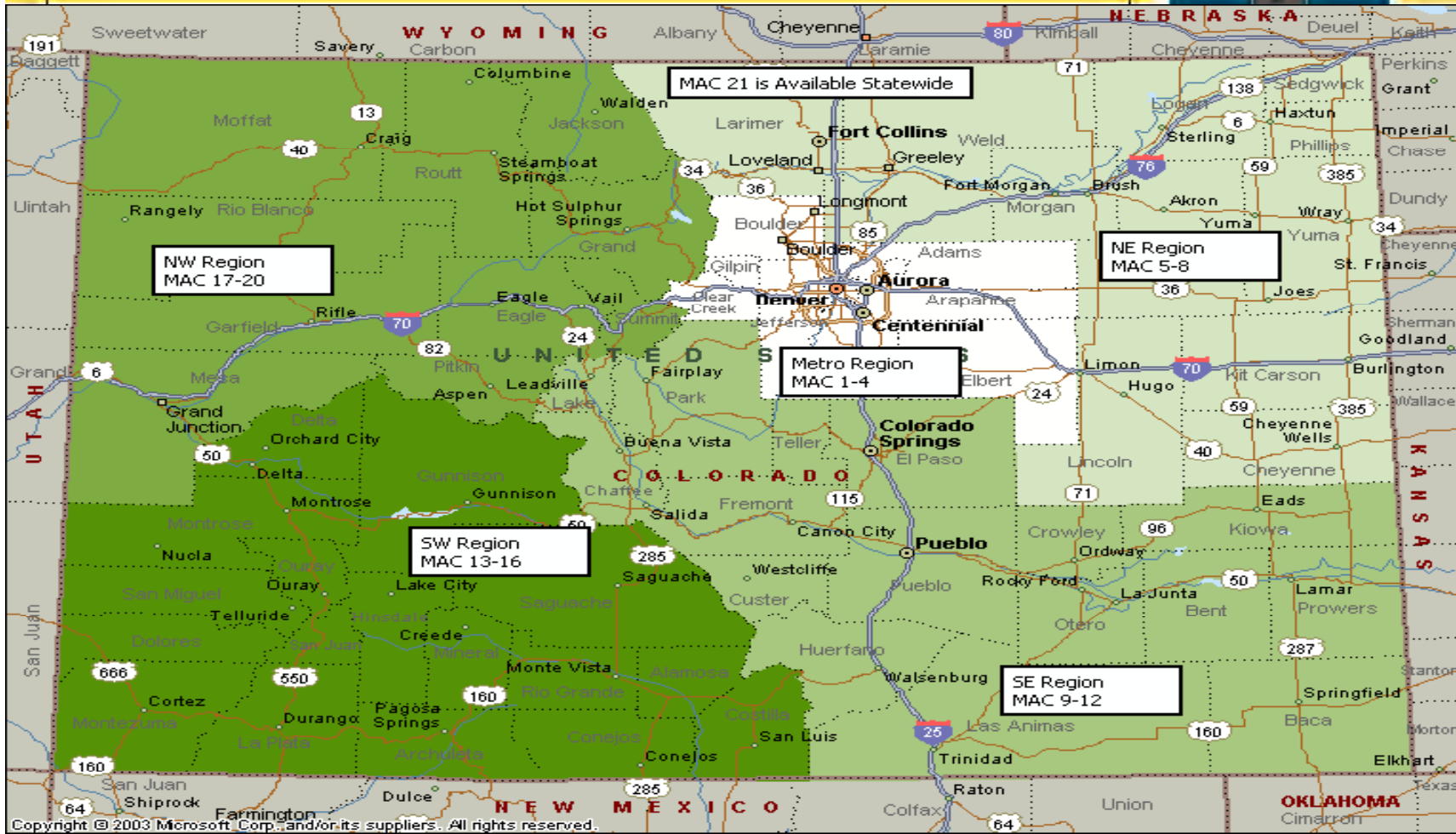
Utilities 6

Tribal Agencies 4





# MUTUAL AID REGIONS



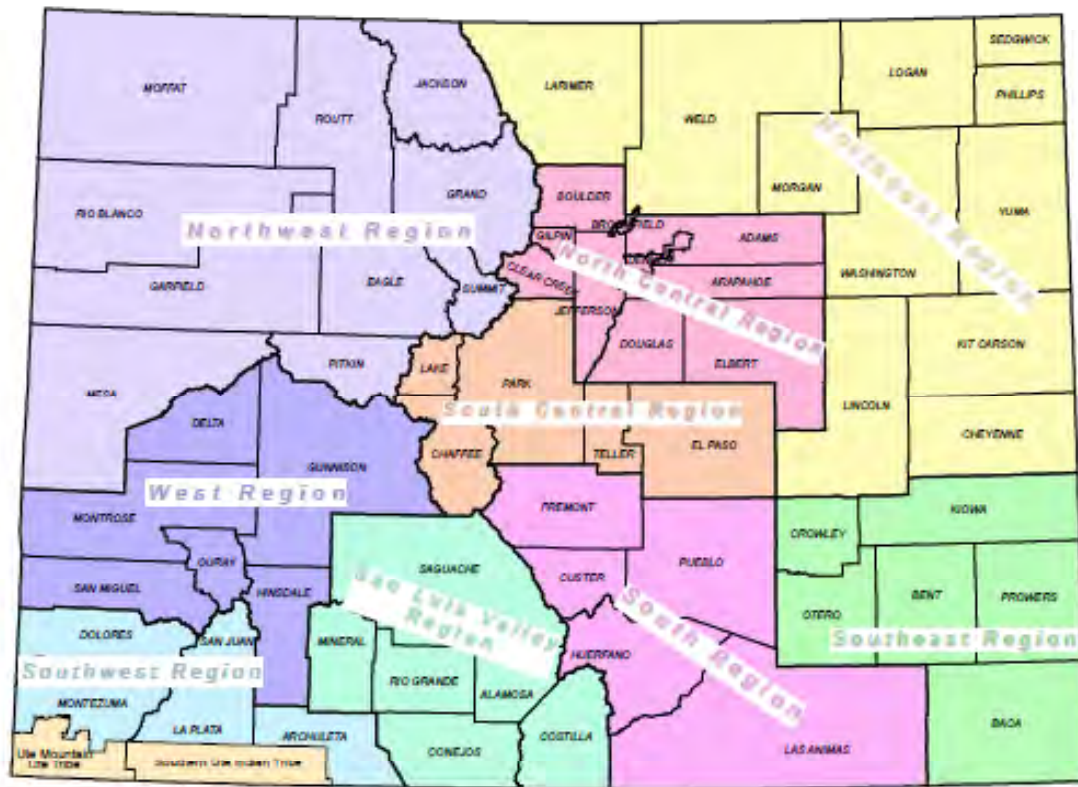
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# All Hazards Regions



Colorado's Nine All-Hazard Regions



Colorado is a “system of systems”

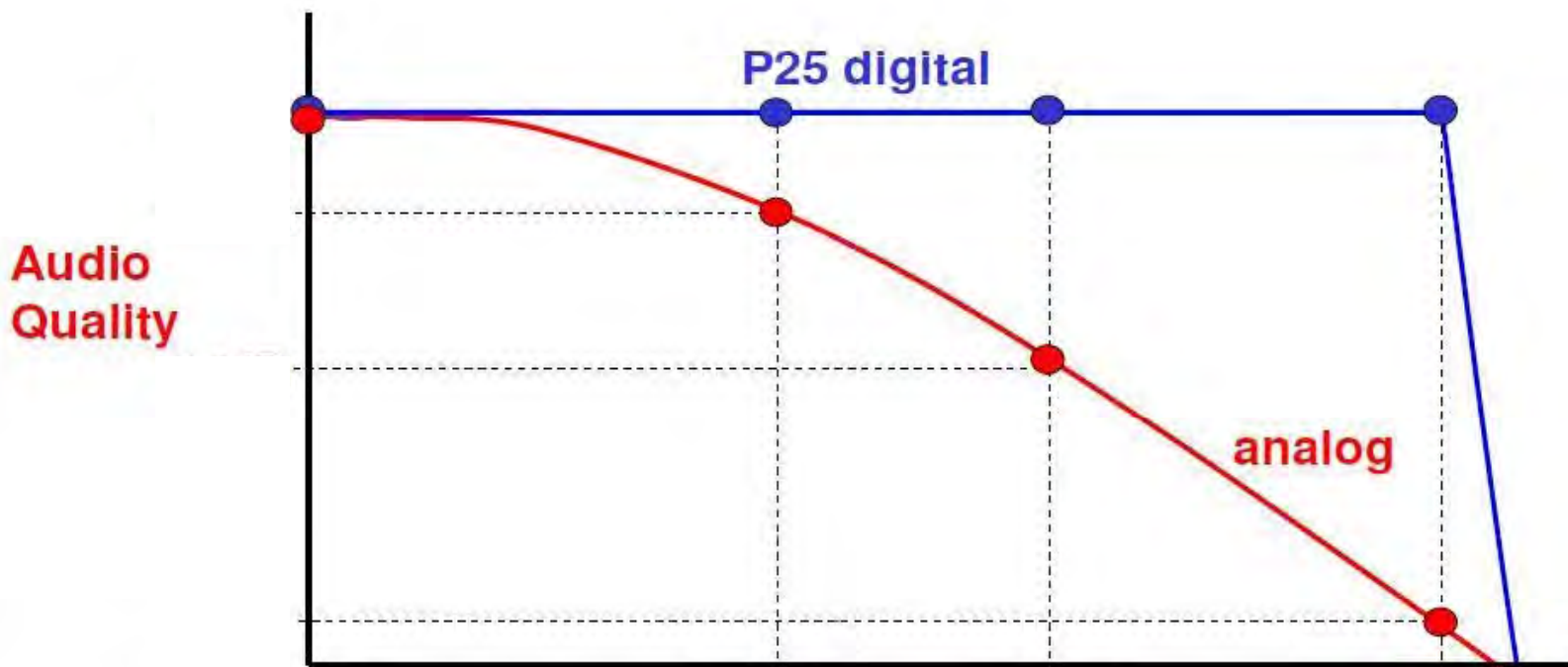
- Statewide DTRS
- Metro Area EDACS
- Conventional VHF
- Conventional UHF
- Conventional 800
- Digital Simulcast VHF

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# Analog vs Digital



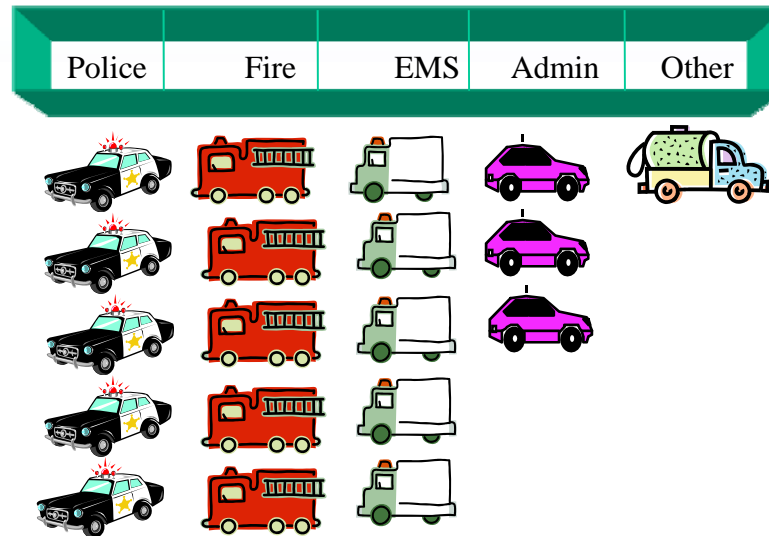
**DISTANCE From SITE**



# Conventional Radio Operation



Conventional Repeater Radio System



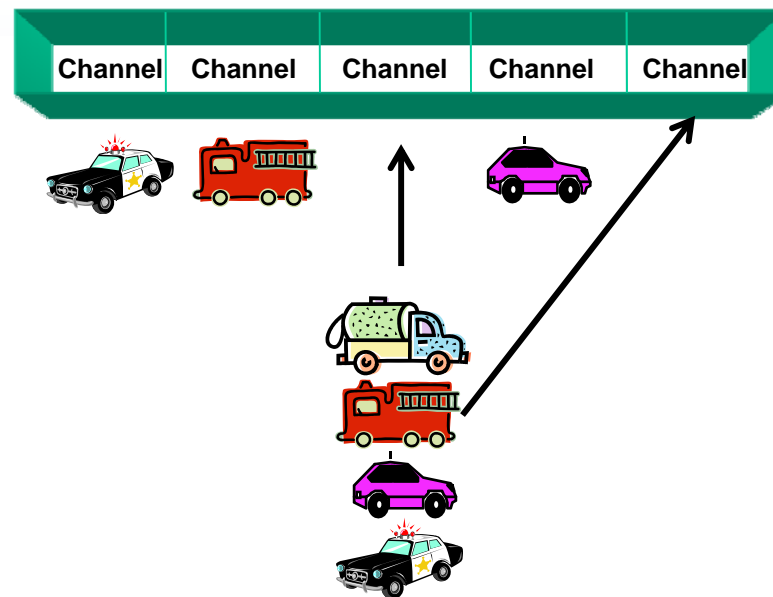
Similar to a grocery store line, users are assigned to one channel/repeater/antenna site. Whoever is in front gets the service.



# Trunking Radio Operation



Basic Trunking Operations



Like a bank teller line, you need services that any “teller” can provide. The person at the front of the line is helped by the next available “teller”.



## CONSOLIDATED COMMUNICATIONS NETWORK OF COLORADO (CCNC)



- **CCNC purpose - manage, promote, and propagate the DTRS**
  - technical guidance
  - policies and procedures
  - coordinate between members
- **CCNC does not control DTRS funding.**
  - Annual membership fee covers CCNC operating budget





## DTRS -Who Pays?

- State Ownership – 52%
- Local Government Ownership – 48%
- System Software Upgrades
- System Hardware Upgrades



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