



San Joaquin County Operational Committee Meeting

San Joaquin County Public Safety Agencies
Robert J. Cabral Agricultural Center
June 7, 2011

Agenda

- Opening Statement
 - ❖ Chief Information Officer Jerry Becker
- Radio Master Plan Update
- County Narrowbanding Update
- Questions

Opening Statement

- Regional progress on the Radio Master Plan
- Implementation of Narrowbanding

Master Radio Communications Plan

- Background of the Plan
- Usage of the Radio Communications System
- Update on the status of the Plan

How the System is Used

Law Enforcement	Local Government
Patrol Vehicle	Road Crews
Officer Portable	Emergency Services
Mobile Computing	Emergency Hazardous Response
Custody	DA Investigators
Animal Control	OES
Undercover/SWAT	Park Maintenance

Master Radio Communications Plan

➤ Members

San Joaquin County

City of Stockton

City of Ripon

City of Lodi

City of Tracy

City of Manteca

City of Lathrop

City of Escalon

13 Rural Fire Districts

➤ Goals

- ❖ Address the Federal Communications Commission (FCC) mandated migration to narrowband communications platform by January 1, 2013
- ❖ Provide interoperable communications between public safety and general government agencies for emergency communications in daily activities and disaster situations

Master Radio Communications Plan

- Phase I – Establish and upgrade radio communications sites to support the countywide Public Safety Communication system.
- Phase II – Establish a countywide public safety digital simulcast infrastructure by upgrading three additional sites serving as the building block for interoperability to add all public safety agencies.

- Phase III – Convert the public safety digital simulcast infrastructure to 450 MHz trunked technology to allow for the migration of other public safety agencies to the Countywide system
- Phase IV – Add the City of Lodi's public safety channels to the system in a trunked mode and public safety field equipment for all public safety agencies except the City of Stockton, which will be added in Phase V.
- Phase V – Add the City of Stockton's public safety channels to the infrastructure and install the communications equipment needed to complete the project.

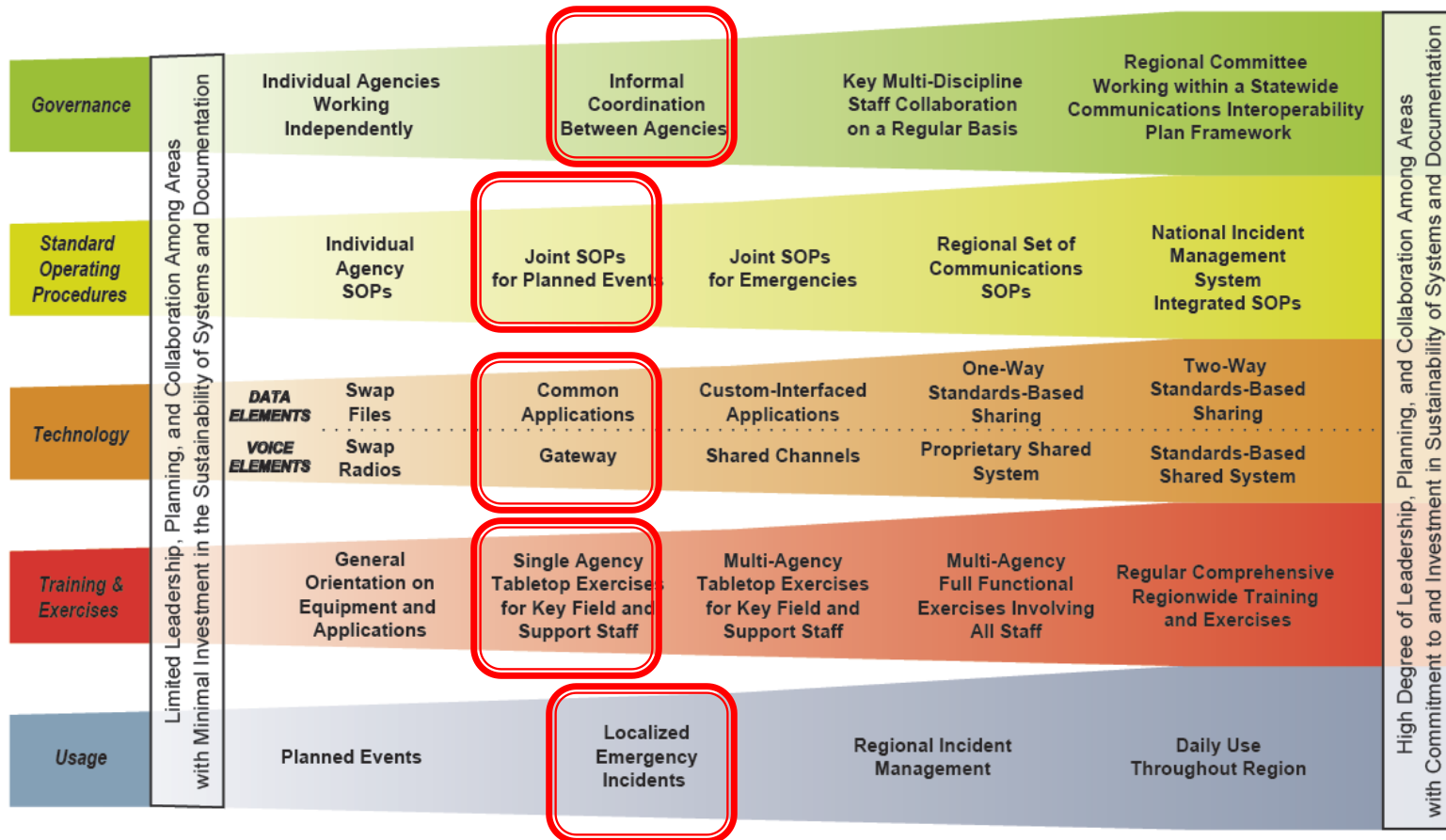
Radio Communications Year 2000

- The County had 12 radio communication sites
- Technology in use:
 - ❖ Analog Quantar Base Stations
 - ❖ Megastar Microwave
 - ❖ Partial OC3 network for data
 - ❖ Most subscriber radios were limited to 16 channels in 25 KHz analog operation.



Interoperability Continuum

YEAR: 2000



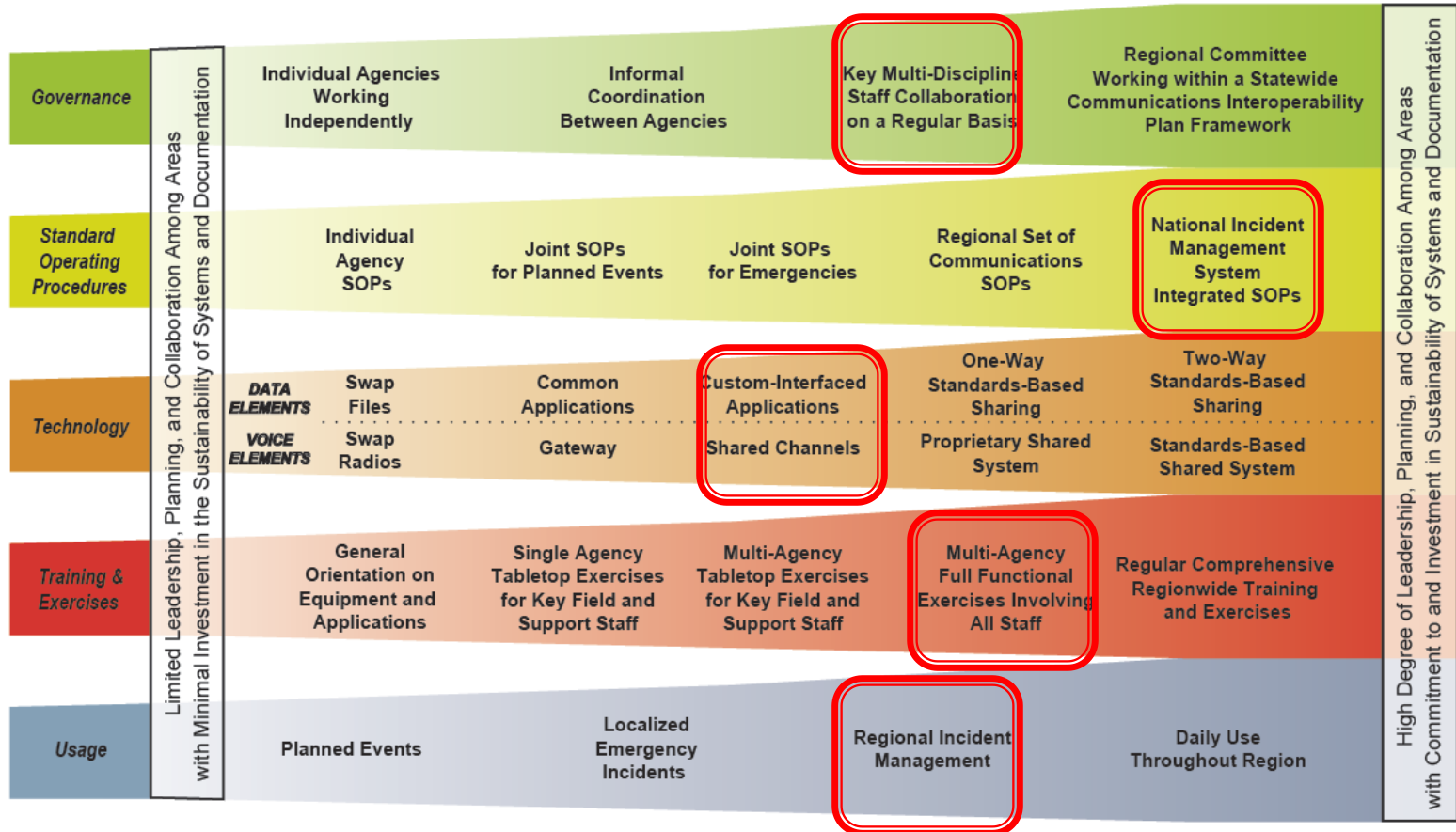
Radio Communications Year 2011

- Construction of new towers:
 - ❖ Agricultural Center
 - ❖ South County
 - ❖ Future tower sites at North County and Port of Stockton are in progress. Agreements for use of two locations in the Corral Hollow area.
- Upgraded two microwave links
 - ❖ Future microwave upgrades in progress:9
 - ❖ New P25 radios: 781 portables; 232 mobiles
- Nearly all Public Safety radio systems are narrowband P25 capable.
- TICP version 1.0
- Procured new narrowbanded frequencies

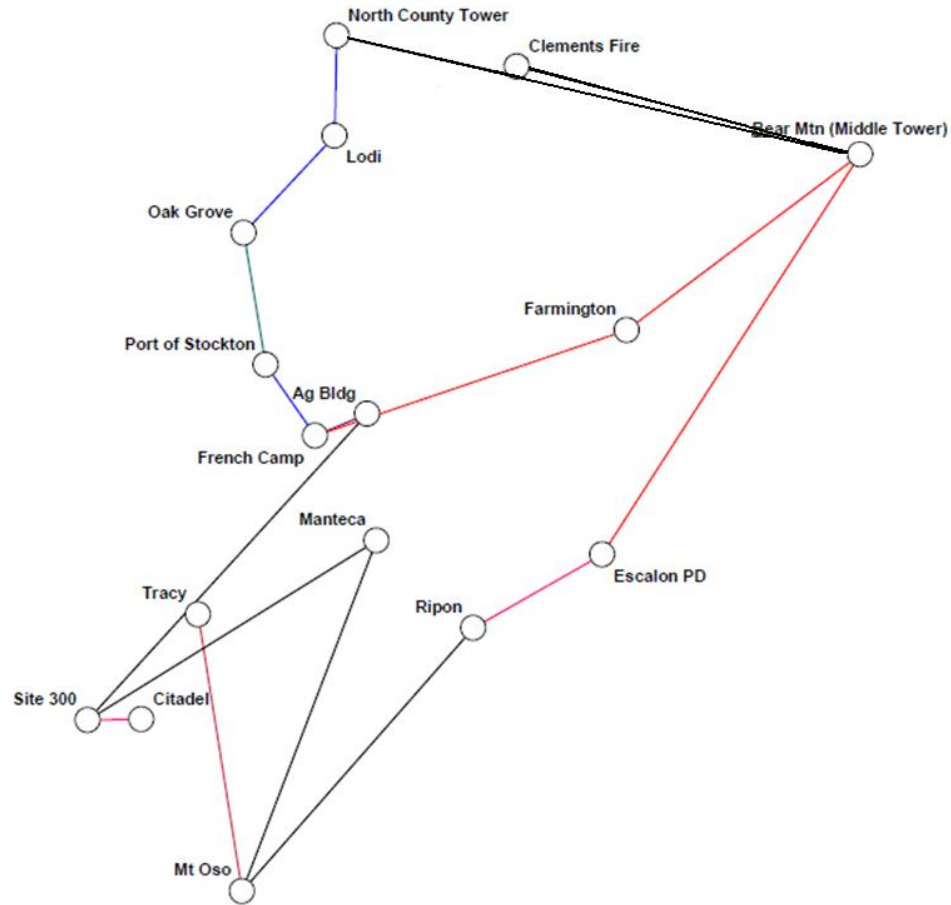


Interoperability Continuum

YEAR: 2011



County Microwave sites for 2011



Factors that Have Changed Since 2000

- Cost for a trunking system for San Joaquin County has significantly increased.
- Quantar series equipment will no longer be available as of September 2011.
- New trunking systems will require network connectivity.
- SJCJRUG purchased new VHF radios to comply with 12.5 kHz requirements.

Trunking

- Interoperability
 - ❖ Within San Joaquin County
 - ❖ Possible connections to neighboring Counties
- Added frequency capacity through “Talk Groups”

Narrowbanding Project

On January 1, 2013, all public safety and business industrial land mobile radio systems operating in the 150–512 MHz radio bands must cease operating using 25 kHz efficiency technology, and begin operating using at least 12.5 kHz efficiency technology. This deadline is the result of an FCC effort that began almost two decades ago to ensure more efficient use of the spectrum and greater spectrum access for public safety and non–public safety users.

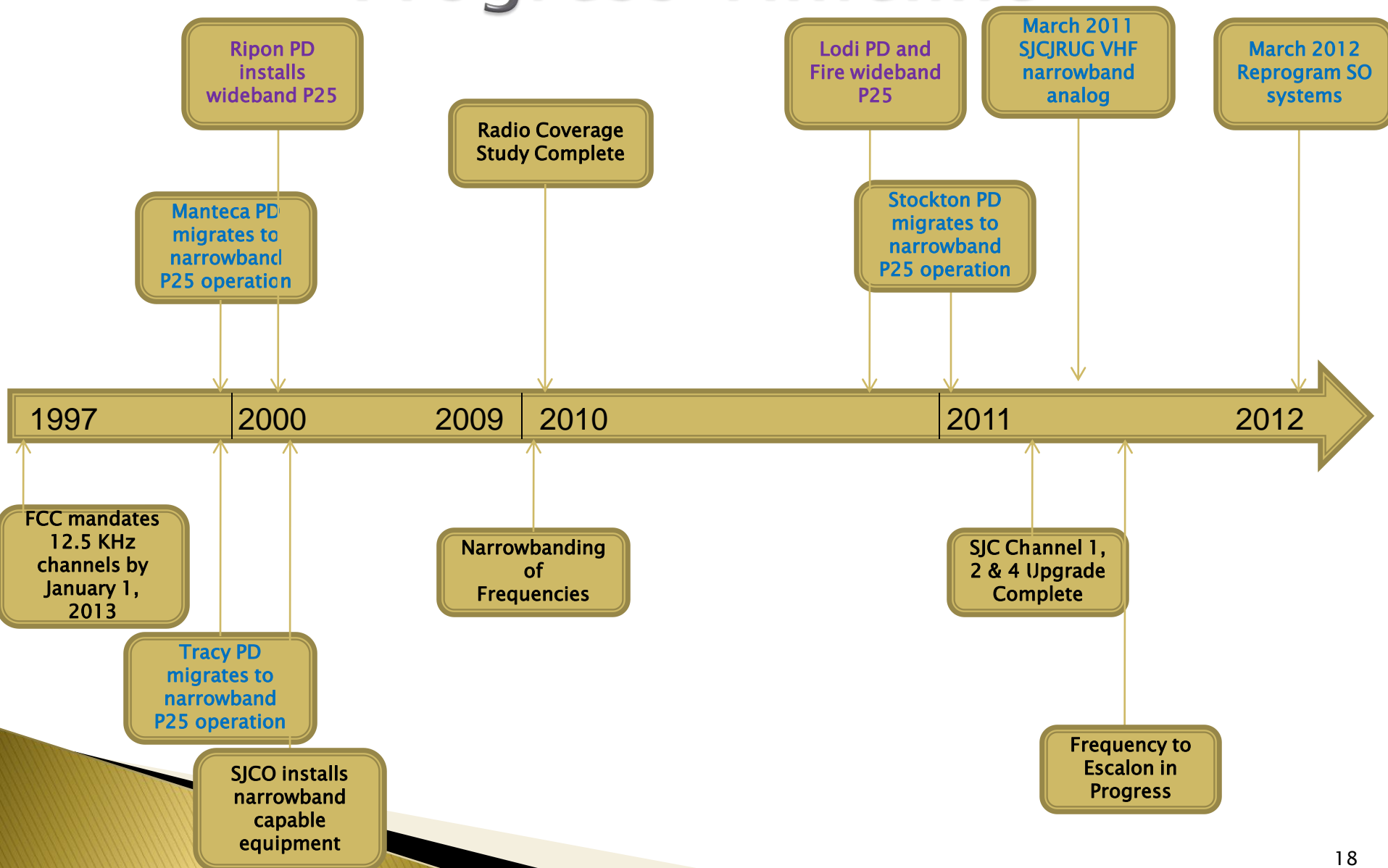
-Federal Communications Commission-

Current Status of Narrowbanding

- Project Plan Elements
 - ❖ Upgrading non P25 sites/channels
 - ❖ Narrowbanding of the County's frequencies
 - ❖ Programming Mobile/Portable Radios

**The County is targeting
March 2012 to Go-Live !**

Progress Timeline



Narrowbanding Project

- Outstanding Work
 - ❖ Channel 3 Simulcast
 - ❖ Bailiff Channel
 - ❖ Main Jail Channel
 - ❖ Ad Seg Channel
 - ❖ Honor Farm Channel
 - ❖ Juvenile Hall Channel
 - ❖ Local Government Channel
 - ❖ Reprogram all subscribers by March 2012

Work in Progress

- Tower construction: North County and Port of Stockton
- Microwave upgrades
- Linear Simulcast of SO Channel 3 with purchase of a K-switch, and MCC7500 consoles
- Mt. Oso, install new shelter and tower
- Purchase core/subscriber equipment for P25 Phase I requirements
- Escalon PD migration from VHF to UHF in progress

QUESTIONS

