SVRIA
Enhancement of Public Safety Communications Systems
Operability & Interoperability

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(Councilmember – City of San Jose District 1)

Silicon Valley Regional Interoperability Authority
Key Objectives

- Enhance the ability of public safety field personnel to communicate with each other (both voice and data)
- Improve capabilities (better systems)
- Reduce costs through improved planning, implementation and management of resources
- Create a regional consortium effort
SVRIA History

SVRIP was the legacy organization
- Successful in obtaining grants
- Built out ECOMM and BayMACS
- Engaged in strategic planning
- Needed a governance structure and sustainability plan

SVRIA (2010+)
- A Joint Powers Authority or JPA
- Governance
  - Board of Directors
  - Working Committee
- Shared funding formulas based on population and use
Distinction Between Operability and Interoperability

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Examples of gaps

- More than 20 different public safety voice radio systems in the County today on various frequencies
- CAD systems and data bases that are not sharing information with each other on a daily basis
- Insufficient capacity and capabilities to accommodate voice and data needs in a large scale critical event
- Mutual aid communications challenge's. High speed chase and felony in progress examples.
- Fire mutual aid request example
- Major wild fire, mud slides, hazmat incident, airplane crash, earthquake scenarios
Interoperability Continuum

**Governance**
- Individual Agencies Working Independently
- Informal Coordination Between Agencies
- Key Multi-Discipline Staff Collaboration on a Regular Basis
- Regional Committee Working within a Statewide Communications Interoperability Plan Framework

**Standard Operating Procedures**
- Individual Agency SOPs
- Joint SOPs for Planned Events
- Joint SOPs for Emergencies
- Regional Set of Communications SOPs
- National Incident Management System Integrated SOPs

**Technology**
- **DATA ELEMENTS**
  - Swap Files
  - Common Applications
  - Custom-Interfaced Applications
  - One-Way Standards-Based Sharing
  - Two-Way Standards-Based Sharing

- **VOICE ELEMENTS**
  - Swap Radios
  - Gateway
  - Shared Channels
  - Proprietary Shared System
  - Standards-Based Shared System

**Training & Exercises**
- Limited Leadership, Planning, and Collaboration Among Areas with Minimal Investment in the Sustainability of Systems and Documentation
- General Orientation on Equipment and Applications
- Single Agency Tabletop Exercises for Key Field and Support Staff
- Multi-Agency Tabletop Exercises for Key Field and Support Staff
- Multi-Agency Full Functional Exercises Involving All Staff
- Regular Comprehensive Regionwide Training and Exercises

**Usage**
- Planned Events
- Localized Emergency Incidents
- Regional Incident Management
- Daily Use Throughout Region

High Degree of Leadership, Planning, and Collaboration Among Areas with Commitment to and Investment in Sustainability of Systems and Documentation
BayMACS

- **History**
  - Available since September 2003 (<$500K)
  - Second expansion phase in 2005 (~$250K)
  - Third phase in 2011/12 (~$300K)
  - Grant funded; low maintenance cost

- **Uses**
  - Inter-agency and inter-discipline exercises
  - Recent example – Permanente cement plant shooter search
Ecomm Digital Microwave System
Silicon Valley Regional Communications System or SVRCS Stage 1
CAD to CAD Project
(think of it as building a data interoperability exchange)

• We are buying a two-way data exchange tool
• First application will be CAD to CAD
• Other data bases can be linked in the future (Police centric examples)
• CAD to CAD scheduled to begin in third Qtr. of 2012
• Will be a 24 month initiative implemented in phases.
TransMACS & VoIP Phone System
TransMACS Trailer

- Transportable Mutual Aid Communications System trailer
- Provides a self-sufficient protected environment for the ACU-1000 radio gateway device connecting public safety radio systems (VHF, UHF, 700/800 and RACES)
- Enhanced performance through more robust antenna structure
- Provides dedicated work space for support technicians
- Will be used for joint exercises, multi-jurisdiction events and critical incidents until such time that the SVRCS is constructed
ACU-1000 Cross Band Repeater
Proposed TransMACS Trailer
EComm IP Emergency Phone System

- An IP based phone system connected through the E-Comm microwave system to PSAPs, Emergency Operations Centers, three hospitals and to Santa Cruz County
- Provides backup communications in the event of a public phone system failure and/or overload (2009 South County fiber optic cable cut)
- Initial system will provide one to three phone lines per agency plus phones at each EComm site
Future Challenge's

• Awareness

• Longevity of consortium effort (keeping partners engaged)

• Funding to build out the regional radio system

• Funding to sustain these critical systems:  
  • Maintenance  
  • Upgrades  
  • Replacement
Questions?