

Interoperable Communications Projects

Bay Area Homeland Security Strategy

Goal 3 – Strengthen Communications and Interoperable Communications

Objectives:

- **Increase Communications Capabilities**
- Strengthen Emergency Public Information and Warning Capabilities
- Enhance EOC Management

Bay Area UASI Interoperability

Two-Way Radio Strategy

- **Mission Critical (No Single Point of Failure)**
- **Project 25 (P25) Standard**
- **700/800 MHz Frequency Band**
- **System of Systems Approach**
- **Infrastructure Only (Backhaul & LMR)**
- **Subscriber Equipment purchased with Non-UASI Funding**
- **Multi-Vendor Subscribers**

P25 Infrastructure Project Funding

System	Total Cost	BAUASI*	Other Funding	Funded To Date	% Funded	Funding Needed
BayLoop	\$6.7M	\$4.236M	\$1.498M	\$5.734M	100	\$0.00
BART Under	\$1.8M	\$1.5M	\$300K	\$1.8M	100	\$0.00
Oakland P25	\$7M	\$6.8M	0	\$6.8M	97	\$200K
EBRCS	\$70M	\$14M	\$54M	\$68M	97	\$2M
SMRIC	\$26.8M	\$8.6M	\$6.7M	\$15.3M	56.7	\$11.5M
SVRCS	\$60M**	\$11.6M	\$6.1M	\$17.7M	29.5	\$42.3M
Marin County	\$46.6M**	\$2.77M	\$5M	\$7.77M	16.67	\$38.83M
San Francisco	\$40M**	\$5.46M	0	\$5.46M	13.65	\$34.54M

*UASI, COPs, PSIC 2006-2011

**Estimate provided by sub-recipient

BayLoop

\$4,235,710

Goals:

- Provide Backhaul Connectivity to the Bay Area Public Safety Agencies
- Expand Backhaul Connectivity throughout the Cap-Bay Planning Area

Specifications:

- 19 Communications Sites
- Dual OC3
- OC3 #1 Broadband Traffic (155 mbps)
- OC3 #2 Channelized Traffic (84 T1's)
- Mission Critical
(Loop and Path Protected)

Possible Applications:

- Connectivity between P25 Systems
- PSAP to PSAP Communications
- Information Sharing (Coplink & ARIES)
- County to County Connectivity

Current Status:

- MERA, Solano County & SFO Operational
- Final Acceptance Scheduled for Fall 2011
- Network Administrator TBD
- One Outstanding MOU



Oakland P25 System

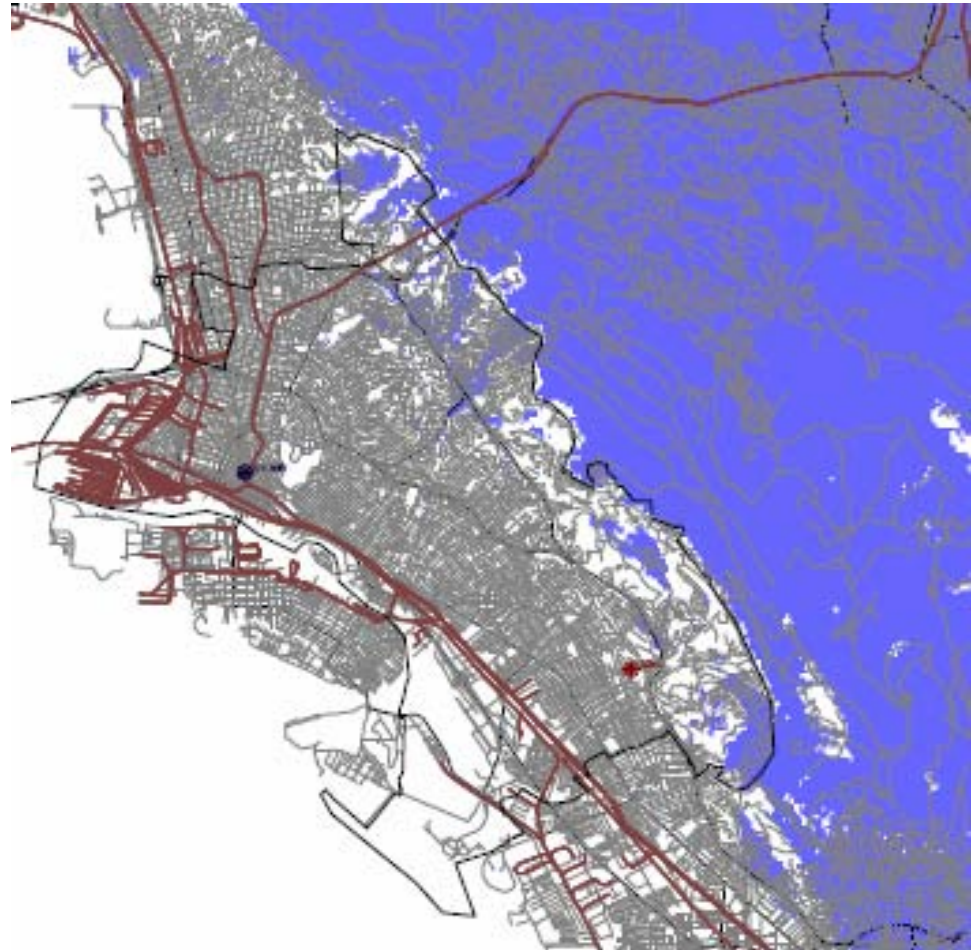
\$6,806,479

Specifications:

- 3 Site P25 Simulcast Design
- 10 Channels
- 800 MHz Spectrum
- 2 Dispatch Centers
- Redundant Master Switches
- Service Area - 56 Sq Mi
- Population - 390,724

Current Status:

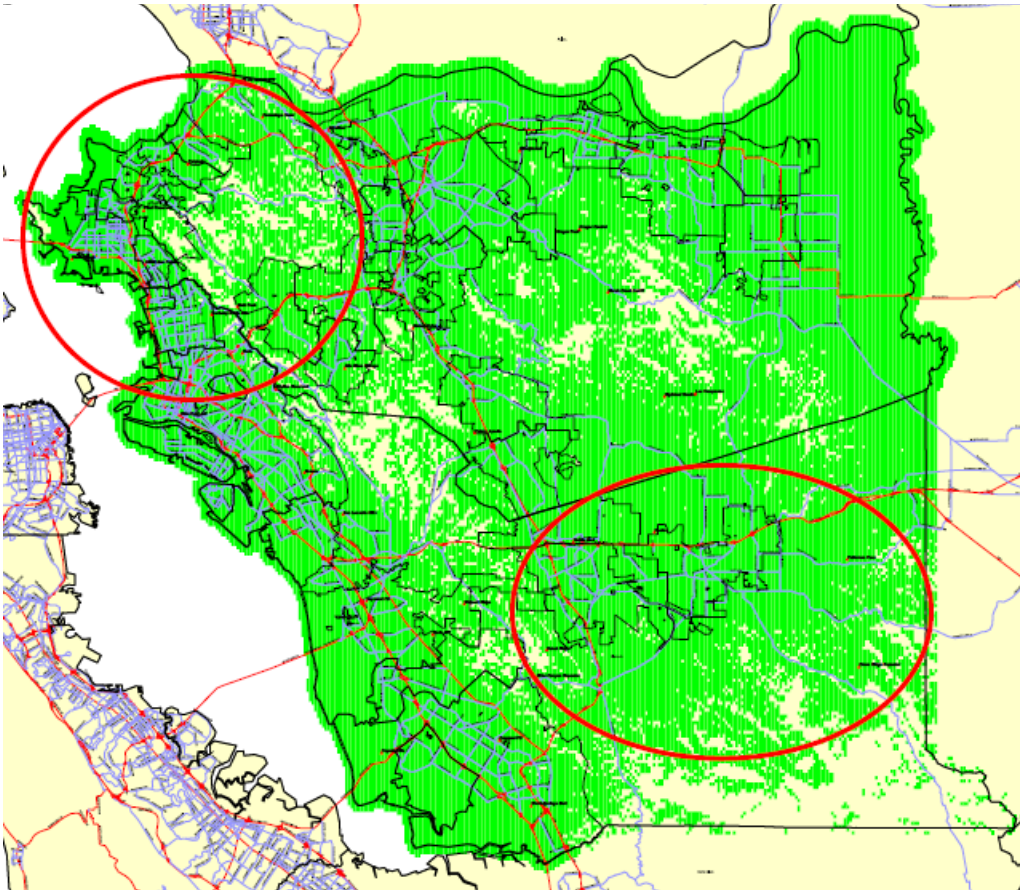
- 2 P25 Simulcast Sites w/7 Channels
- 1 P25 Standalone Site w/3 Channels
- 1 P25 Standalone Site w/1 Channel
- 2200 Public Safety Subscribers
- Target Completion - Dec 2011



Coverage Prediction

EBRCS - East Bay Regional Communications System

\$14,020,055



Coverage Prediction

Specifications:

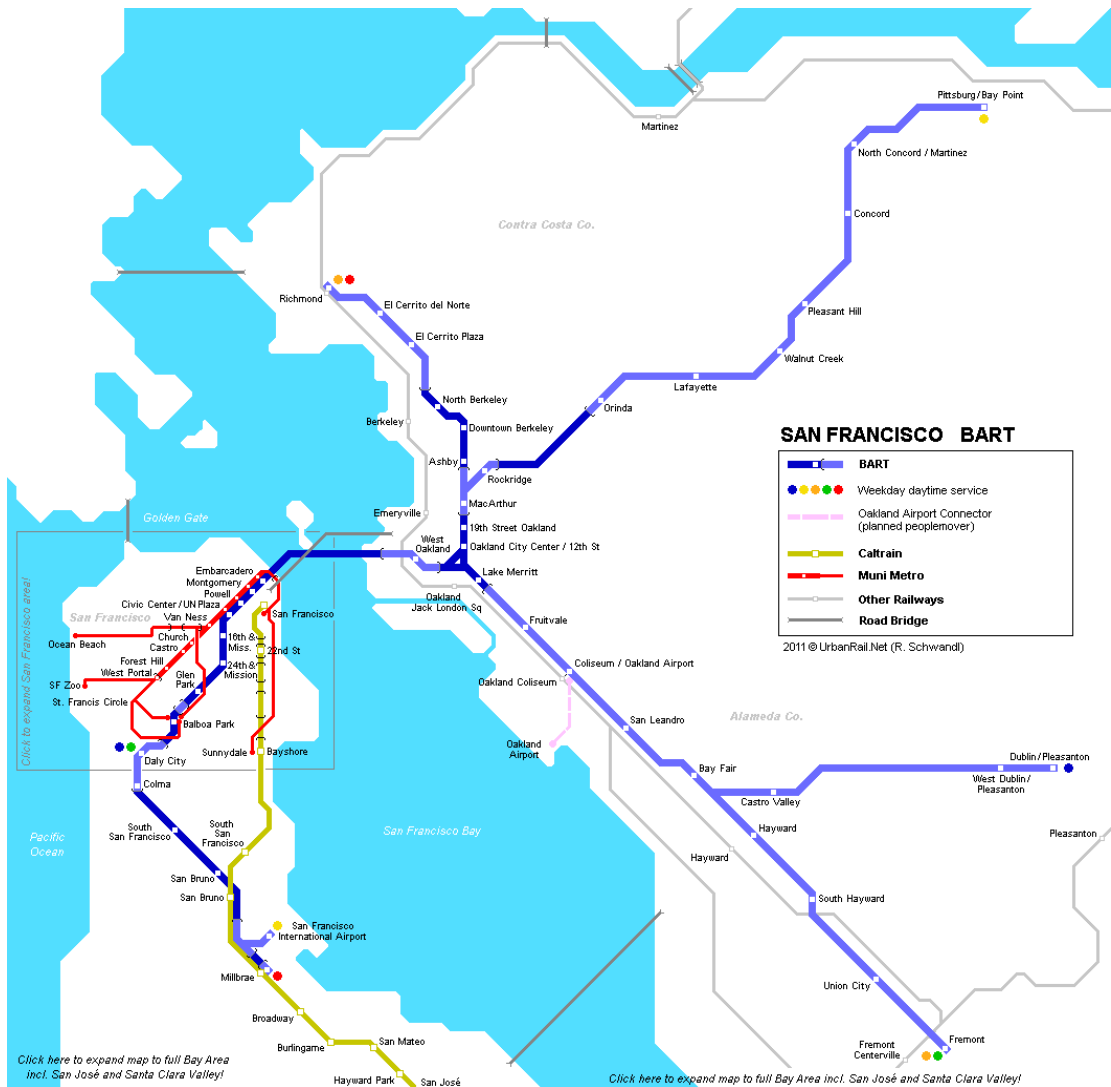
- 36 Site P25 Design
- 6 Simulcast Cells
- 6 Stand Alone Sites
- 700 & 800 MHz Spectrum
- 37 Dispatch Centers
- 12,000 Contracted Subscribers
- Service Area - 1,500 Sq Mi
- Population – 2,500,000

Current Status:

- 20 Sites Installed
- West CCC & East ALCO Operational (1st Qtr 2012)
- Scheduled Completion – Summer 2012

BART Underground P25 System

\$1,500,000



Specifications:

- 31 Miles Underground
- 2 Redundant Radio Sites
- 6 Channels
- P25 800 MHz
- ISSI (Inter RF Subsystem Interface)

Current Status:

- Scheduled Completion Fall 2011

SMIRC – San Mateo Interoperable Radio Communications

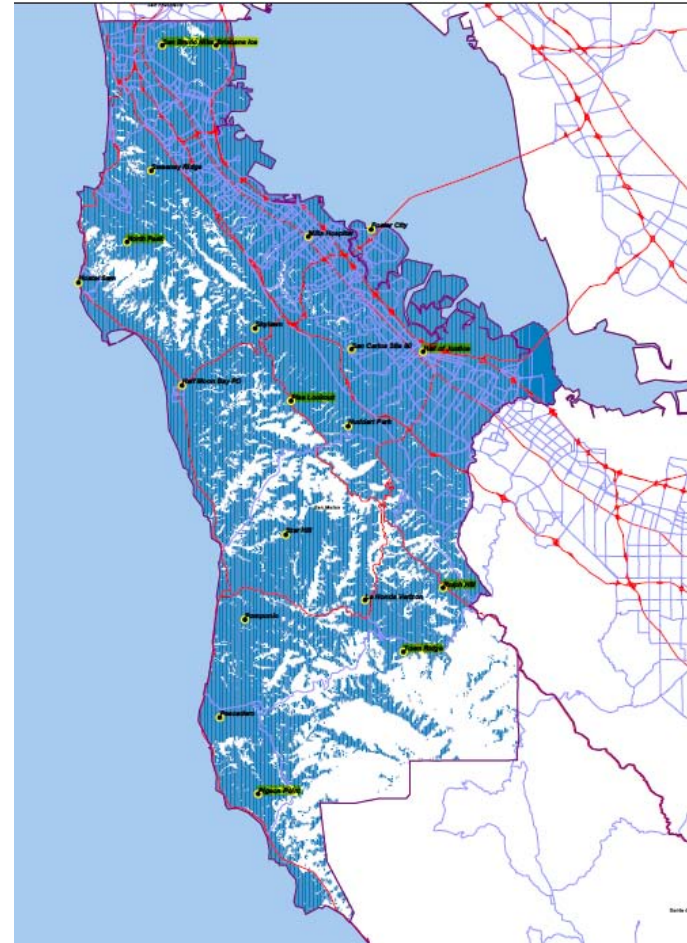
\$8,624,444

Specifications:

- 20 P25 Site Design
- 10 Channels
- 700 MHz Spectrum
- Service Area - 741 Sq Mi
- Population - 718,451

Current Status:

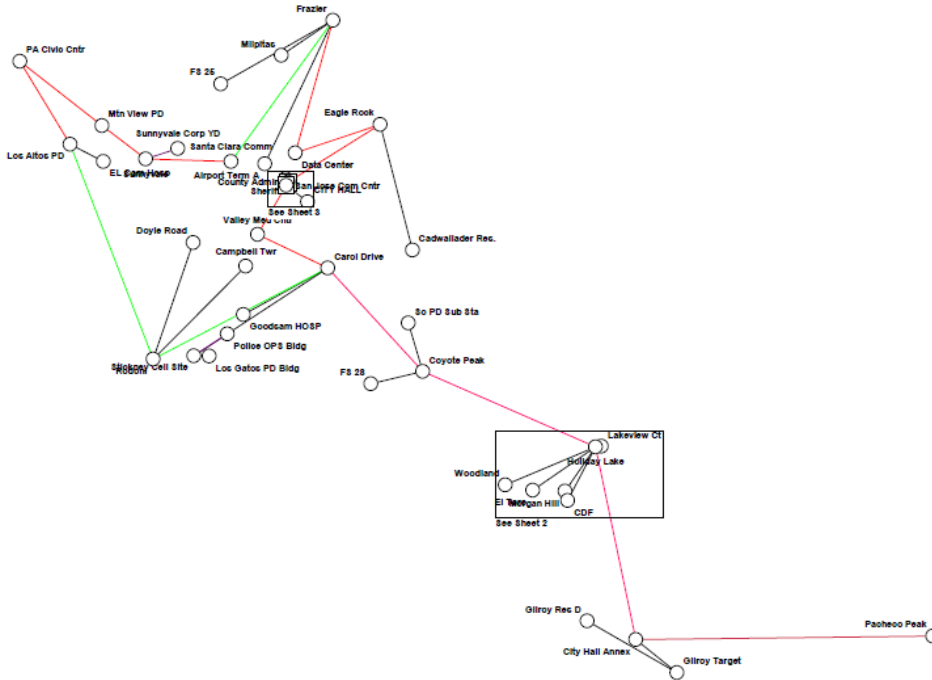
- 8 Sites Completed
- UASI 2010 Funding for 4 Sites
- UASI 2011 funding for 2 Sites
- Scheduled Completion – TBD



Coverage Prediction

ECOMM - Emergency Communications (Microwave)

\$10,882,624



Specifications:

- 41 Sites
- OC3 Channelized with Ethernet Capability
- Service Area - 1,304 Sq Mi
- Population – 1,781,642
- Mission Critical
(Loop and/or Path Protection)

Current Status:

- Every City has something riding on ECOMM
- San Jose, Morgan Hill, Gilroy, Los Altos have 100% of their Public Safety Communications Systems on ECOMM
- South & North County Tactical Channels
- Ethernet Applications are just starting to be deployed, i.e. CLETS

Marin County P25 Conventional Overlay

\$1,670,652



Coverage Prediction

Specifications:

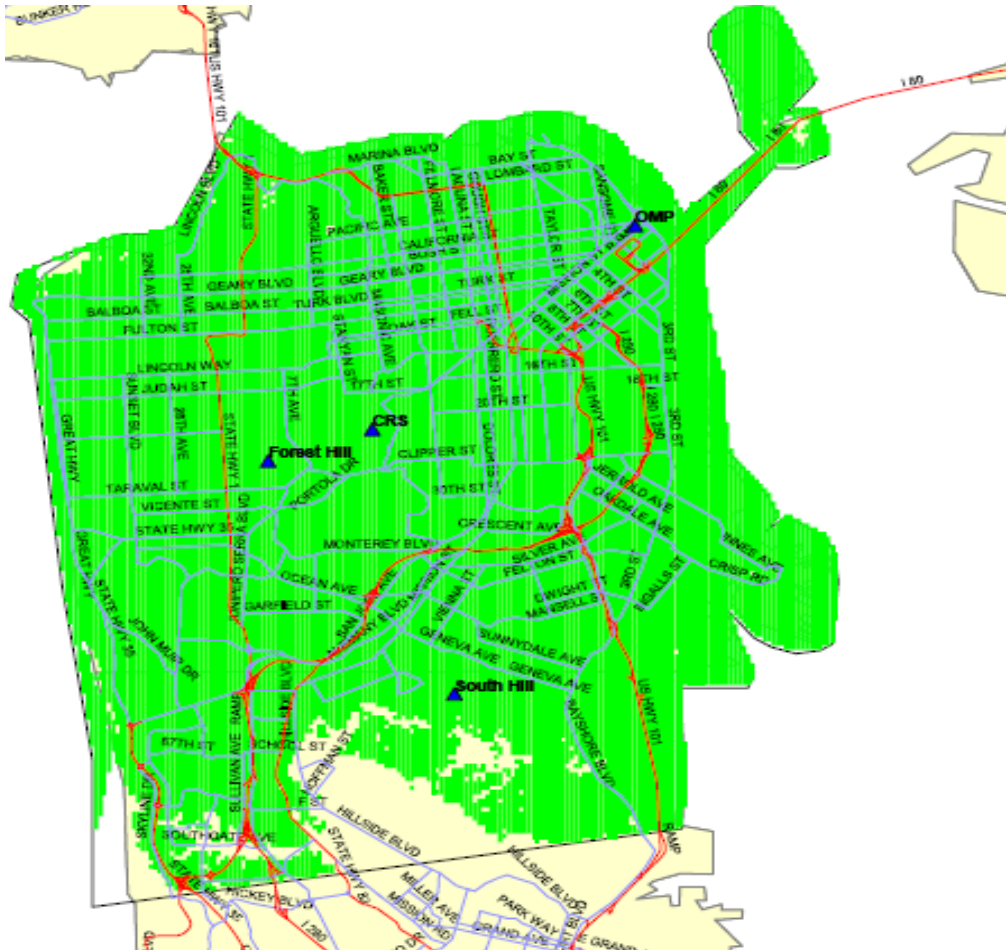
- 32 National 700 MHz Interoperability Channels 9 Sites
- 1 Call Channel Simulcast
- 9 Multi-Channel Base Stations, 12 CH max
- Service Area – 828.2 Sq Mi
- Population – 252,409

Current Status:

- Vendor Selected
- Equipment Ordered
- Completion Date – Jan 2012

San Francisco P25 Mutual Aid Interoperability

\$5,459,732.00



Coverage Prediction

Specifications:

- 4 Site P25 Simulcast Design
- 6 Channels
- 700 MHz Spectrum
- Service Area – 46.9 Sq Mi
- Population – 805,235

Current Status:

- System Accepted
- Ready for use
- P25 Capable Subscribers are being procured

Bay Area UASI Grant Funding Summary

Grant	Grant Award	Interop EQ	% of Total
COPS 2007	\$7,645,314	\$7,645,314	100.00%
PSIC 2007	\$18,625,222	\$18,625,222	100.00%
IECGP 2008	\$1,374,422	\$0	0.00%
IECGP 2009	\$1,374,422	\$748,711*	54.47%
IECGP 2010	\$1,227,632	\$245,000 *	19.96%

*Marin Co. - Narrow Banding \$225,000, Santa Cruz Co. \$129,000 & Alpine Co. - Hawkins Peak \$639,711

Bay Area UASI Interoperability Equipment Funding Summary

Grant	Grant Award	Interop EQ	% of Total
UASI 2006	\$22,656,000	\$6,731,101	29.71%
UASI 2007	\$27,304,000	\$10,916,171	39.98%
UASI 2008	\$29,724,000	\$8,866,317	29.83%
UASI 2009	\$32,510,600	\$7,535,000	23.18%
UASI 2010	\$34,262,130	\$4,554,152	13.29%
UASI 2011	\$34,262,130*	\$5,372,000	15.68%
UASI Total	\$180,718,860	\$43,974,741	24.33%

*UASI 2011 Funding has not been awarded

P25 Interoperability Funding %

