



Cal OES

GOVERNOR'S OFFICE
OF EMERGENCY SERVICES

PUBLIC SAFETY COMMUNICATIONS

Mission

Governor's Office of Emergency Services (Cal OES)

- **We protect lives and property, build capabilities, and support our communities for a resilient California.**
- **We achieve our mission by serving the public through effective collaboration in preparing for, protecting against, responding to, recovering from, and mitigating the impacts of all hazards and threats.**

Cal OES Goals

- 1** Anticipate disasters and enhance prevention capabilities to protect our State from all hazards and threats.
- 2** Strengthen California's ability to plan, prepare for and provide resources to mitigate the impacts of disasters, emergencies, crimes and terrorist events.
- 3** Effectively respond to and recover from both human-caused and natural disasters.

4 Enhance the administration and delivery of all state and federal funding, and maintain fiscal and program integrity.

5 Develop a united and innovative workforce that is trained, experienced, knowledgeable, and ready to adapt and respond.

6 Strengthen capabilities in public safety communication services and technology enhancements.

Mission

Public Safety Communications (PSC)

- PSC is dedicated to the preservation and protection of human life and safety by delivering reliable and dependable communication services, allowing California's public safety agencies to keep connected during times of crisis.
- PSC's mission is to ensure that quality telecommunications services and commodities are provided to all state agencies in the most cost-effective, efficient, and timely manner. This includes maximizing the use of state resources, and the consolidation and joint use of telecommunications systems and services where operationally, technically, and economically feasible.

PSC Goals

1 Provide excellent customer service and satisfaction

2 Deliver competitive technical services and effective use of technology

3 Integrate public safety radio communications to achieve statewide interoperability

4 Replace aging 9-1-1 infrastructure with innovative next generation technology

5 Support a unified public safety broadband network

6 Upgrade California's public safety microwave network

Boards and committees provide information and support to PSC

Public
Safety
Radio
Strategic
Planning
Committee

California
State
9-1-1
Advisory
Board

California
Statewide
Interoperability
Executive
Committee

Public Safety Radio Strategic Planning Committee

Public Safety Radio Strategic Planning Committee (PSRSPC) addresses the need for public safety communications interoperability among the state's public safety departments by:

- 1) Developing and implementing a statewide integrated public safety communications system that facilitates interoperability among state public safety departments as well as other first responder agencies as the committee deems appropriate.
- 2) Coordinating shared uses of public safety spectrum consistent with decisions and regulations of the Federal Communications Commission (FCC).

California State 9-1-1 Advisory Board

The State 9-1-1 Advisory Board advises the Governor's Office of Emergency Services regarding;

- 1) Policies, practices, and procedures for the California 911 Emergency Communications Branch;
- 2) Technical and operational standards for the California 911 system consistent with the National Emergency Number Association (NENA) standards;
- 3) Training standards for county coordinators and Public Safety Answering Point (PSAP) managers;
- 4) Budget, funding, and reimbursement decisions related to the State Emergency Number Account;
- 5) Proposed projects and studies conducted or funded by the State Emergency Number Account;
- 6) Expediting the rollout of Next Generation 9-1-1 technology.

California Statewide Interoperability Executive Committee

The California Statewide Interoperability Executive Committee consists of:

- the planning chair, and co-chairs from each of the four CalSIEC Planning areas. Each Planning area has an established governance structure for interoperable communications that is comprised of emergency responders and representatives of public safety agencies within the operational area including state agencies.

The California Statewide Interoperability Executive Committee is tasked with:

- managing the interoperability spectrum
- developing governance on behalf of all California public safety emergency responders

PSC Branches

Radio Communications Branch

California 9-1-1 Emergency Communications

Technical Services Branch

Funding

The Radio Communications and Technical Service Branches are self-supporting through a fee-for-service/cost recovery model

The California 9-1-1 Emergency Communications Branch is primarily funded through the State Emergency Telephone Number Account (SETNA). However, its Tactical Communication Unit is funded through Emergency Management Performance Grant (EMPG) program.

The Radio Communications Branch

The Radio Communications Branch (RCB) is responsible for the design, installation, maintenance, and repair of public safety radio communications systems and networks used by the State of California's public safety agencies.

Each public safety agency is assigned client representation to provide technical consultation, project management, or guide agencies to the appropriate services that will meet their communications needs.





PSC Radio Shops are located strategically across the state to provide technical services and respond to emergency repairs on a 24 hours/7 days-a-week/365 days-a-year basis. The Branch's services are available to all federal, state, and local public safety agencies.

The branch is equipped with expertise to support and maintain the following:

1. Microwave System Maintenance
2. Handheld Radios
3. Mobile Radios
4. Marine and Aviation
5. Emergency Support
6. Tower and Vault



Public Safety
Communication's sites
are designed to meet
the customers' unique
operational needs with
consideration to
survivability should a
disaster occur.

Emergency power and
redundant equipment
are all major factors
during the design phase
of a communications
system.

The PSC owns and manages 12 radio vault and tower sites statewide and provides services to more than 400 sites across California that are owned or leased by PSC client agencies

(CHP, CAL FIRE, CALTRANS, etc.)

Vaults and tower sites house the equipment and antennas that are the backbone of public safety communications.



CALIFORNIA RADIO INTEROPERABILITY SYSTEM

Cal OES's Public Safety Communications is building the California Radio Interoperability System (CRIS) as the current infrastructure makes it difficult for a responder on one system to communicate with a responder on another system. Many of these radio systems are redundant and antiquated. The CRIS system will:

- Provide seamless, interoperable communications among system users.
- Improve radio coverage to clients whose radio systems are geographically limited.
- Allow radio clients to replace all or part of their legacy system, allowing the State to maintain fewer systems and focus on building one stronger statewide interoperable system.
- Leverage and link to existing state and regional digital trunked radio systems.
- Provide priority for public safety users while allowing non-public safety agencies to use the system.
- Reduce radio programming workload and increase interoperability during emergencies.



California citizens and government agencies depend upon the State's public safety telecommunication systems to conduct routine business and obtain assistance during emergencies.



PSC works behind the scenes to ensure that these essential systems are there when needed.

Past

Do you remember?



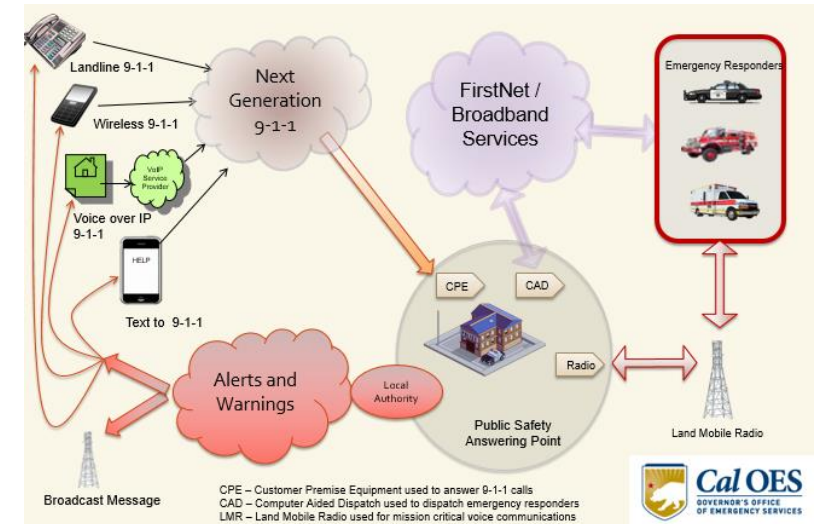
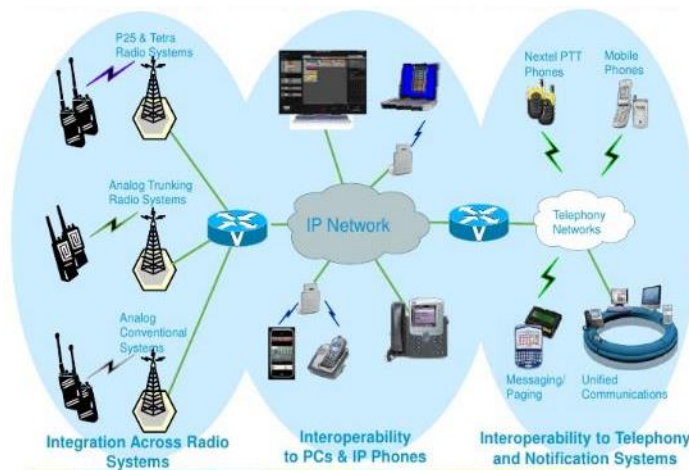
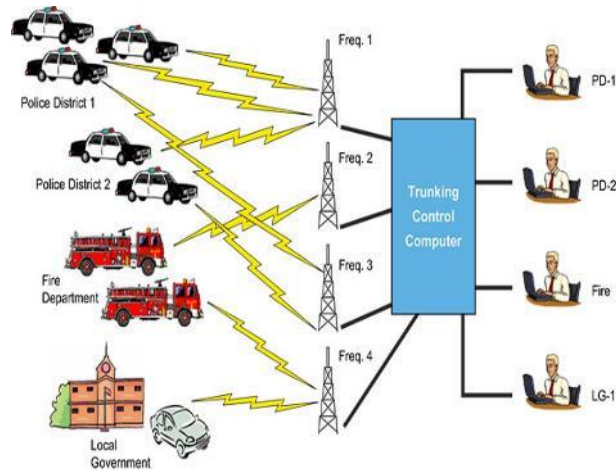
Present

Look how far we have come!



Future

Building better communications!



Technical Services Branch

The Technical Services Branch provides a variety of services to PSC and the public safety agencies it serves. The Branch oversees the California Public Safety Microwave Network (CAPSNET), licensing of public safety radio spectrum, and a host of ancillary services that support PSC's service delivery.





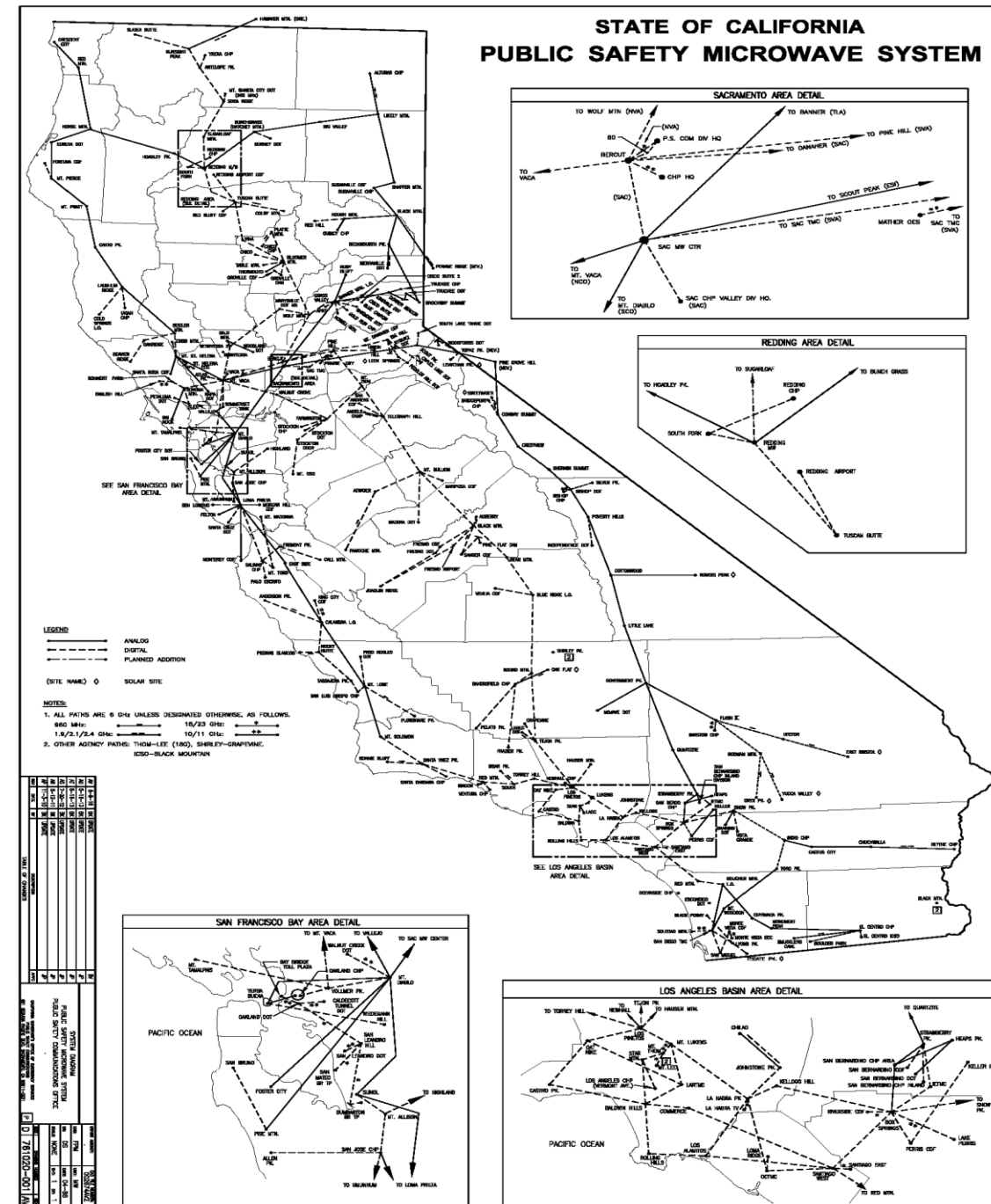
The TSB strives to provide resilient and reliable network solutions and ancillary services that support PSC and the public safety agencies it serves. To support PSC and its client agencies, the branch provides:

- Microwave network engineering to design and implement innovative backhaul technology that meet the performance needs of public safety agencies
- Radio frequency licensing and coordination with the FCC
- Environmental and specification compliance testing of radio technology
- Support services for communications facility agreements, cost recovery, drafting, employee training, and materials management

California's Public Safety Microwave Network (CAPSNET)

PSC has owned and operated the Statewide Public Safety Microwave Network (CAPSNET) for over 60 years.

The system provides reliable microwave circuit connectivity for public safety agencies. Consisting of over 260 physical sites, approximately 300 microwave paths, the system carries over 1,300 circuits serving state, federal, and local agencies and is made up of over 7,000 microwave air miles.



CAPSNET Upgrade

The TSB is currently upgrading CAPSNET from vulnerable legacy technology to modern Ethernet (digital) radios and multi-protocol label switching (MPLS) system technology. The upgrade to newer digital technologies will allow for:

- Redundancy – a fully meshed network instead of point-to-point
- Resiliency – load balancing across multiple devices
- Additional Services - high speed data, voice over internet protocol, and video
- Greater Capacity – able to support 9-1-1 public safety answering points as a backup network



California 9-1-1 Emergency Communications Branch

The goal of the Public Safety Communications 9-1-1 Emergency Communications Branch (CA 9-1-1) is to enable public safety answering points (PSAPs) to provide expedient access to emergency services for all 9-1-1 emergency callers by assisting PSAPs in the administration and funding of this lifesaving resource in their communities and to provide Emergency Communications resources 24/7/365.





The CA 9-1-1 Branch serves as the statewide authority and program manager for policy, technical and operational standards development of California's 9-1-1 Systems including:

1. Management and oversight of the 9-1-1 system
2. Deployment of Next Generation 9-1-1
3. Deployment of Text-to-9-1-1
4. Manages the State Emergency Telephone Number Account
5. First Responders Network and Broadband Services
6. Emergency Support Function 2 and Statewide Interoperability Coordination
7. Emergency Communications Response



Next Generation 9-1-1 In California

While the existing 9-1-1 system has been a success story for more than 40 years, it has been stretched to its limit in the present environment. Unfortunately, it was never envisioned that the current 9-1-1 system would receive calls and data from new and emerging technologies as diverse as what we see today.

Next Generation 9-1-1 will allow for capabilities such as location based routing, policy based routing and dynamic call routing between Public Safety Answering Points (PSAPs).

Applications like text, video, and photos along with continual advancements in communications technology create the desire for a more advanced system to access emergency care.



Emergency Communications Division



Established in 2019 in response to the challenges faced during relentless disasters occurring across the state, the Emergency Communications Division supports and promotes resilient, interoperable communications used to communicate with emergency services and government agencies to keep California safe and secure. The Division increases emergency response capabilities by the Tactical Communication and Broadband Services Units.

How?

By providing strong leadership and concise guidance while managing:

- the integration of broadband data into the 9-1-1 system;
Next Generation 9-1-1 system; and Computer Aided Dispatch;
- leading Emergency Support Function 2 - Communications response efforts;
- coordinating Emergency Communications across the state;
- serving as the Deputy to the Statewide Interoperability Coordinator (SWIC)

Broadband Services Unit

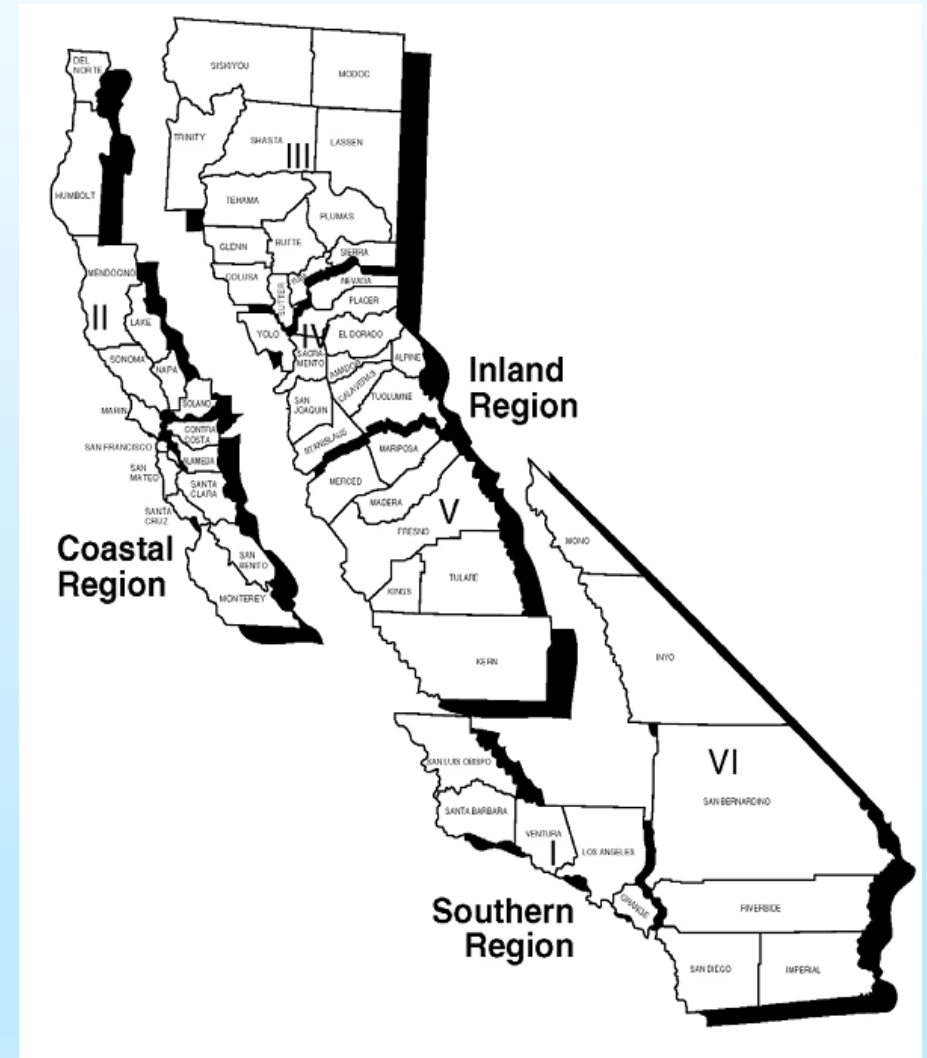
The BSU team consists of four Broadband Service Advisors and one Supervisor. They are actively engaged in public outreach through the Cal SIEC Planning Areas to provide updated information regarding broadband deployment and availability to First Responders across California.

- Assists the Cal SIEC planning areas with annual DHS/CISA Technical Assistance coordination;
- Operationalize the Statewide Communications Interoperability Plan (SCIP) goals and initiatives;
- Staff ESF-2 during State Operations Center activations.

FirstNet works directly with the states to plan and build the nationwide public safety network in each state.

In California, the Governor's Office of Emergency Services (Cal OES) leads the planning effort for FirstNet deployment.

The Assistant Director, Public Safety Communications serves as the State Point of Contact (SPOC) for this effort.





Tactical Communications Unit

Mission:

To provide reliable interoperable communications solutions to our clients and partners ensuring efficient management of disasters and emergencies that occur in the state.

Personnel:

Made up of only six Regional Emergency Communications Coordinators (RECCs), a Supervisor and cadre of 80 volunteers in the Communications Reserve Unit (CRU) they cover the entirety of the State of California.

Responsibilities:

- coordinate and manage use of Interoperability channels;
- assist local operational areas increase communications resiliency by coordinating resources, assist in their planning and mitigation strategies;
- respond to disaster and emergency Mutual Aid requests nationwide;
- provide comprehensive solutions to challenging communication situations.

Assets: Mobile Interoperable Gateway Units(MIGU); Communications Trailers & Vans; Satellite Fly Away Kits; Handheld Satellite Caches; Handheld Radio Caches; Tactical Repeaters; Cell Phones; Mi-Fi hotspots.



The California 9-1-1 Emergency Communications Branch, in concert with all public safety agencies in the State, is dedicated to providing its citizens and its visitors with the best emergency services possible.





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