

**2023 - 2024
Ventura County Grand Jury**



COUNTY *of* VENTURA

Final Report

**Linking First Responders
Ventura County Regional Radio System**

May 22, 2024

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Linking First Responders: Ventura County Regional Radio System

SUMMARY

The ability of first responders to communicate on a common radio system is critical when coordinating a response to a major event. The lives of first responders and the people they serve may be at risk if first responders are unable to call for assistance.

The 2023-2024 Grand Jury researched the readiness, compatibility and use of the radio communication systems first responders employ in the event of emergencies affecting Ventura County. The investigation stemmed from the 2018 Borderline Bar and Grill Mass Shooting in Thousand Oaks, revealing the inadequacies of the communication systems in place at the time.

Since this incident, significant improvements have been made in the ability of first responders to communicate with each other. This report highlights those improvements as well as the remaining challenges.

BACKGROUND

Ventura County Sheriff's Office provides law enforcement for the unincorporated areas of Ventura County and contracts for law enforcement with the cities of Camarillo, Fillmore, Moorpark, Ojai and Thousand Oaks. The cities of Oxnard, Port Hueneme, Santa Paula, Simi Valley and Ventura have their own police departments.

First responders to the Borderline incident included the following:

- **Ventura County Sheriff's Office (VCSO)** At the time of the Borderline incident, 11 uniformed deputies and two sergeants were assigned to patrol Thousand Oaks. Multiple deputies from other contract cities responded to the incident.
- **California Highway Patrol (CHP)** Four CHP personnel responded. In addition to scene and investigative assistance, they assumed administrative responsibility for the officer-involved shooting. (Note: CHP is a state agency primarily involved in traffic control. However, it does have the ability to communicate with local emergency responders if they patch through dispatch.)
- **Oxnard Police Department (OPD)** On-duty officers responded Code 3 (lights and siren) to the incident site approximately 20 miles away.

- **Simi Valley Police Department (SVPD)** Seventeen officers were dispatched, including K-9 and SWAT officers. Two SVPD dispatchers and a dispatch supervisor assisted with transferring calls and sharing information about victims still hiding inside the Borderline Bar and Grill.
- **Ventura County Community College District Police Department (VCCCDPD)** One officer responded from the Moorpark College campus.
- **Ventura County Fire Department (VCFD)** Seven fire engines and three support companies totaling 53 personnel responded. All fire and medical-related calls were managed by the department's regional Fire Communications Center.
- **Ventura Police Department (VPD)** Eight on-duty officers and the on-duty watch commander responded. Five of those responding personnel were members of the SWAT team.
- **Ventura County Emergency Medical Services (VCEMS)** When responding to emergency medical services in the case of a disaster in the county, VCEMS is the lead agency. During this response, VCEMS personnel were assigned to the incident command post to coordinate medical and ambulance response, patient tracking and medical liaison. (Ref-01)

The Sheriff's After-Action Review of the Borderline Mass Shooting states: "When a multi-agency team is deployed in critical incidents, [the agencies must] provide for radio interoperability or sufficient team members who can communicate directly with the agency having primary jurisdiction for the incident." (Ref-02)

Radio communication is crucial in facilitating coordination among first responders during a crisis incident, especially when there are numerous responding agencies on the scene. Radios must have the capability to perform and must be operated appropriately by users. To avoid missing critical pieces of information, first responders must adopt a stringent, disciplined approach to communication. First responders must communicate in mutually understood terminology that is delivered clearly and succinctly. Situational updates must be provided in real-time to keep those on the scene and enroute informed of evolving conditions. (Ref-03)

The Office of Emergency Services (OES) is a division of the VCSO comprising emergency managers with experience from a variety of backgrounds, including law enforcement, fire, planning, finance and technology experts. OES is responsible for the day-to-day administration of the county's preparedness, mitigation response and recovery programs. OES is also responsible for the development and maintenance of the county's emergency operations plan, maintaining the county's

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Emergency Operations Center (EOC) and coordinating EOC activities during a disaster. This team maintains readiness for emergencies. (Ref-04)

Prior to the Borderline incident, various departments within the County of Ventura, including Information Technology Services Department (ITSD) and OES, saw the need for and began taking steps to implement a regional radio system, the Ventura County Regional Radio System (VCRRS). They planned to make this system available to emergency responders and other government agencies throughout Ventura County. Its development is briefly described below. (Ref-05)

- In 2012, Congress set aside the 700 MHz band for public safety radio use. (Ref-06)
- In 2015, the Board of Supervisors (BOS) expressed support for a plan to develop a countywide regional radio network to enhance multi-agency interoperability and provide greater channel capacity for the existing Very High Frequency (VHF) system. The Federal Communications Commission (FCC) allocated 20 frequencies to the county. (Ref-06)
- In 2016, ITSD presented a five-year plan to expand the regional radio system by providing six additional transmission sites, bringing the total to 16 towers throughout the region. (Ref-06)
- From 2016 to 2022, five sites were outfitted with 700 MHz equipment. (Ref-06)
- In March 2020, COVID delayed the proposed new regional radio system. (Ref-06)
- In 2021, the county requested a five-year extension from the FCC for existing frequencies to ensure continued use of the system. (Ref-06)
- On June 20, 2023, the BOS approved \$32,239,081 to upgrade the existing county radio system, improving clarity, coverage, reliability and to provide additional channels and cellular service. The planned participants for this system include the Sheriff's Office and contract cities, the District Attorney's Office and the Probation Agency. The OPD, VPD, California State University Channel Islands Police Department and the Community College District Police Department will also be included. (Ref-05)
- On October 1, 2023, the BOS adopted a Memorandum of Agreement (MOA) for the proposed Regional Radio System. (Ref-07)
- On March 23, 2024, the final appropriations bills in the federal budget for fiscal year 2024 were signed into law. (Ref-08)

This funding includes:

\$963,000 for the Ventura County Regional Public Safety Radio Project

\$963,000 for the City of San Buenaventura (Ventura) Public Safety Communications System Upgrade Project

\$67,000 for the City of Simi Valley 911 Live Implementation Project. (Ref-09)

When completed, the Ventura County Regional Radio System (VCRRS) will provide improved service to the unincorporated areas of Ventura County as well as to the VCSO contract cities. VCRRS can include "interoperability, virtually unlimited concurrent conversations, clearer reception, encryption, location services, prioritized radio traffic and cellular redundancy, which will also supply streaming video and over-the-air programming." (Ref-05)

The cities of Oxnard and Ventura have agreed to be part of the VCRRS and have purchased compatible radios. (Ref-10)

Port Hueneme and Santa Paula are in the process of developing a Memorandum of Understanding (MOU) to present to their city councils for consideration to join the VCRRS. (Ref-10)

The City of Simi Valley has decided to independently upgrade its communication system and will not participate in the VCRRS. (Ref-10)

METHODOLOGY

The Grand Jury interviewed leadership and staff from numerous city and county agencies. Discussions, including e-mails, were held with management from OES, VCFD, first responders from various cities and dispatch personnel.

The documents reviewed included the following:

- 2018 Borderline Bar and Grill Mass Shooting Public Safety Response After Action Review (Ref-01, Ref-02)
- 2018 Hill and Woolsey Fires Emergency Response After Action Review (Ref-11)
- Critical Incident Review: Active Shooter Incident at Robb Elementary School, Uvalde, Texas (Ref-03)
- Standard Operating Procedure for VCSO, including the duties and responsibilities of the OES (Ref-04)
- Written communications from the County of Ventura Board of Supervisors (Ref-05, Ref-06, Ref-07)
- Grant funding sources to offset the cost of the radios (Ref-12)
- Radio frequency assignments from the Federal Communications Commission (FCC) (Ref-06)
- Numerous online sources

DISCUSSION

Ventura County

The Borderline After Action Review Report recommended: "Training should include a focus on communication that ensures simple, plain broadcasts that accurately and completely relay relevant information." (Ref-13)

Incident Command System (ICS) is a standardized, on-scene, all-risk incident management concept. This allows its users to adopt an integrated organizational structure to match the complexities and demands of single or multiple incidents without being hindered by jurisdictional boundaries. ICS has been adopted by all first responders in Ventura County. (Ref-14)

Portions of the radio communications systems currently in use by some agencies within the county are more than 20 years old. These systems lack updated features and cannot penetrate some buildings. In addition, service does not extend to some geographic areas. The VCRRS will significantly reduce these shortcomings. (Ref-10)

As of May 2020, the Department of Justice requires encryption for communication of personally identifiable information. Encryption, which protects individuals' privacy, is not available with some existing systems. The VCRRS will allow for encryption when required. (Ref-15)

Unincorporated Areas and VCSO-Contracted Cities

The OES has taken the lead in ensuring improved communication between first responders by coordinating the construction of communication towers at strategic locations. The unincorporated areas within Ventura County and all cities that contract with VCSO for law enforcement are included in this new system, the VCRRS. (Ref-10)

At the September 12, 2023, BOS Meeting, Agenda Item 53, the BOS approved an \$11,647,462.57 contract to purchase Motorola devices:

- 993 APX NEXT radios
- 501 APX 8500 radios
- 374 APX N30 radios for use in the jails (Ref-07)

The APX NEXT radio can switch automatically to Wi-Fi and cellular when necessary, while APX 8500 radios can switch to Wi-Fi. The APX series radio can provide encryption when necessary. (Ref-10, Ref-16)

OES has developed a suitcase-size interface for the VCRRS between the APX Next radio and a satellite system. This serves as a link from a command center to the VCRRS when the command center is out of range of either the radio system or cellular coverage. (Ref-10)

Multiple funding sources are available for the initial capital investment of the radios. The cost to each agency for participating in the system is a monthly subscription paid to OES, which includes tower maintenance. (Ref-10, Ref-12)

OES has created an advisory group from each VCRRS-participating public safety entity. Each member has only one vote, preventing dominance by any one organization.

The advisory group is presently composed of six members:

- California State University Channel Islands Police Department
- Ventura Community College Police Department
- Oxnard Police Department
- Ventura Police Department
- United Water Conservation District
- County of Ventura (Sheriff, District Attorney and Probation) (Ref-10)

City of Oxnard

In July 2022, the City of Oxnard purchased 160 Motorola APX 8000 portable radios and 247 APX 8500 mobile radios to replace an aging system. The prior mobile radios were known to have both building penetration problems and reception issues in certain areas. These radios are compatible with the VCRRS equipment. The VCRRS will largely eliminate the current problems as well as provide clearer audio, built-in GPS and playback capability for last messages. (Ref-10, Ref-17)

The city's purchase of the new radios was aided by participating in a mutual agreement with Los Angeles County, reducing their cost. (Ref-17)

Multiple sources confirmed that the Oxnard City Council has agreed to join the VCRRS and will participate in the VCRRS advisory group. (Ref-05, Ref-10)

City of Port Hueneme

Port Hueneme's current radio communication system is more than 10 years old. Existing mobile radios are known to have both building penetration problems and reception issues in certain areas. (Ref-10)

The biggest obstacle to the city's joining VCRRS is funding for the new radios. The city's current system is fully paid for. (Ref-10)

A Memorandum of Understanding (MOU) is being developed and will be presented to the city council for consideration to join the VCRRS. (Ref-10)

City of Santa Paula

Santa Paula's radio communication system is aging; it provides communication within the city limits, but performance declines as personnel leave the geographical area. (Ref-10)

The biggest obstacle to the city's joining VCRRS is funding for the new radios. The city's current system is fully paid for. (Ref-10)

A Memorandum of Understanding (MOU) is being developed and will be presented to the city council for consideration to join the VCRRS. (Ref-10)

City of Ventura

The city purchased 168 Motorola APX 8000 radios to replace an aging system. The prior mobile radios were known to have both building penetration problems and reception issues in certain areas. The transition to the new radios is expected to be completed in 2024. (Ref-10, Ref-18)

The purchase of the new radios was aided by grant funding and earmarks from congressional legislation. (Ref-10)

The city will use the March 2024 federal funding "to purchase equipment (dispatch consoles and car radio upgrades) VPD needs to go live on the regional radio system." (Ref-10)

Multiple sources confirmed that the City of Ventura has agreed to join the VCRRS and will participate in the VCRRS advisory group. (Ref-05, Ref-10)

City of Simi Valley

The City of Simi Valley declined to participate in the VCRRS. The city recently upgraded its outdated system with Comm-Line radios rather than Motorola, the radio used in the VCRRS. (Ref-10)

Simi Valley can communicate with other Ventura County agencies using a dispatch "patching" system, which is not as efficient as direct communication. (Ref-10)

The City of Simi Valley plans to install a new communication tower and rehabilitate an existing tower at the city's expense. (Ref-10)

Because of its geographical proximity, the city prefers Los Angeles County as its primary interface rather than Ventura County. (Ref-10)

Ventura County Fire Department

VCFD coordinates all fire and emergency medical services within Ventura County. All county fire stations and all city fire departments are linked by a common communications network. They can communicate with VCRRS as needed. (Ref-10)

VCFD is required to maintain interoperability with CalFire, a state agency. This requires VCFD to remain on the current VHF system. (Ref-10)

FINDINGS

Ventura County Regional Radio System

F-01. Portions of the current systems in use lack upgraded features, cannot penetrate some buildings and are not able to provide encryption as needed.

F-02. A lack of integrated training could cause inaccurate or incomplete information to be transmitted.

City of Oxnard

F-03. Portions of the current system in the City of Oxnard have both building penetration problems and reception issues in certain areas.

F-04. A lack of integrated training could cause inaccurate or incomplete information to be transmitted.

City of Port Hueneme

F-05. Using the current system, first responders in multiple locations may lose communication.

F-06. An MOU for adoption of the VCRRS has not been completed for presentation to the city council.

City of Santa Paula

F-07. Using the current system, first responders may lose communication outside of city limits and in certain geographical locations.

F-08. An MOU for adoption of the VCRRS has not been completed for presentation to the city council.

City of Ventura

F-09. Portions of the current system in the City of Ventura have both building penetration problems and reception issues in certain areas.

F-10. A lack of integrated training could cause inaccurate or incomplete information to be transmitted.

City of Simi Valley

F-11. The system in use by the City of Simi Valley can only communicate with other Ventura County agencies' dispatch using a "patching" system, which is not as efficient as direct communication.

Ventura County Fire Department

F-12. All county and city fire departments, which dispatch emergency medical services, have adopted common technology, providing interoperability without regard to city boundaries. The VCRRS can communicate with all fire departments with no changes.

RECOMMENDATIONS**Ventura County Regional Radio System**

R-01. The Grand Jury recommends that transition to the upgraded system be complete by July 2025 for improved communication throughout the county. (F-01)

R-02. The Grand Jury recommends that OES complete an integrated testing and training plan for all participants of VCRRS by July 2025. (F-02)

City of Oxnard

R-03. The Grand Jury recommends that transition to the VCRRS be complete by July 2025. (F-03)

R-04. The Grand Jury recommends that the City of Oxnard complete an integrated testing and training plan by July 2025. (F-04)

City of Port Hueneme

R-05. The Grand Jury recommends completing and presenting the VCRRS MOU for consideration by the city council by October 2024. (F-05, F-06)

City of Santa Paula

R-06. The Grand Jury recommends completing and presenting the VCRRS MOU for consideration by the city council by October 2024. (F-07, F-08)

City of Ventura

R-07. The Grand Jury recommends that transition to the VCRRS be complete by July 2025. (F-09)

R-08. The Grand Jury recommends that the City of Ventura complete an integrated testing and training plan by July 2025. (F-10)

City of Simi Valley

R-09. The Grand Jury recommends that the City of Simi Valley verify radio interoperability with Ventura County first responders who have adopted the VCRRS by July 2025. (F-11)

COMMENDATIONS

The Ventura County Information Technology Services Department and the Office of Emergency Services are to be commended for their foresight and initiative in developing the Ventura County Regional Radio System and for the independent development of a satellite interface for VCRRS.

RESPONSES

Responses required from:

The following elected officers within 60 days:

Ventura County Sheriff's Office (F-01, F-02, R-01, R-02)

City of Oxnard City Council (F-03, F-04, R-03, R-04)

City of Port Hueneme City Council (F-05, F-06, R-05)

City of Santa Paula City Council (F-07, F-08, R-06)

City of Ventura City Council (F-09, F-10, R-07, R-08)

City of Simi Valley City Council (F-11, R-09)

The following governing body within 90 days:

Ventura County Board of Supervisors (F-01 F-02, R-01, R-02)

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- Ref-09.** Congresswoman Julia Brownley's Office. (2024, March 6). *Brownley Secures \$10.3 Million for Community Projects in the Fiscal year 2024 Spending Package*. <https://juliabrownley.house.gov/brownley-secures-10-3-million-for-community-projects-in-the-fiscal-year-2024-spending-package>
- Ref-10.** Interviews with various Ventura County agencies, including VCSO OES, VCFD, City of Camarillo, City of Fillmore, City of Oxnard, City of Port Hueneme, City of Santa Paula, City of Simi Valley, City of Thousand Oaks and City of Ventura.

- Ref-11.** Ventura County Sheriff's Office, Office of Emergency Services. (2020, January 21). *The Hill & Woolsey Fires Emergency Response After-Action Review*.
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GLOSSARY

TERM

DEFINITION

BOS	Board of Supervisors
CHP	California Highway Patrol
DOJ	United States Department of Justice

EOC	Emergency Operations Center
EOP	Emergency Operations Plan
FCC	Federal Communications Commission
ICS	Incident Command System
ITSD	Information Technology Services Department
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
OES	Office of Emergency Services
OPD	Oxnard Police Department
SVPD	Simi Valley Police Department
VCCCDPD	Ventura County Community College District Police Department
VCEMS	Ventura County Emergency Medical Services
VCFD	Ventura County Fire Department
VCRRS	Ventura County Regional Radio System
VCSO	Ventura County Sheriff's Office
VHF	Very High Frequency
VPD	Ventura Police Department

