Public Safety Consortium Leverages Hexagon Solution to Reduce Crime, Manage Resources

Sonoma County Public Safety Consortium

California, USA

The Sonoma County Public Safety Consortium (SCPSC) encompasses all law enforcement, fire, and EMS agencies serving the citizens of Sonoma County, California.

This district includes Redwood Empire Dispatch Communications Authority, Sonoma County Sheriff's Department, the cities of Cotati, Petaluma, Rohnert Park, Santa Rosa, Sonoma, and the Township of Windsor. Charged with protecting more than a half-million people, these agencies all strive to provide the highest level of service to their communities.

To support this commitment, the SCPSC manages a shared computer-aided dispatch (CAD) and records management system (RMS) used by member agencies. The system allows personnel in any department to communicate directly with each other and share critical information across jurisdictional boundaries.

In addition to the CAD and RMS capabilities, the SCPSC wanted to enhance its analysis capabilities to detect trends and solve crimes. This intelligence was needed to identify high-crime areas, common accident sites, and other locations where public safety incidents occur. The consortium would then use this data for in-depth analysis so all member agencies could take the appropriate measures to improve jurisdictionwide planning and resource allocation.

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>
> **Matthew Harris**
> *SCPSC crime analyst*

Public safety agencies often have limited resources to serve large areas, so providing outstanding service can be a challenge. The ability to easily detect incident patterns and identify areas of abnormal incident frequency can be valuable for resource planning.

To that end, the SCPSC looked for an easy-to-use spatial analysis technology that could:

- Fuse data from CAD and RMS systems
- Discern spatial patterns to better understand where incidents occur
- Correlate these high-risk areas with factors such as time, offense, and other statistics
- Prioritize these areas and the accompanying experience

The solution also needed to identify emerging hotspots to see which areas could be at risk for a specific type of incident.

Overcoming Challenges

- Enable public safety agencies within the consortium to extract the daily data captured from its CAD and RMS
- Provide the ability to collect, collate, and aggregate data to facilitate accurate data analysis using visual tools such as hotspot maps and temporal graphs
- Empower agencies to leverage data to provide a higher level of public service

Realizing Results

To extract and leverage call and incident data, the solution would need to make the data not only accessible, but also easy to understand. The agencies could then collect, collate, and combine data in ways that empower them to improve service and increase safety in their communities.

The consortium selected a Hexagon solution based on two major criteria:

- It can read and use existing Sonoma County maps
- It can pull data directly from the CAD and RMS using an easy-to-understand graphical user interface (GUI)

In addition, the powerful analysis tools such as hot spot and temporal mapping enable agencies to develop plans and improve safety.

Hexagon was charged with implementing the solution and providing the initial training. Since its implementation, agencies have used the system daily for a broad variety of analyses, including mapping drug-and gang-related activities to determine where extra patrols are needed. Crime analysts can also create maps depicting offender locations, and create hybrid documents showing statistics and trends, such as incident types occurring in a geographical area. The documents provide agencies with valuable data, such as historical comparisons and emerging trends, which help solve crimes and optimize resource allocation.

The Hexagon solution has provided numerous benefits, including the ability to provide custom reports to officers and investigators. This allows them to focus their attention on areas of concern and share information with other departments, like the county board of supervisors and city management.

This improved collaboration, both within the consortium and with other departments, has helped reduce the number of crimes, like auto thefts, and increase the number of arrests. Another advantage is the improved ability to provide accurate incident data for purposes like traffic safety grants or other opportunities.

Matthew Harris, crime analyst for the Sonoma County Sheriff's Department, said the Hexagon solution empowers personnel with the information they need and helps the department solve crimes and improve operations.

"As we move into a time of information-led policing, the integrated solution gives us the right tools to extract the data we collect on every incident and use the data analysis to improve the level of service we provide," he said.

Looking Forward

The SCPSC intends to customize and develop current query capabilities using Hexagon's intuitive GUI, including tailored search options that will expand its ability to answer any tactical, strategic, or administrative questions about its data. The consortium also plans to supplement its solution with additional Hexagon capabilities.

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