

California to Track 911 Calls Statewide Through Centralized System

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The three-digit emergency telephone number might be universal across the country, but 911 call centers don't always speak the same language.

At the various call centers -- known as public safety answering points (PSAPs) -- trained operators answer emergency calls and dispatch police, firefighting and ambulance services.

But there is no official standard for equipment configurations or the technology that call centers use for data gathering. And that makes it tricky to compare emergency call statistics -- especially in big states such as California, which has nearly 500 PSAPs and had been using two separate systems, from AT&T and Verizon.

"The interfaces and everything were different," said Andy Nielsen, acting chief of the state's 911 office. "It made it difficult to pull data and compare it."

Now California is deploying a solution that could cut the time it takes to gather the state's 911 call data from months to a matter of minutes. It's called the Emergency Call Tracking System (ECaTS). This secure, Web-based management tool can report on all 911 PSAPs in an entire county, jurisdiction or state, giving clients quick access to key stats: call volume, frequency, type, geographical trends, etc.

Developed by Roseville, Calif.-based Direct Technology, the system is essentially a "universal translator" that takes all the data and converts it to fit in one compatible database, according to Fred Michanie, founder of Direct Technology.

"Over the years, we've developed the technology so it's become more reliable and scalable," Michanie said. "Basically it creates a scorecard of all the PSAPs in the state."

The setup of ECaTS is straightforward. The company, he said, first installs a black box at every PSAP. As soon as a 911 call ends, the live device will capture, compress and encrypt the data, and shoot the information to centralized servers every 15 minutes.

The technology can also track "hot spots," sending e-mails, text messages and other alerts to various PSAPs in case of an emergency. And in a natural disaster, a collaboration module can keep communication lines open between call centers, and a secure Web conferencing option allows them to share videos and applications, and collaborate in ways they never could before.

For \$6 million for the next five years, Nielsen said, the new system will save California at least \$700,000; the state's previous two systems cost \$6.7 million.

Enhancing Emergency Management Response

About 240 million calls are made to 911 in the U.S. each year, according to the National Emergency Number Association. If you were managing the 911 program, traditionally you would have to call all the counties in the state, Michanie said, and those counties would then have to call all the PSAPs to get the basic statistics.

"You're manually stitching all that information to create a statewide report," he said. "The larger the state, the more complicated the effort."

In California, development and implementation of ECaTS was awarded through a competitive process to Verizon and the subcontractor, Direct Technology. The rollout has been in progress and should be completed by October 2010.

In an overview of the centralized data tracking solution, California officials identified the following advantages:

- Comparative data will be available on all reports, which will reflect the call statistics for a single PSAP, and compare averages based on size and proximity. In the future, the system will be able to compare data from the previous year.
- Calls transferred from one PSAP to another can be tracked for investigative purposes. This feature was virtually impossible in the past with two separate systems.
- The state will have standard rules to calculate various measurements like answer times and call durations.
- Call centers may choose to make their data available to other center managers or county coordinators.

The system will also enhance report formatting, in which each report can cover specific periods, automatically compare data, and present the information in textual and graphical format, among other attributes.

These reports will help managers more easily find critical information, such as the 20 busiest hours over an 18-month period or whether 911 calls get answered in 10 seconds or less.

"This new system will give us one reporting system to make it a lot easier for our consultants to evaluate data and make better decisions in terms of funding," Nielsen said. "It really does improve efficiency for the state."

Sponsored by the U.S. Department of General Services, states would need to pay an installation fee and a monthly fee, Michanie said. The costs depend on the size and scale of the

implementation, he said, but it works much like a telephone bill. Along with California, Oregon and Florida have been exploring the ECaTS solution.

"California was really a pioneer," he said. "Now we're taking it out to the country -- and wherever I present, jaws open, kind of like, 'Where have you been all my life?'"