



Commercial Wireless Provides Savings, Speedy Access for LAPD

Concerns about reliability and security have kept public safety agencies from using commercial network carriers in the past. That view is changing as technology improves and agencies begin to partner with commercial carriers for support.

One such agency is the Los Angeles Police Department (LAPD), which, with more than 9,600 sworn officers and 3,000 civilian staff, is among the largest in the nation. Covering approximately 470 square miles with a population of 3.8 million, the department must have reliable, speedy, cost-effective mobile data services. The cost of building a dedicated system to meet LAPD's requirements would be impractical; after reviewing available options, LAPD has turned to a commercial network carrier.

LAPD uses the commercial carrier Sprint for wireless data communications in its field units. LAPD has been using Sprint since 2007 to provide data access services to 1,600 patrol cars, and thus far is pleased with the results.

"We're very satisfied in terms of cost to use the services provided and the bandwidth availability," says Tim Riley, Chief Information Officer for LAPD. "We have better coverage, so that's been extremely beneficial for us as well."

"The Sprint system has been a significant improvement in terms of data speed and resources access," he says. "Our old network was 19.2 kilobytes per second—very small. With Sprint, we have upwards of 800 kilobytes per second. It's huge. The download is 1.2 megabytes per second. So it's a significant improvement in the amount of data that can be sent to the field. We can send photos and fingerprint images back and forth, and use the system for automated report writing, mapping, and access to the department intranet." Officers also will soon have limited access to Internet sites.

The system is used for access to the California Law Enforcement Telecommunications System (CLETS),

which contains information on criminal background checks, Department of Motor Vehicles information, and warrant checks, and connection with the FBI's National Crime Information Center. The system also provides computer-aided dispatch, access to LAPD internal records systems, and access to COPLINK® for information sharing and analysis.

For security purposes, a law enforcement agency in California that has access to CLETS must have a private connection between the agency and the data services provider.

"We use the [commercial] carrier but the service has to ride on a dedicated line. There must be a private connection because of law enforcement sensitive data," Riley says.

The public safety community historically has had concerns about the reliability and security of commercial data services, concerns that have been alleviated somewhat as agencies begin to use commercial carriers.

"The technology has changed," says Peter Small, program manager at the Communications Technologies Center of Excellence (CoE). "There are law enforcement agencies that are using these services and they are working well for them." The CoE is part of the National Law Enforcement and Corrections Technology Center System. NLECTC is a program of the Office of Justice Programs' National Institute of Justice.

With one exception last year, Sprint service has been very reliable, according to Riley.

"Last year, we had 1 day where we had an unplanned outage," Riley says. "Sprint usually notifies us when the service will be down, usually for a few minutes when they do an upgrade. For 1 day, Sprint had a network failure. On that day, LAPD used the old system as backup. Officers can log onto either system."

“It was a specific outage related to our DataLink services in November 2007,” says Stephanie Vinge-Walsh, a spokesperson for Sprint. “Some DataLink customers were affected and some were not. It did not impact wireless phones.”

“DataLink is specifically for our business and public sector customers who need access to data from various locations and within that customer’s own system,” Vinge-Walsh says. “It is for the customer who needs to securely access data from lots of locations at the same time within their own systems.”

She said the outage was specific to one router on the data communications path, and Sprint migrated customers to another DataLink platform. “Coincidentally, we were planning to migrate customers anyway to add more capacity and redundancy. After the outage we continued to migrate customers.”

“Sprint has proven to be just as reliable, if not more reliable, than the old network,” Riley says. LAPD has a solid customer relationship with Sprint, which helps when the department needs additional service.

“We work with them so that if we have a planned event, Sprint will work with us to provide more bandwidth,” Riley says. “They have portable devices to provide additional bandwidth for additional cost, so you can pay as you need it instead of paying every month for service you may not need.”

For example, in preparation for an annual immigrant rights demonstration held each year on May 1, LAPD notified Sprint that it expected more “traffic”—significant usage of the network—so Sprint could provide additional bandwidth. Traffic is the number of bits that are transferred on network connections.

Public safety agencies in the past have contracted with a vendor to build a network to be operated and maintained by the agency. LAPD built its old network at a cost of \$20 million, and continues to maintain it, according to Riley. With Sprint, the agency pays about \$1 million a year to have the commercial carrier available. With the commercial broadband network, LAPD pays a flat fee, with no infrastructure maintenance. The department’s monthly fee rises with each patrol car added to the service.

“In the meantime Sprint has upgraded the network twice and we haven’t paid more,” Riley says.

“When we were considering what to do, we looked at what we had and what was in the marketplace and tried a couple of commercial carriers. Who you choose will depend on coverage, customer service, and cost,” Riley says.

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