



NEWS RELEASE

Department of General Services

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State Tests Enhanced 9-1-1 Emergency Service For Cellular/Wireless Telephone Users

1. What is "enhanced 9-1-1" technology?

Enhanced 9-1-1, currently available only with landline (wired) calls, provides special features in support of emergency call processing. The primary features of enhanced 9-1-1 are the caller's telephone number, address, and routing of calls to the appropriate public safety answering points, based on the caller's location. It is a key component in processing current 9-1-1 emergency calls.

2. How are wireless 9-1-1 calls currently handled?

In California, by statute, wireless 9-1-1 calls are routed to one of 24 California Highway Patrol communications centers. Unlike land-based phone calls, wireless calls do not provide emergency dispatchers with important information such as the telephone number or the caller's location. Obtaining this information verbally can be problematic in times of emergency.

3. Why is enhanced 9-1-1 important for wireless callers?

Wireless enhanced 9-1-1 should help save lives by helping emergency services personnel respond to crises more quickly and efficiently.

Wireless automatic number identification will provide emergency dispatchers with a callback number to use if a 9-1-1 call is disconnected. Wireless automatic location identification will provide dispatchers a starting point (cell coverage area) in locating callers who are disoriented, disabled, unable to speak, or do not know their location. Within a few years this service will be more comparable to landline (wired) enhanced 9-1-1.

4. Where is the pilot taking place?

The pilot is taking place in a 63-square mile area of the San Gabriel Valley in Los Angeles County, with a population of 300,000, and a large number of commuters who travel daily through the area on Interstate 210, and State Route 110. The northern boundary of the trial area is the Angeles National Forest with foothills and rugged mountainous terrain.

5. What is the objective of the LA pilot, and why is it necessary?

The objective is to test the collective ability of carriers and the 9-1-1 network to automatically deliver a wireless caller's 10-digit telephone number and cell site to the appropriate public safety agency. The pilot will provide critical data for cost/benefit analysis and evaluation of technologies, and may be

used as a model for future statewide implementations. The pilot, the most complex test to date of wireless enhanced 9-1-1 service in the U.S., is expected to be completed by the end of 1998.

6. Who oversees the state's current 9-1-1 program and how is it funded?

The Department of General Services (DGS) is responsible for overseeing the statewide Emergency Telephone Number (9-1-1) Program. The 9-1-1 program is funded by a surcharge on telephones utilizing intrastate telephone services in the state.

7. How are 9-1-1 calls handled?

The 9-1-1 program is composed of a network of approximately 475 Public Safety Answering Points designated to provide access to law enforcement, fire, and medical emergency services statewide. However, the CHP's 24 Communications Centers currently receive all 9-1-1 calls placed from cellular phones and other wireless devices.

8. What is the volume of wireless 9-1-1 calls handled by the CHP each year?

Since 1991 the number of wireless 9-1-1 calls handled annually by the CHP has tripled, from 972,000 to 2,786,000 in 1997. Records for the past 12 years (rounded to the nearest 100):

29,000 in 1985;
94,200 in 1986;
171,300 in 1987;
333,600 in 1988;
575,000 in 1989;
747,500 in 1990;
971,700 in 1991;
1,400,000 in 1992;
1,644,700 in 1993;
1,829,100 in 1994;
2,176,400 in 1995;
2,402,700 in 1996; and
2,786,000 in 1997.

9. What role have private sector telecommunications partners played?

Private sector telecommunications partners have been an integral part of this project since its inception more than one year ago. Pacific Bell and GTE are the local dial tone providers in the test area. Pacific Bell also owns switching equipment that selectively routes 9-1-1 calls automatically to the appropriate agency. GTE and Pacific Bell worked closely to ensure that the enhanced 9-1-1 data (the caller's phone number and cell location) is transferred from one carrier's network to the other.

Wireless Carriers (AirTouch Cellular, L.A. Cellular, Pacific Bell Mobile Services, and Sprint PCS) agreed to route their calls through Pacific Bell's enhanced 9-1-1 selective router switching office. This required software and equipment upgrades, and installation of data and voice links to Pacific Bell's switch. Each also partnered with a database provider (XYPOINT, SCC, & Pacific Bell) in order to define and maintain the hundreds of cell sectors needed by the PSAPs. Each of the data base providers is producing detailed reports to the Department of General Services, for evaluating the results of this trial.

GBH Telecom has been hired by the state to provide management information systems reports not otherwise available from the database providers.

Wireless carriers were connected to the new system during the months of July and August 1998. Each also has contracted with the state to ensure that the level of service and support needed in the public safety environment will be maintained.

10. What is the FCC mandate and what are the key milestones?

In July 1996, the Federal Communications Commission (FCC) issued a two-phase order requiring wireless carriers to provide wireless enhanced 9-1-1 services for their customers (FCC Docket No. 94-102):

Phase I: April 1, 1998, the FCC directed wireless carriers to be capable of delivering wireless enhanced 9-1-1 information to public safety answering points, specifically a caller's 10-digit phone number and the cell site/sector location where the call was received.

Phase II: By October 1, 2001, wireless carriers must have the capability to identify the latitude and longitude of a wireless unit making a 9-1-1 call within a radius of no more than 125 meters, (roughly half a block), at least 67 percent of the time.

The FCC mandate only applies to public safety answering points who request the service and are capable of receiving and using the enhanced 9-1-1 information, and only if a cost-recovery mechanism is in place to reimburse carriers for providing the enhanced services.

11. Who are the participants in the Los Angeles area pilot project?

California Highway Patrol
Commissioner Spike Helmick
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Department of General Services
Director Peter G. Stamison
Deputy Director of Telecom, Wendell McCullough, (916) 657-9482

Public Safety Answering Points (PSAPs)

California Highway Patrol, Los Angeles Communications Center
Los Angeles Sheriffs Department's Temple City Station
Pasadena Police Department
Arcadia Police Department
San Marino Police Department
Sierra Madre Department

The PSAP representatives worked together to assign cell sector routing and answering responsibility for the 200+ cell sectors covering the trial area. The PSAPs also coordinated call taker training, call documentation, and trouble reporting procedures.

Private Sector Partners

Air Touch Cellular .

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