

State of California
9-1-1 Operations Manual
CHAPTER IV - WIRELESS 9-1-1 SERVICES

As stated in the “Introduction” to this 9-1-1 Operations Manual (Manual), the State of California, Governor’s Office of Emergency Services, Public Safety Communications, California 9-1-1 Emergency Communications Branch (CA 9-1-1 Branch), is dedicated to providing California citizens and visitors the best emergency services possible. To successfully achieve this commitment, the goal of the CA 9-1-1 Branch is to enable Public Safety Answering Points (PSAPs) to provide the fastest, most reliable, and cost-effective telephone and cellular access to emergency services for any 9-1-1 caller in California. That is, the accessibility of 9-1-1 services from every corner of the state, from any communications device, by anyone in California is essential.

POLICY

In keeping with the goal of the CA 9-1-1 Branch to “*provide the fastest, most reliable, and cost-effective telephone access to emergency services for any 9-1-1 caller in California*”, we have deployed cellular towers to almost every Primary PSAP in California to directly accept 9-1-1 wireless calls within their jurisdiction, where possible, and in agreement with the following policies:

1. In accordance with CA Public Utilities Code Section 2892: Wireless call routing changes shall be determined between the California Highway Patrol (CHP), CA 9-1-1 Branch Office of Emergency Services, and the proposed PSAP. These routing changes shall be determined by these parties (in consultation with the wireless industry, providers of 9-1-1 Selective Routing (S/R) services, and local law enforcement officials) to be in the best interest of the public and will provide more effective emergency service to the public route to 9-1-1 calls. Therefore,
 - a. wireless call-routing changes shall only be submitted to wireless carriers by the CHP, after approval is received from the local PSAP and CA 9-1-1 Branch;
 - b. local agency PSAPs cannot bypass these processes and request wireless carriers to direct-route wireless 9-1-1 calls to their call centers; and,
 - c. wireless carriers will be advised not to bypass these processes and initiate 9-1-1 call-routing changes at the request of local agencies.
2. Wireless 9-1-1 calls are to be direct-routed only to Primary PSAPs.
3. Impacted wireless carriers and local exchange carriers shall notify the CA 9-1-1 Branch of identified potential problem areas and/or costs associated with the direct-routing of wireless 9-1-1 calls to local PSAPs.

BACKGROUND

When wireless cellular telephones were initially introduced in California, their predominant use was in automobiles. As a result, all 9-1-1 cellular calls were routed to the nearest CHP Communications Center PSAP. Use of wireless cellular telephones is now more than seventy five percent (75%) of total 9-1-1 call volume while the traditional landline telephone is less than twenty five percent (25%) and continues to rapidly decrease. Due to the completion of the Routing on Empirical Data Project (RED) in early 2012, and even with a thirty three percent (33%) increase in 9-1-1 calls (16.4M in 2013) the 9-1-1 system had a less than a one percent (1%) busy rate and resulting ninety nine percent (99%) answer rate of 9-1-1 calls..

Passage of an Assembly Bill (AB 1263) in 2001 provides conditions that allow PSAPs outside of the CHP to answer wireless 9-1-1 calls directly from wireless service provider cell sectors that do not cover a CHP jurisdiction. These conditions include jurisdictional considerations and technological feasibility with agreement among the CHP, the PSAP, the CA 9-1-1 Branch and,

consultation with wireless carriers, providers of 9-1-1 S/R services, and 9-1-1 database providers. These entities are referred to as wireless stakeholders in this chapter. For a better understanding of the delivery of 9-1-1 calls (including wireless) in California, you may refer to “*CHAPTER II – SYSTEMS*” of this Manual.

AGREEMENT TO TAKE WIRELESS CALLS

Local PSAPs interested in assuming responsibility for wireless 9-1-1 calls that originate within their respective jurisdictions should contact the CA 9-1-1 Branch, Wireless Enhanced 9-1-1 (E9-1-1) Coordinator, at the following link:

<http://www.caloes.ca.gov/cal-oes-divisions/public-safety-communications/ca-9-1-1-emergency-communications-branch/ca-9-1-1-technology>

In a reciprocal effort, the CHP will notify the CA 9-1-1 Branch of all requests or inquiries from local PSAPs and the CA 9-1-1 Branch will notify CHP of all such requests or inquiries from local PSAPs. Each agency participating in the implementation of direct-routing of wireless 9-1-1 calls shall designate an authorized representative of their agency as a wireless stakeholder for negotiation and approval of routing agreements.

ROUTING IMPLEMENTATION PROCEDURES

The following procedures have been developed by California wireless stakeholders for the effective implementation of routing wireless calls directly to local California PSAPs that have elected to accept wireless 9-1-1 calls directly that originate within their jurisdiction.

1. Wireless 9-1-1 calls will be considered for direct-routing to local PSAPs only when there is a written agreement to do so between the authorized representative of the local PSAP and authorized representative of the CHP.
2. The wireless stakeholders shall work together to identify sites that provide coverage within the jurisdictional boundaries of the local PSAP. The CHP will identify and retain responsibility for cell sites that provide coverage on freeways, county roads, and unincorporated areas within CHP jurisdiction, when appropriate. The CHP will advise the CA 9-1-1 Branch of changes in cell site/sector call-routing agreed to by all stakeholders.
3. A wireless 9-1-1 direct call-routing implementation plan shall be developed for each participating agency with coordination between all wireless stakeholders. Each plan should include a process for:
 - cutover to the local PSAP (slash cutover or a cell sector by cell sector, phased implementation);
 - routing changes; and,
 - termination of direct-routing of wireless calls to the local PSAP, if it proves not to be in the best interest of the public.
4. The CHP and the participating local PSAP shall develop operating procedures to facilitate effective call handling, call transfer, or relay of information between communications centers.
5. The CHP and the CA 9-1-1 Branch will work with all wireless stakeholders to develop procedures for release of subscriber information in emergency situations, notification of misrouted cell sites/sectors, and requests for routing changes.

EDUCATION

The CA 9-1-1 Branch encourages all wireless stakeholders to make public education a top priority for the appropriate use of 9-1-1 when calling from a wireless cellular telephone. With the explosion of wireless devices and services that offer 9-1-1, the CA 9-1-1 Branch continues to provide optimal

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9-1-1 system performance to ensure that every 9-1-1 call reaches a 9-1-1 dispatcher within 10 seconds or less. California citizens can be reassured that every effort is being made daily to ensure they receive 9-1-1 emergency services as fast as possible.

The CA 9-1-1 Branch funding policy for education is provided in Chapter V - Education of this Manual. The entire California 9-1-1 Operations Manual is provided on the CA 9-1-1 Branch website and can be viewed and downloaded as follows:

<http://www.caloes.ca.gov/cal-oes-divisions/public-safety-communications/ca-9-1-1-emergency-communications-branch/ca-9-1-1-operations-manual>

For information on the 9-1-1 Systems and Services Master Purchase Agreements select:

[9-1-1 Systems and Services Master Purchase Agreements – Contract Information](#)