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E9-1-1 Phase II Location Accuracy
State of California

Presentation to the Federal Communications Commission Washington, D.C.

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9-1-1 in California

- In 2013 (January-September)…
  - 37 million residents
  - 455 PSAPs statewide
  - 19.7 million 9-1-1 calls
  - 14.4 million wireless 9-1-1 calls
  - 96 different foreign languages interpreted

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California Call Volume Over Time

YEAR	TOTAL 9-1-1 CALLS*	WIRELESS 9-1-1 CALLS*	PERCENT WIRELESS*
2007	23.3	13.0	55.8%
2008	24.8	15.4	62.1%
2009	24.9	16.6	66.7%
2010	23.9	16.6	69.5%
2011	24.6	16.9	68.7%
2012	26.1	18.7	71.6%
2013 (Jan-Sept)	19.7	14.4	73.1%

*Statewide, in millions

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CA E9-1-1 Phase I/Phase II Comparison

YEAR	PERCENT PHASE II*	PERCENT PHASE I*
2007	59.3%	40.7%
2008	59.8%	40.2%
2009	60.4%	39.6%
2010	56.8%	43.2%
2011	51.6%	48.4%
2012	45.1%	54.9%
2013 (Jan-Sept)	43.3%	56.7%

*as indicated within call detail records

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CA E9-1-1 Phase I/Phase II Comparison

Primary PSAPs Receiving Initial and Transferred Calls		
YEAR	PERCENT PHASE II*	PERCENT PHASE I*
2011	49.2%	50.8%
2012	42.2%	57.8%
2013 (Jan-Sept)	40.3%	59.7%

Secondary PSAPs Receiving Only Transferred Calls		
YEAR	PERCENT PHASE II*	PERCENT PHASE I*
2011	90.4%	9.6%
2012	90.7%	9.3%
2013 (Jan-Sept)	91.5%	8.5%

*as indicated within call detail records

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Call Detail Record Consistency

- The Call Detail Record (CDR) Information is dependent upon the Customer Premise Equipment (CPE) manufacturer and individual configuration
  - The CDR may reflect either the initial ALI location information or the final ALI location information after all rebids, dependent upon the CPE
  - It is unknown at this time with certainty which ALI location information is reflected in the CDR of each California Public Safety Answering Point (PSAP)
- ECaTS currently has a data collection box that allows for the collection and reporting of ALI location information for each ALI bid

CA E9-1-1 Phase I/Phase II

- California will further standardize CDR output requirements, including ALI location information requirements, in the next CPE contract
- California will continue to collect data regarding the delivery of Phase I/Phase II wireless 9-1-1 calls
- Factors to be considered
  - PSAP Equipment
  - Time of Day
  - Call Duration
  - Time it takes to Rebid

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Enhanced 9-1-1 (E9-1-1) Grant Project

- Completed September 2012
- NG 9-1-1 IP network connectivity to 37 PSAPs encompassing 13 counties in Northeastern California
- Verizon Wireless calls routed based on Longitude and Latitude (X/Y) as a result of this project saved 104 hours of transfer time on wireless 9-1-1 call delivery to PSAPs from September 2012 through July 2013

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E9-1-1 Grant Project Detail

- Verizon Wireless and AT&T Mobility wireless calls traverse the IP network
- Verizon Wireless calls are routed based on Phase II Longitude and Latitude (X/Y) of the caller
  - Configurable timer set at 6 seconds – holds the call to retrieve Phase II prior to delivery
  - 56.0% of Verizon Wireless calls within the project area receive Phase II within 6 seconds
  - Calls are routed to the PSAPs based on geospatial boundaries

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The NG9-1-1 Connection

- Timely Phase II location information on initial wireless call delivery
  - Enables NG9-1-1 routing capabilities on initial call delivery
  - Wireless calls may be routed to the correct PSAP the first time based upon the Phase II longitude and latitude of the caller
  - Wireless calls may be routed based on geospatial PSAP boundaries, not on cell sectors

Considerations for the Future

- Inclusion of time requirements for the delivery of accurate Phase II location information
- Date(s) on which Wireless Carriers must meet delivery of Phase II calls within the time requirements