



The Impact of Wireless on Rural South Dakota

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Disruption of Service



- ◆ Broken audio
- ◆ Dropped calls

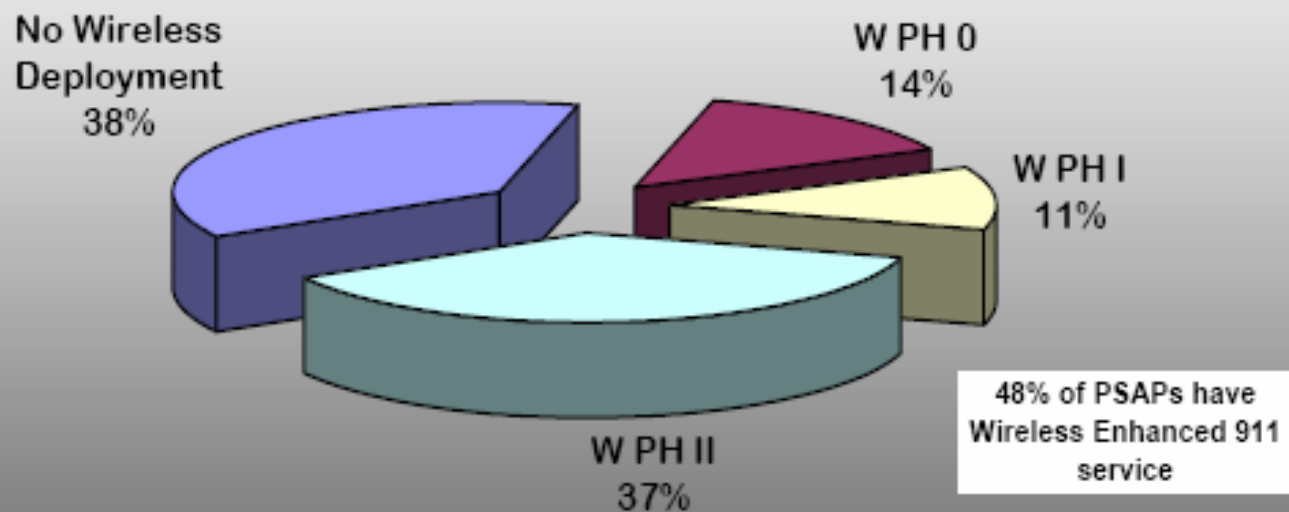
Volume of Calls

- ◆ One incident generates multiple calls
- ◆ Each caller must be interrogated
- ◆ Longer processing time due to poor location information
- ◆ On a per PSAP basis, statewide average is 51% of all 9-1-1 calls are wireless

Public Perception

- ◆ We will know where they are
- ◆ Some of rural areas do not have reliable service
- ◆ 60% of the state's population is covered by wireless enhanced 911
- ◆ 47% have Phase II service
- ◆ 22 PSAPs remain to deploy Wireless Phase II E9-1-1 service
- ◆ 18 PSAPs remain to upgrade to a minimum of wireless Phase I service

Wireless 911 Service Levels



Percentage of PSAPs with each type of Wireless 911 service

Location is the KEY

- ◆ Phase II accuracy in rural area below FCC standards in many areas

FCC Standards

- ◆ Standards for Phase II location accuracy and reliability: (1) for network-based technologies: 100 meters for 67 percent of calls, 300 meters for 95 percent of calls; (2) For handset-based technologies: 50 meters for 67 percent of calls, 150 meters for 95 percent of calls. (3) For the remaining 5 percent of calls, location attempts must be made and a location estimate must be provided to the appropriate PSAP.
- ◆ “the level of accuracy achieved by a carrier shall be calculated based upon all 911 calls originated in a service area in which the carrier is required to supply Automatic Location Identification to PSAPs”.

From Washington

APCO Applauds FCC for Positive Public Safety Actions

Yesterday, the Federal Communications Commission ruled in favor of regulatory language recommended by PCO International, stating that the accuracy of caller location information provided by way of wireless 9-1-1 calls be measured at the PSAP level.

This positive action will dramatically impact 9-1-1 call-takers' ability to locate and send appropriate resources to callers using wireless phones.

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