Deployment of New Mexico NextGen 9-1-1 in the Public Safety Community

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Basic 9-1-1 (Past)

- Installed in the late 1960s and throughout the 1970s
- Basic 9-1-1 systems provide dedicated lines for sending the caller to the correct answering point (PSAP) and does not provide the callers number or address
- Call takers had to rely only on verbal communications with the caller to direct first responders.
- No CAD or maps

Enhanced 9-1-1 (Present)

- Automatically provides the callers telephone number and physical address.
- ANI – Automatic Number Identification
- ALI – Automatic Location Identification
- This information will display on the screen that is associated with the telephone equipment and visible to the call taker.
- Law enforcement districts, fire service districts or EMS response stations (ESN layer)
- At the beginning E911 didn't support wireless 9-1-1's due funding and no way of receiving wireless callers location information.

Enhanced 9-1-1 (Continued)

- Phase I – For E911 Phase I, the wireless carriers deliver to the appropriate PSAP the telephone number of the handset originating the 9-1-1 call (callback number) and the location of the cell site/sector receiving the 9-1-1 call.

- The first Phase I wireless 911 call was in September 1997

- Phase II – For E911 Phase II, Includes Phase 1 information and provides the latitude and longitude of the handset (cell phone).

- The accuracy requirement imposed on the wireless carriers by the FCC varies depending on the location technology used by the wireless carrier.

- Accuracy and reliability shall be:
  - 100 meters for 67 percent of calls
  - 300 meters for 95 percent of calls

NextGen 9-1-1 (Future)

- NextGen 9-1-1 is nation wide internet protocol based emergency communications system designed to replace E9-1-1 systems innovative technology and cloud-based IP networks that allows communication between the 9-1-1 caller, the 9-1-1 center and first responders in the field through various forms of multimedia.

- Integrate new technologies and functions to process data from a wider range of sources beyond the phone. For example; computers, smart sensors, alarm systems, medical devices.

- Continues to have everything that comes with the E9-1-1

- Will create a faster, more resilient nationwide system.

- Will provide caller location data that is more accurate and in real-time by using GPS, RapidSOS, and comprehensive GIS mapping systems.

Why Choose NG911

- Supports various multimedia communications across the public safety community

- Faster and more reliable, secure internet based emergency IP communications (ESInet).

- Add capabilities to integrate with emergency entities beyond the primary PSAP. Allowing other agencies to pick up a call if it rings for more than 20 seconds.

Challenges

- Cybersecurity
- Infrastructure (ESInet, Next Generation Core Services, which is the data base and software to route 9-1-1 calls over ESInet).
- Funding for the PSAP's for solutions beyond call handling equipment such as CAD, Radios
- Staffing at the PSAP's and DFA
- GIS

Five Year Plan

New Mexico NG911 Five-Year Strategic Initiatives
Year One Priorities
• Update legislation—revise legacy terminology and references, clarify NM911 procurement authority, and permit increased funding if determined it is needed
• Update rules
• Conduct an NG911 funding study
• Develop NG911 policies
Year Two Priorities
• Create a communications plan that expands outreach and education
• Create a sustainable funding model
• Develop an NG911 implementation plan
• Develop a cybersecurity plan
• Continue to deploy NG911-capable CHE
Years Three through Five Priorities
• Procure NG911 ESInet and NGCS
• Update the addressing guide
• Adopt NG911 training standards
• Hire NM911 personnel
• Implement text-to-911