Text-to-911 and NG911 Policy Study

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## **Overview**

This research brief summarizes the results of 9-1-1 policies at the state and local levels in relation to text-to-911 and next generation 9-1-1 (NG911) deployments in the United States. This brief is a high-level summary of state emergency communications offices and public-safety answering point (PSAP) policies regarding text-to-911 and/or NG911 as it relates to people with disabilities’ access to emergency services.

## **Background**

Although the current 9-1-1 system is instrumental in everyday public safety, the system faces challenges that affect people involved in emergency situations; particularly people with disabilities. With the current system, people with disabilities, including but not limited to people with vision and hearing disabilities, may face challenges when placing 9-1-1 calls and communicating with emergency dispatchers. For example, if a person with a vision disability wants to call 9-1-1, he or she may be unable to accurately describe the emergency situation if a visual description is required. Or, if a person with a hearing disability wants to call 9-1-1, he or she may be unable to hear the PSAP operator clearly or at all, making the conversation challenging or impossible. Regardless of the disability, when it comes to contacting 9-1-1, the emergency communications system is not consistently usable by people with disabilities who may be involved in emergency situations where a quick response is necessary.

The 9-1-1 systems have evolved over time from Basic 9-1-1 to the most widely used Enhanced 9-1-1 (e911). However, the United States is heading toward the implementation of NG911, which uses Internet Protocol (IP)-based technologies. NG911 also improves the connections and geographic locating between different emergency call centers while also allowing users to communicate their emergencies through photos, text, videos, and data. While some states are currently deploying NG911 solutions, an interim solution, text-to-911, while fragmented, is steadily being implemented across the United States. As of January 11, 2016, 485 PSAPs, representing 233 jurisdictions had registered their text-to-911 readiness with the FCC. In the United States there are 3135 counties, so less than 10% are capable of receiving text-to-911. Now is a prime opportunity to assess the state and local 911 policies to provide guidance as the deployment rates accelerate.

## **Purpose**

The purpose of this study is to identify the extent to which consideration of individuals with disabilities are included in state and local text-to-911 and NG-911 policies. The objective is to identify if written policies exist and if yes, how are they inclusive of people with disabilities. Specifically, to determine which types of disabilities are being considered and planned for when transitioning to NG911. Based on the results, policy and planning recommendations as to how to expand the scope and target population to ensure PSAP operators are prepared to respond to many different types of “callers.”

## **Study Methods**

A Request for Information (RFI) was sent via email to PSAPs and state emergency management offices. They were asked if they had a written policy regarding text-to-911 and/or NG911, and if so to reply with a copy of the policy documents. The FCC’s Master PSAP Registry was the source of local contacts. The data reflected in this brief is for text-to-911 readiness as of January 11, 2016. FEMA’s list of state emergency management agency contacts was used to contact the states.

## **Description of Sample**

A total of 50 states and 233 PSAPs were contacted. Of the 233 PSAPs, 74 responded with information regarding their policies, a 32% response rate; the state response rate was 48% (n=24).

## **Results**

Fifty-eight percent of the states that responded to the RFI indicated that a written policy was in place. Of those with a written policy, 71% included a statement about people with disabilities. The state policies take a very high-level approach and defer to the localities for implementation policies and procedures. Of the 32% of PSAPs that responded to the study, 43% had a written policy on file regarding text-to-911 and/or NG911, 45% did not have a policy on file, and 11% were currently developing a policy. Of the 43% of PSAPs with a policy on file, 24% of the written policies addressed disability.

The statements in all of the disability policies provided by the PSAPs were focused specifically on people with speech or hearing disabilities and for those unable to make a voice call because of the nature of the emergency and their personal safety. The majority of disability inclusion statements are an acknowledgment that text-to-911 is an alternative method that could improve access for people who are deaf, hard of hearing or have a speech disability. However, some PSAPs chose to provide additional information on TTY/TDD procedures, telecommunicator training on new technology, system testing, sensitivity, how to handle out of jurisdiction texts, determining if the individuals can safely make a voice call, and guidance on communicating via text. Below is a sample of portions of disability policy statements that go beyond acknowledgment to provide guidance:

* “Call takers should keep in mind that hearing impaired/deaf callers (who cannot hear sirens) may need regular reassurance until help arrives.”
* “All probationary communications officers receive initial, on the job training in TDD procedures. Communications officers of all ranks complete practical exercises in TDD biannually. The TDD system is tested on each ECC console monthly.”
* “If the dispatcher assigned to Text-to-911 is certified for written Spanish language skills and receives a call in Spanish from someone outside of our jurisdiction who is a member of the Deaf and Hard of Hearing community or in an emergency situation where it is too dangerous to make a voice call the dispatcher will process the call, gathering the necessary information, and contact the correct agency and provide them the information.”
* “The telecommunicator will respond to the caller in plain language, in the full-length form, minus “texting” lingo, acronyms, or shortcuts. The telecommunicator should ask the caller for clarification when receiving information that is not clearly understood. As some of the typed lingo, such as GA and SK, can be different for hearing impaired/deaf callers, the telecommunicator should try to determine if this is a hearing impaired/deaf caller or a “Text to 9-1-1” caller.”

## **Discussion**

The scope of the disability statement was strictly limited to the acknowledgment that text-to-911 would improve access for people with hearing and/or speech disabilities. While this is expected given that most of the PSAPs in the study are currently in the interim text-to911 phase, policy considerations regarding training and disability awareness could ease the transition for both the callers and the call takers. The results, however, show that text-to-911 disability policy statements are as fragmented as the deployments themselves. Besides a general acknowledgment, there were no consistent policy directives across jurisdictions. With regard to NG911 policies and people with disabilities, the scope of populations for which NG911 will improve access includes people with vision and cognitive disabilities, as well as those with hearing and speech disabilities. State level guidance on inclusion principles for NG911 would benefit PSAP operations and call taker effectiveness when communicating with a person with a disability through video, voice, text, and image.

## **Conclusion**

Moving forward in NG911 development a broader disability audience should be considered in the policies to address the different populations this technology can impact on a daily basis. Additionally, guidance on the content of policies concerning people with disabilities would facilitate implementation and maintenance of a robust and effective 911 ecosystem.

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