**PROJECT OBJECTIVE:** Collect qualitative and quantitative data on how people with sensory disabilities experience the Emergency Alert System (EAS).

**METHODOLOGY:** Surveys and Focus Groups

* November 2-18, 2011, conducted two online surveys, one prior to the November 9th national EAS test and the other post-test.
* On November 9, 2011 focus group facilitators led a 90 minute discussion that addressed any problems the participants experienced receiving and understanding the message.

**Survey Results**

* EAS Test on the Television
* **Did not hear the attention tone:**
* 47% of low vision / 27% of blind / 52% of hard of hearing
* **Did not hear audio message:**
* 58% of low vision / 63% of blind / 74% of hard of hearing
* **Did not see video crawl:**
* 46% of low vision / 45% of hard of hearing / 49% of deaf
* 46% received the national EAS test message
* 63% did not hear the alert attention signal
* 70% did not hear the audio message
* 54% did not receive the text crawl
* EAS Test on the Radio
* **Did not hear the attention tone:**
* 50% of low vision / 63% of hard of hearing
* **Did not hear the entire message**
* 67% of low vision / 60% of blind / 88% of hard of hearing

* ***I saw the words go by but it is not possible for me to read them … They move too fast and are not large enough.***
* ***There was no audio and since I'm totally blind that's not good.***
* ***Speakers talk too fast (sounds like mumbling), and the tone is not one I can hear easily due to my hearing*** ***loss.***
* Internet is here to stay…every effort should be made to have emergency alerts available over the internet, radio stations, and websites.
* Some of us use attention getting devices, like strobes for when the phone rings. Is that practical?
* Have a prerecorded ASL video that would automatically come up just like captions or text. Important to have an interpreter on the screen signing the information for the deaf.
* People who are hard of hearing hear at different frequencies. If you’re going to use audio, use a wide range, low and high end.
* I would prefer something flashing to let me know this is different from regular TV or radio.
* I would put really loud audio to go along with it [the crawl].
* Maybe it needs to let us know what we need to do about that specific emergency. Give us a plan of action.

**Focus Group comments: How could EAS messages be improved?**

**Recommendations**

Provide **audio and visual formats** of alert content for all types of alerts. **Reduce the speed** of the text crawl, **increase the size** of the text font and **improve audio** voice quality.

**National EAS Test Accessibility Study**

**Background:** Since the creation of EAS in 1994, people with sensory disabilities, organizations that advocate on their behalf and academics conducting research on disability access to technology have submitted recommendations to the Federal Communications Commission (FCC) intended to enhance the accessibility of the Emergency Alert System (EAS). **The Wireless RERC mission is toresearch, evaluate and develop innovative wireless technologies and products that meet the needs and improve the quality of life and community participation of individuals with disabilities.** For more than a decade we have conducted research and development projects dealing with the accessibility of emergency communications, and have been active in filing comments in federal rulemakings to promote the inclusiveness and accessibility of all emergency communications activities for people with disabilities.

**Testing the Test:** On November 9, 2011, the Federal Emergency Management Agency (FEMA) in collaboration with the FCC conducted the first-ever nationwide test of the EAS. A 30 second test message was sent to EAS participants (television and radio stations) nationwide. **From November 2, 2011 through November 18, 2011, the Wireless RERC conducted two surveys, one prior to the November 9th national EAS test and the other following the test. Four hundred and three (403) people responded to the pre and post-EAS test surveys.** The surveys evaluated responses from people who are deaf, hard of hearing, blind or have low vision in order to understand the effectiveness of EAS for people with sensory disabilities. In addition**, on November 9th during the actual tests, 22 people with sensory disabilities participated in focus groups held at Public Broadcasting Atlanta (PBA).** Thirty-five (35) states were represented in the surveys and focus groups. The focus groups watched/listened to Atlanta’s NPR and PBS stations and discussed the effectiveness of the EAS as a way to alert people with disabilities in the case of national emergencies.

**Findings:** Eighty-one percent (81%) of respondents had heard of EAS and 82% were aware of the November 9, 2011 national EAS test message. The top four sources where people received notice of the national EAS test were from e-mail, television news, public service announcements, and from organizations that serve people with disabilities. Seventy percent (70%) of respondents to the survey had heard or seen an EAS message on television or radio prior to the national test. **While 64% of respondents reported no problems with EAS messages delivered via television or radio, 36% of individuals reported a variety of problems.** Some of the access barriers for those who had sensory challenges included: the television broadcasts were inconsistent in their use of audio; there was no audio accompanying the TV crawl; the text crawl was too small and too fast to decipher; the radio and television broadcasts of the alerts was of poor quality; the attention signal was not in a frequency the hard-of-hearing can hear; there was no visual alert mechanism such as a flashing screen; and there was a lack of awareness of accessible options, for example NOAA weather radios and the Commercial Mobile Alerts System (CMAS).

**Conclusion:** The nationwide test of EAS revealed technical, policy and practice related challenges. Technically, as evident from both the national EAS test focus groups and on-line survey results, **the EAS alerts via television broadcasts were inconsistent in their use of audio and therefore not reliably accessible to people with visual loss. Respondents and participants with hearing loss also found that the national EAS test message was not fully accessible, reporting problems with the attention signal and audio quality.** Regarding policy and practice, the voluntary nature of the system resulted in the inconsistent implementation of the rules and regulations regarding state and local participation in EAS. While we realize the nationwide EAS test was created to evaluate the effectiveness of the system, it served to highlight that there were inconsistencies in delivering the message.