

EMERGENCY HELP. Anytime, anywhere, any device.

Salimah LaForce

Wireless RERC

Social Media, Emergency Communications and People with Disabilities

June 22, 2011

Topics Covered

- Introduction: Emergency Access and People with Disabilities
- Wireless RERC WEC Project
- In the meantime...
- Social Media Survey Findings
- Now what?...Considerations for Accessible Emergency Communications

Introduction

- Access to emergency information
 - Modernization of EAS
 - CMAS
 - CVAA



- Abilities, situation, aging into disabilities
- Not all disabilities are obvious
- Access to emergency services
 - Receiving the message & content
 - Ability to take action
 - Technological issues







Statistics in Perspective

- American Red Cross responded to more than 60,000 disasters in 2010
- 54 million people have some type of disability, by 2030 it will equal 20% of the population
- 96% of the U.S. population use wireless services or products
- 85% of people with disabilities use wireless products and services

Wireless RERC Mission:

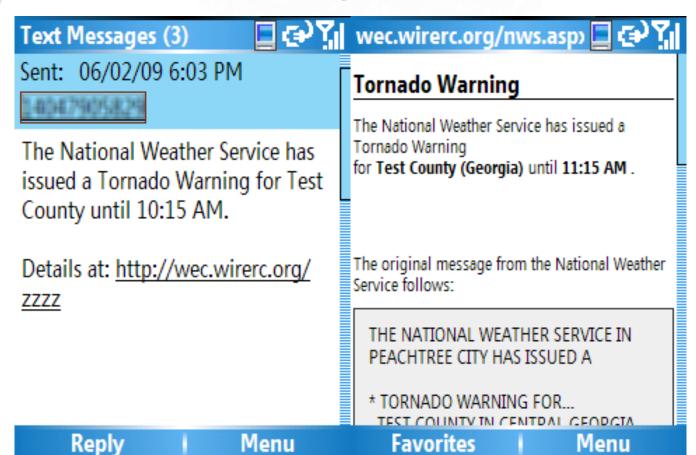
Promote equitable access to wireless technologies by people with disabilities and encourage the adoption of universal design in future generations of wireless devices and applications.

Wireless Emergency Communications (WEC) Project established in 2006:

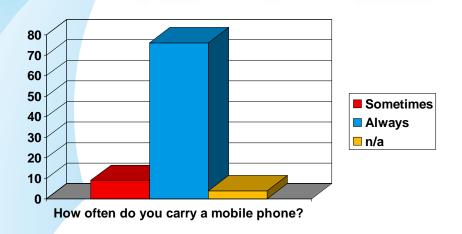
- Develop prototypes of promising technology approaches to broadcast local and targeted alerts in accessible formats
- Field trial working prototypes
- Generate recommendations

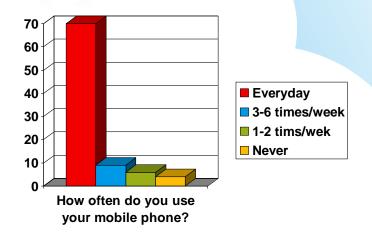
http://www.wirelessrerc.org/publications/emergency-communications-and-people-with-disabilities/

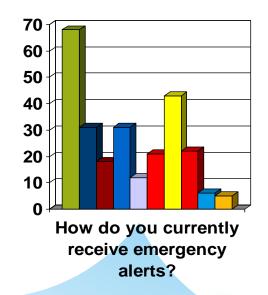
WEC Tech



Some Pre-trial questions









To Confirm Emergency Information:

91.9% turn on television

41.9% turn on Radio

45% check/send E-mail

54.8% check Internet news sources

43.5% use mobile phones/PDAs

66% contact friends and family

77% check their surroundings (environmental cues)

IN THE MEANTIME...













Official Use of Social Media

- 74% of States use SM to disseminate emergency information
 - Twitter 36%
 - Facebook 29%
 - YouTube 13%
- 45% of Cities use SM to disseminate emergency information
 - Twitter: 35%
 - Facebook: 34%
 - YouTube: 11%

Sets Precedent. Sets Expectations.



Image courtesy of Patrice Cloutier, Blogger

"Rather than trying to convince the public to adjust to the way we at FEMA communicate, we must adapt to the way the public communicates ... We must use social media tools to more fully engage the public as a critical partner in our efforts." ~ Craig Fugate, FEMA

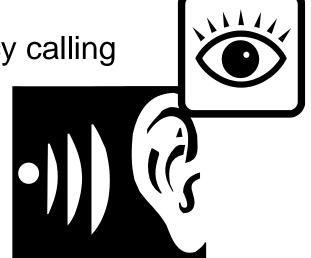
Consumer Advisory Network

- Nationwide survey of people with disabilities
- November-January 2010-2011
 - 1. Contacting 911 emergency services
 - 2. Using social media during public emergencies

Respondent ProfileTotal number of respondents1343Number of respondents with disability1115Age range18-91Age average51.6Standard deviation13.5 years

FCC Survey

- Emergency Access Advisory Committee
- Nationwide survey of people with disabilities and seniors
- March 2011 April 2011
 - Questions regarding emergency calling
 - More than 3000 respondents
 - Report pending



USING SOCIAL MEDIA DURING PUBLIC EMERGENCIES

Do you access social media on the following devices? (non-exclusive)

Devices	Yes (%)
Desktop computer	41%
Laptop computer	31%
Cellphone	22%

- Almost 2/3 (63%) of respondents with disabilities use social media.
- Desktop and laptop platforms are the most commonly used devices for accessing social media.
- Cellphones are the least commonly used platforms for accessing social media. More than 1 in 5 access social media on cell phones.

Do you access social media on the following devices? (exclusive)

	Percent
Desktop only	23%
Laptop only	12%
Cellphone only	3%
Desktop and laptop	6%
Desktop and cellphone	7%
Laptop and cellphone	7%
Desktop, laptop, cell	5%
TOTAL	63%

25% of respondents with disabilities use more than one type of device (e.g., desktop and cell phone) to access social media.

Number of social media outlets used by respondents with disabilities to receive and verify public alerts

Number of social media outlets		
used	Received alert	Verified alert
0	77.4	84.3
1	15.7	11.8
2	4.6	2.6
3	1.4	0.7

Social media are used by a small, but substantial percentage of people with disabilities to receive and verify public alerts.

- 22% have received public alerts via social media
- 16% have verified public alerts using social media

Social media outlets used by respondents with disabilities to receive and verify public alerts

	Received alert	Verified alert
Facebook	11.6%	8.6%
Twitter	4.6%	2.5%
Listservs	4.2%	2.1%
Yahoo	3.8%	2.3%
YouTube	1.3%	1.0%
MySpace	1.3%	0.7%
Google Buzz	1.2%	0.8%
LinkedIn	0.0%	0.6%
Foursquare	0.3%	0.3%

Considerations for Accessible EC

"One of the challenges we face as a nation is ensuring not only that our technological prowess empowers ALL Americans to lead better and more productive lives, but also that we harness these tools to preserve and protect the lives, property, and public safety of ALL citizens by making them universally accessible and usable."

~David Furth, FCC

Considerations for Accessible EC

- Technology
 - Accessible formats to a variety of devices
 - Integration of social media into existing EC systems





- Training and Education
 - Integrate into planning, exercises and simulations
 - Outreach to people with disabilities on options for receiving emergency information in accessible formats

Considerations for Accessible EC

- Policy and Practice
 - Ensure rulemakings include the needs of people with disabilities
 - Social Media for alerting and/or communicating emergency information
 - create best practices be consistent
 - make official

Contact:

Salimah LaForce, Research Analyst, Wireless RERC salimah@cacp.gatech.edu

Wireless Emergency Communications Project:

Helena Mitchell, Ph.D, Co-project Director Frank Lucia, Co-project Director Ed Price, Technical Director Jeremy Johnson, Research Engineer

www.wirelessrerc.org

The **Rehabilitation Engineering Research Center for Wireless Technologies** is funded by the National Institute on Disability and Rehabilitation Research of the U.S. Department of Education under grant number H133E060061. The opinions contained in this presentation are those of the grantee and do not necessarily reflect those of the U.S. Department of Education.