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GOOD STORY

Hurricane Sandy: Smartphone Applications Provide Critical Information to Sandy Responders and Survivors

The LLIS.gov team identified several innovative Whole Community ideas and practices to support preparedness, response, and recovery following Hurricane Sandy.

SUMMARY

In the wake of Hurricane Sandy, a large number of people extensively downloaded and accessed emergency preparedness smartphone applications (apps). The use of these apps helped responders and survivors access critical disaster-related information despite widespread power outages throughout the disaster areas.

DESCRIPTION

Hurricane Sandy

On Monday, October 29, 2012, Hurricane Sandy made landfall near Atlantic City, New Jersey, pushing a massive storm surge to shore and generating winds to up to 75 miles per hour. The National Hurricane Center downgraded Sandy to a post-tropical cyclone shortly after landfall. Sandy caused storm surge, record flooding, and wind damage. Nine days after the storm, a large nor'easter caused massive snowfall undermining response operations in the disaster-impacted areas.

As a result of these events, millions of people were left without power and hundreds were displaced along the East Coast from North Carolina to Maine. According to the Department of Energy, Office of Electricity Delivery and Energy Reliability's [Final Situation Report](#), "The combined total peak customer electricity outages from Hurricane Sandy and the Nor'easter are 8,661,527: 8,511,251 from Hurricane Sandy and 150,276



**Hurricane Sandy Damage of New Jersey's
Barrier Beaches
(Source: The White House)**

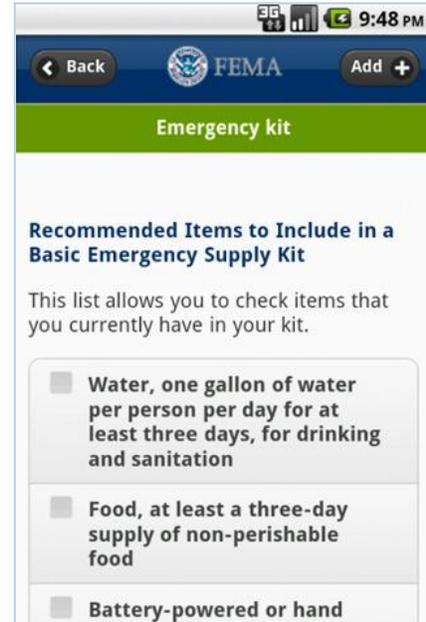
from the Nor'easter Storm, respectively." These widespread power outages hindered the ability of many survivors to employ traditional communications mechanisms such as television and radio broadcast media to access critical real-time information after the storm.

The Smartphone Apps

After previous natural disasters, Federal organizations such as the [American Red Cross](#) (ARC), the [Department of Veterans Affairs](#) (VA), and the [Federal Emergency Management Agency](#) (FEMA) worked extensively with communities and professional stakeholders to define whole community needs. These agencies then developed several smartphone apps designed for rapid dissemination of critical information to survivors and disaster workers.

In the wake of Hurricane Sandy, a large number of New York and New Jersey residents downloaded and accessed apps such as the ARC's Hurricane app, the VA's Psychological First Aid (PFA) app, and the FEMA's Emergency Preparedness app. These apps contain resources and information such as:

- The **FEMA Preparedness App** includes information related to different types of disasters, an interactive checklist for emergency kits, a section to plan emergency meeting locations, information on how to stay safe and recover after a disaster, a FEMA Disaster Recovery Centers and Shelters map, general ways the public can become involved before and after a disaster, and a link to the FEMA blog.
- The **ARC Hurricane app** focuses on topics including how to deal with cellphone and electrical outages, locating open shelters, emergency kits, and how to keep food and water safe.
- The **VA PFA app** provides psychological first aid guidelines and mentoring tips that volunteers and responders can use when managing mental health issues during and after a disaster.



The FEMA Smartphone App
(Source: FEMA)

Before and after the disaster, approximately 400,000 users downloaded the ARC's hurricane app to monitor and track the storm. Further, the VA's PFA app was downloaded 1,800 times, and the FEMA emergency preparedness app was downloaded by more than 50,000 users. Despite widespread power outages throughout the disaster areas, these users were able to access critical emergency preparedness and response information in real time.



The American Red Cross Hurricane App
(Source: ARC Website)

REFERENCES

American Red Cross. *Red Cross Mobile Apps*. (Website accessed on 16 Jan 2013).

<http://www.redcross.org/prepare/mobile-apps>

Department of Energy, Office of Electricity Delivery and Energy Reliability. *Final Situation Report*. 3 Dec 2012. (Website accessed on 27 December 2012).

<http://energy.gov/articles/hurricane-sandy-noreaster-situation-reports>

Department of Veterans Affairs.

<http://www.va.gov/>

Federal Emergency Management Agency

<http://www.fema.gov/>

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