



# IEEE: Mobile Impact During Disasters

October 2013  
Dom Tolli  
American Red Cross

**American Red Cross**

# Agenda



- Introduction to the Red Cross
- Pivot to Mobile
- Sandy Case Study

**American Red Cross**

# Mission – Why We Exist Today

The American Red Cross prevents and alleviates human suffering in the face of emergencies by mobilizing the power of volunteers and the generosity of donors.

# Vision – What We Aspire To

The American Red Cross, through its strong network of volunteers, donors and partners, is always there in times of need. We aspire to turn compassion into action so that . . .

. . . all people affected by disaster across the country and around the world receive care, shelter and hope,

. . . our communities are ready and prepared for disasters,

. . . everyone in our country has access to safe, life-saving blood and blood products,

. . . all members of our armed services and their families find support and comfort whenever needed, and

. . . in an emergency, there are always trained individuals nearby, ready to use their Red Cross skills to save lives.

# Disaster Relief



Responds  
to **70,000** disasters  
a year

# International Disaster Relief



The American Red Cross is one of **187 members** with **13 million** volunteers

# Blood Services



Ships **9 million**  
blood products  
a year

# Services to the Armed Forces



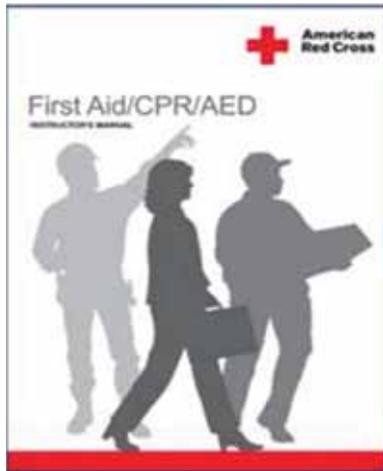
400,000+ emergency services to service members and their families

# Lifesaving Skills



7+ million people  
trained each year

# Digital Evolution of Health and Safety



Open your books...



Open your Computer...



Personalized learning...

# Digital Evolutions Drive Paradigm Shifts



Cab centric: Can we find a cab?



User centric: the cab finds us...

## Still Hurdles for Families Getting Prepared

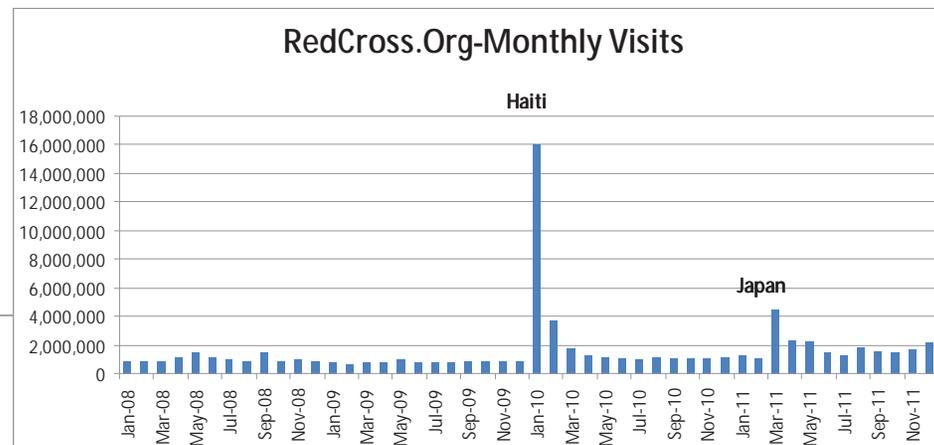
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- Am I really going to be in a disaster?
- I am ready!
- I'll just call 911
- I'll get it when I need it

# The Perfect Storm Has Been Brewing



- Individuals do little to prepare for disasters or emergencies in advance
  - 80% of individuals believe they are prepared for disaster
  - Only 1-4% are truly prepared
- US Mobilization
  - 102% US Wireless penetration
    - 70% of mobile devices sold in US are smartphones
- Individuals turn to the Red Cross during times of disaster



# From wall of data To Solutions

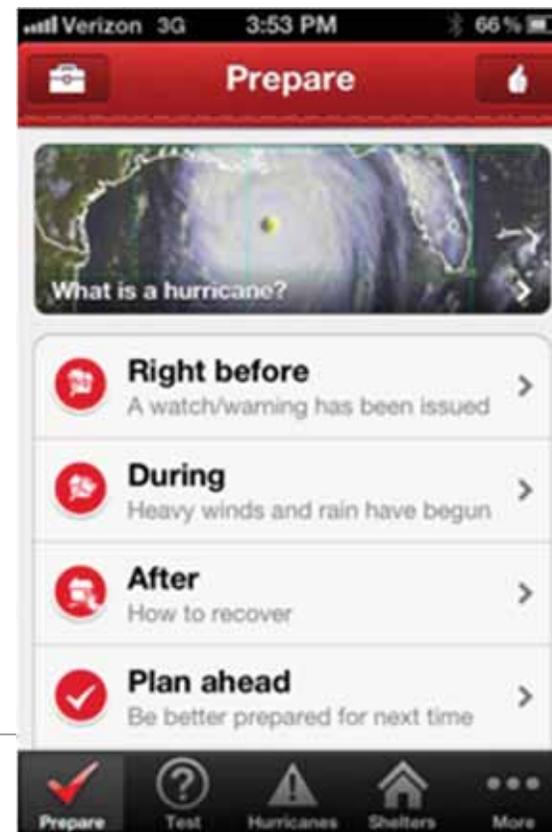
- Preparing for a Hurricane with the Red Cross:

**Prior to August, 2012 -**  
download all these tear-sheets



- Hurricane
- Flood
- Power Outage
- Food Safety
- Evacuation
- Generator Safety
- Pet preparedness
- Be Red Cross Ready

**Since August, 2012 –** download the Hurricane app



# From Digital Void to App Leadership

## Nine Months to Launch 5 National Apps

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- >3.7M downloads
- >150M page views
- >50M weather alerts
- 113M social Comments
- 4.5 of 5.0 stars



**1.6M**

Downloads  
Since June '12



**870K**

Downloads  
Since Aug '12



**211K**

Downloads  
Since Sept '12



**69K**

Downloads  
Since Oct '12



**692K**

Downloads  
Since Mar '13



Red Cross Training Saves Lives.

# Red Cross App Standard Features



- **Dynamic Content, (before, during and after), with Real Time Updates**
- **Red Cross shelter locator**
- **Location-specific real-time alerts, disaster history, & mapping**
- **“I’m Safe” & Quizzes w Badges via email, text or social networks**
- **Toolkit of audible alarms, flashlight, strobe light**
- **Interactive Make a Plan feature**
- **FREE**



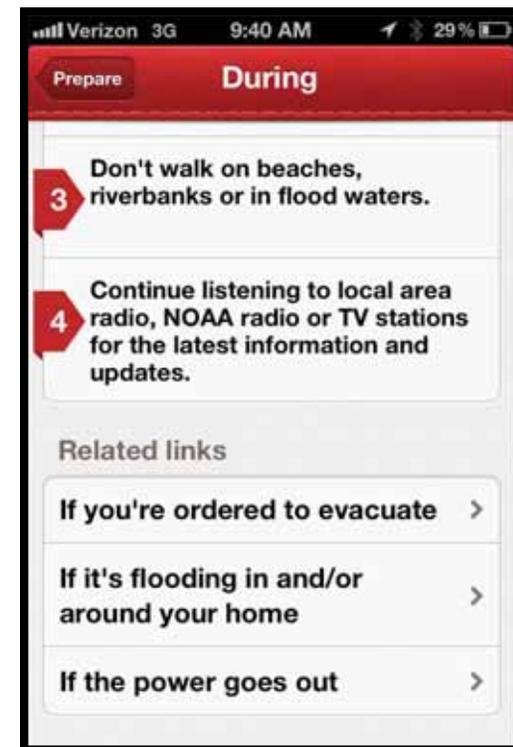
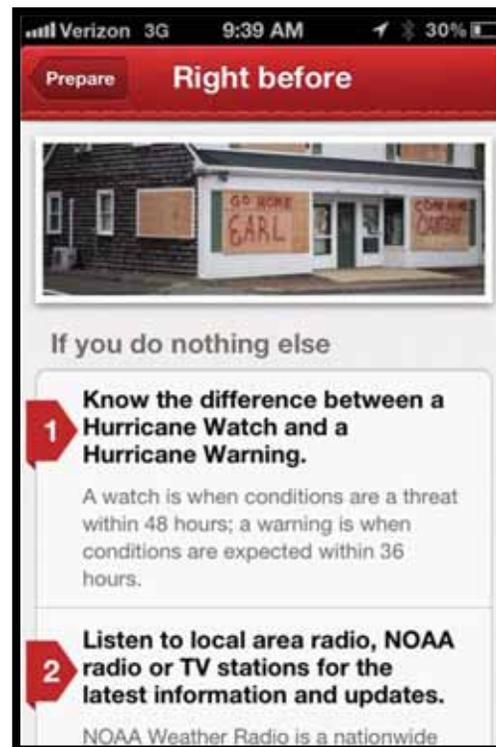
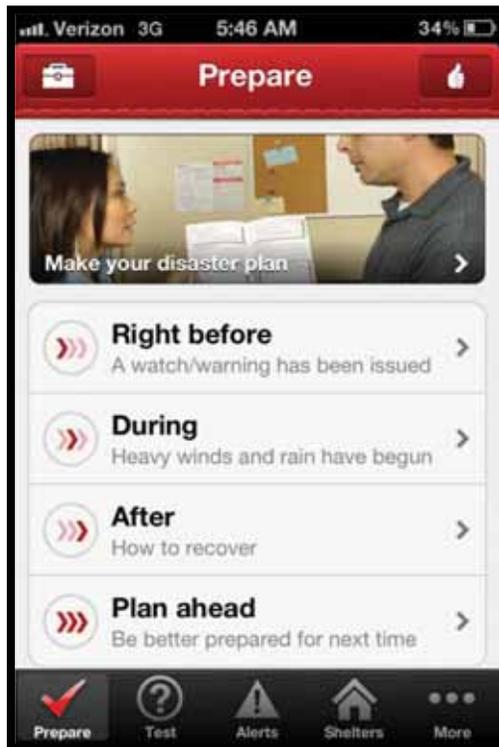


# First Aid App



# Hurricane Mobile App

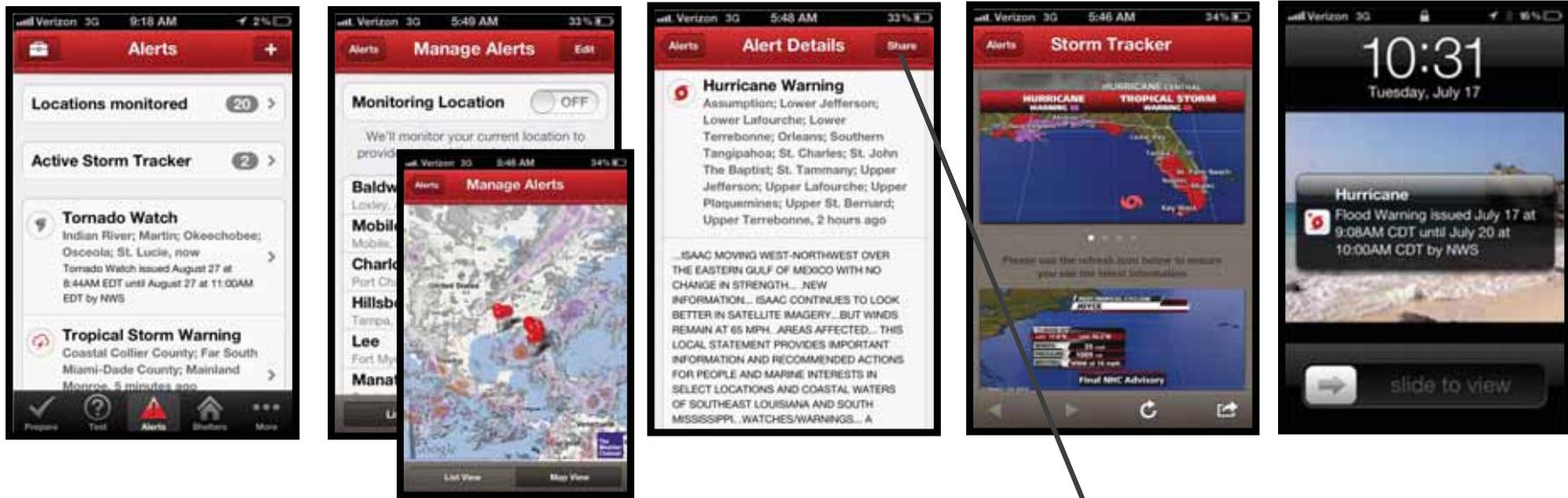
# Prepare



- Default view
- Before/During/After selection
- Spotlights will promote Donate; can also target by state
- Mobile edited, SAC reviewed
- Content broken out into various intuitive sections



# Watch/Warning Alerts



- Badge on app icon and alert tab lets user know
- Location-based NOAA alerts
- Weather maps
- Ability to monitor multiple locations
- View Tweets (from affected areas)
- Sharable via FB, Twitter, text, email
- See hurricane history for other locations monitored



# Important, Real-Time Information



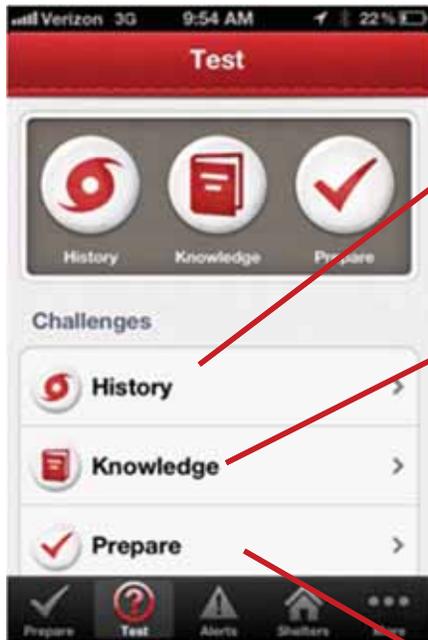
- Find open ARC shelters by current location (default) or search for others
- Recent locations saved
- Open shelters displayed by map or list view
- Location-based NOAA warning and watch alerts for Hurricanes; Tropical Storms; Tornados; Floods
- Track storms in monitored areas with up-to-date images from The Weather Channel.
- Configure a message to quickly/easily let friends/family know you're safe 4 ways



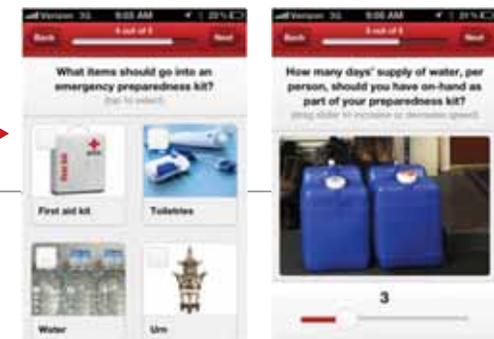
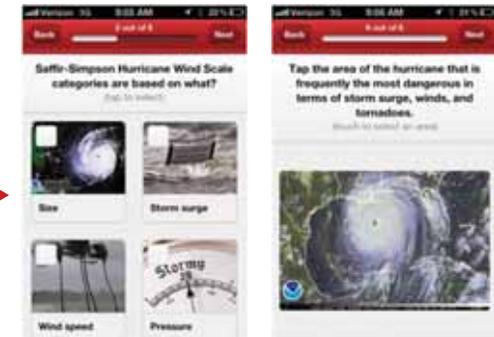
# Educate and Test



## Section: Knowledge/Prepare tests module



- Will display # of previous historical hurricanes in user's location based on NOAA data; tapping will display visual representation
- Test questions about user's general knowledge of hurricanes – watch vs. warning, speed of winds, etc.
- Test questions about user's knowledge about making a plan, putting a kit together, etc.;

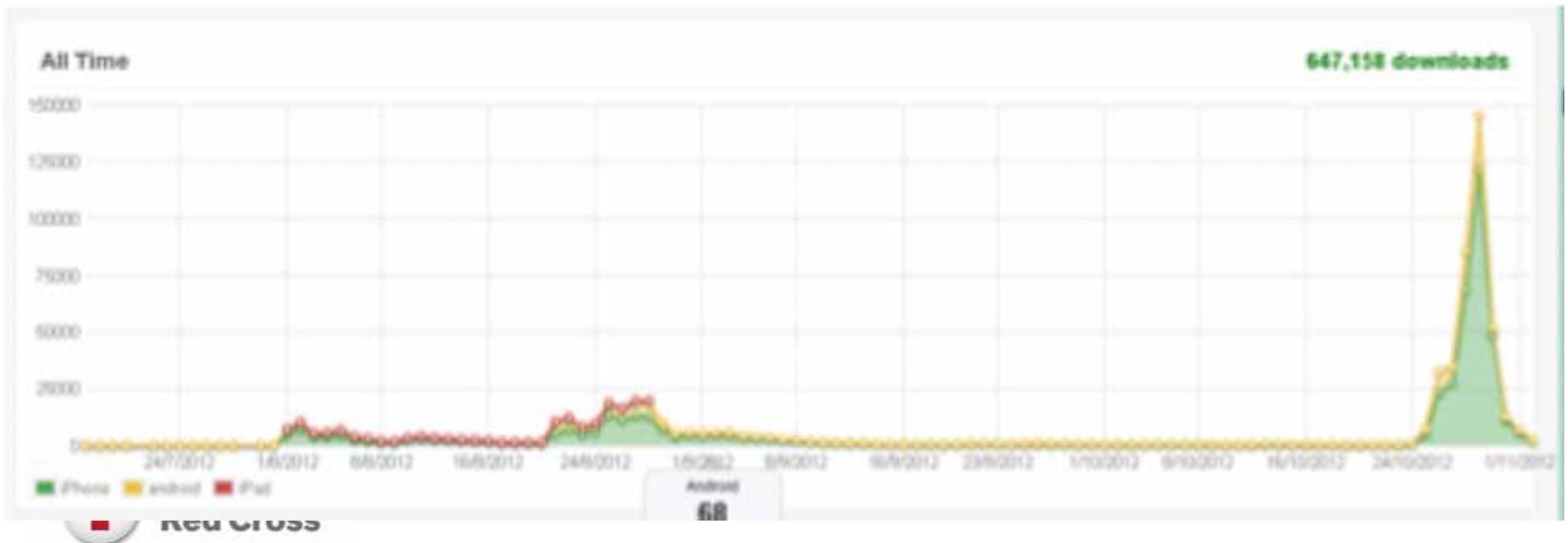


Sandy

# Sandy: Downloads Explode



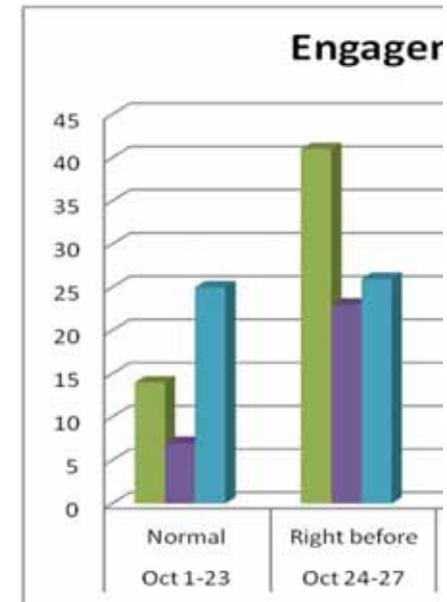
- Activity spikes 3 days before Sandy to hit land
- Just-in-Time information



# Sandy: Before Landfall



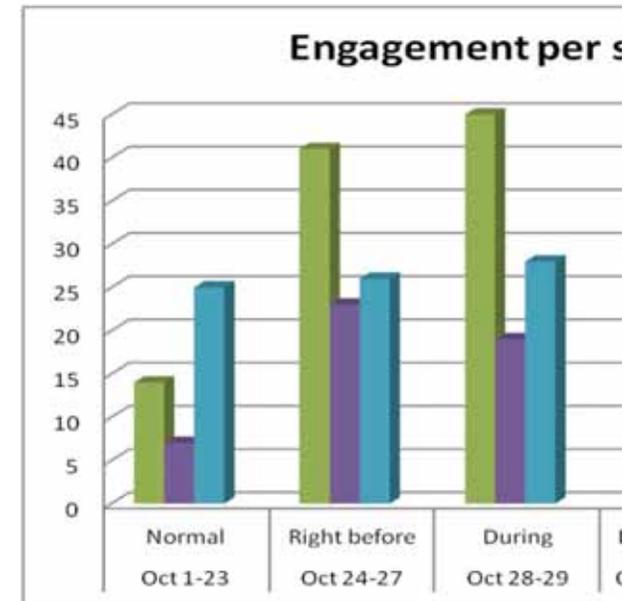
- Spikes across the board
- Preparedness content being studied
- Alerts are being set
- Open shelters are being viewed



# Sandy: Landfall

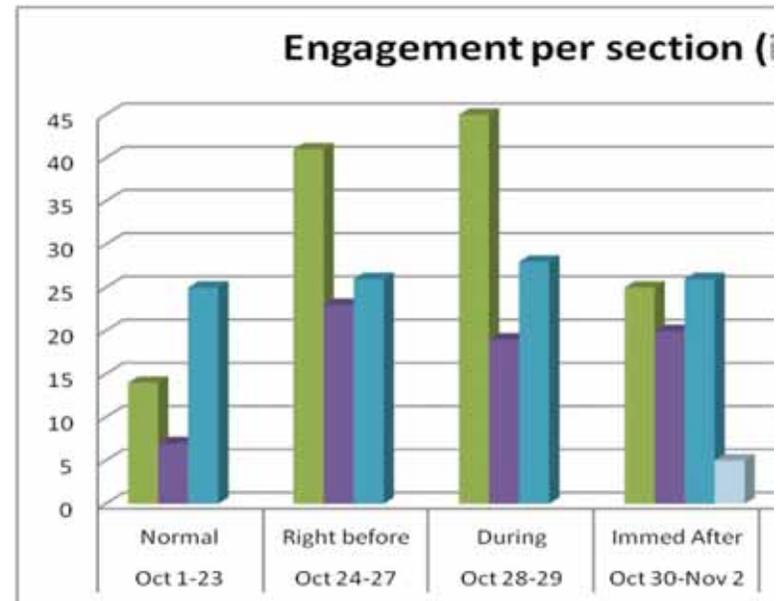


- Preparedness content spikes
- Alerts activity increased
- People are looking to make it through



# Sandy: Immediately After Landfall American Red Cross

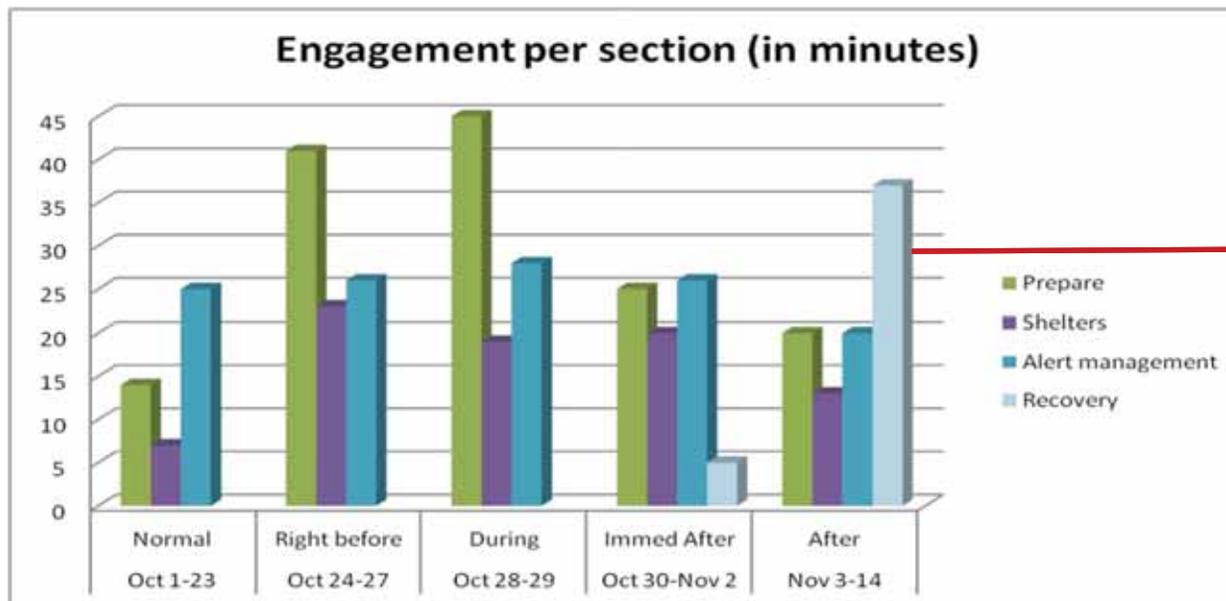
- Preparedness content decreases
- Alerts and Shelter activity remain high
- People starting to look for help



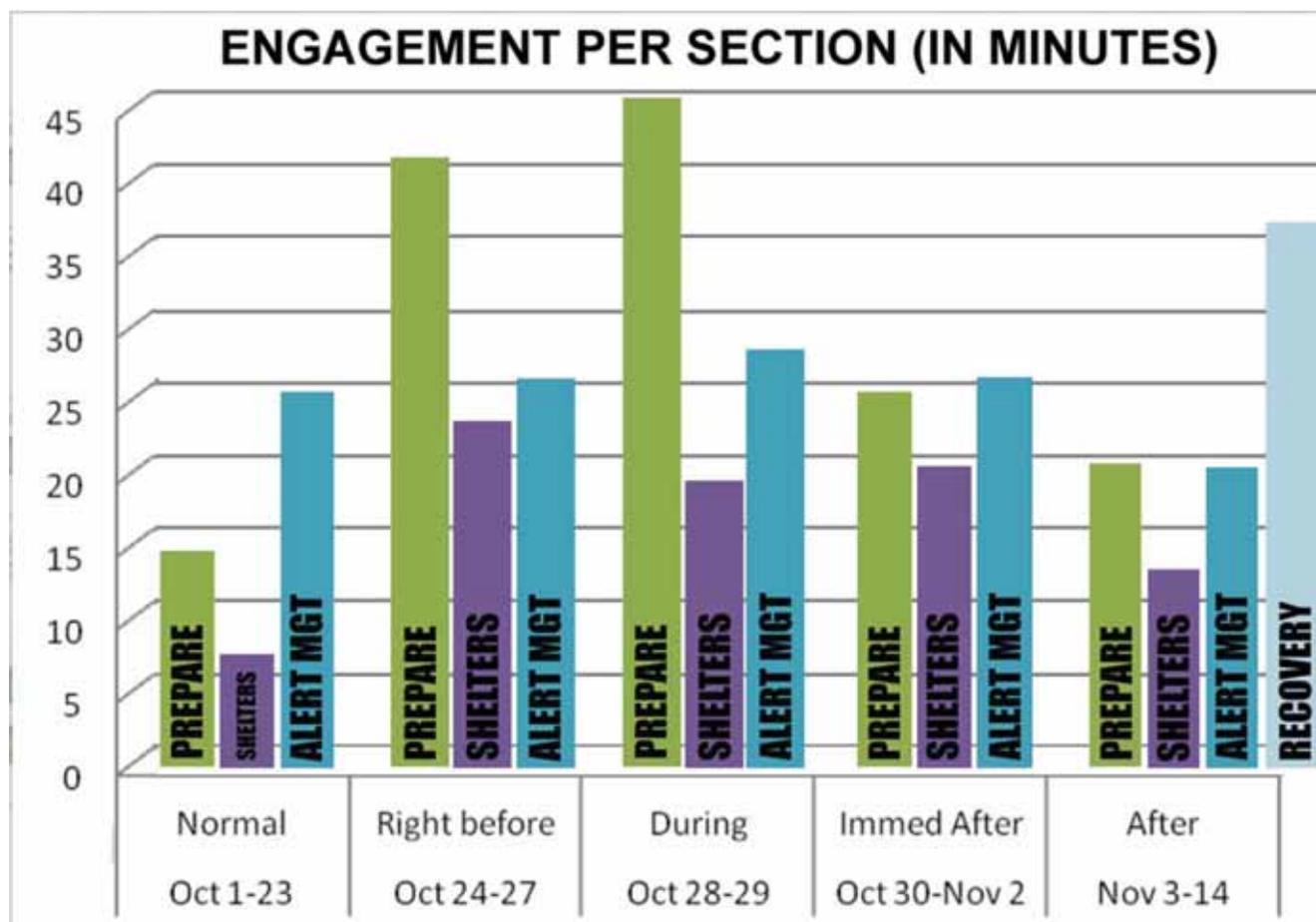
# Sandy: After



- Recovery usage soars Preparedness content decreases
- Preparedness, Alerts and Shelter activity remain stable



# Sandy - All Together Now



# User Reviews - Tornado

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- I was in Oklahoma when the twister hit. The warning came on and I had enough time to gather everybody up and discuss our plan. We checked some info about where to go safely using the app and we found the best places. Thanks to this me, my kids, my wife, my parents and their neighbors are all safe. [^]
- GREAT APP!! Because of the alert from this app, From Omaha, NE., I was able to contact my daughter in Moore, OK before yesterday's tornado hit. Again GREAT APP!!!
- This app told me there was a tornado watch. I went to the basement(just in case) and had just turned on the Weather Channel, when I heard a loud Ripping/ creaking noise. I ran into the bathroom shower and huddled over when I realized it was okay. There was no tornado, but our HUGE tree had fallen into our house! If I wouldn\'t have got that tornado watch alert, I would have been crushed by that tree! Thank you so much for saving my life!

# Summary

- **Transformation Still at the Very Beginning**
  - Preserving H&S for the Next Generation
- **Impact on Individual Outcomes Magnified**
  - Relevant Lifesaving Solutions in Real Time
- **Reach Paradigm Achieve Unimaginable Levels**
  - Inventing the Future's "New Normal"



**Thank You!**

**American Red Cross**