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Office of Safe and Drug-Free Schools
Emergency Management for Higher Education



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Integrating Social Media into Emergency Management Planning

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Kim Stephens has a Master's in Public Administration from Texas A&M University and her career in emergency management has been spent as a researcher and a practitioner. Her experience has spanned federal, local, and non-governmental organizations: from the U.S. Environmental Protection Agency to the Tennessee Montgomery County Office of Emergency Management, and the American Red Cross. Her work has included all aspects of the disaster continuum: planning, response, recovery, and mitigation.

Currently Ms. Stephens is a research associate with a focus on social media's application to emergency management practices. In addition, Ms. Stephens assists with the Recovery Diva blog, which was designed to bridge the gap between researchers and practitioners with commentary and context on current disaster and disaster recovery news. Furthermore, she is managing an effort to create and market for production a real-time digital version of the previously developed Disaster Time Line Series, currently only available in hard copy.

Ms. Stephens is also the assistant to both the Managing Editor and the Business Manager of the Journal of Homeland Security and Emergency Management (JHSEM). In this capacity, she manages JHSEM's social media outreach, such as Facebook, in order to engage and increase readership for the Journal. She also developed and implemented JHSEM's marketing strategy to attract potential sponsors.



Agenda

- * How are Universities currently using social media?
- * How do we engage students in emergency preparedness through social media?
- * What are some social media best practices?
- * What is crowdsourcing and how could it be utilized for preparedness?
- * How is social media used for crisis response?
- * What tools exist to collect, filter, verify & aggregate data?
- * Conclusion

Universities are adept at using social media for public relations.



Fun, non-controversial content thousands of "fans"

192,263 People Like This

Customized Facebook Pages feature an informal format



Web 1.0 in a 2.0 world.

Traditional Preparedness Fact Sheet

Preparing you for Emergencies: Flash Floods

Flash floods are one of the leading causes of weather related deaths annually.

How do flash floods occur? Several factors contribute to flash flooding. The two key elements are rainfall intensity and duration. Intensity is the rate of rainfall, and duration is how long the rain lasts. Topography, soil conditions, and ground cover also play an important role.

Flash floods occur within a five minute or hours of excessive rainfall. Flash floods can move vehicles, tear out trees, destroy buildings and bridges. Rapidly rising water can reach heights of 30 feet or more. Furthermore, flash flood-producing rains can also trigger catastrophic mud slides and road wash-outs. You will not always have a warning that these deadly, sudden floods are coming. Most flood deaths are due to FLASH FLOODS.

Know your area's flood risk. An example in Louisville is the area adjacent to Beargrass Creek. The area surrounding Bellarmine University, Baptist Hospital East and Anchorage have all had flash floods. For more potential locations, call your local National Weather Service office, Red Cross chapter, or local emergency management agency. If you live in a potential flood area, check your homeowner's or renter's insurance. Contact your insurance agent to find out how to obtain flood insurance.

Even 6 inches of fast-moving flood water can knock you off your feet, and a depth of 2 feet will float your car! NEVER try to walk, swim, or drive through such high water. If you come upon flood waters, STOP! TURN AROUND AND GO ANOTHER DIRECTION.

Last updated: 2003

List of Safe Havens

Public Safety (Campus Safety) | Emergency Safety Locations

CAMPUS SAFETY

- Police and Patrols
- Emergency Safety Locations
- Crisis Intervention Team
- Parent Pull Street
- Fire Safety
- Investigation
- Lost & Found

EMERGENCY SAFETY LOCATIONS

The following is a listing of the NPO Safe Havens. Safe Havens are part of the local NPO Protocols on a quarterly basis. Last updated: 10/2013

Safe Haven Study

- Duffin Fire Facility 200 Grand Street
- Fremont 31 Spring Street
- Ellen's Special Cheesecake 13 Cleveland Place
- Spring Mart 202 Main Street
- Maplewood 302 Lafayette Street
- Lindbergh's Cleanhouse 386 Broome Street
- Hans Bakery 198 Main Street
- Huggy Don 70 Lafayette Street
- Salka Salvo Hotel 139 Grand Street
- Don's 202 Lafayette Street

Shelters

- Durkin Donuts 50 Fulton St.
- Shenard Books 65 Fulton St.
- Best of the Best 150 Water St.
- Maxter Shoe Repair 292 Myrtle
- Starbucks 233 Broadway

Union Registry/Fuel Village

- Stacks 58 Union St. W.
- Modern French Cleaners E. 30th & 2nd Ave.
- Homeopathic Pharmacy 343 2nd Avenue
- Starbucks 41 Union St. West
- Barney and Nudies 13 E. 17th Street
- Au Bon Pain 4 Union St. East
- White Foods 4 Union St. South
- Way Hing Laundry 132 4th Avenue
- Yakus Shoe Repair 132 4th Avenue
- Chris French Cleaners 57 4th Avenue
- Royal Cleaners 63 4th Avenue
- Toner Records 692 Broadway
- Toner Video 23 E. 4th Street
- Farmoff Dns 75 3rd Avenue
- Uma Chicago 501 S. 3rd Avenue
- NYC French Cleaners 43 3rd Avenue
- East Village Photo 31 3rd Avenue
- 36A Chicago 102 E. 1st Street

Information is buried in webpage.

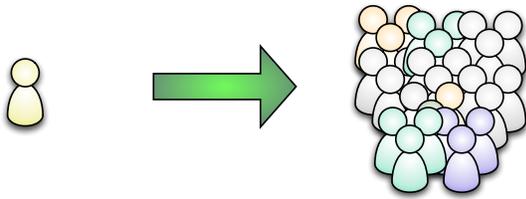
iPhone App



How do we engage students in **Emergency Preparedness** through social media?

Broadcast Messaging

Social Media is currently used as an extension of one-to-many public relations & emergency broadcast system.



Schools are using text alerts and messages to notify students of emergency situations.



Facebook for engagement.



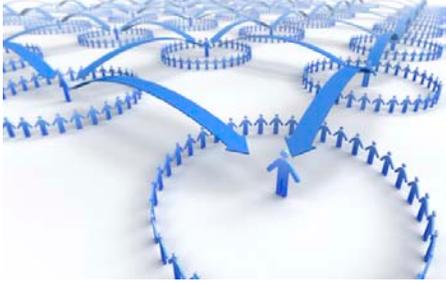
And YouTube to disseminate preparedness information.

Peer-to-Peer Communications

“Social Media is obviously about **more** than how we **reach out** to the public and educate the public...It’s about the **public talking to us**.

It’s also about the **public talking to the public.**”

Nathan Huebner, CDC



Best Practices



CDC creates social media tools **INTENTIONALLY DESIGNED** to be shared peer-to-peer.

Goal is to encourage:

 Information sharing

 Collaboration

 Interactivity



WIDGETS

Social Media Tool is designed to be added to a Web page or blog.



Buttons and Badges

Buttons are offered to be added to anyone’s personal or any public Web site.



E Cards

Cards are designed by CDC to be sent with personal messages to friends & family.



3 lessons learned

1. Clearly define your objectives.
2. Understand your audience.
3. Track each applications' **metrics**:
Are you reaching your audience?

How do we bridge the gap?

- Limited funds
- Limited staff
- Limited IT experience

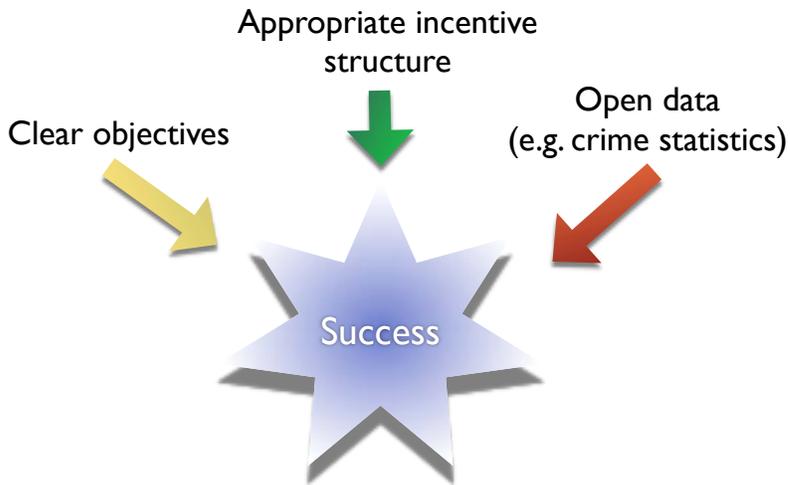


Photo courtesy FEMA Photo Library

Crowdsourcing

“the act of taking a job traditionally performed by a designated agent and outsourcing it to an undefined, generally large group of people in the form of an open call” (Howe, 2006)

Utilize Student Talent



Apps for Democracy

Innovation contest that awarded cash prizes to technology developers using DC government data to create products for citizens.

The first edition of Apps for Democracy:
47 web, iPhone and Facebook apps
in **30 days**.

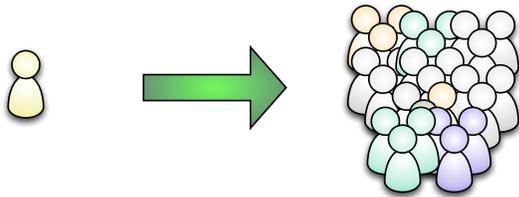
\$2,300,000 value to the city at a cost of **\$50,000**

Crowdsourced Product



**How is social media being
used for
crisis response?**

**Web 2.0 Technologies
provide rapid
way to share information.**



Why would we want to listen to the crowd?

Improve Situational Awareness

The News Media is listening.

*“When a storm hit the region, **instead of** staff making phone calls to sheriffs’ offices in remote counties, the station received **instant feedback** about **storm damage** via **Twitter** from its viewers region-wide.” Fox News Anchor*



Photo courtesy: FEMA Photo library

How do we keep from drowning in information?



Plan

Develop and implement a methodology for data collection & visualization prior to an event.

Questions to consider

Policies, procedures, and resources need to be developed in order to..

Collect

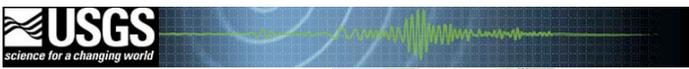
Filter

Verify

Aggregate

What Tools Already Exist?

Several non-profit organizations as well as the Federal government have developed collection, visualization & aggregation tools designed to gather data for both citizens and public safety personnel.



Did you Feel It?



Data is collected from the public to determine macroseismic intensity.

People enter zip code and answer standardized questions.

Almost instant feedback regarding intensity and damage.

Replaced old system where questionnaires were mailed to post offices in earthquake regions.

Health Data Visualization Tool

Eurosurveillance

Google News

CDC

World Health Organization

ProMED Mail



H1N1 Visualization Tool



Aggregates social media health resources and news.

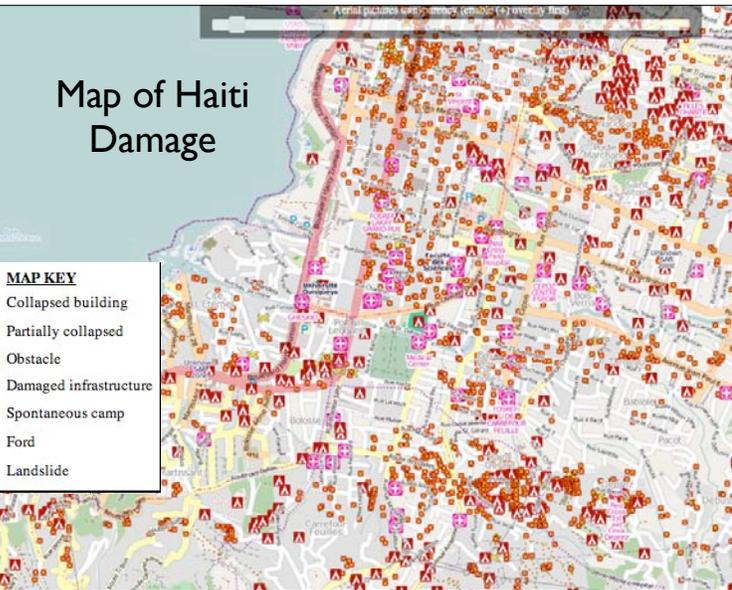


“The Ushahidi Platform allows anyone to gather distributed data via SMS, email or web and **visualize it** on a map or timeline.

Our goal is to create the simplest way of **aggregating information** from the public for use in crisis response.”

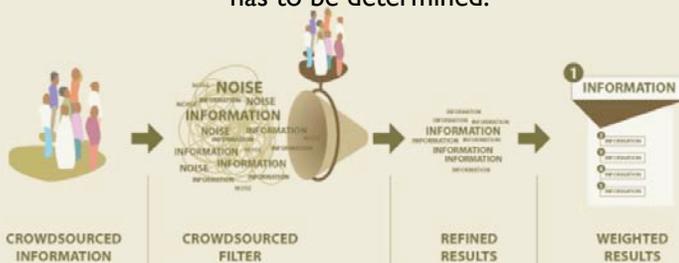


Map of Haiti Damage



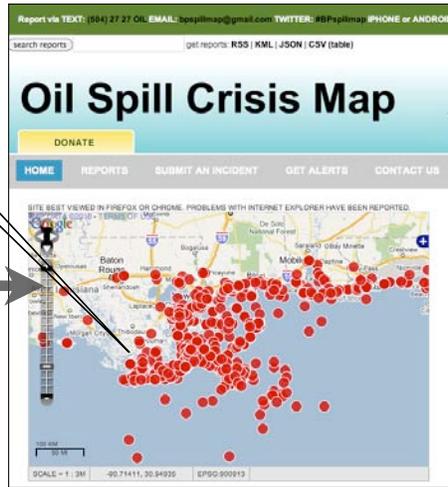
Crowdsourcing: Unbound

Gathering data from all sources, known, or unknown, including general public. Veracity of data has to be determined.



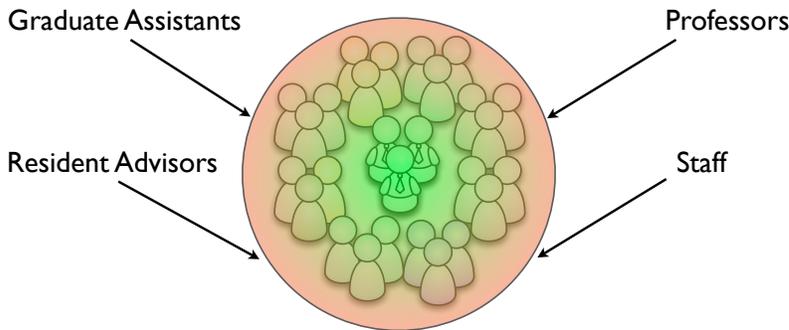
Mathematical models have been created to filter, categorize & “weight” data.

Long stretch of beach with tar balls, some over a foot wide.
Info: Verified
Date: 7/7/2010



Contributing allows people to give “visible testimony”.

Crowdsourcing: Bound



Bound crowdsourcing refers to gathering info from **trusted agents**.
Veracity is high.

Train trusted agents

Advantages of texting:

1. Each message is date and time stamped, sometimes with location data.
2. Non-essential items can wait for processing.
3. People will not jam 911 with non-life threatening issues.



Conclusion

1. Use available talent to your advantage.
2. Research best practices.
3. Embrace changing technology to benefit your organization and your campus.