



U.S. Department of Education  
Office of Safe and Drug-Free Schools  
Emergency Management for Higher Education



FY 2101 Final Grantee Meeting ♦ Atlanta, GA ♦ June 23 – 24, 2011

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## **Social Media's Application for University Emergency Management Preparedness and Response**

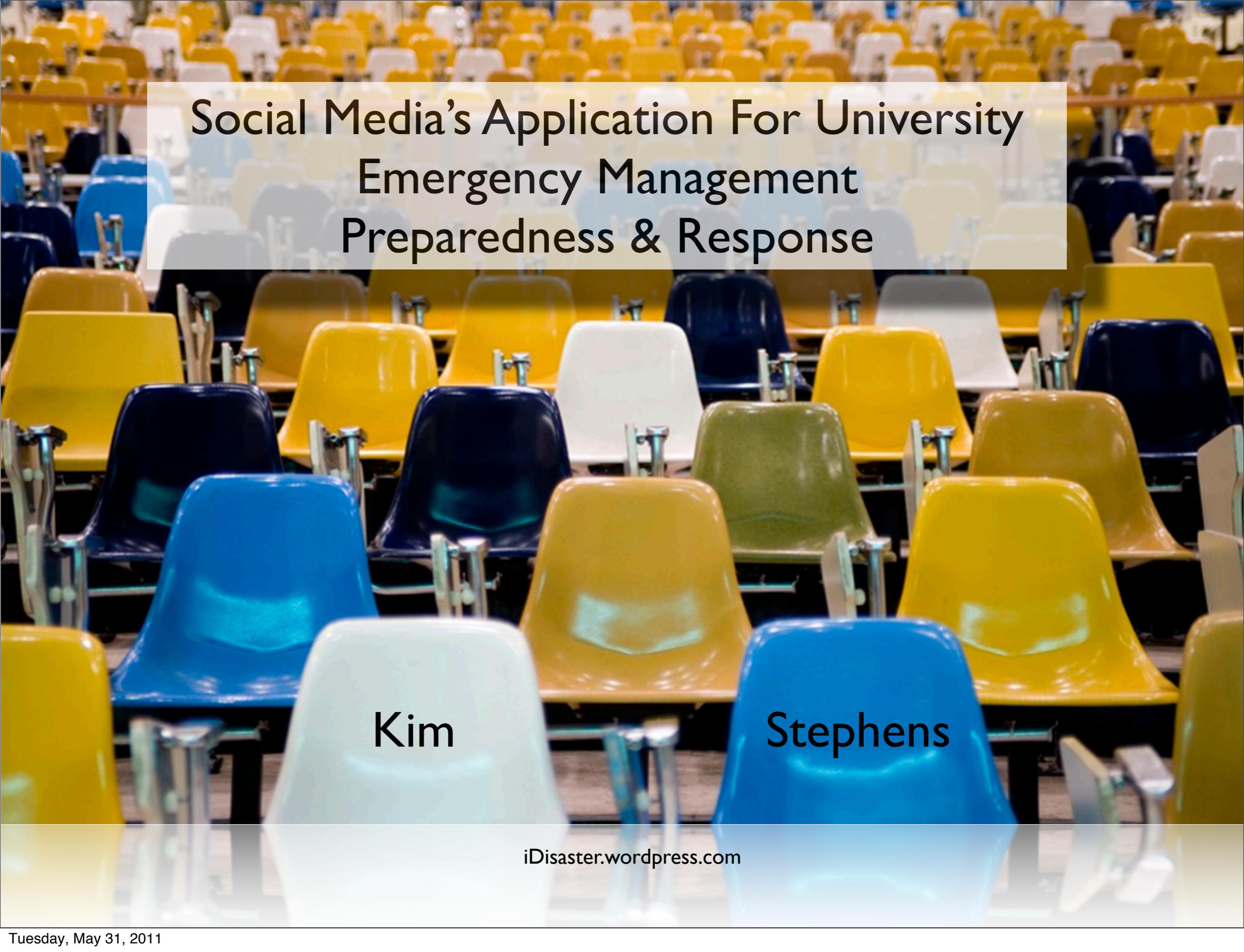
**Kim Stephens**

Social Media Designer, Researcher and Editor

*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.



# Social Media's Application For University Emergency Management Preparedness & Response

Kim

Stephens

[iDisaster.wordpress.com](http://iDisaster.wordpress.com)

# 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?
- \* How do we listen to the crowd?
- \* Conclusion

# Universities are adept at using social media for public relations.

Customized Facebook Pages feature an informal format

Fun, non-controversial content thousands of “fans”



192,263 People Like This

# Web 1.0 in a 2.0 world.

## Traditional Preparedness Fact Sheet

## List of Safe Havens

**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 few minutes 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 areas 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 swift water. If you come upon flood waters, **STOP! TURN AROUND AND GO ANOTHER DIRECTION.**



Does anyone read this?

Public Safety | Campus Safety | Emergency Safety Locations

**CAMPUS SAFETY**

- Posts and Patrols
- Emergency Safety Locations
- Crime Prevention Tips
- Parent Fact Sheet
- Fire Safety
- Investigation
- Lost & Found

**EMERGENCY SAFETY LOCATIONS**

The following is a listing of the NYU Safe Havens. Safe Havens are provided with the help of the local NYPD Precincts on a quarterly basis. Last updated: 1/1/03

**Soho/Little Italy**

- > DiPalo Fine Foods 200 Grand Street
- > Pomodoro 51 Spring Street
- > Eileen's Special Cheesecake 17 Cleveland Place
- > Spring Mart 202 Mott Street
- > Macelleria 202 Lafayette Street
- > Umberto's Clamhouse 386 Broome Street
- > Parisi Bakery 198 Mott Street
- > Happy Deli 70 Lafayette Street
- > Solita Soho Hotel 159 Grand Street
- > Dom's 202 Lafayette Street

**Downtown**

- > Dunkin Donuts 50 Fulton St.
- > Strand Books 95 Fulton St.
- > Best of NY Food 150 Water St.
- > Mercer Shoe Repair 295 Mercer
- > Starbucks 233 Broadway

**Union Square/East Village**

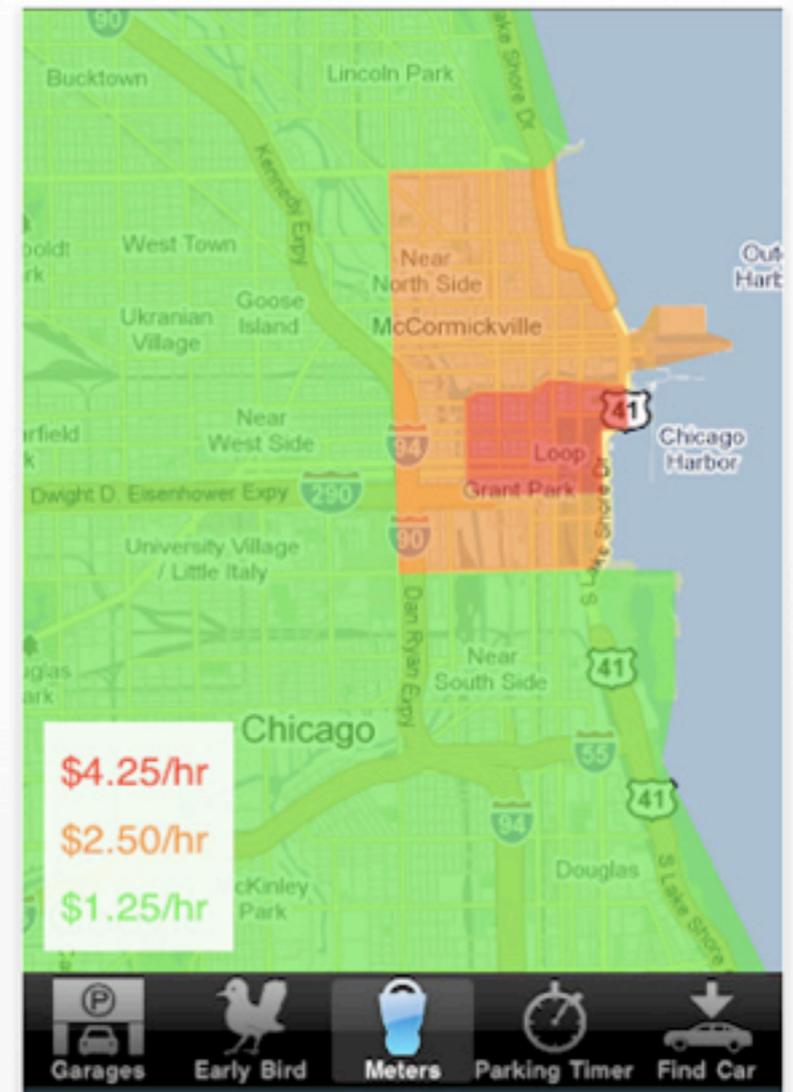
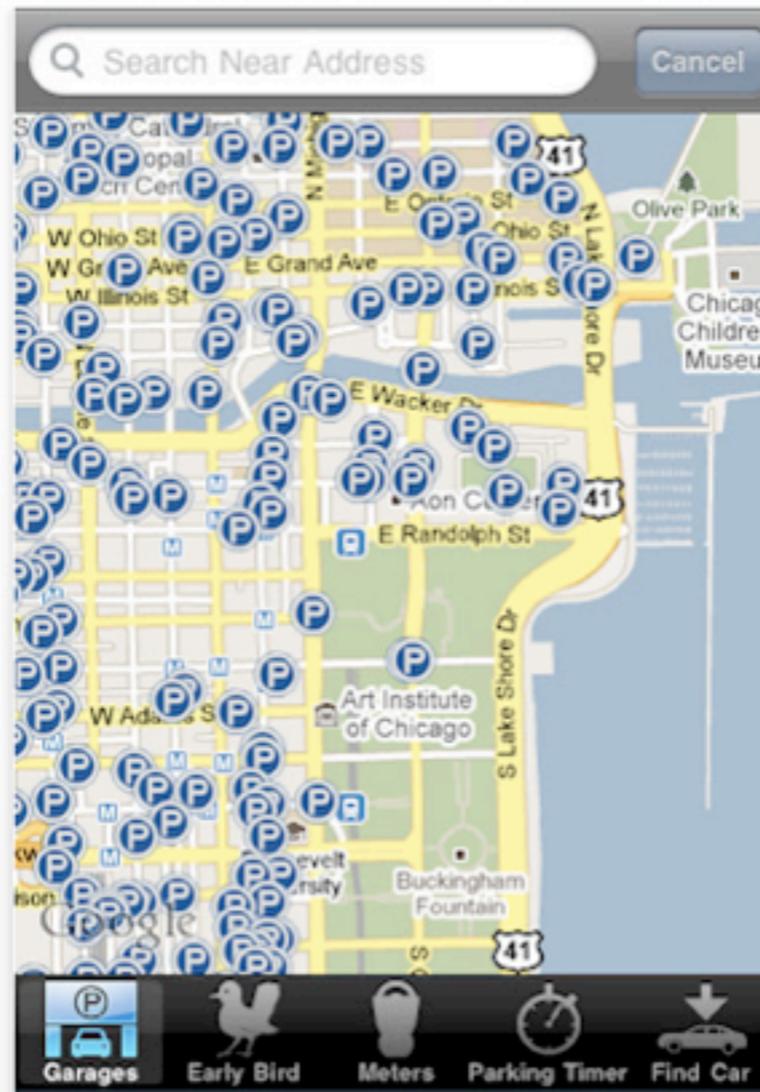
- > Staples 5-9 Union Sq. W.
- > Modern French Cleaners E. 30th & 2nd Ave.
- > ProHealth Pharmacy 385 2nd Avenue
- > Starbucks 41 Union Sq. West
- > Barnes and Nobles 33 E. 17th Street
- > Au Bon Pain 6 Union Sq. East
- > Whole Foods 4 Union Sq. South
- > Wei Peng Laundry 132 4th Avenue
- > Yakou Shoe Repair 132 4th Avenue
- > Chris French Cleaners 57 4th Avenue
- > Royal Cleaners 85 4th Avenue
- > Tower Records 692 Broadway
- > Tower Video 20 E. 4th Street
- > Ferncliff Deli 75 3rd Avenue
- > Uno Chicago Grill 55 3rd Avenue
- > NYC French Cleaners 45 3rd Avenue
- > East Village Photo 35 3rd Avenue
- > M&N Cleaners 207 E. 14th Street

Information is buried  
in webpage.

Last updated: 2003

# 2.0 and Beyond

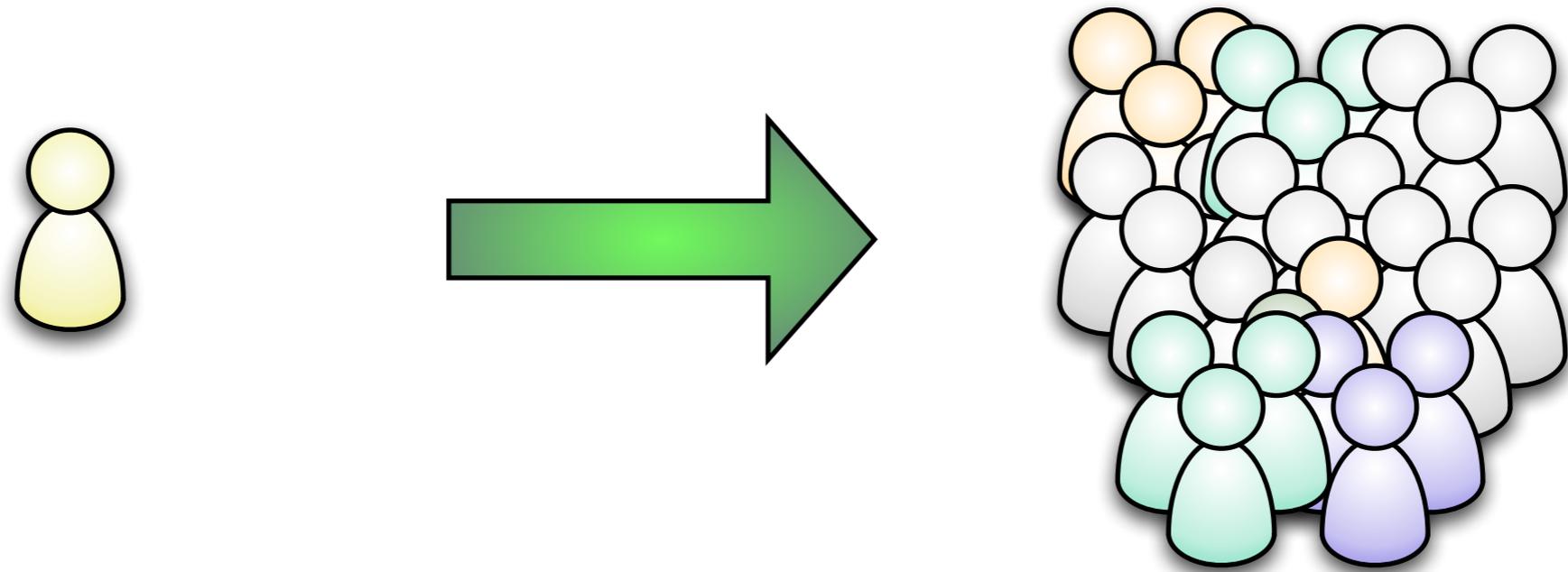
## iPhone Screenshots



# 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 PR & emergency communications system.

Schools use text alerts and twitter messages to notify students of emergency situations.



Facebook for engagement.



YouTube to disseminate preparedness information.

# Introduce Fast Follow: No Twitter Account needed.



follow [@myuniversityEMA](https://twitter.com/myuniversityEMA)

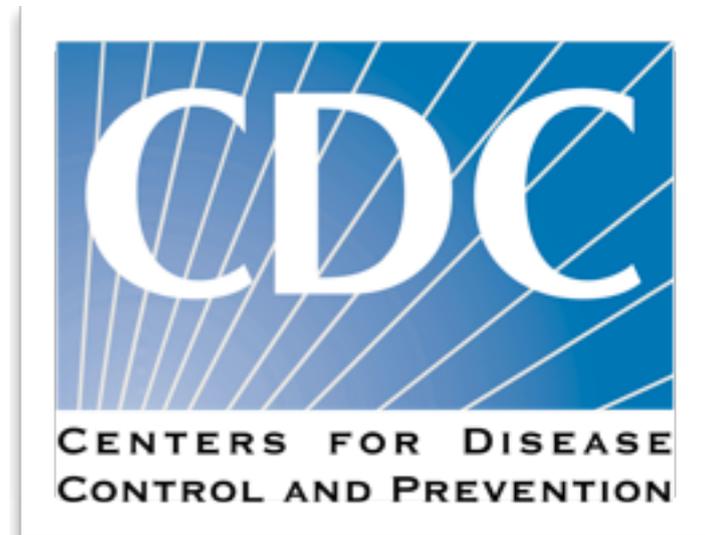
# Peer-to-Peer Communications

“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

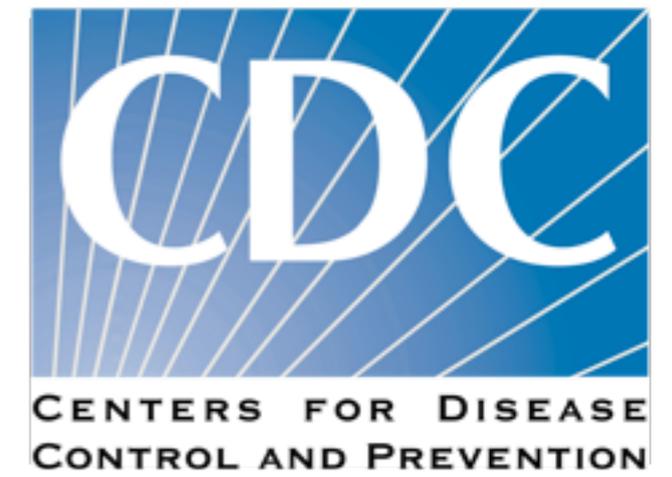
CDC creates social media tools  
**INTENTIONALLY DESIGNED** to be shared  
peer-to-peer.



Goal is to encourage:

- ◆ Information sharing
- ◆ Collaboration
- ◆ Interactivity

# Information Sharing



## Preparedness 101: Zombie Apocalypse



Blog post on [CDC.gov](http://blogs.cdc.gov/publichealthmatters/2011/05/preparedness-101-zombie-apocalypse/) May 16, 2011.

<http://blogs.cdc.gov/publichealthmatters/2011/05/preparedness-101-zombie-apocalypse/>

# Interactivity

www.gamification.com

Gabe Zicherman, Gamification Blog

# Interactivity

Gamification is: the process of using **game thinking** and **game mechanics** to solve problems and **engage users**.

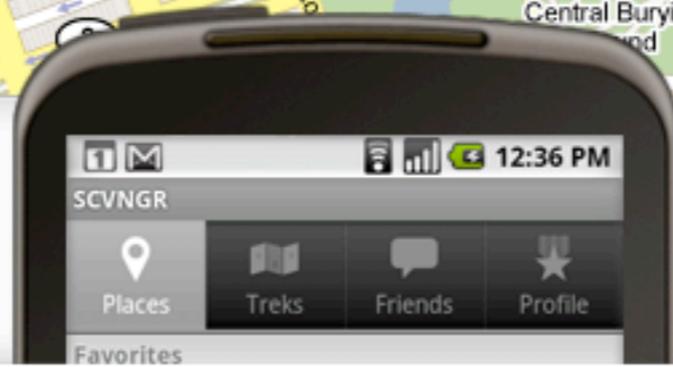
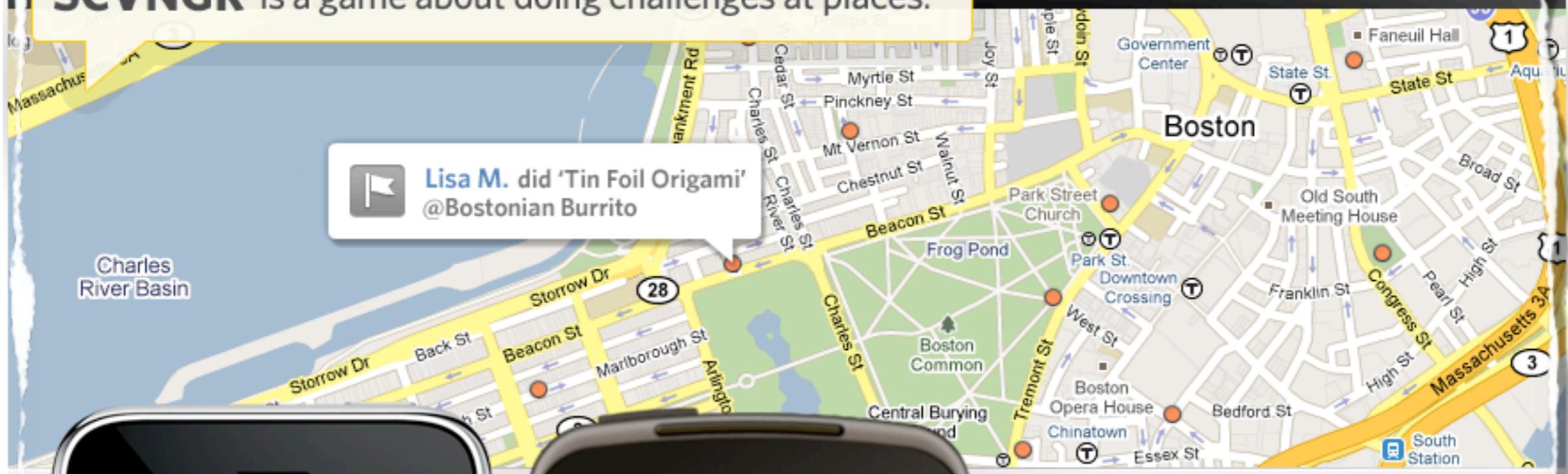
Gabe Zicherman, Gamification Blog



SCVNGR for Business FAQ Contact Log In

SCVNGR is a game about doing challenges at places.

Enter an address



**Enterprises:** Build on SCVNGR

Join the 1000+ institutions in 20 countries who are already building on SCVNGR.

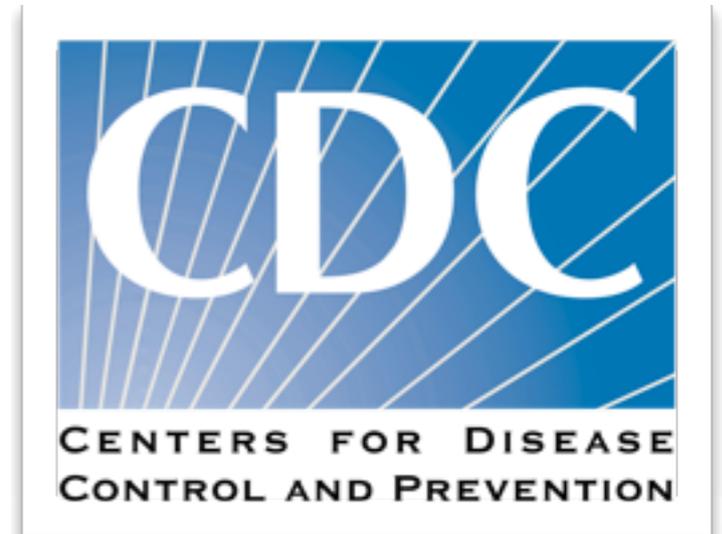
Learn more about building on SCVNGR

play on iPhone

play on Android

Learn more about playing via sms and other platforms!

# Collaboration



## WIDGETS

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



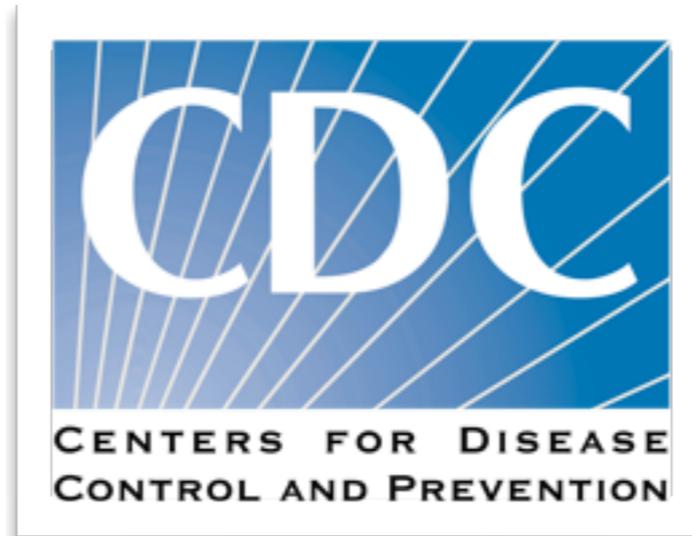
## Buttons and Badges

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 from their experience.***

1. Clearly define your goals & 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

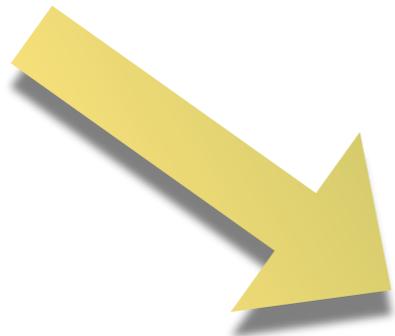
“the act of taking a job traditionally performed by a designated agent and outsourcing it to an undefined, generally large group of people in the form of an open call” (Howe, 2006)

# Utilize Student Talent

Appropriate incentive  
structure

Clear objectives

Open data  
(e.g. crime statistics)



# 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

## iPhone Screenshots

**ARE YOU SAFE Milwaukee**

**THREAT METER**

Moderate

Low High

**'08 Crimes in Immediate Vicinity**

Homicides:	1	Robberies:	23
Assaults:	12	Car Thefts:	17

320 E. Menomonee St Milwaukee, WI  
Updated 5/5/09 1:09 pm EST

**ARE YOU SAFE Milwaukee**

**'08 Crimes in Immediate Vicinity**

Homicides:	0	Robberies:	8
Assaults:	10	Car Thefts:	7

**Put Your iPhone Back in Your Pocket...**

On 3/20/2008, a robbery was reported at 2900 N HUMBOLDT BL. That's about 43 ft. from here. It occurred at 8:50 AM, according to the record. You might be able to glean more context by examining the offense description:

*ROBBERY*

Humboldt Blvd and Locust St MKE  
Updated 7/24/09 10:42 AM EST

**ARE YOU SAFE Milwaukee**

**'08 Crimes in Immediate Vicinity**

Homicides:	2	Robberies:	1
Assaults:	28	Car Thefts:	14

**Please Be Careful**

A homicide took place about 13 ft. from here, on 8/28/2008. The exact address was 409 W VIENNA AV. The method reported was death via GUN.. You might be able to glean more context by examining the offense description:

*Homicide*

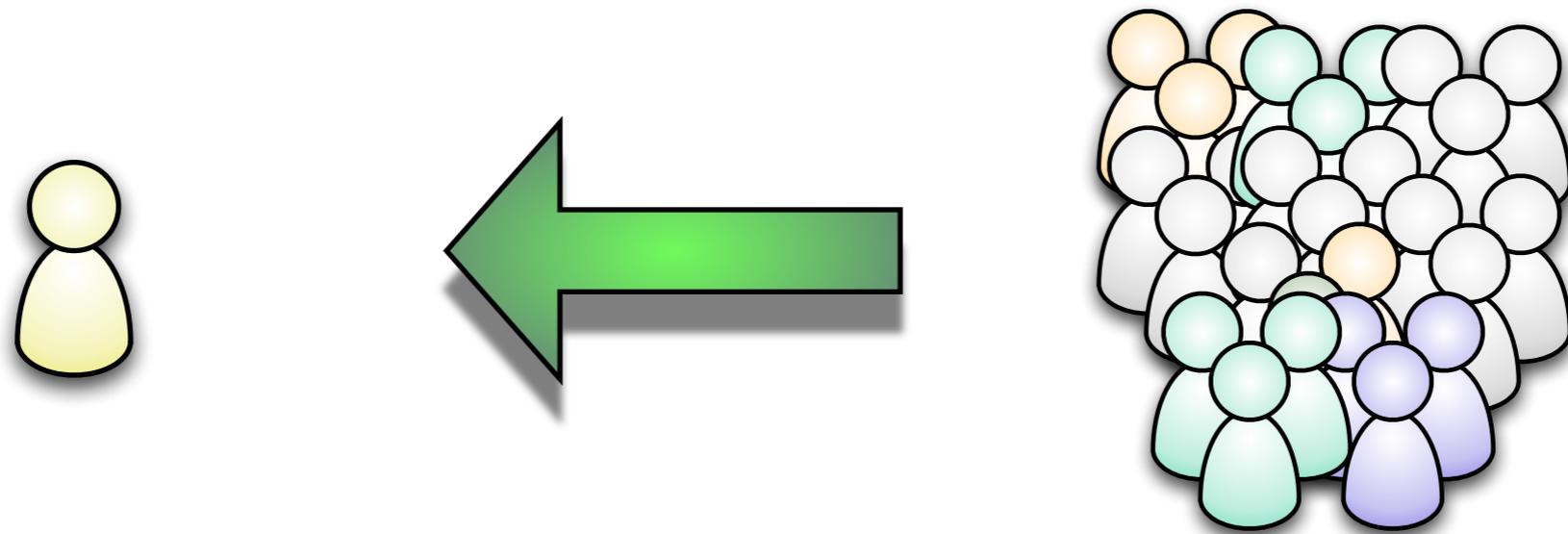
409 W Vienna Ave MKE  
Updated 7/24/09 11:28 AM EST

How can social media be  
used in a  
**crisis?**

crisis?

# Web 2.0 Technologies provide rapid way to share information.

Why would we want to listen to the crowd?



- Situational Awareness
  - Understand Message Penetration
  - Determine & Stop Misinformation

# How do we listen?

Monitor

Participate

Become the “go to” source.

# 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



# Use Social Media to ask questions



**Support Messages for Telecom Staff** information for Telecom Christchurch Staff Members is available here. If you have not let your Manager know that you are safe, please do so as soon as possible



**Telecom New Zealand**

[www.telecom.co.nz](http://www.telecom.co.nz)

Connecting New Zealanders through mobile, broadband and landline calling – Telecom New Zealand.

Tuesday at 2:51pm · Share

## What do you know?



**Support Messages for Telecom Staff** To all Chch people: BNZ are looking for their staff member ANNA JOHNSON, She was last seen leaving BNZ 129 Hereford Street. Please let the guys there know via their Facebook page or TXT 878 (type BNZ then your message) : <http://twitter.com/BNZBank/status/40145199988621312>

Twitter / BNZ Bank: We're looking for BNZ staf ...  
[twitter.com](http://twitter.com)

We're looking for BNZ staffer ANNA JOHNSON Seen her? Let us know here or on [facebook.com/bnzbank](http://facebook.com/bnzbank) or TXT 878 (type BNZ then ur message) #eqnz

Tuesday at 3:39pm · Share



**Chris Mitchell** What does she look like?

Tuesday at 3:43pm



**Support Messages for Telecom Staff** She's been found – thanks guys: <http://twitter.com/BNZBank/status/40151383151742976>

Tuesday at 3:53pm · 5 people

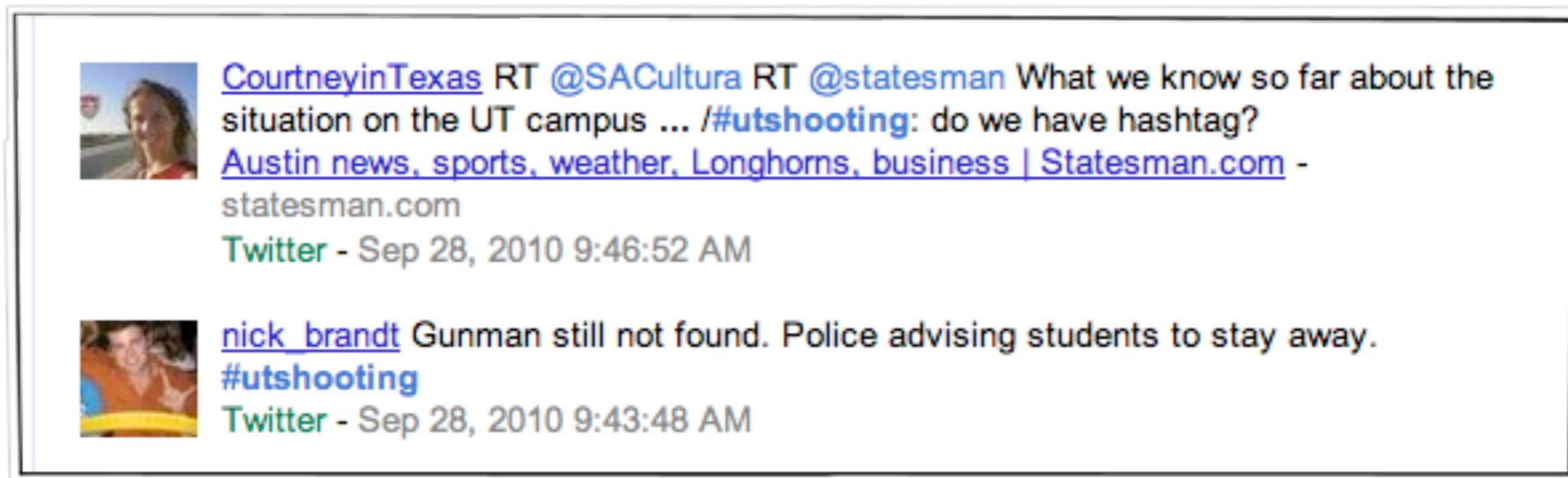


**Support Messages for Telecom Staff** @chris She's been found – thanks tho: <http://twitter.com/BNZBank/status/40151383151742976>

Tuesday at 3:55pm · 1 person

# Monitor Social Networks

## Message Penetration?



Person asks: What do we know?  
Do we have a hashtag?

A student answers with correct information.

# Participate

Determine and Stop Misinformation



[QPSmedia](#) Flood **Mythbuster #5**: Storm King Dam near Stanthorpe has not failed. Some small farm dams are being inspected for... [fb.me/BNJSvESJ](https://fb.me/BNJSvESJ)  
Twitter - Jan 9, 2011



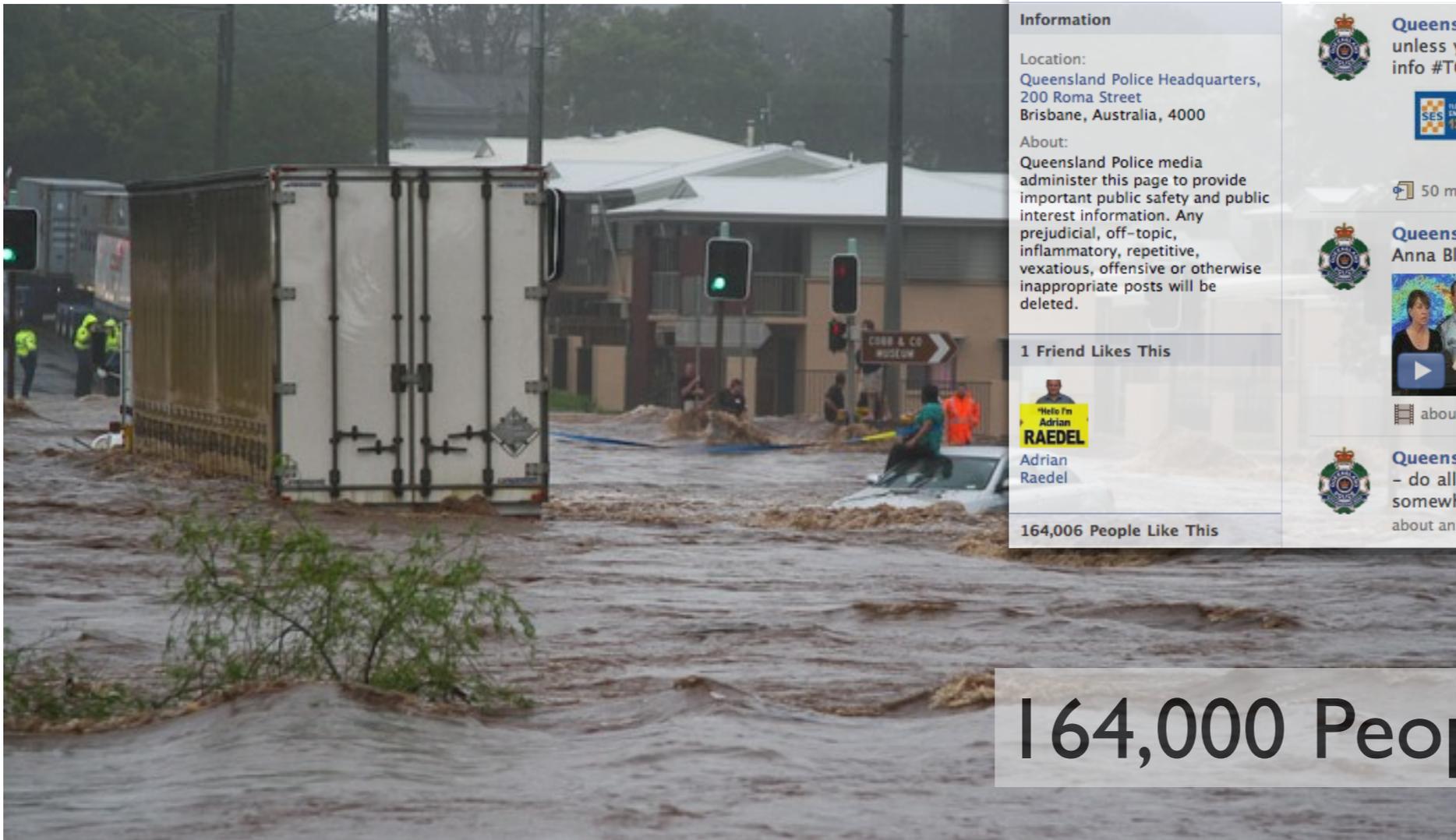
[unhatched](#) RT [@saykay](#): RT [@brittneydanne](#): Hearing rumors: UT gunman had AK47, 7 people shot, gunman killed himself. **#UTshooting #UT #pray**"  
Twitter - Sep 28, 2010 10:12:11 AM

## Bust Myths and Rumors

# Become the “go to” source

Update as often as possible

People will rally around your SM presence.



Queensland Police Service [Like](#)

Wall Info Cyclone info Livestream YouTube RSS >>

 Queensland Police Service Live media conference on #TCYasi is scheduled to start at 1:00pm on our livestream tab.  
about a minute ago · [View Feedback \(2\)](#)

 Queensland Police Service Motorists are urged to avoid Fortitude Valley after a traffic crash between a car and a cherry picker on McLachlan Street (near Brunswick St) around 11am. Man from cherry picker has been taken to the RBH in a serious condition. Vehicles should avoid the area as access from the Story Bridge onto McLachlan Street is reduced to one lane.  
15 minutes ago · [View Feedback \(22\)](#)

 Queensland Police Service If you are in a storm surge area, seek shelter with family and friends. If you have nowhere, more info is coming #TCYasi  
49 minutes ago · [View Feedback \(91\)](#)

 Queensland Police Service Shelter in place is the safest option unless you are in a storm surge area. See [www.disaster.qld.gov.au](http://www.disaster.qld.gov.au) for info #TCYasi

 Welcome to Queensland's Disaster Management Services [www.disaster.qld.gov.au](http://www.disaster.qld.gov.au)  
For information and assistance for communities affected by major disasters such as flooding, severe storms and fires.  
50 minutes ago · [View Feedback \(20\)](#) · [Share](#)

 Queensland Police Service 9:00am #TCYasi briefing with Premier Anna Bligh

 9:00am TC Yasi briefing with Premier Anna Bligh  
Tuesday Feb 1  
[www.youtube.com](http://www.youtube.com)  
Apologies for the audio quality.  
about an hour ago · [View Feedback \(71\)](#) · [Share](#)

 Queensland Police Service Community, church and sporting groups – do all of your members have safe shelter? Can you help them find somewhere? #TCYasi  
about an hour ago · [View Feedback \(41\)](#)

**Information**

Location:  
Queensland Police Headquarters,  
200 Roma Street  
Brisbane, Australia, 4000

About:  
Queensland Police media administer this page to provide important public safety and public interest information. Any prejudicial, off-topic, inflammatory, repetitive, vexatious, offensive or otherwise inappropriate posts will be deleted.

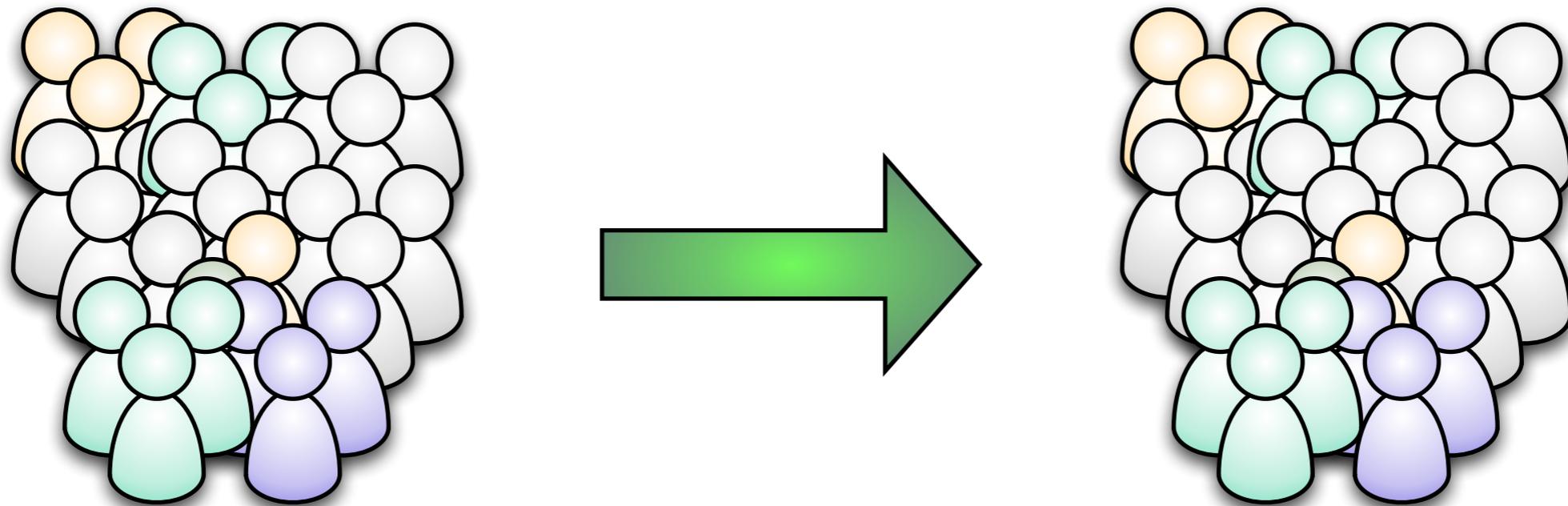
1 Friend Likes This

 Hello I'm Adrian  
**RAEDEL**  
Adrian Raedel

164,006 People Like This

164,000 People “like” this site.

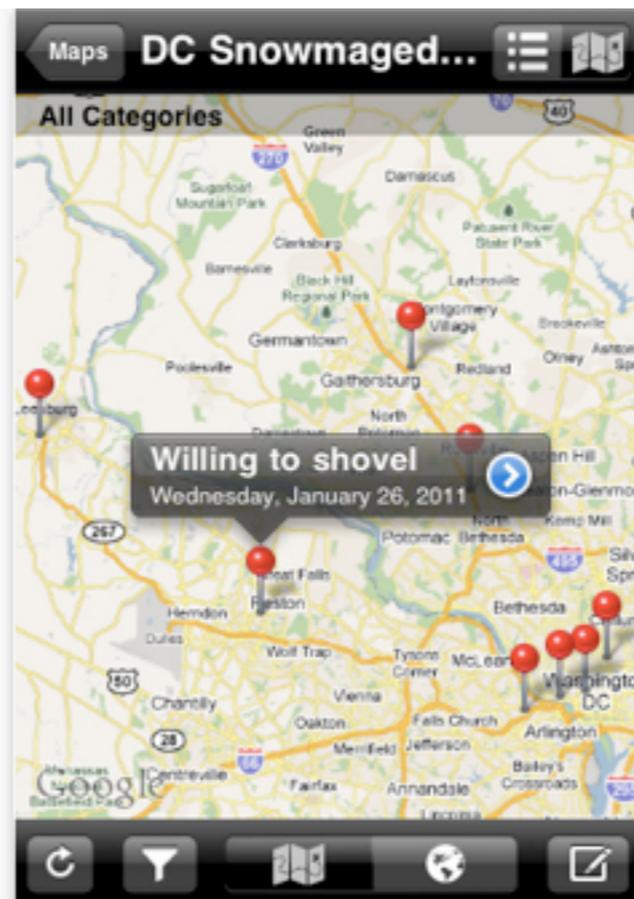
# Public to Public



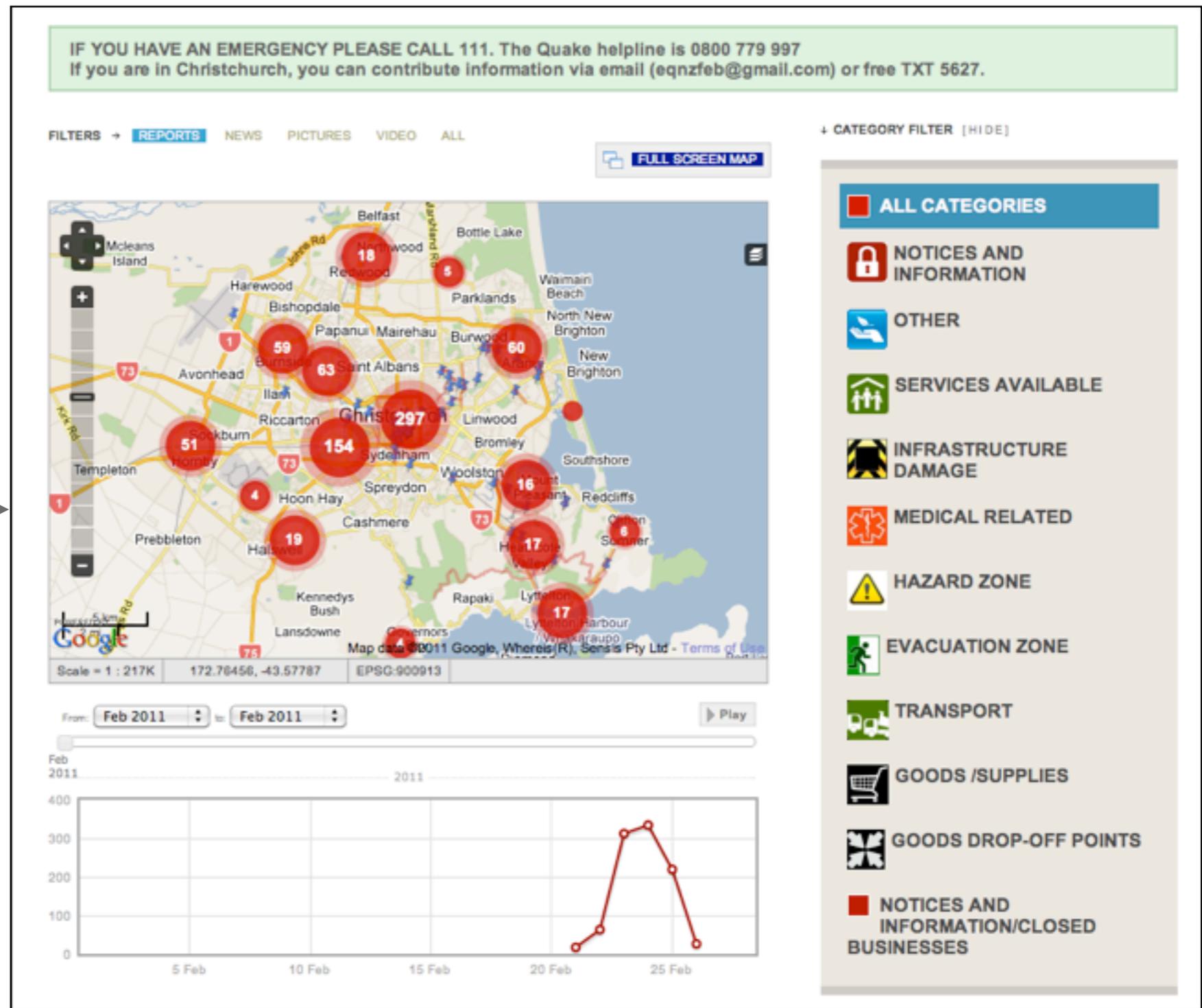
**Social Media are also about the  
public talking to the public.**



“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.”



# Ushahidi Map ChristChurch, NZ



Contributing allows people to help others & themselves.

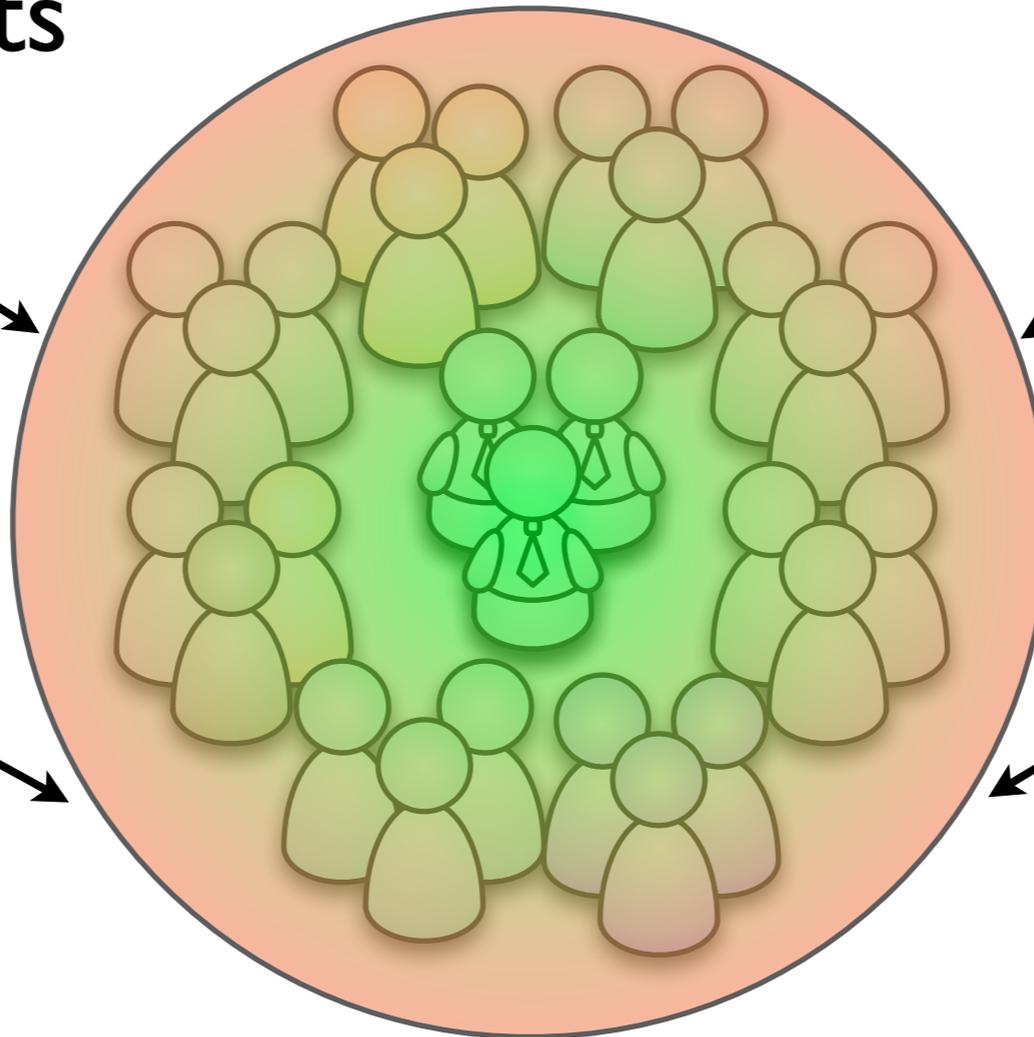
# Crowdsourcing: Bound

Graduate Assistants

Professors

Resident Advisors

Staff



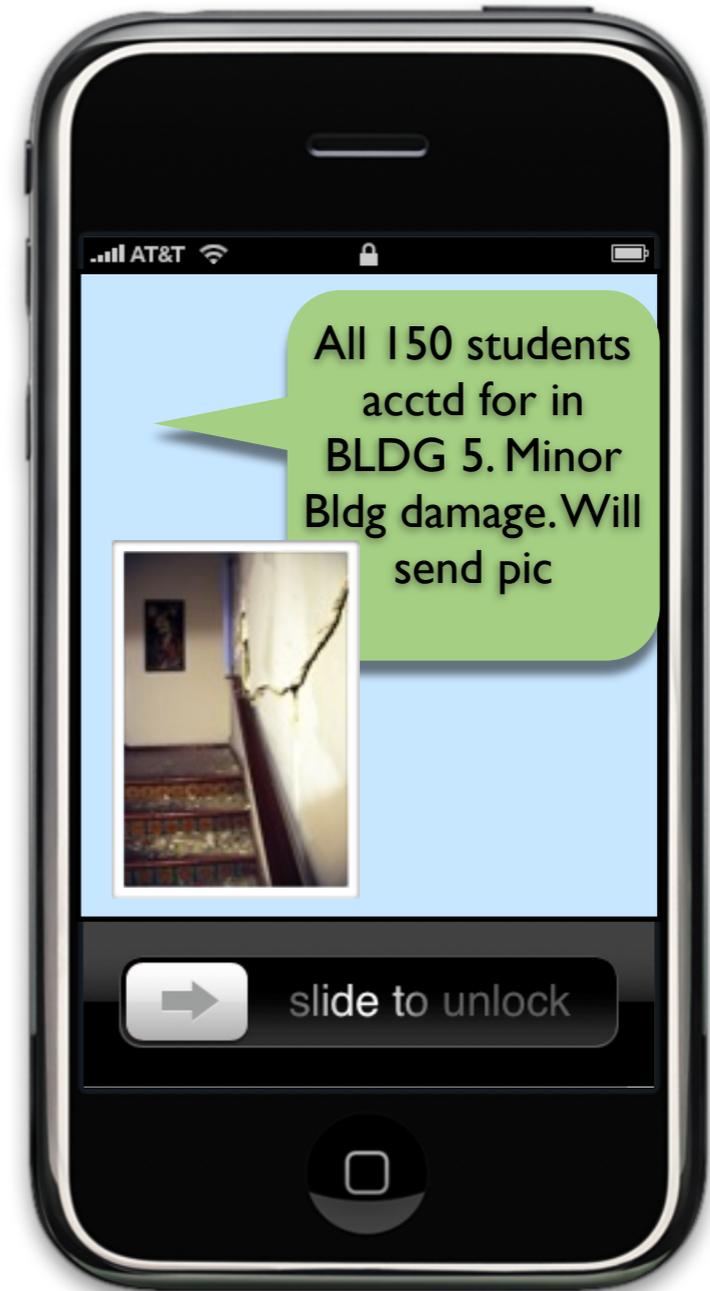
Bound crowdsourcing refers to gathering info  
from **trusted agents**.  
Veracity is high.

# Collect Data

Train trusted agents.

Advantages of texting or twitter :

1. Each message is date and time stamped, sometimes with geo-location data.
2. Txt and tweets data are easier to import/export for processing.
3. Less tax on bandwidth.



# Conclusion

1. Set goals, establish policies, practice procedures.
2. Use available talent to your advantage.
3. Research best practices.
4. Embrace changing technology to benefit your organization and your campus.

# Photo Credits

- Slide 9: <http://lazycrazy.deviantart.com/gallery/#/d2gwla8>
- Slide 11: <http://blogs.cdc.gov/publichealthmatters/2011/05/preparedness-101-zombie-apocalypse/>
- Slide 21: FEMA photo library
- Slide 22: Photo by Martin Luff: Damage to building in New Brighton. Licensed under Creative Commons. <http://www.flickr.com/photos/23934380@N06/5474235937/>
- Slide 25: Photo by KingBob86: Trapped Woman 2 <http://www.flickr.com/photos/kingbob86/5342341008/sizes/l/in/photostream/>

## Where to go for additional help?

- iDisaster 2.0 blog by Kim Stephens about social media and emergency management. See bibliography for list of resources. <http://idisaster.wordpress.com/bibliography/>
- Social Media for Emergency Management.org. Clearing house of information. [SM4EM.org](http://SM4EM.org)