Welcome
• Welcome/introduction from instructors

National Disaster Preparedness Training Center
  – Mission
  – DHS/FEMA-funded
  ndptc.hawaii.edu

Class Structure and Housekeeping
• Breaks
• Lunch
• Restrooms
• Emergency exits
• Cell phones
• Internet connection
Course Goals

• Provide participants with understanding of
  – Social media and its uses
  – Current tools, methods and models to properly make use of social media for crisis communication

Scope of Course

<table>
<thead>
<tr>
<th>Mod #</th>
<th>Module Title</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Welcome, Administration, &amp; Introduction</td>
<td>30 min</td>
</tr>
<tr>
<td>2</td>
<td>Introduction to Social Media</td>
<td>1.25 hour</td>
</tr>
<tr>
<td></td>
<td>Break</td>
<td>15 min</td>
</tr>
<tr>
<td>3</td>
<td>Understanding the Use of Social Media and Disaster Management</td>
<td>45 min</td>
</tr>
<tr>
<td></td>
<td>Break</td>
<td>15 min</td>
</tr>
<tr>
<td>4</td>
<td>Implementing Social Media Platforms in Disaster Management</td>
<td>1 hour</td>
</tr>
</tbody>
</table>

Scope of Course (con’t)

<table>
<thead>
<tr>
<th>Mod #</th>
<th>Module Title</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Facebook Hands-On</td>
<td>1.5 hour</td>
</tr>
<tr>
<td></td>
<td>Break</td>
<td>15 min</td>
</tr>
<tr>
<td>6</td>
<td>Twitter Hands-on</td>
<td>1 hour</td>
</tr>
<tr>
<td></td>
<td>Break</td>
<td>15 min</td>
</tr>
<tr>
<td>7</td>
<td>Crowdsourcing and Datamining</td>
<td>30 min</td>
</tr>
<tr>
<td>8</td>
<td>Course Summary and Administration</td>
<td>30 min</td>
</tr>
</tbody>
</table>
Learning Activities

Modules 2 through 7
• Instructor-led discussion questions dispersed in Modules 2 through 7
• Module 5 and 6 – Facebook and Twitter hands-on computer training

Enabling Learning Objectives
At the end of this module, participants will be able to:
1-1 State the purpose of the course
1-2 Review today’s agenda
1-3 Explain how performance is evaluated

Introductions
• Name
• Organization
• Role(s) before and during emergencies
• Experience using social media
• What you hope to get out of the course
Administrative Matters
You should have submitted the following materials before class:
- Participant registration form
- Pre-test that assessed your current knowledge of the course content
- Post-test administered at the end of the course
- Pre and post test scores will be compared to measure your learning

Participant Registration Form

Test Answer Sheet
Social Media for Natural Disaster Response and Recovery

Module 2: Introduction to Social Media

Pre-test Answers

1. B
2. B
3. B
4. B
5. B
6. D
7. D
8. B
9. D
10. B
11. D
12. B
13. B
14. C
15. D
16. A
17. C
18. A
19. B
20. B

Summary

• Explained how performance is evaluated
• Stated how class materials can be applied to assist stakeholders to gain an understanding of social media and its uses
• Summarized the course and its agenda
Enabling Learning Objectives

2-1 Define social media and how it is different from traditional media types.
2-2 Identify the popular social media platforms and applications.
2-3 Identify social media concepts and emerging trends.

Social Media for Natural Disaster Response and Recovery

"Social media is an innovative way of socializing where we engage in an open dialogue, tell our stories and interact with one another using online platforms." (Associated Press, 2010)

Understanding the Power of Social Media
Attributes and Objectives of Social Media

- Get message out faster
- Reach more people through another communication channel
- Arguably relatively low operating costs
- Reach people via mobile communication device
- Instant, highly scalable form of communication
- Direct from the source

Traditional vs. Social Media

- Some are real-time
- Real-time
- Controlled by the media
- Can be updated instantly by anyone
- Large infrastructure required for large reach
- Broader reach for relatively low cost
- Media is the middleman
- Direct from source

Maximize Reach with Social Media

Cannot reach everyone with social media, but should be used together with other channels of communication to maximize reach within the community.
Who uses social media?

- 65% of adult internet users use social networking sites (Pew Research Center, 2011)
- 63% of people with disabilities use social media (Wireless RERC, 2011)

Increasing usage from all ages

Social media use is highest in the 18-29 age group, but is increasing every year for all age groups.

Growing Group of Interested Stakeholders

Social Media

- Public Safety Agencies
- Business
- Technology industry
- Community at large
- Community-based organizations
- Media
- Congress
## Social Media Applications

- **Facebook**
  - Started in 2004
  - Social networking site
  - 800M+ active users
  - 20% from U.S. (Jan. 2012)

- **Twitter**
  - Started in 2006
  - Microblogging and social networking service
  - 140 character limit
  - 100M+ active users, 230M tweets a day (Sept 2011)
**YouTube**
- Launched in 2005
- Watch and share originally-created videos
- Over 3 billion videos viewed a day
- More video is uploaded to YouTube in one month than the 3 major U.S. networks created in 60 years

**Instagram**
- Founded in 2010
- Mobile application for sharing photos
- 2 million users within first 3 months
  - 10 million users (Sept. 2011)
- 290,000 photos uploaded daily (2011)

**TwitPic**
- Launched in 2008
- Share pictures and videos instantly
- 17 million registered users (2011)
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Google+

- Launched June 2011
- Certain growth through integrated login and features
- 15.2m U.S. users (Nov 2011)

Challenges of Social Media and Public Information

- People expect 2-way conversations
- Set expectations if communications will not be interactive
- Considerations must be made to reach vulnerable populations
- Connect with organizations that communicate directly with vulnerable populations
- Inaccurate information can spread quickly on social media
- Link back to official sources of information
- Social media is used as an additional tool to supplement traditional channels of communication
- Difficult to reach population not connected to social media

Challenges

- Labor rules/policies
- Privacy issues
- Internal policy
- Training in use
- Organizational culture
- Workload and time commitment
- Communication plan integration
- Personal vs. organizational use
- Compliance with social media platform policies
Emerging Trends

• Gamification
  – Facebook
  – Foursquare

• ???
Enabling Learning Objectives
3-1 Identify new roles and uses for social media
3-2 Identify roles of social media in the disaster management cycle
3-3 Identify key trends for use in disaster management

Benefits of Social Media for Emergency Managers
- Improves rapid real time communications
- Improves situational awareness
- Supports common operating picture (COP)
- Provides two and three way dialogue
- Empowers multi-stakeholder engagement
- Expands fundraising opportunities
- Enhances donations management
How is social media used in disaster management?

- Prepare public for emergencies
- Monitor for help needed
- Alert and warn public
- Keep public updated with news and information
- Relief and recovery efforts
- Data Collection
- User feedback via messages, wall posts, polls, etc.

Multiple Roles in the Disaster Management Cycle

- **Mitigation/Preparedness**
  - Information campaigns, readiness information, community outreach, stakeholder engagement and feedback
- **Response**
  - Alerts, warnings, information dissemination, citizen information posts, victim retrieval alerts, rumor management, monitoring
- **Recovery**
  - Information dissemination on community resources and assistance, rumor management, monitoring

Uses in Mitigation/Preparedness

- Readiness campaigns
- Community outreach
- Agency updates
- Training and exercises
- Stakeholder engagement
- Feedback
- Monitoring
- Research
Community Outreach & Readiness
Volunteer Organizations Active in Disaster (VOAD)

Uses in Response
- Alerts and warnings
- Scheduled info dissemination
- Citizen information exchange
- Situational awareness
- Logistics coordination
- Victim retrieval alerts
- Rumor management
- Monitoring

Monitoring on Twitter: Hawaii Tsunami Warning
1. Ginafontillas tweets message:
2. Tinamahina re-tweets message @HI_CivilDefense:
3. HI_CivilDefense gets tweet and replies to both tweeters:

- Hawaii Civil Defense on Twitter
Integrated Approach

- Based on communications strategy
- Closely engages with key government agencies, partners and community
- Uses interagency coordination to provide regular content to City and County Facebook pages
- Promotes agency personality through branding and photos

Social Media for Natural Disaster Response and Recovery

Integrated Approach

- Leverages social reward mechanisms
- Inspires preparedness by tying rewards and social incentives to meaningful real-life activities.
- Educates and motivates public preparedness
- Connects with Facebook, Twitter, other social media
Uses in Recovery

- Community resource news
- Rumor management
- Donations management
- Monitoring
- Evaluation
- Community engagement

Recovery Efforts for Washoe Drive Fire

A Case Study in the Use of Social Media throughout the Disaster Management Cycle

2011 Hurricane Irene

- Made landfall in Puerto Rico, North Carolina, New Jersey
- Severe damage and flooding in New Jersey and Vermont
Department of Homeland Security on Twitter

Communicating to public via Tweets on Twitter

Vermont Emergency Management
Alerts, updates on Twitter and Facebook

City of Trenton, NJ
Information Exchange via Facebook
Social Media for Natural Disaster
Response and Recovery

National Hurricane Center on Facebook and Twitter

- Posted information and updates for public about Hurricane Irene's path

Social Media for Natural Disaster
Response and Recovery

Red Cross engages with community via Facebook

- Provide update about disaster
- Provide relief assistance, shelter app helps people find shelter

Social Media for Natural Disaster
Response and Recovery

Citizens communicate with each other via Red Cross's page
Weather Channel on Twitter and Facebook

Wells Fargo communicates with customers

Tweets from Wells Fargo Twitter page

Updates on Wells Fargo Facebook page

Significant Trends for Use in Disaster Management

- Redefining risk & crisis communications
- Expanding role of citizen journalism
- Enabling geographically-targeted alerts and notifications
- Using *crowdsourced* data
- Spawning Volunteer Technical Communities (VTC)
- Empowering rapid data visualization
Summary

• Social media is empowering emergency managers to communicate in timely, cost effective and interactive ways
• Valuable in all phases of disaster management
• Many social media tools can be used simultaneously
• Social media is rapidly expanding in uses, expectations and applications

Enabling Learning Objectives

4-1 Describe strategies to integrate social media into existing disaster management communications
4-2 Describe strategies to build online organizational identity and credibility
4-3 Describe challenges, concerns and situations where misinformation could occur
4-4 Identify strategies to align objectives and platform
Social Media for Natural Disaster Response and Recovery

Holistically integrate social media

Communication Strategy
- Policy and Procedures
- Target Audiences
- Channels of Communication
  - Approval Process
  - Radio
  - Television
  - Print
  - Social Media

Who
- What
- When
- Where
- Why
- How

Increasing the effectiveness of online media engagement

- Determine if there is a social media component in your disaster media plan
- Initiate step-by-step procedures to incorporate social media into an integrated communication strategy and disaster media plan
- Select targets, approaches, tools, and customize outreach such as creating hashtags and formulas for public to use (i.e. #CityNameEventDate)
- Prepare canned responses and posts for different types of crisis situations
- Develop list of social media contacts (i.e. radio, television, other agencies, etc.) and engage before an event occurs

Reporting & Situational Awareness

- Legal—check with legal department to determine agency or department policies
- Privacy—don’t collect or share copyrighted material (photos, text, or videos); write synopsis, source it, and provide link
- Records management—don’t save or download copyrighted content to a government device.
Community Expectations

Based on Red Cross survey (2010), there are high expectations from the public for disaster organizations to use social media.

Managing Expectations

- Broadcast role
  - Manage presence on social media platforms
  - Work within guidelines of published communication plan
- Interactive role
  - Monitor and respond to emergency requests
    - 74% of people expect help to arrive within an hour (Red Cross survey, 2010)

Utilizing Volunteers to Mitigate Staffing Challenges

@redcross Digital Volunteers
- Uses ARC volunteers in 4-hour shifts
- Role:
  - Monitor questions
  - Track trends or issues
- Provide disaster operations reporting to improve situational awareness

Photo by Chuck Haupt/ American Red Cross
Reaching Your Audience

- Serves as the single point of contact for community based organizations in the Alameda County in Oakland, CA
- Uses social media extensively to reach people considered to be “hard to reach”

Establishing Online Identity

- Visual signature
- Organizational personality
- “Voice”
- Consistency

Messaging

- Make social media efforts message driven, not channel driven
- Keep messages brief and pertinent
- Support a unified message
- One voice, multiple channels
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Misinformation & Corrections
- Monitor
- Quickly correct
- State and explain
- Alert command
- Viral reality
- Recognition

Building Credibility
- Build a reputation
- Create a Presence
- Stay Involved and Current with Information
- Provide access to first source of information

Choose the right platform to match objectives

<table>
<thead>
<tr>
<th>Facebook</th>
<th>Twitter</th>
</tr>
</thead>
<tbody>
<tr>
<td>More features, integrated discussion threads, structured, permission centric</td>
<td>Simple, open, low friction</td>
</tr>
</tbody>
</table>

Bashel Resources, Federal Emergency Management Administration — "Our Twitter follows [urls] tend to be interested in news and information. The [url] also offers more opportunity for discussion among and feedback from the public. And, we receive helpful comments on FEMA policies."
Choose the right platform to match objectives

<table>
<thead>
<tr>
<th>Objective</th>
<th>Facebook</th>
<th>Twitter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disseminate information quickly and effectively</td>
<td>Closed network, but larger number of users</td>
<td>Open access to all users, instant</td>
</tr>
</tbody>
</table>

More users on Facebook than Twitter, but communication dynamics for each platform.

Choose the right platform to match objectives

Grow Your Network

Community targets

Partnerships for information sharing

Potential contributors

People & message focus
Summary

• Social media must integrated into an overall communications strategy.
• Good examples of implementation exist—follow them!
• The rules of communications outreach still apply in social media.
• Twitter is faster paced and users are more interested in brief news and updates.
• The structure of Facebook encourages more community building and discussion.

Enabling Learning Objectives

5-1 Understand Facebook account concepts
5-2 Understand the differences between individual profiles and organizational pages
5-3 Implement Facebook
Facebook Structure

Facebook Profile vs. Page

Facebook profiles are meant to represent a single individual. Organizations of any type are not permitted to maintain an account under the name of their organization. We have created Facebook Pages to allow organizations to have a presence on Facebook. These Pages are distinct presences, separate from user profiles, and optimized for an organization’s needs to communicate, distribute information/content, engage their fans, and capture new audiences virally through their fan’s recommendations to their friends. Facebook Pages are designed to be a media rich, valuable presence for any artist, business or brand.

If you create a profile for your business, your account may be disabled for violating our Terms of Use. If you have questions about how to best leverage your Facebook Page, please check out our Insider’s Guide or FAQ.

Retrieved from a section of Facebook’s official policy

Facebook Pages

- Other users can become Fans and “Like” your Page
- Limited access to individual profile pages on your Organization Page
- Do not allow the ability to invite Friends

New Jersey Office of Emergency Management
Why create a Facebook Page?
• Can maintain a Fans list
• Update your status and broadcast messages (which gets shared with your Fans)
• Interact with the public via your Page
• Share pictures, videos, discussion board, application, wall posts and groups

Practical Exercise
• Like an Organization Page
• Create a Page for Organizations
  – Upload Logo, Get Fans, Basic Information
• Edit Information
• Share a link on Wall
• Comment on an Organization’s Wall

Like an Organization Page
1. Enter name in the search box
2. Select Like
Create a Page for Organizations

Select the type of Page

Choose category and enter name
Follow steps...

Set page username

http://www.facebook.com/username

Edit info

Select Edit Info tab on your home page
Select tabs to edit

Select different tabs to edit various information

Edit: Manage Permissions

Manage posting abilities on Wall

Edit: Manage Admins

Select to remove user as Admin

Enter name to add as Admin
This Page provides insights about your page and users.
To customize who can view link

Comment on Wall

Profiles/Pages: Switching back and forth
Summary

• Be sure to understand Facebook policies and page management good practices
• Differentiate between Facebook profiles (person) and pages (organizational)
• Engage with the community using social media
Enabling Learning Objectives

6-1 Understand the mechanics of Twitter
6-2 Understand basic monitoring tools
6-3 Identify techniques for keeping credibility of messages
Using Twitter

- Simple, open, fast, searchable, topic-based platform
- Uses short messages: 140-character limit
- Enables following other users’ messages
- Enables building a following: Have other people follow you
- Send direct private messages
- Can repost other users’ public messages
- Can reply to a public or private message
- Can create a specific event using a hashtag (#)

Types of Twitter Messages

<table>
<thead>
<tr>
<th>Tweet</th>
<th>Public</th>
</tr>
</thead>
<tbody>
<tr>
<td>@reply @mention</td>
<td>Public</td>
</tr>
<tr>
<td>(Direct) Message</td>
<td>Private</td>
</tr>
</tbody>
</table>

What is a tweet?

- Any message posted to Twitter
- 140 character limit

<table>
<thead>
<tr>
<th>What's happening?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tweets are public and appear on the Twitter feed of every user that follows you.</td>
</tr>
<tr>
<td>Tweet</td>
</tr>
<tr>
<td>61 Tweet</td>
</tr>
</tbody>
</table>
What is following on Twitter?

- someone on Twitter means:
  - You are subscribing to their tweets as a follower
  - Their updates will appear in your Twitter Timeline
  - That person has permission to send private Direct Messages to you

Following someone on Twitter = Can monitor to view tweets on your Twitter Timeline

What are followers on Twitter?

- Followers are people who receive your Tweets.
- if someone follows you, they:
  - Receive your Tweets on their home page, phone, or any application that they use

More followers = Reach more people through Tweets when broadcasting information

Log onto http://twitter.com/
What are hashtags ("#" symbols)?
- Community-driven convention for adding additional context
- Used to categorize tweets according to a specific keyword or topic
- Anyone can create a hashtag
- Can occur anywhere in the Tweet
- Used before relevant keywords in their Tweet

Hashtags: Texas fire in September 2011
Post a Tweet using hashtags

Insert tweet

What's happening?

This is such a fun social media course! #ndpc

Number of remaining characters:

out of 140 for your Tweet

Select “Tweet” to post

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What is an @reply?
• Respond publicly to something another user has tweeted about
• Any tweet that starts with "@" followed by a username
• Will only appear on other users' Twitter Timelines if they are following the person that the tweet starts with

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What is a mention?
• Any tweet that contains an @username anywhere in the body of the tweet
• The tweet will appear for every user who follows you in their Twitter Timeline

Social Media for Natural Disaster Response and Recovery
Reply to a Tweet

1. Hover over a Tweet
2. Select “Reply” button
3. Insert your Tweet you want to reply with
4. Click “Tweet”

What is a Direct Message?
- A private message between 2 Twitter users
- Can only send Direct Message to users who are following you

Send a Direct Message

1. Click “Messages” button
2. Click “New Message” to send a new message
3. Type name or username to send message to
4. Enter message here
5. Click “Send”
What is a Retweet? (RT)
• Share a tweet that you come across with all of your followers

Manual Retweet
(can edit tweet before sharing)

Official Twitter Retweet

Retweet (RT)
1. Hover over a Tweet
2. Select “Retweet” button
3. Confirm pop-up by clicking “Retweet” button

Automatically post tweets to Facebook
Tools to research on Twitter

- Trendsmap
  – http://trendsmap.com
- Twitterfall
  – http://twitterfall.com/
- Advanced Twitter Search
  – http://twitter.com/#!/search-advanced
- Klout
  – http://klout.com

Summary

- Twitter is a powerful social media platform that can be used to communicate with large audiences.
- Twitter, along with Facebook, is recognized by most organizations as a “must” for your social media implementation.
- Many tools are available to enhance the capabilities of Twitter and the data it generates.
Enabling Learning Objectives

7-1 Describe Crowdsourcing as a way to get disaster information from the field
7-2 Describe the emerging role of Volunteer Technical Communities
7-3 Identify mobile technology features that can assist with crowdsourcing information
Volunteer Technical Communities (VTC)
• Nexus between convergent volunteers, disaster managers and social media globally
• Critical new “player” in disaster management
• Based on “crowdsourcing”
• Reflects global resources and impacts
• Recognized by authorities

VTC Examples
• Crisis Mappers
• Crisis Commons
• Humanity Road

VTC Case Study: Crisis Mappers
The world's largest crisis mapping hub
Leveraging mobile platforms, computational linguistics, geospatial technologies, and visual analytics to power rapid crisis response
The Network catalyzes communication and collaboration between and among crisis mappers with the purpose of advancing the study and application of crisis mapping worldwide.
Launched in 2009
Accessed in 191 countries

http://crisismappers.net/
Social Media Reporting and Monitoring

Open Source software to collect, visualize and map data (reports)

Free, hosted, Ushahidi

Platform to help filter and make sense of information. Works with Ushahidi
Example Implementations
http://oilspill.labucketbrigade.org/

Example Implementations
http://vtirene.crowdmap.com/

Example Implementations
http://stlouistornado.crowdmap.com/
Summary

• Advanced monitoring tools, such as Ushahidi, allow emergency managers to quickly and efficiently crowdsource information
• The tools in this area are emerging.
• A new role in disaster management is the volunteer technical communities (VTC)
• Start connecting via Facebook and Twitter to have potential volunteers in place

Enabling Learning Objectives

At the end of the course, participants will be able to:
8-1 Provide course summary
8-2 Provide feedback by completing a course evaluation form
8-3 Successfully complete a post-test
Course Summary

- Understand the definition of social media
- Understand multiple applications but with an emphasis on Facebook and Twitter
- Understand the need to use social media as essential new media communication channel

Course Summary

- Methodologies to implement
  - Facebook
  - Twitter
  - Ushahidi crowdmap
- Keep watch for new trends
  - Google+, mobile apps
- Make use of ecosystem applications
  - Trendsmap, Twitterfall, Twitter Search, Klout

Questions
Going Forward

• Additional resources and free training opportunities are available.
• These additional resources can help you:
  – enhance communications planning and social media use and
  – prepare for, protect from, respond to, recover from, and adapt to all-hazard events.

National Domestic Preparedness Consortium

• Supports a comprehensive all-hazards preparedness strategy
• Variety of specialized on-site and residential training opportunities
• U.S. DHS supported: no end-user costs

NDPC Training Opportunities

• The National Domestic Preparedness Consortium (NDPC) is the principal vehicle that identifies, develops, tests, and delivers training to state and local emergency responders for all-hazard events.
NDPC Strategy

- The NDPC has developed a strategy that tailors an *integrated solution* that provides comprehensive all-hazards training focused to address preparedness, response, and recovery elements.
- NDPC efforts are consistent with the National Incident Management System (NIMS).

Presidential Policy Directive-8

- The NDPC strategy reinforces Presidential Policy Directive 8 (PPD-8), "to establish mechanisms for improved delivery of Federal preparedness assistance to State and local governments, and outlining actions to strengthen preparedness capabilities to Federal, State, and local entities."

NDPC Members

- University of Hawai‘i: NDPTC
- Louisiana State University (LSU): NCBRT
- Texas A&M University: TEEX
- New Mexico Institute of Mining and Technology (NMIMT): EMRTC
NDPC Members (cont.)

- Center for Domestic Preparedness (CDP)
- Department of Energy’s Nevada Test Site: NTS/CTOS
- Transportation Technology Center, Inc./National Center for Emergency Response in Surface Transportation (TTCI/NCERST)
Thank you!

For further information please visit:
http://ndptc.hawaii.edu
808-956-0600