Social Media for Natural Disaster Response and Recovery

Participant Guide

October 2011

FEMA

NATIONAL DISASTER PREPAREDNESS TRAINING CENTER

Copyright Information

Social Media for Disaster Response and Recovery

This Printing: October 2011

Printed in the United States of America

This program was supported by Cooperative Agreement Number 2010-NA-T0-K012 administered by the US Department of Homeland Security, National Training and Education Division. Points of view or opinions in this program are those of the author(s) and do not represent the position or policies of the US Department of Homeland Security.

Social Media for Natural Disaster Response and Recovery

Module 1: Welcome, Administration, and Introduction

October 2011

FEMA

-This page is intentionally blank -

Module 1: Welcome, Administration, and Introduction

Slide 1-1. Welcome, Administration, and Introduction

Duration

1.0 hour

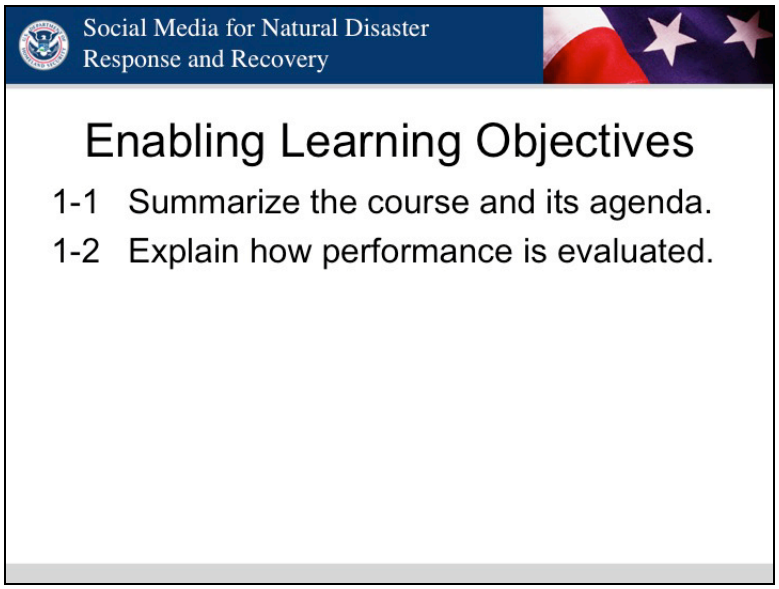
Scope Statement

Participants and instructors will complete course administrative requirements, and participants will learn how their performance will be evaluated. Instructors will present an overview of the course and participants and instructors will introduce themselves.

Terminal Learning Objectives (TLO)

Participants will state the course goal and major module objectives.

Enabling Learning Objectives (ELO)



Slide 1-2. Enabling Learning Objectives

At the conclusion of this module, participants will be able to:

1-1 Summarize the course and its agenda
1-2 Explain how performance is evaluated

Resources

- Module presentation slides
- Laptop with presentation software installed and CD-ROM capability
- Wi-Fi Internet access
- Two audio-visual (A/V)
- Two projector screens
- Easel
- Easel pad
- Markers
- One per participant of the following item:
    - Participant Guide
    - Computers with Wi-Fi access

Instructor to Participant Ratio

1:25

Reference List

None

Practical Exercise Statement

An instructor-led discussion to provide an overview of social media and its impact on society. At the end of the module, students will configure their laptops for Wi-Fi access and will conduct some instructor-led web-browsing of social media sites.

Assessment Strategy

- Practical Instructor observation of participants' involvement in the classroom discussion.
- Instructor-led discussion to ensure that participants understanding of module lesson topics.

Social Media for Natural Disaster Response and Recovery

Icon Map

Knowledge Check: Used when it is time to assess the learners' understanding

Example: Used when there is a descriptive illustration to show or explain

Key Points: Used to convey essential learning concepts, discussions and introduction of supplemental material

Hint: Used to cover administrative items or instructional tips that aid in the flow of the instruction

Participant Notes:

Slide 1-3. Welcome

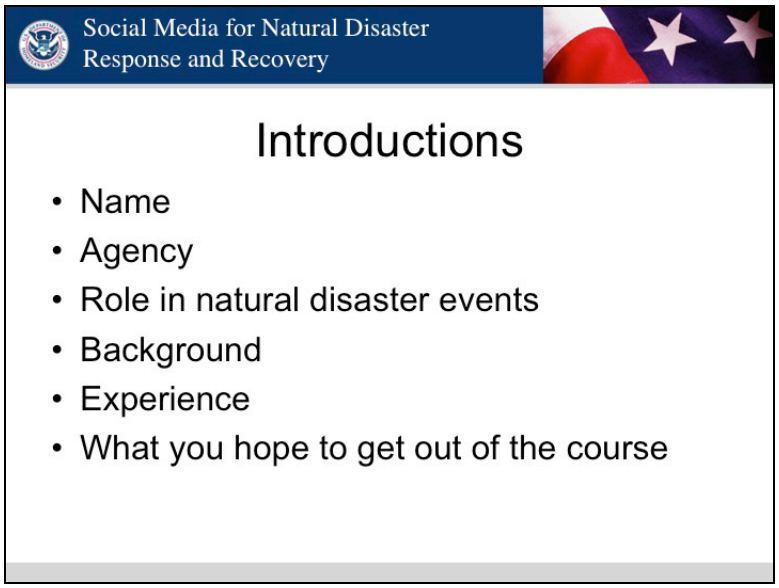
The lead instructor of the course will begin by welcoming the participants and introducing the instructional the instructional team. The typical class structure is approximately 50 minutes of instruction followed by a break of about 10 minutes, with a one-hour lunch break.

Welcome/introduction from instructors

Class structure/housekeeping

- Breaks
- Lunch
- Restrooms
- Emergency exits
- Cell phones

Participant Notes:

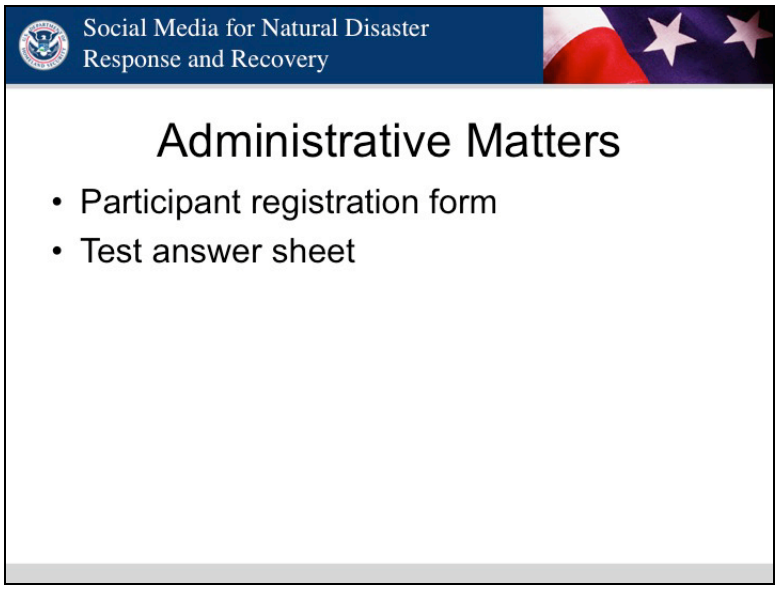


Slide 1-4. Introductions

At this time, the class should take turns and introduce themselves. In their introductions, participants and instructors should include the following information:

- Name
- Agency
- Role in natural disaster events
- Background
- Experience
- What you hope to get out of the course

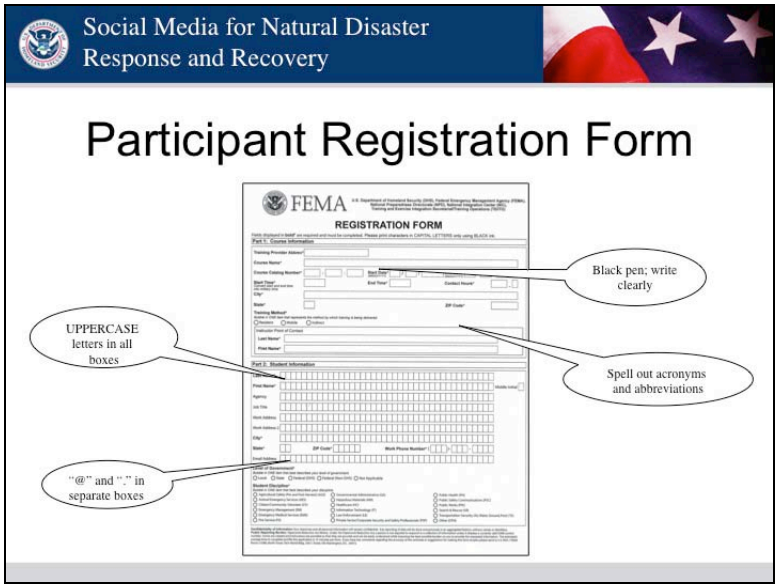
Participant Notes:



Slide 1-5. Administrative Matters

Participant Note: Before the course can actually begin, several administrative requirements must be completed. The instructor will spend a few minutes explaining how participants should complete the participant registration form and the test answer sheet.

Participant Notes:

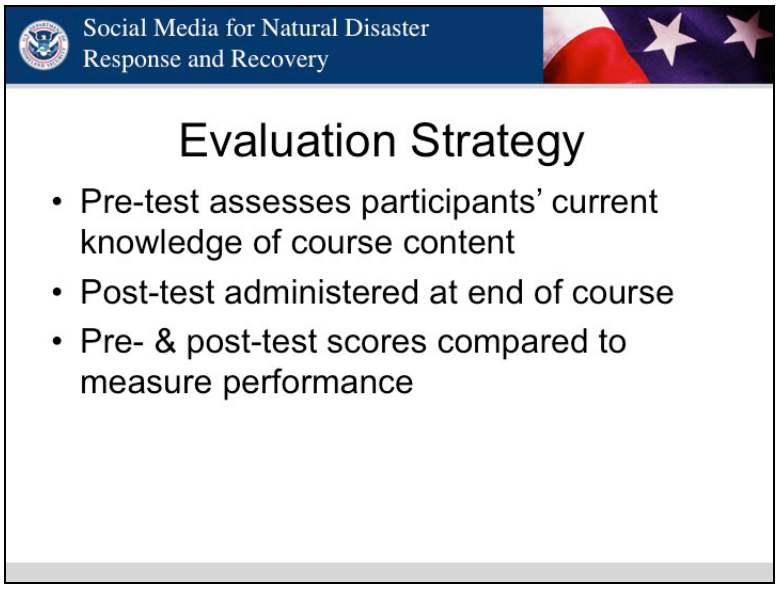


Slide 1-6. Participant Registration Form

Participants should follow these instructions as they complete the participant registration form at this time:

1. Use the black pens provided. If the pen runs out of ink or is not working well, request a replacement pen and discard the old one.
2. Write clearly in uppercase letters. (Even the e-mail address should be in uppercase).
3. Write each letter, number, or symbol in a separate box. (This includes "@" and periods).
4. Write your middle initial in the *Middle Initial* field. (You should not include your middle initial in the *First Name* field).
5. Write any suffixes (such as Jr. or III) in the *Name Suffix* field. (You should not include your name suffix in the *Last Name* field).
6. Spell out all agencies, cities, and counties. (You should not use acronyms to complete fields other than the *State* field).
7. Email addresses must be agency issued (work) email accounts. Home (personal) email addresses are not acceptable.
8. Fill in each bubble completely.
9. Bubble in one item for primary discipline.

Participant Notes:

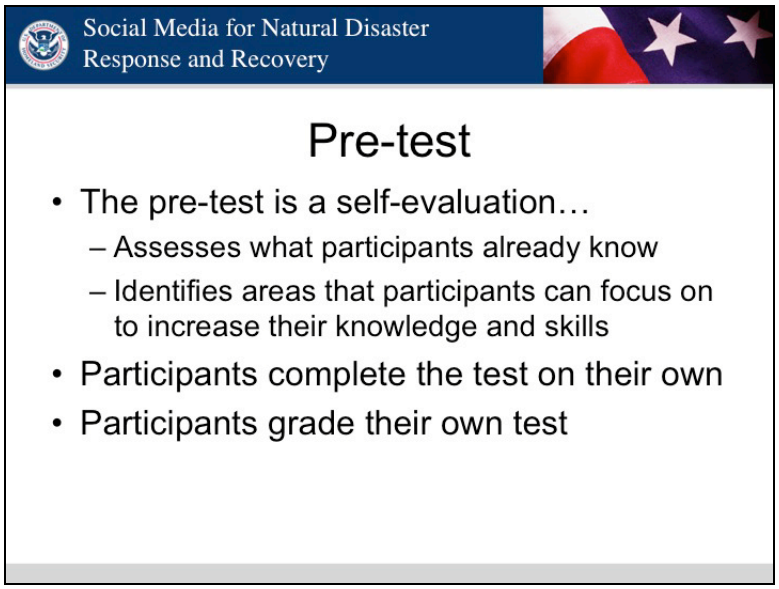


Slide 1-7. Evaluation Strategy

Participants are administered two tests – a pre-test during the first module and a post-test at the end of the course. These objective-based tests are written to assess how well participants have mastered the terminal learning objectives.

The Department of Homeland Security (DHS) requires that all certified courses administer both a pre- and post-test. The pre-test functions primarily as an assessment tool; it is designed to assess participants' knowledge of the course content prior to course attendance. The post-test is objectives-based and comprehensive. Participants' post-test scores are compared against their performance on the pre-test to obtain a learning measure and illustrate the benefit of the course. Participants must attain a score of 70 percent or better on the post-test to successfully complete the course.

Participant Notes:



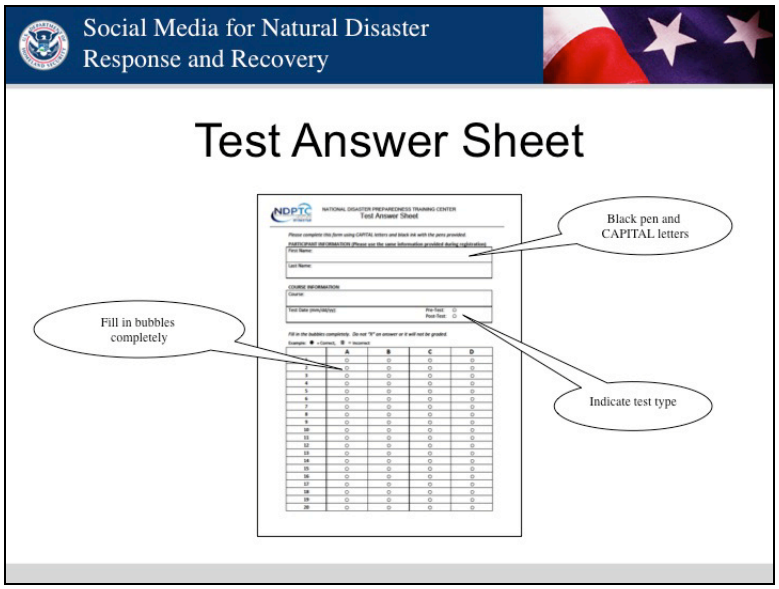
Slide 1-8. Pre-test

The pre-test is primarily a self-evaluation; it is intended as a tool that enables participants to assess their current knowledge on the course content before taking the course.

Participant Note: If participants do not know the answer to a question, they **should not guess** the answers. Leave the answer blank.

Participants should complete the pre-test individually (i.e., without peer assistance). Once all participants have completed the test, they will grade their own tests as the instructor reviews the questions and answers.

Participant Notes:

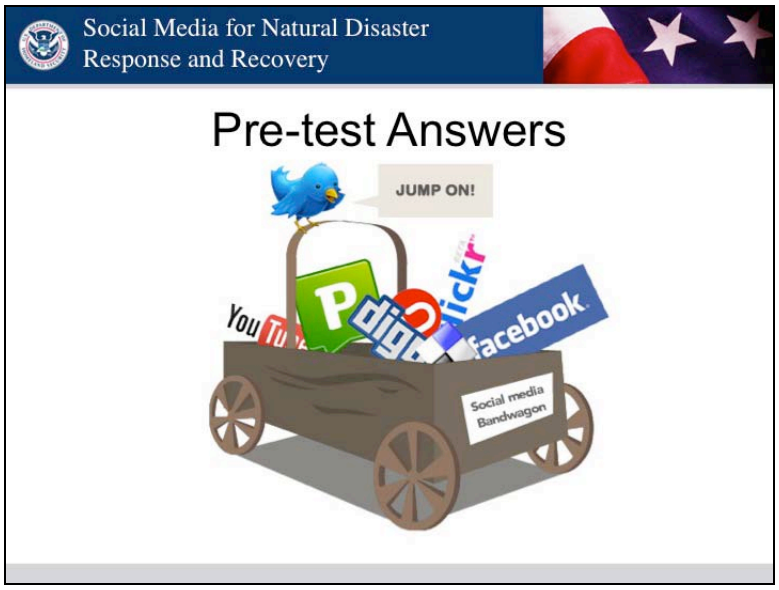


Slide 1-9. Test Answer Sheet

Participants should follow these instructions as they take the pre-test and indicate their answers on the test answer sheet:

1. Use the black pens provided when filling out the forms
2. Write clearly in uppercase letters.
3. Write each letter, number, or symbol in a separate box.
4. Use the same first name, last name, and date of birth provided on the participant registration form. This information will be used to generate a unique ID number for each participant.
5. Complete the *Test Date* field in the upper right hand portion of the sheet by writing the day the test is actually given.
6. Fill in the *Pre-test* bubble.
7. Fill in each bubble completely and make sure the answers are correctly aligned on the test answer sheet.

Participant Notes:

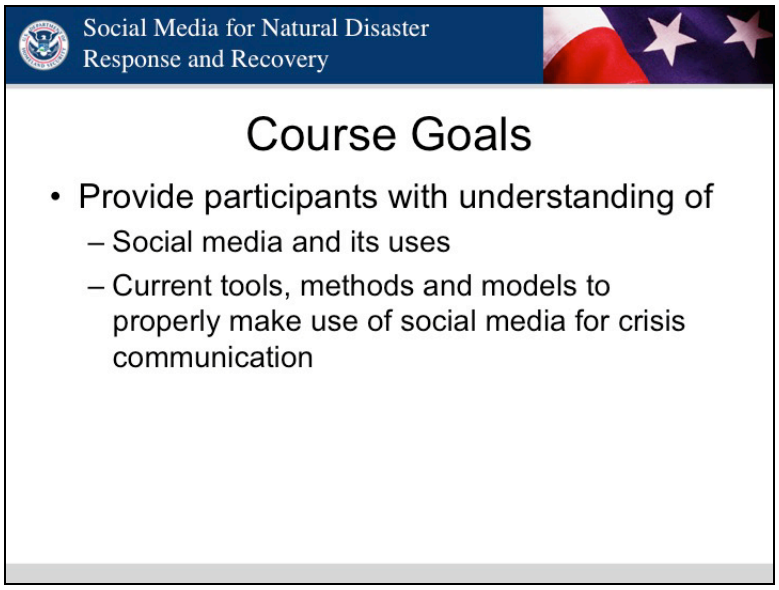


Slide 1-10. Pre-test Answers

Once everyone has finished taking the pre-test, instructors will review the correct answers with the class. Participants should grade their own test, taking care not to make grading marks in columns A through D. Participants may write the correct answer in the margins of the test answer sheet.

Participants are encouraged to write down their pre-test score somewhere other than on the pre-test or test answer sheet. Instructors will come around and collect all testing materials.

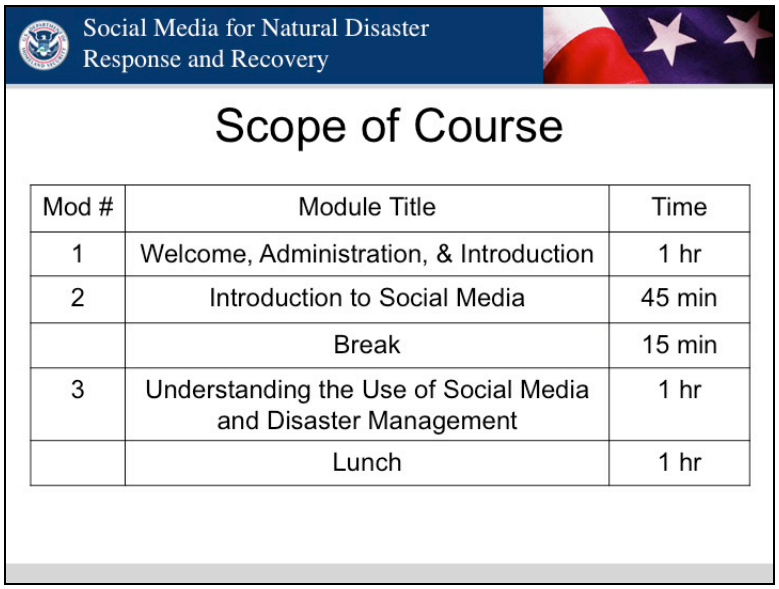
Participant Notes:



Slide 1-11. Course Goals

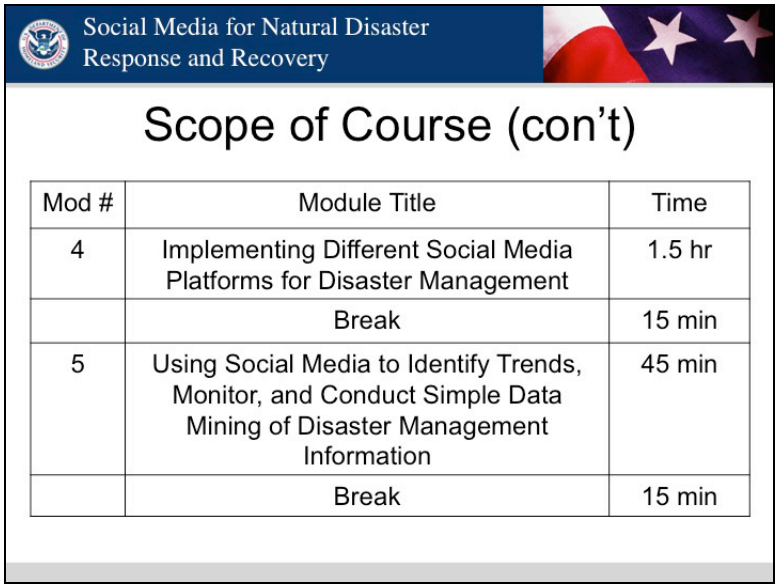
The goal of this course is to provide participants with an understanding of social media and its uses; and current tools, methods and models to properly make use of social media for crisis communication. This course enhances the participants' abilities to organizations' communications strategy for disaster preparedness, response and recovery.

Participant Notes:



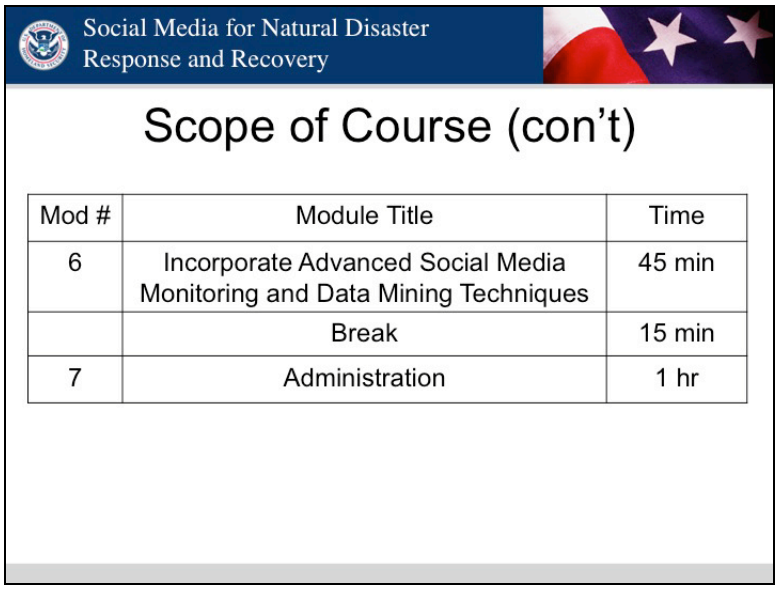
1-12. Scope of Course

Participant Notes:



Slide 1-13. Scope of Course (con't)

Participant Notes:



Slide 1-14. Scope of Course (con't)

This class is designed to be a performance-level course on the use of social media and the social media ecosystem for crisis communication during the phases of disaster management cycle. The class consists of seven modules. These modules include classroom instruction, and instructor-facilitated based activities on materials presented.

Participant Notes:

Module 1: Welcome, Administration, and Introduction

Scope

Participants and instructors will complete course administrative requirements, and participants will learn how their performance will be evaluated. Instructors will present an overview of the course and participants and instructors will introduce themselves.

Terminal Learning Objective

Participants will state the course goal and module objectives.

Module 2: Introduction to Social Media

Scope

Participants will learn the definition, attributes, objectives, and history of social media. Students will also discuss the modern-day uses and impact of social media on our society.

Terminal Learning Objective

Participants will be able to describe the social media ecosystem.

Module 3: Understanding the Use of Social Media and Disaster Management

Scope

Participants will learn how social media can be utilized in disaster preparedness and management. Instructor will also identify the responsibilities and skills required for effective management, key components for a public relations strategy, and guidelines to build a social media network.

Terminal Learning Objective

Participants will be able to identify actions to implement social media for disaster management.

Participant Notes:

Module 4: Implementing Different Social Media Platforms for Disaster Management

Scope

Participants will configure their social media accounts for their organizations and build an emergency management network. Instructors will present "Best Practices" case studies of disaster preparedness and management utilizing social media tools.

Terminal Learning Objective

Participants will be able to implement specific platforms to increase the effectiveness of a disaster media plan, and to build effective geo-focused social media emergency management networks.

Module 5: Using Social Media to Identify Trends, Monitor Data, and Conduct Simple Data Mining of Information in Disaster Management

Scope Terminal

Participants will learn how to measure their social media efforts and improve their social media credibility.

Learning Objectives

Participants will apply best/prove methods to gain insights into public reaction to disasters

Module 6: Incorporating Advanced Social Media Monitoring and Data Mining Techniques

Scope Participants will learn about advanced social media monitoring and data mining techniques and what's required to implement them.

Terminal Learning Objective

Participants will be exposed to advanced social media tools and techniques.

Participant Notes:

Module 7: Course Summary and Administration

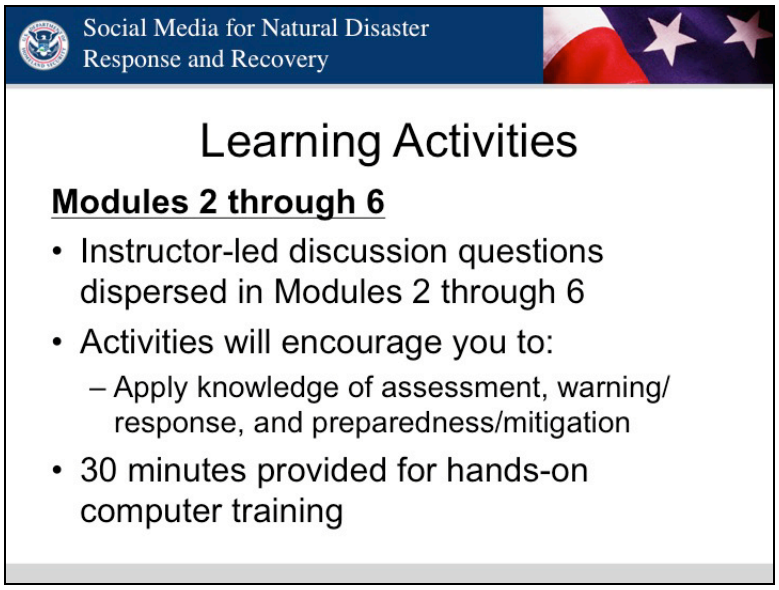
Scope Terminal

Participants will complete a post-test and course evaluation form and provide feedback on the course instruction, content, and materials.

Learning Objective

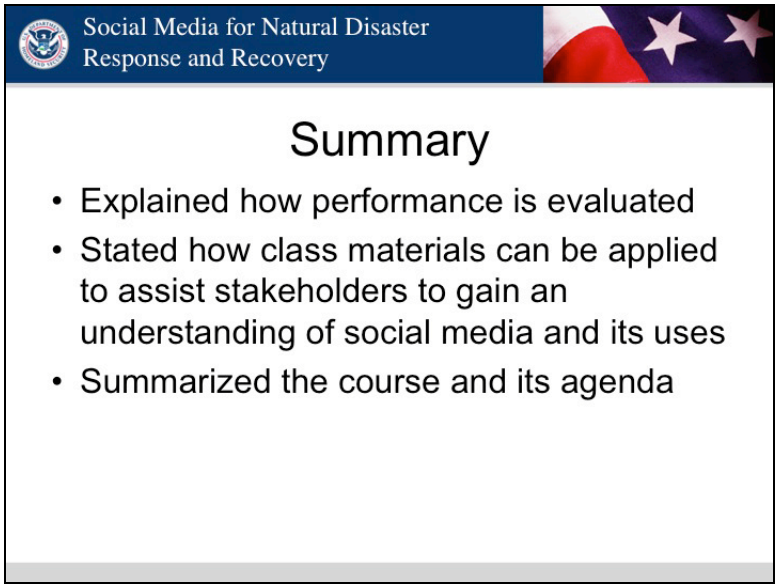
Participants will complete a post-test and course evaluation.

Participant Notes:



Slide 1-15. Learning Activities

Participant Notes:



Slide 1-16. Summary

-This page is intentionally blank -

Social Media for Natural Disaster Response and Recovery

Module 2: Introduction to Social Media

October 2011

FEMA

-This page is intentionally blank -

Module 2: Introduction to Social Media

Slide 2-1. Introduction to Social Media

Duration

1.0 hour

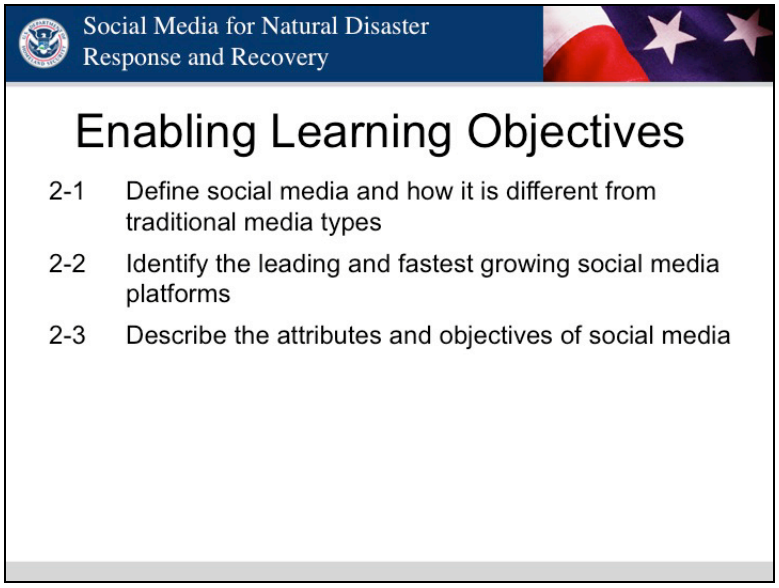
Scope Statement

Participants will learn the definition, attributes, objective, and history of social media. Students will also discuss the modern-day uses and impact of social media on our society.

Terminal Learning Objectives (TLO)

Participants will be able to describe the social media ecosystem.

Enabling Learning Objectives (ELO)



Slide 2-2. Enabling Learning Objectives

At the conclusion of this module, participants will be able to:

2-1 Define social media and how it is different from traditional media types
2-2 Identify the leading and fastest growing social media platforms
2-3 Describe the attributes and objectives of social media

Resources

- Module presentation slides
- Laptop with presentation software installed and CD-ROM capability
- Speakers
- Wi-Fi Internet access
- Two audio-visual (A/V)
- Two projector screens
- Easel
- Easel pad
- Markers
- One per participant of the following item:
    - Participant Guide
    - Computers with Wi-Fi access (provided by participant)

Instructor to Participant Ratio

1:25

Reference List

Alexa The Web Information Company. (2011). http://www.alexa.com/siteinfo/facebook.com

Bauder, David. "Super Bowl sets record with 111M viewers in US." *YahooSports.* February 7, 2011. Accessed March 24, 2011. http://sports.yahoo.com/nfl/news?slug=ap-superbowl-ratings

Bilton, Nick. "Instagram Raises Money." *New York Times*. February 2, 2011. Accessed March 24, 2011. http://bits.blogs.nytimes.com/2011/02/02/instagram-raises-money/

Bryant, Martin. "Gowalla enchances Spot Highlights as it approached 1 million users." *The Next Web.* March 2, 2011. Accessed March 24, 2011. http://thenextweb.com/location/2011/02/10/gowalla-enhances-spot-highlights-as-it-approaches-1-million-users/

Bryant, Martin. "Foursquare grew 3400% in 2010." *The Next Web.* January 24, 2011. Accessed March 24, 2011. http://thenextweb.com/shareables/2011/01/24/foursquare-grew-3400-in-2010-infographic/

Facebook Statistics, 2011, http://www.facebook.com/press/info.php?statistics

Flickr Blog, http://blog.flickr.net/en/2010/09/19/5000000000/

Foursquare, https://foursquare.com/about

Gregory, Sean. "Behind Pepsi's Choice to Skip This Year's Superbowl." *Time.* February 3, 2010. Accessed March 24, 2011. http://www.time.com/time/business/article/0,8599,1958400,00.html

Hemley, Debbie. "42 Social Media Guidelines, But Who's Counting?" *My AD Engine.* June 8, 2010. Accessed March 24, 2011. http://myadengine.com/blog/index.php/2010/06/42-social-media-guidelines-but-who%E2%80%99s-counting/

Instagram, CrunchBase, http://www.crunchbase.com/company/instagramCan

Internet World Stats. United States of American Internet and Facebook User stats, http://www.internetworldstats.com/stats26.htm

Johnson, Anna. "U.S. Internet Users Spend 4.5 Hours on YouTube Per Month." *Kikabink News*. November 21, 2010. Accessed March 24, 2011. http://www.kikabink.com/news/u-s-internet-users-spend-4-5-hours-on-youtube-per-month/

Kirkpatrick, Marshall. "Twitpic to Add Video Sharing Today." *ReadWriteWeb*. February 8, 2011. Accessed March 24, 2011. http://www.readwriteweb.com/archives/twitpic_to_add_video_sharing_today.php

Miniwatts Marketing Group, Internet World Stats, 2010, http://www.internetworldstats.com/stats26.htm

Moore, Robert. "Instagram Now Adding 130,000 Users Per Week: An Analysis." *TechCrunch,* March 10, 2011. Accessed on March 24, 2011. http://techcrunch.com/2011/03/10/instagram-adding-130000-users-per-week/

Pepsico's Social Media Campaign Results, 2010, http://bartonjgoldenberg.wordpress.com/2010/10/13/pepsicos-social-media-campaign-results/

Quantcast, http://www.quantcast.com/linkedin.com/traffic#country

Rosenstiel, Tom and Amy Mitchell. (2011). "Survey: Mobile News & Paying Online." Pew's Research Center's Project for Excellence in Journalism. The State of the News Media, http://stateofthemedia.org/2011/mobile-survey/#summary-of-findings

Siegler, MC. "Gowalla Snaps Back: 1 Million Photos." *TechCrunch,* December 21, 2010. Accessed March 24, 2011. http://techcrunch.com/2010/12/21/gowalla-foursquare-pictures/

Social Media Optimization. "100 Million People Use YouTube." March 27, 2009. Accessed March 24, 2011. http://social-media-optimization.com/2009/03/100-million-people-use-youtube/

Shift Communications, Benefits of Social Media, 2011, http://www.shiftcomm.com/social_media_benefits.html

Twitter Blog. http://blog.twitter.com/2011/03/numbers.html

Webster,Tom. "Twitter Usage in America: 2010." Edison Research, 2010. Assessed March 24, 2011. http://images.publicaster.com/ImageLibrary/account2782/documents/Twitter_Usage_In_America_2010.pdf

YouTube Viewing Across Markets. *comScore Data Mine*. September 16, 2010. Assessed March 24, 2011. http://www.comscoredatamine.com/2010/09/youtube-viewing-hours-across-markets/

Practical Exercise Statement

Participants will be engaged by instructor-led discussion, in which participants will identify how Social Media can be incorporated into an organization and which social media platform matches their organization's needs.

Assessment Strategy

- Instructor observation of participants' involvement in the classroom discussion.
- Instructor-led discussion to ensure participants' understanding of module lesson topics.

Social Media for Natural Disaster Response and Recovery

Icon Map

Knowledge Check: Used when it is time to assess the learners' understanding

Example: Used when there is a descriptive illustration to show or explain

Key Points: Used to convey essential learning concepts, discussions and introduction of supplemental material

Hint: Used to cover administrative items or instructional tips that aid in the flow of the instruction

Participant Notes:

Slide 2-3. What is Social Media?

The Associated Press (2010) defines social media as "an innovative way of socializing where we engage in an open dialogue, tell our stories and interact with one another using online platforms." Social media provides tools that allow users to share information and create communities through online networks of people. Social Media is an umbrella term that defines various activities that integrate technology, social interaction, text, picture, video and audio. It is a revolution in how we communicate and is becoming a dominant form of communication.

Unlike traditional media types, social media allows for two-way communication where the public can be both the **producers** and **consumers** of the content. Additionally, the speed and magnitude of people that information (whether accurate or not) can be disseminated through social media is unprecedented.

✔ **Knowledge Check**: List some ways that social media is different from traditional media types.

Participant Notes:

Slide 2-4. Understanding the Power of Social Media

Social Media Revolution 2 (2010) is video from YouTube, which shows social media and mobile statistics based on the book "Socialnomics" by Erik Qualman.

✔ **Knowledge Check**: What is one way to describe social media?

Participant Notes:

Slide 2-5. Social media used in many industries

Social media is used in many industries including banking, real estate, restaurants, tourism, and e-commerce. It is more commonly used as an online marketing strategy to build consumer base and engage consumers, promote contests and sweepstakes, research consumers' preferences, and provide customer service.

Key Points: Social media is used in every industry, including government agencies.

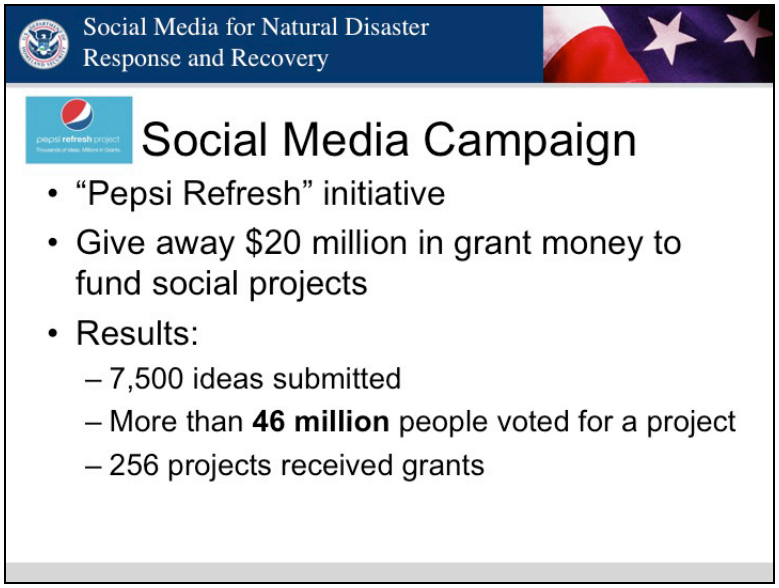
Example: The slide shows two examples of companies using social media. To the left, it shows an example of a post from Frito-Lay on its Facebook page. Frito-Lay posted a survey for its fans to vote on their favorite part of going back to school as a child. Through its presence on Facebook, Frito-Lay is researching customer preferences, engaging customers, and building its customer base.

Example: To the right is an example of Starbucks tweets on Twitter, which it uses to post messages and connect with its customer base.

Participant Notes:

Slide 2-6. Example: Pepsi skips Super Bowl ad for online contests

Participant Notes:



Slide 2-7. Social Media Campaign

Key Points: The "Pepsi Refresh" campaign shows that leading businesses in the market are acknowledging the benefits of social media. Pepsi are investing a lot of money to create innovative way to reach its audience instead of using traditional media channels. This supports a positive return of investment for using social media.

In 2010, Pepsi opted out of advertising in the Super Bowl (which is between $2.5 million and $3 million for 2010 for a 30-second spot). According to the Nielsen Co., an estimate of 111 million people watched the 2011 Super Bowl, while an estimated 106.5 million people watched the 2010 game. The Super Bowl is considered the top advertising opportunity of the year for American television.

Pepsi has reportedly spent $254 million on Super Bowl commercials over the past two decades. In 2011, Pepsi joined its sibling brand, Doritos, in the "Crash the Super Bowl contest," which offered six ad spots for commercials created by consumers. Voters chose which ads make it on the air. According to Ace Metrix, an analytics agency, Pepsi ads scored higher than most beer brands.

Pepsi uses social media to promote its "Pepsi Refresh" initiative campaign. And as desired, competitors have used Facebook and Twitter to gain support for their ideas—thus, promoting Pepsi brand simultaneously. About 19 percent of the 77 million votes were casted

Participant Notes:

through Facebook. Participants used the hash tag "#PepsiRefresh" on Twitter to promote their ideas, which also extended the Pepsi brand.

Pepsi will give away $20 million in grant money to fund projects in six categories: health, arts and culture, food and shelter, the planet, neighborhoods and education. People can submit ideas and vote on other ideas on the Pepsi website, www.refresheverything.com. Every month, Pepsi will offer up to 32 grants to worthy projects.

Statistics show positive results from using social media for the "Pepsi Refresh" project. As of 2010, more than 7,500 ideas have been submitted; more than 46 million people have voted for a project; and 256 projects have received Pepsi Refresh Project grants.

Participant Notes:

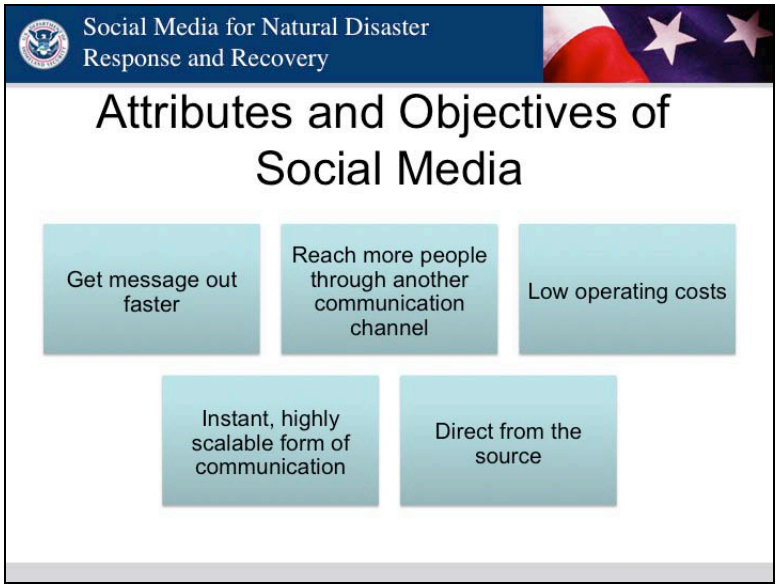
Slide 2-8. Early and Current Social Media Platforms…

Social media platforms most commonly known are Facebook, Twitter, YouTube, MySpace, LinkedIn, and blip.tv. The slide shows examples of both early (some may longer exist) and current social media platforms.

Some basic forms of social media include:

- Social networks (i.e. MySpace, Facebook)
- Blogs (i.e. online journals)
- Wikis (i.e. Wikipedia)
- Podcasts (i.e. iTunes)
- Forums (i.e. online discussion)
- Content communities (i.e. YouTube, Flickr)
- Microblogging (i.e. Twitter).

Participant Notes:



Slide 2-9. Attributes and Objective of Social Media

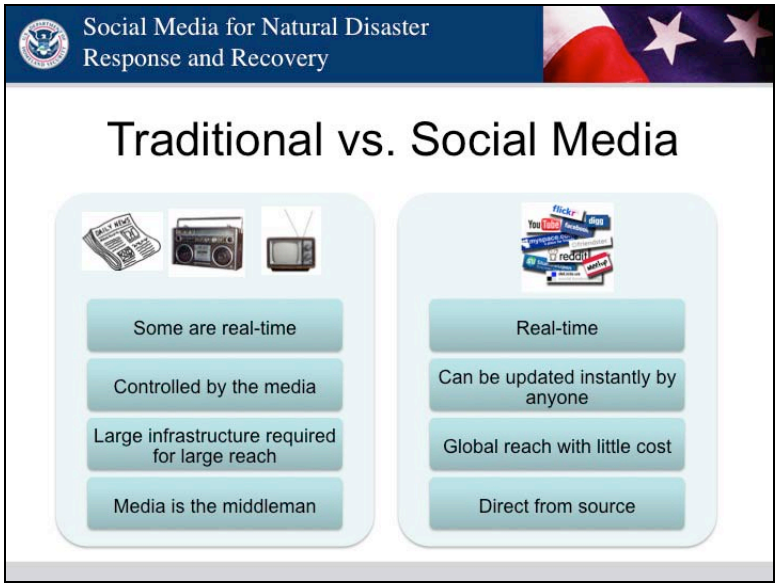
Some of the attributes and objectives of social media include:

- Get message out faster
- Reach more people through another communication channel
- Low operating costs
- Instant, high scalable form of communication
- Information is direct from the source

These attributes and objectives will be used to compare social media to traditional media in the following slide.

Knowledge Check: List the attributes of social media.

Participant Notes:



Slide 2-10. Traditional vs. Social Media

For traditional media, some information may reflect real-time (i.e. radio and television), but some types of traditional media such as newspaper do not provide real-time information. However, social media provides all real-time information.

Information processed through traditonal media are controlled by the media and the press. However, social media can be updated instantly by anyone (i.e. government, citizen, media, etc.).

Large infrastructure is required with traditional media in order to reach large audiences. On the other hand, social media requires little cost while able to reach a global audience.

Through traditional media, the media acts as the middlemen which delivers the news to the public. However, with social media, the informaiton comes directly from the source which elimates the need for a middlemen.

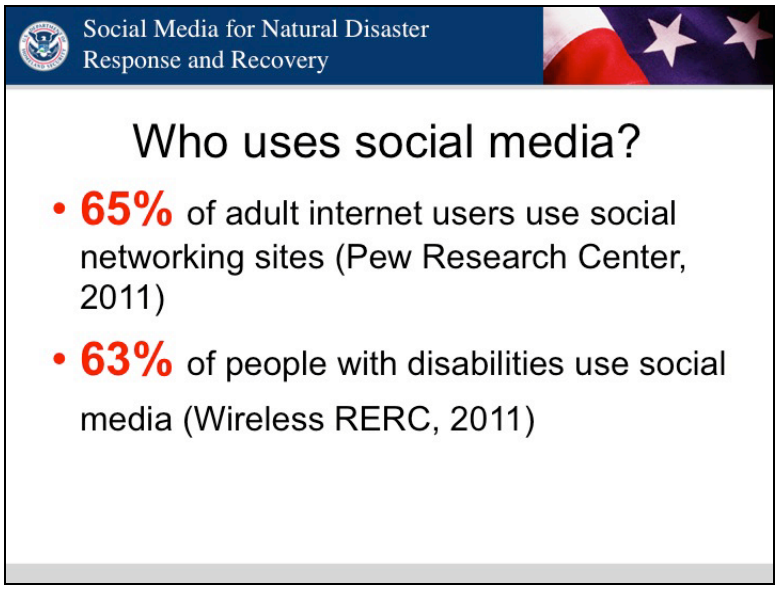
Knowledge Check: List two benefits of using social media compared to traditional media types.

Participant Notes:

Slide 2-11. Maximize Reach with Social Media

Example: The slide above illustrates how through the various channels of communication (newspaper, radio, television, and social media), a certain amount of people are reached (represented by the puzzle pieces). Currently, the traditional channels of communication (newspaper, radio, and television) are most commonly used. Each of those channels reach a certain number of people represented by its respective yellow, green, and red puzzle pieces. However, to complete the entire puzzle piece (to ensure that the maximum number of people are reached), social media needs to be incorporated into the various channels of communication (represented by the blue puzzle piece).

Participant Notes:

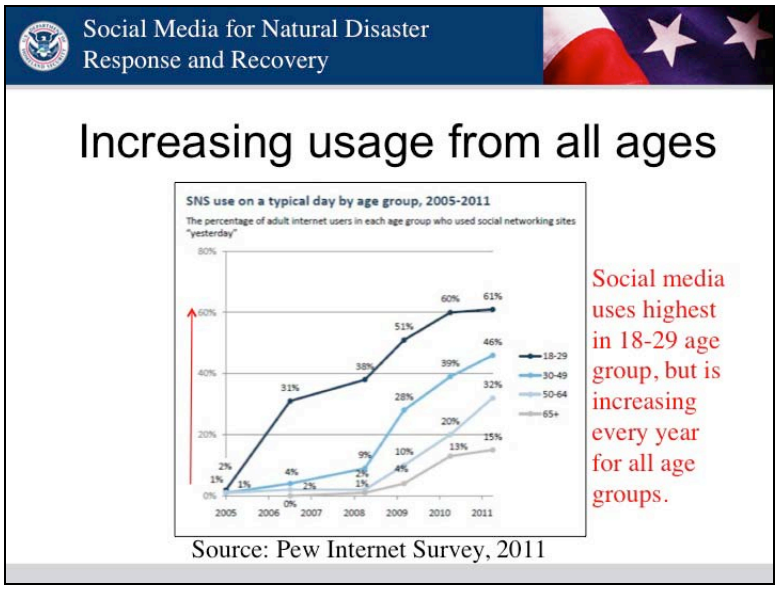


Slide 2-12. Who uses social media?

According to a study done by the Pew Research Center (2011), about 65 percent of adult Internet users use social networking sits. Another study done by the Rehabilitation Engineering Research Center for Wireless Technologies (Wireless RERC, 2011), which is sponsored by the Department of Education on a "Survey on Use of Social Media for Emergencies by People with Disabilities," about 63 percent of people with disabilities (including sensory, physical, and cognitive disabilities) use social media.

Both of these studies show a significant percentage of people using social media, including a vulnerable group in the community.

Participant Notes:



Slide 2-13. Increasing usage from all ages

Based on the Pew Internet Survey (2011), the graph in the slide shows usage on social networking sites on a typical day by age groups from 2005 to 2011. Usage for all age groups has been increasing throughout the years. The 18-29 age group shows the highest percent of social media users.

Only 43 percent of Internet users said that they used social media daily. The seniors (65+) age group showed the highest increase in social media users. However, the percentage of 65+ users is still drastically lower than the younger age groups. During the 2009-2011 period, social networking use among Internet users age 65 and older increased by 150 percent.

Participant Notes:

Slide 2-14. General Social Media Tools

Participant Notes:

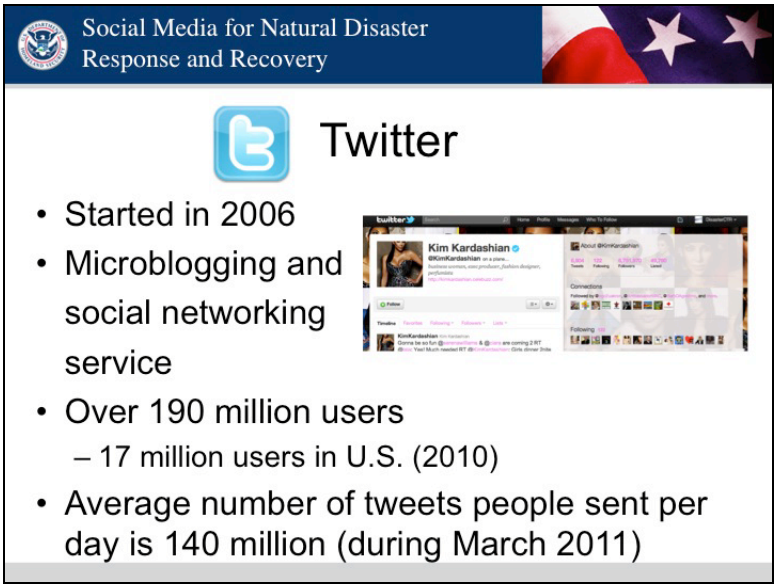
Slide 2-15. Facebook

Facebook, founded in 2004, has a convenient and simple social network platform where users can easily navigate through its site. It builds social communities by allowing users to add friends and groups to their personalized profile pages. Profile pages may include the users' photo, basic information, contact information, activities and interests, and education and work information. Users can also post status updates on their profiles and leave comments on other users' profiles. Additionally, users have the option of receiving notifications of other users' status updates.

According to Facebook Pressroom Statistics, as of 2011 there are more than 500 million users on Facebook with an average user having 130 friends. Facebook included 133.5 million of U.S. users (Internet World Stats, 2011) and over 700 billion minutes a month are spent on Facebook. The chart shows that Facebook consists of 40 percent of daily Web traffic in 2011, while Google consists of 50 percent of daily Web traffic (Alexa, 2010). Facebook receives the most traffic of all social media platforms.

Example: Facebook profile page for Senator Daniel K. Inouye. Users have the capability to write on the profile's wall, to read info about Senator Inouye, to view photos, and to search through his friends. These tabs are located on the left side on the profile below his profile picture. On the left, the number and list of friends are displayed.

Participant Notes:



Slide 2-16. Twitter

Twitter, started in 2006, is a microblogging and social networking platform. Users have the ability to "follow" other users or have "followers" (other users following you). Users can send messages through *tweets*, which allows up to 140 characters, on users' profile page. Users can also *retweet* other users' *tweets*, which creates the ability to disseminate information quickly.

Based on a study by Tom Webster "Twitter Usage in America: 2010," there are more than 190 million users on Twitter, of which 17 million users are from the U.S. According to Twitter's blog post (2011), during March 2011, an average number of 140 million *tweets* was sent per day and an average of 460,000 new accounts per day was created. The ability to reach out to a large population is phenomenal on Twitter.

Example: Twitter profile page for Kim Kardashian. Users can view a list of followers on the right side of the profile page.

Participant Notes:

Slide 2-17. YouTube

YouTube, created in 2005, allows users to upload, share, and view content onto the Web site. Twenty-four hours of video is uploaded every minute, with an average person spending 15 minutes a day on YouTube.

According to comScore Video Metrix, during April 2010, 178 million American Internet users watched online video and an average of 4.3 hours per month are spent on watching YouTube videos. According to YouTube (2010), it received nearly 2 billion views a day, which is almost double the prime-time audience of all three major broadcast networks combined.

e.g.

Example: Video from 2011 Japan Earthquake posted on YouTube.

Participant Notes:

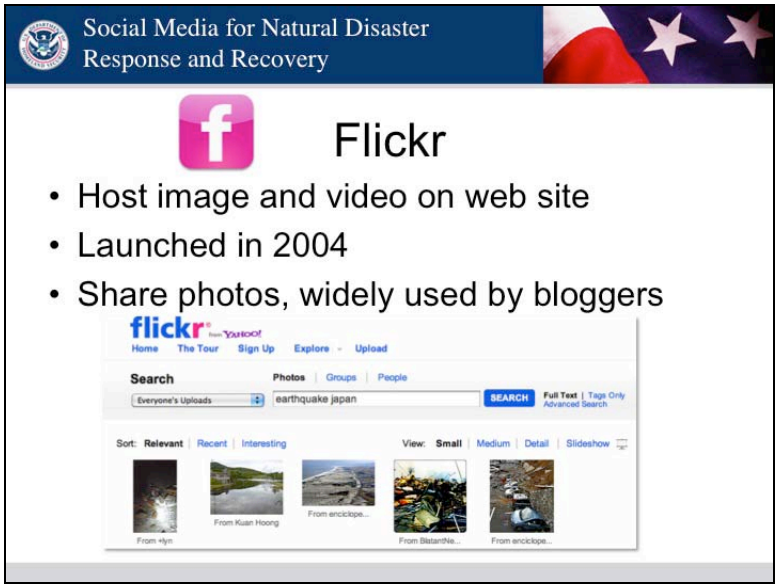
Slide 2-18. LinkedIn

LinkedIn, launched in 2003, is a professional social network site to create, develop, and maintain business relationships. Users can exchange information, ideas, and share opportunities on the Web site. Similar to Facebook, users develop profiles with standardized information in predetermined categories.

As of 2011, LinkedIn has 101 million members worldwide and is located in over 200 countries. Of the users, 27.7 million are located in the U.S. as of January 2011. (Quantcast)

Example: Profile page for an organization, National Fire Fighter Near-Miss Reporting System. This organization has 117 connections**.**

Participant Notes:



Slide 2-19. Flickr

Flickr, launched in 2004, allows users to share photos, which are used by bloggers. Users can host images and videos on the Web site. Flickr has been growing at a steady rate, and have increase by 25 percent in 2010. It hosts more than five billion images. (Flickr, 2011)

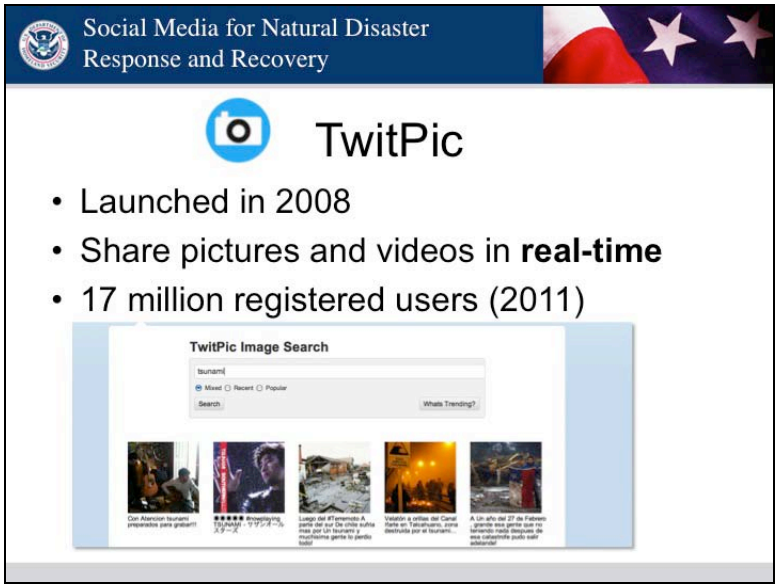
Example: Image: Snapshot of the website for Flickr. Images are shown based on the search topic.

Participant Notes:

Slide 2-20. Instagram

Instagram, founded in 2010, is a photo sharing application. Users can "like" or comment on photos. It is a social network other people's photos. Within the first three months of the launch of the application, Instagram had two million users. According to TechCrunch, 130,000 new users are added per week, and 3.6 million new photos are uploaded per week (or 6 photos per second). In an article in the New York Times, it has been reported that estimated 290,000 photos are uploaded daily (2011).

Participant Notes:



Slide 2-21. TwitPic

TwitPic, launched in 2008, allows users to share pictures and videos in real-time on Twitter. Users can post photos or videos to TwitPic from their phone, site, or through email. In an article, TwitPic's founder, Noah Everett states that there are 17 million registered users and 30,000 users are added each day (2011).

Example: Image: Snapshot of the website for Twitpic. Images are shown based on the search topic.

Participant Notes:

Slide 2-22. Foursquare

Foursquare, launched in 2009, is a location-based social networking application for mobile devices where users "check in" at locations. It is a game-focused app with geolocation tools. Users share their location with friends while earning rewards or discounts by unlocking badges for activities or achievements. Users also become "mayor" by repeatedly checking-in to a location. As of February 2011, Foursquare had 6 million users worldwide (Foursquare).

Example: Snapshot of the Foursquare website.

Participant Notes:

Slide 2-23. Yelp

Yelp is an online urban city guide to find places to shop, eat, drink, relax and play based on opinions from the public. Users can post and view reviews by other members in the community.

Yelp was founded in 2004, and more than 53 million people visited Yelp during June 2011.

Example: Snapshot of results from a Yelp search for burgers in Honolulu, Hawaii.

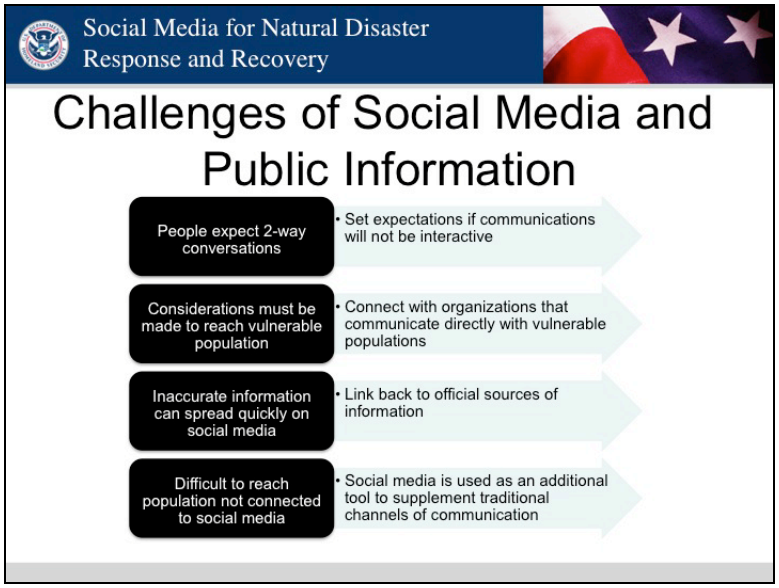
Participant Notes:

Slide 2-24. Google+

Google+ was launched in June 2011 and is a combination of many services. During its first two weeks, it acquired more than 5 million users.

Knowledge Check: Which social media platform has a limit of 140 characters per message?

Participant Notes:



Slide 2-25. Challenges of Social Media and Public Information

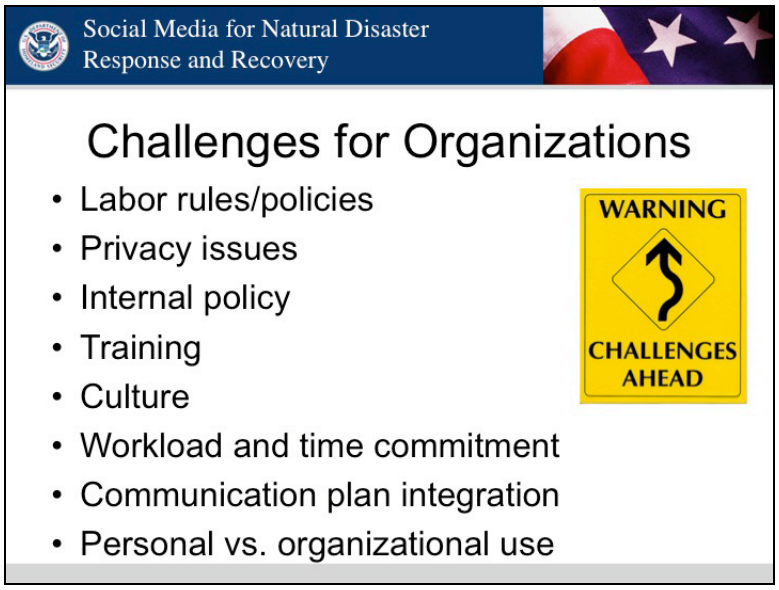
Social media users have come to expect a level of two-way communication that most traditional sites on the Internet cannot readily provide. However, depending on the objectives and goals of organizations using social media, organizations may rely on social media platforms for traditional communication methods due to the speed of dissemination. This will require users to change their expectations of organizations responding via social media as the public may expect a two-way conversation.

Considerations need to be made to reach vulnerable populations (i.e. the blind community, lower-income groups) as lack of access and knowledge to social media poses a barrier to reach them through social media. Connection with organizations that communicate and work directly with these vulnerable populations will help to alleviate this challenge.

Inaccurate information may be broadcasted quickly from second and third level sources. Misinformation can be inadvertently distributed. This will require close monitoring from organizations.

A notable percentage of the population will not be reached as they may not be connected to social media. It is important to note that social media is used as an additional tool to supplement traditional channels of communication.

Participant Notes:



Slide 2-26. Challenges for Organizations

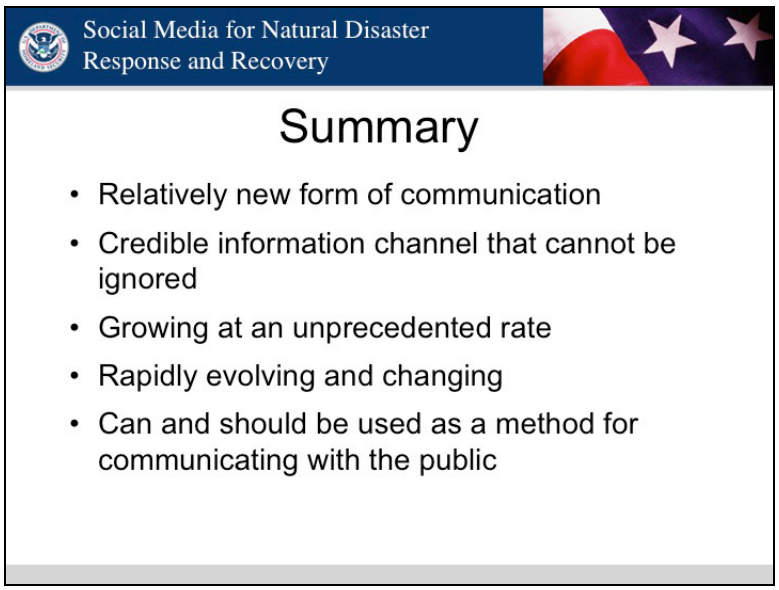
Some of the challenges for organizations are listed below.

- Labor rules/policies: As social media may require employees to be connected and do additional work beyond their normal hours, organizations need to consider how to incorporate the use of social media in the scope of work for employees.
- Privacy issues: Organizations will be face with the challenge of sensitive information being released via social media by employees (i.e. Firefighter tweets or posts about an accident on their own social media accounts).
- Internal policy: Organizations will need to create policies of how social media will be used within its organization.
- Training: Organizations will need to train staff on how to use social media, including proper usage.
- Culture: Culture of organizations will shift with the adaption of social media.
- Workload and time commitment: Organizations will need to decide the amount of time they are willing to commit to social media, as people can be connected social media anytime of the day.
- Communication plan integration: Organizations will need to determine the best strategy to integrate into its current channels of communication.
- Personal vs. organizational use: Organizations will need to monitor and set standards for staff using social media to avoid it being used for personal uses during work hours.

Participant Notes:

Knowledge Check: What are some challenges that you foresee impacting your organization's use of social media?

Participant Notes:



Slide 2-27. Summary

-This page is intentionally blank -

Social Media for Natural Disaster Response and Recovery

Module 3: Understanding the Use of Social Media and Disaster Management

October 2011

FEMA

-This page is intentionally blank -

Module 3: Understanding the Use of Social Media and Disaster Management

Slide 3-1. Understanding the Use of Social Media and Disaster Management

Duration

1.0 hour

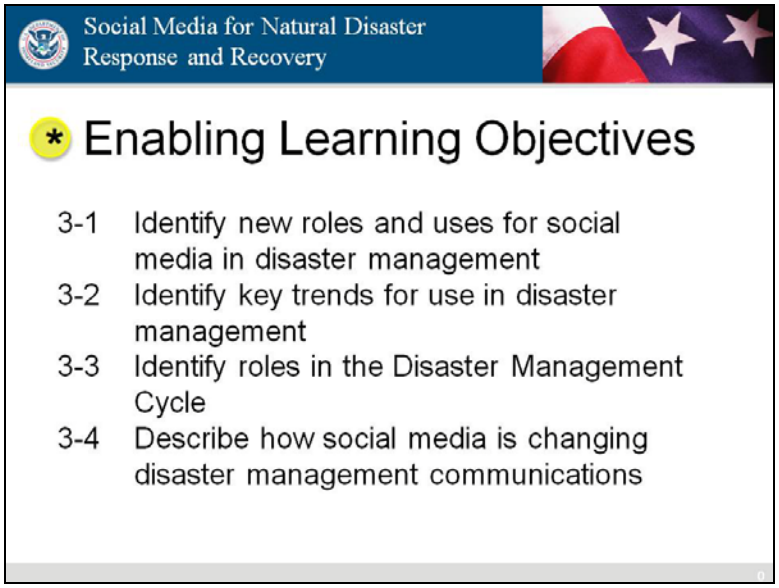
Scope Statement

Participants will learn how social media can be utilized in disaster preparedness and management. Instructor will also identify the responsibilities and skills required for effective management, key components for a public relations strategy, and guidelines to build a social media network.

Terminal Learning Objectives (TLO)

Participants will be able to identify actions to implement social media for disaster management.

Enabling Learning Objectives (ELO)



Slide 3-2. Enabling Learning Objectives

At the conclusion of this module, participants will be able to:

3-1 Identify the new roles and uses for social media in disaster management
3-2 Identify key trends for use in disaster management
3-3 Identify roles in the Disaster Management Cycle
3-4 Describe how social media is changing disaster management communications

Resources

- Module presentation slides
- Laptop with presentation software installed and CD-ROM capability
- Wi-Fi Internet access
- Two audio-visual (A/V)
- Two projector screens
- Easel
- Easel pad
- Markers
- One per participant of the following item:
    - Participant Guide
    - Computers with Wi-Fi access

Instructor to Participant Ratio

1:25

Reference List

American Red Cross. Social Media in Disasters and Emergencies, survey conducted by InfoGroup. Report Date August 5, 2010. Accessed on May 18, 2011. http://www.redcross.org/www-files/Documents/pdf/other/SocialMediaSlideDeck.pdf

Bernstein, Jonathan. "Social Media Connects Japan." *Blog: Crisis Management,* March 18, 2011. Accessed on April 24, 2011. http://managementhelp.org/blogs/crisis-management/2011/03/18/social-media-connects-japan/

Bunz, Mercedes. "In Haiti earthquake coverage, social media gives victim a voice." *Guardian*, January 14, 2010. Accessed on April 24, 2011. http://www.guardian.co.uk/media/pda/2010/jan/14/socialnetworking-haiti

Center for Disease Control and Prevention. Office of the Associate Director for Communication. The Health Communicator's Social Media Toolkit. http://www.cdc.gov/healthcommunication/ToolsTemplates/SocialMediaToolkit_BM.pdf

Ellis, Blake. "Haiti donations exceed $305 million." *CNNMoney,* January 21, 2010. Accessed April 6, 2011. http://money.cnn.com/2010/01/21/news/international/haiti_donations/ .

Feldman, Amy. "Haiti Earthquake Provokes Wave of Text Donations." *Bloomberg Businessweek,* January 14, 2010. Accessed April 6, 2011. http://www.businessweek.com/investor/content/jan2010/pi20100114_236518.html

Frank, T. (1 February 2010). "Social media play part in Haiti's recovery efforts." USA Today.

"Google aids Japan quake victims." *BBC News,* March 11, 2011. Accessed April 24, 2011. http://www.bbc.co.uk/news/technology-12711244

Kalish, Brian. "FEMA will use social media through all stages of a disaster." *Nextgov*, February 8, 2011. Accessed April 24, 2011. http://www.nextgov.com/nextgov/ng_20110208_4142.php?oref=topstory

Lohr, S. (28 March 2011). "Online Mapping Shows Potential to Transform Relief Efforts." The New York Times.

Lowensohn, Josh. "Images: Social media takes on Mother Nature." CNET News, February 18, 2009. Accessed on April 15, 2011.

Martinez, Michael. “California student from Japan finds family alive on YouTube.” *CNN U.S.,* March 15, 2011. Accessed on April 24, 2011. http://articles.cnn.com/2011-03-15/us/california.student.japan_1_host-family-news-crew-sister?_s=PM:US

Nelson, Anne and M. Patel. (11 Jan. 2011). “How Mapping, SMS Platforms Saved Lives in Haiti Earthquake.” PBS Hawaii.

Nelson, Anne and Ivan Sigal. *Media, Information Systems and Communities: Lessons from Haiti*. Accessed April 24, 2011, http://www.knightfoundation.org/dotAsset/377221.pdf

Sharma, Dinesh. “Tsunami survivors turn to blogs for news, help.” CNET News, January 5, 2005. Accessed on April 15, 2011.

Shklovske, Irina and Sara Kiesler. “Technology Adoption and Use in the Aftermath of Hurricane Katrina in New Orleans.” *American Behavioral Scientist.*

Stephens, Kim. “Social Media and the Japan earthquake: What we can learn.” *Idisaster 2.0,* March 12, 2011. Accessed on April 24, 2011. http://idisaster.wordpress.com/2011/03/12/social-media-and-the-japan-earthquake-and-tsunami-what-we-can-learn/

Sterberg, Steve. “Japan crisis showcases social media’s muscle.” *USA Today*, April 12, 2011. Accessed April 24, 2011. http://www.usatoday.com/tech/news/2011-04-12-1Ajapansocialmedia12_CV_N.htm

Yasin, Rutrell. "5 ways social media is changing emergency management." *Government Computer News*, September 2, 2010. Accessed on May 13, 2011. http://gcn.com/articles/2010/09/06/social-media-emergency-management.aspx

Practical Exercise Statement

An instructor-led discussion on the role of social media and managers in disaster preparedness and management. At the end of the module, students will create social media accounts.

Assessment Strategy

- Practical Instructor observation of participants’ involvement in the classroom discussion.
- Instructor-led discussion to ensure that participants understanding of module lesson topics

Social Media for Natural Disaster Response and Recovery

Icon Map

Knowledge Check: Used when it is time to assess the learners' understanding

Example: Used when there is a descriptive illustration to show or explain

Key Points: Used to convey essential learning concepts, discussions and introduction of supplemental material

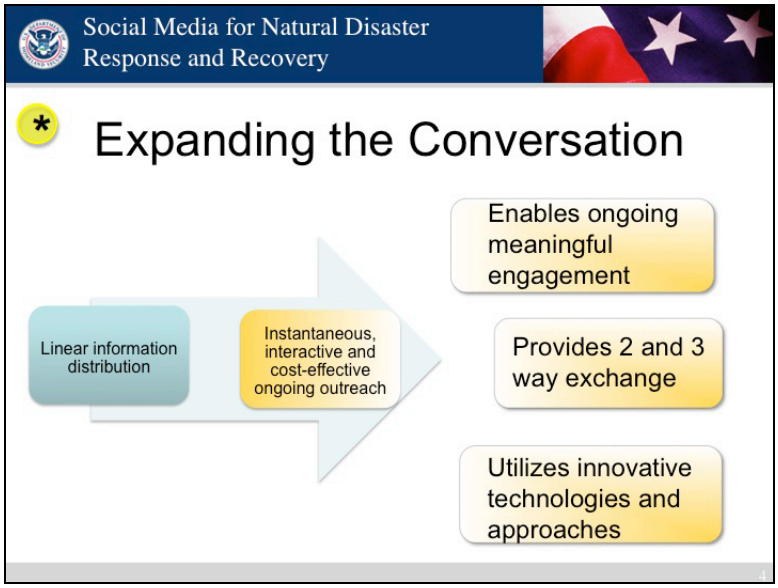
Hint: Used to cover administrative items or instructional tips that aid in the flow of the instruction

Participant Notes:

Slide 3-3. Social Media: *A Paradigm Shift in Disaster Management and Crisis/Risk Communications*

The introduction of social media, its wide-spread use amongst the public, and innovative technologies has bought a paradigm shift in disaster management and crisis/risk communications.

Participant Notes:

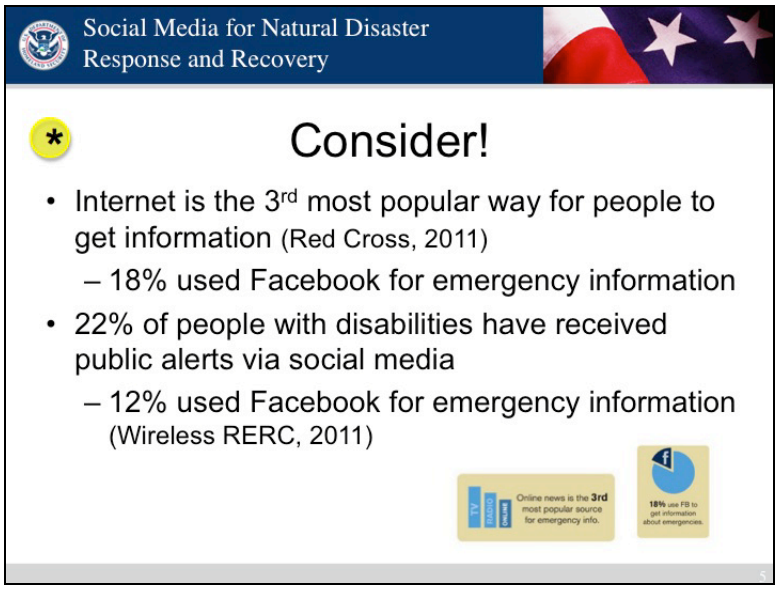


Slide 3-4. Expanding the Conversation

Social media is changing disaster management communications by dramatically expanding the conversation between emergency management agencies and the public.

Social media is important because it creates a shift from linear information distribution to instantaneous, interactive and cost-effective outgoing outreach. It enables ongoing meaningful engagement; provides 2 and 3 way exchange: from agencies to hard-to-reach risk populations, between community members, and response back to agencies; and utilizes innovative technologies and approaches.

Participant Notes:



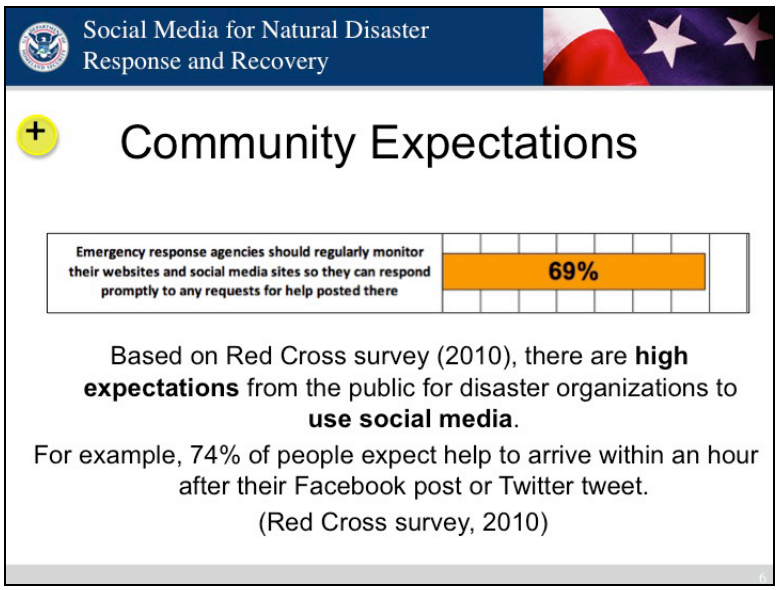
Slide 3-5. Consider!

A considerable amount of people use social media for emergency information purposes.

According to a study by the Red Cross (2011), the Internet is the 3rd most popular way for people to get information. About 18% used Facebook to get emergency information.

Another study done by Wireless REREC (2011) shows that 22% of people with disabilities have received public alerts via social media. About 12% used Facebook for emergency information.

Participant Notes:



Slide 3-6. Community Expectations

Based on the Red Cross Survey (2010), 69% of respondents felt that emergency responders should be monitoring social media sites. Results from the Red Cross survey suggest the need for social media in disaster management, particularly to act in the "interactive" role in monitoring and responding to help when needed. There are high expectations from the public for disaster organizations to use social media. For example, about 74% of people expect help to arrive within an hour after their Facebook post or Twitter tweet (Red Cross survey, 2010).

The interactive role requires a larger time commitment of emergency managers on social media sites. Organizations may not have access to resources to allow for monitoring and responding on social media platforms. Therefore, emergency managers need to change expectations of the public, and stress its role in using social media solely for broadcasting purposes only.

Participant Notes:

Slide 3-7. How is Social Media Being Used in Disaster Management?

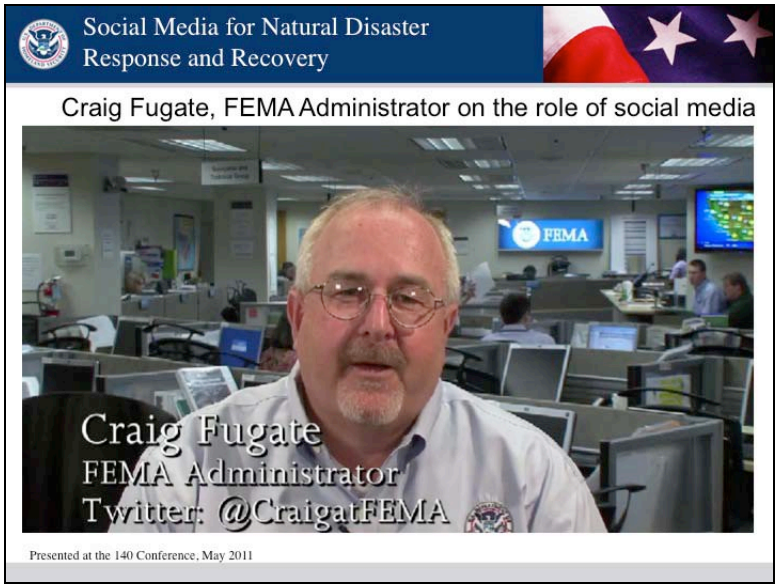
The wide-spread use of social media in disaster management is for the **passive** dissemination of information and getting user feedback via message, wall posts, and polls. Expanding use of social media, which are more **interactive**, include emergency communication, assistance requests, monitoring, and data collection.

Participant Notes:

Slide 3-8.

A quote from Craig Fugate, Administrator of FEMA, in support of using social media.

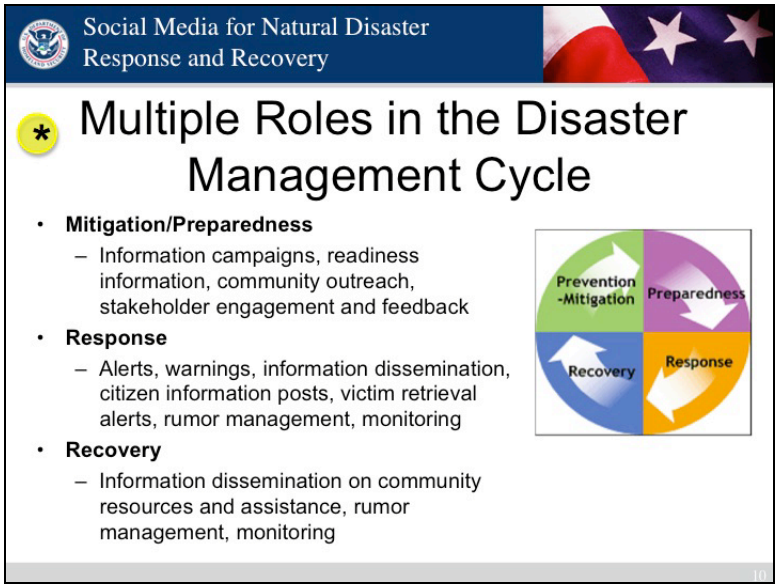
Participant Notes:



Slide 3-9. Craig Fugate, FEMA Administrator on the role of social media

A 3-minute clip from Craig Fugate speaking on the role of social media in disaster management.

Participant Notes:



Slide 3-10. Multiple Roles in the Disaster Management Cycle

Social media play multiple roles in the disaster management cycle. It is used in all four phrases: mitigation, preparedness, response, and recovery.

Participant Notes:

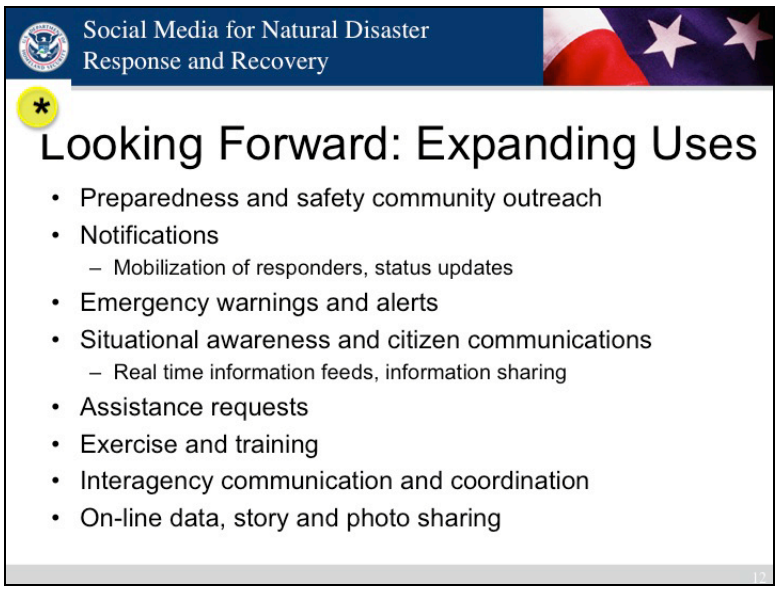
Slide 3-11. Looking Back: Snapshot 2007

Looking back to 2007, social media have been used for numerous emergencies. In April 2007, students facilitated unofficial information-sharing that informed and guided response activities during the Virginia Tech shooting.

In August 2007, during Minneapolis Bridge collapse, there was extensive photo sharing online.

In October 2007, government and citizen information exchange informed response teams of the Southern California Wildfires.

Participant Notes:



Slide 3-12. Looking Forward: Expanding Uses

Looking forward to the expanding uses of social media in disaster management, social media can be used for the following purposes:

-preparedness and safety community outreach

-notifications to mobilize responders and send status updates

-emergency warnings and alerts

-situational awareness and citizen communications with real-time information feeds and sharing

-assistance requests

-exercise and training

-interagency communication and coordination

-online data, story and photo sharing

Participant Notes:

Slide 3-13. Rapidly Evolving Developments

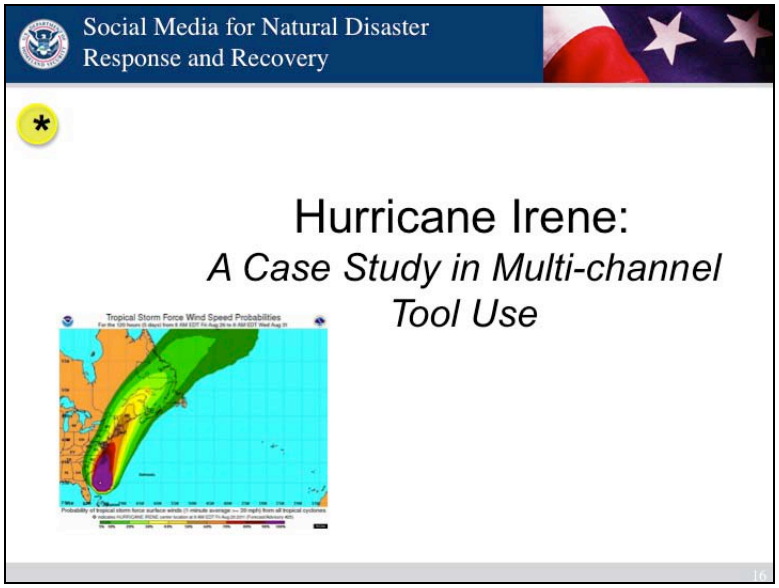
There are rapidly evolving developments to support the use of social media. For example, in May 2011 FEMA announced the Personal Localized Alerting Network (PLAN), which is a new public safety system that allows citizens to receive geographically-specific alerts. The Federal Communications Commission expanded emergency alert system notifications currently sent over television and radio to include mobile phones.

Participant Notes:

Slide 3-14. Growing Group of Interested Stakeholders

There is a growing group of interested stakeholders for social media.

Participant Notes:



Slide 3-15. Hurricane Irene: *A Case Study in Multi-channel Tool Use*

The following slides will present a case study on how organizations used multiple social media tools in preparation, during and after Hurricane Irene, which started off as a tropical wave off the coast of Africa on August 15, 2011.

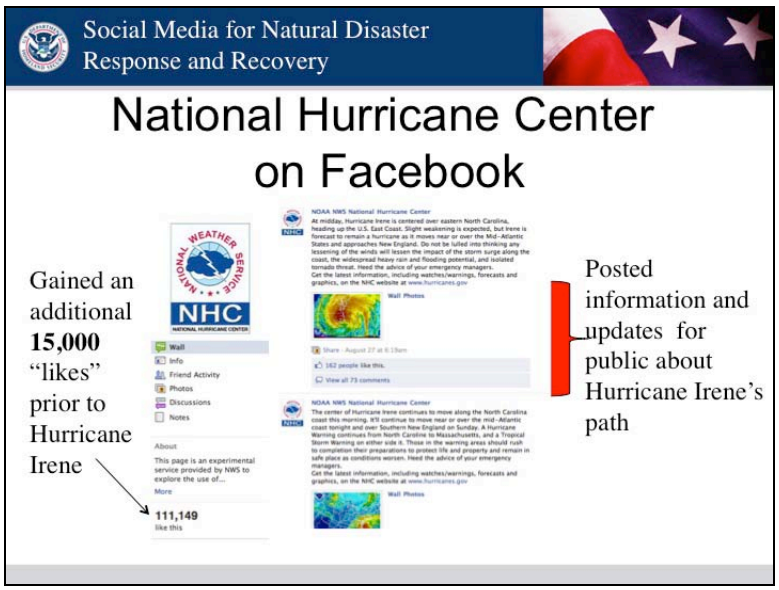
Participant Notes:

Slide 3-16. Hurricane Irene

Hurricane Irene was the first hurricane of the 2011 Atlantic hurricane season that pushed through the Bahamas, the Mid-Atlantic and New England. Hurricane Irene bought in a lot of flooding, rains and strong winds. It made its first landfall in Puerto Rico, then in North Carolina, and in New Jersey on August 28, 2011. Vermont and New Jersey was hit the hardest with severe flooding.

A large number of organizations including financial institutions and emergency officials used social media as a channel of communication regarding Hurricane Irene. The following slides will show examples of various emergency organizations using social media during Hurricane Irene.

Participant Notes:



Slide 3-17. National Hurricane Center on Facebook

Example: The slide shows examples of posts by the National Hurricane Center (NHC) on Facebook. NHC used Facebook to post information and updates for the public about the Hurricane's path. About 111,000 users "Like" this Page, which means any posts by NHC on its Page will appear in the News Feed of people who like NHC's page.

Participant Notes:

Slide 3-18. National Hurricane Center on Twitter

Example: The slide shows examples of Tweets by the National Hurricane Center on Twitter. This organization used Twitter to post information and updates for the public about Hurricane Irene. There are more than 37,000 users following National Hurricane Center on Twitter. The significance of Followers will be explained in Module 4.

Participant Notes:

Slide 3-19. Weather Channel on Twitter and Facebook

Example: The slide shows example of the Weather Channel on Twitter and Facebook. As shown on the right, the Weather Channel has about 612,000 “Likes” on its Facebook Page. This implies that all the users that “Like” the Weather Channel’s Facebook Page will be able to view each post from the Weather Channel on their News Feed.

Participant Notes:

Slide 3-20. Department of Homeland Security on Twitter

Example: The slide shows examples of Tweets from Department of Homeland Security on Twitter during Hurricane Irene. These Tweets were one method that Department of Homeland Security used to communicate with the public. As shown above, Department of Homeland Security has more than 45,000 Followers on its Twitter account. This means that when Department of Homeland Security posts a Tweet, these Followers can get the message via their Tweet updates.

Participant Notes:

Slide 3-21. Wells Fargo communicates with customers

Example: The slide shows examples from both Twitter and Facebook for Wells Fargo, a financial institution, which was used to communicate with its customers during Hurricane Irene. The purpose of this slide is to show that not only emergency organizations can use social media to communicate, but also, social media can be used by diverse industries.

Participant Notes:

Slide 3-22. Red Cross engages with community via Facebook

Example: The slide shows examples of posts from American Red Cross' Facebook Page. The two posts included in the slide provide update about the disaster and relief assistance by promoting an application, which can be used to help people find shelters within an area.

Participant Notes:

Slide 3-23. Citizens communicate with each other via Red Cross' page

Example: The slide represents another impact that social media plays during a disaster. It allows citizens to communicate with each other via an organization's Page. As shown in the slide, one citizen is replying to another citizen's question.

Participant Notes:

Slide 3-24. Vermont Emergency Management

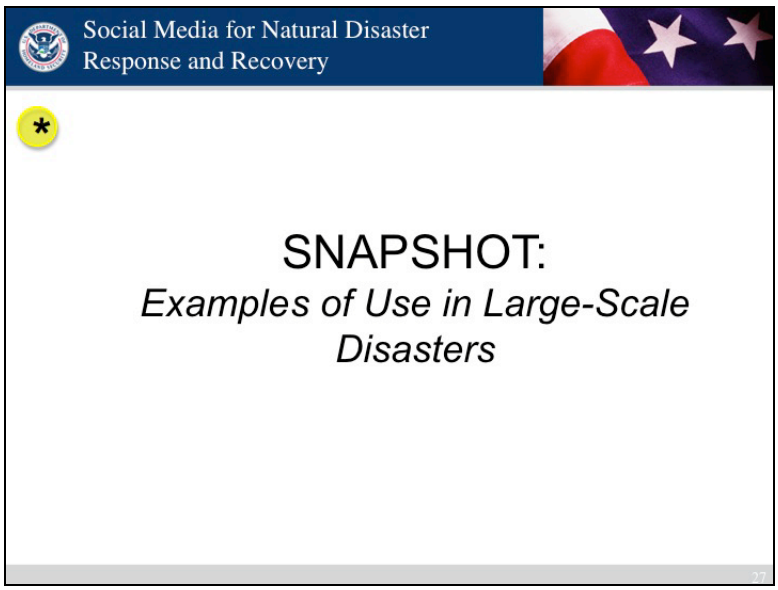
The slide shows the Facebook page for Vermont Emergency Management. Posts include updates about Hurricane Irene to inform the public about the situation. In a post above, Vermont Emergency Management updates that they now have 1,000 Fans on August 26. Five days later, Vermont Emergency Management attained about 2,900 fans. During times of emergencies, citizens will go to various channels to find information, as presented above with the increase in number of Fans. However, organizations should be proactive and have a large number of Fans prior to disasters.

Participant Notes:

Slide 3-25. Alerts, updates on Twitter and Facebook

Example: The slide shows examples of alerts and updates on Twitter and Facebook for Vermont Emergency Management.

Participant Notes:



Slide 3-26. SNAPSHOT: Examples of Use in Large-Scale Disasters

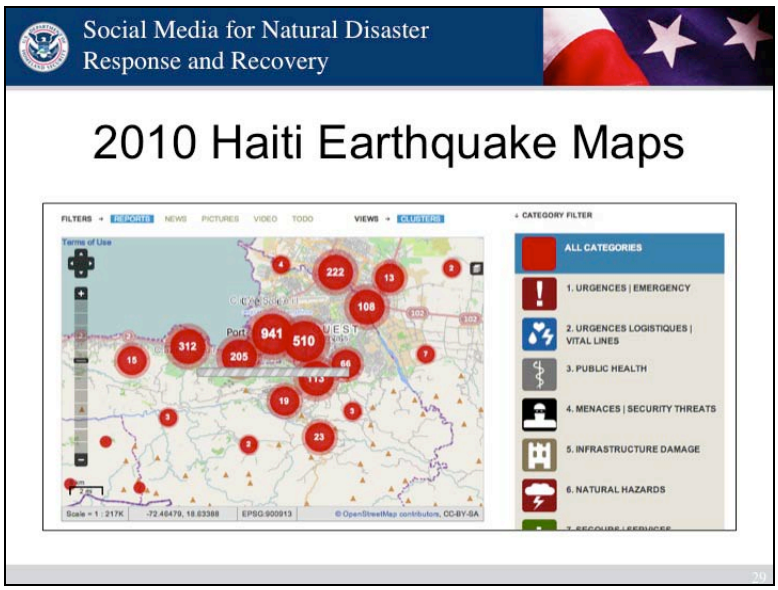
The following slides will show example of social media use in large-scale disasters.

Participant Notes:

Slide 3-27. 2010 Haiti Earthquake

After the Haiti Earthquake in 2010, about 60% of Red Cross donation was from online donations, while 15-20% came from its text messaging campaign. Social media can be used for disaster response to provide relief efforts. Red Cross used Facebook as a communication channel to promote and to raise money following the Earthquake.

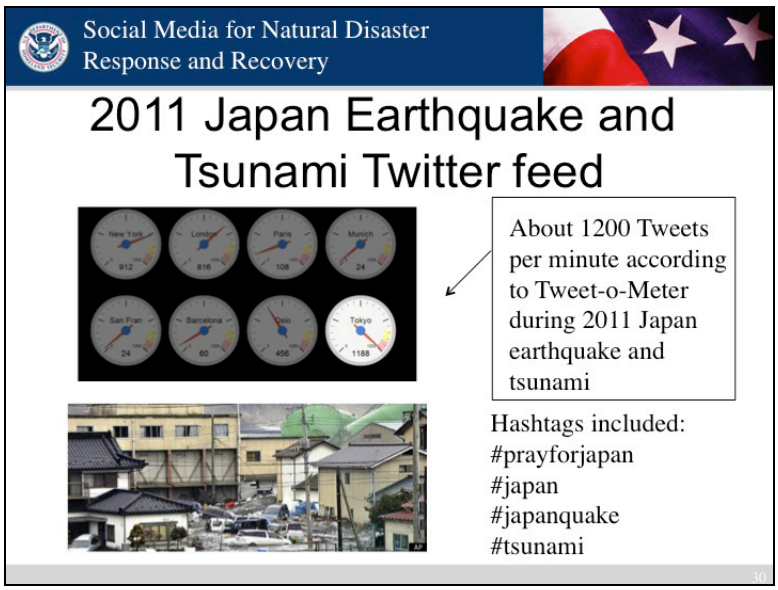
Participant Notes:



Slide 3-28. 2010 Earthquake Maps

Example: The slide shows an example of one of the Ushahidi maps used after the Haiti Earthquake in 2010. Ushahidi maps will be discussed in-depth in Module 6.

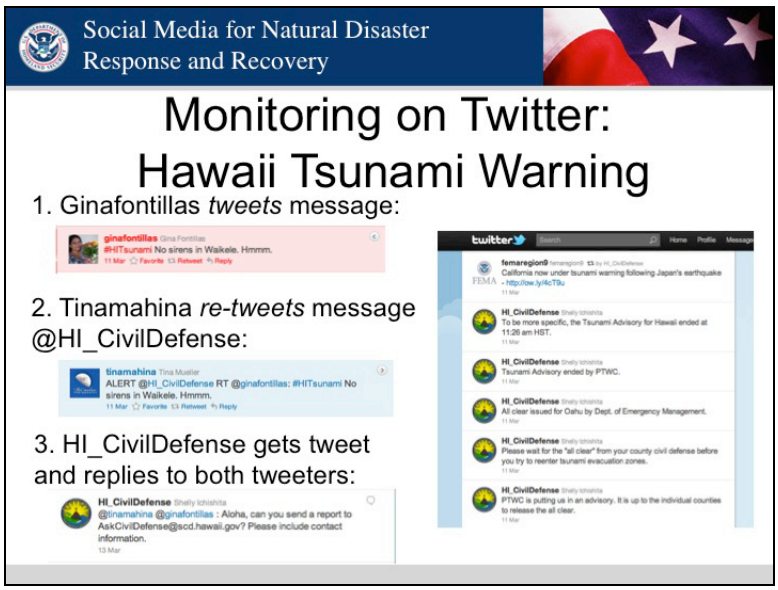
Participant Notes:



Slide 3-29. 2011 Japan Earthquake and Tsunami Twitter feed

After the Japan Earthquake and Tsunami in 2011, about 1,200 Tweets per minute (according to Tweet-o-Meter) were tweeted about Japan. Some of the hashtags used included #prayforjapan, #japan, #japanquake, and #tsunami.

Participant Notes:



Slide 3-30. Monitoring on Twitter: Hawaii Tsunami Warning

In addition to using social media to broadcast information, emergency managers can play an "interactive" role which requires monitoring social media platforms and responding to the public. Broadcast and interactive roles are not exclusive, as broadcast roles are components included in the interactive role.

It is important that social media managers set expectations for the public. If disaster managers plan on using social media solely for broadcasting purposes on social media platforms, disaster managers should post message on platforms to state that they are **not** monitoring the sites so that the public will not expect help to arrive.

Example: Slide shows an example of how Twitter was used by citizens and government officials during the Hawaii Tsunami Warning on March 11, 2011.

1. Gina Fontillas, *ginafontillas,* tweets message on Twitter "#HITsunami No Sirens in Waikele. Hmmm."
2. Tina Mueller, *tinamahina,* re-tweets the message to Hawaii Civil Defense's Public Information Officer (Shelly Ichishita) "ALERT @HI_CivilDefense"
3. Hawaii Civil Defense receives the Tweet and replies "Aloha, can you send a report to AskCivilDefense@scd.hawaii.gov? Please include contact information."

Participant Notes:

This example shows Twitter's capabilities. A hash symbol (#) is used at the start of a Tweet to identify it with a specific topic. For example, *#HITsunami* is used for Hawaii Tsunami Warning. This helps organize and spread information on Twitter.

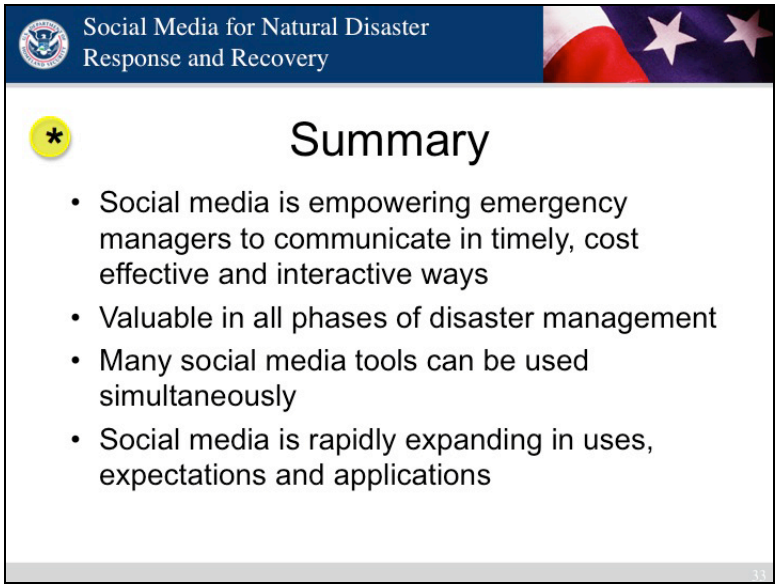
Through the initial Tweet from Gina Fontillas, a common resident, Hawaii State Civil Defense learned about the possibility of sirens not working in an area on Oahu. This example shows the capabilities of social media, in particular Twitter, to serve as a tool for situational awareness during emergencies.

Participant Notes:

Slide 3-31. Significant Trends for Use in Disaster Management

Significant industry trends include redefining risk and crisis communications, expanding the role of citizen journalism, enabling geographically-targeted alerts and notifications, using crowdsourced data, creating Volunteer Technical Communications, and empowering rapid data visualization.

Participant Notes:



Slide 3-32. Summary

Social Media for Natural Disaster Response and Recovery

Module 4: Implementing Different Social Media Platforms for Disaster Management

October 2011

FEMA

-This page is intentionally blank -

Module 4: Implementing Different Social Media Platforms for Disaster Management

Slide 4-1. Implementing Different Social Media Platforms for Disaster Management

Duration

1.5 hour

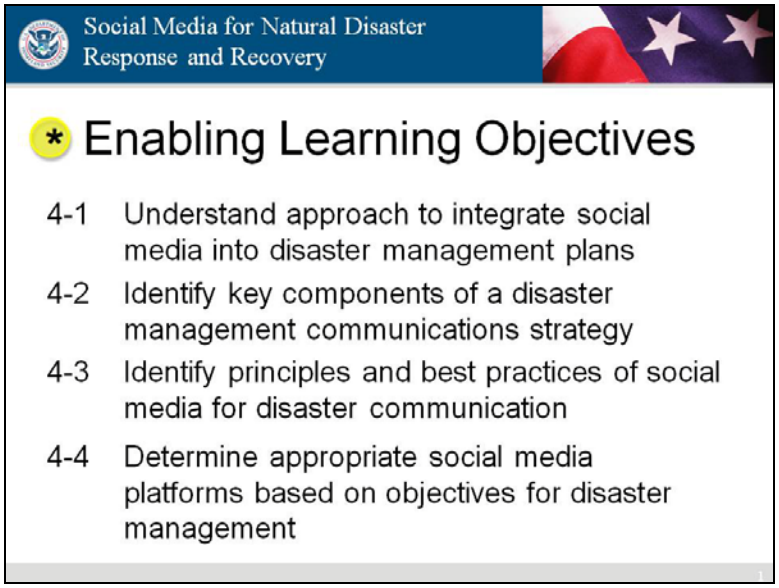
Scope Statement

Participants will configure their social media accounts for their organizations and build an emergency management network. Instructors will present "Best Practices" case studies of disaster preparedness and management utilizing social media tools.

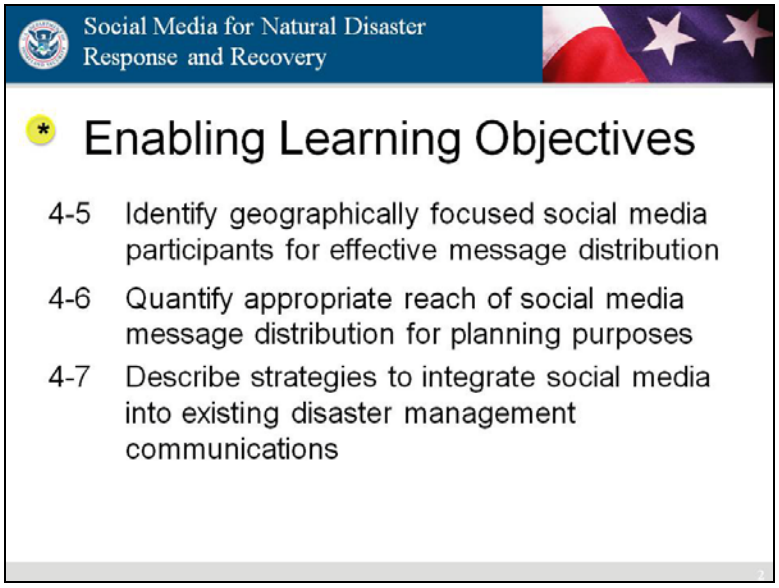
Terminal Learning Objective (TLO)

Participants will be able to implement specific social media platforms to increase the effectiveness of a disaster media plan, and to build a geo-focused social media management networks.

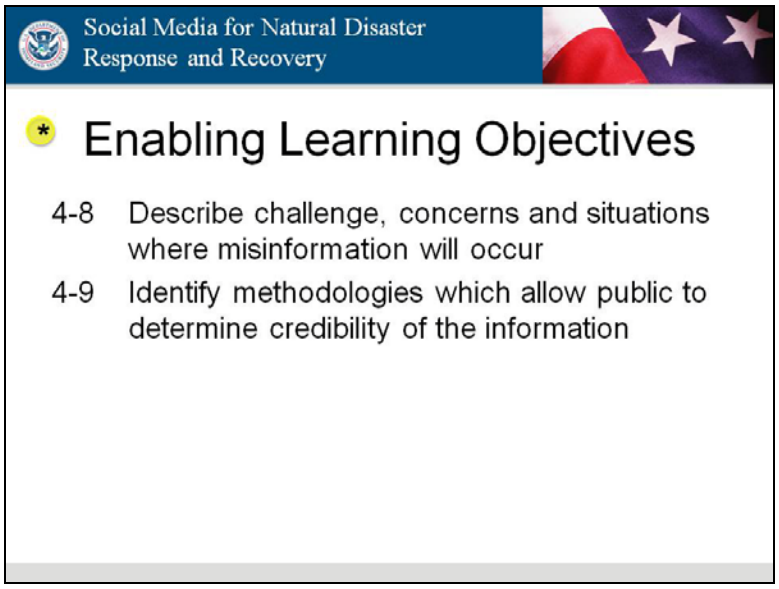
Enabling Learning Objectives (ELO)



Slide 4-2. Enabling Learning Objectives



Slide 4-3. Enabling Learning Objectives



Slide 4-4. Enabling Learning Objectives

At the conclusion of this module, participants will be able to:

4-1 Understand approach to integrate social media into disaster management plans
4-2 Identify key components of a disaster management communications strategy
4-3 Identify principles and best practice of social media for disaster communication
4-4 Determine appropriate social media message platforms based on objectives for disaster management
4-5 Identify geographically focused social media participants for effective message distribution
4-6 Quantify appropriate reach of social media message distribution for planning
4-7 Describe strategies to integrate social media into existing disaster management communications
4-8 Describe challenge, concerns and situations where misinformation will occur
4-9 Identify methodologies which allow pubic to determine credibility of the information

Resources

- Module presentation slides
- Laptop with presentation software installed and CD-ROM capability
- Wi-Fi Internet access
- Two audio-visual (A/V)
- Two projector screens
- Easel
- Easel pad
- Markers

- One per participant of the following item:
  - Participant Guide
  - Computers with Wi-Fi access

Instructor to Participant Ratio

1:25

Reference List

McNaughton, Marissa. “Facebook Will Reach 57% of U.S. Internet Users in 2011.” *The Realtime Report,* March 16, 2011. Accessed on May 31, 2011. http://therealtimereport.com/2011/03/16/facebook-will-reach-57-of-u-s-internet-users-in-2011/

Rao, Leena. “Facebook Now Has 149M Active Users in The U.S; 70 Percent Log On Daily.” *TechCrunch*, February 10, 2011. Accessed on May 31, 2011. http://techcrunch.com/2011/02/10/facebook-now-has-149m-active-users-in-the-u-s-70-percent-log-on-daily/

Practical Exercise Statement

An instructor-led discussion on the various social media platforms and tools. Instructor will highlight Best Practices of social media implementation in agencies. At the end of the module, participants will begin to implement some of the Best Practice social media techniques as with their accounts. Techniques and procedures for implementing these Best Practices examples will be presented and used.

Assessment Strategy

- Practical Instructor observation of participants’ involvement in the classroom discussion.
- Instructor-led discussion to ensure that participants understanding of module lesson topics

Social Media for Natural Disaster Response and Recovery

Icon Map

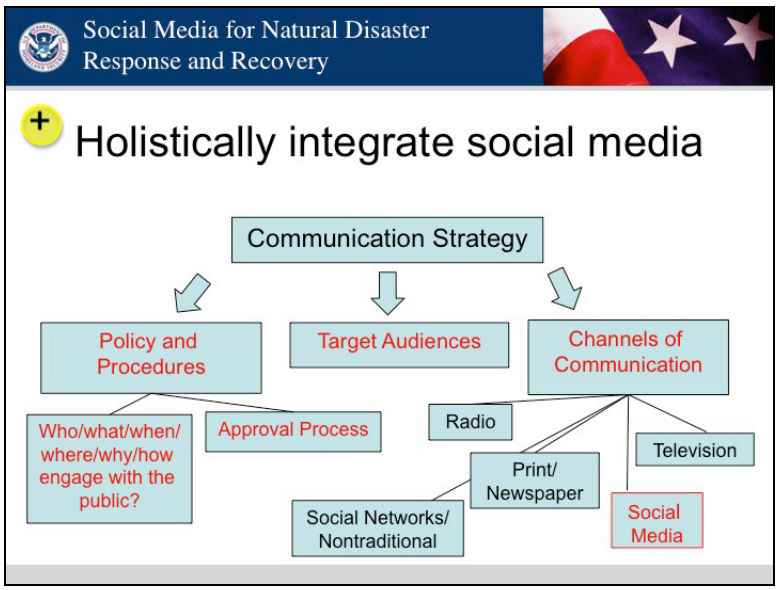
Knowledge Check: Used when it is time to assess the learners' understanding

Example: Used when there is a descriptive illustration to show or explain

Key Points: Used to convey essential learning concepts, discussions and introduction of supplemental material

Hint: Used to cover administrative items or instructional tips that aid in the flow of the instruction

Participant Notes:



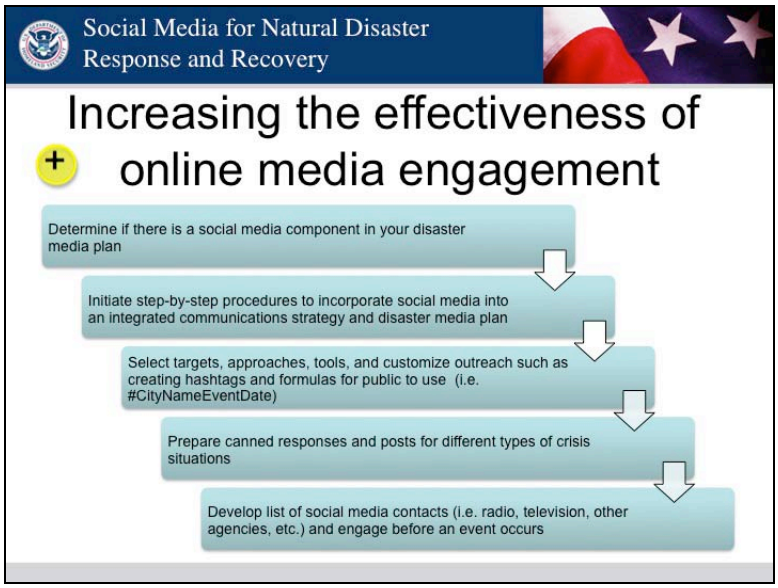
Slide 4-5. Holistically integrate social media

An emergency management communications strategy defines the parameter and actions based upon the disaster. It provides guidelines for responding to different crisis scenarios.

Components of a communications strategy for emergency managers include Policy and Procedures, Target Audiences, and Channels of Communication. Within Policy and Procedures, it should state who, what, when, where, why, and how the organization will engage with the public. In addition, the Policy and Procedures should include the approval process for the organization to communicate with the public via its various channels of communication.

Social media should be used as an additional tool to an emergency organization's current channels of communication. For example, organizations that already use mass text messaging as a tool can easily add social media into their channels of communication as the same messages sent via mass text messaging can be replicated into social media platforms. Social media must be aligned with existing communications plan, must be adapted into the Policy and Procedures, and used to reach a targeted audience.

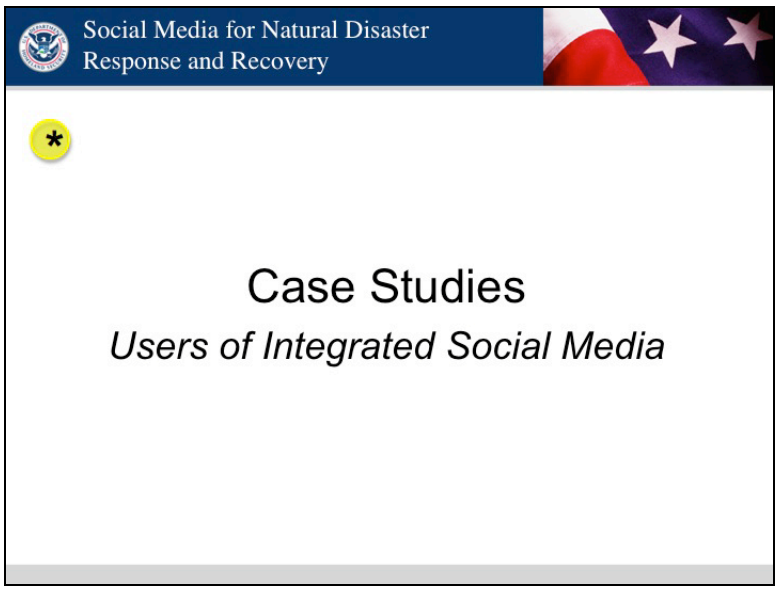
Participant Notes:



Slide 4-6. Increasing the effectiveness of online media engagement

By identifying the key components of a disaster management communications strategy, it will increase the effectiveness of online media engagement. Emergency managers need to determine if there is a social media component in their current disaster media plan. If it currently does not exist, then emergency managers need to include step-by-step procedures on how to incorporate social media into their disaster media plan. Organizations should provide or create hashtags when not already in use for the public to use, or at least provide a standard formula for hashtags (i.e. #CityNameEventDate). This will improve the ability for organizations to categorize messages and to monitor more efficiently. Preparing canned responses and posts for different types of crisis situations will be useful and convenient for emergency managers to manage during an emergency. Additionally, it is beneficial to develop a lost of social media contacts (including radio, television, newspaper, and other agencies) for emergencies.

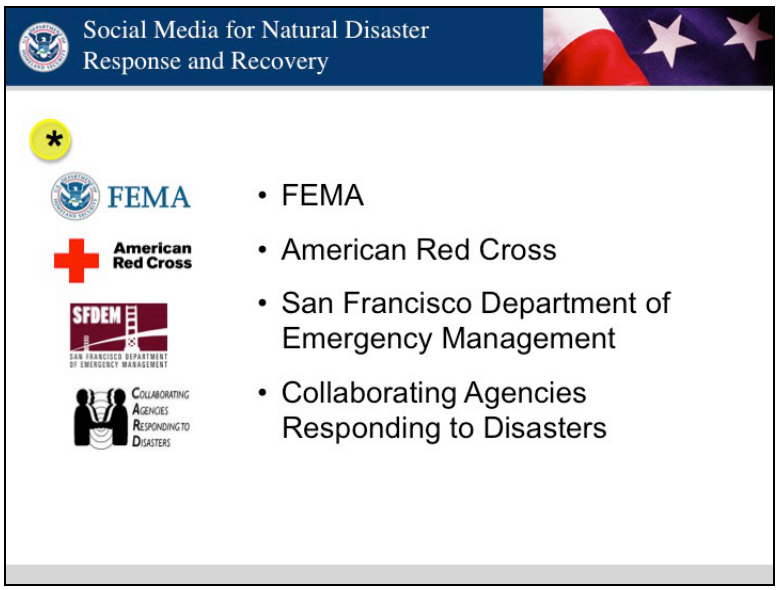
Participant Notes:



Slide 4-7. Case Studies *Users of Integrated Social Media*

The following case studies represent users who have holistically integrated social media into their organizations by including social media in their Policy and Procedures, and by using various channels of communication.

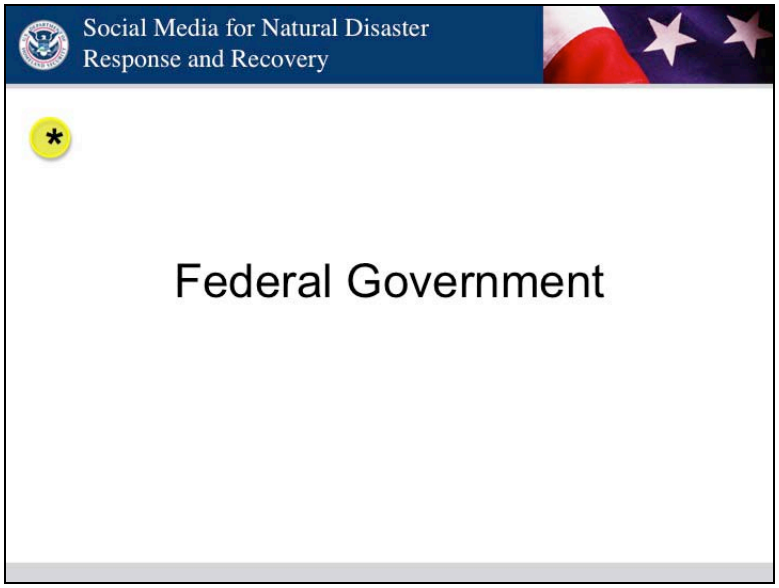
Participant Notes:



Slide 4-8.

The four case studies represent different types of organizations: federal government, non-governmental organization, local/county government, and community-based organization.

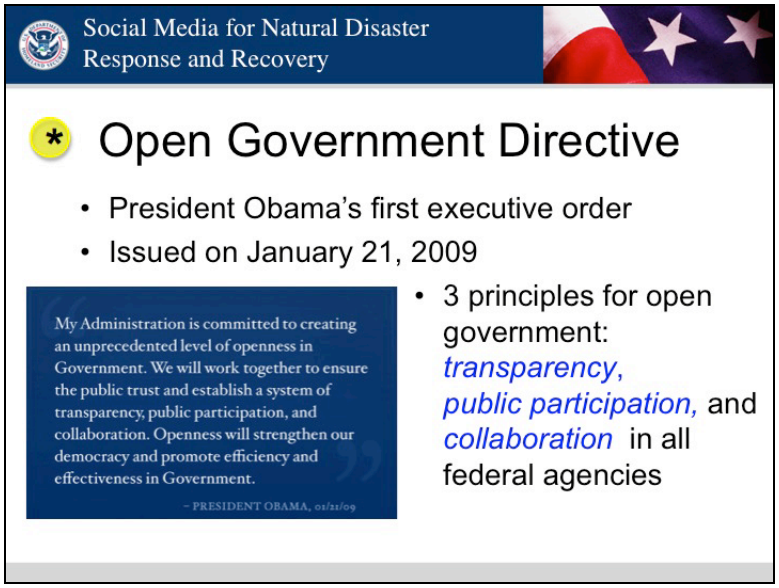
Participant Notes:



Slide 4-9. Federal Government

FEMA is a federal government that incorporates social media in its communication strategy.

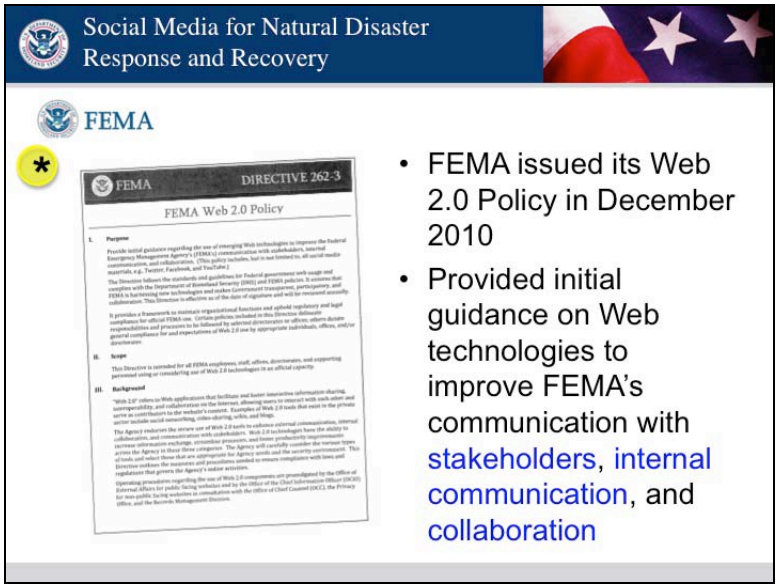
Participant Notes:



Slide 4-10. Open Government Directive

The Open Government Directive from President Obama was his first executive order, which was issued on January 21, 2009. The three principles for open government include: transparency, public participation, and collaboration. This Directive created a framework for the use of social media in all federal agencies.

Participant Notes:



Slide 4-11.

FEMA integrated social media into its policies and procedures by issuing its Web 2.0 Policy in December 2010. It provided initial guidance on Web technologies to improve FEMA's communication with stakeholders, internal communication, and collaboration.

Example: Slide shows an example of FEMA's Web 2.0 Policy.

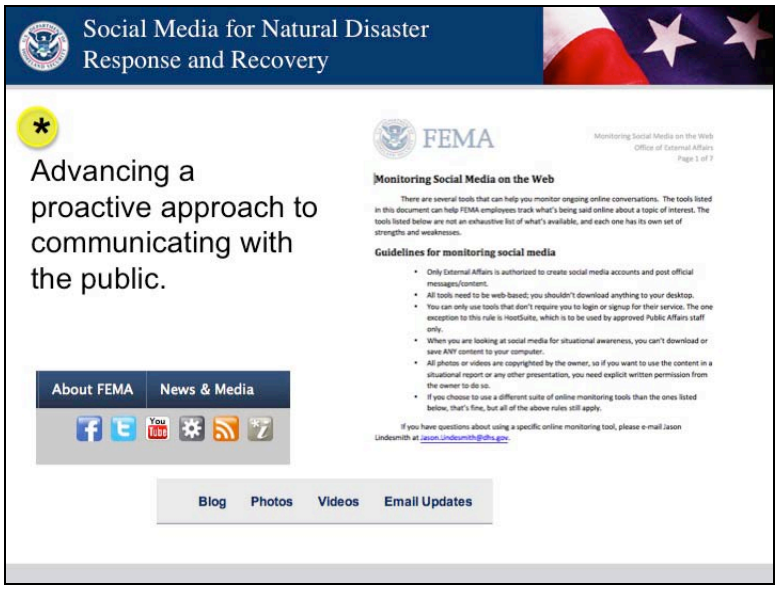
Participant Notes:

Slide 4-12.

FEMA uses numerous communication channels and tools as part of their mission to provide information to the public before, during, and after a disaster.

Example: Slide shows an example of FEMA's Blog, Facebook, YouTube, and Twitter page.

Participant Notes:



Slide 4-13.

FEMA uses a proactive approach to communicate with the public by using multiple social media tools to multiple ongoing online conversations.

Participant Notes:

Slide 4-14.

FEMA has a large audience via its Facebook and Twitter accounts. On Facebook, FEMA has more than 65,000 fans. On Twitter, FEMA has an active presence with 16 different Twitter accounts. On its national FEMA account, it has more than 80,000 followers. Each of FEMA 10 regional offices have its own Twitter account with a total of more than 32,000 followers. Other FEMA accounts include Ready, US Fire, Citizen Corps, and FEMA LRO. Craig Fugate, Administrator of FEMA, has more than 17,000 followers, which is almost one-fourth of the total national FEMA Twitter account followers.

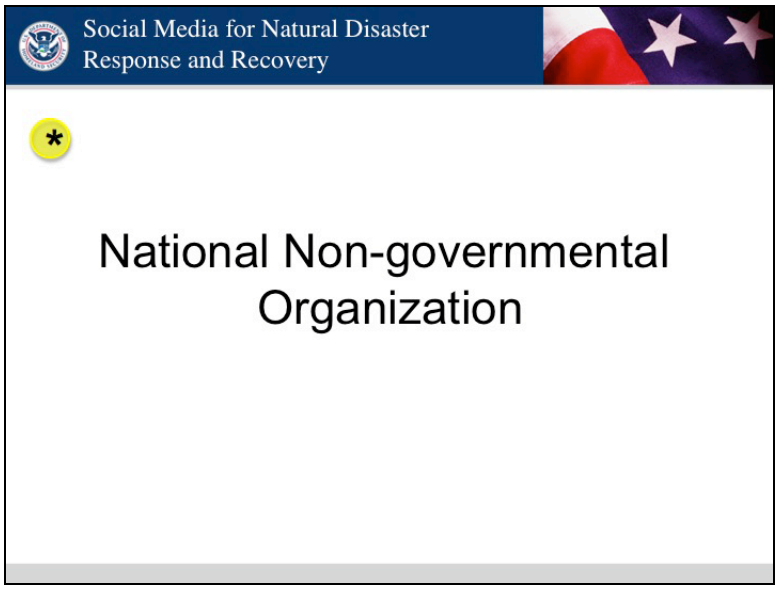
Participant Notes:

Slide 4-15.

FEMA also engages with the public using online tools such as challenge.gov, which allows the public to provide ideas for challenging issues.

Example: Slide shows an example of a recent challenge posted by FEMA, which solicited public input on ways to prepare communities before a disaster. The winner of this challenge was "Map Your Neighborhood," which has been implemented in many communities nationwide.

Participant Notes:



Slide 4-16. National Non-governmental Organization

American Red Cross is a national non-governmental organization that incorporates social media in its communication strategy.

Participant Notes:

Slide 4-17.

American Red Cross' philosophy is to use social engagement to execute the mission of the Red Cross online. Its mission is to help people prevent, prepare for, and respond to emergencies with social media. Its goal is to create an empowered online community of Red Cross supporters.

Participant Notes:

Slide 4-18. A National Leader in Social Media

Red Cross is a national leader in social media. The organization has multiple social media tools. It has a blog which provides forum for discussions, immediate actions to help others, and information about emergencies. Its Disaster Online Newsroom offers the most updated information on disasters worldwide. With its Facebook page, Red Cross engages with community members, provide relief assistance and updates. Its Facebook page has more than 386,000 fans. With its Twitter account, Red Cross shares disaster and preparedness updates daily. Red Cross has more than 564,000 followers.

Participant Notes:

Slide 4-19.

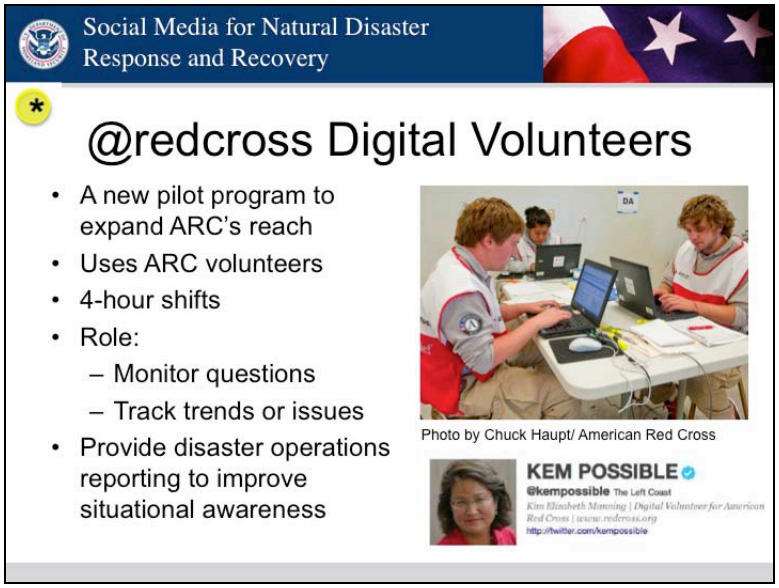
Example: Slide shows examples of Red Cross' social media tools used for communication: Facebook, Twitter, Blog, and Disaster Online Newsroom.

Participant Notes:

Slide 4-20. Additional online presence

Example: Slide shows examples of additional online presence of Red Cross on social media platforms: LinkedIn, Flickr, and YouTube.

Participant Notes:

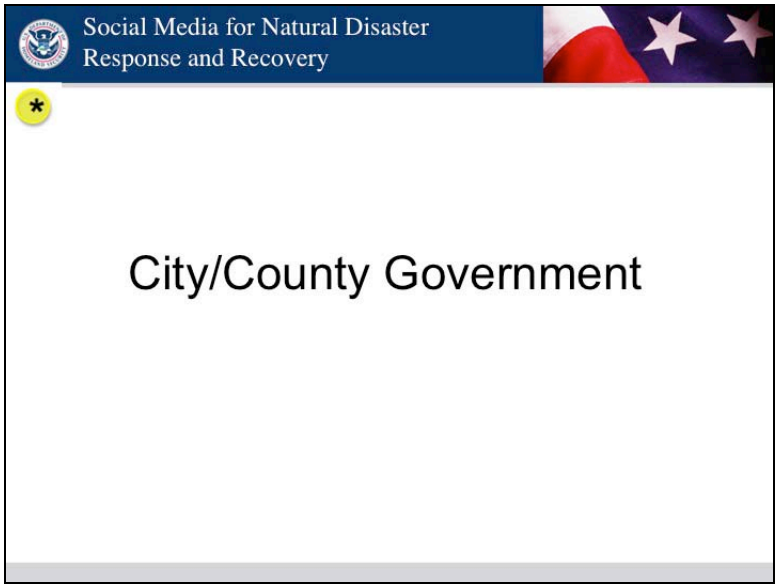


Slide 4-21. @redcross Digital Volunteers

Red Cross launched a new pilot program to expand its community reach. @redcross Digital Volunteers are volunteers who work in 4-hour shifts. They monitor questions and track trends or issues on social media sites. At the end of their shift, Digital Volunteers provide disaster operations reporting to improve situational awareness. Not only do Red Cross volunteers assist in disaster sites, but they also work virtually and assist online.

Example: Slide shows an example (top picture) of Digital Volunteers working online to monitor social media sites. Bottom picture shows an example of a Twitter account for a Digital Volunteer. The blue check to the right of the name shows that the Red Cross verifies the volunteer.

Participant Notes:



Slide 4-22. City/County Government

San Francisco Department of Emergency Management (SFDEM) is a city/county government that incorporates social media in its communication strategy.

Participant Notes:

Slide 4-23.

SFDEM bases engagement on an integrated communications strategy. It works closely with other government agencies, key partners, and the community. It uses interagency coordination to provide regular content to City and County Facebook pages. Additionally, it promotes SFDEM personality through photos shared on social media sites.

Participant Notes:

Slide 4-24.

SFDEM integrates various tools in its communications strategy. On Twitter, SFDEM has nearly 40,000 followers. SFDEM posts regularly either alerts and notifications or preparedness announcement on Twitter. On Facebook, SFDEM promotes preparedness messages, alerts and warning, and posts pictures. On its blog, SFDEM conducts more in-depth message delivery. Blogs reflect core messages, variations for target audiences and support partner efforts.

Participant Notes:

Slide 4-25.

Example: Slide shows examples of SFDEM's The Preparedness Movement Communications Strategy, which includes the use of Facebook, blog , and Twitter account.

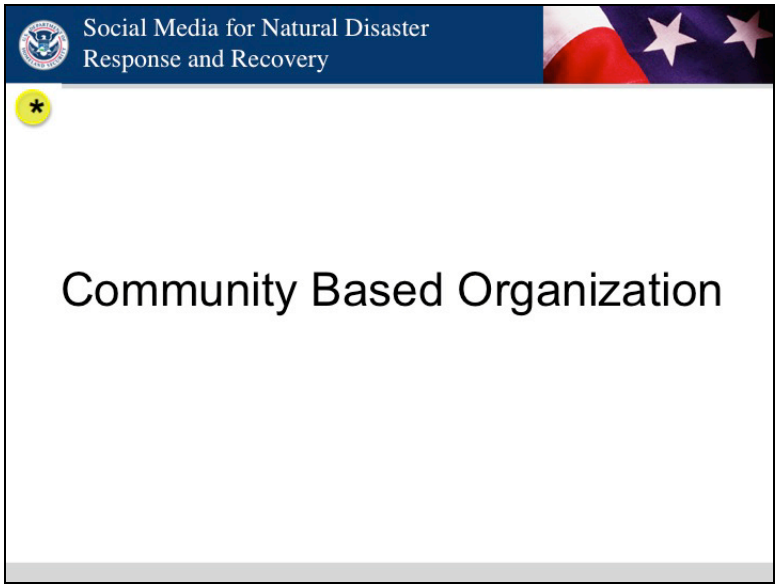
Participant Notes:

Slide 4-26.

SF Heroes is an innovative smart phone application that leverages social reward mechanisms to educate and motivate public emergency and disaster preparedness. SF Heroes connects with Facebook, Twitter, and other social media channels. The application inspires people to take steps to prepare by tying rewards and social incentives meaningful real-life activities.

Example: Slide shows examples of SF Heroes application.

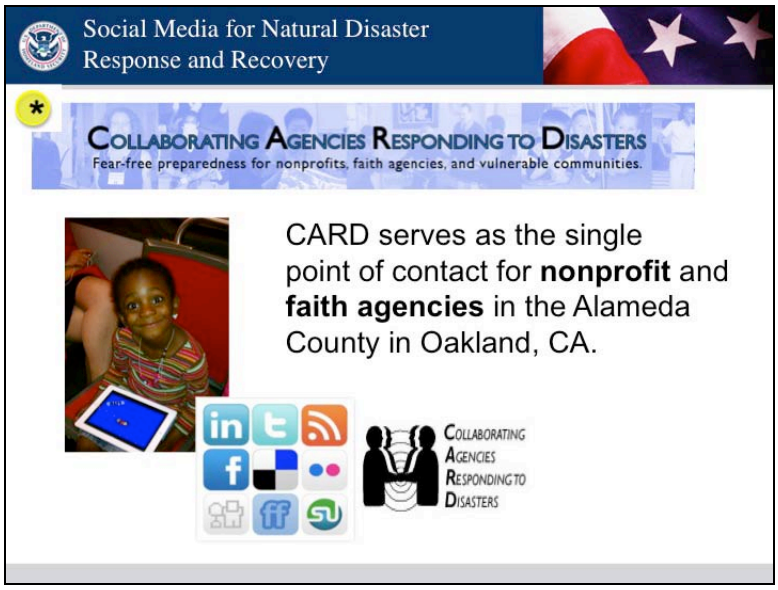
Participant Notes:



Slide 4-27. Community Based Organization

Collaborating Agencies Responding to Disasters (CARD) is a community-based organization (CBO) that incorporates social media in its communication strategy.

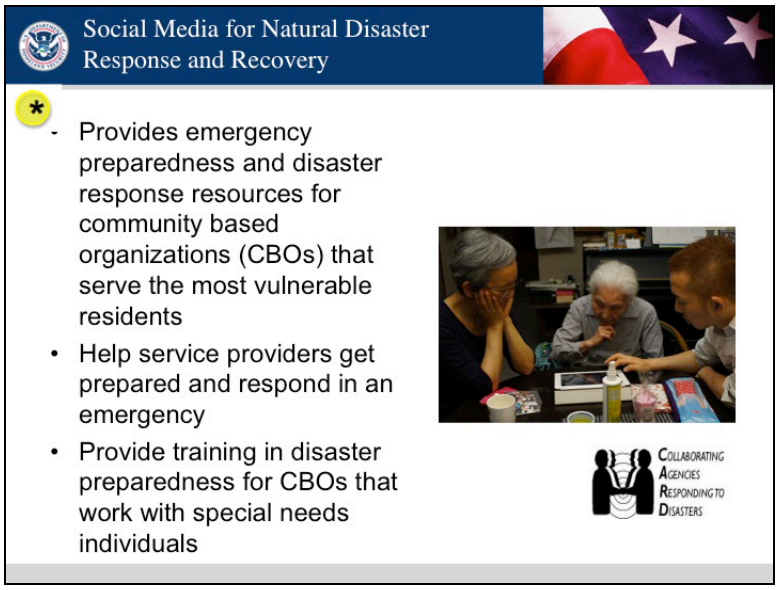
Participant Notes:



Slide 4-28. Collaborating Agencies Responding to Disasters

CARD serves as the single point of contact for nonprofits and faith agencies in the Alameda County in Oakland, California.

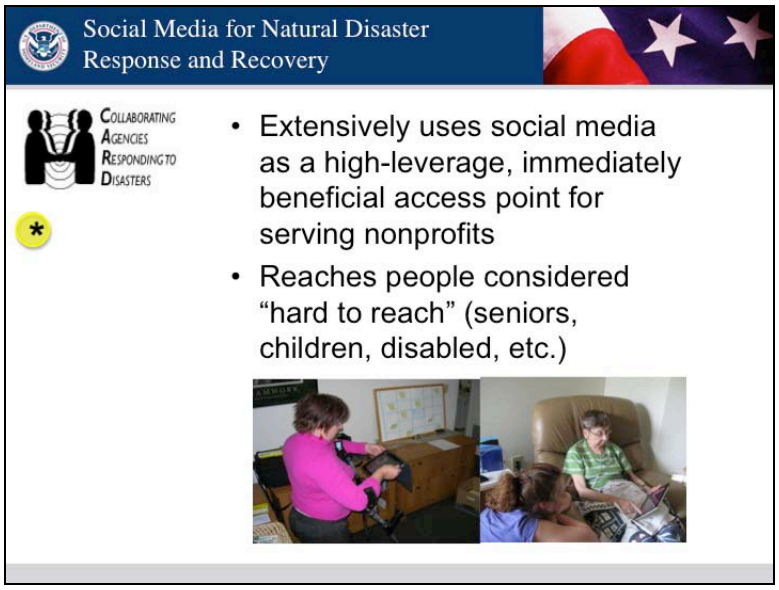
Participant Notes:



Slide 4-29.

CARD provides emergency preparedness and disaster response resources for CBOs that serve the most vulnerable residents. They help service providers get prepared and respond in an emergency. Also, they provide training in disaster preparedness for CBOs that work with special needs individuals.

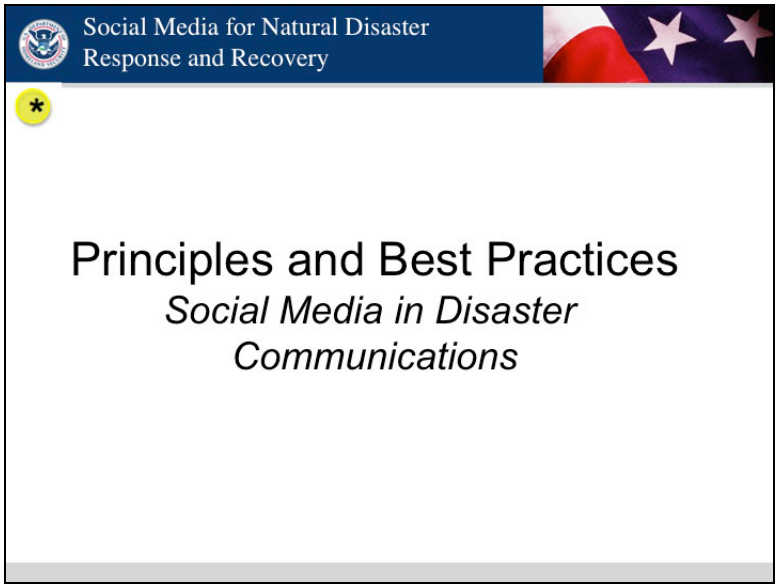
Participant Notes:



Slide 4-30.

CARD extensively uses social media as a high-leverage, immediately beneficial access point for serving nonprofits. It reaches people who are considered "hard to reach" such as seniors, children, and the disabled.

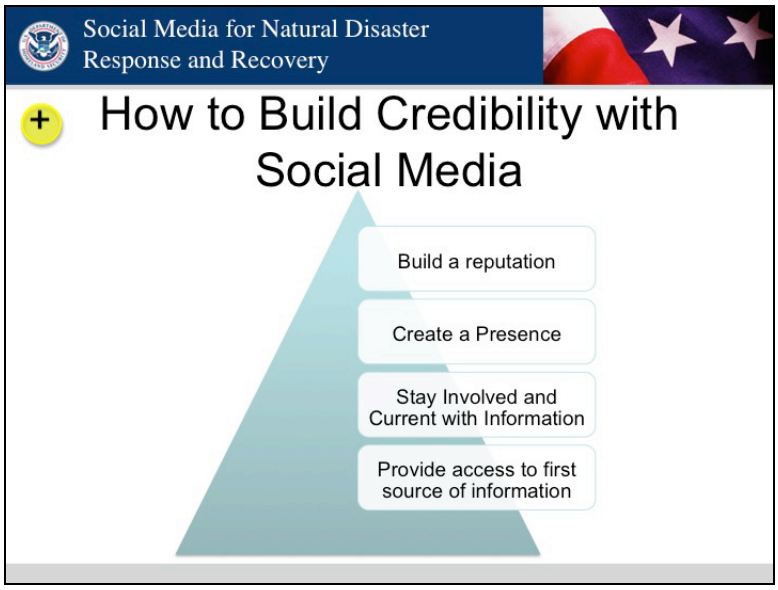
Participant Notes:



Slide 4-31. Principles and Best Practices

This section will cover some on the principles and best practices of social media in disaster communications.

Participant Notes:

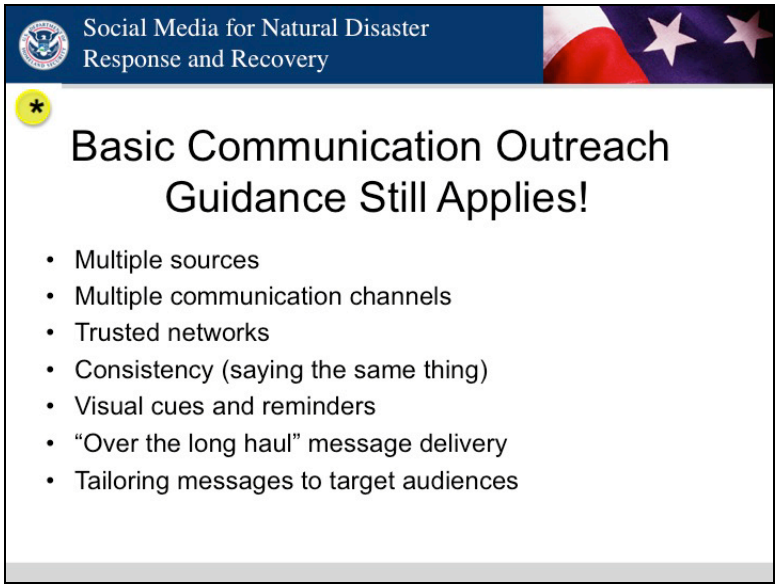


Slide 4-32. How to Build Credibility with Social Media

Emergency managers need to build credibility on social media platforms. It is important to build credibility with the public users because in times of emergencies, citizens will know that your organization is a trusted source to go to on social media platforms. By understanding the social medium, social media managers can effectively use platforms.

Some of the ways that social media managers build social media credibility include building a reputation for using social media as a channel of communication, creating a presence on social media platforms, staying involved on social media sites, staying current with their information provided on social media sites, and providing access to initial source of information.

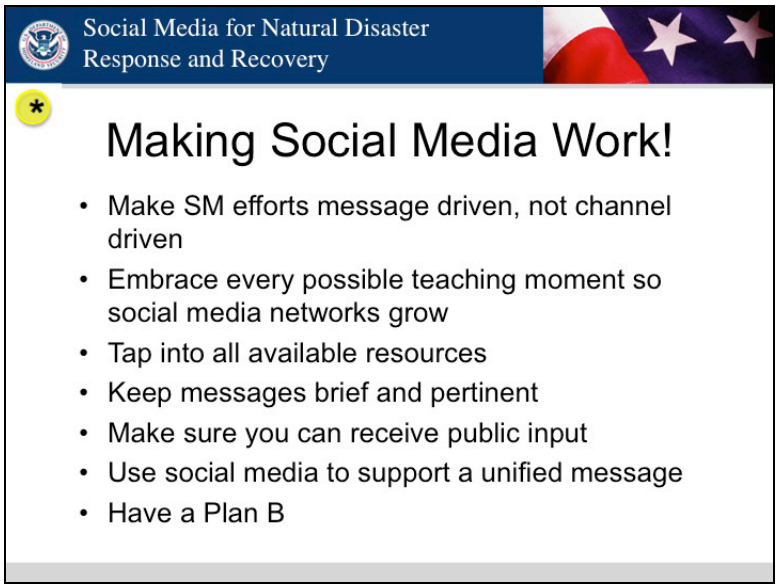
Participant Notes:



Slide 4-33. Basic Communication Outreach Guidance Still Applies!

Basic communication outreach guidance still applies to organizations to develop an effective communications strategy. Organizations need to get information from multiple sources, have multiple communication channels and trusted networks, consistency amongst its communication channels so that it is all saying the same thing, visual cues and reminders on its social media sites, "over the long haul" message delivery, and must tailor messages to target audiences.

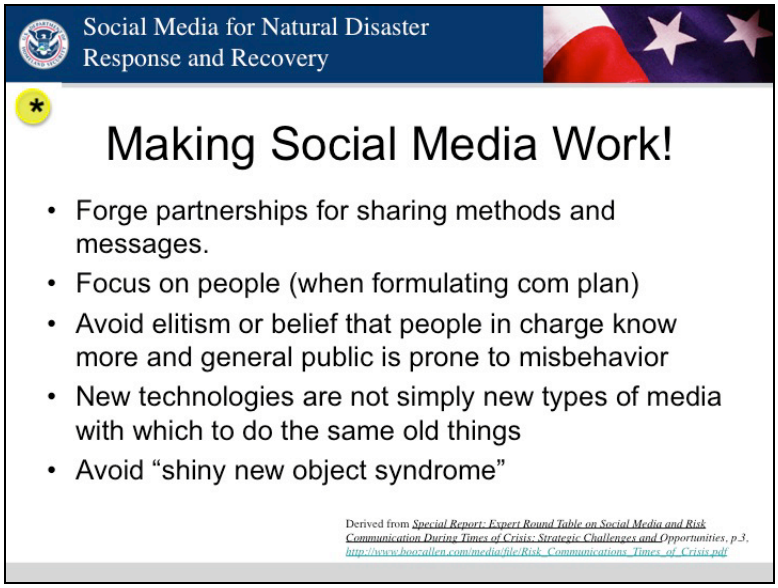
Participant Notes:



Slide 4-34. Making Social Media Work!

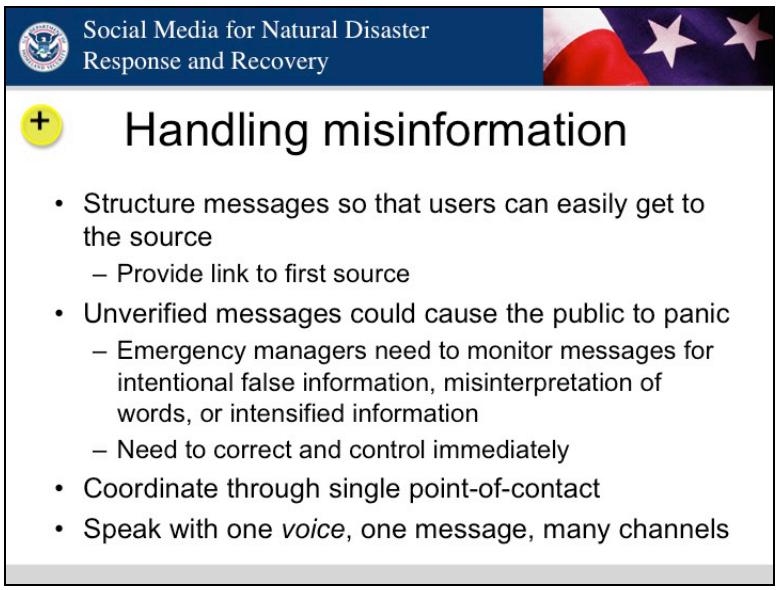
Some tips on making social media work in an organization:
-social media should be message driven, and not channel driven
-embrace every teaching moment so social media networks grow
-tap into all available resources
-keep messages brief and pertinent (right to the point)
-make sure the public can contribute and share information
-use social media to support a unified message
-have a back up plan

Participant Notes:



Slide 4-35. Making Social Media Work!

Participant Notes:



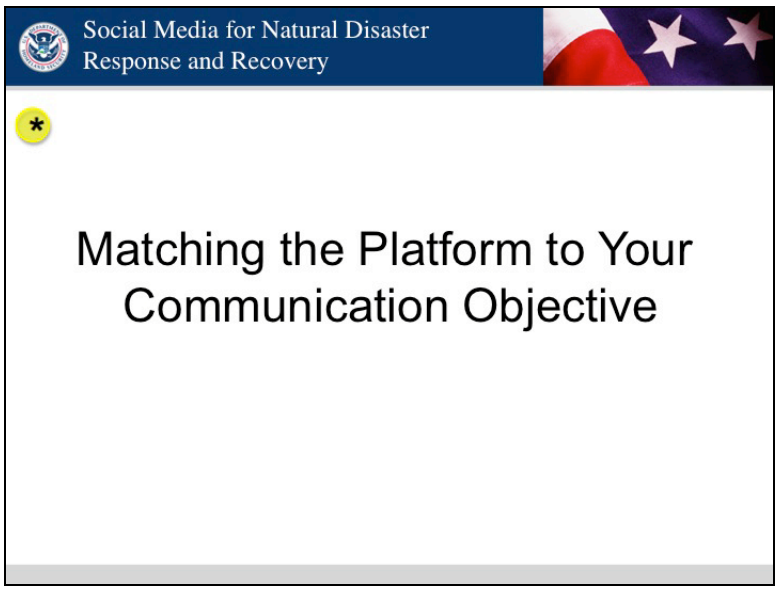
Slide 4-36. Handling misinformation

Social media may have the potential of rapidly spreading misinformation. Emergency managers must be aware of this potential effect. Social media managers need to structure messages so that users can easily get to the source. Organizations can provide link to first source to avoid misinformation.

Unverified messages can cause the public to panic. Emergency managers need to monitor sites because messages, once posted, are hard to control. By monitoring sites, emergency managers can look for intentional false information placed on social media platforms by the public; misinterpretation of words used by social media users; and through intensified information seeking. Organizations need to monitor sites to correct and control misinformation immediately.

Organizations should coordinate through a single point-of-contact to avoid multiple contacts within an organization, and speak with the same voice and message throughout all its channels.

Participant Notes:



Slide 4-37. Matching the Platform to Your Communication Objective

This section addresses matching the platform to your communication objective.

Participant Notes:

Slide 4-38. Choose the right platform to match objectives

Due to the design of the Facebook platform, Facebook provides a place for public discussion and community building. It provides more opportunity for interaction between users. On the other hand, Twitter provides more updates and is more commonly used by users to receive information. Both platforms provide alternative communications channel for users. However, each platform provides a different means of communicating with the public.

Participant Notes:

Slide 4-39. Choose the right platform to match objectives

In an article by *TechCruch*, Facebook contains 149 million U.S. users (February 2011). Twitter reported 16.4 million U.S. users in March 2011. Although there are a significantly larger number of U.S. users on Facebook than Twitter, both platforms consist of different user demographics. Thus, emergency managers may use either platform depending on the target audience.

Participant Notes:

Slide 4-40. Choose the right platform to match objectives

Both Facebook and Twitter can disseminate information quickly and effectively to the public. Facebook is a closed network, which contains more security and privacy settings, and can impede on the opportunity to send information to the most amount of people despite Facebook's higher number of U.S. users. Twitter, on the other hand, is open access to all users and individuals can view accounts on Twitter without having to sign up for an account. Both platforms reflect real-time, which allows emergency managers to immediately notify the public compared to traditional methods that goes through a longer process for the message to be relayed to the public.

✔ **Knowledge Check:** Which is the most appropriate platform for emergency managers to use?

Participant Notes:

Slide 4-41. Using Twitter in Disaster Management

This section addresses using Twitter in Disaster Management.

Participant Notes:

Slide 4-42. Twitter Quake Map

The visualization in the slide above shows the rate and spread of Twitter messages about the earthquake in Virginia within the 80 seconds after it hit. The location and density of the Tweets radiated out from Virginia.

Participant Notes:

Slide 4-43. Using Twitter

Twitter has an open platform where everyone can get involved. Twitter uses short messages with a 140-character limit, enables following other users' messages, enables building a following by having other people follow you, and send direct private messages. Users can also repost other users' messages, reply to a message, and create a specific event using a hashtag.

Participant Notes:

Slide 4-44. Why Twitter matters in disaster communications outreach?

Based on the calculations of one way to approximate reach, which will be presented later in this section, with 7 Followers, a user can reach about 24,000 people. Without taking into account overlaps, a user can reach about 240,000 people with 70 Followers. This is why Twitter matters in disaster communications outreach because of the potential to reach a multitude of people through your Followers.

Participant Notes:

Slide 4-45. About Twitter

When users post a status update on Twitter, it is called a Tweet. A Message is a private message sent via Twitter to one of your Followers. Definition of Followers will be explained in the following slides.

Participant Notes:

Slide 4-46. About Twitter

A retweet is when a user shares a Tweet by another user with their Followers. A reply is any update posted by clicking the "reply" button on another Tweet. The reply will always begin with @username (the name of the person you are replying to), which will automatically appear when you select the "reply" button.

Participant Notes:

Slide 4-47. What is following on Twitter?

Following someone on Twitter means you are subscribing to their Tweets as a Follower. The updates on the user you are following will appear in your timeline. The user you follow will also have permission to send private Tweets (also known as Direct Messages) to you.

It is beneficial for Organizations to follow users for monitoring purposes because Tweets from the users they follow will appear in the Organization's timeline.

Participant Notes:

Slide 4-48. What are followers on Twitter?

Followers are people who receive your Tweets. If someone Follows you, they will receive your Tweets on their home page, phone, or any application that they use.

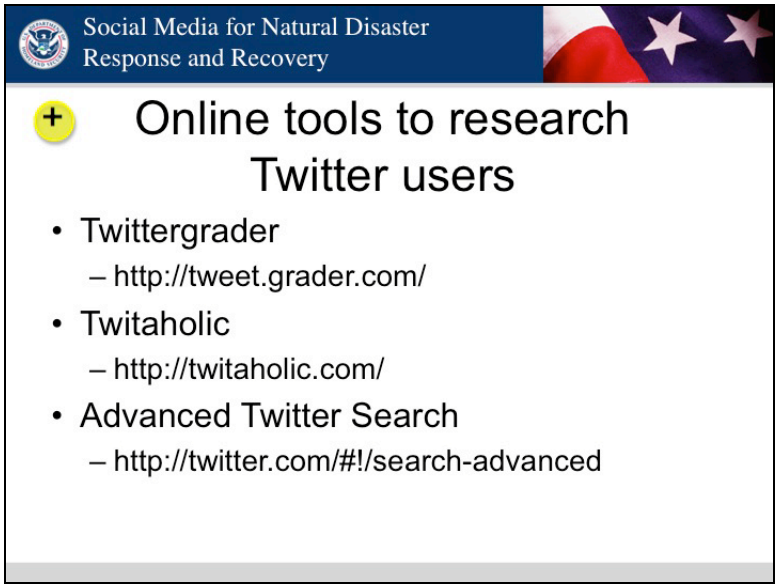
It is beneficial for organizations to have many Followers (users Following the Organization) because this implies that when an Organization posts a Tweet, the update will appear in the timeline of all of their Followers. By having more Followers, organizations have potential to reach more people when they post a Tweet.

Participant Notes:

Slide 4-49. What are hashtags ("#" symbols)?

Hashtags are used to categorize Tweets according to a specific keyword or topic. It represented by a "#" symbol, and can be used anywhere in the Tweet. It is used before relevant keywords within a Tweet. Anyone can create a hashtag. Hashtags will be discussed further later in this module.

Participant Notes:



Slide 4-50. Online tools to research Twitter users

These are some of the online tools to research Twitter users.

Participant Notes:

Slide 4-51. Twitter Grader

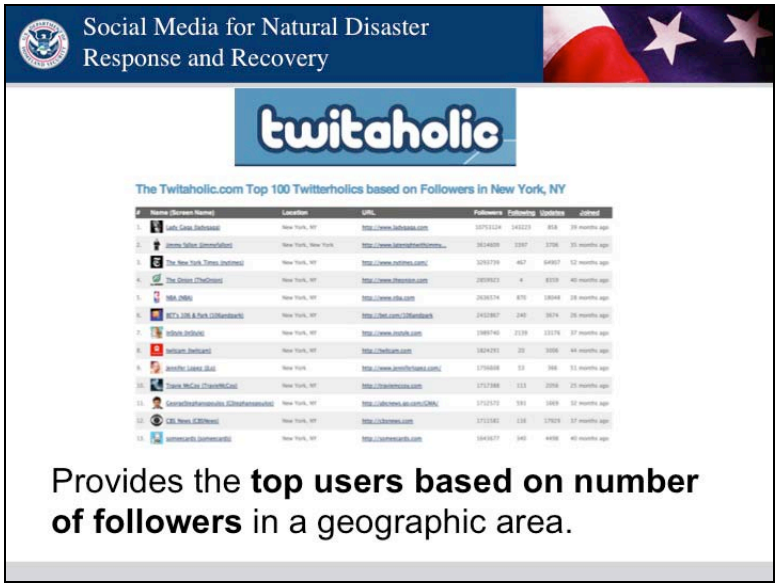
Twittergrader is a tool that can be used to identify geographically focused Twitter participants. It provides the top users by location based on grade. The grade is measured by the impact of a Twitter account, which is influenced by the number of followers a Twitter user has (first-order followers) in addition to all of their followers (second-order followers). Twitter users with a large influence on social media sites have the power to reach out to large number of people. Influence measures the potential of an action of a user to initiate a further action by other user.

Thus, identifying these top users with large influence will allow emergency managers to reach out to millions of people.

According to Twitter Grader, its algorithm to calculate its grade includes the number of followers, power of followers (people with a high Twitter Grade following), number of updates, update recency, follower/following ratio, and engagement.

Example: Slide shows an example of the search result of the top users on Twittergrader for Honolulu, Hawaii. Top users are listed based on the highest grade.

Participant Notes:

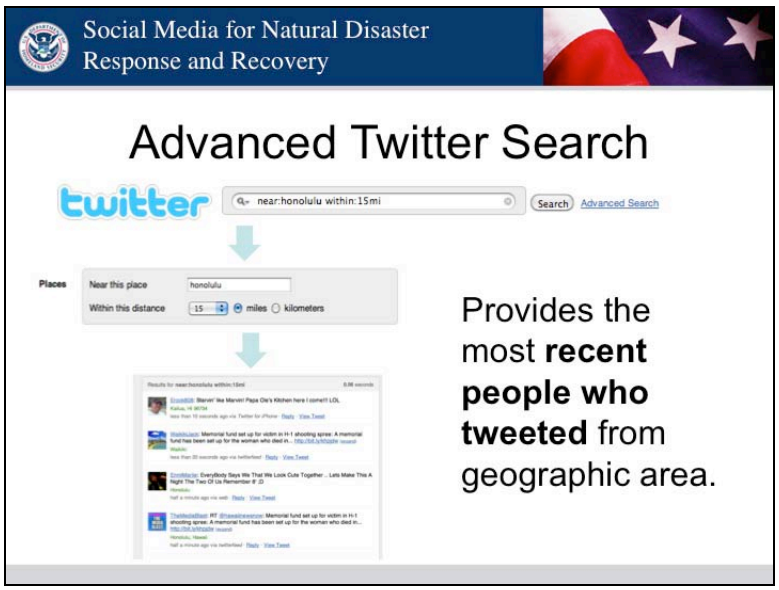


Slide 4-52. Twitaholic

Twitaholic is another analysis tool to identify geographically focused Twitter participants. It provides the top users based on the number of followers in a given geographic area.

Example: Slide shows an example of the search result of the top users on Twitaholic for New York, New York. Top users are listed based on the highest number of followers.

Participant Notes:



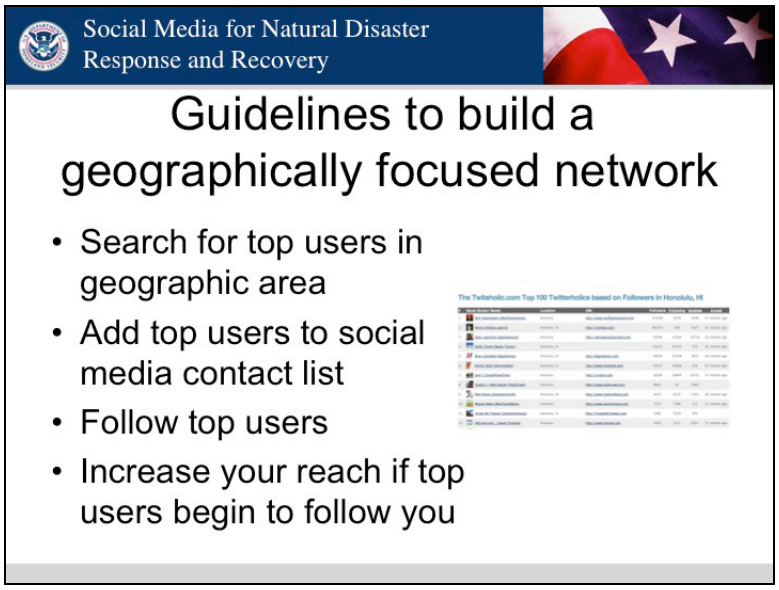
Slide 4-53. Advanced Twitter Search

In addition to the Twittergrader and Twitaholic, Advanced Twitter Search—an advanced search option of Twitter—is another analysis tool to identify geographically focused Twitter participants. This tool allows users to search for Twitter users within a certain distance from a geographic location. Advanced Twitter Search provides the most recent people who tweeted from a geographic area.

Advanced Twitter Search can be found through Twitter's Website under the Search tab of the Help Center or at www.http://search.twitter.com/.

Example: Slide shows an example of the search result of the most recent people who tweeted on Twitter within 15 miles of Honolulu, Hawaii.

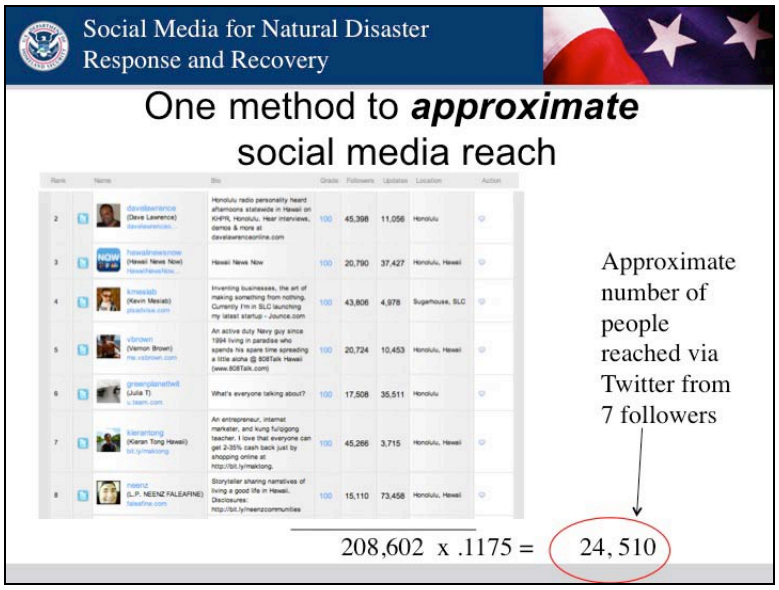
Participant Notes:



Slide 4-54. Guidelines to build a geographically focused network

To build a geographically focused network, emergency managers need to search for top users in geographic area using the tools mentioned in the previous slides. Adding top users of Twitter will allow emergency managers to reach out to an exponentially larger number of people (which will be explained in the following slide). Adding users in a geographic location on Facebook will allow emergency managers to reach out to a wider audience than traditional channels of communication may reach out to.

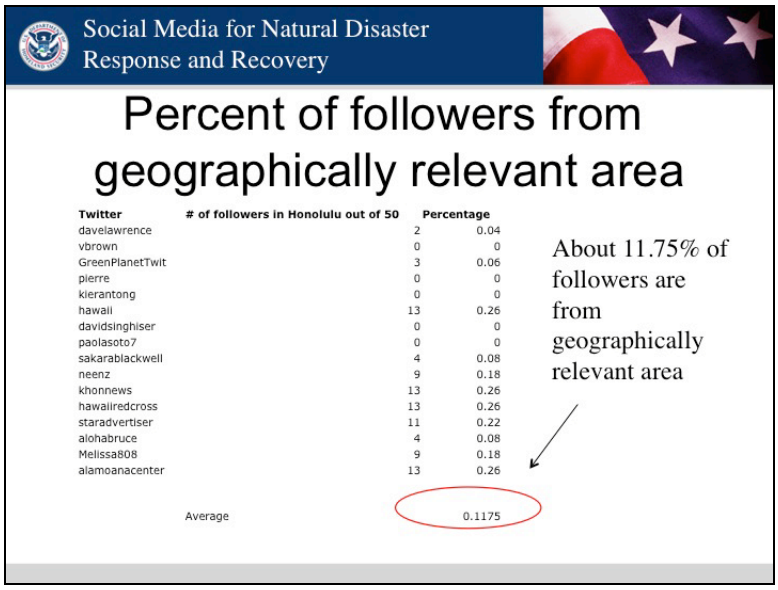
Participant Notes:



Slide 4-55. One method to *approximate* social media reach

One method to approximate social media reach is by using the following calculation. The total number of followers of the top seven users, as shown above, is about 208,602. Based on the study mentioned earlier in the course, about 11.75 percent of a user's followers consist of geographically relevant users. Thus, multiplying 11.75 percent by 208,602 is approximately 24,510. This implies that roughly about 24,510 people are reached via Twitter by having these seven top Twitter users follow your Twitter page.

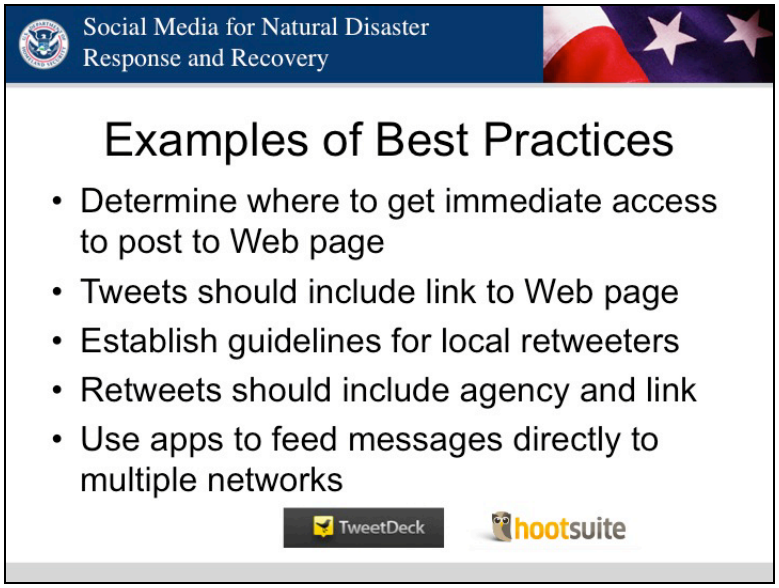
Participant Notes:



Slide 4-56. Percent of followers from geographically relevant area

The slide above shows a list of top Twitter users in Honolulu and the number of followers of each Twitter user that is from Honolulu (out of 50). Approximately 11.75 percent of followers are from the geographically relevant area.

Participant Notes:



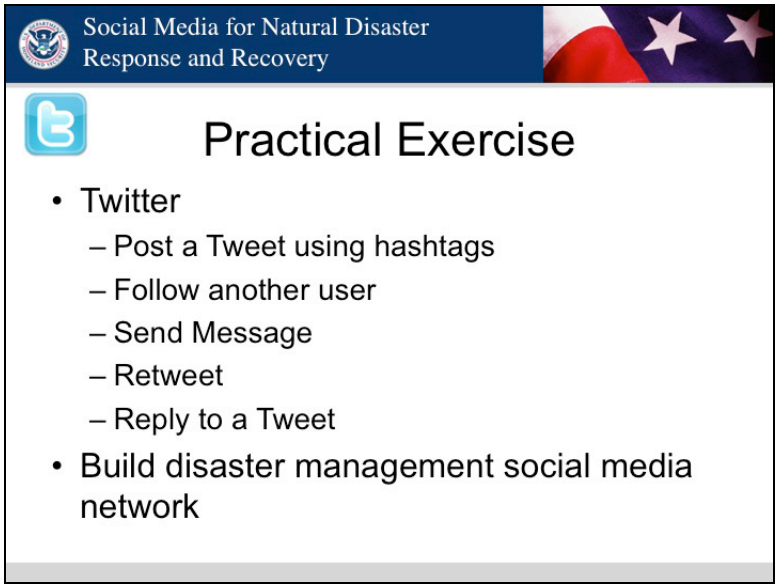
Slide 4-57. Examples of Best Practices

Emergency managers need to determine where to get immediate access to post to Web pages. Delay in posting to Web pages will negate one of the advantages of using social media: to disseminate information quickly.

Tweets should include links to Web pages so that Twitter users can go directly to the initial source of the information. This will eliminate the possibility of imposter tweets. Thus, users can distinguish between official sites from unofficial sites. Emergency agencies may choose to use standard conventions such as naming all official city related sites with the name of the city as the first word (i.e. **Honolulu** Department of Emergency Management, **Honolulu** Department of Information Technology, **Honolulu** Fire Department).

Social media managers should establish guidelines for users who retweet other tweeters' tweets Retweets should include the agency's name from which the tweet is being retweeted and the link to it. Using apps such as TweetDeck and Hootsuite, which feed messages directly to multiple networks may save time for emergency managers from having to go to individual social media sites to post updates.

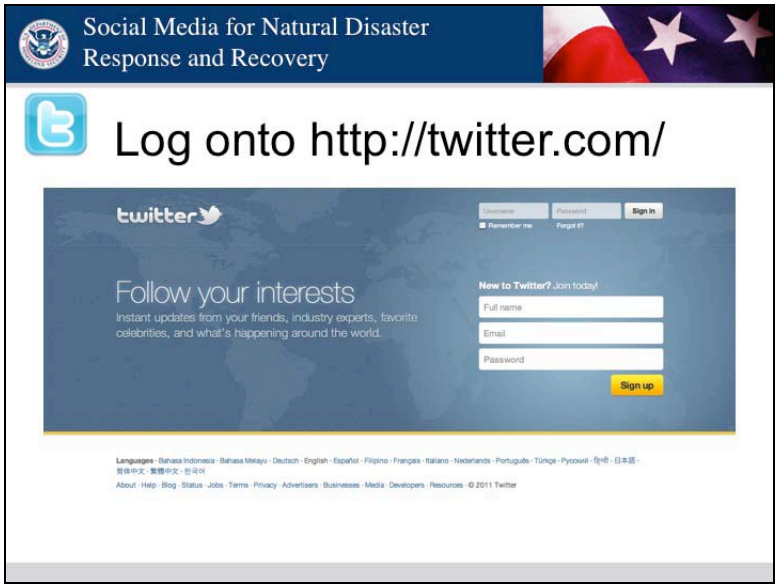
Participant Notes:



Slide 4-58. Practical Exercise

This section covers the practical exercise, which will provide hands-on training online.

Participant Notes:



Slide 4-59. Log onto http://twitter.com/

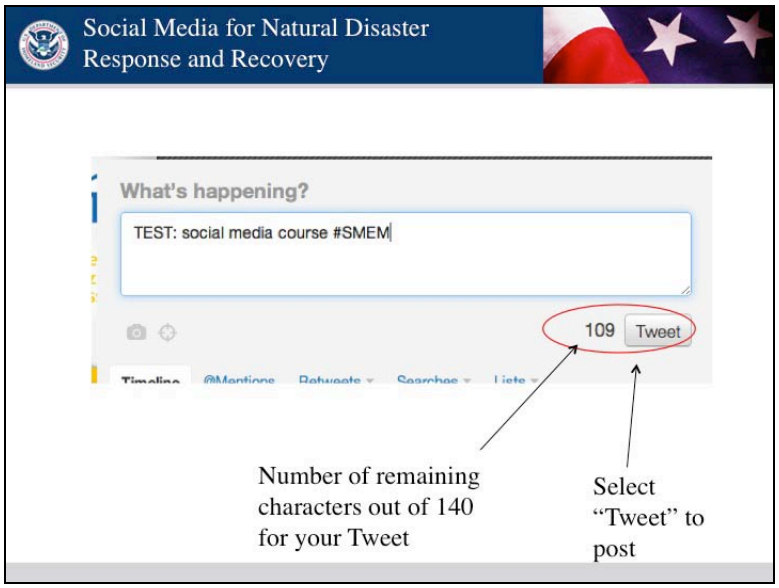
Log in to your Twitter account at http://twitter.com/.

Participant Notes:

Slide 4-60. Post a Tweet using hashtags

1. Type your Tweet into the "What's happening?" box at the top of your screen (shown below).

Participant Notes:



Slide 4-61.

2. Make sure your update is fewer than 140 characters. Remaining characters show up as a number below the box.
3. Click the Tweet button to post the Tweet to your profile.
4. You will immediately see your Tweet in the timeline on your homepage.

Participant Notes:

Slide 4-62. Hashtags: Texas fire in September 2011

Examples of Tweets with hashtags used during the Texas fire in September 2011. Some hashtags included #txfire and #CentralTXfire. As shown, the hashtags include the location and disaster event.

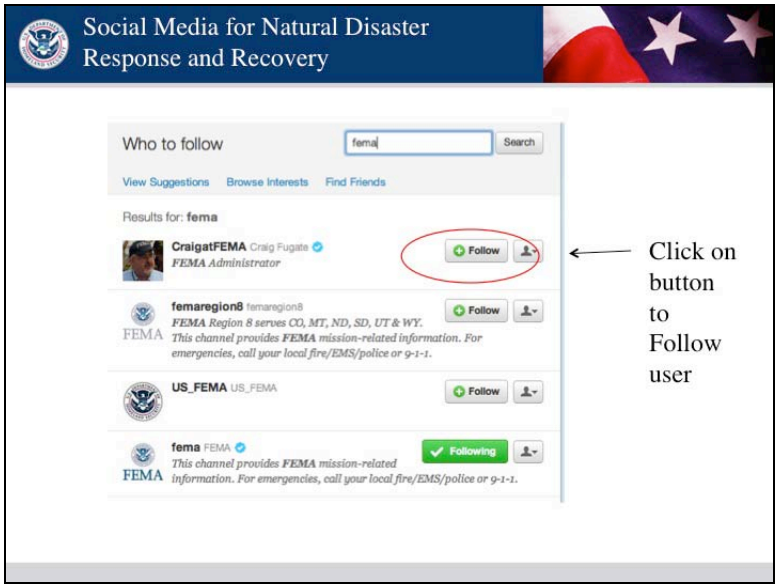
Participant Notes:

Slide 4-63. Follow another user

You can follow people in any of the following ways:
- via the web
- via SMS/text message
- via the mobile website (mobile.twitter.com)
- via third-party application

1. Select the **Who to Follow** tab on the top menu bar of your page.
2. Enter the name or organization into the search box. Then, click the **Search** button.

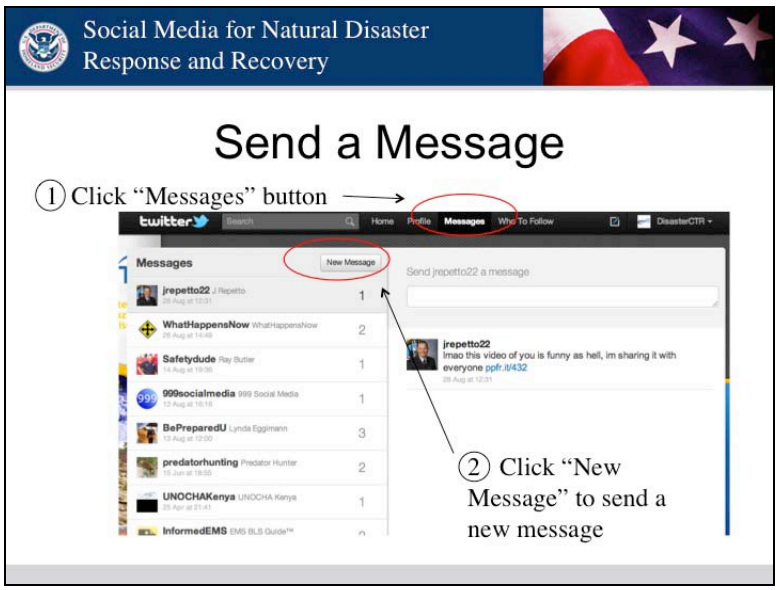
Participant Notes:



Slide 4-64.

3. A list of the results should appear after you enter the name or organization in the search box.
4. Select the **Follow** button next to the user or organization you want to begin to Follow.

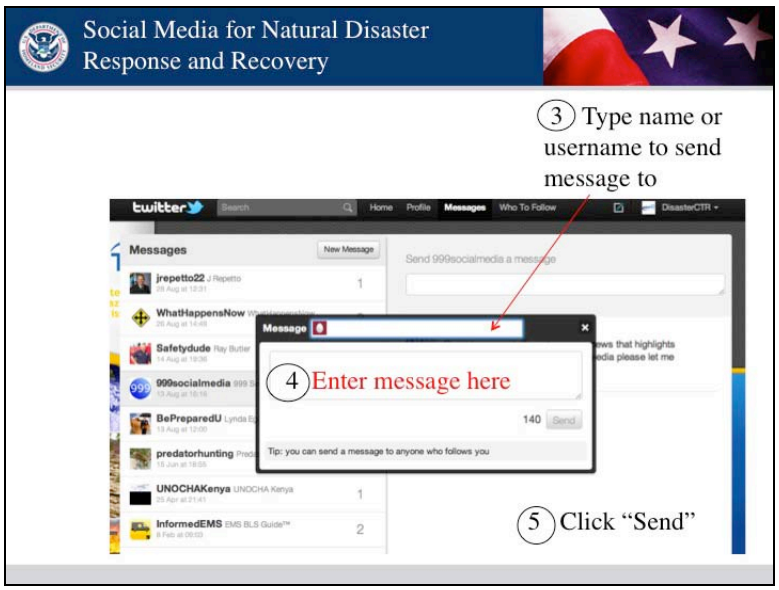
Participant Notes:



Slide 4-65. Send a Message

1. Log in to your Twitter account.
2. Click the **Messages** button on the top menu bar of your page.
3. You'll land on a page showing your private messages history. Click the **New Message** button. Click to send a new message.

Participant Notes:



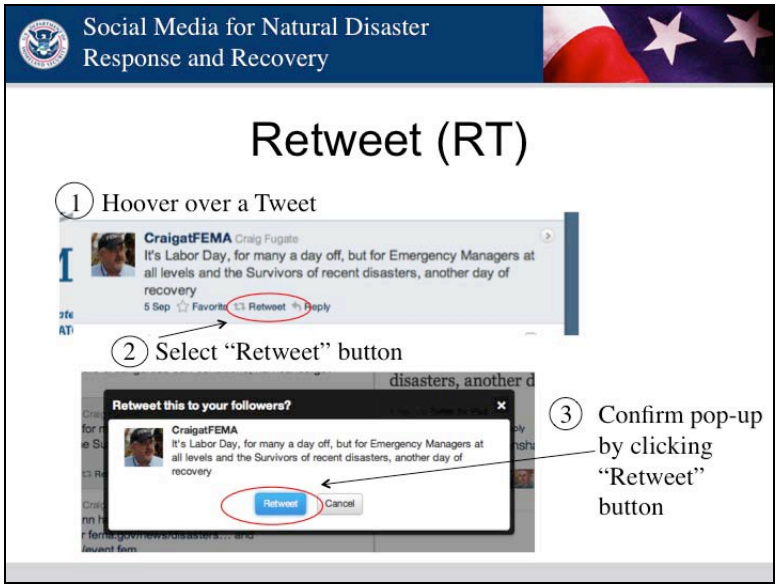
Slide 4-66.

4. In the pop-up box, type the name or username of the person you wish to send to.
5. Enter the message you wish to privately send, and click **Send**.

Please note: t.co links, even those shared via DM, are neither private nor public. **Anyone with the link will be able to view the content.**

Tip: Make sure that user follows you. You may only send a direct message to your followers.

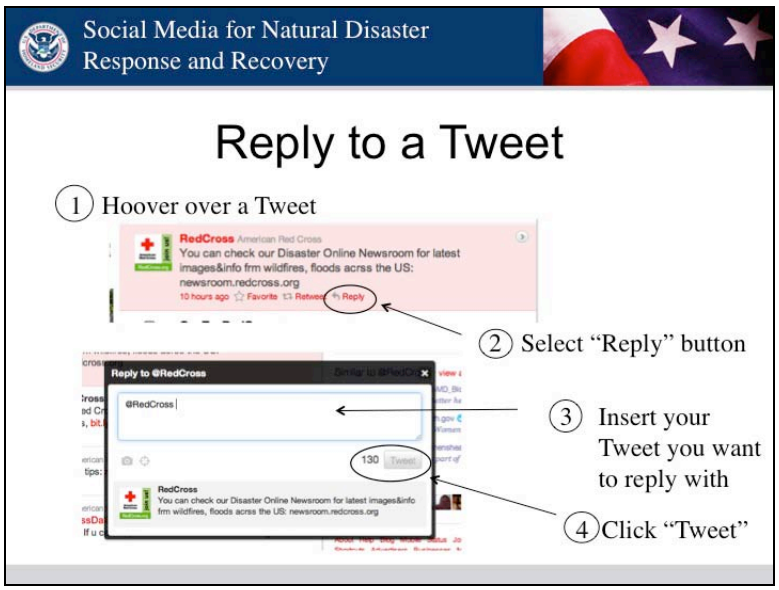
Participant Notes:



Slide 4-67. Retweet (RT)

1. Hover over a Tweet.
2. Click the **Retweet** link.
3. Confirm the pop-up by clicking the **Retweet** button.
4. The Tweet will then be shared with all of your followers.

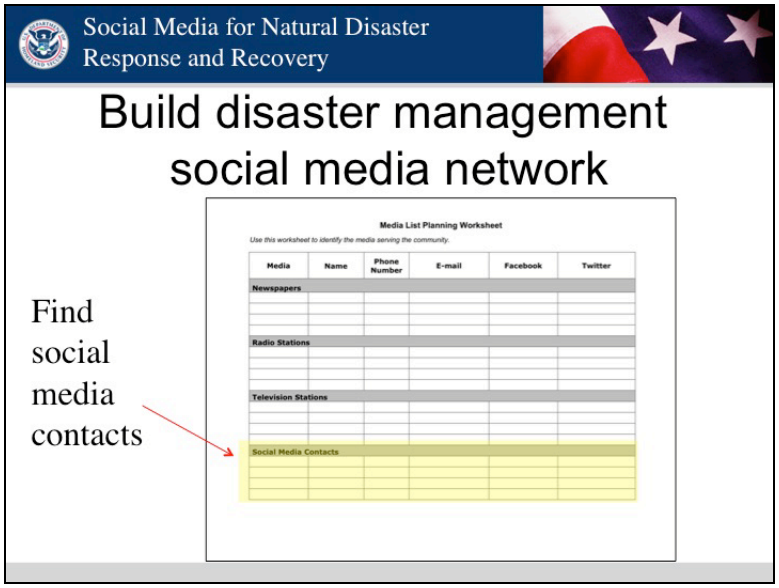
Participant Notes:



Slide 4-68. Reply to a Tweet

1. Find the Tweet you want to react to on Twitter.
2. Hover your mouse over their message and click the **Reply** icon.
3. Complete your Tweet in the box that pops up.
4. Click **Tweet** to send it.

Participant Notes:



Slide 4-69. Build disaster management social media network

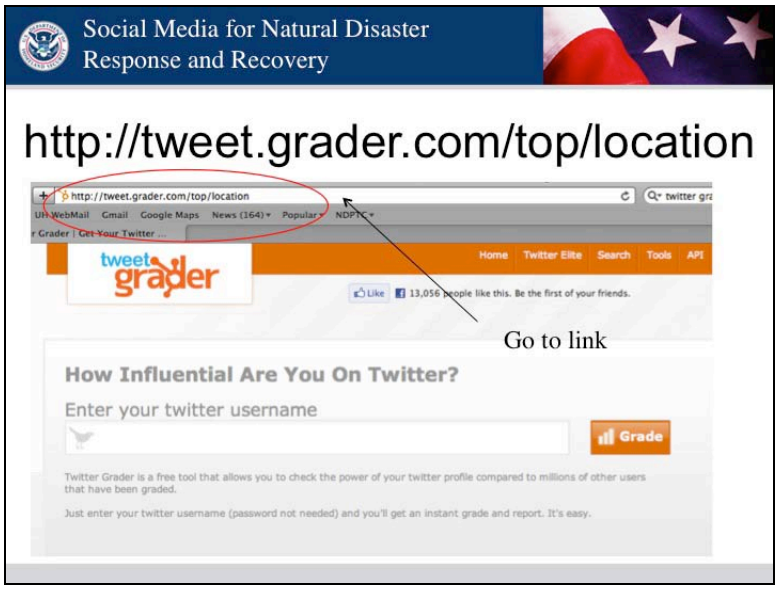
This media list provides contact information for your geographic area during an emergency. To determine your social media contacts, you need to build your geographically relevant social media network. The following slides will show how to build your social media network.

Participant Notes:

Slide 4-70. Build your geographically relevant social media network

To build your geographically relevant social media network, use search tools such as Twitter Grader and Twitaholic to find top users within a geographic area.

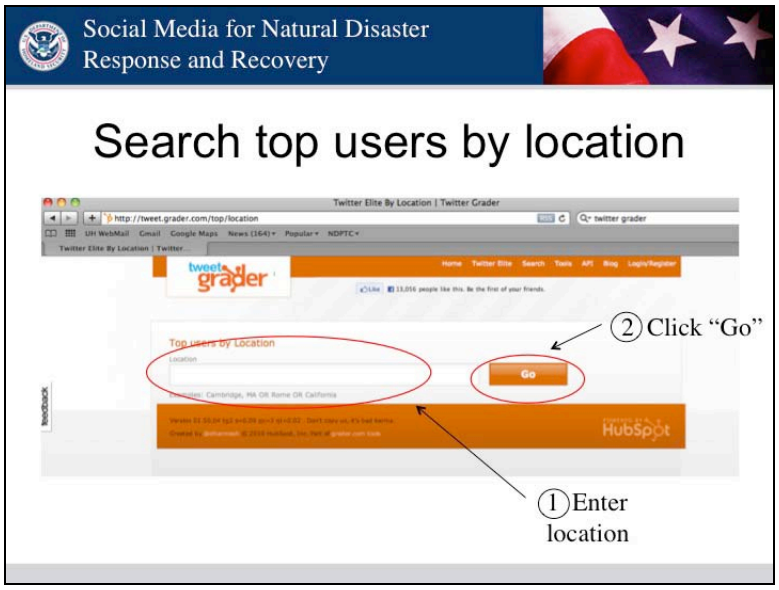
Participant Notes:



Slide 4-71. http://tweet.grader.com/top/location

To search for the top users by location on Twitter Grader, go to http://tweet.grader.com/top/location.

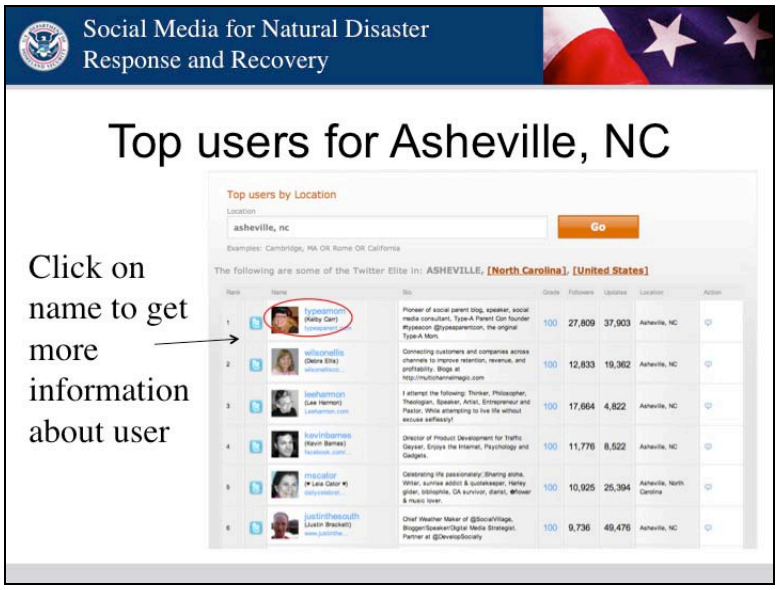
Participant Notes:



Slide 4-72. Search top users by location

1. Enter location to search top users by location.
2. Select the **Go** button to get the list of top users in a certain area.

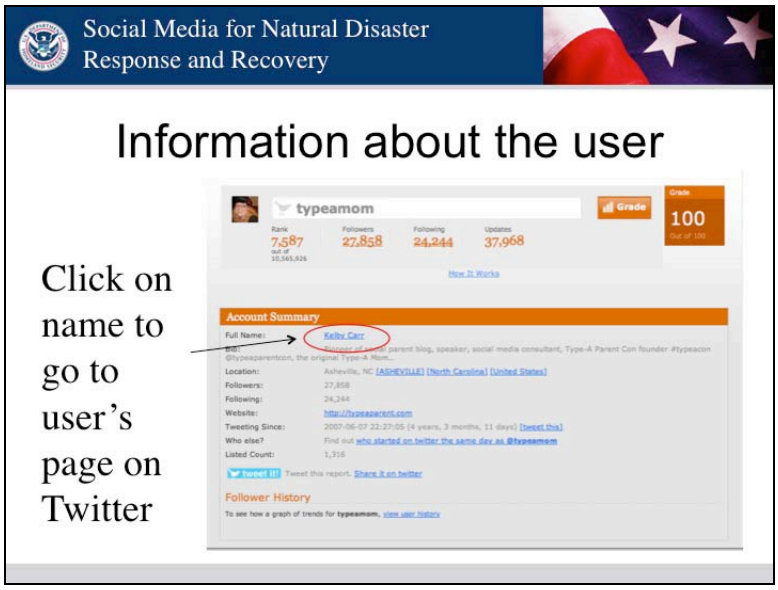
Participant Notes:



Slide 4-73. Top users for Asheville, NC

Top users will be shown based on highest grade. Click on users' name to get more information about the user.

Participant Notes:



Slide 4-74. Information about the user

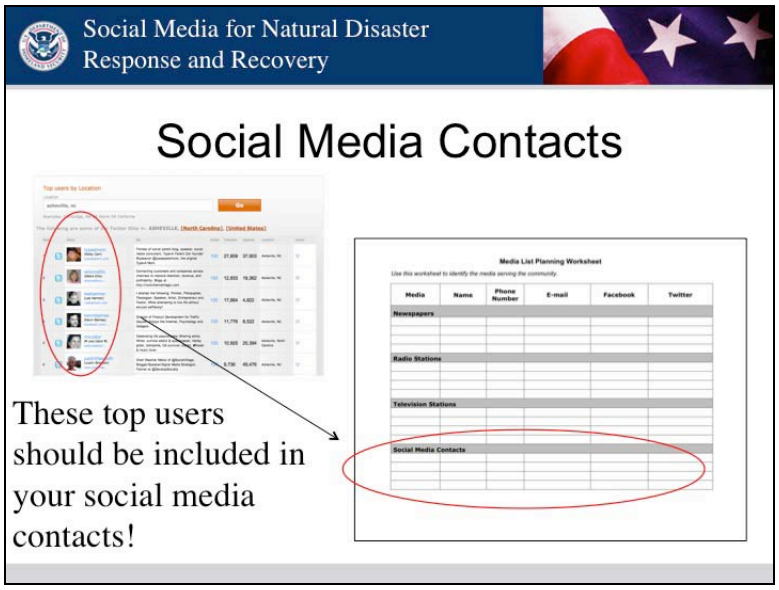
After clicking on the user's name, the information about the user will show up. In order to go directly to the user's Twitter page, click on the user's Full Name.

Participant Notes:

Slide 4-75. Follow user on Twitter

After arriving at the user's Twitter page, select the **Follow** button in order to start following the user on Twitter.

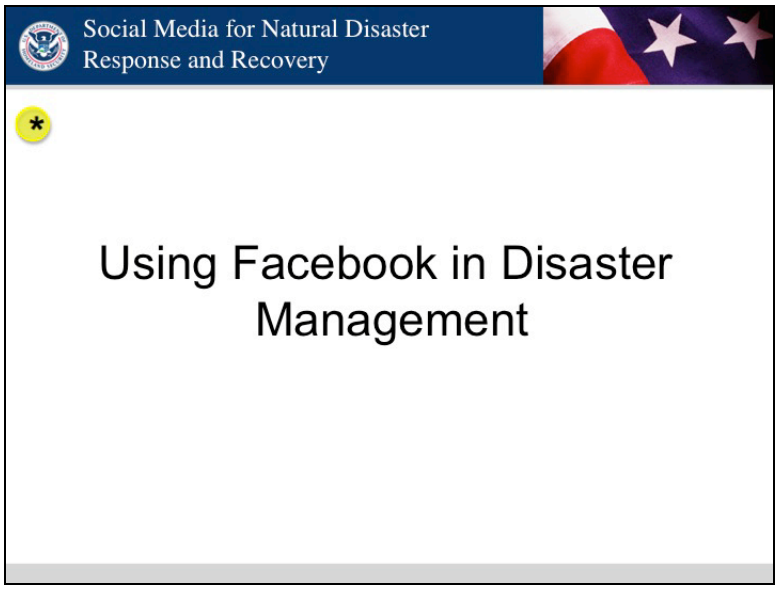
Participant Notes:



Slide 4-76. Social Media Contacts

These top users should be added to your social media contact list to help get the word out in times of emergency. As illustrated earlier in our reach analysis, these contacts will help you distribute your emergency information.

Participant Notes:



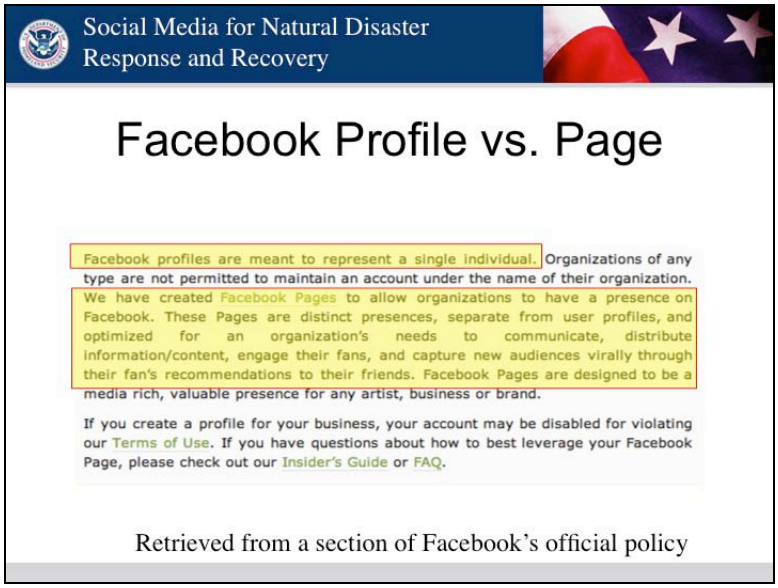
Slide 4-77. Using Facebook in Disaster Management

Participant Notes:

Slide 4-78. About Facebook: Incorporate into your organization

Throughout Module 3, implications of how social media have been used previously during disasters have been presented. The following slides will demonstrate how to incorporate one of the social media platforms, Facebook, into your organization. Twitter will be covered in Module 4. The following slides will explain the difference between an individual profile page and an organization's Facebook Page; the structure of Facebook Pages; and various settings that may be important to understand.

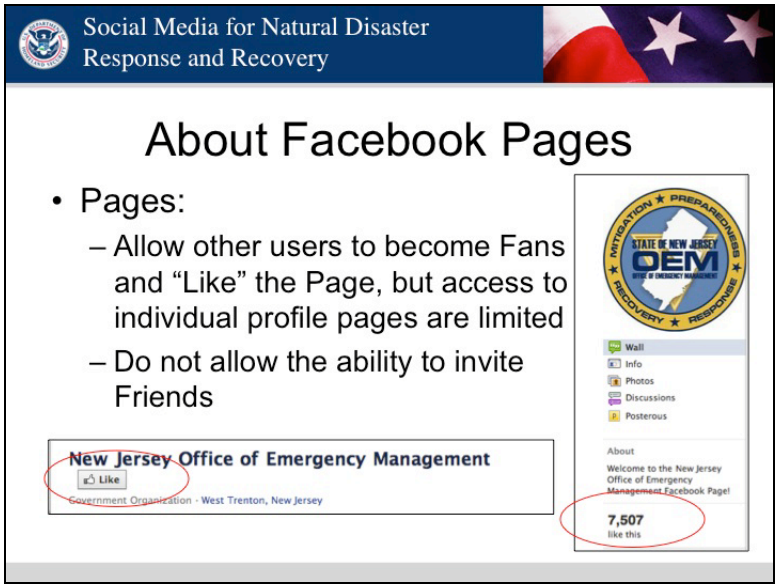
Participant Notes:



Slide 4-79. Facebook Profile vs. Page

Individual Facebook profiles are for individuals. On the other hand, organization Pages are separate from individual profiles and are intended for organization's to have a presence on Facebook.

Participant Notes:



Slide 4-80. About Facebook Pages

Unlike individual profile pages, organization Pages allow users to become Fans and "Like" the page. However, organizations have limited access to the individual profile pages that "Like" their organization. Organizations cannot invite Friends, but only "Like" other organizations.

Example: Slide shows an example of the "Like" button for the Page for New Jersey Office of Emergency Management. As shown to the right, about 7,500 Fans "Like" them, which means that these Fans can see the status updates by New Jersey Office of Emergency Management on their News Feed.

Participant Notes:

Slide 4-81. About Pages

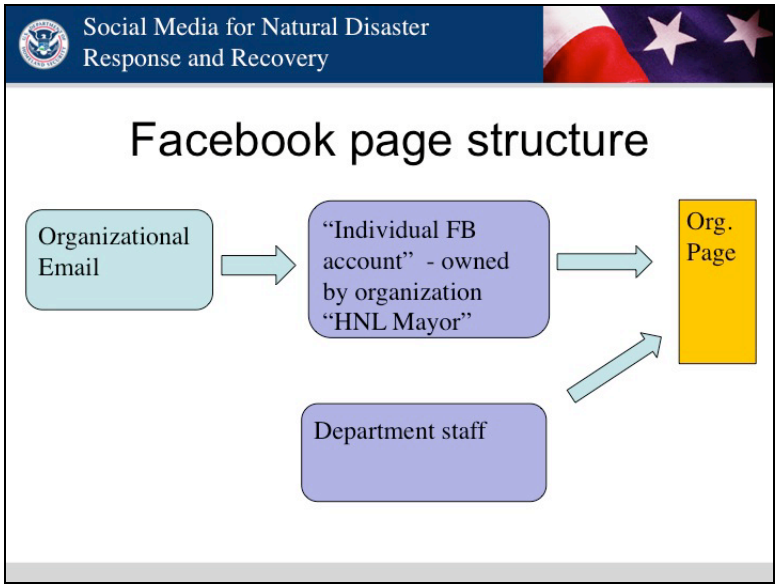
Organizations can only maintain a Fans list, and not a Friends list. Organizations can update their status on their wall pages, which will appear in the News Feeds of people who like their page. It also allows organizations to upload pictures, videos, create discussion boards, use applications, and create wall posts and groups.

Participant Notes:

Slide 4-82. Requirements to create a Page

In order to create an Organization/Fan Page, organizations need to have an individual Profile Page first. This individual Profile Page will be linked (act as administrator) to the Organization Page.

Participant Notes:



Slide 4-83. Facebook page structure

Participant Notes:

Slide 4-84. Settings

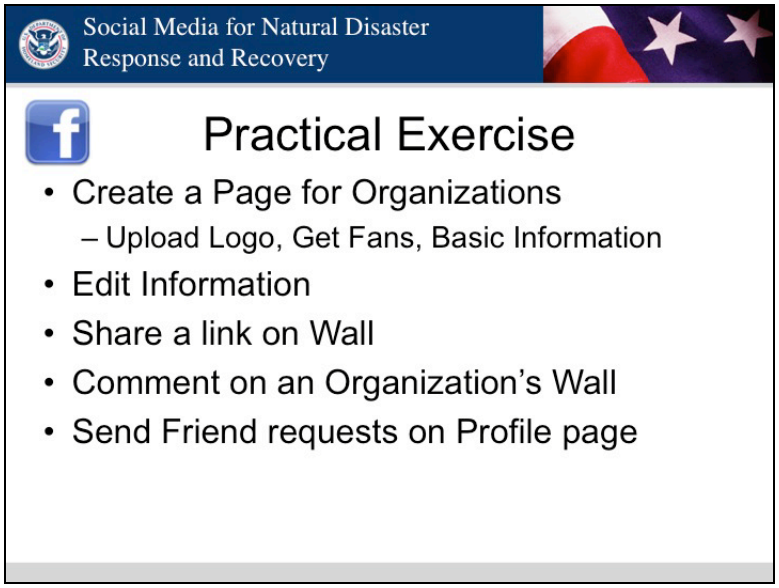
Organizations can control privacy setting on its Facebook Page. They can control users ability to comment or post on their Page and assign administrators (which would be discussed further in the Practical Exercise).

Organizations can switch from their personal profile page to “Use Facebook as Page” which allows the user to use the Organization’s Page as a user (i.e. if the user leaves a comment on a Wall, it would show that the Organization left a comment and not the user’s personal profile page).

In order to attain a unique username for an Organization, the Organization’s Page must acquire 25 Fans before it can sign up for its username. Usernames allow public entities to easily promote your presence on Facebook with a short URL. This username can be used in an organization’s marketing communications, company website and business cards. An example of a username is the phrase "fbsitegovernance" as used in the web address http://www.facebook.com/fbsitegovernance.

Organizations should be mindful when choosing a name for their Organization’s Page as it may help to build credibility and prevent fake accounts.

Participant Notes:



Slide 4-85. Practical Exercise

Participants will need to use their individual profile Facebook account to create an Organization Page. Participants should understand that creating a page from their personal Facebook account means that the Page they create will always be linked to their account. It is suggested to create another individual Facebook account that can be passed on to other people to use. This may require a new e-mail account also.

Participants will conduct hands-on exercises of how to edit information on their Page (including managing Page and settings), share a link on Wall, comment on another organization's Wall, and send friend request via their personal profile page.

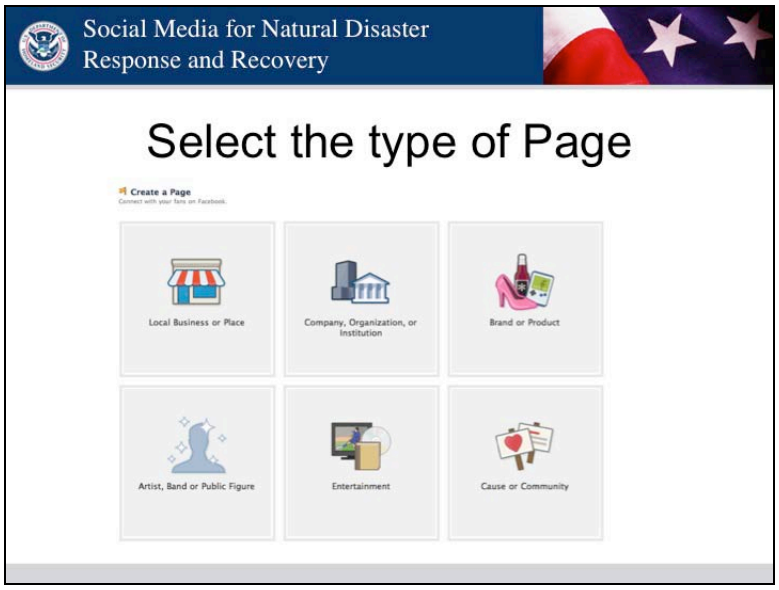
Participant Notes:

Slide 4-86. Create a Page for Organizations

To create a page for organizations:

1. Log onto Facebook using your individual account you just created.
2. Click on “Create a Page”, as shown red box on the bottom right corner.

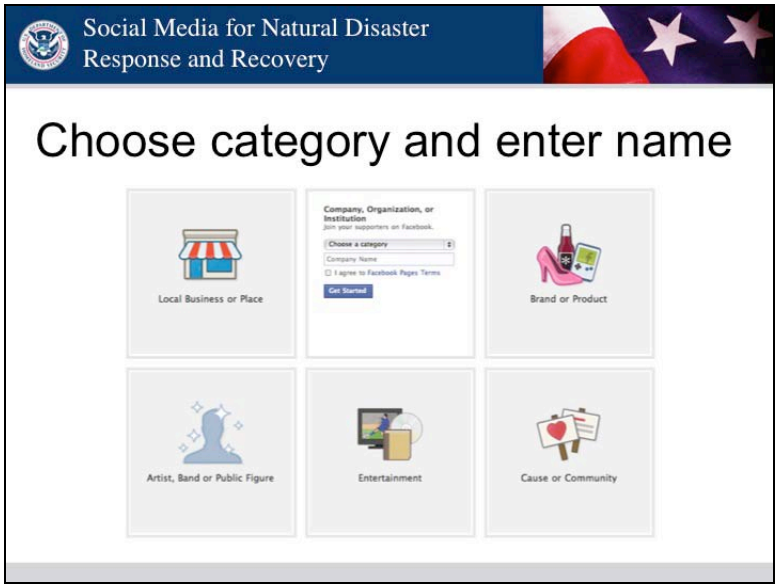
Participant Notes:



Slide 4-87. Select the type of Page

Select the type of Page to create: Local Business or Place; Company, Organization, or Institution; Brand or Product; Artist, Band, or Public Figure; Entertainment; Cause or Community.

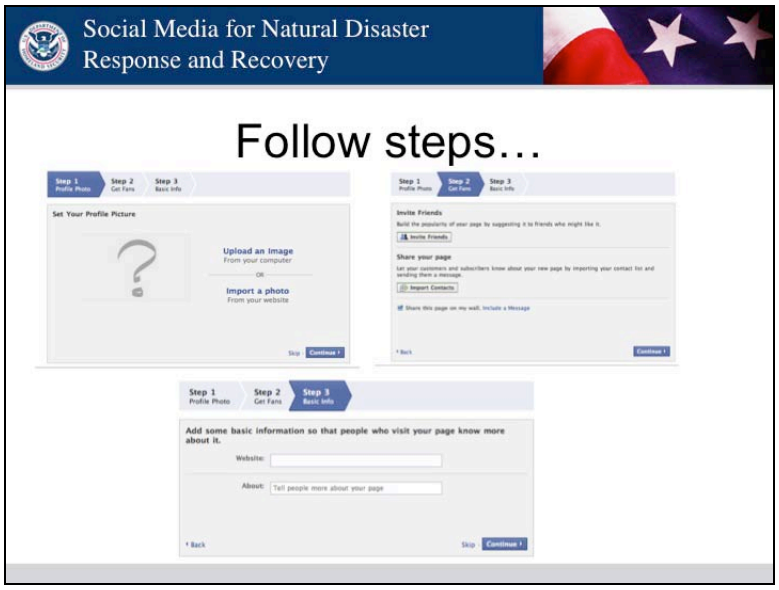
Participant Notes:



Slide 4-88. Choose category and enter name

Choose category and enter name.

Participant Notes:



Slide 4-89. Follow steps…

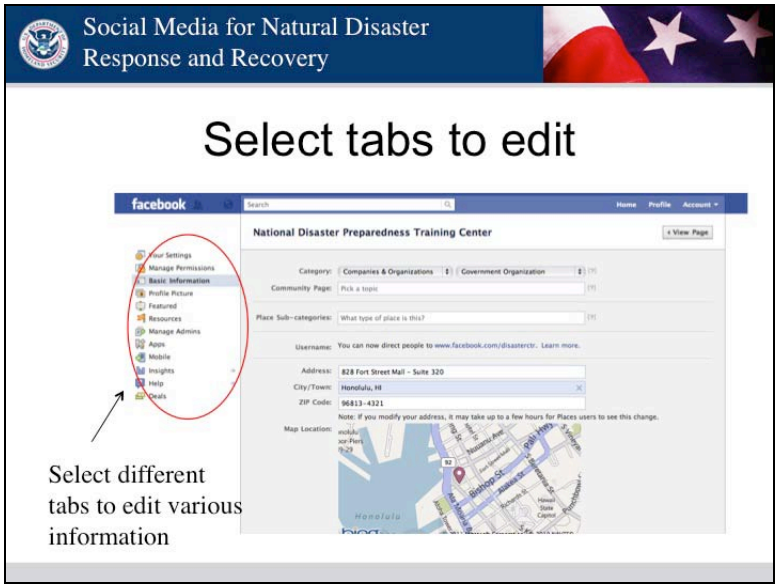
Follow steps shown in slide above. It will guide participants on how to upload an image, get Fans, and input basic information.

Participant Notes:

Slide 4-90. Edit info

To edit information, go the home page and select the **Edit Info** tab on the top of the page. A screen similar to the one shown in the next slide should appear.

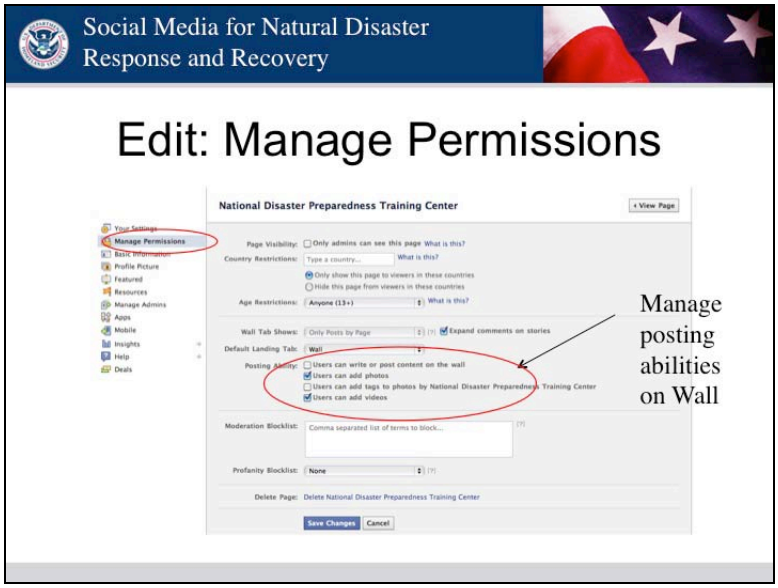
Participant Notes:



Slide 4-91. Select tabs to edit

Users can edit different categories of information as shown on the left side of the page. Tabs include basic information, profile picture, manage admins, and settings.

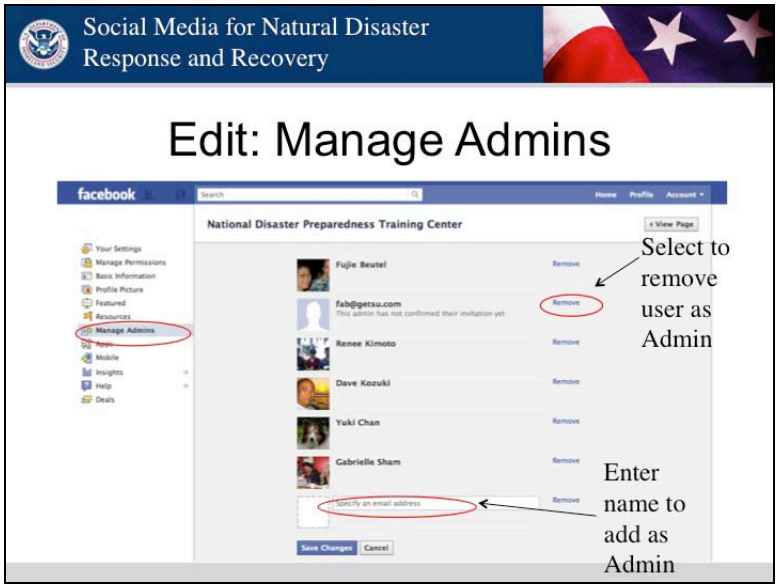
Participant Notes:



Slide 4-92. Edit: Manage Permissions

Under the **Manage Permissions** tab from the left column menu, users can change settings to allow posting abilities from their Fans. Also, other settings include age restrictions, page visibility, and blocklist.

Participant Notes:



Slide 4-93. Edit: Manage Admins

Under the **Manage Admins** tab from the left column menu, users can invite or remove Admins for the Page. Admins have the ability to edit information and manage the Page (sharing posts on your page's Wall, update your status, post photos, share a link, record/upload a video). A Page can have multiple administrators. Each Page administrator will need to have his or her own business account or personal account. Every admin can manage the Page from their own Facebook account using the "Page Manager" application that will appear in the left hand column of the Applications section once they become an admin for a Page. Every admin has equal access to and the same abilities as the other admins for a Page.

To add another admin to your Facebook Page:

1. Go to your page and click the **Edit Page** button in the upper right corner.
2. From the left column menu, click **Manage Admins**.
3. Type the names of other people you'd like to add in the open field and click **Save Changes**. You'll need to enter your password to confirm the change.

Participant Notes:

Slide 4-94. Edit: Page Insights

Under the Page **Insights** tab from the left column menu, users can view insights about their page, which includes daily active users, weekly daily users, monthly active users, new likes, and post views.

Participant Notes:

Slide 4-95. How to share a link on Wall?

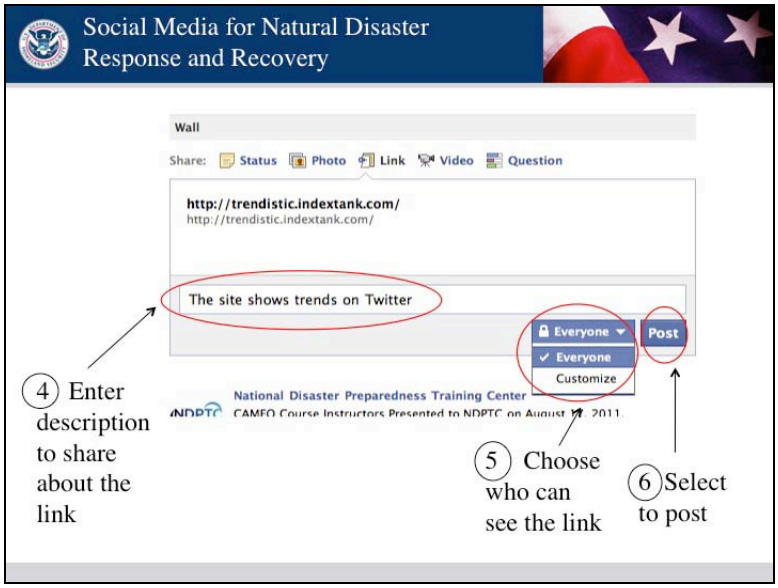
Users can share a link on their Wall (as shown in the slide above).

Participant Notes:

Slide 4-96.

To share a link on the Wall, users need to select the **Wall** tab from the left column menu, and then select the **Link** tab. Insert the link in the box and select the **Attach** button to post the link.

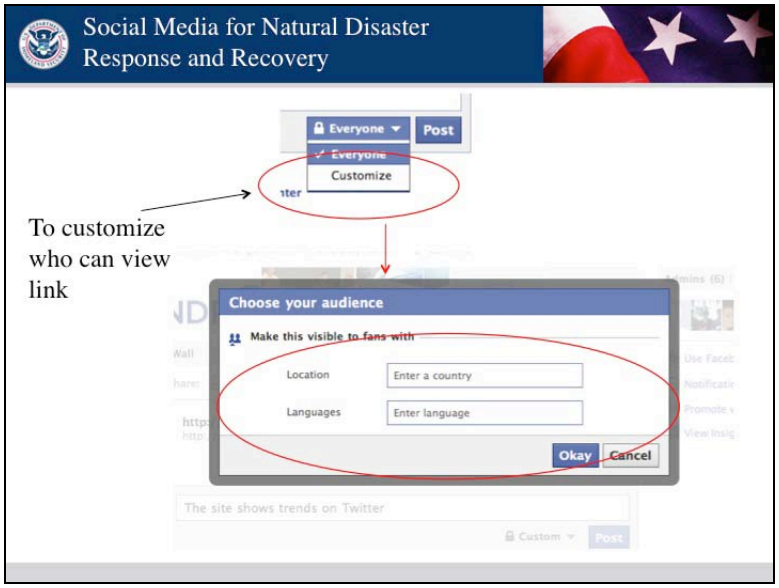
Participant Notes:



Slide 4-97.

After selecting the **Attach** button, users can enter a description to share about the link. Users can also choose who can see the link (everyone or customize). Finally, users need to select the **Post** button.

Participant Notes:



Slide 4-98.

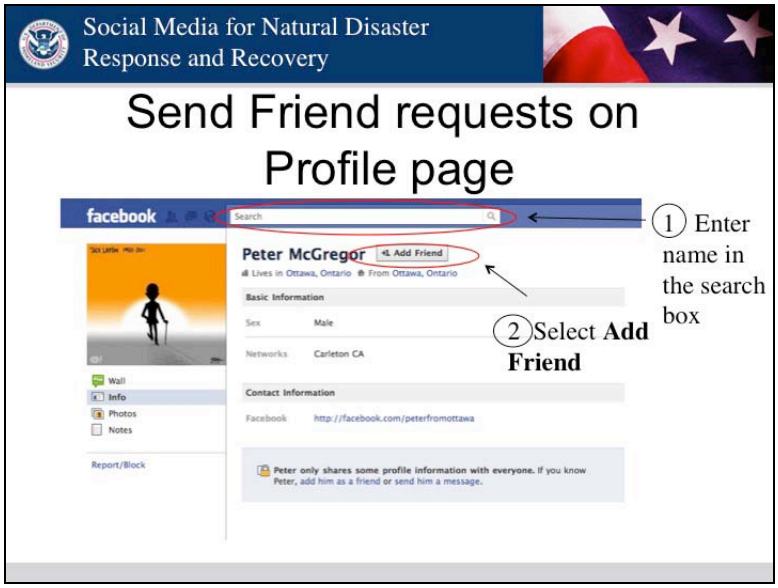
If users selected the **Customize** option, users can make the link visible to Fans within a certain location or language.

Participant Notes:

Slide 4-99. Comment on Wall

To comment on Wall, users need to select the **Wall** tab from the left column menu. Then, write a comment to post directly on Wall. If users want to comment on a previous post on Wall, then write the comment in the box that is provided below the comments as shown in the slide above.

Participant Notes:



Slide 4-100. Send Friend requests on Profile page

To send a Friend request, enter name of the person you want to add in the search box on the top of the page. Then simply click the **Add Friend** button. Organization Pages cannot add Friends, only individual Profile pages can add Friends.

Participant Notes:

Slide 4-101. Summary

Social Media for Natural Disaster Response and Recovery

Module 5: Using Social Media to Identify Trends, Monitor Data, and Conduct Simple Data Mining of Information in Disaster Management

October 2011

FEMA

-This page is intentionally blank -

Module 5: Using Social Media to Identify Trends, Monitor Data, and Conduct Simple Data Mining of Information in Disaster Management

Slide 5-1. Using Social Media to Identify Trends, Monitor Data, and Conduct Simple Data Mining of Information in Disaster Management

Duration

45 minutes

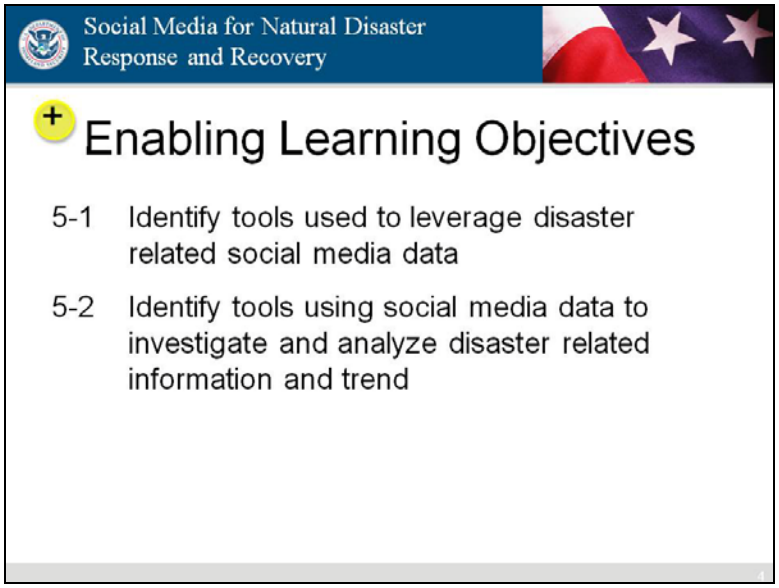
Scope Statement

Participants will learn how to measure their social media efforts and improve their social media credibility.

Terminal Learning Objectives (TLO)

Participants will apply best practices and proven methods to gain insights into public reactions to disasters.

Enabling Learning Objectives (ELO)



Slide 5-2. Enabling Learning Objectives

At the conclusion of this module, participants will be able to:

5-1 Identify tools used to leverage disaster related social media data
5-2 Identify tools using social media data to investigate disaster related information and trends.

Resources

- Module presentation slides
- Laptop with presentation software installed and CD-ROM capability
- Wi-Fi Internet access
- Two audio-visual (A/V)
- Two projector screens
- Easel
- Easel pad
- Markers
- One per participant of the following item:
    - Participant Guide
    - Computers with Wi-Fi access

Instructor to Participant Ratio

1:25

Reference List

Leberecht, Tim. "Twitter grows up in aftermath of Haiti earthquake." *CNet News.* January 19, 2010. Accessed June 27, 2011. http://news.cnet.com/8301-13641_3-10436435-44.html.

Murphy, Tom. "Data Mining: Using Predictive Analysis And Social Network Analysis." *New Tech Post.* February 9, 2011. Accessed July 7, 2011. http://newtechpost.com/2011/02/09/data-mining-using-predictive-analysis-and-social-network-analysis

Oh, Onnok, Kyounghee Kwon, and H. Raghav Rao. "An Exploration of Social Media in Extreme Events: Rumor Theory and Twitter during the Haiti Earthquake 2010." (2010). ICIS 2010 Proceedings. http://aisel.aisnet.org/icis2010_submissions/231.

"Twitter and natural disasters: lessons from Japan." *Homeland Security Newswire.* April 18, 2011. Accessed June 27, 2011. http://www.homelandsecuritynewswire.com/twitter-and-natural-disasters-lessons-japan.

York, Emily. "Confusion Over Marketers' Haiti Relief Donations Goes Viral." *Advertising Age.* January 14, 2010. Accessed June 27, 2011. http://adage.com/article/news/confusion-marketers-haiti-relief-donations-viral/141518/.

Practical Exercise Statement

An instructor-led discussion on measuring social media efforts. At the end of the module, participants will utilize some online tools to achieve a high overview of the types of relevant data that can be accessed using social media tools. Hands on exercises analyzing actual data from periods during recent disasters will be used.

Assessment Strategy

- Practical Instructor observation of participants' involvement in the classroom discussion.
- Instructor-led discussion to ensure that participants understanding of module lesson topics
- Hands-on computer training

Social Media for Natural Disaster Response and Recovery

Icon Map

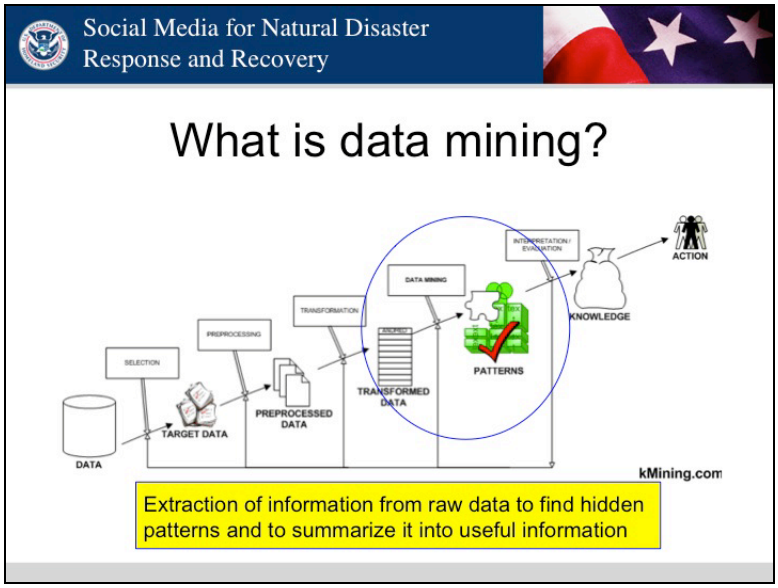
Knowledge Check: Used when it is time to assess the learners' understanding

Example: Used when there is a descriptive illustration to show or explain

Key Points: Used to convey essential learning concepts, discussions and introduction of supplemental material

Hint: Used to cover administrative items or instructional tips that aid in the flow of the instruction

Participant Notes:



Slide 5-3. What is data mining?

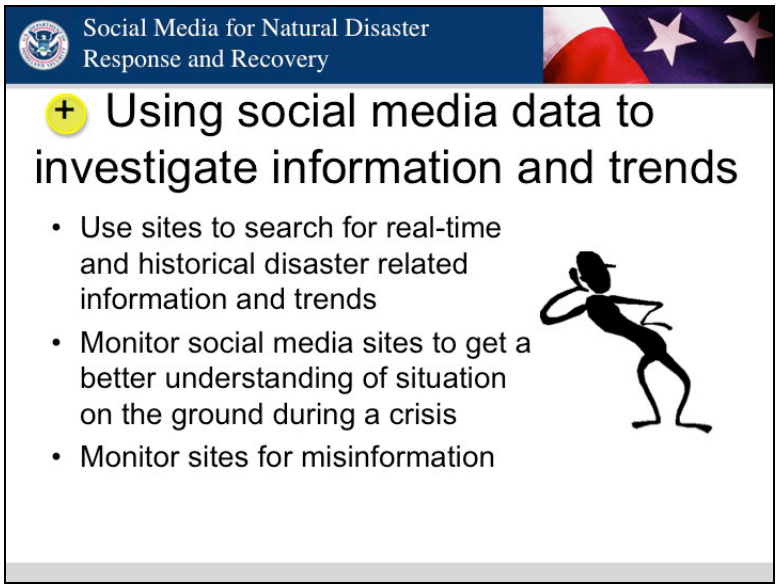
Data mining, also known as knowledge discovery, is the extraction of information from raw data to find hidden patterns within the data. These patterns can be later summarized into useful information. Data mining tools help to analyze data, but are not required to use social media effectively.

This module will discuss tools to conduct simple data mining of information related to disaster management on social networks.

✔ **Knowledge Check:** Define data mining.

✔ **Knowledge Check:** Is data mining required to use social media effectively?

Participant Notes:



Slide 5-4. Using social media to investigate information and trends related social media data

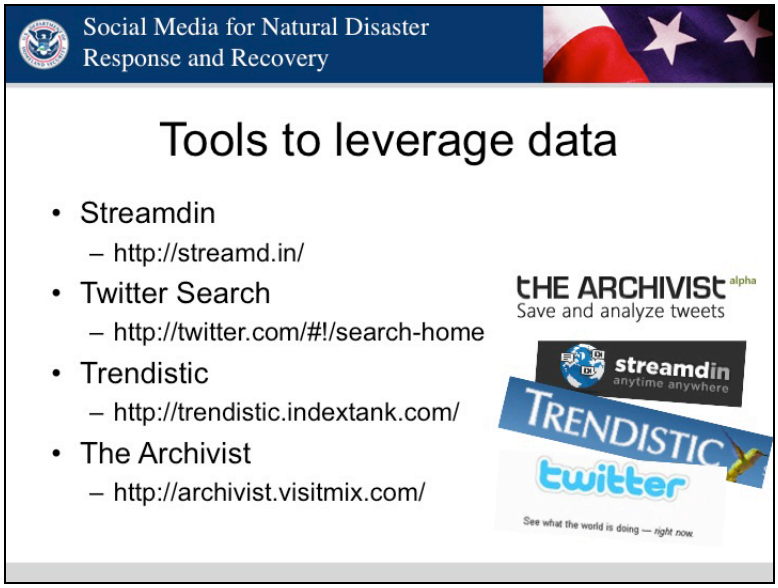
Social media data can be used to investigate information and trends. Sites can be used to search for real-time and historical disaster related information and trends. Emergency managers can monitor social media sites to get a better understanding of situation on the ground during a crisis and to monitor for misinformation.

Participant Notes:

Slide 5-5. Tools to Leverage Data

This section will discuss tools that organizations can use to leverage data.

Participant Notes:



Slide 5-6. Tools to leverage data

Tools to leverage data are shown in the slide above. Links to its respective site are also displayed on the slide.

Participant Notes:

Slide 5-7. Streamdin

Streamdin provides a visual map with real-time tweets from a geographic location. Emergency managers can use Streamdin as a tool to monitor real-time tweets within an area.

Example: Slide shows an example of a search for Tweets near Honolulu on Streamdin Web site.

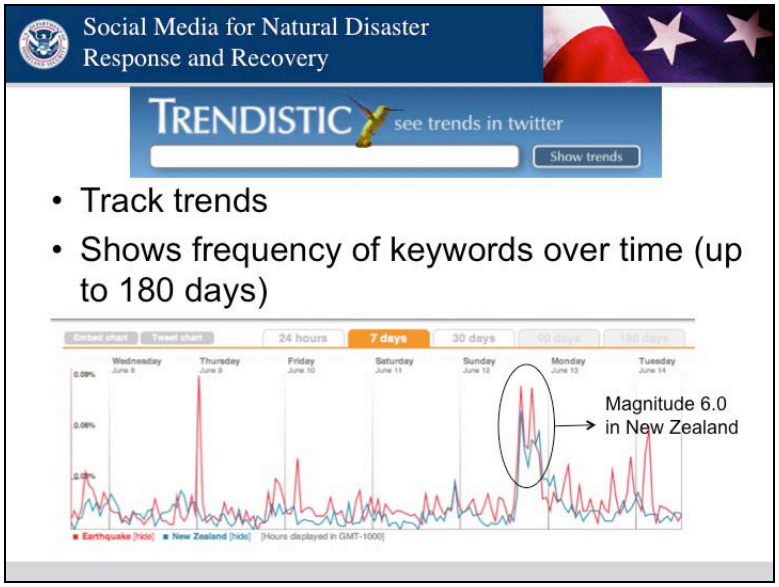
Participant Notes:

Slide 5-8. Twitter Search

Twitter Search provides real-time results for any trending topics. Emergency managers can use this tool to monitor for misinformation and gain situation awareness from tweets from the public about a specific topic during a crisis.

Example: Slide shows an example of a search result for keyword 'earthquake' on Twitter Search. To the left of the page, real-time results for tweets including keyword 'earthquake' are listed. To the right of the page, the top ten trending topics are listed.

Participant Notes:

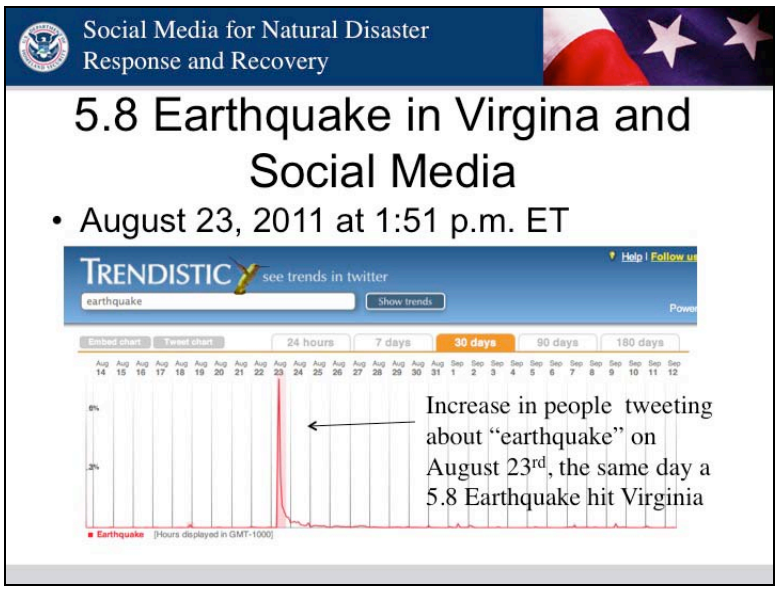


Slide 5-9. Trendistic

Trendistic is a tool to track trends in Twitter. It graphs the frequency that a keyword is mentioned on Twitter. Trendistic provides both historical and real-time trending results, including up to 180 days of historical results. Emergency managers can use Trendistic as a tool to search for pre-defined keywords during a crisis to attain a better understanding of the situation, as Trendistic also provides the tweets is associated with the keywords.

Example: Slide shows an example of a search result for keywords 'earthquake' and 'New Zealand' on Trendistic. The red line depicts the frequency that the keyword 'earthquake' was tweeted over a seven-day period, while the blue line represents the frequency that the keyword 'New Zealand' was tweeted. The graph shows that tweets including both the keywords increased when a magnitude 6.0 earthquake occurred in New Zealand.

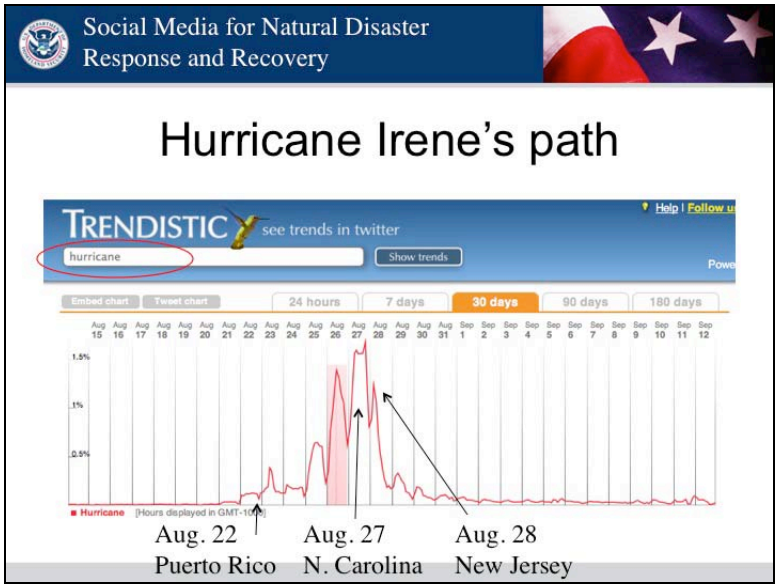
Participant Notes:



Slide 5-10. 5.8 Earthquake in Virginia and Social Media

Example: Slide shows an example of trends for "earthquake" on the Trendistic Web site. There is a spike in the percentage of Tweets including the word "earthquake" approximately the same time that a magnitude 5.8 earthquake hit Virginia on August 23, 2011. This is implication that the public is turning to social media channels to discuss or seek information during a disaster.

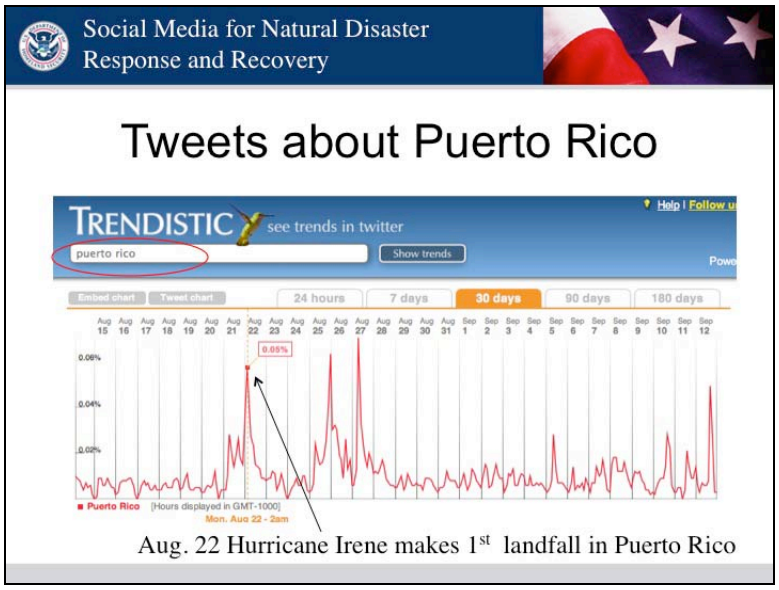
Participant Notes:



Slide 5-11. Hurricane Irene's path

Example: Slide shows an example of trends for "hurricane" on the Trendistic Web site. The graph shows the percentage of Tweets that mentioned "hurricane". The increase in the percentage of Tweets including the word "hurricane" is consistent with the path of Hurricane Irene when it made its first landfall in Puerto Rico on August 22nd, its second landfall in North Carolina on August 27th and its third landfall in New Jersey on August 28th. This is implication that the public is turning to social media channels to discuss or seek information during a disaster.

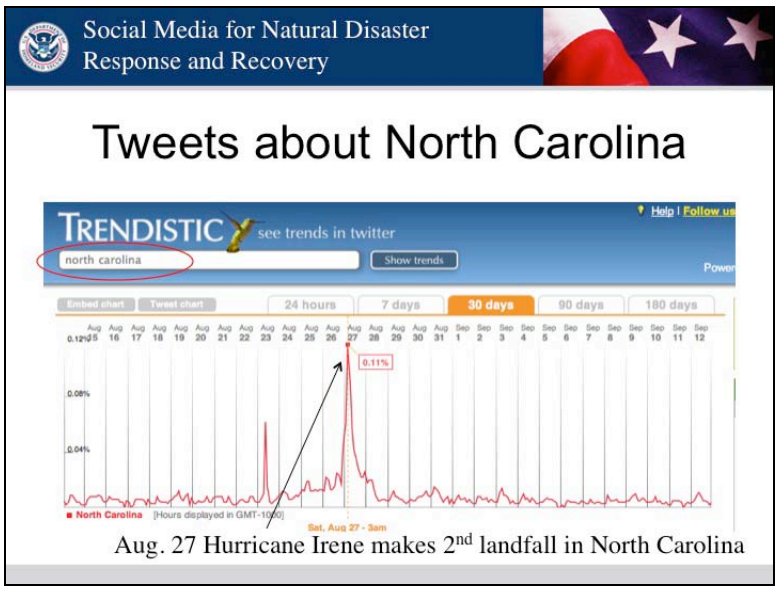
Participant Notes:



Slide 5-12. Tweets about Puerto Rico

Example: Slide shows an example of trends for "Puerto Rico" on the Trendistic Web site. There is a spike in the percentage of Tweets including the word "Puerto Rico" approximately the same time that Hurricane Irene made its 1st landfall in Puerto Rico. This is implication that the public is turning to social media channels to discuss or seek information during a disaster.

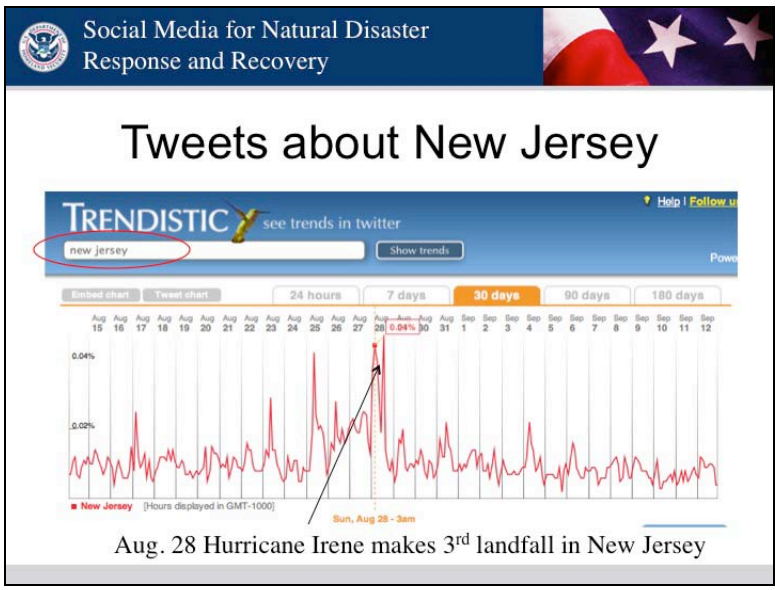
Participant Notes:



Slide 5-13. Tweets about North Carolina

Example: Slide shows an example of trends for "North Carolina" on the Trendistic Web site. Percentage of Tweets including the word "North Carolina" is the highest approximately the same time that Hurricane Irene made its 2nd landfall in North Carolina. This is implication that the public is turning to social media channels to discuss or seek information during a disaster.

Participant Notes:



Slide 5-14. Tweets about New Jersey

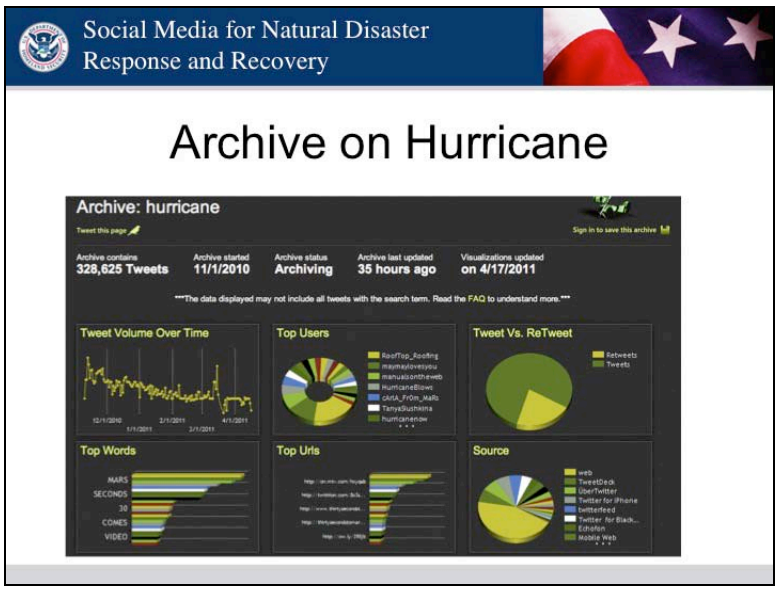
Example: Slide shows an example of trends for "New Jersey" on the Trendistic Web site. Percentage of Tweets including the word "New Jersey" is the highest approximately the same time that Hurricane Irene made its 3rd landfall in New Jersey. This is implication that the public is turning to social media channels to discuss or seek information during a disaster.

Participant Notes:

Slide 5-15. The Archivist

The Archivist is a tool that finds and archives tweets. However, it does represent a complete historical record of a keyword. Once a keyword is entered, the Archivist begins to monitor and analyze that specific keyword. Emergency managers can use the Archivist as a tool to monitor pre-specified keywords that are popularly used during an emergency.

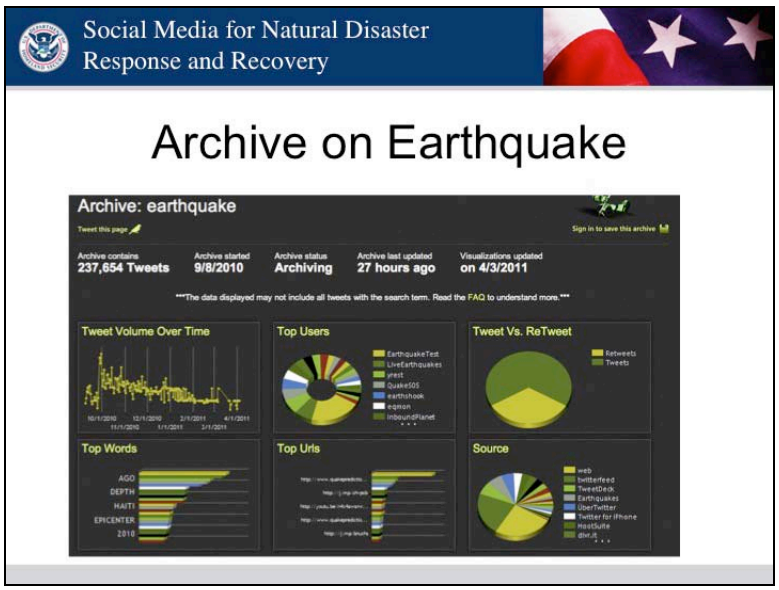
Participant Notes:



Slide 5-16. Archive on Hurricane

Example: Slide shows an example of an analysis for keyword "Hurricane" on the Archivist Web site.

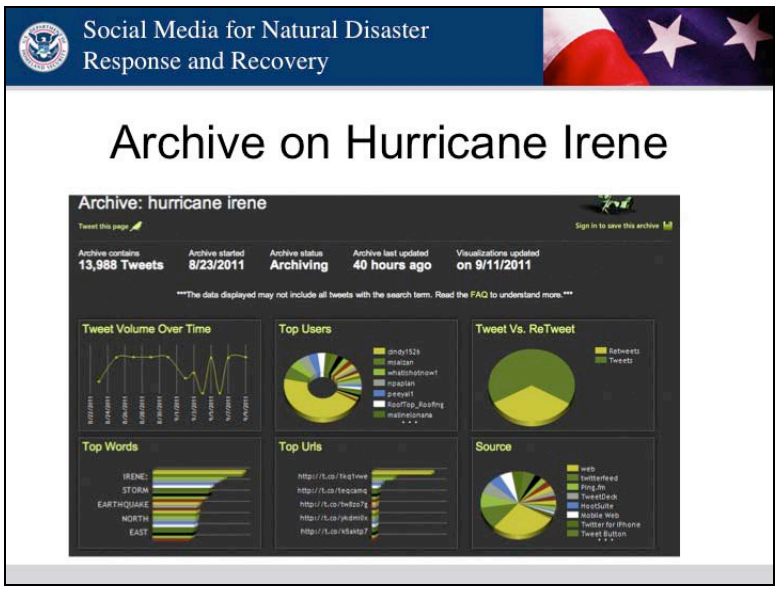
Participant Notes:



Slide 5-17. Archive on Earthquake

Example: Slide shows an example of an analysis for keyword ‘”Earthquake” on the Archivist Web site.

Participant Notes:

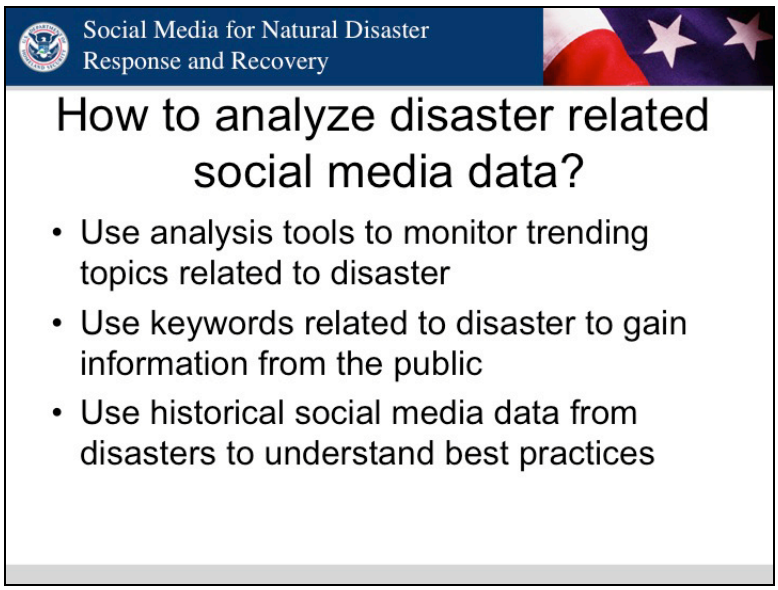


Slide 5-18. Archive on Hurricane Irene

Example: Slide shows an example of an analysis for keyword "Hurricane Irene" on the Archivist Web site.

Knowledge Check: List different online tools to leverage (i.e. to research useful information on past Tweets).

Participant Notes:

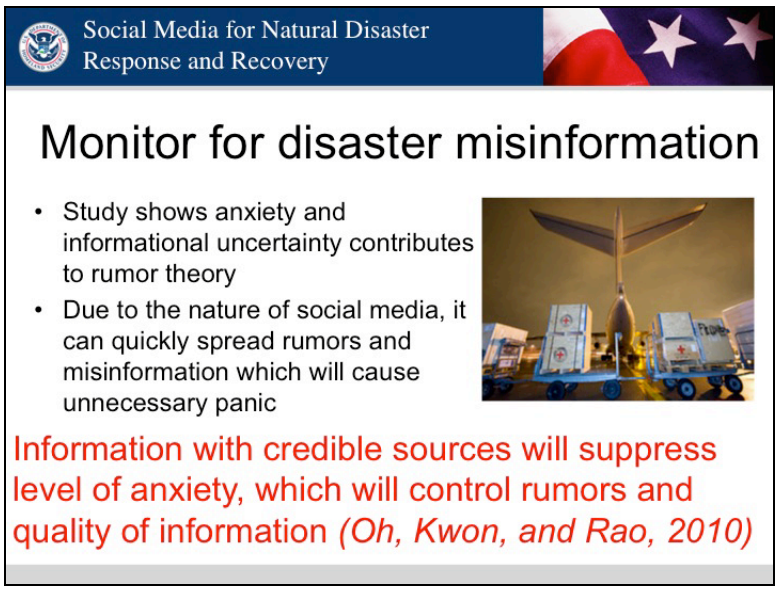


Slide 5-19. How to analyze disaster related social media data?

Emergency managers can use analysis tools to monitor trending topics related to disaster. Managers should search for keywords to gain information from the public, and use historical date to understand best practices of the use of social media during disasters.

✔ **Knowledge Check:** How can your organization benefit from incorporating these online tools to leverage data?

Participant Notes:



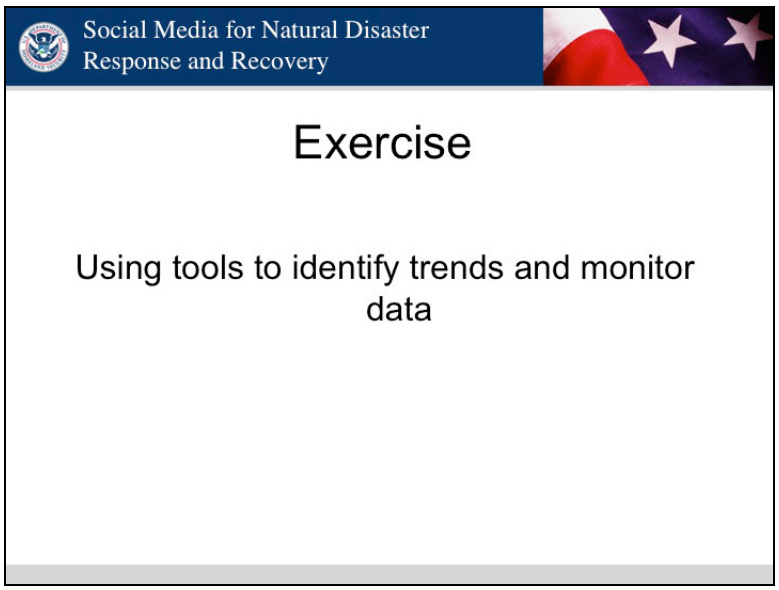
Slide 5-20. Misinformation for disaster information

A study done by Oh, Kwon, and Rao (2010) shows that anxiety and informational uncertainty contribute to rumor theory. Social media sites are vulnerable to spreading rumors and misinformation because of the nature of these social media sites. Rumors, misinformation, and propaganda on social media sites can be widely, and quickly, disseminated; thus, causing unnecessary panic and making the work of emergency responders and other agencies more difficult (Homeland Security Newswire, 2011).

Key Points: Information with credible sources will suppress the level of anxiety of the public, which will help control the level of rumors and quality of information (Oh, Kwon, and Rao, 2010).

Example: After the Haiti Earthquake in 2010, rumors started that UPS was offering free shipping to Haiti for any box with a postage fee of $50 or less. UPS was able to quickly control this misinformation by monitoring and communicating on its social media sites to correct the rumor.

Participant Notes:

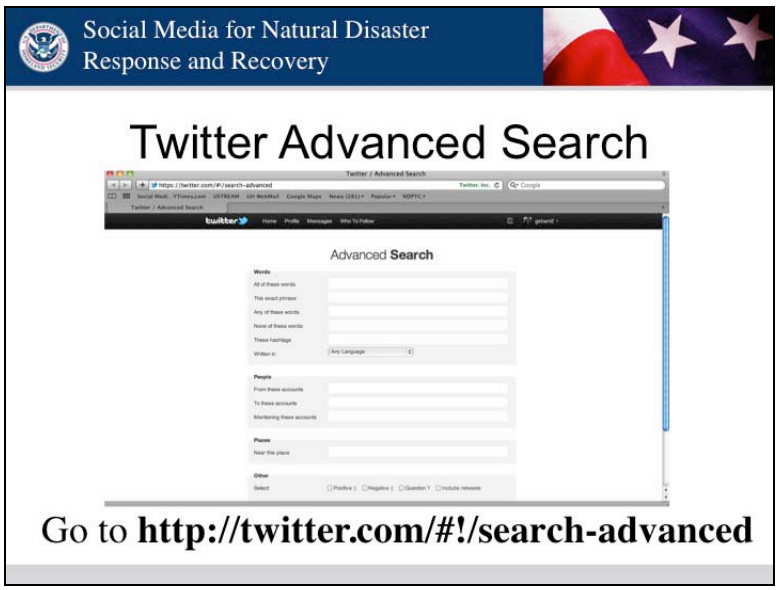


Slide 5-21. Exercise

Participants will utilize online tools to achieve a high overview of the types of relevant data that can be accessed using social media tools.

Using online tools, such as Twitter Advanced Search, Trendistic and The Archivist, participants will search for trends and patterns with disaster related keywords. Keywords may include flooding, earthquake, tsunami, hurricane, fire, and storm.

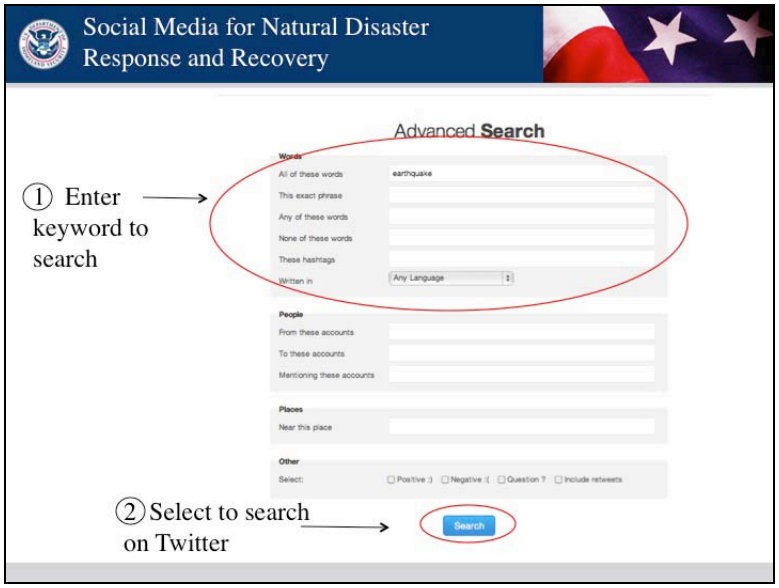
Participant Notes:



Slide 5-22. Twitter Advanced Search

Go to Twitter Advanced Search, http://twitter.com/#!/search-advanced.

Participant Notes:



Slide 5-23.

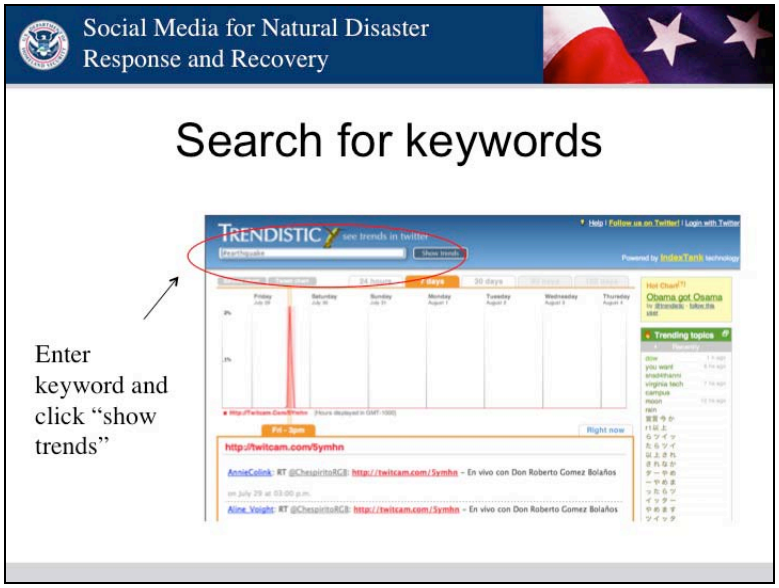
Enter keyword to search on Advanced Search, then click on the **Search** button.

Participant Notes:

Slide 5-24. Search trends on Trendistic

Go to Trendistic website, www.trendistic.com, to search for trends within the last 24 hours, 7 days, 30 days, 90 days, or 180 days.

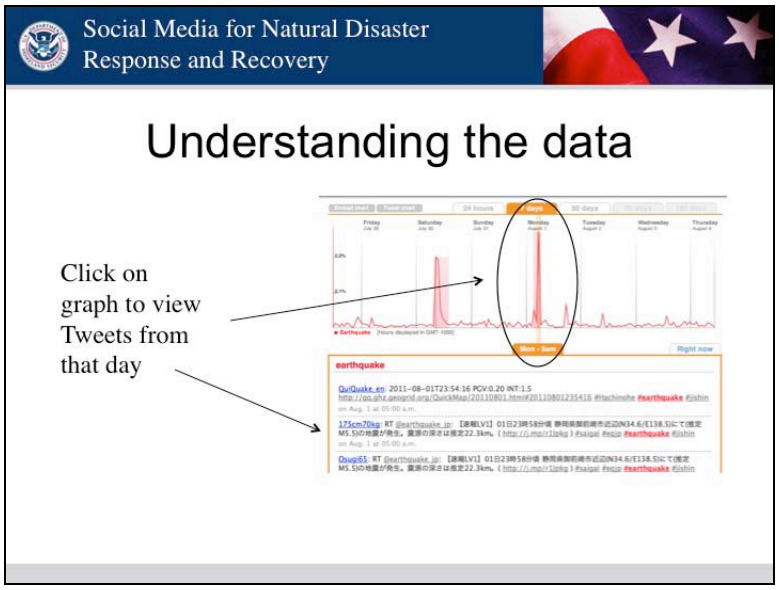
Participant Notes:



Slide 5-25. Search for keywords

Enter keyword in the top left box and click **Show trends**. Graph will show trends on found on Twitter for the keyword entered.

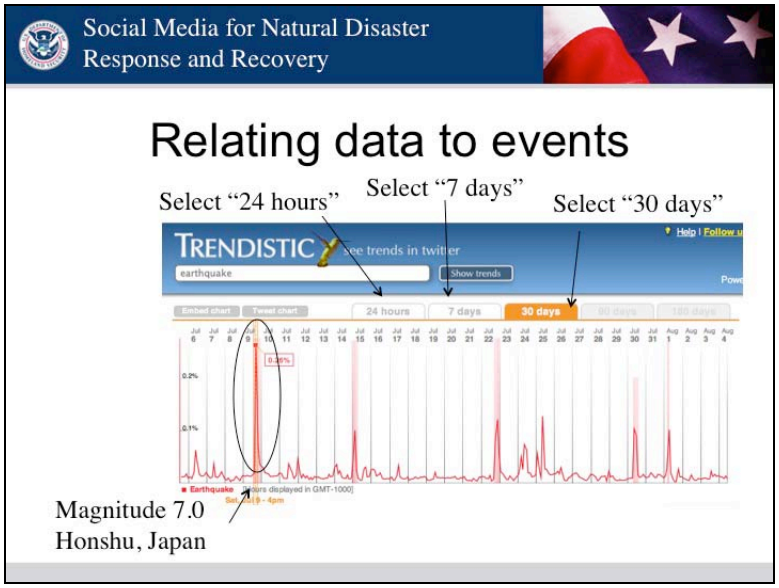
Participant Notes:



Slide 5-26. Understanding the data

By clicking on the graph, a list of Tweets from that day will appear below the graph. Users can also point their mouse on the graph and the percentage of tweets relating to the keyword will appear.

Participant Notes:



Slide 5-27. Relating data to events

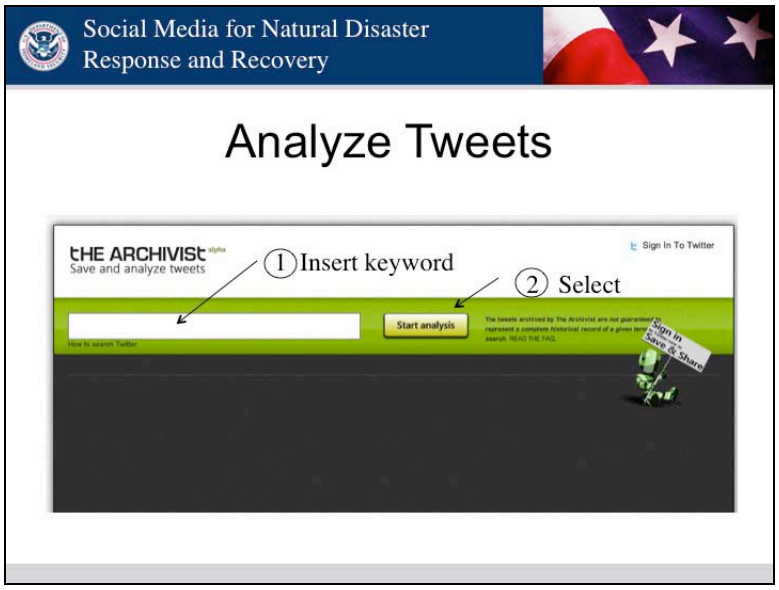
Users can view the data from 24 hours, 7 days, 30 days, 90 days, or 180 days. As shown in the slide above, by selecting 30 days, users can view the historical trend of Tweets with the keyword #earthquake. A spike in tweets with keyword #earthquake appears around the same time that a Magnitude 7.0 earthquake occurred near Honshu, Japan.

Participant Notes:

Slide 5-28. The Archivist

Another tool to use to analyze historical data is The Archivist, http://archivist.visitmix.com/.

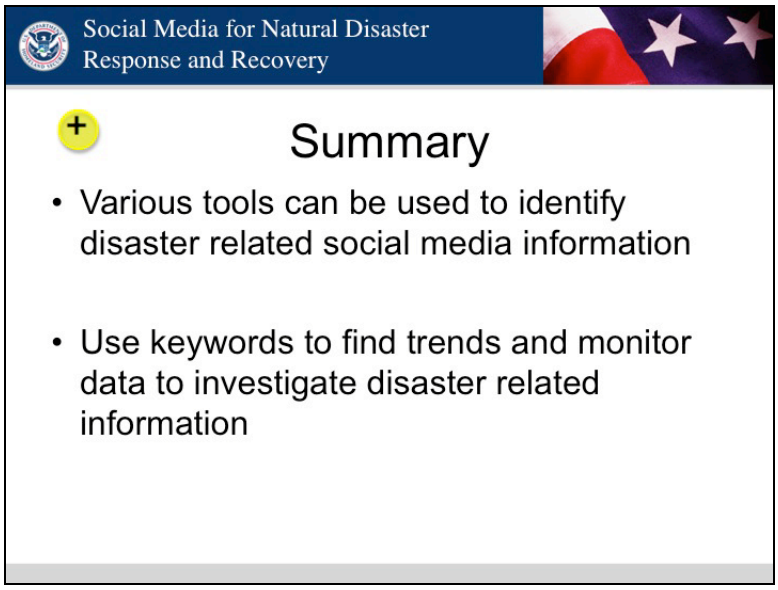
Participant Notes:



Slide 5-29. Analyze Tweets

Users can enter keyword to search for, and then click the **Start analysis** button. An analysis of the keyword entered will appear, including graphs and charts.

Participant Notes:



Slide 5-30. Summary

Social Media for Natural Disaster Response and Recovery

Module 6: Incorporating Advanced Social Media Monitoring and Data Mining Techniques

October 2011

FEMA

-This page is intentionally blank -

Module 6: Incorporating Advanced Social Media Monitoring and Data Mining Techniques

Slide 6-1. Incorporating Advanced Social Media Monitoring and Data Mining Techniques

Duration

45 minutes

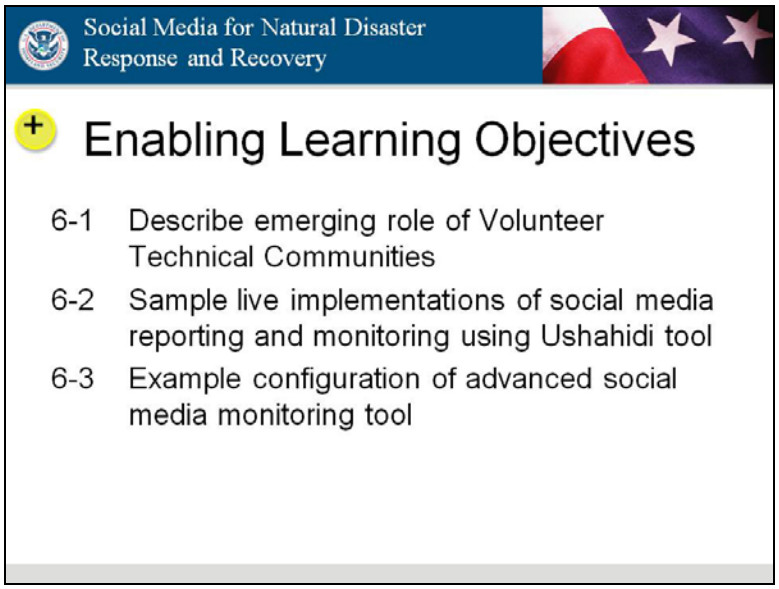
Scope Statement

Participants will learn about advanced social media monitoring and data mining techniques and what is required to implement them.

Terminal Learning Objectives (TLO)

Participants will be exposed to advanced social media tools and techniques.

Enabling Learning Objectives (ELO)



Slide 6-2. Enabling Learning Objectives

At the conclusion of this module, participants will be able to:

6-1 Describe emerging role of Volunteer Technical Communities
6-2 Sample live implementations of social media reporting and monitoring using Ushahidi tool
6-3 Example configuration of advanced social media monitoring tools

Resources

- Module presentation slides
- Laptop with presentation software installed and CD-ROM capability
- Wi-Fi Internet access
- Two audio-visual (A/V)
- Two projector screens
- Easel
- Easel pad
- Markers
- One per participant of the following item:
    - Participant Guide
    - Computers with Wi-Fi access

Instructor to Participant Ratio

1:25

Reference List

O'Dell, Jolie. "IBM Debuts New Social Media Analytics Tool." *Mashable.* May 11, 2010. Accessed July 11, 2011. http://mashable.com/2010/05/11/ibm-social-media-analytics-tool/

Stephens, Kim. "Swift River: A tool for organizing Social Media Information." *Idisaster 2.0.* January 3, 2011. Accessed July 11, 2011. http://idisaster.wordpress.com/2011/01/03/swift-river-a-tool-for-organizing-social-media-crisis-information/

Practical Exercise Statement

An instructor-led discussion on advanced social media monitoring and data mining tools. High level hands on sample test cases will be run using discussed tools.

Assessment Strategy

- Practical Instructor observation of participants' involvement in the classroom discussion.
- Instructor-led discussion to ensure that participants understanding of module lesson topics

Social Media for Natural Disaster Response and Recovery

Icon Map

Knowledge Check: Used when it is time to assess the learners' understanding

Example: Used when there is a descriptive illustration to show or explain

Key Points: Used to convey essential learning concepts, discussions and introduction of supplemental material

Hint: Used to cover administrative items or instructional tips that aid in the flow of the instruction

Participant Notes:

Slide 6-3. Volunteer Technical Communities

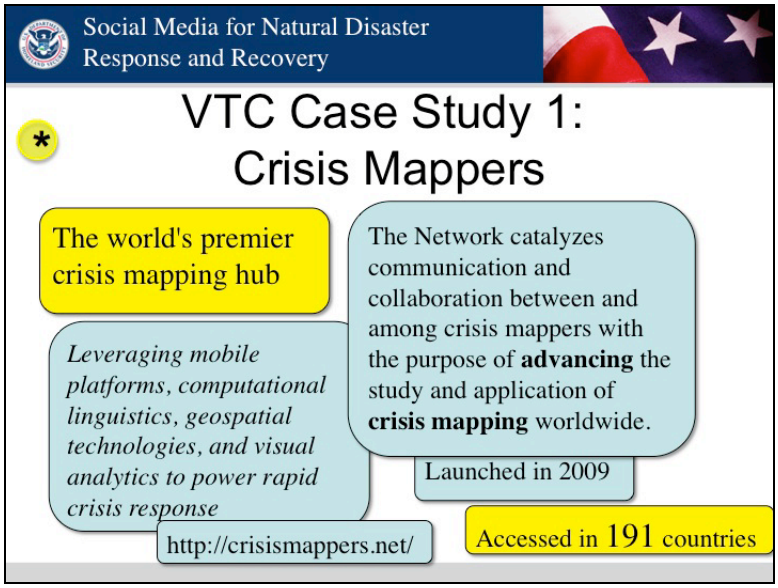
Volunteer Technical Communities (VTC) is a nexus between convergent volunteers, disaster managers and social media globally. They are a critical new player in disaster management that is based on crowdsourcing. VTC reflects global resources and impacts, and is recognized by authorities.

Participant Notes:

Slide 6-4. VTC Case Studies

This section will cover three example of VTC: Crisis Mappers, Crisis Commons, and Humanity Road.

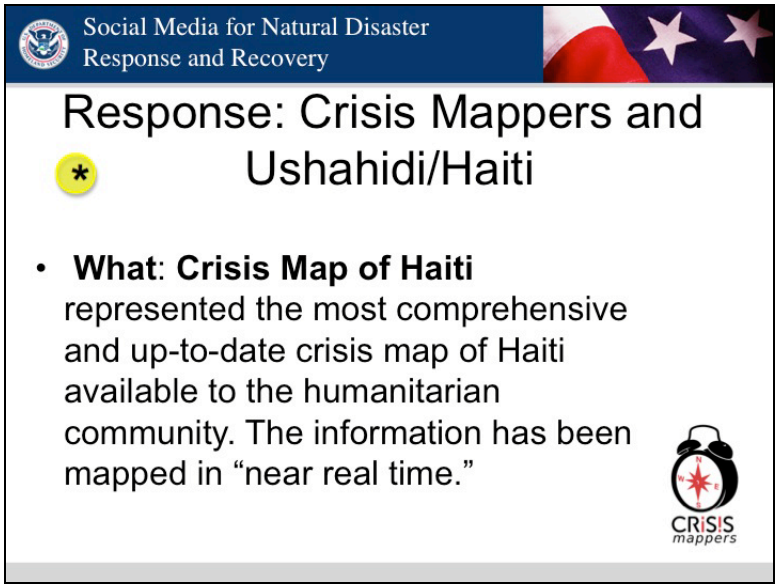
Participant Notes:



Slide 6-5. VTC Case Study 1: Crisis Mappers

Crisis Mappers is the world's premier crisis mapping hub. It was launched in 2009 and accessed in 191 countries. The Network catalyzes communication and collaboration between and among crisis mappers with the purpose of **advancing** the study and application of **crisis mapping** worldwide. It leverages mobile platforms, computational linguistics, geospatial technologies, and visual analytics to power rapid crisis response

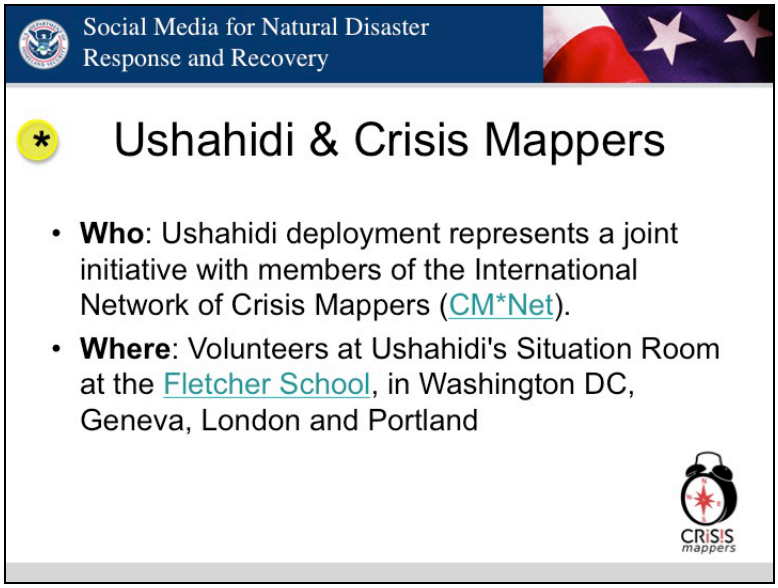
Participant Notes:



Slide 6-6. Response: Crisis Mappers and Ushahidi/Haiti

The Crisis Map of Haiti represented the most comprehensive and up-to-date crisis map of Haiti available to the humanitarian community used in the response phase of the disaster cycle. The information has been mapped in “near real time.”

Participant Notes:



Slide 6-7. Ushahidi & Crisis Mappers

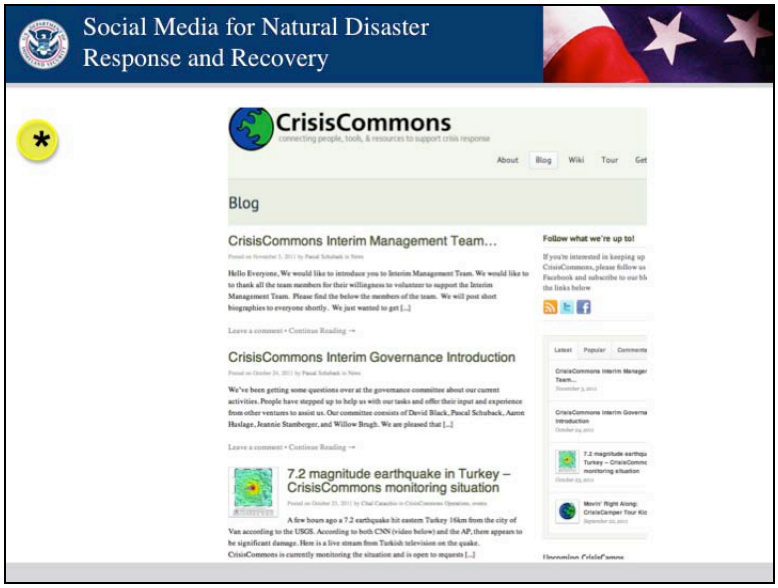
Ushahidi deployment represents a joint initiative with members of the International Network of Crisis Mappers (CM*Net). Volunteers are located at Ushahidi's Situation Room at the Fletcher School, in Washington DC, Geneva, London and Portland

Participant Notes:

Slide 6-8. VTC Case Study 2: Crisis Commons

Crisis Commons is a global movement creating virtual communities of volunteers using their technical expertise to help respond to disasters and improve disaster resiliency.

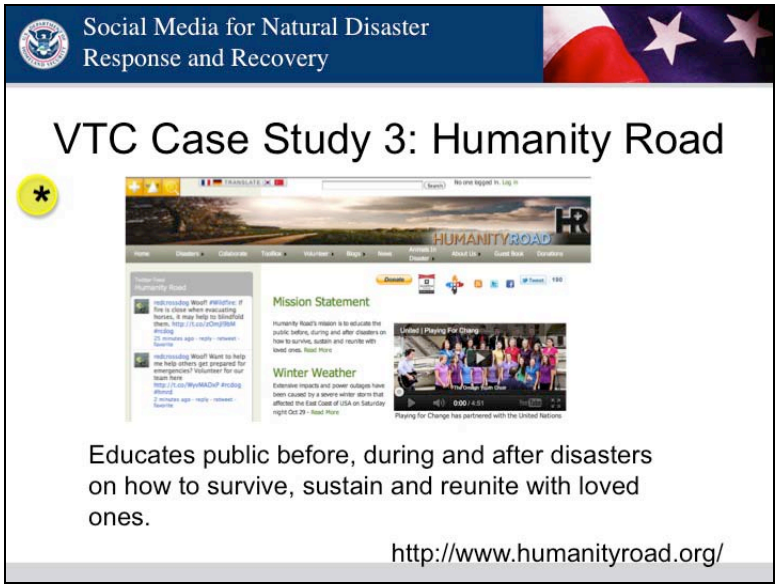
Participant Notes:



Slide 6-9.

Example: This is an example of a blog for Crisis Commons.

Participant Notes:



Slide 6-10. VTC Case Study 3: Humanity Road

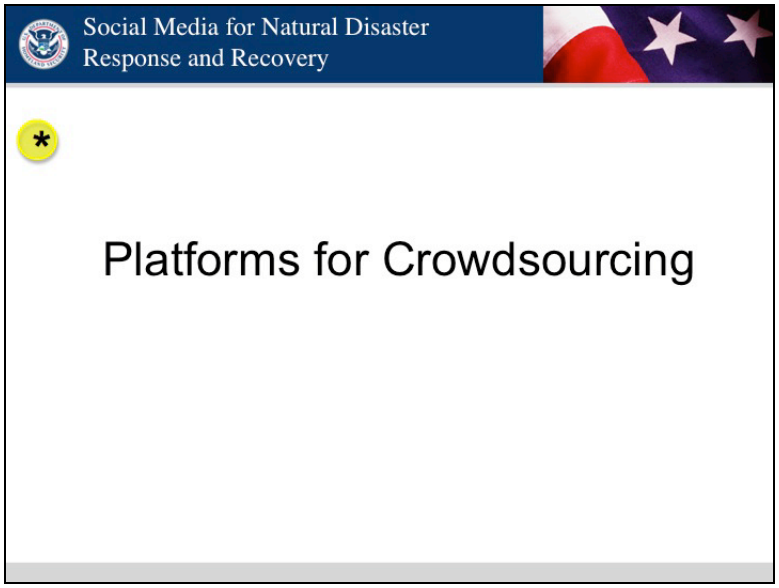
Humanity Road educates public before, during and after disasters on how to survive, sustain and reunite with loved ones.

Participant Notes:

Slide 6-11.

Humanity Road trains and equips volunteers to use Internet and mobile communications technology. Volunteers collect, verify and route public safety information online during sudden onset disaster. It directs public to governmental and aid agencies providing assistance after disaster. In 2010, Humanity Road responded to events in 33 U.S. states/territories and 73 events worldwide

Participant Notes:



Slide 6-12. Platforms for Crowdsourcing

This section addresses platforms for crowdsourcing.

Participant Notes:

Slide 6-13. Social Media Reporting and Monitoring

Several tools to crowdsource information include the Ushahidi platform, Crowdmap, and the SwiftRiver platform. Crowdsource means to outsource tasks to people externally to a company or organization, usually via the Internet. Ushahidi is an open source software to collect, visualize and map data. Crowdmap is the free, hosted version of Ushahidi. SwiftRiver is the platform used with Ushahidi to help filter information.

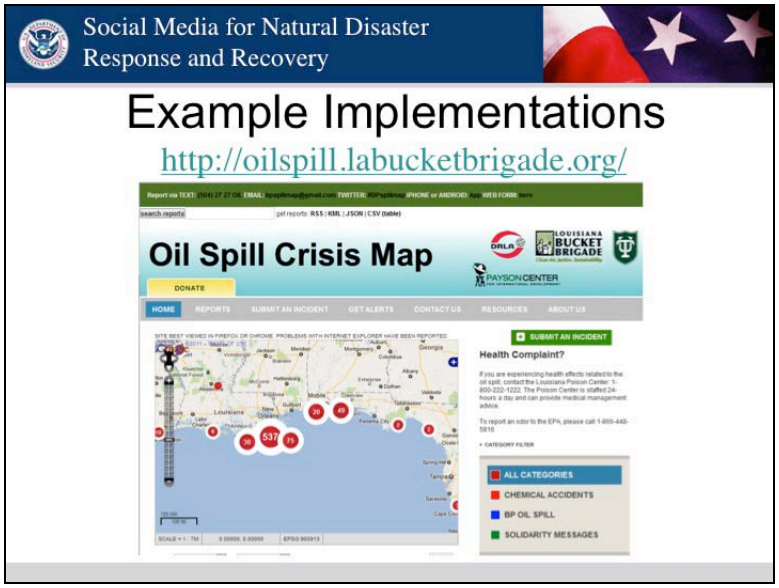
Ushahidi, the online crisis mapping platform, was first used in Kenya to map political violence. However, Ushahidi was first used to map large-scale natural disasters in Haiti.

Participant Notes:

Slide 6-14. What is Ushahidi?

The video found on Ushahidi's Website, http://www.ushahidi.com/, provides an overview of the Ushahidi platform.

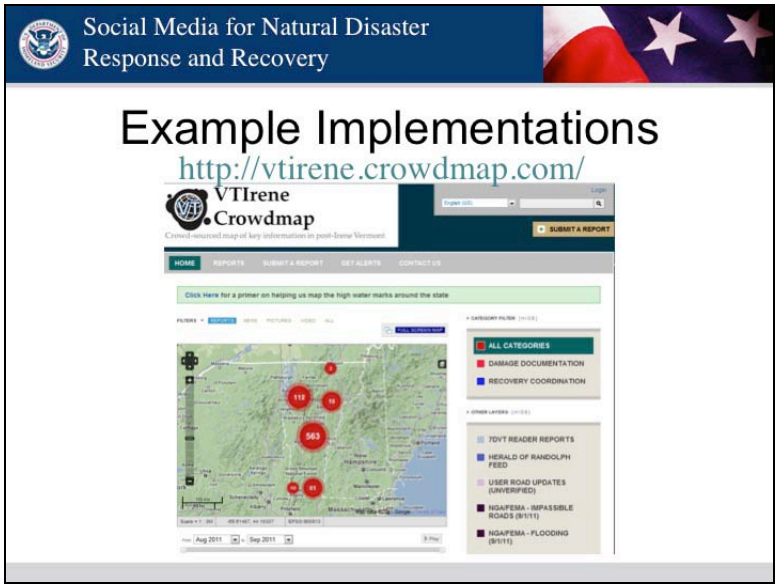
Participant Notes:



Slide 6-15. Example Implementations

Example: This is an example of Ushahidi's platform used to map out the Oil Spill Crisis.

Participant Notes:



Slide 6-16. Example Implementations

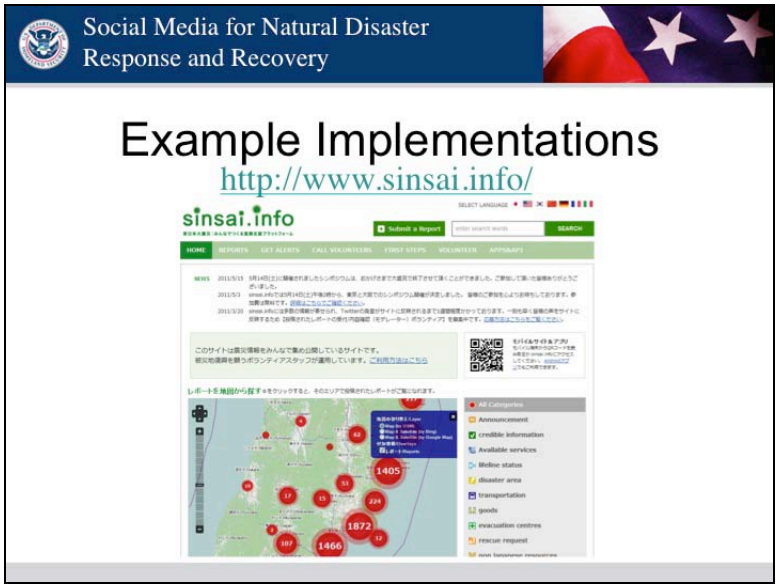
Example: This is an example of Ushahidi's platform used to map out damages and recovery coordination after Hurricane Irene in Vermont.

Participant Notes:

Slide 6-17. Example Implementations

Example: This is an example of Ushahidi's platform used to map out tornados in the St. Louis Region.

Participant Notes:



Slide 6-18. Example Implementations

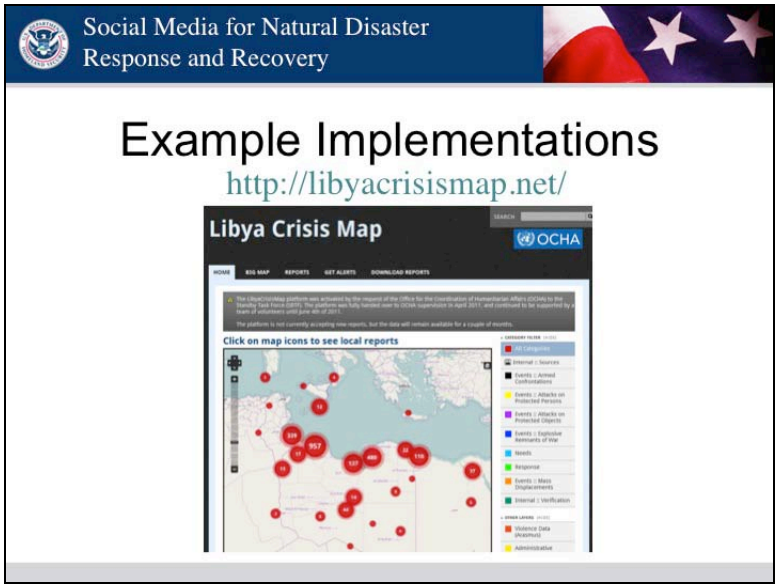
Example: This is an example of Ushahidi's platform used to map out information such as disaster areas, transportation, evacuation centers, and support request areas in Japan following the Earthquake.

Participant Notes:

Slide 6-19. Example Implementations

Example: This is an example of Ushahidi's platform used to map out the world's best burgers. Ushahidi can be use for disaster-related information in addition to mapping out other types of information such as best burgers.

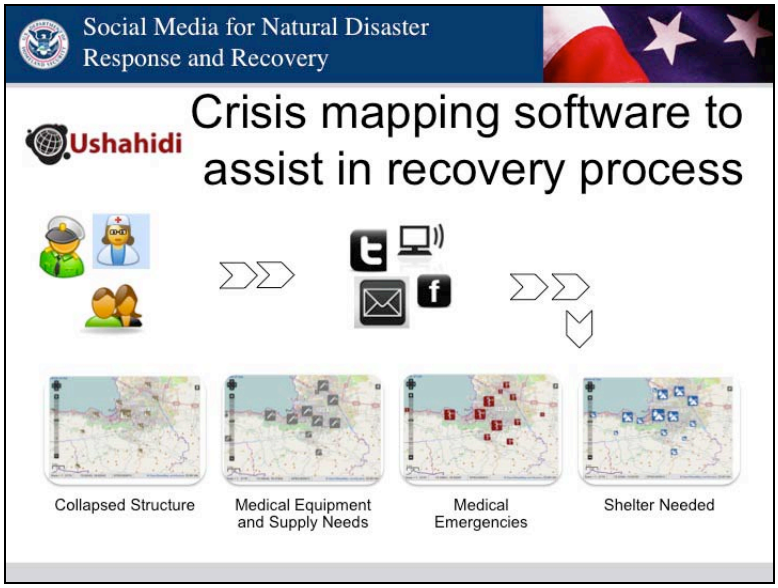
Participant Notes:



Slide 6-20. Example Implementations

Example: This is an example of Ushahidi's platform used to map out the crisis in Libya. Ushahidi's platform can be use to map out political events as well as disaster-related information.

Participant Notes:



Slide 6-21. Crisis mapping software to assist in recovery process

Ushahidi allows end users, such as responders in the field and citizen volunteers, to supply information via social media networks, email, SMS, or feeds in order to generate maps with many layers to give a clear, real-time picture of the situation. Ushahidi places information on a map.

e.g.

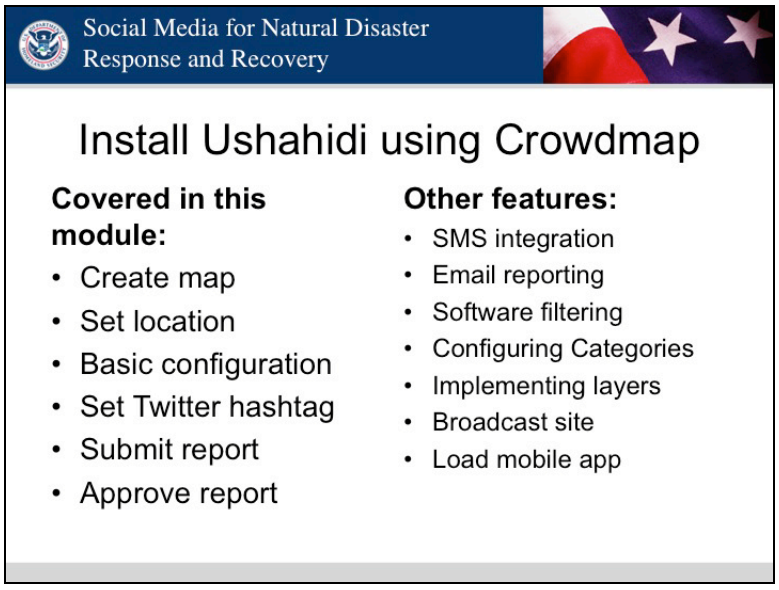
Example: Slide shows the process of end users supplying information via social media networks to produce maps as shown in the figure. Slide includes examples of maps for collapsed structure, medical equipment and supply needs, medical emergencies, and shelter needed following the 2010 Haiti Earthquake on Ushahidi.

Knowledge Check: What is a tool that allows an end user to supply information to generate maps with many layers to give a clear, real-time picture of the situation?

Participant Notes:

Slide 6-22. Practical Exercise

Participant Notes:



Slide 6-23. Install Ushahidi using Crowdmap

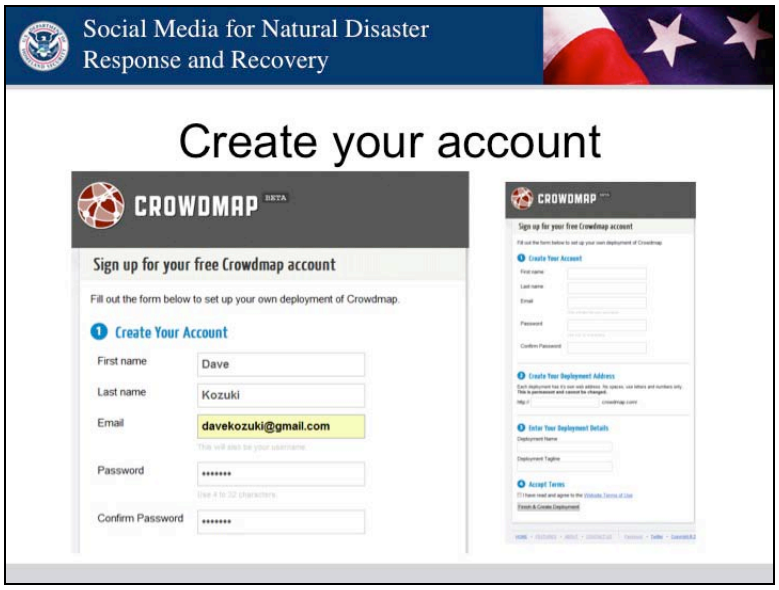
Module 6 will cover how to create a map, set location, set Twitter hashtag, broadcast site, create a sample report, and load mobile application. Additional features that are available include integrating SMS, using e-mail for reporting, software filtering, configuring categories, and implementing layers onto the map.

Participant Notes:

Slide 6-24. Create Ushahidi Crowdmap

Go to the Crowdmap website, http://crowdmap.com.

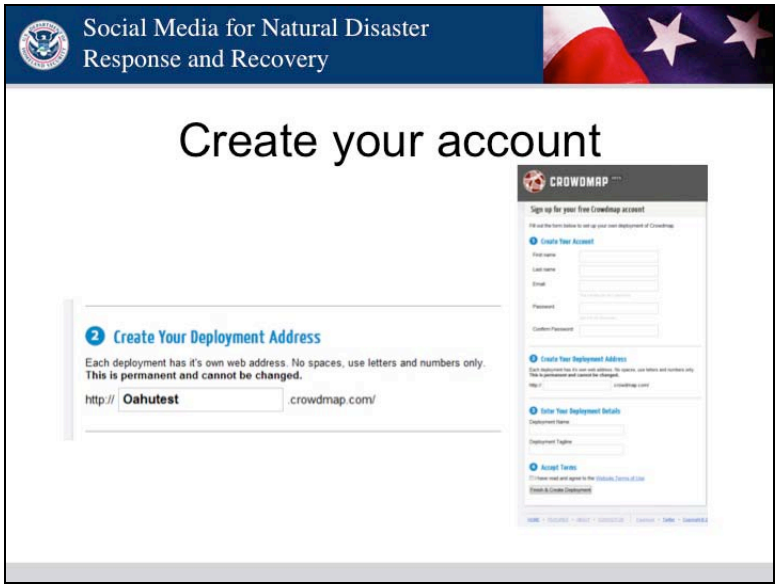
Participant Notes:



Slide 6-25. Create your account

In step 1, create your account by filling in your first name, last name, email, and password.

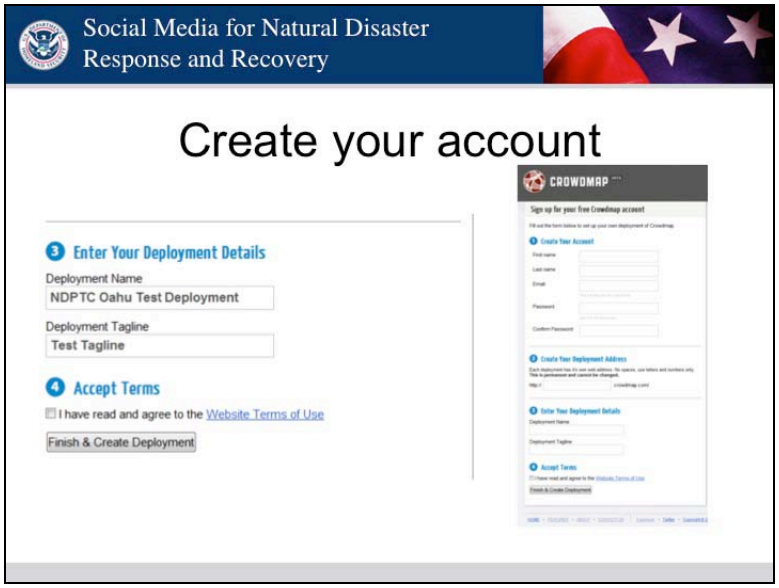
Participant Notes:



Slide 6-26. Create your account

In step 2, create your deployment address.

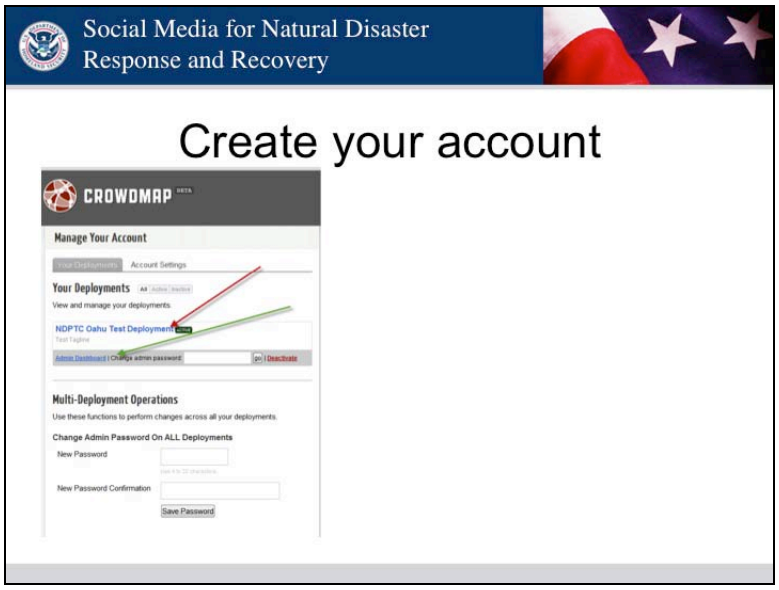
Participant Notes:



Slide 6-27. Create your account

In step 3, enter your deployment name and tagline. In step 4, check the box to accept the Website Terms of Use, and click on the **Finish & Create Deployment** button.

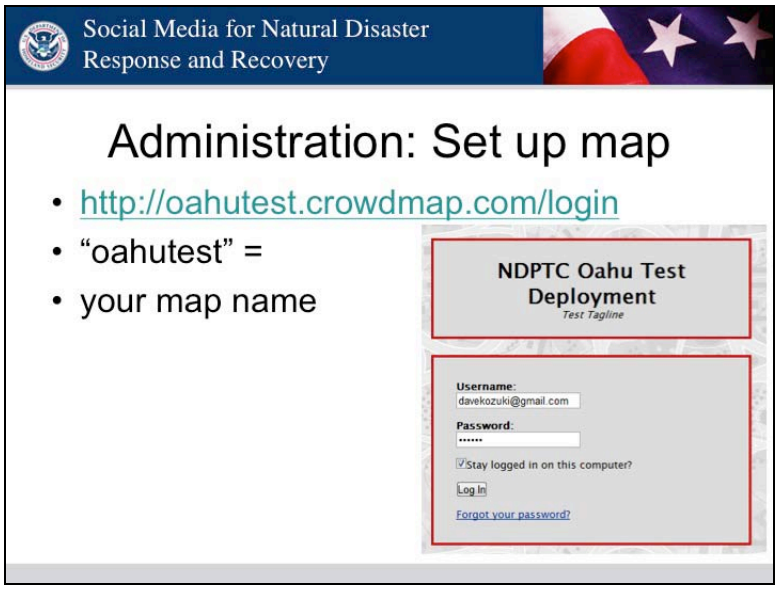
Participant Notes:



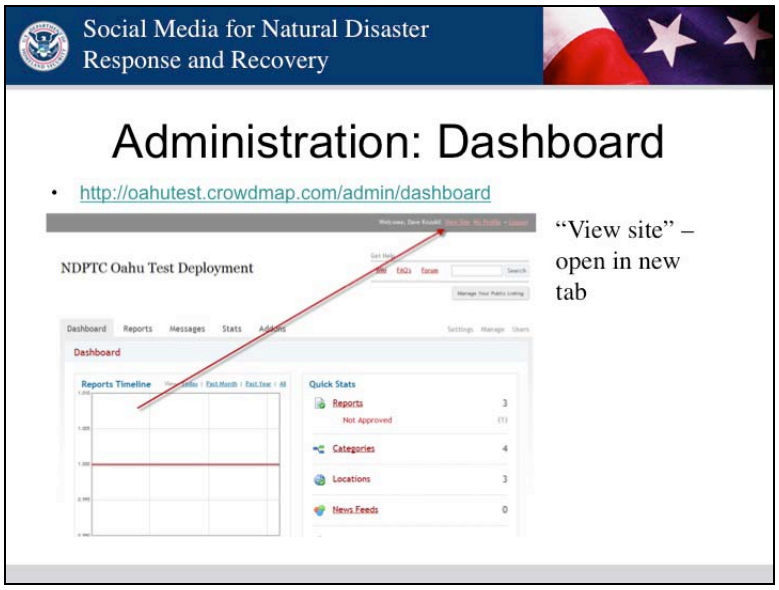
Slide 6-28. Create your account

The red arrow shows where your deployment name is located after you have created your account. Click on the green arrow to view the administration dashboard. When you click on it, another page will appear which will require you to enter your username and password as shown in the next slide.

Participant Notes:

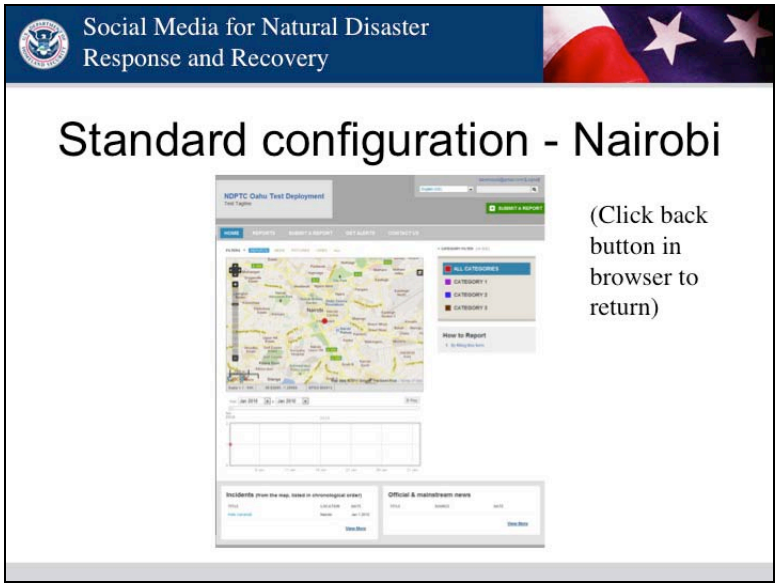


Slide 6-29. Administration: Set up map

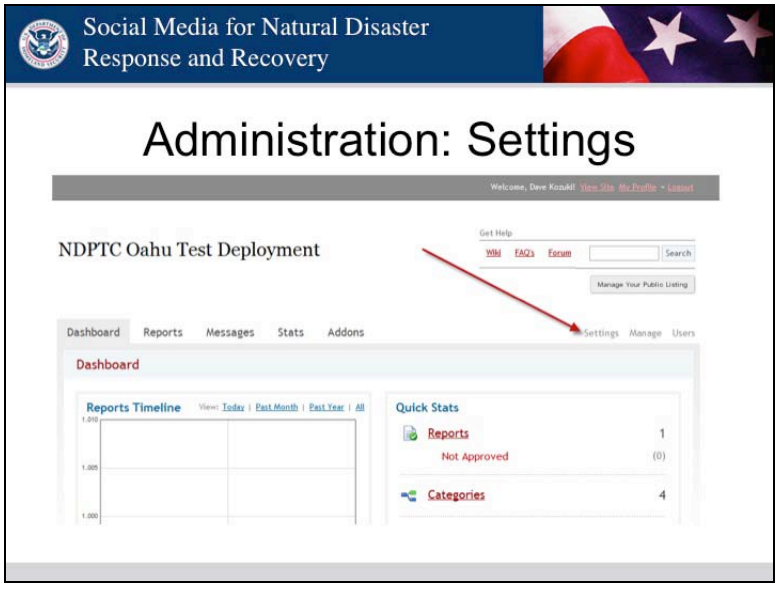


Slide 6-30. Administration: Dashboard

Participant Notes:

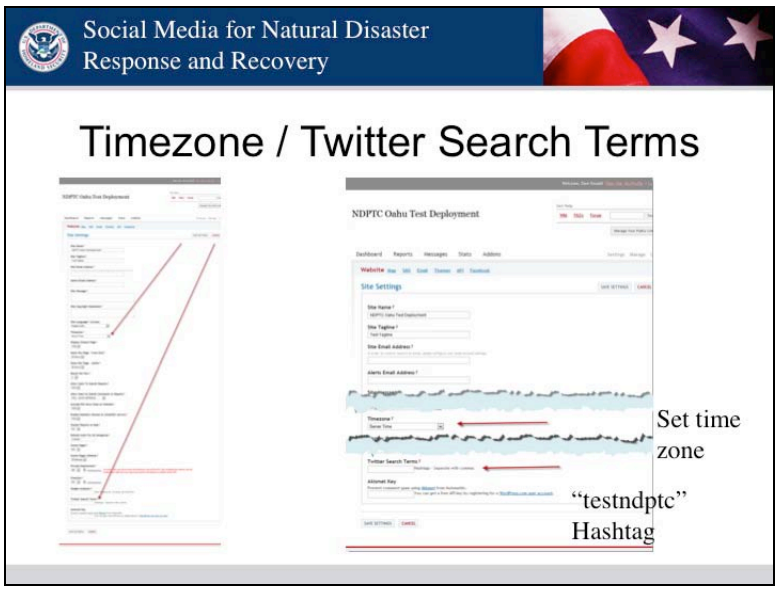


Slide 6-31. Standard configuration-Nairobi

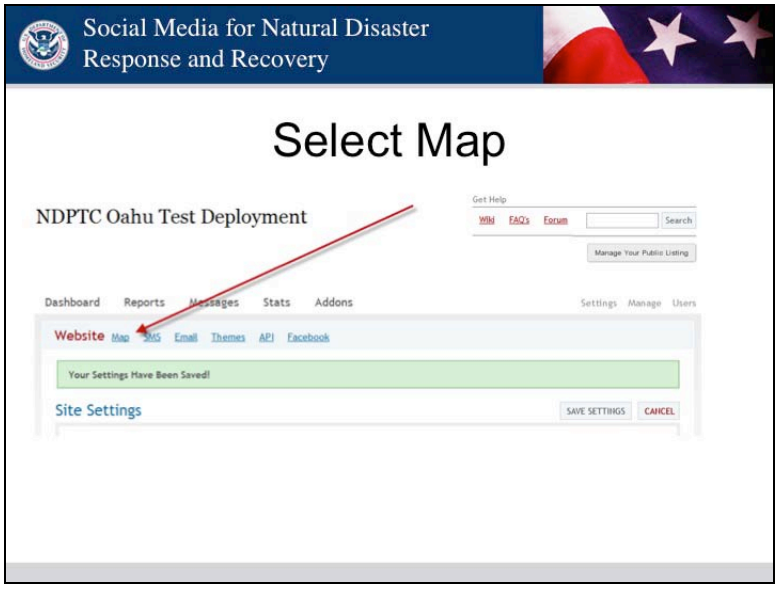


Slide 6-32. Administration: Settings

Participant Notes:

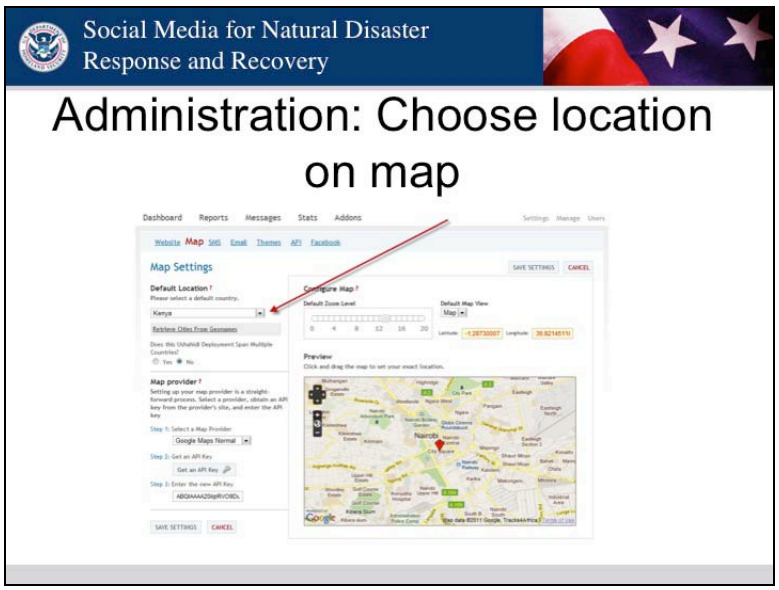


Slide 6-33. Timezone/Twitter Search Terms

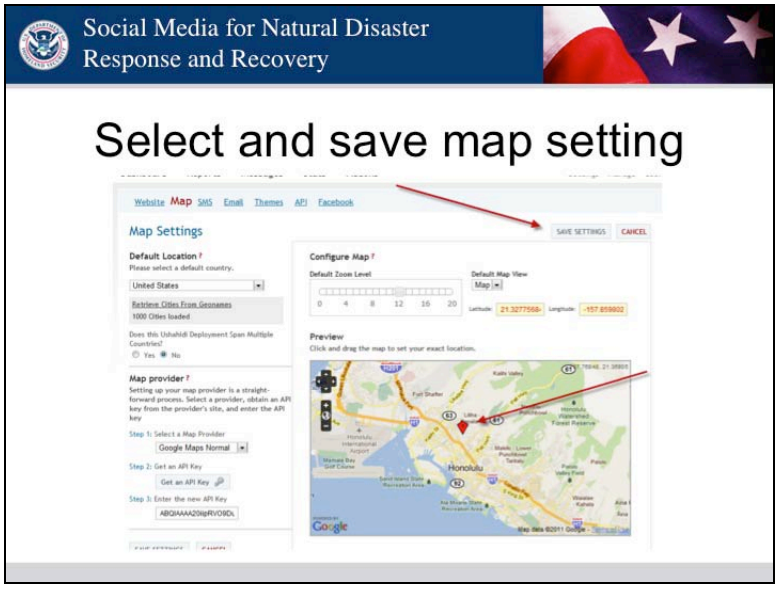


Slide 6-34. Select Map

Participant Notes:

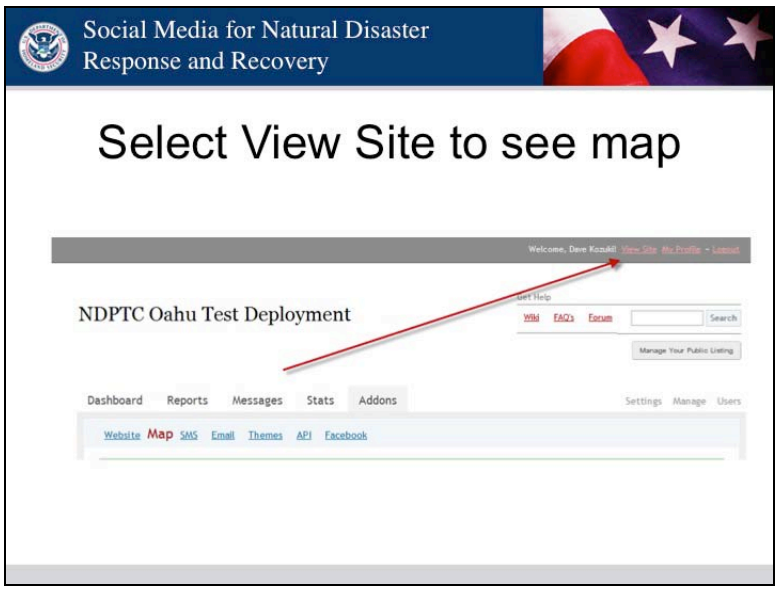


Slide 6-35. Administration: Choose location on map

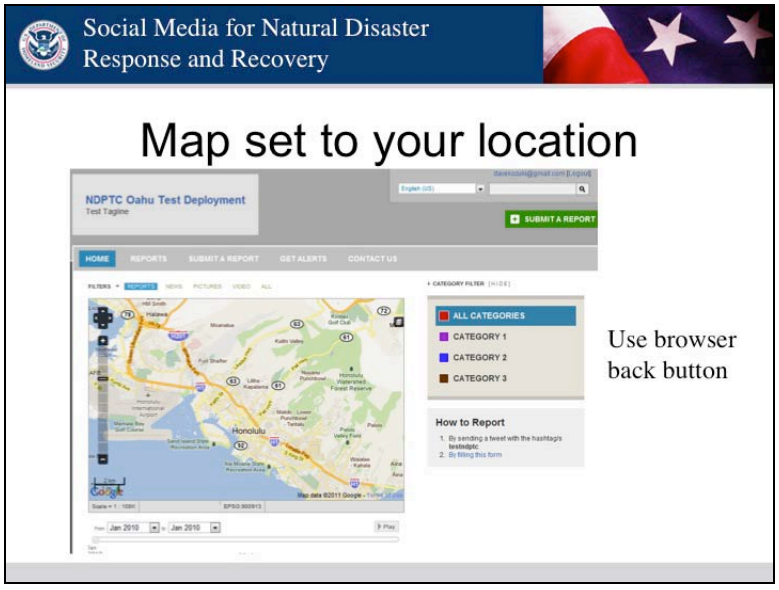


Slide 6-36. Select and save map setting

Participant Notes:

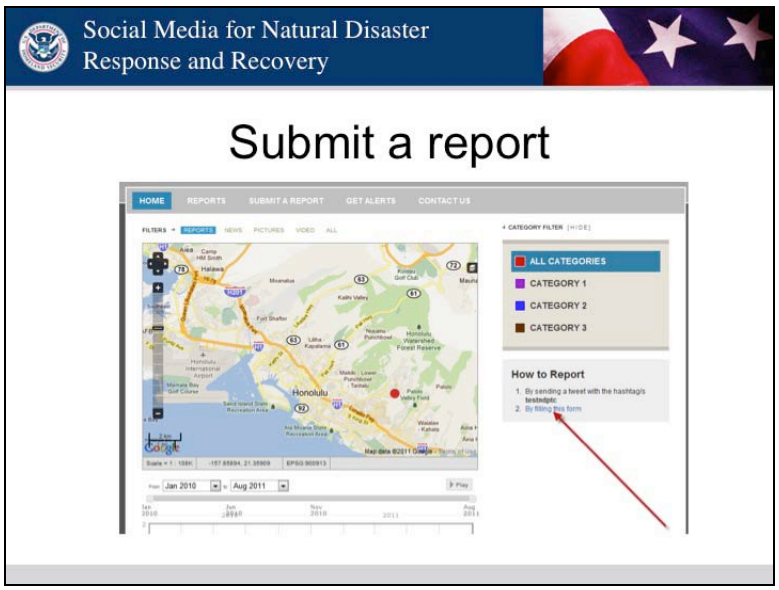


Slide 6-37. Select View Site to see map



Slide 6-38. Map set to your location

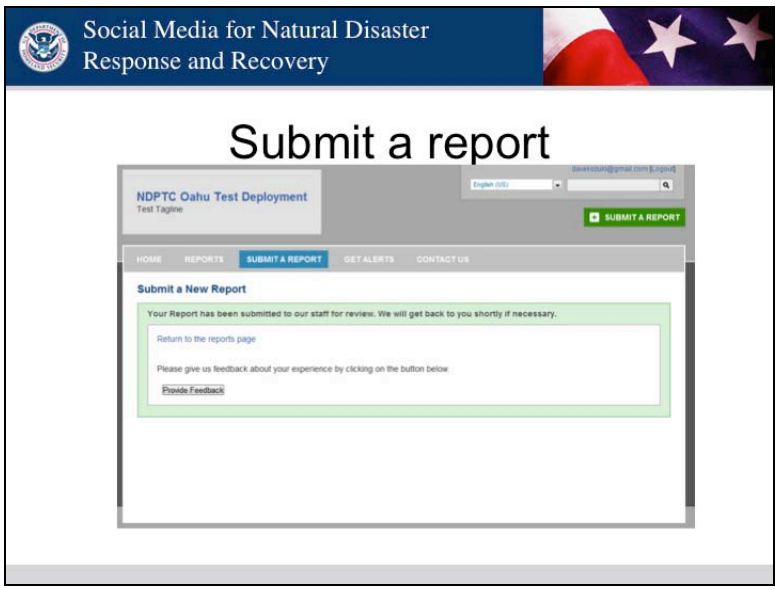
Participant Notes:



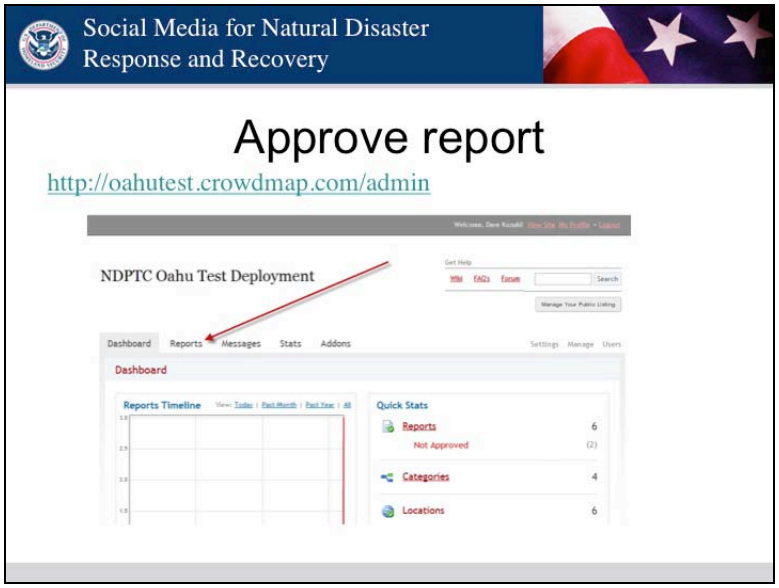
Slide 6-39. Submit a report

Slide 6-40. Submit a report

Participant Notes:



Slide 6-41. Submit a report



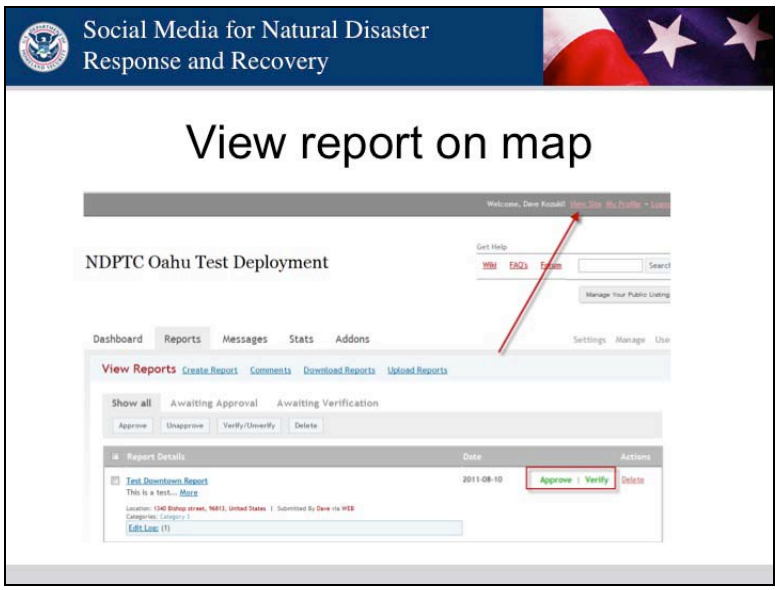
Slide 6-42. Approve report

Participant Notes:

Slide 6-43. Approve report

Slide 6-44. Approve report

Participant Notes:



Slide 6-45. View report on map

Slide 6-46. View report on map

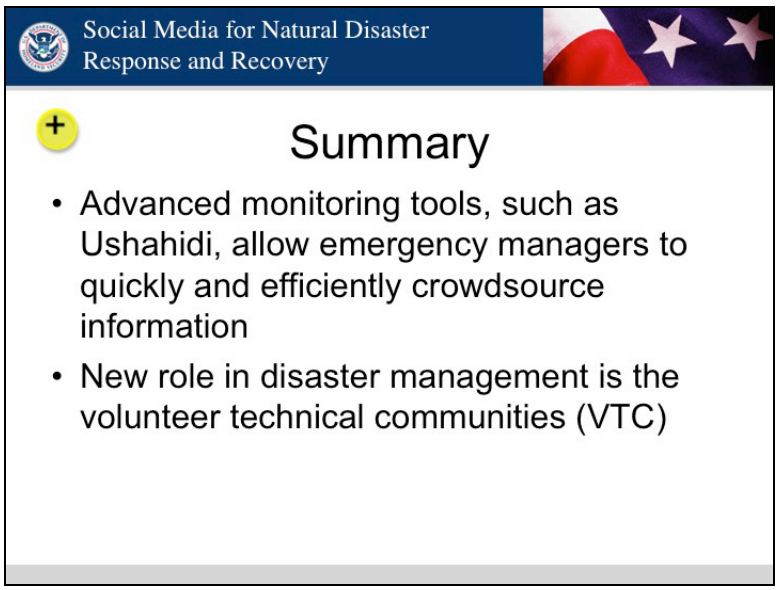
Participant Notes:

Slide 6-47. Resources

Participant Notes:

Slide 6-48. Resources

Participant Notes:



Slide 6-49. Summary

Social Media for Natural Disaster Response and Recovery

Module 7: Course Summary Administration

October 2011

FEMA

-This page is intentionally blank -

Module 7: Course Summary and Administration

Slide 7-1. Course Summary and Administration

Duration

1.0 hour

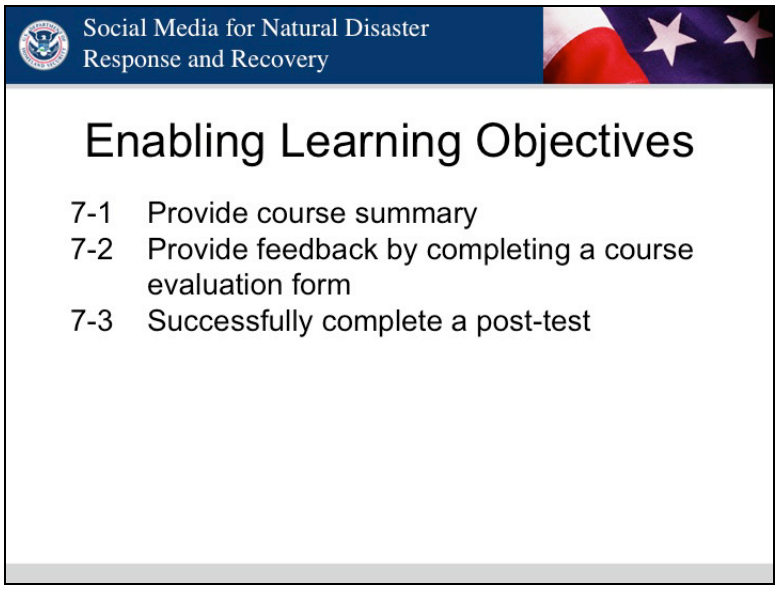
Scope Statement

Participants will complete a post-test and course evaluation form and provide feedback on the course instruction, content, and materials.

Terminal Learning Objectives (TLO)

Participants will complete a post-test and course evaluation.

Enabling Learning Objectives (ELO)



Slide 7-2. Enabling Learning Objectives

At the conclusion of this module, participants will be able to:

7-1 Provide course summary
7-2 Provide feedback by completing a course evaluation form
7-3 Successfully complete a post-test

Resources

- Module 7 presentation slides
- Laptop with presentation software installed and CD-ROM capability
- Wi-Fi Internet access
- Two audio-visual (A/V)
- Two projector screens
- Easel
- Easel pad
- Markers
- Instructor post-test (answer key)
- One per participant of the following item:
    - Participant Guide
    - Computers with Wi-Fi access

- Scannable test answer sheet
- Scannable course evaluation form
- Black pen

Instructor to Participant Ratio

1:25

Reference List

None

Practical Exercise Statement

Not Applicable

Assessment Strategy

- Post-test

Social Media for Natural Disaster Response and Recovery

Icon Map

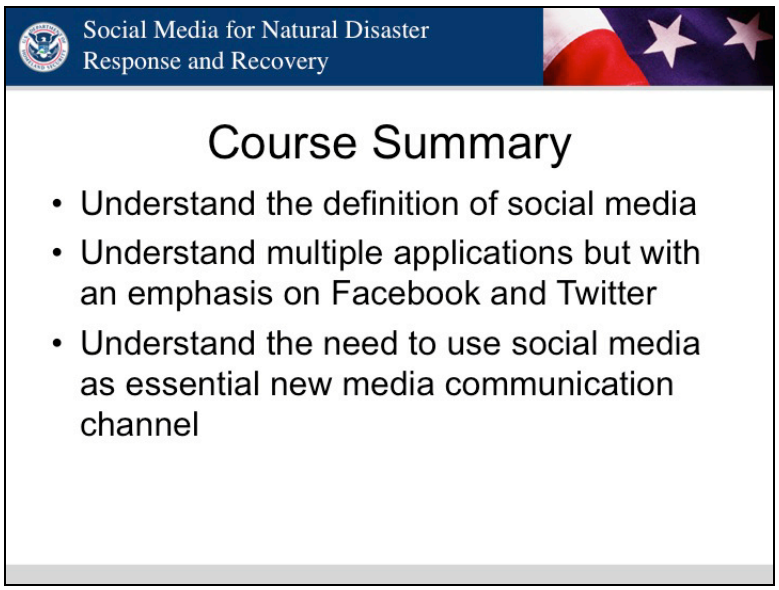
Knowledge Check: Used when it is time to assess the learners' understanding

Example: Used when there is a descriptive illustration to show or explain

Key Points: Used to convey essential learning concepts, discussions and introduction of supplemental material

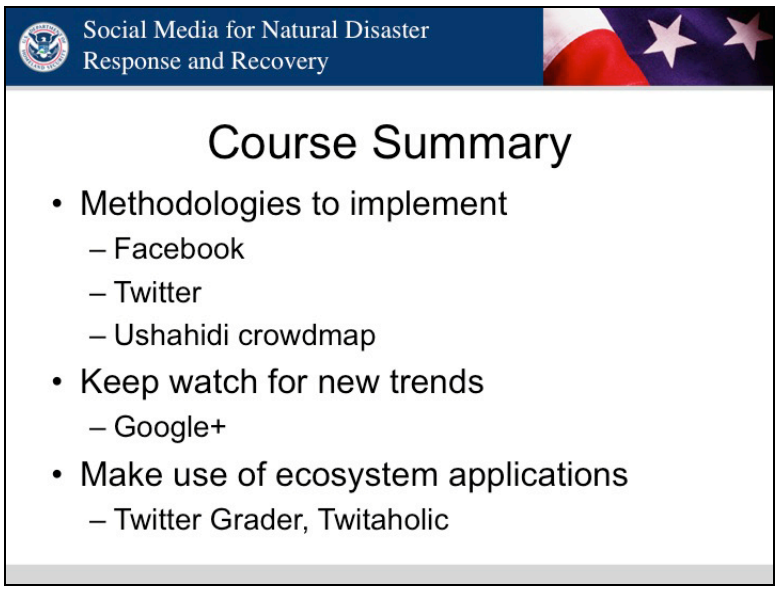
Hint: Used to cover administrative items or instructional tips that aid in the flow of the instruction

Participant Notes:



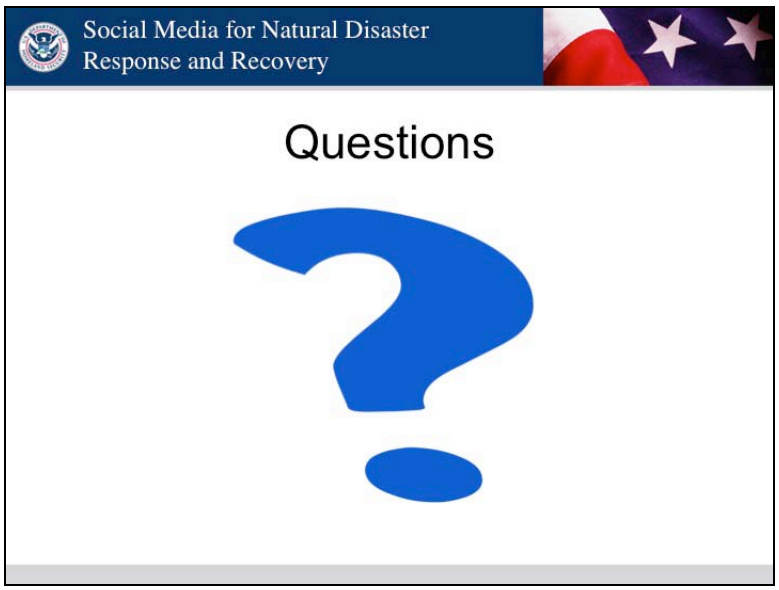
Slide 7-3. Course Summary

Participant Notes:



Slide 7-4. Course Summary

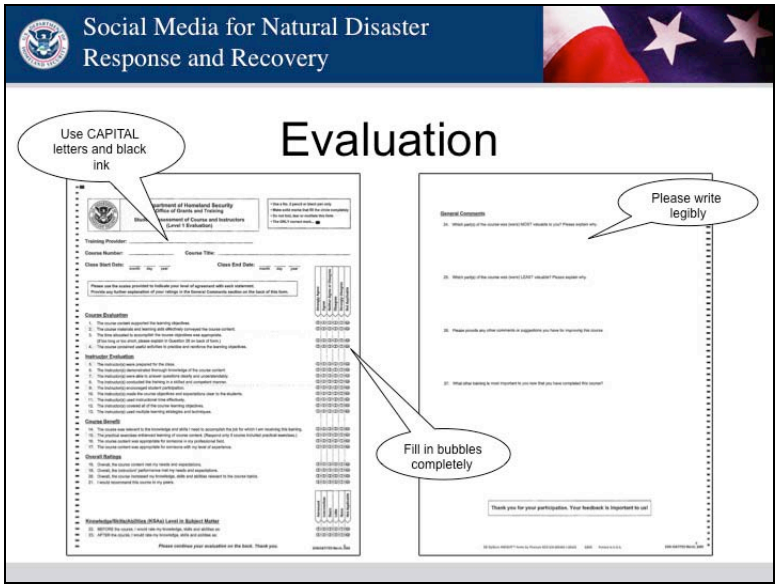
Participant Notes:



Slide 7-5. Questions

Now is the time to ask questions concerning course content.

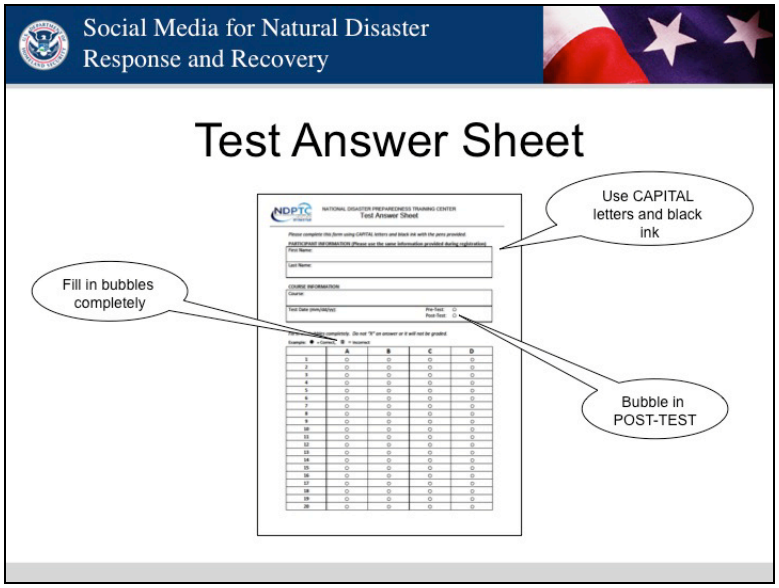
Participant Notes:



Slide 7-6. Evaluation

The NDPTC would like to obtain participant feedback on this course. For this reason, participants are asked to complete a scannable course evaluation form. Participant observations are extremely important in sustaining high-quality instruction and identifying how the course might be improved. Participants should answer these questions carefully.

Participant Notes:



Slide 7-7. Test Answer Sheet

Participants should follow these instructions as they take the post-test and indicate their answers on the scannable test answer sheet:

1. Use the black pens provided when filling out the scannable forms. If the pen runs out of ink or is not working well, request a replacement pen and discard the old one.
2. Use the correction tape dispensers provided to correct any errors.
3. Write clearly in uppercase letters.
4. Write each letter, number, or symbol in a separate box.
5. Use the same first name, last name, and date of birth provided on the scannable participant registration form. This information will be used to generate a unique ID number for each participant.
6. Complete the *Test Date* filed in the upper right hand portion of the sheet by writing the day the test is given.
7. Fill in the *Post-test* bubble.
8. Fill in each bubble completely and make sure the answers are correctly aligned on the scannable test answer sheet.
9. Write the test document ID number in the *Test Doc ID* field. (The ID number is located in the footer of the test handout.)

Participants have 20 minutes to complete the post-test.

Participant Notes:

Slide 7-8.

Social Media for Natural Disaster Response and Recovery

Appendix A: Practical Exercise Statements

October 2011

FEMA

-This page is intentionally blank -

Activity—Social Media optimization

Practical Exercise Statement

The exercise will allow participants to identify how social media can be incorporated into an organization and which social media platform matches their organization's needs.

Introduction:

Action to be Completed: Work with participants at your table to brainstorm ideas of how social media can be used in an organization. Then, work individually to list social media platforms that will best match your organization's needs.

Rationale: The purpose of this exercise is to have participants start thinking of ways that social media can be used in an organization, and more importantly, how social media can be incorporated to suit organizational goals.

Time Necessary to Complete: 15 minutes

Findings: This activity will help participants develop a list of ideas of how social media can be used in their organization, which will be useful to have when participants create social media accounts in the following modules.

Total Exercise Time: 15 minutes

Activity—Using Facebook

Participants should have created a Facebook account that will be shared with their organization or business prior to the start of the course.

Practical Exercise Statement

Introduction: Participants need to use Facebook accounts to create a Page for an organization or business. It is important that participants understand that creating a page from a personal Facebook account means that the Page they create will always be linked to their account. It is suggested that a new Facebook account be created and accessible by others in their organization or business. Creating an additional Facebook account may require a new e-mail account.

The following are examples of the functionality of Facebook:

- Status Updates to broadcast information to the public
- Comment Wall to interact with the public
- Discussions to facilitate two-way conversations

Action to be Completed: For this section, participants will follow along with the instructor:

- Create a page for your organization (upload logo, get fans, enter basic information)
- Edit information
- Share a link
- Comment on an Organization's Wall
- Send Friend Requests

Rationale: This activity will familiarize participants with the capabilities of Facebook to be a component of their organization's disaster management social media network.

Resources: Facebook website

Total Exercise Time: 20 minutes

Activity—Using Twitter

Participants should have created Twitter accounts that will be shared with their organization or business prior to start of the course.

Practical Exercise Statement

Introduction: Emergency managers can use Twitter (along with other social media platforms) to communicate and interact with the public. By building a disaster management social media network, emergency managers can increase their organization's reach to the public. A disaster management social media network serves as an additional tool to communicate to the public during emergency events. The following are examples of the functionality of Twitter:

- Broadcast information by tweeting
- Search for keywords using hashtags
- Follow geographically relevant people
- Re-tweet to broadcast information to more people
- Reply to a tweet to facilitate two-way conversations
- Send direct messages

Action to be Completed: For this section, participants will follow along with the instructor:

- Post a tweet using hashtags
- Follow another user
- Send direct messages
- Re-tweet
- Reply to a tweet

Participants should work individually to search for geographically relevant social media users to build a geographically-focused network. Use social media tools such as TwitterGrader, Twitaholic, and Advanced Twitter Search to identify the top social media users in your area and then following these users on Twitter.

Rationale: The purpose of this exercise is to familiarize participants with Twitter, learn about its capabilities, find geographically relevant social media contacts, build a network using social platforms with these contacts, and learn to use social media platforms to communicate with the public.

Resources: *Media Contact List* worksheet, Twitter, and sites with social media tools (i.e. TwitterGrader, Twitaholic, etc.)

Total Exercise Time: 30 minutes

Activity—Using tools to identify trends and monitor data

Practical Exercise Statement

Introduction: Data mining is a process of analyzing and summarizing data into useful information. The analysis of data through various tools can provide emergency managers with valuable information, which they can use to better understand and respond to ongoing events.

Action to be Completed: Follow along as shown on the screen to search for trends and patterns with disaster-related keywords. Work individually to search for historical data using social media online tools such as Twitter Advanced Search, Trendistic and The Archivist. Search for historical data for the following keywords:

- Earthquake
- Flooding
- Tsunami
- Hurricane
- Fire
- Storm

Rationale: The purpose of this exercise is to have participants search for historical data using social media online tools.

Findings: This activity will help participants understand online tools to conduct data mining.

Total Exercise Time: 30 minutes

Activity—Using advanced social media tools to monitor, conduct data mining, and crowdsource content

For this exercise, participants can follow along with the instructor by building their own Crowdmap installation or watch the instructor build one live.

Practical Exercise Statement

The exercise will demonstrate how to install and use Ushahidi to collect crowdsourced real-time data.

Introduction: Ushahidi is a platform that allows the public, or emergency officials, to submit information in order to get a visual representation of the emergency situation.

Action to be Completed: Watch instructor or follow along to set up a functional Ushahidi account via Crowdmap. Instructors will go through the following:

- Create crowdmap account
- Create map
- Set location
- Basic configuration
- Set Twitter hashtag
- Submit report
- Approve report

Rationale: The purpose of this exercise is to have participants understand the functions of Crowdmap and how it can be used during emergencies.

Total Exercise Time: 1 hour

-This page is intentionally blank -