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First Responder Communities of Practice
Virtual Social Media Working Group
Social Media Strategy
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by

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1 Introduction

Social media and collaborative technologies have become critical components of emergency preparedness, response, and recovery. From the international response efforts after major tsunamis to hurricane recovery in major U.S. cities, officials now turn to social media technologies to share information and connect with citizens during all phases of a crisis. Implementing these new technologies, however, requires that responding agencies adopt new communication strategies and engagement methods.

Recognizing the need to address these challenges, the U.S. Department of Homeland Security's Science and Technology Directorate (DHS S&T) established a virtual social media working group (VSMWG). The mission of the VSMWG is to provide recommendations to the emergency preparedness and response community on the safe and sustainable use of social media technologies before, during, and after emergencies.

Drawn from a cross-section of subject matter experts from federal, tribal, territorial, state, and local responders from across the United States, VSMWG members are establishing and collecting best practices and solutions that can be leveraged by responders throughout the nation's emergency response community. Below is a list of agencies to which the VSMWG members belong.

VSMWG Members' Agencies as of July 2011

- American Red Cross
- Bellingham [Washington] Fire Department
- Boca Raton [Florida] Police Department
- Boynton Beach [Florida] Police Department
- Charlotte [North Carolina] Fire Department
- City of Milwaukee [Wisconsin] Police Department
- City of Seattle [Washington] Public Utilities
- Clark [Washington] Regional Emergency Services Agency
- Fairfax County Office of Public Affairs [Virginia]
- Federal Emergency Management Agency (FEMA) Office of External Affairs
- Fort Bend County [Texas] Health and Human Services
- Johnson County [Kansas] Emergency Management Division
- Montgomery County [Maryland] Fire and Rescue
- Philadelphia [Pennsylvania] Office of Emergency Management
- Philadelphia [Pennsylvania] Department of Public Health
- Portland [Oregon] National Incident Management Organization, U.S. Forest Service
- North Dakota Citizen Corps, State Community Emergency Response Team (CERT)
- Rural/Metro [EMS] of San Diego [California]
- Show Low [Arizona] Fire Department

2 Purpose

The VSMWG developed this document with input from the public safety community through online engagement hosted on the DHS First Responder Communities of Practice portal and through online discussions via other social media channels between February and August of 2011. It is intended for use by all public safety disciplines and all types of agencies to better understand and utilize social media and other Web-based tools without having to “reinvent the wheel” or spend hours searching for examples or policy templates or use cases.

This document provides a high-level introduction to social media and its benefits for public safety, examples and best practices from agencies already using social media, and serves as a starting point for developing an agency’s detailed social media strategy. The VSMWG has also developed a Next Steps document as follow up to this Social Media Strategy, which provides considerations and detailed next steps for public safety agencies on developing and implementing social media.

The purpose of this document is to:

- Provide an introduction and general understanding of how social media and Web-based technologies can be used for public safety in a strategic way;
- Provide recommendations and use cases for agencies that are interested in developing social media programs within their agencies; and
- Introduce the use of social media for public safety and provide additional materials regarding the challenges associated with implementing social media into existing methods (for more on this, see Section 5: Next Steps).

Examples included in this document are not intended to serve as an all-inclusive list, but rather to provide a brief listing of agencies that use social media for public safety purposes. For more information on these topics and additional resources, please visit DHS First Responder Communities of Practice (www.communities.firstresponder.gov).

3 Benefits of Social Media for Public Safety

Social media provides a number of important benefits for public safety. These benefits are noted and elaborated upon below.

3.1 Facilitating Direct Agency Engagement within a Community

The federal government places a strong emphasis on improving local community disaster resiliency and response capabilities. In his May 5, 2011 statement to the Senate Committee on Homeland Security and Governmental Affairs, Subcommittee on Disaster Recovery and Intergovernmental Affairs: [“Understanding the Power of Social Media as a Communication Tool in the Aftermath of Disasters.”](#) FEMA administrator Craig Fugate stated:

“Communication in and around a disaster is a critical, life-saving part of FEMA's mission. Social media provides the tools needed to minimize the communication gap and participate effectively in an active, ongoing dialogue. Social media is an important part of the "Whole Community" approach because it helps to facilitate the vital two-way communication between emergency management agencies and

the public, and it allows us to quickly and specifically share information with state and local governments as well as the public.”

Social media tools provide a means to reach both goals, and offer a great opportunity if used to their fullest during emergencies. Agencies can use social media for two general types of activities:

- Engaging in sustained conversation with the community, preparing them to become more resilient in disasters and other emergencies before they occur. It also helps to increase the visibility of the agency and the likelihood the community will engage in dialogue with the agency, as well as seek out the agency and provide it with information during an emergency through agency channels.
- Gathering, analyzing, and quantifying real-time intelligence and information about an emergency from community members who use social media tools. By monitoring social media, agencies may be able to gather real-time information, including citizen observations from the field, requests for help, opinions, and rumors.

3.2 Creating Trust, Credibility, and Relationships Directly with Your Community

Social media can provide mechanisms beyond those discussed above to help organize community engagement. In recent events, individuals and community organizations used social media for communications and donation/volunteer organization immediately following a disaster. For specific examples of agencies using social media for public safety, please see Section 4.3: Social Networking.

Agencies can tap into community efforts to save resources and time by leveraging existing networks, encouraging participation from the community and official response organizations, and ensuring information shared is accurate.

3.3 Providing Situational Awareness about Emergency Events and Partnership Opportunities

Through mobile technology, the public shares comments, pictures, and on-the-scene detailed information about an event as it unfolds. Agencies can benefit from drawing upon this source of information. However, social media provides an unfiltered view of the comments, and the perceptions it passes on may be far from perfect. Nevertheless, social media is self-correcting, meaning that users often correct inaccurate information posted by other users. Social media self-correction can reduce the number of rumors agencies need to control throughout the course of an event.

In addition, by engaging with other professional colleagues or following local community members via social media, agencies can find out about relevant events, enabling them to partner with others working on relevant projects and efforts.

3.4 Providing an Additional Method to Disseminate Emergency Public Information

Agencies can leverage social media channels to broadcast emergency public information. Social media is growing in popularity among many demographic groups, and is now easily accessible via both computers and mobile phones.¹

With a growing portion of the public owning mobile devices and smartphones with Internet access, agencies have new opportunities to directly reach the community and mobilize members of the public to share messages within their own networks. Social networking enables the public to easily pass on warnings (in various file formats) to their networks, which can include thousands of people. This is a substantial benefit, since people are more likely to take action when receiving an alert or warning from a trusted friend or family member.

Additionally, social media may provide additional channels for information dissemination within African Americans and Hispanic groups. A study jointly conducted in 2010 by Georgetown University’s Center for Social Impact Communications and Ogilvy Public Relations Worldwide found that “nearly one in three African-American adults (30%) and four in ten Hispanics (39%) say they are more likely to support a cause or social issue online than offline today, both significantly higher percentages than Caucasians (24%).” The study also found that ethnic minorities frequently use social networking to gather and share information about social causes in addition to traditional media sources, such as television and radio.²

Incorporating social media outreach into an agency's pre- and post-emergency public information campaigns effectively casts a wider net, reaching a greater number of individuals with preparedness and warning messages.

Social media is also another way to alert and warn the public. Alerts and warnings sent via social media sites can potentially reach more people, in more places, in less time. One of the most important aspects to an agency’s alert and warning program is the ability to be able to reach as much of their community as possible with their messages. The addition of social media into such a program expands the base of the public who will either receive the alert and/or get verification of an alert they received via another medium (such as TV, radio, or cell phone).

Developing a successful capability to issue alerts and warnings via social media requires taking into account five core elements:

- Community awareness;
- Governance;
- Partnerships;
- Resources; and
- Usage.

¹ <http://www.pewinternet.org/Reports/2010/Mobile-Access-2010/Summary-of-Findings.aspx>

² <http://www.diversebusinessnews.com/?p=939>

To learn more about these core elements, please visit the DHS-created “Alerts and Warnings using Social Media” guide, available on the “Make America Safer” community on the First Responder Community of Practice.³

3.5 Providing Evaluation of Public Information

Social media offers real-time evaluation and feedback on released emergency information. As the general public engages with information about the emergency, public safety or information officials can receive feedback on whether messaging is confusing, if the information has been rejected for particular reasons, or if the information requires additional clarification.

Social media tools also allow agencies to solicit feedback directly from the community. Public information sent via social media can enable a two-way flow of communication between agencies and communities. Community members can alert agencies of positive and negative aspects of information received (e.g., the information is confusing, incorrect, etc.). Agencies can also solicit feedback from the public during an emergency, capturing valuable lessons on improving the efficiency of public information distribution.

3.6 Allowing Your Community to Engage in Solving Problems

The public has an interest in being helpful during emergency situations, and they are often the first responders on the scene. Community resiliency and the ability to withstand and rebound from emergencies are improved by individuals who can solve problems at the lowest level possible.⁴ Social media can help engage and empower individuals from all layers of society to address response and recovery needs, sometimes even without government involvement. If agencies effectively leverage social media and traditional channels to communicate the needs of an emergency situation with the public, this empowers the public to develop and implement solutions on their own. If the community is empowered to actively participate in a response, it will then continue to find ways to actively cope with hardships, mobilize, and solve problems, making the transition to recovery occur more quickly.

3.7 Using Social Media to Meet Public Expectations

The public now expects to discover and share information via social media during an emergency. A survey conducted by the Red Cross in August 2010 found that the respondents expected social media to be used by response agencies in emergencies.⁵ Refraining from participating in this trend may cause agencies and the information they share to become obsolete.

4 Social Media Technologies and Public Safety

Recent events have illustrated the benefit of public safety agencies and the public using social media throughout the course of a disaster. Technologies like Twitter, SMS (Short Message Service), Facebook, YouTube, Flickr, and various Websites and mapping tools have been used by agencies and the public for a variety of purposes, including employee accountability, information sharing and dissemination with the public and the field, situational awareness,

³ <https://communities.firstresponder.gov/web/make-america-safer-through-social-media/wiki/-/wiki/Main/Alerts+and+Warnings+Using+Social+Media>

⁴ Presidential Policy Directive #8, http://www.dhs.gov/xabout/laws/gc_1215444247124.shtm

⁵ <http://www.scribd.com/doc/40080608/The-Path-Forward-ARC-Crisis-Data-Summit-Wrap-Up>

misinformation management, improving decision making, locating individuals after an event ("reconnection"), donation solicitation, and volunteer management. Moreover, this list will grow as technology advances.

Figure 1, below, gives a snapshot of the social media tools and how they were used by public safety agencies during recent disasters.

Figure 1: Social Media Tools Used by Agencies During Recent Disasters by Application⁶

	Information Sharing (One Way)	Information Sharing (Two Way)	Situational Awareness	Misinformation Management	Decision Making	Reconnection	Donations	Volunteer Management
Twitter.com (and Twitter API)	X	X	X	X	X	X	X	X
Facebook	X	X	X	X	X	X		X
SMS (Mobile Texting)	X						X	
Photo-Sharing (Flickr, etc.)	X	X	X		X			
Video-Sharing (Youtube, etc.)	X	X	X		X			
Websites	X			X				
Mapping		X	X		X			
Google Person Finder						X		
Blogs	X	X	X	X	X	X		X

Further details on these tools and their uses follow.

4.1 SMS (Mobile Texting)

Agencies can use SMS technology for information sharing and donation solicitation. SMS provides a means for one-to-one or group messaging via a single channel (mobile phones). The technology is not as conducive for situational awareness, decision making, or reconnection as other tools listed in Figure 1. However, it can be very helpful in disseminating brief, to-the-point messages intended for a specific individual or group. For example, the American Red Cross used SMS technology to collect donations immediately following the 2010 Haitian earthquake. Individuals could text "HAITI" to 90999 to donate \$10 to the Red Cross. Donations were made

⁶ Figure 1 represents a sample of events and how specific technologies were used in each. Technologies may be useful for other purposes. Events from which this data was taken include the California wildfires (2007), the San Bruno gas explosion (2010), the Haiti earthquake (2010), the Boulder fires (2010), the Japan earthquake (2011), the Alabama tornado outbreak (2011), Mississippi River flooding (2011), and the Missouri tornado outbreak (2011).

by cell phone companies on behalf of the users, and the \$10 was included in each user’s monthly cell phone bill.⁷

Universities use SMS to send alerts and instructions to students regarding emergencies affecting the campus and surrounding areas. Examples include:

- University of South Florida, MoBull Messenger: <http://www.mobull.usf.edu/>
- University of Texas at Austin: <http://www.utexas.edu/emergency/>
- University of Utah: <http://www.campusalert.utah.edu/faq-sms.htm>

Many government agencies use SMS to provide notifications during incidents and emergencies as well. Examples include:

- Colorado Division of Emergency Management: <http://dola.colorado.gov/dem/sms.htm>
- District of Columbia, Alert DC: <https://textalert.ema.dc.gov>
- Iowa City: <http://www.iowa-city.org/icgov/apps/subscribe/>
- New Orleans Community Alert System: <https://www.nolaready.info/index.php?CCheck=1>
- NOAA National Weather Service, iNWS: <http://inws.wrh.noaa.gov/Philadelphia>
Community Alert System: <https://phila.alertpa.org/index.php?CCheck=1>

It is important to note that SMS communications plans are typically opt-in; agencies may have difficulty encouraging participation within a community. Additionally, during an emergency, individuals may not receive SMS messages in a timely manner should local cell phone towers be overloaded. Like all communications channels, SMS should be used in conjunction with other outreach tactics including Websites, micro-blogging, social networking sites, and other social media channels.

4.2 Twitter (Micro-Blogging)

Twitter is a micro-blogging service that enables individuals to send and receive shortened messages (140 character limit) via mobile phone, e-mail, SMS, API (Application Programming Interface),⁸ and the Twitter Website. Users can search for messages pertaining to a specific topic by entering key words or hash tags.⁹ Twitter “followers” receive updates sent from those accounts they follow in real time.

Twitter also offers a feature called Fast Follow, whereby individuals not using Twitter or without a Twitter profile can receive SMS updates from a Twitter profile. By texting “Follow @(agency profile name)” to 40404, individuals will receive all updates from an agency profile of their choice via SMS.

⁷ http://american.redcross.org/site/PageServer?pagename=ntld_nolnav_text2help

⁸ API is an interface that allows computer software to communicate across platforms, enabling integration features and mobile applications

⁹ A hashtag is a keyword demarked by a “#” or “hash” sign, signifying a Tweet’s topic. Hashtags are ad-hoc categories that can help make a Tweet more discoverable by others searching for specific information.

Twitter is an effective way to keep in touch with your community, search for information shared about your agency and jurisdiction, and a great way to allow non-Twitter users who are key officials to stay in the loop (e.g., the mayor of a town, an incident commander).

While Twitter enables multi-directional information-sharing and is conducive to agencies monitoring online discussion for situational awareness and decision-making, the service does have limitations, from service disruptions to a high volume of data which makes it difficult to sift through non-important information. These limitations make it important for agencies to incorporate several methods of communications.

A few Twitter tips:

- Follow partner agencies, organizations, and the media, as well as community influencers and leaders. Often those you follow will in turn follow you. Following others can help grow your group of followers, making it easier to disseminate information quickly.
- Keep information short and to the point but keep it interesting. Post information that's relevant, timely and actionable; always include a link back to your agency's Website and other agency social media platforms.
- Maintain awareness of what is being said by setting up searches via a Twitter application like Tweet Deck. Keeping track of information shared about your agency will help detect rumors and misinformation quickly and make it easier to correct misinformation before it spreads.

Examples of agency Twitter profiles include:

- Boston Fire Department (@BostonFire)
- Craig Fugate, FEMA (@CraigatFEMA)
- FEMA (@Fema)
- Fairfax County (@fairfaxcounty)
- Johnson County Emergency Management (@joco_emergency)
- Los Angeles County Department of Public Works (@LAPublicworks)
- Massachusetts Bay Transportation Authority (MBTA) (@MBTAnow)
- New York State Office of Emergency Management (@nysemo)
- Oklahoma County Sheriff (@OkCountySheriff)
- Ready.Gov (@readydotgov)
- Red Cross (@RedCross)
- San Francisco Department of Public Works (@sfdpw)
- San Francisco Police (@SFPD)
- Washington Metropolitan Authority of the State of New York (MTA) (@mtainsider)
- U.S. Centers for Disease Control and Prevention (@CDCgov)

4.3 Social Networking Sites

Agencies can use Facebook and other social networking sites (e.g., Govloop, LinkedIn, Myspace, Google+, etc.) as additional sources for the dissemination of emergency public information. Individuals can follow an agency's profile and sign up to receive notifications even when they are not logged into the site.

Agencies can also leverage site features like comments and discussion boards to encourage engagement, information sharing, and interaction within the community and between the community and official response agencies. Many social networking sites provide members the ability to develop their own groups. Such groups could facilitate the coordination of volunteer efforts, which would assist in repatriation and reunification efforts after an event.

Examples of agency social networking sites include:

- California Emergency Medical Services Authority (EMSA): <https://www.facebook.com/pages/California-Emergency-Medical-Services-Authority-EMSA/71895556641>
- Charlotte Fire Department: <http://www.govloop.com/profile/CharlotteFireDepartment>
- City of Boulder: <http://www.facebook.com/bouldercolorado.gov>
- Department of Defense Military Health System: <http://www.govloop.com/group/militaryhealth>
- Fairfax County: <http://www.facebook.com/fairfaxcounty>
- Federal Bureau of Investigation (FBI): <http://www.linkedin.com/company/fbi>
- International City/County Management Association: <http://www.linkedin.com/company/icma>
- Los Angeles Fire Department: <http://www.govloop.com/profile/LosAngelesFireDepartment>
- Massachusetts General Hospital: <http://www.linkedin.com/company/massachusetts-general-hospital>
- National Institutes of Health: <http://www.govloop.com/group/nih>
- National Oceanic & Atmospheric Administration: <http://www.linkedin.com/company/noaa>
- National Oceanic & Atmospheric Administration (NOAA) National Hurricane Center: <https://www.facebook.com/US.NOAA.NationalHurricaneCenter.gov>
- Sibley Memorial Hospital: <http://www.linkedin.com/company/sibley-memorial-hospital>
- Tennessee Emergency Management Agency: <https://www.facebook.com/TNDisasterInfo>

The Department of Homeland Security Science and Technology Directorate First Responder Group developed First Responder Communities of Practice (www.communities.firstresponder.gov), a professional networking, collaboration, and communication platform. The site helps to support improved collaborating and information sharing amongst the nation's First Responders and other Federal, State, Tribal, Territorial, and Local governments supporting homeland security efforts. The vetted community focuses on emergency preparedness, response, recovery, and other homeland security issues.



Volunteer organizations and spontaneous groups have also leveraged social networking sites for collaboration and information and resource sharing during and following disasters. These groups often form in an ad hoc manner and are unaffiliated with any official response agency. Response officials should conduct searches on social networking sites and through search engines to discover any such ad hoc organizations and groups, to both identify potential partnerships and discover potentially malicious efforts.

Examples of volunteer organizations on social networking sites include:

- Alabama Tornadoes: <https://www.facebook.com/PicturesandDocumentsfoundafterAprilTornadoes>
- Joplin Tornadoes: <http://www.facebook.com/joplinmo>
- Save the Gulf of Mexico: <https://www.facebook.com/SaveTheGulfOfMexico>

4.4 Photo-Sharing

Many agencies set up profiles on photosharing Websites (e.g., Flickr, Twitpic, Shutterfly, Picasaweb, etc.), and encourage the public to post photos from the field, including response and recovery activities. These photographs paint a picture for responders and the public of events and efforts at the ground level. Examples include:

- International Committee of the Red Cross (ICRC): <http://www.flickr.com/photos/ifrc/sets/72157623207618658/>
- Fairfax County: <http://www.flickr.com/groups/fairfaxprepares/>
- Tennessee Emergency Management Agency: http://www.flickr.com/photos/t_e_m_a
- Virginia Department of Emergency Management: <http://www.flickr.com/photos/vaemergency/>
- Rhode Island Emergency Management Agency: <http://www.flickr.com/photos/rhodeislandema/>
- U.S. Coast Guard: http://www.flickr.com/photos/coast_guard/
- California Emergency Management Agency: <http://www.flickr.com/photos/calemaphotos/>

- American Red Cross: <http://www.flickr.com/groups/americanredcross/>
- Denver Police Department: <http://www.flickr.com/groups/denverpolice/>
- Salvation Army: <http://www.flickr.com/photos/salvationarmy>
- Boston Fire Department: <http://twitpic.com/photos/BostonFire>
- Maple Bluff [Wisconsin] Fire Department: <http://picasaweb.google.com/MapleBluffFireDepartment>
- Elk River [Minnesota] Fire Department: <http://picasaweb.google.com/elkriverfire>
- Cumberland County Sherriff’s Department: <http://ccsheriff.shutterfly.com>
- Wyckoff Fire Department: <http://wyckofffire.shutterfly.com>

4.5 Video Sharing

Given the explosion in availability, capability, and popularity of mobile video recording technology, individuals in a disaster are often able to capture video recordings of emergencies first-hand and publish them to popular video-sharing Websites like Youtube.com and Vimeo.com before response agencies or the media deploy. These videos are an excellent way to capture real-time information for situational awareness from the field. In addition, videos can be very useful for sharing preparedness information, often providing context not easily communicated via text.

Examples of video sharing sites used by agencies include:

- Boise Police Department: <http://www.youtube.com/user/boisepolice>
- Columbus Public Health: <http://www.vimeo.com/user1159390>
- Federal Emergency Management Agency: <http://www.youtube.com/user/FEMA>
- Florida Division of Emergency Management: <http://www.youtube.com/user/FloridaSERT>
- Gainesville Police Beat: <http://www.vimeo.com/user3764505>
- Los Angeles Fire Department: <http://www.youtube.com/user/LAFD>
- Las Vegas Police Department: <http://www.youtube.com/user/LasVegasPolice>
- Mississippi Emergency Management Agency: <http://www.youtube.com/user/MSEMAorg>
- Polk County (IA) Emergency Management: <http://www.youtube.com/user/PolkCoIaEmergMgt>
- U.S. Centers for Disease Control and Prevention: <http://www.youtube.com/user/CDCStreamingHealth>
- U.S. Department of Homeland Security: <http://www.youtube.com/user/ushomelandsecurity>
- West Fargo Police: <http://www.vimeo.com/wfpd>

4.6 Mobile Web and Mobile Apps

According to a recent report from Nielsen, one in two Americans will own a smartphone by the end of 2011, compared with just one in 10 during 2008. For the first time in the United States, there will be more smartphones than feature phones in use. In the fourth quarter of 2010, smartphones outsold computers for the first time ever. By 2013, mobile data traffic will increase 66 times.¹⁰ Therefore, expanding into mobile-friendly Websites and mobile phone applications ("apps") is an excellent way to reach a large segment of the population.



For example, the San Ramon Valley [California] Fire Department (left) has an iPhone app that provides a window into the San Ramon Valley's 9-1-1 dispatch center, giving users real-time access to emergency activity occurring in the community.¹¹

The government of Fairfax County, Virginia also has an iPhone/iPad and Android app (right), which includes an emergency information section, as well as direct links to mobile versions of all official government social media accounts.¹²



Other examples of mobile applications created for public safety agencies include the following:

- Broward County [Florida] Damage Assessment Tool: <http://gis.broward.org/damage/>
- Damage Mitigation and Recovery Kit (DMARK): <http://gisweb.apsu.edu/dmark>
- Disaster Readiness app, which provides general preparedness info: <http://itunes.apple.com/us/app/disaster-readiness/id356750923?mt=8>
- ESRI's Public Safety Damage Assessment Template for ArcGIS 10: <http://www.arcgis.com/home/item.html?id=8c175986354046cc801757d47372c3da>
- FEMA Preparedness App: <https://market.android.com/details?id=gov.fema.mobile.android>
- Loqi.me app: <http://www.emergency-response-planning.com/news/bid/38564/An-App-for-Disaster-Relief>
- Mobile World Disaster News, a general news app focused on disasters: <http://www.apple.com/webapps/news/mobileworlddisasternews.html>

¹⁰ <http://blog.nielsen.com/nielsenwire/consumer/smartphones-to-overtake-feature-phones-in-u-s-by-2011/>

¹¹ <http://itunes.apple.com/us/app/fire-department/id376052787?mt=8>

¹² <http://itunes.apple.com/us/app/fairfaxcounty/id440217640> and https://market.android.com/details?id=appinventor.ai_yi_tang_1817.Fairfax

- My Crisis Record app: <http://www.mobilemarketingwatch.com/new-mhealth-crisis-management-technology-platform-launches-at-2011-asian-wireless-healthcare-summit-14155/Sparkrelief>, which connects people in disasters to help each other: <http://help.sparkrelief.org/#>
- Open Shelters App: <http://itunes.apple.com/us/app/open-shelters/id389296997?mt=8> Pacific Disaster Center's World Disaster Alerts: <http://itunes.apple.com/us/app/disaster-alert-pacific-disaster/id381289235?mt=8> Red Cross Shelter App: <http://itunes.apple.com/us/app/american-red-cross-shelter/id419258261?mt=8>
- Red Cross First Aid App: <https://market.android.com/details?id=com.sharecare.sos>

4.7 Websites

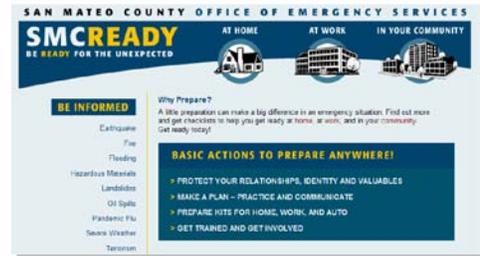
For some time, public safety agencies and response organizations have used Websites as a central location for posting preparedness and critical life-saving information before, during, and after emergencies. As the use of social media continues to grow, agencies should continue maintaining traditional forms of communication, including Websites, as a central point for information, while also leveraging social media tools to reach additional audiences and provide links back to the central Website.

An agency Website should include information and links to all of their corresponding social media profiles. Websites can be used to provide static information, such as preparedness and recovery contact information, recommendations, etc., as well as alerts, updates, and other critical information. When designing or updating an agency Website, important considerations include:

- Adding and linking social media profiles to a central Website;
- Ensuring that commenting policies are posted, so the public understands what information can be shared, what may be deleted, etc.;
- Ensuring the Website can be viewed adequately on a mobile browser;
- Evaluating your Website for Americans with Disabilities (ADA) and Section 508 compliance requirements; and
- Ensuring that document attachments to your Website are compatible with both Windows and Macintosh-based systems.

Below are examples of response agencies' Websites and what they provide the public.

The San Mateo County [California] Office of Emergency Management Website (<http://www.smcready.org/>) allows the public to search for information depending on their location (home, work, within the community); learn about preparedness, response, and training; and quickly link to information about a variety of event types.



The Louisiana Governor's Office of Homeland Security and Emergency Preparedness Website (<http://www.gohsep.la.gov>) allows the public to quickly find information about preparedness, response, and recovery, link to partner sites, sign up for notifications via SMS, follow the @GOHSEP Twitter account, and view calendar events and press releases and recent news.

The City of San Francisco [California] Department of Emergency Management Website (<http://www.sfdem.org>) allows the public to quickly link to information on preparedness, city programs, plans, and reports, the Department's social media profiles, and agency partners. Site visitors can also learn about the city's 311 service and important 911 facts.



The Mississippi Emergency Management Agency Website (<http://www.msema.org/>) allows the public to quickly sign up for the Department's various social media profiles, learn about state disaster declarations, report damage, donate, read recent news, and learn about different types of hazards, including how to prepare, respond to, and recover from each. The site also includes links to partner agencies and Websites.

Other agencies that use Websites to interact with the public include:

- Boca Raton [Florida] Police: <http://www.ci.boca-raton.fl.us/police/>
- Brevard County Office of Emergency Management: <http://embrevard.com/>
- Charlotte [North Carolina] Fire Department: <http://charneck.org/city/charlotte/fire/Pages/default.aspx>
- Mesa [Arizona] Fire Department: <http://mesaz.gov/fire/>
- University of Texas, Austin Campus Police: <http://www.utexas.edu/police/>

4.8 Mapping

Many agencies now leverage mapping technologies such as Ushahidi, Google Earth, and other tools for crowd-sourcing and gathering information and/or data feeds from the field and for the purposes of visualization and enhanced situational awareness.

Examples of mapping in recent disasters include the following:

- Alabama Tornadoes: <http://recoveryalabama.com/>
- Australia Flooding Map: <http://www.esri.com/services/disaster-response/australia-flooding-map-2011/response-map.html>
- Chilean Earthquake 2010: <http://googlemapsmania.blogspot.com/2010/02/google-maps-of-chile-earthquake.html>
- Christchurch, New Zealand Earthquake 2011: <http://www.christchurchquakemap.co.nz/>
- Deepwater Horizon Oil Spill: http://response.restoration.noaa.gov/dwh.php?entry_id=809
- Haiti Earthquake: <http://haiti.ushahidi.com/>
- Wallow fire in Arizona: <http://www.inciweb.org/incident/2262/>
- Indonesia Volcano Eruption 2010: <http://www.esri.com/services/disaster-response/volcanoes/indonesia/index.html>
- Mississippi River Flooding: <http://www.esri.com/services/disaster-response/floods/latest-news-map.html>
- San Bruno Fire: <http://sanbrunofire.crowdmap.com/>

4.9 Google Person Finder

In response to the 2010 Haiti earthquake, a volunteer group of Google engineers developed Google Person Finder, an open-source Web application that provides a registry and message board for survivors, family, and loved ones affected by disasters. Individuals can visit the disaster's Website (<http://www.google.org/personfinder>) for general information on the application.

During a disaster, a new site is established for people to post and search for information about each other's status and whereabouts. As of May 24, 2011, the Japan earthquake Google Person Finder site maintains 624,000 records (<http://japan.person-finder.appspot.com/>) that have been entered by individuals from all over the world.

Additional Google Person Finder examples (or similar efforts) include:

- 9/11 Person Finder (not Google but a predecessor):
<http://webarchive.loc.gov/lcwa0001/20010914220553/http://safe.millennium.berkeley.edu>
- Hurricane Katrina Person Finder, a non-Google predecessor of :
http://en.wikipedia.org/wiki/Katrina_PeopleFinder_Project
- Haiti 2010 Person Finder: <http://haiticrisis.appspot.com/>

- Chile Earthquake Person Finder: <http://chilepersonfinder.appspot.com/>
- Christchurch, NZ Person Finder: <http://christchurch-2011.person-finder.appspot.com/>
- 2011 Japan Earthquake Person Finder: <http://japan.person-finder.appspot.com/?lang=en>

4.10 Blogs

Another means for sharing information with the community is blogging. Blogs provide feedback opportunities on a variety of topics and can serve as a mechanism to query the public about any hardships the public is experiencing or their general concerns. This feedback mechanism may be helpful when agencies face decisions or have to create operational plans with limited resources.

Blogs also provide a platform from which additional information (not “front page” disaster news) can be published, including where volunteers are from, day to day life in an emergency, other special interest stories, etc.

During disasters, agencies can leverage blogs to post information about resources available during the disaster. Agencies may wish to work with individual bloggers before a disaster occurs to leverage existing networks and audiences, sharing information about preparedness, response activities, etc., in addition to developing and maintaining their own blogs. Such a relationship may encourage bloggers to re-post important agency information on their sites during a crisis.

Blogs can include text, photos, and other media, as well as RSS feeds and links. If an agency’s Website doesn’t allow posting of information or comments from the public, blogs can serve as an external method of communication in addition to traditional means. Examples of agency blogs include:

- American Red Cross: <http://newsroom.redcross.org>
- California Wildfires: <http://sosdfireblog.blogspot.com/>
- CDC Public Health Matters Blog: <http://blogs.cdc.gov/publichealthmatters/>
- Colorado Division of Emergency Management Blog: <http://www.coemergency.com/>
- Fairfax County Emergency Information Blog: <http://www.fairfaxcounty.gov/emergency/blog>
- Hurricane Gustav: <http://hurricanegustav.wordpress.com/>
- Kansas City [Missouri] Police Chief Blog: <http://kcpdchief.blogspot.com/>
- Long Beach [California] Fire Department Blog: <http://firechannel.org/blog/>
- Red Cross-Midwest Flooding: <http://redcrossmidwestflooding.wordpress.com/>
- University of Iowa Flood Information: <http://uiflood2.blogspot.com/>
- Montgomery County [Maryland] Fire and Rescue Blog: <http://mcfrs.blogspot.com/>

5 Next Steps

Following publication of this document, the Virtual Social Media Working Group will continue to serve as leaders within the field of public safety on the safe and sustainable use of social media. The group will continue to collect, analyze, and aggregate information, considerations, lessons learned, best practices, and recommendations.

For more information about the DHS Virtual Social Media Working Group and to participate in discussions regarding the use of social media for public safety, please visit DHS First Responder Communities of Practice at www.communities.firstresponder.gov.

The Virtual Social Media Working Group plans to develop the following materials.

5.1 Next Steps

VSMWG has developed a "Next Steps" guide. This guide is important, as there are several steps to adopting new technologies and methodologies, and they require careful consideration and planning. Major steps include choosing the right technology and applications; strategy, policy, and procedure development; setting and managing expectations; engaging the community; managing misinformation; and addressing challenges to adoption, including concerns related to privacy, public comment, record retention, public disclosure, health information, human resources, information technology, and security.

5.2 Social Media and the Incident Command Structure (ICS)

Homeland Security Presidential Directives 5 and 8 mandated the creation and use of the National Incident Management System (NIMS) and the Incident Command Structure (ICS). Federal, state, and local emergency response officials must adopt and implement NIMS into their emergency response plans and procedures to remain compliant with federal law and eligible for federal grant funding. Given the rapid social information revolution and related technologies, the existing NIMS framework, policies, and procedures must be reviewed and expanded to incorporate these robust information sharing resources.

5.3 Crowdsourcing, Authoritative Data Sources, and Visualization Plans

Recent high-impact/high-visibility disasters revealed the proliferation and widespread use of mobile devices and social media to share information. The amount and speed of this information is often staggering and hard to comprehend. As a result, impromptu volunteer efforts have recently emerged after these disasters to aggregate, collate, analyze and display this information in ways that assist and enhance emergency response and recovery efforts.

Currently, groups of GIS and database technicians spontaneously come together and provide ad hoc support in analyzing and displaying social media data and information in easy-to-understand formats, including maps and graphs. These ad hoc efforts must be assessed and appropriately legitimized in ways that reliably enhance emergency response and recovery efforts.