

Public Safety Use of Social Media in Disaster Events

Social Media Town Hall

Wednesday, January 24, 2018

Welcome, Barry Luke, NPSTC Deputy Executive Director. Mr. Luke welcomed the presenters and attendees to the Town Hall presentation on social media use by public safety agencies during disaster events. Social media has been transformational for public safety agencies, he said. It creates authoritative sources for information, allows faster distribution of accurate information to the public, and enhances the efficiency of information transfer to the media. Social media has diminished the need for citizen information hotlines and other notification methods. The daily use of social media tools by public safety agencies is complementary to the use of social media during disaster events.

Social media has also caused some challenges for public safety agencies. The public expects an agency to have a social media presence, even when it may not. Managing social media and maintaining up-to-date, relevant information takes dedicated staff resources. It can be challenging to have a “two way” conversation between the public safety agency and the citizen on social media. Citizens have used social media during recent disasters to call for help, both when 911 service is available and when it is not.

Public Safety Use of Social Media Today

There are three types of social media usage by public safety agencies today:

- Outbound messaging from public safety agencies to citizens are the most common forms of social media usage today (e.g., Twitter, Facebook, and websites).
- Intelligence analysis using “crowd sourced” social media data is more common in metropolitan areas with UASI Fusion Centers.
- Inbound messages from citizens to public safety agencies and PSAPs requesting response are a new issue. It is difficult for public safety agencies to manage these requests, which have resource implications as well as data privacy and risk management aspects.

Outbound messaging coming from the public safety agency is the most common form of social media engagement. Agency-based websites were early examples of social media use. Facebook and Twitter are the most popular social media applications, as well as commercial social media platforms like Next Door. Some public safety agencies are starting to use Facebook Live to broadcast from the incident scene.

Intelligence analysis using crowd-sourced social media data is more common in metropolitan areas with UASI Fusion Centers. Information from Twitter and other social media platforms can be collected for analysis of key words and trends. Data may be used to monitor for threats during large-scale events or can help provide an early assessment of damage following a major storm. Data monitoring includes tracking of hash tags on Twitter to follow certain topics and conversations, as well as information posted to public pages on Facebook. Commercial products available include Tweet Deck, Tweet Suite, and Digital Sandbox.

Inbound messages from citizens to public safety agencies and PSAPs requesting response is a relatively new issue. In many disasters, access to 911 is temporarily unavailable (due to infrastructure damage, power failure, or PSAP overload). Cellular networks are frequently impacted, limiting the public's access to social media messaging. Few public safety agencies have technology and associated policy to manage response requests from citizens, which has significant resource implications as well as data privacy and risk management aspects. In some cases, citizen groups have established informal processes to monitor social media and, in some cases respond, to emergency requests resulting in confusion.

Recent Disaster Response Events

California Wildland Fires, Daron Wyatt, Public Information Officer, Anaheim Police Department & Anaheim Fire & Rescue. The Canyon 2 Fire started on the morning of October 9, 2017. It was fed by sustained Santa Ana winds of 30 mph, with gusts of 50 mph and gusts up to 80 mph in the canyons. Full-scale evacuations were initiated almost immediately. The fire burned 9,200 acres, with 80 structures damaged or destroyed. This is an area that typically suffers fires. At the time there were eight other major fires, all beginning on October 9, so resources were very tight.

Anaheim had developed a social media site before the Canyon Fires, which now has 25,000 followers. There were four agencies fighting the fire under unified command. Anaheim asked all the constituents of the other agencies to point their users to Anaheim Fire as the central POC. The response to the citizen would be sent from the individual agency to the citizen, quoting information received from Anaheim. There was a very positive response from the community to Anaheim's use of Facebook Live to broadcast from the field.

Anaheim relied on Twitter for updating information. "Social media is so much more effective than answering the phone every few minutes," Mr. Wyatt said, a lesson he learned from the handling of the Pulse Nightclub shooting. The social media platforms directed citizens to call 911. The agency received calls from the elderly who were not familiar with social media. Anaheim used the "Reverse 911" phone alerting system to supplement social media messaging. Anaheim also has a subscription-based program called Anaheim Alert, but that requires signing up online. Anaheim is in the process of being approved for subscription to FEMA's IPAWs alerting service but it has been a slow process. The agency received some messaging from citizens requesting help. For the future, Anaheim has added a data/crime analyst to all future events, which the agency did not have at the time.

Hurricane Irma, Alan Harris, Emergency Manager, Seminole County, Florida; and Mark Economou, Public Information Manager, Boca Raton Police Department. Mr. Harris discussed the Central Florida experience with Hurricane Irma, a Category 5 hurricane that impacted the Caribbean and the entire state and was the strongest storm on record in the Atlantic region. The hurricane developed on August 30, 2017, and made landfall in Cudjoe Key, Florida, on September 10. It caused 134 deaths (across all impacted countries). The storm created 1 million cubic yards of debris. Flooding lasted over 2 months. Seminole County borrowed ideas from the lessons learned from Superstorm Sandy and from the effective use of social media in the Pulse Nightclub shooting. During Sandy, citizens were signed up for various sites that were not providing appropriate emergency messaging. The county linked all social media to ensure consistent messages went out.

The county's intelligence branch tracks rumors and can deploy various resources from law enforcement for the Trayvon Martin shooting to power trucks during the hurricane. The citizen hotline, which had been activated earlier for the Trayvon Martin shooting and trial of George Zimmerman, was activated for the hurricane. The county used multimodal forms of communication, to account for those who prefer Facebook and others who rely on Twitter.

The county purchased hardware to include six screens depicting different social media platforms allowing the county to track what was being said. Earlier it had developed a disaster webpage that mirrored one used in Orlando and that could be launched instantaneously. The webpage had one million hits in the first week. For outbound messaging, the county used IPAWS to disseminate evacuation and curfew information. The county provided video presentations for staff to post for evacuees in the shelters, allowing evacuees to get direct information that was very well received by citizens.

The agency used crowd source data to gather preliminary damage information and outbound messaging to organize 350 citizens to fill unmet needs. The county collected unmet needs requests such as the need to repair a wheelchair ramp. There were 300 unmet need cases that were met by volunteers on a public safety day dedicated to helping. There was extensive use of the social media listserv, Next Door, one of the fastest growing platforms for sharing information in neighborhoods. The use of social media reduced the need for the Citizens Information Hotline and other traditional resources.

South Florida. Mr. Economou discussed the South Florida experience. Boca Raton started what he called the 'social media experiment' in 2008. It received calls from other agencies asking how agency was using social media effectively. A 2012 survey showed 90 percent of citizens would turn to social media to obtain information in the event of a hurricane. At one point, Irma was forecast to be a direct hit on the east coast in south Florida. The city turned to his agency for advice on how to disseminate information on debris pick up, where there were gas lines, power lines down, etc. The EOC was activated 24 hours before the storm with four people manning phones for the Citizens Information Center (CIC) and three using social media. The phone was strangely silent while the EOC was inundated with social media. The agency has 40,000 followers on Facebook and on Twitter. Next Door, a listserv for people who live in a

specific neighborhood, is one of the fastest growing programs, with 15,000 followers. The EOC could post messages directly to Next Door. The storm was very slow moving. At some point, citizens started private messaging the EOC. In the day following the storm, the agency used Facebook Live to show damage, areas where citizens should not go, etc.

Mr. Economou said he also serves as the PIO chair of the Domestic Security Task Force for south Florida, providing PIO services. The task force has a mobile joint information center that can be deployed where needed. In Hollywood, FL, when a nursing home had 11 heat-related deaths, the PIOs were called to assist the local police PIO. The most important lesson learned from his experience has been to develop a plan in advance and a team in place and ask for help.

Hurricane Harvey, Michael Walter, Public Information Officer, Houston Emergency Management.

Hurricane Harvey struck the Texas coast on August 24, 2017. It was the costliest tropical cyclone on record, causing approximately \$125 billion in damage. The storm dropped 40 inches of rain in a 4-day period, with some areas receiving 60 inches. The storm displaced 30,000 residents, prompting 17,000 rescues. Houston has had five federally declared floods this year. Then Hurricane Harvey hit. Houston is built on a coastal prairie that drains through a system of bayous. The hurricane was unique in that it impacted the entire city, not various discrete neighborhoods, as in the past. It was not a typical hurricane; it lingered for almost 6 days with the heaviest of the rain bands right over the city.

There were 3,200 calls to 911 an hour, but 911 services did not go down. The Houston PSAP had a 3.5 hour wait time to answer and the public began calling for help via social media. Houston used social media for outbound messaging and monitored social media and pushed specific information identified as critical (e.g., get to the roof, not the attic) in that manner.

Prior to this experience, Mr. Walter said he did not respond to requests coming from non-traditional sources. Houston has a team which has worked on social media and which has the authority to post on each other's sites. With limited personnel resources, this ability is important. Houston Emergency Management has access to information and social media from the police, city, etc., and those agencies can access and post on his social media. The agency received calls from people reaching for assistance any way they could. All the PIOs monitored calls. They created spreadsheets from wherever calls originated. Roads were underwater and firetrucks could not get through.

Houston Emergency launched a blog at HoustonEmergency.org and drove all traffic to the blog website. They live tweeted press conferences. Next Door was a significant tool because of its ability to target geographically. The agency had access to IPAWS, but because of the region-wide nature of the event, it wasn't an effective tool as phones were inundated with messages from weather alerts. There were 10,000 people in the convention center shelter. Houston Emergency sent messages to shelter operations and the convention center itself took over messaging at the shelter. It was important to pull together all the players to coordinate and ensure accurate information. He added another lesson

learned from the experience is that EOCs need 'bench strength,' or teams of people who can be there in the long term.

Pulse Nightclub Shooting, Michelle Guido, Public Information Officer, Orlando Police Department. Ms. Guido discussed the lessons learned from the Pulse Nightclub Shooting. On June 12, 2016, a terrorist attack at the Pulse Nightclub killed 49 people and wounded 58 others. Unlike the other disasters discussed, this was a unique and unexpected incident, giving responders and PIOs no time to prepare. The incident was reported at 2:02 a.m. and the PIOs notified at 3:05 a.m., an eternity in PIO time. The first tweet was issued at 3:58 a.m.

The OPD Twitter feed was established as the authoritative source for information. There were multi-agency coordination issues with local, national, and international media attention. Coincidentally, in the city of Orlando only 2 days earlier, Christina Grimmey, a Voice television show finalist, was murdered. National media was present in the city to cover the murder. And earlier that day, the SWAT team had been called out to deal with a gunman with two small children in his apartment. Generally the SWAT is called out less than 10 times a year. When the Pulse shooting occurred, the SWAT team had been operating overtime.

The first thing Ms. Guido did was send out a tweet when she arrived at the crime scene. The PIO's office had plans in place for disaster events such as hurricanes, and they also do tabletop exercises to handle protests that turn violent, she said, but they had not rehearsed anything as in depth as Pulse. The two PIOs tried to disseminate information on cell phones at the scene. They switched to personal cell phones and began sending out tweets on behalf of the Orlando Police Department.

Ms. Guido said she didn't know what she needed then, but she does know now. She asked the partners in the agencies, 37 of them, surrounding Orlando PD to designate Orlando as the POC for official information. It was important to reinforce the message that all official information was coming from the lead agency. She said it would have been helpful to have a person watching the TV and social media, so she could correct errors or reinforce good information. She had no idea what was being reported because she was so busy. It would have been helpful to have someone to monitor Twitter, as there were 1,000s of tweets every hour. In hindsight, she realized she should have taken photos or videos from the crime scene and would assign a person to do that in the future. The best thing she did was to send an outgoing 'out of office' email stating the Orlando PD would not be answering the phone or email for a number of days. The PD received 1,100 emails that morning. Although the incident generated substantial attention around the world, the press was managed and abided by the social media message. The crime scene was well contained. If the press wanted information, they had to abide by the PIO's rules. Ms. Guido also recommended PIOs should have a 'go' bag and carry a charger.

Panel Discussion.

Are the existing software tools that you use to manage social media sufficient for public safety use? (Is there a technology gap between what's available and what is needed?) There are good software tools,

but better training is needed. Many social media administrators are part time. There is capability, but it requires people who know how it works.

Did you find any operational gaps in managing social media information between the PIO, the PSAP, and Incident Command? Ms. Guido said OPD works with City Hall. Whoever is the point person would retain control of the media channel, in their case Twitter, and no one else is allowed to post. When the immediate situation reached the point of community resiliency and providing information, OPD relinquished control to the city.

Who was involved in the creation of your agency (or regional) social media policy? Mr. Economou said he was involved in the creation of social media policy. It was unique because it was completely new. In 2009, the IACP invited him to report on his social media policy. In the beginning, the policy was quite rudimentary but it has evolved over time.

What social media challenges do you think public safety agencies will experience in the future, including instances where citizens post messages seeking emergency response? Mr. Walter said a few years ago he said he would never accept non-traditional messages, but that's where the messages are coming from. Agencies need to become responsible for information coming from citizens through social media. We have developed national 911 protocols, and we need to do something similar for digital media moving forward.

Closing. Mr. Luke thanked all the presenters for providing valuable information and lessons learned from their experiences. The slide presentation with audio will be available on NPSTC's YouTube channel in the near future.