THE ROLE OF NC MAYORS IN RESPONDING TO COMMUNITY CRISES

Prepared for: The North Carolina Metropolitan Mayors Coalition

Prepared by: Michelle Burgess, Emily Johnson, Chase Peterson, and Chandler Rowland

Sanford School of Public Policy
201 Science Drive
Durham, NC 27708

5/1/2017

Table of Contents

Appendices

I.   EXECUTIVE SUMMARY

Overview

The following report considers best practices for the North Carolina Metropolitan Mayors Coalition to communicate effectively in crises. This report has a three-part goal: 1) help guide mayors through the stages of a crisis, 2) identify best practices in crisis communication, and 3) facilitate conversation and reflection between mayors and their municipal staff. We employ case studies, interviews, and academic literature to achieve this goal.

Policy Question

What are best practices for mayors to use in communicating during crises?

Defining Crisis

Crises are unexpected, quickly emerging and complex events that are varied in nature. Municipalities face crises spanning a wide array of disasters including natural (e.g. hurricanes), economic-technical (e.g. power failures), social (e.g. riots), and political (e.g. terrorist attacks).

Management literature divides crises into four stages. Preparation constitutes planning before a crisis. Response deals with operations during a crisis. Recovery involves restoring a municipality to normal after a crisis. Reflection constitutes long-term measures that reduce or prevent future crises. The crisis process is cyclical as all stages inform the others.

Mayors' Role in a Crisis

Mayors function primarily as key public communicators in crises. Citizens recognize mayors as trustworthy authority figures. Effective communication requires clear and concise messaging. Mayors must consider both external communication—with the public and press— and internal communication—with staff and municipal agencies. Mayors help set the agenda in allocating resources and determining goals throughout crises.

Methods

We used three qualitative approaches to identify best practices in current mayoral crisis communications: 1) analysis of existing crisis communication literature; 2) analysis of national and NC specific case studies; and 3) interviews with selected mayors and experts.

Findings

We frame our findings around the four stages of a crisis: preparation, response, recovery, and reflection. Mayors should consider the following best practices as their municipality moves through a crisis:

During crisis preparation (pages 4-8), mayors should:
- ➢ Develop and coordinate media platforms and protocols before a crisis occurs.
- ➢ Encourage their municipality to develop and update the crisis communication plan in line with the All Hazards Plan.
- ➢ Review and remain informed about the contents of the plan and their roles.
- ➢ Develop relationships with community groups before a crisis.
- ➢ Encourage their municipality to practice crisis response regularly.
- ➢ Request crisis management and communication orientation.

During crisis response (pages 9-15), mayors should:
- ➢ Encourage all municipal officials to provide a single phone number or website to the public as a landing page for all information.
- ➢ Encourage continued communication to the public even if complete information about a crisis is unknown.
- ➢ Encourage their municipality to provide clear first messages on the crisis to set the tone.
- ➢ Encourage municipality to coordinate across city agencies and with partners to create consistent and accurate messages.
- ➢ Monitor social media and community sentiment and tailor communications to address the emotions and needs of city residents.
- ➢ Use their municipality's emergency operations center as a space to gather and share information.
- ➢ Encourage their municipality to embed staff at other agencies to share information.
- ➢ Use existing partnerships with local organizations to reach different segments of their populations.
- ➢ Encourage their municipality to pay attention to language barriers in their communities.

During crisis recovery (pages 15-22), mayors should:
- ➢ Understand diverse community needs in providing resources and information.
- ➢ Communicate with empathy for those affected in a crisis even in complex situations.
- ➢ Address tensions and fractured relationships exposed during a crisis.
- ➢ Follow up and provide information after a crisis so citizens can better return to normal.
- ➢ Publicly recognize partners for their role in effectively responding to a crisis.
- ➢ Provide opportunities for the community to come together after a crisis.

During crisis reflection (pages 23-25), mayors should:
- ➢ Internally reflect to assess how their actions affected the community crisis.
- ➢ Reflect with key governmental agencies and local organizations to assess how their actions worked in conjunction to resolve the community crisis.
- ➢ Seek feedback from citizens in assessing how effective their municipality responded to the crisis.
- ➢ Use non-local crises as opportunities to reflect and reevaluate their own crisis management plans.

Appendix 1 provides more detailed questions to guide mayors through each best practice. Appendices 2 and 3 provide templates for a contact list and crisis checklist that mayors can use in crises.

II.   INTRODUCTION

As North Carolina's municipalities grow in terms of population and economic development, they will need effective crisis communication and planning to mitigate damage from crises.[1] No municipality is immune from crises occurring. Crises can range from civic unrest, natural disasters, random acts of violence, or simple tragedies.

All crises, regardless of the type, are local.[2] Local responders arrive first at the scene, and local governments must lead the emergency management response and provide services. A crisis can quickly propel a municipality to the national stage. Mayors and municipal staff can mitigate the damage of crises with proper planning and intentional reflection.

The specific policy question addressed in this report arose in the wake of several NC crises, including Hurricane Matthew and the police shooting and resulting riots in Charlotte. With these crises, the NC Metropolitan Mayors Coalition (the Coalition) realized that a crisis can affect any city, regardless of its size or location. The Coalition requested that we determine how mayors can more effectively respond to crises, specifically through communication. We focused on the question: what are best practices for mayors to use in communicating during a crisis?

The following report seeks to answer that question with a three-part goal: 1) help guide mayors through the stages of a crisis, 2) identify best practices in crisis communication, and 3) facilitate conversation and reflection between mayors and their municipal staff.[3]

III.   DEFINING CRISES

"A crisis is anything that requires unusual attention…beyond what we normally do in day to day operations."
- Mayor Bill Bell of Durham

We define crises as unexpected, quickly emerging, and complex events that are varied in nature.[4] Crises disrupt and threaten the cycle of normal city life. The crises that municipalities face range from natural (e.g. hurricanes), economic-technical (e.g. power failures), social (e.g. riots), and political (e.g. terrorist attacks).[5] This variety makes it

---

[1] We use municipality to refer to both towns and cities to represent all members of the Coalition.
[2] Somers, Scott, and James H. Svara. 2009. "Assessing and managing environmental risk: Connecting local government management with emergency management." *Public Administration Review* 69(2): 181-193.
Henstra, Daniel. 2010. "Evaluating local government emergency management programs: What framework should public managers adopt?" *Public Administration Review* 70(2): 236-246.
Rahm, Dianne, and Christopher G. Reddick. 2011. "US city managers' perceptions of disaster risks: Consequences for urban emergency management." *Journal of contingencies and crisis management* 19(3): 136-146.
[3] Unless otherwise stated, all best practices refer to both traditional media (television, radio, and newspapers) and social media (Twitter and Facebook).
[4] Denis, Vincent, Vincent Milliot, and Chiara Lucrezio Monticelli. 2016. "Introduction: urban crises, policing crises: mirror images?(c. 1700–1900): cities in flux and changes to policing." *Urban History* 43(2): 200-214.
Kim, Pan Suk, and Jae Eun Lee. 2001. "Emergency Management in Korea: Mourning over Tragic Deaths." Ali Farazmand (ed.). Handbook of Crisis and Emergency Management.
Somers and Svara 2009.

difficult for cities to prepare for all contingencies.

In contrast, we define problems as slowly emerging and gradually evolving trends in society.[6] Governments have the lead time to deal with these issues but often ignore them in the face of other concerns. Emergencies bridge the gap between a problem and a crisis. An emergency occurs in the interaction of a hazard, or catalytic event, with existing vulnerabilities or problems.[7] The resulting crisis and triggering event fall within our definition of crisis, although the underlying problems remain beyond the scope of our analysis.

Crisis management divides into four stages: [8]

1. **Preparation** - planning before a crisis
2. **Response** - operations during a crisis
3. **Recovery** - restoring a community after a crisis
4. **Reflection**[9] – long term measures to reduce or prevent future crises
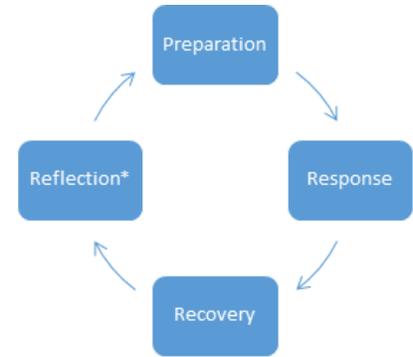
Source: Henstra 2010.

Careful planning during preparation and reflection improves crisis response. Effective crisis response and recovery must integrate this planning with flexibility and improvisation.[10]

IV.   MAYORS' ROLE IN CRISES

Municipal emergency management personnel operationally respond to crises.[11] Mayors work within that framework, primarily as key communicators with the public.[12] Citizens increasingly see mayors as the public faces of their municipality. Mayors become recognizable entities whom the public knows and, presumably, trusts. This visibility can help mayors contribute to crisis communication. Mayors can share details about the crisis, what has occurred, as well as safety, prevention, and mitigation measures for citizens.

---

[5] Kim and Lee 2001, 501. We use page numbers for direct quotes of sources when they are available. However, we use several online newspapers and articles that do not have page numbers available. We cite those with author and year.

[6] Clarke, John. 2009. "What crisis is this?" *Soundings* 43(1): 7-17.

[7] Henstra 2010.

[8] The National Governors Association first distinguished the stages in a 1970 report. Academics and practitioners almost universally use the four stages to describe the different components of crises.
Chua, Alton Y. K. 2007. A tale of two hurricanes: Comparing katrina and rita through a knowledge management perspective. *Journal of the American Society for Information Science and Technology* 58 (10): 1518-28.

[9] The literature refers to mitigation instead of reflection. We use the term reflection to capture the role of mayors during this stage.

[10] Rahm and Reddick 2011; Henstra 2010; Somers and Svara 2009.

[11] Robert Morgan (Former Deputy City Manager), interviewed by Michelle Burgess and Emily Johnson, North Carolina, March 2017.

[12] James Svara (Professor), interviewed by Michelle Burgess, Emily Johnson, Chase Peterson, and Chandler Rowland, North Carolina, February 2017.
Mayors' roles in emergencies may vary based on the existing emergency management structure and the scope of their assigned duties and responsibilities within the emergency response plan.

Mayors' communication in crises can directly shapes the public's response and perception to those crises. Effective communication from mayors can reassure the public's trust and allow municipal staff to respond to a crisis in an efficient way. Poor communication from mayors can spark citizen distrust and larger tensions that complicate how municipalities can operate and respond to a crisis. By crafting and delivering a clear message, mayors can put their citizens at ease and return their municipality to normalcy after a crisis.

Mayors also communicate internally with agencies inside their municipality. Internal communication allows mayors to gather information about what has happened in a crisis. Mayors use internal communication to encourage municipal leadership to evaluate existing crisis management resources.[13] Mayors have a role in setting the agenda to allocate resources and determine goals for crisis preparations.[14]

"People listen better and react better when they're not in panic mode."
- Mayor Pam Hemminger of Chapel Hill

V.   METHODS

We used three qualitative approaches to identify best practices in mayoral crisis communications: 1) analysis of crisis communication literature, focusing on mayors' role in crisis communication; 2) analysis of national and NC specific case studies; and 3) interviews with selected Coalition mayors and experts on crisis communication and NC municipalities.

1) <u>Academic literature:</u> We conducted a thorough review of the literature related to crises and municipalities, mayoral leadership and responsibilities, and crisis communication. We drew from best practices in academic and professional literature, including existing crisis communication guides.[15]

2) <u>Case studies:</u> We identified case studies on crises in NC and across the country. We distilled best practices from crisis communication methods in those situations. We used newspaper articles, local and national news coverage, op-eds, and mayors' social media feeds to reconstruct the crisis communication process in each case study.

NC case studies:[16]
- Chapel Hill and Carrboro's water crisis (2017)
- Greenville's Hurricane Matthew (2016)
- Raleigh's downtown fire (2017)
- Raleigh's police shooting of Akiel Denkins (2016)

---

[13] James Svara interview.
[14] Somers and Svara 2009; Henstra 2010; Rahm and Reddick 2011.
[15] See Appendix 4 for the most helpful of these resources.
[16] We selected NC case studies from municipalities that were members of the Coalition and had significant media coverage.

National case studies:[17]
- Chattanooga's deadly school bus crash (2016)
- Ferguson's police shooting of Mike Brown (2014)
- New York City's Hurricane Sandy (2012)
- Orlando's Pulse Nightclub Shooting (2016)

3) Interviews: We conducted interviews with mayors, an academic expert on municipal governance, and a practitioner with over thirty years of experience in municipal management.[18]

Mayoral Interviews: Mayoral interviews helped us better contextualize the literature and case studies. These interviews guided our understanding of mayors' perception of crisis communication and the political feasibility of recommendations.
- Mayor Ian Baltutis of Burlington
- Mayor William Bell of Durham
- Mayor Pam Hemminger of Chapel Hill
- Mayor Lydia Lavelle of Carrboro
- Mayor Allen Thomas of Greenville

Expert Interviews: Expert interviews provided an additional lens to examine the complexities of municipal crisis preparation and response, especially in NC.
- Professor James Svara of the University of North Carolina School of Government, an expert in local municipal governance
- Robert Morgan, a former deputy manager with thirty years of experience working in NC municipalities

VI. FINDINGS

We frame our findings around the four stages of a crisis: preparation, response, recovery, and reflection.

1. Preparation

The preparation stage allows municipalities to create clear and concise plans for responding to crises. Preparation comes from reflecting on previous crises and from observing how other municipalities handled crises. Mayors focus on developing communication networks within the government and with community groups in anticipation of possible crises.

Emergency management literature recommends engaging in risk communication during the planning process—informing citizens of potential hazards during particularly risky times, such as flu season. For example, public officials can recommend that citizens prepare evacuation

---

[17] We selected national case studies to highlight the variety of crises mayors can face and those used throughout the best practice literature.

[18] See Appendix 5 for a list of interview questions used in the interviews.

plans and gather emergency supplies at the start of the hurricane season and before a hurricane hits. Risk communication allows individuals to make their own preparation for a crisis thereby mitigating harm. The literature also suggests that public leaders should engage in agenda setting, hire competent staff, and develop an incident management system during preparations.[19]

A. The Importance of Existing Social Networks

> **Best Practice: Mayors should develop and coordinate media platforms and protocols before a crisis occurs.** Pre-existing media platforms and protocols allow for consistent communications to the public. Social media protocols should include plans for how officials can distribute the same message consistently across different platforms.

Prior to Hurricane Sandy, New York City cultivated a social media network of several online accounts including the NYC Mayor's Office, the New York City Office of Emergency Management (NYCEM), and Mayor Bloomberg's personal account. Local officials built capacity for novel uses of technology, including online streams of press conferences and updated Google maps offering location based information.[20] The mayor's office assigned point people to coordinate consistent messaging across social media accounts and alternate communication channels.[21]

Citizens received clear messages before, during, and after the storm because of this planning. NYC officials employed several communication channels—the press, email alerts, robo-calls, and social media posts—to warn citizens of potential dangers and give updates as the storm passed.[22] The city posted the same messages on their different social media accounts. Mayor Bloomberg asked people to retweet his messages to share his posts with their network.[23] Repeating clear messages allowed NYC to reach citizens throughout the crisis.

Hurricane Sandy: In October of 2012, Hurricane Sandy caused at least 43 direct deaths and billions of dollars of damage in NYC. Hurricanes do strike the city, but Sandy's uncommon path allowed it to gain intensity as it moved up the coast. The storm devastated the city. Over 1.1 million children could not attend school for a week. 11 million travelers had delayed routes. The New York Stock exchange closed for two days, a first since 1888.

Source: "Hurricane Sandy Fast Facts." CNN. November 02, 2016. Accessed April 16, 2017.

The evacuation of Zone A (bit.ly/SPojeU) is mandatory. It is for your own safety. If you need help call 311 #Sandy #NYC

NYC NYCEM ✓
@nycoem

Follow

RT @nycmayorsoffice: Mayor: If you can't evacuate yourself and need assistance, please call 311. #Sandy

Source: Twitter, @Mike Bloomberg and @NYCEM

---

[19] Somers and Svara 2009.

[20] PlaNYC. *A Stronger, More Resilient New York, Sandy and its Impacts*. New York: 2013. Accessed April 16, 2017.

[21] New York City's large budget and population allowed for immense attention on proper emergency response. However, resources alone are not what makes the city's response during Hurricane Sandy notable. Preparation and social media building can be done at a smaller scale with intention and foresight.

[22] U.S. Congress, House of Representatives, Committee on Homeland Security, Global Climate Change: Hearings before the Subcommittee on Emergency Preparedness, Response, and Communications, 113th Cong., 2013.

[23] Bloomberg, Michael. Twitter Post. October 29, 2012. 7:14 PM. https://twitter.com/mikebloomberg/status/263101553362214912.

B. The Importance of a Crisis Communications Plan

> **Best Practice: Mayors should encourage their municipality to develop/update the crisis communication plan. Mayors should review and remain informed about the contents of the plan and their role in its strategy.** Crisis communication plans create a reliable strategy during uncertain times. Mayors who are familiar with the crisis communication plan can better help municipal officials disseminate clear and consistent messaging in a crisis.

An All Hazards Plan normally governs the operational response to a crisis. A crisis communication plan determines communication strategy. Trained and competent staff write, update, and execute these plans. Mayors need to remain familiar with both plans and their role in the prepared strategy.[24] Plans evolve in the preparation stage as well as after a crisis on the ground. Each crisis demands adaptation and flexibility in regards to the plan. However, this foundation becomes essential in enabling municipalities to respond quickly.[25]

Mayor John Dyer of Orlando understood the importance of crisis communication prior to the Pulse Nightclub Shooting. When Hurricane Charley struck Orlando in 2004, Mayor Dyer had difficulty communicating with citizens. The city learned from that experience and further developed their crisis communication plan. After the storm, the city practiced crisis scenarios, emphasizing the role of city communication teams.[26]

> **Orlando Pulse Night Club Shooting:** On June 12, 2016, a terrorist attack at Pulse Nightclub in Orlando, FL killed 49 people and wounded 53. The attack garnered national attention as the largest terrorism incident on US soil since 9/11. The gunman had pledged allegiance to ISIS, raising questions about the group's influence within the American Muslim community.
>
> Source: Burke et al 2016.

As the events at Pulse unfolded, Mayor Dyer found that preparation eased his role in communicating with the public. Planning and the control of information allowed him and other municipal leaders to set the tone of the response. Planning did not allow city officials to control entirely the public messages. Sen. Bill Nelson (D-FL) called the attack a terrorist incident before Orlando police made the information public.[27]

"People expect instantaneous information and [communication is] a job that has been reworked in recent years." - Mayor Lydia Lavelle of Carrboro

In NC, Mayor Lydia Lavelle of Carrboro echoed the need for communication planning. Carrboro is in the process of developing a crisis communication plan. Mayor Lavelle mentioned that the town also hopes to create a position for a full-time communication staffer.

---

[24] We conducted a survey of the Coalition municipalities and their crisis communication plans. Those results can be found in Appendix 6.

[25] Rahm and Reddick 2011.

[26] Burke, Sharon, Alyssa Sims, and David Sterman. *War and Tweets, Terrorism in America in the Digital Age*. Washington D.C.: New America, 2016. Accessed April 16, 2017. https://na-production.s3.amazonaws.com/documents/War-And-Tweets10.27.pdf.

[27] Detman, Gary. "Sen. Nelson: Pulse Nightclub gunman may have ties to ISIS." WPEC. June 12, 2016. Accessed April 16, 2017. http://cbs12.com/news/local/sen-nelson-pulse-nightclub-gunman-may-have-ties-to-isis.

C. The Importance of Building Community Relationships

> **Best Practice: Mayors should develop relationships with community groups before crises.** Mayors should recognize the role community partnerships play in reaching all segments of the population, including those who may not receive information by traditional means. Strong community partnerships allow mayors to leverage existing and intimate social circles and mitigate harm during a crisis. Mayors must build relationships based on trust before a crisis in order to communicate effectively.

In the NC Water Crisis, the independent OWASA operationally dealt with the water line concerns.[28] Surrounding local governments worked to get the messaging out. Mayor Lydia Lavelle of Carrboro expressed particular concern in communicating with members of the immigrant, refugee, and non-English speaking communities.

> **The Chapel Hill/ Carrboro Water Crisis**: On February 3, 2017, an Orange Water and Sewer Authority (OWASA) water main pipe broke a day after officials discovered a fluoride overfeed in a pumping station. The two events created a situation where water contamination threatened Chapel Hill and Carrboro.
>
> Source: OWASA 2017.

Existing relationships allowed Mayor Lavelle to explain the nuances of the issue in peoples' native languages, or to those who may not have been reached otherwise, including refugees.[29] Relationship building is crucial as the demographics of NC municipalities change over time.

D. The Importance of Practicing for a Crisis

> **Best Practice: Mayors should encourage their municipality to practice crisis response regularly.** The best way to mitigate the high stress and uncertainty of a crisis lies in regularly practicing hypothetical scenarios with multiple agencies. The insights gathered help build relationships, evaluate the response of staff, and inform crisis planning.

Municipalities can mitigate the uncertainty of crises by practicing crisis scenarios. Municipalities can simulate crises regularly. Simulations allow mayors and staff to improve their familiarity and capacity in crisis communication as well as uncover areas that need improvement.

Mayor Allen Thomas of Greenville emphasized the importance of practicing crisis response within the city.[30] First responders work regularly with Greenville's East Carolina University (ECU) to practice active shooter drills in preparation for a campus shooting.[31] In a

---

[28] Bennett, Abbie. "Update: OWASA back to normal, ends water shortage." *The News & Observer*. February 5, 2017. Accessed April 16, 2017. http://www.newsobserver.com/news/local/counties/orange-county/article130891329.html.

[29] Lydia Lavelle (Mayor of Carrboro), interviewed by Michelle Burgess and Chase Peterson, NC, March 2017.

[30] Allen Thomas (Mayor of Greenville), interviewed by Michelle Burgess and Chandler Rowland, NC, March 2017.

[31] "Active shooter simulations taking place at local schools this week." WITN. August 8, 2016. Accessed April 16, 2017. http://www.witn.com/content/news/Active-shooter-simulations-taking-place-at-local-schools-this-week-389454561.html.

Greenville chose practice crises like the emergency shooting drill based on risk levels in the community. Crisis simulations should take into account risk levels in choosing the scenario. However, all crisis practice, regardless of the emergency, will improve crisis communication strategies.

recent practice, police simulated locking down the building, exchanging gunfire, and testing emergency communication systems. Emergency communications about the simulated incident came through ECU's alerts system. All began with "THIS IS A DRILL."[32]

Pitt Greenville Airport also holds emergency simulations of crisis scenarios. The Federal Aviation Administration requires drills to verify that an airport has the required safety measures.[33] In 2016, Pitt Greenville simulated a plane crash with dozens of volunteers who played crash victims.[34] The volunteers portrayed injuries for medical staff to treat. Real smoke and fire set an authentic stage and gave firefighters a chance to practice response skills. Greenville Fire Rescue called the drill a success with participation from agencies in Pitt County and Greenville. Coordination between these agencies will better prepare the area for a real crisis.

E. The Importance of Transition Between Administrations

> **Best Practice: Mayors should request crisis management and communication orientation.** New mayors should work with agency officials to learn of existing plans and strategies as soon as they enter office. More established mayors should seek a formalized review of plans and strategies as the municipality updates them. Future success in responding to community crisis relies upon these practices being passed from one administration to the next.

Professor Svara stresses the importance of educating new leaders on crisis communication.[35] A transition between one mayor and the next is incomplete without a transfer of crisis communication understanding. Sharing information on how to communicate during crises requires the involvement of the new mayor and representatives from all relevant municipal agencies, such as city managers, police chiefs, fire chiefs, and communication personnel.

"Our chief did a great job reaching out so I sat down with him within my first month of being elected….it was a good opportunity for him to share more about [our] relationship." – Mayor Ian Baltutis of Burlington

Mayor Ian Baltutis of Burlington understood the importance of transition. Mayor Baltutis has a strong relationship with the police in Burlington. He sat down with the department and visited the police academy when he first took office.[36] He also visited the emergency operations center during a snowstorm to become familiar with the process.

---

[32] "Media Updates Active Shooter Drill." ECU News Services. August 2, 2011. Accessed April 16, 2017. http://www.ecu.edu/cs-admin/news/Drillpage.cfm.

[33] United States. Federal Aviation Administration. Advisory Circular Airport Emergency Plan. [Washington, D.C.]:U.S. Dept. of Transportation, Federal Aviation Administration, 2009.

[34] Seegars, Michael. "Pitt Greenville Airport practices for emergency." The East Carolinian. March 22, 2016. Accessed April 16, 2017. http://www.theeastcarolinian.com/news/article_b6d75ba4-efc7-11e5-a9f7-a708dd40e143.html.

[35] James Svara interview.

[36] Ian Baltutis (Mayor of Burlington), interviewed by Chandler Rowland, North Carolina, March 2017.

2. Response

During response, municipalities must respond to crises by meeting citizens' short-term needs. One of the most critical components involves providing clear and consistent messaging to the public.[37] Municipalities inform citizens about real time updates, resources available to meet immediate needs, and government actions or plans to deal with the situation.

The public seeks information from several sources during crises to determine their perception of the level of risk and action required.[38] Government officials need to provide consistent messaging across media platforms and with a common message. Officials should also recognize that social media can both strengthen or hinder this consistency because incorrect or off-message information can spread quickly.

A. The Importance of Streamlined Information

> **Best Practice: Mayors should encourage municipal officials to provide a single phone number or website to the public as a landing page for all information.** This repository will help coordinate communications channels and a consistent message from the municipality. Mayors should use this resource in all of their communications. Mayors should also encourage coordination across city agencies and with partners to ensure that all organizations are sharing this repository of information with their constituencies.

After the Raleigh fire was reported at 10 pm on March 16, the city quickly worked to launch a public website by 11:55 pm with up to date information.[39] The first posts gave preliminary information while acknowledging the continuing work and investigations underway. Maintaining fluid communication allowed public information to evolve and reassured the public that the government was taking action.[40]

Updates provided logistical information on road closures, Red Cross assistance, shelter locations, and safety

> **Raleigh Fire:** On March 16, 2017, a large fire occurred in downtown Raleigh, the city's largest since the 1920s. The fire destroyed a downtown apartment complex that was under construction and damaged surrounding buildings. "Around 15 fire engines [and] 130 firefighters" worked on containing and stopping the fire overnight. Although no residents were injured, the fire forced people to evacuate from nearby homes and apartments, closed roads in the surrounding blocks, and created significant debris for the surrounding area.
> Source: City of Raleigh 2017.

---

[37] Cole, Terry and Fellows, Kelli. 2008. "Risk communication failure: A case study of New Orleans and Hurricane Katrina." *Southern Communication Journal* 73 (3): 211-28.
Allied Independent Consulting. "Mayors' Guide to Emergency and Disaster Management." *Louisiana Municipal Association.* Date unknown.
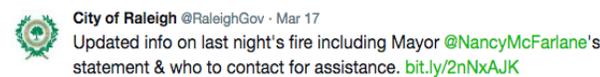
[38] Anthony, Katheryn and Sellnow, Timothy. 2013. "Message Convergence as a Message Centered Approach to Analyzing and Improving Risk Communication." *Journal of Applied Communication Research* 4: 346-364

[39] "Update: W. North Street Fire." *City of Raleigh,* March 17, 2017. Accessed April 14, 2017. http://www.raleighnc.gov/home/news/content/CorNews/Articles/NorthStreetFire.html.
See appendix 7 for the Raleigh Fire Information Website.

[40] Allied Independent Consulting; Seegar 2006.

City of Raleigh @RaleighGov · Mar 17
Updated fire information page with FAQ's. bit.ly/2nNxAJK

City of Raleigh @RaleighGov · Mar 17
Updated info on last night's fire including Mayor @NancyMcFarlane's statement & who to contact for assistance. bit.ly/2nNxAJK

precautions.[41] The site also provided key emergency phone numbers for people who needed further information. The city's twitter page, as seen in the image to the left, likewise provided condensed updates, while directing citizens to the webpage or phone numbers for additional information.[42]

> **Best Practice: Mayors should encourage continued communication to the public even if complete information about a crisis is unknown.** Municipalities should update the public about what information is already available as well as what processes are underway to collect more information. Pairing an acknowledgement of uncertainty with a concrete plan reassures the public about government's transparency and ability to deal with the crisis at hand.

The city's Communication Department held a news conference the following morning from the Raleigh Municipal Building with representatives from key agencies.[43] Mayor McFarlane released her statement around the same time.[44]

Fire Chief McGrath gave additional updates about the fire and the inspection process for nearby buildings.[45] He provided transparency in clarifying what the city did not yet know (i.e. the final cost of the fire or the exact number of individuals displaced) and in explaining how the city was working to gather and transmit that information. Throughout the press conference, city officials continually highlighted the city's phone number for fire information.

B. The Importance of Messaging

The shooting and death of Michael Brown and the subsequent protests revealed crisis communication problems in Ferguson. An analysis of communication throughout the protests would reveal many other shortfalls. Yet in this section, we focus on communication in the response stage immediately following Brown's death. Effective communication in the initial stages could have mitigated and potentially prevented the subsequent protests.

Ferguson Shooting: On August 9, 2014 a white police officer, Darren Wilson, shot and killed an unarmed black man, Mike Brown, in Ferguson, MO after stopping him for jaywalking. Brown's body laid uncovered in the street for more than four hours. Ferguson residents shared criticism and pictures on social media. The Ferguson mishandling of Brown's death drew national criticism and sparked civil rights protests for over three months.

Source: Blankstein 2014.

---

[41] City of Raleigh. "Update: W. North Street Fire."
[42] City of Raleigh. Twitter post. March 17, 2017, https://twitter.com/RaleighGov.
[43] Communications Director Damien Graham, City Manager Ruffin Hall, Fire Chief John McGrath, and Police Chief Cassandra Deck-Brown were in attendance.
City of Raleigh. "Downtown Raleigh Fire News Conference." *YouTube,* March 17, 2017. Accessed April 14, 2017. https://www.youtube.com/watch?v=3gxfvjUVjVI.
[44] City of Raleigh. "Update: W. North Street Fire."
[45] City of Raleigh. "Downtown Raleigh Fire News Conference."

> **Best Practice**: **Mayors should encourage their municipality to provide clear first messages on the crisis to set the tone**. Mayors and the municipal government should be the first ones to provide information and prevent speculation about the event. If the initial message is inaccurate, officials should acknowledge previous messaging, address misconceptions, and provide more accurate information.

After considering the situation, the city handed over command to the Missouri state police and designated Captain Ron Johnson, an African American native of Ferguson, as the liaison with the community. Things quickly fell apart at the next day's press conference. Ferguson Chief of Police Thomas Jackson revealed Officer Wilson's involvement in the shooting at the same time he released a video and photographs of an attempted robbery that Brown was allegedly involved with before his shooting.[46] Later that same day, Chief Jackson changed the message slightly by stating that Officer Wilson did not know about Brown's potential robbery involvement and instead stopped him for jaywalking.[47] This conflicting information without an accompanying explanation created more confusion on an already sensitive and emotional topic.

> **Best Practice**: **Mayors should encourage their municipality to coordinate across city agencies and with partners to create consistent and accurate messages.** Officials should add new information, but updates should not contradict earlier points or create confusion for

Chief Jackson's messaging also revealed divisions and lack of communication planning between the Ferguson Police and the Missouri State Highway Patrol. Captain Johnson apparently learned of the robbery allegations at the same time as the public during the first press conference. Other government officials in attendance, including Governor Nixon, could "barely disguise their astonishment at Chief Jackson's decision to combine the two releases."[48]

> **Best Practice**: **Mayors should monitor social media and community sentiment to tailor communications to the emotions and needs of city residents.** Mayors should ensure that messaging addresses the concerns of all segments of their population. Mayors should ensure that their messaging remains sensitive to the populations affected by the crisis.

Circulating images showed Brown's body in the street uncovered for nearly four hours. Ferguson police had no apparent need for the body to remain uncovered for that long. Experts expressed "surprise at how Brown's body had been allowed to remain in public view."[49] Citizens quickly shared images of the scene on social media, highlighting perceptions of police

---

[46] Blankstein, Andrew. "What Went Wrong in Ferguson?" *NBC News*. August 20, 2014. Accessed April 16, 2017. http://www.nbcnews.com/storyline/michael-brown-shooting/what-went-wrong-ferguson-n184996.
[47] Taintor, David. "How Ferguson Police made the situation worse." *MSNBC*. August 16, 2014. Accessed April 16, 2017. http://www.msnbc.com/msnbc/ferguson-police-department-made-situation-worse.
[48] Swaine, Jon. "The Five Leaders who failed Ferguson." *The Guardian*. November 24, 2014. Accessed April 16, 2017 https://www.theguardian.com/us-news/2014/nov/27/ferguson-five-leaders-failed-michael-brown.
[49] Bosman, Julie and Joseph Goldstein. "Timeline for a Body: 4 Hours in the Middle of a Ferguson Street." *Ney York Times*. August 23, 2014. Accessed April 16, 2017. https://www.nytimes.com/2014/08/24/us/michael-brown-a-bodys-timeline-4-hours-on-a-ferguson-street.html.

insensitivity. Chief Jackson's comments reinforced images of a city ignorant to racial tensions and a police force insensitive to Brown's death.

City officials should have instead used the initial press conference to calm the public and provide accurate and timely information, perhaps even an explanation or apology for the treatment of Brown's body. Chief Jackson's lack of empathy increased the risk of riots and strengthened distrust of police.[50] Experts criticized Ferguson officials' lack of "clear strategy."[51]

During this time, Mayor James Knowles remained remarkably absent from the communication around Brown's death. In an interview, Mayor Knowles repeatedly called Brown's body "it" when trying to explain why Brown's body was left uncovered.[52] Mayor Knowles showed little remorse. He also presented confusing evidence by going back and forth on how the body was covered and then was not covered.[53]

He appeared ignorant of the impact that the image had on residents and the national media. Communication experts criticized his language as using "hedging words to dismiss the severity of the situation, dismiss the feelings of African American residents."[54] His insensitivity and mishandling of Brown's death prompted national criticism and a "Recall Knowles 2015" campaign that collected nearly 2,200 signatures.[55]

C. *The Importance of Coordination Among Officials*

> **Best Practice: Mayors should use their municipality's Emergency Operations Center as a space to gather and share information.** Face-to-face communication facilitates information exchange and helps mayors collect up-to-date and accurate information.

To achieve clear and consistent messaging, mayors need to be able to acquire accurate information and disperse that information to the public. Acquiring accurate information requires collaboration and coordination with credible sources.[56] Mayors and municipal officials need

---

[50] Taintor 2014.

[51] Blankstein 2014.

[52] Hunn, David, and Bell, Kim. "Why was Michael Brown's body left there for hours?" *St Louis Post-Dispatch*, September 14, 2014. Accessed April 17, 2016. http://www.stltoday.com/news/local/crime-and-courts/why-was-michael-brown-s-body-left-there-for-hours/article_0b73ec58-c6a1-516e-882f-74d18a4246e0.html.

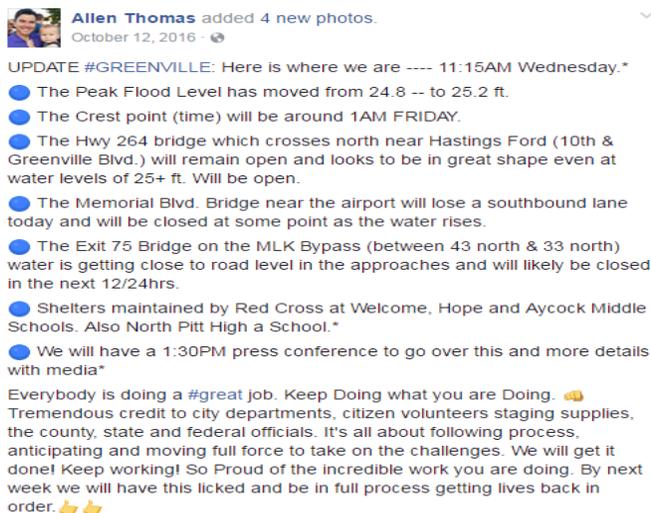[53] CNN. "Interview with Mayor James Knowles of Ferguson, Missouri." *CNN*. August 21, 2014. Accessed April 16, 2017. http://www.cnn.com/TRANSCRIPTS/1408/21/nday.05.html.

[54] Malandro Consulting. "Ferguson's Mayor Uses Slippery Communication: Don't Make the Same Mistake." *Malandro Consulting Group*. October 6, 2014. Accessed April 16, 2017. http://malandro.com/fergusons-mayor-uses-slippery-communication-dont-make-mistake/.

[55] Gillerman, Margaret. "Group says it has enough names on petition to recall Ferguson mayor." *St. Louis Post-Dispatch*. May 24, 2015. Accessed April 16, 2017. http://www.stltoday.com/news/local/metro/group-says-it-has-enough-names-on-petition-to-recall/article_5380e931-87f0-5d86-9c0f-373b642dfbb8.html.

[56] Seegar 2006; Cole and Fellows 2008; Allied Independent Consulting. Covello, Vincent. 2003. "Best practices in Public Health Risk and Crisis Communication. *Journal of Health Communication* 8 (sup1): 5-8.

access to all available information from reliable sources, subject-area experts, and a variety of stakeholders. Mayors should also recognize the diversity of their communities' demographics.[57]

In terms of dispersing information, different audiences use various communication channels based on their age, access needs, and population characteristics. Mayors should engage with different community leaders to gain their support in using their communication networks to spread messages to their respective audiences. Governments must "devote effort and resources to the slow, hard work of building partnerships and alliances with other organizations" if they want to be effective in the dissemination of clear and credible messages.[58]

Allen Thomas added 4 new photos.
October 12, 2016 ·

UPDATE #GREENVILLE: Here is where we are ---- 11:15AM Wednesday.*
🔵 The Peak Flood Level has moved from 24.8 -- to 25.2 ft.
🔵 The Crest point (time) will be around 1AM FRIDAY.
🔵 The Hwy 264 bridge which crosses north near Hastings Ford (10th & Greenville Blvd.) will remain open and looks to be in great shape even at water levels of 25+ ft. Will be open.
🔵 The Memorial Blvd. Bridge near the airport will lose a southbound lane today and will be closed at some point as the water rises.
🔵 The Exit 75 Bridge on the MLK Bypass (between 43 north & 33 north) water is getting close to road level in the approaches and will likely be closed in the next 12/24hrs.
🔵 Shelters maintained by Red Cross at Welcome, Hope and Aycock Middle Schools. Also North Pitt High a School.*
🔵 We will have a 1:30PM press conference to go over this and more details with media*

Everybody is doing a #great job. Keep Doing what you are Doing. 👏 Tremendous credit to city departments, citizen volunteers staging supplies, the county, state and federal officials. It's all about following process, anticipating and moving full force to take on the challenges. We will get it done! Keep working! So Proud of the incredible work you are doing. By next week we will have this licked and be in full process getting lives back in order. 👍👍

Source: Facebook, Allen Thomas.

Hurricane Matthew: On October 8, 2016, Hurricane Matthew hit NC and dumped over a foot of rain over parts of the state. In Greenville, the storm caused a two-part emergency comprised of the original storm as well as the resulting flooding and damage in the ensuing week. The first night of the storm alone required over 100 water rescues. Later in the week, the Tar River rose to 25 feet and flooded roads and bridges in Greenville, making routes impassable and requiring mandatory evacuation for parts of the city. Mayor Thomas announced a curfew for Wednesday, during the peak of flooding, before ordering evacuations "for about one-tenth of Greenville's 90,000 people."
Source: Bacon and Rice 2016.

The Hurricane Matthew case study highlights the importance of this information collection and dispersal in a quickly evolving crisis. Mayor Thomas provided frequent updates using Facebook, Twitter, and traditional media as seen in the above image.[59] He incorporated key information, photos, and videos to educate citizens about the ongoing situation and required precautions. He purposefully referenced the previous flooding during Hurricane Floyd to benchmark the danger in terms the community understood.[60]

---

[57] Seegar 2006; Cole and Fellows 2008.
World Health Organization. *World Health Organization Outbreak Communication Planning Guide.* WHO Library Cataloguing-in-Publication Data, 2008. http://www.who.int/ihr/elibrary/WHOOutbreakCommsPlanngGuide.pdf.
[58] Covello 2003, 13.
[59] Thomas, Allen. Facebook Page. Accessed April 15, 2017, https://www.facebook.com/MayorAllenThomas/.
[60] Allen Thomas (Mayor of Greenville), interviewed by Michelle Burgess and Chandler Rowland, North Carolina, March 2017.

Mayor Thomas maintained a conversational tone in his comments to citizens. He explained the logic for each decision the city made and directed citizens to key website and phone resources available at the city.

Part of his messaging involved his decision to film several of his videos, including the evacuation announcement, from Greenville's Emergency Operation's Center (EOC).[61] This communal space allowed officials to exchange information and make key decisions together. Mayors need to be involved in that information exchange to have the most accurate and timely information.[62] Mayor Thomas emphasized the importance of the EOC in his process of collecting information during the hurricane.

> *"We have what's called the emergency management crisis team… there are point people from each of those entities that come together, and we actually set up a command center when [crises] happen"*
>
> *-Mayor Pam Hemminger of Chapel Hill*

During the Chapel Hill and Carrboro Water Crisis, the towns also used an Emergency Operations Center encompassing the emergency management crisis team with members from Chapel Hill, Orange County, the University of North Carolina at Chapel Hill, and Carrboro. Chapel Hill Mayor Pam Hemminger issued a state of emergency, while the university canceled Friday classes and encouraged students to leave campus for the weekend. Point people from each entity worked from the command center to make decisions and communicate with the public.[63]

> **Best Practice: Mayors should encourage their municipalities to embed staff at other agencies to facilitate information sharing and the collection of accurate information during crises.** For example, municipalities could send city staff to join county level meetings or invite county level staff to their Emergency Operations Center.

Mayor Thomas of Greenville mentioned the importance of embedding city staff in other government agencies. This tactic places city personnel at other agencies, such as county emergency management offices or police stations, to encourage face-to-face communication. In a crisis, internal communication plays a key role to collect accurate information.[64] This face to face communication helps the process, especially when decisions are being made quickly.

D. The Importance of Community Partnerships

> **Best Practice (i): Mayors should use existing partnerships with local organizations to reach different segments of their populations.** Mayors can leverage relationships with partners like religious organizations, community groups, or schools, to amplify their message.

---

[61] An EOC is "a prearranged location from which local officials can coordinate and communicate with responders, other levels of government, and the public" (Henstra 2010, 237).

[62] Allied Independent Consulting.

[63] Pam Hemminger (Mayor of Chapel Hill), interviewed by Emily Johnson and Chandler Rowland, NC, March 2017.

[64] Seeger 2006.

> **Best Practice (ii): Mayors should encourage municipalities to pay attention to language barriers in their communities.** Municipalities should translate messages as needed to ensure that the entire community has the necessary safety information.

Mayor Thomas and Greenville relied not only on social and traditional media to spread information but also on community partners and their networks.[65] Local churches helped to reach seniors with door-to-door messaging. This outreach is similar to Chapel Hill and Carrboro's efforts during the water crisis to reach key populations through community partnerships. Carrboro worked with El Centro to reach the Spanish speaking population. Chapel Hill relied on schools as a connection point.[66] The town also translated key communications to overcome language barriers.

"We told [OWASA] that they needed to send out alerts in Spanish and Burmese ... to make sure th[ose populations] knew what was going on. We made sure the leader of El Centro knew everything that was going on so she could get word out to people that she was in contact with because we worry about language barriers."

-Mayor Lydia Lavelle of Carrboro

3. Recovery

Recovery involves restoring normalcy after a crisis. This stage can differ in time length but requires municipalities to face complex questions involving diverse stakeholders and resource allocation. By this stage, the affected population is more stable than earlier in the crisis.

Short-term recovery includes restoring essential services or providing for direct human needs, like shelter or food.[67] Long-term recovery involves reconstruction of the affected area and management of "psychological, demographic, economic, and political impacts."[68]

Actors, ranging from government officials, business leaders, and community activists, are essential to the recovery stage.[69] "Each group plays a role in determining how the recovery will progress."[70] Similar to preparation and response, effective recovery is rooted in having strong relationships within the government and throughout the community.

Empathetic and sensitive communication is especially important in the recovery stage. Because the crisis might have affected the population in different ways, mayors and their municipality should reflect appropriate emotional understanding. Some citizens might have had

---

[65] Allen Thomas interview.
[66] Pam Hemminger interview.
Lydia Lavelle (Mayor of Carrboro), interviewed by Michelle Burgess and Chase Peterson, NC, March 2017.
[67] Baird, Malcolm. 2010. "The Recovery Phase of Emergency Management." *Vanderbilt Center for Transportation Research:* 1-39.
[68] Lindell, Michael, Prater, Carla and Perry, Ronald. *Fundamentals of Emergency Management, Electronic Textbook.* Federal Emergency Management Agency, 2006.
http://training.fema.gov/EMIWeb/edu/fem.asp.
[69] Haddow, George, Bullock, Jane and Coppola, Damon. *Introduction to Emergency Management (Third Edition).* Burlington, Massachusetts: Butterworth-Heinemann, 2008.
[70] Haddow et al 2008, 13.

traumatic experiences related to the crisis and may be grieving loss of life or property. The municipality should acknowledge this loss while providing clear information on resources for people to return to normal. Resources should be appropriate for population needs and may include emergency housing, counseling services, federal or state relief, and insurance support.

A. The Importance of Providing Appropriate Assistance

> **Best Practice: Mayors should understand diverse community needs to provide adequate resources and information.** The varying populations effected by a crisis have specialized needs. Mayors should be aware of this variety, seek input from impacted segments of the community, and tailor their recovery efforts to those needs.

A critical piece of the recovery stage involves providing resources to help guide citizens back to normalcy. After traumatic crises involving loss of life or property, municipalities should designate resources to help individuals process the event and move beyond it.

After the Pulse Nightclub shooting, Mayor Dyer of Orlando established a family assistance center where families of the victims and community members could receive counseling and access to social services.[71] The family assistance center provided financial assistance, made possible through a city-initiated crowd-funding platform, for proper burials of the deceased victims and travel assistance for family members to attend those services.[72] Mayor Dyer's awareness of the unique needs facing the LGBTQ and Latinx community allowed the city to provide accessible and identity-appropriate services.[73]

Mayor Dyer was also cognizant that the shooting disproportionately affected marginalized populations and caused heightened anxiety after the attack. Muslim-Americans, for example, were nervous about revengeful hate crimes and discrimination because the shooter self-identified with ISIS.[74]

Mayor Dyer organized a city vigil to acknowledge the community's pain and provide a constructive way for individuals to grieve collectively. He intentionally invited leaders from marginalized communities, including LGBTQ, Latinx, and Muslim communities, to lead the march and reinforce messages of unity, hope, and healing.[75] More than 50,000 people attended

---

[71] Garcia, Ahiza. "Orlando Mayor: We've Taken Care of 256 victims." *CNN Money,* June 17, 2016. Accessed April 16, 2017. http://money.cnn.com/2016/06/17/news/orlando-pulse-shooting-victims/.

[72] Powers, Taylor. "Family Assistance Center offers array of services to help club shooting victims, families." *WFTV9ABC,* June 15, 2016. Accessed April 16, 2017. http://www.wftv.com/news/local/family-assistance-center-offers-array-of-services-to-help-club-shooting-victims-families-/344083335.
The city established an "OneOrlando Fund" where people could donate to the victims and families of the victims. City of Orlando. 2017. "OneOrlando Fund." Accessed April 14, 2017. https://www.oneorlando.org/.

[73] Latinx refers to both Latino and Latina populations as a more gender inclusive term.

[74] Khan, Hannah. "Don't throw the blame on Muslims for the Pulse Nightclub Shooting in Orlando." *Huffington Post,* June 13. 2016. Accessed April 16, 2017.
http://www.huffingtonpost.com/hannah-khan/dont-throw-the-blame-on-muslims_b_10433836.html.

[75] Bevil, Dewayne and Stennett, Desiree. "Crowd estimated at 50,000 packs into Lake Eola Park for Pulse Vigil." *Orlando Sentinel.* June 19, 2016. Accessed April 16, 2017.

the vigil. Some citizens shared that the vigil was a "turning point" after which they could "continue to remember, but hopefully … move on."[76] Through his leadership, Mayor Dyer provided for the needs of the affected and mitigated potential harm to other marginalized groups.

B. The Importance of Empathy

> **Best Practice: Mayors should communicate with empathy for those affected in crises even in complex situations.** The public expects an empathetic response from its leaders. The lack of empathy will alienate segments of the population and fuel distrust.

The most common recommendation from scholars and practitioners alike is to communicate with empathy.[77] People want to know that leaders recognize their concerns in response to the crisis.[78]

The public responds more positively and trusts spokespeople who express concern and emotion for the people affected by crisis and any harm caused.[79] Practitioners suggest that officials must share empathy in the first 30 seconds of any response to allow the public to absorb the information without constantly questioning whether the government "gets it."[80]

Chattanooga School Bus Crash:

On November 21, 2016, six children were killed and dozens were injured in Chattanooga, TN when a school bus rolled over and hit a tree. The tragic deaths of children greatly affected the entire community of Chattanooga. The event, although extremely localized, became a national headline.

Source: Blinder 2016.

Mayor Andy Berke of Chattanooga responded proactively to the Chattanooga bus crash. He gave his first press conference that same afternoon to express empathy and commitment to those grieving. Mayor Berke declared, "We are again dealing with unimaginable loss."[81] He later tweeted, "There are no words to comfort the broken heart of a mother or father. As I pray for families affected by tragedy, I ask you to do the same."[82]

---

http://www.orlandosentinel.com/news/pulse-orlando-nightclub-shooting/os-pulse-vigil-lake-eola-20160619-story.html.
The city had established these relationships with identity leaders before the crisis. The engagement in the aftermath of the crisis strengthened the relationships further.
[76] Bevil and Stennett 2016.
[77] Seegar 2006; Covello 2003.
Reynolds, Barbara. Crisis & Emergency Risk Communication: By Leaders For Leaders. *Center for Disease Control*, 2002. https://emergency.cdc.gov/erc/leaders.pdf.
Coombs, Timothy. 2007. "Crisis Management and Communications*." Institute for Public Relations.* http://www.instituteforpr.org/crisis-management-and-communications/.
[78] Covello 2003.
[79] Seegar 2006.
[80] Reynolds 2002.
[81] Blinder, Alan. "A Crumpled School Bus Leaves Chattanooga Dazed." *The New York Times,* November 22, 2016. Accessed April 16, 2017.
https://www.nytimes.com/2016/11/22/us/chattanooga-school-bus-crash.html.
[82] Larimer, Sarah, Schmidt, Samantha, and Wang, Amy. "'You could hear them screaming': School bus crash leaves at least 5 dead in Chattanooga." *Washington Post,* November 22, 2016. Accessed April 16, 2017.

Mayor Berke remained visible in the community. He shared images on social media of him giving blood and preparing care packages for the injured children.[83] By sharing his involvement and commitment to the response, he modeled positive actions that the community could take to support one another.

When addressing complex crises, like a police shooting, mayors may feel pressure to stifle an emotional response in case the public perceives their affect as confirming the municipality's legal guilt. Mayors may hesitate to comment due to ongoing investigations. Mayors should be aware that public perception of complex political crises becomes incredibly important. Expressing empathy for loss of life, no matter the circumstances, can help mitigate further tension in the community and help a community slowly return to normal.[84]

Literature often cites the Ferguson crisis as a cautionary tale of the consequences for lack of empathy. Not only did the city fail to provide genuine empathy directly after the shooting of Brown, the city continued to deny legitimacy to the civil rights protests that occurred after the shooting. The protests first erupted a day after Brown's death on August 9.[85] The image of nonviolent protestors met with militarized police with tear gas and rubber bullets thrust Ferguson into the national spotlight on August 14.[86] National leaders criticized this response from the Ferguson and St. Louis police, and later the National Guard, as heightening tensions.[87]

C. The Importance of Addressing Tensions

> **Best Practice: Mayors should address community tensions and fractured relationships exposed during crises.** Hosting community conversations and facilitating a community space for dialogue can help mend relationships in the recovery phase and long-term.

Underlying problems in a municipality can catalyze a single event into a full crisis if mayors and municipal officials fail to address the situation and assume responsibility. Ignoring or dismissing underlying problems during a crisis can create distrust between the community and municipal agencies, exacerbating single incidences.

The Ferguson police shooting provides a perfect example of how a single incident, when left unaddressed by city officials, can transform into a chaotic crisis. When presented with evidence on racial disparities in police arrests, Mayor Knowles denied political and social

---

https://www.washingtonpost.com/news/morning-mix/wp/2016/11/21/multiple-fatalities-following-school-bus-crash-in-tennessee/?utm_term=.a72165cb5e3e.
[83] Berke, Andy. Twitter Post. November 23, 2016, 8 :46 pm.
[84] Stanton, Peter. "Communication During a Crisis: Words Matter." *Stanton Communications,* August 18, 2014. Accessed April 16, 2017. http://stantoncomm.com/communication-during-a-crisis-words-matter.
[85] Siddiqui, Sabrina and McCormack, Simon. "Here's a Timeline of the Events in Ferguson since Michael Brown's death." *Huffington Post,* November 25, 2014. Accessed April 16, 2017.
http://www.huffingtonpost.com/2014/11/25/ferguson-timeline_n_6220166.html.
[86] Goyette, Brayden. "Ferguson Protests Met with Heavy Police Response, 2 reporters and Alderman Arrested." *Huffington Post,* August 14, 2014. Accessed April 16, 2017.
http://www.huffingtonpost.com/2014/08/14/ferguson-protests-police-response_n_5677741.html.
[87] Levs, Josh. "Ferguson: Some rip police tactics, use of military equipment." *CNN,* August 15, 2014. Accessed April 16, 2017. http://www.cnn.com/2014/08/14/us/missouri-ferguson-police-tactics/.

realities of the Ferguson black community. He stated, "There is not a racial divide in the city of Ferguson. That is the perspective of all residents in our city, absolutely… Allegations that Ferguson has experienced racial tensions during our history are absolutely ridiculous."[88]

Mayor Knowles received criticism for this blatant denial of a racial divide in Ferguson when significant evidence existed that police targeted the black community with arrests, fines, and disproportionate violence.[89]

In contrast, when Officer Twiddy shot and killed Akiel Denkins, Mayor Nancy McFarlane acknowledged that Raleigh had room for improvement in police-community relations. Mayor McFarlane recognized that Raleigh was not immune to national challenges of racial injustice and community policing.

> **Raleigh Police Shooting:**
>
> On February 29, 2016, Raleigh police officer D.C. Twiddy shot and killed Akiel Denkins during an arrest attempt. Denkins had failed to appear in court for a felony drug charge. Witnesses reported that Twiddy shot Denkins while he ran away, sparking protests and concern from the community.
>
> Source: Grzybowski 2016.

"Through these conversations we hope to bring to light many of the challenges that face our community. This is really about the community and what the community is feeling…It's not our job to sit at the table talking. It's our job to listen."
- Mayor Nancy McFarlane of Raleigh

She sought opportunities for constructive feedback and dialogue by launching a "Community Conversations" meeting series where city officials, law enforcement, and community members gather to restore the public's trust in police.[90] This series ensured that the city continued to address these issues with concerned and impacted residents. The city hosted two citywide meetings and five additional meetings at the district level in February 2017.[91]

D. *The Importance of Information in Recovery*

> **Best Practice: Mayors should follow up and provide information after crises so citizens can better return to normal.** Citizens expect full information after a crisis. Information is crucial for them to return to everyday activities.

---

[88] Giles, Matthew. 2016. "Color Blindness in the Public Consciousness." *eTopica.*
[89] Lopez, German. "The shooting of Michael Brown was the final straw for people in Ferguson." *Vox,* August 14, 2014. Accessed April 16, 2017. http://www.vox.com/2014/8/14/5999929/shooting-mike-brown-final-straw-ferguson-st-louis-missouri.
[90] "Community Conversation Meetings." *City of Raleigh*, March 1, 2017. Accessed April 16, 2017. https://www.raleighnc.gov/community/news/content/CorNews/Articles/DistrictwideCommunityMeetingsEvents.html.
[91] Grzybowski, David. "Raleigh officials and residents meet for 'community conversation.'" *WNCN,* November 14, 2016. Accessed April 16, 2017. http://wncn.com/2016/11/14/raleigh-officials-and-residents-meet-for-community-conversation/.

During the Chapel Hill/Carrboro Water Crisis, OWASA, Chapel Hill, and Carrboro responded within an hour of the water main breaking by issuing "DO NOT USE" and "DO NOT DRINK" directives to the citizens and businesses in the area.[92] Since the crisis unfolded so quickly, details on what caused the crisis and what made the water unusable did not get priority.

"People want to know [about the details of the crisis]. They are not satisfied with it's just over. They want to know the whys behind it… It's important too to finish up that communication piece."- Mayor Pam Hemminger of Chapel Hill

As the town began to return to normal, some residents remained hesitant to use the water since they did not know the full story. Mayor Pam Hemminger of Chapel Hill pointed out that many people wanted to know exactly what caused the water crisis.

In response, OWASA created a FAQ document and "2017 Water Emergency Crisis" website page with details about the timeline, actors, and links to town meetings where the crisis was discussed.[93] The document explained that OWASA issued the "DO NOT USE" directive due to the low water pressure stemming from the water main break and that the water was not contaminated with bacteria during the crisis.[94]

The town of Chapel Hill helped push out the document on multiple social media platforms. OWASA shared the link to the website in emails to OWASA customers. By taking the time to address citizens' concerns, the town moved the community forward in a productive way. In collaboration with OWASA, the town also held public forums to further address questions and concerns.

E. *The Importance of Acknowledging Partners*

> **Best Practice: Mayors should publicly recognize partners for their role in effectively responding to crises.** Taking the time to acknowledge the various actors in the crisis response highlights a shift from directly responding to the crisis to recovering and reflecting on the crisis itself. Partners who played an instrumental role in communicating the immediate response of the city will appreciate recognition.

---

[92] OWASA. "2017 Water Emergency." *OWASA,* February 8, 2017. Accessed April 16, 2017. http://www.owasa.org/2017-water-emergency.
[93] OWASA 2017.
See appendices 8 and 9 for OWASA Water Emergency webpages.
[94] OWASA. "FAQS 2017 Water Emergency." *OWASA,* February 8, 2017. Accessed April 16, 2017. http://www.owasa.org/faqs.

One component of recovery is publicly acknowledging agencies and individuals helping to mitigate the crisis. The response stage occurs immediately after a crisis. If officials implement a plan effectively, the response is swift and calculated. This can leave no time for personal recognition or thanksgiving. Recognizing first responders, community partners, and responding agencies can build strong relationships and buy-in for response in the future.

"I want to thank Raleigh's first responders for their heroic efforts in protecting the public during last night's destructive fire. ... I would also like to thank the community organizations and businesses that have opened their doors and offered food, shelter and support."
- Mayor Nancy McFarlane of Raleigh

After the fire in downtown Raleigh, Mayor Nancy McFarlane recognized the efforts of firefighters and police officers in responding to the fire and restoring the community back to normal.[95] Mayor McFarlane publicly thanked first responders and community partners the day after the fire in a public statement. Mayor McFarlane's statement echoes thanksgiving and support from the community to signal the end of the crisis. Her statement also indicated the start of efforts to restore the city back to normal.

F. The Importance of Community Solidarity

> **Best Practice: Mayors should provide opportunities for the community to come together after crises.** A crisis emphasizes residents' feelings of powerlessness. Providing constructive opportunities to come together can reassure residents and aid in the recovery process.

Hurricane Matthew forced thousands of Greenville residents to evacuate. Residents were extremely anxious about the days ahead.[96] Through social media and press releases, Mayor Allen Thomas of Greenville highlighted the community's strength and unity and shared messages of hope and solidarity with the Greenville citizens.[97]

After the initial damage caused by Hurricane Matthew, Mayor Thomas organized a prayer vigil near the Tar River, which was expected to rise to nearly 24 feet.[98] Nearly 1,000 citizens came to the bridge to pray for the Tar River water to recede and for the victims of the

---

[95] WRAL. "Cleanup from largest Raleigh fire in decades to last into weekend." *WRAL,* March 17, 2017. Accessed April 16, 2017.
http://www.wral.com/raleigh-building-inspected-50-times-before-massive-overnight-fire/16589787/.
[96] Bacon, John, and Doyle, Rice. "Flooded NC city: 'Please pray for our community.'"*USA Today,* October 11, 2016. Accessed April 16, 2017. https://www.usatoday.com/story/news/nation/2016/10/11/flooded-nc-city-please-pray-our-community/91887120/.
[97] Thomas, Allen. Twitter posts. October 12, 2016.
[98] "Hurricane Matthew Brings Record River Flooding to North Carolina." *Weather.com,* October 15, 2016. Accessed April 16, 2017. https://weather.com/storms/hurricane/news/matthew-river-flooding-carolina-records.

hurricane and the impending floods.[99] Along with the Mayor Pro-Tem and religious leaders from the city, Mayor Thomas spoke messages of hope, solidarity, and community resilience.

Source: Reflector 2016.

"The water may rise, but we rise higher because we have faith and we believe ... in each other." - Mayor Thomas of Greenville

The message of community resilience and unity proved powerful and inspirational. Several news outlets captured pictures of the crowds on the bridge. The prayers and speakers were recorded and shared so that others in the community could view the vigil.[100] Mayor Thomas effectively gathered his community to express their anxiety in a supporting and intentional environment.

4. Reflection[101]

Reflection calls for government officials and agencies to develop strategies that prevent future crises or minimize their effects. After crises occur, municipalities enter into the reflection stage to help better prepare for future crises. Reflection requires municipalities to identify and employ methods to improve the community's crisis response plan.[102]

During reflection, municipal management and staff develop and implement mitigation strategies. The mayor meanwhile plays a key role in evaluating and amending their crisis communication strategies. Mayors should use the time after recovery to reflect on their actions and their municipality's response and recovery.

> **Best Practice: Mayors should internally reflect to assess how their actions impacted community crises.** Mayors should review their communication and efforts from all stages, including preparation, response, and recovery.

As the public face of municipalities, mayors must convey a variety of information to their constituents. Mayors share details about the crisis, what has occurred, as well as safety, prevention, and mitigation measures for their citizens.

---

[99] Velliquette, Beth. "People gather at the river to pray for flood victims." *Reflector,* October 12, 2016. Accessed April 16, 2017. http://www.reflector.com/Crime-and-Rescue/2016/10/12/People-gather-at-the-river-to-pray-for-flood-victims.html?fullsize=1&item=.

[100] Jewell, Jessica. "Hundreds show up to Greene Street Bridge for prayer vigil in Greenville." *WNCT,* October 12, 2016. Accessed April 16, 2017. http://wnct.com/2016/10/12/hundreds-show-up-to-greene-street-bridge-prayer-vigil-in-greenville/.

[101] The stage after recovery is more commonly referred to as mitigation.

[102] Henstra 2010.

Mayors need to assess how well they conveyed information after their municipality has returned to normal. Reflection informs the planning stages for the next crisis. An internal reflection allows mayors to highlight areas of improvement.

A. The Importance of Reflecting with Partners

> **Best Practice: Mayors should reflect with key governmental agencies and local organizations to assess how their actions worked in conjunction to resolve community crises.** Mayors should establish a protocol to seek feedback from organizations involved in crisis response and recovery.

After the Chapel Hill/Carrboro Water Crisis, Mayor Pam Hemminger reflected on how the town government and partnering agencies could have better served the community. The town partnered with El Centro to deliver information to the Spanish speaking population. Yet, Mayor Hemminger admitted that during the crisis information flowed only from the town to the nonprofit. She recognized the need for more active two-way communication with organizations like El Centro in the response and recovery stages. She has begun working with town agencies to develop strategies to do so, starting by seeking feedback from community leaders.

"We knew [what groups to connect with], we just weren't as specific as to what needed to be done and we're meeting to debrief backwards and saying 'tell us what worked and what didn't work and what you need."

- Mayor Pam Hemminger of Chapel Hill

B. The Importance of Community Feedback

> **Best Practice: Mayors should seek structured feedback from citizens in assessing how effective the municipality responded to the crisis.** Mayors should establish platforms for citizens to voice concerns and suggestions to enhance future crisis planning and responding.

Mayors should listen and respond to the needs of the public.[103] This is especially true when reflecting on crisis response and recovery. Structured feedback channels like focus groups, advisory groups, and surveys can help gather the public's perception of risks and their suggestions on how to respond. Mayors may find that knowledge gaps exist between the public and the government. Mayors can work to address those issues and incorporate feedback before another crisis occurs.[104] This acknowledgement helps strengthen the public's trust in the municipality.

Chapel Hill's lack of jurisdiction over the water treatment agency complicated its response and recovery efforts. OWASA led the recovery efforts in decontaminating the water supply and restoring normal water operations. The Town of Chapel Hill took responsibility for disseminating critical information to the citizenry regarding the recovery efforts and resources.

---

[103] Covello 2013.
[104] Reynolds 2002.

In the days after the Chapel Hill/ Carrboro Water Crisis, the town began to assess how they responded in handling the event and addressing citizen concerns. In conjunction with OWASA, the town held a community forum and invited citizens to provide feedback on the water crisis recovery efforts. This forum allowed citizens to voice their concerns. Citizens also provided input on how the town could better distribute information and resources in the future.

"We had a business meeting on the Tuesday after the crisis, and businesses came and told us what went well and what didn't go well and we listened."
- Mayor Pam Hemminger of Chapel Hill

Mayor Hemminger emphasized the importance of garnering community feedback to inform future handling of a crisis. She stressed the challenges of reaching all citizens in a timely manner. Chapel Hill has a large population without access to instant media sources, like the town's social media. The town needs partners to reach these populations in crises. The community forum provided the mayor and her staff with greater insight into how to serve these unique populations. All municipalities should foster this community insight when they reflect on a crisis.

C. The Importance of Reflecting on Non-Local Crises

Best Practice: Mayors should use crises elsewhere as opportunities to reflect and reevaluate their own crisis management plans. Crises in a single municipality occur infrequently. Mayors and municipal staff should reflect on lessons learned from other crises to improve their own crises strategies.

Mayors should not overlook the importance of lessons learned from non-local crises. Mayor Ian Baltutis of Burlington emphasized this point as he described how the crisis in Ferguson prompted an inter-governmental discussion in Burlington on improvements to community-police relations. The town used Ferguson as an opportunity to revisit and assess their own community relationships and crisis management plans.

"When we look at things like Ferguson…[it's] important to think what do our relationships look like with the community and the police department? That can go a long way in diffusing those issues."

- Mayor Ian Baltutis of Burlington

Burlington promoted enrollment in their Citizens Police Academy, a program designed to encourage community conversation and improve community-police relations.[105] The Burlington Police Department also hosted four community dialogues about gun violence.[106] These forums encouraged "the community's collaboration [with the police department] to better understand

---

[105] "Citizens Police Academy." Burlington, NC - Official Website. Accessed April 16, 2017. http://www.ci.burlington.nc.us/1489/Citizens-Academy.
[106] See image above for the Burlington Citizens Police Academy.

concerns, improve community safety, evaluate strategies for future action, and share appropriate details regarding the current spate of gun crimes."[107]

Source: Town of Burlington

> *"When Ferguson happened and there were riots all over the country, we had a couple of people come to the police department with some signs, and I went out there and I talked with them, gave them some information about our citizen's academy and welcomed them in."*
> *- Asst. Police Chief Chris Verdeck of Burlington*

CONCLUSION

As North Carolina cities grow, they will face new and unique challenges. While Coalition cities each have their own characteristics, they will experience similar challenges associated with rapid development. Coalition mayors bring their own skills and expertise to their municipality and the Coalition. Mayor should share these skills and lessons learned from personal experience with other mayors to assist one another.

Mayors have the opportunity to mitigate crises through effective communication. Effective communication comes from an understanding of the community, strong partnerships, and clear and concise messaging. These themes emerge in each of the four stages of a crisis. We hope the best practices in this report spark a conversation about crisis communication in municipalities within the Coalition. Appendix 10 contains a list of the best practices highlighted in this report.

We have included three tools for mayors to implement our recommended best practices. The Guiding Questions, found in Appendix 1, helps mayors walk through the recommended best practices to assess their municipality's existing crisis communication. The questions will help start conversations between mayors and their community and staff. The Contact Sheet Template in Appendix 2 provides a worksheet for a comprehensive list of community and agency partners that mayors may need to contact in crises. Finally, the Crisis Checklist Template, found in Appendix 3, suggests action items for mayors once crises occur.

Mayors can customize the Contact Sheet and Crisis Checklist to their communities' specific needs. While these tools are intended to aid in crisis communication, mayors should continue to adapt and reflect according to their communities' needs and the nature of the crisis.

---

[107]"Citizens Police Academy." 2017.

APPENDIX 1: QUESTIONS FOR MAYORS' CRISIS COMMUNICATION REVIEW

PREPARATION

Crisis Communication Plans and Coordination
1. Have we (the municipality) developed a crisis communication plan? Do we regularly update it?
2. Do I (the mayor) understand my role in the crisis communication plan?

Community Relationship Building
1. What community organizations do we have relationships with?
2. How are we working to strengthen relationships with key community organizations?

Crisis Response Practice and Orientation
1. Do we regularly simulate crises to determine our preparation? How do we capture lessons learned in simulations to inform our plans?
2. Are updated crisis communication plans shared with municipality officials? Do we have a plan how to share this information with new mayors and municipal officials?

RESPONSE

Streamlined and Consistent Messaging
1. Do we have a clear and consistent message about the crisis?
2. Do we have a single website with all of the information related to a crisis? Is this single website shared across our social media platforms and communications channels?
3. When did we last update citizens on our crisis response?
4. How is this message being shared to other municipal officials and agencies involved?

Accessibility of Messaging
1. Is our message accessible to all citizens? Is it translated into multiple languages? How are we sharing this message to citizens without social media access?
2. Is our message sensitive to the needs of our citizens? Is it empathetic? Is it understandable?
3. Are we working with existing partners (schools, community groups) to share the message to more citizens?

Emergency Operations Center (EOC)
1. Have we visited the EOC during the crisis? Have you shared the information you learned there with your citizens?
2. Are staff from the mayor's office embedded in the EOC and vice versa?

RECOVERY

Unique Needs of those Affected
1. What are the unique needs of those affected by the crisis? How are we providing for these needs? How are we sharing resources with these citizens?

Community Resilience
1. What underlying issues were exposed during the crisis? How are we working to address them to heal community- municipality relations?
2. What opportunities exist to bring together the community in this crisis? How has the community healed in the past?

Follow Up to the Crisis
1. What information do citizens still need to return to normal? How is this information being shared with citizens after the crisis?
2. What agencies and partners did we engage with during this crisis? Have we thanked them publicly and internally yet?

REFLECTION

Internal Reflection
1. What is our definition of effective communication during a crisis? Was this achieved?
2. What role did I play in distributing information accurately and effectively?
3. Who were my main points of contact during the crisis? Were any critical contacts missing from this list?

Community Reflection
1. How are we gathering feedback from the community after a crisis? How will we integrate this feedback into future crisis preparation plans?
2. Who are the main community partners and populations we should seek feedback from?
3. Who are the main contacts from the above community partners?

External Reflection on Outside Crises
1. How prepared are we to handle a crisis like _____? What are some similarities between my municipality and _____?
2. What lessons from _____ can we use to inform our own crisis management?

Knowledge Share
1. What valuable information can I share from the crisis with other mayors in the coalition?
2. Have I reached out to other mayors to discover lessons learned from their recent crises?

North Carolina Metropolitan

MAYORS
COALITION

APPENDIX 2: CRISIS CONTACT TEMPLATE

MUNICIPAL DEPARTMENT	CONTACT INFORMATION	CONTACT MADE?
ANIMAL CONTROL NAME:	PHONE#: EMAIL:	
CITY ATTORNEY NAME:	PHONE#: EMAIL:	
CITY COUNCIL NAME:	PHONE#: EMAIL:	
CITY CLERK NAME:	PHONE#: EMAIL:	
CITY MANAGER NAME:	PHONE#: EMAIL:	
CITY PLANNING NAME:	PHONE#: EMAIL:	
COMMUNICATIONS NAME:	PHONE#: EMAIL:	
EMS NAME:	PHONE#: EMAIL:	
FIRE DEPT NAME:	PHONE#: EMAIL:	
HEALTH DEPT NAME:	PHONE#: EMAIL:	
INFORMATION TECHNOLOGY NAME:	PHONE#: EMAIL:	
POLICE DEPT NAME:	PHONE#: EMAIL:	
PUBLIC UTILITIES NAME:	PHONE#: EMAIL:	
SCHOOL DISTRICT NAME:	PHONE#: EMAIL:	
TRANSPORTATION NAME:	PHONE#: EMAIL:	
WASTE SERVICES NAME:	PHONE#: EMAIL:	
COMMUNITY CONTACTS (AS NEEDED)	CONTACT INFORMATION	CONTACT MADE?
NAME:	PHONE#: EMAIL:	
NAME:	PHONE#: EMAIL:	

North Carolina Metropolitan
MAYORS
COALITION

APPENDIX 3: CRISIS CHECKLIST TEMPLATE

ESSENTIAL CONTACTS ACTION ITEMS	RESPONSE ACTION ITEMS
☐ Contacted city manager. ☐ Contacted city council members. ☐ Contacted police chief. ☐ Contacted fire chief. ☐ Contacted health department & local hospital. ☐ Contacted local television and print media. ☐ Contacted public works department. ☐ Contacted faith-based community. ☐ Contacted red cross/ salvation army. ☐ Contacted transportation authority.	☐ Reported to emergency operations center. ☐ Reviewed all hazards plan. ☐ Reviewed crisis communication plan. ☐ Declared state of emergency. ☐ Contacted NC Governor. ☐ Requested state/ federal assistance. ☐ Released evacuation/ shelter directives.
MESSAGING & UPDATES ACTION ITEMS	**RECOVERY ACTION ITEMS**
☐ Provided single phone number/ webpage to the public as a landing page for all information updates. ☐ Prepared public announcement & instructions. ☐ Scheduled press conference. ☐ Translated information & updates into multiple languages. ☐ Released official updates & statements to local news & radio outlets. ☐ Released official updates & statements on all mayoral social media platforms. ☐ FACEBOOK ☐ TWITTER	☐ Provided updated recovery information on all messaging platforms. ☐ Provided for mobility impaired residents. ☐ Provided assistance for non-English speaking residents. ☐ Determined recovery needs with community partners. ☐ Provided information for citizens who wish to volunteer.

APPENDIX 4: ADDITIONAL CRISIS COMMUNICATION RESOURCES

We used several Crisis Communication plans for recommendations in this report. The plans are listed below in alphabetical order.

- Affect. *Crisis Management in the Social Media Age: A Guide to Integrating Social Media in Your Crisis Communications Strategy.* PR Council, 2014. http://prcouncil.net/wp-content/uploads/2011/03/Affect_Social_Media_Crisis_Management_White_Paper.pdf.
- Anthony, Katherine, Sellnow, Timothy, Millner, Alyssa. "Message Convergence as a Message Centered Approach to Analyzing and Improving Risk Communication." *Journal of Applied Communications Research* 41, 4 (2013): 346-364.
- Coombs, Timothy. "Crisis Management and Communications.*" Institute for Public Relations* (2007). http://www.instituteforpr.org/crisis-management-and-communications/
- Allied Independent Consulting. *Mayors' Guide to Emergency and Disaster Management.* Louisiana Municipal Association, 2010. https://www.lma.org/docs/Publications/17.F.%20New%20Mayors%20Emergency%20Management%20Guide.pdf.
- OECD. *The Use of Social Media in Risk and Crisis Communication.* OECD Working Papers on Public Governance, 2013. http://www.keepeek.com/Digital-Asset-Management/oecd/governance/the-use-of-social-media-in-risk-and-crisis-communication_5k3v01fskp9s-en#page11.
- Reynolds, Barbara. *Crisis & Emergency Risk Communication: By Leaders For Leaders.* Center for Disease Control, 2002. https://emergency.cdc.gov/erc/leaders.pdf.
- Seegar, Matthew. "Best Practices in Crisis Communication: An Expert Panel Process." *Journal of Applied Communication Research* 34, 3 (2006): 232-244.
- Tinker, Tim, and Vaughan, Elaine. *Risk and Crisis Communications: Best Practices for Government Agencies and Non-Profit Organizations.* Booz Allen Hamilton, 2010. http://iptk.moh.gov.my/doc/Risk-and-Crisis-Communications-Guide.pdf.
- World Health Organization. *World Health Organization Outbreak Communication Planning Guide.* WHO Library Cataloguing-in-Publication Data, 2008. http://www.who.int/ihr/elibrary/WHOOutbreakCommsPlanngGuide.pdf.

APPENDIX 5: INTERVIEW QUESTIONS

Mayoral Interview Questions: We standardized the questions asked in each mayoral interview and adapted questions to particular crises within mayors' municipalities.

1. How would you define a crisis in your community?
2. How do you communicate with the public in a crisis? How did you communicate in x crisis?
3. How do you communicate with the media in a crisis? How did you communicate in x crisis?
4. How do you communicate internally and across government agencies in a crisis? How did you communicate in x crisis?
5. Can you give an example of a mayor who did a great job communicating in a crisis? Why do you think so? What did they do?
6. What challenges do you think exist with communicating in a crisis? What technology or capacity would be helpful for you in that role?

Expert Interview Questions: We standardized the questions asked to our experts.

1. What is the role of mayors in crises? Internally? Externally? Are these roles standard across cities or does it vary based on the personalities and structure of the cities involved?
2. How do you measure effectiveness of communication?
3. What are aspects that influence the public's perception of a mayor's effectiveness in communication? Do these criteria change in times of crises? What are strategies a mayor can use to be a better communicator / increase positive public perception?
4. How does the mayor's tone influence the situation?
5. How do mayors work within the NC context – structure / leadership?
6. Does a mayor's crisis communication fit into the visionary and transformational ideas? Is a crisis a situation where the mayor has more of a take-charge role?
7. When and how can a mayor utilize a "take charge" approach to lead in a crisis? How does political feasibility play into this consideration?
8. Can you think of any examples of mayors who effectively communicate or deal with crises? Do you think there is a connection between the two? I.e. would a good communicator naturally communicate well in a crisis?
9. Can you recommend any other resources that we should look at?

APPENDIX 6: COALITION CRISIS COMMUNICATION PLAN SURVEY RESULTS

We conducted an online survey of Coalition municipalities and asked about their crisis communication plans. City managers of 22 municipalities responded to the survey. We find that most municipalities have a crisis communication plan. Yet, room for improvement exists in regards to crisis simulation and staff training on crisis communications. Further findings are detailed below.

Question Asked	Yes responses (%)	No responses (%)	Other responses (%)
Does your city/town have an all hazards plan?	90.9% (20/22)	9.1% (2/22)	N/A
Does your town/city have a specific crisis communication plan?	61.9% (13/21)	38.1% (8/21)	N/A
Does your town/city have at least one full time communications staff member or public information officer?	86.4% (19/22)	4.5% (1/22)	9.1% (2/22)
Does your town/city have a physical space designated for use as your emergency operations center?	91% (20/22)	4.5% (1/22)	4.5% (1/22)
In the event of a crisis, can your operations run from an off-site location?	86.4% (19/22)	4.5% (1/22)	9.1% (2/22)
In the event of a crisis, can your operations run outside of normal business hours?	86.4% (19/22)	9.1% (2/22)	4.5% (1/22)
In the event of a crisis does your town/city have a designated staffer to coordinate communications with the public and media?	90.9% (20/22)	9.1% (2/22)	N/A
Does your town/city staff receive training on crisis communications?	59.1% (13/22)	40.9% (9/22)	N/A
Does your town/city staff participate in simulated crisis drills?	81.8% (18/22)	18.2% (4/22)	N/A

Social Media Accounts Maintained

Number of Respondents (%)
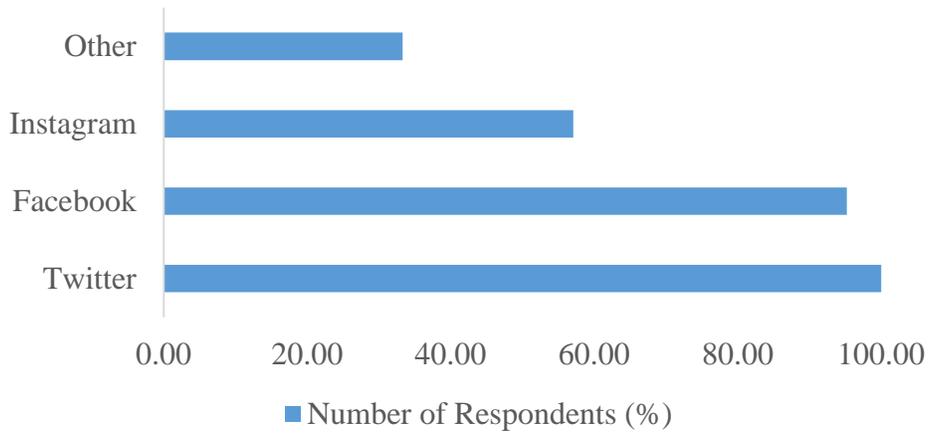
Who Manages Social Media Accounts?

- Different city staff for different accounts
- A communications professional
- Other
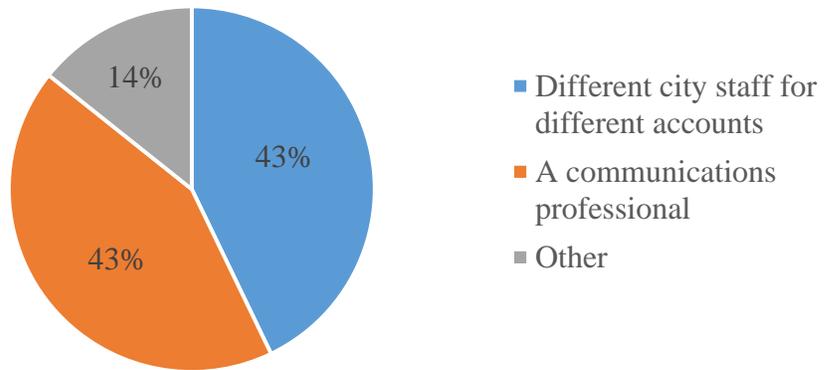
Who coordinates crisis communication with the public and media?

- City Manager
- Public Information Officer or Communications Professional
- Administrative Head of the Emergency (police chief, fire chief, public works director, etc.)
- Other

4%

14%

5%

77%
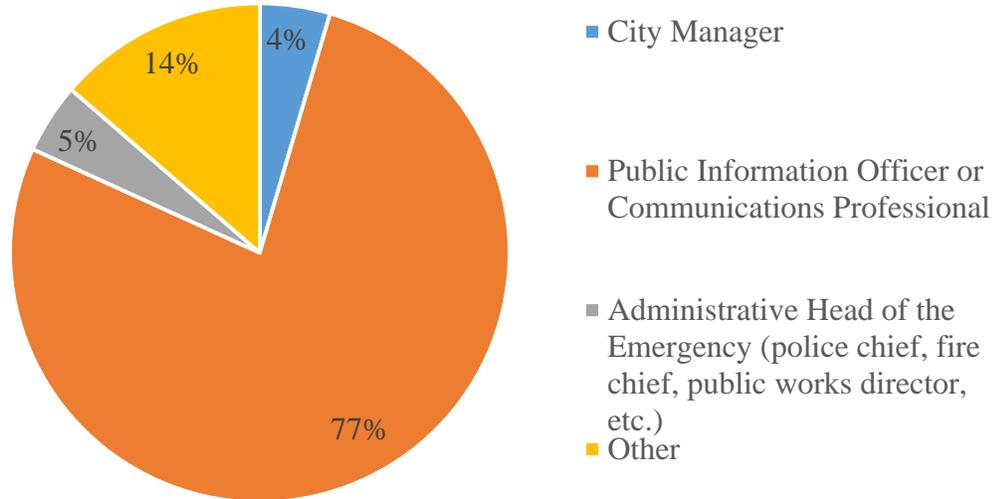
APPENDIX 7: RALEIGH FIRE INFORMATION WEBSITE

City of Raleigh. "Update: W. North Street Fire." *City of Raleigh,* March 17, 2017.
http://www.raleighnc.gov/home/news/content/CorNews/Articles/NorthStreetFire.html.

APPENDIX 8: OWASA WATER CRISIS WEBSITE

OWASA. "2017 Water Emergency." OWASA, 2017. http://www.owasa.org/2017-water-emergency.

APPENDIX 9: OWASA WATER CRISIS FAQ

OWASA. "FAQs: February 2017 Water Emergency." OWASA, 2017.
http://www.owasa.org/faqs.

ORANGE WATER AND SEWER AUTHORITY

UPDATES ON WATER EVENT

A public, non-profit agency providing water, sewer & reclaimed water services to the Carrboro-Chapel Hill community.

ABOUT OWASA | CUSTOMER SERVICE | WHAT WE DO | CONSERVATION AND EDUCATION   Login | Español | Contact Us Search

ABOUT OWASA

- Board Of Directors
- Board Of Directors' Meetings
- Staff Information
- Employment Opportunities
- Performance & Financial Information
- Topics of Interest
- News

MANAGE MY ACCOUNT

START OR STOP SERVICE

WATER WATCH

CARE TO SHARE

Home > About OWASA > 2017 Water Emergency > FAQs

FAQs

February 2017 Water Emergency

In February 2017, a series of events led to a large-scale water emergency in our community, resulting in Do-Not-Use and Do-Not-Drink directives for the entire service area that remained in effect for over a day. These directives were required to protect public health and the water supply. We know that the community has and will have many questions in the days and weeks to come, below are answers to some frequent questions we have heard from members of the community. As the community and OWASA recovers, we will continue to provide updates to the community on the impact and investigation of the event. Updates will be made available on our website.

Will OWASA reimburse me for my personal expenses or my business losses associated with the water emergency?

We recognize and regret the negative economic impact that this water emergency had on the community. Unfortunately, we do not have the authority to issue bill credits or reimburse businesses for their losses.

Will I receive a credit on my bill for the period of time that water service was unavailable?

As the community-owned (public, non-profit) water utility for Chapel Hill-Carrboro, all of our revenue comes from our customers. A credit, if it were provided, would have to come from our customers themselves; we have no shareholders, nor the authority from the State to issue bill credits. Although OWASA invests about half of our revenues to maintain and replace our water and sewer infrastructure, water main breaks do occur. Service interruptions are to be expected, and no

APPENDIX 10: LIST OF BEST PRACTICES

PREPARATION

Mayors should develop and coordinate media platforms and protocols before a crisis occurs. Pre-existing media platforms and protocols allow for consistent communications to the public. Social media protocols must include plans for how officials can distribute the same message consistently across different platforms.

Mayors should encourage their municipality to develop/update the crisis communication plan. Mayors should review and remain informed about the contents of the plan and their role in its strategy. Crisis communication plans create a reliable strategy during uncertain times. Mayors who are familiar with the crisis communication plan can better help municipal officials disseminate clear and consistent messaging in a crisis.

Mayors should develop relationships with community groups before crises. Mayors should recognize the role community partnerships play in reaching all segments of the population, including those who may not receive information by traditional means. Strong community partnerships allow mayors to leverage existing and intimate social circles and mitigate harm during a crisis. Mayors must build relationships based on trust before a crisis in order to communicate effectively.

Mayors should encourage their municipality to practice crisis response regularly. The best way to mitigate the high stress and uncertainty of a crisis lies in regularly practicing hypothetical scenarios with multiple agencies. The insights gathered help build relationships, evaluate the response of staff, and inform crisis planning.

Mayors should request crisis management and communication orientation. New mayors should work with agency officials to learn of existing plans and strategies as soon as they enter office. More established mayors should seek a formalized review of plans and strategies as the municipality updates them. Future success in responding to community crisis relies upon these practices being passed from one administration to the next.

RESPONSE

Mayors should encourage municipal officials to provide a single phone number or website to the public as a landing page for all information. This repository will help coordinate communications channels and a consistent message from the municipality. Mayors should use this resource in all of their communications. Mayors should also encourage coordination across city agencies and with partners to ensure that all organizations are sharing this repository of information with their constituencies.

Mayors should encourage continued communication to the public even if complete information about a crisis is unknown. Municipalities should update the public about what information is already available as well as what processes are underway to collect more

information. Pairing an acknowledgement of uncertainty with a concrete plan reassures the public about government's transparency and ability to deal with the crisis at hand.

Mayors should encourage their municipality to provide clear first messages on the crisis to set the tone. Mayors and the municipal government should be the first ones to provide information and prevent speculation about the event. Studies show that people tend to remember and believe the first information they hear, even if presented with subsequent information later. If the initial message is inaccurate, officials should acknowledge previous messaging, address misconceptions, and provide more accurate information.

Mayors should encourage their municipality to coordinate across city agencies and with partners to create consistent and accurate messages. Officials should add new information, but updates should not contradict earlier points or create confusion for citizens.

Mayors should monitor social media and community sentiment to tailor communications to the emotions and needs of city residents. Mayors should ensure that messaging addresses the concerns of all segments of their population. Mayors should ensure that their messaging remains sensitive to the populations affected by the crisis.

Mayors should use their municipality's Emergency Operations Center as a space to gather and share information. Face-to-face communication facilitates information exchange and helps mayors collect up-to-date and accurate information.

Mayors should encourage their municipality to embed staff at other agencies to facilitate information sharing and the collection of accurate information during crises. For example, a municipality could send city staff to join county level meetings or invite county level staff to their Emergency Operations Center.

Mayors should use existing partnerships with local organizations to reach different segments of their populations. Mayors can leverage relationships with partners like religious organizations, community groups, or schools, to amplify their message.

Mayors should encourage their municipality to pay attention to language barriers in their communities. A municipality should translate messages as needed to ensure that the entire community has the necessary safety information.

RECOVERY

Mayors should understand diverse community needs to provide adequate resources and information. The varying populations effected by a crisis have specialized needs. Mayors should be aware of this variety, seek input from impacted segments of the community, and tailor their recovery efforts to those needs.

Mayors should communicate with empathy for those affected in crises even in complex situations. The public expects an empathetic response from its leaders. The lack of empathy will alienate segments of the population and fuel distrust.

Mayors should address tensions and fractured relationships exposed during crises. Hosting community conversations and facilitating a community space for dialogue can help mend relationships in the recovery phase and long-term**.**

Mayors should follow up and provide information after crises so citizens can better return to normal. Citizens expect full information after a crisis. Information is crucial for them to return to everyday activities.

Mayors should publicly recognize partners for their role in effectively responding to crises. Taking the time to acknowledge the various actors in the crisis response highlights a shift from directly responding to the crisis to recovering and reflecting on the crisis itself. Partners who played an instrumental role in communicating the immediate response of the city will appreciate recognition.

Mayors should provide opportunities for the community to come together after crises. A crisis emphasizes residents' feelings of powerlessness. Providing constructive opportunities to contribute can reassure residents and aid in the recovery process.

REFLECTION

Mayors should internally reflect to assess how their actions impacted community crises. Mayors should review their communication and efforts from all stages, including preparation, response, and recovery.

Mayors should reflect with key governmental agencies and local organizations to assess how their actions worked in conjunction to resolve community crises. Mayors should establish a protocol to seek feedback from organizations involved in crisis response and recovery.

Mayors should seek feedback from citizens in assessing how effective their municipality responded to the crisis. Mayors should establish platforms for citizens to voice concerns and suggestions to enhance future crisis planning and responding.

Mayors should use non-local crises as opportunities to reflect and reevaluate their own crisis management plans. Crises in a single municipality occur infrequently. Mayors and municipal staff should reflect on lessons learned from outside crises to improve their own crises strategies.

WORKS CITED

"Active shooter simulations taking place at local schools this week." WITN. August 8, 2016. Accessed April 16, 2017. http://www.witn.com/content/news/Active-shooter-simulations-taking-place-at-local-schools-this-week-389454561.html.

Allied Independent Consulting. "Mayors' Guide to Emergency and Disaster Management." *Louisiana Municipal Association.*

Anthony, Katheryn and Sellnow, Timothy. 2013. "Message Convergence as a Message Centered Approach to Analyzing and Improving Risk Communication." *Journal of Applied Communication Research* 4: 346-364

Bacon, John, and Doyle, Rice. "Flooded NC city: 'Please pray for our community.'"*USA Today,* October 11, 2016. Accessed April 16, 2017. https://www.usatoday.com/story/news/nation/2016/10/11/flooded-nc-city-please-pray-our-community/91887120/.

Baird, Malcolm. 2010. "The Recovery Phase of Emergency Management." *Vanderbilt Center for Transportation Research*: 1-39.

Bennett, Abbie. "Update: OWASA back to normal, ends water shortage." The News & Observer. February 5, 2017. Accessed April 16, 2017. http://www.newsobserver.com/news/local/counties/orange-county/article130891329.html

Bevil, Dewayne and Stennett, Desiree. "Crowd estimated at 50,000 packs into Lake Eola Park for Pulse Vigil." *Orlando Sentinel,* June 19, 2016. Accessed April 16, 2017. http://www.orlandosentinel.com/news/pulse-orlando-nightclub-shooting/os-pulse-vigil-lake-eola-20160619-story.html.

Blankstein, Andrew. "What Went Wrong in Ferguson?" *NBC News.* November 24, 2014. Accessed April 16, 2017. http://www.nbcnews.com/storyline/michael-brown-shooting/what-went-wrong-ferguson-n184996.

Blinder, Alan. "A Crumpled School Bus Leaves Chattanooga Dazed." *The New York Times,* November 22, 2016. Accessed April 16, 2017. https://www.nytimes.com/2016/11/22/us/chattanooga-school-bus-crash.html.

Bosman, Julie and Joseph Goldstein. "Timeline for a Body: 4 Hours in the Middle of a Ferguson Street." *Ney York Times.* Accessed April 16, 2017. https://www.nytimes.com/2014/08/24/us/michael-brown-a-bodys-timeline-4-hours-on-a-ferguson-street.html.

Burke, Sharon, Alyssa Sims, and David Sterman. *War and Tweets, Terrorism in America in the Digital Age*. Washington D.C.: New America, 2016. Accessed April 16, 2017. https://na-production.s3.amazonaws.com/documents/War-And-Tweets10.27.pdf.

Cole, Terry, and Fellows, Kelly. 2008. "Risk communication failure: A case study of New Orleans and Hurricane Katrina." *Southern Communication Journal* 73 (3): 211-28.

Coombs, Timothy. 2007. "Crisis Management and Communications.*" Institute for Public Relations.* http://www.instituteforpr.org/crisis-management-and-communications/.

Covello, Vincent. 2003. "Best practices in Public Health Risk and Crisis Communication. *Journal of Health Communication* 8 (sup1): 5-8.

Chasmar, Jessica. "Ferguson unrest costs taxpayers $5.7 million and counting." *Washington Times,* October 20, 2014. Accessed April 16, 2017. http://www.washingtontimes.com/news/2014/oct/20/ferguson-unrest-costs-taxpayers-57m-and-counting-r/.

City of Raleigh. "Downtown Raleigh Fire News Conference." *YouTube,* March 17, 2017. Accessed April 14, 2017. https://www.youtube.com/watch?v=3gxfvjUVjVI.

Clarke, John. 2009. "What crisis is this?" *Soundings* 43(1): 7-17.

Chua, Alton Y. K. 2007. A tale of two hurricanes: Comparing katrina and rita through a knowledge management perspective. *Journal of the American Society for Information Science and Technology* 58 (10): 1518-28.

CNN. "Interview with Mayor James Knowles of Ferguson, Missouri." *CNN,* August 21, 2014. Accessed April 16, 2017. http://www.cnn.com/TRANSCRIPTS/1408/21/nday.05.html.

"Community Conversation Meetings." *City of Raleigh*, March 1, 2017. Accessed April 16, 2017. https://www.raleighnc.gov/community/news/content/CorNews/Articles/DistrictwideCommunity MeetingsEvents.html.

Denis, Vincent, Vincent Milliot, and Chiara Lucrezio Monticelli.2016. "Introduction: urban crises, policing crises: mirror images?(c. 1700–1900): cities in flux and changes to policing." *Urban History* 43(2): 200-214

Detman, Gary. "Sen. Nelson: Pulse Nightclub gunman may have ties to ISIS." WPEC. June 12, 2016. Accessed April 16, 2017. http://cbs12.com/news/local/sen-nelson-pulse-nightclub-gunman-may-have-ties-to-isis.

Garcia, Ahiza. "Orlando Mayor: We've Taken Care of 256 victims." *CNN Money,* June 17, 2016. Accessed April 16, 2017. http://money.cnn.com/2016/06/17/news/orlando-pulse-shooting-victims/.

Gillerman, Margaret. 2015. "Group says it has enough names on petition to recall Ferguson mayor." *St. Louis Post-Dispatch.* May 24, 2017. Accessed April 16, 2017.

http://www.stltoday.com/news/local/metro/group-says-it-has-enough-names-on-petition-to-recall/article_5380e931-87f0-5d86-9c0f-373b642dfbb8.html.

Giles, Matthew. 2016. "Color Blindness in the Public Consciousness." *eTopica.*

Goyette, Brayden. "Ferguson Protests Met with Heavy Police Response, 2 reporters and Alderman Arrested." *Huffington Post,* August 14, 2014. Accessed April 16, 2017. http://www.huffingtonpost.com/2014/08/14/ferguson-protests-police-response_n_5677741.html.

Grzybowski, David. "Raleigh officials and residents meet for 'community conversation.'" *WNCN,* November 14, 2016. Accessed April 16, 2017. http://wncn.com/2016/11/14/raleigh-officials-and-residents-meet-for-community-conversation/.

Haddow, George, Bullock, Jane and Coppola, Damon. *Introduction to Emergency Management (Third Edition).* Burlington, Massachusetts: Butterworth-Heinemann, 2008.

Henstra, Daniel. 2010. "Evaluating local government emergency management programs: What framework should public managers adopt?" *Public Administration Review* 70(2): 236-246.

"Hurricane Matthew Brings Record River Flooding to North Carolina." *Weather.com,* October 15, 2016. https://weather.com/storms/hurricane/news/matthew-river-flooding-carolina-records.

Jewell, Jessica. "Hundreds show up to Greene Street Bridge for prayer vigil in Greenville." *WNCT,* October 12, 2016. Accessed April 16, 2017. http://wnct.com/2016/10/12/hundreds-show-up-to-greene-street-bridge-prayer-vigil-in-greenville/.

Khan, Hannah. "Don't throw the blame on Muslims for the Pulse Nightclub Shooting in Orlando." *Huffington Post,* June 13. 2016. Accessed April 16, 2017. http://www.huffingtonpost.com/hannah-khan/dont-throw-the-blame-on-muslims_b_10433836.html.

Kim, Pan Suk, and Jae Eun Lee. 2001. "Emergency Management in Korea: Mourning over Tragic Deaths. Ali Farazmand (ed.). Handbook of Crisis and Emergency Management."

LaPlante, J.M. 1988. "Recovery issues following a disaster: policy issues and dimensions." *Managing Disasters: Strategies and Policy Perspectives:* 217-235.

Larimer, Sarah, Schmidt, Samantha, and Wang, Amy. "'You could hear them screaming': School bus crash leaves at least 5 dead in Chattanooga." *Washington Post,* November 22, 2016. (accessed April 16, 2017) https://www.washingtonpost.com/news/morning-

mix/wp/2016/11/21/multiple-fatalities-following-school-bus-crash-in-tennessee/?utm_term=.a72165cb5e3e.

Levs, Josh. "Ferguson: Some rip police tactics, use of military equipment." *CNN,* August 15, 2014. Accessed April 16, 2017.
http://www.cnn.com/2014/08/14/us/missouri-ferguson-police-tactics/.

Lindell, Michael, Prater, Carla and Perry, Ronald. *Fundamentals of Emergency Management, Electronic Textbook*. Federal Emergency Management Agency, 2006.
http://training.fema.gov/EMIWeb/edu/fem.asp.

Lopez, German. "The shooting of Michael Brown was the final straw for people in Ferguson." *Vox,* August 14, 2014. Accessed April 16, 2017.
http://www.vox.com/2014/8/14/5999929/shooting-mike-brown-final-straw-ferguson-st-louis-missouri.

Malandro Consulting. "Ferguson's Mayor Uses Slippery Communication: Don't Make the Same Mistake." *Malandro Consulting Group.* October 6, 2014. Accessed April 16, 2017.
http://malandro.com/fergusons-mayor-uses-slippery-communication-dont-make-mistake/.

"Media Updates Active Shooter Drill." ECU News Services. August 2, 2011. Accessed April 16, 2017. http://www.ecu.edu/cs-admin/news/Drillpage.cfm.

OWASA. "2017 Water Emergency." *OWASA,* February 8, 2017. Accessed April 16, 2017.
http://www.owasa.org/2017-water-emergency.

OWASA. "FAQS 2017 Water Emergency." *OWASA,* February 8, 2017. Accessed April 16, 2017. http://www.owasa.org/faqs.

Powers, Taylor. "Family Assistance Center offers array of services to help club shooting victims, families." *WFTV9ABC,* June 15, 2016. Accessed April 16, 2017.
http://www.wftv.com/news/local/family-assistance-center-offers-array-of-services-to-help-club-shooting-victims-families-/344083335.

Rahm, Dianne, and Christopher G. Reddick. 2011. "US city managers' perceptions of disaster risks: Consequences for urban emergency management." *Journal of contingencies and crisis management* 19(3): 136-146.

Reynolds, Barbara. Crisis & Emergency Risk Communication: By Leaders For Leaders. *Center for Disease Contro*l, 2002. https://emergency.cdc.gov/erc/leaders.pdf.

Reynolds, Barbara, and Matthew W. Seeger. 2005. "Crisis and emergency risk communication as an integrative model." *Journal of health communication* 10, no. 1: 43-55.

Roth, Zachary. "Ferguson's lack of diversity goes way beyond its cops." *MSNBC,* August 14, 2014. Accessed April 16, 2017. http://www.msnbc.com/msnbc/ferguson-lack-diversity-goes-way-beyond-its-cops.

Seeger, Matthew W. 2006. "Best practices in crisis communication: An expert panel process." *Journal of Applied Communication Research* 34(3): 232-244.

Seegars, Michael. "Pitt Greenville Airport practices for emergency." The East Carolinian. March 22, 2016. Accessed April 16, 2017. http://www.theeastcarolinian.com/news/article_b6d75ba4-efc7-11e5-a9f7-a708dd40e143.html.

Siddiqui, Sabrina and McCormack, Simon. "Here's a Timeline of the Events in Ferguson since Michael Brown's death." *Huffington Post,* November 25, 2014. Accessed April 16, 2017. http://www.huffingtonpost.com/2014/11/25/ferguson-timeline_n_6220166.html

Somers, Scott, and James H. Svara. 2009. "Assessing and managing environmental risk: Connecting local government management with emergency management." *Public Administration Review* 69(2): 181-193.

Stanton, Peter. "Communication During a Crisis: Words Matter." *Stanton Communications,* August 18, 2014. Accessed April 16, 2017. http://stantoncomm.com/communication-during-a-crisis-words-matter.

Swaine, Jon. "The Five Leaders who failed Ferguson." *The Guardian.* November 27, 2014. Accessed April 16, 2017. *https://www.theguardian.com/us-news/2014/nov/27/ferguson-five-leaders-failed-michael-brown.*

Taintor, David. 2014. "How Ferguson Police made the situation worse." *MSNBC.* August 16, 2014. Accessed April 16, 2017. http://www.msnbc.com/msnbc/ferguson-police-department-made-situation-worse.

United States. Federal Aviation Administration. Advisory Circular Airport Emergency Plan. Washington, D.C.]:U.S. Dept. of Transportation, Federal Aviation Administration, 2009.

"Update: W. North Street Fire." *City of Raleigh,* March 17, 2017. Accessed April 14, 2017. http://www.raleighnc.gov/home/news/content/CorNews/Articles/NorthStreetFire.html.

Velliquette, Beth. "People gather at the river to pray for flood victims." *Reflector,* October 12, 2016. Accessed April 16, 2017. http://www.reflector.com/Crime-and-Rescue/2016/10/12/People-gather-at-the-river-to-pray-for-flood-victims.html?fullsize=1&item=.

World Health Organization. *World Health Organization Outbreak Communication Planning Guide.* WHO Library Cataloguing-in-Publication Data, 2008.

WRAL. "Cleanup from largest Raleigh fire in decades to last into weekend." *WRAL,* March 17, 2017. Accessed April 16, 2017. http://www.wral.com/raleigh-building-inspected-50-times-before-massive-overnight-fire/16589787/.