ICMV

LEADING EDGE RESEARCH

LEADERSHIP AND PROFESSIONAL LOCAL GOVERNMENT MANAGERS:

Before, During, and After a Crisis



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Carlee's emergency management experience includes managing Arlington County's response to the 2001 terrorist attack on the Pentagon during his first year as Arlington county manager. As the senior civilian overseeing the local response, Carlee led the Arlington Emergency Operations Center and the interagency operation. Third-party evaluators have praised Arlington's performance at the Pentagon for the high level of interagency coordination. Carlee also managed Arlington's response to the 2002 sniper attacks in the metropolitan Washington region and to Hurricane Isabel. He championed the successful creation of Arlington's Office of Emergency Management. Arlington provided multiple deployments to assist with hurricane damage in Florida, Louisiana, and Mississippi, including the coordination of a Northern Virginia regional response to New Orleans after Hurricane Katrina. Further, he managed response to police shootings early in his career in Birmingham, Alabama, and late in his city manager career in Charlotte, North Carolina.

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The work of city management is all-consuming for most professionals in the field. Taking the time to be interviewed for a project like this means that other work is not getting done. A special debt is owed to the managers who made themselves available multiple times to share their insights in this report.

Emily Cross provided valuable insights, ideas, and editorial support for this project. Laura Goddeeris was the project manager for ICMA; she also offered valuable insights and ideas and ensured that the project kept moving forward.

Cover photo: Long Beach Island, New Jersey, following Hurricane Sandy; New Jersey Air National Guard Tech. Sgt. Matt Hech; November 6, 2012.

CAUTION

Flooding is the crisis most often mentioned by ICMA members as an issue in their communities.

reported having to manage flood events

of respondents



ery early in my career I was struck by a crisis in Chicago. In late January 1979, after an earlier snowstorm and frigid temperatures, Chicago was forecast to get a couple more inches of snow; however, Chicago got hit by a blizzard that paralyzed the city. Chicago Mayor Michael Bilandic declared an emergency, but his crews just couldn't handle the response demands. Perhaps worse, messaging from the mayor's office was poor. The mayor did not offer hope or empathy. As a result of the failed response, Chicago elected a new mayor, Jane Byrne, who had been seen as having no chance against the incumbent—until people found themselves needing government and government did not deliver.

At that time, I was in my first local government job as assistant to the mayor in Birmingham, Alabama. I was bothered less by the political consequences of the Chicago incident than I was by people suffering from the inadequacy of the response and losing confidence in their government. This was the beginning of my interest in crisis management. Ironically, Birmingham experienced its own crisis later that year when a white police officer killed the unarmed African-American woman Bonita Carter. We were not prepared, and we handled the case poorly. The mayor, David Vann, was deeply committed to civil rights and had worked hard to change the image and reality of racism in Birmingham from the Bull Connor days in the early sixties. Like Michael Bilandic, David Vann lost reelection from the inadequate management of the shooting. More importantly, years of work to improve relationships between the city government and the African-American community were undermined as people lost faith in the commitment to change. Bonita Carter and her family did not get the justice they deserved.

At the end of my practitioner career, I experienced another police shooting. This time I was city manager in Charlotte. I had a progressive police chief, Rodney Monroe, and a progressive city council. On September 14, 2013, Jonathan Ferrell, an unarmed African-American man, was killed by a Charlotte police officer. In this case, the officer involved was arrested and charged with involuntary manslaughter. The city worked closely with Mr. Ferrell's family and reached an early civil settlement. Even though the officer's trial resulted in a hung jury in 2015, the city avoided major protests and loss of confidence. The relationship between the police and the community, however, was fragile.

In addition to the police shootings, I was manager in Arlington, Virginia when terrorists flew a plane into our largest office building, the Pentagon. I've experienced tropical storms, winter storms, the great recession, PCBs dumped into the sewer system, and a mayor who accepted a bribe from undercover FBI agents. Anything can happen in any community at any time. We never know, and we must be prepared.

The lessons shared by managers interviewed in this report provide an opportunity to learn from a diverse group of dedicated professionals who have been tested. They spoke openly and honestly. They shared their stories in a sincere effort to help their colleagues, who may one day face an event similar to their event. They all demonstrated humility. They expressed admiration for the employees of their cities and appreciation for their peers who provided either direct aid or moral support. They represent the values of city management and show how managers can rise to the occasion when extraordinary events occur. Their work is inspiring.



he leadership and management skills of professional local government managers are tested when confronted with an emergency or crisis situation. Natural disasters such as floods, hurricanes, tornados, and wildfires can cause severe disruptions to the local government organization and to the community for days or years. The same is true for human-created crises such as mass shootings, violent protests, and industrial accidents. Crises typically occur with little or no warning, requiring an immediate response as well as the forethought to plan for the mid-term and long-term consequences.

The purpose of this project is to understand the common and effective leadership and management skills and techniques that professional managers deploy when a crisis strikes. ICMA wishes to understand the lessons learned from its members and to identify leading or promising practices that can be adopted by others. This project seeks to capture the ideas, feelings, and stories of the professional managers who were involved in different crises. The paper is targeted to professional local government managers to provide peer learning and to promote connections across the profession.

The importance of advance preparation and training for crisis management was repeatedly identified as important. Despite that planning, a common theme is that the actual crisis will be different from what was anticipated; however, advance planning and experience provide a foundation to improvise and adapt to the unique elements of a crisis. Formal reviews after the crisis are important for documenting what was learned, to confirm what went well, to identify mistakes that were made, and to revise plans for subsequent responses.

The importance of preparation—including learning and applying the lessons of others—cannot be understated even for localities that rarely or have never experienced a crisis. The cases in this study described the experiences of managers who were responding to events that they had never imagined or at a scale that was never imagined. Most had never had national news media in the locality before the crisis reviewed.

This project is not a substitute for emergency management guidance available online through the Federal Emergency Management Agency (FEMA) and the Department of Justice (DOJ). It is also not a substitute for the many third-party after-action reviews available, reviews that contain valuable and detailed operational and tactical lessons learned. This research project supplements these other resources, sharing the insights of battle-tested managers with other managers. An annotated bibliography is provided from the after-action reviews for the events covered and other recent events, as well as a bibliography of other essential resources.

CRISES CAN OCCUR ANYWHERE, ANYTIME

As noted, crises can take many different forms. This project covers three types of weather events: flooding, fires, and a tornado. It also covers a mass shooting, mass demonstration, and unusual police shooting. The following outlines the larger context and reveals how all communities are at risk for a crisis.

Weather. The number of FEMA-declared disasters varies by year. In this decade, the number has ranged from a low of 80 declarations in 2015 to

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a high of 242 in 2011. In 2017, 25 million Americans, almost 8 percent of the U.S. population, were impacted by disasters declared by FEMA, including 59 major disaster declarations, 16 emergency declarations, and 62 Fire Management Assistance Grant declarations, across more than 35 states, tribes, and territories. In 2018 there were 123 FEMA-declared disasters in 41 of the 50 states.

The most common weather events are severe storms, often accompanied by flooding and/or wind damage. Fires are common in the west, with California breaking the record for its largest wildfire in 2017 and then again in 2018. Tornados and winter weather events are also common.

Flooding is the crisis most often mentioned by ICMA members as an issue in their communities. In a 2015 ICMA survey, 53 percent of respondents reported having to manage flood events.² Three flooding events were considered in this study: two from 2013, which recently passed their five-year anniversaries, and one event from 2017. Two of the events are examined from the perspective of different localities experiencing the same event, but in different ways: the 2017 Hurricane Harvey flooding in Texas and 2013 flooding in Colorado. The third event is also from 2013, in Peoria, Illinois.

Wildfires are a different type of weather event. They are often started by people, but can also be caused by lightning. In Gatlinburg, Tennessee, both happened. Wildfires become catastrophic when nature's winds fed and spread the fire. Wildfires tend to be more geographically confined than other weather events-mostly in the west. Wildfires can produce unimaginable terror, extensive destruction, and create the potential for secondary disasters from debris flow for months or years after the fire. In 2018, California had the three of the largest wildfires in its history: Mendocino Complex (#1), Carr (#7), and Camp (#16). These three events killed 94 people, 84 of whom died in the Camp Fire, the deadliest in California history.3 Two wildfire cases are included in this study: the experiences of the City of Ventura, California with the massive Thomas Fire in 2017

(the second largest fire in California history), and those of the City of Gatlinburg, Tennessee, a resort town that experienced a multiple fire event in 2016.

Winter Storms have similar characteristics to other weather events as well as having their own unique elements. The impacts vary significantly between localities that regularly have severe winters and have resources to deal the snow and ice versus localities, especially in the south, where severe cold weather events are rarer and resources are limited. An example of a crippling southern event occurred in Georgia in 2014 that heavily impacted the Atlanta area. For information on this incident see the following:

 Internal Review and Action Plan, Winter Storm Event, January 26-30, 2014. State of Georgia.

Mass Shooting. Not fully captured in FEMA data are mass shootings and police shootings. In 2018 there were 12 mass shootings, resulting in 80 deaths and 67 injuries. The 49 people killed in the 2016 attack on the Pulse nightclub in Orlando, which is covered in this report, represented the largest mass murder in U.S. history until the 58 people killed the following year in Las Vegas.

Police Shooting. Police shootings of African Americans, mostly men, have generated crises in a number of communities. The 2014 death of Michael Brown in Ferguson, Missouri, is one recent example of a high-profile police shooting. Significant civil disturbances occurred in Ferguson, Baltimore, and Charlotte. There also have been retaliatory assassinations of police officers, most notably in 2016, with the attack on the Dallas police. To learn more about police-involved shootings see the following:

- Investigation of the Ferguson Police Department, 2015. United States Department of Justice, Civil Rights Division.
- Recommendations for Enhancing Baltimore City's Preparedness and Response to Mass Demonstration Events, 2015. Johns Hopkins University.



- Advancing Charlotte, A Police Foundation
 Assessment of the Charlotte-Mecklenburg
 Police Department Response to the September 2016 Demonstrations, 2018. The Police
 Foundation.
- Las Vegas After-Action Assessment: Lessons Learned from the Las Vegas Metropolitan Police Department's Ambush Incident, 2016. Office of Community Oriented Policing Services.
- War on Cops, ROCIC Special Research Report (undated). Regional Organized Crime Information Center.
- Ambushes of Police: Environment, Incident Dynamics, and the Aftermath of Surprise Attacks Against Law Enforcement, 2015.
 Office of Community Oriented Policing Services.

This paper contains reports on two different types of police issues. The first is an unusual case from Punta Gorda, Florida, and the second is from one of highest-profile incidents of the decade, the shooting of Trayvon Martin by George Zimmerman in Sanford, Florida. While very different events, both involved chiefs of police who had been liked by the departments, the community, and their respective city managers. In both cases, however, the city managers had to fire their chiefs.

In context, since 2016 there have been over 900 police shootings each year. In 2018, 998 people were shot and killed by police.⁵ Any one of these could erupt into a major incident in any locality of any size. Furthermore, with the impact of social media, incidents are no longer localized, but can quickly become national. The widespread media coverage of events contrib-

utes to a national narrative about police and racial relations that may or may not be reflective of one's own community. Nonetheless, the national narrative is in every community and can contribute to events locally. Demonstrations related to Trayvon Martin, Michael Brown, Freddie Gray, and others occurred in cities other than where the event originated, and all have become merged into the Black Lives Matter movement. Similarly, a police ambush can occur anywhere. According to the FBI, the number of police officers killed by ambush were 17 in 2016, 5 in 2017, and 11 in 2018.6

The Washington Post maintains an open database on police shootings. Statistics on police officer deaths can be found at the FBI's website.

Other Crises Not in This Report

Demonstrations. Of emerging concern are demonstrations rooted in hate speech and the counterdemonstrations that they draw. Were the 2017 white supremacist events in Charlottesville a unique occurrence, or do they forebode events that may emerge elsewhere in the current polarized climate? What symbols of racism could be a rallying point in one's community? For details about the Charlottesville incident, see this highly informative after-action report:

 Final Report: Independent Review of the 2017 Protest Events in Charlottesville, Virginia, 2017. Hunton & Williams.

Technological Crises. Of late, some human-created crises have focused on water. The most widely publicized case is the contamination of the water supply in Flint, Michigan. This complex case remains in progress, including the criminal prosecution of

the professional manager and other state and local government staff involved with decisions affecting the Flint water system. A State of Michigan-commissioned report calls Flint a story of government failure, intransigence, unpreparedness, delay, inaction, and environmental injustice. Currently, there are also unresolved issues regarding industrial contamination of the water supply in the Wilmington, North Carolina region.

Common Lessons from Unique Places and Events

Local government professionals understand that every local government is unique—the state's enabling legislation, relationships with other local governments such as city-county overlap, types and level of services provided, amount of authority delegated to professional administrators, organizational structure, budget and fund structure, composition and authority of elected officials, and, most notably, community characteristics and culture. Similarly, each crisis is unique—the breadth and depth of impact on life and property, financial impact on the local government, individuals, and businesses, and the emotional impact on the community and the local government organization. The immediate impact may be very confined, such the mass shooting at a single location, as was the case with the Pulse nightclub shooting in Orlando. On the other hand, the event may spread across the community, such as the floods that crippled the entire Houston region and the flood that inundated Lyons, Colorado, and the tornado that tore across Washington, Illinois.

The context of each crisis is also unique, including the following elements:

- Existence of relevant emergency plans
- Proficiency and experience of city personnel in executing emergency plans
- Capacity of the local government
- Relationships between the local government and other governments, nonprofits, and businesses.

Finally, recovery is unique. The aftermath may be short term, with the impacts largely resolved in a couple of weeks. Or, the event may affect a community for many years, while extensive rebuilding occurs by the public and private sectors. Consider the case of Sanford, Florida—the oldest in this study. A single person died at the hands of another member of the public in 2012; there was no property damage. Yet the city still wrestles with the underlying social justice issues and negative publicity six years after the initial event. In August 2018, the Paramount Network released a six-part documentary on the event.

While the many variables that define local governments result in unique entities and while no two individual crises are the same, common lessons emerge. These lessons can help managers prepare for the next event or for their first.

Cases Reviewed

The types of events covered in this research are far from exhaustive, and the different types of local governments would be more appropriately considered as illustrative rather than representative. There was an intentional focus on small to midsize communities, which represent the majority of local governments in the United States and are reflective of ICMA membership:

- Population greater than 120,000: 1 case
- Population 100,000 to 120,000: 4 cases
- Population 50,000 to 100,000: 3 cases
- Population less than 50,000: 6 cases.

The largest locality is the City of Orlando, Florida (population 280,257), and the smallest is the Town of Lyons, Colorado (population 2,148). All of the localities operate with some version of the council-manager form of government except Orlando, which has the strong mayor form. All of the localities have overlapping responsibilities with a county government. This paper focuses on the roles of the following cities and towns:

- Town of Lyons, Colorado (2,148)
- City of Gatlinburg, Tennessee (4,163)
- City of Washington, Illinois (16,851)
- City of Punta Gorda, Florida (19,761)
- City of Alvin, Texas (26,474)
- City of Friendswood, Texas (39,839)
- City of Sanford, Florida (59,317)
- City of Baytown, Texas (76,804)
- City of Longmont. Colorado (94,341)
- City of Boulder, Colorado (107,125)

- City of Ventura, California (109,592)
- City of Peoria, Illinois (112,883)
- City of Pearland, Texas (119,940)
- City of Orlando, Florida (280,257)

Report Organization

The report is divided into two major sections: (I) Crisis Events and (II) Lessons Learned. The report draws on interviews with city managers (see list below) and on after-action reports and other resources (see References, page 54).

Part I. Crisis Events. This section contains a narrative about the crisis that each of the managers faced and key memories and observations from the event:

- Norton N. Bonaparte, City Manager, City of Sanford, Florida—2012 Shooting of Trayvon Martin
- Jane Brautigam, City Manager, City of Boulder, Colorado—2013 Flood
- Sereniah M. Breland, Town Administrator, Town of Alvin, Texas—2017 Flood, Hurricane Harvey
- Byron W. Brooks, Chief Administrative Officer, City of Orlando, Florida—2017 Mass Shooting
- Cindy Cameron Ogle, City Manager, City of Gatlinburg, Tennessee—2016 Wildfires (Chimney Tops 2)
- Richard (Rick) Davis, City Manager, City of Baytown, Texas—2017 Flood, Hurricane Harvey
- Harold Dominguez, City Manager, City of Longmont, Colorado—2013 Flood
- Tim Gleason, Former City Administrator, City of Washington, Illinois—2013 Tornado
- Morab Kabiri, City Manager, City of Friendswood, Texas—2017 Flood, Hurricane Harvey
- Howard Kunik, City Manager, City of Punta Gorda, Florida—2016 Police Shooting

- Dan Paranick, Interim City Manager, City of Ventura, California—2016 Wildfires (Thomas)
- Clay Pearson, City Manager, City of Pearland, Texas—2017 Flood, Hurricane Harvey
- Victoria Simonsen, Town Administrator, Town of Lyons, Colorado—2013 Flood
- Patrick Urich, City Manager, City of Peoria, Illinois—2013 Flood

Part II. Lessons Learned. This section integrates the observations, lessons, and recommendations from city managers across the following areas with key takeaways:

- Leadership. In a crisis, city managers must be leaders, setting the tone for the responses, coordinating their roles with the elected officials, playing appropriate operational roles with city departments, and ensuring effective relationships with community and governmental partners.
- Preparation and Response. City managers must ensure that a city is prepared when a crisis hits, know its risks and operational capacity, and be prepared to improvise in response to unique and unexpected circumstances.
- Employee Support. City managers must ensure the health and safety of employees during and after a crisis event and be prepared to support employees who may themselves be victims of a disaster.
- Media Management. For a major event with national or international attention, city managers must have a plan to secure the communications resources needed to protect the reputation of the city, to keep its residents informed, and to combat rumors and misinformation.
- Recovery. City managers must ensure that recovery planning starts immediately, is highly focused, and returns the community to normalcy as quickly as possible.



n this section, crisis management is explored from the perspectives of the managers who have been tested, sharing ideas that worked and areas where performance could have been better. Material is also drawn from after-action reports, news media, and other documentation.

As noted, a crisis can take many different forms. This project covers three types of weather events: flooding, fires, and a tornado. It also covers a mass shooting, mass demonstration, and an unusual police shooting. These are clearly not representative of all crises that a city may face, especially winter storms and technological disasters (water contamination, chemical spill, bridge collapse, etc.); however, collectively they present lessons learned and commonalities that can be used in whatever crisis a manager may face. A broad knowledge of crisis management will provide a wide range of ideas and tools from which to draw.

This section is intended to capture part of the stories of the managers involved. It provides a context for what happened and how it was experienced by the different managers. The next section integrates their experiences, lessons learned, and recommendations. Again, only part of the managers' stories can be shared in this format. Each manager has far more to share than can be captured in a single report. Working through a major community crisis can be life-changing, a crucible that permanently changes the way that a manager

Managers Interviewed

- Patrick Urich, City Manager, City of Peoria, Illinois
- Victoria Simonsen, Town Administrator, Town of Lyons, Colorado
- Harold Dominguez, City Manager, City of Longmont, Colorado
- Jane Brautigam, City Manager, City of Boulder, Colorado
- Clay Pearson, City Manager, City of Pearland, Texas
- Morab Kabiri, City Manager, City of Friendswood, Texas
- Sereniah M. Breland, Town Administrator, Town of Alvin, Texas
- Richard (Rick) Davis, City Manager, City of Baytown, Texas
- Tim Gleason, Former City Administrator, City of Washington, Illinois
- Dan Paranick, Interim City Manager, City of Ventura, California
- Cindy Cameron Ogle, City Manager, City of Gatlinburg, Tennessee
- Norton N. Bonaparte, City Manager, City of Sanford, Florida
- Howard Kunik, City Manager, City of Punta Gorda, Florida
- Byron W. Brooks, Chief Administrative Officer, City of Orlando, Florida

approaches the work and views the world. A crisis can create an extended adrenaline rush that makes other aspects of city management seem mundane and many controversial issues seem petty.



Peoria is one of the oldest cities in the Midwest, settled along the Illinois River, which floods routinely. In April 2013, there was excessive rainfall and widespread flooding across central and northern Illinois, especially in Chicago. The rainfall from Chicago flows down the Illinois River to Peoria and other communities downstream. As City Manager Patrick Urich describes the scene, "We had a wall of water coming at us and we knew we would flood." And, it did. Flood stage for the Illinois River is 18 feet. In this event, the river crested at 29.35 feet. The crest beat the previous high of 28.8 feet during the May 1943 flood.9

With the history of flooding, extensive knowledge about how and where flooding would occur, and with advance notice, the City of Peoria was able to take preventive measures to mitigate the impacts of this historical event. The city manager convened his entire team, and together they mapped a plan to reinforce flood control by building temporary floodwalls with sandbags to protect downtown. Additionally, Jersey barriers were used as part of the floodwall construction. Over the course of several days, the city built a new, temporary floodwall at a cost of approximately \$1 million, plus an additional estimated half million dollars in related costs. Impacts of the flood were minimal. Recovery took only a couple of weeks and mostly involved removing mud and debris from roadways.

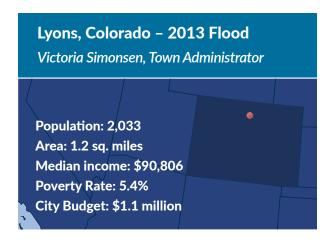
Since 2013, Peoria has experienced flood events almost every year. The focus has been to make the

temporary floodwall construction more cost efficient. A new product that uses a water-filled bladder to form a protective barrier has reduced the time for floodwall installation by approximately one-third. Additionally, a new park is being constructed, which can also contain water during severe floods.

A key takeaway from Urich is the importance of involving the whole city team in order to identify creative solutions. Another takeaway is partnering closely with the community in a joint effort.

INTRODUCTION TO 2013 COLORADO FLOODING: LYONS, LONGMONT, AND BOULDER

In September 2013, the Rocky Mountain area of Colorado experienced a experienced a 1,000-year flood event that damaged over 19,000 homes and damaged 485 miles of roads across 14 counties in the Boulder region. Like Peoria, the local governments in Boulder, Longmont, and Lyons are based in river communities and all anticipate flooding events. Rainfall in the mountains flows downstream, first into Lyons, then into Longmont, making its way next to Boulder. The St. Vrain is the major river, beginning with north and south forks that border the sides of Lyons; they merge as the water hits Longmont. The St. Vrain and various other waterways find their way into Boulder. These areas regularly have flash flooding. Flood control is part of routine planning.



Severely impacted from the 2013 flood was Lyons, an incorporated town with a population of 2,000 and a \$1.1-million general fund budget at the time. The town had 13 employees, including the town administrator, Victoria Simonsen.

Sitting at the entrance into the Rocky Mountain National Park, Lyons lies at the confluence of the North and South St. Vrain Creeks. The volume and velocity of water took out bridges and roads, causing the river to change course and go into areas into which it had never gone before. Lyons was entirely isolated into a series of islands with stranded residents. Approximately 20 percent of the housing was destroyed, along with most of the town's buildings: town hall, public works, library. Estimated damage was \$75 million.

Lyons had done its emergency planning based on the 100-year flood plain. As Simonsen says, "We knew the 500-year flood plain was there, but you can't really afford to plan to that level." The 2013 flood was a 500- to 1,000-year event.

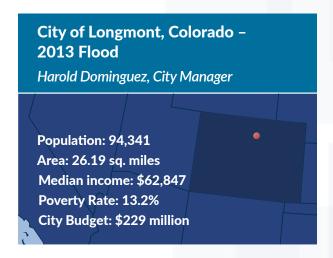
Simonsen, who was recently married, was at home in the evening with her family as the rains continued. She decided to return to the office. She wanted to send an e-blast to let everyone know what was happening. The county has a reverse 911 system, but it is population based, so Lyons is at the end of the calls even though in this case it was among the first in terms of impacts. Simonsen was also concerned about records and the town's computer server in Town Hall. The bridge Simonsen crossed to get to Town Hall would soon wash away and she would be stranded from her family for days. With her in Town Hall was the community development director. They moved the server and records to a higher spot in the buildings. At one point, Simonsen looked out a window, and water was rushing down the side of the building, four to five feet deep. She and her colleague left through the other side of the building, which only had water that was knee-deep at that point.

Simonsen made her way to the volunteer fire station, where there were volunteer firefighters and a few sheriff deputies. Their first task was to open a shelter for others who had fled the waters. In the ensuing hours, Lyons became a town of six isolated islands surrounded by rushing high-velocity water. All utilities were lost—electricity, water, and sewer. Flood waters did not subside for two weeks.

Lyons lost all of its municipal facilities and was uninhabitable. A shelter was created in the adjacent City of Longmont, which essentially

adopted the Town of Lyons, providing facilities for the town government as well as facilities for the public schools, enabling students to continue their education with minor interruption.

Simonsen provided this reflection: "These were the most challenging and most rewarding days of my life. I'm still working long hours and have only had one week of vacation in five years. Only five town employees are left of the thirteen we had before the floods. People got exhausted, including the entire public works department. I thought about leaving several times. This is so hard. We've had nine different critical paths happening at once. Why am I staying? It's hard to understand if you don't have the roots in the community. It's overwhelming but I think we've done a good job for a small community. I am proud of what we've done."



Downstream from Lyons is the City of Longmont, a larger community with a population of over 90,000 with a total budget of \$228.6 million. City Manager Harold Dominquez had been in Longmont not quite 18 months when the floods came, but he had worked hard to learn about the community and threats to it. His approach was based on experiences with a water system that had failed in his previous community of Port Angelo, Texas. Dominguez's key message is to know the risks that a community faces and to communicate those risks to the city council and to the community in an open and transparent way.

Several months before the flood, city staff had been evaluating information about St. Vrain's flood impacts and had concluded that the river could not contain a 100-year flood event. The council had been briefed and work was beginning on a resiliency plan.

Dominguez had a premonition about the 2013 flood. The day before, he had been walking along the greenway on the St. Vrain with the public works director, talking about the rain. He noted that they really needed to watch this one. The next day, the stalled weather pattern remained, and he drew other people into a deeper discussion. The rain gauges upstream were not reporting problems, but that didn't seem correct. They investigated further and concluded that the gauges were blown and not reporting accurately. Dominguez decided to fully activate emergency plans.

Dominguez was able to get into the air by helicopter and learned why the gauges had been wrong. Debris had washed down from the mountains due to the extraordinary rains. The debris blocked the normal flow of the river in multiple locations—such as bridges—and the river had jumped its banks. This was what contributed to the unusual and devasting flooding in Lyons, and now the river was headed to Longmont from new directions. Evacuations were ordered while Dominquez was still in the air.

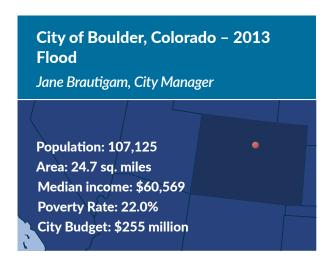
The 2013 flood is described by Dominquez as the most significant natural disaster in Colorado, stressing every state, county, and local resource. Longmont suffered significant damage: a bridge on a major thoroughfare, major wastewater main, and an entire wastewater plant under water. Nonetheless, it did not consume the entire community and Longmont did not suffer major revenue loss. Total public damage was estimated at \$25 million.

Longmont, however, was well organized with significant resources. It provided significant support to the Town of Lyons and to the region. Longmont was aggressive in creating a regional Disaster Assistance Center, and served as the fiscal agent for the Community Development Block Grant (CDBG) Disaster Recovery program serving Boulder County and all of the municipalities.

Longmont provides extensive information about the flood and the recovery on its website. A video well worth watching is "Longmont Strong: September 2013." Produced by the city, the video captures the experiences of city employees "demonstrating bravery, teamwork, selflessness

and compassion, the people of Longmont survived the flood with no loss of life." An especially dramatic and emotional experience is told by emergency communications specialist Laura Randolph. She took a call from the father of a teenager who was trapped in her car in rising waters. Randolph reached the teen on her cell phone. The teen was panicked and could not give an exact location. Randolph patiently calmed the teen, got the location, and dispatched help. As one listens to the call, there is fear that the young girl will not survive as the car fills with water, and it is hard to imagine what was going through Randolph's mind all this time. The teen survived and we get a view into the life of a 911 specialist.

Among the many key takeaways that Dominquez offers is this: "No matter how much you plan, the unexpected is going to happen. You plan so that you can manage the unexpected. There's not going to be a blueprint for it."



Flash floods and wildfires are both expected in this city of 107,000. According to City Manager Jane Brautigam, "We have some type of event every year." The September 2013 floods, however, were a surprise, caused by unprecedented amounts of water that flowed in all 15 major creeks and irrigation ditches, some at the equivalent of 100-year and 500-year flood rates.¹²

Brautigam describes the unfolding of the event in this way: "It started raining, and I thought nothing of it. It's raining. We need rain. Yeah." It was only the next day, she said, that the city realized it was facing a "huge and terrible event." Severe flooding began in the overnight hours, and a large

public works dump truck picked up Brautigam at her home and took her to the emergency operations center (EOC).

It was too late for evacuations. Swift water rescues were executed on a wide scale. Fire vehicles attempting rescues had their electronics damaged by water and needed emergency repairs by fleet maintenance staff. The sewer system backed up, one water plant was shut down, and another ran on generator power for days. Boulder had \$27 million in damage to public facilities and \$300 million in damage to private property; 6,000 homes were damaged, about 14 percent of Boulder households. Because of strong cash reserves, Boulder did not have cash flow issues as it awaited FEMA reimbursements. Boulder's total budget in 2013 was \$255 million.

An important lesson that Brautigam shares relates to recovery. Initially, Boulder attempted recovery management in the National Incident Management System/Incident Command System (NIMS/ICS) response structure, but she found that it did not work. "We had parts of the town that were really bad and other parts that were not. We had a divide. For some residents, things were normal; for others, their whole world was upside down." As a city, Boulder had to respond to both populations.

While Boulder had engaged in robust preparation for emergency management response, Brautigam noted Boulder did not have an advance plan for handling significant disaster recovery operations and having such a plan would have been helpful. Eventually, she developed a recovery structured with the public works director as the recovery manager. "We created a parallel structure of three recovery teams: (1) infrastructure and city operations; (2) finance and FEMA; and (3) community services. We had not been through a recovery like this, and it took a while to get everyone on the same page."

One of Brautigam's strongest recommendations is to develop clear recovery priorities, get them adopted by the city council, and report progress to the council and community on a regular basis. Most importantly, Brautigam considers it critical to develop an organizational culture

that empowers employees to do the right thing, both during response and recovery. For example, a Boulder employee made a decision in the field to use back roads and to cross private property to get a fuel truck to the water plant to keep generators running. Brautigam says that everyone in the organization needs to be a leader.

INTRODUCTION TO 2017 HURRICANE HARVEY, TEXAS: PEARLAND, FRIENDSWOOD, ALVIN, AND BAYTOWN

Hurricane Harvey was a Category 4 hurricane when it originally hit the Texas coast in August 2017, but it stalled and became a prolonged rain event for 4 days, dropping over 60 inches of rain over southeastern Texas and causing catastrophic flooding. At least 69 people died in the costliest storm since Katrina in 2005. FEMA approved 373,433 individual assistance applications for \$1.6 billion, plus \$813 million in public assistance grants.¹³

Much of the media focus was on the City of Houston and Harris County. For this research, four smaller communities were examined:

- City of Pearland with land in Brazoria, Fort Bend, and Harris Counties
- City of Friendswood with land in Galveston and Harris Counties
- City of Alvin in Brazoria County
- City of Baytown with land in Harris and Chambers Counties

Pearland, Friendswood, and Alvin are south of Houston. Baytown is east of Houston, across the San Jacinto Bay. While each of the cities operates under the mayor-council form of government, under Texas law, the mayor becomes the emergency manager in a crisis. Generally, the mayors in these cities delegated authority to the city manager. Cities also overlap with county governments and, as shown above, a city may straddle multiple counties—for example, Pearland straddles three counties. The counties are led by an elected executive known as the county judge.

City of Pearland, Texas – 2017 Floods from Hurricane Harvey Clay Pearson, City Manager Population: 119,940 Area: 47.0 sq. miles Median income: \$96,954 Poverty Rate: 4.5% City Budget: \$287 million

Pearland staff began preparing for Harvey on August 23 and 24, clearing drainage infrastructure, exercising stormwater pumps, exercising generators, securing fuel, and making preparations for emergency staffing.

City Manager Clay Pearson remembers, "We weren't caught flat-footed, but all were surprised that the storm developed stronger and more quickly than predicted." Pearland has grown considerably, 25 percent from the 2010 Census to 2017, and the newer developments effectively withstood the water onslaught, according to Pearson.

Formal EOC activation occurred on Saturday evening, August 26. The water, however, rose rapidly, isolating the city from Houston and, inside Pearland, from its two hospitals. The city was on its own for approximately 48 hours. Challenges included meeting the medical needs of residents and managing the logistics of food and water. There were 400 high-water rescues or personnel transports in this 1,000-year flood event. Over 400 employees were working continuous 12-hours shifts, and 1,000 people were served at the recreation center that provided temporary shelter.

Despite the flooding and threat to the waste-water treatment plants, the city never lost electricity. Communications systems stayed operational, and the EOC was able to function without interruption. High winds from a hurricane event would have vastly complicated the response and recovery. Accordingly, Pearson calls the city "fortunate" in this event and a beneficiary of extensive past experience. He said, "It also

gave us a chance to test our capabilities and make them better for the next time."

The EOC stood down on August 31, and city offices reopened for substantially normal business. The impact included over 1,000 flooded homes, over 30 flooded businesses, and 2 wastewater plants were temporarily out of service. Over 70 employees were personally affected. Pearland spent approximately \$4.3 million on Harvey impacts. Pearland's total budget is approximately \$287 million (all funds).

Pearson and his team have been working on extending ICS training, getting more high-water rescue vehicles, making the sewer system more resilient, and tightening the debris removal contract. Moreover, temporary sheltering coordination with county and other agencies can be improved, he said. And, there are additional extensive capital projects underway to add capacity to the already strong stormwater management system. According to Pearson, Pearland "did well responding to Harvey, and we can do better next time."



Harvey's flooding was "devastating for the community," according to Friendswood City Manager Morad Kabiri. "We were broken into islands and presented with operational challenges we had not faced before." In preparation, the city activated the EOC, topped off generators, and pre-positioned people and equipment. Around 10:30 p.m. on Saturday, August 26, the city realized that the event was going to be much larger than predicted and called on all emergency response personnel who could do so to report.

Areas flooded that had never flooded before, resulting in the loss of some of the pre-positioned resources. High-water rescues were the immediate focus. As Kabiri puts it, they called on "every Tom, Dick, and Harry that had a boat" to report to locations and partner with police and fire to rescue people. Over 48 hours, 1,200 rescues occurred with no loss of life. "We had trained in deploying boats," Kabiri said, "but had not trained for deploying volunteers; that was done on the fly."

After rescuing people, the city had to decide what to do with them. The city had not previously opened a shelter of last resort, but officials thought they would use a city facility that could hold 100 to 150 people. At the height of the storm, however, Friendswood had four shelters serving around 1,000 people, located based on where people could get. "We were loading people into dump trucks to take them to a shelter," Kabiri noted. "As a bifurcated city," he said, "reassignments were commonplace based on where people were; for example, the public works director had to support a shelter." Among the shelter issues were food, medicine, medical attention, and pets. Shelters in schools had conflicts with schools that wanted to reopen before those being sheltered had housing.

Friendswood maintains a 90-day reserve of \$6.7 million, which due to flood costs was reduced to \$2.6 million. If there is another major storm, the city will have to borrow to cover costs. The total budget is approximately \$56 million.

Kabiri reports that Friendswood "is about 70 percent recovered but vulnerable for the next storm. Some city departments are not back in their offices. For public works and parks, we leased an old grocery store, but were delayed by FEMA procurement rules for leasing facilities." He said that the city is building its capacity based on Harvey: "Next time we will have everyone available, we will be better prepared for shelters, and we will be better prepared to track volunteers. It's hard to know where to draw the line, but it is better to assume the worst and hope that you're wrong."

City of Alvin, Texas – 2017 Floods from Hurricane Harvey Sereniah Breland, City Manager Population: 26,474 Area: 24.3 sq. miles Median income: \$45,949 Poverty Rate: 16.9% City Budget: \$46 million

Like the Boulder City manager, Alvin City Manager Sereniah Breland also got trapped at her house. She went to her home in the adjacent city of Dickenson, expecting to easily get back to the EOC when needed. She looked out her window and saw her truck was under water. A passing boat picked her up. She arrived initially at the Dickenson EOC.

In Alvin, there were 168 water rescues and 6 of the city's facilities were damaged, including 39 of 42 lift stations. Approximately 300 properties were flooded. Alvin had strong information about what areas would flood, and it proved correct. The main concern was the wastewater treatment system and the need for people to limit water use. While the sewer system was stressed, it remained functional. The city lost its public works facility. For a while the VOIP 911 system was not functioning properly, with calls rolling over to every phone in City Hall.

The total cost to the city is expected to be \$1.5 million. The city's total budget is approximately \$46 million. Like Clay Pearson in Pearland, not losing power during the floods was a great help.

During the response, Breland said that much of her attention was on the elected officials who wanted to be kept informed and wanted to help. There were challenges communicating with employees, for whom not all cell numbers were current and some of whom were victims of flooding themselves. Shelters were another challenge, as in Friendswood. "We're an evacuation area," Breland shared. "We don't build shelters, we build roads to get people out of here." Once a location for a shelter was identified, it was a challenge to get staff from the Red Cross to the shelter to staff it. Some council members helped in the shelters.

As echoed by other managers, recovery presented another set of challenges. For Alvin it was debris and donations. Debris removal is an ongoing process, according to Breland. "We think we've gotten rid of it and more shows up," she says, admitting that she had ten feet of water in her garage and has yet to clear all of her own debris. The problem with donations is that people send items that can't be used, such as soiled clothes and strange items such as ski gear.

Breland said that they needed to do a better job communicating that "every employee is essential during a disaster and may have to work out of their comfort zones." She adds that it is also important to take care of employees: "We need to keep up morale and a sense of humor... we need to provide the time for employees to deal with their issues and make sure they get paid properly." Breland said that during the floods she had to make some quick decisions and hope that the council would support them.

Breland is currently the city manager for Pflugerville, Texas.

City of Baytown, Texas – 2017
Floods from Hurricane Harvey
Richard (Rick) Davis, City Manager

Population: 76,804
Area: 35.5 sq. miles
Median income: \$49,930
Poverty Rate: 16.4%
City Budget: \$186 million

In his fiscal year 2018-2019 budget, Baytown City Manager Richard "Rick" Davis called Hurricane Harvey more than a wake-up call. "It tested every fiber of our organization and ability to respond to extreme natural disasters." Davis said that in planning for Harvey, he and his staff followed the forecasts, knew they would get rain, and were prepared for it. The EOC was open and key desks were staffed.

Baytown, as other cities, knew the areas that were subject to flooding and was able to be prepared to focus on them. The unprecedented circulation of the storm, however, was something Davis said could not have been anticipated. The primary response focus was, first, evacuation—going almost door-to-door in two neighborhoods (Pinehurst and Whispering Pines).

Since there was electricity, the city could use all of its communications tools, include automated calling. To give people reassurance, the city used the mayor to record the automated calls. "We decided early on that people need to hear the mayor's voice and it brought a calm over the city," Davis said. "His reassuring voice had a positive impact and people appreciated frequent updates."

After evacuations were announced, "some people wanted to stay, and others went immediately," Davis shared. After the inundation, however, the effort switched to rescue, at first using high-water vehicles, which were good to about three feet of water. For deeper water, the city had to deploy shallow-bottom boats. This operation ran for thirty-six hours.

The next large challenge was sheltering the people displaced. The city had to "ad lib" a series of shelters, referred to as hubs, that utilized a series of churches. It had previously been expected that the county would provide shelters, but, like other cities, Baytown was on its own. Davis said that the main focus was on the welfare of people in the city's care and sustaining infrastructure, including lift stations and traffic control cabinets that were flooded.

Davis describes the Baytown response as successful despite the challenges: "We've been diligent on NIMS training, we have a state-of-art EOC, we had key desks pre-staffed with shift assignments. People were competent in their roles, and incident management was particularly effective." Relatively speaking, Davis said that Baytown has "tremendous resources"—such as high-water vehicles and boats. "Emergency planning has always been a priority and funding has been provided."

Davis shared that Baytown Mayor Stephen Don Carlos likes to use three numbers, 0, 0, and 4,500: zero fatalities, zero looting, and 4,500 homes impacted. The estimate cost of Hurricane Harvey was \$7.5 million.

City of Washington, Illinois - 2013 Tornado

Tim Gleason, City Administrator

Population: 16,811
Area: 18.8 sq. miles
Median income: \$71,702
Poverty Rate: 4.5%
City Budget: \$20 million

On November 17, 2013, 25 tornados were reported across Illinois, with winds of up to 190 miles per hour. In the path of the storms was the city of Washington, which experienced an EF-4 tornado, the strongest tornado on record in Illinois since 1950. The tornado was on the ground for approximately one hour, creating a path of destruction across 46 miles.¹⁴

The city administrator at the time was Tim Gleason. He remembers the weather being unseasonably warm for November, hitting 72 degrees. On Friday, November 15, he had a premonition: "I did something I had never done before and have not done since. I connected with the fire chief, police chief, and public works director and told them to be prepared. I had a feeling." Gleason's wife was working on Sunday morning, and he took his nine-year-old daughter with him to get coffee at his regular place. He saw the ominous clouds, told people to take cover, and headed with his daughter to City Hall, where they took cover in the basement. "When we came out," Gleason said, "there was an eerie silence." He drove to the police center and left his daughter in the safe hands of the 911 communications staff.

Gleason went out into the community to survey the damage and connected with the mayor, who was standing amidst the devastation. Gleason knew that the mayor deeply loved the city and was overwhelmed by what had happened so quickly to his city. Gleason, however, recognized that with a blank canvas, they could make the city even better than before the tornado if they understood that every major decision would be a forever decision for the community.

Gleason made two decisions during the recovery that were controversial. Both decisions were driven by the tornado hitting so late in the fall. He expected that winter weather would come soon, and he was correct. There were sleet and ice ten days later, and there were severe snows that winter. Knowing the potential for what proved to be the reality, Gleason concluded that two things had to happen as quickly as possible: people needed to have electricity and other utilities restored and the debris had to be removed.

Gleason's first hard decision was not to let homeowners back into the damaged area so that electricity and other utility crews could work unimpeded and make repairs. A curfew was declared, and there was tight security to keep looters out. Gleason said he "anguished over this decision, because people had lost everything, and they wanted to find things that were meaningful to them—a wedding ring, an American flag; but, when the lights came on, you could hear everybody cheering. It was amazing." By having the damaged area secured and uninhabited, utility crews performed work in days that they said would have taken weeks.

His second hard decision was rapid debris removal. FEMA and the state wanted homeowners' private insurance to take care of personal debris. Gleason thought that this would take too long. If the debris got snow covered, it would still be there in the spring, delaying recovery both physically and emotionally. He decided to move forward with city removal of debris as quickly as possible.

After reflecting on these decisions, Gleason concluded that they were the right decisions despite the pressure to make other choices. "We knew that people would suffer from the cold if utilities were not restored. We also knew that could not drag out debris removal," he said. "It was our disaster and we were not relinquishing to FEMA or anyone else. We knew our community better than anyone outside of the community and we had to do what was right for the people we served."

Gleason offers this advice to other managers: "This is easy to say and chances are if, God forbid, you are faced with the same type of challenge, you're not going to take this advice. You must find a way to take care of yourself. November 17 was the day of the tornado. I truly did not have my first



day off at home with my family until Christmas Day. I spent plenty a night catching a little sleep in my chair or laying on the floor under the desk because it was darker. You must find a way to take care of yourself because if you're not hitting on all eight cylinders, you're not performing at optimal levels for your community in its greatest time of need."

So, what sustained Gleason when he wasn't taking care of himself? "The community was amazing; people had a positive attitude and were rowing in the same direction. There were thousands of positives to any one negative. Also, the outpouring of support from ICMA and ILCMA [Illinois City/County Management Association] was amazing. I'll never be able to thank all the people who sent resources or words of encouragement—emails and texts. When I got to them, the words of support gave me an energy boost."

Tim Gleason is currently city manager of Bloomington, Illinois.

City of Ventura, California — 2017
Thomas Fire

Dan Paranick, Interim City Manager

Population: 110,700
Area: 21.66 sq. miles
Median income: \$70,541
Poverty Rate: 10.7%
City Budget: \$277 million

On December 4, 2017, a fast-moving active brush fire started north of Santa Paula, California, and was pushed by strong east winds through Santa Barbara and Ventura counties, impacting multiple communities. At the time, it was the largest wildfire in California history.

The Thomas Fire burned for 40 days. One firefighter and one civilian were killed during the fire; 1,063 structures were destroyed, 280 structures damaged; 281,893 acres were affected; and 100,000 people were evacuated. In the City of Ventura, more than 100 structures were damaged and more than 500 structures destroyed. The city's vice-mayor called the incident "the darkest hour of our community." According to the fire chief, the city evacuated 27,000 people in one hour, with no fatalities.

One of the aftermaths of a wildfire is the risk of mudslides and debris flow that can occur if heavy rains hit the fire-scorched hillsides. It becomes an immediate risk of a second crisis. Santa Barbara County, adjacent to Ventura, was also ravaged by the Thomas Fire. On January 9, 2018, flash flooding occurred in the Montecito section of Santa Barbara County. The debris flow killed 23 people and damaged 470 structures.¹⁶

Dan Paranick was Ventura assistant city manager when the fire started. At the council meeting on December 4, the council approved his contract to be interim city manager upon the retirement of City Manager Mark Watkins at the end of the month. Many of the responsibilities of manager had transitioned to him during the six-month period after Watkins announced his retirement plans. During the council meeting, a message came from the fire chief that there was a wildfire in Santa Paula, twelve miles away, and that he was sending a fire engine to assist. The next message, around 9:30 p.m., came from the

police chief, reporting that the county sheriff had informed him of the need to evacuate thousands of people immediately.

Houses were already burning. Around 11:00 p.m., the entire city lost power. Winds were blowing fire embers through the blackened city. Dan Paranick describes the scene as "emotional and chaotic." He said that "it was all about life-safety; it was scary; it was about twenty-four hours of fear."

Among the challenges the city faced in an event of this magnitude were coordination, communication, and getting the team in place early. Paranick noted the involvement of multiple agencies, multiple jurisdictions, and multiple hierarchies, all of which have their quirks and nuances. "It's that early period when you're trying to gauge the scope of the event and resourcing the event early and bringing up an organizational and resource structure that is appropriately sized for the challenge." Ventura's response was aided by what Paranick describes as "an outstanding county emergency center and robust emergency structure to which there had been a commitment over many years."

"Once the EOC was activated, city staff stepped outside of their normal roles in city hall and we became an emergency response organization," Paranick said. "Our emergency plan drives the response, and we realize that it takes the whole organization to deal with an event this encompassing: fighting fire, evacuation, protecting the community from looting, managing the road system, setting up shelters, managing animals, monitoring public health issues from smoke and ash, dealing with water and sewer issues, planning on getting businesses and schools open, and thinking about the future with the potential for rain and mudslides. Additionally, normal operations at city hall have to continue."

Paranick observed that "you can prepare all you want but it's hard to do it until you live the case study you're in at the moment." He went on to say, "I can't emphasize enough the planning process right out of the gate, taking the time during the chaos to develop calm and get in a room with principals from partner agencies and take an hour or two to set some ground rules and put a plan together. This is extremely important in a multi-agency environment. Take the time: while it may be emotional and frantic, calmly go

over roles and responsibilities and philosophical approach; establish those working relationships and the communication protocol."

For an event with a long-term recovery, he offers this advice: "The immediate crisis moment may last twenty-four hours and then you've got a period of four to five days cleaning up. Once that emotion dies down, you can lose sight that this thing is here to stay for months if not a couple of years. You must remind the organization that this is a long-term event and that we cannot let up; we have to remain focused."

Dan Paranick is now district manager for the Rancho Simi Recreational Park District of California.

City of Gatlinburg, Tennessee – 2016 Chimney Tops 2 Wildfires

Cindy Cameron Ogle, City Manager

Population: 4,163
Area: 10.67 sq. miles
Median income: \$36,445
Poverty Rate: 15.0%
City Budget: \$53 million

In November 2016, East Tennessee and the Great Smoky Mountains National Park were experiencing drought conditions. The day before Thanksgiving, November 23, teenagers started a fire in a remote part of the Great Smoky Mountains National Park. National Park Service personnel decided upon initial siting that the location was too dangerous to reach. They decided to let the fire burn within a containment area of 400 acres. Neither the City of Gatlinburg nor Sevier County were officially notified of the fire until the following Monday morning.

Over the Thanksgiving weekend, winds begin to increase in the area and the fire began to spread. On Monday, November 28, conditions grew increasingly worse. The fire spread to the Gatlinburg border, and the city began voluntary evacuations and activated mutual aid support. Between 5:00 and 6:00 p.m., however, winds increased dramatically, blowing embers and starting multiple fires beyond the park. The wind downed power

lines and trees. At 6:11 p.m., the first neighborhood evacuation was ordered, with other neighborhoods evacuated as the fire spread rapidly from the wind, engulfing at its peak 2,000 acres an hour. By around 8:30, a total evacuation was ordered for the entire city, with evacuees facing treacherous conditions of blowing fire and blocked roads. Fourteen people died, 3 in Gatlinburg; 2,500 structures were impacted, and 17,000 acres burned. The city was closed for 10 days.¹⁷

Gatlinburg is a one-industry town: tourism. It is a small town where the residents all know each other and are friends. There are far more bedrooms than people, many of the rooms spread throughout the mountains, owned by individuals. Many are cabins with views of the mountains. Fiscal Year 2016 had been a banner year for tourism.

Cindy Cameron Ogle has been city manager of Gatlinburg since 1988 and has worked for the city since 1978. She was with the fire chief and others as the decision was made to mandate a full evacuation. On Monday evening as the fires spread, she had been out surveying conditions with the Sevier County mayor and the fire chief. They returned to the emergency operations center for a very long night that could never have been imagined.

Back at the EOC, Ogle learned that her home had burned. The city's mayor lost his home and business. The next day Ogle was in the EOC with mayor's wife and told her, "I just don't think I can do this." The mayor's wife responded, "Cindy, we need you to do this." The two of them went into a corner of the EOC and, in Ogle's words, "she prayed for me and with me; and, it was just the kick in the butt that I needed." Ten other city employees also lost their homes.

As the night developed and the fire spread, the entire city government complex was threatened and the EOC had to be relocated into the community center. "Never in our wildest dreams did we consider losing our government complex, but had it not rained when it did, we would have." Gatlinburg now takes seriously the need to have a continuity of operations plan. Among other post-disaster actions, more data and systems have moved to cloud platforms.

While the fire devastation was extensive, it did not destroy the core of downtown and the

tourist attractions there. Ogle said that one of the biggest concerns after the fire was the impression outside of the area that the city was burned down. Tourists stopped coming. In response, the city recovery plan placed a heavy emphasis on getting the town's single industry—tourism—operational. The city went into fund balances to double its marketing budget with an additional \$3 million. Almost two years later, Ogle, reports that "crazy as it seems, there is still a perception among some that the town is not open."

Indeed, Gatlinburg is open, and it hosted the 2017 ICMA Regional Summit. Revenues are now within 2 percent of FY 2016 totals. Recovery, however, has been uncharted territory. People who had rentals with a view and were making money appear to have rebuilt. Many have not, perhaps as many as half.

Together with Sevier County, Gatlinburg commissioned a comprehensive after-action report (AAR) that was produced by an independent third party, with recommendations, some dependent on funding. Ogle said that she hopes her city manager colleagues will read the AAR and find value in the recommendations.¹⁸

Ogle is now in her new home and says that she and the city have made great strides. "People ask me why I stay when I can retire after forty years; when you've been through this much together, it's hard to leave."



Trayvon Martin was killed by George Zimmerman over two years before Michael Brown's death in Ferguson, Missouri. Unlike most of the recent highprofile shootings, this one was not a police officerinvolved shooting. However, the incident became all about the police, not because of what they did, but because of what they did not do: immediately arrest and hold the shooter, George Zimmerman. Zimmerman was part of a neighborhood watch group for his gated residential complex, the Retreat at Twin Lakes. City Manager Norton Bonaparte noted that in previous communities where he has lived, gated communities were places of affluence. In Sanford, however, he said that "they are more modest; they are simply communities with a gate."

On February 26, 2012, Trayvon Martin was visiting the Retreat at Twin Lakes, on a trip with his father to see his father's girlfriend who lived there. Martin went to the 7-Eleven and bought Skittles and AriZona Iced Tea. As Martin returned to the townhouse in the complex, Zimmerman called 911 to report a suspicious person and followed Martin despite being told not to by the 911 operator. Zimmerman claimed that the unarmed Martin threatened him, and, in self-defense, Zimmerman shot and killed Martin. There were no witnesses or definitive video. Sanford Police arrested Zimmerman, questioned him, but lacking evidence to disprove his self-defense claim, let him return home while the investigation continued. In April 2012, Zimmerman was charged with second-degree murder and manslaughter. He was acquitted in July 2013.19

City Manager Bonaparte was informed of the shooting when it occurred and trusted the police to conduct the investigation. Intense media inquiries started about two weeks later and quickly gained international prominence: "another young black man shot by a white person, and police do nothing." As a result of the media attention, four major protest events occurred in Sanford:

- Rev. Al Sharpton led a march of 30,000 people.
- An NAACP rally had several thousand people.
- 3,000 people came to a City Commission meeting, which normally attracts 20 to 30 people.
- College students, who called themselves
 Dream Defenders, walked from Daytona
 Beach to Sanford and staged a sit-in in front of the Sanford police station.

There were no major incidents at any of these events. Bonaparte attributes the lack of violence or property damage to the city's adopting a philosophy of welcoming people to the community, listening to their concerns, accommodating their needs, and facilitating their First Amendment rights. The following are examples:

- For the Rev. Sharpton's march, normal protocol would have required about a sixty-day process for an event of this size. The permit was approved in days, facilitated by the city. Bonaparte activated the emergency operations center to monitor events, attended the rally, and walked around and talked with people participating in the event.
- When the city learned that the Martin family was bringing 3,000 people to the commission meeting, the city moved the meeting from its normal facility, which seats 125, to its largest venue at the civic center, which seats 600. For those who would be left outside, the city rented a giant screen so people could see and hear the meeting and provided portable toilets and water. Arrangements cost an unbudgeted \$35,000, which Bonaparte explains this way: "It wasn't a cost; it was an investment in our community's security."
- When students staged the sit-in at the police station, it was clear that they wanted to be arrested, a narrative that Bonaparte thought would be disastrous: Sanford police arrest peaceful black students but won't arrest the killer of Trayvon Martin. Bonaparte moved civilian police staff to city hall and let the community know that if they had business to do with the police, staff would be available in city hall. He then engaged the U.S. Department of Justice's Community Relations
 Service to assist in negotiating a peaceful resolution of the sit-in—a service Bonaparte strongly recommends to other managers.

To address the larger issues, Bonaparte convened a blue-ribbon committee, which made recommendations for improving police relations in June 2013. A two-year progress report is available on the Sanford website. Over the course of the event, the City Commission took a no-confidence



vote on the police chief, who Bonaparte later dismissed. Although the police were seen as the underlying focal point of the presenting issue, distrust of the city ran deep and was multifaceted. Thus, the response to the bigger picture required engagement of all city departments.

Today, Bonaparte says that progress has been made. "You will see in the city's parks people of various races and backgrounds together; people get along." There is redevelopment in distressed areas showing tangible results to the community. At the same time, Bonaparte expresses awareness that "unresolved issues remain, and we continue the work between the African-American community and Sanford Police Department; we continue the work to earn the community's trust."

Punta Gorda, Florida – 2016 Police Shooting of Mary Knowlton Howard Kunik, City Manager

Population: 19,761
Area: 22.0 sq. miles
Median income: \$56,119
Poverty Rate: 9.1%
City Budget: \$100 million

Punta Gorda Police Chief Thomas (Tom) Lewis called City Manager Howard Kunik at home on the evening of August 9, 2016. Kunik remembers the chief saying, "Howard, something just happened. I said, OK what happened? He says we just shot somebody."

In Punta Gorda, that's a very unusual circumstance, says Kunik. "Our police officers have not

had to use their weapons in decades. So I ask, is the officer OK; is the person OK? And, he said, Howard, you don't understand, we just shot somebody. Yeah, I heard you, Tom. Is everybody OK? And he said, don't you remember, tonight was the citizens' academy for the Punta Gorda Chamber of Commerce. I said, what? What are you talking about? What do you mean? Are you telling me we shot someone at a citizens' academy? And he said, yes. And I said, oh my God."

Kunik went to police headquarters and found "the command staff in one room, the police chief in another room on his computer, and the Chamber of Commerce participants down the hall in another room."

In a simulated shoot/don't shoot scenario, common to citizens' academies, Officer Lee Coel had loaded live ammunition into his personal weapon. In front of the chamber leadership and the entire leadership of the Punta Gorda Police Department, 73-year old Mary Knowlton was struck by ricocheted bullets from Coel's gun. She died a short time later. Knowlton was a retired librarian, beloved by the community, and was actively working with the Friends of the Library to raise funds for a new facility. The city manager and city council members all personally knew and admired Knowlton.

The Florida Department of Law Enforcement (FLE) arrived on the scene and took over the investigation. Meanwhile, the city manager placed calls to the five council members to let them know that Knowlton had been shot and a short time later had to call them all again to let them know that she had died. The council met the next morning and members were very shaken. Kunik launched a review of policies and procedures within the department.

Soon, he also began assembling an internal investigation team that could start work as soon as FLE completed its work.

Kunik expected the reviews to go quickly. He had the city create a website where all material related to the shooting could be posted to provide as much transparency as possible. FLE completed its work in October and then turned it over the state prosecutor, who did not provide it to the city until February 2017. In November 2017, the city reached a financial settlement with the Knowlton family. In February, the State Attorney charged Chief Lewis with culpable negligence. Lewis was placed on leave and was found not guilty on June 29, 2017. By this point, however, Kunik concluded that the chief had to be replaced based on the internal investigation. Officer Coel was charged with manslaughter and dismissed from the department.20 Coel has not yet gone to trial. A pre-trial conference was scheduled for the first quarter of 2019.21

For Kunik, this event made him reflect on his management style. "My philosophy is to not micromanage departments; you want to give departments the tools they need to do what they need to do and let them run with it. They're the experts. You can run the risk that things can happen if you get too lackadaisical or relaxed in what you're doing. As a manager, we have to stay on our toes and pay attention. Just handing the reins over and not paying attention is not a good thing to do."

This assessment came based largely on the internal investigation he launched into the shooting. There were extensive errors and omissions in the way the police department was handling simulations, lapses in judgement, and lack of oversight by police management. Initially the police chief took responsibility, but then became divisive, refusing to resign after being charged by the state. Kunik had trusted the chief, but the cumulative evidence was too much and Kunik had to fire him.

Reflecting on what he may have done differently, Kunik said, "If I had known it would take so long, I wouldn't let it drag on. As the chief became more divisive, I should have brought him in, but I didn't know all that had happened and all the mistakes that had been made. It humbles you. You think something like this could never occur. It affects you and you need to use whatever

resources you've learned over the years; you need to keep a level head and move on."



The Pulse nightclub in Orlando, Florida, is a latenight club popular with the LGBTQ and Latin communities. At 2:00 a.m. on Sunday, June 12, 2016, an estimated 300 people were socializing and dancing to the thriving music in 3 different dance areas. Last call had come from the bar. The Pulse was dark and loud and had different sections connected by small hallways.

A purported terrorist seeking to avenge U.S. attacks in the Middle East entered the club and began randomly shooting people. At first, people did not know that the sounds were gunfire, and it was hard to see what was happening. Patrons began running out the exits as police converged on the scene. Within seven minutes a police contact team was in the patio area and, two minutes later, inside the club. The shooter took cover in a restroom as officers extracted injured and uninjured people from the club. The shooter called 911 at 2:35 a.m. Police continued to remove hiding patrons throughout the building. At 5:15 a.m., police breached the area where the gunman was barricaded, exchanged fire, and killed the gunman. The gunman's wife was later charged with aiding the attack, but was acquitted. The shooter killed forty-nine people and injured fifty-three others. It was the worst terrorist attack in the United States since September 11, 2001.22

Byron Brooks is Orlando's chief administrative officer (CAO) in the city's strong-mayor form of government. Brooks runs day-to-day operations. It is very common for him to get calls from the police chief or designee at all hours of the night,

so when the first early morning call he got on Sunday, June 12 came in, he let it go into voicemail. In fact, the chief was in transit to the scene and did not yet know all the details of the incident at the time of his initial call. With the second call, however, Brooks began to grasp that this was an extraordinary event. Brooks joined the mayor at the command post on the Pulse scene. The shooter had been killed at this point. The mayor and Brooks were not at the command post to intervene with operations, but to get situational awareness. As the post-shooting phase unfolded, people arrived at hospitals looking for loved ones, family members called 911, and unidentified bodies were still in the club. "At this point," shared Brooks, "it was no longer a police matter, but something to which the whole organization needed to respond."

The emergency operations center was opened, and Brooks reported there for the next several days. "As administrators, we must think about what is needed beyond the scene. We had businesses shut down, we had roads shut down, we would have law enforcement on the scene for an extended time. What other things would they need? We needed to prepare for the media. We had to decide what functions to activate in EOC since this wasn't our usual hurricane or other weather event."

Among Brooks' observations are these:

- "That the event happened early on a Sunday enabled us to avoid extensive community disruption and provided an opportunity to prepare for Monday. We were fortunate that a Level One trauma center is only a few blocks from the nightclub."
- "We were not prepared for the hospitals to get swamped with people. The hospitals had a plan, but it was inadequate. We had nothing in our plans about setting up a family reunification center. We had never established a family assistance center."
- "911 operators who were taking the calls of frightened people in the club were unsung heroes. IT personnel played multiple critical roles, and the communications team responded remarkably."

 "Some of the immediate response needs are so basic. At the crime scene, people needed portable toilets and trash cans; they needed to be fed."

The horror of the shooting and the scene of carnage was hard to imagine. At first, managers tended to be highly focused on the mission. It was later that morning, however, that Brooks said he heard a report from the news media, almost in passing, and suddenly the numbers hit him: forty-nine killed:

That struck me and caused me to pause for the first time. For about a minute or two it just paralyzed me. That was a moment of reckoning. It was unbelievable and beyond anything that I could imagine. I don't know why it was that moment or hearing that number. It was some six hours later. For each of us it may hit us at a different point in time, but for all us that human side of us needs to be acknowledged. For me it was a private moment in the room.

Brooks said that the city's response proved the importance of being well trained, having well-prepared team members, and people knowing their roles. Even though the training in Orlando is mostly focused on weather events, city personnel had the ability to adapt to a very different situation. Another important element of the response was the city's relationships with others: the county and other local governments, the faith and LGBT communities, and social service agencies. "Others are willing to be of help, but we needed to make the call. "

SUMMARY

The fourteen managers interviewed have different backgrounds and levels of experience, and they had served their cities for different tenures. Each was tested by an experience of a lifetime. Each was proud to be associated with the other local government employees who worked with diligence and often at great personal risk. The managers drew strength and inspiration from the city staff. They were generous in sharing their experiences because they each saw things that went well and things that could have gone better. The next section synthesizes these observations into lessons learned and recommendations for other managers.



here are many ways to organize a review of lessons learned in a crisis. The most common is the sequential flow of a crisis as outlined in FEMA's National Preparedness Goal: prevention, protection, mitigation, response, and recovery.²³ Each of these areas is addressed to some degree in this report; however, it is not the purpose of this report to present a comprehensive crisis response system. Appendix A provides a list of essential planning resources that can be used to better understand these different phases of a disaster in order to develop plans, training, and testing. All of the managers interviewed recommend making the time to do the advance work.

The purpose of this section is to help managers learn from the observations of their colleagues who have endured a crisis. Five broad areas and twenty sub-areas emerged from interviews with these managers:

- 1. Leadership
 - a. Leading Up
 - b. Leading Down
 - c. Managing Oneself
 - d. Thinking Ahead
 - e. Managing Relationships
 - f. Managers Supporting Managers
- 2. Preparation and Response
 - a. Planning in Advance
 - b. Improvising
 - c. Assessing Risks

- 3. Employee Support
 - a. Health & Safety
 - b. Pay Policies
 - c. Employees' Victim Assistance
- 4. Media Management
 - a. Traditional Media
 - b. Communicating Directly
 - c. Social Media
 - d. Branding
- 5. Recovery
 - a. Planning for Recovery
 - b. Working with FEMA
 - c. Financing Disasters
 - d. Debris Removal
 - e. Volunteers & Donations
 - f. Mental Health Support

The extent of planning and the wide range of skills needed for successful crisis management can appear daunting. In fact, the challenges faced by some of these managers were overwhelming by their own recognition. At the same time, they all recognized that this is the job they signed up for. They had a sense that they were where they needed to be at a time when they needed to be there.

In addition to sharing examples from the managers that illustrate their observations and recommendations, a series of questions are posed in each area for self-assessment.

LEADERSHIP

Fundamentally, the city manager has to be a leader. The manager sets the tone and must demonstrate confidence, calm, and organization—even if the manager is relatively new or is in an interim position. The organization looks to the manager for emotional maturity and to set an example.

"Everyone in the organization is going to look to you to see how rattled, nervous, unsettled you are during an event. No matter how rattled and unsettled you are, you need to be cognizant and manage it. If you're going crazy and you're showing a lot of emotions that is going to start bleeding into everyone else. I tried to be as calm and as pragmatic as I could to create that kind of atmosphere in the EOC and with our staff so we could do our best work." Harold Dominguez, Longmont

"There comes a time and place where you have to take a risk relative to your charge. You don't have the answers—but you have to make the decision, for example, to spend money even though you don't know if you have it or will be reimbursed. You must be focused on the mission and worry about the other stuff later." Dan Paranick, Ventura



Leading Up: Defining the Roles of the Mayor and Council

A key element of effective emergency planning is a clear delineation of roles and responsibilities between the city manager and the elected officials. Training and advance discussion of these roles can avoid confusion and distraction when a crisis occurs. If there is conflict over roles before a crisis, they are likely to exacerbate during a crisis. Similarly, if the mayor and council are dysfunctional, they are not likely to improve under the stress of a crisis.

City managers are understandably reluctant to talk about their elected officials and risk retaliation from their bosses. Privately, managers acknowledge the challenge of managing multiple bosses during a crisis, the extent of which varies randomly by the diverse personalities that may be on a council at any given time. The council-manager form of government is unambiguous about the city manager's subordinate role to elected officials, a cardinal rule of which is that a manager does not publicly criticize elected officials, past

or present. Criticism would be a career ender. It is understood among managers that elected officials can act inappropriately during a crisis and it falls to the manager to serve as a buffer between the elected officials and the professional staff. Behaviors by elected officials that were observed include the following:

- Wanting to take operational control
- Giving directives that bypass the manager
- Sharing premature or incomplete information on social media
- Sending uncoordinated and sometimes conflicting messages to the public
- Jealousy over the role of the city manager
- Jealously about the roles of other elected officials who have operational responsibility
- Seizing the crisis to further political ambition
- Inappropriately appearing in the EOC or on the scene of an event
- Acting as individuals rather than a collective.

A key role of the manager is to recognize the potential for these behaviors and proactively engage the elected officials in constructive and helpful behaviors.

Forms of Government May Define Roles. The roles of elected officials can also be complicated by different forms of government in a region. The City of Boulder has the council-manager form of government while the County of Boulder has the commission form of government and no county administrator. The City and County share an emergency operations center. The three county commissioners are in the EOC making operational decisions, while city council members have traditional legislative and nonoperational roles. Even more unusual is that twin sisters sit respectively on the city council (Mayor Suzanne Jones) and on the county commission (Commissioner Elise Jones).

In the Texas communities studied, by code the mayors are the emergency managers but traditionally they delegate responsibility to the city manager. County-level emergency management may also pre-empt the cities and towns. In cases like these the statutory leadership could come from individual commissioners (Boulder County, Colorado), the county judge (Texas), the county



mayor (Sevier County, Texas), or the county manager (Ventura County, California). This overlapping complexity adds more political relationships to manage, especially where there are shared emergency operation centers.

Keys to Managing Relationships with Elected Officials.

Approaches to managing relationships minimally require the following:

- Provide Council Training. Provide the mayor and council with pre-crisis training so that they know their roles, the manager's role, and the overall emergency management structure under NIMS and ICS. Help them understand how incident command works and how they can be effective. Understand that all members may not be willing to participate in training and may not take the training seriously.
- Keep Council Informed. Keep the mayor and council fully informed in a timely manner during a crisis, taking into consideration the following:
 - Establish a system, such as text messaging, for notifying the council of immediate time-sensitive information, knowing what communications methods work for which council members.
 - Provide regular updates so that the elected officials are not getting news from the media, but from the manager.
 - Have a process for the mayor and council to ask questions, share ideas, and report rumors. Know state law on open meetings and electronic communications;

- know open records laws and expect all electronic communications to be covered.
- Understand that information shared with council may be shared with others, including posting on social media. This is especially a concern when information is emerging and subject to change.

Keeping the elected officials informed can be extremely time consuming, especially with a large council. Even making five individual calls can be onerous, to say nothing of nine, eleven, or more calls. A manager may need to delegate operational responsibilities in order to manage council relations. In a larger community, a manager may be able to assign a senior deputy or assistant manager to keep the mayor and council current, but still they will need to hear directly from the manager.

Elected Officials and the EOC. The emergency operations center, along with incident command posts in the field, are the hubs of operation in the management of most crises, especially disaster situations. A subject of continuous debate is whether or not council members should be in the emergency operations center. One manager said that it is critical that they be there, while another said that the council's presence would be a "train wreck." Notwithstanding this potential, the consensus is to provide a structured way for the mayor and council to visit the EOC in a constructive manner:

 If possible have a place in or near the EOC specifically for elected officials, a place where they can come and feel connected,

- can get information, and where the manager can talk with them.
- Minimize council presence in the core EOC during the early chaotic stages of a crisis in order to avoid distraction.

Visits to the EOC can demystify the operation and provide elected officials with more confidence in communicating with their constituents about the nature of the city's response.

City Size Matters. In smaller cities, the mayor and council may need to operate out of the EOC with specific roles. The two smallest communities in this study were Lyons, Colorado and Gatlinburg, Tennessee (respective populations of 2,148 and 4,206). Their disasters—one flood and the other fire—were so extensive that the managers needed all of the help they could get from their mayors and council members, especially those with technical expertise. In Gatlinburg, the mayor's wife was even in the EOC and was a source of critical moral support to the manager at a time when it was most needed.

Beyond the EOC - Constructive Roles for Elected Officials. There are constructive roles that the mayor and council can play in an effective emergency response. Despite some troubling examples of interference, most of the elected officials sincerely want to be involved and to be helpful. They feel a duty and responsibility to be involved. Some of the roles identified include the following:

The Mayor as City Spokesperson

- In Orlando, the FBI wanted to take control
 of communications after the mass shooting
 at the Pulse nightclub, but the city stood
 strong, knowing that the people of Orlando
 needed to hear from people that they knew
 and trusted.
- In Baytown, Texas, the mayor recorded the automated calls to residents. The city manager concluded that it was important for people to hear the reassuring voice of the mayor; it brought calm to the community and showed that the city cared. Frequent updates were provided this way and seemed appreciated by the community.

Council Members Helping in Shelters

 In Alvin, some of the council members worked in the shelters. Sometimes they would provide comfort and support. In other cases, with proper training they could help staff the shelter as any other volunteer.

Technical Expertise of Council Members

- In Lyons, Colorado, the town trustees dealt with the people/constituent issues and staff dealt with the infrastructure. A trustee who was an engineer, however, helped with utility issues, and a trustee who was a pharmacist helped with medication issues.
- In Friendswood, Texas, a council member with construction expertise drove a dump truck, helping rescue people from the Hurricane Harvey floods.

Elected Officials at the Scene of an Incident. The

most sensitive area is the scene of a physical incident: flood or fire damage, location of a mass shooting, etc. Here managers have a responsibility to self-regulate their own involvement and to ensure no political interference. At the same time, it may be valuable for elected officials to see what happened in the field so that they can share with others what they've seen and what the city is doing. Visuals are important. They make the incident real, sometimes in very disturbing ways.

- In Orlando, the chief administrative officer arranged for the council to come collectively to the scene of the nightclub shooting. It was still a crime scene and they could not go through the nightclub, but they met in a private command area nearby and received a full briefing on what happened and followup actions.
- In the City of Boulder, an official was assigned to the council to safely take them individually to see flood-damaged areas.
- In Gatlinburg, Tennessee and Washington, Illinois, the city managers personally accompanied their mayors on tours of damaged areas.

>>> Key Questions: Leading Up

- 1. Have you had a discussion with your mayor and council about roles in a crisis?
- How do they prefer to be notified and kept informed?
- How will you get complete information to council in a timely manner? How do you deal with information that is not yet confirmed but may be on social media?
- What is the policy, understanding, and expectation of the mayor and council regarding the EOC?
- How will field visits for elected officials be managed?

Leading Down: The City Manager's **Role with Staff**

As we have seen, the manager has a crucial responsibility in working with the mayor and council. But what is the appropriate role as the chief administrative officer? The consensus is the manager must be clearly in charge, behind the scenes if not out front. As noted at the beginning of this section, the manager sets the tone. That tone needs to be one of "we can do this." This can be difficult.

In Ventura, Dan Paranick was named interim manager the very night that the wildfire hit the city. He was in an overlap period with the retiring city manager, who officially was to leave at the end of the month. He said, "I had to recognize that I was the leader and the people were looking to me to make decisions."

Sometimes those decisions can be unpopular at the time. In Washington, Illinois, Tim Gleason made a decision to keep homeowners out of their tornado-ravaged neighborhoods until utilities could be repaired. It was a hard decision, but workers did in days what would have taken weeks had the neighborhoods been reoccupied.

Different managers see different roles for themselves.

"I'm is a strong believer in letting the directors take the lead and not injecting myself into operations; I'm not going put a light on the top of my car and rush to the scene." Sereniah M. Breland, Alvin

"I don't want to be cooped up in a room; I want to be out seeing what is going on. I should not interfere with operations, but play a support role, letting employees know that they are appreciated." Harold Dominguez, Longmont

"The city manager needs to be a cheerleader; city employees are highly motivated during an emergency and will get the job done." Peter Urich, Peoria

>>> Key Questions: Leading Down



- How hands-on should the manager be? Does the manager stay in the EOC and delegate other city operations to an assistant if there is one? Or does the manager delegate EOC responsibilities to an assistant and focus on the council and other city
- To what extent should the manager be present in the field, not to micro-manage or pre-empt other leaders, but to obtain situational awareness and show support for the responders in the field?
- How focused (if not obsessed) with the event should the manager be and for what period of time? When and how does the manager signal a return to normalcy?



Managing Oneself

Effective crisis management requires discipline, including knowing one's limits. The managers in this study recognized the need to take care of themselves and most confessed that they did so poorly. Most worked twenty-four to thirty-six hours during the initial phase of the crisis, even those who knew that they shouldn't.

"You need to listen to your team and to your family when they tell you it's time to extract yourself; staying is not good for anyone." Harold Dominguez, Longmont

"I worked for about thirty-six hours until the assistant city manager, whose home had been flooded, had the place of mind to say that we should go on shifts. Police and fire had done so, but the others had to catch up." Rick Davis, Baytown

"I worked thirty-six straight days.... You have to listen to your body and realize that you've reached a point where it's beyond your physical or mental capacity to be there. My police chief and others were watching me and I can remember specifically my assistant chief saying, 'Dan, you need to get some rest.' You must realize when you're at a point where you are not being effective or your judgement is cloudy. Take the external clues—when someone comes up to you and says, 'you're not looking good' or 'you don't seem like yourself.' Don't push yourself until you break." Dan Paranick, Ventura

"I didn't sleep for two days. I had nowhere to go, but I got a message delivered to the fire department for me saying 'This is Christine, you don't know me, I live at this address and I happen to be in Arizona. Please go use my house.' I remember trudging up there in the pitch black. In a mountain town with no electricity it is really black. I wore someone's big ol' muck boots and I found her house in the dark. She said where the key would be. I opened the house in the dark and laid down. That was after forty-eight hours and my head was swimming, just reeling. At that point you're so psyched up, you can't relax. It was still thundering and lightning. It was bizarre. It was different. I knew at that moment that I was exactly where I was supposed to be." Victoria Simonsen, Lyons

Physical and mental exhaustion were identified as risks in all of the crises studied. Many mangers felt that they not only had to work as hard as everyone else, they had to work harder. They demanded things of themselves they would never require of others.

Despite one's best efforts, it can sometimes not be enough for the elected officials or for the public.

The Manager Must Be Prepared for Personal Attacks.

The managers interviewed were all inspired and motivated by the commitment of their staff members and partners and by the resilience of their communities. A crisis can bring out the best in people, and it can bring out the worst. Elected officials can become angry and frustrated and take it out on the manager. There will be second-guessing and Monday morning quarterbacking. Small slights or errors can arise repeatedly in subsequent performance reviews. The manager can become a scapegoat. And, worse, the manager can be subject of threats.

In Sanford, Florida, emotions were very high around the shooting of Trayvon Martin. The Sanford Council remained supportive of City Manager Norton Bonaparte, but externally he received threats against him and his family. Over his career he had had his share of angry community meetings—it's part of the job. But one Sunday afternoon he got a threat on his home phone. He got angry emails and voicemails. People sent him empty Skittle bags and AriZona Iced Tea cans—

the treats that Trayvon Martin had bought at the 7-Eleven before being killed. The anger only intensified when people learned that Bonaparte is African American.

In Gatlinburg, Tennessee, everybody knows everybody. The people think of themselves as "Mountain Tough." The wildfires in 2016 caused devastation at a level they never imagined due to conditions never contemplated—sudden winds around hurricane levels caused the fires to rapidly spread. Fires and smoke were all around and trees and power poles were down. Evacuations were very difficult. A total of fourteen people died-three in Gatlinburg and eleven in Sevier County. Their deaths are heartbreaking. It was a surprise, however, when a group of survivors organized on Facebook and began attacking city and county officials. The county mayor was publicly called a murderer with similar accusations directed at other officials. They were called liars and accused of covering up information. These attacks were made even though the city manager lost her home to the fires and the mayor lost his home and business to the fires.

It was noted above that the manager must have the discipline not to stay on the job until a physical or mental break. The shifts that are imposed on others should be followed by the manager as an example to others. Even then, how does a manager actually relax and stay centered?

"I tried to spend as much time with my wife and daughter as I could. Each day as I left and came home through the garage, I took strength in a plaque I have in there: 'Lord help me to remember that nothing is going to happen to me today that you and I can't handle.'" Norton Bonaparte, Sanford

"I live on five acres with horses. When you have horses, you wake up every morning and you go to work and you don't go to bed until the work is done at night. It helps." Howard Kunik, Punta Gorda

>>> Key Questions: Managing Oneself



- 1. How do you maintain personal resilience?
- 2. With whom can you discuss sensitive issues and get perspective and advice?
- 3. How do you know when you are over-stressed? What do you do about it?



Thinking Ahead

While the manager will have critical responsibilities to the immediate crisis, the consensus among the managers in this study is that the manager should let police, fire, and public works handle the immediate response while the manager begins preparing for what happens next. The manager needs to be thinking beyond the immediate operations and planning for the next four, eight, twelve, twentyfour, forty-eight hours. Consider the following:

- How long will the immediate response take and what resources will be needed to sustain operations?
- Where are there capacity challenges and the need for mutual assistance, not just for field responders, but for support staff, such as logistics, finance, and public information?
- What will be the immediate impacts of the crisis on residents, businesses? What will they need from the city?
- What will be the expectations of those not impacted by the crisis? Will normal city services be expected? If so, how will they be provided?

In an event that causes widespread property damage, the manager must begin organizing for the mid- and long-term recovery. A key issue is preparing to work with FEMA. If a city has never had FEMA experience it is critical that assistance be secured early so that the city's work, even while still in crisis operations, can meet FEMA reimbursement standards. A starting point is the state's emergency management office as well as city manager colleagues who have prior experience.

In a small community, this will be difficult because of the operational role the manager must play. And it can be hard in any community because of the operational role that the managers think they should play.

>>> Key Questions: Thinking Ahead



Who can assist the manager in taking a longer-term perspective on what will be needed from whom and when?



Managing Relationships

It would be hard to overstate the importance that managers place on the role of relationships in helping effectively manage a crisis. Managers stressed the importance of having personal relationships with key leaders in advance of a crisis. This is why the task of day-to-day community building is so important. Jane Brautigam of Boulder refers to this as "social resiliency." People do not want to be establishing relationships within a community for the first time during a crisis. If a relationship is broken, it needs to be repaired, especially if it is with an overlapping unit of government, such as a county.

The critical recommendation is to assess the state of relationships and be intentional about connecting the city government directly with the community. In a crisis, the contacts are important for two main reasons: (1) to engage others in the crisis response activities, and (2) to keep others informed proactively about what is happening so that they can have confidence in the city's response and are prepared to help.

Among the relationships considered most critical are the following, organized in the categories of community, government, and professional:

Community Relationships

Community Organizations, especially those representing specific populations such as the NAACP and advocates for disability services, immigrant rights, and LGBTQ rights. Trust between the local government and the people it serves is critical. The sensitivity and fragility of the relationship are revealed in the trust issues related to police and the African-American community. Bonaparte acknowledges that much work remains to be done between the city, its police department, and the African-American community in Sanford. Nonetheless, he credits the efforts that had been made prior to the Trayvon Martin shooting and afterwards for Sanford's ability to avoid major civil disruption. Byron Brooks says that the efforts by the City of Orlando to build strong relationships and respect with the LGBTQ community both before and after the mass shooting

- at the Pulse nightclub helped all manage through a horrific event. Those who were targeted knew that they had the respect and support of city officials.
- Nonprofits, such as the United Way, Red Cross, and those unique to one's community. Nonprofits are critical to the community safety net. Depending on the local structure, the relationships with nonprofits may be stronger with county human services personnel than city personnel. This is an example where pre-crisis relationships and plans are important. Residents, especially those who are victims of a crisis, should not have to tolerate confusion or finger-pointing between different levels of government. The nonprofit community is often the bridge that brings support to people in their moments of greatest need. They can be valuable partners in supporting shelters, organizing and staffing victim and disaster assistance centers, and managing volunteers and donations.
- Faith Community, especially if there is an interfaith association. The faith community proved valuable in several communities. In Longmont, a local preacher kept contacting the assistant city manager, repeatedly offering to help, but there was no immediate need. However, as the city moved into the recovery phase, help was critically needed to prepare empty retail space to accommodate a disaster assistance center. The assistant city manager pulled out the preacher's card, made the request, and he showed up with fifty people who got the job done. The faith community was also helpful in several communities in both providing and staffing shelters. In Baytown, most of the help came from churches and the United Way; the Church of the Latter Day Saints flew people into the city, who were also very helpful.
- Business Community. The business community can be a strong partner, especially when it understands that a key objective of the local government is getting businesses open and people back to work. Among the relationships that are important are with businesses that have supplies that may need to be appropriated when vendors are not open and cannot

get to their establishments. In Pearland, the economic director contacted businesses to let them know that the city had to go into some stores and take critical supplies. Urich commended the construction community in Peoria for providing critical support in the construction of the temporary floodwall. Reciprocally, a business in Peoria needed large pumps to save its factory floor from flooding, and the city was able to help obtain them. In Baytown and other cities, local businesses provided food to the EOC and other worksites and to shelters. Brautigam had praise for Boulder's internal resource team, which practices on a monthly basis and has great relationships with those that have the critical supplies that are needed in a crisis. Business organizations such as the Chamber of Commerce can also be used as a conduit for information through their communication channels to Chamber members.

Governmental Relationships

- School Superintendent. The schools can
 be a first choice for sheltering, making use
 of large spaces, such as gyms, and the food
 and sanitary facilities that can accommodate
 large numbers. With the rise in school shootings, beginning with Columbine, the relationships and joint emergency planning have
 become more critical than ever.
- County Government including the Sheriff.
 Where cities and counties have overlapping responsibilities, the relationships were identified as especially critical.
 - a. In Longmont, Harold Dominguez said he was concerned about relationships with Boulder County when he arrived and that he worked hard to improve them. "Had we not done that work on the front end, I don't know how we would have managed the flood." The relationships paved the way for Longmont to take the lead in opening a disaster assistance center to serve the county.
 - In Ventura, Dan Paranick was highly complimentary of the way that Ventura County coordinated with his city during and after the wildfire. He said that the

- most important parts of the response were getting organized at the beginning and defining roles. The wildfire started during the evening. Early the next morning he and his key leaders met with leadership from the county and other cities. They decided that there would be a seamless operation between the city and the county. An example of the collaboration was the integrated website for recovery, venturacountyrecovers.com.
- c. In Sanford, Norton Bonaparte was concerned about the first planned mass rally after the Trayvon Martin shooting-30,000 people, led by Rev. Al Sharpton, plus every national media outlet. Much of the demonstrators' concern focused on the Sanford Police Department for not arresting the shooter, George Zimmerman. Bonaparte wanted to avoid potential confrontation, so he sought help from the Seminole County sheriff for traffic and crowd management during the march. He wanted the marchers to see the green uniforms of the county rather than the blue uniforms of the city. Ironically, Bonaparte said that a protestor complained on television about the lack of Sanford Police presence, claiming that they were not taking the march seriously. Nonetheless, the march occurred without incident.
- Neighboring Cities. Relationships with other local governments can yield some of the most effective support because staff understand the city's role. The support that the City of Longmont provided the Town of Lyons is a model case. Longmont provided a shelter at a church, where people from Lyons gathered every Thursday to get an update on their town and when they might be able to return. The Lyons trustees met in the Longmont City Hall. Even more dramatic, the Longmont School Board had administrative operations in a former school, which they vacated so that the Lyon School Board could start classes for its students two weeks after the flood. Longmont loaned the Lyons Town manager an administrative staff person who

- became a critical support for Simonsen. "She followed up on decisions that were made and told me when to eat and when to rest."
- State Government, especially its emergency management office. The state plays a critical role in emergency management and in relationships with the federal government, including mutual assistance, disaster declarations, and the management of federal and state funds. Brautigam explained that coordination with the state went well because her emergency manager had strong relations with the state and that state personnel trusted Boulder. While it is obvious that that the manager needs to keep the council informed about what is happening, the state legislative delegation should also be in the loop so that they are prepared to assist with any state issues.
- Federal Government. While there will be extensive interaction with FEMA on a large-scale weather event, the Department of Justice can be helpful in community disputes. Norton Bonaparte found DOJ's Community Dispute Resolution staff valuable in resolving demonstrations. The city's congressional delegation can also be a valuable resource in helping negotiate federal relationships, and its members should be kept fully informed about what is happening during and after a crisis.

Professional Relationships

Manager Associations. The network with other managers can assist during a crisis in multiple ways. Active engagement in one's state association and with ICMA enable a manager to establish relationships with people who uniquely understand one's needs and are willing to help. While there are formal processes for mutual assistance, informal relations in the city manager network can prove valuable. Pearson and Breland, for example, related how they contacted manager friends they knew through the Texas City Management Association (TCMA) and got quick assistance when it was needed. It is also important that the manager support memberships in other professional associations for senior members of staff, for the same reasons as above. When Punta Gorda needed assistance with crisis communications, the manager was able to make contact with a valuable resource through the police chief to the state police chief's association, which had a firm on retainer.

Municipal Associations. There is value in both the manager and the elected officials actively engaging in state municipal leagues. Many leagues offer affordable insurance options. More importantly, they create relationships that can be called upon when a need arises.

Obviously, it may not be possible for a manager, especially one who is new to the community, to have all of these relationships. It is important to prioritize and make time for those that can be most critical. Where the manager may not have a strong direct relationship in the organization, who does? The economic development director can be an excellent liaison with the business community in a crisis. The community development staff can connect with neighborhood associations. The mayor and council members may need to be points of contact with the faith community or with community organizations.

>>> Key Questions: **Managing Relationships**



- Who are the critical leaders upon which a city will depend during and after an emergency? What is the status of relationships? How can connection and support be sustained?
- Who are the critical leaders that can address different populations and ensure social resiliency within a community?
- Who else in the organization has strong relationships that can be leveraged in a crisis, such as elected officials, planning and economic development personnel, purchasing staff, and others?



Managers Supporting Managers

Above it was noted that managers benefit from their active engagement with state associations and ICMA. With the benefit comes responsibility. In a crisis, the task is simply to reach out and ensure that managers in crisis know that you are available. Managers in this study expressed appreciation for having peers who sent emails and left voice mail messages. Sometimes it took a while to get to them, but often they were seen and heard at a pivotal moment and provided strength and encouragement.

Sereniah Breland was critical of herself in regard to supporting other managers. She noted that it is important to remember how long some events go and that people can feel forgotten during the painful recovery stage. Alvin, where Breland was manager, is adjacent to Santa Fe, Texas. On May 18, 2018, a student at Santa Fe High School killed eight students and two teachers; thirteen people were injured.

Breland, who considers the Santa Fe manager a friend, said that she had no idea how long they had kept their EOC operational and how embarrassed she was for not checking on her colleague and offering assistance. Herein lies a paradox. Managers are reluctant to interject themselves into someone else's incident, and managers are too often reluctant to ask for help that they need. To Breland, "This struck me as a really profound and unexpected point. I would like us to highlight this among reasons to read this report."



>>> Key Questions: **Managers Supporting Managers**



- Who are the managers with whom you have a close
- How do you maintain contact and know when they may need assistance?

Summary – Roles of City Manager

As is clear, city managers must operate on multiple levels, juggling multiple tasks, with many eyes focused on them. In fact, the job is more complex than that described above. In the following sections, additional roles and responsibilities are discussed. The key takeaway from the discussion is that the manager cannot and should not try to lead a crisis alone or in isolation. The pre-crisis work with elected officials, with other city staff, and with the external relationships are all designed to build a team. The team provides mutual support among team members and permits appropriate delegation of tasks and diversity of perspectives.

PREPARATION AND RESPONSE

An effective response in a crisis is highly dependent on the preparation prior to the event. The following four areas were highlighted by managers in this study:

- Planning in Advance
- Improvising
- Assessing Community Risks
- Assessing Operational Capacity.

These areas are overarching and further address the leadership responsibilities of the city manager. Much more detailed guidance is provided in FEMA disaster management material. The numerous after-action reports provide detailed operational and tactical lessons learned. The discussion here, targeted to city managers, is at a higher level, intended to provide a framework or context for preparing and responding to a crisis.

Planning in Advance

It is universally recognized that every city needs to have an emergency management plan, as did all communities in this study. That plan must include a thorough understanding of the National Incident Management System (NIMS) and the Incident Command System (ICS). This is the foundation for managing all types of emergencies and provides a plug-and-play framework for outside assistance to integrate with one's locality.

Clay Pearson's assessment was that Pearland needed to expand training. "The press of other compelling priorities often deters training, but the flood experience of Hurricane Harvey taught me that we need to extend the training deeper and broader in the city." Nonetheless, Pearson found that key staff were well trained and had actual experience in previous disaster responses. This mitigated the lack of a more systemic approach to training, which is now one of his priorities.

Jane Brautigam warns that "a community that does not have frequent events may not expect dangers, may not be preparing, and is likely not motivated because of all the other demands on the city." She recommends that all cities do a resilience study and assess what acute problems could occur.

Observations and recommendations in afteraction reports reinforce the need to plan, to keep

plans up to date, to train people who may be called upon in a large-scale event, and to test the plan using table top and other exercises. Minimally, anyone who will be involved in disaster response needs a basic understanding of ICS. A test of the plan should be done at least annually, but cities at significant risk need to consider a range of different types of tests with different partners on a more frequent basis.

The National Preparedness Goal identifies five elements of the national goal:²⁴

- Preventing, avoiding, or stopping a threatened or an actual act of terrorism
- Protecting citizens, residents, visitors, assets, systems, and networks against the greatest threats and hazards in a manner that allows our interests, aspirations, and way of life to thrive
- 3. Mitigating the loss of life and property by lessening the impact of future disasters
- Responding quickly to save lives, protect property and the environment, and meet basic human needs in the aftermath of an incident
- Recovering through a focus on the timely restoration, strengthening, and revitalization of infrastructure, housing, and the economy, as well as the health, social, cultural, historic, and environmental fabric of communities affected by an incident.

The framework identifies three "core capabilities" that cut across each of the six areas and thirty capability-specific elements. The three overarching capabilities are:

- Planning
- Public Information and Warning
- Operational Coordination.

These three areas should be addressed in each of the six areas. Proficiency in these three areas establishes the foundation for what is referred to as "all-hazards planning." The type and probability of risks that a community faces will determine the areas in which the plans need to be more or less detailed and determine which capabilities are a priority to developed.

Gatlinburg, for example is under a routine threat of flash floods and had plans well developed for this possibility; however, it had not had to deal with a major wildfire.

>>> Key Questions: Planning in Advance

- Do you have a comprehensive emergency management plan? Is it current?
- How are the five areas in the National Preparedness 2. Goal addressed in the plan?
- 3. What are the most probable risks that the city faces? How are these risks addressed in the plans?
- Who are the critical partners in an emergency operation?
- Who will play what roles in an emergency? How many of them have been trained in NIMS/ICS?
- What exercises have occurred and what was learned?
- Who in the city has actually been through a major crisis event?
- From where would the city draw emergency management support?



Improvise

Advanced planning, training, and testing provide the foundation from which a manager can respond to a wide range of emergencies, including those never imagined. The city manager and emergency team should expect the unexpected and be prepared to improvise. Disasters do not follow a playbook.

In most of the cases in this report, cities were responding to events that had never before occurred and/or had not occurred at the same scale. Several cities were dealing with 500- and 1,000-year events or events never imagined. Having a plan, however, provides a foundation from which the city can adapt to the unique circumstances that unfold in a real emergency.

"As I was abandoning Town Hall on the side of the building where water was only knee deep, I reached for the emergency manual and then thought, what good is this if no one can get in or out?" Victoria Simonsen, Lyons

In Friendswood, Morab Kabiri thought they were ready for Harvey. The EOC was activated, resources staged, and people positioned. The floods hit overnight with more rain than predicted and flooded places that had never flooded, resulting in the loss of some of the prepositioned resources. The city had trained for deploying for

water rescues, but had never anticipated deploying ad hoc volunteers to conduct water rescues.

In Alvin, the 911 system used a VOIP system that failed. 911 calls would ring over to every phone in City Hall.

Clay Pearson says you have to learn as you go along. Peter Urich recommends convening one's entire team, not just the obvious emergency responders. He says that everyone can help map a plan and a best strategy, exploring what will and will not work.

>>> Key Questions: Improvising



- Who on your team will question conventional assumptions?
- Is there a diversity of opinion and perspective and different skill sets?
- How quickly can the team pivot?



Assess Risks to the Community

Each community faces different risks. Some are highly probable and others not so much. Managers identified four types of risks that need exploration: (1) typical FEMA-type disasters; (2) infrastructure failure; (3) social risks; and (4) organizational risks. Each is briefly outlined below.

Risks from FEMA-type Disasters. The potential for some disasters is obvious, such as wildfires in the west and coastal storms. In these areas the question is not if, but when? The mass shooting at the music festival in Las Vegas in 2017 was horrific, but the consequences could have been much worse had Las Vegas jurisdictions not trained for active shooter/terrorist attacks over many years. They knew they were a target. In Boulder and Peoria, the reality of a flood threat is long-standing. Awareness of the threat enabled Boulder to build a more resilient community over many decades. In Peoria, knowing the location of flood-vulnerable properties enabled the rapid construction of a temporary flood wall. For many cities, the possibilities are more remote, especially winter storms in the south, such as the 2014 storm that shutdown the greater Atlanta region and had some motorists stranded in their cars for twenty-four hours.²⁵

The main point is to know one's risks, understand the probability and worst-case scenarios, and then plan and build capacity with transparency and intentionality.

Infrastructure Risks. Another risk that cities face can be from their own infrastructure. Harold Dominguez learned this when he was manager in St. Angelo, Texas. While there, he had staff make a comprehensive assessment of the water system. Staff found the potential for catastrophic failure due to deferred maintenance. He took the assessment and threat information to the council and community. Four months later, the city had the failure he feared and lost water to 75 percent of the community the week before Christmas. The failure was still catastrophic but not a total surprise, and efforts were already in place to deal with the issue. Similarly, in Longmont, Dominguez was working with staff to test the assumptions about the 100-year flood plain and plan mitigation efforts.

Most of the communities experiencing widespread destruction—fire, flood, and tornado—had had infrastructure that was stressed by the crisis. Specifically, water and sewer systems in the different cities had different levels of resiliency against the onslaught of nature. Resiliency and redundancy in water and sewer systems were repeatedly identified as issues in communities, both the plants as well as pumps and lift stations. Until water and sewers are functional, a city cannot return to normalcy.

Social Risks. Sanford provides an example of a different kind of risk assessment as it relates to civil unrest. When the Trayvon Martin shooting occurred, Norton Bonaparte had only been city manager for about five months. "I was getting to know the community that seemed pretty harmonious and a real nice place to live." There was no reason for him to expect racial tensions, especially as the new African-American city manager. After the shooting, however, African Americans started coming to him, sharing various events that had occurred in the past and how they lingered, even those far in the past. In 1891, the City of Goldsboro became the second incorporated black city in Florida. It was a thriving community of AfricanAmerican businesses and residents with their own elected officials. In 1911, however, the adjacent city of Sanford wanted to expand and convinced the state legislature to de-charter Goldsboro and it was then annexed by Sanford. In the 1940s, famed baseball player Jackie Robinson, the first professional black player in the major leagues, came to Sanford for spring practice with the New York Giants. Robinson could not stay in the hotel with other players. In his first appearance on the baseball field, Bonaparte was told, the Sanford chief of police went out on the field and ordered Robinson to leave. There are similar stories of historical injustice that lie underneath the surface of the 2016 riots in Charlotte. North Carolina and in Ferguson, Missouri in 2014. It's important to know the city's past and how that history is remembered and felt in different communities, especially among oppressed or marginalized populations.

>>> Key Questions: Assessing Risks



- What are the most probable disasters that your city could face? What are the worst-case scenarios?
- What is the city's capacity to deal with the worst cases?
- How resilient is the city's infrastructure? Where are the risks? Is the council aware of the risks? Is the community aware of the risks? Is there a plan to address them?
- What redundancies are there in the water and sewer systems? If the city lost a water or sewer plant, what would happen?
- What is the social fabric of the community? What is the social history? Have past injustices been reconciled? Are there current injustices?
- How strong is the city organization? Are all of the executives up to the task? Can they effectively manage their assigned areas and function as an integrated team in a crisis?



Assess Operational Capacity

Extended emergency operations test the capacity of staff, facilities, and equipment. Cities in this study with populations of around 100,000 generally had strong capacity, as did most of those with populations exceeding 50,000. For small communities, resources were exhausted quickly. For example, the small Town of Lyons only had thirteen employees when the flood hit, only three of whom were avail-

able for response. Even larger cites may find that they do not have much depth in critical areas. When a crisis hits, it is also possible that key staff will not be available. They may be on vacation, at a conference, or otherwise separated from the city. Challenges faced by cities in this study included the following:

- Pearland found that its public works facility was inadequate; public works trucks and fire engines were not good for moving people.
- Lyons lost its public works facility, town hall, and library.
- Friendswood lost its public works facility and parks and recreation facility.
- Boulder's fire engine electronics were damaged by the high water.
- Longmont had high water vehicles and boats, but not enough.
- Friendswood staff were patching lift stations on the fly.
- Baytown had a sewer plant go offline and 100 lift stations were of concern.

While there is a well-developed system of mutual aid in the United States, it cannot always come quickly. In the widespread flooding events, the managers learned very quickly that their cities were on their own. These events suggest that a city needs to be prepared for at least seventytwo hours of self-sufficiency, if not longer. There is a danger that an entire community can be isolated.

- In Lyons, Colorado, no one could get in or out for thirty-six hours even if they had been available. Within the stranded city there was even more isolation, with six islands divided by highvelocity water or crevices. It was toward the end of the second day that helicopters came, along with the National Guard in high-water vehicles; FEMA arrived three weeks later.
- Friendswood, Texas, was also divided into islands during the Harvey floods and was on its own from Saturday to Wednesday. FEMA arrived within two weeks.
- In Pearland, Clay Pearson reported that "the Marines literally rolled in with great fanfare with their convoy nearly a week later."

Finally, in assessing the city's operational capacity, it is important to understand that major crises involve more than the so-called "first responders." In a major event everyone will have a role. Critical agencies identified by managers included IT, finance, parks and recreation, fleet and building maintenance, libraries, and others. Personnel may very likely not be doing their normal jobs, but will need to be reassigned to assist critical functions.

>>> Key Questions: **Assessing Operational Capacity**



- At what point does the city exhaust its resources?
- What would the city do if it had to be completely self-sufficient? For how long could the city be self-sufficient?
- 3. What support personnel are needed for a response?
- How can city staff be redeployed to critical functions, especially those requiring 24/7 coverage?

EMPLOYEE SUPPORT

Every manager talked with pride and admiration for the dedication and competence of city/county staff during the emergency. Some events are clearly fire events (wildfires) or police events (shootings), while others are more complex, such as floods where public works plays a major role in both response and recovery. Lead roles notwithstanding, every manager made clear that a major crisis involves every department and potentially every employee.

Jane Brautigam expressed the need to create an organizational culture that empowers staff to do the right thing under pressure. Examples during the Boulder flood included field decisions to save the sewer system and an employee finding a creative way to get a fuel truck to the water plant through back roads and across private property so that the generators could keep running. In Brautigam's words, "We need a leadership philosophy wherein everyone is a leader. It's about culture, culture, culture."

Before an incident occurs, every city employee needs to understand that in an emergency any employee can be deemed essential and reassigned an emergency responsibility. Phones must be answered, food served, bathrooms cleaned, and garbage taken out. People who would normally do these tasks—often contractors—may not be available, but the functions need to be filled.

Three issues were consistently raised: health and safety, pay policy, and victim assistance.



Health and Safety

Many employees are willing to put their lives at risk during a crisis and to work many more hours than it is safe to do. Police and fire, which normally operate 24/7, tend to be good about implementing twelve-hour shifts and rotating personnel appropriately. Other departments, which must adapt into a 24/7 mode, may not have the policies and discipline to effectively implement shifts. This can especially be a problem for managers and supervisors. Excessive work can cloud one's judgment and put the employees and others at risk.

"Managers should not be hardheaded about asking for help when they need it." Harold Dominguez, Longmont

"Some employees who made it to work then could not get back home; they just kept working and at times we had to make people stop." Jane Brautigam, Boulder



Mental Health Support

It is common for fire and police to have procedures for critical incident stress debriefing and take advantage of it. It is less common in other agencies. Managers strongly recommended using peer counselors and/or employee assistance programs to get help for all employees who may have been exposed to traumatic events during the disaster. Employees may have seen or heard unforgettable horror or pain. The overall event may just be distressing. In Longmont, long-term employees had spent decades building a signature waterfront park only to see it destroyed in hours.

"I was concerned for employees dealing with victims, listening to heart-wrenching stories, wanting to help, but often could only offer an empathetic ear." Jane Brautigam, Boulder

"Before the flood, two teenagers were killed one weekend in our small town. It shook people up. And then there was the high school shooting in Santa Fe. We needed help coping with these events and

the fire chief in Sugarland sent a team to help us." Sereniah Breland, Alvin

"In Baytown, the city is strong, but every time it rains, people get a little nervous; nonetheless, the future is a little less scary because we know we can handle it." Rick Davis, Baytown



>>> Key Questions: **Supporting Employees**



- Do all departments have procedures for implementing and enforcing reasonable shifts?
- Do all departments have access to peer counselors and/or employee assistance? Is it used? If not, how can it be encouraged?
- Do the city manager and department heads set a good example?
- What training do supervisors have in recognizing stress and the need for intervention?



S Pay Policies

It is common that cities either do not have adequate pay policies for a disaster or that the policies are not understood or that they are not enforced. One manager described their city's policy as a "cluster" with pay issues unresolved nine months after the event. Another manger had angry employees who somehow thought they were getting paid double-time during the crisis.

Pay policies at the time a disaster occurs set the standard by which a city will get reimbursed for eligible personnel costs. For example, it is typical that The Fair Labor Standards Act (FLSA) exempt employees normally receive compensatory time for authorized overtime work; the amount of compensatory time that can be earned may be limited. During a crisis, it would be better to have alternative plans in place so that even exempt employees are paid at least straight time for authorized overtime. Rules about covered employees may also need a predeveloped emergency exception in how overtime is earned, especially if the work week transitions to twelvehour shifts. Failure to have clear policies that are understood in advance can result in months of dispute and can demoralize staff.

>>> Key Questions: Pay Policies



- 1. What are your city's pay policies for a disaster? Are they different from regular overtime policies? Should they be? Are the policies understood by employees and their supervisors?
- 2. How do you communicate pay policies during a crisis, manage expectations, and ensure motivated and sustained employee response?

Victim Assistance for Employees

Unfortunately, it is not uncommon for employees themselves to be victims in a disaster. They may lose their homes or have major damage. They may also lose a family member, friend, or pet. During the disaster they may be worried about life and property.

- The Gatlinburg city manager, mayor, and ten other employees lost their homes to wildfires.
- Managers in Alvin and Boulder had to be evacuated from their homes to get to their EOCs.
- In Friendswood, a city council member's home was flooded and a second one's home almost flooded.
- In Baytown, a council member's home was flooded.
- Alvin's city engineer was trapped in his home. He, his wife and two children, and the dog had axed through the roof and were stranded there. The city got a boat to him, he got his children and dog in a hotel, and he then showed up at the EOC to work a twelve-hour shift. During the emergency he continued working his shift despite a ninetyminute commute each way.
- The Baytown assistant city manager was working in the EOC when his house flooded. His mother and wife were evacuated by boats. Later, the city took him by boat to check on his home, which had four feet of water.
- Pearland's city engineer had his home flooded and was evacuated, but he maintained contact with staff and was sending email updates on the stormwater and rising levels even as he was being evacuated.
- In Washington, Illinois, staff members lost homes and everyone had someone in their

family impacted. Council members also had damage, with two losing their homes completely.

Cities in this study did not have consistent policies, if any, for dealing with losses by multiple employees. In Longmont, the message was for supervisors to simply do the right thing.

"You can't have employees worrying about their families and worrying about their homes and then do the best that they can for the residents of the community. Let them take the time to deal with their issues. On any given day our employees give more to the community than anyone can realize. This time the employees were going through a significant trauma, and they needed to deal with it so that when they came back they would be completely in the game in terms of helping residents." Harold Dominguez

Cities that had employees affected by the event gave employees time off-formally or informally—to deal with issues. In some cases, the city or city partners helped raise funds to support city workers, such as the Rotary Club in Friendswood. In Gatlinburg, the Tennessee Municipal League and Tennesse City Management Association (TCMA) provided valuable support.

>>> Key Questions: **Victim Assistance for Employees**



- How would your city organization help employees who experience a disaster and major loss? Could the help be provided fairly across a number of employees if necessary?
- Do supervisors and managers have the discretion to flexibly provide support for employees based on their needs?

MEDIA MANAGEMENT

An area that severely tests a local government in a crisis is media management. What do you do when the satellite trucks roll into town? How do you feed a twenty-four-hour news cycle? Several of the smaller communities in this study did not even have a public information officer. Staff were overwhelmed almost from the beginning of the crisis. Larger cities also found resources strained

or inadequate. Recommendations from this study include the following:

- Don't wait to get help if you need it, especially from someone experienced in crisis communications.
- Monitor social media to avoid surprises and to be able to quash rumors.
- Use the city's website to provide comprehensive information in as transparent manner as possible.
- Determine who will be the spokesperson and in what situations. Speak with one voice.

Traditional Media

Several of the local governments in this study had intense media scrutiny, but none more than Sanford. The Sanford protests were, in fact, created intentionally as a media spectacle in order to focus attention on the injustice done to Trayvon Martin. The Martin family took lessons from the family of Emmett Till, whose mother insisted on an open casket for her son after he was tortured and killed in Mississippi in 1955. She wanted the world to see what had happened to her son. Trayvon Martin's family was concerned that George Zimmerman would walk free for the death of their son and could not accept it. They enlisted the services of an attorney who developed a media strategy that included national celebrities like Al Sharpton.

Sanford was one of the cities that did not have a communications professional. An employee had recently been given public information duties and was in the process of being trained when the Trayvon Martin case exploded. Sanford was able to find an experienced communications person who had worked in the Seminole County emergency management office to help.26

Punta Gorda, as a small community, also did not have a communications office or public information officer when the fatal police shooting occurred. The police department had a part-time PIO, a sworn lieutenant who had a range of other operational responsibilities. Furthermore, since the incident involved the police, it didn't seem appropriate for police personnel to handle the media. The city reached out to the Florida Police Chiefs Associations, which had a contract with a communications firm in Tallahassee and it fit the

#BlackLivesMatter

The acquittal of George Zimmerman gave birth to #BlackLivesMatter, which was first used in a Facebook posting by Alicia Garcia. On the day of the Zimmerman verdict, she posted, "the sad part is, there's a section of America who is cheering and celebrating right now.[sic] and that makes me sick to my stomach. we gotta get it together y'all." Later, she added, "btw stop saying we are not surprised. that's a damn shame in itself. I continue to be surprised at how little Black lives matter. And I will continue that, stop giving up on black life." She ended with "black people. I love vou. I love us. Our lives matter." Garza's friend Patrisse Cullors, amended the last three words to create a hashtag: #BlackLivesMatter.

See Monica Anderson and Paul Hilton, "The hashtag #BlackLivesMatter emerges: Social activism on Twitter," Pew Research Center, August 15, 2016. Available at: http://www.pewinternet.org/2016/08/15/ the-hashtag-blacklivesmatter-emerges-social-activismon-twitter/; and Jelani Cobb, "The Matter of Black Lives," The New Yorker, March 14, 2016. Available at: https://www.newyorker.com/magazine/2016/03/14/ where-is-black-lives-matter-headed

bill. According City Manager Kunik, "We could not have done it without them; they wrote or reviewed all responses to media."

Orlando had a trained and experienced communications officer who supported the mayor and who was critical from the very beginning. When the first press conference came there was an issue about who should be the spokesperson. There was a tug of war about who should lead, with the FBI thinking that it should. The mayor's press person pushed back, saying that the people of the community look to their local elected leaders. Those are the faces that they will connect with and can inspire them. The mayor did lead, not to give the details that police and FBI would provide, but to deliver that first message to the community. As CAO Brooks explained, this was "to tell the community you're safe"; to address the city's commitment to tolerance and support to the LGBTQ community; and to say that Orlando "will define how we will be as a community," not the shooter.

One manager described the media as "feeding the appetite of people who want to know about things that don't go well." Another manager accused the media of asking questions "just to hurt the city."

The Sanford city manager shared a mnemonic used by his mayor. He said that in dealing with the media, one should be Open, Honest, Sincere, Helpful, Informative and Truthful.



Communicate Directly with Residents

While dealing with the media is a necessity, modern communications tools make it easy for local governments to communicate directly with their residents and businesses.

Create a Dedicated Website. Many people need information after a disaster; at the same time, life goes on in the city. How does a city use its home page to meet both needs? It is not unusual to visit the website of a city that has had a major crisis and find little about the crisis on the site. In other cities, the disaster dominates the website. A practice found in this study was to create a separate web page and sometimes a new URL to address issues related to the crisis.

- Punta Gorda dedicated a website related to the Mary Knowlton shooting. Howard Kunik was concerned about possible allegations of cover-up and wanted to achieve maximum transparency. "We put our dirty laundry out there for the world to see. The incident was so dramatic, we felt that we had to get it out there so that it would not look like the City or the police were trying to hide anything. So, no matter how bad it looked, we put it out there. Some of your employees made mistakes and the whole world could see it."27
- The City of Ventura integrated its information on a new, unified county site—Ventura County Recovers—created to consolidate information about recovery from the wildfires of 2016. Four of the cities have links on the unified page for city-specific information.²⁸
- Orlando created a dedicated web page to consolidate all public records requests about the shootings at the Pulse nightclub. Links are provided to records.²⁹

Social Media. Social media presents a daunting challenge during a crisis. It gives cities the potential to get accurate and critical information to people in a timely manner. However, it also provides a platform for rumors, misinformation, and destructive behavior.

- Longmont and Alvin both identified active social media as critical to their strategies.
 Alvin emphasized the importance of "staying on top of social media" and knowing what is floating around, especially misinformation and rumors.
- Orlando used social media to identify a rumor after the Pulse nightclub shooting that there had been another shooting at the hospital, which was not true.
- In Gatlinburg, Cindy Cameron Ogle found social media to be helpful for emergency services in keeping the public informed, but social media became a distraction as a group used it to make accusations about city and county officials.

An article in a publication for independent insurance agents recommends that the general guideline is to provide only critical information with an action item so people can make informed decisions: "Ask yourself, 'What is important to your audience who is being affected by this real-time crisis?' Respect the gravity of the situation at hand in terms of both the content and tone of voice in your posts, and understand that social media is a two-way communication tool. Being responsive and facilitating conversations goes a long way." A disaster recovery firm featured in the website article offered these additional guidelines:

- Avoid canned responses. Every disaster is local and different, so take the time to find out more about the situation.
- Follow up on replies, answer any questions and identify any trends. Your customers expect it. And while you may not know the answer, make sure you follow up with the individual and post the answer publicly—it could be valuable to the larger audience.
- Don't post anything that looks overly speculative. Date and timestamp posts if they are time sensitive and always ensure content is current and accurate.

- Use hashtags. It enables those searching your organization or the event to easily find and sort available information and stay a part of the conversation.
- Be careful of reposting or retweeting content from other organizations, especially with minute-by-minute developments. If you make a mistake, it could go viral. Keep the most accurate information out there that you can.
- Refer to other authorities and share tools and resources. You can pick up more followers by making it easier for your followers to repost what you provide.
- Consider all your different audiences: employees, stakeholders, clients, community, media, and competitors. Craft your messages carefully and keep in mind that different audiences will see your communications.³⁰

It is also recommended that your employees know the city's policy on the use of their personal social media accounts. To the extent possible, try to develop a shared understanding among elected officials about what is appropriate to post during a crisis.

Branding. The term "disaster branding" was identified in the after-action report on the Orlando Pulse shooting conducted by the University of Central Florida:

With Pulse, City staff released for widespread, free use a rainbow version of the City's fountain logo. Staff really focused on crafting a message and sticking to it in the immediate response and even beyond. Even today, when something negative happens in the City, there is a message of love and unity.³¹

Other cities also adopted a visual identity related to their disasters and a "brand" name. The most common is [Community]-Strong. The use of the term "strong" appears to have emerged after the Boston Marathon bombing, when "Boston Strong" became a rallying point for recovery. *The Boston Globe* calls the term "shorthand for defiance, solidarity, and caring." 32

 Longmont, Colorado used a common visual image, but five different sub-brands to identify five different areas of recovery:

- a. Longmont Prepares! Flood Awareness
- b. Resilient St. Vrain! Restore & Revitalize
- c. Longmont Cares! Flood Assistance
- d. Boulder County Collaborative CDBG
 Disaster Recovery Funding
- e. Longmont Works! Flood Recovery (specifically city reconstruction projects)
- BOCO Strong was created to unify resiliency efforts in the Boulder region. It is comprised of representatives from Lyons, Jamestown, Boulder, Longmont, and Boulder County as well as the Red Cross, Boulder Flood Relief, Foothills United Way, Intermountain Alliance, and the Office of Emergency Management.
- Gatlinburg partnered with Sevierville, Pigeon Force, and Sevier County on wildfire recovery under the brand of "Mountain Tough."

Key Questions: Media and Communications



- How would you supplement communications staff during a prolonged emergency?
- 2. Who would speak for the city and in what circumstances? When should the message come from an elected official or a professional expert? How do you avoid fragmented or conflicting messages coming from the city?
- 3. What would you do if someone sought to pre-empt communications for the city, such as the county, state, or federal government? How would you ensure coordinated communications?
- 4. What communication channels do you have to communicate directly with the public: electronic newsletter, social media platforms? How many people do these platforms reach?
- 5. How would you monitor traditional and social media during and after a crisis? How would you respond to rumors and misinformation?
- 6. How quickly could you create a website for disaster information? Could you sustain it? How would you drive people to it?
- 7. Does the crisis need a "brand"? What would it be? How would the visual image be created? What is the brand intended to convey? Is it authentic and inclusive? If the city did not facilitate the brand is there a risk that someone else will (e.g., #BlackLivesMatter)?

RECOVERY

For some crises, recovery—the return to normalcy—may be relatively quick. For other crises, recovery can extend for years. Significant physical or social damage can take a long period to rebuild. The recommendation from these cases is to have a disaster recovery plan as part of pre-crisis planning. Not all of the cities had a such a plan, which made the job of recovery harder. In some cases, there was only a vague understanding or no knowledge of items such as a disaster recovery center, family reunification center, victim assistance center, or community development disaster recovery grants. Fortunately, these are activities rarely if ever needed in most communities; however, many cities do not even know what they do not know.

FEMA's National Disaster Recovery Framework provides a starting point in pre-disaster recovery planning. "The ability of a community to accelerate the recovery process begins with its efforts in pre-disaster preparedness, including coordinating with whole community partners, mitigating risks, incorporating continuity planning, identifying resources, and developing capacity to effectively manage the recovery process, and through collaborative and inclusive planning processes. Collaboration across the whole community provides an opportunity to integrate mitigation, resilience, and sustainability into the community's short- and long-term recovery goals."³³

The FEMA Framework provides details on eight guiding principles and eight core capabilities.

Guiding Principles

- 1. Individual and Family Empowerment
- 2. Leadership and Local Primacy
- 3. Pre-Disaster Recovery Planning
- 4. Engaged Partnerships and Inclusiveness
- 5. Unity of Effort
- 6. Timeliness and Flexibility
- 7. Resilience and Sustainability
- 8. Psychological and Emotional Recovery

Core Capabilities

- 1. Planning
- 2. Public Information
- 3. Operational Coordination

- 4. Infrastructure Systems
- 5. Health & Social Services
- 6. Housing
- 7. Natural & Cultural Resources

Cutting across these different elements, managers who have been through the recovery process identify six areas for managers' attention: recovery plan, FEMA, finance, debris removal, volunteers/donations, and mental health support.

Planning for Recovery

Once a crisis occurs, the managers recommend that people immediately start thinking about recovery. It is important to realize that only part of a community may need extended care and attention while other parts of the community and the city organization go about business as normal. Regardless, it is recommended that the city establish specific recovery goals, have them approved by council, and understood by the public, and that regular progress reports be made to the council and public. In some communities, reports were made at each council meeting. Some communities "branded" recovery efforts and posted information in the community. Each milestone achieved provided an opportunity to reinforce the commitment of the community to come back-to be resilient. In fact, recovery plans should consider a focus on resilience, not just

rebuilding; that is, rebuilding smarter and better for

a stronger and more resilient community.

- Boulder at the time of the 2013 floods did not have a recovery plan. The community development director reached out to colleagues who had been through a disaster. They recommended focusing the recovery effort and consistently reporting on progress. Boulder then developed five recovery goals, which were adopted by council, with frequent updates to the council and the community. The goals were (1) help people get assistance; (2) restore and enhance infrastructure; (3) assist business recovery; (4) pursue and focus resources to support recovery efforts; and (5) learn together and plan for the future.
- Longmont developed a map of recovery projects and posted them throughout the community, providing regular updates on the progress that had been made.



For a long-term recovery, an organizational structure must be established to support the recovery effort while enabling the city to provide normal, day-to-day operations. The ICS model used to manage the response phase may not work during recovery.

>>> Key Questions: Planning for Recovery



- Who will be assigned the responsibility during a disaster to begin the recovery planning process?
- How will goals be established for recovery? How will the community be engaged? Will the goals be adopted by council?
- How will recovery progress be reported? What opportunities are there for celebrations or remembrances? What will happen on the one-year anniversary and thereafter?
- 4. What organizational structure will be created to appropriately resource and sustain the recovery effort to its completion? Who will be in charge and what disciplines and skills will be needed to achieve the adopted recovery goals?
- How will the recovery be "branded"?

FEMA

A discussion on federal relations could fill an entire report by itself. Some cities had positive experiences with federal agencies and others did not. The most important consensus recommendation to facilitate relations with federal agencies is to document everything thoroughly from the beginning:

- Take pictures/video of damage, and provide detailed estimates of damage.
- Document everything that is purchased, and explain why and how.
- Document staff costs and the purpose of the staff.

If a community is at high risk for a FEMA-type event, it is recommended that staff get training

It's the FBI. Can we come in?

Lyons Town Administrator Victoria Simonsen had seen the town virtually wiped out by floods. Recovery would have been a daunting task for any community and especially for one with a staff of thirteen people. Simonsen said she and her team worked diligently to follow federal procedures the best they could, but the town didn't even get procurement training until a year after the floods. On October 4, 2015, Simonsen was at home when she got a knock on the door. Two FBI agents were there and wanted to talk with her about a procurement issue. She offered them coffee and they proceeded to interrogate her for two hours, denying that she was actually under investigation. Meanwhile other agents were at her offices copying computers. The next day she and the city clerk were put on leave. How did she feel? "I wasn't as shook up as others. Right next to my desk is my ICMA Code of Ethics. I follow it and believe fully in the integrity that my position holds and knew I hadn't done anything wrong." Two weeks later the investigation was dropped and the town administrator and clerk were reinstated.

on FEMA procedures in advance. Otherwise, it is important to connect with other cities or vetted consultants that have been through a FEMA event and know the policies and procedures.

It is also important to know the following information about FEMA:

- FEMA staff may not arrive early in the event.
- FEMA resources may be stretched.
- FEMA staff will change regularly, and you may have to effectively start over multiple times.

Different FEMA staff will give conflicting interpretations of eligible approaches or expense.

>>> Key Questions: FEMA



- What does your organization understand about FEMA procedures? How quickly could staff get up to speed?
- Who would manage documentation procedures? How quickly could they centralize record keeping?
- From whom could you get assistance with FEMA procedures?

S Finance

The most important aspect of expenditures before, during, and after an emergency is documentation. Every manager who went through the FEMA processes emphasized the critical role of documenting the procurement process and accounting for services, supplies, and staff time. Also emphasized was the need for a healthy fund balance. For the midsize cities, reserves were adequate to cover expenses pending FEMA reimbursement. For smaller communities, this can be more challenging since the damage to public facilities can far exceed current resources.

- Lyons was able to get a loan from the State of Colorado to assist with cash flow.
- Friendswood could manage its cash flow without borrowing, but if another event occurred before FEMA reimbursements were received, there would not be sufficient reserves to finance response and recovery up-front.
- In Boulder, the flood has helped reinforce the importance of reserves, which elected officials and community leaders sometimes want to divert to projects.

>>> Key Questions: Finance



- Who would be assigned to document disaster expenses and are they trained in FEMA processes?
- 2. What is your fund balance policy?
- At what point would the fund balance be accessed?
- If the fund balance was accessed for a crisis, how would it be rebuilt and what contingency plan would the city have during that time?
- If the fund balance could not support a disaster response, what would the city do?

Debris

In major weather events, debris removal is consistently a major issue. The lingering of debrisfilled streets provides a visible reminder of the disaster and indicates a lack of recovery. It also creates a public health and safety issue. The leading practice was to have a contract negotiated in advance for debris removal and to assess the community's capacity to supplement the contract with city crews or other contractors. It is also important to note that there are specialized procedures for debris removal and lot clearance after a fire.

- Pearland thought it had its pre-event contract in order, but confusion arose across multiple external agencies regarding the procurement process, resulting in a delay in getting started.
- Alvin reported that they had the last debris collection and then had the last debris collection and then had the last debris collection....

>>> Key Questions: Debris



- If a major weather event occurred, how would debris be removed?
- What is the capacity both for collection and disposal?
- If you use a contractor, what other contracts may conflict with your contract?
- How would debris procedures be communicated to the public?

▼ Volunteers and Donations

An encouraging aspect of disasters is that many people want to help. However, volunteers and donations are not free of cost. They need to be managed. Volunteers may arrive upon request or just show up. Most local governments have no need for standing capacity in this area, but they need to have a contingency plan. Some communities look to the nonprofit sector to help manage volunteers or donations, turning to an organization like a United Way. A community foundation may also be able to assist with financial donations.

The people who want to help need a way to express their support for people in need and for the responders helping them. Unless the city proactively finds ways for people to help, they will improvise in ways that may not be helpful.



>>> Key Questions: **Volunteers and Donations**



- How would you convey what you need?
- 2. Who would manage volunteers during a crisis?
- How would self-deployed volunteers-including professionals—be managed?
- How would volunteers be recruited?
- How would they be screened, deployed, and supervised? Is there a nonprofit that can help?
- Where would donations of supplies be received and warehoused? How would they be distributed?
- Who would receive cash donations? How would they be distributed?
- How do you handle prepared food that is donated and ensure its safety?



Mental Health Support

Some disasters can be traumatizing for people affected. People may see and experience horror. Some people may lose close family, friends, and pets. In some cases, people will have lost all of their physical possessions. Many of the people will not have sufficient financial resources and will feel overwhelmed about starting over. Working with other governmental units to draw on public and private mental health resources will be critical. Cities who have experienced such needs are usually generous in providing advice and assistance.



Key Questions: Mental Health Support



- Who are the mental health providers in your community?
- 2. Do they have disaster experience and/or capabilities?
- Are they part of a network that can provide additional resources?

CONCLUSION

This report illustrates how the leadership and management skills of professional local government managers are tested and how professional managers are able to respond effectively. The report illustrates trial by floods, hurricanes, tornados, wildfires, mass shootings, and protests. The crises occurred with little or no warning, requiring an immediate response and the forethought to plan for the mid-term and long-term consequences to their communities.

The cases in this study describe experiences that the managers had never imagined or at a scale that was never imagined. The lessons shared provide an opportunity to learn from a diverse group of dedicated professionals who have been tested. They spoke openly, honestly, and with humility.

The managers in this study repeatedly stressed the importance of advance preparation and training for crisis management. From these battletested managers, five important lessons emerged:

- City managers must be leaders, setting the tone for the responses, coordinating their roles with the elected officials, playing appropriate operational roles with city departments, and ensuring effective relationships with community and governmental partners.
- City managers must ensure that a city is prepared when a crisis hits, knows its risks and operational capacity, and is prepared to improvise.
- City managers must ensure the health and safety of employees during and after a crisis event and be prepared to support employees who may themselves be victims of a disaster.
- City managers must have a plan to secure the communications resources needed to protect the reputation of the city, to keep its residents informed, and to combat rumors and misinformation.
- City managers must ensure that recovery planning starts immediately, is highly focused, and returns the community to normalcy as quickly as possible.

The managers interviewed shared their stories in a sincere effort to help their colleagues who may one day face an event similar to their event. They expressed admiration for the employees of their cities and appreciation for their peers who provided either direct aid or moral support. They represent the values of city management and show how managers can rise to the occasion when extraordinary events occur.

In the following pages are additional resources to help managers and other local government professionals plan for crisis:

References includes an annotated bibliography of the After-Action Reports for the incidents in this project. These reports provide a much deeper exploration of each incident and detailed recommendations, most of which are applicable for pre-crisis planning.

Resources for Crisis Management (Appendix B).

The federal government and others have provided extensive resource material to help plan, recover, and mitigate crisis events. This section is a high-level review of some of the most important and basic resources.

Additional After-Action Reports of Interest (Appendix C). AARs are among the best learning materials available for crisis and emergency planning. Ten valuable reports are referenced, with annotations to the 2018 Mass Shooting at the Las Vegas Harvest Festival.

Other managers will not have an incident exactly like any of those described in this report, but whatever crisis they do confront will very likely have elements similar to all of the crises herein. A core competency of a professional manager is the ability to see connections and relationships, harnessing one's collective education, knowledge, and experience to respond effectively to novel circumstances. Climate change, the proliferation of guns, and highly charged partisan politics portend more rather than fewer future crises to test the competence and resilience of professional managers. It is hoped that the lessons shared in this report will help better prepare them for what appears to be inevitable.

ENDNOTES

- Federal Emergency Management Agency, "FEMA Reflects on Historic Year," Press Release Number HQ-17-191, December 29, 2017. Available at: https://www.fema.gov/ news-release/2017/12/29/fema-reflects-historic-year
- International City/County Management Association, "Local Government Sustainability Practices, 2015 Summary Report," March 2016. Available at https://icma.org/ documents/icma-survey-research-2015-local-governmentsustainability-practices-survey-report
- CAL FIRE, "Top 20 Largest California Wildfires," January 15, 2019 and "Top 20 Deadliest California Wildfires," December 12, 2018. Retrieved from http://cdfdata.fire. ca.gov/incidents/incidents_statsevents
- 4. According to the most recently available FBI data, there were 50 active shooter incidents in 2016 and 2017, resulting in 221 deaths and 772 injuries. Mother Jones magazine maintains a database of mass shootings that uses a narrower definition than the FBI's active shooter data. Mother Jones reports 12 mass shootings in 2018, with 80 deaths and 67 injured. FBI data for 2018 was not available at the time of publication. A more detailed database of gun violence can be found at the Gun Violence Archive, https://www.gunviolencearchive.org.
- Washington Post Data on Police Shootings. Retrieved February 5, 2019, from https://www.washingtonpost.com/ graphics/2018/national/police-shootings-2018/
- See FBI data on "Law Enforcement Officers Killed and Assaulted (LEOKA)." Available at: https://www.fbi.gov/ services/cjis/ucr/publications#LEOKA
- Flint Water Advisory Task Force, Final Report.
 March 2016. Available at: https://www.michigan.gov/documents/snyder/FWATF_FINAL_REPORT_21March2016_517805_7.pdf
- 8. For more information, see the "GenX Investigation" section on the website of the North Carolina Department of Environmental Quality, available at https://deq.nc.gov/news/hot-topics/genx-investigation
- National Weather Service, "Record River Flooding of April 2013." Available at: https://www.weather.gov/ilx/ apr2013flooding
- Christopher T. Clavin, et al, Case Studies of Community Resilience and Disaster Recovery from the 2013 Boulder County Floods, Washington, D.C.: National Institute of Standards and Technology, 2017). Available at: https:// www.nist.gov/publications/casestudies-communityresilience-and-disaster-recovery-2013-boulder-countyfloods
- City of Longmont, Colorado, "Longmont Strong: September Flood 2013," YouTube video, 1:23:47, posted May 29, 2014, https://youtu.be/wYYCiyQSsPY. The 911 story told by Laura Randolph begins at 42:12.
- 12. Clavin, et al, 9.

- See Eric S. Blake and David A. Zelinsky, Hurricane Harvey: 17 August - 1 September 2017, National Hurricane Center, Tropical Cyclone Report AL092017, May 9, 2018, available at: https://www.nhc.noaa.gov/data/tcr/AL092017_Harvey. pdf; and Federal Emergency Management Agency, "Texas Hurricane Harvey (DR4332)," available at: https://www. fema.gov/disaster/4332
- National Weather Service, "November 17, 2013 Tornado Outbreak." Available at https://www.weather.gov/ lot/17nov2013
- CAL FIRE, "Incident Information, Thomas Fire," January 3, 2019. Available at: http://cdfdata.fire.ca.gov/incidents/incidents_details_info?incident_id=1922
- 16. County of Santa Barbara Office of Emergency
 Management, Thomas Fire and 1/9 Debris Flow After-Action
 Report and Improvement Plan, October 2018. Available at:
 https://www.countyofsb.org/asset.c/4550
- Vernon H. Guthrie, et al, After Action Review of the November 28, 2016, Firestorm, ABS Group, December 2017. Available at: http://gatlinburgtn.gov/pdf/planning/ Wildfire/AAR%20of%20the%20Nov%2028%202016%20 Firestorm.pdf
- 18. Ibid.
- 19. There is no after-action report on the Trayvon Martin case. For a timeline, see "Trayvon Martin Shooting Fast Facts," CNN Library, May 7, 2018. Available at: https://www.cnn.com/2013/06/05/us/trayvon-martin-shooting-fast-facts/index.html. Also, see the six-part documentary, Rest in Power: The Trayvon Martin Story, Paramount Network, 2018. Available at https://www.paramountnetwork.com/episodes/8gym0h/rest-in-power-the-trayvon-martin-story-stand-your-ground-season-1-ep-1. An earlier documentary, 44 Daze, was created by Sherry Suttles, a former city manager. The trailer is available on YouTube: https://youtu.be/HXtXGplt304
- 20. Official reports on this incident are accessible on a City of Punta Gorda website, "Incident at Community Demonstration," available at this address: http://www.ci.punta-gorda.fl.us/government/incident-overview
- 21. NBC2, WBBH-TV, "Trial delayed for officer who killed librarian during training exercise," October 19, 2018. Available at http://www.nbc-2.com/story/39321826/trial-delayed-for-officer-who-killed-librarian-during-training-exercise
- 22. Straub, Frank, et al, Rescue, Response, and Resilience: A Critical Incident Review of the Orlando Public Safety Response to the Attack on the Pulse Nightclub, U.S. Department of Justice, Community Oriented Policing Services and Police Foundation, 2017. Available at: https://ric-zai-inc.com/ Publications/cops-w0857-pub.pdf

- 23. Department of Homeland Security, *National Preparedness Goal*, Washington, D.C., Second Edition, 2015.
 Available at: https://www.fema.gov/media-library-data/1443799615171-2aae90be55041740f97e8532fc68 Od40/National_Preparedness_Goal_2nd_Edition.pdf.
- U.S. Department of Homeland Security, National Preparedness Goal, Second Edition, September 2015. Available at: www.fema.gov/media-librarydata/1443799615171-2aae90be55041740f97e8532fc68 0d40/National_Preparedness_Goal_2nd_Edition.pdf
- State of Georgia, Internal Review and Action Plan, Winter Storm Event, January 26-30, 2014, February 2014. Available at: https://gov.georgia.gov/sites/gov.georgia.gov/files/ related_files/document/Internal%20Review%20and%20 Action%20Plan_Winter%20Storm%20Event%20Jan%20 26-30%2C%202014.pdf
- For details on the approach used by Trayvon Martin's family, see the documentary, Rest in Power: The Trayvon Martin Story, Paramount Network, 2018. Available at https://www.paramountnetwork.com/episodes/8gym0h/ rest-in-power-the-trayvon-martin-story-stand-yourground-season-1-ep-1
- 27. See City of Punta Gorda, "Incident at Community Demonstration." Available at: http://www.ci.punta-gorda. fl.us/government/incident-overview
- 28. See "Ventura County Recovers." Available at: https://www.venturacountyrecovers.org/
- See City of Orlando, "Pulse Tragedy Public Records."
 Available at: http://www.cityoforlando.net/cityclerk/pulse-tragedy-public-records/
- Morgan Smith, "How to Use Social Media During a Crisis," ia, July 10, 2015. Available at: https://www.iamagazine. com/strategies/read/2015/07/10/how-to-use-social-media-during-a-crisis
- 31. Thomas Bryer, Staci Zavattaro, Sofia Prysmakova-Rivera, and Esteban Santis, I'mPulse: The Story of and Lessons from the City of Orlando's Response to the Pulse Nightclub Shooting, University of Central Florida, 2018, p. 102. Available at: https://www.cohpa.ucf.edu/cpnm/wp-content/uploads/sites/25/2018/04/web-upload.pdf
- 32. Ben Zimmer, "Boston Strong,' the phrase that rallied a city," *The Boston Globe*, May 12, 2013. Available at: https://www.bostonglobe.com/ideas/2013/05/11/boston-strong-phrase-that-rallied-city/uNPFal8Mv4QxsWqpjXBOQO/story.html
- 33. U.S. Department of Homeland Security, *National Disaster Recovery Framework*, Second Edition, June 2016, i.

REFERENCES

Overall Information Sources

Information for this report draws primarily from telephone interviews with the city managers identified, conducted between June 20, 2018 and August 10, 2018.

After-action reports were a valuable additional source of information. Some cities did not conduct an AAR, while others had a third party prepare an independent and detailed AAR. In three of the cases—the 2013 floods in Colorado, the 2016 Gatlinburg fires, and the 2017 shooting at the Pulse nightclub in Orlando—there are two different reports that add perspective to the many different elements of a major crisis.

Recommendations from the AARs have been incorporated into this paper; however, each report provides extensive detail on the incident and is based on multiple interviews. They are valuable resources, and each is worthy of review. Below is an annotated bibliography and summary of the reports reviewed. In the annotation for each AAR is a recommendation on who can most benefit from a detailed review of the report.

Demographic data is from the Census Bureau. Budget information is from each city's fiscal year 2018 adopted budget, all funds, rounding to the nearest million.

Additional information was obtained from various documents on city and county websites and from news media reports.

Summaries from After-Action Reports for Events in this Report

2013 Floods in Boulder, Longmont, and Lyons, Colorado

Clavin, Petropoulos, Gupta, & Tokita. 2017. Case Studies of Community Resilience and Disaster Recovery from the 2013 Boulder County Floods. U.S. Department of Commerce Operating Unit, National Institute of Standards and Technology, IDA Science and Technology Policy Institute.

Recommended for engineers and other professionals responsible for designing infrastructure,

including flood control and water/sewer systems. Also recommended for emergency managers and others with responsibilities for recovery, including health and human services, building permits and inspections, economic development, finance, and community development.

This report is not a comprehensive after-action report, but consists of integrated case studies of how the 2013 floods affected Boulder County, the City of Boulder, and the Towns of Lyons and Jamestown. It was conducted by NIST, the National Institute for Standards and Technology. The report focuses on two areas: (1) infrastructure design, planning, and implementation and (2) administrative actions to meet the needs of the community. In the cases of Boulder County and the City of Boulder, the report examines four areas in each local government:

- 1. Pre-flood preparation
- 2. Response and short-term recovery
- 3. Mid-term recovery
- 4. Long-term recovery.

There is less detail on the small towns, addressing the two overarching issues of infrastructure recovery and community needs. The research team makes seven observations about infrastructure and eight related to community needs.

The State of Colorado also did an after-action report covering the impact of the 2013 floods across the state, as well as the Black Forest Fire, which occurred the same year. It is described below.

Division of Homeland Security & Emergency Management. 2015. After-Action Report, State of Colorado 2013 Floods and Black Forest Fire. Department of Public Safety, Colorado.

Recommended for emergency managers and other local officials who have liaison responsibilities with the state during emergencies.

While focused primarily on the state's response, this report provides insights for local officials. The report identifies twenty-one strengths, forty areas for improvement, and thirty-three recommendations related to the floods. Regarding the fire, the report identifies eleven strengths, seven areas for improvement, and eight recommendations. The report is oriented to operations and tactics. Among the flood

recommendations, about 80 percent were related to either training or communications. Material that directly relates to local governments includes the following:

- Local-level organizations had challenges in making quick decisions for the response.
- Upper management and elected officials at the local level need a better understanding and knowledge of ICS.
- Local emergency managers, response personnel, and county staff were not aware of the roles and capabilities of a FEMA Urban Search and Rescue (USAR) Task Force.
- The rapid deployment of the FEMA Mobile Emergency Response Support (MERS) was delayed.
- As a whole, first responders tend to be territorial and not want to let go of their areas of responsibility. There is also a reluctance to rely on/ask for help.
- Provide more training on damage assessment at the local level. Expedite the receipt of damage assessment information from 911 into the EOC.
- The local emergency management director convened a financial working group among county, state, and federal officials at the outset of the emergency to de-conflict and clarify guidance, significantly reducing the amount of paperwork needing re-accomplishment when the department later sought reimbursement.
- Better cross-tracking of information on responders, vehicles, equipment, and consumables is needed. Many responders submitted forms with incomplete information, placing a greater burden on the local EM department and making it more difficult to recoup covered expenses.
- Change the county's overtime policy to include exempt employees during emergency. This needs to provide specific language for reimbursement (per FEMA).
- Ensure that on-call procedures are sufficiently flexible and meet the needs of all emergency responses. Work closely with

[local] Office of Emergency Management to ensure critical contact information of key personnel is available.

2017 Hurricane Harvey Floods in Alvin, Baytown, Friendswood, and Pearland

Harris County Office of Homeland Security and Emergency Management. 2018. Harris County Hurricane Harvey After Action Report. Harris County, Texas.

Recommended for emergency managers, especially for those in large cities.

The report was conducted by the Harris County Office of Homeland Security and Emergency Management and as such is directed to that audience. Interestingly, the report is marked "Marked for Official Use Only" and that the materials should be disseminated only on a need-to-know basis.

The report is organized around three main categories and thirteen subcategories:

Command & Control

- Federal, State, and Local (County and City)
 Coordination
- Emergency Operations Center Operations
- Human Resources
- Public Information
- Coordination with Private Sector Partners (Including Utilities)

Operations

- Communications Interoperability
- Rescue Operations and Coordination
- Debris Management
- Transition to Recovery

Mass Care & Sheltering

- Shelter Establishment and Operation
- Housing
- County Staging Areas (Ice, Water, Food, etc.)
- Volunteer and Donations Management

The report identifies thirty-five strengths and twenty-five opportunities for improvement. Sections of particular value include those on Command & Control, EOC Operations, and Public Information.

2016 Fires in Gatlinburg

Guthrie, Finucane, Keith, & Stinnett. 2017. After Action Review of the November 28, 2016, Firestorm. ABS Group.

Recommended for city managers and all personnel involved in crisis response, especially leaders in small cities and towns.

This AAR is a good example of one that follows an orthodox approach. It is conducted by a third party and was jointly sponsored by the City of Gatlinburg and Sevier County. The overall goal was "to identify actions to better prepare the community for potential wildfires or other relevant hazards in the future." Extensive interviews were conducted by subject matter experts from multiple agencies. There is a detailed explanation of the events leading to the fires and a detailed description of the response.

The report provides descriptions of what went well, issues, and lessons learned in six areas:

- Command Staff and Incident Management, with subsections for Fire, Law Enforcement, and Emergency Management.
- 2. Operations, with subsections for Fire, Law Enforcement, and Emergency Management.
- 3. Inter-Agency Communications
- 4. Public Information
- 5. Logistics
- 6. Recovery and Humanitarian Outreach.

The report synthesized this information into conclusions that included the following:

- Forty-one recommendations for the City of Gatlinburg and/or Sevier County
- Nine recommendations for other agencies/ jurisdictions
- Twenty actions already taken or underway for the City of Gatlinburg and/or Sevier County
- Thirty-three identified best practices.

A separate AAR was conducted by the National Park Service (NPS) described below.

Division of Fire and Aviation, National Park Service, U.S. Department of Interior. 2017. Chimney Tops 2 Fire Review, Individual Fire Review Report.

Recommended for leaders in the fire service at all levels of government and for large federal and state agencies that have land management responsibilities.

This is a more technical and bureaucratic report than the ABS review. It provides details about how the original fire developed and progressed. It has nine key findings and recommendations, mostly related to plans and policies. The report concluded that "[t]he unprecedented Chimney Tops 2 Fire event exposed several wildland fire situational preparedness and planning weaknesses at the Great Smoky Mountains National Park. Despite these weaknesses, the review team found no evidence of wanton disregard or negligence by anyone at the park." Nonetheless, it is clear from this report that the National Park Service had a number of structural, policy, and human failures that may have led to the initial fire getting out of control.

Interestingly, NPS included an appendix by Dr. Branda Nowell of the School for Public and International Affairs at North Carolina State University, "Human/Organizational Factors and Sensemaking During the Chimney Tops 2 Wildland Fire." She concludes the following:

It appears that we are entering an era where the "unprecedented" is happening with increasing frequency (Field, 2012). This signifies a massive organizational challenge for our federal land agencies—particularly those that have worked in relatively stable systems for a long time and that are simultaneously facing increasing budget constraint. Incidents like CT2 are critical opportunities for learning that must not be wasted. These incidents provide new technical insight into the bio-physical micro-dynamics that can challenge our assumptions about what is possible. We can use this information to identify patterns that suggest possibilities that may be, heretofore, unimaginable. However, vague predictions of the "big one" will have little effect if organizational logics inoculate an agency against sensemaking. Therefore, it is also vital that we use incidents like CT2 to illuminate organizational vulnerabilities and opportunities for enhancing adaptive capacity.

2016 Pulse Nightclub Shootings in Orlando

Bryer, Zavattaro, Prysmakova-Rivera, & Santis. 2018. I'mPulse: The Story of and Lessons from the City of Orlando's Response to the Pulse Nightclub Shooting. University of Central Florida, School of Public Administration.

Recommended for local government leadership who may need to confront in a major crisis, particularly a mass casualty event.

This is not a traditional after-action report. It is more of a review to identify key decision points that Orlando confronted and to pose lessons learned and recommendations. The report does not address tactical issues related to the shooting response, but the larger policy and administrative issues required by the incident. It was conducted by faculty and doctoral students in public administration and is written from that perspective. As such, it can provide a good overview of the wide range of issues that local government leadership will need to consider in their crisis planning.

The report is organized across the following activities that generally follow the time sequence of an event:

- 1. Preparation
- 2. Response
- 3. EOC
- 4. Emergency Information Line
- 5. Family Reunification Center
- 6. Victims' Fund
- 7. Immediate-Need/Family Assistance Center
- 8. Long-Term/Orlando United Assistance Center
- 9. One-Year Anniversary
- 10. Continuity of Operations
- 11. Employee Mental Health
- 12. Partnerships
- 13. Managing Donations and Community Support
- 14. Language Needs
- 15. Leadership Traits
- 16. Funding for Disaster
- 17. Business Community & Continuity
- 18. Social Media Communication
- 19. Handling the Media

- 20. Disaster Branding
- 21. Public Records Requests
- 22. Community Cohesion
- 23. Training Post-Mortem

In most of these areas, the researchers first pose questions related to decisions that a city government will need to make in that area, then offer lessons learned and a short narrative around each question that describes the Orlando experience. A total of fifty-nine questions are posed across the areas along with sixty-two lessons learned and recommendations. The team additionally identifies another thirteen cross-cutting issues and provides fifty-eight more recommendations in these areas.

A second after-action report, focused more on tactical and operational issues, was done by the Department of Justice and the Police Foundation and is described below.

Straub, Cambria, Castor, Gorban, Meade, Waltemeyer, and Zeunik. 2017. Rescue, Response, and Resilience: A Critical Incident Review of the Orlando Public Safety Response to the Attack on the Pulse Nightclub. Critical Response Initiative. Washington, DC: Office of Community Oriented Policing Services.

Recommended for law enforcement, emergency managers, and media specialists. Also recommended for any senior leaders who may be involved in managing a mass shooting and its aftermath.

This is an important and detailed case study and is appropriate for any community that may face a mass casualty event, which in essence is every community. Even small cities that will not have the assets that are available in the City of Orlando and Seminole County need to be aware of the activities they may face and think about from where resources can be drawn in a planned rather than ad hoc manner. What happened at Pulse could happen in a school or a factory.

The report provides extensive information about the incident itself, in five phases: (1) response to the active shooter; (2) response to a barricaded suspect with hostages; (3) recognition that this is a terrorist act; (4) final entry and neutralization of the suspect; (5) investigation and the

recovery process. The report then addresses nine areas, describing the event and then providing observations and lessons learned in each area:

- 1. Leadership and Relationships
- Tactical Response and Command and Control
- 3. Equipment and Training
- 4. Emergency Medical Care
- Officer Safety and Post-Event Responder Wellness
- 6. Post-Event Victim Welfare
- 7. Investigations
- 8. Media and Public Relations
- 9. Community Engagement and Relationships

Across these nine areas, thirty-eight observations are drawn, and eighty-six lessons learned.

2016 Punta Gorda Police Accidental Shooting of Mary Knowlton

Negrinelli, Special Agent Gary. 2016. Knowlton Death Investigation. Florida Department of Law Enforcement.

Cochran, Lt. Terry A., 2017. Final Report for Professional Standards Investigation 16-001. Sanford Police Department.

Recommended for police chiefs and city managers.

These are not conventional after-action reports but are actually investigations. The first report was conducted by an outside state agency and became the basis for charges filed by the state against the officer that shot Mary Knowlton and charges against the police chief. The second report is Punta Gorda's internal review and resulted in the dismissal of the police chief. These reports show how loose standards and poor oversight can result in tragedy.

2012 Sanford Shooting of Trayvon Martin by George Zimmerman

Sanford Blue Ribbon Panel. 2013. Police Department/ Community Relations Assessment Report. 2013. Smith, Cecil. 2015. Sanford Blue Ribbon Panel, Police Department/Community Relations Assessment Report, Twenty Month Progress Report, July 2013 – February 2015

44 Daze. 2013. Directed by Sherry Suttles.

Rest in Power: The Trayvon Martin Story. 2018. Directed by Jenner Furst and Julia Willoughby Nason. Cinepart.

Recommended for city managers, police chiefs, and human relations/chief equity officers, communications staff.

These four items are not conventional afteraction reports. The issue underlying the protests in Sanford, Florida, after the shooting of Travon Martin by a member of the public, George Zimmerman, was on the surface the perceived failure of the Sanford Police Department to arrest and charge George Zimmerman. There emerged, however, deeper feelings of alienation between the African-American community and the Sanford government and its police department over literally the past century.

In response to the protests, the city developed a plan to improve community relations, including the appointment of a blue-ribbon committee, with twenty-five community members. The first two of the above references are the report that the panel produced and an implementation status report from the police chief twenty months later.

The second two items are documentaries made about the Martin incident. The first, 44 Daze, was produced soon after the event by former City Manager Sherry Suttles. It has a strong focus on the role of the city manager during the event. It is a difficult video to access and had limited exposure. The second documentary is a new six-part series on the Paramount Network. It provides extensive details about Trayvon Martin's family and their effort to get justice for their son. The documentary shows how an incident can go from local to national through the effective use of media.

APPENDIX A Local Governments Participating in the Study

2013 Floods in Colorado

- City of Boulder
 Jane Brautigam, City Manager
- City of Longmont Harold Dominguez, City Manager
- Town of Lyons
 Victoria Simonsen, Town Administrator

2013 Flood in Illinois

 City of Peoria Patrick Urich, City Manager

2017 Floods from Hurricane Harvey in Texas

- City of Alvin
 Sereniah M. Breland, City Manager
- City of Baytown
 Richard (Rick) Davis, City Manager
- City of Friendswood
 Morab Kabiri, City Manager
- City of Pearland
 Clay Pearson, City Manager

2016 Wildfires in the Great Smoky Mountains of Tennessee

City of Gatlinburg
 Cindy Cameron Ogle, City Manager

2017 Thomas Fire in Southern California

City of Ventura
 Dan Paranick, Interim City Manager

2013 Tornados in Illinois

City of Washington
 Tim Gleason, Former City Administrator

2012 Shooting of Trayvon Martin and the Arrest and Trial of George Zimmerman in Florida

 City of Sanford Norton N. Bonaparte, City Manager

2016 Accidental Police Shooting of Mary Knowlton in Florida

 City of Punta Gorda Howard Kunik, City Manager

2017 Mass Shooting in the Pulse Nightclub in Florida

City of Orlando
 Byron W. Brooks, Chief Administrative
 Officer

Notes:

- 1. Ms. Breland was city manager of the City of Alvin, Texas, during the incident; as of August 13, 2018, she is city manager of the City of Pflugerville, Texas.
- Mr. Gleason was city manager of the City of Washington, Illinois, continuing until March 23, 2015. He is currently city manager of the City of Bloomington, Illinois.
- Mr. Paranick was assistant city manager, transitioning to interim city manager of the City of Ventura, California during the event; as of August 27, 2018, he is district manager for the Rancho Simi Recreational Park District of California.

APPENDIX B Resources for Crisis Management

Extensive materials exist to help managers plan and organize for emergency management. Resources can be found on the websites for the U.S. Department of Homeland Security, FEMA, and the Department of Justice. These are the beginning points for understanding emergency management. The most important of these resources is the FEMA material on the National Incident Management System (NIMS).

NIMS provides a common, nationwide approach to enable an integrated approach to manage all threats and hazards. NIMS applies to all types of incidents and is applicable in any local government, although it will scale differently. The NIMS approach is valuable in managing any large event—such as a festival—which can provide practice for when it may be needed for an emergency. In a large-scale event, resources that come from the federal, state, or local governments will expect to plug into a NIMS structure and its common language. Conflicting structures, philosophies, and language were exposed during 9/11 in particular. NIMS has evolved since 2004 to provide a common platform for multi-agency responses.

Ready.gov provides detailed information on how to prepare for specific types of emergencies, including quick reference guides and numerous manuals and videos, training, and social media toolkits. The Office of Community Oriented Policing Services (COPS) of the Department of Justice also provides extensive guides, training, and after-action reports on incidents from a policing perspective.

Weather Events and Other Disasters

- FEMA. October 2017. National Incident Management System, Third Edition.
- FEMA. February 2017. Pre-Disaster Recovery Planning Guide for Local Governments.
- FEMA. June 2016. National Disaster Recovery Framework.

- FEMA U.S. Fire Administration. April 2008.
 Special Report: The After-Action Critique: Training Through Lessons Learned.
- FEMA, U.S. Fire Administration. June 2015.
 Operational Lessons in Disaster Response
- National Weather Service. August 2015.
 Post Wildfire Flash Flood and Debris Flow Guide.

Police Shootings and Community Relations

- Final Report of the President's Task Force on Twenty-First Century Policing. 2015. Police Research Executive Forum (PERF). 2016.
- Guiding Principles on Use of Force. Police Research Executive Forum (PERF). 2016.
 ICAT, Integrating Communications, Assessment, and Tactics, Training Guide for Defusing Critical Incidents.

Other References

 Smith, Morgan. 2015. How to Use Social Media During a Crisis. IA. Available at: https://www.iamagazine. com/strategies/read/2015/07/10/ how-to-use-social-media-during-a-crisis

After-Action Reviews

After-action reviews (AAR) are an important way to capture what went well and where a community needs to improve after a major crisis. They can also be a valuable tool in less impactful events, even ones that affect a single agency or team. Regularly using after-action reviews is part of continuous learning culture for high performing organizations.

AARs are common in the fire service, guidelines for which were published by FEMA's Fire Administration (USFA). The report cited below provides recommendations on how to conduct an AAR that is applicable beyond fire departments. It also includes sample forms for collecting information.

Ockershausen, Joseph. 2008. Special report: the after-action critique: training through lessons learned. Department of Homeland Security, FEMA, United Sates Fire Administration, National Fire Data Center. Report 159 of Investigation and Analysis of Major Fire Incidents and USFA's Technical Report Series Project conducted by TriData, a Division of System Planning Corporation under Contract (GS-10-F0350M/HSFEEM-05-A-0363) to the DHS/USFA, and is available from the USFA Web page at https://www.usfa.fema.gov/downloads/pdf/publications/tr_159.pdf

The U.S. Department of Veterans Affairs produced a practical, generic overview guide to afteraction reviews, with a focus on four questions:

- What was expected to happen?
- What actually happened?
- What went well and why?
- What can be improved and how?

The guide also provides sample forms. It is available through the Center for Evidence-Based Management.

 Salem-Schatz, Ordin, Mittman. 2010. Using Evaluation to Improve Our Work: A Resource Guide, Guide to the After-Action Review.
 U.S. Department of Veterans Affairs, Center for Implementation Practice and Research Support. Retrieved from Center for Evidence-Based Management, https://www. cebma.org/wp-content/uploads/Guide-tothe-after_action_review.pdf

APPENDIX C Additional After-Action Reviews of Interest

2017 October 1 Mass Shooting at the Harvest Festival in Las Vegas

FEMA. 2018. 1 October After-Action Report

Recommended for law enforcement and police departments, especially those that are in localities that host large-scale events.

This report adds to the growing body of knowledge and lessons learned in dealing with mass shootings and other mass casualty events. It a very technical report, targeted specifically to fire departments and law enforcement. In this case, the fire department is a county agency and the law enforcement responsibilities are under an elected county sheriff.

Few cities have the extensive capacity of the Clark County Fire Department and especially the Las Vegas Metropolitan Police Department. The latter has its own fusion center. Given the high level of terrorism threat in Las Vegas and Clark County, there has been an extensive investment in training and development of strategic, operational, and tactical capabilities. Nonetheless, the mass shooting at the outdoor music festival with 20,000 attendees was highly chaotic and tested the responders' training, discipline, staffing,

and operational capacities. It is hard to imagine what the consequences of the attack could have been in a locality with less training and capability.

The report reached three "key conclusions":

- Strong cross-agency collaboration is critical for a quick and effective response.
- Response training that is tailored to address an incident of mass violence is an especially valuable preparedness investment.
- Coordinated, cross-agency planning for an incident of mass violence is necessary for successful outcomes.

The report makes seventy-two "observations" in eleven areas:

- 1. Pre-Incident Special Events Planning
- 2. Emergency 9-1-1 Services and Notification
- 3. Initial Response to the Scene
- 4. Fire Mutual Aid and Scene Management
- 5. Tactical Operational Response
- 6. Operational Coordination
- 7. Public Information Notifications
- 8. Resource Management

- 9. Operational Communications
- 10. Family Assistance and Victim Services
- 11. Responder Wellness

From the observations in these areas, the authors make 177 recommendations, with each targeted either to police, fire, or both. As such, the report should be essential reading for any large police or fire department. The following are representative of the types of information found in this report that would be of value to other responder agencies.

In the first minutes of the incident, there was confusion over the shooter's location and profile. Public safety personnel reported over the radio that there were shots fired from multiple, disparate locations in the venue.

These distraction calls, commonly reported after mass shootings, ranged from shots fired/heard, active shooter(s), fires, possible explosive devices, and hostages. The calls caused a heightened sense of alert, and in some cases, the fear of a multipronged, coordinated attack near the initial shooting. While none of these calls proved to be further threats, they did create issues at the command and ground levels.

Security in the medical tent became an issue due to crowd panic, exacerbated by intoxicated festival attendees wanting to assist. This led to multiple altercations inside the medical tent that hampered patient care and treatment.

Self-dispatching of law enforcement officers, fire personnel, and other external agency personnel created staffing challenges and hampered the ability of the incident commanders and dispatchers to maintain personnel and unit accountability.

Good Samaritan stories of civilians—as well as many off-duty first responders and military—aiding, protecting, and providing care to the wounded were a major success observed in this response. These efforts were essential to saving many lives before emergency medical crews were able to access the site.

As noted, the report is technical. It includes detailed recommendations such as how to initially mark victims and the challenges of establishing unified command in such a large geographical area. The report is full of acronyms and obscure refer-

ences that involve sensitive information that fire and police will understand—or, if not, they should.

2014 Georgia Ice/Snow Storm: State of Georgia. 2014. Internal Review and Action Plan: Winter Storm Event, January 26-30, 2014.

2012 Hurricane Sandy: FEMA. 2013. Hurricane Sandy FEMA After-Action Report.

2014 Ferguson Shooting of Michael Brown and Civil Unrest: Community Oriented Policing Services, Department of Justice. 2017. After-Action Assessment of the Police Response to the August 2014 Demonstrations in Ferguson, Missouri.

2017 Charlottesville White Supremacist Rally and Death of Heather Heyer:

- Hunton & Williams. 2017. Final Report, Independent Review of the 2107 Protest Events in Charlottesville, Virginia.
- Governor's Task Force on Public Safety Preparedness and Response to Civil Unrest.
 2017. Final Report and Recommendations December 1, 2017

2014 Flint Water Contamination:

- Flint Water Advisory Task Force. 2016. Final Report.
- U.S. Environmental Protection Agency, Public Water System Supervision Program.
 2017. Review of the Michigan Department of Environmental Quality Drinking Water Program 2016.
- Jacobson, Boudides, Bernstein, Chrysler, and Citrin. 2018. Learning from The Flint Water Crisis: Protecting the Public's Health During a Financial Emergency. Michigan School of Public Health, de Beaumont Foundation, and The Network for Public Health Law.

2014 Charleston West Virginia Chemical Spill into Public Water Supply: U.S. Chemical Safety and Hazard Investigation Board. 2016. Investigation Report: Chemical Spill Contaminates Public Water Supply in Charleston, West Virginia.

2016 Dallas Police Ambush: Regional Organized Crime Information Center. Undated. War on Cops: ROCIC Special Research Report.

2014 Las Vegas Police Ambush: Thorkildsen, Zoë, Ashley Shultz, Thomas Woodmansee, and Drew Tracy. 2016. Las Vegas After-Action Assessment: Lessons Learned from the Las Vegas Metropolitan Police Department's Ambush Incident. Washington, DC: Office of Community Oriented Policing Services.

2016 Charlotte Police Shooting and Riots: Straub, Frank, et al. 2018. Advancing Charlotte: A Police Foundation Assessment of the Charlotte-Mecklenburg Police Department Response to the September 2016 Demonstrations. Police Foundation.

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