Ready in Advance: The City of Tuscaloosa’s Response to the 4/27/11 Tornado

In spring 2008, Walter Maddox, the Mayor of Tuscaloosa, AL, was leading a homeland security exercise simulating a dirty bomb attack at a University of Alabama football game. But as he watched an extrication occurring in the stadium’s upper deck, saw a hazardous materials team outside, and imagined that the stands were filled to capacity with over 100,000 people, the mayor was uncertain of what to do. “Following the drill, quite honestly, I felt lost,” he later said. “Public administration is my background, not public safety. So some of the decisions that were being asked, and some of the actions that were being taken seemed very foreign to me.”

After the exercise, the mayor shared his concerns with the drill’s architect, Tuscaloosa Fire Chief Alan Martin, as they drove back to City Hall. Martin, who had become Tuscaloosa’s fire chief in 2002, had long believed that the city was not dedicating enough resources to emergency management and had designed the exercise to illustrate the challenges of managing intense, complex, rapidly-evolving events. Sensing that the mayor was now focused on this issue, Martin suggested that city apply for a week long, Community Specific Integrated Emergency Management Course at FEMA’s National Emergency Training Center in Emmitsburg, MD. The mayor, though initially noncommittal, was intrigued. “From the very beginning, that seemed like a very wise decision to me,” he reflected. “I knew that I felt uncomfortable during the exercise, and I imagined that with so many new positions at the city that a large number of our staff felt uncomfortable.”

In January 2009, 67 leaders from Tuscaloosa travelled to Emmitsburg for the weeklong institute, the focus of which was a series of crisis simulations, culminating with a massive tornado slicing through the heart of the city. Some officials questioned whether training for such an improbable event was the best use of their time, but, in a

1 Interview with Walter Maddox, Mayor, City of Tuscaloosa, by telephone, July 12, 2013. Hereafter cited as “Maddox interview.” Unless noted, subsequent quotations from and attributions to the mayor come from this interview as well as an in-person interview conducted by the authors with the mayor at Tuscaloosa City Hall on September 9, 2013.

2 Interview with Alan J. Martin, Fire Chief, City of Tuscaloosa, September 9, 2013. Hereafter cited as “Martin interview.” Unless noted, subsequent quotations from and attributions to Martin come from this interview.

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striking example of life imitating art, on April 27, 2011, a scant 27 months later, an EF4 tornado tore through a six-mile-long and one to one-and-a-half miles wide stretch of Tuscaloosa, following a path that was eerily similar to the one in the FEMA simulation. One of 62 tornadoes in Alabama that day, the storm killed 53 people and essentially leveled one-eighth of the area within the city limits, including the building in which the county emergency management agency was located. It also seriously damaged or destroyed the local headquarters of the American Red Cross and of the Salvation Army, a police precinct, a fire station, and thousands of homes.

How would Tuscaloosa’s recently revamped incident command system perform in response to what was surely the largest natural disaster in the city’s history? Would the mayor and his administration be able to lead the city through its worst crisis? Amidst a statewide sea of destruction, could Tuscaloosa marshal enough aid from and coordinate with the Alabama National Guard and others to get the help their stricken city so desperately needed?

Background

Located in west-central Alabama, Tuscaloosa (see map in Exhibit A) is a large, growing city anchored by the University of Alabama and several large manufacturers but, in 2011, was grappling with substantial poverty and a significant socioeconomic divide. In 2010, the city was home to 90,500 people, making it Alabama’s fifth most populous city and representing a 16% increase since 2000. Much of this growth stemmed from the University of Alabama, which has its main campus in Tuscaloosa and had expanded its student body from 19,318 in 2000 to 30,232 in 2010. The city also benefitted from a robust manufacturing sector, led by Mercedes Benz, which was planning to expand its Tuscaloosa plant; BF Goodrich; and several other firms. Nevertheless, from 2007 to 2011, 29.6% of the population fell below the poverty line. This hardship disproportionately affected the city’s minority communities (about two-fifths of the city’s population was African-American, and 3% were of Hispanic origin).

3 Developed in 1957 by Dr. T. Theodore Fujita of the University of Chicago, the Enhanced Fujita (EF) Tornado Scale measures the severity of a tornado by placing it in one of six categories (EF0 through EF5). A higher number on the scale indicates a more severe tornado. “The Enhanced Fujita Tornado Scale,” National Climactic Data Center, National Oceanic and Atmospheric Administration, available at [http://www.ncdc.noaa.gov/oa/satellite/satelliteseye/educational/fujita.html](http://www.ncdc.noaa.gov/oa/satellite/satelliteseye/educational/fujita.html) [accessed on November 6, 2013].


In 2011, Mayor Maddox was two years into his second term and served full-time as Tuscaloosa’s chief executive officer in the city’s mayor-council government structure. A Tuscaloosa native and 1995 graduate of the University of Alabama-Birmingham (UAB), from which he held a Bachelor’s Degree in political science, the mayor had begun his career as a Field Director with the Alabama Education Association before entering municipal politics in 2001 when he was elected to the Tuscaloosa City Council. The position, which he held concurrently with his role as the Executive Director of Personnel for the Tuscaloosa Public Schools and while completing a Master’s Degree in public administration from UAB, provided the platform for his 2005 election as mayor. During his time in office, the mayor, who was reelected in 2009 without opposition, had introduced “311,” a hotline that citizens could call to alert the government of non-emergency problems; helped design a “comprehensive plan” for the city’s development, which included an amphitheater and efforts to attract new businesses to downtown Tuscaloosa; and created a pre-kindergarten education initiative for the city’s least prosperous residents. In implementing these efforts, he worked closely with Tuscaloosa’s seven-member City Council, whose members serve part time and are responsible for enacting legislation and reviewing the mayor’s budget. The mayor presides over City Council meetings but votes on Council business only when there is a tie.

Natural Disasters and Emergency Management in Tuscaloosa

Tuscaloosa is frequently affected by hurricanes churning through the southeastern United States, and from 1952 through 2012, Tuscaloosa County experienced 69 tornadoes.


10 Interview with Brigadier General Allen Harrell and Lieutenant Colonel Jim Hawkins, Alabama National Guard, Tuscaloosa, AL, September 10, 2013. Hereafter cited as “Harrell and Hawkins interview.” Unless noted, subsequent quotations from and attributions to Harrell and Hawkins come from this interview and a telephone interview conducted by the author with LTC Hawkins on August 29, 2013.

11 The city of Tuscaloosa, for which there is not specific data on tornado frequency, is the seat of Tuscaloosa County. Although this area had experienced numerous tornadoes, the only prior storms that approached the April 27, 2011 tornado in severity were a series of EF4 tornadoes that struck Tuscaloosa in 1904, 1932, and 2000, killing 36, 37, and 11 people, and an EF5 tornado that affected the region in 1966. The latter storm only killed one person but injured 518 others. “Tornadoes in Tuscaloosa County, Alabama,” Tornadohistoryproject.com, available at http://www.tornadohistoryproject.com/tornado/Alabama/Tuscaloosa [accessed on September 30, 2013]; and Adam Jones,
An even more frequent (and decidedly more pleasant, but also demanding) challenge for Tuscaloosa is that on six to seven weekends each fall, the University of Alabama’s home football games pose an array of crowd control, traffic management, and security tasks for city officials. The team, which consistently ranks among the best in the nation, plays in a stadium that seats 101,821 people; as many as 100,000 additional fans typically watch the games in local restaurants and bars and tailgate on the university’s quadrangle. The large crowds double the city’s population and, city officials (and others) fear, create a wide range of potential risks, including, at in the extreme, being a possible target for a terrorist attack.

Early in Maddox’s administration, some city officials believed that the city government was ill prepared to handle a large emergency. At the time, the city’s crisis response system was led by the Tuscaloosa County Emergency Management Agency (EMA), which operated out of the basement of City Hall, and the city did not have a written emergency plan. The County EMA employed FEMA’s legacy “Emergency Support Functions” (ESFs) – a system that originated in the federal government and was used to organize federal aid during disasters – to organize responsibilities (e.g., transportation, mass care, communications, and firefighting) and distribute them to different response organizations. From the vantage point of Tuscaloosa Fire Chief Alan Martin, who had experienced a large number and wide variety of significant disasters over his 30-plus-year career as a firefighter, this setup had numerous limitations. One was that the city and county had not dedicated enough personnel and resources to emergency management. Second, the chief felt that the use of ESFs instead of the Incident Command System (ICS) inhibited interdepartmental coordination. ESFs, he believed, often result in organizations working in silos on their separate designated roles. By contrast, ICS – a system with which he had become familiar while serving as the Assistant Fire Chief in Birmingham, Alabama – creates an integrated command structure that puts different responders in dialogue. (For an overview of the basic ICS structure, see Exhibit B.)

ICS originated in wildland firefighting in California in the 1970s and had spread widely; it had also been adopted subsequently, particularly by state and local response agencies, in urban/structural firefighting, emergency management, emergency medical response, and a number of other professional disciplines – although not universally. The Homeland Security Act of 2002, however, mandated creation of a National Incident Management System (NIMS) as the template for all emergency response organizations in the country. NIMS incorporated ICS as one of its major elements (while retaining the ESF system as a means of organizing resource


Interview with Tim Summerlin, Police Chief, University of Alabama, Tuscaloosa, AL, September 11, 2013; and Maddox interview.


flows of different types). After 2002, the transition to NIMS and ICS was slow in response organizations like the Tuscaloosa County EMA that had not previously used it. But in most fire departments ICS had for some time been applied daily for every incident ranging from a modest house fire to a conflagration, so Martin was intimately familiar with it and believed it should be the fundamental organizing system for the city in responding to disasters of any scale.

Above all, Chief Martin felt that the county had an important role to play as a resource coordinator but that the city needed to command its own response and have a detailed plan for how it would do that. “If it’s in our city, we’re going to be the ones that are responders,” he later said. “The County EMA can provide support, but it can’t command ... we need to manage that ourselves....And we didn’t have a written document to do that.”

After sharing his concerns with the mayor and getting his support for a planning effort, Chief Martin and his staff began drafting a crisis response plan for the city that employed ICS, but he encountered resistance on several fronts. (See Exhibit C for a timeline of events.) In particular, several of the city’s department heads balked at the chief’s request that they create departmental response plans. The chief, who felt these would be important annexes to the city’s overall strategy, relayed his colleagues’ reaction to the mayor, who impressed upon them the significance of planning. “I don’t think I can emphasize enough how much importance there is for the Mayor to be behind this,” the chief later said. “When he says, ‘department heads, come to this meeting and bring a draft of [your] plan,’ they’re going to do that.” At the same time, officials from the county emergency management agency, the chief recalled, questioned whether city officials were infringing on their “turf.” “There was a real feeling from the county EMA that we were trying to take over their operation, and that was not the case,” he explained, while emphasizing that the county should help coordinate resources to support the city’s response. “We believed – and still do – that the county EMA and the county EOC (Emergency Operation Center) is a resource.”

The FEMA Training: Spring 2008 – January 2009

Once the city’s new emergency management plan had been completed, Chief Martin designed a series of unannounced tabletop exercises so that Tuscaloosa officials could become comfortable with the system and their roles with in it. He realized, however, that these drills could not fully capture the complexity of a crisis and believed that the city’s best hope of engaging a more robust simulation would be attending training offered by FEMA at a facility in Maryland. The chief, who had attended FEMA’s Institute with Jefferson County while serving as the Assistant Fire Chief in Birmingham, realized that it would be crucial to have mayoral support for the city’s application to succeed. He therefore designed the spring 2008 dirty bomb drill in the stadium to ensure that the mayor saw the scale and intensity of the decision-making challenges that could arise in a major event. “We had extrication going on from the upper deck, we had the bomb techs doing their thing over in the corner, [and] we had the haz mat guys set up outside...and then we had our command post,” the chief recalled. “One of [the mayor’s] comments was, ‘If this happened in the stadium, what would be my role?’” As the mayor continued to raise concerns and questions in the car ride back to City Hall, the chief broached the possibility of the city applying
for the FEMA training, which, he emphasized, could be funded almost entirely through a FEMA grant, with the city only incurring expenses for meals and staff time off.

In the months that followed, Martin, in consultation with the mayor, oversaw the city’s application and preparation for the Emmitsburg institute. The application, which required documentation from numerous city officials, was accepted in late 2008, after which the chief began developing a list of possible attendees. At first, some city officials questioned whether the training would be the best use of their time, but staff sentiment shifted after the mayor said that he would attend. In the end, the chief and the mayor arrived at a list of 67 attendees, including leaders not only from the mayor’s administration but also at least one representative each from the City Council, the county and surrounding municipalities, local NGOs, the University of Alabama, Alabama Power (a local utility company), and the media. To participant Robin Edgeworth, who at the time of the training was the city’s legal affairs administrator and who became the director of recovery operations after the tornado, the decision to bring such a large number and wide array of stakeholders enhanced their experience. “For any group that participates in this exercise, you really, really have to set your egos aside,” she later said. “The city could have said, ‘OK, we’re going and we’re going to take all of our City Hall/City people because we want them to be the best trained,’ and at the end of the day we would not have had the good results that we had.”

After arriving in Emmitsburg on Sunday, January 18, 2009, the Tuscaloosa delegation worked day and most nights through the following Friday, attending emergency management classes and participating in crisis simulations. The lectures covered topics ranging from debris removal to disaster response financing, with the latter class focusing heavily on the importance of the documentation necessary to obtain reimbursements from FEMA after a major disaster declaration. The core of the institute, however, was a series of simulations, which began with a riot after an Auburn-Alabama basketball game and culminated with a massive tornado destroying a large swath of Tuscaloosa, including City Hall. To respond to the crisis, the city employed its previously developed plan, and FEMA trainers divided the participants into three groups: the policy group, which consisted of elected officials and department heads and handled major policy decisions; an operations section, which implemented the strategies outlined by the policy group; and a logistics group to support the operations. The instructors also spoke extensively with different participants about their roles, emphasizing in particular that the mayor had to steer clear of all but the most major policy and tactical decisions. In the simulations, the mayor therefore focused on responding to the onslaught of media requests, contacting the National Guard, and interacting with an array of politicians. “I learned that my job is to stay at 45,000 feet and not drop below,” said the mayor in a news story about the training published in February 2009. “I need to let the people in the field do their job.”

Participants had a range of reactions to the institute. At the time, some questioned the course perspective and the seemingly improbable simulations. “It’s kind of like...when you’re taught algebra, ‘you sit and say I’ll never need this,’” Edgeworth said, “and that’s the attitude that a lot of us had in this training.” Looking back,
however, many thought the institute was highly beneficial. One advantage was helping non-public safety staff understand ICS and how it often forces people to work outside their expertise. “In our training...we purposefully put people into something a little more challenging for them...,” said Edgeworth. “[We were] trying to...give people a different knowledge base and [teach them] how to fit into a different command structure.” Participants also built relationships with colleagues in different organizations and jurisdictions with whom they would have to communicate and coordinate in a crisis. “When you go to Emmitsburg, Maryland, you’re kind of in the middle of nowhere,” the mayor reflected. “Face to face, you start talking about what you’re learning and the experiences you’ve had individually and then all of a sudden you...begin to build this relationship that then carries over to that day when...you’re reaching out...in a very important way.” City Councilman Bob Lundell described it as “probably one of the most interesting experiences I’ve had in my 45-year [career].”

Practicing and Refining ICS: February 2009 through April 15, 2011

In the two years after their trip to Emmitsburg, Tuscaloosa officials honed their emergency management approach by activating the Incident Command System for numerous “fixed events” (including an air show, an Olympic triathlon competition, and University of Alabama football games) and several severe weather events. This provided officials who had gone to Emmitsburg an opportunity to strengthen the relationships that they had begun to build there and enabled Emmitsburg participants to share their knowledge with colleagues who had not attended. This information exchange, the mayor believed, was crucial to preserve institutional memory as the city experienced turnover. The use of ICS for fixed events also gave Tuscaloosa officials experience executing procedures – such as requesting assistance from another agency – which they might have to carry out in a crisis. Actually completing these actions, noted the then-Fire Marshal, John Brook, provided a benefit that would have been difficult to obtain from conducting tabletop exercises and simulations. In an exercise, officials would say that they were going to carry out a step (e.g., calling the Tuscaloosa Department of Transportation to close down a street); but when using ICS for a fixed event, they had to complete that action – and thus learned what issues might arise in the process. “You begin to see who you are going to talk to,” Brook explained, “...and you find out the questions that they’re going to ask you.”

As they grew more comfortable with ICS, the mayor and his staff tailored the system to their needs. One significant change came during a response to a flood in late July 2010 when the mayor decided to start using two incident commanders. When the floods first occurred, the city did not activate the incident command system; but as the incident unfolded, Robin Edgeworth, then Tuscaloosa’s Legal Affairs Administrator, realized that the city’s transportation and engineering departments were duplicating efforts. In Emmitsburg, FEMA officials had

19 Interview with Bob Lundell, Member, Tuscaloosa City Council, Tuscaloosa, AL, September 11, 2011. Hereafter cited as “Lundell interview.” Unless noted, subsequent quotations from and attributions to Lundell come from this interview.

20 A “fixed event” is a public activity, planned in advance, that has an announced schedule and location, and draws significant numbers of people, concentrated at that time and place, who may prove vulnerable to accidents, natural disasters, or terrorist attack.

21 Interview with John Brook, Deputy Fire Chief, City of Tuscaloosa, Tuscaloosa, AL, September 9, 2013. Hereafter cited as “Brook interview.” Unless noted subsequent quotations from and attributions to Brook come from this interview.
recommended using ICS for a multi-agency event, so she approached the mayor about activating ICS. He agreed and asked that Edgeworth serve as a co-incident commander along with then Fire Marshal John Brook. The mayor was intrigued by the benefits of having Brook and Edgeworth lead the response because of their complementary skill sets. Brook had an extensive background in public safety and ICS; Edgeworth had administrative skills and experience as well as deep knowledge of the workings of the City’s agencies and their procedures, which, the mayor believed, would be essential for coordinating actions across administrative silos. Having tried out this dual-headed command structure, the mayor decided to maintain it in part because he noticed a “chemistry” between Edgeworth and Brook and because he sensed that having non-department heads in charge would diminish turf battles. “During a disaster, I need our department heads focused on the issue at hand and not worried about someone gaining influence or power within the organizational structure,” the mayor explained. “So not only were they [Edgeworth and Brook] talented, they were non-threatening to my talented staff.”

After activating ICS for a series of winter storms in early 2011 and an EF3 tornado that touched down in the city on April 15, the mayor realized that his staff was becoming more comfortable with the “two-headed” command structure and that the setup enabled him to operate more efficiently:

For us, that was a very good practice...on a department level to work on integration because...I have 16 department heads that report directly to me, which, even on a normal day, is a cumbersome organizational structure. In an emergency, that would paralyze an organization. So our incident command structure is effective not only in terms of the response but from the chief executive level of being able to get the right information to make the right decision... I know for me it flowed very smoothly and allowed me to focus on what I needed to focus on and allowed our outstanding staff to focus on what they needed to focus on.”

For the mayor, the April 15 tornado also provided a valuable lesson about when to activate ICS. That morning, the National Weather Service informed city officials that there was a possibility that the city would experience a tornado that day. The mayor, however, chose not to activate ICS until after the tornado, which, he later realized, slowed the city’s response to the approximately 100 families with damaged homes.

**Catastrophe Strikes: The Morning and Afternoon of Wednesday, April 27**

On the morning of April 27, less than two weeks after the April 15 tornado, the National Weather Service issued a warning that there was a strong possibility that communities across the state, including Tuscaloosa, would experience tornadoes later that day. As a result, at 11 am, Alabama Governor Robert Bentley declared a State of Emergency, enabling the National Guard to activate up to 1,000 soldiers. Officials at the National Guard’s Joint Force Headquarters also reminded the Guard units of their “Immediate Response Authority,” which empowered them to take immediate action after the storms to prevent grave suffering and damage even if they had not yet received specific orders.\(^{22}\) Meanwhile, in Tuscaloosa, where forecasters indicated that there was a 45% chance of

\(^{22}\) Every state’s National Guard has a Joint Force Headquarters, which provides command and control for its troops and from which Guard officials can oversee an event and communicate with its forces across the state. As defined by Department of Defense (DoD) directive 3025.15, Immediate Response Authority permits “any form of immediate action taken by a DoD Component or military commander to save lives, prevent human suffering, or mitigate great property damage under imminently serious conditions when time does not permit approval from higher headquarters.” “Joint Force Headquarters –
a tornado later in the day, the mayor, with some reluctance, decided to activate the city’s Incident Command in preparation for a possible major event. “I kept telling myself that, ‘There’s no way you get hit by two tornadoes in 12 days…,’” the mayor recalled. “That’s statistically impossible.” Nevertheless, remembering that his decision not to pre-activate the ICS on April 15 had slowed the city’s response, he chose to trigger the system midway through the day. “We had spent several hundred thousand dollars…on the April 15 tornado with no hope of FEMA reimbursement,” the mayor added, “and the last thing I wanted to do was go out and spend another $100,000 or $200,000 dollars holding shifts over and have nothing happen. But I knew in my heart the lessons of April 15 and would rather us be ahead of the game.”

In the early afternoon, Edgeworth, Brook, and Maddox gathered at City Hall to make final preparations as the city, along with communities across the state, braced for severe storms. As they had now done repeatedly in earlier events, Tuscaloosa officials organized their response into the standard ICS structure of four core subgroups: an “operations group,” consisting of each of the department heads; logistics and planning groups, providing support to each of the city’s departments; and a finance representative. They also reviewed the personnel they had on duty and made sure communications had gone out to close all schools and encourage businesses to shut down as well. At 3:53 p.m., a major tornado struck Cullman County in northern Alabama, one of dozens of tornadoes now touching down throughout the state. Then, at 4:40 p.m., a sizeable tornado began tearing through southeast Alabama on a path toward Tuscaloosa. Fearing the worst, Maddox and his staff retreated to a shelter in the basement of City Hall from which they watched the storm come towards them on television. “It was a larger tornado,” Brook recalled, “than any of us had ever seen.”

The storm crossed the city limits into Tuscaloosa at 5:13 p.m., entering the city at its southwest corner and travelling along a six mile path of destruction between one and one-and-a-half miles wide before exiting to the northeast only a few minutes later. City officials would eventually learn that this storm — one of the worst of 62 tornadoes across the state that day — had killed 53 people and destroyed or severely damaged nearly everything located in an area that constituted 12.5% of the city, including demolishing the building in which the county emergency management agency (EMA) was located, the local headquarters of the Red Cross and that of the Salvation Army, thousands of homes and entire apartment complexes, a police precinct station, and a fire station. The destruction of the County EMA facility temporarily extinguished the County’s capacity as a responder and coordinator, and the damage to the Red Cross and Salvation Army headquarters buildings staggered these agencies as well. “The scene looked like something out of a big-budget Hollywood disaster movie,” the Tuscaloosa News reported. “Homes and businesses leveled to concrete slabs. Cars, vans and 18-wheelers flipped upside-down and turned on their sides. Trees uprooted and light poles bent like plastic straws. Pile after pile after pile of twisted metal and shattered memories. Block after devastated block.”23

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The Response Begins: The Evening of Wednesday, April 27

After the storm passed, the mayor and his colleagues returned to the command post on the second floor and began fielding alarming but incomplete damage reports, making it difficult for them to grasp the scale of the crisis. One of the first calls was from their liaison to the County EMA, who, along with the agency’s staff, was trapped in the basement safe room under debris from the building. With the County EMA out of operation, city officials realized that they were the only functioning local emergency coordinators and would have to go it alone until outside assistance could be obtained. Tuscaloosa’s leaders were fielding reports from first responders, who painted a frightening picture of destroyed buildings, bloodied citizens walking the streets, and people trapped in the rubble calling for help.\(^{24}\) The reports were scattered because the storm had knocked down myriad power lines and communications towers and created massive amount of debris, making it difficult for people in many of the most heavily affected areas to communicate their plight to city leaders and preventing first responders from accessing many of these areas as well. The city’s leaders initially assumed that, as had been the case in past tornadoes, the storm had touched down in multiple places; but over the next few hours, as the reports kept coming in, they realized that the storm had travelled along a much larger, uninterrupted path of destruction. “[In] our previous experience..., a tornado touches down and hits in the Rosedale area, and we respond to the Rosedale area. [Then] it touched down maybe somewhere else,” Chief Martin said. “The surprise for us was... [that the April 27 tornado] was continuous... like a giant lawnmower.”\(^{25}\)

As the city fielded damage reports, Incident Commanders Brook and Edgeworth started to prioritize and structure the city’s response. The focus early on was conducting damage assessments and search and rescue missions and then providing food and water, medical care, and shelter to those in need. To monitor progress towards these goals, they met with the ICS operations subgroup every three to four hours. This would provide an opportunity to flag and address problems – and figure out which needed to be framed and brought to the mayor, who was briefed following each of these meetings by a “Policy Group” consisting of Brook, Edgeworth, and, if necessary, other relevant city officials – for example, drawing in the police chief if a security issue was being discussed.

As the city swung into action, the National Guard, which was responding to dozens of tornadoes across the state, deployed 200 soldiers to Tuscaloosa. The Guardsmen, who began arriving in Tuscaloosa within 35 minutes of the storm, included a portion of the 31st Chemical Brigade, which is based in Northport, a city that borders Tuscaloosa, as well as a separate unit that had been heading to Cullman County to respond to the tornado there but was rerouted to Tuscaloosa by officials at Joint Force Headquarters. Initially operating under their Immediate Response Authority, the soldiers — who had security, medical, and engineering (debris removal) capabilities — were under the command of Brigadier General Charles Gailes.\(^{26}\) Gailes, however, was driving to Tuscaloosa from his


\(^{25}\) Rosedale is a neighborhood in Tuscaloosa. One of its housing complexes, Rosedale Court, was heavily damaged during the tornado on April 27.

\(^{26}\) Although the personnel were initially operating under their Immediate Response Authority, the Alabama Emergency Management Agency retroactively issued a request for 200 troops to provide security, engineering (debris removal), and
home in Huntsville, a little over 150 miles from Tuscaloosa, so he was initially coordinating through his administrative officer, Lieutenant Colonel David Ward (who was already in Tuscaloosa), about how to organize the Guard’s efforts. One of the initial challenges they faced was connecting with Tuscaloosa officials. In Alabama, the National Guard and local governments coordinate through the county EMA, but Gailes and Ward learned from officials at Joint Force Headquarters that the county EMA had been knocked out of operation. In the early evening, they therefore sent liaison officers to various city and county agencies, including the county sheriff’s office, which requested that the Guard help with house-to-house search-and-rescue missions, and the city’s police force, which asked the Guard to assist with traffic control. Within hours of the storm, the Guard began carrying out these missions while completing its own damage assessments to forecast future requirements.

The mayor, meanwhile, recalling the lessons of the Emmitsburg training, was focusing on select policy tasks and public information efforts and was trying to avoid being drawn into any but the most important operational decisions. Chief among his tasks was contacting Alabama Governor Robert Bentley to update him on the situation in Tuscaloosa and alert him that the city would likely need additional support from the National Guard in the coming days. At the local level, the mayor connected with officials from the University of Alabama – which had not suffered direct damage to its campus but was attempting to confirm the safety of its students, many of whom lived in neighborhoods that had been hit hard by the tornado. Finally, the mayor prepared for a press briefing scheduled for later that evening. “For me, in those first couple of hours of response, in terms of decision-making, my role was very limited, as it should be,” the mayor later said. “If I hadn’t had that Emmitsburg training, I don’t know if I would have been comfortable with that….But I understood the model and I knew I was fulfilling my role and responsibilities.”

At 8:45 pm, immediately after receiving his first briefing from the policy group, the mayor entered the City Council chambers to address the media for the first time. Speaking before dozens of journalists and multiple banks of camera, the mayor said that the storm had killed at least 15 people, injured over 600 others, and destroyed thousands of buildings. He added that, unfortunately, those numbers were likely to climb as the city gathered more data. To ensure that he and his staff could lead the people of Tuscaloosa in the response to and recovery from the storm, he announced that he would ask the City Council to exercise the “emergency powers clause” of the City Charter. This would give the mayor extraordinary executive powers that he could employ without requiring Council approval that might delay decisive action. Above all, the mayor encouraged Tuscaloosa residents to remain hopeful in the face of the crisis. “Tragedy and destruction has encompassed our city, but it will not

27 Harrell and Hawkins interview; Interview with Brigadier General Charles Gailes, Alabama National Guard, by telephone, September 16, 2013. Hereafter cited as “Gailes interview.” Unless noted, subsequent quotations from and attributions to Gailes come from this interview; and “Situation Report: Tornado Recovery,” HHD 315 CBRN BDE, Northport, Alabama, April 27, 2011, obtained by author from Alabama National Guard.
conquer us,” the mayor declared. “Rather, it will inspire us to demonstrate our patience, our faith and our confidence that a new day will certainly dawn.”

Shortly after the mayor’s press conference, President Obama issued a major disaster declaration for Alabama, making federal funds available for Tuscaloosa and other affected communities across the state and marking the beginning of a long night throughout which Tuscaloosa officials continued to organize and prioritize their response. To that end, the mayor met with the City Council to review his request for emergency powers. The Council granted the request.

Thursday, April 28

As daylight returned, Edgeworth and Brook continued their attempts to focus the City’s response on accessing the hardest-hit neighborhoods. This was a key priority because the inaccessibility obstructed progress on numerous other fronts, including missing person searches, damage assessments, and the provision of food, medical care, and water. The city therefore deployed available environmental services personnel and vehicles, a large number of firefighters, and police officers to assist with debris removal. National Guardsmen, who were continuing to coordinate with local law enforcement, also assisted the police with debris removal. Unfortunately, accessing many of the damaged areas was extremely challenging because a maelstrom of debris was piled high at every hand; the city’s fleet of environmental services vehicles, which was usually used to remove debris, had been severely damaged; and people kept stopping responders to ask for help. “One of the things that really was an issue for us early was the areas that were inaccessible,” recalled Fire Chief Alan Martin. “All of the streets [had] trees, wires, cars, [and] people….One of the firefighters...said it took him an hour to walk just a few blocks.”

City officials also repeatedly had to shift their attention to an evolving set of unexpected challenges. For example, early on Thursday morning, the Water and Sewer Department director reported to Brook and Edgeworth that the water levels in East Tuscaloosa storage tanks were dropping. This was problematic because the fire department relied on that water supply, and the drop could also reduce water pressure enough to allow backflow that would contaminate the drinking water. Brook and Edgeworth therefore met with Water and Sewer Department personnel to determine the cause of and identify a solution to the problem. The officials said that a precipitous drop of this nature was usually triggered by a burst water main, which would produce a huge puddle of water, indicating the location of the break. There was no such puddle, however, so they hypothesized that instead there could be many different water lines that had experienced less severe damage, creating multiple minor leaks that when combined had caused significant water loss. Such distributed damage would be much more difficult—and require substantially more manpower—to locate and to fix. Reaching out for needed capacity where they


29 Although he no longer needed the Council’s permission for myriad decisions after the grant of extraordinary powers, the mayor nonetheless continued to confer with the legislative branch on major decisions. “One of the intentional things that we did very early on is that when the council gave me emergency powers, I pledged to them that, even though I would exercise them, I would always provide them detail, [and] they would always remain in the loop,” Maddox said. “I wanted to make sure that I had political solidarity.”
could find it, Brook and Edgeworth redeployed the environmental services staff (many of whom had been idled because their entire fleet of trucks had been destroyed by the tornado) to help check the water lines and find ways to shut off water flow when leaks were identified. As a precaution, the city also issued an order for East Tuscaloosa at 6:45 am on Thursday morning for citizens to boil their water before using it, and the mayor issued an executive order asking people to conserve water.30

By mid-afternoon on Thursday, the water levels had begun rising, suggesting the city’s strategy was working. City officials now became concerned about mitigating growing public fears about the effects of the tornado. Over the course of the day, citizens had been swarming the city’s few open convenience stores and gas stations, stripping them of available supplies and creating lines at gas stations that in some instances stretched for blocks. Most of the stores in town were closed because the storm had knocked out power in over half of the city; many people, city officials now realized, thought the city was running out of food, water, and gas and were beginning to panic as a result.31 Meanwhile, the mayor and his colleagues were fielding reports of looting in many tornado-affected areas, which they feared could further undermine public confidence. “[You] can’t have hope,” Maddox later said, “if you have looting.”32

Late on Thursday afternoon, Maddox and his staff therefore focused on reestablishing security. To that end, the mayor employed the “emergency powers clause” to declare a curfew for Thursday evening in the affected areas. To enforce it, he deployed Tuscaloosa police across the city; but with one police precinct building having been destroyed and thousands of citizens needing assistance, he and his team knew that they needed additional security support. They therefore asked the University of Alabama’s police force to take control of the heavily affected Cedar Crest neighborhood, which lay adjacent to the university campus and where many students resided. The University – which, among other things, was now housing the remaining, relocated elements of the County EMA and had just cancelled the remainder of its school year – agreed to take over policing for the area. Maddox also contacted the Governor twice on Thursday afternoon and evening to request a total of 800 additional troops from the National Guard, which, he hoped, would also help to enforce the curfew. The Guard agreed to provide the troops, but the additional soldiers were not expected to begin arriving until Friday.33


33 The first of the city’s two requests for Guard support that evening came at 4:15 p.m. and was for 500 troops but did not identify a specific mission. The second came at 7:45 pm, was for 300 soldiers, and specified that the troops would be used to assist with “limiting access to impacted areas.” “Additional National Guardsmen,” Message 11-2324, Alabama Emergency Management Agency, April 28, 2011, 4:17 pm; and “Tuscaloosa City,” Message 11-2324, Alabama Emergency Management Agency, April 28, 2011, 7:45 pm; “Tasker Number: 18 – 11 – 2324,” Alabama National Guard, April 28, 2011; and “Tasker Number: 26 – 11 – 2387,” Alabama National Guard, April 28, 2011 Documents obtained by author from LTC Jim Hawkins of the Alabama National Guard.
In the interim, however, the Guard forces already in Tuscaloosa – which had been continuing to assist local law enforcement with search-and-rescue missions, debris removal, and traffic control – agreed to help the Tuscaloosa police implement the curfew on Thursday night. Unfortunately, from the Guard’s perspective, the city did not have a clear strategy to utilize its personnel. “It was difficult,” recalled Gailes, the commander of the Guard’s task force who by Thursday night had arrived in Tuscaloosa and went to one of the neighborhoods where the curfew was going into effect. “There was not a plan for the full employment of the forces. So there was a lot of work going on right there in the middle of a dark street on what assets were available, how they could be used, and how they would assist.”

As emergency responders and Guardsmen worked to coordinate their efforts, Maddox announced the curfew at a press conference on Thursday evening during which he reported that the city now knew of 798 injured residents and 37 fatalities but emphasized that they had not yet fully grasped the damage. “We are dealing with an overwhelming situation in terms of its impact on city resources,” Maddox said. “The amount of damage I’ve seen is beyond a nightmare.”

**Friday, April 29**

Throughout the rest of Thursday night, the mayor and the incident command team remained at City Hall where they monitored reports of looting (which seemed to have decreased) while continuing to piece together reports on the extent of the damage. Shortly after 9:00 am on Friday, the mayor left City Hall to travel to Tuscaloosa’s airport where he and Governor Bentley were scheduled to meet President Obama and the First Lady and then accompany them on a driving and walking tour of the city’s hardest-hit areas. Soon after arriving at the airport, the mayor was greeted by General Gailes, the head of the National Guard’s forces in Tuscaloosa. Gailes had gone to the airport at the request of the Adjutant General, the commander of the Alabama National Guard and the governor’s chief advisor on military affairs, who wanted the governor to have a Guard representative on site.34

While waiting for the President’s arrival, Gailes told the mayor that he wanted to speak to him about how the Guard could be most helpful to the city’s response – a subject about which there was some ambiguity following the Guard’s experience with the curfew the previous evening and because the traditional channels through which the city was supposed to request aid were not functioning. In Alabama, the protocol for coordination between the Alabama National Guard and local governments is through the county EMA, whose emergency operations center is supposed to submit a request for assistance with a specific mission to the Alabama Emergency Management Agency (AEMA). AEMA then vets the request, making sure that it entails a specific mission (for example, traffic control or security) and that the Guard, rather than another state agency, is best equipped to satisfy the need. In Tuscaloosa, however, the tornado had destroyed the County EMA building and had at least temporarily disabled the agency. Maddox and other city officials had been requesting Guard assistance through several channels,

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34 Every state guard unit is led by an adjutant general. In many states, including Alabama, the adjutant general is a member of the governor’s cabinet. “The Adjutant General,” Alabama National Guard, available at http://www.al.ngb.army.mil/command/Pages/Tag.aspx [accessed on November 7, 2013].
including calling the governor directly, but had frequently described their needs in terms of the number of soldiers they thought they needed rather than by framing the missions they needed these soldiers to carry out.

The mayor told Gailes that he needed to focus on the President’s visit then but that they could meet late Friday afternoon. For the mayor, the President’s arrival was a key priority in part because he had initially feared that the visit and all of the accompanying staff and security would place too much strain on already-taxied first responders. However, over the course of the day travelling with the President and White House and other Washington-based FEMA officials, he developed relationships with people who, he realized, could help facilitate the city’s subsequent requests for help during what would inevitably be a long recovery. He also saw that the President’s visit was boosting people’s spirits. “For us,” said the mayor, recalling people lining the street as the motorcade went through Tuscaloosa, “it meant everything.” Finally, the day helped the mayor to understand more clearly that his own public presence could help to ameliorate people’s concerns. “I didn’t at first want to leave...my office or dealing with high-level meetings,” the mayor later explained. “For me, especially as a public administrator, I felt like I’m taking time away from my job. What I discovered was, ‘This is my job.’”

By late Friday afternoon, first responders had accessed the hardest-hit areas, so, following President Obama’s departure, the mayor held a press conference at City Hall at which he was able to be more specific about the extent of the challenges the city faced – and would face for some time. The storm, he reported, had carved a path that was 5.9 miles long and one to one-and-a-half miles wide, destroying over 10% of the city and affecting more than 20,000 people. At least 45 people had died, a minimum of 990 were injured, and thousands more had been displaced from their homes. The mayor emphasized that the city faced an extraordinary challenge. “I can’t put into words the amount of destruction,” he said, “There is no easy path out. There is no easy solution. It’s amazing that anyone survived this.” Maddox also announced again that the city would be having a curfew again that evening.

The mayor remained very concerned about the possibility of additional looting. Early on Friday afternoon, he called the governor to request 500 additional troops from the National Guard. The Guard felt it could not respond to the request, however, because Guard officials were still unclear about precisely what the newly requested troops (and those already deployed) would be doing. Instead, Gailes went to City Hall for his scheduled meeting with the mayor. Gailes assured the mayor that the city would receive all of the Guard support it needed, but he also said that he and his colleagues needed a clearer sense of the city’s priorities. “‘General,’” Gailes recalled the mayor saying, “I want law and order.’” “It was kind of a vague statement, but it was a very strong statement,” said Gailes, who understood the mayor’s belief that having security was a prerequisite for every other aspect of the response.

Going forward, Gailes and his colleagues made several changes that, he believed, helped the Guard address the city’s security needs and minimize additional coordination challenges. To begin with, Gailes himself began

working (and regularly meeting) with Brook and Edgeworth and key members of the operations group to position the Guard’s forces in the city’s hardest-hit areas and to have armed soldiers on hand to provide security, particularly during the evening curfew hours. He also deployed planning officers to City Hall to help city officials formulate subsequent requests for Guard aid that identified more specific “mission sets.” This in turn made it easier for Gailes and his colleagues to determine what kinds of soldiers they should deploy and what equipment they should bring and what briefings those troops should receive in advance. Finally, with the permission of officials at Joint Force Headquarters, the Guard’s Tuscaloosa task force went into a direct support relationship with the city. This meant that the city’s leadership could now bypass AEMA and request missions and resources directly from the Tuscaloosa task force. From General Gailes’ perspective, this made it far easier for the Guard to understand and respond to the city’s needs. “I felt like that we were all synched up on priorities,” said Gailes, “and how we were asking for mission sets.”

Within several hours of his meeting with Gailes, Maddox received his final briefing of the night from his policy group, and he grew frustrated when several staff members had an extensive debate in front of him. The mayor felt they should have conducted the debate prior to his arrival and then presented him with a summary of the issues and a recommended action rather than taking his time to listen to their arguing with each other. “From that point...,” the mayor recalled, “I made it pretty clear that I didn’t want to be part of this [kind of discussion], that I didn’t have time to do this.” Moving forward, Co-incident Commanders Brook and Edgeworth ensured that the operations group resolved the technical or tactical issues among themselves, and then framed the higher-level policy issues for the mayor’s attention. Where significant divisions remained, Edgeworth and Brook concisely presented the issues to the mayor but did not rehearse the entire debate in front of him – or allow others to do so. To Maddox, the improvement in the briefings demonstrated his staff’s flexibility. “What impressed me most about our organization was our ability to adapt and learn,” Maddox said. “We rarely made the same mistake [twice].”

The Missing Persons Dilemma: Saturday, April 30 – Sunday, May 1

On Saturday, Maddox was becoming more upbeat about the city’s progress. This was in part because of the increased assistance the city was receiving from outside organizations, including dozens of FEMA personnel who set up six registration points in different parts of the city where people could learn about the process of applying for federal disaster assistance. Moreover, many of the additional National Guardsmen that the city had requested on Thursday had now arrived (by Saturday evening, Tuscaloosa had 915 soldiers on hand). In part thanks to the increased Guard presence, looting continued to decrease. More broadly, the city was making substantial progress with the restoration of services. By late Saturday morning, the water tanks in East Tuscaloosa had returned to full

36 E-mail from General Charles Gailes to author, November 24, 2013.
37 To Gailes, the creation of the “Direct Support” relationship also embodied his strong working relationship with officials at Joint Force Headquarters. “There was never a moment out there that I felt like I wasn’t supported,” said Gailes, who continued to speak with officials at Joint Force Headquarters multiple times per day, “and I always felt like I had...a great deal of flexibility in how [I] would respond to a mission.”
capacity (although, as a precaution, the city maintained the boiled water order pending further testing); and
following the restoration of power in many parts of the city, several additional gas stations and convenience stores
opened, helping to ameliorate public concern about shortages. These developments led the mayor to believe that
he and his team were “really hitting [their] stride” — a sentiment that he tried to convey in his press conference
that morning. “I woke up this morning,” the mayor said, “with a new sense of optimism that we will once again
become a shining city on a hill.”

Despite this progress, city officials and community members still obviously faced daunting challenges. These
included continuing to sift through huge amounts of debris; coordinating volunteers, many of whom had arrived
from far-flung places with no organizational affiliation and some of whom had themselves gotten injured while
sifting through the debris; and restoring power to thousands of residents. Another problem was communicating
messages about the response to the city’s Hispanic population, some of whom were recent immigrants who spoke
little English and initially thought that the National Guardsmen were conducting a raid on illegal immigrants.
Meanwhile, following the presidential disaster declaration on Thursday, the finance representative on the Incident
Command team was working feverishly with city agencies to insure that they tracked and accurately and
appropriately documented expenses so that the city would later be able to apply for reimbursement from FEMA
under the Stafford Act. This was crucial because, through hard work and fiscal discipline in the years before the
storm, the city had amassed a $44 million reserve, but that was paltry compared to the rising costs of the response
and recovery, which appeared likely to climb into the hundreds of millions of dollars — and for which the City was
entitled to seek reimbursement, but only if it could accurately and contemporaneously document its storm-related
expenses.

The biggest difficulty throughout the weekend, however, was clarifying the number of missing persons. In the
immediate aftermath of the storm, missing persons reports had been received by a number of different city (and
university) offices and agencies, and more or less all it took for a name to be added to one of these lists was for
someone to call and give the name of someone they were unable to locate. In the midst of the immediate life-
safety rescue missions of Wednesday evening, the missing persons problem seemed minor and a distraction, but
as the situation began to stabilize and the rescue phase was completed as Thursday wore on, the missing persons
problem began to loom larger. It was not, however, seen as a major priority until uncertainty about the number of
missing persons erupted as a result of questions raised at the mayor’s Thursday evening press conference. At the
Thursday briefing, a reporter asked the mayor how many people were missing. The mayor turned to the police
chief, who signaled by hand that there were eight people identified as missing, and Maddox relayed this to the
press. At his first meeting with the policy group on Friday morning, however, he learned that the city now had
collated reports listing over 1,300 people as missing. “It’s one of the few times,” recalled Maddox, “I was about to
hit the roof.”

Before briefing the press again, therefore, Maddox worked with his staff on Friday morning to understand
more clearly the source of the discrepancy and how to address it. The eight-person figure had come from the

state’s Emergency Management Agency, while the 1,300-person number came from the city’s police department. Fire Department representatives, who had been overseeing searches of the affected areas with cadaver dogs, also assured the Mayor that the actual number of missing persons was likely far closer to the state’s number. “If there were 700 or 800 bodies out here,” Tuscaloosa Fire and Rescue Sgt. Shawn Morrow later said, “we’d be falling all over them.” The police department therefore said that it would start calling everyone who had reported a missing person to identify erroneous reports; and at his press conference on Friday morning, Mayor Maddox said that 454 people were now missing but emphasized that he expected the number to continue to decrease. “The number of those unaccounted for, although we’re unsure of its accuracy, gives us a sense of what we’re facing,” the mayor said. “We’re going to check each one and hope to get a more accurate number within the next 48 hours. I find it unlikely that we have that many missing.”

By Saturday, however, the police were reporting 570 missing people, an increase of more than 100 people from the day before. This led Edgeworth to recommend that the city create a “Missing Persons Task Force” that included members of the city attorney’s office, the police – and an individual from the finance unit hand-picked by Edgeworth because she was known for being detail-oriented. The team began improvising various ways to cull the list. They established protocols for hotline operators to ask questions to discern whether the person reporting someone as missing was qualified to do so (for example, by asking, “if this person were safe, would he/she be likely to call you?”); they began checking their master list against Facebook and Twitter to see if people had posted about their safety; and they worked with the University of Alabama to create a “seek and find website/database” for students. By Sunday, the list had shrunk to 300 and continued rapidly falling thereafter.

“Turning a Corner:” Monday, May 2 and Beyond

During the week of May 2, the city restored several crucial services, contributing to a sense among municipal officials that Tuscaloosa was now making substantial strides towards stabilizing its situation. On Monday afternoon, Mayor Maddox announced that eight garbage trucks were resuming service; the following day, the city announced that the water system was now fully tested and safe, so that citizens no longer needed to boil their water; and by the end of the week, almost all of Tuscaloosa’s habitable residences had their electricity back. “There’s something comforting to get some sense of normalcy,” said Maddox at a press conference early in the week, before adding that Tuscaloosa was now “at the point of turning a corner.”

In the weeks that followed, the city continued to make progress with the response, gradually clearing people from the list of missing persons; decreasing its reliance on the National Guard (the final Guardsmen left the city

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41 Morton, “Maddox says...” and Holland, “Maddox Updates....”
three weeks after the tornado struck); and with the help of the U.S. Army Corps of Engineers, which was handling debris removal, clearing the city’s streets. As the immediate crisis began to abate, Maddox and other city leaders turned their attention to the large, daunting process of rebuilding. To that end, Maddox established the “Rebuilding Tuscaloosa Task Force,” which was led by the head of the city’s Planning Department and consisted of 50 city officials and citizens charged with creating and then beginning to implement a plan to rebuild and redesign the portion of the city the storm had destroyed. The mayor warned that this would be “a long process” (he later predicted that rebuilding would take approximately five years) and that there would “no easy answers” to questions about how to rebuild. But he also emphasized that he and his fellow citizens had an opportunity to honor those who died by making the city stronger through effective rebuilding and, in the process, show the rest of the country what a community could do when it worked together. “There’s something that we’re doing right here in Tuscaloosa,” the mayor contended at a press conference in May. “It’s a resilient spirit. It’s like we’ve harnessed the American Dream. We’re going to fight.”

Exhibit A: Map of Alabama with Tuscaloosa Highlighted

The Incident Command System (ICS) provides a flexible and scalable framework for coordinating the efforts of governmental, nongovernmental, and private sector entities involved in an emergency response. It hinges on several core tenets, including 1) a “clear chain of command,” connecting every responder to the incident command; 2) “unity of command,” meaning that each responder only receives orders from one supervisor; 3) a standardized “span of control,” ensuring that each supervisor has a limited number of people reporting to him/her; and (4) standardized terminology, facilitating communication and coordination among actors representing different professions and geographic regions. To ensure that responders adhere to these principles, emergency responders use a common ICS structure. At the top is the “incident command,” which in an event within a single jurisdiction usually consists of one incident commander. If the event encompasses multiple jurisdictions or increases in complexity, however, responders may create a “unified command” consisting of representatives of multiple agencies, jurisdictions, or levels of government involved in the response. The incident commanders oversee two main groups. The first is a “command staff” consisting of 1) a public information officer, 2) a safety officer, who serves as the primary advisor on operational safety; 3) a liaison officer; and 4) any other command staff deemed necessary. The other is the chiefs of the four main sections involved in an incident command: 1) the operations section, which manages all tactical elements of the response; 2) the planning section, which obtains and analyzes data so that the command group can update its strategy; 3) the logistics section, which supports the responders’ needs, ranging from food and shelter to well-maintained equipment; and 4) the finance/administration section, which monitors money and time dedicated to the response. Note: The figure depicted above represents the ICS structure in its most basic form. As the response structure expands in scope and complexity, branches, divisions/groups, and units are formed under the four functional sections.  

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Exhibit C: Timeline

Early 2008:

Tuscaloosa Fire Chief Alan Martin begins leading an effort to revamp the city’s emergency management plan. Over the course of the year, Chief Martin also organizes a series of tabletop emergency response exercises.

Spring 2008:

Tuscaloosa, in conjunction with neighboring jurisdictions, holds a homeland security drill designed by Chief Martin simulating a dirty bomb attack at a University of Alabama football game.

Summer/Fall 2008:

Tuscaloosa applies for and is accepted to the FEMA training in Emmitsburg, MD.

January 18 – 23, 2009:

Mayor Walter Maddox and 66 other leaders from Tuscaloosa and surrounding jurisdictions travel to Emmitsburg for the FEMA training.

February 2009 – December 2010:

Tuscaloosa practices using its Incident Command System (ICS) by activating the system for a series of fixed events, including an air show, a triathlon competition, and the University of Alabama’s home football games.

January – March 2011:

Tuscaloosa experiences a series of snowstorms for which it activates ICS.

April 15, 2011:

An EF3 tornado touches down in Tuscaloosa, damaging approximately 100 homes; Maddox activates ICS in the wake of the storm.

Wednesday, April 27, 2011:

Morning: Several small tornadoes touch down in Tuscaloosa County, and the National Weather Service issues a warning that there is a 45% chance that the city of Tuscaloosa will experience a tornado later that day.

11 am: Alabama Governor Bentley declares a State of Emergency and authorizes the Alabama National Guard to place approximately 1,000 soldiers on State Active Duty.

Late Morning/Early Afternoon: Maddox activates the Incident Command System and convenes key emergency response officials at City Hall, including incident commanders John Brook and Robin Edgeworth.
3:53 pm: A severe tornado touches down in Cullman County in northern Alabama, one of dozens of tornadoes now breaking out across the state.

4:40 pm: A sizable tornado begins tearing through southeast Alabama on a path toward Tuscaloosa, prompting the mayor and his staff to take shelter in the safe room in the basement of City Hall.

5:13 pm: The storm reaches Tuscaloosa, entering the city at its southwest corner and travelling along a six mile path between one and one-and-a-half miles wide before exiting the city in its northeastern corner. The tornado destroys the building in which the County Emergency Management Agency (EMA) is located, damages the headquarters of both the Red Cross and that of the Salvation Army, destroys one fire station and one police precinct station, and essentially levels 12.5% of the area of the city.

5:58 pm: Within 35 minutes of the storm exiting the city, 200 Alabama National Guard troops are on the ground in Tuscaloosa responding to the disaster. Working with the county sheriff and the city’s police force, the Guardsmen begin assisting with house-to-house search-and-rescue missions and also operate traffic control points. The troops initially operate under their independent “Immediate Response Authority” but subsequently respond under a mission set by the Alabama Emergency Management Agency.

8:00 pm (approximately): The mayor is briefed by Robin Edgeworth, John Brook, and other members of the incident command team.

8:45 pm: The mayor holds a press conference about the disaster and the city’s response.

Evening: President Obama signs a presidential disaster declaration for areas of Alabama including Tuscaloosa.

Overnight: Looting occurs in tornado-affected areas of Tuscaloosa.

Thursday, April 28, 2011:

6:45 am: The City of Tuscaloosa encourages residents to restrict water usage because of falling levels in two water storage tanks in East Tuscaloosa. The mayor issues a boiled water order for East Tuscaloosa.

9:00 am: The mayor flies over the affected areas, directly observing the extent of the destruction for the first time.

1:00 pm: The University of Alabama announces that it is cancelling final exams and postponing graduation.

4:15 pm: The City of Tuscaloosa requests 500 additional National Guard troops. The Guard issues a mission assignment for the soldiers to deploy to Tuscaloosa.

Late Afternoon/Evening: The University of Alabama takes over security operations in the Cedar Crest area. The County EMA has relocated its surviving operations to a site on the University of Alabama campus.

7:00 pm: At a press conference, the mayor announces that a curfew would go into effect in the most heavily affected areas, to begin at 10 pm on Thursday night and last until 6 am on Friday morning. In answer to a question at the press conference, the mayor also says that only eight people are listed as missing.
7:45 pm: Mayor Maddox requests 300 additional National Guard personnel for assistance in limiting access to high-impact areas. The Guard issues a mission assignment for the soldiers to deploy to Tuscaloosa.

10:00 pm: Curfew goes into effect. The Guardsmen already in Tuscaloosa help the city’s police enforce the curfew.

Friday, April 29, 2011:

Throughout the day, the Guardsmen that the city requested on Thursday continue arriving, bringing the total number of troops in the city to 372 by the end of the day.

6:00 am: The overnight curfew in the affected areas concludes.

Morning: The mayor learns that the City’s lists of missing persons actually contain over 1,300 names (rather than the eight people he had reported to the press as missing at his press conference the evening before).

9:45 am: President Obama arrives in Tuscaloosa and drives and walks through tornado-affected areas for about two hours.

2:30 pm: The mayor requests 500 National Guard troops for perimeter control. The Guard does not issue a mission set for the troops.

Late afternoon: Brigadier General Charles Gailes, commander of the National Guard troops in Tuscaloosa, meets with the mayor. Soon after this meeting, the Guard’s Tuscaloosa task force goes into a direct support relationship with the City of Tuscaloosa.

Evening: An extended debate among incident command participants occurs during a briefing for the mayor, prompting him to ask staff to resolve conflicting points of view as much as possible before his arrival.

8:00 pm: The curfew in the affected areas goes back into effect.

Saturday, April 30, 2011:

Throughout the day, the Guardsmen that the city requested on Thursday continue arriving, bringing the total number of troops in the city to 915.

6:00 am: The overnight curfew in the affected areas concludes.

11:54 am: The city announces that the damaged water tanks are back at full capacity but keeps the water restriction and boil water alert in effect pending further testing.

12:03 pm: A “seek and find” page is launched on the City of Tuscaloosa’s website, enabling residents to report missing persons. A separate website – seekandfind.ua.edu – operated by the city but hosted by the University of Alabama is also in use.

Monday, May 2, 2011
Partial garbage service resumes.

Tuesday, May 3, 2011

The city lifts the boiled water and water conservation orders.