

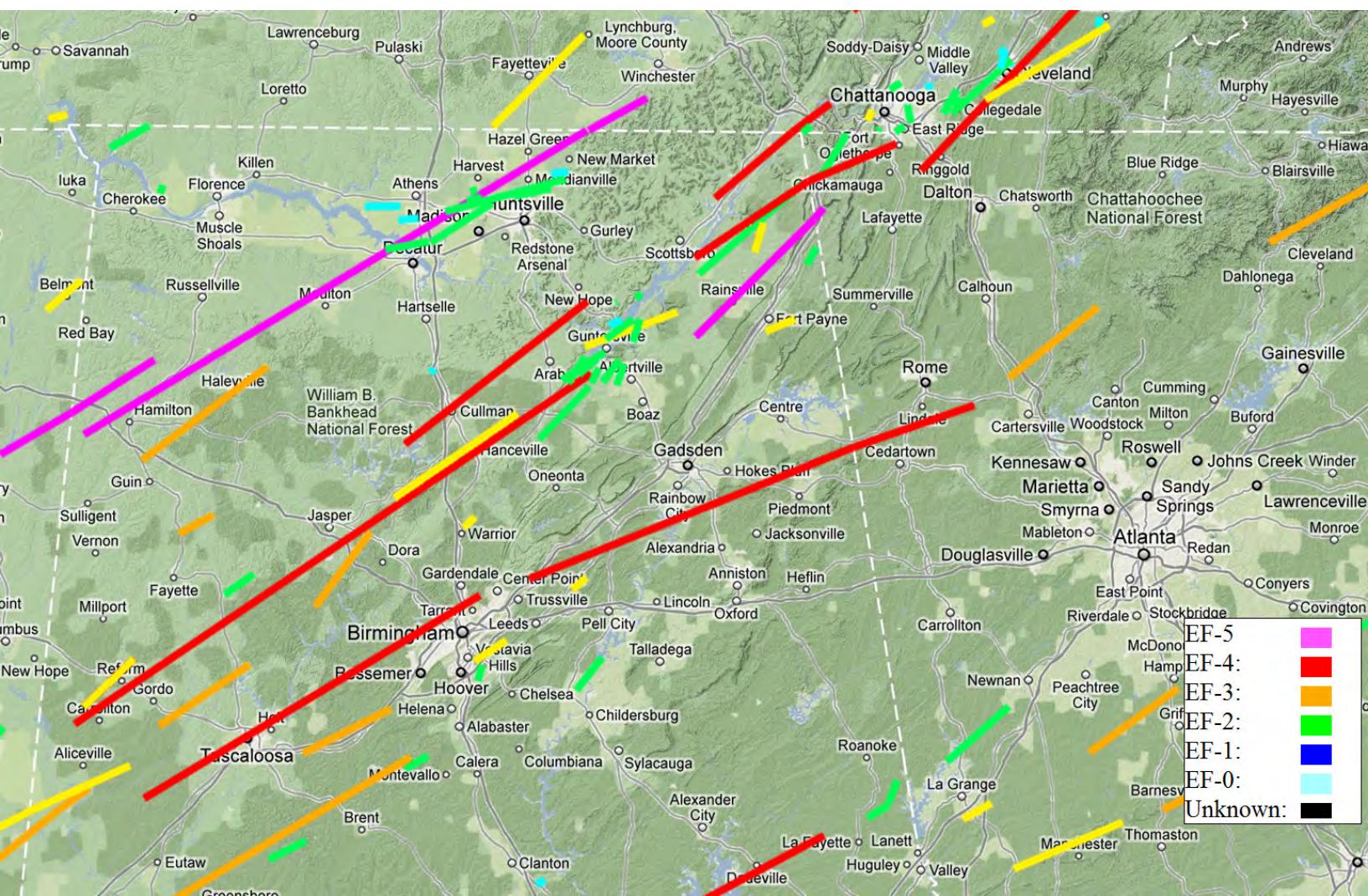
U.S. Fire Administration

# Fire Service Operations for the Southeastern Tornadoes—April 2011

April 2012



FEMA



## **U.S. Fire Administration**

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### **Mission Statement**

*We provide National leadership to foster a solid foundation for our fire and emergency services stakeholders in prevention, preparedness, and response.*



**FEMA**



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**Prepared in partnership with the Alabama Fire College(AFC),  
the Georgia Fire Academy (GFA), and the  
Georgia and Alabama Fire Chief's Associations (GFCA/AFCA).**

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## Executive Summary

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On April 27, 2011, the southeastern United States experienced a devastating series of tornados starting in Mississippi, hitting Alabama and Georgia very hard, and trailing off into Tennessee. The dollar loss has been roughly tallied at \$6 billion in insured losses and a total of over \$10 billion for all losses. An estimated 336 lives were lost in the region's tornados and related events, with 239 of those in Alabama. At least 10,000 homes were heavily damaged or destroyed and dozens of public facilities were rendered inoperative. Many areas that were isolated by road closures and power outages extended over 2 weeks in some rural areas. At least five tornados were rated at EF5 on the Enhanced Fujita Scale (EF Scale), and, if laid end to end, the tornado tracks in this region would stretch across the country!

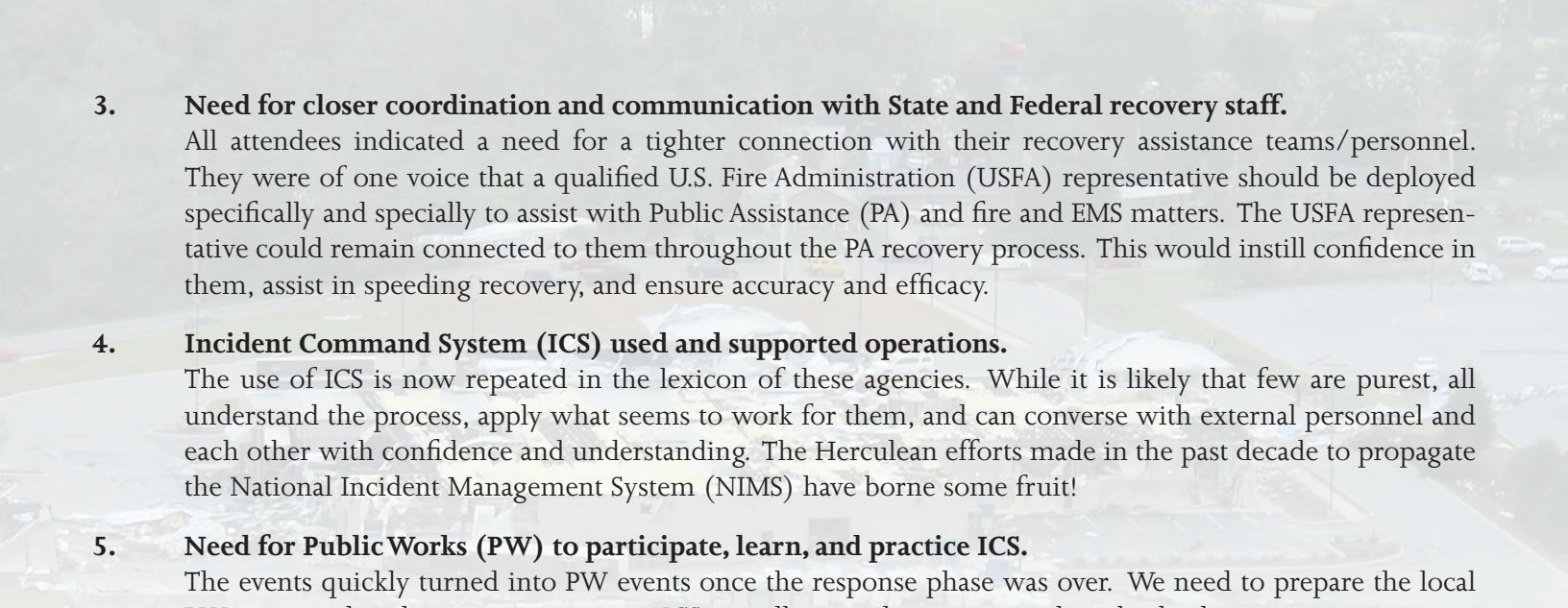
A series of meetings was held in the summer of 2011 to look at fire department and emergency medical services (EMS) organization activities in Alabama and Georgia during the tornados. Over 50 representatives of impacted departments attended and each had an opportunity to respond to specific questions as well as provide a free range of their own inputs. This report condenses those meetings and inputs and provides an insight into the routines and needs of local fire and EMS agencies in disasters. There are 66 specific observations/recommendations included in this report as well as four operational priorities identified. However, there are five overarching critical areas noted that were repeatedly identified:

**1. Lack of disaster preparedness.**

While some communities were better prepared than others, clearly emergency operations planning is largely nonexistent or maintained. Many responders admitted to not knowing the details of their community Emergency Operations Plan (EOP). There were clear exceptions, usually from communities with staffed emergency management offices, some strategic planning, and a training program. This is an area that can be addressed with available training and leadership attention.

**2. Need for more disaster management training.**

All attendees identified needs for more training and exercises including, but also beyond, operations training requirements. This included more Integrated Emergency Management Courses (IEMCs) as well as "process" training for documentation required for cost recovery as well as "job aids" to assist them while performing these jobs.



### **3. Need for closer coordination and communication with State and Federal recovery staff.**

All attendees indicated a need for a tighter connection with their recovery assistance teams/personnel. They were of one voice that a qualified U.S. Fire Administration (USFA) representative should be deployed specifically and specially to assist with Public Assistance (PA) and fire and EMS matters. The USFA representative could remain connected to them throughout the PA recovery process. This would instill confidence in them, assist in speeding recovery, and ensure accuracy and efficacy.

### **4. Incident Command System (ICS) used and supported operations.**

The use of ICS is now repeated in the lexicon of these agencies. While it is likely that few are purest, all understand the process, apply what seems to work for them, and can converse with external personnel and each other with confidence and understanding. The Herculean efforts made in the past decade to propagate the National Incident Management System (NIMS) have borne some fruit!

### **5. Need for Public Works (PW) to participate, learn, and practice ICS.**

The events quickly turned into PW events once the response phase was over. We need to prepare the local PW personnel on how to participate in ICS as well as to take an active role in leadership.

Regardless of planning, staffing, training, and equipment, this series of events exceeded almost every community's self-sufficiency. The State Emergency Management Agencies (EMAs), mutual-aid organizations, a timely Federal Emergency Management Agency (FEMA) response, and, most of all, hard and focused work by local responders and citizens all contributed to the local successes.

This report is not comprehensive, but does serve as a benchmark to provide USFA an opportunity for resection to ensure we are providing the services that the first responder community requires for success as well as to map directions for future endeavors.



## Introduction

On April 27, 2011, a series of tornados ranging from EF1 to EF5 in severity slashed across Mississippi, through Alabama into Georgia, and lastly Tennessee. A total of 336 persons were killed and over 10,000 structures were heavily damaged and/or destroyed. The dollar loss was tabulated at over \$10 billion. Response operations lasted from 36 to 72 hours after the event in most communities and exhausted local and mutual-aid resources. Incident Management Teams (IMTs) and overhead support personnel were brought in by fire departments, and Emergency Management Assistance Compact (EMAC) requests and the Presidential Declaration ensured a strong and steady flow of national resources. While recovery was well underway, there was much to be done and lessons to be learned.

In May 2011, the Acting U.S. Fire Administrator, Glenn Gaines, directed staff, including the National Emergency Training Center (NETC) Learning Resource Center (LRC) staff, to collect video, data, and geographic information in regard to the fire and EMS response to the storms in Mississippi, Alabama, and Georgia. In further discussions on the assignment, he directed a partnership with the fire training organizations and fire chief's associations in each of the States. He also created specific questions that he wanted answered. (See Attachment 1.) Staff organized data, photo, and video collecting with the LRC and the National Preparedness Network (PREPnet) and engaged each of the partnering organizations in discussions regarding the assignment. Alabama and Georgia were on board, while Mississippi was dealing with posttornado flooding and opted out of the initial work. Further discussions with each State resulted in three meetings—two in Georgia and one in Alabama, and three days of discussions with over 50 fire service leaders regarding the participating fire department experiences, successes, and gaps in planning, mitigation, operations, and recovery.

Meetings included suburban, urban, and rural communities; career, volunteer, and combination departments as well as the State fire training agencies representing a wide range of affluence, missions, experience, and exposures. The leadership was diverse in terms of gender, race, age, years of service, professional qualifications, and community characteristics providing an excellent representation of what happened in the region on April 27, as well as what would be the likely experiences transposed to almost any location in the United States. Thus, their observations, successes, and failures can provide a map for other agencies preparing for disasters.





## Georgia

### **Chickamauga, GA—Walker County Fire Department Headquarters (15 Attendees)**

This area covers the “tristate” corner just south of Chattanooga and includes the Chickamauga National Military Park. It is trans piedmont with sharply rolling hills dividing valleys transforming from agricultural and rural to suburban bedroom communities for Chattanooga and Atlanta. This area was served by career and combination departments as well as volunteers. Most of the attendees represented career and combination agencies. Damage in this area was severe with eight fatalities (four in one family) and over 1,200 structures damaged and/or destroyed, 500 in Bartow County alone. One of the contributing factors to the relatively low loss of life was the early warning northeast Georgia residents had as this day’s tornados tracked across Alabama. Citizens were largely warned and had time to take shelter or move to safer locations. Many did so. However, one concern for the entire region was that many residences did not have a substantial safe area of refuge. Many residents lived in mobile homes or structures not designed for severe weather without basements or “safe rooms.” Some fire departments only provided shelter under their apparatus.

### **Georgia Public Safety Training Center, Georgia Fire Academy, Forsyth, GA (14 Attendees)**

This meeting differed from the previous day in northeast Georgia. The attendance at this meeting reflected agencies that were more rural, mostly volunteer or combination departments, with more limited resources. These areas did not have significant weather events earlier in the day. The scope of damage was somewhat contained to more rural and underpopulated areas. This will account for a reduced number of homes, businesses, and community buildings being affected. There was well-broadcasted advanced warning as the southern track tornados hit the State. This allowed enough time for most citizens to seek shelter and even some to displace to safer locations. It also allowed some agencies to assume a higher state of readiness in anticipation of coming events.

The damage in Alabama by this series of tornados was already roughly known. However, there was still loss of life and injuries sustained in the affected areas.

The financial tolls for the communities were via the loss or interruption of some businesses, but mainly through a large amount of timber destroyed and rendered unharvestable. This loss will significantly impact these areas for years. Because of the rural and widespread damage, restoring electricity was slowed. Some citizens were without power for over two weeks. All agencies are working on further identifying problem areas and working on solutions for these issues.



## Alabama April 2011 Tornado Report

On August 23, the Alabama Fire College (AFC) and the Alabama Fire Chief's Association (AFCA) cohosted a meeting at the Fire College in Tuscaloosa of the senior leadership in the State's fire departments that had been impacted by the April 27, 2011 tornados. The tornado was not one event, but rather a series of several tornados spawned in two separate waves 4 to 6 hours apart, which followed a less severe series that occurred in most of the same areas some two weeks earlier on April 15. The April 27 events stretched from Mississippi where there were also tornado touchdowns, east across the State, and exiting into Georgia where the tracts and events were described earlier in this report. Exacerbating the natural threat of the tornados, 16 percent of Alabamians live in manufactured housing, most without a basement or other area of refuge.



There were 239 fatalities in Alabama (population of 4.7 million), with an estimated 2,500+ injured enough to require medical treatment. The missing were accounted for, and the fatalities included some who died subsequent to the events of April 27. The property loss was estimated at \$10 billion. In absolute terms of life loss, this series of tornados was the fifth deadliest tornado day in U.S. history. The long-term economic loss to the State and region was profound. Some small towns lost their only employer, and one town lost 33 out of its 34 commercial entities.

Most affected areas experienced migration as citizens were leaving for other places, some with their insurance settlements and others with little more than the clothing on their backs. The numbers were only in the hundreds, but again, this is a State with a very small population and hits the small rural fire departments very hard. Many of the volunteer agencies use fees based on homes as their major funding stream. The loss of structures and citizen migrations reduced the income for many rural departments. While a very minor loss in terms of the overall picture, some agencies lost their "fund generation facilities," their barbecue (BBQ) pits and pavilions, fairground facilities or dunking booths, and their revenues will be further diminished until these are replaced.

Among the attending departments, member losses or major damage to their homes were limited to less than a dozen. While there were no estimates to cover the agencies not represented, the attendees generally thought it matched their experiences. One positive, albeit unexpected outcome of these tornados, was that throughout the affected region there was a general agreement that volunteerism has increased. Many of the volunteer fire departments have gained new members and supporters, likely reflective of the hard work they engaged in to minimize community sufferings.

The attendees were mostly happy with the Alabama Emergency Management Agency (AEMA) and FEMA's response, saying they were on the scene quickly and able to provide advice and support almost immediately. They were not happy with the paperwork that is required to document and procure the things they want covered under reimbursable programs. Because many fire stations and owned properties were destroyed or damaged, some attendees felt disconnected and underserved by their PA Project Managers who were reassigned as needs changed or otherwise departed, leaving the attendees with little information regarding the success or status of their applications or sometimes what was on the Project Worksheet. Prior to the tornados, none of the departments were aware of PA programs or processes and only had some vague idea of what disaster assistance FEMA would provide.



AFC played a unique role in the response and recovery efforts. AFC's location and infrastructure, just south of Tuscaloosa's southern-most tornado track, astride a major north-south highway three miles off the interstate was ideal. The AFC had hard stands, equipment bays, classrooms, and bathrooms. They supported several disaster response teams, individuals, the IMT base camp, the Mobile Emergency Response Support (MERS) Unit, and the relocated

Tuscaloosa County Emergency Operations Center (EOC). AFC cancelled classes and focused on disaster support. Many AFC scheduled students were deployed in response and recovery operations to their home communities or supporting agencies in the north end of the State. The Director, Alan Rice, took his agency outside “mission space” in a commendable response to the needs of his citizenry.



Tuscaloosa (population of 90,468/Tuscaloosa County population of 171,159) was the largest community badly hit across the region with this series of tornados. It was one of the better prepared communities among those that suffered major losses. The city leadership had been to the National Emergency Training Center (NETC) in Emmitsburg, MD, in 2009 to participate in the Emergency Management Institute’s (EMI’s) community specific IEMC. As a result, the entire city uses ICS in planning as well as during emergency events. The city’s leadership is experienced with the system, and all senior personnel in every agency are knowledgeable with the system and familiar with the language. Earlier in April during the first series of severe weather events, they had used ICS to manage a major concert they sponsored that featured the band “Sugarland”. When tornados threatened that event, the Incident Commander (IC) cancelled the concert at a \$250,000 loss to the city. They inserted Section and Branch Chiefs from outside the fire department to staff their command structure based on the event, expertise, and availability.

The April 27, 2011, tornado series started that morning with an EF3 tornado north of Tuscaloosa and was followed by another set some four hours later. The Tuscaloosa City/County EOC was located in the basement of a building that was destroyed. They had to be extricated and relocated to an alternate location immediately. This caused the loss of EOC communications for a few hours. There were 50 fatalities and more than 1,000 injuries in Tuscaloosa. A total of 7,000 structures were damaged, 3,000 of them totally destroyed, and more than 5,000 large trees (27 inches or greater in diameter) were taken down. PW and fire department communications were temporarily knocked off the air. The local American Red Cross (ARC) and Salvation Army facilities were destroyed.

Outside Tuscaloosa the events were equally horrific, but impacted less densely populated and built upon areas. The area between Muscle Shoals and Tuscaloosa, which includes the towns of Hackleburg, Haleyville, and Phil Campbell, were among the hardest impacted areas. The economic damage is unequalled and per capita loss of life and injuries reflects the nature of the tornado tracks through this area.

Birmingham (population of 212,237) with Shelby (population of 178,187) and Jefferson (population of 656,700) Counties, are the largest population/metropolitan areas in the State and the largest city struck by the tornados. The tornado passed through the suburbs on the north side of town. While damage was extensive, Birmingham Fire Department and the county EMAs were prepared, equipped, and warned; citizens largely heeded the advanced warnings and sheltered accordingly.

Further east and north, Huntsville (population of 180,105) and Madison County (population of 304,307) faced the tornados that tracked through most of the width of the State. They were warned, had plans for response in place, and generally fared as well as possible. They also were fortunate in that the tornados moving through their area were mostly in the EF1–EF3 range, with consummately less damage.

Many agencies lost fire stations or suffered station damage. Some lost their apparatus and/or equipment. None of the fire stations had been constructed to serve as “areas of refuge” but many became points where citizens (many apparently living in mobile homes) fled to when the tornado warnings were sounded. One fire station in west Alabama was destroyed but several citizens in the basement were spared. Firefighters in other stations sheltered under the apparatus and were later able to remove debris and use the rigs for response purposes.

Throughout the region, citizens turned to their fire departments for assistance, guidance, and support. Fire agencies focused on firefighting and rescue activities. Other sites were transformed into community kitchens, family locators, assembly points, housing centers, logistics centers, distribution points, and more. One department reported the arrival of a truck full of porta-potties for community use, looking to drop off several at fire stations. We discussed this “mission creep” and while pressing the point that most were not prepared to do this kind of work and did not have the resources or training to handle the responsibility, in fact, every agency plans to continue in that role.

The central and eastern portions of the State had some lead time to alert their citizens and take some precautionary measures. The early morning, first wave of tornados was covered on local television and radio stations as well as through AEMA and weather sources. The second wave of violent weather found many citizens already sheltered and arguably that helped reduce the number of casualties. Departments on the western side of the State had less warning and some were unaware of the impending first wave.

Most agencies in the impact zones found themselves with degraded communications after the second wave of tornados came through their areas. The Southern Company, the parent company for most of the region’s privately owned power companies (Georgia Power, Alabama Power, and Florida Power, etc.) installed an 800-MHz (megahertz) telephone/radio backbone system 15 years ago. The system is called “Southern Link,” and the Southern Company rents access and equipment to public and private entities in the southeast. The system provides regular cellular telephone service and a “push-to-talk” radio capability with all the linking and grouping capacities we have come to see on public safety 800 MHz systems. Many of the departments in the affected area used the “Southern Link” and it provided a reliable and robust backup during this period.

Regardless of equipment, training, resources, or communications, rural fire departments were faced with four universal tasks/operational domains while suburban and urban areas focused on the first three:

1. Opening roadway access to structures.
2. Search, rescue, treatment, and transport of occupants.
3. Self protection and survival.
4. Providing food, water, housing, and sanitary needs for their communities.

The participants pointed out issues that they felt worthy of attention based on their experiences in the April tornados.

There was discussion regarding USFA providing a direct support person to affected fire departments during disasters. The attendees largely felt that the FEMA support representatives who had deployed to assist with PA were capable, but didn’t understand the specifics of fire department operations. They also reported that their PA liaisons transferred or rotated out prior to a determination regarding the project, and they were not able to focus on fire and EMS recovery or related issues. They would like that “fixed” and see that the USFA might be best positioned to take on this task. Clearly the AEMA staff had concerns about “too many cooks in the kitchen.” They have specialists on-scene to assist the fire departments and others with PA, and FEMA has a cadre of PA experts who can help. The concern is that another group might create yet another set of rules and processes that serve to frustrate the applicant. If we go forward with this recommendation, it will require a lot of training for USFA staff who would be deployed, shadowing for several iterations, and careful on the ground liaison with the State and Federal PA folks.



## General Conclusions

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The events of April 27, 2011, were devastating and deadly. Fortunately, there was enough notice for most citizens to shelter and for public safety personnel to be made aware of the impending events. However, the scope of the tornados exceeded most attendees' experience and expectations as well as their organization's capabilities. Most recovered and were quickly able to provide services to their communities.

Almost all of them found themselves responsible for missions outside of their normal tasks. They generally undertook these with some anxiety mixed with a spirit of willing service; and they usually performed well. While many responders suffered personal losses, they continued to provide services as their communities needed.

Regardless of planning, staffing, training, and equipment, these series of events exceeded almost every community's self-sufficiency. The State EMAs, mutual-aid organizations, a timely FEMA response, and most of all, hard and focused work by local responders and citizens all contributed to local successes.

## Specific Observations

While the 66 observations at the end of the report are generally actionable and finite, some came to the forefront as requiring attention and perhaps some effort should be applied in the near future. These observations include

- We can never do too much planning, training, and evaluation, and repeat that cycle again. Individual, company, and department competencies must be ensured through training, practice, exercises, honest evaluation, and leadership. Then they must be integrated into county emergency operations plans to be used for additional training and exercises. Roles and responsibilities must be known and practiced pre-event.
- Disasters are first responder emergency events that quickly turn into PW recovery activities. While most response agencies participated in that transition and continued to work in recovery, explicit preparation to do so would prove beneficial.
- Agencies need assistance in obtaining postdisaster assistance to recovery and mitigation. They feel confused and irritated by the complex process which they find duplicative, conflictual, and dismissive of their concerns.

- Fire departments must plan on becoming their communities' "agency of last resort." They need to know the county EOP, where resources are, where people and resources are to be collected, logistics distribution and support plans, special needs plans, and other information that people will congregate at the fire hall to gather. If they intend to maintain fire/rescue capacity, they will need to know how to shed these additional duties or to obtain additional firefighting and rescue assistance for the duration.

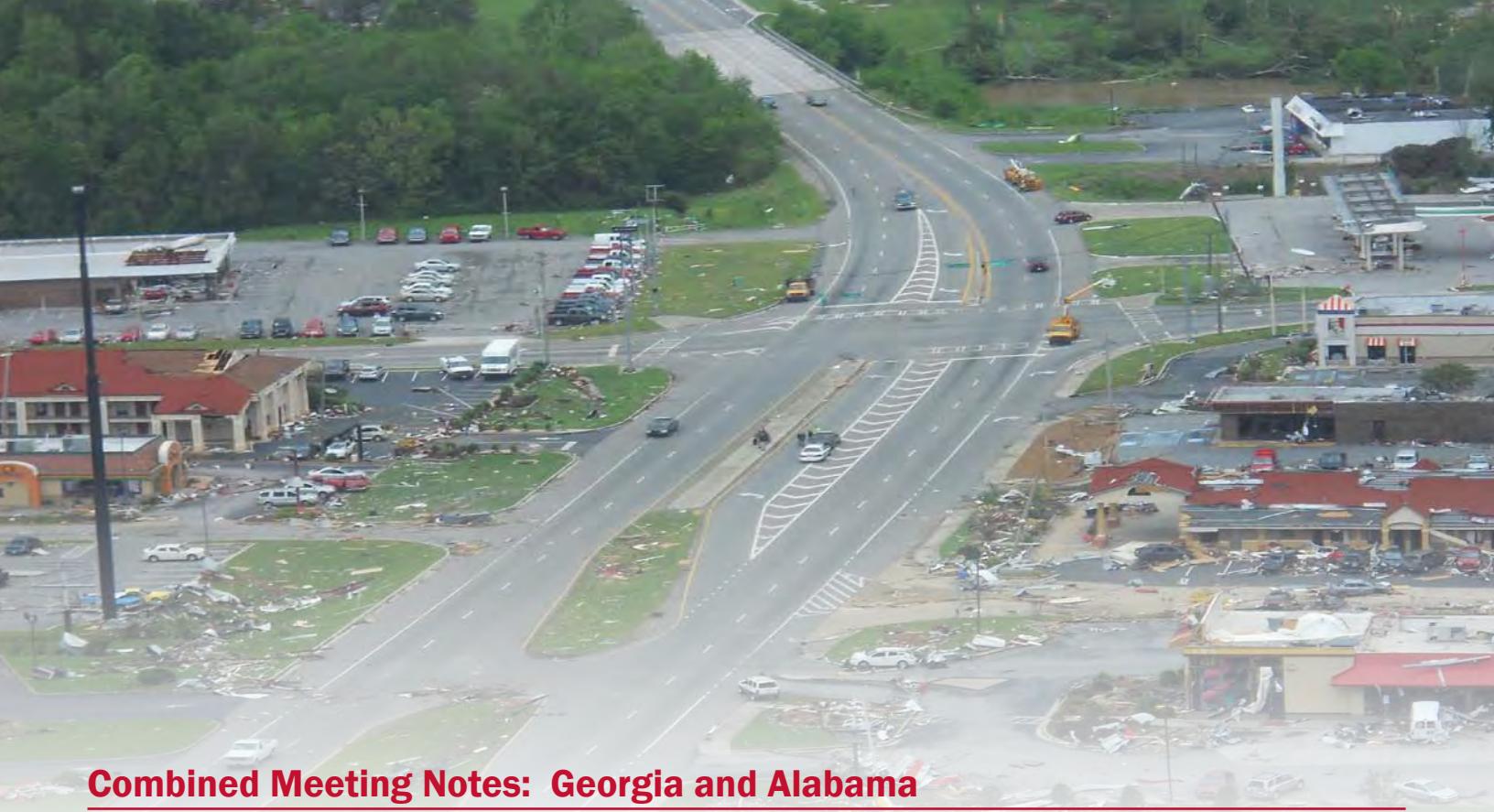
### **Fire Service Major Take Aways**

- plan, train, exercise, evaluate, implement, and repeat;
- develop or revisit the community EOP regularly. The EOP should have annexes for a variety of events, provide flexibility, be used regularly, and be updated periodically;
- plan for, train with, and use Global Positioning Systems (GPSs) for multiple missions;
- plan and train to do Preliminary Damage Assessments (PDAs);
- plan for the fire department to become the community's hub of activity;
- plan for and exercise continuity of operations and government; and
- plan for 9-1-1 failure, use of the alternate facility, and triaging calls.

### **Concluding Remarks**

As fire and EMS leaders we are challenged in many ways through the demands placed on our grass roots service demands. These include emergency medical incidents, vehicle and building fires, outside fires, and hazardous material (hazmat) release incidents. Ensuring that we are operationally ready through staffing, training, material resourcing, and facilities takes much of our available time. Accordingly, ensuring we are prepared as a profession to respond to, recover from, and mitigate the impact of known potential disasters such as those experienced by these communities takes a huge commitment. Additionally, fire and EMS leaders must also convince their communities and regional and State agencies that have the statutory responsibility to respond to and manage a portion of the planning, response, and recovery effort that staffing, planning, training, and exercising are imperative if we are to be successful in our mission to reduce the loss of life and property to these catastrophic incidents.

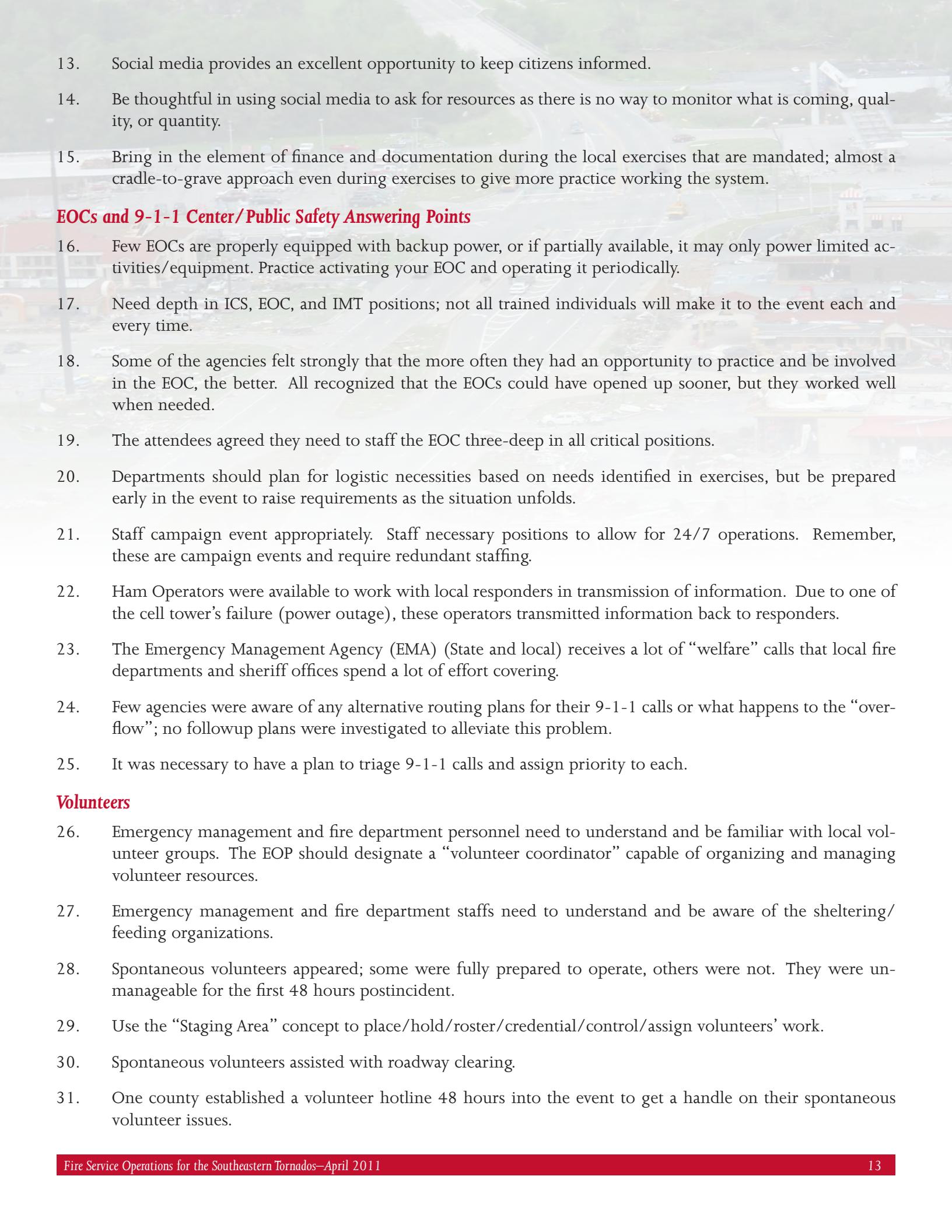
With scarce resources, the need for regional cooperation and sharing expenses for equipment, staff, and training are critically important to ensuring communities are prepared for these regional events successfully. Finally, many of those responsible for responding to these events were indeed victims themselves, suffering devastating loss of life, injuries to family members and friends, and the loss of property. Yet they responded to the call for help from their communities, to their State, and to their country. For that reason, they are to be held in the highest esteem by our political leaders and citizens and congratulated for their commitment, valor, and service.



## Combined Meeting Notes: Georgia and Alabama

### Emergency Operations Plans (EOPs) and Incident Management

1. Continuity of government is underplanned or largely missed by professionals, elected officials, and policy-makers.
2. EOPs are not updated, used, or understood in many communities.
3. The Joint Information Center (JIC) in Catoosa County worked and was important.
4. Local governments need to be prepared to establish and staff a “helpline” for reporting non-9-1-1 needs.
5. The Incident Command System/National Incident Management System/Incident Management Team (ICS/NIMS/IMT) training has worked. Several IMT members were deployed and proved to be valuable assets. In most areas the Emergency Operations Center (EOC) staffs and the assisting/responder communities were familiar with ICS terms, meanings, and applications.
6. De facto Area Command (AC) and Unified Command (UC) were established in several events. Responders and emergency managers need to understand how to implement ICS AC/UC and be able/prepared to do so.
7. NIMS for Public Works (PW) is important.
8. In some communities, law enforcement still have not bought into ICS. How can we make that happen?
9. Communities need “traffic flow and access plans”—predetermining priority of efforts in opening roads and getting access to appropriate locations.
10. Provide and expect decisionmakers at meetings.
11. There was confusion on U.S. Army Reserve and IMT roles and capacities.
12. Triage incident based on operational priorities and people most at risk.

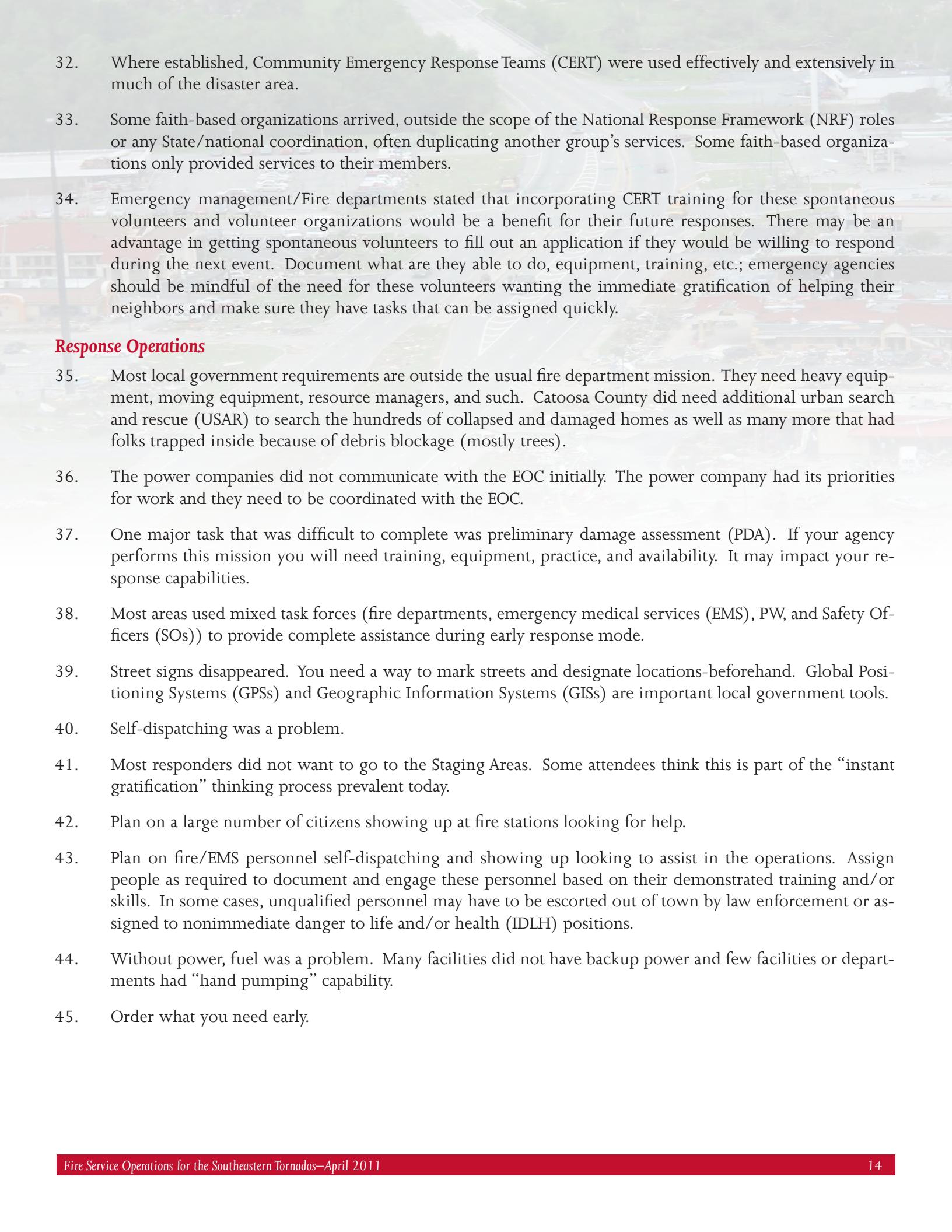
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- 13. Social media provides an excellent opportunity to keep citizens informed.
  - 14. Be thoughtful in using social media to ask for resources as there is no way to monitor what is coming, quality, or quantity.
  - 15. Bring in the element of finance and documentation during the local exercises that are mandated; almost a cradle-to-grave approach even during exercises to give more practice working the system.

### **EOCs and 9-1-1 Center/Public Safety Answering Points**

- 16. Few EOCs are properly equipped with backup power, or if partially available, it may only power limited activities/equipment. Practice activating your EOC and operating it periodically.
- 17. Need depth in ICS, EOC, and IMT positions; not all trained individuals will make it to the event each and every time.
- 18. Some of the agencies felt strongly that the more often they had an opportunity to practice and be involved in the EOC, the better. All recognized that the EOCs could have opened up sooner, but they worked well when needed.
- 19. The attendees agreed they need to staff the EOC three-deep in all critical positions.
- 20. Departments should plan for logistic necessities based on needs identified in exercises, but be prepared early in the event to raise requirements as the situation unfolds.
- 21. Staff campaign event appropriately. Staff necessary positions to allow for 24/7 operations. Remember, these are campaign events and require redundant staffing.
- 22. Ham Operators were available to work with local responders in transmission of information. Due to one of the cell tower's failure (power outage), these operators transmitted information back to responders.
- 23. The Emergency Management Agency (EMA) (State and local) receives a lot of "welfare" calls that local fire departments and sheriff offices spend a lot of effort covering.
- 24. Few agencies were aware of any alternative routing plans for their 9-1-1 calls or what happens to the "overflow"; no followup plans were investigated to alleviate this problem.
- 25. It was necessary to have a plan to triage 9-1-1 calls and assign priority to each.

### **Volunteers**

- 26. Emergency management and fire department personnel need to understand and be familiar with local volunteer groups. The EOP should designate a "volunteer coordinator" capable of organizing and managing volunteer resources.
- 27. Emergency management and fire department staffs need to understand and be aware of the sheltering/feeding organizations.
- 28. Spontaneous volunteers appeared; some were fully prepared to operate, others were not. They were unmanageable for the first 48 hours postincident.
- 29. Use the "Staging Area" concept to place/hold/roster/credential/control/assign volunteers' work.
- 30. Spontaneous volunteers assisted with roadway clearing.
- 31. One county established a volunteer hotline 48 hours into the event to get a handle on their spontaneous volunteer issues.

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- 32. Where established, Community Emergency Response Teams (CERT) were used effectively and extensively in much of the disaster area.
  - 33. Some faith-based organizations arrived, outside the scope of the National Response Framework (NRF) roles or any State/national coordination, often duplicating another group's services. Some faith-based organizations only provided services to their members.
  - 34. Emergency management/Fire departments stated that incorporating CERT training for these spontaneous volunteers and volunteer organizations would be a benefit for their future responses. There may be an advantage in getting spontaneous volunteers to fill out an application if they would be willing to respond during the next event. Document what are they able to do, equipment, training, etc.; emergency agencies should be mindful of the need for these volunteers wanting the immediate gratification of helping their neighbors and make sure they have tasks that can be assigned quickly.

## Response Operations

- 35. Most local government requirements are outside the usual fire department mission. They need heavy equipment, moving equipment, resource managers, and such. Catoosa County did need additional urban search and rescue (USAR) to search the hundreds of collapsed and damaged homes as well as many more that had folks trapped inside because of debris blockage (mostly trees).
- 36. The power companies did not communicate with the EOC initially. The power company had its priorities for work and they need to be coordinated with the EOC.
- 37. One major task that was difficult to complete was preliminary damage assessment (PDA). If your agency performs this mission you will need training, equipment, practice, and availability. It may impact your response capabilities.
- 38. Most areas used mixed task forces (fire departments, emergency medical services (EMS), PW, and Safety Officers (SOs)) to provide complete assistance during early response mode.
- 39. Street signs disappeared. You need a way to mark streets and designate locations-beforehand. Global Positioning Systems (GPSs) and Geographic Information Systems (GISs) are important local government tools.
- 40. Self-dispatching was a problem.
- 41. Most responders did not want to go to the Staging Areas. Some attendees think this is part of the "instant gratification" thinking process prevalent today.
- 42. Plan on a large number of citizens showing up at fire stations looking for help.
- 43. Plan on fire/EMS personnel self-dispatching and showing up looking to assist in the operations. Assign people as required to document and engage these personnel based on their demonstrated training and/or skills. In some cases, unqualified personnel may have to be escorted out of town by law enforcement or assigned to nonimmediate danger to life and/or health (IDLH) positions.
- 44. Without power, fuel was a problem. Many facilities did not have backup power and few facilities or departments had "hand pumping" capability.
- 45. Order what you need early.

## **Recovery**

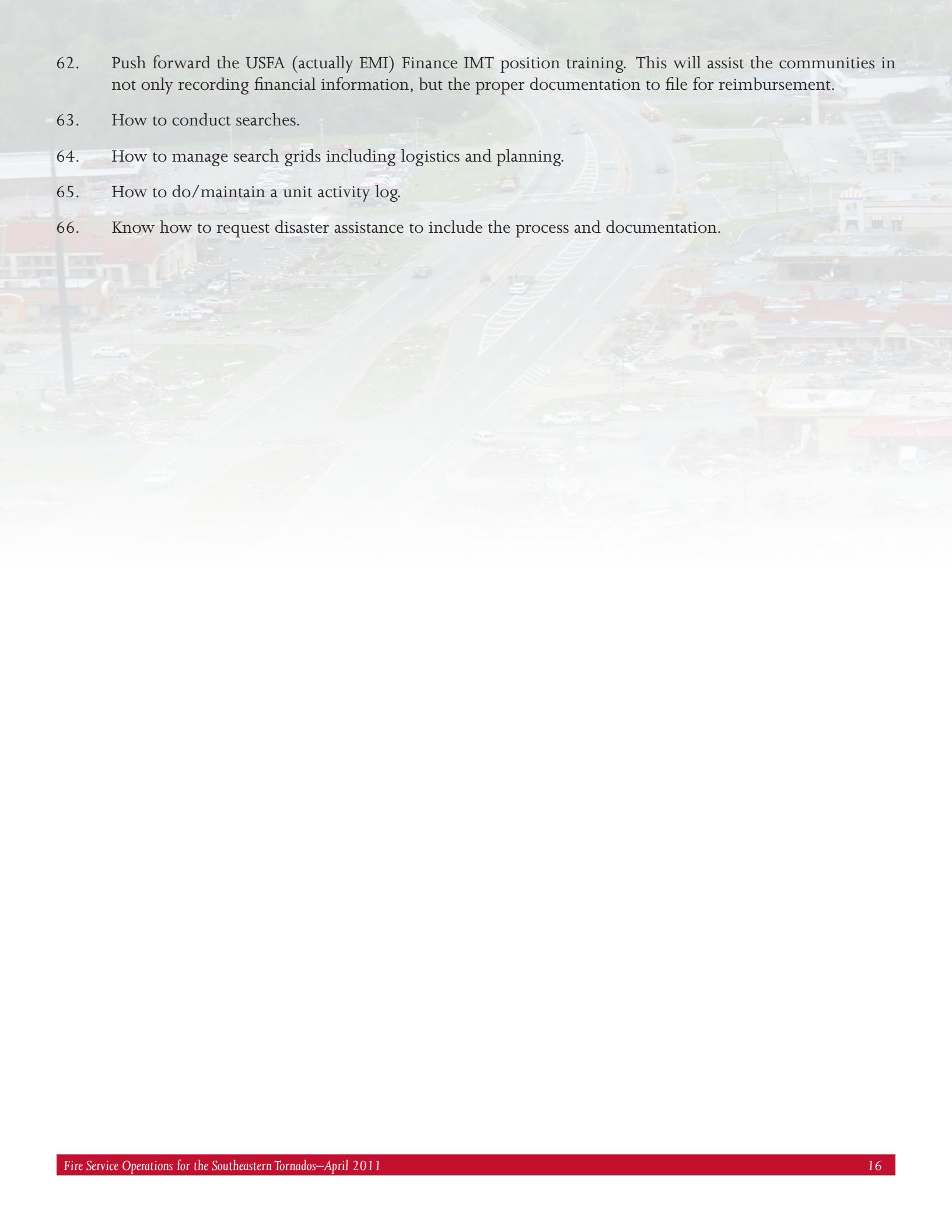
46. Local veterinarians were an important resource and used for pet shelters and care.
47. This was really a PW event. Once the initial phase of accounting for public and handling injuries, etc., this becomes something other than an emergency response. Attendees suggested that the U.S. Fire Administration (USFA) and the State consider training on the passing of command or a PW person become Operations Chief in a UC system.
48. Shelter (designation, opening, support, and management) was an issue that through communications issues, lack of knowledge about their EOP, or though default, fire departments were expected to manage.
49. Departments need to plan and train for becoming the “agency of last resort” and the place people turn to when community and infrastructure collapse.
50. Predisaster identification and coordination for heavy equipment and hauling capacity is necessary.
51. Preidentification of debris collection process and points allows early engagement in community recovery.

## **Safety Concerns**

52. Many home generators were not installed to the National Electric Code (NEC) and were capable of “back feeding” the grid and causing casualties as rescue and debris clearing personnel came in contact with lines thought to be “dead.”
53. Safety is a big problem. Everybody has a chainsaw; 10 percent know how to use them and have all the safety equipment to do so.

## **Training Matters**

54. Folks don’t know how to use or “read” the USAR marking system. Both groups strongly favored USFA bringing back a short Structural Collapse Awareness course that included this (in a dual format for online and instructor-led deployment).
55. A National Fire Protection Association (NFPA) 1670, Standard on Operations and Training for Technical Search and Rescue Incidents awareness course is needed.
56. Every job needs a Federal Operations Guide (FOG) or job aid.
57. Need training on Public Assistance (PA) programs and processes and other assistance available to assist agency recovery from disasters.
58. Predisaster training is important and included additional requests for the Structural Collapse Awareness course, as well as the NIMS and operational training. They were all interested in an Integrated Emergency Management Course (IEMC)-type holistic exercise-based course on county level incident management.
59. Involve Boards of Education (BOE) in NIMS training and EOP development and exercises (this also applies to nongovernmental organizations (NGOs) and private sector players as well). (The Emergency Management Institute (EMI) already has a course and program that targets BOEs, districts, and schools.)
60. Everybody wanted more training in Federal Emergency Management Agency (FEMA) forms and debris removal as well as general finance and administration, plus job aids.
61. Public Assistance Manual training would be helpful and a field version of the PA manual with quick access to information for resources would be a significant and useful tool.

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62. Push forward the USFA (actually EMI) Finance IMT position training. This will assist the communities in not only recording financial information, but the proper documentation to file for reimbursement.
63. How to conduct searches.
64. How to manage search grids including logistics and planning.
65. How to do/maintain a unit activity log.
66. Know how to request disaster assistance to include the process and documentation.



## Attachment 1

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### **U.S. Fire Administration (USFA) 2011 Georgia-Alabama 2011 Report**

Directions from the Acting Fire Administrator: "Look for things we can assist fire departments in preparing for future events...work with Ed Metz to begin collecting video, data, geographic information, and other elements in regard to the fire and EMS response to the recent storms in Alabama, Georgia, and Mississippi."

1. How was your community impacted by the storms?
2. Did you have sufficient resources to fulfill your responsibilities and missions? If not, could you acquire them? How did you obtain them?
3. What resources were not available and how successful were you in acquiring them?
4. Assuming at least one or more of needed resources were not available, how did you set priorities and what were they?
5. How did you triage incidents and how were they addressed in priority?
6. What parts of the Incident Command System/National Incident Management System (ICS/NIMS) were activated/used?
7. What lessons were learned? And share any other thoughts that you have for other agencies to benefit from this experience.

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