COLLABORATIVE PLANNING AS A TOOL FOR STRENGTHENING LOCAL EMERGENCY MANAGEMENT

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Abstract

Post September 11 and the shift to a broader focus on Homeland Security, public officials are realizing that even wider community education and meaningful collaboration with non-governmental actors, as well as with citizens, is critical to effective prevention, preparedness, response, and recovery processes. The administrative and leadership challenge is in creating a new governance system, one that builds on existing patterns of collaboration and relationships while adding new public and private partners. This paper uses Tennessee's District 11 Homeland Security strategic planning process as a case study to gauge efficaciousness of collaborative planning processes as a tool in the creation of local capacity for emergency management.

Collaborative activities involving a diverse set of actors are increasingly used to address a wide range of public problems. The growing realization that complex policy issues require improved internal collaboration within public agencies and external collaboration with key community organizations and leaders is even more cogent given current fiscal constraints. Emergency management provides an excellent illustration of this phenomenon.

Emergency management has been a government function since as early as 1786 (Schroeder, Wamsley, & Ward 2001, 361). This function has evolved from local government to federal responsibility with a post-World War II emphasis on national preparedness (1970s), natural disaster response (1990s), and after September 11, Homeland Security and terrorism prevention (Ward, Wamsley, Schroeder, & Robins 2000, 1020). The emergency management arena is striking for its high degree of fragmentation and loosely connected actors as federal, state, and local government agencies share public responsibility for emergency management planning and response. Moreover, emergency management is more broadly collaborative after the fact, when government, nonprofit, and private sector actors are all needed to respond to the consequences of disasters or crises. With the realities of addressing domestic and foreign terrorism threats post September 11, emergency management officials are faced with the challenge of proactively achieving broader based collaborative efforts in order to build local capacity to respond and recover from disasters and terrorist incidents. This paper Journal of examines the research literature on collaboration and emergency management and uses Tennessee's District 11 Homeland Security strategic planning process as a case study to gauge efficaciousness of collaborative planning processes as a tool in the creation of local capacity for emergency management.

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Understanding Collaboration in Emergency Management

From its inception, civil defense and emergency management activities required technical expertise and collaboration within local communities, whether watching for enemy ships or responding to tornado damage. As the calls grew in the 1970s for a less fragmented and more effective response to natural disasters, the direction of efforts was viewed appropriately as the domain of professionals and administered through a federal, executive command and control model (Ward, Wamsley, Schroeder & Robins 2000, 1020; Agranoff & McGuire 2001; Wise 2002; Stephens & Grant 2001). Although at some level government officials and citizens recognize the importance of planning and preparation, managing emergencies in practice often entails "ad hoc organizing and a certain amount of learning by mistake" (Wise 2002, 138). Consequently, professionals too often under-appreciate the value and importance of developing and sustaining broad-based collaborative planning processes and relationships necessary to create community capacity.

Post September 11 and the shift to a broader focus on Homeland Security, public officials are realizing that even wider community education and meaningful collaboration with nongovernmental actors, as well as with citizens, is critical to effective prevention, preparedness, response, and recovery processes. The administrative and leadership challenge is in creating a new governance system, one that builds on existing patterns of collaboration and relationships while adding new public and private partners, prioritizes the exchange of resources (Ward, Wamsley, Schroeder, & Robins 2000), and respects autonomous technical expertise while recognizing the legitimacy of broader based participation.

The changes to the landscape of emergency management are similar to pressures in other public policy arenas. Agranoff and McGuire (2001) argue that the changing shape of federalism reflects the complexity of operational realities as governments at all levels address complex policy problems. These researchers argue that federalism is shifting from both a top-down model, marked by executive control and strong federal management and leadership, and a donor-recipient model, marked by interdependence among jurisdictional levels but with the donor's goals requiring some degree of conformity, to two new emergent models, jurisdiction-based and network, that are much more collaborative in nature and require attention to issues of governance not just intergovernmental arrangements. Finding U.S. federalism to present an institutional challenge to a policy arena that calls for "strong and concerted action," Kettl (2003) consequently concludes that effectively coordinating homeland security is not a management problem but an issue of governance. Consequently, emergency management officials must develop and maintain institutional support "for special cooperation in collective action situations in which individual rationality would otherwise lead to conflict and the law of the jungle" (Scholz & W. Gray 1997, 714). Further, Barbara Gray notes that the involved parties must be able to see different aspects of a problem, "constructively explore their differences and search for solutions that go beyond their own limited visions of what is possible" (1989, 5). Of relevance, Bardach (1998) suggests a framework of "craftsmanship" to examine and explain interagency collaboration. Based on the theory of craftsmanship, the construction of a successful collaboration becomes a function of the skill and purposiveness of craftsmen interacting with the quality of available materials and the craftsmen's ability to fashion protections against potentially destructive environmental forces such as personnel turnover, high degrees of turf protectiveness, and the erosion of political alliances (Bardach 1998).

Nevertheless hierarchical organizations and decision making processes continue in the emergency management context even as research suggests that the network or collaborative approach is a good predictor for readiness and response effectiveness (Schroeder, Wamsley & Ward 2001; Carley & Harold 1997; Gillespie 1993). Many of the key actors involved with emergency management are technical experts (such as firefighters, rescue, and police) with very specific functions in the emergency context and typically have had limited prior interaction with the other nongovernmental emergency actors. Thus the value emphasis in emergency response has been on professional expertise (Romzek & Ingraham 2000). Although Kettl (2003) notes that political systems rarely tackle trade-offs openly, homeland security as a policy area is bringing the trade-off of security with other public choices into the open and making the increased need for improved intergovernmental reliability visible (2003, 269-70). As homeland security-related decision making becomes the province of politics and governance rather than predominantly the dominion of the professional (Romzek & Ingraham 2000), the need for new models to emerge increases. The case of Tennessee's District 11 Homeland Security Council explores the emergency role of collaborative planning in emergency management.

Memphis Homeland Security and Emergency Management Context

Memphis, Tennessee has various geographic and economic features that make emergency planning important in assessing its vulnerability and assuring its viability. Memphis is located in the southwestern corner of Tennessee at the top of the Mississippi River Delta, and directly adjacent to the states of Mississippi and Arkansas. Located near the New Madrid fault and serving as an important distribution hub for the nation, the Memphis/Mid-South Region is vulnerable to natural and technological disasters as well as terrorist incident. Two of the three bridges across the Mississippi River within the state of Tennessee are located within the Memphis city limits. City, county, state and federal government offices are found within a few short blocks of the Mississippi River. The nation's largest inland naval base is found directly north of the city in Millington, Tennessee. The U.S. Coast Guard has the responsibility for monitoring all river traffic, and the U.S. Army Corps of Engineers maintains authority for management of the locks along the Mississippi River along more northerly stretches of the river before it reaches Memphis. Interstate Highway 40 traverses the city east west while Interstate 55 carries traffic north and south. Barge, motor, and railroad shipping are significant components of the city's business endeavors and important to the economic viability of the Region and nation. Approximately one million people live in the Memphis/Shelby County metropolitan area (U of M, Bureau of Business and Economic Research).[1] Many more live in surrounding counties in Tennessee, Arkansas, Mississippi and Missouri.[2] The predicted loss of life and damage to

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[1] As of July 2003, the population in Shelby County, TN was 897,472; Fayette County, TN, 28,806; and Tipton County, TN, 51,271. The city of Memphis ranks as the 18th largest city in the United States and serves as an important economic, health, transportation, and cultural center for the MSA (U. of M., Bureau of Business and Economic Research).

[2] Across the Mississippi River, Crittenden County, Arkansas has a population of 50,866 and across the Tennessee border, DeSoto, Mississippi, is a growing population center with a population of 107,199. Many of the adults in these nearby counties work in Shelby County (U. of M., Bureau of Business and Economic Research).

property and the regional economy from a major earthquake would be devastating (Charlier 2005).

The responsibility for emergency management in the State of Tennessee is coordinated by the Tennessee Emergency Management Agency (TEMA) headquarters located in the state capitol and three Regional Offices (East, Middle, and West). The regional officials provide technical advice and logistical support as needed. Although not unique, the intergovernmental and interagency coordinative task facing TEMA is multifaceted. TEMA coordinates the State's emergency management efforts among 95 counties, more than 300 municipalities, 30 state agencies with emergency functions, and numerous federal agencies (State of Tennessee, Department of Military, 246). The Tennessee Emergency Management Agency (TEMA) has seen the complexity of its mission increase to now include natural and common technological disasters as well as domestic preparedness (counter-terrorism) and crucial infrastructure protection (State of Tennessee, TEMA Mission).

In Tennessee each county's chief executive officer appoints a local director who serves as the key emergency management liaison, intergovernmental official (State of Tennessee, TEMA Regions). The Memphis/Shelby County Emergency Management Agency (MSC/EMA) has approximately ten full-time staff, three part-time staff members, a volunteer Amateur Radio Program, and a volunteer Reserve Program (Memphis & Shelby County, EMA). Nearby counties in Tennessee, Arkansas, and Mississippi are less populated and have limited full-time staff assigned solely to emergency management, relying on their respective fire and police chiefs for support.

Prior to September 11th, MSC/EMA engaged in various collaborative activities. Various city and suburban police and fire departments, MSC/EMA, and the Federal Bureau of investigation participated together in Incident Command tabletop exercises to prepare for large scale events. Each jurisdiction continues to train their respective personnel, with some jurisdictional sharing of training. Recognizing the vulnerability of the bridges across the Mississippi River at I-55 and I-40 and thus the need to work across jurisdictions, government officials joined together to form a "Bridge Mitigation" team in 2000, and created multi-agency agreements regarding hazards removal and patrolling the bridges (Cook 2001).

In his remarks at the Tennessee Emergency Management Convention on August 25, 2005, Governor Bredesen noted that Homeland Security rests with communities as first responders and that coordination and cooperation from all stakeholders is critical to emergency response capacity. He further recognized the resource exchange function of the State as he described the funding provided to the local level to purchase equipment, assure interoperable communication systems, train emergency responders, and encourage citizen involvement (Bredesen 2005). Thus, Post September 11 Homeland Security has set the stage for many new activities and responsibilities related to local emergency management. In addition to the required update of state and local emergency plans, spearheaded by TEMA and MSC/EMA, a concurrent, but separate opportunity for collaborative planning came as the Tennessee Department of Homeland Security created 11 districts and required creation of district level strategic plans. District 11 includes Shelby, Tipton and Fayette Counties and has a Director and seven staff members (State of Tennessee, Department of Homeland Security). As the planning process progressed, the council recognized the importance of crossing state lines and the need to include Crittenden County, Arkansas and DeSoto County, Mississippi in the planning process.

The District 11 Council is chaired by the Shelby County Mayor (representing the most populous county in the district). Membership on the District 11 Council is wide-ranging, representing key traditional emergency actors, such as local government leaders and law enforcement, fire, public health, and agriculture representatives. Voting members for the most part represent official government agencies and jurisdictions; no nonprofit agency leaders are on the Council. Non-voting members and interested individuals who attend district meetings include officials from various district 11 jurisdictions and local, state, and federal government agencies. Attendance at district meetings can number between 50-60 individuals. Due to the large size of the council and the broad interest in homeland security issues, the council formed a nine-member executive committee in September 2005.

Tennessee District 11's strategic planning process included five subcommittees: Prevention (focused on intelligence gathering and surveillance), Mitigation (focused on lessening the impact of an incident), Response (focused on responding to the incident), Recovery (focused on repair/replacement of infrastructure and recovery), Community Preparedness (focused on public outreach), and Joint Operations (focused on issues related to interoperability). Subcommittees were each led by two co-chairs and facilitated by faculty from the University of Memphis. Subcommittee members included members from the Council but then expanded to include experts in the various functional areas. The strategic plan was presented to the Council on September 28, 2005 and will be implemented under the direction of the Executive Committee.

The vision of the strategic plan states "Safety and Security through Collaboration" with collaboration and partnership as key values underlying the planning process. Although the strategic plan addresses traditional emergency management issues of interoperability of communication systems, collaborative training, information sharing, mutual aid agreements, and coordinated strategies for medical treatment, evacuation, and recovery operations, it emphasizes the need for collaboration and partnering. See Appendix 1 for a table for the Strategic Plan Goals. The plan also emphasizes the need for new kinds of communication and outreach to citizens as well as partnering with an expanded list of actors in the public, nonprofit and private sectors, including the creation of a Citizen Corps. A nongovernmental collaborative initiative started at about the same time. In late 2002, new Department of Homeland Security dollars were obtained by the local Volunteer Center (Volunteer Memphis) to form a community VOAD (Voluntary Organizations Active in Disasters). The creation of this new collaborative of nonprofit and faith-based organizations with missions on disaster prevention, preparedness, response and recovery moved very quickly through the classic stages of collaborative development and continues to play an important role in information sharing and problem solving related to emergency management issues. The membership of the collaborative is far reaching including traditional disaster response agencies such as the American Red Cross and the Salvation Army, a broad group of faith-based initiatives including the Episcopal Diocese of West Tennessee, Southern Baptist Disaster Relief and the United Methodist Committee on Relief, and other nonprofits including Senior Services, Hands On Memphis, Search Dog South, United Way of the Mid-South and Volunteer Memphis.

The bottom line for Memphis was that while collaborative planning of several kinds was occurring, it was mainly sector (public or nonprofit) or government level (local or state) specific collaboration with some intergovernmental activity, based largely around the possibility of pass through funding. Consequently, we are reminded that building emergency management capacity is an evolutionary process and requires leadership, vision, resources, and relationships. The

insights gained from the District 11 case illustrate that foundational work in emergency management planning is very important but must be sustained if high level capacity is to be realized.

Moving to Optimal Collaboration to Create Capacity for Emergency Management

Farazmand notes that "a central feature of all crises is a sense of urgency… Situations change so dramatically and so rapidly that no one seems to be able to predict the chain of events or the possible outcomes" (2001, 3). Thus the ultimate goal of creating and maintaining local emergency management collaborations is to create the capacity for the locality to manage local crises or disasters prior to their occurrence. This is particularly complex for emergency managers who are hired by local governments with expectations to develop integrated strategies for the successful management of emergencies (Stephens & Grant 2001). Wolensky and Wolensky (1990) refer to the creation of "synthetic groups" useful to emergency management in urban areas. Dluhy (1990) suggests that coalitions be formed to meet command and control as well as assessment and deployment needs. Relatedly, Farazmand (2001) suggests that:

> Under normal bureaucratic situations, management literature points to decentralized and hands-off decision making as a good organizational strategy. But under crisis situations, this model of stable organizational behavior is ill-suited and becomes seriously problematic. It is interesting to note, ironically, that the crisis management literature points to a more centralized decision structure (5).

Describing government as increasingly marked by indirect and collaborative service delivery, Salamon convincingly argues that the "tool" chosen by policy makers to implement a public program is not only "profoundly political" but also operational in nature, affecting the set of actors who become collaborators and the outcomes of the collaboration (2002, 9-11). Thus, as illustrated by the District 11 case, collaboration can be understood as a consciously chosen tool to build emergency management capacity. See Figure 1.

From this perspective, several major factors influence the outcome of emergency management capacity, including severity of the incident and strength of collaboration.

Figure 1: Understanding Capacity
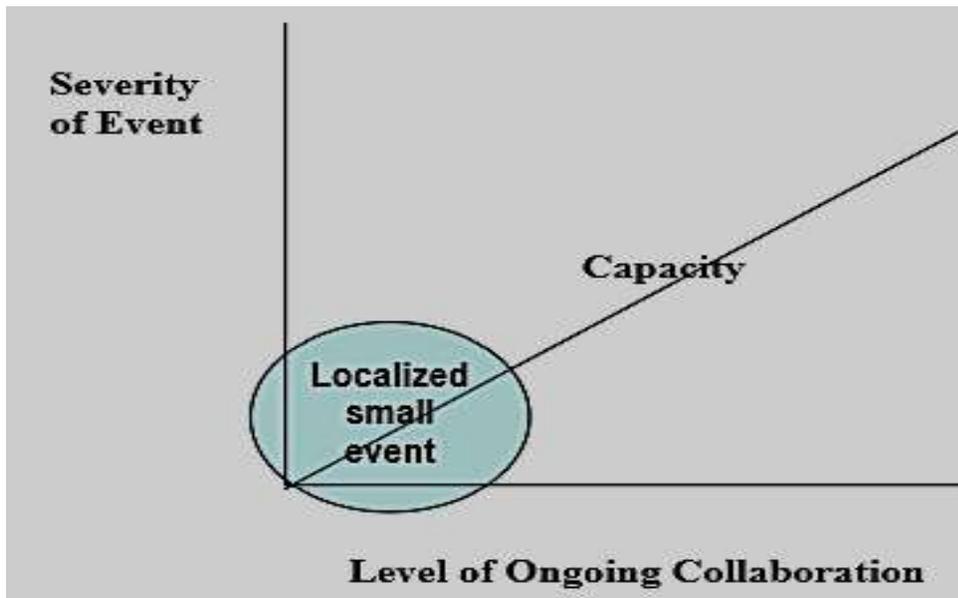
Severity of the disaster incident directly affects the collaborative operations. Severity includes the geographic area impacted by the incident, the number of individuals, and the amount of property affected, as well as the magnitude of those affected. The lower the severity, the easier it is for localities to demonstrate competence in addressing emergency response needs; however, as the severity of scope and magnitude increase, the needs of the area impacted by the disaster will increase.

The second major influence on building emergency management capacity is the strength of collaboration prior to the incident. That is, understanding motivations and actions of the participants involved in the collaboration and the sense of relationships and norms established through the collaboration (Melaville, Blank, & Asayesh 1993; Radin 1996; Winer 1994). Of particular importance are the actors involved in the local emergency management collaboration:

- Local emergency management who constitute the official government response, including first responders such as local emergency management offices; elected officials at the municipal and county levels; (and governor and president if size and scope warrant); municipal and county fire departments; municipal and county police departments; depending on the size and scope of the disaster may involve state EMA and FEMA; and if crime is involved, size and scope may bring in the state police and FBI.

- Non-profit voluntary and faith based organizations including the American Red Cross (chartered by the federal government to assist in emergency response), Salvation Army, Amateur Radio Emergency Service Center, Boy Scouts, Church Health Center, Council for the Hearing Impaired, Episcopal Diocese, Exchange Club Family Center, Hands On America, Center for Independent Living; Food Bank, Humane Society, Government

Victim Assistance Center, Southern Baptist Disaster Relief, United Methodist Committee on Relief (UMCOR), United Way of the Mid-South.

- Private companies ranging from insurance companies to large companies such as Walmart, Lowes and Home Depot to specific disaster recovery firms (e.g., companies that provide secure, online backup and recovery solutions for servers, desktop and notebook computers, copies that provide communication technologies or that building restoration services).

- Private citizens who choose to volunteer or donate goods and dollars in a time of disaster.

Several distinct categories of collaboration may exist related to the emergency context. For example, fire departments in a given geographic area may regularly share information, expertise and equipment. Nonprofit, voluntary, and faith-based organizations may have come together to form a community Voluntary Organizations Active in Disasters (VOAD) groups to increase communication and coordination before, during and after an emergency. Cross agency and jurisdictional public agency collaboration may exist as it does in Tennessee's District 11 Homeland Security Advisory Council. While each of these collaborative efforts play a useful role in creating capacity for disaster prevention, preparedness, response and recovery, without an opportunity for collaborative processes that integrates their knowledge and expertise a large scale emergency will likely overwhelm the locality. The Tennessee District 11 case illustrates the importance of an interlocking collaborative that operates across levels of government (Federal-state-local) and within levels of government (city-city, county-county, state-state), acknowledges the role of nongovernmental partners (nonprofits, faith-based, private enterprise) and recognizes the need for a point of authority and responsibility in time of emergency.

Schroeder, Wamsley and Ward (2001) suggest that while everyone acknowledges the need for coordination in an emergency:

> No want wants to be 'coordinated,' nor is it clear just what the term means in practice. Statutory authority is not easily transformed into legitimate political authority, and emergency management agencies are very seldom given anything but statutory authority to "coordinate' in the event of an emergency or disaster... (360).

This clearly identifies the benefit of a formal integrative or interlocking collaborative structure with a focus on strengthening capacity. While every locality brings a distinctive set of geographic, political and socioeconomic issues, the experiences of the various Memphis collaborations assist in identifying essential characteristics of a mature, integrative emergency management collaboration:

1. Basic understanding that the command and control structure will take over in the time of emergency requiring all actors to be trained to play their role within the "official response" structure. The National Incident Management System (NIMS) is one example of a structure that has been widely tested and utilized.

2. General understanding of the roles that various public, nonprofit, voluntary, faith-based and private organizations as well as private citizens play in all stages of emergency management including prevention, preparedness, response and recovery. In particular, the interlocking collaboration should consider whether: a) technical knowledge needs are covered; b) technical equipment is available; c) infrastructure is in place (i.e., alternate communication systems, power grids, flood controls); d) formalized mutual aid agreements are in place; and e) sufficient numbers of trained volunteers are identified.

3. Fundamental understanding of the socio-economic conditions of the locality and geographic distribution of these conditions, including identification of language and other access issues.

4. Building of a comprehensive planning, response and recovery vision and implementation plan that includes citizen and organization-level preparedness, short term response (first responders) and long term response and recovery (24 hours and beyond the disaster).

5. Rehearsal of possible disaster scenarios to test response capacity using a variety of strategies and participants. Strategies range from interactive, computer-generated case studies and table top exercises to real time simulations.

6. Inclusion of multiple feedback opportunities to identify problems and generate solutions through changes in policy, communications and behavior.

7. Develop (and widely market) a central source for local information and referral during the time of an emergency that is in place before the incident.

8. Recognize the variables that are often not directly controlled by emergency management leaders and develop strategies to address. These variables include the role of the media, the role of elected and appointed officials, the public perception of preparedness, and the public perception of past and current response efforts.

Conclusions

Chaos is the common first reaction to any disaster. The capacity created through a new model of cross sector, integrated collaboration should aid in ordering the chaos resulting in localities that have better prevention, preparedness, response and recovery strategies in place. More research is needed to examine the role of leadership in this next level of collaboration. Specifically, will the desired outcome of strengthened capacity require the sustained participation and attention of high level managers and elected officials? Should local emergency management offices be more directly structured and linked to high level officials to reduce bureaucratic layers and provide needed status to elicit broad based participation? As emergency management becomes more politicized, will sufficient levels of stability and continuity be able to be achieved?

Kettl argues that the quality of local emergency preparedness varies widely and this variance reflects differences in a capacity to coordinate (2003, 261-262). Thus to create an effective collaborative, participants must be able to articulate a vision, define a mission, and establish concrete goals (Bardach 1998: 199) as well as understand that "risk assessment and risk reduction are predictably and intensely political" (Lewis 2000, 203). Taking on small, distinct tasks and accomplishing them effectively through group planning efforts can set the stage for continuing collaboration. This builds momentum for additional joint endeavors and makes "smart" use of "the desire on some people's parts to do good in the world according to their own lights and to participate in the creative challenge of doing it in a nontraditional way" (Bardach 1998, 308). Consequently, attention to meaningful emergency management planning processes and broad based collaboration can potentially create an infrastructure to assure sustainable local emergency management capacity.

The experiences of emergency management professionals during recent hurricane response efforts elevate the need for new models for strengthening disaster response capacity. The model proposed here emphasizes a cross-sector collaborative structure that recognizes the need for authority and responsibility in time of emergency within a framework that works across and within levels of government and acknowledges the important role of nongovernmental partners.

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Appendix 1: District 11 Strategic Plan Goals

GOAL 1: Implementation of National Incident Management System (NIMS) throughout District 11.

GOAL 2: Planning: Implementation of a continuing, District-wide planning process incorporating the principles of NIMS and the National "Response Plan (NRP) which integrates public and private-sector leaders, organizations, and citizens throughout District 11.

GOAL 3: Information Sharing: Facilitate all-hazards prevention, response and recovery by enhancing the abilities of public-and private-sector organization to gather, analyze, and share information.

GOAL 4: Training and Exercises: Ensure that District 11 training and exercises provide responders in District 11 with capabilities needed for effective prevention, response, and recovery to all-hazards events.

GOAL 5: Communications Interoperability: An interoperable communication system providing instant and disruption-resistant communications capabilities for all public safety and first responder agencies.

GOAL 6: Identification and Protection of Critical Infrastructure: Identify and prioritize critical infrastructure, key assets, and high-population density venues in order to develop proven and effective protection strategies.

GOAL 7: Enhance Response and Recovery Capabilities: Ensure that District 11 has the capacity to equip, train, and effectively manage first responder resources and subsequent recovery during all-hazards events.

GOAL 8: Citizen Participation: Coordinate the development of public education and outreach, training, and volunteer service opportunities to encourage every citizen to participate in homeland security.

GOAL 9: Continuity of Government and Essential Operations: Coordinate development of continuity of government plans by District 11 jurisdictions ensuring 1) command and control of response and recovery operations, and 2) facilitating the restoration of critical and essential services.