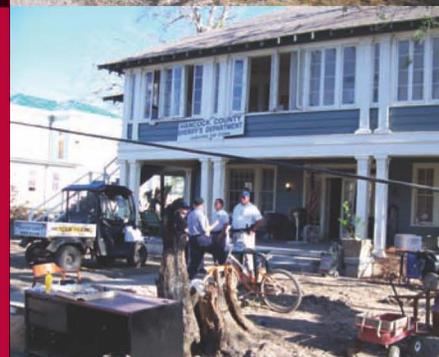


Law Enforcement Lessons Learned From Hurricane Katrina

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By Michael R. Smith, Ph.D.
and Jeff Rojek, Ph.D.





- Most law enforcement agencies in the Gulf Coast region did not have comprehensive disaster plans and had not adequately practiced disaster response.
- Major disasters require pre-planned lines of command and control to coordinate the response of multiple public safety agencies, including those from out of state.
- States without a strong mutual aid system should consider adopting mutual aid legislation that designates a state-level coordinating agency and requires a current inventory of resources and personnel available for disaster response.
- State and local law enforcement agencies must be familiar with the EMAC system for requesting out-of-state assistance and should have a streamlined process in place for making EMAC requests.
- Redundant and interoperable communications systems are vital. These capacities can be developed at the state and local levels with existing technologies.
- Generators, batteries, chainsaws, extra radios, and a five-day supply of food and water for law enforcement personnel should be stockpiled as part of a comprehensive disaster plan.
- Providing medical and psychological care for first responders is an important, but often overlooked, component of disaster planning.
- Search and rescue, points of distribution (POD) security, looting, and traffic control are expected law enforcement priorities immediately following a disaster. Longer-term impacts include increases in domestic and interpersonal violence and substance abuse.

Law Enforcement Lessons Learned From Hurricane Katrina

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Hurricane Katrina was the costliest natural disaster ever to strike the United States. Risk management experts estimate that the storm resulted in \$40-60 billion in insured losses (Risk Management Solutions, 2005), while actual losses likely will exceed \$150 billion. In terms of human costs, the effects of Katrina will be felt for decades. Permanent population shifts and large-scale changes in land use practices are just some of the far-reaching consequences of this killer storm.

Katrina evolved from a tropical depression southeast of Nassau into a Category 1 hurricane off the coast of Fort Lauderdale on August 25, 2005. After crossing the southwest tip of the Florida peninsula with winds just above hurricane strength, Katrina moved into the Gulf of Mexico on a southwestward track. Following a weakening ridge over Texas, Katrina exploded over the warm gulf waters into a Category 5 hurricane with sustained winds over 175 mph and minimum barometric pressure of 902 mb, which was the fourth lowest central pressure on record for an Atlantic hurricane (NOAA, 2005).

On Monday, August 29, at 6:10 a.m., Katrina again made landfall in Plaquemines Parish, Louisiana. At the time of its second landfall, Katrina had wind speeds of 140 mph and was one of the largest storms ever to hit the United States. Its track across the Louisiana peninsula and northward over the border between Mississippi and Louisiana was eerily similar to that of Hurricane Camille in 1969. In fact, Camille was mistakenly viewed by many area residents and government officials as the benchmark for planning for Katrina. However, Katrina's impact on coastal Louisiana and Mississippi was unprecedented and far exceeded the damage caused by Hurricane Camille. The storm surge, in particular, was significantly higher in many places and affected a much larger coastal area than Camille's. It was this devastating surge of water that obliterated entire communities in both states and ultimately resulted in the failure of levies in New Orleans and the flooding of more than 80 percent of the city (NOAA, 2005).

“Lessons from Katrina are important in preparing for future hurricanes and natural disasters; and possible terrorist strikes, especially those involving weapons of mass destruction.”



Temporary Headquarters of Hancock County Sheriff Department

Along the coasts of Mississippi and southeastern Louisiana, the devastation wrought by Katrina severely impacted people and infrastructure, including key public safety agencies at the state and local levels. The disruption was so severe that in some cases, entire law enforcement agencies ceased to function as viable public safety entities for days after the storm.

Although the challenges faced by the New Orleans Police Department received the lion's share of the media's attention, smaller agencies in Louisiana and Mississippi were left in even worse shape. In some cases, these agencies lost their buildings, communications equipment, and their entire fleets of vehicles. After the storm passed, they were left to respond to the unprecedented disaster of Katrina with virtually nothing.

The damage caused by Hurricane Katrina and the attempts by state and local law enforcement agencies in the area to cope with its aftermath offer a unique opportunity for other agencies to learn from the Katrina experience. The law enforcement lessons that can be taken from Katrina are important not only in preparing for future hurricanes but also in dealing with other natural disasters and possible terrorist strikes, especially those involving weapons of mass destruction.

In an effort to document and learn from one of the worst storms in U.S. history, the University of South Carolina provided almost \$400,000 in University funds to 18 teams of researchers who submitted proposals to study a variety of social, environmental, and ecological impacts of Hurricane Katrina. Among these research teams were two professors from USC's Department of Criminology and Criminal Justice. Both former police officers, these criminal justice researchers traveled to Mississippi and Louisiana in late September 2005 (approximately one month after the hurricane) to interview law enforcement officials along the Gulf Coast about their experiences in managing the extraordinary public safety challenges brought about by the storm. They returned to the region six months later to evaluate the recovery efforts of area law enforcement agencies.

This monograph presents the results from their interviews with more than 40 public safety officials in many of the coastal areas most affected by Hurricane Katrina and with Florida officers who provided critical assistance to the region after the storm. Through an introductory letter provided by Chief Robert Stewart of the South Carolina Law Enforcement Division and the cooperation of several key law enforcement officials in the region, Dr. Michael R. Smith and Dr. Jeffrey Rojek were able to interview state and local law enforcement executives, homeland security personnel, public officials, and line-level officers in coastal Mississippi, New Orleans, and along the north shore of Lake Pontchartrain.

In order to encourage full, open, and truthful responses, Dr. Smith and Dr. Rojek guaranteed anonymity to those with whom they spoke. Respondents are identified only by their ranks (or other general criteria) and the geographic area in which they work. The lessons to be learned from these discussions, though, reflect critical self-assessments offered by law enforcement officials who were largely unprepared for Hurricane Katrina.

Pre-Disaster Planning

Many of the law enforcement agencies in Mississippi and Louisiana did not have written hurricane plans. Officers in these agencies had not practiced or trained for disasters and were unsure what to do after the storm hit and communications were lost. Because of this lack of disaster planning, individual officers or those in small groups were forced to improvise ad hoc responses to the public safety problems brought about by the storm. Although the efforts of most officers were selfless or even heroic, they undoubtedly would have been more effective if they had been coordinated through an agency-wide or even regional disaster response plan.

Efforts have been underway for several years at the federal level to establish a national, unified incident command system. However, Katrina showed that state and local law enforcement officials must take greater responsibility for disaster planning at the local level. Agencies should plan and practice for the complete evacuation of their cities. In the New Orleans metropolitan area, a regional evacuation plan was activated that reversed the traffic flow on key interstate highways and allowed egress across all lanes of travel. Although not widely reported, this effort, which had been practiced six months before Katrina struck, was successful in facilitating the evacuation of hundreds of thousands of area residents.

Far more planning and training of this type should be undertaken by state and local public safety agencies. Such disaster planning should anticipate the total loss of communications, as occurred in many places after Katrina, and should identify clear lines of command and control, rallying points, and priority tasks for local emergency responders. In addition, realistic provisions should be made for safeguarding patrol cars and other critical equipment and for accessing fuel, food, water, and shelter for emergency personnel.

The assessment of every law enforcement official interviewed for this project was that local agencies were unprepared for the “worst case scenario” that Katrina represented. In many agencies, no disaster planning had taken place before the storm at all. In the hours before the storm hit, and as agencies grasped the magnitude of it, they scrambled to piece together a plan. Most of these last ditch efforts were based on memories of Hurricane Camille and were inadequate in the face of a much more destructive storm.

Experience teaches that the best disaster plans will be stressed and parts may break down in the chaos of a real-world crisis. Katrina clearly demonstrated, however, that the failure by local law enforcement agencies to imagine and plan for a major hurricane exacerbated the public safety impacts of the storm and severely hampered their ability to provide much-needed public services. Above all, Katrina showed that pre-disaster planning and regular training are necessary at all levels of government, including local law enforcement.

Command and Control

Coordinating the response of many different law enforcement agencies in the wake of a disaster is critical. In some areas affected by Katrina, local officials had previously established a unified command and control structure that was to be activated in the event of a disaster. For example, the St. Tammany Parish (LA) Office of Emergency Preparedness utilized an incident command system that was led by the parish president from an incident command post. The command post was staffed by parish emergency management personnel and representatives from the various parish municipalities. The system had been created before Katrina and practice drills had been conducted as recently as several months before the storm. The command post served as a clearinghouse for requests for help from towns and municipalities and for coordinating the assistance efforts of law enforcement personnel from outside of the parish. By most accounts, this system worked pretty well, although widespread communications outages and fuel shortages hampered its ability to function optimally. Nonetheless, it was far better than having no pre-existing unified command and control system at all, which was the case in many other areas of Mississippi and Louisiana.

In Mississippi, state-level law enforcement commanders, as well as some local law enforcement officials, were unaware that a 600-person response team from the Florida Department of Law Enforcement (FDLE) had been operating for two days along the Gulf Coast. Within 24 hours of Katrina’s landfall, the FDLE team arrived in Harrison County under an EMAC (Emergency Management Assistance Compact) approved by FEMA and began providing vital public safety support when state and local agencies were in desperate need of help in coordinating their response. Recognizing their limitations in dealing with the disaster, state and local law enforcement officials ceded command and control of law enforcement operations to the FDLE team for several weeks. The Mississippi officials interviewed

all agreed that the equipment, personnel, and command and control expertise that FDLE brought with them filled a critical void in the devastated public safety infrastructure along the Mississippi coast.

The fragmented nature of American law enforcement poses difficult challenges to command and control in the wake of a disaster. Fortunately, in Mississippi, law enforcement officials mostly laid aside their egos and allowed an outside agency to work with them to coordinate their efforts. All agreed that a unified command and control system that had been planned and practiced in advance would have been far more preferable. Until a viable unified command system emerges at the national level, state and local law enforcement officials must take it upon themselves to develop effective command and control modalities on a regional basis following a disaster.

Statewide Mutual Aid Systems

The law enforcement agencies along the coasts of Louisiana and Mississippi were in serious need of assistance as the storm passed. They had to address increasing demands for service, while wrestling with a reduced operating capacity due to destroyed equipment and facilities. State-level police, highway patrol, and investigative agencies in both states stepped in to provide personnel and equipment, but this response alone provided only a modest increase in the resources needed to address the hurricane’s impact. Furthermore, there was no previously established formal agreement as to how these resources would be deployed and decision-making authority shared, which resulted in conflicts between agencies and a lack of coordination in the initial response effort.

One approach for addressing these resource and coordination problems is a formal statewide mutual aid system. Florida, for example, has enacted detailed legislation for such a statewide system (Florida Stat. Ann. § 23.12 et. seq., 2006). A key component of the statute is the identification of planning and coordination authority for emergency response, which in this case rests with the Florida Department of Law Enforcement (FDLE). The statute also addresses the powers and privileges of law enforcement officers operating outside their normal jurisdictions. Mississippi law enforcement officials acknowledged that such a formal system would have been much more effective in providing a coordinated response to Katrina than the informal agreements they had in place. As it was, the informal agreements that existed among some agencies in Mississippi broke down as Hurricane Katrina approached the coastline.

Another important provision in the Florida statute is the responsibility of the FDLE director to maintain an inventory of all local and state law enforcement resources, along with those possessed by the Florida National Guard. This inventory includes the number of personnel an agency can dedicate to a crisis, the special skills of these personnel, and the equipment the agencies can offer. Such equipment and special skills can include field kitchens, mobile auto service, search and rescue teams, and horse mounted patrol, to name a few.



Destroyed Pass Christian Police Headquarters

Under the Florida statute, this resource inventory is then incorporated into a multi-layered mutual aid response system. The Florida Mutual Aid Plan divides the state's law enforcement agencies into seven regions. When an emergency occurs, whether the result of natural or man-made causes, the initial response rests with the impacted local jurisdiction. If the emergency overwhelms the capabilities of this agency, however, local law enforcement officials then contact their FDLE regional director who utilizes the inventory list of agencies in the region to deploy needed resources. When the region has depleted its resources or lacks a needed special skill or piece of equipment, it then calls upon the statewide coordinator to draw resources from other regions. It was this multi-layered strategy that allowed FDLE to quickly draw on resources from different Florida regions to form the 600-officer contingent that aided Mississippi coastal agencies.

It is important to recognize, however, that simply creating such a formalized mutual aid system does not guarantee an effective response. FDLE officials commented that the system's success also requires the development of interpersonal relations and trust between the state-level coordinating agency and local departments, as well as between local departments themselves. These informal organizational elements are needed for agency leaders to feel comfortable in asking for assistance or committing resources to aid another agency or in sharing operational control over joint response efforts. These effective interpersonal relations, however, require time to develop. As one FDLE official aptly stated, "You can't build friendship and trust at the point of crisis." One way to foster this informal connection is to hold regular regional and statewide training exercises. These events allow the leaders and personnel from different agencies to observe the capabilities of others and provide opportunities to eliminate any barriers to effective partnerships before a crisis actually occurs.

Requests for Outside Assistance

Requests for and coordination of outside assistance are among the most critical issues that must be addressed in establishing regional command and control systems. After Katrina, thousands of law enforcement officers from across the country lived and worked in the affected areas under EMAC agreements underwritten by FEMA. Unfortunately, the EMAC system was poorly understood by many officials in Mississippi and Louisiana, and systems for requesting and distributing outside law enforcement resources were lacking. As a result, overwhelmed law enforcement agencies sometimes did not receive needed assistance in a timely manner. Likewise, agencies from other states that sent personnel to the Gulf Coast without an approved EMAC agreement placed their officers in legal jeopardy and later struggled to get reimbursed from FEMA.

Briefly, EMAC was established in 1996 as a federal legislative framework for coordinating requests for mutual aid following disasters. It is administered by the National Emergency Management Association. Under EMAC, states have the ability to request assistance from other states and have the associated costs reimbursed by FEMA. Officers operating under an approved EMAC possess the necessary legal authority to act in a law enforcement capacity and are covered by normal workers compensation and civil liability rules.

Agencies planning for a possible disaster should be familiar with EMAC and with their state's EMAC enabling legislation. They also should have a clear and streamlined process for making EMAC requests in the event of a disaster and command and control systems in place for managing officers from outside agencies when they arrive. Further information about EMAC can be obtained from the EMAC website at www.emacweb.org.

Communications

The inability of Gulf Coast law enforcement agencies to communicate by radio, cell phone, or even landline telephone was frequently cited by law enforcement officials as their most critical problem following the storm. Most agencies along the coast lost fixed radio transmission equipment due to wind or flood. Many small agencies had no backup equipment. In the immediate aftermath of the hurricane, officers in most agencies had only limited car-to-car communications. Once communications systems began to be restored, agencies could talk to their own personnel but could not talk to other agencies in their area (due to incompatible radio systems) or to the myriad of officers from other states who were flooding in to provide assistance.

After the storm had passed and officers began emerging from shelter to go to work, many found that they had no way to locate fellow officers. Central transmission systems, repeaters, and cell phones were inoperative. Many officers literally were on their own in the midst of almost unimaginable destruction. Naturally, their responses were uncoordinated and ineffective in a strategic sense. More than a month after the storm, public safety communications in many areas remained severely disrupted.

Katrina underscored the crucial need for redundant communications systems and interoperability during and after a disaster. Each time a disaster strikes, communications failures emerge as a central problem for public safety agencies. In 1998, long before the events of September 11, 2001, the National Institute of Justice created AGILE (Advanced Generation of Interoperability for Law Enforcement). The AGILE program was designed to coordinate interoperability projects within the Department of Justice and among federal, state, and local law enforcement agencies (Smith & Tolman, 2000).

By 2001, some progress had been made toward interoperability, but communications failures were a central finding of the 9/11 Commission in its report on the terrorist attacks on New York and Washington, D.C.

Recently, the 9/11 Commission, as part of its public discourse project, graded the nation's homeland security preparedness and implementation of the 9/11 report recommendations. First on the list of recommendations to receive a grade was the following: "Provide adequate radio spectrum for first responders." The grade given by the commissioners on the implementation of this recommendation was an F (Final Report on 9/11 Commission Recommendations, 2005).

At some point, Congress might mandate a unified, interoperability standard for first responders. However, law enforcement agencies that wish to prepare for a disaster in their communities should move toward communications redundancy and interoperability now. There is no greater need in the event of a disaster than the ability of public safety agencies to communicate with each other and with their own personnel.

Following Katrina, Gulf Coast law enforcement agencies that had mobile communications vans pressed those vehicles into use. These vehicles allowed for limited communications while repeaters, transmitters, and antennas were repaired. In many cases, a mobile communication van provided the only central communications capability within an agency for weeks. Law enforcement agencies from across the country sent their mobile command posts to the area to provide communications support and to facilitate communications with their own officers working in the region. In short, these redundant systems were vital to maintaining rudimentary radio communications while the permanent infrastructure was undergoing repairs.

Agencies that do not have a mobile communications van should consider purchasing one or partnering with another agency to obtain such equipment. Spare transmitters, antennas, repeaters, satellite telephones, and generators are also a wise investment in preparing for a disaster. Locating spare communications equipment or a mobile command post in a well-protected area is paramount. Many Gulf Coast law enforcement agencies lost their communications facilities and most of their patrol cars to floods. Law enforcement planners should imagine the unimaginable and plan accordingly.

In addition to developing communications redundancy, the Katrina experience suggests that state and local law enforcement agencies should begin addressing the issue of interoper-

ability on their own, without waiting for a federal mandate that still may be years away. Communications modules currently exist that allow for the interconnection of dissimilar radio systems. In fact, the Office of Domestic Preparedness (ODP) has published a handbook on the most widely used of these systems—Raytheon's ACU-1000 (Office of Domestic Preparedness, 2002). This system allows radio and telephone (landline and cell) signals to interface through a Gateway Switch, effectively allowing an agency with one type of radio system to talk to an agency with a different type of radio system.

ODP has funded a pilot program to place approximately 50 ACU-1000 units in 10 jurisdictions around the country. When Katrina struck, though, no state or local law enforcement agency in Mississippi was equipped with an ACU-1000 or other communications gateway system. Fortunately, the FDLE team that responded to the Mississippi coast brought its gateway system with it. The system proved invaluable in permitting officers from the Mississippi coast to communicate with FDLE and with EMAC officers from other states.

Gateway communications systems are expensive and beyond the budgetary reach of many local agencies. Thus, partnerships in the purchase of a gateway system may be necessary. As another alternative, the Department of Homeland Security's CEDAP (Commercial Equipment Direct Assistance Program) program provides direct technology transfers to agencies that qualify, including transfers of gateway communications systems. Information about CEDAP can be found on the Responder Knowledge Base website at www.rkb.mipt.org.

Public safety was significantly compromised in the aftermath of Katrina because law enforcement agencies were unable to communicate effectively. Thus, state and local law enforcement agencies must respond with urgency to the need for redundant, interoperable communications systems in the event of a disaster.

Equipment & Supplies

Many of the law enforcement agencies impacted by Katrina had insufficient food, water, fuel, and equipment on hand to deal with the aftermath of the storm. Key equipment shortages included radios, batteries, generators, tires, and chainsaws. After the storm passed, officers immediately found themselves confronted with roadways made impassable by downed trees. In places, large trees were stacked on top of one another along miles of interstate highways and secondary roads. A one-and-a-half-hour trip from Hattiesburg, Mississippi, to the coast took Mississippi Highway Patrol officials nine hours on the afternoon after Katrina struck. Officers across Mississippi and Louisiana were stuck in their stationhouse parking lots, driveways, or neighborhoods because of the sheer volume of trees down on the roadways. Officers needed chainsaws to cut paths for their patrol cars, but, unfortunately, most did not have them. Days after the storm, entire neighborhoods remained inaccessible because of trees and other debris on the roads. Agencies planning for storms, earthquakes, or other natural disasters



Gulfport, Mississippi

should consider chainsaws to be indispensable items for patrol officers.

Once the roadways were partially cleared and officers got mobile again in their vehicles, fuel became a critical commodity that very quickly began to run short. Power was out across almost all of southern Mississippi and southeastern Louisiana. As a result, fuel pumps at commercial gas stations and municipal facilities would not function. Many facilities did not have backup generators, or the generators themselves were flooded. Patrol cars began to run out of gas, leaving officers stranded. Even agencies that could pump fuel ran short within a few days. In the first week after Katrina, state officials in Mississippi and Louisiana issued orders to highway patrol and state police officers to commandeer fuel trucks passing through their states. Very few law enforcement agencies had sufficient fuel supplies on hand to operate their fleets normally. Thus, the storm pointed to a critical weakness in the public safety response to the disaster – lack of fuel for emergency vehicles.

In future disasters, law enforcement agencies must plan for fuel shortages to last significantly longer than the two- or three-day supply of gasoline that many keep on hand. In addition, they should plan for widespread power outages that require generators to run fuel pumps, communications equipment, and other critical infrastructure.

If the fuel and electricity shortages were not problems enough, law enforcement officers, like much of the civilian population, quickly ran out of food and water. Cities like New Orleans and Slidell, Louisiana, were flooded and cut off from outside assistance. Within a couple of days, officers in both places began scavenging food and water to sustain themselves and citizens who came to police facilities for help. Slidell Police planned better than most. They had three days worth of food and water on hand for their officers. The first relief trucks did not arrive in Slidell, though, until five days after the storm. In the meantime, police officials scavenged food from stores and

restaurants and set up an improvised field kitchen to feed police officers, firefighters, and citizens who had not evacuated.

Katrina showed how a major disaster can disrupt power and transportation and lead to critical shortages of food and water. Law enforcement agencies can no longer take these basic necessities for granted when planning for a disaster. Disaster planning by law enforcement agencies should include stockpiling food, water, and basic medical supplies at the local level, as well as providing the means for distributing those supplies to officers working in the field. Some of the EMAC agencies that responded to the Gulf Coast, including the FDLE and the Escambia County Florida Sheriff's Department, brought their own mobile field kitchens. Agencies such as these have developed such capacities after weathering hurricanes themselves.

Personnel Needs

In addition to providing for basic necessities like food and water, law enforcement agencies planning for a disaster must be cognizant of the physical and emotional needs of their employees. Almost immediately after Katrina struck, law enforcement officers across the Gulf Coast went to work. Many worked without rest for several days. In most agencies, officers continued to work 12-18 hours per day, seven days per week, for weeks after the storm. Often they worked out of necessity or a sense of duty, but most agencies did not have disaster plans in place that provided for adequate rest for officers. Predictably, injuries, illness, and psychological stress took their tolls.

In Mississippi, a team of critical-incident response officers from Tennessee eventually were deployed to assist local and EMAC officers in coping with the stress of the disaster and all that they had seen and done. A high-ranking state law enforcement official from Mississippi stated that providing for early stress counseling should be a component of any future law enforcement disaster plan.

Again, the Florida EMAC teams were better equipped in this arena than most. The FDLE team arrived with its own paramedics and nurses. Unlike the civilian population, which can evacuate an area when warnings are given, law enforcement officers must stay and continue to provide much-needed services in the wake of a disaster. As a result, agencies should work to ensure that their physical and emotional needs are met through appropriate scheduling, rest periods and days off, and medical and psychological treatment.

Law Enforcement Priorities

Hurricane Katrina provides an excellent case study of the public safety needs that arise after a major disaster. Every law enforcement official interviewed for this project sketched a similar picture of what occurred after the storm and how their officers responded to the public safety needs that it created. First among the law enforcement responses to Katrina was search and rescue. Before the storm had even left the area, law enforcement officers across Mississippi and Louisiana began venturing

outside to check on the welfare of citizens left in their towns and cities. Telephone service was down, so law enforcement agencies had no means of receiving calls for service. Instead, officers slowly made their way into neighborhoods and into houses to check on those who might have been left behind. Many officers told stories of stopping and listening periodically for cries for help. When a person was located, officers worked to extract the individual and transport him or her to a place of safety. Oftentimes, that place was a police station, hospital, or even a piece of high ground that had not been flooded.

As search and rescue operations continued, the next priority in many areas was the control of looting. Looting was widespread not only in New Orleans, but across the coastal areas of Louisiana and Mississippi. Officers chased many looters away and arrested many more. As relief trucks began to arrive and points of distribution (PODs) were set up, officers were tasked with providing security at the PODs. People were desperate and would have overrun the PODs without the security provided by law enforcement officers and, in some cases, National Guard troops.

Most agencies had no plans for POD security and had no experience setting up or securing POD sites. At first, they set up too many sites and provided too few officers at each site. Later, they consolidated PODs into three or five sites per jurisdiction, with as many as 15 officers at each POD for security.

As food, water, and other relief supplies arrived, officers also began taking supplies to people in outlying areas and to those who were otherwise unable to get to a POD on their own. Officers often heard about these people in need through word of mouth. As the law enforcement tasks mounted, agencies quickly ran short of personnel.

In part because streamlined EMAC systems were not in place in many jurisdictions, assistance from outside agencies was slow to arrive. When officers from other states did arrive, the inability to communicate with them by radio or cell phone was a constant problem and a limitation to their effectiveness. Many were assigned POD security duty because it did not require mobility or much in the way of communications. Later, as hordes of relief workers and cleanup crews choked the remaining undamaged roads, EMAC officers assumed traffic control duties at major intersections. Ironically, parts of rural Louisiana and Mississippi now have traffic problems that rival the nation's biggest cities.

A month after the storm, agencies were just beginning to return to normal shift rotations. Hundreds of EMAC officers remained in the area and continued to assist with a law enforcement landscape that had been transformed by the enormous destruction of Hurricane Katrina.

Changes in Service Demands

The hurricane also provides the opportunity to examine changes in service demands that occur after the initial crisis passes and rebuilding starts. Citizens have slowly returned to their communities in coastal Louisiana and Mississippi and

have been joined by a large number of contractors and laborers engaging in reconstruction efforts. This repopulation has stressed the storm-damaged transportation infrastructure of these communities, which has led to tremendous traffic congestion problems in the six months since the storm has passed. As a byproduct, the number of traffic accidents law enforcement agencies are responding to have increased two- and three-fold in some jurisdictions.

As residents have returned, they are wrestling with the stress of their personal losses, which appears to have led to an increase in interpersonal conflicts and the use of alcohol and controlled substances for coping. A number of agencies reported an increase in calls for services over the past six months for domestic violence and neighborhood conflicts, as well as increased arrests for drug possession and driving under the influence. Furthermore, agencies reported an increase in social service-related calls, such as providing transportation for people leaving hospitals (many taxi companies have gone out of business) or counseling children whose parents are having a hard time controlling them.

In addition, agencies reported that their activities have been impacted by temporary communities comprised of FEMA-purchased trailers. Many of these temporary trailer parks are a patchwork of individuals and families from diverse communities who have developed little trust among one another and sometimes have differing values. These differences, along with the personal stress of coping with the hurricane's aftermath, have resulted in frequent conflicts and minor disorder incidents that disproportionately prompt calls for service from these communities. Slidell, Louisiana, recognized this potential problem and adopted a city regulation that required all trailers to be placed on an individual's or family's personal property. The intent of this regulation was to get residents quickly back into their neighborhoods in order to revitalize their sense of community. As a result of this strategy, the Slidell Police Department has been able to avoid the calls for service hot spots of the trailer parks, which has freed up officer time to address other community problems.

The repopulation of communities impacted by Hurricane Katrina also has created cultural and demographic shifts that have challenged law enforcement agencies. Specifically, there has been an increase in Spanish-speaking individuals who have sought work as contractors and laborers in the rebuilding effort. Given that this group has not historically been a sizable population in these communities, law enforcement agencies have never made a concerted effort to hire Spanish-speaking officers. As a result, officers are facing communication problems in their increasing contacts with these workers and their families. Slidell has found a temporary solution by developing a cadre of bilingual citizen volunteers in the community who can serve as translators. However, if these demographic shifts persist over time, agencies will have to consider a more permanent solution that may require hiring Spanish-speaking officers or providing language training to existing officers.

Reconstituting Agency Capacity

The storm had a devastating impact on the facilities and equipment of many coastal law enforcement agencies. Some agencies had upwards of 50 percent of their patrol fleets destroyed by the storm surge. A number of agencies also had their stations flooded by the surge, resulting in destroyed computers and other equipment. Unfortunately, six months after the storm, most agencies that had flooded stations were still working out of temporary trailers and did not foresee a change in this situation for at least a year. Furthermore, they were still patrolling with end-of-service patrol cars donated by out-of-state agencies in the weeks after the storm and were waiting for FEMA funds to purchase new vehicles. The leaders of these agencies noted that all they could do was maintain detailed records of lost or damaged equipment and have patience for the long rebuilding effort.

It is also important to note that some agencies had evidence and records destroyed by flooding. The loss of these sensitive items, particularly evidence, can have irrevocable consequences once prosecution efforts start back up. Thus, as agencies engage in the slow rebuilding process, they must consider placing these items in more protected areas. One of the agencies impacted by the storm is even in the process of creating a system that would allow for records and evidence to be quickly moved during similar emergencies. This effort involves creating storage systems that allow for critical items to be quickly loaded onto a truck and moved to a protected location as a storm approaches.

Concluding Lessons

Law enforcement officials from across the Gulf Coast region candidly admit that they were unprepared for the disaster of Katrina. Their struggle in the wake of the storm to carry out their mission of service is an extraordinary tale of dedication and resilience. Their struggle, and the lessons to be learned from it, should serve as a wake-up call to the nation's state

and local law enforcement agencies. Homeland security and terrorism experts are united in their belief that another terrorist attack on U.S. soil is inevitable. In the meantime, the forces of nature will continue to bring storms, earthquakes, and floods to communities large and small.

Katrina demonstrated that in the days following a major disaster, local jurisdictions must shoulder more of the burden of responding to public safety needs. To truly be prepared, state and local law enforcement agencies, like many of the Florida agencies that assisted after Katrina, must develop their own capacities for disaster response. They must plan for the worst-case scenario, train their personnel accordingly, and equip themselves appropriately. Just as importantly, they must recognize danger as it approaches and have the courage to take politically unpopular positions in defending their public safety imperative.

Complacency played a large role in the lack of preparedness by law enforcement agencies in the Gulf Coast region. Many officials simply did not believe that the storm would be as destructive as it was. Others assumed that it would be no worse than Hurricane Camille. A few, however, recognized the danger. One police chief moved all of his patrol cars to the north side of Interstate 10 before the storm arrived. He was criticized at the time for being overly cautious, but his fleet was one of the few that survived the storm surge intact.

Remaining vigilant for months or even years at a time is difficult when communities and political leaders make competing demands on law enforcement priorities. Katrina, though, provides an ideal backdrop for beginning discussions on how to better prepare at the state and local levels for the next disaster.

References

Florida Stat. Ann. § 23.12 et. seq. (2006). Florida Mutual Aid Act.

Final Report on 9/11 Commission Recommendations. (2005). Retrieved on December 16, 2005, from <http://www.9-11pdp.org>.

National Oceanic and Atmospheric Administration. (2005). Hurricane Katrina: A Climatological Perspective (Preliminary Report). Washington, D.C.: Author.

Office of Domestic Preparedness. (2002). Developing Multi-Agency Interoperability Communication Systems: User's Handbook (ACU-1000 Modular Interface/Interconnect System and TRP-1000 Transportable Radio Interconnect System). Washington, D.C.: Author.

Risk Management Solutions. (2005). Hurricane Katrina: Profile of a Super Cat. Retrieved December 16, 2005, from http://www.rms.com/Publications/KatrinaReport_LessonsandImplications.pdf.

Smith, B. and Tolman, T. (April 2000). Can We Talk? Public Safety and the Interoperability Challenge. National Institute of Justice Journal, 17-21.

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