Challenge Your Understanding

The following questions are designed to challenge your understanding of the material presented in this chapter. Some questions may require additional research outside this book in order to provide a complete answer.

- 1. List three different attacks on U.S. service members overseas in the years before the attack on the USS Cole.
- 2. Identify three differences and three similarities between the attacks you listed and the attack on the USS Cole.
- 3. Compared to the other three attacks, would you have thought al Qaeda a major threat in December 2000? Explain.
- 4. Describe the failed efforts by the CIA and DoD to capture or kill Osama bin Laden before 9/11.
- 5. Explain why the FBI failed to arrest known al Qaeda operatives in the U.S. as they trained for the 9/11 attacks.
- 6. Explain how FAA regulations abetted the 9/11 hijackers even after they were flagged by CAPPS.
- 7. Describe the U.S. air defense posture on 9/11.
- 8. Explain what the 9/11 Commission meant by a "failure of imagination".
- 9. Even if the CIA and FBI had coordinated better, how might they have still failed to prevent 9/11? Explain.
- 10. Discuss the possible repercussions if NORAD had shot down the hijacked aircraft before they crashed into the South Tower and Pentagon on 9/11.

Failure of Initiative

Learning Outcomes

Careful study of this chapter will help a student do the following:

- Describe events that contributed to the deaths of 1,464 New Orleans residents.
- Discuss breakdowns between City, State, and Federal officials that frustrated emergency response.
- Assess the consequences and difficulties of evacuating a major U.S. city.

"If 9/11 was a failure of imagination, then Katrina was a failure of initiative. It was a failure of leadership."

- 2005 House Committee Report

Introduction

No matter how secure the country is made from malicious acts, it will remain susceptible to acts of nature. When a natural disaster overwhelms local emergency management, an intricate choreography is required to engage State and Federal support, and efficiently coordinate the combined response to maximize lifesaving efforts within the first critical 72 hours of a disaster. The deaths and breakdown of civil order in New Orleans as a result of Hurricane Katrina are a cautionary tale of what happens when this choreography breaks down, and emergency aid is neither swift nor efficient because of a leadership failure of initiative.

First responders local fire, police, and emergency medical personnel who respond to all manner of incidents such as earthquakes, storms, and floods — have the lead responsibility for carrying out emergency management efforts. Their role is to prevent, protect against, respond to, and assist in the recovery from emergencies, including

Local Disaster Response

First responders — local fire, police, and emergency medical personnel who respond to all manner of incidents such as earthquakes, storms, and floods — have the lead responsibility for carrying out emergency management efforts. Their role is to prevent, protect against, respond to, and assist in the recovery from emergencies, including natural disasters. Typically, first responders are trained and equipped to arrive first at the scene of an incident and take action immediately, including entering the scene, setting up a command center, evacuating those at the scene, tending to the injured, redirecting traffic, and removing debris. [1, p. 45]

Local governments — cities, towns, counties or parishes — and the officials who lead them are responsible for developing the emergency operations and response plans by which their communities respond to disasters and other emergencies, including terrorist attacks. Local emergency management directors are also generally responsible for providing training to prepare for disaster response and seek assistance from their state emergency management agencies when the situation exceeds or exhausts local capabilities. In many states, they may also negotiate and enter into Mutual Aid Agreements (MAAs) with other jurisdictions to share resources when, for example, nearby jurisdictions are unaffected by the emergency and are able to provide some assistance. [1, p. 46]

State Disaster Response

As the state's chief executive, the Governor is responsible for the public safety and welfare of the state's citizens and generally has wide-ranging emergency management responsibilities. Governors are responsible for coordinating state resources to address the full range of actions necessary to prevent, prepare for, and respond to incidents such as natural disasters. [1, p. 46]

Upon their declaration of an emergency or disaster, governors typically assume a variety of emergency powers, including authority to control access to an affected area and provide temporary shelter. Also, in most cases, states generally authorize their governors to order and enforce the evacuation of residents in disaster and emergency situations. [1, p. 46]

Governors also serve as the commanders-in-chief of their state military forces, specifically, the National Guard when in state active duty or Title 32 status. In state active duty — to which governors can call the Guard in response to disasters and other emergencies — National Guard personnel operate under the control of the governor, are paid according to state law, and can perform typical disaster relief tasks, such as search and rescue, debris removal, and law enforcement. Most governors have the authority to implement mutual aid agreements with other states to share resources with one another during disasters or emergencies when, for example, others (particularly nearby states) are unaffected by the emergency and able to provide assistance. Most states request and provide this assistance through the Emergency Management Assistance Compact (EMAC). If all these resources are not fast enough or sufficient, then the Governor may petition the President for support. [1, p. 46]

Federal Disaster Support

When an incident overwhelms, or is likely to overwhelm, state and local resources, the Stafford Act (Title 42 USC Ch. 68) authorizes the President, in response to a request from the Governor of the affected state, to issue two types of declarations—emergency or major disaster. An emergency is "any occasion or instance for which, in the determination of the President, federal assistance is needed to supplement state and local efforts and capabilities to save lives and to protect property and public health and safety, or to lessen or avert the threat of a catastrophe in any part of the United

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States." A major disaster is "any natural catastrophe (including any hurricane, tornado, storm, high water, wind-driven water, tidal wave, tsunami, earthquake, volcanic eruption, landslide, mudslide, snowstorm, or drought), or, regardless of cause, any fire, flood, or explosion, in any part of the United States, which in the determination of the President causes damage of sufficient severity and magnitude to warrant major disaster assistance under this chapter to supplement the efforts and available resources of States, local governments, and disaster relief organizations in alleviating the damage, loss, hardship, or suffering caused thereby." [1, p. 31]

If the President approves an emergency or major disaster declaration, then the Federal Emergency Management Agency (FEMA) will setup a Joint Field Office (JFO) in proximity to the State Emergency **Operations Center** (SEOC), and a FEMA Federal Coordinating Officer (FCO) will begin working with the designated State Coordinating Officer (SCO) to deliver requested federal assistance.

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The federal government typically responds to most natural disasters after the affected states request support. In practice, states may make these requests before disasters strike because of the near certainty that federal assistance will be necessary after such an event (e.g., with hurricanes) or, afterwards, once they have conducted preliminary damage assessments and determined that their response capabilities are overwhelmed. In either case, the resources the federal government provides in any disaster response are intended to supplement state and local government resources devoted to the ongoing disaster relief and recovery effort. This system in use for most disasters — providing federal assistance in response to requests of the states (or local governments via the states) — is often referred to as a "pull" system in that it relies on states to know what they need and to be able to request it from the federal government. [1, pp. 30-31]

In certain instances, however, the federal response may also be considered a "push" system, in which federal assistance is provided and/or moved into the affected area prior to a disaster or without waiting for specific requests from the state or local governments. [1, p. 31] The "push" system can be risky, especially if resulting damages are less than expected and the expended federal resources are not needed by the State. The "push" system has the distinct advantage, though, of reducing delays and expediting delivery of federal aid to the disaster. Much of the criticism leveled at the federal government was that it relied on a "pull" system when it should have initiated a "push" system in response to Hurricane Katrina.

Hurricane Katrina

Hurricane Katrina was the costliest natural disaster, as well as one of the five deadliest hurricanes in the history of the United States. The storm ranks third behind the 1935 Labor Day hurricane and Hurricane Camille in 1969. Overall, at least 1,500 people died in the hurricane and subsequent floods, making it the deadliest United States hurricane since the 1928 Okeechobee hurricane. Total property damage was estimated at \$108 billion. [2]

The tropical depression that became Hurricane Katrina formed over the Bahamas on August 23, 2005. Early the following day, the new depression intensified into Tropical Storm Katrina. The cyclone headed generally westward toward Florida and strengthened into a hurricane only two hours before making landfall between Hallandale Beach and Aventura on Thursday morning, August 25. The storm weakened as it crossed over Florida, but regained hurricane strength shortly after emerging into the Gulf of Mexico on Friday, August 26. The storm strengthened to a Category 5 hurricane over the warm waters of the Gulf of Mexico, but weakened before making its second landfall as a Category 3 hurricane in southeast Louisiana in the early morning hours of Monday, August 29. [2]

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Figure 8-1: Track of Hurricane Katrina [2]

Katrina caused severe destruction along the Gulf coast from central Florida to Texas, much of it due to high winds and flooding. Florida suffered twice, first when the storm crossed over South Florida August 25, and a second time August 29 when Katrina drove ashore in Louisiana, grazing the Florida Panhandle. Twelve deaths were blamed on the storm in South Florida. It also left 1.45 million people without power and caused \$523 million in damages, most of it to crops. Two more deaths were attributed to the storm as it grazed the Florida Panhandle, leaving another 77,000 people without power, and causing an additional \$100 million in damages. Overall, the hurricane killed 14 people and caused \$623 million in damages to Florida. Alabama was also hit by winds and floods as Katrina made landfall. Sustained winds of 67 mph left 600,000

people without power. A 12-foot storm surge caused significant flooding several miles inland along Mobile Bay. The combined winds and high waters washed ships, oil rigs, boats, and fishing piers ashore along Mobile Bay. Four tornadoes were spawned inland. Two deaths were attributed to the storm. Twenty-two Alabama counties were declared disaster areas. In its second landfall, Katrina's powerful right-front quadrant passed over the west and central Mississippi coast, causing a 27-foot storm surge to penetrate 6 miles inland, and up to 12 miles along bays and rivers. Together with the storm surge, the state was battered by heavy winds and torrential rains. The combination proved devastating, destroying 90% of all structures within a half mile of the coastline. The storm destroyed bridges, barges, boats, piers, houses, and cars. Eighty-two counties were declared disaster areas. Some 900,000 people were left without power; 238 people were left dead. Mississippi might have been the center of national attention, except for what happened in New Orleans. [2]

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New Orleans

New Orleans was at particular risk. Though about half the city actually lies above sea level, its average elevation is about six feet below sea level—and it is completely surrounded by water. Over the course of the 20th century, the Army Corps of Engineers had built a system of levees and seawalls to keep the city from flooding. The levees along the Mississippi River were strong and sturdy, but the ones built to hold back Lake Pontchartrain, Lake Borgne and the waterlogged swamps and marshes to the city's east and west were much less reliable. Even before the storm, officials worried that those levees, jerry-built atop sandy, porous, erodible soil, might not withstand a massive storm surge. Neighborhoods that sat below sea level, many of which housed the city's poorest and most vulnerable people, were at great risk of flooding. [3]

The day before Katrina hit, New Orleans Mayor Ray Nagin issued the city's first-ever mandatory evacuation order. [3] Between 80 and 90 percent of the residents of New Orleans were evacuated safely in time before the hurricane struck. Despite this, about 100,000 remained in the city, mainly those who did not have access to personal vehicles. [2] To assist those left behind, Mayor Nagin opened the Superdome as a "shelter of last resort". The stadium was situated on relatively high ground near downtown. It had been used as a shelter during previous storms, including Hurricane Georges in 1998. The Superdome had been estimated to withstand winds up to 200 miles per hour, and water levels of 35 feet. By the evening of August 28, the night before Hurricane Katrina hit, some 20,000 people had taken shelter in the Superdome under the care of 300 Louisiana National Guard. [4]

At 3 a.m. on August 29, Hurricane Katrina made landfall near Buras-Triumph, Louisiana as a strong Category 3 storm with 125 mph winds. It brought a 14-foot storm surge and 8-10 inches of rain. These raised the level of Lake Pontchartrain causing significant flooding along its northeastern shore. Several bridges were destroyed, including the I-10 Twin Span Bridge connecting New Orleans to Slidell. Most of the roads traveling into and out of the city were damaged. The only routes out of the city were the westbound Crescent City Connection and Lake Pontchartrain Causeway, which was restricted to emergency traffic. Power went out. High winds blew out the windows of many high-rise buildings, and peeled back the waterproof membrane of the Superdome. However, by mid-day as the eye of the hurricane passed east of the city, it seemed New Orleans had been spared the worst of the storm. Despite the heavy winds and rain, most buildings appeared to be structurally intact. But then the levees began to break. [4]

Katrina's storm surge overwhelmed the city's levees and drainage canals. The Mississippi River Gulf Outlet breached its levees in 20 places, flooding much of east New Orleans, most of Saint Bernard Parish, and the East Bank of Plaquemines Parish. The federally built levee system protecting metro New Orleans breached in 53 places, including the 17th Street Canal, London Avenue Canal, and the Industrial Canal. By August 31, 2005, 80% of New Orleans was flooded, with some parts under 15 feet of water. [4]

The extensive flooding stranded many residents in their homes. Many chopped their way onto their roofs with hatchets and sledge hammers, which residents had been urged to store in their attics in case of such events. House tops across the city were dotted with survivors. Some were trapped inside their attics, unable to escape. Trapped in their homes, many families awaited rescue, without power, without water, without food. [4]

The first deaths were reported shortly before midnight on August 28, as three nursing home patients died during an evacuation to Baton Rouge. By 11:00 pm on August 29, Mayor Nagin described the loss of life as "significant" with reports of bodies floating on the water throughout the city, though primarily in the eastern portions. The National Guard began setting up temporary morgues in select locations. [4]

After the storm passed, on August 30, as flood waters continued to rise, the media reported rampant arson and looting across the city. Atrocities were reported at the Superdome. Later investigations proved most of the reports greatly exaggerated. Still, there was a breakdown in civil order, spurred, in part, by desertions within the New Orleans Police Department. On August 31, Mayor Nagin imposed a curfew and ordered the NOPD to abandon search and rescue missions in order to restore civil

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order. The same day, Governor Blanco ordered in 6500 National Guard. Relief efforts were disrupted by violence. Charity Hospital was forced to halt patient evacuations after coming under gunfire. On September 2, Governor Blanco requested an additional 40,000 National Guard for assistance in evacuation and security. [4]

The situation was indeed miserable at the Superdome. On August 29, as Katrina passed over New Orleans it ripped two holes into the roof. The scene inside the building was described as chaotic; reports of rampant drug use, fights, rape, and filthy living conditions were widespread. Despite increasingly squalid conditions, the population inside continued to grow as many more arrived hoping to find food, water, and maybe transportation out of town. On August 31, Governor Blanco ordered the Superdome evacuated, and sent in 68 school buses to relocate civilians to the Houston Astrodome. By September 4, the Superdome was completely evacuated. [4]

Final reports indicate that the official death toll, according to the Louisiana Department of Health, was 1,464 people. Investigations following the hurricane decried many of the deaths as "preventable". Furthermore, they determined that the suffering in the days and weeks after the storm was unnecessarily prolonged.

As rescue operations commenced on August 29, rescuers began dropping people off outside the Convention Center. It was meant to be a transit point to shelter. The problem was, no transportation was sent. By the afternoon of the 29th, a crowd of about 1,000 people had begun to gather outside the Convention Center. After being told the facility had no food, water, or services, the crowd nonetheless broke in and took refuge. The next day, a contingent of 250 National Guard engineers arrived and began working from the facility. The engineers were never given orders to control the crowd, nor were they prepared for the task. Still, the number of people at the Convention Center continued to grow over the next three days; some sent there from the Superdome, some dropped off after being rescued from their roof, and some arriving of their own volition. There was nobody in charge; nobody to provide for the evacuees' care and safety. Reports of robberies, murder, and rape began to surface. A large cache of alcohol was stolen. People died, and their bodies left where they passed. Finally, on September 2, a sizable contingent of National Guard arrived to establish order and provide essential provisions. On September 3, buses began arriving and refugees evacuated. By September 4, the Convention Center was completely evacuated. [4]

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Table 8-1: Hurricane Katrina New Orleans Timeline

	Table 8-1: Aurricane Katrina New Orleans Timeline
Date	Description
Wed.	• First alerts of a tropical storm stirring in Caribbean
24 Aug 05	
Fri.	Most residents work a full day and take "wait and see" approach
26 Aug 05	• 5 pm warnings from National Weather Service show Hurricane Katrina turning
	New Orleans potentially within range
Sat.	• Saturday morning most residents learn that Katrina's path is set for New Orleans
27 Aug 05	• Metro-area evacuations begin en masse clogging all outbound arteries of the city for 48 hours
	• St. Tammany, St. Charles, Plaquemines Parishes announce mandatory evacuations
	Orleans and Jefferson Parish both announce voluntary evacuations
	• Governor Blanco sends "State of Emergency" letter to President Bush
	• Louisiana State University scientists issue a projected storm surge map
Sun.	• At 9:30 am Orleans Parish issues first-ever mandatory evacuation
28 Aug 05	• At 10 am Katrina becomes a Category 5 storm with winds of 175 mph
	• At 11:30 am, President Bush vows to help those affected by the storm
	• State puts contra-flow plan into effect on interstates
	• Superdome designated city's "refuge of last resort"
	• Director of the National Hurricane Center warns Times-Picayune of a "worst-case scenario"
	• Tropical storm-force winds close down emergency services in metro area
	• At 9 pm, Times-Picayune building loses power, generators power up
Mon.	• At 3 am, Katrina makes landfall as a Category 3 hurricane
29 Aug 05	Metro-area emergency officials hold status meeting
	• At 6 am, 317,000 households are without power
	 At 7 am, water reported coming over the levee in the 9th Ward
	• At 8:45 am, six to eight-foot flood waters reported in Lower 9th Ward
	• At 9 am, winds rip hole in roof of Superdome
	• At 9 am, eye of the storm passes to the east of New Orleans central business district.
	Windows in high-rise buildings blow out
	• 11 am, National Weather Service reports a breach in the Industrial Canal levee, emptying Lake Pontchartrain into the neighborhoods of Eastern New Orleans, the Lower Ninth Ward in Orleans Parish and all of St. Bernard
	Parish
	• 2 pm, breach in the 17th Street Canal is confirmed; Lakeview, Mid-City, Broodmoor, Gentilly flooded over next 48 hours.
	• 2 pm, flood waters in the Lower Ninth Ward reach 12 feet in some areas
	• Flood waters continue to rise and it becomes apparent that it is a worst-case scenario
Tue.	• 9 am, Times-Picayune employees evacuate building in delivery trucks as water rises a foot an hour
30 Aug 05	• Local media reports that Martial Law is declared in Orleans, Jefferson and Plaquemines Parish
	Looting reports go national presenting
	Flood waters continue to rise throughout city
Wed.	• Flood waters reach an equilibrium as the "bowl" of the city is now even with Lake Ponchartrain
31 Aug 05	• Some neighborhoods under as much as 20 feet of water
	• Hellish scenes reported from those stranded in the Superdome: assaults, rape and suicide reported though later
	most dismissed
	Estimates of 30 days before city can be pumped out
	 Thousands stranded in houses, on roofs

- Thousands stranded in houses, on roofs
- Approximately one million people without power in metro area
- Media reports that thousands are stranded in the New Orleans Convention Center without food or water as a steady stream of people, many from the flooded Central City neighborhood, trickled first toward Lee Circle and then to the Convention Center, hoping to be saved from increasingly desperate straits

Date	Description
Thu.	 Corps of Engineers begins to build dam to stop levee breach at the 17th Street Canal
1 Sep 05	 More than 10,000 people have been rescued in St. Bernard Parish
	• Times-Picayune asks, "Where is the Cavalry?"; No federal help arrived
	 ◆ Governor Blanco demands "no less than 40,000 troops"
	• Mayor Nagin lambasts federal officials in a tirade for their lack of effective response
	• First 5,000 of approximately 23,000 evacuees arrive at Houston Astrodome by bus
	Bush seeks \$10.5 billion storm-relief package
Fri. 2 Sep 05	• 7,000 soldiers move in on the Convention Center; they confront 15,000 angry refugees and a boulevard littered with putrefying corpses
	• Fires break out in various warehouses across the city
	Bush tours area, says what is wrong "we're going to make right"
	 Mayor Nagin predicts electricity to be out in city for three months
	Airport becomes way station for refugees
	 Thousands of refugees still in Superdome, Convention Center and I-10
Sat.	 FEMA says storm overwhelmed agency; outrage grows in Washington
3 Sep 05	 Authorities begin to regain grip on city with military's aid
	 President Bush orders 7,200 additional active duty troops to the region, for a total of 30,000
	Rape, gunfire reported at Convention Center
	• Law enforcement agencies fielded about 1,000 distress 911 calls Saturday
	• St. Bernard rescuers find 31 dead in nursing home
	 Death toll expected to be in thousands, though nothing official yet
	• Last of evacuees taken from Superdome and Convention Center
	• Jefferson Parish President Aaron Broussard breaks down on "Meet the Press" and tells how a colleague's elderly mother died in her home Friday after waiting four days for rescuers that never arrived
	Rescuers continue to pluck residents from hellish waters
Sun.	• Estimated 2,000 people, many of them with serious medical problems, were still housed inside Louis Armstrong
4 Sep 05	International Airport
Mon.	• 16,000 National Guard troops dedicated to search and rescue mission
5 Sep 05	• Jefferson Parish residents allowed home to survey damage
	Agencies begin trying to save stranded pets
	Corps of Engineers shifts work to damning London Avenue Canal
	Mayor Nagin says more than 10,000 could be dead

• Makeshift morgue set up in St. Gabriel, La. to handle 140 bodies per day [6]

Failure Analysis

According to the Senate investigation of Hurricane Katrina, government failure was pervasive in that 1) long-term warnings went unheeded and government officials neglected their duties to prepare for a forewarned catastrophe; 2) government officials took insufficient actions or made poor decisions in the days immediately before and after landfall; 3) systems on which officials relied on to support their response efforts failed, and 4) government officials at all levels failed to provide effective leadership. The results were tragic loss of life and human suffering on a massive scale, and an undermining of confidence in the governments' ability to plan, prepare for, and respond to national catastrophes. [5, p. 2]

Unheeded Warnings

The potentially devastating threat of a catastrophic hurricane to the Gulf region has been known for forty years: New Orleans experienced flooding in some areas of remarkably similar proportions from Hurricane Betsy in 1965, and Hurricane Camille devastated the Gulf Coast in 1969. More recently, numerous experts and governmental officials had been anticipating an increase in violent hurricanes, and

New Orleans' special and growing vulnerability to catastrophic flooding due to changing geological and other conditions was widely described in both technical and popular media. [5, p. 4]

Hurricane Georges hit the Gulf in 1998, spurring the state of Louisiana to ask FEMA for assistance with catastrophic hurricane planning. Little was accomplished for the next six years. Between 2000 and 2003, state authorities, an emergency-preparedness contractor, and FEMA's own regional staff repeatedly advised FEMA headquarters in Washington that planning for evacuation and shelter for the "New Orleans scenario" was incomplete and inadequate, but FEMA failed to approach other federal agencies for help with transportation and shelter or to ensure that the City and State had the matters in hand. [5, p. 4]

Then, in 2004, after a White House aide received a briefing on the catastrophic consequences of a Category 3 hurricane hitting New Orleans, the federal government sponsored a planning exercise, with participation from federal, state, and local officials, based on a scenario whose characteristics foreshadowed most of Katrina's impacts. While this hypothetical "Hurricane Pam" exercise resulted in draft plans beginning in early 2005, they were incomplete when Katrina hit. Nonetheless, some officials took the initiative to use concepts developed in the drafts, with mixed success in the critical aspects of the Katrina response. However, many of its admonitory lessons were either ignored or inadequately applied. [5, p. 4]

During the Pam exercise, officials determined that massive flooding from a catastrophic storm in New Orleans could threaten the lives of 60,000 people and trap hundreds of thousands more, while incapacitating local resources for weeks to months. The Pam exercise gave all levels of government a reminder that the "New Orleans scenario" required more forethought, preparation, and investment than a "typical" storm. Also, it reinforced the importance of coordination both within and among federal, state, and local governments for an effective response. [5, p. 5]

The specific danger that Katrina posed to the Gulf Coast became clear on the afternoon of Friday, August 26, when forecasters at the National Hurricane Center and the National Weather Service saw that the storm was turning west. First in phone calls to Louisiana emergency management officials and then in their 5 p.m. EDT Katrina forecast and accompanying briefings, they alerted both Louisiana and Mississippi that the track of the storm was now expected to shift significantly to the west of its original track to the Florida panhandle. The National Hurricane Center warned that Katrina could be a Category 4 or even a 5 by landfall. By the next morning, Weather Service Officials directly confirmed to the Governor of Louisiana and other state and local officials that New Orleans was squarely at risk. [5, p. 5]

According to the Senate investigation of Hurricane Katrina, government failure was pervasive in that 1) long-term warnings went unheeded; 2) government officials took insufficient actions; 3) systems on which officials relied on to support their response efforts failed, and 4) government officials at all levels failed to provide effective leadership.

Over the weekend, there was a drumbeat of warnings: FEMA held video-teleconferences on both days, where the danger of Katrina and the particular risks to New Orleans were discussed; Max Mayfield of the Hurricane Center called the governors of the affected states, something he had only done once before in his 33 year career; President Bush took the unusual step of declaring in advance an emergency for the states in the impact zone; numerous media reports noted that New Orleans was a "bowl" and could be left submerged by the storm; the Department of Homeland Security's Simulation and Analysis group generated a report stating that the levees protecting New Orleans were at risk of breaching and overtopping; internal FEMA slides stated that the projected impacts of Katrina could be worse than those in the Hurricane Pam exercise. The warnings were as widespread as they were dire. [5, p. 5]

While Katrina's destructive force could not be denied, state and local officials did not marshal enough of the resources at their disposal.

Insufficient Preparation

While the State of Louisiana and the City of New Orleans undertook unprecedented measures to prepare ahead of the storm, ineffective leadership, poor advance planning and an unwillingness to devote sufficient resources to emergency management over the long term doomed them to fail when Katrina struck. Despite the understanding of the Gulf Coast's particular vulnerability to hurricane devastation, officials braced for Katrina with full awareness of critical deficiencies in their plans and gaping holes in their resources. While Katrina's destructive force could not be denied, state and local officials did not marshal enough of the resources at their disposal. [5, p. 6]

For example, while Governor Blanco stated in a letter to President Bush two days before landfall that she anticipated the resources of the state would be overwhelmed, she made no specific request for assistance in evacuating the known tens of thousands of people without means of transportation, and a senior state official identified no unmet needs in response to a federal offer of assistance the following day. The state's transportation secretary also ignored his responsibilities under the state's emergency operations plan, leaving no arm of the state government prepared to obtain and deliver additional transportation to those in New Orleans who lacked it, when Katrina struck. In view of the long-standing role of requests as a trigger for action by higher levels of government, the state bears responsibility for not signaling its needs to the federal government more clearly. [5, p. 6]

Compounded by leadership failures of its own, the federal government bears responsibility for not preparing effectively for its role in the post storm response. [5, p. 6]

FEMA was unprepared for a catastrophic event of the scale of Katrina. Established in 1979 to consolidate emergency management functions previously dispersed throughout federal government, FEMA had not developed – nor had it been designed to develop – response capabilities sufficient for a catastrophe the size of Katrina. Nor had it developed the capacity to mobilize sufficient resources from other federal agencies, and the private and nonprofit sectors. [5, p. 6]

Moreover, FEMA's Director, Michael Brown, lacked the leadership skills that were needed. Before landfall, Brown did not direct the adequate pre-positioning of critical personnel and equipment, and willfully failed to communicate with his boss, Secretary Chertoff. Earlier in the hurricane season, FEMA had pre-positioned an unprecedented amount of relief supplies in the region. But the supplies were not enough. Similarly, while both FEMA and the Department of Health and Human Services made efforts to activate the federal emergency health capabilities of the National Disaster Medical System (NDMS) and the U.S. Public Health Service, only a limited number of federal medical teams were actually in position prior to landfall to deploy into the affected area. Only one such team was in a position to provide immediate medical care in the aftermath of the storm. [5, p. 7]

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More broadly, the newly created Department of Homeland Security, charged with preparing for and responding to domestic incidents, failed to effectively lead the federal response to Hurricane Katrina. DHS leadership failed to bring a sense of urgency to the federal government's preparation for Hurricane Katrina, and Secretary Chertoff himself should have been more engaged in preparations over the weekend before landfall. Secretary Chertoff made only top-level inquiries into the state of preparations, and accepted uncritically the reassurances he received. He did not appear to reach out to the other Cabinet Secretaries to make sure that they were readying their departments to provide whatever assistance DHS – and the people of the Gulf – might need. [5, p. 7]

Similarly, had he invoked the Catastrophic Incident Annex (CIA) of the NRP, Secretary Chertoff could have helped remove uncertainty about the federal government's need and authority to take initiative before landfall and signaled that all federal government agencies were expected to think — and act — proactively in preparing for and responding to Katrina. The Secretary's activation of the National Response Plan (NRP) CIA could have increased the urgency of the federal response and led the federal government to respond more proactively rather than waiting for formal requests from

overwhelmed state and local officials. Understanding that delay may preclude meaningful assistance and that state and local resources could be quickly overwhelmed and incapacitated, the NRP CIA directed federal agencies to pre-position resources without awaiting requests from the state and local governments. Even then, the NRP CIA held these resources at mobilization sites until requested by state and local officials, except in certain prescribed circumstances. [5, p. 7]

The military also had a role to play, and ultimately, the National Guard and active duty military troops and assets deployed during Katrina constituted the largest domestic deployment of military forces since the Civil War.

The military also had a role to play, and ultimately, the National Guard and active duty military troops and assets deployed during Katrina constituted the largest domestic deployment of military forces since the Civil War. And while the Department of Defense took additional steps to prepare for Katrina beyond those it had taken for prior civil support missions, its preparations were not sufficient for a storm of Katrina's magnitude. Individual commanders took actions that later helped improve the response, but these actions were not coordinated by the Department. The Department's preparations were consistent with how DOD interpreted its role under the National Response Plan, which was to provide support in response to requests for assistance from FEMA. However, additional preparations in advance of specific requests for support could have enabled a more rapid response. [5, pp. 7-8]

In addition, the White House shared responsibility for the inadequate pre-landfall preparations. To be sure, President Bush, at the request of FEMA Director Michael Brown, did take the initiative to personally call Governor Blanco to urge a mandatory evacuation. He also took the unusual step of declaring an emergency in the Gulf States prior to Katrina making landfall. On the other hand, the President did not leave his Texas ranch to return to Washington until two days after landfall, and only then convened his Cabinet as well as a White House task force to oversee federal response efforts. [5, p. 8]

The effect of the long-term failures at every level of government to plan and prepare adequately for a catastrophic hurricane in the Gulf was evident in the inadequate preparations before Katrina's landfall and then again in the initial response to the storm. [5, p. 8]

Inadequate Response

Flooding in New Orleans drove thousands of survivors to attics and rooftops to await rescue. Infrastructure damage complicated the organization and conduct of search-and -rescue missions. Destruction of communications towers and equipment in particular limited the ability of crews to communicate with one another, undermining coordination and efficiency. Rescuers also had to contend with weapons fire, debris, and polluted water. [5, p. 8]

Planning for search and rescue was also insufficient. FEMA, for instance, failed to provide boats for its search and rescue teams even though flooding had been confirmed by Tuesday. Moreover, interagency coordination was inadequate at both the state and federal levels. While the Louisiana Department of Fisheries and Wildlife and FEMA are responsible for interagency search and rescue coordination at the state and federal levels respectively, neither developed adequate plans for this mission. Staggeringly, the City of New Orleans Fire Department owned no boats, and the New Orleans Police Department owned five. Meanwhile, widespread communications failures in Louisiana and Mississippi were so bad that many officers reverted to either physically running messages from one person to another, or passing messages along a daisy chain of officers using radios with limited range. [5, p. 9]

While authorities recognized the need to begin search-and-rescue missions even before the hurricane winds fully subsided, other aspects of the response were hindered by a failure to quickly recognize the dimensions of the disaster. On the day after landfall, DHS officials were still struggling to determine the "ground truth" about the extent of the flooding despite the many reports it had received about the catastrophe; key officials did not grasp the need to act on the less-than-complete information that is to be expected in a disaster. DHS leaders did not become fully engaged in recovery efforts until Thursday, September 1, two days after Hurricane Katrina hit New Orleans. But this effort should have begun sooner. [5, p. 9]

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FEMA Director Michael Brown, then in Louisiana, contributed to the problem by refusing to communicate with Secretary Chertoff opting instead to pass information directly to White House staff. Moreover, even though senior DHS officials did receive on the day of landfall numerous reports that should have led to an understanding of the increasingly dire situation in New Orleans, many indicated they were not aware of the crisis until sometime Tuesday morning, August 30, the day after landfall. [5, p. 9]

The Department of Defense also was slow to acquire information regarding the extent of the storm's devastation. DOD officials relied primarily on media reports for their information. Many senior DOD officials did not learn that the levees had breached until Tuesday; some did not learn until Wednesday, August 31, two days after Katrina made landfall. As DOD waited for DHS to provide information about the scope of the damage, it also waited for the lead federal agency, FEMA, to identify the support needed from DOD. The lack of situational awareness during this phase appears to have been a major reason for DOD's belated adoption of the forward-looking posture necessary in a catastrophic incident. [5, p. 10]

While large numbers of active-duty troops did not arrive until the end of the first week following landfall, the Department of Defense contributed in other important ways during that period. Early in the week, DOD ordered its military commanders to push available assets to the Gulf Coast. They also streamlined their ordinarily bureaucratic processes for handling FEMA requests for assistance and emphasized movement based on vocal commands with the paperwork to follow, though some FEMA officials believe that DOD's approval process continued to take too long. They provided significant support to search-and-rescue missions, evacuee airlifts, logistics management of buses arriving in the State for evacuation, and other matters. [5, p. 11]

Without effective law enforcement, real or imagined safety threats interrupted virtually every aspect of the response. Toward the end of the week, with its own resources stretched thin, FEMA turned to DOD to take over logistics for all commodity movements. The Department of Defense acceded to the request, and provided some logistics assistance to FEMA. However, it did not undertake the complete logistical take-over initially requested by FEMA because that was not needed. [5, p. 12] On Wednesday, August 31, the National Guard Bureau began calling on state Adjutants General to deploy National Guard forces. This process quickly resulted in the largest National Guard deployment in U.S. history, with 50,000 troops and supporting equipment arriving from 49 states and four territories within two weeks. [5, p. 11] These forces brought in relief supplies provided by FEMA, established law and order, and assisted with evacuations. [5, p. 12]

Law Enforcement

Law enforcement outside the Superdome and the Convention Center was a problem, and was fueled by several contributing factors, including erroneous statements by top city officials inflaming the public's perception of the lawlessness in New Orleans. [5, p. 12]

Without effective law enforcement, real or imagined safety threats interrupted virtually every aspect of the response. Fearing for their personal safety, medical and search and rescue teams withdrew from their missions. FEMA and commercial vendors of critical supplies often refused to make deliveries until military escorts could be arranged. In fact, there was some lawlessness, yet for every actual act there were rumors of dozens more, leading to widespread and inaccurate reporting that severely complicated a desperate situation. Unfortunately, local, state, and federal officials did little to stanch this rumor flow. Police presence on the streets was inadequate, in part because in a matter of hours Katrina turned the New Orleans police department from protectors of the public to victims of the storm. Nonetheless, most New Orleans police officers appear to have reported for duty, many setting aside fears about the safety of their families or the status of their homes. [5, p. 12]

Even so, the ability of the officers who remained to perform their duties was significantly hampered by the lack of basic supplies. While supplies such as weapons and ammunition were lost to flooding, the NOPD leadership did not provide its officers with basic necessities such as food; nor did the department have logistics in place to handle supplies. Members of the NOPD also identified the lack of a unified command for this incident as a major problem; eight members of the Command Staff were extremely critical of the lack of leadership from the city's Office of Emergency Preparedness (OEP). The department's rank and file were unfamiliar with both the department's and the city's emergency-operations manuals and other hurricane emergency procedures. Deficiencies in the NOPD's manual, lack of training on this manual, lack of familiarity with it, or a combination of the three resulted in inadequate protection of department resources. [5, p. 13]

Federal law-enforcement assistance was too slow in coming, in large part because the two federal departments charged with providing such assistance — DHS and the Department of Justice (DOJ) — had done almost no pre-storm planning. In fact, they failed to determine even well into the post-landfall period which of the two departments would assume the lead for federal law enforcement. As a result, later in the week, as federal law-enforcement officers did arrive, some were distracted by a pointless "turf war" between DHS and DOJ over which agency was in the lead. In the end, federal assistance was crucial, but should have arrived much sooner. [5, p. 13]

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Health Care

Medical teams had to triage more than 70,000 evacuees and provide acute care to the sick and wounded. While officials used plans developed in Hurricane Pam as a helpful framework for managing this process, existing emergency-room facilities were overwhelmed by the volume of patients. Local and state officials quickly set up temporary field hospitals at a sports arena and a K-mart in Baton Rouge to supplement hospital capacity. [5, p. 14]

New Orleans had a large population of "special needs patients," individuals living at home who required ongoing medical assistance. Before Katrina struck, the City Health Department activated a plan to establish a care facility for this population within the Superdome and provided transportation to evacuate several hundred patients and their caregivers to Baton Rouge. While Superdome facilities proved useful in treating special needs patients who remained behind, they had to contend with shortages of supplies, physical damage to the facility necessitating a post-landfall relocation of patients and equipment to an area adjacent to the Dome, and a population of more than 20,000 people using the Superdome as a refuge of last resort. Also, FEMA's

Disaster Medical Assistance Teams which provide the invaluable resources of pharmacies and hospital equipment, arrived at the Superdome on the night following landfall, but left temporarily on Thursday, before the evacuation of the Superdome's special needs population was completed, because of security concerns. [5, p. 14]

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In Louisiana, hospitals had to evacuate after landfall on short notice principally due to loss of electrical power. While hospitals had evacuated some of their patients before landfall, they had retained others thought to be too frail for transport, and believed by staying open they would be available to serve hurricane victims. Their strategy became untenable after landfall when power was lost, and their backup generators were rendered inoperable by flooding and fuel shortages. The Louisiana Department of Health and Hospitals stepped in to arrange for their evacuation; while successful, it had to compete with search and rescue teams for helicopters and other needed resources. [5, p. 14]

Many nursing homes in and around New Orleans lacked adequate evacuation plans. While they were required to have plans on file with local government, there was no process to ensure that there were sufficient resources to evacuate all the nursing homes at once, and dozens of patients who were not evacuated died. When evacuation became necessary, some sent their patients to the Superdome, where officials struggling to handle the volume of patients already there were obliged to accept still more. [5, p. 14]

Evacuations

The City of New Orleans, with primary responsibility for evacuation of its citizens, had language in its plan stating the city's intent to assist those who needed transportation for pre-storm evacuation, but had no actual plan provisions to implement that intent. In late 2004 and 2005, city officials negotiated contracts with Amtrak, riverboat owners and others to pre-arrange transportation alternatives, but received inadequate support from the city's Director of Homeland Security and Emergency Preparedness, and contracts were not in place when Katrina struck. As Katrina approached, notwithstanding the city's evacuation plans on paper, the best solution New Orleans had for people without transportation was a private-citizen volunteer carpool initiative called Operation Brothers' Keepers and transit buses taking people — not out of the city, but to the Superdome. [5, p. 16]

The Louisiana Department of Transportation and Development, whose Secretary had personally accepted departmental responsibility under the state's emergency operations plan to arrange for transportation for evacuation in emergencies, had done nothing to prepare for that responsibility prior to Katrina. Had his department identified available buses or other means of transport for evacuation within the state in the months before the hurricane, at a minimum the State would have been prepared to evacuate people stranded in New Orleans after landfall more quickly than it did. [5, p. 16]

While the Superdome provided shelter from the devastating winds and water, conditions there deteriorated quickly. Katrina's "near miss" ripped the covering off the roof, caused leaking, and knocked out the power, rendering the plumbing, air conditioning, and public announcement system totally useless. [5, p. 16] By Tuesday afternoon, the New Orleans Superdome had become overcrowded, leading officials to turn additional refugees away. Mayor Nagin directed evacuees be sent to the Convention Center, but communicated his decision to state and federal officials poorly, if at all. That failure, in addition to the delay of shipments due to security concerns and DHS's own independent lack of awareness of the situation, contributed to the paucity of food, water, security or medical care at the Convention Center, as a population of approximately 19,000 gathered there. [5, p. 12]

On Monday, August 29, as Katrina passed over New Orleans, Governor Blanco asked FEMA Director Michael Brown for buses. Brown assured the state the same day that 500 buses were enroute to assist in the evacuation of New Orleans and would arrive within hours. In spite of Brown's assurances and the state's continued requests over the course of the next two days, FEMA did not direct the U.S. Department of Transportation to send buses until very early on Wednesday, August 31, two days after landfall. Still, the buses did not begin to arrive until Wednesday evening and not in significant numbers until the next day, four days after landfall. Concerned over FEMA's delay in providing buses - and handicapped by the Louisiana Department of Transportation and Development's utter failure to make any preparation to carry out its lead role for evacuation under the state's emergency plan - Governor Blanco directed members of her office to begin locating buses on Tuesday and approved an effort to commandeer school buses for evacuation on Wednesday. But these efforts were too little, too late. Tens of thousands of people were forced to wait in unspeakably horrible conditions until as late as Saturday, September 4, to be evacuated. [5, p. 13]

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Conclusion

Effective response to mass emergencies is a critical role of every level of government. It is a role that requires a substantial amount of planning, coordination and dispatch among governments' diverse units. Following the terrorist attacks of 9/11, the nation underwent one of the most sweeping reorganizations of federal government in history. While driven primarily by concerns of terrorism, the reorganization was designed to strengthen our nation's ability to address the consequences of both natural and manmade disasters. In its first major test, this reorganized system failed. [5, p. 2]

Challenge Your Understanding

The following questions are designed to challenge your understanding of the material presented in this chapter. Some questions may require additional research outside this book in order to provide a complete answer.

- 1. Why wasn't New Orleans completely evacuated in advance of the storm?
- 2. How did City and State emergency managers fail to assist the evacuation?
- 3. How did City and State emergency managers fail to provide adequate shelter?
- 4. How did the breakdown in local law enforcement contribute to the disaster?
- 5. Describe the breakdown in communications between the Governor and President.
- 6. Describe the breakdown in communications within the new Department of Homeland Security.
- 7. Describe the breakdown in communications between the responding military forces.
- 8. Explain why the House Report characterized the response to Hurricane Katrina as a "failure of initiative".
- 9. If you were mayor of New Orleans, why would you wait to evacuate your city?
- 10. If you were mayor of New Orleans, how would you expedite your city's evacuation?