

The Worst Is Yet to Come

Lessons from September 11 and Hurricane Katrina

Donald F. Kettl
Fels Institute of Government
University of Pennsylvania

September 2005

Fels Government Research Service
Report 05-01



Executive Summary

Following September 11, everyone promised that the nation would learn the painful lessons the terrorist attack taught. But Hurricane Katrina not only revealed that we have failed to learn. It also showed that we have yet to build the capacity to deal with costly, wicked problems that leave little time to react. Even worse, we continually show the wrong instinct: to try to draw a box around every new case. We are trying to solve the most important challenges of the 21st century by retreating back to models from the past.

More crises like September 11 and Katrina are inevitable, from a major California earthquake to a nasty flu virus, from a terrorist attack to mega-storms. These problems slop over the boundaries we've created to deal with them. Yet we keep trying to draw boxes around problems that defy boundaries. We keep resorting to old ideologies for new problems. Even worse, Katrina isn't over. We'll be dealing with its consequences, from reconstructing the city's homes to rebuilding its civic life, for years to come.

If we don't learn the real lessons this time, the worst is yet to come.

We need a federal government:

- That operates from the top down so the system works from the bottom up.
- That builds a nimble response system up to a wide array of challenges.
- That, in particular, pulls FEMA out of the Department of Homeland Security and uses it to build an effective "all-hazard" approach to disaster response.
- That equips top officials with the skills to lead.
- That uses the federal budget to create incentives to set a floor for preparedness everywhere.
- That creates a communication system that links top leaders in any disaster.

We need state and local governments:

- That create a unified command.
- That establish a single public face to promote citizens' trust.
- That establish communication systems tying together key decision makers.
- That practice their plans.
- That build the capacity to spend, efficiently and responsibly, the hundreds of billions of dollars set to flow to the stricken area.

Two stress tests applied to the nation's homeland security system—the September 11 terrorist attacks and Hurricane Katrina—showed serious coronary blockages. That surely was serious enough. But, in a sense, we were lucky: The events could have been even more serious, and the cost to the nation of our inability to respond could easily have been far bigger.

We don't need to suffer further. We've been taught the lessons we need to learn. The question now is whether we will learn them. If not, the worst surely is yet to come.

A Failure to Learn

When President Bush addressed the nation in the aftermath of Hurricane Katrina's devastating attack on the Gulf Coast, he promised the government would build on the lessons the storm taught:

This government will learn the lessons of Hurricane Katrina. We're going to review every action and make necessary changes, so that we are better prepared for any challenge of nature, or act of evil men, that could threaten our people.¹

Of course, after the September 11 terrorist attacks, top government officials pledged that the nation would be far better prepared for crisis. Democrats pressed for the creation of a new department for homeland security. Bush embraced it and shaped it to his liking. Everyone promised the government would work better.

But when faced with Katrina, government, at all levels, failed. In fact, the bungled response ranks as perhaps the biggest administrative failure in American history. September 11 thus was a major lost opportunity. Government could have—and should have—learned from that awful day about how to make homeland security work. When put to the test, it failed. The reason? We failed to learn.

Moreover, as bad as Katrina was, it could have been worse. What if, instead of a glancing blow from a Category 4 hurricane, Katrina had delivered a direct Category 5 hit on New Orleans? And once the storm left, the problems certainly didn't end. Federal, state, and local governments, together with the private and nonprofit sectors, face the monumental job of rebuilding New Orleans and the other stricken areas, where the bill will likely run \$200 billion or more. Hundreds of thousands of displaced residents will need to recover their lives. How will the government help with housing, provide medical and income assistance in the meantime, and rebuild the ruined infrastructure?

It could have been even worse—and it's not over. The 9/11 Commission pointed to a "failure of imagination" as perhaps the most important underlying cause of the government's failure.² Since then, we've seen that failure of imagination continue, with top federal officials saying that they had no idea that Katrina could cause such damage or that thousands of New Orleansians could be marooned for days without food, water, shelter, or medical care. With local officials marooned for days without telephone communication. With state officials without a way to get resources to the scene.

And perhaps most disturbing, government's staggering recovery efforts raise real worries about its ability to respond to other events. Based on what we've seen, do we have confidence that the government could deal with an avian flu pandemic? With a major earthquake in California? With a dirty bomb attack? With a second hurricane hit on the Gulf Coast or a major hurricane impact on Miami?

Some of these things are possibilities. Some are probable. It's virtually certain that the government will face continued challenges, on an even larger scale than Katrina. And the evidence from the aftermath of the hurricane is that it wasn't ready—that, despite past

promises, government had not learned. Even worse, there are disturbing signs that the government is learning precisely the wrong lessons from Katrina. We need to invest—now—in the intellectual capital to ensure we're far better prepared for the inevitable tests we face in the future.

Failing the Stress Test

Think about the stress test that cardiologists administer to their patients. They wire up the patient with electrodes, fire up the treadmill, and gradually increase the speed and the incline to see how well the patient's heart responds to stress. If the patient fails the test—if it reveals blockages that prevent the heart from responding as it should—the doctor stops the test and prescribes treatment. If the patient collapses, there's a nurse and a bottle of oxygen at the ready.

Twice we've subjected the homeland security system to a stress test. Twice—first with 9/11, second with Katrina—it's collapsed. So far, we've failed to fix the system because we've failed to learn what the test revealed, and the failure has killed Americans. A third failed test might prove even more damaging. Most cardiac patients don't recover from heart damage that builds up over time.

The core of the problem lies in three puzzles.

1. Wicked problems

We're increasingly facing problems that, by their very nature, are wicked.³ From megastorms to terrorist attacks, from nasty flu viruses to earthquakes, we face the virtual certainty of big events that provide *little time to react*, and where the *cost of failure* is enormous.

More problems are wicked, and the failure to respond to them can pose enormous—sometimes unthinkable—consequences.

2. Messy boundaries

We design our big bureaucracies to deal with routine problems and, from mailing social security checks to managing air-traffic control, they're pretty good at it. But we are now facing important problems that fall outside of normal routine. Moreover, we're facing more and more problems that, by their very nature, slop over any boundary—political or organizational—that we can draw. Hurricanes pay no attention to the jurisdictional lines between Louisiana parishes or, for that matter, between the federal, state, and local governments. But terrorists surely have learned. They know about the fragmentation of our system and are planning to exploit it.

More problems slop over the boundaries we've created to deal with them, and for the really wicked problems, it's impossible to draw a box around them. The

mismatch between our boundaries and the problems we're trying to solve invites repeated failure.

3. Depleted intellectual capital

When we face big problems that demand quick responses, we understandably retreat back to what we know or, at least, what we find comfortable. It's easy to blame terrorists in other countries, to suggest that others are either for us or against us, to use well-tested strategies of reorganization. But we're facing big problems where past models provide a poor guide. Fixing new, wicked problems with old, outdated tools is like trying to change a tire with a screwdriver and a hammer. If we don't have the right tools in the toolbox, we won't be up to the job—and we're spending precious little time designing the right toolbox for the problems we face.

More problems simply don't fit with the comfortable and well-accepted ways in which we view the world. If we don't construct a new toolbox for new problems, we're doomed to be constantly outmaneuvered by events—and by combatants who seek to exploit our weaknesses.

The Pathologies of Failure

Why have we failed to learn from 9/11—and why are we likely to fail to learn yet again from Katrina? We have our instincts hard-wired for obsolete approaches, and that makes us hard-wired for failure. We need to rewire our systems for success.

What are these obsolete strategies? Consider the following five approaches.

1. An instinct to look back instead of looking forward

In observing the American response to the September 11 terrorist attacks, a European diplomat was puzzled. The Bush administration pointed to the creation of the Department of Defense in 1947 as the model for the new Department of Homeland Security: a merger of organizations into one mega-department. "I'm struck," the diplomat said, "that in charting a strategy for the future that the nation focused on a model from the past." In devising a new strategy for the most important problem of the 21st century, the nation relied on the best of 1940s technology. When Katrina put the new system to a stress test, it responded about as well as a 1947 Nash would respond on a 2005 interstate highway.

Not only are many of the most important problems we face inherently wicked. Many of them are *asymmetric*: broad and unpredictable events aimed, deliberately or not, at points of vulnerability in the system. On September 11, terrorists cleverly discovered and exploited weaknesses in the airline security system. Four years later, Hurricane Katrina inflicted enormous damage because of weaknesses in New Orleans's levee system.

We can deal with events that play to our strengths. That's why both Gulf Wars lasted mere weeks. But when asymmetric events occur, backward-looking strategies doom us to enormous damage and injury. We need to get much smarter, much faster, in learning how to deal with asymmetric threats. However, because big events demand a quick response, we tend to pull our game plans off the shelf.

If all we have are backward-looking plans, we doom ourselves to repeated failure.

2. An instinct to reform instead of to govern

The single most important fact about the creation of the Department of Homeland Security in 2002 is that it grew around political, not administrative imperatives. The administrative case for building a new department depended on the need to coordinate the nation's prevention of and, if necessary, response to terrorist acts. But the driving force behind the creation of DHS was the need of elected officials to respond—and to be seen as responding—to the attacks of September 11, 2001.

In the first months of the national soul-searching over how the attacks could have happened, the recurring refrain was the need to “connect the dots”—to bridge the gaps in the system to prevent such attacks from ever occurring again. In 2002, Sen. Chuck Grassley (R-Iowa) bluntly asked, “What will it take to ‘connect the dots’ necessary to piece together obscure clues and pursue leads to prevent another September 11 from devastating America all over again?”⁴

The conclusion: merge 22 agencies into a single new department. The Bush administration did everything it could to stop the plan but, when it became clear that Congress was about to pass it, the administration embraced it. However, in what provide one of the most brilliant tactical gambits of the George W. Bush years, the president used the homeland security proposal to force congressional Democrats to accept a massive change in the new department's personnel system. They had little choice but to accept a department they had pressed on the president; in return, the president undermined a key part of the Democratic constituency.

The debate over creating the department in the end turned much less on how best to secure the homeland than on how to balance executive and legislative power. Bush turned the congressional initiative for the department into a clever tactic to shift the balance of power to the executive branch.

Key dots remained unconnected. What drove the debate was the need to coordinate intelligence, but the intelligence agencies successfully fought to remain outside the new department. How to make the new department work was largely an afterthought. It was huge, unwieldy, and beset by cross-pressures and bureaucratic turf wars. To make things worse, the Bush administration did not pay sufficient attention to staffing key positions, including FEMA, with officials skilled in emergency management. Just as bad, the department did not build skilled career administrators into key support positions. Too

much of the department's intellectual capital was contracted out. It was little surprise that, when the Department of Homeland Security needed key people with the right instincts, no one was home at Homeland.

Some of these wars were unquestionably battles that had to be fought. Given the enormous breadth of the homeland security issue, the new department could only be viewed as a work in progress. It was sure to take years for the department to settle into established routines. But in the process, FEMA's role in disaster response was weakened, and the people of the Gulf Coast paid the price.

“When in doubt, reorganize!” is the usual watchword. Too often, we declare victory as soon as the ink of the president's signature is dry. Too often, we neglect the job of making things work. Political candidates often put so much emphasis on the race that they forget to stop to ask themselves what they are going to do with the prize when they get it. They forget that so much of the work of government is governing. Every once in a while, we have a case like this where really truly terrible things happen because of a lack of capacity. And then we have to learn the lesson all over again that the game isn't over when the election is done.

When we settle for bright political symbols instead of efficient government organizations, we inevitably pay the price.

3. An instinct to think vertically instead of horizontally

Battles over the chain of command erupted in the days after Katrina hit. New Orleans Mayor Ray Nagin complained that federal officials “don't have a clue what's going on down here.”⁵ Louisiana Governor Kathleen Babineaux Blanco said she could not get the feds to respond. Army officials said they were on the scene with 3,600 troops from the 82nd Airborne Division within eight hours of getting the request to respond—but that it took three days for that request to arrive. “If the first Cav and 82nd Airborne had gotten there on time, I think we would have saved some lives,” explained Army Gen. (Ret.) Julius Becton, Jr, who had served as FEMA director under Ronald Reagan. “We recognized we had to get people out, and they had helicopters to do that.”⁶

All along the vertical line, from local officials through the states to federal officials at the highest level, battles erupted. Officials were clearly confused about who ought, could, and should do what. The vertical chain of command proved yet again its value in providing political cover. In a tall hierarchy, the problem (and blame) always lies somewhere else.

The debate since has confused the inescapable need for a “unified command”—ensuring that the key decision makers are all on the same page—with the “chain of command”—the vertical links among decision makers, from top to bottom of the system. Someone has to be in charge of the response to events like Katrina. But we simply do not have to stage a continuing civil war among levels of government and between government organizations over just who that ought to be. Indeed, as long as we have a system of

federalism, even thinking about “top” and “bottom” makes no sense. Federalism preserves autonomy for officials at each level. They need to coordinate with each other. They surely do not need to fight over who is in charge.

In the aftermath of September 11, New York Mayor Rudolph Giuliani eventually established himself as the front-line spokesman. He gathered around him the resources he needed, from all levels of government. And New York’s response began to emerge. It didn’t emerge because Giuliani clawed to the top of a pyramid. It emerged because he became the conductor of a large and hugely complex symphony. He built a network of horizontal partnerships.

That, indeed, is the lesson of the first responders who worked so effectively together at the Pentagon on September 11. The jurisdictions that surrounded the Pentagon, and the government agencies that worked within them, agreed far in advance of the attack who would be in charge at the scene of any major problem. What happened? It worked. By deciding—and practicing—the incident command system in advance, the area governments were ready when the terrorists struck.⁷ They did not magnify the disaster by creating a bureaucratic disaster of their own. They worked effectively in a tightly knit horizontal network instead of struggling over a vertical chain of command.

Former congressman Lee Hamilton, who served as vice-chairman of the 9/11 Commission, put it bluntly in the days after Katrina struck. On creating a unified command, he concluded, “we’re falling far short of where we would like to be four years after 9/11.” He added that what has to be done

as quickly as possible after a disaster has struck is to have a unified command so that the hundreds of decisions—and there are hundreds of them that have to be made quickly about personnel and equipment and rescuing people and alleviating suffering and all of the rest—can be made quickly. There was not a unified command in New York in 9/11. There was not a unified command quickly enough after Katrina.

If the tough decisions are not made in advance, Hamilton concluded, “you have a disaster that will impact far more people than if you had the plan in place.”⁸

We need strong vertical lines in our organizations. Hierarchy provides the critical, unifying structure to the capacity of complex organizations. But we need horizontal relationships to put that capacity to work. We need to *organize vertically* and to *work horizontally*.

If government officials fight over the baton instead of finding an effective orchestra conductor, Americans will needlessly suffer in any wicked problem.

4. An instinct to regulate instead of to perform

In case after case, the government's response to Hurricane Katrina rules, procedures, and paperwork stymied the response. President Bush said, "We will not allow bureaucracy to get in the way of saving lives."⁹ But an infuriated Rep. Charlie Melancon (D-La.) told *Nightline*, "What I've seen the last several days is bureaucrats that were worried about procedure rather than saving lives. That's what I've seen."¹⁰

Hundreds of firefighters from around the country were stuck in Atlanta, receiving days of training on community relations and sexual harassment, before they reached the front lines. Truck drivers carrying thousands of water bottles were prevented from driving to New Orleans because they had not yet been assigned a "tasker number."¹¹ Sheriffs from other states simply ignored the paperwork. Wayne County, Michigan, Sheriff Warren C. Evans said he refused to stop his convoy of 6 trailer trucks, full of food and water, and 33 deputies. "I could look at CNN and see people dying, and I couldn't in good conscience wait for a coordinated response," he said.¹²

Rules are invaluable. They help ensure that the same people in the same circumstances receive equitable treatment from government. For example, we would not want individual social security workers making their own best estimate about the size of a senior citizen's check. But regulations can also create deep pathologies. They provide safety from protection and blame and make it easy for officials to duck the responsibility for thinking about what they are trying to accomplish.

Rules matter. But they exist to foster superior performance. We can't afford thousands of cowboys in the middle of a crisis, each setting policy on his own. When rules don't fit the situation, obedience to them can paralyze the capacity to act.

The search for superior performance, not blind obedience to rules, must guide emergency response.

5. A misplaced reverence for outdated traditions instead of a focus on effective governance

In the midst of the post-Katrina problems, a senior state homeland security official (from far outside the region) sad sadly that a major impediment to effective response is "our maniacally single-minded devotion to home rule."¹³ We have governmental units that follow geographical lines, like river banks or lines on map. In many parts of the country, we've drawn our boundaries to meet important 17th century goals, such as ensuring that citizens live within a day's horseback ride of the county seat. These boundaries might have served the needs of centuries ago. They often prove a very poor match for 21st century problems.

Self-government has always been the foundation of American democracy. That is as it should be, and America will survive any challenge it faces as long as self-government remains strong. But our government ought to empower effective action. The boundaries of government should not constrain our ability to act. Too often, even years after the

September 11 attacks, first responders in neighboring jurisdictions have radios that operate on different frequencies. Communication problems in crises sometimes occur because of technical problems. Too often, as a report from the Century Foundation discovered in 2003, they persist because officials in neighboring communities simply do not want to talk to each other.¹⁴

Not long after watching a television newsmagazine report on the risks of sports-utility vehicle rollover accidents, I just missed witnessing just such an accident. I came upon the scene moments later, and there was an SUV on its roof on the side of the road. As luck would also have it, the occupants were not hurt—but they were hanging upside down by their seatbelts. But as luck would also have it, the accident was precisely at the intersection of two local governments. It was anything but clear whose job it was to get those people out.

In a case like that, two bad things could happen: neither government might respond, with each assuming the other would handle the call; or both governments would respond, with the full first-response arsenal, and with a big waste of taxpayer dollars. Because both communities had worked out these problems in advance, a third alternative occurred: emergency vehicles with sirens wailing converged on the scene from both directions—with just the right level of support. They managed to extract the occupants from the vehicle, and in the process the taught the critical lesson: When you are hanging upside down from your seatbelts in a rolled-over SUV, the last thing you care about is the name on the decal on the side of the emergency vehicle.

But bad things happened in Katrina's wake. In Louisiana, the "maniacal devotion to home rule" literally produced gunfire at the boundary between two communities. New Orleans authorities advised some of the tourists trapped at the city's convention center that the only way out of the city was across the Crescent City Connection, a bridge that led to neighboring Gretna City. Buses were waiting for them there, they were told. But when hundreds of bedraggled tourists dragged their suitcases to the bridge, they found police from the community across the bridge, Gretna City, waiting for them. When the tourists tried to cross the bridge, the Gretna City police fired over their heads to warn them back to New Orleans. They told the crowd that Gretna City "was not going to become New Orleans and there would be no Superdomes in their city." What was the alternative? some members of the crowd asked. They reported later that the armed security officials told them "that was our problem," and that they had no water to give them. As two paramedics, caught amid the crowd, later wrote, "These were code words for if you are poor and black, you are not crossing the Mississippi River and you are not getting out of New Orleans."¹⁵

Too often throughout the struggle to deal with Katrina's aftermath, the boundaries separating neighboring jurisdictions—as well as the federal, state, and local governments—became barriers handicapping the government's response. These tales proved even more chilling than what occurred on September 11.

People want their problems solved; they don't fuss over the patch on the arm of the person who solves them.

Lessons from Katrina

What general lessons does Katrina teach?

- We face a new generation of wicked problems that demand innovative solutions.
- Lessons of the past are important, but old lessons can hamstring our ability to look forward.
- We need to govern instead of reaching for symbols. We need to plan, practice, implement—and learn.
- We need public officials to lead. Communicating confidence to citizens and delivering on promises are both critical in crises.
- We need to devise new strategies for effective horizontal coordination so that we are not handicapped by the pathologies of vertical bureaucracies.
- We need good rules, but we cannot afford to allow them to undermine common-sense solutions or high performance at times of crises.
- While we can—and must—protect our traditions of self government, we can't let boundaries drawn centuries ago handcuff our ability to respond.

But we can go much farther. After September 11—and long before Katrina hit—careful analysis identified big problems. They plagued us in Katrina's wake. We must determine now that they will never again prevent the government from doing what it must do.

Lessons for the Federal Government

As Katrina bore down on New Orleans, explains Leo Bosner, a 26-year FEMA veteran, “We told these fellows [the agency's leaders] that there was a killer hurricane” taking aim on the city. “We had done our job, but they didn't do theirs.”¹⁶

After September 11, Congress and President Bush joined in a fundamental restructuring of the nation's homeland security apparatus. FEMA, along with 21 other agencies, were moved into a new Department of Homeland Security. When Bush signed the bill creating the department on November 25, 2002, his promise was clear:

Today, we are taking historic action to defend the United States and protect our citizens against the dangers of a new era. With my signature, this act of Congress will create a new Department of Homeland Security, ensuring that our efforts to defend this country are comprehensive and united.

The new department will analyze threats, will guard our borders and airports, protect our critical infrastructure, and coordinate the response of our nation for future emergencies. The Department of Homeland Security will focus the full resources of the American government on the safety of the American people.¹⁷

But when it faced its first important test, the department failed. Indeed, the government's response to Katrina ranks as perhaps the biggest failure of public administration in the nation's history. While the storm was so immense that it surely would have swamped anything the government could have created in advance, the department's sluggish response simply did not match the promise that Democrats and Republicans, the president and members of Congress made when they created it.

DEPARTMENT OF HOMELAND SECURITY — FIRST YEAR	
OVERALL GRADE	C+
Aviation Security	B-
Intelligence	B-
Immigration	B-
Coordination with State and Local Governments	C
DHS Management	C+

Century Foundation Report Card (2004)

<http://www.homelandsec.org/publications.asp?pubid=451>

However, the problems were not surprising. In March 2004, under my direction the Century Foundation issued a report card on the Department of Homeland Security's first year that eerily outlined many of the issues that plagued the department's response to the hurricane. The Century Foundation report card grade DHS on five areas: aviation security, intelligence, immigration, coordination with state and local governments, and departmental management. The overall grade was a C+. The lowest-graded areas? Coordination with state and local governments—a grade of C—and internal management—a grade of C.¹⁸

In fact, a close look at the criteria for these two areas reveals chilling warnings. In supporting state and local governments, DHS received low grades for devising a national strategy to help state and local governments deal with homeland security issues; a failure to allocate grant funds according to risk; poor support for state training; and poor support for first responders.

In managing its own operations, DHS struggled to integrate its vast collection of agencies into a single, coordinated department. It was little wonder, therefore, that when DHS

faced its first big challenge, it fell far short in coordinating its own response and in dealing effectively with state and local governments.

DETAILED DEPARTMENT OF HOMELAND SECURITY REPORT CARD (Cont'd.)	
COORDINATION WITH STATE AND LOCAL GOVERNMENTS	C
◆ Develop a national strategy for homeland security	C
◆ Get DHS Office of State and Local Government Coordination up and running	B
◆ Allocate money based on the risk of a terrorist attack	D
◆ Establish lines of communication with state governments	B
◆ Get money out the door to state governments	C
◆ Consolidate training, equipment, and planning grants for the states	C
◆ Improve overall accessibility and flexibility of grant money to local governments and first responders	D
◆ Provide training for local first responders	C
◆ Define expectations for states and local governments as partners in homeland security	C
DHS MANAGEMENT	C+
◆ Create clear and measurable goals for assessing performance	C
◆ Implement the new DHS personnel system	C
◆ Manage relationships with foreign counterparts	B
◆ Establish a clearer and more useful national warning system	B
◆ Integrate disparate agencies into a coordinated department	C
◆ Provide strong leadership on homeland security	B
◆ Work with Congress and other key interests to develop clear policy goals	D

What first steps can DHS take to deal with this problem?

- *Work from the top down so that the system works from the bottom up.* Most of DHS's efforts have been focused in corralling its vast federal empire. Coordination with state and local governments has largely been an afterthought.

But yet again, Katrina taught a fundamental lesson of homeland security. Just as was the case on September 11, all homeland security events start as local events. The federal response will fail if it is not part of an integrated national—federal, state, and local—plan.

- *Structure matters—but not as much as leadership.* It now seems clear that it was a mistake to move FEMA to the Department of Homeland Security. Prevention of terrorist attacks—the core mission of DHS—is closely related to managing response to events that do occur—the core mission of FEMA. But not all events that demand FEMA’s response come from terrorism. Emergency planners have long worked to develop what they call an “all-hazard” approach: it doesn’t matter whether the reason people are trapped in a building is because of a terrorist bomb, a tornado, an earthquake, or a hurricane—they just need to be rescued. We need a much more agile emergency response system, and there is disturbing evidence that FEMA’s response was crippled by internal problems within DHS. Even more important, however, is the recognition that good leaders can bridge the boundaries of any bureaucracy. We need a better structure.
- *Every disaster is different.* But, even more, we need top homeland security officials who understand their critical role in coordinating an integrated response from the vast collection of tools in the government’s toolbox. Crucial to building that integrated response is developing a leadership, especially in FEMA, that understands its role. Every disaster is different, with different challenges, just as every piece of music is different. Homeland security leaders need to work like symphony conductors to bring the right collection of instruments together to make the right music to fit every situation.
- *Use the federal budget to create incentives for a minimal level of preparedness of everywhere.* Major homeland issues, including natural disasters, can occur anywhere. Moreover, given the ease of travel throughout the nation, citizens from anywhere can easily find themselves deeply affected by problems somewhere else. Four tourists from York, Pa., weren’t paying much attention to the forecast when they set off for a New Orleans vacation—and then they found themselves stranded without electricity and struggling with New Orleansians for the basic needs of life. Some communities face far bigger risks than others—New Orleans (from hurricanes), San Francisco (from earthquakes), New York and Washington (from terrorist attacks)—and federal money needs to focus most there. But for the funds distributed elsewhere in the country, the federal government has missed the chance to use those grants as incentives to make sure that citizens everywhere have at least a minimum level of protection.
- *Create a communication system that links leaders in disaster.* Just as was the case in the aftermath of September 11, top officials found themselves cut off from other parts of the government because of failures in the communication system. New Orleans Mayor Nagin was stuck in the Hyatt Hotel for two days without a telephone. He resorted to sending pleas for help through CNN reporters. His

staffers finally rigged a telephone line through an internet long distance account that a city technology team member had set up for his personal use.¹⁹ Few things are more important than crisis communication, and job one for federal authorities ought to be to make sure that top officials can talk to each other in the inevitable future crises.

Lessons for State and Local Officials

State and local officials had their own struggles. The steady drumbeat of stories flowing out of the stricken area teaches, yet again, that state and local officials ought to follow these lessons:

- *Create a unified command.* Disaster management experts recommend that state and local officials establish unified command—bringing the full range of commanders together at a single location. There is strong evidence that command, up and down the intergovernmental system, remained fragmented throughout much of the crisis.
- *Create a single public face to encourage citizens' confidence.* Citizens need a voice of confidence from the scene. In the 1979 accident at the Three Mile Island nuclear power plant, near Harrisburg, Pa., Governor Dick Thornburgh and Harold Denton, from the Nuclear Regulatory Commission, brought unified command and constant communication with citizens. Their hard work helps steady nervous neighbors. Mayor Rudolph Giuliani underlined that lesson with his steady leadership following the September 11 terrorist attacks. One of the things that worsened Katrina's aftermath was the sense that no one was in charge because the public did not have steady communication from an official who could speak confidently about what was being done.
- *Establish communication systems.* There are technical elements to these systems: devices, like battery-powered satellite phones, that can continue to operate even if the power goes out and cell phone towers are blown down. There are people-based elements to this system, with a command system that links key decision makers so that they can make key decisions. But technology isn't enough. There is disturbing evidence that, in the crisis, many public officials couldn't communicate because they didn't have established relationships on which they could draw. Coordination isn't possible without pre-existing trust.
- *Practice.* Written plans are worthless unless everyone—including top officials—practice them regularly. There is disturbing evidence that many top officials at the federal, state, and local levels were unfamiliar with the disaster plans. As a result, the situation played out like a football game when the coach picks up the game plan for the first time on the way down the tunnel to the field on a Sunday afternoon.

- *Build capacity to manage.* But better disaster management is only one of the lessons that Katrina teaches. Recovery from the blow that Katrina struck will take years, and government has promised substantial aid likely to total far more than \$100 billion. There is disturbing evidence that the federal, state, and local governments will struggle to spend the money well: to produce quick results without courting the evil trio of waste, fraud, and abuse.

Evidence from the 2005 Government Performance Project, which measured the management capacity of American states, is not reassuring. The GPP, in which I served as research director, produced grades for four management areas: Money, People, Information, and Infrastructure. Consider the grades for Infrastructure—the capacity of state governments to manage the roads, bridges, utilities, and other basic facilities.



**Infrastructure grades
Government Performance Project (2005)**

<http://results.gpponline.org>

The region facing the mega-reconstruction is the region graded lowest in the nation for its capacity in managing infrastructure. Louisiana and Mississippi received grades of C+. For Alabama, the grade was D. Moreover, the states are starting way behind. In all three states, officials say that they had postponed at least half of needed maintenance for at least the last four years. Deferred maintenance in Louisiana exceeds \$3.8 billion. In Mississippi, it's \$3.9 billion, and in Alabama, the total is \$2.9 billion. Why? Officials in each state claim "lack of resources," although the three states rank among the lowest in tax burden.

But even if the money began to flow, the infrastructure management systems in each of these states lags behind those of the nation's highest-performing states. Alabama does not have a capital plan. In Louisiana, the plan is heavily influenced by political factors, and the Department of Transportation and Development has not implemented a comprehensive maintenance and management system.

So post-Katrina resources will begin flowing to states that already have a substantial infrastructure backlog. All three states rank below the national average in capacity to manage infrastructure (and Alabama was ranked 50th). What is their capacity to handle the enormous influx of funds? And, down the road, how can taxpayers be assured that the new facilities that are built with scarce tax dollars from around the nation will be maintained properly?

The Worst Is Yet to Come?

Two stress tests applied to the nation's homeland security system—the September 11 terrorist attacks and Hurricane Katrina—showed serious coronary blockages. That surely was serious enough. But, in a sense, we were lucky: The events could have been even more serious, and the cost to the nation of our inability to respond could easily have been far bigger.

We might not be even this lucky—if the word can possibly be used—the next time. Another hurricane might be a direct Category 5 hit. An earthquake could shatter a major west coast city. And any of a variety of terrorist events could pose even large consequences.

The results of the first two stress tests are not encouraging. It's not clear how well the patient would survive a third test. Americans deserve better because we surely now know better. We need to learn from September 11 and Katrina—but we need to make sure we learn the right lessons.

But the consequences go far deeper than our response to terrorist events. Katrina also laid bare deep problems in the performance of American government that threaten to undermine the effort to rebuild the region, especially New Orleans. It was bad enough for the city to suffer catastrophic damage and loss of life. It would be worse for the city—and the nation—to suffer catastrophic failure amid the effort to rebuild it.

We don't need to suffer further. We've been taught the lessons we need to learn. The question now is whether we will learn them. If not, the worst surely is yet to come.

Notes

- ¹ Address to the Nation (September 15, 2005), <http://www.whitehouse.gov/news/releases/2005/09/20050915-8.html>
- ² National Commission on Terrorist Attacks Upon the United States, *The 9/11 Commission Report* (New York: Norton, 2004), pp. 344, 350.
- ³ The label comes from Horst W. J. Rittel, *Dilemmas in a General Theory of Planning* (Berkeley: Institute of Urban and Regional Development, University of California, 1973).
- ⁴ Sen. Chuck Grassley, “Fixing the FBI,” June 7, 2002, <http://grassley.senate.gov/cgl/2002/cg02-06-7.htm>
- ⁵ CNN.com, “Mayor to Feds: ‘Get Off Your Assess’” (September 2, 2005), at <http://www.cnn.com/2005/US/09/02/nagin.transcript/>
- ⁶ Drew Brown, Seth Borenstein, and Alison Young, “Key Military Units’ Hurricane Aid Was Stalled for 3 Days,” *Philadelphia Inquirer* (September 17, 2005), p. A1.
- ⁷ See Arlington County, *After-Action Report on the Response to the September 11 Terrorist Attack on the Pentagon*, at <http://www.arlingtonva.us/departments/Fire/edu/about/FireEduAboutAfterReport.aspx>
- ⁸ PBS *Newshour* (September 14, 2005), at http://www.pbs.org/newshour/bb/fedagencies/july-dec05/hamilton_914.html
- ⁹ George W. Bush (September 3, 2005), at <http://www.whitehouse.gov/news/releases/2005/09/20050903.html>
- ¹⁰ ABC News, *Nightline* (September 2, 2005).
- ¹¹ For some of the Army’s rules on “tasker numbers,” see <http://www.afsc.army.mil/im/rcdsmgt/admin/closetaskers.txt>
- ¹² “Breakdowns Marked Path from Hurricane to Anarchy,” *New York Times* (September 11, 2005), Sec 1, pp. 1, 28, 29.
- ¹³ Interview with the author.
- ¹⁴ See Donald F. Kettl, ed., *The States and Homeland Security: Building the Missing Link* (New York: The Century Foundation, 2003), at <http://www.tcf.org/list.asp?type=PB&pubid=262>
- ¹⁵ Shaun Waterman, “Cops Trapped Survivors in New Orleans,” *The Washington Times* (September 9, 2005), at <http://washtimes.com/upi/20050908-112433-4907r.htm>. See also ABC News Online (September 2, 2005), at <http://www.abc.net.au/news/newsitems/200509/s1452073.htm>
- ¹⁶ CNN.com, “A Disturbing View from Inside FEMA” (September 17, 2005), at <http://www.cnn.com/2005/US/09/17/katrina.response/index.html>
- ¹⁷ The White House, “President Bush Signs Homeland Security Act” (November 25, 2002), at <http://www.whitehouse.gov/news/releases/2002/11/20021125-6.html>
- ¹⁸ Donald F. Kettl, *The Department of Homeland Security’s First Year: A Report Card* (New York: The Century Foundation, 2004), at <http://www.homelandsec.org/publications.asp?pubid=451>
- ¹⁹ Christopher Rhoads, “At Center of Crisis, City Officials Faced Struggle to Keep in Touch,” *Wall Street Journal* (September 9, 2005), p. A1.