

# **The *Next* Government of the United States: Challenges for Performance in the 21st Century**

Transformation of Organizations Series



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IBM Center for  
**The Business  
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December 2005

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## F O R E W O R D

December 2005

On behalf of the IBM Center for The Business of Government, we are pleased to present this report, "The Next Government of the United States: Challenges for Performance in the 21st Century," by Donald F. Kettl. The intent of this paper, as well as of the Thought Leadership Forum summarized in Part II of this report, is to spark the imaginations of government leaders to look beyond their day-to-day "urgencies" and reflect upon the important challenges the nation will face tomorrow.

In the past five years, the performance of our national government has been challenged from unexpected quarters, leading to organizational change within government. For example, the 9/11 terrorist attacks led to the creation of the Transportation Security Administration, the Department of Homeland Security, and the reorganization of the intelligence community. The hurricanes this year, especially Hurricane Katrina, have led to a reassessment of the nation's emergency response system and our ability to provide essential social services and lead a reconstruction effort in the aftermath of a natural disaster. The looming threat of avian flu challenges the public health system. And all of these challenges are occurring in the context of a large federal deficit and the inexorable onset of retirements from the baby-boom generation, which will place increasing pressures on Social Security and healthcare expenses.

So, what happens next? The next president will face a very different set of management challenges from the ones that confronted the current president when he took office. Can we begin to predict and start preparing to respond to these challenges? That is the task that Dr. Kettl took on, through our encouragement, using his insightful essay in Part I of this report to promote discussion during a two-day Thought Leadership Forum that the IBM Center for The Business of Government convened this past summer.

Will the trends identified by Dr. Kettl and the forum participants come to fruition? As stock prospectuses warn us, "past performance is not a guarantee of future results," but it does provide some guideposts. We hope that government executives across the nation will find both parts of this report enlightening and thought provoking. We intend to use the framework presented here to shape much of our research efforts over the next several years.

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## EXECUTIVE SUMMARY

In response to a request from the IBM Center for The Business of Government, the author prepared this report to stimulate a discussion on what the “next government” of the United States might look like. In Part I, the discussion focuses on the following five imperatives for the performance of American government in the 21st century:

- A policy agenda that focuses more on *problems* than on *structures*
- Political accountability that works more through *results* than on *processes*
- Public administration that functions more *organically*, through heterarchy, than *rigidly* through hierarchy
- Political leadership that works more by *leveraging action* than simply by *making decisions*
- Citizenship that works more through *engagement* than *remoteness*

These imperatives emerge from America’s struggle to deal with deep challenges facing the nation. At the core is a fundamental problem: The current conduct of American government is a poor match for the problems it must solve. If government is to serve the needs of its citizens in the 21st century, it must reconfigure itself—to shift the boundaries of who does what and, even more important, how its work gets done.

Some public organizations have already experimented with the challenges of stretching and bridging their boundaries. At the Centers for Disease Control and Prevention (CDC), Dr. Julie Gerberding struggled with

a series of challenges, including the 2001 anthrax attack and Severe Acute Respiratory Syndrome (SARS), and devised a new model for CDC’s operation. Part I of this report concludes with an analysis of the steps she took, along with a broader discussion of the imperative for creating knowledge-driven learning organizations.

In June 2005, experts from government, academia, nonprofit organizations, and the corporate world considered the arguments for the “next government” of the United States. Part II of this report presents a summary of major discussion points at the forum. From their professional experience, forum participants distilled three big challenges facing government, all of which require transformational change in the next round of government reform:

- Using networks to organize for both routine and non-routine problems of government management.
- Using a “center-edge” approach to govern through a network of networks that sets basic policy but gives frontline operators considerable flexibility in how best to implement it.
- Engaging citizens in new roles to solve public problems.

Government is moving into the information age. Effective government requires public institutions that can manage information to learn how best to improve their effectiveness. In the information age, democratic government demands both citizen engagement and transparency. However, the growing complexity of government’s administrative tools makes it far harder to determine who is responsible for what. Innovations in information—who produces it and who uses it—will be essential to crack this emerging paradox of 21st century governance.

**Part I:**  
The U.S. Government  
of the Future

**Donald F. Kettl**

# Shifting Boundaries

Americans have always been explorers and, as they have stretched their ambitions, they have always built boundaries. “Good fences make good neighbors,” wrote Robert Frost in his poem “Mending Wall.” The urge to escape the boundaries of the east drove settlers west—and one of the first things they did was to construct fences. So it has been with Americans and their government. The Constitution’s long shadow over American democracy is one of boundaries: of what each branch of government is empowered to do, of powers reserved to state governments, and, most important, on the limits of governmental power enshrined in the Bill of Rights.

Yet, as Frost begins his famous poem, “Something there is that doesn’t love a wall.” American governments increasingly face problems that pay little attention to the boundaries created to manage them. Moreover, the boundaries with American government—and between its public institutions—have long been porous. Indeed, the American separation-of-powers approach is less a way of building fences around governmental institutions than of structuring the political conflict between them. Having created the boundaries, we test them, and we test them often. Moreover, the relative power of American political institutions has shifted regularly throughout American history. Indeed, one of the greatest and least-appreciated strengths of American democracy is the ability of its systems to stretch and accommodate new political pressures without shattering the fundamental balance at the core.

## Periodic Revolution

The constancy of change has been at the core of American government. Americans have always loved to tinker. Benjamin Franklin’s many inventions came from puttering about in search of solutions to problems

he observed. For more than 40 years, Thomas Jefferson continually redesigned and rebuilt his beloved Monticello. The administrative structure of American government has followed much the same pattern. Throughout the 20th century, as Paul C. Light describes, American government was awash in tides of reform, which regularly sought to transform how government did its work.<sup>1</sup> A driving culture of pragmatism has long been at the core of American political culture.

Beyond the constancy of change, however, lie more periodic, revolutionary transformations. American history has been marked by “punctuated equilibriums,” deep, fundamental, and sometimes violent changes that have interrupted the steady wash of reformist tinkering.<sup>2</sup> They have come as earthquake-like changes, along deep fault lines in the political system. Three fault lines have long proven to be the most important:

**Federalism.** In the early decades of the American republic, the nation slid around fundamental questions of the balance of power between the federal and state governments. The Articles of Confederation put power in the states, but the young nation proved incapable of organizing itself to solve tough problems like security in the countryside and trade among neighboring states. The Constitution firmly stated in the 10th Amendment: “The powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people.” But where the boundaries lay proved a long-simmering problem. Slavery was the flash point, but there were important economic and social forces as well that built up tension along this fault line. The earthquake came with the Civil War, which resolved the tensions, if uneasily, in favor of federal supremacy.

**Privatization.** The American Revolution was in part about the colonists' revolt against the king's effort to restrain commerce. The Boston Tea Party, after all, was an act of vandalism by Bostonians against ships owned by the British East India Company, which the British government had tried to aid through a special tax plan. Americans wanted freedom of commerce, which they largely got until the Industrial Revolution. Toward the end of the 19th century, tensions began building on the role of the free market. Market-based competition increasingly hurt citizens, from unregulated steamship boilers that exploded to large trusts that gained monopoly control over the marketplace. Americans demanded tougher controls on business. The earthquake came with the Progressive Era, which ushered in new restrictions and a new role for government, from governing the value of money through the Federal Reserve to regulating markets through independent regulatory agencies.

**Globalization.** Once they fought off the British crown, Americans largely contented themselves with conquering the vast land that stretched to the Pacific. They showed little interest in the battles that so often preoccupied Europe, until World War I drew them into a conflict they could not escape. When the war ended, they settled back into a happy isolationism that even Hitler's invasion of Europe did not shake. The tensions finally proved overwhelming when Japanese forces attacked Pearl Harbor. The earthquake redefined America's role in the world and made it a central player on the global stage.

Throughout American history, tensions have periodically built up. The existing boundaries proved unworkable, and no amount of tinkering could resolve the problem. When American government proved it was not up to the problems it had to solve—and when the costs of the strain proved unacceptable—an earthquake in government occurred, and a new government arose to replace it.

These earthquakes have come with surprisingly regularity: the Civil War in the 1860s, followed by the limits on free markets led by the Progressives in the 1900s and 1910s, and then the rise of American global power in the 1940s and 1950s. By the end of the 20th century, the nation was overdue for another fundamental shift. And, sure enough, the 9/11 terrorist attacks brought a stunning earthquake.

As the *New York Times* editorialized on September 12, 2001, "We look back at sunrise yesterday through pillars of smoke and dust, down streets snowed under with the atomized debris of the skyline, and we understand that everything has changed."<sup>3</sup> Everything, of course, had changed—but in fact the change had occurred *before* 9/11. We just had not realized it. It took the earthquake of 9/11 to point out the transformations that had already taken place.

For the first time in American history, all three boundaries moved at once. In federalism, the political and administrative revival of the American states brought them into far greater prominence in domestic policy, just as political gridlock paralyzed federal policy makers. In privatization, the rise of free-market capitalism and deregulation spurred a rise of corporate power the likes of which the nation had not seen for a century. In globalization, important changes occurred: the fall of communism, America's rise as the world's unchallenged military power, the growing importance of global economic markets, and the unexpected challenge of global terror networks. Americans found themselves, for the first time ever, struggling to redefine the boundaries of federalism, privatization, and globalization—simultaneously.

That frames the fundamental question. Following the earthquake that occurred at the beginning of the 21st century, how is the political landscape being transformed? Toward what is American government moving? Indeed, what is the *next* government of the United States?

# The Next Government of the United States: A Portrait

Just what might the next government of the United States look like? We can imagine five imperatives for a new and more effective strategy of government.

## A Policy Agenda That Focuses More on *Problems* Than on *Structures*

Not long after watching a television newsmagazine report on the risks of sport-utility-vehicle rollover accidents, the author just missed watching such an accident. Coming upon the scene moments later, he saw 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, three things could happen, and two of them would be bad. Neither government might respond, with each assuming the other would handle the call, and the victims would remain trapped. Both governments might respond with the full first-response arsenal, and taxpayers would have paid twice for the same service. Fortunately, the third alternative was the one that occurred. Because both communities had worked out these problems in the past, 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 they made the critical point: 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. People want their problems solved; they don't fuss over who solves them. In the United States, it has

### Five Imperatives for the Performance of American Government in the 21st Century

- A policy agenda that focuses more on *problems* than on *structures*
- Political accountability that works more through *results* than on *processes*
- Public administration that functions more *organically*, through heterarchy, than *rigidly* through hierarchy
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- Citizenship that works more through *engagement* than *remoteness*

been called “one-stop shopping.” In the United Kingdom, it is “no wrong door” and “joined-up government.” But the point is the same.

*Effective 21st century governments work to ensure seamless service delivery in which governments structure their service delivery systems according to the problems to be solved, not by focusing on the organizations charged with solving them.*

## Political Accountability That Works More Through *Results* Than on *Processes*

Creating such integrated service systems demands a mechanism for holding managers accountable for

their actions. If government's service system resembles a web more than a hierarchy, who is responsible for what? If the government is part of a broader network, is government just one player among many, one claimant at a table with multiple claims on all sides? Who steers the network—if, in fact, the network is being steered? Who safeguards the public interest—and how can it best be done?

The answer to these questions traditionally came through hierarchy, but, as we have seen, the conduct of 21st century government directly challenges this approach. We certainly are not about to abandon authority as the cornerstone of public administration. Nor should we. Elected officials and citizens alike have the right to expect to hold administrators accountable for the performance of public programs. But the more we rely on network-based service systems, the more we need approaches to accountability beyond hierarchy to ensure that public agencies effectively manage public programs.

Where authority falls short, information systems and performance management can help fill in the gap. These techniques surely cannot replace the bedrock approaches to accountability. However, techniques like the New York City Police Department's CompStat system and the "Virginia Excels" system offer supplemental approaches for bridging the gaps that authority fails to cover. Moreover, since organizational partnerships can shift and evolve rapidly, government needs a flexible accountability system that can keep up.

*Effective 21st century government requires a high-performing government whose accountability systems keep track with the evolution of the public sector's toolbox.*

## **Public Administration That Functions More Organically Than Rigidly**

The analyses of how government responded to the 9/11 attacks showed the deep pathologies of public organizations trapped in functional silos. In New York City, for example, the emergency response system suffered from a host of problems, including communications breakdowns and deep strains in coordinating police and fire units.<sup>4</sup> At the Pentagon, by contrast, the story is remarkably different.<sup>5</sup>

Governments in Arlington County and throughout the region had long anticipated the possibility of a major attack, had worked out possible scenarios in advance, and had drilled with each other on how to respond. They did not have to work out tactics on the spot. Instead, they were able to shift into pre-arranged patterns, which made the response far smoother.

Emergency responders typically call this problem "interoperability," but it extends far past establishing common procedures, command structures, communication systems, and other details like fire hoses that actually connect to different cities' hydrants. These straightforward elements have challenged many communities. But interoperability extends to the process of ensuring that public organizations work together carefully and seamlessly.

There are huge challenges to this approach. Such coordination often fails because it is an unnatural act among non-consenting bureaucrats. Indeed, one of the first things that Arlington County Police Chief Ed Flynn had to do that morning was to decide that he would surrender command over the crime scene to firefighters, who were struggling to contain the blaze at the Pentagon. The Arlington emergency response succeeded because administrators had, in the past, worked out such arrangements so they were ready in case of trouble.

But working out such relationships is often difficult because organizational boundaries often mirror the jurisdiction of legislative committees and subcommittees, and sharing power among legislative jurisdictions is a feat of supreme difficulty. American Enterprise Institute analyst Norm Ornstein has counted 88 different congressional committees and subcommittees with some jurisdiction over the new Department of Homeland Security. That political fragmentation makes it increasingly hard to ensure administrative coordination.

*Nevertheless, effective 21st century government requires new mechanisms for coordinating government agencies to ensure that they connect organically as they seek to solve the manifest problems they confront.*

## Political Leadership That Works More by *Leveraging Action* Than Simply by *Making Decisions*

The challenges facing 21st century government demand more than innovative policy tools and fresh administrative approaches.<sup>6</sup> They also demand new leadership by elected officials. It is unreasonable for elected officials to promise more than they can deliver in homeland security, just as it is unconscionable for them not to try as hard as they can to protect citizens. It is unthinkable for them to demand accountability from administrators at the same time they might be creating obstacles to performance. The challenges demand a higher level of truth-telling from elected officials, truth-telling that rises above a promise not to dissemble, to a commitment to engage citizens in a frank debate about the realities of what government should and should not seek, and what it can and cannot do.

Too often, media exposés prompt witch hunts to ensure problems never happen again. That sometimes prompts government to act without exploring the full consequences of its decisions—or without examining related fallout. When studies showed that the use of the painkiller Vioxx was associated with heart attacks and strokes, public uproar led the manufacturer, Merck & Co., to withdraw the drug from the market and the Food and Drug Administration to issue a public advisory. Some patients who found relief only with Vioxx countered that the decision dramatically lowered their quality of life. Some researchers pointed out that the cardiac risks of Vioxx were relatively low and that other painkillers sometimes caused serious bleeding problems. Reporters, citizens, and policy makers often look for black-and-white answers to questions that live only in shades of gray.

The highly combative, closely balanced political system can make elected officials gun-shy about wading into such complexity. The last two presidential elections have shown just how deeply divided the public is, and that has made it even harder for elected officials to deal with the inevitably complex issues they face—and to escape the gridlock that so often constrains American politics. The problem goes even deeper, however. Although the nation is politically balanced on a razor's edge, there are relatively few states whose governments are so evenly

divided. Within those states, there are even fewer divided communities. The sense of deep political division is in fact a curious coincidence of communities with a strong sense of what they believe, which balance other communities that frequently believe something quite the contrary. That makes it even more difficult for the political system to deal in subtle shades of gray, because different communities so often hold such different views. It also vastly complicates the basic role of elected officials in making decisions, and it often freezes relatively junior or minority party officials from a serious role in public debate.

However, these problems also create new and sometimes unexpected, out-of-role opportunities for elected officials. Several relatively junior Pennsylvania state legislators devised a new leadership role for themselves. As a new highway project was being built through their districts, they realized that a larger, busier highway was likely to create the risk for more dangerous accidents. To tackle the problem, they worked to bring together local officials—elected officials, first responders, transportation managers, and others—along the new highway corridor. One key player was reluctant to join the conversation: state troopers, who did not normally work with local officials. Local officials countered that, without their presence, the response system would inevitably have a large hole.

They determined that was unacceptable. And to solve the problem, they called the state police headquarters with a simple invitation for representatives to attend the meeting. The message, of course, was unmistakable: No administrative agency could afford to ignore such a subtle hint without provoking a less-subtle reaction. The troopers came to the meeting.

Not long afterwards, the planning paid off. The team had prepared for a wide range of contingencies, but they did not expect their first major call would be for an accident involving an asphalt truck. The black, sticky stuff began oozing from its side and soon would have created a large new lane of rough pavement that would have ruined that new stretch of highway. But the region's officials invoked their new response plan. Sand trucks from nearby jurisdictions quickly converged on the accident scene, and highway teams used the sand to sop up the spilled asphalt. Everyone agreed that the advance

understandings had allowed them to dramatically reduce the closure of the major highway. And the state legislators learned that they do more in the policy process beyond legislating. They played a critical role as conveners—and, in ensuring that the key players were at the table, they provided important bridge building among public administrators at several layers of government and across many different agencies.

*Indeed, effective 21st century government requires innovative approaches to leadership by elected officials—approaches that stretch traditional roles and that, in some cases, may require courageous risk taking.*

## **Citizenship That Works More Through *Engagement* Than *Remoteness***

The demands that government solve policy problems are growing; the public's taste for a bigger government has not. Indeed, the tax-limitation movement has forced elected officials into ever more creative tactics for expanding government's reach without appearing to increase its size, at least as typically measured by indicators like the number of government agencies or the number of employees. The new push for homeland security, especially at the federal level, has broken these barriers, with a major new cabinet department and the federalization of airport screeners. But in most other areas of government, at all levels, the push is on to deal with the fundamental dilemma: satisfying public demand without dramatically increasing government bureaucracy.

To deal with this paradox, governments at all levels have been increasingly relying on a vast array of indirect tools. The war in Iraq, to a level never before seen, depended on a huge range of private support contractors. Investigators have discovered that interrogators working for private contractors were directing the interrogations that some members of the armed forces were conducting at Abu Ghraib prison.<sup>7</sup> At home, welfare reform has built on a vast network of for-profit and nonprofit contractors.<sup>8</sup> Medicare and Medicaid are hugely leveraged programs, with just a handful of government employees at the federal, state, and local levels responsible for a huge collection of hospitals, clinics, doctors, and nursing homes that actually provide the service.

This not only presents important challenges for ensuring accountability and effective results. It also is posing new and unexpected challenges for citizenship. Indeed, there is a profound irony that more and more citizens are feeling disaffected from government just as they are themselves, as contractors and other agents of public services, becoming ever more integral to the delivery of government programs. A pharmacist might be filling the prescription for a Medicaid-funded drug at one moment, the prescription of a retired military officer the next, then a drug paid for by a managed care plan, followed by someone paying cash. In many policy areas, the streams of public and private action have become so intermingled that it is impossible to disentangle them. It is likewise extremely difficult to inculcate a sense of the public interest in those responsible for frontline service delivery when so many of those responsible are in the private sector and do not even stop to think about their role.

At the same time, the Internet has provided remarkable new opportunities for citizen interaction. The 2004 Howard Dean presidential campaign stunned candidates with its prowess in raising money on the web. Blogs allow individuals to circumvent the news media, and web-based rumors sometimes spread more quickly than hard news. This has many very positive aspects, especially by increasing the opportunities for citizen engagement at a time when many citizens are feeling alienated. But it also challenges public officials. They are developing new strategies for e-government, but the spread of technology has multiplied opportunities—and challenges—for citizen action faster than government's ability to keep up. One thing can be said with certainty: Technology has fundamentally transformed citizens' interactions with government.<sup>9</sup>

*Thus, effective 21st century government requires a new role for citizens, one that requires them to rethink their connection to—and involvement in—the pursuit of the public interest.*

# The Government of the Future: Dr. Julie Gerberding at the CDC

What might the government of the future look like? Dr. Julie L. Gerberding's hard work on the challenges facing the Centers for Disease Control and Prevention (CDC) provides some telling evidence. She has struggled mightily to put her reforms in place. But the tale offers stark evidence of the emerging problems that public managers everywhere increasingly face.

## Anthrax

Dr. Gerberding was a most unlikely hero of the 2001 terrorist attacks. In fact, when the towers fell on September 11, she was working more than 600 miles away in Atlanta, Georgia, at CDC headquarters. But Gerberding quickly found herself buried in some of the nation's toughest homeland security problems.

She had not intended to commit herself to a new job. At the end of August, CDC's deputy directorship of the National Center for Infectious Diseases became vacant, and Gerberding's boss pressed her to take the job. A physician, Gerberding had worked for three years to develop CDC's patient safety program, including a cutting-edge strategy to reduce medical errors. But she had little background and less interest in taking the infectious disease job. When her boss twisted her arm, she reluctantly agreed to serve for a month—maybe three—but not a second longer. The field was a long way from her expertise and not what she wanted to do next. And, she explained later, "In the first 10 days of my job, I really couldn't figure out what in the world I was going to do."<sup>10</sup>

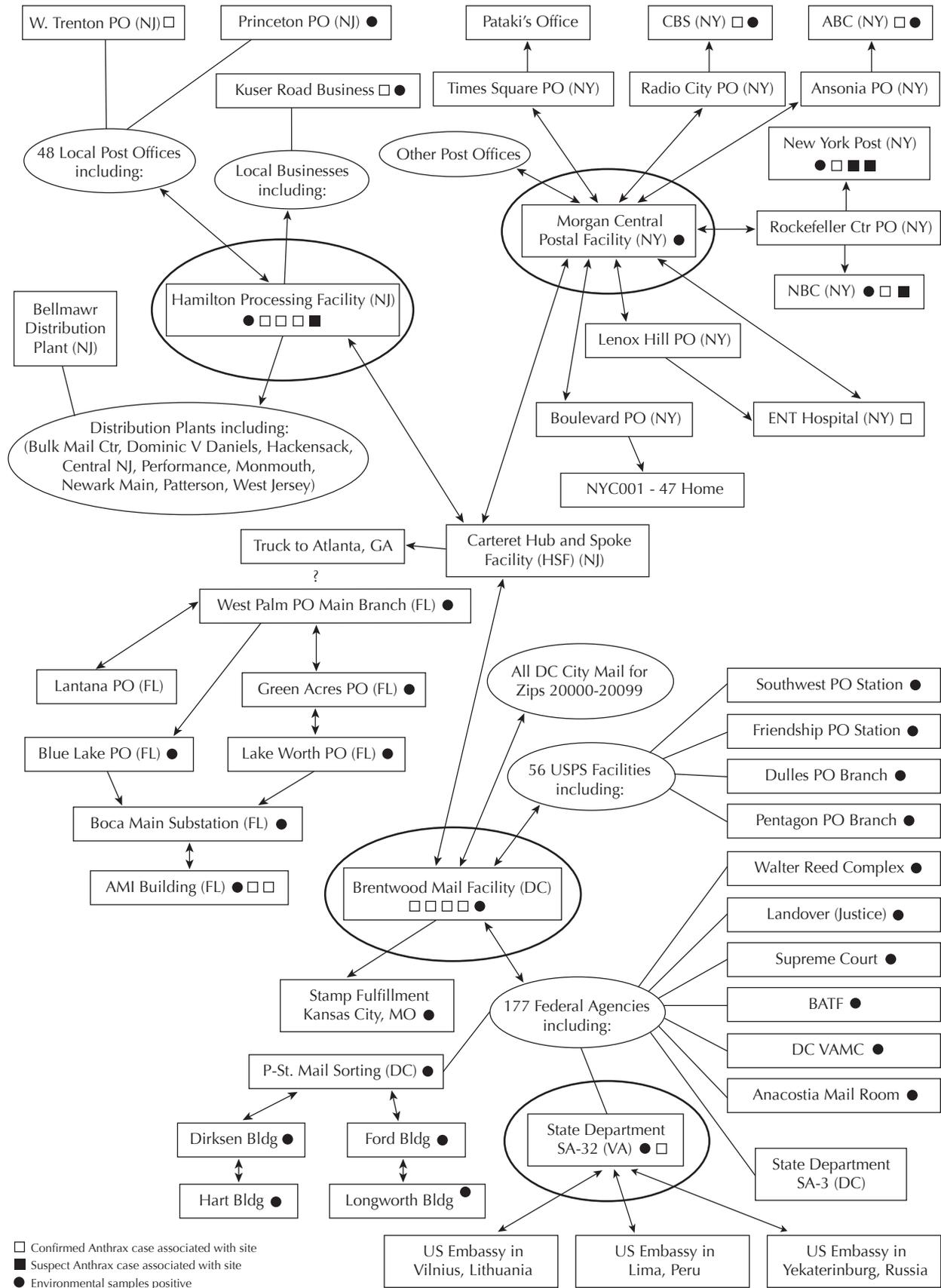
But that all changed in just a few weeks. Mysterious respiratory illnesses surfaced around the country. First, a photo editor at the company that produced the *National Enquirer* fell ill and suddenly died. Postal workers in Washington, D.C., and a 94-year-old

Connecticut widow soon followed. The pattern seemed random, and the source was baffling. Experts soon diagnosed the disease as anthrax, and it continued to spread. It hit assistants to NBC news anchor Tom Brokaw and CBS anchor Dan Rather. When workers in Senator Tom Daschle's mail room discovered a suspicious white powder in an envelope, officials quickly evacuated one of the Senate's office buildings.

The blizzard of anthrax reports terrified citizens across the country—and provoked an avalanche of false alarms. Emergency workers evacuated hotels and office buildings on the discovery of cleaning fluids, flour, and even the sticky residue of spilled soft drinks. In one Wisconsin community, office workers shivered outside in the early-fall chill as they went through decontamination showers, only to discover that the mysterious powder for which they had been evacuated was harmless (and not even the same color as anthrax). People feared the trip to the mailbox, and some individuals put on rubber gloves to open their junk mail.

Because of the job she had reluctantly agreed to take, Gerberding was the senior CDC official on the case. With determined detective work, she and her staff traced the problem to a small handful of envelopes that contained anthrax powder. As the anthrax-laced envelopes passed through mail-sorting facilities, the machinery became contaminated and spread the powder through diplomatic mailbags shipped to American embassies in Peru and Russia. A devious act by an unknown terrorist, who created a small number of biological weapons disguised as ordinary envelopes, spread contamination, quite literally, around the world (see Figure 1).

Figure 1: Anthrax Attack 2001—Mail Flow Network



Source: Centers for Disease Control, November 7, 2001.

Gerberding proved herself a hero in the case, but in a very different way from the firefighters and police officers who, heedless of their own safety, had run up the stairs of the World Trade Center. She faced the task first of figuring out what was happening, where it was coming from, how to stop it, and how to treat victims. No one knew much about anthrax, how it spread, how to detect it quickly, and how to minimize its spread. Medical treatment—strong antibiotics—was effective if administered quickly, but if victims did not receive the medicine soon after inhaling anthrax spores, the disease spread quickly and often proved suffocatingly fatal.

Especially in the aftermath of the September 11 attacks, people were terrified, and everyone demanded quick results. Gerberding's challenge was determining how best to shape the government's response. Her distinctive contribution to the anthrax outbreak was her diagnosis of the government's underlying problem—that its traditional hierarchical systems were a poor match for the anthrax problem—and her prescription—that government needed a far more flexible network-based approach to tackle the issue.

## SARS

The spread of Severe Acute Respiratory Syndrome (SARS) in the spring of 2003 confirmed both Gerberding's diagnosis and prescription. A global outbreak developed from a single physician who had been treating patients in rural China. He visited his brother in Hong Kong without knowing he was becoming ill with the flu and, in the process, unknowingly spread it to other guests on the eighth floor of his Hong Kong hotel. These hotel guests, in turn, soon traveled back to their homes around the world, including the United States, and they took SARS with them (see Figure 2).

With far greater frequency, Gerberding and CDC found that new problems were arising from unexpected directions, spreading through unpredictable patterns, and outstripping the capacity of traditional government bureaucracies. Public organizations like the CDC, structured with traditional hierarchical boundaries, found themselves struggling to cope with problems that paid no attention to these boundaries. Indeed, more and more problems began resembling the drawings adorning the refrigerators of parents and grandparents of 2- and 3-year-olds everywhere: boldly colored strokes spilling beyond the outline of color-by-number pictures. How should public

organizations deal with problems that refuse to stay within the lines?

Gerberding identified the key hubs of action, the opinion leaders who leveraged others in the network, and the bridges that connected them. She minimized central authority and worked to create open consortia of action. She understood that responsibility had to be distributed, not centralized.

But, most of all, she grasped an important but extraordinarily difficult reality of modern public administration. Like many public organizations facing critical issues, the CDC had ultimate *responsibility* for the results but did not have *authority* to produce or control them. Gerberding had to set a course and determine how best to mobilize the forces required to serve it. She had to find a way to learn quickly, to minimize mistakes. And she had to find a way to enlist partners, in government and outside, in the United States and around the world, to manage the problem. In short, she had to find new ways of bringing important knowledge, often held widely in organizations spanning the globe, to bear on new problems, with high risks, that had to be solved.<sup>11</sup>

## CDC as a Learning Organization

Gerberding explained that she quickly had to move “from a situation where I knew nothing about anthrax into one of the world's experts.” In July 2002, Gerberding became CDC director, and she decided to take a radical step away from the CDC's typical procedures. She concluded that her agency's traditional structures and usual procedures were a poor match for the anthrax crisis. To replace the standard operating procedures, she cobbled together a new administrative approach—and she knew full well that, given the genuine public health risk and the public panic over anthrax, failure was not an option. She developed a new network of hubs (concentrated centers of expertise) and spokes (connecting rods to the front lines of operations). In the process she created a world-class operation that has become finely tuned to the risks of bioterror, as well as to the increasing risks that mysterious diseases like bird flu and flu pandemics can spread as well. In short, she tried to transform the CDC into a learning organization.

Gerberding institutionalized these changes with a 2005 CDC reorganization, around four “coordinating centers,” which moved CDC from function to





mission: Environmental Health and Injury Prevention, Health Promotion, Infectious Diseases, and Health Information and Services (see Figure 3). The goal, CDC announced, was to improve the ability of CDC experts to share what they knew, to streamline the flow of information to top officials, and to improve the agency's ability to leverage the expertise of its partners. "The changes add greater agility and accountability," Gerberding explained. "We have transformed CDC into a learning organization."<sup>12</sup> The restructuring went far past bioterror. Her goal was to build CDC not around functions but around the health and safety issues in people's lives. She aimed to "help CDC's scientists collaborate and innovate across organizational boundaries."<sup>13</sup>

Gerberding's restructuring proposal encountered enormous resistance within CDC. A 2005 survey of employees found that two-thirds of them opposed the restructuring. Some employees criticized what they viewed as an "inappropriate" business focus to the CDC's health mission, loss of trust, low morale, and damage to the agency's reputation. Gerberding understood the difficulty of the change. "It was done at the worst possible moment as far as people's anxiety," she said. "I knew how hard it would be." But, she added, "We had to change."<sup>14</sup> Some employees criticized her management style. Others pointed to what they contended was political interference with CDC, including a big budget cut and turmoil over the distribution of flu vaccine. The reorganization had stretched on over two years, and many employees said they were frustrated and exhausted. Turnover of key scientists proved a major problem. One top official said that "it's gone from dedication to make change to being aghast at the process and the changes being made." But another official concluded, "This is exactly what the agency needs to be doing," and he pointed to the problems as "growing pains." Outside experts said that the restructuring was long overdue, but some were concerned about how long it was taking and about the morale problems that had arisen.<sup>15</sup>

Like all big reorganizations, this one stirred up deep passions among those being reorganized. Debate raged over the tactics. Some critics suggested that CDC should have pursued other alternatives. But it is impossible to escape the central lesson of the case: The CDC's traditional hierarchical organization proved a poor fit for the 21st century problems it was facing, and it needed a fundamental change.

Government is being fundamentally transformed, as Mark A. Abramson, Jonathan D. Breul, and John M. Kamensky have found, with changing rules, a new emphasis on performance, a focus on improved service delivery, and increased collaboration.<sup>16</sup> But organizing government to accomplish these goals—and, at the same time, to cope with the urgent policy problems facing them—is challenging the very foundation of public administration in the United States and around the world.

# Creating the Government of the Future

What general principles can we draw from the issues that CDC faced? Consider these three:

- The imperative for *knowledge-driven organizations*
- The increase in *non-routine problems*
- The growing need for *non-hierarchical solutions*

## The Imperative for Knowledge-Driven Organizations

For many tough problems, success increasingly depends on information as much as more-traditional assets like authority. Experts including Peter Drucker and Daniel Bell have made the case that the post-industrial era is a knowledge society, where the chief assets are communication, innovation, and information.<sup>17</sup> As Tom Peters famously put it, “Get innovative or get dead.”

The arguments for the “knowledge society” soon become so well-known as to be trite. But the case for the knowledge society is far more straightforward than the plan for how to achieve it—and, especially, how to transform organizations to make them limber enough to learn without being so flaccid as to lose their effectiveness and discipline. Moreover, having made the case, the cutting-edge theorists have not always stopped to ask whether all problems need the same knowledge-society solutions. The impulse for innovation can become an obsession that stirs up turmoil as well as new ideas. Reform fatigue is a frequent side effect of a continuous improvement strategy. So the trick is building organizations that can learn and adapt while remaining focused and effective on their mission; that can match the learning approach to the special problems they face; and that can remain lively and vital without wearing out their employees.

## The Knowledge Society and Innovation

The case for innovation is unarguable. Modern life presents organizations with a host of new problems for which old solutions are a poor fit. That is often true in spades for public organizations, as Gerberding found, which often face, by default or design, the social problems that are most important or most intractable. The more rapid the pace of change and challenge, the greater the need for innovation. But as Markus Reihlen perceptively argued, “formalization of the innovation process is one of the biggest obstacles for fundamental learning processes.”<sup>18</sup> Doing something new once, especially sparked by crisis, is one thing. Doing it again can strain an organization’s capacity. Doing it as a matter of routine is an enormous challenge. Doing it within hierarchical organizations, with their powerful focus on routine, can be daunting indeed. Yet restructuring public organizations so that they respond more dynamically to new challenges can fly in the face of centuries of tradition, theory, and law about the accountability of public organizations.

## Challenges to Building Knowledge-Based Organizations

The fundamental problem in creating knowledge-based organizations is that hierarchies focus on building expertise to accomplish, efficiently and effectively, matters of routine. Knowledge-based organizations, by contrast, focus on building the capacity to adapt rapidly to change—that is, to cope with problems that are distinctly non-routine.

Government, of course, does not face an either/or choice. Most government functions have been—and will continue to be—largely routine. Sometimes those routine functions are ordinary, such as delivering

(and billing for) safe drinking water. Sometimes those routine functions can be quite complex, such as putting out fires and catching criminals. Some straightforward routines, like mailing Social Security checks and managing air traffic, require deceptively complicated support systems. At the core, however, most government actions are routine, large-scale activities that have always relied on hierarchy for effective administration.

On the other hand, many important government functions, including programs ranging from the social services to homeland security, are increasingly non-routine. They typically involve partnerships among multiple organizations, at all levels of government and between government and the for-profit and nonprofit sectors. They involve very hard problems where the costs of failure can be great. And they require very complex administrative technologies. The fastest-growing portion of most state budgets is Medicaid, and the engine driving Medicaid costs is nursing home coverage for older Americans. That care is deceptively complicated. As one social worker put it, “If you’ve met one Alzheimer’s patient, you’ve met one Alzheimer’s patient.” The required care varies with each patient, and that care must change as the person’s condition changes. The care comes from a wide variety of medical disciplines, including nursing, nutrition, physical therapy, psychiatry, dentistry, and medicine. Most of the care is provided by private and nonprofit organizations. Most of the financing is managed through for-profit intermediaries. For government, the job of managing the program is finding leverage over this vast and complex network. The job of ensuring effective service requires doing so in a way that brings coordination to this wide array of services so that they work well (yet differently) for each recipient.

The same is true in environmental policy, where the federal government itself does relatively little itself. Much environmental management is delegated to the states, which in turn regulate and oversee private companies and manage cleanups through private contractors. In public health, specialists are puzzling over how best to control the risks of flu pandemics, which because of the speed of international travel can spread quickly from individual cases in desolate areas and cause worldwide problems.

It is true in spades for homeland security, which depends on coordinating private and public functions,

at multiple levels. For example, fire and police departments have sometimes warred over who is in charge at the scene of an emergency. Indeed, in 2005, this issue yet again ruptured the always stormy relationship between the New York City police and fire departments.<sup>19</sup> Terrorists are most effective when they take advantage of holes in the system—that is, when they identify hierarchical, bureaucratic routines and discover the inevitable gaps they can exploit.

Solutions to these problems increasingly depend on innovation and information. Traditional organizations typically struggle to keep up with these challenges. Creating a knowledge-driven government thus requires a new approach to government.

## The Increase in Non-Routine Problems

Moreover, more of the problems government faces are non-routine—even “wicked,” as some analysts have described them.<sup>20</sup> First, many critical problems allow *little time to react*. The Air Force scrambled jet fighters on the morning of September 11, but they did not reach Washington in time to stop the plane that crashed into the Pentagon. The small private plane that panicked Washington in May 2005 proved harmless, but even at its slow speed, it was just minutes from the White House. Global flu pandemics can spread quickly, as the SARS case demonstrated.

Second, these problems can bring a *high cost of failure*. The breakdown of the nation’s airline security system in 2001 killed nearly 3,000 people and crippled commerce. The spread of anthrax quickly killed five persons and made millions of Americans afraid of opening their mail.

Third, these problems often tend to be *critical to citizens’ needs*, from public health and transportation to commerce and a sense of well-being. They are problems that citizens notice. Failure can not only bring great cost to citizens. It can bring a harsh spotlight on the policy makers under whose watch the failures occur.

Finally, *responsibility for solving these problems is highly diffused*. Indeed, no one organization, public or private, and no single nation can hope to control these issues. As Gerberding concluded, local issues have increasingly become global, and global issues

increasingly demand a local response.<sup>21</sup> Effectively leveraging government's power is deceptively difficult, and measuring how well it's doing the job often lies beyond our grasp.

### The Implications for Government

These non-routine problems are increasingly important to government: because the increasingly interconnected nature of policy problems leaves everyone more vulnerable to failures anywhere; because citizens expect that government will solve these problems; and because the solutions require integrated, coordinated solutions involving a remarkably wide range of organizations, both inside government and out. Large organizations are best at dealing with problems that can be reduced to routine, if complex, solutions. The rise of non-routine problems makes that difficult, especially for many of the most important problems that governments face. That fuels the need to make substantial parts of government into "learning organizations."<sup>22</sup>

This argument, of course, has been made often, but its subtle implications often lie unexplored. Consider these challenges, for example:

- Many non-routine problems require nimble organizations that can quickly adapt. Hierarchical organizations are designed to present a common face to problems.
- Non-routine problems require solutions based on communication and information. That gives great power to those who hold the information. But hierarchical organizations give power according to position. Those who hold the information might well not be those who have authority in the hierarchy, so there is great potential for internal organizational conflict if information-based power wins out—or ineffective response if position-based power triumphs.
- Non-routine problems require different patterns of coordination for different problems. This argument, in fact, lies at the heart of the case reformers have made for flexibility in government administration, including "reinventing government."<sup>23</sup> As Reihlen puts it, "coordination patterns are developed according to situational requirements." Hierarchical organizations seek

coordination through routine. Theorists have long embraced complexity as part of hierarchy.<sup>24</sup> But it is clear that public organizations are facing challenges that strain the ability of even complex hierarchies to adapt quickly enough.

- Non-routine problems require non-routine solutions, which in turn require innovative problem solvers driven by information. Large, formal organizations frequently create cultures that make it hard for innovative managers to thrive. Moreover, it is hard for any organization to exist long without creating a culture that shapes the lens through which its members view the world—and thus limits the perspectives they can bring to new challenges.

### Non-Routine Problems and Learning Organizations

Many of the critical problems facing 21st century government require a lithe, learning organization. Learning organizations find ways of managing the non-routine in a routine way—making innovation the standard operating procedure, making large organizations nimble, and encouraging administrators to color outside the lines without shredding the organization's ability to accomplish its mission. Moreover, the challenge is not only creating learning organizations. It is also encouraging innovation while maintaining side-by-side routine operations, administered through more traditional organizations and procedures. Finally, it is important as well to ensure that the search for flexible, innovative solutions does not license administrators to skirt the requirements of *public* administration: management that complies with the law about both *what* ought to be done and *how* it is to be done. Creating a government capable of solving non-routine problems thus requires a new approach to government.

### The Growing Need for Non-Hierarchical Solutions

Dr. Gerberding discovered that the traditional CDC hierarchy did not allow her to solve these problems. Instead, she self-consciously embraced an approach of *heterarchy* to replace *hierarchy*. Reihlen explains that heterarchies are pluralistic structures that rely heavily on the initiative of their members, who seek to learn quickly and effectively about how best to

handle uncertain futures.<sup>25</sup> This concept grew in the 1990s as an alternative to traditional hierarchy. Organizational theorists sought to solve two problems. First, much of the work of complex organizations increasingly occurs not through individual organizations that control a solution but through networks that share a portion of the action. Second, as problems become more complex, no organization can hope to control or manage all the inputs and outputs that affect it. Organizations, including public ones, increasingly find they depend on other organizations to accomplish their missions.

These puzzles—and Gerberding’s network-based approach—challenge traditional public administration. If, as we have seen, American political institutions have revolved around boundaries, that is even more true of American public administration: between that which is the public and that which is not; between what ought to be done by one organization and what ought to be done by another; between how responsibility is allocated throughout the organization; between the budgetary and human resource policies that define what can and cannot be done; and, ultimately, between the instruments of governmental power—the bureaucracy—and those who set governmental policy—elected officials. Line-drawing has thus been important because it helps answer the fundamental dilemma of modern bureaucracy: how to empower it to act effectively without making it so powerful as to endanger bureaucracy.

### **Boundaries, Bureaucracy, and Democracy**

When modern American bureaucracy grew in the late 19th century, reformers worried about how to empower bureaucracy without threatening democracy. They responded with a scheme to separate policy making from policy administration. As Woodrow Wilson famously put it:

If I see a murderous fellow sharpening a knife cleverly, I can borrow his way of sharpening the knife without borrowing his probable intention to commit murder with it; and so, if I see a monarchist dyed in the wool managing a public bureau well, I can learn his business methods without changing one of my republican spots.<sup>26</sup>

The Progressives saw strict boundaries as a way to constrain the exercise of government power:

to empower government to get the job done, but to keep the exercise of that power politically accountable. This solution, however, has become harder to maintain. As government has grown larger, its bureaucracy has necessarily become more powerful. As government tackles more problems, its power has increased. As government relies more on indirect tools of action—like grants, contracts, regulations, loan programs, and tax incentives—that power has increasingly penetrated the private and nonprofit spheres of action. And as government has moved more from hierarchy to heterarchy, the dilemma of maintaining effective yet accountable public bureaucracy has grown ever sharper.

One solution is to push back against the drift toward heterarchy—to restrain administrative flexibility, to force public administration back into hierarchy, and where new puzzles challenge existing hierarchy, to create new hierarchies or to devise new strategies and tactics within the conventional model. Indeed, we have generations (if not centuries) of tradition and experience in managing hierarchical organizations. We also know that giving administrators more flexibility can court behavior that is not accountable to either the law or to policy makers. This worry, in fact, drove many of the criticisms of the Clinton administration’s “reinventing government” movement.<sup>27</sup> And if the government is part of a network, is it one player among many or the prime mover of the system? That is a critical question in defining and enforcing accountability. We know how to hold hierarchical organizations accountable. With a single focus of responsibility and a clear chain of command from an organization’s top to its bottom, hierarchy provides a straightforward answer to the question of how to hold bureaucratic power accountable. So despite the difficulties that hierarchies have in meeting modern policy challenges, there are powerful reasons for trying to find some way of fixing the hierarchical approach instead of seeking other approaches like heterarchies.

### **Hierarchical Bureaucracy and Political Cross-Pressures**

Moreover, hierarchical approaches to public administration are about more than management. The structure of public agencies mirrors the preferences of elected officials, especially legislators. In fact, as the creation of the Department of Homeland Security demonstrates, administrative structure tends

to mirror the legislative jurisdictions. Even though we tend to talk about the president as “chief executive,” bureaucratic structure tends far more often to reflect the patterns and preferences of congressional committees and subcommittees.

The news media reinforce this tendency. When problems occur, from homeland security to public health and from local garbage problems to forest fires, reporters ask why government did not prevent the problem from happening—and then ask who in government is responsible for the failure. The media have a hard time reporting on indirect management networks. The way that newspapers, and especially television network news and newsmagazine shows, package stories lends them most to the who-should-have-done-what approach. Moreover, many reporters (like most elected officials and ordinary citizens) view government bureaucracy as a kind of vending machine, with money inserted at the top and services emerging from the bottom. They have little interest and less patience for how the machine works—or with a perspective that suggests that the process is not one but many machines, each producing a different piece of the service. Complicated public-private-nonprofit networks simply do not lend themselves easily to sound-bite-based news coverage. For example, the plight of a 95-year-old grandmother in a nursing home makes for a natural story. The explanation of how Medicaid works in treating her does not. Reporters, as do members of Congress, think hierarchically in seeking accountability.

Nevertheless, as Gerberding found, hierarchical organizations have struggled to keep up with the challenges of 21st century governance. Many—indeed, perhaps most—of government’s most important problems refuse to stay within the boundaries of the government agencies established to solve them. New agencies created to tackle the new generation of problems, like the federal Department of Homeland Security, have struggled to find their footing. Even more important, they tend to be backward looking, focused on solving the last set of problems rather than scanning the environment for the next set of problems that must be solved. As Marshall McLuhan argued, “We see the world through a rear-view mirror. We march backwards into the future.” That is the way in which we have designed most of our public bureaucracies. Looking back can often pose enormous challenges for future problems that do not resemble those of the past. That is the central

force driving the need for a new approach to governance and public administration. Hierarchical organizations find themselves facing problems for which hierarchy is, at best, a poor match.

Thus, we face several core puzzles. Even if we need flexible, nimble, non-hierarchical solutions, we typically need to pursue them through hierarchically organized government bureaucracies. Even if we build strong ties between government and its for-profit and nonprofit service partners, government is—and must be—the principal force in the partnership if government is to protect and promote the public interest. Yet we nevertheless need to find solutions to problems, from SARS and bird flu to Alzheimer’s care and space exploration, that refuse to stay within the lines—and where solutions depend on a rapid response from multiple organizations, both within and outside of government.

### **Performance Measures to Span Boundaries**

Most boundary-spanning solutions are in their infancy. There are hosts of ideas to break down the silos that constrain problem solving and organizational options. Indeed, one of the most common complaints of government managers is that once a problem is tossed down a functional silo within a government agency, it often becomes virtually impossible to make the connections with other parts of the same agency—let alone with partners in other agencies or outside government.

One of the most promising solutions is performance management. The technique embraces the usual puzzles of defining what organizations ought to do and measuring how well they do it. Some of the most interesting innovations involve “crosscutting performance management”<sup>28</sup> to encourage all of the members of an interorganizational network to recognize their individual contributions to shared goals—and to assess their effectiveness in doing so. Seen this way, performance management becomes more than a tool of measurement and more than a driver of management—it becomes a language for talking about common action. The mutual-aid agreements that helped rescue the passengers in the SUV who were hanging upside down is a prime example: a focus on the contribution that each agency needs to make to help the passengers escape, and a strong incentive—helping the hapless passengers—pushing aside the usual bureaucratic pathologies.

The U.S. Government Accountability Office has found that performance measures often founder when they supply information that decision makers do not find useful. On the other hand, performance measures tend to work when they foster communications among the key parties.<sup>29</sup> Performance measurement has the greatest potential for becoming performance management, and ultimately for growing into a device for transforming government, when it becomes a language that transforms how the players think and talk about government programs.

Re-creating these performance measures into geographic-information-system-based pictures—as has occurred in New York City’s police department (with CompStat), Baltimore’s municipal services (with CitiStat), and Philadelphia’s school system (with SchoolStat)—suggests performance measures can now in fact transform the language of government. Moreover, when key data become translated into memorable pictures, they often prove unforgettable to those involved in the process. These different approaches to measurement suggest that the performance approach not only has potential for improving the results of government programs. It can also create an information-driven language to break down the silos that so often separate the agencies managing government programs. Thus, creating a government capable of solving non-hierarchical problems requires a new approach to government.

# Conclusion

This is not the first time that American government has faced such challenges. Indeed, a careful reading of American history suggests that the nation periodically has gone through a dramatic redrawing of the boundaries of government. In the past, new boundaries have been important for the role of state and local governments, then the role of the private sector, then the role of the American government in the world. For the first time, however, we face a tectonic shift on all three boundaries. The shift was already under way before 9/11. The awful terrorist attacks of that day shine a harsh spotlight on these changes, reminding us that change is inescapable.

The frontline public servants who put the welfare of others ahead of their own safety—the firefighters, police officers, and other first responders who bravely did their jobs in the face of unthinkable danger—were surely heroes. But, in a quiet and no less important way, so too are public leaders like Julie Gerberding and Ed Flynn, who had the insight about how to meet the challenges of 21st century governance and the courage to face the barriers of systems not always friendly to innovative thinking.

Their actions chart the steps we can use to meet the challenges of 21st century governance. They are the face of the *next* government of the United States.

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## **Part II:**

# Report from the IBM Wye River Thought Leadership Forum on the Toughest Challenges Facing Government

**Donald F. Kettl**

# The Toughest Challenges Facing Government

The IBM Center for The Business of Government sponsored a Thought Leadership Forum, at the Wye River Conference Center in Queenstown, Maryland, June 26–27, 2005. The goal of the forum was to explore “what’s next” in government and to explore the toughest management challenges facing government. Conference participants nominated their own suggestions for the toughest and most important management challenges that American government faces. (See the Appendix for a list of forum participants.) Part I of this paper was presented at the forum to provoke discussion about the future of government. The ensuing discussion produced a wide-ranging menu, from which the group ultimately selected three challenges on which to focus their discussion:

- **Using networks to organize for routine and non-routine problems.** Although public institutions are organized in hierarchies, they increasingly face difficult, non-routine problems that demand networked solutions. On the other hand, hierarchies do often work well for routine issues. And, in any event, the political realities of American government make it likely that the executive branch will continue to be organized hierarchically. How can government resolve these tensions?
- **Using a “center-edge” approach to govern through a network of networks.** Top executive-branch leaders must find new ways of leveraging the action of their organizations. This is difficult enough for problems attacked through the hierarchy, but it is even harder for issues that require a networked solution. How can top executive-branch officials at the center shape the behavior of those at the edge of the service system, both within and outside the government, to effectively solve problems?
- **Engaging citizens in new roles to solve public problems.** As the forms of government action have become more complex, citizens have taken on new roles in attacking society’s problems. New technologies, from e-government to podcasts, have quickly arisen. These changes, in turn, have redefined citizens’ roles. Meanwhile, public trust in government continues to be a nagging problem. What role can citizens play in solving society’s problems? And what steps can be taken, by both governmental and non-governmental actors, to strengthen citizenship?

## Using Networks to Organize for Routine and Non-Routine Problems

With the exception of Alexander Hamilton, America’s founders did not pay a great deal of attention to the administrative structure of the new nation, but the new nation soon followed the course of other countries in relying on hierarchical organization. And when the Progressives reformed government at the beginning of the 20th century, they even more firmly established hierarchy as the foundation of the nation’s administrative state.

The 20th century taught two important lessons about hierarchy. It proved an exceptionally effective strategy for routine problems, from garbage collection to processing Social Security checks. However, it presented great difficulties in addressing non-routine issues, such as the management of environmental and social policy programs. What management approaches work best for which kinds of problems?

The forum concluded that hierarchies work best for routine problems (like Social Security, air traffic control, garbage collection, and snow plowing). Non-hierarchical approaches, especially networks,

**Figure 1: Policy Problems and Administrative Responses**

		Problem	
		Routine	Non-routine
Response	Hierarchical	<ul style="list-style-type: none"> <li>• Social Security</li> <li>• Air traffic control</li> <li>• Garbage collection</li> </ul>	Performance problems <ul style="list-style-type: none"> <li>• Defense contracts</li> <li>• IT contracts</li> </ul>
		Distributed organizations ( <i>using hierarchical and networked approaches</i> ) <ul style="list-style-type: none"> <li>• Homeland security</li> <li>• Law enforcement</li> <li>• Public health</li> </ul>	
	Non-hierarchical	Performance problems <ul style="list-style-type: none"> <li>• Education</li> <li>• Drug control</li> </ul>	<ul style="list-style-type: none"> <li>• Social services</li> <li>• Medicaid nursing homes</li> <li>• Environmental programs</li> </ul>

work best for non-routine problems (like the management of social service programs, Medicaid services in nursing homes, and environmental programs). (See Figure 1.)

Some problems rely on *distributed organizations* (mixed hierarchical and networked approaches), for problems like homeland security, law enforcement, and public health. These important problems require managers to weave strong hierarchies into effective networks. The complexity of this task presents difficult management challenges. Given the enormous significance of these problems, government must devise new strategies for creating an effective mixture.

Another key management problem is the often-repeated instinct to create a mismatch between important problems and the administrative responses to them. For example, restrictive hierarchical approaches have often hindered government’s ability to manage defense and information technology contracts. Non-hierarchical approaches to education and drug control programs have often produced serious problems.

Government needs to create enhanced capacity to:

- Match policy problems with the most effective administrative responses for solving them.

- Develop strategies for managing the hierarchical and non-hierarchical responses, especially in building effective performance systems.
- Recognize that creating problem/response mismatches can create serious performance problems.

### Using a ‘Center-Edge’ Approach to Govern Through a Network of Networks

The implication of the first point is that networks must be managed differently than hierarchies. Managing networks hierarchically and managing hierarchies solely through network approaches are both likely to create serious management problems. And as the U.S. Government Accountability Office’s high-risk list consistently demonstrates, performance problems frequently come from the failure to build robust management systems to match the programs being managed.<sup>1</sup>

Governments have been managing hierarchies for centuries. Networks, however, are newer phenomena. They have been spreading faster than the capacity of government’s systems to manage them effectively. That poses a serious performance problem.

Moreover, many approaches to networks see them as loose confederations organized around communities of shared interest or shared administrative

responsibility.<sup>2</sup> For public programs, however, government is not just one among many members of the network but, rather, its prime mover. Its funding has often stimulated the creation of the network. Its elected policy makers presume that the network ultimately will fulfill the expectations of the legislation that helped create it. They expect that both what the network accomplishes and how it does its work will meet the standards of public programs.

That raises the fundamental public sector dilemma for networks: How can government take advantage of their flexibility while shaping the network's behavior so that it achieves the public interest?

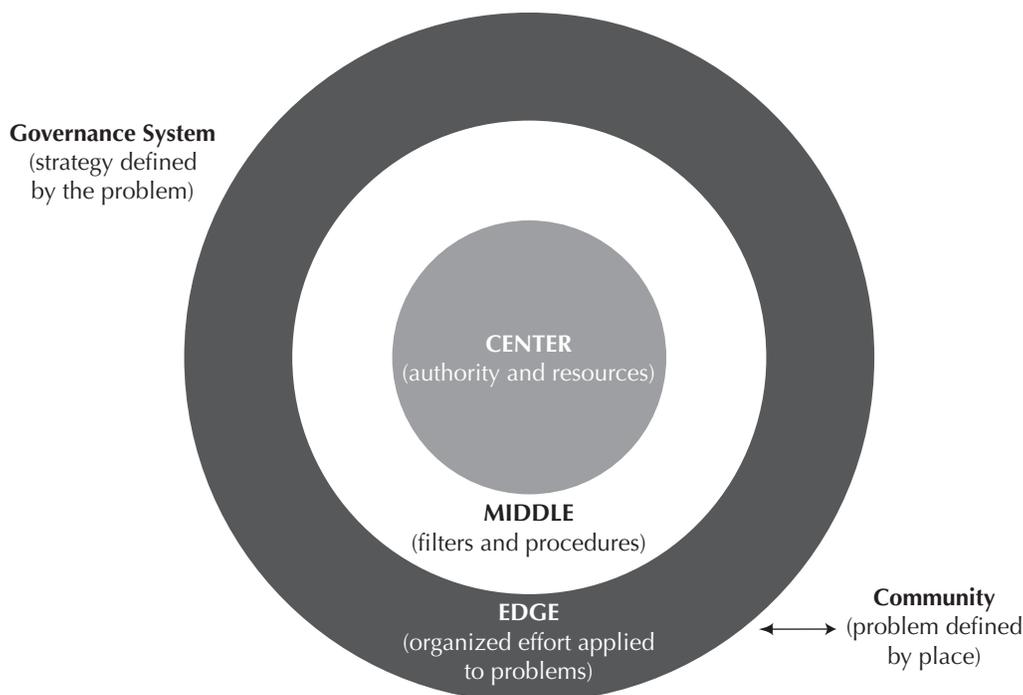
The Clinton administration's National Partnership for Reinventing Government developed an approach for this puzzle, which its officials christened "center-edge."<sup>3</sup> The approach focuses on policy areas that rely on networked service delivery and that involve mixed public/private/non-governmental organizational strategies. It begins by viewing the governance system as a strategy defined by the problem. For the community, the problem is defined by the place in which it occurs. The objective is to link the governance system to the community: to build the service delivery system from the top down so that it works from the bottom up—so that the elements

of different programs come together to provide a place-based, coordinated solution. It builds on a related point: that place matters—healthcare solutions for low-income individuals in East Los Angeles are different from those that work best in Omaha.

The center-edge approach has three layers (see Figure 2):

- **Center.** The center—top policy-making officials and senior managers—challenges the members of the system to set ambitious goals; assesses results; and intervenes when necessary to correct problems in the system. The center provides money to members of the network, with conditions: that participants (both inside and outside government) join the network; measure results according to accepted and shared performance metrics; and share information about what works best to solve problems (so that all network members can learn from the experience of each network member). The center also assesses the quality of the results. If a program's goals are not being met, center officials ask whether the problem is the basic strategy, the system's management, or some other issue. They redesign the strategy or recruit different network members if necessary.

**Figure 2: Managing Networks Through the Center-Edge Approach**



- **Middle.** The strategy seeks to minimize the role of the middle as much as possible. The center-edge approach aims to flatten the service system by minimizing the distance between top officials and frontline service delivery organizations. The middle takes on the new role of facilitators, connecting players among and between various networks.
- **Edge.** The edge is the point at which organized effort is applied to solve problems. It is the front line of service delivery: government organizations, non-governmental organizations, and private contractors.

The center-edge approach makes several contributions. First, it clearly identifies the different roles that different players in the policy system must play. Second, it provides a strategy for policy implementation through networks and central direction of that policy. Third, it builds a policy implementation system around incentives for service providers; it is structured not by authority but by the flow of information. That provides flexibility for service providers and an accountability strategy for policy makers. Finally, it provides an approach for everyone to learn from the experiences of each frontline service delivery organization at the edge.

Although the center-edge approach is in its infancy, there are examples that fuel its proponents' enthusiasm. For example, John Koskinen headed the President's Council on Year 2000 Conversion, to prevent a potential disaster within computer systems as the calendar turned to January 1, 2000. With a small team, he built an effective network, in both the public and private sectors, that resolved virtually all of the critical Year 2000 (or Y2K) problems before they could cripple society. In retrospect, Koskinen said, if the broad network had not aggressively responded:

the world as we knew it would end. The New York Stock Exchange would not have been able to open on Jan. 3, the financial markets would have closed, the banks would have had very great difficulty calculating accurately the money they were owed, or the money they owed to others. Payroll systems and other basic complicated financial systems in the U.S. would not have functioned. And over time we would have had a clear degradation in telecommunications

and some power systems. I think that we wouldn't have had to wait very long, if we had done nothing. As systems started to operate, they would have stopped.<sup>4</sup>

Instead, with a remarkably small staff at the center, he worked to leverage activity across a broad edge and head off the electronic collapse.

Some jurisdictions have developed real-time performance-based information systems to tie together the center and the edge. The pioneer is the New York City Police Department's CompStat system. The city of Baltimore's CitiStat extended the strategy to a broad collection of city services, from potholes to health. In Philadelphia, the city school district has applied the strategy to education, in its SchoolStat program, and similar systems are being developed in the Los Angeles County Department of Public Social Services and the New York City Human Resources Administration.<sup>5</sup> The armed forces have developed "netcentric warfare" to give central commanders better information about what is happening on the front lines and to give frontline forces access to a broader range of important information.<sup>6</sup>

Network strategists put the puzzle sharply: how best to inform the center about what ought to be done and what has been accomplished; and how best to empower the edge to provide enough operational flexibility to adapt broad policy goals to specific place-based problems. Feedback on performance drives the system.

Network strategists recognize that over-reliance on performance information can risk driving policy through a rear-view mirror: charting the future with lessons learned in the past, but with the danger that future problems might not match earlier ones. Moreover, the U.S. Government Accountability Office has found, much of the performance information that government agencies have collected is not put into a language intelligible to policy makers.<sup>7</sup> Greater reliance on performance information can also make everyone in the implementation chain more politically vulnerable, as what works—and what does not—becomes more obvious. This puzzle raises difficult questions about transparency. For example, should performance meetings (like those for CompStat and CitiStat) be open to the public, including the media? Full transparency would suggest the answer should be yes; managers would counter

that shining too bright a light on every stage of the process would make everyone too risk averse at each stage, and that summary statistics on a program's overall performance would be reported as satisfactory.

The center-edge strategy is embryonic, but it nevertheless captures crucial problems: how to help the implementation system escape a hierarchy-based straitjacket that might not fit the management process well; how to allow everyone involved in complex policy networks enough flexibility to match broad policy goals to the very different needs of different communities; and how to hold the entire system accountable to elected officials and to avoid having the government be just one player among many in an intricate game. A performance-based, information-driven system offers an intriguing alternative to hierarchical systems that have often broken down under the pressures of 21st century problems.

## Engaging Citizens in New Roles to Solve Public Problems

American democracy faces a profound paradox: More Americans voted in Fox TV's *American Idol* competition than for president. Distrust of government has been a lasting problem, and efforts to rebuild trust have had a spotty record at best. A study in 1998 by the Pew Research Center for the People and the Press found that fewer people believed that government in Washington was too inefficient and wasteful, too controlling and unresponsive. Nevertheless, the Pew report concluded, "No matter how the question is posed, it is a decided minority that has a positive opinion of government." People are more frustrated than angry, but the share of those frustrated by government (56 percent of those surveyed) is enormous.<sup>8</sup> The engagement of Americans in the nation's civic life has declined to a dangerous level, and there are many obstacles to civic engagement.<sup>9</sup>

For the management of public programs, there were two bright signs. First, citizens tended to trust career federal administrators far more than elected officials, by a margin of 67 to 16 percent. Second, since the early 1970s, "confidence in Washington has eroded, while faith in state and local government has actually grown."<sup>10</sup> Citizens seem to have less distrust the closer they get to the actual delivery of services.

The government's increased reliance on private contractors and non-governmental organizations, along with state and local governments, would seem to offer promise for reducing the gap in trust. So too would a variety of new technologies, from podcasts to e-government, that offer new possibilities for linking citizens to government.

Confounding that hope, however, are several important issues. First, the central idea—that government closer to the people increases citizens' trust—depends on transparency. However, with the proliferation of complex networks in the service delivery system, transparency is more difficult. The more members of these networks share responsibility for service delivery, the harder it is to tell who is responsible for what. The complex of Medicaid-funded nursing home care, for example, might include private physicians, physical therapists, dental technicians, nutritionists, practical nurses, registered nurses, administrators, and a wide variety of other professionals working for a host of organizations. What matters is the care provided to the nursing home resident. Determining just who is responsible for what—and coordinating the various elements of the service system—can prove a daunting challenge.

Second, the transparency argument assumes that if information is produced, citizens will consume it. Declining readership of newspapers and ratings for television news both raise serious questions about this assumption.

Third, if citizens do consume the information, will they act on it? It is one thing for citizens to have greater knowledge about what government is doing. Making that knowledge actionable, however, is quite another. Governmental instruments that are extraordinarily complex, no matter how close, might still seem forbidding to citizens.

Nevertheless, there is a rich lore of government efforts to engage citizens—and citizens' actions to affect government—that offer hope.

- **Citizen forums on government performance.** There have been several notable examples of citizen engagement in charting government's goals and tracking its performance: Oregon Shines, Social Security Administration forums,

performance scorecards in Boston and New York, and citizen summits (in communities including Washington, D.C., and Philadelphia). Each of these efforts has engaged large numbers of citizens in defining government priorities and solutions to future challenges. None of them has had sustained impact, but each suggests the potential for involving citizens in governance.

- **Internet.** From Joe Trippi's startling success in using the Internet to raise funds for Howard Dean's presidential campaign to the rapid spread of blogs as forums for public debate, the Internet has had a rapid, significant, but mostly uncharted impact on American politics. The spread of podcasts, from the right (including Jerry Falwell's Thomas Road Baptist Church in Lynchburg, Virginia) to the left (including scores of shows taking on Republicans and conservative talk-show hosts), offers virtually anyone the chance to reach virtually anyone else. The technical and financial barriers to reaching citizens through the Internet remain, but they are quickly evaporating. Large television cable companies like Comcast are increasing their penetration of their markets, and the spread of video-on-demand within these markets is vastly increasing citizens' access to a wide choice of programming, including public affairs. Grass-roots technological forces are fundamentally transforming the ways in which citizens can connect with government.
- **E-government.** On the other hand, new strategies of electronic government are making it possible for government to connect in new ways with citizens. Baltimore Mayor Martin O'Malley, for example, uses his CitiStat process not only to track and manage the performance of city agencies but also to connect with citizens. The electronic follow-up system to electronically filed complaints provides a fresh strategy for linking government with citizens. Even more fundamentally, as Harvard Professor Bob Behn notes, the most sophisticated e-government strategies are really "i-government": innovation, "a completely unprecedented strategy for achieving a public purpose—perhaps even a wholly new public purpose. The innovation lies in the novel use of the information that the electronic technology makes possible."<sup>11</sup>

The innovation required to connect citizens better with government depends on information: new tactics for citizens to influence government, new tactics for government to connect with citizens, broader strategies to make information relevant and actionable. This kind of interaction offers new ways to hold policy makers accountable, to help agency managers strengthen their legitimacy, and to help citizens get more responsive government.

The effort to strengthen citizen engagement, however, confronts a tough paradox. Engagement depends on transparency, but the growing complexity of government (especially of government's administrative tools) makes it far tougher for government to be transparent as to who is accountable. Information provides a possible response. Innovations in information—who produces it and who uses it—will be essential to crack this paradox.

# Appendix: Participants of the IBM Thought Leadership Forum

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# Endnotes

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**Donald F. Kettl** is Stanley I. Sheerr Endowed Term Professor in the Social Sciences at the University of Pennsylvania, where he is Director of the Fels Institute of Government and Professor of Political Science. He is also a Nonresident Senior Fellow of Washington's Brookings Institution.

A student of public policy and public management, Professor Kettl specializes in the design and performance of public organizations. He is the author or editor of a dozen books and monographs, including *System under Stress: Homeland Security and American Politics*; *The Global Public Management Revolution*; *The Politics of the Administrative Process* (with James W. Fesler); *The Transformation of Governance: Public Administration for Twenty-First Century America*; and *Leadership at the Fed*.



Professor Kettl has also published widely in professional journals. He is the recipient of the Donald C. Stone Award of the American Society for Public Administration for significant contributions to the field of intergovernmental management (2005); the Louis Brownlow Book Award of the National Academy of Public Administration for the best book published in public administration, for *The Transformation of Governance: Public Administration for Twenty-First Century America* (2003); and the Charles H. Levine Memorial Award of the American Society for Public Administration, in recognition of contributions to research, teaching, and outreach (1998).

Professor Kettl has consulted for a broad array of public organizations, including the U.S. Departments of Defense, Energy, Labor, Health and Human Services, and Treasury; the Forest Service, the U.S. House of Representatives Committee on the Budget, the Food and Drug Administration, the Federal National Mortgage Association, the Securities and Exchange Commission; and the National Commission on the Public Service (Volcker Commission), and the National Commission on the State and Local Public Service (Winter Commission). He has advised the White House during both Republican and Democratic administrations and has worked with the World Bank and the Organization for Economic Cooperation and Development.

Prior to his appointment to the University of Pennsylvania, Professor Kettl taught at the University of Wisconsin–Madison, Vanderbilt University, the University of Virginia, and Columbia University. He is a fellow of Phi Beta Kappa and the National Academy of Public Administration. He is also a shareholder in the Green Bay Packers.

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