

A CASCADE OF BREAKDOWNS:
HOW GOVERNMENT DAYDREAMS BECOME NIGHTMARES,
AND HOW TO WAKE UP

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This spring's Office of Personnel Management data breach is yet another sign that the recent cascade of federal government breakdowns is continuing. Just when one breakdown such as the federal government's sluggish response to the Ebola crisis, Secret Service shenanigans, and failure to anticipate the rise of the Islamic State in Iraq and Syria recedes from the headlines, another pops up, often in a totally unexpected place. Federal breakdowns have become so common that they are less of a shock to the public than an expectation. The question is no longer if government will fail every few months, but where and how.

Government was not always so predictably unpredictable. Name a significant domestic or international problem that the nation confronted after World War II, and the federal government almost certainly did something about it, and often with great success. Government made impressive progress in addressing some of the most difficult problems of the postwar era. It worked hard to diminish the effects of diseases such as polio, cancer, stroke, and heart attacks, and did. It worked to reduce poverty among older Americans, and did. It worked to build an interstate highway system, and did. It worked to help veterans readjust to civilian life after war, and did. And although it did not win Lyndon Johnson's war on poverty, it did halve the effects of misfortune.

But these underappreciated successes cannot obscure the recent cascade of breakdowns. Government has long worked hard to provide steady care for the nation's veterans of war, but failed to prevent the mistreatment of wounded soldiers at Walter Reed or their long wait for medical appointments in Phoenix. Government tried to keep a watchful eye on terror, but failed to prevent the September 11 terrorist attacks. It tried to answer the calls for help after Hurricane Katrina, but failed to act with dispatch. And it worked tirelessly to fill the regulatory gaps and coordinate the confused federal response to the 2008 financial collapse, but lacked the policy, resources, and organizational commitment to do so. And it launched an increasingly aggressive campaign against the Islamic State in Iraq and Syria, but did so only after warnings drifted

through the vast intelligence community and failed to draw presidential attention in a distracted White House.

This paper is designed to ask four questions about these and other federal government breakdowns: (1) where did government break, (2) why did government break, (3) what caused each breakdown, and (4) what can be done to redress the underlying causes? The easy answer to these questions is drawn from the ancient Japanese saying that “vision without action is a daydream.” Unless policy visions include careful discussions of implementation and administration, they will no doubt become daydreams, too.

Before proceeding, I want to be clear that I am not calling for a more implementation studies. This research movement has and will continue to offer great insights for government performance, but too much of the conversation asks about the post-enactment process for converting policy endeavors into administrative realities. Important though this work is, I am calling for a much deeper integration of implementation and administration into every conversation along the path to policy. Successful implementation cannot be an afterthought left to under-resourced agencies

WHY STUDY BREAKDOWNS?

I should note that many of my colleagues have criticized my research on breakdowns as unduly negative. Why focus on the federal government’s breakdowns when it creates so many miracles? Why not tell more stories about government success?

My answer is that the breakdowns simultaneously reveal the effects of past disinvestment in government’s capacity to convert endeavors into achievements, and offer warnings about future disappointment. Breakdowns also offer tangible evidence of the daydreams that now preoccupy Congress and the president. It is one thing to develop grand visions of future good, and quite another to craft effective policies, and provide the resources, structure, leadership, and organizational cohesion to honor the promises made. Breakdowns provide one way to track the

benign and deliberate neglect of government capacity, and in turn, a clear signal that nuts and bolts not only matter once a policy is made, but matter in making that policy.

Government's Greatest Achievements

I also tell my puzzled colleagues that this particular project started in 1998 with my Brookings Institution project on government's greatest achievements. I coded every major statute recorded in the *Congressional Quarterly* from 1945 to 1999, compressed the resulting list of 540 statutes into 50 endeavors, and asked 1,000 members of the American Political Science Association and American Historical Association about the subjective importance, difficulty, and ultimate success of each endeavor.

These 450 respondents who received my burdensome, some might say onerous mail questionnaire were asked to rate each of the 50 endeavors separately on its importance, difficulty, and success. I still owe the 450 my greatest thanks for converting my research endeavor into a survey achievement of sorts. And if I may be permitted a personal opinion here, their ratings still ring true fifteen years later.

I asked the 450 respondents three questions about each of the 50 endeavors. First, was the endeavor very, somewhat, not too, or not at all important, which still strikes me as the most important question Congress and the president can ask. After all, why bother to create grand visions and government capacity to address trivial issues? Here my respondents rated the federal government's effort to expand the right to vote as the most important endeavor, followed by rebuilding Europe after World War II, providing greater access to health, reducing workplace discrimination, and promoting equal access to public accommodations.

Second, was the endeavor very, somewhat, not too, or not at all difficult, which comes directly from Alexander Hamilton's notion in *Federalist* No. 72 that government should engage in "arduous and extensive enterprises for the public benefit." Why bother to create grand visions and government capacity to pick the low-hanging fruit that is so easily harvested by others? Here, my respondents rated the effort to advance human rights as the federal government's most

difficult endeavor, followed by reducing workplace discrimination, increasing arms control, renewing poor communities, and containing communism.

Third, was the endeavor very, somewhat, not too, or not at all successful, which focuses on the core link between endeavor and achievement. Why bother to launch a grand scheme it is bound to fail? Although even the best laid plans of mice and men often go awry, government cannot discharge its responsibilities without at least some confidence that its plans will succeed. Here my respondents rated rebuilding Europe as the federal government's most successful endeavor, followed by expanding the right to vote, strengthening the nation's highway system (which I took to mean building the Interstate Highway System), containing communism, and promoting equal access to public accommodations.

Based on a final weighted score that combined importance (30 percent), difficulty (10 percent), and success (60 percent) of each endeavor, respondents rated rebuilding Europe after World War II as the federal government's greatest achievement, followed by expanding the right to vote, promoting equal access to public accommodations, reducing disease, and reducing workplace discrimination. A new survey would most certainly change the order--some endeavors once rated at or near the very top of the list such as protecting the right to vote would almost certainly fall, while others once ranked at or near the bottom of the list such as providing access to health care for the uninsured would almost certainly rise. And there would be new endeavors such as the war on terrorism that would be added to a new survey headed toward some as yet unknown ranking.

The problem is that many of these achievements are now in peril, in part because bureaucratic breakdowns undermine faithful execution, and in part because of the "dysfunction" created by intense polarization. Federal agencies and employees make miracles every day, but miracles are in short supply as Congress and the president make up for declining legislative productivity through backdoor legislative smothering at one end of the avenue, or easily erasable regulations on new issues such as climate change at the other end.

Fifteen years is just a heartbeat in historical time, but it has worked its will on my list of government's greatest achievements and disappointments. As Table 1 suggests, all but two of the

federal government's top 25 achievements in 1999 were under increasing bureaucratic, political, and/or financial pressure fifteen years later. Rebuilding Europe after World War II and the war on communism were both finished, but the other 23 achievements were all in trouble to one degree or another. The budget surpluses of the late 1990s were gone, voting rights were under fire, the financial markets were still reeling from 2008, the space program was mostly adrift, efforts to help veterans were clouded by budget cuts and the waiting list scandal, the Consumer Protection Safety Commission was still under-funded and overworked, the nation's highways, railways, and bridges were still rusting, childhood poverty was still high, the working poor were still struggling, and Social Security and Medicare were both turning "cash negative" as wage growth sagged and retirements began to surge.

TABLE 1 HERE

There are bright spots on the list, however. Health care access for older Americans gained ground with prescription drug coverage, health care access for uninsured Americans soared with the Affordable Care Act, while efforts to reduce disease should be rising through new vaccines, designer treatments, and preventive care; the air and water are no doubt cleaner, but showing the effects of climate change; childhood obesity seems to be falling and nutrition improving; and presidential candidates are now talking about access to education and student debt loads. Perhaps it is time to ask my respondents for another round of ratings?

Government's Most Visible Breakdowns

My interest in describing government achievements eventually led me to study government breakdowns. Even as my list of government's greatest achievements began to decay, my list of government's most visible breakdowns began to grow. I was originally trained in the president's agenda, but was eventually drawn into what Paul A. Volcker's 1988 National Commission on the Public Service called the "quiet crisis" in public service, and eventually came back to it in 2012 when Volcker's Alliance for Effective Governance asked me to look at the quiet crisis again. Was he right when he warned that the quiet crisis was coming?

Despite the federal government's grand success turning bold into achievements, I concluded that the crisis was no longer quiet at all. It was deafening. In a sentence, Volcker's warning had come true. The federal government had become ever more vulnerable to breakdowns. Although my conclusion is mine, and mine alone, it shows what I believe to be a shocking acceleration in the federal government's production of highly visible mistakes, miscalculations, and maladministration. Although there are many examples of highly performing federal departments and agencies, the aging bureaucracy can no longer guarantee faithful execution of all the laws, and is increasingly unpredictable in where and how it will slip.

Few will be surprised by the list of 48 breakdowns presented in Table 2. After all, almost a quarter eventually became the focus of a historically significant congressional or presidential investigation. Moreover, all 48 were in the news long enough to create national controversy and stoke public interest. Although I was surprised to find so much public interest in the pet food recall, postal service crisis, Benghazi attack, and the true story of Cpl. Pat Tillman's death by friendly fire in Afghanistan, all of the events discussed in this paper generated enough public attention to merit further review.

TABLE 2 HERE

My list of government breakdowns came from a search of the news stories listed in the Pew Research Center's "News Interest Index." The nonpartisan index was originally launched in mid-1986 to measure the percentage of Americans who were following "some stories covered by news organizations" very closely, fairly closely, not too closely, or not at all closely.

These were not just any stories, however. They were the most visible stories based on Pew's general reading of news coverage from month to month, and reflected what its staff concluded was "in the news" at any given moment in time. According to my count, Pew asked Americans how closely they were following more than 2,000 stories between 2001 and today, including 250 about the situation in Iraq and Afghanistan, 150 about upcoming campaigns and elections, 150 about the state of the economy, 50 about the war on terrorism, and 150 about presidential

speeches, decisions, travel, and behavior over the years. (Readers are encouraged to peruse the “Seven Examples” box below for a more tangible definition of how the breakdowns actually occurred.)

According to my further search for specific stories that dealt specifically with a government policy and/or administrative breakdown of some kind, the public paid very close or fairly close attention to stories about 48 breakdowns over the period. Although most of the stories were in the news just long enough to reach one Pew survey, the 9/11 attacks and 2008 financial collapse were in the news long enough for ten surveys over the years, Hurricane Katrina was in long enough for seven, the Abramoff lobbying scandal and the consumer product recalls were in for four each, the Enron bankruptcy and mistreatment of wounded soldiers were in for three each, and the 2003 flu vaccine shortage, failure to find weapons of mass destruction in Iraq, the healthcare.gov launch, and safety defects in cars made by General Motors and Toyota were all in long enough for two each.

The rest of the 48 breakdowns were in the news long enough for just one Pew survey, but even a week or two of stories about events such as the Shuttle Columbia accident or Minnesota’s I-35W bridge collapse produced very high news interest. Moreover, breakdowns in operating programs such as veterans’ health care are just as likely to produce headlines as breakdowns in oversight programs such as banking regulation. And breakdowns under steady pressure are just as likely to produce headlines as breakdowns during surges in demand.

EXPLORING THE LIST

It is entirely possible, even highly probable that Pew left additional breakdowns off its regular surveys of what it introduced as “some stories covered by news organizations this past week.” I also no doubt left other breakdowns off the list that I culled from Pew’s list, including Clinton’s impeachment for perjury, repeat budget crises, the two government shutdowns, and occasional stories about presidential decisions to put their children in private schools even as they worked to improve public education. But I had to draw a line between government breakdowns and ethical misconduct that had no spark buried in government policy or administration.

Similarly, past budget battles and debt ceiling crises had great effects on government, but were not created by government. Once again, I had to draw a line between what government did and what was done to it. The budget battles showed up again and again as plausible causes for breakdowns, such as the failure to prevent the Gulf oil spill and to recruit enough intelligence agents to fully monitor the movements of the Boston terrorists as they prepared for their vicious attack. In all of these cases, I erred toward the conservative option—breakdowns had to be clearly linked to government administration, be it in the failure to create clear policies that might have prevented tragedies, or the decline in staff morale caused by micro-management, understaffing, or ancient information technology.

An Initial Reconnaissance

Whatever the odds on replicating my list with the same data, the 48 breakdowns share four characteristics.

First, most of the breakdowns involved errors of omission, not commission. The federal government did not hijack the aircraft that killed so many Americans on September 11, 2001, but did not imagine the possibility in time to prevent the tragedy. It did not breach the levees when Hurricane Katrina came ashore in 2005, but did not have the leadership or plans to respond quickly. And it did not design the Byzantine instruments that triggered the banking collapse in 2008, but had little capacity to stop the risk.

Second, some breakdowns stayed in the news longer than others. The failure to “connect the dots” prior to the 9/11 attacks, prepare and respond quickly to Hurricane Katrina, anticipate and prevent the 2008 financial collapse, and catch the regulatory violations that led to the Gulf oil spill generated much higher visibility than the one-off stories of the Plame cover breach, the Haditha and Blackwater killings, the Vioxx drug recall, and Operation Fast and Furious, all of which were featured in just one or two Pew surveys.

Sustained visibility often generated multiple, near simultaneous blue-ribbon investigations. Although 9/11 and the Challenger accident produced just one blue-ribbon commission each and spotty congressional hearings, the Gulf oil spill produced seven much deeper reviews, including four in the House, two in the Senate, and one presidential commission co-chaired by former Sen. Bob Graham (D-Florida) and former Environmental Protection Agency chief, William Reilly. Despite the resulting inventory of hearings and final reports, I tended to rely much more heavily on newspapers such as *The New York Times* and *Washington Post* for insights on cause and effect, and the longer a story survived, the more likely a deep piece would follow.

Third, Pew's story list contained very few successes against which to compare the 48 breakdowns, and such a list is essential for confident conclusions about probable cause and consequence in each breakdown. Indeed, I counted just ten successes on the Pew's post-2001 list of stories in the news, including three about early successes in Iraq and Afghanistan; three about the killings of Saddam Hussein, his sons, and Osama bin Laden; two about successful Mars landings; and one each about the capture of a senior al-Qaeda leader in 2003 and the National Highway Traffic Safety Administration's relatively fast investigation of the Toyota floor mat problem in 2007.

Finally, a handful of breakdowns contained elements of both success and failure. The Boston Marathon bombing will always be remembered as a moment of heroic response by runners and the police alike, but is also a story about the all-too-familiar intelligence breakdowns. "It's people like this that you don't want to let out of your sight, and this was a mistake," Sen. Lindsey Graham (R-South Carolina) said of the bombers almost a year later. "I don't know if our laws were inefficient or if the FBI failed, but we're at war with radical Islamists, and we need to up our game."

Patterns in the Breakdowns

As noted above, these breakdowns are a small subset of the 2,000 stories that Pew has tested over time. However, these stories produced some of the highest public interest in contemporary history with the Shuttle Challenger accident, 9/11, and Hurricane Katrina still the most closely

followed stories since 1986. More to the point of needed reform, my answers to the following questions suggest that the cascade will continue, and almost certainly accelerate absent comprehensive reform to improve both vision and administration.

1. *Has the number of government breakdowns increased over time?* The answer is “yes,” and significantly so. Looking through the news interest surveys back to mid-1986, government had 23 breakdowns in the nearly fourteen years before January 2001 (1.6 per year), compared with 48 breakdowns in just the nearly 14 years since (3.3 per year). Government breakdowns were relatively rare during the first decade of the thirty-year period, but began to increase during the second, and accelerated during the third. At the current rate, government will set a contemporary record in the number of post-2001 breakdowns under Obama. Government is currently running at 3.5 breakdowns per year, which should put the president over the top sometime just before the next president is elected.
2. *Did the number of breakdowns vary across the five administrations?* As would be expected from the pre- and post-2001 comparisons, the answer is “yes” again. The federal government had four breakdowns during the final months of Ronald Reagan’s second term (1.6 per year), five during George H. W. Bush’s first and only term (1.2 per year), 14 during Bill Clinton’s two terms (1.8 per year), 25 during George W. Bush’s two terms (3.1 per year), and 23 during Barack Obama’s first six-and-a-half years (3.5 per year). At its current pace, government may yet set a record in the average number of breakdowns per year before Obama leaves office in 2017.
3. *Did the number of breakdowns vary across first and second terms?* The answer is “yes,” and significantly so again. Second-term presidents face much greater risks that government will produce more breakdowns. Government produced a total of 29 breakdowns during the George H. W. Bush, Clinton, George W. Bush, and Obama first terms (1.8 per year), compared with 42 during the Reagan, Clinton, George W. Bush, and Obama second terms (2.9 per year). The differences are large enough to suggest that government may be somewhat more likely to fail during the last few years of a two-term

presidency, perhaps because presidents start to lose focus, appointees begin to look for post-administration jobs, the opposition party becomes more likely to undermine government performance in advance of an open election, and the media looks harder for bureaucratic mistakes. All of these explanations make sense, but my view is that the lack of presidential attention and appointee turnover are the most important context setters.

4. *Did the number of breakdowns vary across a government agency's primary mission?*

Here, the answer is “only slightly.” By my definition, *oversight* agencies focus mostly on monitoring and enforcement of regulations on regulated parties such as banks, drillers, campaign funders, drug makers, federal employees, and presidential appointees. In turn, *operations* focuses on providing day-to-day goods, services, and even protection to government beneficiaries such as veterans, taxpayers, the uninsured, and unaccompanied children who have crossed into the United States from Latin America. Based on subjective distinction, the post-2001 government breakdowns were more likely to involve operations (27), not oversight (21). In short, Congress and the president may have increased the odds of bureaucratic breakdowns by underinvesting in government's administrative capacity regardless of the task.

5. *Did more breakdowns occur during surges in demand?* The answer is “no.” Government organizations were more likely to break down during steady demand (31) than surges (17), perhaps confirming the notion that surges sharpen organizational attention to risk. Steady demand, however, does not mean lighter workloads. It just means that government is not under siege at a particular point in time. Some of the agencies on my list were under enormous stress for years before they failed during steady conditions, while others were under relatively light pressure for years before they failed during a surge.

6. *Finally, did more complex breakdowns produce greater public news interest?* The answer is “yes.” The eight breakdowns that crossed the 81 percent threshold in public interest averaged almost 11 check marks in my analysis of probable causes, while the seven that fell into the 71 to 80 percent range, nine in the 61 to 70 percent range, and 10 in the 51 to

60 percent range all averaged seven check marks; the eight breakdowns in the 41 to 50 percent range averaged just over six check marks; and the six in the 30 to 40 percent range averaged just five. Either a more complicated breakdown generates higher public interest, or higher public interest produces the kind of deep investigations that reveal more complex causes. Given my reading of the record, I believe the former explanation holds.

The cascade of breakdowns described below is no doubt rooted in broad demographic, economic, and social trends that have put greater pressure on the federal government to solve increasingly difficult, even unpredictable problems with an aging bureaucracy that underwent its last major overall in the early 1950s. The federal government's vision seems unsteady as the world changes, and its action is often impeded by what the founders called the "deadly adversaries" of government: cabal, intrigue, and corruption. Surveying the inventory of recent government breakdowns, Max Weber might even decide that bureaucracy is no longer the "optimum" form of organization for precision, speed, and clarity, but the most vulnerable to breakdown, especially in the federal government.

EXPLORING PLAUSIBLE CAUSE

The central question for this paper is why breakdowns occur. Absent some sense about what causes what, reformers can only guess what might break the cascade. And the result of such guessing will likely be minor improvement at best, and wasted motion at worst. The key to successful reform is an indictment based on probable cause. However, the search for probable cause here must begin with a set of plausible explanations.

Searching for Plausibility

Breakdowns occur for many reasons, not the least of which is that some programs are so complex that the odds of mistakes are high, while others are so poorly funded that success is beyond reach. But risk and funding are only two of the plausible causes among many. Table 3

suggests at least five classes of plausible cause, and at least three secondary causes within them. The 15 plausible causes include a mix of poor vision and/or weak administration.

TABLE 3 HERE

Policy anchors the first category of plausible cause. Congress and the president can easily set a future breakdown in motion by adopting meek solutions to major problems, rescinding or diluting policies that could have prevented a future breakdown, creating so much ambiguity that implementation cannot proceed, or even delegating action to a high-risk, vulnerable agency. Policies do not have to be perfect to be implemented, and Congress often gives agencies significant authority to smooth the edges of ambiguous statutes. Nevertheless, some policies are simply “unimplementable” under even the best of circumstances.

Resources, or more accurately, the lack thereof, create a second category of plausible cause. Congress and the president can lay the foundation for a future breakdown long before adoption by denying the budget needed to cover program costs and the staffing needed to draft even relatively simple regulations, by failing to conduct effective oversight or oversee essential contracts, and by not providing the administrative systems needed to track impacts, secure enrollment, and provide full transparency for every dollar spent. At some point, government simply runs out of miracles, and reverts to the form created by deliberate starvation.

Organizational structure frames a third category of plausible clause. Congress and the president can undermine effective implementation by adding new layers of management to a federal hierarchy already filled with record numbers of management layers and title-seekers who slow the flow of information up the chain of command, sidetrack warnings of developing breakdowns as they move toward the top of the towering agency, slow guidance as it moves down, and deny accountability for sluggish implementation. In turn, these often-hidden blockades can create an overdependence on a faster, but less accountable phalanx of contractors, produce distracting conflicts as agencies protect the duplication and overlap that undermines cooperation, and generate needless meddling and cross checks that undermine effective implementation, and waste scarce resources.

Leadership generates a fourth category of plausible cause. Acknowledging that the senior officers of government are often singled out for the “perp walks” that often open congressional investigations, leaders can and do create breakdowns through neglect, inexperience, and just plain bad decisions. Some leaders enter office with little expertise in the subject matter at hand and negligible experience making tough, crisp decisions during a crisis. Moreover, even the most talented implementers cannot make good decisions if they are not in office, arrive exhausted by a selection process that is best characterized as “nasty, brutish, and not at all short,” and have to start their 12- to 24-month stay by learning their agency’s politics and the structure needed to stop a developing breakdown.

Organizational culture creates the final category of plausible cause. Although culture is as difficult to define as it is to measure, organizations do adopt norms and tolerate behaviors that can easily lead to breakdowns. Some implementing agencies cannot agree on their mission, if only because they have more than one mission to implement. Other agencies have long histories of entertaining “cabals of intrigue,” creating their own standards of conduct, and ignoring obvious deceit. Such cultures of evasion have long been a source of breakdowns and embarrassments, and prove the point that cultures of excellence and innovation are easy to destroy with a single incident, but exceedingly difficult to create.

EXPLORING PROBABLE CAUSE

As the following analysis shows, the five classes of plausible cause often come together to generate tragic breakdowns. In doing so, they move from plausible causes to probable indictment. The only way to make the jump from one to the other is to follow the investigatory trail wherever it might lead, even all the way to a disengaged president, disaffected congressional committee, or a uniformed judiciary.

I followed the 48 trails covered by this paper through congressional hearings, investigatory reports and hearings, deep news stories, government’s own reviews, think-tank analyses, occasional interviews with key participants, and final judgments of the 13 blue-ribbon

commissions that Congress or the president created to resolve doubts about what happened and pinpoint opportunities for future prevention. These investigations involved hard judgments about the possible causes, but were informed by the many indictments that were made before my tracking began, some of which led to firings, and at least one that led to prison.

I reviewed these records many times as I added and subtracted check marks in Table 4. But conservative as I might have been, I assigned 351 checkmarks across 48 breakdowns for an average of just over 7 per breakdown. As Table 4 shows, some breakdowns earned many more check marks than others, but the overall indictment of government's ability to link vision and action provides a very uncomfortable warning to those who favor smaller-scale reforms: There are multiple contributors to every breakdown, and multiple breakdowns for every contributor, and therefore, multiple reforms that must be brought together toward deep reform.

TABLE 4 HERE

Table 4 also provides rather uncomfortable advice for those who labor on behalf of alluring reforms such as more accurate performance measurement, new computer systems, more aggressive discipline, tougher hiring and pay freezes, and aggressive attacks on duplication and overlap: The time for these kinds of one-shot reforms is long over. There are simply too many causes, and too little evidence of a domino effect to identify a single target for braking or even slowing the cascade.

Hence, I believe that the only way to address the breakdowns is comprehensive, collaborative, and coordinated reform, something too many good government groups eschew. Just as the 48 breakdowns involved many probable causes, government reform must also address many probable causes. If a government divided cannot stand, an implementation system divided cannot end the daydreaming.

The following category-by-category ranking of probable cause provides an initial brief for comprehensive reform, while the short case studies offer examples of how the probable causes interacted in many breakdowns:

1. Policy was the largest contributor to the 48 government breakdowns with 92 check marks, including 32 for poor design, 31 for a high degree of implementation difficulty, and 29 for delegation to a damaged or vulnerable agency.

The 2013 healthcare.gov collapse is a useful illustration of how policy design affects breakdowns. The highly visible event earned seven check marks largely based on the high degree of difficulty associated with launch, which was abetted by under-resourcing and the lack of accurate tracking systems leading up to the heavily promoted launch. The policy was also delegated to the logical, but high-risk agency, and set an audacious deadline that required nearly flawless delivery from a poorly coordinated collection of 55 outside vendors.

The launch also depended on under-funded, under-staffed agencies, and ongoing support from a Republican House that won a midterm majority in 2010 having promised to repeal the health care law. In short, the website was almost destined to fail, and involved battle after battle to secure full implementation. It was built on complex policy that could have been simpler, created a high degree of difficulty, and was delegated to an agency that had been waiting for a Senate-confirmed administrator for almost seven years. It is little wonder that the website might have been a breakdown in progress from the beginning.

2. Resources were the second-largest contributor to the breakdowns with 82 check marks, including 22 for under-funding shortages, 31 for under-staffing, and 29 for weak administrative systems.

The Consumer Product Safety Commission's 2007 "Year of the Recall" is a helpful example of how resources can undermine prevention. Although Commission's 450 separate recalls of dangerous products was a miracle of a sort given its woeful under-staffing, its recalls came after most of the cribs, building sets, toy ovens, building sets, and dolls had already caused injuries and death. The Commission's failure to react quickly to the surge in dangerous products was based on the lack of authority and staff to inspect products before they left for market, especially products made in other nations such as China. The breakdown also involved the hint of

corruption involving Commission staffers had taken multiple trips to foreign countries sponsored and underwritten by trade associations and product manufacturers who sought quick movement to the market.

3. Organizational culture was the third-largest contributor with 70 check marks, including 24 for misaligned missions, 17 for ethics and misconduct, and 29 for a lack of effective implementation monitoring.

The Department of Homeland Security's 2004 decision to raise the nation's confusing terrorism advisory system is a prime example of a flawed organizational culture, which was abetted by organizational growing pains, the nearly complete lack of policy guidance, and political interference in the final decision. The color-coded terrorism alert system was rushed into operation within months in the wake of 9/11, implemented by a confused department built from 22 agencies in a bidding war between a Republican White House and Senate Democrats, and eventually abandoned in 2011 as a failure. Given the lack of clear guidelines for raising or lowering the alert level, the system was also highly vulnerable to political interference, which the White House exploited in 2004 when it pressured the department to raise the warning from "elevated" (yellow) to "high" (orange) just days after a highly successful Democratic national convention. The former secretary of the Department of Homeland Security, Tom Ridge, acknowledged the pressure in his 2009 autobiography describing White House worries about the political fallout from a new al-Qaeda tape recording. Ridge later wrote that he knew right then that he had to get out of government to save his reputation.

4. Structure was the fourth-largest contributor to the breakdowns with 62 check marks, including 26 for organizational thickening, 17 for overdependence on contracting, and 19 for duplication and overlap.

Structure may not have been associated with the largest number of breakdowns, but it was a probable cause of several of the most visible breakdowns. Although the 9/11 attacks earned 12 check marks for a long list of probable causes, it is an exceptionally telling example of the role an unwieldy administrative structure, which was abetted by a host of other probable causes.

According to the National Commission on Terrorist Attacks upon the United States chaired by former Pennsylvania Gov. Tom Ridge and former Rep. Lee Hamilton, the 9/11 attacks reflected failures in imagination, policy, capabilities, and management.

However, based on my reading of the 9/11 commission's report, the breakdown was largely caused by the intelligence community's unwieldy structure abetted by the lack of clear policy to deal with the terrorist threat; the lack of funding, staff, and administrative systems; and intelligence hoarding across the intelligence agencies themselves. Consider the Commission's sweeping summary of what it learned about the multiple contributors to the breakdown: "We learned that the institutions charged with protecting our borders, civil aviation, and national security did not understand how grave this threat could be, and did not adjust their policies, plans, and practices to deter or defeat it. We learned of fault lines within our government—between foreign and domestic intelligence, and between and within agencies. We learned of the pervasive problems of managing and sharing information across a large and unwieldy government that had been built in a different era to confront different dangers."

5. Leadership at the bottom of the list of contributors to the breakdowns with 45 check marks, including 11 for weak leadership, 27 for poor decisions, and just 7 for vacancies and delays in filling essential positions.

The government's sluggish response to Hurricane Katrina earned 14 check marks for its cacophony of causes, but stands as an example of poor leadership, which was abetted by confusing policy in some cases, the complete lack of policy in others, under-resourcing, and a history of vulnerability at an agency that had recovered during the Clinton administration from years of poor performance only to descend again during the Bush administration. According to my reading of the House, Senate, and presidential investigations, the response was driven by the lack of a fully developed national response plan, which was abetted in turn by organizational confusion created by the Department of Homeland Security merger, egregiously unqualified leadership that seemed incapable of thoughtful decision making during the hurricane, vacancies throughout the agency, and the unrelenting confusion surrounding responsibilities across the federal, state, and local response system.

Most importantly, the agency's leadership was inexperienced at best, and incompetent at worst. It was led by the former Judges and Stewards Commissioner of the International Arabian Horse Association, Michael "Brownie" Brown, who had no experience in disaster relief and little knowledge of FEMA's complicated administrative system, which was riddled with vacancies in the regions closest to the coming catastrophe.

COMBINING VISION WITH ACTION

Much as Congress and the president might long for the one best way to prevent future breakdowns, I did not find it. I could easily argue, for example, that policy design almost always precedes breakdowns, if only because the textbooks say so, but the fact is that policy design often follows other breakdowns as Congress and the president try to prevent future problems that involve resources, structure, leadership, and culture. The only way to reduce the potential for breakdowns is to repair government as a whole. The time for tinkering on one cause or another has long-since passed.

Ultimately, I believe the only way to prevent future breakdowns is to integrate policy design (vision) and implementation (action) at the very start of the policymaking process. If daydreams are built on vision without action, then what good is even the most elegant vision? And if action moves forward without vision, what purpose does it serve? Yet, vision and action rarely meet before the vision is cast. Action is assumed, and only rarely considered.

This tendency to separate vision and action is easy to spot in the federal policymaking process where legislation is drafted, marked-up, enacted, and signed into law with little or no testimony about implementation. The Congressional Budget Office and General Accounting Office rarely talk to each about their respective expertise in policy design and implementation; the government's experts in policy and planning rarely talk to their colleagues in budget and management; and the "M" in the Office of Management and Budget rarely talks to the "B," nor does the M have significant staff left to do the talking. The vast array of policy advocates rarely

talks with the small circle of good government reformers. Policy design and administration seem still blissfully isolated from each other.

This age-old dichotomy also appears among the nation's top graduate schools in "public affairs," a catch-all term that *U.S. News & World Report* uses for rating more than 250 public policy, public administration, and blended policy + administration programs. All three kinds of programs teach a bit of policy along with a lot of administration, a bit of administration along with a lot of policy, or a fairly even menu that sometimes leads to separate specialization nonetheless.

I use two ways to spot the differences across the schools. First, as Table 5 suggests, the nation's top policy schools tend to ask their students to take almost twice as much economics and policy analysis as the public administration schools, while the public administration schools ask their students to take almost twice as much public administration as the public policy schools. In turn, the comprehensive schools ask their students to take roughly equal amounts of policy analysis and public administration, confirming their designation as comprehensive.

TABLE 5 HERE

Tenure being the gold standard of commitment to a particular emphasis, the second way to determine primary interest is to examine the core disciplines of the tenure or tenure-track faculty. As Table 6 shows, 40 percent of the public policy faculties have doctorates in economics, compared with just 9 percent of the public administration faculties. In turn, just 1 percent of the public policy faculties have doctorates in public administration, compared with 36 percent of the public administration faculties.

TABLE 6 HERE

All three kinds of schools have roughly equal numbers of political scientists, sociologists, anthropologists, historians, lawyers, scientists, and physicians, and so forth, but the blended schools are almost as heavily anchored in economics as their public policy peers. As the

curriculum analysis shows, the public policy and blended schools do care about implementation and management. But these courses are more likely to be taught either from an economist's perspective or by a clinical professor with no chance of tenure. This does not mean the instruction is biased or the subject disparaged, but the faculty distribution does suggest that many of the nation's top programs tend to produce more policy designers than implementers. Indeed, several of the top public policy and blended schools have not tenured a public administration faculty member for the better part of two decades. The prestige, not to mention tenure, seems to rest with policy design, not implementation.

As a result, one might easily suggest that public policy schools are the place to learn vision-making, public administration schools are the place to learn action, and the comprehensive schools might be able to cover both, though the workloads for full engagement in vision and action would be heavy, and might well lead students to specialize in one or the other nonetheless. Moreover, the faculties at the comprehensive schools would seem to lean a bit more toward classes on vision than action.

BREAKDOWNS BY DESIGN

Not all of the 48 breakdowns on my list were accidents. To the contrary, some were the predictable consequence of decisions made by Congress and the president in the messy process of creating, amending, or repealing policy. Some of the breakdowns were also carefully designed through backdoor budget cuts, hiring freezes, sequesters, duplication and overlap, and a host of administrative ills that were and still are well known to Congress and the president, but have yet to garner careful attention. Congress and the president know that there are significant savings to be found in comprehensive reforms—indeed, estimates currently range from \$1 trillion over the next decade to \$1.4 trillion.

The blame for inaction falls on congressional Republicans and the president alike. The Republicans have done everything in their power to undermine performance. They have never met a freeze or cut they could not embrace; they have repeatedly stonewalled needed policy changes, and made implementation of new programs as difficult as possible. They have cut

budgets, staffs, and collateral capacity to a minimum, proving the adage that the logical extension of doing more with less is doing everything with nothing. They have used the presidential appointments process to decapitate key agencies, and appointed more than their share of unqualified executives; and they have muddied mission, tolerated unethical conduct, and gamed the performance measure process to guarantee failing scores for a host of government policies that they oppose, but cannot repeal through constitutional means. The repeal is de facto, not de jure—by practice, or the lack thereof, and not by law, or the lack thereof, too. Republicans may delight the “perp walks” of disgraced presidential appointees caught in their investigatory cross-hairs, but they have done little to address the problems, and have yet to meet a personnel cut or freeze they do not like.

Notwithstanding this Republican assault, I suspect that the Founders would reserve even sharper criticism for the past two presidents for government’s distress. After all, the president, not Congress, has the constitutional responsibility to “take care that the laws be faithfully executed.” The Founders might applaud President Obama’s 2011 promise to give Americans a “more competent and more efficient government,” but they might also ask why he never followed up.

Obama was justified to complain that Congress would not give him the reorganization authority that past presidents had used for comprehensive reform. But he could have moved in other ways just as so many of his predecessors did through the ordinary legislative process. Would it have been difficult? Absolutely. Did he even try? Not too hard.

Ironically, reform was well within reach, if only because comprehensive action could have produced \$1 trillion or more in savings for the budget battles. Moreover, Obama could have easily won reform through the ordinary legislative process. After all, Carter had reorganization authority, but chose the legislative option for the 1978 Civil Service Reform Act and 1979 Regulatory Flexibility Act; George H. W. Bush used the legislative option for the 1989 Whistleblower Protection Act and the 1990 Pay Comparability Act; and Clinton used it to generate agreement on the 1993 Government and Results Act and on his 1994 reinventing government package. Committed presidents and congressional leaders can always find a path to reform, but they have to want implementation badly enough to try.

Congressional Democrats also contributed to the breakdowns, and invented many of the disinvestment tactics that the Republicans would use after they retook the House majority in 1995. But the Democratic contribution to the cascade of breakdowns was more one of omission, while the Republican contribution was one of very deliberate commission. Although they conducted much more serious investigations of the 2008 financial catastrophe and the Gulf oil spill than the Republicans might have, they refused to put comprehensive government reform on the agenda, or push Obama toward more aggressive action to prevent his second term breakdowns.

With Obama quietly “seething” about the latest breakdown, but doing little to prevent more breakdowns in the future, congressional Republicans started to repeal the easy way—by cutting administrative funding, blocking needed appointments, freezing the hiring process, increasing the degree of difficulty in implementation, and heightening the very duplication and overlap they decried on the campaign trail. As for the treasured source of past reform legislation, the new Republican majority allowed the once-proud House Government Operations Committee to fall into disrepute as a playground for frivolous investigations and bureaucratic harassment.

STOPPING THE CASCADE

Not only is the political dysfunction underpinning the cascade of breakdowns “worse than it looks,” as my colleagues Thomas E. Mann and Norman J. Ornstein have argued, but it also is more destructive to the faithful execution of the laws than imagined. And the threat to future government performance is doomed to accelerate if the bitter polarization between the two parties increases.

Applying the Brakes

The question is whether Congress and the president can do anything at all to prevent future breakdowns, including the one that is almost certain to occur within the first six months of the

next presidency. I believe the answer is “yes,” but only if the nation’s leaders put vision and action on the agenda throughout the policymaking process.

They could start by simply adding an implementation assessment to every proposal headed toward the House or Senate floor for final approval, and every rule about to be forwarded to the *Federal Register* for notice and comment. Presidents and Congress could easily order their support agencies such as the Government Accountability Office, Congressional Budget Office, and Office of Management and Budget to begin asking implementation questions at the start of the process, and provide final ratings for every policy headed toward final passage.

Congress would also be well within its authority to order the federal Inspectors General to prepare implementation ratings for major legislation. After all, these quasi-independent officers not only have full statutory access freedom to any and all information, but also have full authority to assess obstacles to the economy and efficiency of government, including the prevention of any threats to performance.

Congress and the president could also order their support agencies, committees, and appropriators to develop implementation cost estimates that might be used to create “set-asides” to cover implementation costs such as bridge funding, additional staff, and new technologies to ensure immediate action. And they even could use these reviews to set reasonable “make-or-break” points for each implementation process. Such make-or-break points would create timely opportunities to set new implementation targets, increase set-asides, and even offer privileged “perfecting amendments” to adjust policy to reduce vulnerability.

These are only small steps to forcing a long-needed integration of vision and action. Congress and the president will need to think comprehensively about addressing the probable causes reviewed in this report, but they are fully capable of collecting the information needed to do so. And most know that government desperately needs an overhaul. Every president since Franklin Roosevelt has taken the oath of office promising to create a government as good as the people, but very few have delivered.

The next president is likely to follow tradition with one important difference. The next breakdown is likely to occur within months, even weeks of Inauguration Day. The next president can either get ahead of the breakdown by presenting a detailed reform agenda during the campaign, and launching the overhaul in his or her first State of the Union Address, or wait for a wave of regret when the next breakdown hits. I have no doubt whatsoever that a breakdown will hit in 2017. The only question is how early. My data suggests that it will arrive before June 30.

Back to the Future with Paul A. Volcker

As the cascade continues and the failed implementation grades pour in one after the other, Congress and the president will have little choice but to confront the threats addressed above. Luckily, they can find a ready-made reform agenda in the final report of the 1989 National Commission on the Public Service. Led by Paul Volcker, the Commission's agenda is not only still relevant, but could be copied word-for-word, including another one-time pay increase for judges and senior career executives designed to close the pay gap with the private sector and even tighter ethics reform that would relax the burdensome paperwork imposed on federal employees by eliminating the loopholes that riddle the current law, and that did so much to create some of the breakdowns inventoried in Table 2.

Dusty though it may be on first brush, the Commission's warning of a coming crisis in government performance was sadly accurate, and the Commission's argument that the need for a strong public service was growing, not lessening, is even more prescient. The federal agenda has grown exponentially over the 25 years since Volcker and the Commission presented the report to George W. Bush in the White House Cabinet Room, and the need for imagination and energy has never been greater. As the report notes on its second page, "the simple idea that Americans must draw upon talented Americans to serve us in government is uncontested." So is the need for careful policymaking, adequate resources, inspired leadership, and zero tolerance for misconduct and confusion.

Luckily, Volcker is still ready and willing to lead the effort through his Volcker Alliance, and many of his board members and supporters are ready to help Congress and the president update

the 1989 recommendations to stop the current cascade and bring the federal government into the 21st century. Even in 1989, Volcker's Commission knew that the federal government was losing its capacity to turn endeavor into achievement, and marry vision to action. But they are no doubt shocked by the continued diminishment of the government's ability to faithfully execute the law.

Ironically perhaps, Volcker led a second National Commission on the Public Service in 2003. Unlike that in 1989, the 2003 report never found its way to George W. Bush, and was presented to the White House in a dusty fourth-floor cubbyhole occupied by a talented, but under-supported senior budget officer. No one can know where this second report went, but I suspect it was swallowed in the maelstrom of what would become the longest wars in U.S. history.

The reform agenda does not want for good ideas—indeed, one might argue that the problem today is not too few proposals, but too many and too meek. Both of the Volcker commission reports contained comprehensive proposals for repairing the federal bureaucracy, thinning its needless layers, attacking its excessive duplication and overlap, and knitting policy and implementation in the nation's leading schools of public policy and administration, its legislative committees, and the Oval Office. Volcker is well worth quoting as the final word of this analysis, for he captures the essence of repairing the schism between vision and action:

We depend on government in so many ways, often unseen and unrealized. But one can't help but conclude upon seeing our institutions at work—or more accurately not working to their fullest potential—that we need to make some fixes. These institutions, from the UN and the World Bank, to our federal, state, and local governments for that matter—are tools that can improve peoples' lives. We need them to run well. We have seen what happens when insufficient attention is given to understanding and mastering the basics of execution—the botched launch of healthcare.gov, the gaming of the veterans' medical scheduling system, and, of course, the failure of the financial regulatory system to prevent unacceptable levels of private-sector risk-taking at the expense of the stability of the economy.

TABLE 1: ACHIEVEMENTS IN PERIL*

| Achievement | Global Dynamics & New Threats | Political Polarization & Stalemate | Fiscal & Economic Constraints | Administrative Disinvestment |
|--|-------------------------------|------------------------------------|-------------------------------|------------------------------|
| 1. Rebuild Europe after World War II | N/A | N/A | N/A | N/A |
| 2. Expand the Right to Vote | | X | | X |
| 3. Promote Equal Access to Public Accommodations | | X | X | X |
| 4. Reduce Disease | X | | X | X |
| 5. Reduce Workplace Discrimination | X | | | X |
| 6. Ensure Safe Food and Drinking Water | X | | | X |
| 7. Strengthen the Nation's Highway System | | | X | |
| 8. Increase Older Americans' Access to Health Care | | X | X | |
| 9. Reduce the Federal Budget Deficit | | X | | |
| 10. Promote Financial Security in Retirement | X | X | X | |
| 11. Improve Water Quality | | | X | X |
| 12. Support Veterans' Readjustments and Training | X | | X | |
| 13. Promote Scientific and Technological Research | | X | X | |
| 14. Contain Communism | N/A | N/A | N/A | N/A |
| 15. Improve Air Quality | X | | | X |
| 16. Enhance Workplace Safety | | X | | X |
| 17. Strengthen the National Defense | X | | | |
| 18. Reduce Hunger and Improve Nutrition | | X | X | |
| 19. Increase Access to Post-Secondary Education | | | X | |
| 20. Enhance Consumer Protection | | X | | X |
| 21. Expand Foreign Markets for U.S. Goods | X | | | |
| 22. Increase the Stability of Financial Institutions and Markets | | X | | X |
| 23. Increase Arms Control and Disarmament | X | | | |
| 24. Protect the Wilderness | | X | X | |
| 25. Promote Space Exploration | | X | X | |

* From Paul C. Light, "Government's Greatest Hits in Peril," in Steven Conn, ed., *To Promote the General Welfare The Case for Big Government*, Oxford University Press, 2012

TABLE 2: THE POST-2001 BREAKDOWNS

| Breakdown | Description | Date | News Interest | Mission | Demand |
|----------------------------------|---|------|---------------|------------|--------|
| 1. 9/11 Terrorist Attacks* | Despite early warnings, al-Qaeda operatives were able to hijack four commercial airliners on September 11, 2001, and use them as missiles to attack the World Trade Center's Twin Towers in New York City and the Pentagon. | 2001 | 96% | Oversight | Surge |
| 2. Enron Bankruptcy* | The Enron Corporation filed for bankruptcy after misrepresenting its financial health through false statements, and committing both securities and wire fraud. Worldcom and Adelphia soon followed suit. | 2001 | 66% | Oversight | Steady |
| 3. Shoe Bomber Terrorist Plot | A terrorist attempted to ignite explosives hidden in one of his tennis shoes on board a trans-Atlantic flight, but was subdued by the flight crew and passengers who smelled the bomber's match smoke and took immediate action. | 2001 | 54% | Oversight | Steady |
| 4. Shuttle Columbia Accident* | A breach of the Space Shuttle Columbia's heat shield upon reentry after a 16-day mission killed its seven-member crew, and confirmed many of the same problems that caused the Challenger disaster almost two decades earlier. | 2003 | 82% | Operations | Steady |
| 5. Iraqi WMD* | United States forces were unable to find even a trace of the alleged biological, chemical, or nuclear weapons of mass destruction that created momentum for the Iraq War. Specially trained U.S. troops spent two years in the search before giving up. | 2003 | 76% | Operations | Surge |
| 6. Valerie Plame Cover Breach | A group of senior presidential advisers exposed Valerie Plame as a secret operative of the Central Intelligence Agency in retaliation for her husband's criticism of the George W. Bush administration's prewar intelligence allegations about Iraq's weapons of mass destruction. | 2003 | 48% | Operations | Surge |
| 7. "Code Orange" Terrorism Alert | The White House allegedly pressured the Department of Homeland Security to raise the nation's terrorism threat from elevated (yellow) to orange (high risk) just days after the Democratic national convention ended. The department's secretary at the time later wrote that he had been "pushed to raise the alert" to aid the president's reelection campaign. | 2004 | 70% | Operations | Steady |
| 8. Flu Vaccine Shortage | Flu vaccine supplies plummeted at the Centers for Disease Control and Prevention just as the 2004 flu season began, and were late to recover because the agency had no contingency plan for such shortages. | 2004 | 71% | Operations | Surge |
| 9. Vioxx Drug Recall | Despite warnings that its best-selling Vioxx pain killer doubled cardiovascular risk, Merck continued to sell the drug without any Food and Drug Administration post-market review for almost six years before withdrawing it voluntarily. | 2004 | 59% | Oversight | Steady |

| | | | | | |
|-------------------------------|--|------|-------|------------|--------|
| 10. Abu Ghraib Prison Abuse* | Prisoners at Iraq's infamous Abu Ghraib prison were abused and humiliated by U.S. guards and contractors, leading to widespread publication of photos from the incident, and later reports of similar abuse at the Guantanamo Bay detention camp. | 2004 | 87%** | Operations | Surge |
| 11. Hurricane Katrina* | Hurricane Katrina made landfall in Louisiana on August 29, 2005, breaching the levees protecting New Orleans; stranding thousands of residents on rooftops, in the Superdome, and on bridges; and freezing the Federal Emergency Management Agency and state agencies. | 2005 | 91% | Operations | Surge |
| 12. Haditha Killings | United States soldiers from the 3rd Battalion, 1st Marines killed 24 unarmed Iraqi civilians in Haditha after an improvised explosive device, or bomb, exploded beneath one of their Humvees. The platoon leader was charged with two counts of premeditated homicide, but the charges were later dropped. | 2005 | 55% | Operations | Steady |
| 13. Mine Accidents* | Twelve miners were killed when methane gas exploded inside a West Virginia mine, and another six were killed soon after when the walls collapsed inside a Utah mine. Other mine disasters occurred in the interim. | 2006 | 80% | Oversight | Steady |
| 14. U.S. Attorney Firings* | The Justice Department fired nine U.S. Attorneys in 2006 without warning or explanation in an alleged effort to punish perceived voter fraud and corruption cases against Democrats. | 2006 | 48% | Operations | Steady |
| 15. Abramoff Lobbying* | "Super-Lobbyist" Jack Abramoff, who designed and eventually pled guilty to a complicated bribery scheme that involved at least one member of Congress and a senior White House official, was ordered to repay at least \$25 million in fraudulent billings. | 2006 | 38% | Oversight | Steady |
| 16. I-35W Bridge Collapse | Thirteen people were killed and 90 injured when an interstate highway bridge perched over the Mississippi River in Minnesota collapsed during rush hour in part due to a repair project designed to fix a flawed design. | 2007 | 80% | Oversight | Steady |
| 17. Consumer Product Recalls | The Consumer Product Safety Commission issued 473 recalls during a surge in Chinese imports that slipped into the United States without adequate inspection, but could not keep up with the flood of cheap and often toxic toys. | 2007 | 77% | Oversight | Surge |
| 18. Care of Wounded Soldiers* | Wounded soldiers being treated at the Walter Reed Army Medical Center were abused, neglected, and quartered in filthy, cockroach-infested facilities. Further investigation revealed similar conditions throughout the veterans' health system. | 2007 | 62% | Operations | Surge |
| 19. Food Safety Recalls | The Food and Drug Administration issued dozens of warnings and recalls of food products such as eggs, meat, peanut butter, peppers, and pet food that had slipped through its porous inspection system in 2007. | 2007 | 56% | Oversight | Surge |

| | | | | | |
|---------------------------------------|---|------|-----|------------|--------|
| 20. Enhanced Interrogation Techniques | Although the agency had used “enhanced interrogation techniques” such as waterboarding on detainees since 2001, the story finally reached the public in 2007 and returned to the news two years later with further information released by the Obama administration. | 2007 | 55% | Operations | Steady |
| 21. Wartime Cover-Ups | Two stories of early wartime heroism were discredited in 2007: (1) the capture and rescue of Private Jessica Lynch in 2003, and (2) the enemy fire that killed Cpl. Patrick Tillman in 2004. Tillman had been killed by friendly fire, while Lynch had never fired her weapon before being taken prisoner. | 2007 | 43% | Operations | Steady |
| 22. Blackwater Killings | Operating under a contract with the State Department, heavily armed employees of Blackwater Security Consultants killed 14 unarmed Iraqi civilians. According to the Federal Bureau of Investigation, the civilians were killed “without cause.” | 2007 | 40% | Operations | Surge |
| 23. Financial Collapse* | After years of risky investments and with little regulation, the banking system collapsed under the weight of toxic assets created by risky mortgage loans, poorly understood financial instruments, and a credit crisis that froze the economy. | 2008 | 92% | Oversight | Steady |
| 24. Madoff Ponzi Scheme | Despite explicit warnings that Bernard Madoff had built an elaborate Ponzi scheme, the Securities and Exchange Commission never investigated his too-good-to-be-true success. Madoff was turned in by his sons in 2008 and eventually convicted of a \$65 billion fraud that had lasted for the better part of two decades | 2008 | 60% | Oversight | Steady |
| 25. Southwest Airline Groundings | Southwest Airlines grounded 46 of its older Boeing 737 aircraft to search for fuselage cracks. The groundings exposed the Federal Aviation Administration’s porous inspection process, which involved lax oversight of its own contractors and the lack of a clear oversight mission. | 2008 | 49% | Oversight | Steady |
| 26. Fort Hood Shooting | Army Major Nidal Hasan shot and killed 13 people and wounded another 43 while shouting, “Allah is great,” in a terrorist attack at Fort Hood, Texas. Hassan later described himself as a “soldier of Allah.” | 2009 | 78% | Oversight | Steady |
| 27. Christmas Day Bombing Plot | A terrorist attempted to detonate explosives sewn into his underwear in the final minutes of a Northwest Airlines flight from Amsterdam to Detroit, but was subdued by the flight crew and passengers. After early assertions that the system had worked, the secretary of Homeland Security admitted that it had “failed miserably.” | 2009 | 73% | Oversight | Steady |
| 28. Gulf Oil Spill* | Failures to conduct thorough inspections were partially to blame for an explosion on British Petroleum’s Deepwater Horizon offshore drilling platform that killed 11 workers, while the failure of a “blow-out preventer” created a leak far below that lasted 87 days and caused the largest spill in history. | 2010 | 88% | Oversight | Steady |
| 29. GSA Conference | The General Services Administration spent \$822,000 on a lavish four-day Las Vegas conference for 300 employees that included numerous “scouting trips” for advance planning. The conference featured skits, a clown, and psychic readings. | 2010 | 39% | Operations | Steady |

| | | | | | |
|--------------------------------------|--|------|-----|------------|--------|
| 30. Postal Service Financing Crisis | Faced with rising costs and declining volume, the U.S. Postal Service hit a severe financial crisis that prompted proposals for post office closings, elimination of Saturday delivery, personnel streamlining, and full privatization. | 2011 | 49% | Operations | Steady |
| 31. Operation Fast and Furious* | The Justice Department launched an ill-fated program designed to follow illegal firearms as they “walked” across the border to the top of the Mexican drug cartels. However, many of the firearms were lost once they changed hands, and one might have been used to kill a U.S. Customs and Border Protection agent. | 2011 | 37% | Operations | Steady |
| 32. Benghazi Attack | The U.S. Ambassador to Libya and three other Americans were killed during an attack by heavily armed forces that launched what appears to have been a coordinated attack on the U.S. Special Mission in Benghazi. | 2012 | 67% | Operations | Surge |
| 33. Secret Service Misconduct | Thirteen Secret Service agents arrived in Cartagena, Colombia, 48 hours before President Obama was to arrive for an international summit, and spent their first night in the city soliciting prostitutes and drinking heavily. | 2012 | 51% | Operations | Steady |
| 34. Boston Marathon Bombings | Aided by his younger brother, a known terrorist, who had been lost by at least two federal intelligence agencies, detonated improvised “pressure-cooker” bombs near the Boston Marathon finish line, killing three spectators and wounding 250 others. | 2013 | 85% | Oversight | Steady |
| 35. Navy Yard Shootings | Armed with a shotgun purchased only days before, a Navy subcontractor shot and killed 12 people, and injured three others, after using a valid entry pass to smuggle the weapon into the Washington Navy Yard. | 2013 | 66% | Oversight | Steady |
| 36. healthcare.gov | Designed as an easily accessible portal to health insurance, healthcare.gov crashed under heavy traffic, producing long wait times, frozen screens, and uncompleted applications. | 2013 | 64% | Operations | Surge |
| 37. Texas Fertilizer Plant Explosion | An explosion at an ammonium nitrate plant killed 14 citizens, and destroyed most of the surrounding town of West, Texas. The U.S. Chemical Safety Board blamed all levels of government for failing to identify the hazard and correcting it through policies that would have prohibited building the plant so close to the community. | 2013 | 59% | Oversight | Steady |
| 38. IRS Targeting | The Internal Revenue Service unit that was responsible for granting tax-exempt status created a public relations disaster by setting aside applications from organizations with names such as “Tea Party,” “Patriots,” and “9/12” for further review. | 2013 | 50% | Operations | Surge |
| 39. NSA Leaks | Edward Snowden stole 250,000 secret documents from the National Security Agency while working as a contract employee under the supervision of the Booz Allen Hamilton consulting firm. He later fled the U.S. and leaked the documents to major news outlets. | 2013 | 50% | Oversight | Surge |

| | | | | | |
|-----------------------------------|---|------|--------|------------|--------|
| 40. Automobile Recalls | Seven years after it rejected an investigation of deadly accidents that involved a faulty ignition switch, the National Highway Safety Transportation Administration (NHSTA) ordered General Motors to recall 2.2 million Chevrolet Cobalt and other vehicles for immediate repairs. | 2014 | 64% | Oversight | Steady |
| 41. Children's Crossing | Starting in mid-2014, tens of thousands of unaccompanied, undocumented children began crossing the Mexican border into the United States. The U.S. government acknowledged that it created the perception that the children would be allowed to stay once they joined their families already in the United States. | 2014 | 63% | Operations | Surge |
| 42. VA Waiting List | The Department of Veterans Affairs came under intense criticism in May 2014 for long waiting times and secret waiting lists in providing outpatient appointments. Initial reports alleged that as many as 40 veterans had died while waiting for appointments in Phoenix alone. | 2014 | 61% | Operations | Steady |
| 43. Fort Hood Shooting II | Five years after the first attack on Fort Hood, an Army Specialist killed three people, injured another 12, and killed himself over a seemingly trivial incident regarding a request for leave. | 2014 | 57% | Operations | Steady |
| 44. Ebola Response | The federal government generally ignored the growing Ebola crisis in Africa until the epidemic had become a global threat. The failure to act followed other incidents at the Centers for Disease Control involving a breakdown in the agency's safety culture. | 2014 | 53% | Operations | Surge |
| 45. Secret Service II | Two years after the Secret Service embarrassment in Cartagena, agents stumbled in a series of events that included shots fired against the White House that were never investigated, an intruder who jumped the White House fence and was not caught until he entered the White House, and drunk-driving charges against two agents who drove their SUV into a crime scene just outside the White House gate. | 2014 | 45% | Operations | Steady |
| 46. ISIS | Despite early warnings about the Islamic State in Iraq and Syria, the Obama administration reportedly either lost the intelligence or ignored it until late spring 2014 when ISIS seized control of Mosul, Iraq's second-largest city and a prize target during the long U.S. war in Iraq. | 2014 | 67% | Oversight | Surge |
| 47. Government Information Breach | Hackers secured access to the federal government's information servers through antiquated security barriers and stole information on at least 21 million Americans who had applied for a security clearance from the government or its contractors over an unknown period of time. | 2015 | 39%*** | Operations | Steady |
| 48. State Department Email Policy | Secretary of State Hillary Clinton allegedly created and used a private email account to conduct State Department business in clear violation of U.S. record-keeping statutes. Ongoing investigations suggested that federal employees in other federal agencies also used personal accounts in violation of federal rules because their agency information systems were too cumbersome or antiquated to use. | 2015 | 39% | Operations | Steady |

* Each of these breakdowns produced one of the 100 most significant congressional and/or presidential investigations since World War II; see Paul C. Light, *Government by Investigation: Congress, Presidents, and the Search for Answers, 1945–2012* (Brookings/Governance, 2014), for the full list. The failed search for weapons of mass destruction and the Abu Ghraib prison abuse were both part of the long-running congressional and presidential investigation of Iraq War conduct, and are included here as separate investigations.

** This figure comes from Pew's May 12, 2004, survey showing that 87 percent of respondents were paying very or fairly close attention to the situation in Iraq, which followed the Center's May 9, 2004, survey showing that 92 percent of respondents had heard about reports of mistreatment

of Iraqi prisoners by U.S. troops, and 76 percent had seen photos from the incident. The proximity of the surveys strongly suggests that respondent interest in the situation in Iraq was heavily influenced by the Abu Ghraib story. Hence, I put the incident on my list in combination with allegations of prisoner abuse at the Guantanamo Bay detention camp in 2005.

*** This figure comes from Pew's August 15, 2014, survey showing that 55 percent of Americans were not too or not at all confident that government would keep any of their computer records secure and private, and is supported by the Monmouth University Polling Institute June 22, 2013, survey showing that 39 percent of Americans had read or heard a lot about the cyber attack on government computers earlier this spring, while another 44 percent said they had read or heard a little, and 18 percent said they had not read or heard anything at all.

TABLE 3: THE PLAUSIBLE CAUSES OF BREAKDOWN

| | | |
|------------|----------------------|--|
| Policy | Design | Was the policy likely to address the issue at hand? |
| | Degree of Difficulty | Was the policy particularly difficult to deliver? |
| | Assignment | Was the policy assigned to a “high-risk” agency? |
| Resources | Budget | Was the implementing agency given enough funding to deliver the policy? |
| | Human Capital | Was the implementing agency given enough staffing to deliver the policy? |
| | Support Systems | Did the implementing agency have the appropriate administrative systems to deliver the policy? |
| Structure | Hierarchy | Was there a clear chain of command for ensuring the clear direction and accountability to deliver the policy? |
| | Contracting | Were contracts adequately structured and outsourcing appropriately designed and monitored to deliver the policy? |
| | Overlap | Did duplication and overlap with other departments and agencies reduce effective delivery? |
| Leadership | Expertise | Did the senior leadership have the skills necessary to deliver the policy? |
| | Decision Making | Did the senior leadership make effective decisions before, during, and after the failure? |
| | Vacancies | Was the senior leadership in office in time to deliver the policy? |
| Culture | Alignment | Was the agency aligned in full support of the policy? |
| | Misconduct | Was the policy undermined by corruption or ethical misconduct? |
| | Monitoring | Was the policy appropriately monitored during implementation and ongoing delivery? |

TABLE 4: THE PROBABLE CAUSES OF BREAKDOWN

| Failure | Year | News Interest | Policy | | | Resources | | | Structure | | | Leadership | | Culture | | | Check Marks | |
|-------------------------------|------|---------------|--------|------------|------------|-----------|---------------|-----------------|-----------|-------------|---------|------------|-----------------|-----------|-----------|------------|-------------|------------|
| | | | Design | Difficulty | Assignment | Budget | Human Capital | Support Systems | Hierarchy | Contracting | Overlap | Expertise | Decision Making | Vacancies | Alignment | Misconduct | | Monitoring |
| 9/11 Terrorist Attacks | 2001 | 96% | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 12 |
| Financial Collapse | 2008 | 92% | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 11 |
| Hurricane Katrina | 2005 | 91% | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 14 |
| Gulf Oil Spill | 2010 | 88% | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 10 |
| Abu Ghraib Prison Abuse | 2004 | 87% | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 9 |
| Boston Marathon Bombings | 2013 | 85% | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 10 |
| Shuttle Columbia Accident* | 2003 | 82% | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 9 |
| "Code Orange" Terrorism Alert | 2004 | 81% | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 10 |
| I-35W Bridge Collapse | 2007 | 80% | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 9 |
| Mine Accidents | 2006 | 80% | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 8 |
| Fort Hood Shooting | 2009 | 78% | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 2 |
| Consumer Product Recalls | 2007 | 77% | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 11 |
| Iraqi WMD | 2003 | 76% | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 5 |
| Christmas Day Bombing Plot | 2009 | 73% | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 7 |
| Flu Vaccine Shortage | 2004 | 71% | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 6 |

| | | | | | | | | | | | | | | | | | | |
|-----------------------------------|------|-----|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Benghazi Attack | 2012 | 67% | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | | ✓ | | | ✓ | | | | 8 |
| ISIS | 2014 | 67% | | ✓ | ✓ | | | ✓ | | ✓ | ✓ | | | | | | | 5 |
| Enron Bankruptcy | 2001 | 66% | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | | | | | 9 |
| Navy Yard Shootings | 2013 | 66% | ✓ | ✓ | | | ✓ | ✓ | | | ✓ | | ✓ | | | | ✓ | 7 |
| Automobile Recalls* | 2014 | 64% | ✓ | ✓ | | | ✓ | ✓ | ✓ | | ✓ | | | | ✓ | ✓ | ✓ | 9 |
| healthcare.gov | 2013 | 64% | | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | | | | | | | ✓ | 7 |
| Children's Crossing | 2014 | 63% | ✓ | | ✓ | ✓ | | ✓ | | | | | | | ✓ | ✓ | | 6 |
| Care of Wounded Soldiers | 2007 | 62% | ✓ | ✓ | ✓ | | ✓ | | ✓ | ✓ | | ✓ | ✓ | ✓ | | | ✓ | 10 |
| VA Waiting List | 2014 | 61% | ✓ | | | ✓ | ✓ | | | | | ✓ | | | | | | 4 |
| Madoff Ponzi Scheme | 2008 | 60% | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | | ✓ | | ✓ | | | 10 |
| Texas Fertilizer Plant Explosion | 2013 | 59% | | | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | | | | ✓ | ✓ | 8 |
| Vioxx Drug Recall | 2004 | 59% | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | | | | | | | ✓ | ✓ | 8 |
| Fort Hood Shooting II | 2014 | 57% | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | | | | ✓ | ✓ | 9 |
| Food Safety Recalls | 2007 | 56% | ✓ | | | ✓ | ✓ | | | | ✓ | | | | ✓ | ✓ | | 6 |
| Enhanced Interrogation Techniques | 2007 | 55% | | ✓ | ✓ | | | | | | ✓ | | | | ✓ | | ✓ | 5 |
| Haditha Killings | 2005 | 55% | ✓ | ✓ | | | | ✓ | ✓ | | ✓ | | | | | | | 5 |
| Shoe Bomber Terrorist Plot | 2001 | 54% | ✓ | ✓ | | | ✓ | | | ✓ | | ✓ | ✓ | | | ✓ | | 7 |
| Ebola Response | 2014 | 53% | | ✓ | | | ✓ | | ✓ | | | | | | | ✓ | | 4 |
| Secret Service Misconduct | 2012 | 51% | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | ✓ | | | 10 |
| IRS Targeting System | 2013 | 50% | ✓ | ✓ | ✓ | | ✓ | ✓ | | | | ✓ | | | | | ✓ | 7 |
| NSA Leaks | 2013 | 50% | ✓ | | ✓ | | ✓ | | | | | ✓ | | ✓ | | ✓ | | 6 |
| Postal Service Financing Crisis | 2011 | 49% | ✓ | | ✓ | | ✓ | | ✓ | | | ✓ | | ✓ | | ✓ | | 7 |

| | | | | | | | | | | | | | | | | | | |
|---------------------------------|------|-----|--------|------------|------------|-----------|---------------|-----------------|-----------|-------------|---------|------------|-----------------|-----------|-----------|------------|------------|-----|
| Southwest Groundings | 2008 | 49% | ✓ | ✓ | | | ✓ | ✓ | ✓ | | | ✓ | | | ✓ | 7 | | |
| U.S. Attorney Firings | 2006 | 48% | ✓ | | ✓ | | ✓ | ✓ | | ✓ | | | | ✓ | | ✓ | 7 | |
| Valerie Plame Cover Breach | 2003 | 48% | ✓ | | | ✓ | | | ✓ | | | ✓ | | ✓ | | ✓ | 6 | |
| Secret Service II | 2014 | 45% | | ✓ | | | | | | | | ✓ | ✓ | | ✓ | ✓ | 5 | |
| Wartime Cover-Ups | 2007 | 43% | ✓ | | | | | | | | | ✓ | ✓ | | ✓ | ✓ | 5 | |
| Blackwater Killings | 2007 | 40% | ✓ | | ✓ | | ✓ | | | | | ✓ | | ✓ | | ✓ | 6 | |
| State Department Email Security | 2015 | 39% | | ✓ | | | ✓ | | ✓ | ✓ | | | | ✓ | ✓ | ✓ | 7 | |
| General Services Conference | 2010 | 39% | ✓ | | | | | | | ✓ | | | | | | ✓ | 3 | |
| Government Information Breach | 2015 | 39% | | ✓ | | | ✓ | | | ✓ | | ✓ | | | | | 4 | |
| Abramoff Lobbying | 2006 | 38% | ✓ | | | ✓ | ✓ | ✓ | | | | | | | | ✓ | ✓ | 6 |
| Operation Fast and Furious | 2011 | 37% | ✓ | | | | | | | ✓ | | ✓ | ✓ | | | ✓ | 5 | |
| Check Marks per Category | | | Policy | | | Resources | | | Structure | | | Leadership | | | Culture | | | 351 |
| | | | 92 | | | 82 | | | 62 | | | 45 | | | 70 | | | |
| Check Marks per Subcategory | | | Design | Difficulty | Assignment | Budget | Human Capital | Support Systems | Hierarchy | Contracting | Overlap | Expertise | Decision Making | Vacancies | Alignment | Misconduct | Monitoring | 351 |
| | | | 32 | 31 | 29 | 22 | 31 | 29 | 26 | 17 | 19 | 11 | 27 | 7 | 24 | 17 | 29 | |

TABLE 5: COMPARING THE CORES

| Type of School | The Core Curriculum* | | | | | |
|---|-----------------------------|----------------|-----------------------|---------------------|------------------|-----------------------|
| | Economics & Policy Analysis | Policy Process | Public Administration | Finance & Budgeting | Research Methods | Internship & Capstone |
| Public Administration | 17% | 7% | 35% | 13% | 19% | 8% |
| Public Policy | 31% | 10% | 20% | 3% | 24% | 11% |
| Blended (Public Policy + Public Administration) | 25% | 12% | 24% | 9% | 22% | 8% |

*The list of core courses can be found on each school’s website, and were sorted as follows:

1. Economics and Policy Analysis courses included titles such as economics for policy analysis, managerial economics, policy analysis, policy design, and all other classes that deal with economic analysis and the process of determining and designing preferred public policy options.
2. Public Administration/Business Administration courses included titles such as human resource management, organizational behavior, leadership, ethics, implementation theory, operations management, and other classes that relate to the management of organizations and implementation of policy initiatives.
3. Finance and Budgeting courses included titles such as financial accounting, budgeting for organizations, and all other courses that deal with managing the finances and budgets of organizations and firms.
4. Research and Methods courses included titles such as statistics, program evaluation, and performance measurement and management.

There were actually 22 schools in this analysis because two of the public administration schools were tied for the 7th spot in their categories. The top public policy schools ranked as such in the 2013 *U.S. News & World Report* were Carnegie Mellon, Duke, Georgetown, Princeton, Chicago, and Michigan. The top public administration schools were American University, George Washington, Ohio State, Rutgers, the State University of New York at Albany, Arizona, Georgia, and Kansas (George Washington was not ranked in 2013 due to paperwork problems, but was in the top 7 in 2011). The comprehensive schools were at Harvard University, Indiana, New York University, Texas Austin, Washington, and Wisconsin. This analysis focuses on the primary focus of each school—public policy schools teach some public administration, and vice versa, but the primary focus of each school can be determined in part by its name, in part by its stated emphasis in its catalogue and advertising material, and in part by its core curriculum.

TABLE 6: COMPARING THE DISCIPLINES

| Program Type | Public Administration | Economics | Political Science | Sociology & Anthropology | Other & Not Discernible |
|---|-----------------------|-----------|-------------------|--------------------------|-------------------------|
| Public Administration | 36% | 9% | 24% | 4% | 27% |
| Public Policy | 1% | 40% | 21% | 2% | 26% |
| Blended (Public Policy + Public Administration) | 8% | 30% | 18% | 5% | 29% |

*Primary discipline was determined by reading the faculty biographies on each school's website with a special emphasis on the core discipline of each faculty member's Ph.D., his or her teaching interests and courses, and a sampling of his or her publications.