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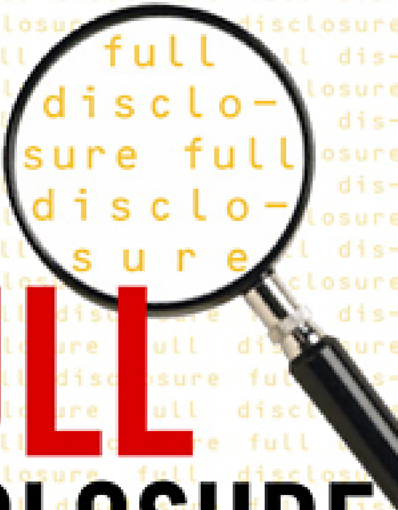

FULL DISCLOSURE

The Politics, Perils and Promise of Targeted Transparency

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FULL DISCLOSURE

Which SUVs are most likely to roll over? What cities have the unhealthiest drinking water? Which factories are the most dangerous polluters? What cereals are most nutritious? In recent decades, governments have sought to provide answers to such critical questions through public disclosure to force manufacturers, water authorities, and others to improve their products and practices. Corporate financial disclosure, nutritional labels, and school report cards are examples of such targeted transparency policies. At best, they create a light-handed approach to governance that improves markets, enriches public discourse, and empowers citizens. But such policies are frequently ineffective or counterproductive. Using an analysis of eighteen U.S. and international policies, *Full Disclosure* shows that the information provided is often incomplete, incomprehensible, or irrelevant to consumers, investors, workers, and community residents. To be successful, transparency policies must be accurate, must keep ahead of disclosers' efforts to find loopholes, and, above all, must focus on the needs of ordinary citizens.

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Full Disclosure

The Perils and Promise of Transparency

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To our parents

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Preface

Five years ago, we set out to explore a question of growing importance in public life: can government legislate transparency policies that reduce risks to health, safety, and financial stability, or improve the performance of major institutions such as schools, hospitals, and banks?

We were an unlikely trio – a political scientist, an economist, and a lawyer, each busy with our own research concerning new trends in participatory democracy, workplace practices, and regulatory policy. But all of us were based, serendipitously, at the Kennedy School's Taubman Center for State and Local Government at Harvard University. We began meeting every couple of weeks to talk about an intriguing development that each of us had noted separately in our work. Faced with challenges to reduce serious risks or improve public services, legislators were no longer simply setting standards or imposing taxes. They were also creating scores of public disclosure policies.

In effect, policymakers were honing transparency – a widely shared but amorphous value – into a refined instrument of governance. This trend raised a fundamental question that no one seemed to be asking: does transparency work? Can new information – placed in the public domain and structured by government mandate – improve consumers', investors', and voters' choices and, in turn, create new incentives for manufacturers, hospitals, schools, and other organizations to bring their practices more in line with public priorities? We decided to examine that question together.

As we framed our research project, transparency policy failures with devastating consequences helped convince us that the inquiry was important. In 2001, Enron Inc., the world's largest energy trading firm, collapsed. To prosecutors, Enron's demise represented fraudulent efforts by executives to hide huge losses from investors. To many investors, it represented the loss of life savings. To us, however, the Enron debacle also signaled a failure of the nation's oldest and most trusted transparency system – the detailed federal requirements that publicly traded companies disclose their profits and losses. Enron's demise was followed quickly by the sudden collapse of other respected companies – WorldCom and Tyco, for example – incidents that underscored the flaws in financial reporting.

Over the next two years, the Bush administration's attempt to employ transparency to reduce risks of death and injury from terrorist attacks also failed. The tragedy of the terrorist attacks of September 11, 2001, was leavened by the grace and courage of citizen heroes. Firefighters rushed into the World Trade Center towers as company managers ushered their fellow workers out of the doomed buildings, saving thousands of lives. Passengers aboard United Airlines Flight 93 attacked their hijackers and sacrificed themselves to halt a terrorist attack on the nation's capital.[1] On September 11, as in many other emergencies, citizens were the first to respond.

Perhaps recognizing the importance of public awareness and mobilization, the Bush administration created a color-coded ranking system for terrorist threats early in 2002.[2] That system was designed to encourage government agencies, the private sector, and members of the public to take steps at each threat level to minimize attacks and their consequences. Instead, announced increases in the threat level created confusion, leaving millions of Americans uncertain what they should do to protect themselves. Before long, terrorism threat ranking degenerated into fodder for late-night comedians.

These and other instances of transparency gone awry drove home three important points. First, transparency policies were always limited by politics. They represented compromises forged from conflict, as people and organizations with diverging interests and values battled over how much information should be made public and in what forms. Some of the issues raised by the accounting scandals – whether and how companies should have to report on stock options and off–balance sheet entities – had been the subject of decades of intense lobbying. Thus, in public policy, there was no such thing as full disclosure – only varying degrees of partial transparency that might or might not serve the public's needs.

Second, the transparency measures we observed were fundamentally different from the more familiar right-to-know policies that dated from the 1960s in the United States and became contentious once again as George W. Bush expanded executive branch secrecy during his two terms as president. Right-to-know laws, a cornerstone of democratic governance, required general openness in federal, state, and local government in order to hold officials accountable for their actions. The transparency measures we observed, by contrast, required disclosure of specific factual information, usually by corporations or other private organizations. Their aims, too, were specific: to reduce needless economic losses to investors from corporate deception, to prevent deaths and injuries, to improve the quality of public services, or to fight corruption. We developed a name for this second generation of public disclosure: targeted transparency.

Third, the consequences of failed transparency could be devastating. The underreporting and misreporting of financial data by Enron and WorldCom cost thousands of workers their pension savings and millions of stockholders their investment funds. The ambiguity of the terrorist threat ranking system ultimately led many individuals and organizations to ignore it, creating the potential for a disastrous boy-who-cried-wolf scenario.

We began our inquiry into the effectiveness of targeted transparency as skeptics. We could think of many reasons from each of our disciplines to predict that new information would not in fact reduce risks. At the same time, the idea of transparency remained appealing. Who could oppose providing more information to the public? The spread of these targeted policies made it especially important to understand their strengths and drawbacks.

Over coffee, covering blackboards and papers with arrows and boxes, we explored how targeted transparency might further specific policy objectives and how obstacles might block the way. When we searched for studies by other researchers, we found almost no literature analyzing targeted transparency across a range of policy areas. There were, however, new and interesting empirical studies that explored the effectiveness of individual transparency systems in domains such as financial policy, environmental regulation, public health, and product safety. Supplementing these studies with our own research, we began to examine and compare specific transparency policies to see how they worked.

The evidence we developed turned us from skeptics into pragmatists. Certainly, some targeted transparency policies were costly failures. But others were clearly effective. What made the difference between success and failure?

With foundation funding as well as support from the Kennedy School's Taubman Center, its Environment and Natural Resources Program, and what is now the Ash Institute for Democratic Governance and Innovation, we organized the Transparency Policy Project to explore that question. We examined a carefully chosen array of fifteen targeted transparency systems in the United States to determine their purposes, politics, effects, and effectiveness. We also examined three international transparency policies to see whether targeted transparency could further nations' shared aims.

As our research progressed, we tested the emerging ideas in papers, seminars, and articles. We found that diverse transparency policies shared common roots, characteristics, and challenges, and therefore represented a single policy innovation.[3] We also found that the dynamics of targeted transparency were of central importance; that transparency systems were more likely to grow weaker than to improve over time; and that the systems that grew stronger featured strong groups representing information users, offered benefits to at least some information disclosers, and provided comprehensible content.[4]

Finally, we created a framework for analyzing the effectiveness of targeted transparency policies. We constructed a stylized "action cycle" to describe the steps from information disclosure to risk reduction in order to see at what point policies failed. At each step, we found that the linchpin of effective transparency was the connection between information and action. Targeted policies were effective only when they provided facts that people wanted in times, places, and ways that enabled them to act. That is, effective policies were those that succeeded in embedding new information in users' and disclosers' existing decision-making routines.[5] That meant that the starting point for any transparency policy was an understanding of the priorities and capacities of diverse audiences who might use the new information. Effective policies did not simply increase information. They increased knowledge that informed choice.

We presented our ideas to audiences at the Kennedy School, the Brookings Institution, the American Enterprise Institute, Georgetown University, the Association for Public Policy Analysis and Management, Boston University, and the American Political Science Association, among other venues, and received valuable feedback. In three occasional papers for the Ash Institute for Democratic Governance and Innovation, we set forth our emerging ideas. We also introduced our ideas to broader audiences in articles for the *Financial Times*, *Environment*, *Issues in Science and Technology*, the *Atlantic Monthly*, the *Journal of Policy Analysis and Management*, and other publications.

This book is an effort to bring together what we have learned in order to offer the first systematic account of the political economy of targeted transparency systems. Because targeted transparency has been applied to such a diverse range of problems, we have based our conclusions on a rich variety of cases. Like biologists collecting and comparing specimens of flora and fauna to derive common classifications, we have examined individual policies to gain insights into the common elements of their operation and consequences.

Our multidisciplinary approach recognizes that transparency policies arise from real-world compromises rather than from pristine public policy analyses, and that the resulting incentive systems are dynamic, evolving under pressure from the shifting economic and political interests of affected parties. We provide an analytical structure for understanding how such policies work and what makes the difference between success and failure.

We speak to three audiences. First, we hope to inform the work of scholars in many disciplines. Targeted transparency is of interest to economists, political scientists, regulatory analysts, cognitive psychologists, specialists in business administration, information technology analysts, and many others.

Second, we hope to provide useful insights that provoke debate among those engaged in framing and responding to targeted transparency policies. These groups include not only policymakers but also business executives, consumer groups, and advocacy organizations.

Finally, we hope to alert interested citizens to both the promise and the perils of targeted transparency. Ultimately, the effectiveness of transparency policies depends on the needs and capacities of ordinary citizens. The provision of information doesn't automatically enable people to make more informed choices. That requires an alert and engaged public that understands the dynamics of transparency and is ready to participate energetically in using new information and in shaping more effective policies.

This book could not have been completed without the contributions of many at the Kennedy School of Government. First among these is Alan Altshuler, who, as director of the Taubman Center for State and Local Government, supported our work from the beginning. Alan offered insightful comments at every stage and created that rare environment that fosters truly interdisciplinary work. The Taubman Center provided a fortuitous home for our project. State and local governments proved to be true laboratories of democracy in the development of targeted transparency policies. Many of the most innovative policies we studied began as state or local mandates – among them, school performance reporting, nutritional labeling, patient safety reporting, restaurant hygiene grades, workplace chemicals reporting, and sex offender community notification. Wherever policies originated, nearly all succeeded or failed because of their impact (or lack of it) on the choices of people going about their everyday lives in their communities.

We also owe a great deal to Henry Lee, director of the school's Environment and Natural Resources Program, for his early and enthusiastic interest and for keeping the research project afloat at key moments. Gowher Rizvi,

director of the Roy and Lila Ash Institute for Democratic Governance and Innovation, offered not only financial support and a venue for publication of three of our papers but also invaluable personal encouragement.

The Brookings Institution in Washington, D.C., and in particular Carol Graham and Pietro Nivola, successive directors of Governance Studies, also supported the project from the outset. They offered valuable insights, provided crucial research support for the development of international cases, offered Mary Graham a Visiting Fellow appointment, and published (with the Governance Institute) her in-depth analysis of three public disclosure systems, *Democracy by Disclosure.*

We also received essential financial support at key junctures from the William and Flora Hewlett Foundation, from another major foundation, and from the Center for Business and Public Policy at Georgetown University.

We have benefited from the intellectual and financial support as well as the warm friendship of colleagues at the Taubman Center, including Ed Glaeser, Arn Howitt, David Luberoff, and Sandy Garron. The insights of Cass Sunstein, a dean of the American regulatory state, led us to ask important questions that we otherwise might have missed. We are also indebted to the editors and four anonymous reviewers of the *Journal of Policy Analysis and Management* for their comments on "The Effectiveness of Regulatory Disclosure Policies," the article that forms the basis of the fourth chapter of this book.

A host of individuals provided us with insights, detailed comments, observations, and camaraderie in our ongoing discussions. We owe a special debt to Richard J. Zeckhauser, Frank Plumpton Ramsey Professor of Political Economy at the Kennedy School, whose detailed and insightful comments we pondered and debated for months with the result that our analysis was enriched in many ways. We are also very grateful for several conversations with the late Daniel Patrick Moynihan, whose distinguished career included an investigation of the issues of secrecy and transparency, summarized in his last book, *Secrecy*. We thank Dara O'Rourke, Charles Sabel, Michael Dorf, Bradley Karkkainen, Amy Shapiro, William Simon, James Liebman, Cary Coglianese, Jennifer Nash, Rob Stavins, Lori Snyder, James Hamilton, Ron Mitchell, the late Vicki Norberg Bohm, and John Mayo.

Two Kennedy School graduates, Elena Fagotto and Khalisha Banks, joined our research team at the Taubman Center. They helped enormously in documenting and analyzing the transparency policies on which this book is based. Elena Fagotto, the project's senior research associate, has participated in our intellectual journey from almost its beginning and joins us as coauthor of

the book's chapter on effectiveness. At the Brookings Institution, Andrew Eggers offered exceptional research support as well as original insights that contributed greatly to the development of the international cases.

Several individuals assisted us in finalizing the manuscript. Karl Weber took on the formidable task of editing our chapter drafts to make the book comprehensible to those in many disciplines. Terri Gallego-O'Rourke gave us the benefit of her legal expertise, attention to detail, and indefatigable good humor in completing the fact-checking and sourcing of the manuscript. Martha Nichols provided important feedback on a very early draft.

The book benefited enormously from the wise counsel, experience, and enthusiasm of Cambridge University Press senior editor Scott Parris, who shepherded it through the publication process. We are grateful to Marielle Poss for managing the publication process with alacrity on a very tight schedule. As copy editor, Janis Bolster improved the manuscript and saved us from several inconsistencies. Melissanne Scheld, Gene Taft, and Greg Houle worked to bring the book to the attention of many specialized audiences.

Finally, we would not be fully transparent if we did not gratefully acknowledge our families for their ongoing support and willingness to listen to and critique our ideas and musings on this project over the last five years.

ONE

Governance by Transparency

THE NEW POWER OF INFORMATION

On September 12, 2000, Masatoshi Ono, the chief executive of leading U.S. tire manufacturer Bridgestone/Firestone, faced a panel of senators and a battery of television cameras in a packed hearing room. The senate panel was investigating mounting deaths from a mysterious series of auto accidents in which tires blew out without warning, causing vehicles – many of them Ford Explorer SUVs – to roll over. Addressing the senators and the room full of victims' families, auto safety advocates, and industry representatives, as well as a nationwide television audience, Ono uttered words that no CEO wants to say: "I come before you to express my deep regret and sympathy to you, the American people and especially to the families who have lost loved ones in these terrible rollover accidents."[1]

The Firestone scandal remained national news during the summer and fall of 2000 because auto companies and tire makers had failed to inform the public about deadly risks. Documents from Firestone/Bridgestone and Ford indicated that both companies had been aware of a pattern of fatal accidents caused by a combination of tire tread separation and top-heavy SUVs but had done nothing to alert drivers. Bridgestone/Firestone executives knew that its plant in Decatur, Illinois, where most of the problem tires were made, had long had quality-control problems. When the count was finally complete, 271 people had been killed in accidents involving problematic SUV design and defective tires.[2]

The public, however, learned about these problems only by chance – and only after many of the deaths and injuries. In early February of 2000, Houston station KHOU-TV reported that lawsuits claimed that exploding Firestone tires and associated Explorer rollovers had caused thirty deaths. It took another six months for Bridgestone/Firestone executives to acknowledge the problem and recall 6.5 million tires, the largest tire recall since the 1970s.[3]

More troubling, the Senate investigation revealed that the problem was larger than a limited number of defective tires. In the 1990s, many people bought SUVs because they thought they were safer than smaller cars. The Firestone/Explorer revelations showed that, to the contrary, SUVs were more likely to roll over than other cars – and some SUV models were much more prone to roll over than others. That was important because rollovers remained the most deadly auto accidents, accounting for nearly a third of auto fatalities in the United States even though they represented less than 4 percent of all accidents.[4] Nonetheless, information about which SUVs were prone to roll over – like the facts about the unusual Firestone tire blowouts – remained locked in company files.

As reports of deaths and injuries mounted, congressional committees debated what action to take. Regulators had authority only to mandate recalls and impose modest fines on automakers and tire companies for safety defects. States could prosecute officials for criminal negligence, of course, and injured passengers could sue for damages. But such actions would not reduce the likelihood of future deadly accidents.

Circling around contentious issues concerning how to mandate safer design, Congress instead legislated targeted transparency. The Transportation Recall Enhancement, Accountability, and Documentation (TREAD) Act, approved in November 2000, required auto companies for the first time to give car buyers the facts about each model's rollover risks so that they could make their own safety choices.[5]

The idea was not just that the public deserved better information. It was that the power of information would create a chain reaction of new incentives. Armed with new rollover ratings, buyers would choose safer cars. Confronted with declining sales of the most top-heavy SUVs, auto companies would improve design. Safer design would save lives and prevent injuries. The new law thus made transparency into a precise policy tool.

Information had new power because policymakers did not stop at simply placing facts about risks in the public domain – where they could easily be lost in the cacophony of new-car hype. Instead, policymakers required that information be presented in a format that was designed to be user-centered. They distilled the complex probabilities of rollovers into simple five-star ratings based on government tests of each new model (see Figure 1.1). In a few seconds, car buyers, regardless of their math or language skills, could compare risks and identify rollover-prone models. A five-star vehicle, with a 10 percent or less chance of rolling over in a single-vehicle crash, was much safer than a one-star vehicle, with a 40 percent or more chance of rolling

Vehicle	Frontal Star Rating based on risk of head & chest injury		Side Star Rating based on risk of chest injury		Rollover Rating	
	Driver	Passenger	Front Seat	Rear Seat	2 wheel drive	4 wheel drive
2006 Acura MDX 4-DR. w/SAB (SUV)	☆☆☆☆☆	☆☆☆☆☆	☆☆☆☆☆	☆☆☆☆☆	*Not rated*	☆☆☆☆
2006 Buick Rendezvous 4-DR. w/SAB (SUV)	☆☆☆	☆☆☆☆	☆☆☆☆☆	☆☆☆☆☆	*Not rated*	*Not rated*
2006 Cadillac Escalade 4-DR. w/SAB (SUV)	☆☆☆☆	☆☆☆☆	*Not rated*	*Not rated*	☆☆☆	☆☆☆
2006 Cadillac Escalade ESV 4-DR. w/SAB (SUV)	☆☆☆☆	☆☆☆	*Not rated*	*Not rated*		☆☆☆

Figure 1.1. Rollover Star Rating Graphic. *Source:* http://www.SaferCar.gov

over. Buyers could also customize information to suit their needs. Anyone interested in more detail could delve deeper into narratives and Web site links. In 2005, Congress made the policy even more user-centered. A new law required that information be presented by September 2007 *where* car buyers most needed it, on showroom new-car stickers.[6]

The policy also included an interesting built-in mechanism intended to increase the chances that transparency would be sustainable. It required that ratings become more accurate over time. The initial scores would be based on simple mathematical modeling of rollover propensity combining each model's center of gravity and track width. But the law required that safety regulators also work toward a road test that would more accurately mimic real-world driving conditions, and it directed the National Academy of Sciences to study possible tests and required regulators to consider the academy's recommendations. As a result, regulators instituted a new test in 2004 that combined modeling with driving maneuvers.[7]

Congress added other disclosure-based incentives. The TREAD Act required tire pressure monitoring sensors by 2003;[8] safety regulators required automakers to disclose information on customer complaints and other early indications of safety defects;[9] and new labels made it easier for car owners to see if their tires had been recalled.[10]

This, then, was the concept: government would use the power of information to drive better choices by car buyers, which in turn would improve vehicle designs and reduce risks. But would it work?

Five years after the release of the first set of rollover ratings, the answer appeared to be yes. Initially, SUV models had widely varying rollover rates – and most performed poorly. In 2001, thirty models received only one or two stars, meaning that they had a greater than 30 percent chance of rolling over, while only one model (the Pontiac Aztek 4-DR) earned a four-star rating, meaning that it had a less than 20 percent chance of rolling over. By 2005, however, only one model (the Ford Explorer Sport Trac) received as few as two stars, while twenty-four models earned four stars.[11]

Transparency also created pressures that ended a generation of industry lobbying against a rollover safety standard. The national attention that rollover accidents received in 2000 and the new star ratings spurred automakers to accelerate their introduction of stability-control technology. By 2005, 20 percent of new vehicles were equipped with sensors that triggered corrective braking, compared with fewer than 5 percent in 2000. Voluntary adoption of new technology changed the political dynamic. In 2005, Congress approved the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), which directed regulators to issue minimum performance standards for auto rollovers.[12]

TRANSPARENCY INFORMS CHOICE

In recent years public attention has focused mainly on struggles over broad transparency in government – President Clinton's championing of a broader public right to know and President George W. Bush's controversial moves to increase government secrecy, for example. Few have recognized that a second generation of targeted transparency has been rapidly gaining ground.

Instead of aiming to generally improve public deliberation and officials' accountability, targeted transparency aims to reduce specific risks or performance problems through selective disclosure by corporations and other organizations. The ingeniousness of targeted transparency lies in its mobilization of individual choice, market forces, and participatory democracy through relatively light-handed government action.

Since the mid-1980s, scores of targeted transparency policies have percolated up through the political system in the United States – usually without any awareness by their creators that they were participating in a more general innovation in governance. After a deadly chemical accident in Bhopal, India, killed thousands of people, Congress required in 1986 that manufacturers tell the public about the toxic pollutants they released – factory by factory and chemical by chemical. After scientists confirmed that unhealthy eating habits were contributing to millions of deaths from heart disease and cancer each year, Congress required in 1990 that food companies inform the public about the levels of fat, sugar, and other nutrients in each can of soup and box of cereal. After a series of revelations about the surprising frequency of serious medical mistakes, Congress considered proposals in 2000 to require hospitals to inform the public about such mistakes, and several states required hospitals and doctors to tell the public their mortality rates for specific procedures. After the corporate accounting scandals of 2001 and 2002, Congress required that public companies improve their financial disclosure.

Targeted transparency policies have also been crafted to improve the fairness and quality of public services. In response to continuing concern about financial institutions' discrimination against inner-city borrowers, Congress strengthened requirements in 1989 and 1992 that banks report on their mortgage loans according to the race, gender, and income level of borrowers in each geographical area they serve. In response to continuing concern about the quality of public schools, Congress required in 2001 that school performance reporting demonstrate school improvement as a condition of federal aid.

Each of these laws wrested from the files of corporations, nonprofit organizations, or public agencies some of the facts that executives would often like to keep confidential – information about the risks they create and about flaws in the quality of goods and services they provide. Each offered sunlight in a format that poor performers would most like to avoid – in labels, reports, or Web sites that allowed consumers, investors, employees, and community residents to compare products and practices.

Though the problems they address vary widely, the idea behind all these new laws is the same. A generation of research by economists and political scientists has shown that markets and deliberative processes do not automatically produce all the information people need to make informed choices among goods and services. When hidden risks or service flaws create serious problems for the public at large, the government can help reduce those risks or improve services by stepping in to require the disclosure of missing information.

Why is government action needed? Three reasons: First, only government can compel the disclosure of information from private and public entities. Second, only government can legislate permanence in transparency. Third, only government can create transparency backed by the legitimacy of democratic processes.

The core characteristics of targeted transparency policies are also the same. It is hard to imagine that nutritional labeling, school performance ratings, and corporate financial reporting have much in common. Yet all targeted transparency policies include these characteristics:

- mandated public disclosure
- by corporations or other private or public organizations
- of standardized, comparable, and disaggregated information
- regarding specific products or practices
- to further a defined public purpose.

When they achieve their objectives, these policies all work in the same way, incorporating the following sequence of events or "action cycle":

- Information users perceive and understand newly disclosed information
- and therefore choose safer, healthier, or better-quality goods and services.
- Information disclosers perceive and understand users' changed choices
- and therefore improve practices or products
- that in turn reduce risks or improve services.

While new in its broad information-age applications, targeted transparency is not a new idea in governance. In 1913 Louis D. Brandeis, the "people's attorney" and later Supreme Court justice, wrote in *Harper's Weekly* that "sunlight is . . . the best of disinfectants." Brandeis recommended new laws to require public companies to disclose their profits and losses in order to stop insider deals that deceived investors. He pointed to an even earlier law, the 1906 Pure Food and Drug Act, which required listing ingredients on interstate shipments of foods, as an example of government-mandated "sunlight" to reduce public risks.[13]

President Franklin D. Roosevelt quoted Brandeis's words twenty years later when he urged Congress to require new corporate financial disclosure rules after millions of Americans lost their savings in the stock market crash of 1929. The 1933 and 1934 Securities and Exchange Acts ordered publicly traded companies to disclose assets and liabilities at regular intervals and in a standardized format.[14] Corporate financial disclosure as required by those laws, which remains at the core of U.S. securities policy, has become the United States' most sophisticated – though still imperfect – example of targeted transparency policy.

TRANSPARENCY AS MISSED OPPORTUNITY

However, targeted transparency policies can also do more harm than good. Such policies are always the products of political compromise. When the information from the tug and pull among many interests is incomplete, inaccurate, obsolete, confusing, or distorted, it can contribute to needless injuries or deaths or to large economic losses.

Four years before successful use of targeted transparency to reduce auto rollovers, Congress tried to enlist the power of information to reduce another serious safety risk – disease outbreaks from contaminated public water supplies. This time Congress failed.

Drinking water safety became national news in 1993 when a microbe called cryptosporidium infested the drinking water of Milwaukee, Wisconsin, sickening an astounding 400,000 individuals and killing as many as 110 within a matter of weeks. Congress responded in 1996 by demanding that water authorities inform their customers about contaminants in the water supply.[15]

That time, though, Congress crafted a requirement that employed technical terms, produced inaccurate and out-of-date information, failed to link contaminant data to health risks, and did not provide comparability from one community to another. Instead of receiving clear information that was comprehensible at a glance, like the five-star auto rollover rankings, consumers seeking information about the relative safety of their tap water faced

City of Cambridge Water Department
2005 Annual Drinking Water Quality Report
250 Fresh Pond Parkway
Cambridge, MA 02138
DEP PWS ID#3049000 June 2006

24 Hour Emergency/Customer Service
Phone Number 1-617-349-4770

Cambridge Water Department - Consumer Confidence Report 2005 Data								
Lead and Copper	Units	90% Value	Range	Action Level(AL)90%	MCLG	Violation	Sites exceeding AL	
Copper	ppm	0.035	0.001-1.09	1.3	0	NO	0 of 60	Corrosion of household plumbing.
Lead	ppb	7	0 - 157	15	0	NO	2 of 60	Corrosion of household plumbing.
Regulated- Inorganic Contaminants		Highest	Range	MCL	MCLG	Violation		
Barium	ppm	0.047	0.035-0.047	2	2	NO		Erosion of natural deposits.
Fluoride	ppm	1.3	0-1.3	4	4	NO		Water additive to promote strong teeth.
Nitrate as Nitrogen	ppm	0.74	0.29-0.74	10	10	NO		Runoff from fertilizer use.
Nitrite as Nitrogen	ppm	0.015	0-0.015	1	1	NO		Runoff from fertilizer use.
Unregulated - Inorganic Contaminants		Average	Range					
Sulfate	ppm	25	23-27					Erosion of natural deposits.
Sodium	ppm	70	60-92					road salt.
Unregulated - Organic Contaminants		Average	Range					
Bromodichloromethane	ppb	2.8	1.6-4.6					By-product of drinking water chlorination.
Bromoform	ppb	1.8	0.9-3.4					By-product of drinking water chlorination.
Chloroform	ppb	1.4	0.7-3.0					By-product of drinking water chlorination.
Dibromodichloromethane	ppb	3.9	2.3-6.3					By-product of drinking water chlorination.
Regulated -Volitale Organic Contaminants		Highest Ave	Range	MCL	MCLG	Violation		
Total Trihalomethanes(THMs)	ppb	10.3	4.8-18	80	0	NO		By-product of drinking water chlorination.
Haloacetic Acids(HAA5)	ppb	8.7	3.5-20	60	0	NO		By-product of drinking water chlorination.
		Highest Ave	Range	MRDL	MRDLG	Violation		
Chlorine as Chloramine	ppm	3	1.3 - 3.0	4	4	NO		Water additive used to control microbes.
Regulated - Radioactive Contaminants (2002)						Violation		
Gross Alpha Activity	pCi/L	0.3	n/a	15	0	NO		Erosion of natural deposits.
Gross Beta Activity	pCi/L	14	n/a	AL = 50	0	NO		Decay of naturally occurring deposits.
Turbidity	TT	Lowest Monthly %		Highest Daily Value		Violation		
Daily Compliance(NTU)	1			0.16		NO		Suspended matter from soil runoff.
Monthly Compliance	At least 95%	100				NO		Suspended matter from soil runoff.
Bacteria	Highest % Positive in a Month			Total # positive	MCL	Violation	MCLG	
Total Coliform	1%(April)			1	>5%	NO	0	Naturally occurring in the environment.

Figure 1.2. Drinking Water Safety Report – Cambridge, Massachusetts. *Source:* Excerpts from City of Cambridge report, June 2006, http://www.cambridgema.gov/CityOfCambridge_Content/documents/CCR2005_web.pdf

the daunting task of interpreting complex documents like that shown in Figure 1.2. Just at the time when electronic monitoring and the Internet made real-time reporting feasible, water authorities' lobbying as well as careless planning by policymakers produced partial and hard-to-decipher information that was as much as a year out of date.[16]

As a result, some customers who relied on assurances that tap water was safe actually suffered *increased* health risks. In a particularly troubling series of incidents, media reports in 2004 revealed that tens of thousands of children in Washington, D.C., Boston, and other big cities were drinking water contaminated with unreported high levels of lead, an especially dangerous toxin that could cause severe neurological damage in children. In the nation's capital, federal and local officials admitted they had known about the lead contamination for years but had neither informed customers nor taken steps to remedy the problem. Instead, the city's contaminant reports assured customers, "Your Drinking Water Is Safe." One reason that risks remained hidden was because contaminant reports did not include information about microbes or toxins that entered water after it left the filtration plant – as it passed through hundreds of miles of old lead pipes.[17]

Drinking water reports represent a missed opportunity with serious consequences. According to the National Centers for Disease Control and Prevention, up to 30 percent of reported disease outbreaks each year can be attributed to problems of public water systems, affecting as many as nine hundred thousand people. In 2005, Stephen L. Johnson, the new administrator of the federal Environmental Protection Agency, estimated that at least 10 percent of Americans regularly drink unhealthy water.[18] All in all, as many as 50 million Americans drink water containing industrial solvents and related chemicals that may have long-term health effects.[19]

In the largest water systems, the mixture and levels of contaminants vary greatly from week to week as weather and waste discharges change. Accurate and current contaminant reporting can be critical for those most vulnerable – the very young, the very old, and people on chemotherapy, suffering from AIDS, or with otherwise compromised immune systems. Such individuals – who together make up roughly 20 percent of the U.S. population – are at special risk from bacteria or toxins in drinking water.

Meanwhile, the public's trust in the nation's water supply continues to erode. A quarter of Americans reported in 1999 that they never drank tap water. Sixty-five percent of those who did drink tap water reported that they drank bottled water or filtered tap water some of the time.[20]

Transparency gaps that increase serious risks are common. Some other prominent examples:

- Millions of investors lost savings and retirement funds in 2001 and 2002 not only because corporate executives at some of the nation's largest and best-known companies fraudulently withheld information but also because the financial accounting system allowed them to hide – and profit from – information about financial risks in their companies.
- Millions of people have unknowingly increased their risk of heart disease because nutritional labels have not told consumers when cookies, muffins, and other fast foods contain trans fats, the most dangerous fats on the market. For two decades, scientists have known and warned of trans fat risks.

- Despite twenty years of alarming evidence that more people in the United States die from medical errors in hospitals than from auto accidents and findings that some institutions are ten times safer than others, hospitals are still not required to disclose mistakes that cause death or serious injury.
- Five years after the September 11, 2001, terrorist attacks in New York City and Washington, D.C., government officials still rely on a five-color terrorist threat warning system that does not provide the public with needed information for self-protection – leaving information gaps that could cost thousands of lives.

The cases we have drawn together illustrate both the promise and the perils of a new generation of targeted transparency. By requiring auto rollover ratings, Congress invented a means of communicating complex information in a simple format that helps car buyers compare models and make safe choices. By requiring reports on drinking water safety, Congress settled for a compromise that produced out-of-date and incomplete information that confuses and sometimes misleads customers. Such distorted disclosure not only impairs public health. It also undermines one of democracy's central tenets – that citizens can trust their government as a source of reliable, timely information.

A REAL-TIME EXPERIMENT

What makes the difference between transparency success and failure and how can its effectiveness be improved? We have written this book to answer these questions.

We have scrutinized a carefully selected group of transparency policies using a multidisciplinary approach. We have analyzed the effectiveness of fifteen major targeted transparency policies in the United States and three international policies. Out of the universe of policies that fit our definition of targeted transparency, we chose a set of relatively mature cases, distributed across a range of public policy areas, with potentially important consequences, and whose varied effectiveness has been assessed in rigorous empirical studies.

We reviewed the legislative history and legal requirements of each policy and examined the politics surrounding initial approval and later amendments. We assessed each policy's regulatory structure and the incentives that structure provided for accurate reporting by disclosers, as well as the kind of information it ultimately provided to users. We also analyzed the decision-making processes of users and disclosers in order to understand their actual responses to newly released information. Finally, we identified the drivers of effectiveness by analyzing hundreds of empirical studies and by interviewing policymakers, scholars, and diverse users and disclosers of information. This approach has allowed us to develop a theory of targeted transparency effectiveness that explains the varying outcomes of existing policies and can provide the basis for future research. Table 1.1 provides an overview of the eighteen targeted transparency policies that form the analytic core of this book, and the Appendix contains our detailed descriptions of them.

Our analysis has limitations. We did not attempt to construct a random sample of all targeted transparency policies or undertake a formal meta-analysis of studies. Such approaches were neither tenable nor desirable given the diversity of transparency policies we examined. The benefits of using a multidisciplinary approach and rooting our conclusions in well-grounded studies outweighed the inevitable biases that arose from choosing a subset of all possible cases.

We conclude that the effectiveness of targeted transparency depends heavily on two factors that form the book's two major themes.

- First, targeted transparency policies succeed when they are *user-centered*. Successful policies focus first on the needs and interests of information users, as well as their abilities to comprehend the information provided by the system. Such policies also focus on the needs, interests, and capacities of disclosing organizations. They seek to embed new facts in the decision-making routines of information users and to embed user responses into the decision making of disclosers. Successful transparency policies thus place the individuals and groups who will use information at center stage.
- Second, effective transparency policies must be *sustainable* to be effective. Sustainable policies are those that gain in use, accuracy, and scope over time. Such improvement is important because policies inevitably start as flawed compromises, because markets and public priorities change, and because policymakers constantly need to fill loopholes discovered by reluctant information disclosers.

The sudden bankruptcies of Enron, WorldCom, and other large and respected companies in the 2001 and 2002 illustrate how costly transparency failure can be. While no disclosure system can prevent fraud or intentional