

The Past and Future of Internet Voting

During the recount of votes in Florida in the 2000 presidential election, one of the most heated debates was over how military ballots should be counted. Under a 1982 federal consent decree between the U.S. Department of Justice and the state of Florida, ballots from overseas voters are to be accepted up to ten days after an election.¹ As the nation watched and the presidential election hung in the balance, election supervisors and canvassing boards met to determine which overseas votes would count and which would not.

The canvassing boards often rejected as many or more ballots from overseas voters as they accepted. Orange County—home of the tourist magnet Disneyworld—rejected 117 overseas ballots and accepted only thirty. But in Escambia County—home of the Pensacola Naval Air Station—the canvassing board rejected 112 ballots and accepted 147. Across the state, election officials estimated that 40 percent of overseas ballots were rejected in the initial 2000 election count—about as many as were rejected in 1996.²

Thousands of individuals—many of them men and women in the United States armed forces, military dependents, or civilians serving the nation in nonmilitary capacities—went to great lengths to procure an absentee ballot and vote in the 2000 election, only to have their ballot not included in the final count. In the end, their votes were disregarded for reasons that occur in election after election. The absentee ballots of many voters were rejected because the ballot lacked a signature or witness. In many other cases, the rejection of the ballot was not due to a mistake of

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the voter; while the Pentagon has rules specifying that all mail is to be postmarked, military mail clerks sometimes fail to do so in order to get the mail into bags and onto waiting airplanes or boats headed for the United States. As Pat Halloran, the election supervisor in Okaloosa County, noted, "Postmarks were never a problem before; we never accepted [ballots without postmarks] before, and we didn't accept them this time."³

The experience of overseas voters in the 2000 election raises fundamental questions about the election process: Can technology facilitate voter registration and voting? Can registration and voting from remote locations be done easily and accurately, so that voters do not have to worry about whether they are eligible to vote or whether their ballot will be counted? For many, the answer seems simple: Internet voting.

The 2000 election was a historic event. Of course, most people view it as being historic for the obvious reason: it was one of the closest presidential elections in the history of the United States, and for thirty-seven days, it was unclear who would be elected president. The nation received a crash course in election administration, learning about voting procedures, voting equipment, pregnant and dimpled "chads," military and absentee voting, and the rules for counting and recounting ballots. In the end, the decision of the U.S. Supreme Court in *Bush v. Gore*, by halting the Florida recounts, made the story that much more compelling.

However, the controversy surrounding the 2000 presidential vote in Florida was not the only thing that made the election historic. History also was being made on election night because hidden among the tens of millions of ballots being counted across the country were eighty-four ballots that were unique in the history of U.S. presidential elections. These ballots were cast over the Internet by citizens overseas, the first online ballots ever counted in a presidential general election. Moreover, earlier in the year, online voting had come to the primary process in two states: in a straw poll of Alaska Republicans and in the Arizona Democratic presidential primary, when Arizona became first state to use the Internet as a mode of voting.

For many, Internet voting seems natural. Ever since the Netscape Navigator software made the World Wide Web easy to use, the Internet has been touted as a revolutionary force in American society. Indeed, in many ways, it has been revolutionary. In just four years, Internet use in the United States skyrocketed: while only 18 percent of households had an Internet connection in 1997, by 2000 almost 42 percent of households were online and more than half of all households had a personal computer.

For young people, Internet availability is even more ubiquitous—almost 95 percent of white school children and approximately 80 percent of minority students have access to the Internet at school.⁴ An entire generation of kids will soon enter adulthood with no memory of a world without instant messaging, web surfing, and e-mail.

The revolutionary nature of the Internet has carried over to the political realm, as Internet savvy politicians have realized how this technology can be used to further their interests. Consider the following examples from the past several years:

Presidential candidates in the 2000 election used the Internet in every aspect of their campaigns. Steve Forbes declared his candidacy in an online web cast.⁵ Senator John McCain raised \$810,000 in campaign contributions over the Internet in forty-eight hours after winning the New Hampshire primary; 40 percent of the donors were first-time political contributors and 34 percent were under the age of forty.⁶ Candidates posted speeches, policy positions, and attacks and counterattacks on their websites at a frantic pace as they competed to control the flow of information during the campaign.

Unconventional political activists also have found the Internet to be a revolutionary tool. As Juliette Beck, an activist in the antiglobalization movement, told the *New York Times*, “The events and the nonviolence training and the political theater—the Internet made it possible. . . . We have lots of Lilliputians all acting autonomously and at the same time connected.”⁷ With the Internet, disparate groups of activists share information, coordinate activities, rally supporters, and develop strategies without ever meeting face to face. Wireless technology is expanding the opportunities for such activities, allowing political dissidents and other actors to communicate on the fly, as events occur.⁸

Because of the difficulty of controlling the flow of information online, the Internet often is touted as the medium that will promote democracy around the world. As President Bill Clinton said, “In the new century, liberty will spread by cell phone and cable modem. . . . We know how much the Internet has changed America, and we are already an open society. Imagine how much it could change China. Now, there's no question China has been trying to crack down on the Internet—good luck. That's sort of like trying to nail Jell-O to the wall.”⁹

Finally, governments across the United States and around the world are developing “e-government” initiatives designed to connect the public to the government through the Internet.¹⁰ In addition to offering direct e-mail

connections to government staff, e-government allows the public to access a variety of services online. For example, the federal government hopes to have 80 percent of taxpayers file their tax returns electronically by 2007; in fiscal year 2002, 20.7 percent of all tax returns were filed electronically.¹¹ Millions of Americans use the Internet every day to get information from the government, and there is growing demand for more online government services.¹²

Internet Voting: A Good Idea?

With the Internet being used for a variety of different political activities—from collecting information to collecting political contributions—it is only a small leap to asking why the Internet cannot be used for voting as well. President Clinton asked just that question well before the 2000 presidential election; in a memorandum dated December 17, 1999, he directed the National Science Foundation to study the potential for Internet voting.¹³ Some would argue that Internet voting could be a panacea for what ails our political system.

But before we launch deeply into the debate over Internet voting, we need to clarify our use of the term. When we write about Internet voting in this book we are discussing what has been defined as “remote Internet voting.”¹⁴ Remote Internet voting is voting by using a computer that is not under the physical control of election officials; the ballot is cast over an Internet connection. It is important to distinguish remote Internet voting, or what we refer to in this book as Internet voting, from three other types of Internet voting:

—*Kiosk Internet voting.* Voting is done at certain locations by using a computer under the physical control of election officials to cast a ballot over the Internet.

—*Polling place Internet voting.* Voting done at any valid polling place by using a computer under the physical control of election officials to cast a ballot over the Internet.

—*Precinct Internet voting.* Voting that is identical to polling place Internet voting except that the voter can vote only at his or her own precinct polling place.

Despite the four types of Internet voting, unless otherwise indicated, when we say Internet voting we mean remote Internet voting, although in practice a jurisdiction may use any combination of the four types in an election. In addition, our use of the term “voting” includes both registra-

tion and voting; thus when we write about Internet voting systems in this book, we are talking about an integrated remote Internet registration and voting system.¹⁵

Proponents of Internet voting make several arguments in its favor. First, Internet voting may make it easier for voters to participate in an election because every computer that has an online connection becomes a potential polling site. Internet voting also might lower the cost of voting for the entire electorate, and it has the potential to eliminate problems such as those that might have kept millions of voters from participating in the 2000 presidential election.¹⁶ No longer would voters have to trudge down to a school, church, or community center in order to vote. No longer would factors like bad weather, long lines, or confusion over the location of polling places impede voter participation. Instead—in the comfort of their home or office, a public library, or an Internet café—individuals could log on and vote without having to make a special effort. The Internet also could be used to register voters and to allow them to check the status of their registration, thus reducing problems that often plague the first steps in the electoral process.¹⁷

Internet voting could especially lower the cost of participation for certain special populations. Consider, for example, four types of voters. First, imagine a soldier overseas or a sailor on a nuclear submarine. Both are serving their country, yet their ability to vote is limited because of the logistics of obtaining an absentee ballot and getting it back in time to be counted. In the last presidential election, military personnel encountered numerous problems in the voting process.¹⁸ With the Internet, they could vote from anywhere in the world, confident that their vote would be received and counted.

Second, consider voters confined to a wheelchair. They want to participate in the electoral process like everyone else, but in most of the United States that is difficult for them to do. According to a General Accounting Office study conducted during the 2000 presidential election, more than 80 percent of polling places across the nation had some barrier that prevented citizens in a wheelchair from accessing the poll site.¹⁹ With Internet voting, disabled voters could cast their ballot from their own home without having to navigate the myriad of obstacles that await them at the polling place.

Third, imagine an executive who travels frequently or a working single parent. Both might want to vote on election day but find it difficult or impossible to do so because of events beyond their control. For example,

the executive may have to take an unexpected trip out of town the day before the election or the single parent may have to work longer than usual on Election Day and then rush to get his or her children from the daycare center. Under current election procedures, these potential voters generally cannot obtain an absentee ballot on short notice. In each case, with Internet voting, these individuals could find it easier to vote because they could do so without having to make a trip to the polls.

Finally, Internet voting might pull the hardest-to-reach voters—those between the ages of eighteen and twenty-five—into the political process. As noted, younger Americans typically are well-versed in using the Internet. They have a tremendous amount of experience in surfing the Net and like the idea of using new, cutting-edge technologies. Internet voting could help increase voting among this group, which historically has voted at very low rates. The Internet also could help many young people who are attending college away from home to vote without having to make a special trip home or request an absentee ballot.

Proponents also note that even without the Internet, alternative voting methods have become more pervasive since the early 1970s.²⁰ The most extreme version of alternative voting is found in Oregon, which now holds all of its elections by mail. The state has no poll site voting at all; instead, all voters receive a ballot by mail that they can cast anytime after they receive it through election day. Oregon's system often is presented as analogous to Internet voting because it is a truly remote system designed to lower the cost of voting by making it easier to vote. According to that argument, Internet voting would not be much different from voting in Oregon: everyone votes from home; they just use the technologically superior Internet instead of the mail.

Internet voting also could have a positive effect on other factors that are difficult to quantify. Proponents of Internet voting have asserted that it could increase the quality of votes cast. It is easy to imagine a voter opening one browser window on her computer to display the ballot, opening a second window to display a voter guide with information about candidates and ballot measures, and opening two or three other windows to candidate, party, or other election-oriented websites. The voter could then spend more time becoming informed about the choices she faces, in the convenience of her home or office, increasing the quality of her vote. Internet voting systems could also be programmed to help voters avoid common mistakes, such as casting more votes than allowed in a certain race.

Imagine moreover a system of Internet voting in which voters can access their ballot weeks before the election, make their choices then, but revise their votes until 8:00 p.m. on election day. Such a system could dramatically alter the dynamics of contemporary political campaigns, in which a decision to mount a negative attack on the opposition often is made in the final days of the campaign, when (as has occurred in recent California elections) as many as 25 percent of votes already have been cast in the vote-by-mail process.²¹ Such a system could change the incentives for using last-minute negative attacks: voters, alienated by a harsh end-of-campaign personal attack by a candidate, might reconsider their earlier vote for that candidate.

...Or a Recipe for Disaster?

Just as some people see Internet voting as the solution to many of the problems facing the U.S. electoral system, others see it as sowing the seeds of disaster. Most opponents point first to the issue of online security. Over the past several years, there have been numerous high-profile cases of Internet viruses and attacks on Internet portals that have shut down the websites of major corporations and government agencies. In February 2000, computer hackers brought down five highly prominent websites: Amazon.com, Buy.com, CNN.com, eBay, and Yahoo.com. The hackers used a “denial-of-service” attack, which flooded the servers with fake messages, to bring down the servers.²² In 2001 several computer “worms” and e-mail viruses spread across the Internet, often causing havoc. In July 2001, the “Code Red” worm attacked more than a quarter-million computers and forced the Department of Defense to block access to many of its public websites in order to install a prophylactic device to stop future attacks.²³

Most of these Internet attacks have been carried out by young hackers. However, the Internet is also vulnerable to more sophisticated attacks carried out by national governments. At congressional hearings held after the 2000 denial-of-service attacks, two terrorism experts noted that many nations and terrorist organizations were developing plans for cyberterrorism. As one expert noted, denial-of-service attacks “could be used on a much more massive scale at the nation-state level to generate truly damaging interruptions to the national economy and infrastructure.”²⁴ These attacks can be quite problematic because they can be staged from anywhere in the world where an individual can log on to the Internet. The

CIA has argued that “the foreign cyber threat constitutes a means to harm U.S. national interests in a nontraditional way using nontraditional attacks. It is transnational in origin, transcends geographic limitations, and is wholly independent of military intervention.”²⁵

A second major concern about Internet voting is whether such a system would favor some voters at the expense of others. Individuals who connect to the Internet at home tend to be white, wealthy, well educated, male, and Republican.²⁶ Similarly, white-collar workers are more likely to have Internet access at work than are blue-collar and retail workers. The gap between those who have convenient Internet access and those who do not is called the digital divide. With Internet voting, the digital divide would create a situation in which one group of voters could access the polls easily, while another group would have fewer avenues for gaining access. Even more problematic, the voters who would be likely to have an advantage are those who typically vote at higher-than-average rates, while the voters who probably would be disadvantaged generally vote at lower-than-average rates. Thus the interaction of the digital divide and the factors that lead some voters to participate at higher rates than others might exacerbate current inequities in political representation.

A second type of digital divide is now becoming a concern to observers of Internet development: the growth of significant differences in the quality of Internet access. Urban, wealthy, and typically white areas of the United States have access to relatively inexpensive, high-speed Internet service, either in the form of a digital subscriber line (DSL) or cable modem access. In 2000 less than 20 percent of Internet users had such high-speed connections.²⁷ The remainder of the Internet-using population had either 28.8K or 56.6K dial-up modem access, both of which are considerably slower in downloading today’s multimedia Internet content. This new manifestation of the digital divide could become a significant obstacle to Internet voting if it requires broadband access.

The digital divide also could create a legal barrier to wide-scale Internet voting. In a seminal study conducted following the 2000 election, the California Institute of Technology and the Massachusetts Institute of Technology found that some voting technologies are more effective than others in ensuring that votes are counted.²⁸ The digital divide may create a situation in which the ballots of Internet voters are more likely to be counted than those of non-Internet users. Because Internet voting is likely to be more accurate than other forms of voting, its use could be problematic. Even more problematic is the fact that this new technology may

not be as available to groups that historically have been victims of both intentional and unintentional discrimination—especially poor and minority voters. Particularly in light of the Supreme Court’s decision in *Bush v. Gore*—and laws such as the Voting Rights Act and its amendments—these two factors make Internet voting a likely target of litigation for some time to come.

A third criticism of Internet voting is that it could further the disintegration of civic life in the United States. As Robert Putnam found in his study of civic involvement, there was a marked decline in participation over the last half of the twentieth century, with fewer people engaging in political or civic activities. Instead of being part of a group, Americans now tend to “bowl alone.”²⁹ Internet voting could exacerbate this problem, allowing individuals to participate in one of the most important civic duties—voting—in isolation. Internet voting is the antithesis of the community-based electoral process that many believe is desirable. Norm Ornstein eloquently described this process before the National Commission on Federal Election Reform:

Voting at the polls on Election Day is an act of community, balanced with individual freedom. . . . It is done just as voters choose, from a common pool of available information, with prompt counting and verification of results, and with a critical zone of privacy surrounding that vote. . . . [V]oting at the polls really is an important link to citizenship. It is an exquisitely balanced act where you go and congregate with your fellow citizens, showing that you are a community, but then you move into a private booth, draw a curtain, and perform a supremely private act, an enormous act expressing the freedom of choice that exists in a democracy.³⁰

Our Argument

Both sides in the debate over Internet voting make compelling arguments. Internet voting could expand the opportunities to vote for many citizens, especially those who have a hard time getting to the polls. As much as U.S. soldiers in Afghanistan or Iraq may want to do their civic duty at a polling place in their hometown, the Defense Department is not going to fly them back to the United States to vote. The Internet could allow active-duty military personnel to vote from the front lines or at sea, and they could be assured that their vote would be counted. If Internet voting can mobilize

and attract hard-to-reach voters—like young people, who typically vote at very low rates but often are tech-savvy—then it could benefit U.S. democracy. Of course, if the critics are correct in claiming that a teenaged hacker or a foreign agent can affect the outcome of an election through cyberterrorism, then the election fiasco of 2000 might look like a picnic. An election tainted by widespread fraud and uncertainty over whether votes submitted online accurately reflect the preferences of the voters who submitted them could completely undermine public confidence in the electoral process.

Our argument is very straightforward:

There is no way to know whether any argument regarding Internet voting is accurate unless real Internet voting systems are tested, and they should be tested in small-scale, scientific trials so that their successes and failures can be evaluated.

The debate over Internet voting will continue to rely on heated but often poorly informed arguments about its potential benefits and problems. What is needed, however, are facts about its actual pros and cons, and those facts will come to light only if serious scientific testing of Internet voting is undertaken. Unfortunately, the field of election administration has not been known for developing and testing products in an orderly, systematic manner. The existing standards and testing procedures focus primarily on technical requirements for voting machinery, not on how voters actually interact with voting machines or on how voting systems perform in real-world settings.³¹

Many of the problems that occurred in Florida during the 2000 presidential election can be traced to lack of testing or failure to use the scientific method of investigation. Imagine, for instance, that the Palm Beach election administrator had tested the butterfly ballot in a random sample of voters before using it on election day and compared the voting experience of the experimental group to a control group that used some more traditional ballot format. If the experiment was set up correctly, it is likely that the problems with the butterfly ballot design would have been revealed and that it would not have been used in Palm Beach County.

Even today, after the 2000 elections illustrated the problems that voters have with almost every type of voting technology, from punch cards to optical scan ballots, localities across the country are buying new voting technologies without conducting field tests to determine how well the technologies will work for the types of voters who live in their area. For

example, the Florida legislature passed election reform legislation in 2000 that allowed communities across the state to purchase optical scan equipment, even though it has been asserted that optical scan voting was the source of a tremendous number of voting errors in the 2000 presidential election in the state of Georgia.³² If a locality adopts a new technology without first running tests to determine how effectively it works with the voters who will actually use it, there is no way of knowing whether it will solve problems such as overvoting or undervoting in a specific community or whether it will cause new problems.

Pilot testing can be an effective means of learning about the efficacy of a voting system. For example, Los Angeles County pilot tested a touch-screen voting system during early voting for the 2000 general election. The test allowed the county to determine whether touch-screen voting effectively served the county's entire population—which includes concentrations of elderly, disabled, and language-minority voters—as well as to examine administrative issues, such as poll worker training and the simple logistics associated with the use of electronic equipment.³³ Small-scale pilot testing can effectively and inexpensively provide a great deal of data on how new voting technologies work in specific settings, without forcing election officials to make logistical commitments or a massive financial investment in an unproven system. Small-scale testing of any new voting system, especially an Internet system, will also minimize risks when things do not work as expected. Experiments do fail, and experiments with new voting systems will be no exception; however, as much, and maybe more, can be learned from failed experiments as from successful ones. It is only through experimentation, on a small scale, that the advantages and disadvantages of Internet voting will become apparent.

With that in mind, a strong argument can be made for pilot testing Internet voting systems in real elections. Three small-scale tests of Internet voting technology already have been conducted, and Congress is interested in seeing such a system tested for overseas and military voters in the 2004 general election. We argue that limited testing, followed by appropriate evaluation, would allow for thorough examination of many of the points raised by both sides in the debate. Only productive experimental data from pilot projects, coupled with government and privately funded research on Internet security, can provide the scientific data that policymakers and the public need to make intelligent decisions regarding the electoral process and the future of Internet voting in the United States.

Plan of the Book

The remainder of the book addresses specific issues related to Internet voting and concludes with an analysis of how it may fit into the American electoral landscape. Chapter 2 presents a careful examination of academic and policy reviews of Internet voting conducted in recent years. Of particular concern for our work are two major policy studies, one by the California Internet Voting Task Force and the other by the National Science Foundation. These two reports, which were conducted by task forces of social and computer scientists, policymakers, and election officials, have set the agenda for the broad debate on Internet voting. As one of the authors of this book participated in both projects, we have a unique perspective on the process behind both studies and the logic behind the cautious conclusions reached in each report.

Chapter 3 examines the basic problems of voting systems and the digital divide and how both affect political representation. One of the important results of the 2000 presidential election has been a much deeper appreciation of the impact of different voting systems on how people cast their ballots and on the ease with which they participate in the political process. For Internet voting to be effective in a democratic society, all members of that society must have access to similar voting technologies. If some groups of people—for example, the rich—have extensive access to the Internet but other groups—such as low-income citizens or members of certain ethnic minorities—do not have access or have different types of access, some groups of voters may have more influence in the electoral process than others. If a digital divide exists between classes of voters, Internet voting could promote a biased instead of democratic representation of the people's will.

Chapter 4 explores how the Internet fits into the broader political dynamic, such as online political debate, interactive policymaking, and e-government. As many will recall, in 1992 presidential candidate Ross Perot presented a vision of American deliberative democracy in which voters would educate themselves on various issues and then vote directly, in an instant referendum, on the policy choices before them. This is a vision of a return to Greek democracy, in which the rule of the majority of eligible voters determined the outcome of every issue, with the public directly selecting the policy it wants over the Internet. We offer two critiques of this vision. First, we examine the reality of the debate that occurs in referendums and consider whether electronic communication would

facilitate a more informed debate or lead instead to the coarsening and narrowing of debate. Second, referring to the literature on communitarianism and representative democracy and applying our understanding of the arguments put forth by the nation's founders, we question the political efficacy of this approach. We consider the reasons why we live in a republican society and how instant online referendums could have a negative impact on the ability of the government to function effectively.

Chapter 5 examines the issue of online security—for many observers, the 500-pound gorilla of Internet voting. We frame the discussion within the broader debate over election fraud and security. Cases of vote fraud, such as in the 1997 Miami mayoral election, compromise the integrity of the electoral process. American history contains examples of electoral fraud perpetrated through all forms of voting: individuals have stuffed ballot boxes, manipulated lever machines, and cast illegal absentee votes. Internet voting, like any voting system, is susceptible to fraud, although Internet vote fraud is obviously different because of its potentially greater magnitude. Consider, for instance, how using the Internet to vote differs from using the Internet to make a purchase. The failure of a website because of a denial-of-service attack inconveniences both buyers and sellers, but transactions can be completed once the problem is corrected. But because elections are conducted on a specific day between specific hours, a similar problem on an election website would disenfranchise voters, who have a right to choose the people who will represent them. Similarly, data show that a small but significant percentage of Internet transactions are fraudulent. That is not a significant problem for most merchants or buyers, as most transactions are insured in some way. Similar levels of fraud in an election could undermine public confidence in the outcome, and it could be quite costly if an election had to be repeated. We discuss how market pressures and government intervention are likely to improve Internet security in the near future.

Chapter 6 presents analogies to Internet voting that provide a basis for gauging the potential impact of Internet voting on the U.S. electoral process. The most direct analogy is Oregon's vote-by-mail system, which we examine to determine whether it increases voter turnout and whether it affects turnout differently among different categories of voters. We also consider analogous reforms, such as general expansions of absentee voting and early voting, to see whether they do in fact increase voter turnout and representation, and we use recent polling data to consider whether these reforms properly identify the potential benefits that may accrue from

Internet voting. New technologies, especially the Internet, have energized and excited younger generations of Americans. We therefore ask whether Internet voting will make younger Americans—who do not participate frequently in elections—more excited about politics and more likely to vote in future elections.

Chapter 7 examines recent tests of Internet voting in the United States—such as the Republican straw poll in Alaska, the Democratic primary in Arizona, and the use of the Internet by the Federal Voting Assistance Program (FVAP) in the 2000 general election—and the use of the Internet in public elections overseas. Each of these cases illustrates both the potential of Internet voting and the myriad of problems associated with it, and they all point to the need for additional small-scale, controlled experiments.

Chapter 8 presents a series of policy recommendations for bringing Internet voting into the electoral realm. The United States is becoming a highly wired society, and as citizens use the Internet more to perform routine activities, pressure is likely to increase on the government to use the Internet for voting. We describe a process for slowly, deliberately, and gradually integrating Internet voting into the existing election system. We contend that during this process, several different reforms could and should occur that would facilitate a gradual transition to Internet-based voting.

First, a series of well-planned, controlled experiments testing the feasibility of Internet voting should be conducted. The FVAP, whose clients have special reasons for voting over the Internet, will conduct the first such experiment in 2004, under a congressional mandate to allow military voters to vote over the Internet in the next presidential election.³⁴ We believe that additional small-scale experiments are likely to occur in the near future that will further test the effectiveness of Internet voting.

Second, the federal government should play a key role in facilitating these types of experiments. It should initiate a program that gives grants to states to implement well-designed Internet voting pilot projects. These state projects should become laboratories for studying the impact of Internet voting on the electoral process—for learning what works well and what does not.

Third, a transitional process should be developed that leads from the way elections are conducted today to full-blown Internet registration and voting in the future. That transition cannot, and should not, occur

overnight. There must be a deliberate strategy, involving experimentation and research, that moves along a rational path to Internet voting.

Fourth, the transitional process should include efforts to promote a different, robust, and interactive form of democracy over the Internet that avoids the trap of instant referendums and to encourage government at all levels to make better use of the Internet to provide information and services. The Internet should become a forum in which political rhetoric and debate produce meaningful contributions to policy discussions, and we later discuss ways in which political rhetoric and debate can be improved.

Fifth, Internet security issues must be studied more effectively. We propose that the government help fund deliberate efforts to develop solutions to known security problems.

Sixth, study must begin on the legal and regulatory changes needed to make Internet voting a reality in every state. Election law in America is a patchwork quilt of laws and regulations at the state, county, and local levels, and it is likely that hundreds or perhaps thousands of laws and regulations will have to be changed to make Internet voting possible.

Seventh, the digital divide must be narrowed, so that all voters will have a more equal opportunity to vote over the Internet. We discuss various reforms aimed at eliminating the digital divide.

The remainder of the book addresses specific issues related to Internet voting and concludes with an analysis of how Internet voting may fit into the American electoral system. This book is not about the technology for conducting Internet voting. The technology—the code to create such a system and the computers and servers to host it—is well known and has been tested numerous times. In addition to the Internet voting trials that have been conducted in public elections, many private elections are held online. Shareholders file online proxy votes, union members and university faculty cast online ballots, and teenagers “vote” for their favorite artists or sports figures in online popularity contests. There is no question that an Internet voting system can be constructed. We focus instead on how such a system will affect the electoral landscape for voters and the administrative landscape for election officials.