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Cast your ballot.com: Fulfill your Civic Duty over the Internet

Kristen E. Larson

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CAST YOUR BALLOT.COM: FULFILL YOUR CIVIC DUTY OVER THE INTERNET

Kristen E. Larson†

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I. INTRODUCTION

Once voting was the American dream; now it is simply a forgotten right. Voting was considered a civic duty with elections being a community event where everyone would go to his or her local polling place and socialize. Some voting experts suggest voting is a civic ritual. "[Voting] should be a philosophical and ethical commitment, and the ceremonial aspects are important. You go to the polling place, you see the flag, you walk into the booth, you take your kids with you, and you hand in your ballot." Have Americans forgotten the struggle our ancestors made less than a century ago to give them the right to vote? "[I]t is hard not to be appalled at how cavalierly people treat voting in this country. It is tempting to say that anyone unwilling to sacrifice an hour to exercise the right to vote doesn’t much deserve it."

This article will explore the barriers to introducing Internet voting as well as the possible benefits of Internet voting. To understand some of the controversy surrounding Internet voting, first the evolution of voting will be explained. Second, by presenting the different types of Internet voting systems, this article explores how Internet voting systems work. Third, this article critiques two elections—a straw poll and a presidential preference primary—that were conducted over the Internet but had inconclusive results. Fourth, this article explains the results of both California and Washington's Internet voting committees. Finally, this article examines the possibility of implementing Internet voting in Minnesota.


3. Id. at 15. Rick Valelly, an Associate Professor of Political Science at Swarthmore College, and Curtis Gans of the Committee for the Study of American Electorate both suggest that Internet voting will cause Americans to lose their civic ritual (going to polling places to vote) and also diminish the value of voting. Id. However, Wolf Blitzer, CNN Washington Correspondent, points out the rest of the election day tradition left unmentioned by his colleagues—the long lines and bad weather. Id. at 16. "[T]radition alone may not be enough to outweigh the convenience of voting over the Internet." Id.

4. Id. at 15 (statement by Tracy Westen, President of the California based Democracy Network).

5. Id.
CAST YOUR BALLOT.

II. HISTORY OF VOTING

The United States has a popular sovereignty that provides for rule by the people where the people express their will through elections. At the beginning of colonial America, only prominent white male landowners were able to vote, while the rest of our ancestors struggled for suffrage rights. It was not until the 1780s that America abandoned the British style of governance and adopted the United States Constitution creating republicanism. The Constitution also authorized the states to conduct elections.

The Constitution was amended over time to provide for all citizens to vote regardless of their race, gender, and income. Blacks gained their suffrage rights in 1870 with the passage of the Fifteenth Amendment. Women's suffrage rights did not come

6. VOTING AND THE SPIRIT OF AMERICAN DEMOCRACY, supra note 1, at 5.
7. Id.; see also INNOVATIONS IN ELECTION ADMINISTRATION, Federal Election Comm'n, Ballot Security and Accountability 10 (Sept. 1995) [hereinafter Ballot Security and Accountability] (stating that only five percent of the adult population qualified to vote in the first presidential election).
8. VOTING AND THE SPIRIT OF AMERICAN DEMOCRACY, supra note 1, at 5. Suffrage rights are the rights to be eligible to cast ballots in elections. Id.
9. Id. at 8. The British style of governance was monarchy, aristocracy, and the people. Id.
10. Id. at 9. Republicanism is where people elect their own representatives to voice their beliefs. Id. Early American elections used premarked ballots based on political parties. California Internet Voting Task Force, A Report on the Feasibility of Internet Voting, (January 2000) available at http://www.electioncenter.org/voting/voting_report.html (last visited July 31, 2000) [hereinafter California Internet Task Force]. In 1888, Massachusetts first utilized the "Australian Secret Ballot." Id. Other states later followed. Id. "The 'Australian Secret Ballot' is an official ballot printed at public expense on which all the names of all nominated candidates appear. It is distributed only at the polling place and voted in secret." Id.
11. U.S. CONST. art. I, § 2 states "The House of Representatives shall be composed of members chosen every second Year by the People of the several States, and the Electors in each State shall have the Qualifications requisite for Electors ...." U.S. CONST. art. I provides "The Times, Places and Manner of holding Elections for Senators and Representatives, shall be prescribed in each State ...." U.S. CONST. art. II, § 1 establishes each state's ability to appoint electors. The Twelfth Amendment provides for electors to vote by ballot in their states. U.S. CONST. amend. XII.
12. U.S. CONST. amend. XV, § 1. "The right of citizens of the United States to vote shall not be denied or abridged by the United States or by any State on the account of race, color, or previous condition or servitude." Id. However, most experts would say that the voting discrimination against blacks did not end until after the passage of the Voting Rights Act of 1965. It was passed as an attempt to end discrimination in voting by prohibiting several southern states and counties from changing voting procedures without prior federal approval. Dictson & Ray, supra
until fifty years later in 1920 with the passage of the Nineteenth Amendment. The Twenty-fourth Amendment destroyed an economic barrier by eliminating poll taxes. In 1971, the Twenty-sixth Amendment passed, providing suffrage rights for all citizens of eighteen years or older.

Voter turnout has declined greatly since the Nineteenth Century. For presidential elections, the voter turnout was almost eighty-two percent in 1876, seventy-three percent in 1900, sixty percent in the 1930s and 1950s, fifty-three percent in 1984, and fifty-one percent in 1988. In 1998 the voter turnout in the United States' general election was less than fifty percent. This 1998 turnout ranked 138th out of 170 democratic nations' elections.

Why such a low turnout in recent decades? One commentator suggests:

The modern voter is not as likely to get as personally involved in political campaigns as his nineteenth-century counterpart: he or she is more likely to watch thirty-second political advertisements on television than to attend a political rally. Moreover, while most modern voters have partisan affiliations, they are less committed to their party's success than to the success of individual candidates. Finally, modern voters have less confidence than their nineteenth-century predecessors that their votes make a difference. Political Scientists have noted a growing level of alienation among voters based largely on the feeling or powerlessness—many voters report feeling that "I don't matter." Therefore, a large portion of the elec-

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13. U.S. Const. amend. XIX, § 1. "The right of citizens of the United States to vote shall not be denied or abridged by the United States or by any State on account of sex." Id.
14. U.S. Const. amend. XXIV, § 1. "The right of citizens of the United States to vote ... shall not be denied or abridged by the United States or any State by reason of failure to pay any poll tax or other tax." Id.
15. U.S. Const. amend. XXVI, § 1. "The right of citizens of the United States, who are eighteen years of age or older, to vote shall not be denied or abridged by the United States or by any State on account of age." Id.
17. Id. Voter turnout was even lower for congressional years and local elections. Id.
19. Id.
torate is deferring to the political elite to vote.\textsuperscript{21}

Two commentators suggest that if people were automatically registered to vote, they would vote.\textsuperscript{22} Another commentator believes that Americans do not vote because they believe their vote does not matter.\textsuperscript{23} Also, a large portion of the population cannot vote because they are nonresidents, felons, or institutionalized.\textsuperscript{24}

In all elections, ballots are the critical element for calculating the results.\textsuperscript{25} The means by which ballots are calculated have changed over America’s voting history. In 1869, Thomas Edison invented the first election machine.\textsuperscript{26} In the 1920s to 1940s, mechanical lever machines were used to calculate ballots.\textsuperscript{27} After World War II, electronic voting systems emerged.\textsuperscript{28} Now, “[m]ost polling places use one of three computer-based technologies: punch cards, optical scans, or electronic recording.”\textsuperscript{29} Absentee

\begin{itemize}
  \item \textsuperscript{21} Id. at 15. “Like the middling colonialists who deferred to the leadership of the merchant and planter elite, the modern voter defers to the bureaucrats who run businesses, government, and even political parties.” Id. It is the author’s opinion that in the 1998 Minnesota gubernatorial election, Jesse Ventura was elected governor as a third party candidate because the electorate came out and voted; they did not defer to the political elite Republican or Democratic parties.
  \item \textsuperscript{22} See generally Francis Fox Piven & Richard Cloward, WHY AMERICANS DON’T VOTE (1988). The author believes automatic registration would make it easier for people to vote because they would not have to fill out the bureaucratic forms themselves.
  \item \textsuperscript{23} See generally Ruy A. Teixeira, WHY AMERICANS DON’T VOTE: TURNOUT DECLINE IN THE UNITED STATES, 1960-1984 (1987).
  \item \textsuperscript{24} VOTING AND THE SPIRIT OF AMERICAN DEMOCRACY, supra note 1, at 113. Over nine million resident aliens are disenfranchised because they are not citizens. Id. Any persons who have been convicted of felonies are disenfranchised. Id. Persons who are institutionalized for mental disabilities are disenfranchised also. Id.
  \item \textsuperscript{25} Ballot Security and Accountability, supra note 7, at 3.
  \item \textsuperscript{26} California Internet Voting Task Force, supra note 10, at 8.
  \item \textsuperscript{27} Ballot Security and Accountability, supra note 7, at 4.
  \item \textsuperscript{28} Id. The electronic voting systems provided for ballots to be counted by electronic means. Id.
  \item \textsuperscript{29} Dictson & Ray, supra note 2, at 9. Thus, Americans do vote by computers. Id. “Punch cards are simply computer-readable paper ballots, and as such, have all the problems of paper ballots except for the inaccuracy and slowness of manual counting.” Roy G. Saltman, Voting Systems, THE BELL (May 2000) at 13, available at http://www.thebell.net/archives/thebell111.pdf. The use of punch card ballot systems began in 1964 in Georgia, Oregon, and California. Id. By 1974, punch cards were used by ten percent of U.S. voters. Id. Punch cards are problematic when the punch hole paper is not completely removed, because the paper hole may become filled when read. Id. Sometimes the punch cards have to be run through the reader more than once. Id.
\end{itemize}

The problems with punch cards became apparent in the 2000 Presiden-
voting has also become commonplace. In most states, the voter must request to vote by absentee ballot in person, by mail, or by phone. According to most voting experts, Internet-based voting technology may dominate the next generation of voting.

III. INTRODUCING INTERNET VOTING SYSTEMS

Federal, state, and local governments are already using the Internet to provide users access to government information and services. The progress of Internet use by government varies widely from state to state and city to city. “The diversity of government information available reflects significant differences in government funding, priorities, and openness to new technology.”

Currently consumers use the Internet for a variety of secure ac-
tivities including banking, proxy voting, paying bills, federal student loan applications, and purchasing stock. Voting by means of the Internet "seems a natural extension of this powerful technology." The benefits of Internet voting is that it can be more secure, less expensive, less time consuming, more convenient, and environmentally helpful. One commentary suggested that at least twelve states are considering Internet voting legislation. Internet voting should be introduced, however, as an alternative for voters, not as a replacement of traditional polling places. In a poll, forty-eight percent of the persons polled favored a move to Internet voting as long as it was secure from fraud.

A. Barriers To Introducing An Internet Voting System

Several barriers need to be removed before Internet voting systems can be introduced. "Critics of Internet voting claim that the technology required to properly authenticate voters and assure the accuracy and integrity of the election system either does not exist or is not widespread enough in society to be equitable and effective." The California Internet Voting Task Force identified several problems associated with introducing Internet voting systems, including digital identification, voter registration, petition signatures, and voter access. The technical and security issues surrounding

41. Id. at 960.
42. Deborah M. Phillips & David Jefferson, Is Internet Voting Safe?, (July 10, 2000), at http://www.voting-integrity.org/text/2000/internetsafe.shtml [hereinafter Is Internet Voting Safe?]. Phillips is the chairperson and president of the Voting Integrity Project. Voting Integrity Project is a national, nonprofit, nonpartisan voter rights organization. Id. Dr. David Jefferson is the chairman of the California Secretary of State’s Internet Voting Advisory Committee, a member of the board of directors of the California Voter Foundation (a nonprofit, nonpartisan voter advocacy organization), and a senior research scientist with Compaq Systems Research Center in California. Id.
43. Dictson & Ray, supra note 2, at 9. ABC News conducted this poll. Id. In the age group of 18 to 34 year-olds, sixty-one percent supported Internet voting. Id. This group is typically the least likely to vote in elections. Id.
44. Id. at 1.
45. California Internet Voting Task Force, supra note 10, at 9. Digital identification is the process whereby an Internet server is able to identify the
Internet voting include voter authentication, ballot secrecy, ballot integrity, reliable vote transport and storage, prevention of multiple voting, and defense against hacker attacks. 4

1. Equal Access

The first challenge would be to introduce an Internet voting system that is equally accessible to all voters. As this paper will later explore, the litigation involving the Arizona Democratic Primary arose from the idea that poor and minority voters do not have equal access to Internet voting systems, because they do not have computers or Internet access at home or work. "The well-off are far more likely to have home PCs than the poor." 47 Clay Roberts, Florida's Election Division Director, suggests, "[i]f you have a system that makes it easier for the middle class and upper middle class to vote than the poor, that's a fundamental inequality." 48

Persons with disabilities and impairments may also be denied equal access to Internet voting. 49 Various disabilities, including physical, visual, auditory, and communication, cultural differences, economic barriers, and cognitive or neurological impairments may deny a person equal access to the Internet. 50 The Electronic and Information Technology Access Advisory Committee ("EITAAC") 51 is studying the accessibility of the Internet to persons with disabilities. EITAAC is also developing federal standards to regulate the federal government and parties contracting with the federal government and to ensure that disabled persons have access to services

48. Id.
49. Imparl, supra note 32, at III 4-13.
50. Id. at III 4-13 – III 4-14.
51. This committee is under the Architectural and Transportation Barriers Compliance Board. Id. at III 4-14. The statutory authority for EITAAC is 29 U.S.C. § 794d.
available on the Internet.52

One commentator suggests that setting up computer polls in several public places, including neighborhood stores, schools, and churches, could ease equal access.53

2. Security

An Internet voting system must be secure from Internet attacks.54 A hacker’s dream or a terrorist’s revenge could be an election official’s nightmare.55 A hacker or terrorist could destroy an Internet voting system with a virus or, even worse, change votes that were already cast to alter the outcome of an election.56 Hackers also could create problems such as “jamming,” “man in the middle,” and “page jacking.”

“Jamming” is when a hacker jams the web site by overloading requests for information, preventing genuine users from accessing the site.58 “Man in the middle” is when the hacker sets up a different web site similar to an actual web site.59 Thus, the user is at the wrong website, but believes he or she is at the correct web site and enters all the requested information.60 “Page jacking” is when a

52. Imparl, supra note 32, at III 4-14.
54. Id. at 1. Internet systems are more susceptible to attack than standard polling places. Id.
55. [R]oughly half of those traveling the information super highway come from outside our borders. This is important in light of recent disclosures by the Pentagon that many hostile foreign governments have developed special capabilities to utilize the Internet for terrorist or warfare purposes. Developing the ability to interfere with or manipulate the outcomes of American elections would almost certainly become an attractive goal of such entities.

The Internet is already host to hackers of all manner from all over the world. Although the number who are talented and motivated enough to construct the kinds of programs capable of breaking through firewalls, gaining root privileges and escaping detection may currently be limited to a few thousand, but the reality is that it does not take much talent to write a computer virus and unleash it via the Internet. Is Internet Voting Safe?, supra note 42, at 4-5.
56. Because the vote has to be separated from the voter’s identity, a voter will only know that his or her vote was cast, not for which candidate it was cast. Id. at 5. If a voter knew his or her vote was stolen, there is no way to separate that voter’s ballot from the others. Id.
57. Dictson & Ray, supra note 2, at 12.
58. Id.
59. Id.
60. Id. In this case, the voter would believe that he or she voted. The hacker
user is led off the actual web site to the hacker's web site.\textsuperscript{61}

To protect the integrity of the election process, new laws must be enacted to criminalize certain behaviors, including those mentioned above.\textsuperscript{62}

The two types of Internet voting systems, those designed for polling places and those designed for remote use, present different security problems.\textsuperscript{65} An Internet system for polling systems is more secure for several reasons.\textsuperscript{64} Election officials control the election and the voter is provided with the infrastructure.\textsuperscript{65} Moreover, privacy and security protocols are uniform, voting is secret, and an election official verifies the voter's identity on site.\textsuperscript{66}

However, an Internet system for remote systems is less secure.\textsuperscript{67} Election vendors and election officials both control the election and the voter provides the infrastructure.\textsuperscript{68} In addition, a wide variety of computers and operating systems must be supported, voting may not be secret,\textsuperscript{69} and the voter's identity is verified online by an election vendor.\textsuperscript{70} Both systems "shift control of elections from the election officials to election vendors because of the technical expertise required."\textsuperscript{71}
What is the solution to the security problem? Advanced encryption techniques may be helpful but will not solve the problem. Moving the votes from web servers to secure computers for collection is a possible solution. One commentator suggests "[t]he best answer is vigilance and the use of multiple redundant servers."

3. Costs

Internet voting systems may offer potential cost savings. If the election is entirely remote by the Internet, ballot printing costs would be eliminated, training and employment of election poll workers would be eliminated, the costs of mailing absentee ballots could be reduced, and voters would be paying for most of the voting infrastructure. For current election systems, ballots must be specially printed and then inspected individually once printed and inspected again prior to Election Day.

An impediment to Internet voting, however, is the cost of setting up new Internet voting systems. Thus, Internet voting could result in greater costs if used at polling places. Election officials would maintain responsibility for supplying platforms. However, computers would probably have to be replaced every three to five years. "[T]here may be additional software and consumer interface costs resulting from multiple platforms and voter-provision of infrastructure." Technical experts would be necessary to help voters who were having problems voting. Moreover, verifying the

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72. Wildstrom, supra note 47, at 1.
73. Id.
74. Id. Multiple redundant servers are when two or more identical servers are set up exactly the same way. If one server fails, the process is moved to another server. Id.
75. Is Internet Voting Safe?, supra note 42, at 2.
76. Id. at 2-3. The voters would pay for most of the infrastructure because they would be providing the computers or other devices used to access the Internet to vote. The election officials would only provide the Internet election ballot on the election website.
77. Dictson & Ray, supra note 2, at 2. "Needless to say, this is an extremely labor and resource intensive process." Id.
79. Id. at 2.
80. Id. The current election equipment can be used for decades. Id.
81. Id.
82. Id. at 2.
identity of voters will increase costs and election officials would have the additional cost of providing and distributing authentication devices.

Purchasing the new Internet systems, developing secure voting access, and training could be also quite expensive. Nevertheless, in the long run, an Internet voting system would be less expensive because the technology will already have been developed and will just need to be maintained. Eventually, fewer paper ballots will need to be printed and fewer polling places will need to be provided.

B. Benefits Of Internet Voting Systems

Internet voting can provide many benefits to the election process.

Proponents of Internet voting believe that the new technology will increase voter participation, add a much needed element of convenience to the voting process, allow the electorate to be more knowledgeable and informed, greatly increase the efficiency and security of elections, and make access to the democratic process more widely available.

1. Convenience

Internet voting would be convenient for those with access to the Internet at home or work. It would also be convenient for those persons out of town on the polling day. Just imagine yourself sitting at home drinking a cup of coffee during breakfast and turning on your computer to vote. This would eliminate the race to get up earlier or leave work earlier to vote. Adding convenience for some is not the same as denying convenience for those without Internet access.

83. Id.
84. Id. at 3. This is an additional step for verifying voter identity and would require personal identification numbers or keys. Id.
85. Dictson & Ray, supra note 2, at 1.
86. James Ledbetter, "Virtual Voting" Faces Real-World Concerns (Mar. 16, 2000), at http://slate.msn.com/netelection/entries/00-03-16_77458.asp. Having a service available to everyone is equality. Although everyone does not have access to the Internet, Internet services should be equally available for everyone to use.
2. Fewer Polling Places

In the long run, Internet technology could eliminate the need for all the polling places to be open. This would save the time and money used to train poll workers and staff polling facilities.

3. Higher Voter Turnout

Currently, voter turnout is at an historic low. In Minnesota, the voter turnout rate was just over sixty-four percent in the 1996 presidential elections. This was the highest percentage out of all fifty states. Overall turnout for all fifty states was only less than fifty percent. Turnout rates are dramatically lower for congressional and local elections. Internet voting could increase the voter turnout rates. "Indeed, the ability to vote via the Internet could result in greater participation by business executives, overseas military, and the young—three groups that could have ready access to the Internet and who typically have lower participation rates." If people had easier access to ballots, they may be more inclined to vote.

IV. INTERNET VOTING SYSTEMS

The key to a successful online election is authentication, privacy, security, and equity. The system must be able to verify that online voters are using their own identity to vote. Once the voters are identified correctly, the system must remove all voter informa-

87. Is Internet Voting Safe?, supra note 42, at 1. As of the date of this article, the Federal Election Commission had not yet published voter turnout rates for the 2000 presidential election.
88. Voter Registration and Turnout, Federal Election Commission, at <http://www.fec.gov/pages/96to.htm. The voting age population for Minnesota was 3,422,000; out of that number, 3,067,802 were registered to vote. Id. Thus 89.65% of the voting age population was registered to vote. Id. Even though the total voting age population, total number of registered voters, and the total number of votes cast have increased, the percentage of registered voters who turn out to vote has decreased since 1960. Id.
89. Id.
90. Id. The voting age population for the United States was 196,511,000; out of that number 146,211,960 were registered to vote. Id. Thus 74.40 percent of the voting age population was registered to vote. Id.
91. Id.; California Internet Voting Task Force, supra note 10, at 22.
92. Wildstrom, supra note 47, at 1.
93. Id.
tion from the actual vote to preserve voter secrecy. 94 Ballots must be secure from fraud, tampering, and terrorism. 95 Equal voting access must be provided to all voters. 96

One expert suggests a system that may fulfill the above requirements. 97 Voters would have to sign up to vote online in the election. 98 Each voter who signed up would be "mailed a disk containing a cryptographic key and an affidavit, which they must sign and return. The key, which is required to vote, is only activated after the affidavit is checked against the signature on file."99 "[C]omputer software will encrypt [the] e-ballot, then encrypt the package with a different key, to generate the anonymous envelope."100

Another expert suggests a different system to fulfill the requirements. 101 The voter prepares a voted ballot and encrypts it with a secret key. 102 The voter uses a blind signature on the ballot. 103 Then, the voter sends the ballot to a validator, who verifies

94. Id.
95. Id.
96. Id. This includes those who do not have access to the Internet at home or work. Id.
97. Id. (citing a suggestion made by Jim Adler, President and CEO of VoteHere.net.) Id. Founded in 1996, VoteHere.net is a provider of Internet voting located in Bellevue, Washington, at http://votehere.net/VH-Content-v2.0/company info.html. Adler graduated from the University of Florida with a Bachelor of Science in electrical engineering and The University of California, San Diego with a Master of Science in electrical engineering. Id. Because of his reputation as an expert in cryptography and Internet security, Adler served as a member on California's Internet Voting Task Force Committee. Id.
98. Wildstrom, supra note 47, at 1.
99. Id.
100. Id. This process is similar to the envelopes for absentee voting. Id. "An absentee voter puts the ballot into an unmarked envelope, which is placed inside another envelope that he or she signs and seals before mailing. At the election office, the outer envelope is discarded before the anonymous inner one is opened." Id.
101. Lorrie Faith Cranor, Electronic Voting: Computerized Polls May Save Money, Protect Privacy 5 (1996), at http://info.acm.org/crossroads/xrds2-4/voting.html. Cranor, an expert in Internet voting, has a web site devoted entirely to Internet Voting. See http://www.ccrcl.wustl.edu/~lorracks/sensus/hotlist.html. The web site provides links to various Internet voting providers, voting equipment vendors, several sites publishing information on Internet voting, and other relevant material. Id. Cranor currently works as a Senior Technical Staff Member of the Secure Systems Department at AT&T Labs-Research in New Jersey. See http://www.research.att.com/~lorrie/.
102. Cranor, supra note 101, at 5.
103. Id.
that the signature belongs to that registered voter. If valid, the validator will sign and return the ballot to the voter. The voter then removes the signatures or unbinds the ballot, revealing an encrypted ballot signed by the validator. Next, the voter sends the ballot to the vote tallier. If the ballot is valid, the tallier will publish the name of the voter who votes and the voter must verify his or her ballot is on the list. The voter then sends the vote tallier his or her decryption key and the tallier publishes the encrypted ballot and key for vote verification.

Both of the above Internet voting systems seek to provide possible solutions to the basic problems with Internet voting. Although each system looks good on paper, the true colors will shine through when the systems are tested. Without extensive testing and legislative analysis of Internet voting systems, the perfect system is unknown.

Many different organizations have tried and used Internet voting for elections; however, organizational elections do not hold the same high integrity that federal, state, and local elections do.

Two states have used Internet voting technology in the past year: Alaska and Arizona. The Alaskan Republican Party conducted a straw poll in January 2000 and the Arizona Democratic Party conducted a presidential primary in March 2000. Two more states are studying Internet voting. California organized an Internet voting task force through legislation to examine Internet voting systems. The state of Washington soon followed in organizing its own Internet voting task force.

Unfortunately, Minnesota has not conducted any Internet voting elections nor has it enacted legislation to analyze this emerging voting technology. Many election officials are reluctant to try

Blind signatures are a class of digital signatures that allow a document to be signed without revealing its contents. The effect is similar to placing a document and a sheet of carbon paper inside an envelope. If somebody signs the outside of the envelope, they also sign the document in the inside of the envelope. The signature remains attached to the document, even when it is removed from the envelope.

Id.
104. Id.
105. Id.
106. Id.
107. Id.
108. Id.
109. Id.
Internet voting because of fear of the unknown. Clay Roberts, Florida Elections Division Director, stated: "I’m very worried that some jurisdiction will have an online election that turns into a disaster. That would set back a technology that could be a boon for everyone."\textsuperscript{110}

A. States Using Internet Voting Technology

1. Alaska Straw Poll

The Alaskan Republican Party conducted a straw poll over the Internet in January 2000.\textsuperscript{111} Three remote congressional districts were allowed to vote in the straw poll over the Internet.\textsuperscript{112} VoteHere.Net provided the Internet voting technology for the poll.\textsuperscript{113} VoteHere.Net sent eligible voters software, which had to be installed on the voter’s computer to enable him or her to vote.\textsuperscript{114} Three thousand one hundred persons were eligible to vote online; however, only thirty-five persons voted in the poll via the Internet.\textsuperscript{115} The figures may be lower than expected because it was a straw poll instead of a general election.

2. Arizona Democratic Primary

Arizona held the first statewide election on the Internet. However, the process used by the Arizona democrats was criticized as inadequate.\textsuperscript{116} This process included mailing each voter a personal identification number, which allowed a vote to be cast.\textsuperscript{117}

\begin{thebibliography}{9}
\bibitem{110} Wildstrom, \textit{supra} note 47, at 1. It is hard to imagine a ballot disaster worse than the one Florida had in the 2000 presidential election.
\bibitem{111} James Ledbetter, \textit{Net Out the Vote: Arizona's Democratic Primary Has Been Hailed as the First Successful Online Election. Will Net Voting Boost Turnout--Or Exacerbate the Digital Divide?}, \textit{The Indus. Standard} 116 (Mar. 27, 2000), available at http://www.thestandard.com/article/display/0,1151,13004,00.html [hereinafter \textit{Net Out the Vote}]. "Kathleen Dalton, a member of the Alaska Straw Poll Committee, commented, ‘Internet voting will open up a completely new domain to an Alaskan population that is handicapped by vast distances, lack of land transportation routes, and slow or interrupted postal service in winter months.’" Dictson & Ray, \textit{supra} note 2, at 23.
\bibitem{112} \textit{Net Out the Vote}, \textit{supra} note 111, at 123.
\bibitem{113} \textit{Id.} at 121.
\bibitem{114} \textit{Id.}
\bibitem{115} \textit{Id.} at 116. This figure includes Alaskan congressional members who voted from Washington, DC. \textit{Id.}
\bibitem{116} Wildstrom, \textit{supra} note 47, at 1.
\bibitem{117} \textit{Id.}
\end{thebibliography}
Several voters never received their personal identification numbers and had to go to polling places. Several voters could not vote over the Internet because they had older model web browsers. Moreover, the process did not provide for a sophisticated tracking system to verify the correct person was voting. While 85,970 votes were cast in the primary, only about half were cast online. Of those votes cast online, ninety percent were estimated to have been cast from voters' homes or work offices.

The Arizona Democrats teamed up with Election.com to hold the election online. Election.com reported the election as a success. However several reasons suggest otherwise.

First, Election.com ran the election for the Arizona Democrats with no supervision or certification by election officials. This is problematic because election officials are trained in election secrecy and integrity. Second, the election was vulnerable to service denial.

\[\text{Net Out the Vote, supra note 111, at 126.}\]
\[\text{Mark Fleisher, Arizona Democratic Chairman, acknowledged that several persons did not receive PIN numbers and suggested that some threw their PIN numbers out because they perceived them to be junk mail. Id.}\]

\[\text{Id.}\]
\[\text{Joe Mothen, Chief Executive Officer of Election.com, explained "that for security reasons, the sites ran numerous Java applets, which older versions of Netscape, Explorer and AOL browsers couldn't handle." Id.}\]

\[\text{Id.}\]
\[\text{Wildstrom, supra note 47, at 1. Election officials had no way to verify if a vote was lost or stolen or whether the correct person was voting it. Id.}\]

\[\text{Net Out the Vote, supra note 111, at 127. Thirty-two thousand one hundred fifty-nine of the votes were cast by mail and 18,000 or so went to the polls to vote. Id. The voters in the primary represented a mere ten percent of the registered voters. Id.}\]

\[\text{Id.}\]
\[\text{Net Out the Vote, supra note 111, at 116. Election.com is a private industry founded in 1999 in Garden City, New York. The 100 List, Red Herring (Jason Pontin, ed.), at 111, 144 (June 2000). Election.com "[p]rovides Internet-based public and private election services for governments, trade associations, labor unions, school districts, credit unions, and large corporations. Competing with others like Voter.com and Grassroots.com in a market estimated at $10 billion annually in election costs and related materials and services." Id.}\]

\[\text{Net Out the Vote, supra note 111, at 116. Election.com held the election and received attention in the news worldwide. Id. See also Is Internet Voting Safe?, supra note 42, at 1 (stating Election.com claimed success because there were no proven security lapses).}\]

\[\text{Id.}\]
\[\text{Is Internet Voting Safe?, supra note 42, at 7.}\]

\[\text{Id.}\]
\[\text{Similar attacks were made on Yahoo, CNN, Ebay, and other web portraits earlier this year. Id. Election.com acknowledged this vulnerability by suspending voting over the Internet on the final day. Id. Individuals' personal computers were vulnerable to virus attacks that could have destroyed or changed votes.}\]
same time, the voting system would have denied service to some voters. A service denial would disenfranchise some voters who only had one opportunity in their busy schedules to vote. Third, voter identification was minimal and voter privacy was vulnerable. The possibility for fraud is great when personal identification numbers are mailed to voters. If a person lived in an apartment and received three other voters’ personal identification numbers, they could vote four times if so inclined because the voter authentication was minimal. Fourth, some computers and systems were incompatible with Election.com’s voting site. Fifth, the site was not working for a full hour on the first day of the election. Finally, neither Election.com nor the Arizona Democrats took statistics to show the number of voters who attempted to vote online but were denied service.

3. Litigation Brought By Voting Integrity Project

Arizona’s Internet election was challenged prior to its occurrence in a federal court. The Voting Integrity Project (“VIP”), one African American man, and one Hispanic woman filed a lawsuit against the Arizona Democrats. They sought an injunction in federal court to stop the election. Their complaint alleged unequal access and discrimination in violation of the Voting Rights Act of 1965. The President of VIP, Deborah Phillips, stated “Internet voting, however well-intentioned, is not secure from fraud and is grossly unfair to persons without Internet access. This is just

Id. For example the “Love Bug” or “I love you” virus from May of 2000 “infected 45 million computers in 20 countries and caused an estimated $8 billion in damage.” Id.

127. Id.

128. Id. Many older computers, older Netscape browsers, and Macintosh computers were unable to connect to vote. Id.

129. Id.

130. Id.


132. Id. at 1.

133. Id.

134. Id.
a millennium version of the literacy test."\(^{135}\)

Voters with Internet access had four full days to vote, while those without had one day, from 7:00 a.m. to 7:00 p.m., to vote.\(^{136}\) Historically, voting access has always been limited to one day for everyone. The discrimination allegation was based on "digital divide"\(^{137}\) statistics from a recent United States Department of Commerce report showing that "whites are more likely to have Internet access from home than most racial and ethnic minorities from any location, including home, work, school, or library."\(^{138}\) One commentator approved of the litigation, arguing that the five days available to those with Internet access clearly violated the law.\(^{139}\) This argument was made under the equal protection clause of the United States Constitution.\(^{140}\) By giving some people and not others a longer period to exercise their right to vote, equal protection was violated. U.S. District Judge Paul G. Rosenblatt did not grant VIP's injunction, but suggested that the votes could be thrown out if the election resulted in racial discrimination.\(^{141}\)

The online election is also under the scrutiny of the United States Justice Department.\(^{142}\) The Justice Department sent a letter to the Arizona Democratic Party informing it that the Department would allow the election to go forward but would review the results.\(^{143}\)

\(^{135}\) Id.

\(^{136}\) Id.

\(^{137}\) "Digital divide" is a term used to explain the gap between the people with Internet access and the number of people without Internet access.

\(^{138}\) VIP Files, supra note 131, at 2. In 1998, the Commerce Department found that non-Hispanic whites had eighty-three percent of in-home Internet access, even though they only were sixty-eight percent of Arizona's population. Ben White, On-line Balloting: A Question of Fairness, WASHINGTON POST, Mar. 19, 2000, at A09 [hereinafter White].

\(^{139}\) Id. (citing a comment by Professor Michael Confield of George Washington University). Prof. Confield, who studies the politics of the Internet, argued further by stating, "It just wasn't fair to give people who had Web knowledge and Web access four more days to vote than people who didn't .... In Federalist 57, [James] Madison said, 'Who are to be the electors? .... Not the rich, more than the poor; not the learned, more than the ignorant.'" Id.

\(^{140}\) The Fourteenth Amendment to the United States Constitution states "No State shall ... deny to any person within its jurisdiction the equal protection of the laws." U.S. CONST. amend. XIV, § 1. If the election laws give some voters more days to vote, then the other voters are not being equally protected under the law.

\(^{141}\) White, supra note 138, at A09.

\(^{142}\) Id.

\(^{143}\) Id.
B. Legislative Committees’ Analyses Of Internet Voting Systems

1. California

Bill Jones, California Secretary of State, held the first meeting of California's new online voting task force in March 1999. California was the first state to organize a commission to explore the possibility of Internet voting. The report on the feasibility of Internet voting was completed in January 2000.

144. Dictson & Ray, supra note 2, at 22.
145. Id. at 4.
146. California Internet Voting Task Force, supra note 10, at 1. The purpose of the task force was to identify legal and technical challenges to implementing Internet voting. Id. at 5. The California Task force consisted of several members with different areas of expertise. Id. Alfred Charles, Assistant Secretary of State for eGovernment was, the Task Force Chairman of the committee. Id. David Jefferson, Systems Engineer for Compaq Computers, served as the Technology Chairman. Id. Linda Valenty, Assistant Professor of Political Science at San Jose State University, was the Policy Issues Chairperson. Id. The regular task force committee members and their place of employment are the following: Jim Adler, VoteHere.net; Pete Adlerberg, VoteHere.net; Sylvia Ahern, Sterling Software; Kim Alexander, California Voter Foundation; Michael Alvarez, California Institute of Technology; Dwight Beattie, Sacramento County Elections; Kaye Caldwell, Silicon Valley Software Industry Coalition; Jacquie Canfield, League of Women Voters; Assemblyman Jim Cunneen, State Capitol; Steve Cunningham, Cisco Systems; Roger Dao, County of Santa Clara; Tim Draper, Draper, Fisher, Jurvetson; Brian Gangler, Secretary of State; Pam Giarrizzo, Secretary of State; Mikel Haas, San Diego County Registrar of Voters; Tom Hill, Secretary of State; Thad Howard, The Howard Agency; Steve Knecht, Global Election Systems; Rom Lopez, Assembly Elections Committee; Stacey Morgan, Assemblyman Jim Cunneen; John Mott-Smith, Secretary of State; Phillip Muller, Political Technologies, Inc.; Jonathan Nagler, UC Riverside; Cameron O’Rourke, Oracle; Mark Reynolds, iLumin Corporation; Joe Rodota, FAQvoter.com; Peter Schmidt, Cisco Systems; Warren Slocum, San Mateo County Assessor/Clerk/Recorder; Larry Sokol, Senate Elections Committee; Bernard Soriano, Secretary of State; and James L. Wayman, National Biometric Test Center. Id. at 5-6. Regardless of the feasibility of Internet voting, the legislature would be required to approve Internet voting before implementation. Dictson & Ray, supra note 2, at 22. Internet voting is not provided for in the current laws of California. California Internet Task Force, supra note 10, at 8.

[T]hree stages of government approval may be required: 1) The State Legislature would have to amend the elections code to adapt the current paper-ballot voting requirements to the electronic voting and vote tabulation process, 2) The Secretary of State would need to review and certify specific election systems for use by county election offices, and 3) County officials would have to agree to purchase and implement the new Internet voting systems once they appear on the Secretary of State’s list of Approved Election Systems.

Id.
The task force opined that Internet voting could increase voter participation among those with Internet access who regularly do not vote.\(^{147}\) The task force advised, "the election process would be best served by a strategy of evolutionary rather than revolutionary change."\(^{148}\) Thus, it recommended the Internet should be used as an additional method of voting in the beginning.\(^{149}\) The task force suggested two phases for the evolution of Internet voting.\(^{150}\) Phase one would use Internet voting technology at traditional polling places.\(^{151}\) Phase two would utilize remote Internet voting systems.\(^{152}\) This phased-in approach provides for gradual testing of Internet voting systems.\(^{153}\)

2. Washington

The state of Washington soon followed California by creating a similar task force.\(^{154}\) The Washington task force, led by Washington Secretary of State Ralph Munro, focused on voter authentication and privacy.\(^{155}\) Washington explored the option of Internet voting because it desired to provide convenience for voters.\(^{156}\)

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148. Id. at 2-3.
149. Id. The task force concluded that, at this time, a remote Internet voting system is not "legally, practically or fiscally feasible" to "completely replace the current paper process used for voter registration, voting, and the collection of initiative, referendum and recall petition signatures." Id. If remote Internet voting systems are eventually adopted they it should be modeled after the current absentee process. Id. at 2.
150. Id. at 3.
151. California Internet Task Force, supra note 10, at 3. "In this phase, voters would not yet gain the advantage of voting from any place at any time, but the integrity of the voting and tabulation technology will be verified through the use of Internet Voting Machines." Id. Stage one of this phase would have the voter vote at the voter's neighborhood polling place. Id. at 10. Stage two of this phase would allow the voter to vote at any polling site within his or her county. Id.
152. California Internet Task Force, supra note 10, at 3. In the remote system, "authentication of voter identity would take place with a combination of manual and electronic procedures that would provide at least the same level of security as the existing voting process." Id. Stage one of this phase would include providing the voter with digital signatures to vote on county computers at specified locations which are not staffed by poll workers. Id. at 10. Stage two of this phase would allow the voter to vote from any computer so long as the connection is secure. Id.
153. Id. at 10.
154. Dictson & Ray, supra note 2, at 22.
155. Id.
156. Elliott, supra note 62, at 1. David Elliott is the assistant director of elections for the State of Washington. Id.
Washington has an overwhelming majority of its voters using either absentee voting or voting by mail. Washington concluded that the use of absentee voting and voting by mail has increased voter participation because both are more convenient for voters. Another convenience Washington enacted for its voters was to change the cutoff date for voter registration from thirty days to fifteen days prior to election day. Washington believes that voter convenience would be furthered even more with Internet voting.

Washington studied three types of Internet voting models. First, Internet voting could be used as an imitation of the current absentee process. The ballots would be distributed to the voter over secure e-mail. The voter would have the option of printing the ballot and mailing it back or returning the ballot via secure e-mail.

Second, Internet voting could be accomplished from a voting web site. In this system a voter would log onto the web site through secure means, establish his or her identity with an identifying key, and vote a ballot on the web site.

157. Id. In fact, the proportion of voters receiving their ballots via mail will soon be the majority. Id. Washington also allows voters to request absentee ballot via mail, telephone, or in person. Id. at 2. This request can be ongoing to allow the voter to vote in all elections by absentee ballot. Id. Absentee ballots are delivered by the United States Postal Service or given to the voter in person. Id. The absentee ballot is filled out by the voter and placed in a secure envelope. Id. The secured envelope is then sealed inside another envelope, which the voter has signed under oath. Id. When the election office receives the absentee ballot, they verify the signature with the signature in the voter's file. Once the signature is verified, the outer envelope is discarded, leaving the ballot in the secure envelope. Id. The envelopes are opened on election day and the ballots are counted. Id.

158. Id.
159. Id.
160. Id.
161. Id. at 2.
162. Id.
163. Id. at 2.
164. Id. The advantage of this system is that the voter more easily understands the process, each vote is handled as an individual transaction, and the ballots are less susceptible to hacker attacks. Id. This system would also require procedures to make sure each voter only votes once and has a secure and secret ballot. Id.

165. Id.
166. Id. A voter could vote from home, office, or a library over a several day period. Id. This system would be similar to most transactions that occur over the Internet. Id. The voting web site could also provide on-line help to voters. Id. The web site could also provide a variety of different languages for the voter to chose from. Id. Of course, this system would be vulnerable to the types of hacker problems that were mentioned earlier. Id. at 3. Washington suggests that the so-
Third, Internet voting could be utilized at the current polling locations. The election officials would verify the identity of the voter and configure the correct ballot to the computer terminal, and then the voter would cast his or her ballot. This system would allow the voters to use any polling site within their county because all ballots would be available through the central server.

Washington also suggests that digital signature technology would provide the most secure voter identity for transactions. Unfortunately, this technology is too expensive for the individual voter or the government to provide. Washington’s conclusion about Internet voting is that “[g]overnment’s job is to provide the convenience of an online voting system while making no compromise of the democratic election system.”

Although both California and Washington have analyzed Internet voting, they have only begun the long process toward enacting Internet voting in election statutes. Both states analyzed the Internet voting benefits, problems, and technology. Both made recommendations to their legislatures on how to proceed. This approach is logical and commendable. Other states should use this approach to introduce Internet voting in their states.

Solution to the hacker related problems is “to create over-capacity, either by spreading the voting period over several weeks or through more equipment.” Id. Web capacity must be adequate for the number of people that will be visiting the web site. Id.

167. Id.
168. Id. at 3.
169. Id. “Currently, a voter’s ballot can only be found in his or her neighborhood.” Id. For example, if a person was registered to vote in the city of New Brighton, Ramsey County, Minnesota, he or she would be able to vote anywhere in Ramsey County. If that person worked in downtown St. Paul, he or she could vote at a downtown polling site over lunch or on a break instead of adjusting their work schedule to vote at a designated neighborhood polling site. This would add convenience to the voting process for voters. Advantages of this system would be reduced printing costs and convenience for the voter. Id.

170. Id. at 4. Digital signatures are an electronic form of a signature used to verify a person’s identity. Since there are various levels of digital signatures, not all types are secured the same way. Id. Some digital signatures require several types of identification and personal interviews, while others have minimal, if any, requirements for acquiring a digital signature. Id.

171. Id.
172. Id. at 5.
C. Minnesota Election Laws

1. Current State Of The Law

Currently Minnesota’s voting system does not provide for Internet voting. Although the Secretary of State has authority to approve voting machines before they can be implemented, the Secretary’s authority is not broad enough to approve Internet voting systems. The barrier to adopting an Internet voting system is the ballot requirement. Absent the legislature making a statutory change, Internet voting will not be a possibility in Minnesota.

a. Printing Of Ballots

The Minnesota Statutes fully address voting and ballot requirements. The Minnesota Rules also provide guidance. “All ballots shall be printed with black ink on paper of sufficient thickness ... and shall be printed in easily readable type with suitable lines dividing candidates, offices, instructions and other matters printed on the ballot.” Minnesota Statutes further require what color paper should be used for each election. The rules also re-

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173. MINN. STAT. §§ 200-211 (2000). Other federal and constitutional laws also apply. According to the United States Constitution, “[t]he times, places, and manner of holding elections for Senators and Representatives, shall be prescribed in each state by the legislature thereof.” U.S. CONST. art. I, § 4, cl. 1. Certain federal provisions are mandatory and regulate all state elections; these are found in United States Code Annotated and the United States Constitution. The voting requirements for Minnesota are found in the Minnesota Constitution and Statutes. The Minnesota Constitution addresses the eligibility and place of voting. MINN. CONST. art. 7, § 1. It provides:

Every person 18 years of age or more who has been a citizen of the United States for three months and who has resided in the precinct for 30 days next preceding an election shall be entitled to vote in that precinct. The place of voting by one otherwise qualified who has changed his residence within 30 days preceding the election shall be prescribed by law. The following persons shall not be entitled or permitted to vote at any election in this state: A person not meeting the above requirements; a person who has been convicted of treason or felony, unless restored to civil rights; a person under guardianship, or a person who is insane or not mentally competent.


175. MINN. STAT. § 204B.36, subd. 1 (2000).

176. “The candidates for partisan offices shall be placed first on the white bal-
quire “paper ballot procedures as provided in Minnesota election law must be followed to the extent possible.” The statutes also require the ballots to be printed in advance to polling. Thus, this is an impediment to voting by means of the Internet.

b. Secret Ballots

Minnesota Statutes require voting to be secret. No one shall assist the voter in marking his or her ballot. If the voter intentionally shows a ballot to another person, it will not be recorded. To preserve a secret ballot, political party preferences shall not be noted nor shall any identifying marks be made on the ballot.

c. Mail Ballots

Minnesota statutes also provide for mail balloting, but that is limited to cities having fewer than 400 registered voters. The counties of Ramsey and Kittson can also request the Secretary of
State to authorize the conduct of experimental mail balloting. 184

2. Feasibility Of Introducing Internet Voting In Minnesota

Minnesota's current laws do not provide for an Internet voting system. The Minnesota Secretary of State's position is that an election cannot be held via the Internet under current law. 185

The laws do provide for electronic voting systems. Minnesota law requires the secretary of state to approve the electronic voting systems if those systems meet certain requirements: 186

An electronic voting system may not be employed unless it:

(1) permits every voter to vote in secret;

(2) permits every voter to vote for all candidates and questions for whom or upon which the voter is legally entitled to vote;

(3) provides for write-in voting when authorized;

(4) rejects by means of automatic tabulating equipment, except as provided in section 206.84 with respect to write-in votes, all votes for an office or question when the number of votes cast on it exceeds the number which the voter is entitled to cast;

(5) permits a voter at a primary election to select secretly the party for which he wishes to vote; and

(6) rejects, by means of the automatic tabulating equipment, all votes cast in a primary election by a voter when the voter votes for candidates of more than one party. 187

For electronic voting systems, "[t]he ballot information...must be in the same order provided for paper ballots, except that the information may be in vertical or horizontal rows, or on a number of separate pages. The secretary of state shall provide by rule for standard ballot formats for electronic voting systems." 188 This requirement does not state "paper;" it states "pages." Web pages may

184. Id. at subd. 1a. The request must be made 90 days prior to the election. Id.

185. Memorandum from J. Bradley King, Director of Elections Division, to Mary Kiffmeyer, Minnesota Secretary of State, (June 7, 2000) (on file with author) [hereinafter Memorandum].

186. MINN. STAT. § 206.57 (2000).

187. Id. § 206.80.

188. Id. § 206.84, subd. 3.
be sufficient to fulfill this requirement. Nevertheless, this interpretation was not contemplated or even dreamed of by the drafters of the statute.\footnote{189}

Internet voting could also be modeled after absentee ballots, which are valid in Minnesota. The ballots for absentee voting “shall conform to the requirements of Minnesota election law, except that modifications in the size or form of ballots or envelopes may be made if necessary to satisfy the requirements of the United States postal service.”\footnote{190} Absentee ballots are required to be mailed back with certain personal information and an affidavit stating the voter voted by him or herself.\footnote{191} Internet voting could conform to these standards by mailing each voter a P.I.N. (personal identification number) and asking relevant identification questions online. The Internet ballot could look the same as a regular ballot with the same color, format, and write-in lines. Instead of punching or marking a paper ballot, the voter could mark an “X” in the box next to his other desired candidate. The vote could be confirmed by a computer question of “are you sure you want to vote for candidate X?”\footnote{192} Then the voter would transmit the ballot when he or she was done voting. Internet voting may be even more reliable than sending absentee ballots by mail.

\section{V. Conclusion}

Several steps must occur before Internet voting can replace traditional polling places. First, laws and regulations must be enacted to provide for the use of the Internet for voting systems. Second, voter identification, ballot secrecy, and security must be pro-

\footnote{189} Memorandum, \textit{supra} note 185. The memorandum stated:

\footnote{190} \textit{Minn. Stat.} \textsection 203B.21, subd. 1 (2000).

\footnote{191} \textit{Id.} \textsection 203B.21.

\footnote{192} Stone, \textit{supra} note 40, at 980.
vided for. Third, each voter must have equal access to Internet voting systems. Fourth, technology must be explored further to develop an Internet voting system that will be easy to use and convenient, but at the same time protect the sacred ballot. Fifth, states and the Federal Election Commission must test the Internet systems prior to use. So far all the systems look good on paper but have not been subjected to essential testing by election experts and officials.

As Internet voting systems are being introduced, states are carefully watching for new advancements. Even if a state’s laws do provide for Internet voting technology, a state must ensure an Internet voting system will not compromise democracy and voting integrity. A state would have to decide how it wanted to use the Internet. The California approach very wisely suggests an evolution to Internet voting instead of a revolutionary change. A state could model Internet voting after its current absentee ballot process, or it could utilize the Internet Voting systems at polling places. This would allow for a more controlled environment.

Internet Voting will be customary within the next decade. In the meantime, voters will have to continue to walk, jog, bike, or drive to their polling place and relish the fading civic ritual of going to a polling place, filling out a ballot, casting a ballot, and receiving an “I voted” sticker.