3. Voting Technology

The Help America Vote Act of 2002 authorized up to $650 million in federal funds to replace antiquated voting machines throughout the country. States are using these funds and their own resources to upgrade voting technology, generally to replace punch card and lever voting machines with new optical scan and electronic voting systems. As a result, voting technology is improving, but new concerns related to electronic voting systems have arisen. These concerns need to be addressed, because it is vital to the electoral process that citizens have confidence that voting technologies are registering and tabulating votes accurately.

3.1 Voting Machines

The purpose of voting technology is to record and tally all votes accurately and to provide sufficient evidence to assure all participants — especially the losing candidates and their supporters — that the election result accurately reflects the will of the voters.

Voting machines must be both accessible and transparent. As required by HAVA, the machines must be accessible to language minorities and citizens with disabilities, including the blind and visually impaired citizens, in a manner that allows for privacy and independence. Voting machines must also be transparent. They must allow for recounts and for audits, and thereby give voters confidence in the accuracy of the vote tallies.

Two current technology systems are optical scan and direct recording electronic (DRE) systems. Optical scan systems rely on preprinted paper ballots that are marked by the voter, like the ovals students fill in with a No. 2 pencil on a standardized exam, and then are run through an optical scan machine that determines and tallies the votes. Such systems provide transparency because the paper ballots can be recounted and audited by hand. Under HAVA, all aspects of the voting system, including the production of audit trail information, must be accessible to voters with disabilities.

DRE machines present voters with their choices on a computer screen, and voters choose by touching the screen or turning a dial. The vote is then recorded electronically, usually without ballot paper. DREs make up a growing share of voting equipment. Nearly 30 percent of voters live in jurisdictions that use DREs, compared to 17 percent in the 2000 election (see Table 2 on page 27). DREs allow voters with disabilities to use audio prompts to cast ballots privately and independently, and they facilitate voting by non-English speakers by offering displays of the ballot in different languages. DREs also provide greater accuracy in recording votes, in part by preventing over-votes, whereby people mistakenly vote for more than one candidate, and by discouraging accidental under-votes by reminding voters when they overlooked one or more races.

The accessibility and accuracy of DREs, however, are offset by a lack of transparency, which has raised concerns about security and verifiability. In most of the DREs used in 2004, voters could not check that their ballot was recorded correctly. Some DREs had no capacity for an independent recount. And, of course, DREs are computers, and computers malfunction. A malfunction of DREs in Carteret County, North Carolina, in the November 2004 elections caused the loss of more than 4,400 votes. There was no backup record of the votes that were cast. As a result, Carteret County had no choice but to rerun
the election, after which it abandoned its DREs. Other jurisdictions have lost votes because election officials did not properly set up voting machines.29

To provide backup records of votes cast on DREs, HAVA requires that all voting machines produce a “permanent paper record with a manual audit capacity.” This requirement is generally interpreted to mean that each machine must record individual ballot images, so that they can be printed out and examined in the event of a disputed result or of a recount. This will make DREs somewhat more transparent, but it is still insufficient to fully restore confidence.

One way to instill greater confidence that DREs are properly recording votes is to require a paper record of the ballot that the voter can verify before the ballot is cast. Such a paper record, known as a voter-verifiable paper audit trail (VVPAT), allows the voter to check that his or her vote was recorded as it was intended.

Because voter-verifiable paper audit trails can permit recounts, audits, and a backup in case of a malfunction, there is a growing demand for such paper trails. As of early August 2005, 25 states required voter-verifiable paper ballots, and another 14 states had proposed legislation with such a requirement.30

Since very few of the DREs in use today are equipped to print voter-verifiable paper audit trails, certain bills before Congress would require election authorities to “retrofit” DREs with such printers. In 2004, DREs with voter-verifiable paper audit trails were used only in Nevada. They appear to have worked well.31 When Nevadans went to the polls and made their selection, a paper record of their vote was printed behind a glass cover on a paper roll, like the roll of paper in a cash register. Voters were able to view the paper record and thereby check that their vote was recorded accurately before they cast their ballot. The paper record was saved in the machine and thus was available for later use in recounts or audits. After the 2004 elections, Nevada election officials conducted an internal audit, which confirmed the accuracy of the votes recorded by the DREs. While less than one in three Nevada voters reportedly looked at the paper record of their ballot, these voters had the opportunity to confirm their vote, and the paper allowed a chance to verify the computer tallies after the election.

While HAVA already requires that all precincts be equipped with at least one piece of voting equipment that is fully accessible to voters with disabilities for use in federal elections by January 1, 2006, must be accessible to voters with disabilities, the Commission believes that transparency in voting machines should also be assured in time for the 2008 presidential election. With regard to current technology, states will need to use either DREs with a voter-verifiable paper audit trail and an audio prompt for blind voters or optical scan voting systems with at least one computer-assisted marking device for voters with disabilities to mark their ballot. To ensure implementation of this requirement, Congress will need to appropriate sufficient funds to cover the costs of either retrofitting DREs with voter-verifiable paper audit trails or purchasing a computer-assisted marking device for each polling place that uses optical scan voting systems.

Concerns have been raised that the printers could malfunction just as computers do. Of course, the previous ballot papers will be available, and the operators will know when the printers fail. Still, precincts should have backup printers for that contingency. A second concern is that the length of the ballot in some areas — such as California, which frequently
has referenda — would require paper trails that would be several feet long. In the case of non-federal races, state law would determine whether the non-federal portion of the ballot would similarly be required to provide a voter-verified paper audit trail. That is not a perfect solution, but it is still better than having no paper backup at all.

The standards for voting systems, set by the EAC, should assure both accessibility and transparency in all voting machines. Because these standards usually guide the decisions of voting machine manufacturers, the manufacturers should be encouraged to build machines in the future that are both accessible and transparent and are fully capable of meeting the needs of Americans with disabilities, of allowing voters to verify their ballots, and of providing for independent audits of election results.

### TABLE 2: Types of Voting Equipment Used in Recent Presidential Elections

<table>
<thead>
<tr>
<th>Type of Voting Equipment</th>
<th>Registered Voters in 2000 (by percentage)</th>
<th>Registered Voters in 2004 (by percentage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Punch Card</td>
<td>27.9%</td>
<td>12.4%</td>
</tr>
<tr>
<td>Lever</td>
<td>17.0%</td>
<td>14.0%</td>
</tr>
<tr>
<td>Paper Ballots</td>
<td>1.3%</td>
<td>0.7%</td>
</tr>
<tr>
<td>DataVote</td>
<td>2.8%</td>
<td>1.3%</td>
</tr>
<tr>
<td>Optical Scan</td>
<td>29.5%</td>
<td>34.9%</td>
</tr>
<tr>
<td>Electronic</td>
<td>12.6%</td>
<td>29.4%</td>
</tr>
<tr>
<td>Mixed</td>
<td>8.9%</td>
<td>7.4%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>100.0%</strong></td>
<td><strong>100.0%</strong></td>
</tr>
</tbody>
</table>


### Recommendations on Voting Machines

**3.1.1** Congress should pass a law requiring that all voting machines be equipped with a voter-verifiable paper audit trail and, consistent with HAVA, be fully accessible to voters with disabilities. This is especially important for direct recording electronic (DRE) machines for four reasons: (a) to increase citizens' confidence that their vote will be counted accurately, (b) to allow for a recount, (c) to provide a backup in cases of loss of votes due to computer malfunction, and (d) to test — through a random selection of machines — whether the paper result is the same as the electronic result. Federal funds should be appropriated to the EAC to transfer to the states to implement this law. While paper trails and ballots currently provide the only means to meet the Commission's recommended standards for transparency, new technologies may do so more effectively in the future. The Commission therefore urges research and development of new technologies to enhance transparency, security, and auditability of voting systems.

**3.1.2** States should adopt unambiguous procedures to reconcile any disparity between the electronic ballot tally and the paper ballot tally. The Commission strongly recommends that states determine well in advance of elections which will be the ballot of record.
3.2 AUDITS

While voter-verifiable paper ballots will contribute to strengthening public confidence in DREs, regular audits of voting machines are also needed to double-check the accuracy of the machines’ vote tallies. Such audits were required by law in 10 states as of mid-August 2005.32 To carry out such audits, election officials would randomly select a sample of voting machines and compare the vote total recorded by the machines with the vote total on the paper ballots. The audits would test the reliability of voting machines and identify problems, often before a close or disputed election takes place. This, in turn, would encourage both suppliers and election officials to effectively maintain voting machines.

Some concern has been expressed about the possibility of manipulation of paper audit trails.33 If DREs can be manipulated to alter the vote tallies, the same can be done with paper audit trails. Such manipulation can be detected and deterred by regular audits of voting machines. Regular audits should be done of all voting machines, including DREs and optical scan systems.

Recommendation on Audits

3.2.1 State and local election authorities should publicly test all types of voting machines before, during, and after Election Day and allow public observation of zero machine counts at the start of Election Day and the machine certification process.

3.3 SECURITY FOR VOTING SYSTEMS

DREs run on software that can be compromised. DRE software may get attacked or hacked by outsiders, perhaps through the Internet. As experience in computer security shows, it is often difficult to defend against such attacks. Hackers often are creative and determined, and voting systems provide a tempting target. However, while some DREs send their results to election headquarters over the Internet, they are not connected to the Internet during voting.

The greater threat to most systems comes not from external hackers, but from insiders who have direct access to the machines. Software can be modified maliciously before being installed into individual voting machines. There is no reason to trust insiders in the election industry any more than in other industries, such as gambling, where sophisticated insider fraud has occurred despite extraordinary measures to prevent it. Software can also be programmed incorrectly. This poses a likely threat when local programmers who lack the necessary skills nonetheless modify the ballot for local offices, and many might not have the sophistication required for the new machines.

In addition to the output of DREs, which can be verified through a paper audit trail, the inside process of programming DREs should be open to scrutiny by candidates, their supporters, independent experts, and other interested citizens, so that problems can be detected, deterred, or corrected, and so that the public will have confidence in the machines.
At the same time, manufacturers of voting machines have legitimate reason to keep their voting machine software and its source code proprietary. The public interest in transparency and the proprietary interests of manufacturers can be reconciled by placing the source code in escrow with the National Institute of Standards and Technology (NIST), and by making the source code available for inspection on a restricted basis to qualified individuals. NIST might make the source code available to recognized computer security experts at accredited universities and to experts acting on behalf of candidates or political parties under a nondisclosure agreement, which would bar them from making information about the source code public, though they could disclose security flaws or vulnerabilities in the voting system software.

Doubt has been raised that some manufacturers of voting machines provide enough security in their systems to reduce the risk of being hacked. Such concerns were highlighted after a group of computer security experts examined a voting system source code that was accidentally left on the Internet. Independent inspection of source codes would strengthen the security of voting systems software by encouraging manufacturers to improve voting system security. Expert reviews may also detect software design flaws or vulnerabilities. This, in turn, could bolster public confidence in the reliability of DREs to accurately record and tally the vote in elections.

In addition to the source codes, the software and the voting machines themselves are potentially vulnerable to manipulation. Security for voting systems should guard against attempts to tamper with software or individual voting machines. When voting machines are tested for certification, a digital fingerprint, also known as a “hash,” of their software is often sent to NIST. Following the delivery of new voting machines, a local jurisdiction can compare the software on these machines to the digital fingerprint at NIST. This comparison either will identify changes made to the software before delivery or, if the software is unaltered, will confirm that the software on the individual machines meets the certified standards.

Once voting machines arrive at the local jurisdiction, election officials must take precautions to ensure security by restricting access to authorized personnel and by documenting access to the machines.

The process of testing and certifying voting machines is designed mainly to ensure their reliability. Testing and certification is conducted under EAC supervision, although some states require additional testing and certification. The state testing can make the process more rigorous, particularly when voting machines are field tested. When California conducted a mock election with new voting machines in July 2005, it found unacceptable rates of malfunctions that were not apparent in lab tests.
No matter how secure voting machines are or how carefully they are used, they are liable to malfunction. To avoid a situation where a machine malfunction will cause a major disruption, local jurisdictions need to prepare for Election Day with a backup plan, including how the vendor will respond to a machine malfunction and what alternatives, including paper ballots, should be made available.

Recommendations on Security for Voting Systems

3.3.1 The Independent Testing Authorities, under EAC supervision, should have responsibility for certifying the security of the source codes to protect against accidental or deliberate manipulation of vote results. In addition, a copy of the source codes should be put in escrow for future review by qualified experts. Manufacturers who are unwilling to submit their source codes for EAC-supervised testing and for review by independent experts should be prohibited from selling their voting machines.

3.3.2 States and local jurisdictions should verify upon delivery of a voting machine that the system matches the system that was certified.

3.3.3 Local jurisdictions should restrict access to voting equipment and document all access, as well as all changes to computer hardware or software.

3.3.4 Local jurisdictions should have backup plans in case of equipment failure on Election Day.

3.4 INTERNET VOTING

The Internet has become such a pervasive influence on modern life that it is natural for the public and election officials to begin considering ways to use it to facilitate voting. The first binding Internet election for political office took place in 2000, when the Arizona Democratic Party used it during its primary. In 2004, the Michigan Democratic Party allowed voting by Internet during its caucuses. Meanwhile, Missouri announced that any member of the U.S. military serving in combat areas overseas could complete an absentee ballot for the general election and email a scanned copy to the Department of Defense, which then would forward it to the appropriate local election offices.

Despite these much-publicized trials, serious concerns have been raised about the push for a “digital democracy.” In 2004, the Department of Defense cancelled its $22 million Secure Electronic and Voting Registration Experiment (SERVE) program designed to offer Internet voting during the presidential election to members of the U.S. military and other overseas citizens. The cancellation came after a group of top computer scientists who reviewed the system reported that without improved security, Internet voting is highly susceptible to fraud.
First, there are the issues of privacy and authentication. When using the Internet, one cannot assure voters that their ballot will remain secret. Second, the current system is not fully secure. Although data sent via the Internet can be encrypted and then decoded by local election administrators, hackers can compromise the system. This was the conclusion of the computer scientists who reviewed the SERVE program for the Pentagon. Due to security threats, some state and local election offices do not allow vote totals to be transmitted via the Internet. Third, no government or industry standards specifically apply to Internet voting technology. The EAC may begin developing such standards, but that work has not begun. Finally, Internet voting from homes and offices may not provide the same level of privacy as the voting booth.

To date, the most comprehensive study of Internet voting is contained in a 2001 report sponsored by the National Science Foundation. This report urges further research and experimentation to deal with the problems posed by this form of voting. Its authors suggest that it will take at least a decade to examine the various security and authentication issues. Our Commission agrees that such experimentation is necessary, and that the time for Internet voting has not yet arrived.
4. Expanding Access to Elections

The Commission believes that the vitality of America's democracy depends on the active participation of our citizens. Yet, even in the presidential election in 2004, when voter interest was higher than normal, more than one in three eligible voters did not participate. We need to do more to increase voter participation, and we have considered numerous methods. None of them will solve the problem, but we encourage states to experiment with alternatives to raise the level of voter participation.

Recent elections have seen a substantial increase in early voting and in voting by mail. While only 8 percent of ballots were cast before Election Day in 1994, by 2004 the percentage of ballots cast before Election Day had risen to 22 percent. This increase in early and convenience voting has had little impact on voter turnout, because citizens who vote early or vote by mail tend to vote anyway. Early and convenience voting are popular, but there is little evidence that they will significantly expand participation in elections.

There are other measures that can be taken to expand participation, particularly for military and overseas voters and for citizens with disabilities. There is also much to do with regard to civic and voter education that could have a long-term and lasting effect, particularly on young people. However, we first need to reach out to all eligible voters and remove any impediments to their participation created by the registration process or by identification requirements.

All citizens, including citizens with disabilities, need to have access to polling places. Polling places should be located in public buildings and other semipublic venues such as churches and community centers that comply with the Americans with Disability Act (ADA). Additionally, polling places should be located and protected so that voters can participate free of intimidation and harassment. Polling places should not be located in a candidate's headquarters or in homes or business establishments that are not appropriately accessible to voters with disabilities.

4.1 Assured Access to Elections

The Commission's proposals for a new electoral system contain elements to assure the quality of the list and the integrity of the ballot. But to move beyond the debate between integrity and access, specific and important steps need to be taken to assure and improve access to voting.

States have a responsibility to make voter registration accessible by taking the initiative to reach out to citizens who are not registered, for instance by implementing provisions of the National Voter Registration Act that allow voter registration at social-service agencies or by conducting voter registration and REAL ID card drives with mobile offices. Michigan, for
example, uses a mobile office to provide a range of services, including driver's licenses and voter registration. This model should be extended to all the states.

Political party and nonpartisan voter registration drives generally contribute to the electoral process by generating interest in upcoming elections and expanding participation. However, they are occasionally abused. There were reports in 2004 that some party activists failed to deliver voter registration forms of citizens who expressed a preference for the opposing party. During the U.S. House Administration Committee hearings in Ohio, election officials reported being deluged with voter registration forms at the last minute before the registration deadline, making it difficult to process these registrations in a timely manner. Many of the registration forms delivered in October to election officials were actually collected in the spring.

Each state should therefore oversee political party and nonpartisan voter registration drives to ensure that they operate effectively, that registration forms are delivered promptly to election officials, that all completed registration forms are delivered to the election officials, and that none are "culled" and omitted according to the registrant's partisan affiliation. Measures should also be adopted to track and hold accountable those who are engaged in submitting fraudulent voter registrations. Such oversight might consist of training activists who conduct voter registration drives and tracking voter registration forms to make sure they are all accounted for. The tracking of voter registration forms will require better cooperation between the federal and state governments, perhaps through the EAC, as the federal government puts some registration forms online. In addition, states should apply a criminal penalty to any activist who deliberately fails to deliver a completed voter registration form.

Recommendations on Assured Access to Elections

4.1.1 States should undertake their best efforts to make voter registration and ID accessible and available to all eligible citizens, including Americans with disabilities. States should also remove all unfair impediments to voter registration by citizens who are eligible to vote.

4.1.2 States should improve procedures for voter registration efforts that are not conducted by election officials, such as requiring state or local registration and training of any "voter registration drives."

4.1.3 Because there have been reports that some people allegedly did not deliver registration forms of those who expressed a preference for another party, states need to take special precautions to assure that all voter registration forms are fully accounted for. A unique number should be printed on the registration form and also on a detachable receipt so that the voter and the state election office can track the status of the form. In addition, voter registration forms should be returned within 14 days after they are signed.
4.2 VOTE BY MAIL

A growing number of Americans vote by mail. Oregon moved entirely to a vote-by-mail system in 1998, and the practice of casting ballots by mail has continued to expand nationwide as voters and election officials seek alternatives to the traditional system of voting at polling stations. The state legislatures of California and of Washington state have considered legislation to expand the use of vote by mail, and in 24 states no excuse is required to vote absentee.

The impact of vote by mail is mixed. Proponents argue that vote by mail facilitates participation among groups that experience low voter turnout, such as elderly Americans and Native Americans.

While vote by mail appears to increase turnout for local elections, there is no evidence that it significantly expands participation in federal elections. Moreover, it raises concerns about privacy, as citizens voting at home may come under pressure to vote for certain candidates, and it increases the risk of fraud. Oregon appears to have avoided significant fraud in its vote-by-mail elections by introducing safeguards to protect ballot integrity, including signature verification. Vote by mail is, however, likely to increase the risks of fraud and of contested elections in other states, where the population is more mobile, where there is some history of troubled elections, or where the safeguards for ballot integrity are weaker.

The case of King County, Washington, is instructive. In the 2004 gubernatorial elections, when two in three ballots there were cast by mail, authorities lacked an effective system to track the number of ballots sent or returned. As a result, King County election officials were unable to account for all absentee ballots. Moreover, a number of provisional ballots were accepted without signature verification. The failures to account for all absentee ballots and to verify signatures on provisional ballots became issues in the protracted litigation that followed Washington state’s 2004 gubernatorial election.

Vote by mail is popular but not a panacea for declining participation. While there is little evidence of fraud in Oregon, where the entire state votes by mail, absentee balloting in other states has been one of the major sources of fraud. Even in Oregon, better precautions are needed to ensure that the return of ballots is not intercepted.

The evidence on “early” voting is similar to that of vote by mail. People like it, but it does not appear to increase voter participation, and there are some drawbacks. It allows a significant portion of voters to cast their ballot before they have all of the information that will become available to the rest of the electorate. Crucial information about candidates may emerge in the final weeks or even days of an election campaign. Early and convenience voting also detracts from the collective expression of citizenship that takes place on Election Day.

An Oregon voter drops off his mail ballot (AP Photo/Rick Bowmer)
Day. Moreover, the cost of administering elections and of running campaigns tends to increase when early and mail-in voting is conducted in addition to balloting on Election Day. Early voting should commence no earlier than 15 days prior to the election, so that all voters will cast their ballots on the basis of largely comparable information about the candidates and the issues.

Recommendation on Vote by Mail

4.2.1 The Commission encourages further research on the pros and cons of vote by mail and of early voting.

4.3 VOTE CENTERS

Another alternative to voting at polling stations is the innovation of “vote centers,” pioneered by Larimer County, Colorado. Vote centers are larger in size than precincts but fewer in number. They are dispersed throughout the jurisdiction, but close to heavy traffic routes, larger residential areas, and major employers. These vote centers allow citizens to vote anywhere in the county rather than just at a designated precinct. Because these vote centers employ economies of scale, fewer poll workers are required, and they tend to be more professional. Also, the vote centers are reported to use more sophisticated technology that is more accessible to voters with disabilities. Vote centers eliminate the incidence of out-of-precinct provisional ballots, but they need to have a unified voter database that can communicate with all of the other centers in the county to ensure that eligible citizens vote only once.

While vote centers appear to have operated effectively in Larimer County, further research is needed to determine if the costs of establishing vote centers are offset by the savings of eliminating traditional polling sites. Moreover, because vote centers replace traditional voting at precincts, which are generally closer to a voter's home, it is not clear that citizens actually view them as more convenient.

Recommendations on Vote Centers

4.3.1 States should modify current election law to allow experimentation with voting centers. More research, however, is needed to assess whether voting centers expand voter participation and are cost effective.

4.3.2 Voting centers need a higher quality, computer-based registration list to assure that citizens can vote at any center without being able to vote more than once.
4.4 MILITARY AND OVERSEAS VOTING

Military and overseas voting present substantial logistical challenges, yet we cannot overstate the imperative of facilitating participation in elections by military and overseas voters, particularly by service men and women who put their lives on the line for their country. The Commission calls on every state, with federal government assistance, to make every effort to provide all military and overseas voters with ample opportunity to vote in federal elections.

More than six million eligible voters serve in the Armed Forces or live overseas. These voters include 2.7 million military and their dependents and 3.4 million diplomats, Peace Corps volunteers, and other civilian government and other citizens overseas.

Voter turnout among members of the armed forces is high. So is the level of frustration they experience when their votes cannot be counted. This happens largely because of the time required by the three-step process of applying for an absentee ballot, receiving one, and then returning a completed ballot. The process is complicated by the differences among states and among localities in the registration deadline, ballot format, and requirements for ballot return, and it is exacerbated because of the mobility of service men and women during a time of conflict. Since September 11, 2001, more than 500,000 National Guard and Reserve personnel have been mobilized, and many were relocated before they received their absentee ballots.

Congress passed the Uniformed and Overseas Citizens Absentee Voting Act (UOCAVA) in 1986 to help eligible members of the armed services and their families, and other citizens overseas, to vote. UOCAVA required each state to have a single office to provide information on voter registration and absentee ballot procedures for military voters. The Help America Vote Act of 2002 (HAVA) recommended — but did not require — that this state office should coordinate voting by military personnel by receiving absentee ballot applications and collecting voted ballots. The introduction of statewide voter registration databases under HAVA provides an opportunity to put this recommendation into practice. But aside from Alaska, which already had a single state office, no state has centralized the processing of absentee ballots. This is another example as to why recommending, rather than requiring, a course of action is insufficient.

The Commission recommends that when registering members of the armed forces and other overseas voters, states should inquire whether to send an absentee ballot to them automatically, thus saving a step in the process.

In the 2004 presidential election, approximately one in four military voters did not vote for a variety of reasons: The absentee ballots were not returned or arrived too late; they were rejected for procedural deficiencies, such as a signature not properly witnessed on the back of the return envelope; blank ballots were returned as undeliverable; or Federal Post Card Applications were rejected.
The U.S. Department of Defense’s Federal Voting Assistance Program, which assists military and overseas voters, tried to reduce the time lag for absentee voting by launching an electronic voting experiment. However, this experiment was ended because of fundamental security problems (see above on “Internet voting”). In the meantime, the Federal Voting Assistance Program encouraged states to send blank ballots out electronically and to accept voted ballots by fax. There now are 32 states that permit fax delivery of a blank ballot to military voters and 25 states that allow military voters to return their voted ballot by fax. In addition, some jurisdictions allow the delivery of blank ballots by email. The return of voted ballots by fax or email, however, is a violation of the key principle of a secret ballot, and it is vulnerable to abuse or fraud.

Although the Uniformed and Overseas Citizens Absentee Voting Act applies to both military and nonmilitary voters overseas, procedures to facilitate overseas voting serve military voters better than civilians. To provide civilian overseas voters with equal opportunities to participate in federal elections, new approaches are needed at both the federal and state levels.

Recommendations on Military and Overseas Voting

4.4.1 The law calling for state offices to process absentee ballots for military and overseas government and civilian voters should be implemented fully, and these offices should be under the supervision of the state election offices.

4.4.2 New approaches should be adopted at the federal and state levels to facilitate voting by civilian voters overseas.

4.4.3 U.S. Department of Defense (DOD) should supply to all military posted outside the United States a Federal Postcard Application for voter registration and a Federal Write-in Absentee Ballot for calendar years in which there are federal elections. With adequate security protections, it would be preferable for the application forms for absentee ballots to be filed by Internet.

4.4.4 The states, in coordination with the U.S. Department of Defense’s Federal Voting Assistance Program, should develop a system to expedite the delivery of ballots to military and overseas civilian voters by fax, email, or overnight delivery service, but voted ballots should be returned by regular mail, and by overnight mail whenever possible. The Defense Department should give higher priority to using military aircraft returning from bases overseas to carry ballots. Voted ballots should not be returned by email or by fax as this violates the secrecy of the ballot and is vulnerable to fraud.

4.4.5 All ballots subject to the Uniform and Overseas Civilians Absentee Voting Act must be mailed out at least 45 days before the election (if request is received by then) or within two days of receipt after that. If the ballot is not yet set, due to litigation, a late vacancy, etc., a temporary ballot listing all settled offices and ballot issues must be mailed.
4.4.6 States should count the ballots of military and overseas voters up to 10 days after an election if the ballots are postmarked by Election Day.

4.4.7 As the technology advances and the costs decline, tracking systems should be added to absentee ballots so that military and overseas voters may verify the delivery of their voted absentee ballots.

4.4.8 The Federal Voting Assistance Program should receive a copy of the report that states are required under HAVA to provide the EAC on the number of absentee ballots sent to and received from military and overseas voters.

4.5 ACCESS FOR VOTERS WITH DISABILITIES

There are almost 30 million voting-aged Americans with some kind of disability—about 15 percent of the population (see Table 3 on page 40). Less than half of them vote. There are federal laws to facilitate voting and registration by eligible Americans with disabilities, but these laws have not been implemented with any vigor. As a result, voters with disabilities still face serious barriers to voting. Congress passed the Voting Accessibility for the Elderly and Handicapped Act in 1984 and the Americans with Disabilities Act of 1990, which required local authorities to make polling places physically accessible to people with disabilities for federal elections. Yet a Government Accountability Office survey of the nation’s polling places in 2000 found that 84 percent of polling places were not accessible on Election Day. By 2004, accessibility for voters with disabilities had improved only marginally. Missouri, for example, surveyed every polling place in the state and found that 71 percent were not accessible. Most other states have not even conducted surveys.

There is similarly weak implementation of laws designed to facilitate voter registration by citizens with disabilities. Section 7 of the National Voter Registration Act (NVRA) requires state-funded agencies which provide services to citizens with disabilities to offer the opportunity to register citizens to vote. Implementation of this requirement, according to advocates for voters with disabilities, is rare or poor.
HAVA provided additional support to Section 7 of NVRA by including social-service agencies as places to register voters, but only one state, Kentucky, has complied with Section 7, according to advocates for voters with disabilities. Moreover, at the current time, there is not a single case where the new statewide voter databases comply with Section 7. Thus, 12 years after the National Voter Registration Act was passed, voters with disabilities still cannot apply for voter registration at all social service offices.

<table>
<thead>
<tr>
<th>Disability Type</th>
<th>Population Age 16 and Older (in millions)</th>
<th>Percent of Total Voting Age Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sensory, Physical, Mental or Self-Care Disability</td>
<td>29.5</td>
<td>15%</td>
</tr>
<tr>
<td>Self-Care Disability</td>
<td>6.4</td>
<td>3%</td>
</tr>
<tr>
<td>Physical Disability</td>
<td>12.5</td>
<td>6%</td>
</tr>
<tr>
<td>Mental Disability</td>
<td>4.0</td>
<td>2%</td>
</tr>
<tr>
<td>Sensory Disability</td>
<td>3.9</td>
<td>2%</td>
</tr>
<tr>
<td>Sensory and Physical Disability</td>
<td>2.5</td>
<td>1%</td>
</tr>
<tr>
<td>Sensory, Physical, and Mental Disability</td>
<td>2.0</td>
<td>1%</td>
</tr>
<tr>
<td>Total Voting Age Population in the U.S. (18 and older)</td>
<td>203.0</td>
<td>100%</td>
</tr>
</tbody>
</table>

Notes: Respondents were able to report more than one type of disability.

Sources: U.S. Census Bureau, Selected Types of Disability for the Civilian Noninstitutionalized Population 5 Years and Over by Age: 2000; U.S. Census Bureau, Voting and Registration in the Election of November 2000.

Recommendations on Access for Voters With Disabilities

4.5.1 To improve accessibility of polling places for voters with disabilities, the U.S. Department of Justice should improve its enforcement of the Americans with Disabilities Act and the accessibility requirements set by the Help America Vote Act.

4.5.2 States should make their voter registration databases interoperable with social-service agency databases and facilitate voter registration at social-service offices by citizens with disabilities.

4.5.3 States and local jurisdictions should allow voters with disabilities to request an absentee ballot when they register and to receive an absentee ballot automatically for every subsequent election. Local election officials should determine which voters with disabilities would qualify.

4.6 RE-ENFRANCHISEMENT OF EX-FELONS

Only Maine and Vermont allow incarcerated citizens to vote. In all other states, citizens who are convicted of a felony lose their right to vote, either temporarily or permanently. An estimated 4.65 million Americans have currently or permanently lost their right to vote as a result of a felony conviction. Most states reinstate that right upon completion of the full sentence, including of parole, but three states — Florida, Kentucky, and Virginia — permanently ban all ex-felons from voting, and another 10 states have a permanent ban on voting for ex-felons.
voting by certain categories of ex-felons. These laws have a disproportionate impact on minorities.

Some states impose a waiting period after felons complete their sentence before they can vote. Few states take the initiative to inform ex-felons when their voting rights are restored. As a result, only a small portion of the ex-felons who have regained their voting rights are registered to vote.

Proponents of re-enfranchisement argue that ex-felons have paid their debt to society when they have completed their full sentence. Restoring their right to vote would encourage them to reintegrate into society. Each state therefore should automatically restore the voting rights of ex-felons who have completed their full sentence, including any terms of parole and compensation to victims. Opponents of re-enfranchisement, however, see this as a "punishment" issue rather than a "voting rights" issue. They believe that each state should be free to decide whether to restore the voting rights of ex-felons. States set punishment for state crimes, and this often extends beyond the completion of a felon's sentence. Ex-felons are, for instance, usually barred from purchasing firearms or from getting a job as a public-school teacher. Nonetheless, weighing both sides of the debate, the Commission believes that voting rights should be restored to certain categories of felons after they served the debt to society.

Recommendations on Re-Enfranchisement of Ex-Felons

**4.6.1** States should allow for restoration of voting rights to otherwise eligible citizens who have been convicted of a felony (other than for a capital crime or one which requires enrollment with an offender registry for sex crimes) once they have fully served their sentence, including any term of probation or parole.

**4.6.2** States should provide information on voter registration to ex-felons who have become eligible to vote. In addition, each state's department of corrections should automatically notify the state election office when a felon has regained eligibility to vote.

**4.7 VOTER AND CIVIC EDUCATION**

Among the simplest ways to promote greater and more informed participation in elections is to provide citizens with basic information on voting and the choices that voters will face in the polling booth. HAVA requires only that basic voter information, including a sample ballot and instructions on how to vote, be posted at each polling site on Election Day. However, additional voter information is needed.

States or local jurisdictions should provide information by mail and on their Web sites to educate voters on the upcoming ballot — on the issues and the candidates, who will provide the information about themselves. Local election officials should set limits on the amount — but not the content — of information to be provided by the candidates. In Washington state, for example, every household is mailed a pamphlet with information on how to register, where to vote, and texts of election laws and proposed ballot initiatives and
referendums. This voter's pamphlet also has a picture of each candidate for statewide office and a statement of the candidate’s goals for the office they seek. In addition, there should be greater use of the radio and television to communicate these messages.

Efforts to provide voter information and education to young Americans merit particular attention. Voter turnout among youth declined steadily from the 1970s to 2000, when it was 24 percent lower than turnout of the entire electorate. In 2004, however, there was a surge of 11 percent in voter turnout among Americans aged 18 to 24, and the gap between youth turnout and overall turnout dropped to 17 percent (see Table 4). 51

While participation by youth increased significantly in the last election, it continues to lag far behind the rest of the population. It can and should be increased by instructing high school students on their voting rights and civic responsibilities. Just one course in civics or American government can have a strong influence on youth participation in elections. According to a 2003 survey, about twice as many young Americans who have taken a civics course are registered to vote and have voted in all or most elections than young Americans who have never taken such a course. 52

Moreover, Americans want public schools to prepare their children for citizenship and to provide better civic education. While most Americans believe that the most important goal of public schools is to develop basic skills, seven in 10 respondents to a 2004 survey agreed that preparing students to become responsible citizens is a “central purpose of public schools.” When asked to grade the civic education programs of public schools, 54 percent of respondents give these programs a “C” and 22 percent give them a “D.” 53

It is difficult to assess the current efforts of state and local voting and civic education programs because only one state, Florida, publishes a report on its activities and spending in this area. We recommend that more states and local jurisdictions follow Florida’s example in order to generate more information on the most effective methods for voter and civic education.

TABLE 4:
Voter Turnout in Presidential Elections by Age, 1972-2004

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>18 to 24 years</td>
<td>49.6</td>
<td>42.2</td>
<td>39.9</td>
<td>40.8</td>
<td>36.2</td>
<td>42.8</td>
<td>32.4</td>
<td>32.3</td>
<td>41.9</td>
</tr>
<tr>
<td>25 to 44 years</td>
<td>62.7</td>
<td>58.7</td>
<td>58.7</td>
<td>58.4</td>
<td>54.0</td>
<td>58.3</td>
<td>49.2</td>
<td>49.8</td>
<td>52.2</td>
</tr>
<tr>
<td>45 to 64 years</td>
<td>70.8</td>
<td>68.7</td>
<td>69.3</td>
<td>69.8</td>
<td>67.9</td>
<td>70.0</td>
<td>64.4</td>
<td>64.1</td>
<td>66.6</td>
</tr>
<tr>
<td>65 years+</td>
<td>63.5</td>
<td>62.2</td>
<td>65.1</td>
<td>67.7</td>
<td>68.8</td>
<td>70.1</td>
<td>67.0</td>
<td>67.6</td>
<td>68.9</td>
</tr>
</tbody>
</table>

Recommendations on Voter and Civic Education

4.7.1 Each state should publish a report on its voter education spending and activities.

4.7.2 States should engage in appropriate voter education efforts in coordination with local election authorities to assure that all citizens in their state have the information necessary to participate in the election process.

4.7.3 Each state should use its best efforts to instruct all high school students on voting rights and how to register to vote. In addition, civic education programs should be encouraged in the senior year of high school, as these have been demonstrated to increase voter participation by youth.

4.7.4 Local election authorities should mail written notices to voters in advance of an election advising the voter of the date and time of the election and the polling place where the voter can cast a ballot and encouraging the citizens to vote. The notice should also provide a phone number for the voter to contact the election authorities with any questions.

4.7.5 States should mail pamphlets to voters, and post the pamphlet material on their Web sites, to provide information about the candidates for statewide office and about ballot initiatives and referenda.

4.7.6 The federal government should provide matching funds for the states to encourage civic and voter education and advertisements aimed to encourage people to vote.