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OLDER VOTERS: OPPORTUNITIES AND CHALLENGES IN THE 2008 ELECTIONS

HEARING

BEFORE THE

SPECIAL COMMITTEE ON AGING
UNITED STATES SENATE

ONE HUNDRED TENTH CONGRESS

SECOND SESSION

WASHINGTON, DC

January 31, 2008

Serial No. 110–20

Printed for the use of the Special Committee on Aging

Available via the World Wide Web: http://www.gpoaccess.gov/congress/index.html
U.S. GOVERNMENT PRINTING OFFICE
44–092 PDF WASHINGTON : 2008

For sale by the Superintendent of Documents, U.S. Government Printing Office
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OLDER VOTERS: OPPORTUNITIES AND CHALLENGES IN THE 2008 ELECTIONS

THURSDAY, JANUARY 31, 2008

U.S. SENATE,
SPECIAL COMMITTEE ON AGING,
Washington, DC.

The Committee met, pursuant to notice, at 10:50 a.m., in room SH–216, Hart Senate Office Building, Hon. Herb Kohl (chairman of the committee) presiding.

Present: Senators Kohl, Smith, Salazar, McCaskill, and Wyden.

OPENING STATEMENT OF SENATOR HERB KOHL, CHAIRMAN

The CHAIRMAN. Good morning to one and all. We would like to welcome all of you to our hearing. Today this Committee will focus on older workers and the various barriers they face in exercising their right to vote.

What sets this topic apart from others on the Aging Committee is that voting is not a benefit of our great society, but it is a right. Things like lower drug prices and consumer protection are things we would like to afford older Americans, and that we certainly think that they deserve. But the right to vote is fundamental and undeniable, and it does not expire with age.

Twenty-four States will hold primary elections on Super Tuesday, just 5 days from now. Eight of these States facilitate voting in long-term care settings, either by setting up public polling locations on the premises, sending election officials into the facility to assist seniors, or helping nursing home administrators obtain absentee ballots in advance.

But the other 16 States currently make no accommodations for voters living in long-term care settings, and long-term care administrators are offered no direction from election officials as to how they should assist their residents with their voting.

Today I am sending a letter, along with Rules Committee Chairman Dianne Feinstein, to request that the Election Assistance Commission conduct research on voting within long-term care settings, and develop voluntary guidelines to help States facilitate such voting. We hope this will help address barriers to voting within these settings.

There is also the matter of disabled older voters outside of the long-term care setting. Many States, like my own State of Wisconsin, do have laws on the books requiring that all polling sites are accessible to disabled individuals.

Unfortunately, such laws do not always dictate reality and voting sites are often found to be not in compliance. During the 2000 elec-

tions the GAO found that only 16 percent of polling sites surveyed nationwide were fully accessible to people with disabilities.

This has a real impact on older voters because, in spite of their tendency to be more engaged politically, older voters with a disability are almost 50 percent less likely to vote than their peers without a disability.

Several of my Senate colleagues and I will ask GAO to follow up on their previous study and monitor the level of accessibility during the 2008 elections. There is no reason for States to fall down on the job of voter accessibility. We know that innovative mechanisms exist to allow older and disabled Americans to vote, regardless of their physical disabilities.

Ranking Member Gordon Smith, who is sitting beside me, hails from Oregon, where all residents vote by mail. As I understand it, that State has seen an increase in voting between 5 and 10 percent. We will also hear about Vermont's vote-by-phone system today.

Finally, our hearing today will also touch on the issue of voter ID. Currently the Supreme Court is considering whether an Indiana requirement designed to stem voter fraud will actually result in discriminating against the elderly, minority, and low-income populations who are less likely to have proper identification. Studies have found that seniors are more likely to lose their right to vote when voter ID is implemented.

My State of Wisconsin has been battling over its own voter ID proposals. A 2005 study by the University of Wisconsin found that 23 percent of people age 65 and older in Wisconsin do not have a driver's license or other photo ID. A Supreme Court ruling on the Indiana law is expected by late June and is sure to have national implications for current and future voter ID laws.

As you listen to our witnesses this morning, and when you leave this room and return to the barrage of nonstop election coverage, please keep in mind the message of today's hearing. If we do not remove the barriers that prevent elderly and disabled citizens from exercising their right to vote, then we are for all intents and purposes disenfranchising them.

So we thank our witnesses who are here today with us.

We now turn to our distinguished Ranking Member, Gordon Smith, for his opening comments.

OPENING STATEMENT OF SENATOR GORDON SMITH, RANKING MEMBER

Senator SMITH. Thank you, Mr. Chairman.

To all our witnesses, we welcome you. We thank you for your time and the attention you are giving to this vital question of how we make sure that our senior citizens continue to enjoy the right of the franchise in an unfettered way.

Mr. Chairman, with your permission, I will put my opening statement in the record. It largely reflects your own. But I would just make these comments.

Oregon has one way of doing it. It is vote-by-mail. It has been a success. It is a better success every election because it has gotten better every election in terms of the integrity of the ballot, and

shoring up loopholes that somehow add to or dilute the integrity of the result.

So, I congratulate both our people for voting for this, and also the way our State officials have worked hard to implement it. It does make it easier for the elderly and the disabled to vote.

However States choose to devise it, as is their constitutional right, I would simply say make it as easy as possible but emphasize the integrity of it. I feel like the Carter-Baker commission report as to real ID actually makes a lot of sense because of what I hear from seniors in Oregon.

I know there are different opinions on this, but if you go with me to a nursing home in Oregon and you talk about voting, one of the concerns that is often expressed to me by seniors is that somehow their vote is added to, or taken away from, by those not constitutionally eligible to vote.

I think they express that with such vigor because it was their generation that died in the hundreds of thousands defending the right to vote, the franchise. They don't want to see it trampled upon by those who are not constitutionally eligible.

So I feel very strongly about that. I think Oregon has got it right and I think we are getting it better all the time.

But I do think—you know, obviously as you note, Mr. Chairman, the Supreme Court will take up this issue. After some of the memories we have had in recent elections with charges and countercharges of fraud, I think it is incumbent upon public officials to do everything they can to make sure that votes are accessible, but that they are lawful. We owe them both of those values and that ought to be our focus.

Thank you.

PREPARED STATEMENT OF SENATOR GORDON H. SMITH

Mr. Chairman, thank you for holding today's hearing on older voters.

From paper ballots and mechanical levers to vote-by-mail, as we do in my home state of Oregon, our nation has experimented with different ways for Americans to cast their votes. Although some of the mechanics of casting a ballot have changed over our country's history, voting remains the ultimate demonstration of our democracy at work. That is why voter access to the polls and the preservation of the integrity of our voting system is imperative to ensure maximum voter participation and confidence in the system.

America's elderly encounter particular challenges when voting. Many individuals lack access to transportation to and from polling locations, while others have physical impairments that present challenges to cast a ballot. Furthermore, alternative forms of voting, such as absentee balloting, often can be complicated and confusing for seniors. I look forward to hearing from our witnesses about how we can properly address these challenges and identify opportunities for older voters to cast their votes with ease and confidence to ensure they remain engaged in elections.

In addition to enhancing the accessibility of voting, we also must take measures to deter and detect fraud in our voting system. Several states have adopted Voter ID laws that require voters to present identification at the polls. And in 2005, the Carter-Baker Commission recommended states use "REAL ID" complaint cards for voting purposes. In large part, I support the recommendations of the bipartisan Commission to enhance the integrity of our voting system. However, we must look for ways that minimize the impact on seniors and persons with disabilities to encourage their participation in our democratic process.

Mr. Chairman, I like you, want to ensure that seniors do not experience barriers to the voting booth when Election Day arrives. I look forward to hearing from our witnesses about innovative approaches to ensure elderly voters have appropriate access to cast a ballot in a simple and secure manner.

Thank you Mr. Chairman.

The CHAIRMAN. Thank you, Senator Smith, for your very outstanding comments.

On the witness panel, our first witness today will be Barbara Bovbjerg. Ms. Bovbjerg is director of education, workforce and income security issues at the U.S. Government Accountability Office. There, she oversees evaluative studies on aging and retirement income policy issues. Previously, Ms. Bovbjerg was assistant director for budget issues at the GAO.

She is accompanied here today by her colleague, William Jenkins, Jr., who serves as director for Homeland Security and Justice at GAO, where he leads GAO's work on emergency preparedness and response, the Federal judiciary and elections. I am also pleased to note that he received his Ph.D. in public law from the University of Wisconsin.

Our second witness will be Vermont's Secretary of State Deborah Markowitz. She is the first woman to be elected secretary of state in Vermont and is currently serving her fifth term in office.

As secretary of state, Ms. Markowitz is the constitutional officer chiefly responsible for Vermont's election and for providing education assistance to the State's local officials. During her term she has implemented an ambitious election reform agenda including widespread voter education and outreach programs, some of which we hope to hear about today.

Our third witness will be Michael Waterstone, who is an associate professor of law at the Loyola Law School in Los Angeles. Mr. Waterstone is a nationally recognized expert in disability and civil rights law. He is also a commissioner on the American Bar Association's Commission on Physical and Mental Disability, as well as a board member of the Disability Rights Legal Center.

Next we will hear from Dr. Jason Karlawish who is an assistant professor of medicine within the geriatric division at the University of Pennsylvania. He is also a fellow of the University Center for Bioethics, and the senior fellow on the Leonard Davis Institute of Health Economics.

Dr. Karlawish's research has included the ethical, legal, and social issues raised by persons voting in long-term care settings.

Finally, we will hear from Wendy Weiser, deputy director of the Democracy Program at the Brennan Center for Justice at NYU law School of Law, where she directs the center's work on voting rights and elections.

She has authored a number of reports and papers on election reform, litigated ground-breaking voting rights lawsuits, and provided policy and legislative drafting assistance to Federal and State legislators and administrators all across our country.

So we thank you all for being here today.

We will start with you, Ms. Bovbjerg.

STATEMENT OF BARBARA BOVBJERG, DIRECTOR, EDUCATION, WORKFORCE AND INCOME SECURITY ISSUES, U.S. GOVERNMENT ACCOUNTABILITY OFFICE, WASHINGTON, DC

Ms. BOVBJERG. Thank you, Mr. Chairman, Senator Smith.

I am pleased to be here today with my colleague to speak about access to voting for older Americans. Voting is fundamental to our democratic system, and Federal law has generally required polling places to be accessible to the elderly and to people with disabilities.

Yet, assuring access to the variety of polling places and voting methods used can challenge State and local election officials. The Help America Vote Act of 2002 has sought to improve this situation by requiring accessibility in voting systems and providing funding to support it.

Our testimony today focuses on a number of factors that affect older voters, including their ability to travel to polling places, their ability to enter polling places once they get there, their ability to cast their votes using available equipment and assistance, and the ability to utilize alternative voting provisions, such as absentee or early voting or mail voting.

Our statement is drawn from a broad range of GAO work, and particularly our onsite observations on accessibility during Election Day 2000. But I will speak first about travel to the polling place.

Transportation challenges become more acute with age and can limit seniors' ability to reach polling places. While most older adults drive, their abilities can deteriorate. Each year, roughly 600,000 older people stop driving and become dependent on others for transportation.

For those who do not or cannot drive, our previous work for this Committee found transportation gaps only partly filled by partnerships across governments and nonprofits. Thus, some older Americans may not be able to join their neighbors at polling places on election day.

As for those who are able to come to the polls, the immediate vicinity of the polling place may pose additional obstacles. In our Election Day 2000 work we visited 496 polling sites in 100 counties across the country and examined each for features that could impede access.

We looked at the parking areas, the route from those areas to the building entrance, the route from the entrance to the voting room and various other aspects of voting. These onsite inspections revealed that only about 16 percent of polling places nationwide were free of impediments that could prevent elderly or disabled voters from reaching the voting room.

Of those sites with impediments, about two-thirds offered curbside voting. However, advocates for disabled Americans note that such measures still do not provide an opportunity to vote in the same manner as the general public.

Our subsequent work on access suggests improvements since the 2000 election. In our 2005 survey of all States and a sample of local jurisdictions, State provisions for polling place access have increased, and the funding provided through the new Federal election law has had an impact. However, until voting sites are inspected again we cannot know how much on-the-ground impact these provisions have had.

With regard to voting itself, that is, the system in the voting room that allows voters to cast their ballots, our findings were similar. On Election Day 2000 we saw challenges posed by the voting systems used and by the configuration of the voting booths, although some form of assistance was usually available in the voting room.

Forty-three percent of polling places used paper or scanable ballots, which was challenging for voters with impaired dexterity. We also found that many of the voting booths were not appropriately configured for wheelchairs. But most offered assistance, and a small majority provided written instructions or sample ballots in very large type. None provided ballots or equipment for blind voters.

But the situation has improved. Our 2005 survey of State and local jurisdictions reported an increase in State provisions for accessible voting equipment compared to our 2000 review, although difficulties in assuring reliability and security of new voting systems is causing some States to abandon new and potentially more accessible technology.

Finally, let me turn to alternative methods. Federal law has long required that elderly or disabled voters assigned to an inaccessible polling place be provided with an alternative means for casting a ballot. Alternative methods may include curbside voting, early voting, or absentee voting, among other things.

State provisions allowing alternative methods have generally increased since 2000. For example, the number of States that will carry ballots to a voter's residence has risen from 21 to 25. In addition, 21 States reported allowing voters to vote absentee without requiring a reason or an excuse. That is three more than in 2000.

Although such accommodation may be more commonly offered now, our experience in 2000 suggested there may be wide variation in implementation.

In conclusion the increase in State provisions and reports of practices to improve accessibility is encouraging. The complexity, though, of the election system and the expense of changing it suggests that not all such policies will be in evidence at polling places on Election Day 2008.

Yet, the aging in the American population and the concomitant growth in voters needing accommodation will increase the urgency for policies of this nature to be implemented on the ground. Clearly, improved access will require sustained attention from election officials at all levels of government.

That concludes my statement. I await your questions.

[The prepared statement of Ms. Bovbjerg follows:]

United States Government Accountability Office

GAO

Testimony
Before the Special Committee on Aging, United States Senate

For Release on Delivery
Expected at 10:30 EST
Thursday, January 31, 2008

ELDERLY VOTERS

Some Improvements in Voting Accessibility from 2000 to 2004 Elections, but Gaps in Policy and Implementation Remain

Statement of Barbara D. Bovbjerg, Director, Education, Workforce, and Income Security, and William O. Jenkins, Director, Homeland Security and Justice

GAO-08-442T

January 31, 2008

GAO

Highlights

Why GAO Did This Study

What GAO Found

ELDERLY VOTERS

Some Improvements in Voting Accessibility from 2000 to 2004 Elections, but Gaps in Policy and Implementation Remain

Ensuring that older voters or other individuals with disabilities successfully cast their votes in an election requires that policymakers think broadly about access. This includes access with respect to transportation, polling places, voting equipment, and alternative voting methods. During the 2000 election, most polling places we inspected had one or more potential impediments that might prevent older voters and voters with disabilities from reaching voting rooms, although curbside voting accommodations were often made available. Additionally, our 2000 review of state provisions and practices related to accessible voting systems and accommodations in the voting room revealed that provisions to accommodate individuals with disabilities varied from state to state and may vary widely in their implementation. A 2004 GAO report also found transportation gaps in meeting the needs of seniors, which may create a barrier to voting for many elderly voters, and a lack of data on the extent of unmet needs.

Since the passage of HAVA and the subsequent 2004 election, we have identified a number of reported efforts taken to improve voting access for people with disabilities. In particular, our 2006 report on election systems shows a marked increase in state provisions addressing the accessibility of polling places, voting systems, and alternative voting methods. However, the degree of change in accessibility is difficult to determine, in part because thousands of jurisdictions have primary responsibility for managing elections and ensuring an accurate vote count, and the complexity of the election system does not ensure that these provisions and reported practices are reflective of what occurs at polling places on election day.

Understanding and addressing accessibility gaps represent enormous tasks for state and local election officials who are challenged by the multiplicity of responsibilities and requirements they must attend to within resource constraints. At the same time, as the population ages and the percentage of voters with disabilities expands, the expectation of accommodation and assistance to participate in this basic civic exercise will grow, making accessibility a key performance goal for our election community.

United States Government Accountability Office
Washington, DC 20548

January 31, 2008

Mr. Chairman and Members of the Committee:

We appreciate the opportunity to participate in today's hearing on older Americans' access to voting. Voting is fundamental to our democratic system, and federal law generally requires polling places for federal elections to be accessible to all eligible voters, including older voters and voters with physical disabilities. In particular, the Voting Accessibility for the Elderly and Handicapped Act requires that, with a few exceptions, local election jurisdictions assure that polling places used in federal elections are accessible, in a manner as determined by the state, to the elderly and voters with disabilities. These requirements can present a challenge to state and local election officials because achieving accessibility—which is affected by the type of impairment and various barriers posed by polling place facilities and voting methods—is part of a larger set of challenges they face in administering elections on a periodic basis. Following reports of problems encountered in the close 2000 presidential election with respect to voter registration lists, absentee ballots, ballot counting, and antiquated voting systems, the Help America Vote Act of 2002 (HAVA) was enacted. Among others, HAVA contains provisions to help facilitate voting for individuals with disabilities, many of whom are also elderly, including requirements for the accessibility of voting systems used in elections for federal office, effective January 1, 2006, and authorizing the appropriation of funding for payments to states to improve the accessibility of polling places.

Our testimony today will focus on a number of factors that affect the ability of older voters to travel to polling places, enter polling places, and cast their vote once they arrive in the voting room; or to avail themselves of alternative voting provisions, including absentee and curbside voting. It will also describe trends and changes regarding accessibility of polling places and alternative voting methods—as manifested in state provisions or reported in surveys and discovered during site visits—since the 2000 election. As agreed, our statement will draw from the broad array of prior work that has a bearing on voting access for older voters, including our 2001 report on accessibility of polling places for election year 2000,[1] our

[1] GAO, *Voters with Disabilities: Access to Polling Places and Alternative Voting Methods*, GAO-02-107 (Washington, D.C.: Oct. 15, 2001).

2004 report on transportation-disadvantaged seniors,[2] our 2006 report covering a range of election issues as of election year 2004,[3] our 2007 testimony on electronic voting system challenges,[4] and our 2008 report on bilingual voting assistance.[5] The GAO reports on which this testimony is based were conducted in accordance with generally accepted government auditing standards. The scope of this testimony will not cover accessibility for older voters with cognitive impairments, nor will it cover registration challenges for older voters.

Overall, our work prior to the 2004 general election—including on-site inspections of a national sample of polling places in election year 2000 and a review of transportation issues facing seniors—has identified a number of potential barriers to voting for older Americans. We found transportation gaps in meeting the needs of seniors and lack of data on the extent of unmet needs. Significantly, we found that most polling places we inspected had one or more potential impediments for people with mobility impairments—only 16 percent had no impediments—although some provided for curbside voting. Since the passage of HAVA, and after the 2004 election, we surveyed state and local election jurisdictions and identified a number of reported efforts taken to improve voting access for people with disabilities.[6] In particular, we found a marked increase in state provisions addressing accessibility of polling places and voting systems, and alternative voting methods, such as curbside and absentee voting. However, achieving accessibility in the polling place and with respect to voting systems is complicated by the fact that thousands of jurisdictions have primary responsibility for managing and conducting elections and ensuring an accurate vote count. We have not examined the extent to which the improvements reported by state and local election jurisdictions since November 2000 have been implemented and, thus, do

[2] GAO, *Transportation-Disadvantaged Seniors: Efforts to Enhance Senior Mobility Could Benefit from Additional Guidance and Information*, GAO-04-971 (Washington, D.C.: Aug. 30, 2004).

[3] GAO, *Elections: The Nation's Evolving Election System as Reflected in the November 2004 General Election*, GAO-06-450 (Washington, D.C.: June 6, 2006).

[4] GAO, *Elections: All Levels of Government Are Needed to Address Electronic Voting System Challenges*, GAO-07-741T (Washington, D.C.: Apr. 18, 2007).

[5] GAO, *Bilingual Voting Assistance: Selected Jurisdictions' Strategies for Identifying Needs and Providing Assistance*, GAO-08-182 (Washington, D.C.: Jan. 18, 2008).

[6] Oregon has, since 1998, conducted its elections almost exclusively by mail ballot; thus, it has no polling places.

not know the extent to which they have yielded improved accessibility of polling places and voting systems.

Background

The proportion of older people in the United States who may face challenges exercising the right to vote is growing. As of 2003, there were almost 36 million individuals aged 65 or older (12 percent of the population), and the majority have at least one chronic health condition. By 2030, those aged 65 and over will grow to more than 20 percent of the population. Disability increases with age, and studies have shown that with every 10 years after reaching the age of 65, the risk of losing mobility doubles.[7] In many ways, lack of mobility and other types of impairments can diminish seniors' ability to vote without some assistance or accommodation. With increased age, seniors will become more limited in their ability to get to polling places by driving, walking, or using public transportation. Once seniors arrive at the polling places, they may face additional challenges, depending on the availability of accessible parking areas, accessibility of polling places, type and complexity of the voting equipment, availability of alternative voting methods (such as absentee voting), and the availability of voting assistance or aids.

Responsibility for holding elections and ensuring voter access primarily rests with state and local governments. Each state sets the requirements for conducting local, state, and federal elections within the state. For example, states regulate such aspects of elections as ballot access, absentee voting requirements, establishment of voting places, provision of election day workers, and counting and certifying the vote. The states, in turn have typically delegated responsibility for administering and funding state election systems to the thousands of local election jurisdictions—more than 10,000 nationwide—creating even more variability among our nation's election systems.

Although state and local governments are responsible for running elections, Congress has authority to affect the administration of elections. Federal laws have been enacted in several major areas of the voting process, including several that are designed to help ensure that voting is accessible for the elderly and people with disabilities. Most importantly, the Voting Accessibility for the Elderly and Handicapped Act (VAEHA),

[7] See Wan He, Manisha Sangupta, Victoria A. Velkoff, and Kimberly A. DeBarros, *65+ in the United States: 2005*, Current Population Reports Special Studies, pp. 23-209(Washington, D.C.: Dec. 2005).

enacted in 1984, requires that political subdivisions responsible for conducting elections assure that all polling places for federal elections are accessible to elderly voters and voters with disabilities (with limited exceptions). Any elderly voter or voter with a disability assigned to an inaccessible polling place, upon his or her advance request, must be assigned to an accessible polling place or be provided with an alternative means for casting a ballot on the day of the election. Under the VAEHA, the definition of "accessible" is determined under guidelines established by each state's chief election officer, but the law does not specify what those guidelines shall contain or the form those guidelines should take. Additionally, states are required to make available voting aids for elderly and disabled voters, including instructions printed in large type at each polling place, and information by telecommunications devices for the deaf. The VAEHA also contains a provision requiring public notice, calculated to reach elderly and disabled voters, of absentee voting procedures.

HAVA also contains a number of provisions designed to help increase the accessibility of voting for individuals with disabilities. For example, under HAVA, voting systems for federal elections must be accessible for individuals with disabilities in a manner that provides the same opportunity for access and participation as for other voters. To satisfy this requirement, each polling place must have at least one voting system equipped for individuals with disabilities. In addition, the Secretary of Health and Human Services is required to make yearly payments (in an amount of the Secretary's choosing) to each eligible state and unit of local government, and such payments must be used for (1) making polling places (including path of travel, entrances, exits, and voting areas) accessible to individuals with disabilities, and (2) providing individuals with disabilities with information about the accessibility of polling places. The Act also created the U.S. Election Assistance Commission (EAC) to serve, among other things, as a clearinghouse and information resource for election officials with respect to the administration of federal elections. For example, the EAC is to periodically conduct and make available to the public studies regarding methods of ensuring accessibility of voting, polling places, and voting equipment to all voters, including individuals with disabilities. Under HAVA, the EAC is also to make grants for carrying out both research and development to improve various aspects of voting equipment and voting technology, and pilot programs to test new technologies in voting systems. To be eligible for such grants, an entity must certify that it will take into account the need to make voting equipment fully accessible for individuals with disabilities.

The Voting Rights Act of 1965 (VRA), as amended, provides for voter assistance in the voting room. Specifically, the VRA, among other things, authorizes voting assistance for blind, disabled, or illiterate persons. Voters who require assistance to vote by reason of blindness, disability, or inability to read or write may be given assistance by a person of the voter's choice, other than the voter's employer or agent of that employer or officer or agent of the voter's union.

Other laws also help to ensure voting access for the elderly and people with disabilities—albeit indirectly. For example, Title II of the Americans with Disabilities Act of 1990 (ADA) and its implementing regulations require that people with disabilities have access to basic public services, including the right to vote. However, it does not strictly require that all polling place sites be accessible. Under the ADA, public entities must make reasonable modifications in policies, practices, or procedures to avoid discrimination against people with disabilities. Moreover, no individual with a disability may, by reason of the disability, be excluded from participating in or be denied the benefits of any public program, service, or activity. State and local governments may comply with ADA accessibility requirements in a variety of ways, such as by redesigning equipment, reassigning services to accessible buildings or alternative accessible sites, or altering existing facilities or constructing new ones. However, state and local governments are not required to take actions that would threaten or destroy the historic significance of a historic property, fundamentally alter the nature of a service, or impose undue financial and administrative burdens. In choosing between available methods of complying with the ADA, state and local governments must give priority to the choices that offer services, programs, and activities in the most integrated setting appropriate.

Title III of the ADA covers commercial facilities and places of public accommodation. Such facilities may also be used as polling places. Under Title III, public accommodations must make reasonable modifications in policies, practices, or procedures to facilitate access for individuals with disabilities. They must also ensure that no individual with a disability is excluded or denied services because of the absence of "auxiliary aids and services," which include both effective methods of making aurally and visually delivered materials available to individuals with impairments, and acquisition or modification of equipment or devices. Public accommodations are also required to remove physical barriers in existing buildings when it is "readily achievable" to do so, that is, when it can be done without much difficulty or expense, given the entity's resources. In the event that removal of an architectural barrier cannot be accomplished

easily, the accommodation may take alternative measures to facilitate accessibility. All buildings newly constructed by public accommodations and commercial facilities must be readily accessible; alterations to existing buildings are required to the maximum extent feasible to be readily accessible to individuals with disabilities.

Finally, the Older Americans Act of 1965 (OAA), as amended, supports a wide range of social services and programs for older persons. The OAA authorizes grants to agencies on aging to serve as advocates of, and coordinate programs for, the older population. Such programs cover areas such as caregiver support, nutrition services, and disease prevention. Importantly, the OAA also provides assistance to improve transportation services for older individuals.

Transportation Challenges Become More Acute with Aging and Can Limit Seniors' Ability to Reach Polling Places

For older adults who wish to vote at polling places, access to the polls is highly affected by their ability to travel to the polling place on election day. While most older adults drive, their physical, visual, and cognitive abilities can deteriorate, making it more difficult for them to drive safely. One study found that approximately 21 percent (6.8 million) of people aged 65 and older do not drive,[8] and another study found that more than 600,000 people aged 70 and older stop driving each year and become dependent on others for transportation.[9] According to senior transportation experts, the "oldest of the old" (those aged 85 and older) are especially likely to be dependent on others for rides, particularly if they are also in poor health.

For those who do not or cannot drive, our previous work for this committee on the mobility of older adults identified other options than driving that are available; nevertheless, transportation gaps remain.[10] Consistent with the Older Americans Act and other legislation, the federal government provides some transportation assistance, but this is largely to provide older adults with access to other federal program services—such as health and medical care or employment. This has been done through

[8] U.S. Department of Transportation, Bureau of Transportation Statistics, 2001 *National Household Travel Survey*.

[9] Daniel J. Foley, MS, Harley K. Heimovitz, PhD, Jack M. Guralnik, MD, PhD, and Dwight B. Brock, PhD, "Driving Life Expectancy of Persons Aged 70 Years and Older in the United States," *American Journal of Public Health*, vol. 92, no. 8 (2002).

[10] GAO-04-971.

partnerships with local agencies, nonprofits, and other organizations that provide transportation services and also contribute their own funds. Such partnering efforts may afford the opportunity to transport seniors to polling places as well. For example, the Montana Council on Developmental Disabilities partners with other organizations, such as AARP and the Montana Transit Association, to provide election day rides to older adults and people with disabilities. Still, we generally found that older adults in rural and suburban areas have more restricted travel options than do those in urban areas. In addition, we have reported that federally supported programs generally lacked data identifying the extent to which older adults have unmet needs for mobility. Consequently, we do not know to what extent older adults are unable to find transportation to polling places.

To address this lack of data and improve transportation services, more than 45 states had utilized the "Framework for Action" by 2005,[11] a self-assessment tool created by the Federal Interagency Coordinating Council on Access and Mobility (CCAM) for states and communities to help them identify existing gaps in transportation services for people with disabilities, older adults, and individuals with lower incomes. According to the CCAM, communities across the country are now using this tool as they establish coordinated transportation plans at the local level. Voting access is one need that might well be identified and better met through this assessment process.

Physical Access to Polling Places Was Uneven during Election 2000, but May Have Improved since HAVA Was Enacted in 2002

Our on-site inspections of polling places in the 2000 general election revealed many impediments that can limit access for older voters and voters with disabilities. Through our mail survey of states and local election jurisdictions conducted after the 2004 general election, we learned of improvements to provisions and practices pertaining to accessibility of polling places. We did not conduct on-site inspections in

[11] The Framework for Action was developed by what is now known as the Federal Interagency Coordinating Council for Access and Mobility, a body with senior leadership from 11 federal departments and agencies that are charged with coordinating transportation services provided by federal programs and promoting the maximum feasible coordination at the state and local levels. In addition, the Department of Health and Human Services' Administration on Aging and the Department of Transportation's Federal Transportation Administration created a toolkit for state and local planners to help them assess older adults' transportation needs and to coordinate transportation services, organized around the Framework for Action planning process.

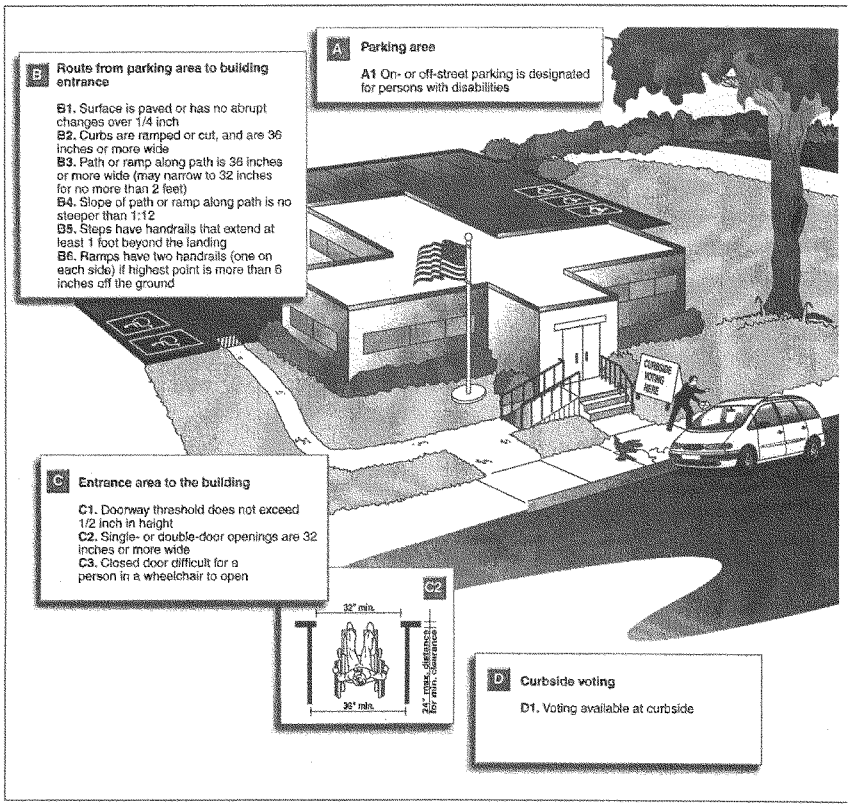
the 2004 general election and therefore do not know the extent to which such improvements took place at polling places.

An Estimated 16 Percent of Polling Places Used in the 2000 General Election Had No Potential Impediments

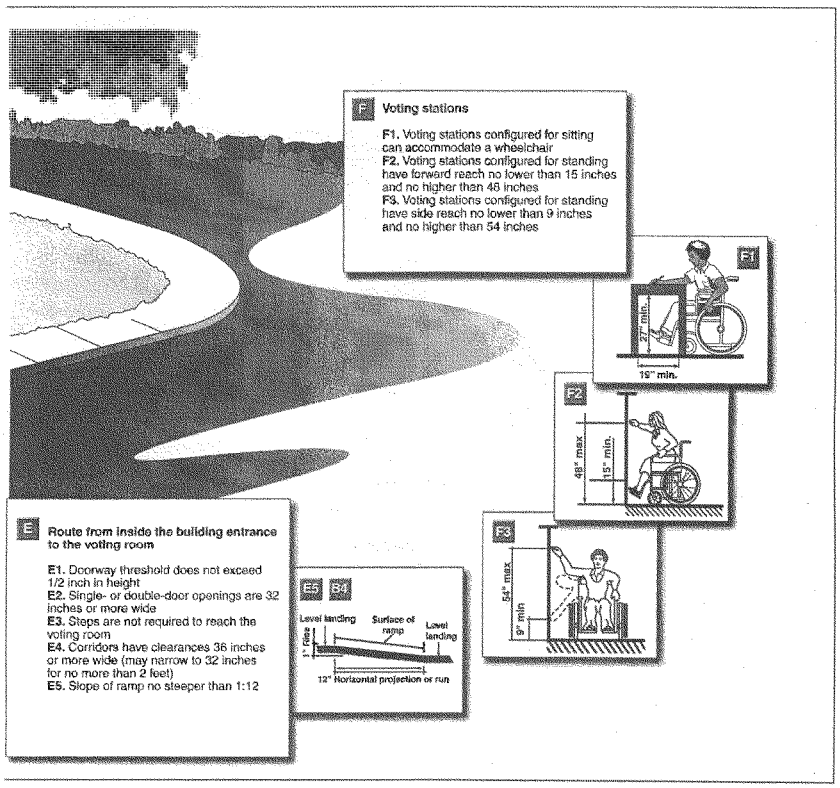
Once older voters reach the polling place, they generally must make their way inside the building and into the voting room in order to cast their votes. Prior to the 2000 election, very little was known about the accessibility of polling places—and what was known was dated and had significant limitations. To estimate the proportion of polling places in the country with features that might either facilitate or impede access for people with mobility, dexterity, or visual impairments, we visited 496 randomly selected polling places in the United States on Election Day 2000. Our random sample was drawn by first selecting a random sample of counties—weighted by population—and then randomly selecting some polling places within those counties. At each polling place, using a survey based on federal and nonfederal guidelines on accessibility, we took measurements and made observations of features of the facility and voting methods that could impede access.[12] See figure 1 for the key areas at polling places where we conducted our observations. We also interviewed poll workers who were in charge of the polling place to identify any accommodations offered.

[12] For additional details on our methods, see GAO-02-107, app I.

Figure 1: Key Features at Polling Places

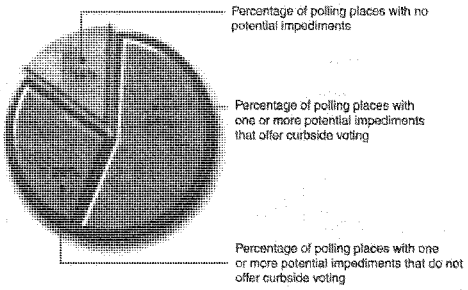


Source: GAO-02-107, pp 24-25.


F Voting stations
F1. Voting stations configured for sitting can accommodate a wheelchair
F2. Voting stations configured for standing have forward reach no lower than 15 inches and no higher than 48 inches
F3. Voting stations configured for standing have side reach no lower than 9 inches and no higher than 54 inches
F1
27" min.
19" min.
F2
48" max.
15" min.
F3
54" max.
9" min
E Route from inside the building entrance to the voting room
E1. Doorway threshold does not exceed 1/2 inch in height
E2. Single- or double-door openings are 32 inches or more wide
E3. Steps are not required to reach the voting room
E4. Corridors have clearances 36 inches or more wide (may narrow to 32 inches for no more than 2 feet)
E5. Slope of ramp no steeper than 1:12
E5 E4
Level landing
Surface of ramp
Level landing
1" Rise
12" Horizontal projection or run

These on-site inspections during the 2000 election revealed that only an estimated 16 percent of polling places were free of impediments that might prevent elderly voters and voters with disabilities from reaching voting rooms.[13] The rest had one or more likely impediments from the parking area to the voting room, although curbside voting was often made available where permitted by the state (see fig. 2). These were potential impediments primarily for individuals with mobility impairments.

Figure 2: Prevalence of Potential Impediments at Polling Places and Availability of Curbside Voting in November 2000 Election



Source: GAO-02-107, p. 8; GAO analysis of polling place data collected on Nov. 7, 2000.

Note: These potential impediments are located along the route from the parking area to the voting room.

Further, many polling places had more than one potential impediment in 2000. Impediments occurred at fairly high rates irrespective of the type of building used as a polling place. About 70 percent of all Election Day 2000 polling places were in the types of facilities that are potentially subject to either Title II or III of the ADA—such as schools, recreational/community

[13] Sampling errors for polling place data range from 3 to 10 percentage points, unless otherwise noted in this report.

centers, city/town halls, police/fire stations, libraries, and courthouses.[14] However, under the ADA, only new construction and alterations must be readily accessible, and we did not determine the date that polling place facilities were either constructed or altered. Moreover, due to the number of possible approaches for meeting ADA requirements on accessibility to public services and because places of public accommodation need remove barriers only where it is easy to do so, we cannot determine from our data whether the potential impediments we found would constitute a failure to meet ADA requirements.

In addition to inspecting polling places in 2000, we also reviewed state provisions (in the form of statutes, regulations, or policies) and surveyed state and county practices that affect voters' ability to get into polling places and reach the voting room, and found significant variations. While all states and the District of Columbia had provisions concerning voting access for individuals with disabilities, the extent and manner in which these provisions addressed accessibility varied from state to state. For example, 43 states had provisions that polling places must or should be accessible, but only 20 had provisions requiring that reporting by the counties to the state on polling place accessibility. See table 1 in app. I for additional state provisions concerning the accessibility of polling places in the November 2000 election.

Our survey of election officials in each state and 100 counties also revealed variation in practices for ensuring the accessibility of polling places.[15] For example, while 25 states reported providing local governments with training and guidance for assuring polling place accessibility, only 5 states reported helping finance polling place modifications to improve access in 2000. At least an estimated 27 percent of local election jurisdictions reported not using accessibility in their criteria for selecting polling places. While at least an estimated 68 percent

[14] As noted previously, Title II, Subtitle A, which applies to state and local governments, requires that public programs, services, and activities be accessible to individuals with disabilities (42 U.S.C. §§12131-34). Title III requires reasonable modifications in policies, practices, or procedures to be made by public accommodations to achieve accessibility for people with disabilities (42 U.S.C. §12182(b)(2)(A)(ii)). Also, new construction and alteration of existing facilities by state and local governments, public accommodations, and commercial facilities generally must be readily accessible to individuals with disabilities (42 U.S.C. §12183(a)).

[15] Sampling errors for county survey data generally range from 4 to 25 percentage points. We generally presented the lower bound of the estimate when the sampling error was large. For details, see GAO-02-107, app I.

of local jurisdictions reported that they inspected all polling places, the frequency of such inspections varied from once a year to only when a polling place is first selected or following a complaint or remodeling.

New Provisions and Practices May Be Improving Access to Polling Places, although the Degree of Change Is Difficult to Determine

After the November 2004 general election, we found signs of improvement in access to polling places when we surveyed each state and representative sample of local election jurisdictions nationwide in 2005 about their state provisions and practices.[16] While the methods we used to collect data from states differed between the 2000 and 2004 elections, state provisions related to polling place accessibility and accommodations nevertheless appear to have increased over time. For example, 32 states told us in 2005 that they required local jurisdictions to report on polling place accessibility to the state, an increase from 20 states with such provisions in 2000. At the same time, the number of states requiring polling place inspections decreased by 1 from 2000 to 2004, although 16 in addition to the 24 requiring inspections had provisions in 2004 that allowed for polling place inspections. See Table 2 in app. I for additional information on state provisions concerning accessibility of polling places and accommodations for individuals with disabilities for the November 2004 general election.

In addition to changes in state provisions, most states reported that they had spent or obligated HAVA funds to improve the accessibility of polling places, such as by providing access for voters with mobility or visual impairments. Responding to our 2005 survey following the 2004 election, 46 states and the District of Columbia reported having spent or obligated HAVA funds for this purpose. For example, election officials in a local jurisdiction we visited in Colorado told us they had used HAVA funds to improve the accessibility of polling places by obtaining input from the disability community, surveying the accessibility of their polling places, and reviewing voting equipment with representatives of the blind community.

From our 2005 survey of local election jurisdictions nationwide, we estimated 83 percent of local jurisdictions nationwide made use of their state's provisions to determine the requirements for accessibility at their

[16] For our 2005 local election jurisdiction survey, we used a stratified random probability sample. For details, see GAO-06-450, apps. III, IV and V.

polling places.[17] During our site visits to local jurisdictions in 2005, we asked election officials to describe the steps or procedures they took to ensure that polling places were accessible.[18] Election officials in many of the jurisdictions we visited told us that either local or state officials inspect each polling location in their jurisdiction using a checklist based on state or federal guidelines. For example, election officials in the four jurisdictions we visited in Georgia and New Hampshire told us that state inspectors conducted a survey of all polling locations. Election officials in the two jurisdictions we visited in Florida told us that they inspected all polling places using a survey developed by the state.

Our information of provisions and practices related to polling place accessibility in 2004 is based on self-reported data collected, and site visits we conducted, in 2005. We did not observe polling places during the 2004 election and therefore do not know the extent to which increased state provisions and reported state and local practices resulted in actual improvements to the accessibility of polling places in the 2004 general election.

Election Officials Reported Challenges to Ensuring Voter Access That Were Similar to Those Encountered in 2000

In preparing for and conducting the November 2004 general election, officials reported encountering many of the same challenges to ensuring voter access that they had encountered in 2000, such as locating a sufficient number of polling places that met requirements (such as accessibility). According to our 2005 mail survey, while 75 percent of small jurisdictions reported finding it easy or very easy to find sufficient number of polling places, only 38 percent of large jurisdictions did.[19] Conversely, 1 percent of small jurisdictions found it difficult or very difficult while 14

[17] Unless otherwise noted, the maximum sampling error for estimates of all local election jurisdictions from this survey is plus or minus 5 percentage points. For more details on this survey, see GAO-06-450, apps. III and V.

[18] We visited 28 local election jurisdictions to collect information about the election administration process and their experiences during the November 2004 general election. For more details, see app. IV of GAO-06-450.

[19] Unless otherwise noted, the maximum sampling error for estimates for large population jurisdictions from this survey is plus or minus seven percentage points, plus or minus 7 percentage points for medium population jurisdictions, and 5 percentage points for small jurisdictions.

percent of large jurisdictions did.[20] Other challenges reported included recruiting and training an adequate supply of skilled poll workers, designing ballots that were clear to voters when there were many candidates or issues (e.g., propositions, questions, or referenda), having long lines at polling places, and handling the large volume of telephone calls received from voters and poll workers on election day. In general, officials in large and medium jurisdictions—those with over 10,000 people—reported encountering more challenges than those in small jurisdictions.

Improving Accessibility of Voting Equipment and Assistance in Voting Room May Prove Challenging

Once inside the voting room, the type of voting method can pose particular challenges to some elderly voters, and facilitating voting may require further accommodation or assistance. For example, voters with dexterity impairments may experience difficulty holding writing instruments for paper ballots, pinpointing the stylus for punch card ballots, manipulating levers, or pressing buttons for electronic voting systems. Similarly, visually impaired voters may experience difficulty reading the text on paper ballots and electronic voting systems, or manipulating the handles to operate lever machines. All these voting methods can challenge voters with disabilities, although some electronic voting systems can be adapted to accommodate a range of impairments.

Accessible Voting Systems in the November 2000 General Election

During our on-site inspections of polling places in 2000, we identified challenges posed by the voting systems used and by the configuration of the voting booths, although some form of assistance was generally provided in the voting room. With respect to voting systems, we found that either traditional paper ballots or mark-sense ballots (a form of optical scan paper ballots) were the most widespread—one or the other were in use at an estimated 43 percent of polling places. This voting method is challenging for voters with impaired dexterity who have difficulty using a pen or pencil, and also for voters with visual impairments who need to read the text on the ballots. Next in prevalence were punch card ballots (21 percent), electronic voting systems (19 percent), and lever machines

[20] For this survey, large jurisdictions are defined as those with a population over 100,000, medium jurisdictions have a population of over 10,000 to 100,000, and small jurisdictions have a population of 10,000 or less. In 2004, 7,627 of the nation's election jurisdictions had a population of 10,000 or less. While small jurisdictions represent the majority of local election jurisdictions, nearly all are in states that contained a small portion of the U.S. population according to Census 2000. Local election jurisdictions with over 10,000 people comprised 27 percent of all election jurisdictions in the United States, but nearly all were in states that comprised a large portion of the population.

(17 percent)—each of which can be a challenge for voters with certain impairments. We also found that many voting booths were not appropriately configured for wheelchairs, either because voting stations configured for sitting did not have the minimum dimensions for a wheelchair or those configured for standing had one or more features that might pose an impediment to a wheelchair. At the same time, nearly all polling places allowed voters to be assisted either by a friend or a poll worker, which is a right granted by the VRA. Moreover, about 51 percent provided voting instructions or sample ballots in 18-point or larger type and about 47 percent provided a magnifying device.[21] None of the polling places provided ballots or voting equipment adapted with audio-tape or Braille ballots for blind voters.

Our 2000 review of state provisions and practices related to accessible voting systems and accommodations in the voting room revealed significant gaps, insofar as 27 states lacked provisions that voting systems should accommodate individuals with disabilities, 18 lacked provisions for wheelchairs in voting booths, and many lacked provisions to provide aides to the visually impaired; for example, 47 states lacked a provision to provide a large type ballot, and 45 lacked a provision to provide a Braille ballot. (See app. I, table 1.) On the other hand, we found that state provisions were not necessarily predictors of practice inside the polling place. For example, we found that half the polling places we visited provided voting instructions or sample ballots with large type even though only 3 of the 33 states whose polling places we visited had provisions to do so. Conversely, none of the polling places we visited provided for Braille ballots, even though 5 of the 33 states we visited had provisions for doing so. In addition to many states lacking provisions for voting room accommodations, in only 11 states did election officials, in response to our state survey, report financing improvements to accessibility by helping to fund new voting systems.

Progress Made to Improve Accessibility of Voting Systems after 2000, but Significant Challenges Remain

Our 2005 survey of states also revealed an increase in state provisions for accessible voting equipment, compared to what we found in our review of state provisions in 2000. As of August 1, 2005, 41 states and the District of Columbia reported having laws in place or having taken executive action (through orders, directives, regulations, or policies) to provide each polling location by January 1, 2006, with at least one electronic voting system or other voting system equipped for individuals with disabilities.

[21] Sampling error of plus or minus 11 percentage points at the 95 percent confidence level.

Five of the 9 remaining states reported plans to promulgate laws or executive action to provide each polling location with at least one voting system equipped for individuals with disabilities.[22] This is an increase from 2000, when 24 states had (and 27 lacked) provisions that voting systems must or should accommodate individuals with disabilities.

In response to our survey of local election jurisdictions in 2005, many jurisdictions reported having at least one accessible voting machine per polling place in the 2004 election, although this varied by jurisdiction size. We estimated that 29 percent of all jurisdictions provided at least one accessible voting machine at each polling place during the 2004 general elections. In addition, more large and medium local election jurisdictions reported using accessible voting machines than small jurisdictions. In 2005, we estimated that 39 percent of large jurisdictions, 38 percent of medium jurisdictions, and 25 percent of small jurisdictions provided accessible voting machines at each polling place.[23]

These improvements may be the result of HAVA, which, as noted earlier, requires each polling place to have at least one voting system equipped for individuals with disabilities, including individuals who are blind or visually impaired. To facilitate the adoption of technology, HAVA authorized appropriations to provide funds to states to replace punch card and lever voting equipment with other voting methods. Since HAVA's enactment, the General Services Administration (GSA) reported in 2003 the distribution of an estimated $300 million to 30 states for funds to replace old voting equipment and technology. In addition, states may receive other HAVA funds that could be used for multiple purposes, including replacement or upgrade of voting systems. In 2004, the EAC reported that almost $344 million had been distributed to each of the 50 states and the District of Columbia under this multiple purpose funding category.

HAVA notwithstanding, our surveys and site visits in 2004 indicated that significant challenges remain for acquiring and implementing accessible electronic voting systems. Touch screen direct recording electronic (DRE) equipment—which can be adapted with audio and other aids to

[22] The 5 states that reported having plans were Kansas, Louisiana, Ohio, Oklahoma, and Wyoming. The 4 remaining states that reported having no plans or were uncertain about their plans were Delaware, Massachusetts, Missouri, and Tennessee.

[23] The differences between both large and medium jurisdictions and small jurisdictions are statistically significant.

accommodate a range of impairments—is generally more costly than other types of systems due to software requirements and because more units are required. Based on our mail surveys of local election jurisdictions, the estimated percentages of predominant voting methods used by local jurisdictions in the 2000 and 2004 general elections did not change appreciably.[24] As we noted earlier, more large and medium local election jurisdictions reported using accessible electronic voting machines than small jurisdictions. Some election officials representing small jurisdictions expressed concerns to us about the appropriateness of HAVA requirements for accessible voting equipment for their jurisdictions and its implementation cost. In addition, some elections officials have acted on concerns regarding the reliability and security of electronic voting systems by, for instance, decertifying systems previously approved for use within their states.

In 2007, we testified on the range of security and reliability concerns that have been reported, and long-standing and emerging challenges facing all levels of government, with respect to electronic voting systems. For example, significant concerns have been raised about vague or incomplete standards, weak security controls, system design flaws, incorrect system configuration, poor security management, and inadequate security testing, among other issues. Jurisdictions reported that they did not consistently monitor the performance of their systems, which is important for determining whether election needs, requirements, and expectations are met and for taking corrective actions when they are not. Finding remedies, however, is challenging, given, for example, the distribution of responsibilities among various organizations, and financing constraints and complexities. Given the diffused and decentralized allocation of voting system roles and responsibilities across all levels of government, addressing these challenges will require the combined efforts of all levels of government, under the leadership of the EAC.

States Have Increased Provisions for Voting Rooms Accommodations, though the Extent of Such Improvements Is Unclear

Our 2005 survey of state election officials revealed a marked increase since the 2000 election in the number of state provisions related to accommodations in the voting room. For example, the number of states that reported having provisions for wheelchair accommodations in voting areas was 43, compared to 33 in 2000. Further, the number of states that

[24] We defined the predominant voting method as one that processed the largest number of ballots regardless of when the vote was cast: on general Election Day, as a provisional vote, during absentee voting, or during early voting. See GAO-06-450, pp 292-300 for additional details on these results from our 2005 mail survey.

reported having provisions to require or allow ballots with large-type, magnifying instruments, and Braille ballot or voting methods increased by 18, 20, and 8, respectively. At the same time, a few states reported having provisions that prohibit certain accommodations, such as ballots in Braille or large type.[25] (See app. I, table 2 for details on 2004 state provisions.) It is important to keep in mind, however, our findings for the 2000 election—i.e., that state provisions are not necessarily predictors or indicators of whether these accommodations will be found at polling places.

Most recently, we reported on accommodations provided to bilingual voters, including elderly bilingual voters.[26] Under the VRA, when the population of a "single language minority" with limited English proficiency is large enough, voting materials (including ballots, instructions, and assistance) must be provided in that minority's language, in addition to English. Of the 14 election jurisdictions we contacted, 13 reported providing similar assistance, such as translated voter materials and bilingual poll workers. All 14 reported facing similar challenges, such as recruiting a sufficient number of bilingual poll workers, effectively targeting where to provide assistance, and designing and translating the bilingual materials provided. However, GAO found little quantitative data on the usefulness of various types of bilingual voting assistance. Jurisdictions were challenged to assess the effectiveness of such assistance, in part because jurisdictions may be prohibited from collecting data on who used such assistance. Thus, it is difficult to know the extent to which elderly voters use bilingual assistance and what forms of assistance they find most useful.[27]

[25] Our information on state provisions in election 2004 was self-reported. We did not independently review state laws or policies in 2004.

[26] GAO, *Bilingual Voting Assistance: Selected Jurisdictions' Strategies for Identifying Needs and Providing Assistance*, GAO-08-182 (Washington, D.C.: Jan. 18, 2008)

[27] While did not specifically assess the extent to which older voters use such assistance, election officials and community groups we contacted provided examples of issues related to older workers. For example, some jurisdictions reported that many elderly voters may need extra time to review the translated materials and ballots, and thus may prefer to vote absentee.

State Provisions for Alternative Voting Methods and Accommodations Generally Increased since 2000, but Implementation Practices May Vary

As noted earlier, the VAEHA requires that any elderly voter or voter with a disability assigned to an inaccessible polling place, upon his or her advance request, must be assigned to an accessible polling place or be provided with an alternative means for casting a ballot on the day of the election. The VAEHA also contains provisions to make absentee voting more accessible by prohibiting, with limited exceptions, the requirement of a notary or medical certification of disability in granting an absentee ballot. However, states generally regulate absentee voting and other alternative voting method provisions.[28] Alternative voting methods may include advance notice of an inaccessible polling place; curbside voting; taking ballots to a voter's residence; allowing voters to use another, more accessible polling location either on or before election day; voting in person at early voting sites; or removing prerequisites by establishing "no excuse" absentee voting or allowing absentee voting on a permanent basis.[29] Disability advocates have told us that while alternative voting methods are important and needed options for some voters with disabilities, they still do not provide an equal opportunity to vote in the same manner as the general public and therefore should not be viewed as permanent solutions to inaccessible polling places.

Meanwhile, state provisions that allow for alternative voting methods had, in 2004, generally increased from the 2000 election period. Specifically, the number of state provisions permitting curbside voting increased from 28 in the 2000 election to 30 in the 2004 election. The number of states with provisions that provided for carrying ballots to voters' residences on or before election day increased from 21 to 25. Additionally, state provisions regarding notification of voters of inaccessible polling places went up from 19 to 27. In addition, 21 states reported allowing voters to vote absentee without requiring a reason or excuse—3 more than for the November 2000 election.

Although states may offer similar alternatives and accommodations, our review of state provisions in 2000 indicated that there may be wide variation in their implementation. For example, in accordance with the

[28] In our 2001 report we define "alternative" voting methods as any voting method other than traditional in-person voting at a polling place on election day.

[29] No excuse" absentee voting is available to all voters—that is, voters do not need to give a reason to vote absentee. In permanent absentee voting, the voter may request that an absentee ballot be automatically mailed to them, rather than applying separately, for each election. Voters may need to periodically reapply for permanent absentee ballot status.

VAEHA, as previously mentioned, all states allowed absentee voting for voters with disabilities without notary or medical certification requirements in 2000. However, the dates by which absentee ballots must be received varied considerably, with some states requiring that, to be counted, the ballot must be received before election day. In addition, where states lacked provisions, or had provisions allowing but not requiring accommodation or alternative method of voting, county and local government implementation practices can vary. For example, in 2000, we found that in a number of states without formal provision for curbside voting, some counties and local governments reported offering curbside voting and some did not. Similarly, in a number of states that lacked provisions for allowing voters to use an alternate voting place on Election Day, our 2000 county survey data also showed that some counties and local governments offered this alternative, while others did not.

Expanding alternative voting methods or making special accommodations can provide voters with additional options. Early voting, for example, allows voters, including elderly voters, to choose a day without inclement weather on which to vote. However, the implementation of voting alternatives can also present election officials with legal, administrative, and operational challenges. For example, expanding the use of curbside voting requires having staff trained and available to assist voters outside the polling place. In some states where it is not authorized or in practice, policymakers would need to be convinced that it would not increase the risk of fraud with ballots being taken out of the polling place facility.[30] Similarly, reassigning voters to more accessible polling places requires officials to notify the voter, train the poll workers, and provide an appropriate ballot at the reassigned location. Election officials reported to us in 2001 that establishing early voting sites and expanding the number of absentee voters added to the cost and complexity of running an election. For example, with early voting, election officials must set up and close down the polling place daily, ensure that there are trained poll workers at each early voting site, and update the voter registration lists to be used on election day to indicate which voters have already voted early. Absentee voting challenges include receipt of late absentee voter applications and ballots; administrative issues including workload demands and resource constraints; dealing with potential voter error caused by unsigned or otherwise incomplete absentee applications and ballot materials; as well

[30] The number of state provisions prohibiting curbside voting went from 4 in the 2000 election to 18 in the 2004 election.

as guarding against fraud. Internet voting—an alternative that has been used only on a limited basis to date—could offer voters the convenience of voting from their homes or other remote locations, and help increase voter participation. On the other hand, numerous election officials and others have expressed concerns about the security and reliability of the Internet and lack of widespread access to it. To resolve these issues, studies by some task forces have suggested a phased-in approach to Internet voting.

Conclusions

Ensuring that seniors or individuals with disabilities successfully cast their votes in an election requires government to think broadly about access, including access to transportation, access into buildings, access with respect to voting equipment, and access to various alternative voting methods. The increase in state provisions and reports of practices to improve the accessibility of the voting process is encouraging. At the same time, the complexity of our election systems is such that we cannot be assured that these provisions and reported practices reflect what actually occurs at polling places on election day. Understanding and addressing accessibility gaps is an enormous task for our state and local election officials who are challenged by the multiplicity of responsibilities and requirements they must attend to within resource constraints. At the same time, as our population ages, and with it the percent of voters with disabilities swells, the expectation of accommodation and assistance to participate in this basic civic exercise will grow, making accessibility a key performance goal for our election community.

Appendix I: State Provisions for Accessibility of Polling Places and Accommodations for the November 2000 and 2004 Elections

Table 1: State Provisions Concerning Accessibility of Polling Places for the November 2000 Election

State provisions	Number of states with provisions		Number of states with no provision
	Statute or regulation	Policy Only*	
Voting accessibility			
Voting by people with disabilities explicitly addressed	51	0	0
Polling place accessibility			
All polling places must/should be accessible	36	7	8
State provisions contain one or more polling place accessibility standards	23	19	9
Inspection of polling places to assess accessibility is required	15	14	22
Reporting by counties to state on polling place accessibility is required	10	10	31
Voting booth areas and equipment			
Voting booth areas must/should accommodate wheelchairs	17	16	18
Voting systems must/should accommodate individuals with disabilities	13	11	27
Aids for visually impaired voters			
Braille ballot or methods of voting must/may be provided	3	3	45
Ballots with large type must/may be provided	2	2	47
Magnifying instruments must/may be provided	7	15	29

Source: GAO-02-107, p. 17; GAO analysis of statutes, regulations, and other written provisions in 50 states and the District of Columbia. Provision categories were identified based on our review of these legal and policy documents.

*Policies for a particular provision were identified only if a state did not have either a statute or regulation for that provision.

Table 2: State Provisions Concerning Accessibility of Polling Places and Accommodations for Individuals with Disabilities for the November 2004 General Election

Provision	Required	Allowed	Not allowed	Not addressed	Not applicable	Required or allowed
Polling place accessibility standards[a]	41	6	0	2	1[b]	47
Inspections of polling place accessibility	28	16	0	6	1[b]	44
Reporting by local jurisdictions to the state on polling place accessibility	32	8	0	9	2[b]	40
Accommodations of wheelchairs in voting areas	39	4	0	7	1[b]	43
Provision of ballot or methods of voting in Braille[c]	1	13	2	33	1	14
Provision of ballots with large type	5	17	3	26	0	22
Provision of magnifying instruments[c]	8	34	0	7	1[b]	42

Source: GAO-06-450, p. 507; GAO 2005 survey of state election officials

[a]Election officials in one state responded that they did not know.
[b]Oregon conducts voting by mail; thus, provisions for polling place accessibility are not applicable.
[c]Election officials in one state did not respond to this question.

Related GAO Products

Bilingual Voting Assistance: Selected Jurisdictions' Strategies for Identifying Needs and Providing Assistance. GAO-08-182. Washington, D.C.: January 18, 2008.

Elections: All Levels of Government Are Needed to Address Electronic Voting System Challenges. GAO-07-741T. Washington, D.C.: April 18, 2007.

Older Driver Safety: Knowledge Sharing Should Help States Prepare for Increase in Older Driver Population. GAO-07-413. Washington, D.C.: April 11, 2007.

Elections: The Nation's Evolving Election System as Reflected in the November 2004 General Election. GAO-06-450. Washington, D.C.: June 6, 2006.

Social Security Reform: Answers to Key Questions. GAO 05-193SP. Washington, D.C.: May 2, 2005.

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The CHAIRMAN. Thank you.
Mr. Jenkins.

STATEMENT OF WILLIAM JENKINS, DIRECTOR, HOMELAND SECURITY AND JUSTICE, U.S. GOVERNMENT ACCOUNTABILITY OFFICE, WASHINGTON, DC

Mr. JENKINS. I am just here to answer questions about our work.
The CHAIRMAN. Thank you.
Mr. JENKINS. I led the work that did the 2005 survey.
The CHAIRMAN. Ms. Markowitz.

STATEMENT OF DEBORAH MARKOWITZ, VERMONT SECRETARY OF STATE, MONTPELIER, VT

Ms. MARKOWITZ. Well, I want to begin by thanking you for inviting me here today.

Vermont is a trade State. You should know, Chairman, that my family is from Milwaukee. So the Chudnotes from Milwaukee send their fond regards.

You know, there was a time not long ago when the only people really concerned about how we ran our elections were those bureaucrats who actually did the work. We all know that changed in 2000 when we saw dramatically how a poorly planned election really could call into question the legitimacy of our democracy.

I guess my statement today really is that we have an opportunity to avoid a similar kind of problem in the future. You know, there is no reason that we need to wait for the system to break down in order to think about ways to fix it.

According to the Census Bureau, we are going to have a tremendous aging of America. I am going to just give you a few statistics. There is more in my written statement.

But the number of Americans who are 55 and older will nearly double between 2007 and 2030, from 20 percent of the population to 31 percent. That is tremendous. We don't actually even need to wait that long to see a real rapid growth in what that will mean for us. By 2015 the number of Americans ages 85 and older is expected to increase 40 percent.

So we need to be prepared. We need to think about how we run elections. Understand that, with medical advances, as people age they are going to continue to be active, more active than the previous generation of old folks.

Of course, we also know this older generation, our generation—are a generation of voters and they will expect to be able to continue to exercise the franchise. So those of us who are running elections need to think ahead.

As we plan for future elections, what I would ask this Committee is to keep in mind our underlying value that, as a democratic society, we should facilitate access to voting the best we can. That should be our first obligation, is to make sure that people who want to vote have an opportunity to vote. At the same time, we have to have in place safeguards to ensure its integrity. So it is this balance between access and integrity.

I have got some suggested steps that we take across the country to prepare for the aging of America, and I would like to just go through them pretty quickly.

One is I think we have an obligation to make sure that in every State our elderly voters have the option of voting by mail or by absentee ballot. It is something that you have seen, Senator Smith, in your State as being a very successful way to reach older voters. We find in Vermont that is how many of our older voters prefer to vote. There is no reason why it can't work in every State in this country.

We have to ensure that our polling places are convenient to our older voters, like they do in your State, Senator Kohl, sometimes having polling places in their senior centers. That is a fabulous idea.

Making sure that there is transportation to the polling places. That is essential.

We also must rethink our polling places to make sure that not only are they convenient for people with disabilities, but we are thinking about the needs of older Americans.

For example, there needs to be chairs available. Something as simple as chairs, so that when somebody is waiting in line they don't have to stand up. We know that may be one of the most significant barriers to older folks coming and voting at the polling places, not knowing how long they are going to be asked to be on their feet.

We also have to explore new ways to reach voters who are in residential care facilities to ensure that they are provided an opportunity to vote, and to prevent voter intimidation and fraud.

One of the things that I hear about in Vermont is a fear of an overzealous and perhaps over-political activities director in a nursing home is influencing all of the residents to vote in a particular way. We can avoid that. There are thing that we can do today so that in the future we can make sure that there is security in that voting system in our residential care facilities.

Finally, we have to be sure that States that choose to adopt voter identification requirements do so in a way that doesn't disenfranchise the elderly who no longer have a valid driver's ID license or government—or other governmental-issued identification. I believe that is a serious problem, not just in Vermont but across the country.

I would like to mention Vermont's approach, some of the things we are doing in Vermont to try to get ready for the aging Vermonters.

One is we are one of the five States that use the IVS Vote-By-Phone system to permit voters with disabilities, the elderly and others to vote privately and independently at our polling place.

With this system voters use a telephone keypad to mark a paper ballot which is then centrally counted and added to the election count at the end of the night with the rest of the counting of the ballots.

So far we have deployed this technology in our polling places, but it has got tremendous opportunity for folks to use at home. There are some additional security steps that we have to put in place in order to fully deploy it so that voters can use the phone at home.

But for an elderly voter, somebody with a disability where they can't mark their ballot on their own, they shouldn't have to go to the polling place to have that privacy and independence in their

vote that is required under HAVA when there is technology available, like the vote-by-phone system, to let them have the benefit of the absentee ballot, but still have the privacy that the technology in a polling place would offer. So we are hoping that in the future, by the time we have got this demographic, we will have our vote-by-phone ready.

Finally, mobile polling in the 2008 election we plan to implement. It is a pilot project where trained election workers will be taking ballots into our nursing homes, having an election day in the nursing homes, and assisting people who need assistance in bipartisan pairs. It is that pairing of election workers that will prevent collusion, prevent fraud, and ensure that people in residential facilities have the opportunity to vote without the opportunity for fraud.

So I thank you very much and I am happy to take questions later.

[The prepared statement of Ms. Markowitz follows:]

U.S. Senate Special Committee on Aging

Thursday, January 31, 2008 (10:30 AM)

Testimony of Hon. Deb Markowitz, Vermont Secretary of State

Immediate Past President, National Association of Secretaries of State (NASS)

Good morning. Thank you Chairman Kohl and committee members for the opportunity to offer some insights on the affect of the aging population in the United States on the administration of elections.

I am Vermont Secretary of State Deb Markowitz, also Immediate Past President of the National Association of Secretaries of State (NASS). I have served as Vermont's Secretary of State for ten years, and I also serve on the Election Assistance Commission's Board of Advisors. Last year I had the pleasure of participating in a McGeorge Law Review Symposium addressing the challenges of voting as people age.

There was a time not too long ago when the only people who spent much time thinking about the challenges of running our nation's elections were the bureaucrats charged with elections administration. But that all changed in November of 2000 when the country experienced a dramatic example of how a poorly managed election could call into question the legitimacy of our democracy. Since that time our electoral system has undergone close scrutiny resulting in public debate, judicial decisions, federal and state legislation and unprecedented investments in new technology. One of the lessons we have learned from this experience is that it is not acceptable to wait until a system breaks down before we fix it—especially if it involves the fundamental expression of our democracy - voting. That is why it is vitally important that we anticipate and plan for the challenges our country's voting systems will face as our nation ages.

The aging of America. According to the United States Census Bureau, the number of Americans who are 55 and older will nearly double between 2007 and 2030, from 60 million (or 20 percent of the population) to 107.6 million (31 percent of the population.) By 2030, there will be 70.3 million Americans who are 65 and older, nearly two times the 34.8 million alive today. This demographic bloc will make up 20% of the overall population. We don't even have to wait that long to see the effect of the "aging of America;" between 2007 and 2015, the number of Americans ages 85 and older is expected to increase by 40 percent.

With medical advances not only are Americans living longer, but more will be healthy and active. The National Institute on Aging has reported that the rates of disability and functional limitation among the older population have declined substantially over the past two decades with only one-in-five older Americans reporting a chronic disability. That being said, we can expect an increase in long term care needs as more people will live long enough to develop age-related conditions such as dementia. It is projected that among Americans who reach age 65, 69 percent will need long-term care at some time in their lives. Indeed, the Congressional Research Service has reported that "[t]wo-thirds of the people receiving long-term care are over 65, an age group expected to double by

2030. After 2030, even faster growth rates are anticipated for people over 85, the age group most likely to need care."

As Americans age we do not expect to see a decline in their interest in participating in civic life by voting. People age 65 and older consistently vote in higher proportions than other age groups. In 2004, 69 percent of the older population voted, compared with 52 percent of those ages 25-44. In 2004, of all the votes cast, 19 percent were by people age 65 and older. By the 2040 presidential election, people 65 and older are projected to cast 41 percent of all of the votes. This means that as we plan for future elections we must consider the unique opportunities and challenges that will be presented by the aging of America.

Planning for the future. With more Americans living longer the challenge of meeting the civic needs of older people must be addressed by the individuals and institutions that serve this growing population, and by the individuals and institutions that run our elections. As we do this we must remain clear about our underlying values: that in a democratic society we should facilitate access to voting while ensuring that there are safeguards in place to preserve its integrity.

Maximizing access to voting while protecting the integrity of the election is not as easy as it sounds. There is a varied body of state and federal laws designed to ensure voting rights, discourage voter suppression and prevent voter fraud; and every state has its own unique history, tradition and legal structure related to the administration of elections within its jurisdiction.

It is important to remember that the issues that arise with aging voters must be addressed within the broader political context. Policies that balance the tension between increasing access and preserving integrity are hotly debated. We see this particularly as applied to such issues as voter registration reforms, the need for voter identification, and technology that will permit all voters to cast a private and independent vote. Also, the tension between voting access and integrity raise unique challenges when applied to people who need assistance to vote, who are under guardianship or who have cognitive impairment, as well as to those who no longer have current identification and to those who may not have easy access to the polling place.

Recommendations. There are steps we can take in our states to prepare for the aging of America.

1. We must make sure that across the country elderly voters have the option of voting by absentee ballot or by mail.

2. We must ensure that our polling places are convenient to our older voters, perhaps by placing polling places in senior centers or by offering public transportation to the polls.

3. We must make our polling places easier for the elderly to navigate by having clear, easy to read signs and chairs available to make it easier for elders to "stand" in line.

4. We must continue our efforts to develop voting technology that is easy to use to permit elderly voters to continue to vote privately and independently even as they have a harder time reading and writing.

5. We must explore new ways to reach voters who are in residential care facilities to ensure that they are provided an opportunity to vote, and to prevent voter intimidation or fraud.

6. We must be sure that states that choose to adopt voter identification requirements do so in a way that does not disenfranchise the elderly who no longer have a valid drivers license or other government issued identification.

Vermont's approach. In Vermont we are addressing the challenge of the aging population in a variety of ways.

1. Vote-by-phone technology. We use the IVS Vote-By-Phone system to permit voters with disabilities, the elderly and others to vote privately and independently at our polling places. This system permits a voter to use the telephone keypad to mark a paper ballot which is printed out in our Elections Center, and which can then be counted with the rest of the ballots on Election Day. Although we have so far only deployed this voting option in our polling places it has great potential for use by older and disabled voters who may wish to vote at home, but who cannot privately and independently mark a paper ballot.

2. Mobile polling. In the 2008 general election we plan to implement a mobile polling project in which trained election workers will bring ballots to residential care facilities prior to the election to permit eligible residents to register and vote. Residents who cannot vote independently will be offered assistance from bipartisan pairs of election workers who have been trained to work with elderly voters, and in particular, voters who may have some cognitive impairment. We will be partnering with Dr. Jason Karlawish, University of Pennsylvania Department of Medicine, Geriatrics Division; Richard J. Bonnie, John S. Battle Professor of Law, University of Virginia; and Charles P. Sabatino, Director of the American Bar Association's Commission on Law and Aging to pilot, test and measure the success of mobile polling in Vermont. Mobile polling has tremendous potential to enable residents of nursing homes, assisted living facilities and other residential care facilities to freely exercise their rights to vote while minimizing risk of voter intimidation and fraud.

Conclusion. In our states and as a nation we must be proactive to ensure that we do not shut our older Americans out of the voting process. I thank this committee for taking the time to consider how our election laws and practices must change and adapt to ensure that in the future we are prepared for this new challenge.

The CHAIRMAN. Thank you very much.

Mr. Waterstone.

STATEMENT OF MICHAEL WATERSTONE, ASSOCIATE PROFESSOR OF LAW, LOYOLA LAW SCHOOL, LOS ANGELES, CA

Mr. WATERSTONE. Mr. Chairman, thank you for inviting me.

Voting is a huge process, ranging from voter registration to counting. This morning I will be talking about one part of that process: challenges faced by older voters when they are actually voting.

I will be discussing older voters and voters with disabilities more or less together. These groups are linked. As the population ages, more people develop mobility, cognitive, and manual dexterity impairments.

In brief, I will suggest that for older voters with these types of impairments the way that we have administered elections has cheapened their voting experience. This has occurred both at the polling place and with absentee voting.

I will conclude by discussing how we can create a better voting experience for these voters in the 2008 election and beyond.

Our goal must be that these voters are treated with equal dignity in the voting process, that they get assistance when it is truly desired, but otherwise get to vote secretly and independently like other citizens, either at the polling place or by absentee ballot.

We don't need to look any further than next Tuesday to see the real life significance of this issue. A huge number of voters, including older voters, will go to the polls on Super Tuesday, or have already done so via absentee voting. Why?

The most straightforward answer is to help pick a President. We should have procedures that protect accurate voting without fraud or undue influence.

But these people also vote to demonstrate their membership in the community. In meeting the challenges faced by older voters we need to focus on both of these parts of the right to vote.

What are the voting experiences of older voters who may have physical or mental impairment? At the polling place, those who use wheelchairs may encounter high door thresholds, ramps with steep slopes, and a lack of accessible parking.

More than 15 years after the passage of the Americans with Disabilities Act, inaccessibility persists. Voters with various types of impairments who are able to get inside the polling place may not be able to cast a secret and independent ballot.

Older voters with manual dexterity impairments can have trouble using paper ballots. Voters with cognitive or vision impairments may have difficulty reading certain ballot formats.

The Help America Vote Act, which explicitly requires secret and independent for voters with disabilities, will help older voters. But although HAVA is still relatively new and more study is needed, initial reports suggest that, like the ADA's accessibility requirements, implementation and enforcement has been slow and uneven.

What about absentee ballot voting? While this can be a useful tool to bring older voters into the voting process, it is not a substitute for accessible polling places, at least to the extent they exist

for other voters. When people who would otherwise travel to the polling place are effectively forced to vote in private, it sends a harmful signal about their full inclusion in the community.

As currently practiced, absentee balloting is not fully accessible, meaning that older voters with impairments may have to rely on the help of others. This can be helpful and we should establish guidelines for appropriate assistance, but it can also increase the potential for fraud, coercion, or unwarranted capacity assessments. This is not respectful of the equal dignity of older voters.

What can be done? I actually believe we are at a point where our Federal laws are fairly strong, at least on paper. With aggressive implementation and enforcement, combined with some law reform and State creativity, great strides can be made. Let me offer three concrete suggestions, although I have given more in my written testimony.

First, the secret and independent ballot provisions of the Help America Vote Act must be aggressively enforced. The primary means of enforcement is with the Department of Justice which has not made this a priority. I support amending HAVA to include a private right of action, or supporting judicial construction of one.

Second, we need heightened enforcement of the ADA's requirement that polling places be accessible. It is unacceptable that so many years after the ADA's passage there are still violations. Given recent Supreme Court decisions, ADA enforcement has become more complicated but this must become a priority, ideally with public enforcement authorities taking the lead.

Third, we should support improved practices on absentee voting. Absentee balloting should be done in a way that supports secret and independent voting to the greatest extent possible, affirmatively providing people appropriate assistance, yet also minimizing chances of undue coercion and error.

Suggestions for reform have included easing the application process, more accessible ballots—including HTML ballots and phone voting, as Secretary Markowitz has discussed—guidance for caregivers, and mobile polling.

I thank you again for the fastest 5 minutes of my life and I look forward to your questions.

[The prepared statement of Mr. Waterstone follows:]

TESTIMONY

OF

PROFESSOR MICHAEL E. WATERSTONE

OF

LOYOLA LAW SCHOOL (LOS ANGELES)

BEFORE THE

SENATE SPECIAL COMMITTEE ON AGING

January 31, 2008

Mr. Chairman and distinguished members of the Special Committee on Aging, thank you for inviting me to speak here today. My name is Michael Waterstone. I am a professor at Loyola Law School in Los Angeles. I am also a Commissioner on the American Bar Association's Commission on Physical and Mental Disability. Along with several of my fellow witnesses at today's hearing, I participated in the Symposium on Facilitating Voting as People Age convened by Borchard Foundation Center on Law and Aging, the American Bar Association, and McGeorge Law School. My comments represent my own personal views and are not necessarily those of Loyola Law School or any other organization with which I am affiliated.[1]

I will be testifying today as to challenges faced by elderly voters and voters with disabilities when they vote. I will conclude by suggesting how vigorous enforcement and implementation of federal laws, combined with some law reform, can and should create more equal voting opportunities for older voters and voters with disabilities in the election of 2008 and beyond. I note that I will be discussing both of these groups – older voters and voters with disabilities – together in my testimony. Although not identical, these two groups are very much linked. As our population ages,[2] more people are increasingly likely to need mobility assistance, have cognitive impairments, and have declining vision and hearing. As I will discuss below, many of the barriers that have existed in voting exclude people based on these types of impairments. I also note that although voting is a comprehensive process ranging from registration to vote tabulation, my testimony today will focus primarily on only one stage of that process: the actual act of voting.[3]

This issue has real and immediate importance. This Tuesday, February 5th, 2008 is an important day in our democracy. In what has been termed "Super Tuesday," "Super-Duper Tuesday," and even "Tsunami Tuesday," large numbers of people are expected to go the polls and vote, or have already done so using some method of absentee voting. Why do they do so?

The most straightforward answer is to help pick the next President of the United States. Accordingly, one important voting policy is to make sure that their vote is

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[1] My writings on this topic, from which much of this testimony is drawn, include *Constitutional and Statutory Voting Rights for People with Disabilities*, 14 Stan. L. & Policy Rev. 353 (2003); *Civil Rights and the Administration of Elections – Toward Secret Ballots and Polling Place Access*, 8 J. of Gender, Race, & Justice 102 (2004); *Lane, Fundamental Rights, and Voting*, 56 Ala. L. Rev. 793 (2005); and *The Untold Story of the Rest of the Americans with Disabilities Act*, , 58 Vand. L. Rev. 1807 (2005).

[2] Between 2000 and 2030, the U.S. population aged sixty-five or older is expected to more than double from 35 million to 71.5 million. *See* Admin. On Aging, U.S. Dep't of Health and Human Servs., A Profile of Older Americans: 2006 3 (2006), http://www.aoa.gov/PROF/Statistics/profile/2006/2006profile.pdf.

[3] Therefore, other important legal and policy issues impacting the rights of older voters, including state statutes that disenfranchise various categories of people with disabilities, *see, e.g.*, Doe v. Rowe, 156 F.Supp. 2d 35 (D. Me. 2001) (holding that Maine law disenfranchising any individual under guardianship violated Equal Protection Clause, ADA, and Section 504 of the Rehabilitation Act), and capacity assessments that are made by care-givers who are not qualified nor legally empowered to make them, *see* Nina A. Kohn, *Preserving Voting Rights in Long-Term Care Institutions: Facilitating Resident Voting While Maintaining Election Integrity*, 38 McGeorge Law Review 1079-98 (2007), are not the main focus of my testimony.

accurately conveyed and counted, minimizing the chance of fraud, coercion, or mistake. But the strict instrumental act of choosing an elected official is unlikely to be the only reason that people vote. Even after the Bush v. Gore election in 2000, it is extraordinarily unlikely that *one* vote will ever make the difference in a large election.[4] So why do people turn out to vote in large numbers? Apart from their instrumental act of trying to choose elected officials and policies, voting is a way by which people assert their place in the community, making a symbolic statement that they belong and have a voice in the democratic process.[5] For groups like older voters that may be socially isolated and marginalized, this is exceptionally important.

When thinking about challenges that any group of voters face, it is important to focus on protecting a person's actual choice as well as voting's more expressive and symbolic elements. All too often, older voters with cognitive and physical impairments have not had these two vital elements of the right to vote protected.

Voting Experiences for Older Voters and Voters with Disabilities

Voting at the Polling Place

Many older voters and voters with disabilities want to vote in the polling place in the same way as their fellow citizens. Yet historically, they have had problems doing so. Despite federal laws including the Voting Rights Act of 1965 (as amended in 1982),[6] the Voting Accessibility for the Elderly and Handicapped Act,[7] Section 504 of Rehabilitation Act of 1973,[8] and the Americans with Disabilities Act (ADA),[9] voters who use wheelchairs have encountered accessibility barriers at polling places, including high door thresholds, ramps with steep slopes, and a lack of accessible parking.[10] Older voters and voters with disabilities who are able to actually enter the polling place have seen their

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[4] *See* Samuel Issacharoff, *Private Parties With Public Purposes: Political Parties, Associational Freedoms, and Partisan Competition,* 101 Colum. L. Rev. 274, 306 n 117 (2001) ("The wonder of it all is that people do actually turn out in massive numbers in spite of the unlikelihood that their vote will have any instrumental value.").

[5] *See* Adam Winkler, *Expressive Voting*, 68 N.Y.U. L. Rev. 330, 368 (1993) ("[By voting], the individual says essentially, 'I am a member of the American community.' Through participation itself, the voter expresses an identification with the greater community and reveals her attachments to and associations with it. In this way, the act of voting is the individual's alignment to the greater society; it is the method by which the individual 'signs' her name to the social contract and becomes herself part of the collective self-consciousness.").

[6] 42 U.S.C. § 1973aa-6 (requiring, *inter alia*, that a voter who requires assistance to vote by reason of blindness or disability may be given assistance by a person of the voter's choice).

[7] 42 U.S.C. § 1973ee (providing that state and state political subdivisions must assure that polling places used in federal elections are accessible).

[8] 29 U.S.C. § 794 (providing that entities that receive federal financial assistance cannot discriminate on the basis of disability).

[9] Title II of the ADA, 42 U.S.C. § 12132, provides that public entities cannot discriminate against qualified individuals with disabilities on the basis of disability.

[10] *See, e.g.,* U.S. Government Accountability Office, *Voters with Disabilities – Access to Polling Places and Alternative Voting Methods* 7 (Oct. 2001) (noting that 84% of polling places visited in study had at least one impediment), http://www.gao.gov/new.items/d02107.pdf.

right to cast a secret and independent ballot compromised.[11] People with manual dexterity impairments can have trouble using voting machines that require them to mark a paper ballot with a pen or other writing device. People with cognitive and vision impairments may have difficulty reading certain ballot formats. And people with hearing impairments may not be able to hear or understand instructions from poll workers. All of these impairments are common to older voters. Until recently, voters falling into all of these categories have been directed to vote with the assistance of a poll worker or friend at the polling place. While this can be helpful to an elderly voter who truly desires assistance, it can cheapen the voting experience for voters who would rather vote like everyone else – secret and unassisted.[12]

Absentee Voting

The use of absentee balloting has expanded greatly in the last four decades.[13] Undoubtedly, this provides an opportunity to reach elderly voters and voters with disabilities for whom it is difficult or impossible to get to the polls on Election Day. Yet to the extent that a state still offers some of its citizens an opportunity to vote on Election Day,[14] it is unacceptable to use absentee voting as a substitute for accessible polling places. When older voters are directed to vote at home *instead* of going to the polling place with their fellow citizens, it sends a harmful message about their full citizenship and inclusion in the community. Moreover, absentee ballots themselves are usually inaccessible, meaning that voters with vision, cognitive, or manual dexterity impairments may be required to rely on the assistance of another party when completing their ballot.[15] This increases the potential for fraud or coercion, an especially important concern in the instance of elderly voters in long term care facilities who may be reliant on others for contact with the outside community.[16] Finally, absentee ballots typically have to be received before Election Day, which means that voters can miss the opportunity to base their decisions on late-breaking developments.[17] In short, while absentee voting can be a useful tool to increase the capability of elderly voters with cognitive or physical impairments to participate in the electoral process, as currently practiced it is not a panacea.

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[11] *Id.* at 7 ("[T]he types and arrangement of voting equipment used may ... pose challenges for people with mobility, vision, or dexterity impairments).

[12] As Jim Dickson, the President of the American Association of Disabilities, who is blind, explained it: "Twice in Massachusetts and once in California, while relying on a poll worker to cast my ballot, the poll worker attempted to change my mind about whom I was voting for. I held firm, but to this day I really do not know if they cast my ballot according to my wishes. To voters with disabilities, there is always some level of uncertainty when another person marks your ballot for you." James C. Dickson, Testimony Before the N.Y. City Council Comm. On Mental Health, Mental Retardation, Alcoholism, Drug Abuse, and Disability Services (July 22, 2002).

[13] *See* Daniel P. Tokaji and Ruth Colker, *Absentee Voting by People with Disabilities: Promoting Access and Integrity*, 38 McGeorge L. Rev. 1015, 1020 (2007).

[14] The state of Oregon has abolished precinct-based voting and moved entirely to an all-mail voting system.

[15] *See* Tokaji and Colker, *supra* note 13, at 1036-1040.

[16] *See* Kohn, *supra* note 3.

[17] For example, in the California gubernatorial recall election in 2003, there were late-breaking revelations relating to alleged sexual harassment by one of the candidates that were not publicized until just before Election Day, but after the absentee ballots were due.

Existing Law

Why, despite several federal laws that address this topic, have the rights of older voters and people with disabilities been allowed to be degraded? I believe there are several reasons. First, until the recent passage of the Help America Vote Act, no federal statute explicitly recognized the right to a secret and independent vote. Courts have split on whether the ADA mandates secret and independent voting for people with disabilities.[18] Although Title II of the ADA requires programs that are run by public officials to be accessible when viewed in their entirety (which should translate into accessible polling places), the ability of private litigants to enforce these provisions have been undercut by standing problems and the Court's sovereign immunity decisions.[19] Nor have public enforcement authorities shown leadership on this issue.[20] The combination leads to chronic underenforcement.

The most recent law impacting these issues is the Help America Vote Act (HAVA).[21] HAVA is unique in explicitly requiring that people with disabilities be provided "the same opportunity for access and participation (including privacy and independence) as other voters."[22] HAVA's provisions regarding accessible polling places are less concrete; rather than any specific requirements, it makes grant funds available for the purpose of making polling places more accessible.[23] And HAVA does not directly apply to absentee voting.

Moving Forward: Opportunities to Expand Access

Looking ahead, there are opportunities to expand more meaningful access to voting older voters. In doing so, we need to be mindful of the important values of ensuring that the voting experiences of elderly voters who may have cognitive or physical impairments – particularly the ability to vote secretly and independently, and in a polling place if they so choose – are protected, as well as the importance of integrity and accuracy in elections. I offer several suggestions in this effort.

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[18] *Compare* American Association of People with Disabilities v. Hood, 310 F.Supp.2d 1226 (M.D. Fla. 2004) (holding that Florida had violated Title II by purchasing voting system that was not readily accessible to people with disabilities without third-party assistance); American Association of People with Disabilities v. Shelley, 324 F.Supp.2d 1120 (C.D. Cal. 2004) (holding that Title II does not provide the right to a secret and independent vote for people with disabilities). The Department of Justice has taken the position that curb-side voting, whereby a polling place worker will bring a voting machine curbside for voters who cannot get into an inaccessible polling place, does not constitute discrimination under the ADA. *See* DOJ Letter of Finding #18 (Aug. 25, 1993), http://www.usdoj.gov/crt/foia/lofc018.txt; *see also* DOJ Letter of Finding #21 (Sept. 10, 1993), http://www.usdoj.gov/crt/foia/lofc021.txt.

[19] *See* Waterstone, *Untold Story*, *supra* note 1, at 1855-56, 1860-65.

[20] *Id.* at 1865-67. It should be noted that the Department of Justice has promulgated a checklist for polling places relating to ADA compliance. *See* http://www.usdoj.gov/crt/ada/votingchecklist.htm.

[21] 42 U.S.C. §§ 15301-15545.

[22] *Id.* at § 15481(a)(3)(B).

[23] *Id.* at § 15421(b).

Vigorous Enforcement of HAVA's Secret and Independent Voting Requirement

On paper, HAVA is a strong law. Although more study is needed, the existing reports I have seen indicate that compliance is a problem. A report commissioned by the Electoral Assistance Commission in 2004 found that less than a quarter of polling places allowed voters with visual impairments to cast a secret ballot.[24] Although these numbers had improved by 2006,[25] these patterns are troubling, particularly when seen in the light of systemic underenforcement of predecessor disability rights laws, especially as they relate to voting.[26] HAVA's enforcement mechanisms are weak: it provides for no private right of action for individuals who are denied their right to a secret and independent ballot, and the Department of Justice (DOJ) has opposed a judicial recognition of one.[27] The DOJ does have the power to bring "civil actions against any State or jurisdiction in an appropriate United States District Court for such declaratory and injunctive relief as may be necessary,"[28] although it appears the it has only brought two such cases (in Maine and New York). This should be made a priority for the 2008 election.

Along with others, I have called for HAVA to be amended to allow individuals who are denied a secret and independent vote to sue in federal court.[29] This would take sole enforcement responsibility off the DOJ, and create incentives for states to take their compliance efforts more seriously.

Continued Efforts to Develop Accessible Voting Technology

To realize the goals of providing voting experiences to older voters and voters with disabilities that are commensurate, to the greatest extent possible, with other voters, we need to continue to develop expertise in voting technologies that both accommodate reasonable security concerns and create access, including a secret and independent ballot. HAVA takes strong steps in this regard: it calls for the Election Assistance Commission to conduct studies of accessible voting for people with disabilities,[30] and also requires the National Institute of Standards and Technology to report to Congress on the usability of

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[24] *See* U.S. Election Assistance Comm'n, *A Summary of the 2004 Election Day Survey: Access to Voting for the Disabled* 14-4 (2005). This report noted that more than half the states failed to even respond to the survey questions on accessibility.

[25] A 2006 survey found some improvement, both in terms of states that had reported (nearly 80% of jurisdictions) and percentage of polling places that allowed voters with disabilities to cast a private ballot (self reported at 84.5%). *See* U.S. Election Assistance Comm'n, *2006 Election Administration and Voting Survey* 26 (2006).

[26] *See* Michael Waterstone, *A New Vision of Public Enforcement*, 92 Minn. L. Rev. 434 (2007).

[27] *See* Federal Defendants' Opposition to Plaintiff's Motion for Preliminary Injunction, 2006 WL 1505602, *2 (arguing HAVA confers no private right of action) in *Taylor v. Onorato*, 428 F.Supp.2d 384 (W.D. Pa. 2006) (holding that private plaintiffs have no private right of action HAVA access provisions).

[28] 42 U.S.C. § 15511.

[29] *See* Waterstone, *Constitutional and Statutory Voting Rights for People with Disabilities*, *supra* note 1, at 382; *see also* Recommendations of McGeorge Symposium on Facilitating Voting as People Age, 38 McGeorge L. Rev. 861, 862 (2007).

[30] 42 U.S.C. § 15381.

different types of voting equipment for individuals with disabilities.[31] This should be done also with an eye toward the needs of older voters with sensory and cognitive impairments.

Vigorous Enforcement of ADA Accessibility Provisions

Inaccessible polling places violate the ADA. As discussed above, in 2000, the GAO found that 84% of polling places that they visited contained one or more accessibility barriers.[32] A 2005 Election Assistance Commission study found that only 70.9% of precincts from reporting states were wheelchair accessible.[33] As yet another example, on October 2, 2004, a half-page advertisement in the Memphis Commercial Appeal proclaimed in bold letters: "Notice of Polling Locations That Do Not Meet All ADA Standards, November 2, 2004, Election." It then listed 139 polling place locations. This many years after the ADA's passage, this is unacceptable, and leads to too many older voters and voters with disabilities not being able to get to their polling places. In the 2008 election, public enforcement authorities need to take the lead in prosecuting public entities that do not live up to their accessibility obligations.

Improved Practices on Absentee Voting

As discussed above, current absentee balloting practices do not provide the opportunities for all older voters or voters with disabilities who wish to and are able to vote unassisted to do so. HAVA does not include any requirements in this regard, nor has Title II of the ADA been interpreted to require accessibility in absentee voting.[34] This is troubling, because all of the arguments supporting the need for a secret and independent vote in the polling place context apply equally to voting at home.

Absentee balloting, to the extent it is a choice and not a substitute for accessible polling places, does offer an opportunity to reach out to older voters and voters with disabilities. This needs to be done, however, in a way that protects secret and independent voting to the greatest extent possible; minimizes chances for fraud, undue influence, or unsanctioned capacity screening; and is offered through a process that is easy for voters to navigate. In a recent article, Professors Daniel Tokaji and Ruth Colker address these issues, and offer a "menu of choices for policymakers and election officials to consider."[35] These include better outreach, easing the application process, allowing permanent absentee voter status, more accessible ballots (including development of HTML ballots and phone voting), guidance for caregivers, and mobile polling (whereby

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[31] *Id.* at § 15383. For one expert's views on creating voting systems that are accessible to older voters and voters with disabilities, *see* Ted Selker, *The Technology of Access: Allowing People of Age to Vote for Themselves*, 38 McGeorge L. Rev. 1113 (2007).
[32] *See supra* note 10.
[33] *See supra* note 24.
[34] This view of the ADA, however, is not inevitable. *See* Tokaji and Colker, *supra* note 13, at 1035-36 (offering an argument why absentee voting should be covered by Title II's program access standard).
[35] *Id.* at 1047.

election officials bring the accessible polling technology to voter's homes or facilities and assist them in voting).[36]

Conclusion

Currently, the turnout level of voters with disabilities lags behind other groups.[37] As our population ages and additional number of voters develop physical and cognitive impairments, the population of older voters could view the voting process with a skeptical eye, potentially depressing turnout among this group.[38] We cannot let this happen. We need to focus on making the voting experience for older voters as commensurate with other voters as is possible: namely, focusing on the opportunity to vote secretly or independently when possible, and giving older voters the true choice as to whether they want to do so at the polling place or at home.

I thank you for the opportunity to address you on this issue, and I look forward to working with you on it in the future. I close with a quote from Representative Steny Hoyer. It speaks to the need and value of creating real opportunity and access for all voters:

> One of our most profound accomplishments since the founding of the United States is the progressive broadening of the franchise to include African-Americans, women and others subject to pervasive discrimination. In this process, we have learned that few of the rights or interest of a particular group of Americans can be secure so long as that group lacks the right to vote for officials who will become accountable to them. We have also learned that, as more adult citizens become full participants in our polity, the democratic process is enriched for all. We are still in the process of learning this lesson with regard to persons with disabilities.[39]

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[36] *Id.* at 1047-50; *see also* Kohn, *supra* note 3 (offerings similar ideas).

[37] One study found that people with disabilities have lower levels of voter registration than people without disabilities (62% versus 78%, respectively). *See* 2000 Nat'l Org. on Disabilities, Harris Survey of Americans with Disabilities 83 (2000). Another set of researchers found that in the 1998 elections, people with disabilities were about 20% less likely to vote than those without disabilities, even after controlling for demographics and other factors related to voting. *See* Douglas L. Kruse *et. al.*, *Empowerment Through Civic Participation: A Case Study in the Political Behavior of People with Disabilities 2* (April 1999).

[38] Older voters have traditionally voted in larger numbers than other age groups. In the 2004 presidential election, 71.8 % of citizens ages fifty-five and older reported voting, which was the highest percentage of any age group. *See* U.S. Census Bureau, Voting and Registration in the Electino of November 2004: Population Caracteristics 4 tbl.B (2006), http://www.census.gov/prod/2006pubs/p20-556.pdf.

[39] H.R. Rep. No. 107-329, pt. 1, at 79 (2001).

The CHAIRMAN. Thank you, Mr. Waterstone.

Dr. Karlawish.

STATEMENT OF JASON KARLAWISH, M.D., ASSOCIATE PROFESSOR OF MEDICINE AND MEDICAL ETHICS, UNIVERSITY OF PENNSYLVANIA, PHILADELPHIA, PA

Dr. KARLAWISH. Thank you.

Let me begin with this hearty thanks to the members of the Committee and their excellent staff for having this important hearing and for inviting me to speak.

So let me tell you two stories. On Election Day, 2004, my colleague, Dr. John Bruza, was visiting a patient of his in a nursing home in Philadelphia, and she was in tears of anger and frustration. She wanted to vote but she couldn't vote. Her polling place was at a far away district, and she hadn't had the chance to reregister. She had no way to get there, and she had missed the application for absentee balloting.

November of 2007 a candidate for the Philadelphia council lost by just 120 votes. When the machine count was tallied he had won, but when absentee ballots were counted he lost. The newspapers report that he claims improprieties in how absentee ballots were handled at several nursing homes and he has now filed suit in Federal court.

What do those two cases tell us? They tell us that elderly voters, especially elderly voters who live in long-term care settings, are suffering doubly. First, people decide whether they can vote and, second, people steal their votes.

I think you all here have a great opportunity to change this. I want to tell you the nature of the problems with some data that we have gathered from our research, and then suggest a set of solutions.

I want to share with you the results of studies my colleagues and I have done examining voting in long-term care. In particular we have done two surveys, one in Philadelphia after the 2003 municipal election, and the second was in 2006 after the general election in the State of Virginia.

Both Pennsylvania and Virginia share a common feature. Unfortunately, like 27 other States, they have absolutely no guidelines for accommodations for residents in long-term care facilities.

As you know, the number of Americans with cognitive impairment is increasing. Many of these people live in assisted living facilities or in nursing homes. In these settings, staff have substantial control over how residents live their day-to-day lives; what they can do and what they can't do and this includes voting.

Unfortunately, election officials have paid limited attention to assuring the residents have access to the ballot, and also preventing unscrupulous people from stealing their votes.

Next week, 24 States will be in Super Tuesday, as has already been pointed out by Senator Kohl. Eight of them have policies to address voter accommodations in long-term care settings.

But unfortunately, of those guidelines that exist, they are largely inadequate. They lack proactive steps to get people registered, they rely upon the resident to apply for an absentee ballot, they spring

into effect when certain thresholds are met, like a certain number of absentee ballots being ordered, and so on.

But the majority of States, as I say, don't have any guidelines for voting in long-term care. So what does that mean? Well, let me tell you what we found from our research.

The staff of a nursing home, typically a social worker or an activities director, are in charge of voting; not elections officials.

No. 2. There is substantial and unnecessary variability in registration and voting procedures, and in staff attitudes about who has the right to vote, and this variability likely disenfranchised voters.

In fact, many facilities have reported to us that there were residents who wanted to vote but were unable to vote, largely because of remediable procedural problems like failure to order ballots, to get them registered, or being unable to get people to the polls.

Much of the voting in long-term care facilities is absentee balloting. At some facilities up to 2/3 of the residents voted absentee. This kind of balloting is well recognized as the source for voter fraud.

Most of these residents need assistance voting, and most of that voting is provided by one person, the social—the activities director or the social worker.

Finally, many of the facilities reported to us that the staff assessed whether a resident is capable of voting, and the methods they use likely disenfranchise people who arguably were probably capable of voting.

I am going to read you this quote from an interviewee. She said to us, "You know, the right to vote is such a basic right. To feel like you are taking that away from someone, particularly if they are borderline, guidelines would help to make sure there are fair objective applications. Not, 'I am sure she is not going to vote for the person I want so I am not going to take her to the polling place or help her with her ballot.' You do have quite a bit of power and authority over folks."

What have we learned? Our studies show that in States without guidelines for voting in long-term care, elections officials play a very limited role, access to the polls is really determined by the staff and the attitudes of that staff and these practices are arguably largely unacceptable.

In the Super Tuesday States that have no guidelines, the residents of long-term care facilities will likely suffer the very experiences we have talked about, and multiplied over many, many States.

Making a long-term care facility a polling site is not a solution to this problem. Expanding access to absentee ballots is not a solution to this problem. I would be happy to discuss in the question and answers why that is the case.

The solution is mobile polling. Mobile polling means that the elections officials or their equivalent groups go to the facilities prior to registration deadlines to encourage and solicit registration. Then in the days prior to the election they go back to the facility, they assist voters in gather—completing their ballots, and they gather the ballots and they bring them back. These officials are trained to

address the unique issues of voting by the elderly, such as how to assist a voter.

Models do exist for mobile polling. In Australia and Canada it is the norm. Maryland has a great set of guidelines, but they are underfunded.

To achieve this goal of universal mobile polling in the United States of America, I would propose the United States Election Assistance Commission conduct research to develop a model set of best practices for mobile polling, training for election officials to implement them, and then partner with States to test their feasibility and to refine them.

Thanks so much for this opportunity to talk to you. Happy to address questions.

[The prepared statement of Dr. Karlawish follows:]

Karlawish - Senate testimony

Testimony for Senate Special Committee on Aging hearing on opportunities and challenges for older voters.

Prepared by Jason Karlawish, MD, Associate Professor of Medicine and Medical Ethics, University of Pennsylvania.
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INTRODUCTION.

On Election Day, 2004, my colleague Doctor John Bruza was visiting a patient at a nursing home in Philadelphia. She was in tears of anger and frustration. She wanted to vote but she couldn't. Her polling place was at a far away district. She could not get there and she had not been able to re-register at a closer site or apply for an absentee ballot.

In the November 2007 election, a candidate for Philadelphia council lost by some 120 votes. When the machine count was tallied, he won. When absentee ballots were counted, he lost. The papers report that he claims improprieties in how absentee ballots were administered at several nursing homes. He has now filed suit in Federal Court.

What do these two cases tell us? Elderly voters -- especially elderly voters who live in long term care settings -- suffer doubly. People decide whether they can vote and people steal their votes.

Your committee has a unique opportunity to change this. I'd like to tell you the nature of the problems and then suggest a set of solutions.

My name is Jason Karlawish. I am an associate professor of medicine and medical ethics at the University of Pennsylvania. My colleagues and I have done a series of studies examining voting rights for the elderly. You can learn more about these studies by visiting our website at www.pennadc.org and clicking on the link "Facilitating voting as people age." I particularly want to acknowledge the leadership and dedication of Charlie Sabatino at the American Bar Association and Ned Spurgeon at the Borchard Foundation Center on Law and Aging.

Today, I'd like to share with you the results of our studies of voting in long term care: in 2003, after the Philadelphia municipal election, and in 2006 in Virginia. Both Pennsylvania and Virginia share a common feature. They like 27 other states have no guidelines for voting accommodations for residents of long term care facilities. This is a problem.

THE SIGNFICANCE OF THE PROBLEM AND THE SHORTCOMING OF THE PRESENT SYSTEM.

As you know, the number of Americans with cognitive impairments is increasing, and advancing age is the key risk factor for these impairments. Many of these people live in long term care settings such as assisted living facilities and nursing homes. While cognitive impairment is prevalent among these residents, the severity of that impairment varies. In these settings, staff have substantial control over residents day-to-day lives: what they can do and what they cannot do. As you shall learn, this includes voting.

Unfortunately, election officials have paid limited attention to two key issues: assuring that residents of long-term care facilities have access to the ballot, and preventing unscrupulous

persons from exploiting their vote. Federal long term care regulations oblige nursing homes to respect residents' voting rights, but they do not provide any guidance on how a facility can satisfy this obligation.

Next week, among the 24 states that will particulate in Super Tuesday, only nine of them have some policies to address voter accommodations in long term care settings. I've prepared a table that summarizes this and taken the liberty to highlight the states that the members of this committee represent.

Most of these guidelines are inadequate. They lack proactive steps to register residents. They rely upon the resident to apply for an absentee ballot. They spring into effect when a facility reaches a threshold number of absentee ballots, or a voter submits a written request for assistance, or a voter has an abrupt move to a facility after the close of the time to request absentee ballots.

THE SHORTCOMINGS IN GREATER FOCUS.
But the majority of states have no guidelines. What happens in these settings? To answer that question, I will present the key findings of our surveys of voting in assisted living facilities and nursing homes. I'm going to focus on the Philadelphia study, because it is published. But I emphasize that we found very similar results in Virginia.

We found that long term care staff – typically a social worker or activities director -- were in charge of voting. Not election officials. Not families.

- There was substantial and unnecessary variability in procedures used for registration and voting and in long term care staff attitudes about who can vote. This variability likely disenfranchised voters.
- Many facilities reported there were residents who wanted to vote but were unable to vote, largely due to remediable procedural problems such as failure to order ballots, register or being unable to get to the polls.
- Much of the voting at long term care facilities is absentee balloting – this kind of balloting is well recognized as among the principle mechanisms for voter fraud. Most residents needed some assistance with absentee balloting and typically, a single staff member provided this assistance.
- Many facilities indicated that the staff assessed whether a resident was capable of voting and the methods they used likely disenfranchised residents who were actually able to vote.

I'd like to talk about that last point in greater detail. The most common method staff used to decide whether someone was able to vote was an assessment of resident cognition, and either an informal assessment of voting capacity based on familiarity with the resident or asking the resident election-related questions. Here is a sample quote from a staff member at a nursing home:

> "Is this person aware there is an election going on? What it's for? Is it for the mayor, for the president, or whatever? The irony is that a lot of people who are able to vote would

> also fail this test. Would this resident have the capacity to make an informed decision, or just go 'eenie-meenie-minie-moe?' It's pretty subjective on my part."

Let me leave you with this quote from an interviewee who recognized the extent of their authority over their residents, the consequences of the failure to exercise it properly, and the need for guidelines:

> The right to vote is such a basic right—to feel like you're taking that away from someone, particularly if they're borderline—guidelines would help to make sure there are fair, objective applications—not 'I'm sure she's not going to vote for the person I like, so I'm not asking her to the polling place.' You do have quite a bit of power and authority over folks.

WHAT WE NEED TO DO.

What have we learned? Our surveys of Philadelphia and Virginia show that in states without guidelines for voting in long-term care, election officials play a limited role, and access to the polls is largely determined by the practices and attitudes of the long-term care staff, typically social workers or activities directors and those practices are inadequate and they are unacceptable.

Your committee has a marvelous opportunity. You have the precedent of Congressional efforts to facilitate voting by people with disabilities and to promote greater uniformity in state electoral practices. You also have the federal reach into nursing homes through the regulations that govern nursing home inspections and the quality of care.

In the Super Tuesday states that have no guidelines, the residents of long term care facilities will suffer the experiences we discovered in Philadelphia and Virginia.

Simply making a long term care facility a polling site is not a solution. Voters form outside the facility show up and crowd the lines, some residents cannot leave their rooms, none of the problems related to registration are solved.

Simply expanding access to absentee balloting is not the solution. People have to order the ballot, get it, store it and then someone has to help them complete it. Studies of expanded access to absentee balloting show that they generally increase voting among groups that already have high rights of voting, such as community dwelling elderly. In addition, among the elderly, changes in hand writing can lead to the rejection of the ballot. Finally, absentee balloting without proper oversight in congregate settings is one of the chief mechanisms for voter fraud.

What is needed is a model for mobile polling. Mobile polling means election officials or equivalent groups visit facilities prior to registration deadlines to encourage and solicit registration and then in the days prior to the election, they return to the facility and assist voters and gather the ballots. These officials are trained to address the unique issues of voting by the elderly, such as how to assist a voter.

Models do exist. In Australia and Canada, mobile polling is the norm. Maryland has a good set of guidelines, but they are not adequately funded.

To achieve this goal of universal mobile polling, I would propose the United States Election Assistance Commission conduct research to develop a set of best practices for mobile polling in long term care facilities, training for election officials to implement then, and then partner with states to test their feasibility and refine them.

Materials submitted with this testimony.

Smith A and Sabatino C.P. Voting by residents of nursing homes and assisted living facilities: state law accommodations. BiFocal (American Bar Association in Focus on Aging and the Law). 26(1);2004: 1-2,4-10.

Karlawish J.H.T., Bonnie R., Appelbaum P.S., Lyketsos C., Karlan P., James B.D., Sabatino C., Lawrence T., Knopman D., Kane R.M. Identifying the barriers and challenges to voting by residents of long-term care facilities: A study of the 2003 Philadelphia mayor's race. J Aging and Soc Policy. 2008; 20(1): 65-80.

Sabatino C.P. and Spurgeon E.D. Introduction to Symposium "Facilitating voting as people age: Implications of cognitive impairment." *McGeorge Law Review.* Vol 38(4): 843-860.

Recommendations of the Symposium "Facilitating voting as people age: Implications of cognitive impairment." *McGeorge Law Review.* Vol 38(4): 861-870.

The CHAIRMAN. Thank you very much, Dr. Karlawish.

Ms. Weiser.

STATEMENT OF WENDY R. WEISER, DEPUTY DIRECTOR, DEMOCRACY PROGRAM, BRENNAN CENTER FOR JUSTICE AT NYU SCHOOL OF LAW, NEW YORK, NY

Ms. WEISER. Thank you very much and thank you to the Committee for holding this important hearing.

As you know, the issue of voter ID is currently before the Supreme Court and it is one of the most important voting rights issues facing Americans today. It could transform how Americans vote and which Americans vote.

Whatever your views are on voter ID in general, the kinds of restrictive voter ID proposals we have seen across the country, like the Indiana law before the Supreme Court, are unusually harmful to older Americans. So we strongly urge this Committee to take a serious look at how voter ID requirements affect older Americans and disabled Americans.

I have submitted detailed written testimony. Today I will just stress three points.

First, restrictive voter ID requirements could disenfranchise and burden huge numbers of older Americans. The fact is that millions of older Americans don't have the kinds of documents that are called for by these new voter ID laws which are typically State-issued photo IDs or proof of citizenship documents.

The Brennan Center recently did a national survey that found that 18 percent of citizens over 65 don't have current government-issued photo IDs, as compared to 11 percent of voters overall. Other major social science studies have similar findings.

It is also especially hard for older Americans to obtain these kinds of IDs. To get a photo ID you typically need ID, including a birth certificate. But many older Americans, as it turns out, don't have birth certificates and they would have to expend money and effort to obtain one. For some, these efforts would be futile—like for one of the plaintiffs in the Indiana case, 85-year-old Thelma Ruth Hunter who, like many other older Americans, was born at home and, thus, there is no record of her birth.

For the typical older American who doesn't drive, who has a disability, and who lives on a fixed income, it is a real burden to have to travel to a government office and pay a fee twice just to be able to later go to the polls and vote.

These laws hurt voters for no good reason. It is hard to imagine what purpose would be served by disenfranchising Valerie Williams, who is one of the Indiana voters who was barred from voting in the lobby of her retirement home, even though she had an expired driver's license, a current telephone bill, and a Social Security letter with her address.

Extensive studies show that the one kind of fraud targeted by these ID laws—commonly called impersonation fraud—almost never happens. The States already have adequate mechanisms in place to identify voters and to protect elections from this kind of fraud.

While we really must take the fear of the voter fraud that Senator Smith mentioned very seriously, we should act only on those

fears that are based in fact and make sure that voters are educated about which ones are not.

The second big point I would like to make is that this isn't just an abstract, remote issue. It could actually affect the 2008 elections.

Restrictive ID requirements are now in place in three States. If the Supreme Court upholds Indiana's law, we could see stepped-up efforts to impose these kinds of requirements across the country.

In 2007 there were restrictive ID bills introduced in 31 States, including all but three of the Super Tuesday States and Georgia, which already had an ID law. This year already nine States have introduced new restrictive photo ID bills and 13 have restrictive proof of citizenship bills pending as well.

This election has generated an unusually high level of interest among voters in both parties, many of whom had not previously participated. It really would be a travesty if many of these newly enthusiastic voters were thwarted because of onerous and unnecessary ID requirements.

The third point that I would like to make is that, regardless of how the Supreme Court rules in the Indiana case, there are a number of affirmative steps that Congress can take to ensure that ID requirements don't disenfranchise older Americans and Americans with disabilities. I will go quickly through some of them.

First, Congress should continue to resist efforts to impose new ID requirements at the Federal level.

Congress should also protect voters from disenfranchisement as the result of State ID requirements such as by barring the most restrictive kinds of ID requirements, or at least by requiring reasonable alternatives for voters without IDs.

Congress can also make it easier and less expensive for Americans, and especially older Americans and indigent Americans, to obtain Federal IDs and citizenship documents.

Another step would be to repeal the new onerous provisions of the REAL ID Act, which is going to make it much harder and more expensive for people to get State IDs.

Finally, Congress can provide resources for poll worker and voter education on voter ID requirements.

In closing, there is something especially troubling about telling a person who has been voting in her community for her whole life that she can no longer vote unless she goes through a time-consuming and expensive process that may or may not get her the documents that she needs to vote.

Older Americans and our democracy deserve better than that. Thank you.

[The prepared statement of Ms. Weiser follows:]

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Testimony of

WENDY R. WEISER

Deputy Director, Democracy Program
Brennan Center for Justice at NYU School of Law

Before the
Senate Special Subcommittee on Aging

January 31, 2008

On behalf of the Brennan Center for Justice at NYU School of Law, I thank the Senate Special Subcommittee on Aging for holding this hearing and for providing me the opportunity to discuss opportunities and challenges facing older voters.

My name is Wendy Weiser, and I direct the Brennan Center's work on voting rights and elections. The Brennan Center is a nonpartisan think tank and legal advocacy organization that focuses on issues of democracy and justice. Among other things, we seek to ensure fair and accurate voting procedures and systems and to promote policies that maximize citizen enfranchisement and participation in elections. We have done extensive work on a range of voting issues of concern to older Americans, including voter identification and voting system accessibility and usability. Our work on these topics has included the publication of studies and reports; assistance to federal and state administrative and legislative bodies with responsibility over elections; and, when necessary, participation in litigation to compel states to comply with their obligations under federal law and the Constitution. Most recently, we submitted an *amicus* brief to the Supreme Court in *Crawford v. Marion County Election Board*, a case challenging the constitutionality of Indiana's voter identification law.[1]

My testimony today will focus principally on voter identification requirements and their impact on older Americans. As set forth below, voter ID requirements—especially the restrictive photo ID requirements that have been proposed and introduced over the past few years—substantially and disproportionately burden the voting rights of seniors. If restrictive ID requirements are put in place, many older Americans will be deprived of their right to vote.

[1] The Brennan Center's webpage devoted to the Crawford case, available at http://www.brennancenter.org/content/resource/crawford_v_marion_county_election_board, contains all the Supreme Court filings in the case and a range of other resources. The Brennan Center's brief in that case is posted here: http://brennan.3cdn.net/a465d0f4779ca49726_tim6blgw7.pdf.

The impact on our elections would be far-reaching. As the AARP recently noted in a brief before the Supreme Court, older Americans consistently participate in the electoral process at a higher rate than other age groups.[2] Moreover, by 2030, the number of older voters is expected to double (to 71.5 million), which means that older voters will likely comprise a much larger percentage of the electorate.[3] It is vital to the health of our democracy that we ensure that our electoral systems facilitate, and do not impede, the participation of this important segment of the population.

New Restrictive Voter ID Requirements

Over the past few years, there has been a concerted push across the country to impose new, strict identification requirements on voters. In 2007 alone, bills were introduced in more than thirty states and in Congress to make voter identification requirements more restrictive by requiring voters to show photo ID or proof of citizenship.[4] (Those states include all but four of the Super Tuesday states.) Since the beginning of 2008, restrictive photo ID bills have been introduced or pre-filed in at least nine states,[5] and officials in at least two other states have publicly announced their intent to pursue photo ID requirements.[6] More than a dozen states also have currently pending bills requiring documentary proof of citizenship to register or to vote.[7]

Prior to 2005, no state mandated photo ID as an absolute requirement for voting, and no state required documentary proof of citizenship to register or to vote. The vast majority of states still use other methods of identifying voters that are far less onerous than photo ID. And in most states that require some form of documentary ID, there is an alternative identification mechanism for those voters who do not have the required documentation that allows then to vote at the polls. I attach as an appendix to my testimony a summary of the current voter identification requirements in the states.

In the Help America Vote Act of 2002 ("HAVA"), Congress considered and rejected a photo ID requirement for voting, opting instead for a more limited ID provision focused on new registrants who had not yet been vetted by state election systems, and allowing those voters to

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[2] *See* Brief *Amici Curiae* AARP and National Senior Citizens Law Center in Support of Petitioner, *Crawford v. Marion County Election Bd.*, No. 07-21 (U.S. 2007) [hereinafter "AARP Brief"], at 7, available at http://brennan.3cdn.net/1edc5ab89fbe9edeb8_v6m6bnrlw.pdf. For example, according to the U.S. Census Bureau, in the 2004 presidential election, 71.8% of citizens 55 and older reported voting, as compared to 63.8% of all voting-age citizens. U.S. Census Bureau, *Voting and Registration in the Election of November 2004: Population Characteristics* 4 (Mar. 2006), http://www.census.gov/prod/2006pubs/p20-556.pdf.

[3] AARP Brief at 8 (citing Administration on Aging, U.S. Dep't of Health and Human Services, *A Profile of Older Americans: 2006* (last updated July 12, 2007), http://www.aoa.gov/prof/Statistics/profile/2006/profiles2006.asp).

[4] Those states include: Alabama, Arkansas, California, Colorado, Florida, Georgia, Illinois, Iowa, Kansas, Maine, Massachusetts, Michigan, Mississippi, Missouri, Montana, New Hampshire, North Carolina, New Mexico, New York, Nevada, Oregon, Oklahoma, Pennsylvania, Rhode Island, South Carolina, Tennessee, Texas, Utah, Virginia, Washington, West Virginia, and Wisconsin.

[5] Those states include: Colorado, Illinois, Maryland, Mississippi, Missouri, New Mexico, Oklahoma, Tennessee, and West Virginia.

[6] Those states are Texas, which just held a hearing on voter ID and fraud on January 25, 2008, and Kansas.

[7] Those states include: Colorado, Georgia, Kansas, Massachusetts, Maryland, Michigan, Mississippi, Missouri, New York, Rhode Island, South Carolina, Tennessee, Virginia, and Washington.

identify themselves using a broad range of documents.[8] Notwithstanding the compromise reached in HAVA, proponents of voter ID continue to strenuously press their cause.

To date only three states—Georgia, Indiana, and Missouri—have passed laws requiring voters to present photo ID to vote and to have their votes counted, and only Georgia and Indiana still have those requirements in place.[9] Although four other states also request photo ID of their voters, voters who do not have photo IDs in those states are entitled to cast ballots that will count without having to negotiate significant hurdles. Specifically, Louisiana, Michigan, and South Dakota allow voters who do not have photo IDs to cast regular ballots if they swear an affidavit to their eligibility. And while Florida law provides that a voter without photo ID may only vote by provisional ballot, the state must count that provisional ballot so long as the voter's signature matches the signature on file with election officials.[10]

Although only a few states currently impose strict photo ID requirements, other states have made their existing voter ID requirements more burdensome. The most onerous new requirement beyond photo ID is Arizona's requirement that voters present documentary proof of citizenship in order to register to vote.[11] Like the recently-enacted Georgia and Indiana laws, Arizona's law is currently being challenged in court.

Impact of Voter ID Requirements on Older Americans

Strict voter ID requirements have the potential to disenfranchise millions of eligible voters. Those requirements fall most harshly on the poor, people of color, youth, and—most significantly for this hearing—senior citizens. Studies consistently show that millions of Americans do not have government-issued photo IDs, and that seniors are disproportionately represented among those without IDs.

Studies Show That Millions of Older Americans Lack Photo IDs

According to a nation-wide survey by the National Opinion Research Corp. sponsored by the Brennan Center in late 2006, 11% of voting-age Americans—roughly twenty-one million citizens—do not have current government-issued photo IDs.[12] The impact is far more

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[8] 42 U.S.C. § 15483(b) (requiring first-time voters who register by mail and whose registration information the state is unable to match with an existing state record to show either a photo ID or one of a variety of non-photo IDs).

[9] All three of those laws have been challenged in court. The Missouri Supreme Court struck down the Missouri law under the state constitution, and so it is no longer in effect. *Weinshenck v. Missouri*, 203 S.W.3d 201 (Mo. 2006). Prior versions of the Georgia law were enjoined by federal and state courts, *Common Cause/Georgia v. Billups*, 439 F.Supp.2d 1294 (N.D. Ga. 2006); *Perdue v. Lake*, 647 S.E.2d 6 (2007). An amended version of Georgia's law was upheld by a federal court and is now on appeal. Indiana's law is currently being considered by the U.S. Supreme Court after being upheld in lower courts.

[10] See Ltr. from Christopher Coates, Acting Chief, U.S. Dep't of Justice Voting Section, to Florida Attorney General Bill McCullom and Assistant General Counsel Maria Matthews, Jan. 23, 2008, *available at* http://www.brennancenter.org/page/-/Democracy/AR-M620U_20080124_105007.pdf (preclearing Florida's amended voter ID law with the understanding that provisional ballots cast by voters without photo ID will count so long as the signatures match).

[11] Ariz. Rev. Stat. § 16-579.

[12] Brennan Center for Justice at NYU School of Law, *Citizens Without Proof: A Survey of Americans' Possession of Documentary Proof of Citizenship and Photo Identification*, at 3 (Nov. 2006), http://www.brennancenter.org/page/-

pronounced for older Americans: 18% of citizens 65 and older do not have current government-issued photo IDs.[13] Using 2005 census estimates, that amounts to more than 6 million senior citizens who could be excluded by strict photo ID requirements.

These findings are consistent with the findings of the three major social science studies that have examined the rates of ID possession in particular states. Most recently, researchers at the University of Washington studied the rates at which voting age citizens in Indiana possessed the kinds of ID required by the state's photo ID law. They found that age has a "curvilinear relationship" with access to photo ID, in which both younger and older voters are less likely to have access to photo ID.[14] According to their survey results, 19.4% of registered voters over 70 do not have valid photo IDs, as compared to 16.3% of total registered voters in Indiana.[15]

A 2005 study by researchers at the University of Wisconsin who examined the state's driver's license and photo ID records found that 23% of people aged 65 and older (177,399 people) in Wisconsin do not have a driver's license or a non-driver's photo ID. Of that group, 79% are women.[16] Researchers at the University of Georgia similarly found that older citizens in Georgia are significantly less likely than average to have government-issued photo ID.[17] Surveys by the AARP in Indiana and Georgia also found that significant numbers of seniors do not have the kinds of photo IDs required by those states' laws.[18]

It is not surprising that so many seniors lack government-issued photo IDs. By far the most common state-issued photo ID is a driver's license, but many older Americans do not drive. Indeed, many states make it difficult for seniors to obtain driver's licenses.[19] Relatively few Americans, including older Americans, travel abroad, and so few have need for a passport.

/d/download_file_39242.pdf; *cf.* Robert Greenstein *et al.*, Center for Budget and Policy Priorities, *Survey Indicates House Bill Could Deny Voting Rights to Millions of U.S. Citizens* (Sept. 22, 2006), http://www.cbpp.org/9-22-06id.htm.

[13] *Citizens Without Proof*, *supra* note 12, at 3.

[14] Matt A. Barreto, Stephen A. Nuño & Gabriel R. Sanchez, *The Disproportionate Impact of Indiana Voter ID Requirements on the Electorate* (Working Paper, Washington Institute for the Study of Ethnicity and Race), Nov. 8, 2007, at 11, 14, at http://depts.washington.edu/uwiser/documents/Indiana_voter.pdf. The study also found that 21.8% of black Indiana registered voters (and when non-registered citizens are included, 28.3% of eligible black Indiana citizens) do not have valid photo IDs.

[15] *Id.* at 18.

[16] John Pawasarat, Employment and Training Institute, University of Wisconsin-Milwaukee, *The Driver License Status of Voting Age Population in Wisconsin*, at 1 (June 2005), *available at* http://www.brennancenter.org/page/-/d/download_file_50902.pdf.

[17] M. V. Hood III & Charles S. Bullock, III, *Worth A Thousand Words?: An Analysis of Georgia's Voter Identification Statute*, at 14 fig. 1 (April 2007) (presented at March 2007 Annual Meeting of the Southwestern Political Science Association), *available at* http://www.brennancenter.org/page/-/d/download_file_50886.pdf.

[18] According to the Indiana AARP's survey of its registered voters, 3% of those 60 and older and 6% of those 75 or older had neither a valid driver's license nor a state-issued identification card. *See Indiana Democratic Party v. Rokita*, 458 F. Supp. 2d 775, 824 n.73 (citing Susan L. Silberman, Indiana AARP, *Voter Identification in Indiana: A Demographic Analysis of Impact on Older Indiana Citizens* (Oct. 2005)). And according to the Georgia chapter of the AARP, 36 percent of Georgians over age 75 do not have a driver's license. *See* Deanna Wrenn, *Three States Debate Requiring Voters to Show ID*, Ventura County Star, Mar. 31, 2005, at 6.

[19] See AARP Brief, *supra* note 2, at 9 (noting that 17 states, including Indiana, require older drivers to renew their licenses more frequently than other drivers; at least 10 states require a special vision screening for older drivers, and some require a physician's note attesting to the individual's fitness for driving; and 17 states require older drivers to appear in person at the DMV to renew their licenses).

According to the U.S. Department of State Bureau of Consular Affairs, only 25% of Americans have a U.S. passport.[20] And, as discussed below, it is difficult for many older Americans to fulfill the requirements for obtaining state-issued photo IDs.

Requirements for Obtaining Photo ID Are Especially Burdensome for Seniors

All current state-issued photo IDs cost money, either directly or indirectly. Although some states waive the direct costs of photo IDs for indigent citizens, no state waives the costs of all the underlying documents required to obtain a photo ID. An applicant for a state-issued photo ID in Indiana, for example, is required to show several documents, including one of the following: a certified copy of a U.S. birth certificate, a passport, naturalization papers, or a U.S. military or merchant marine photo ID. For a birth certificate search, Indiana charges $10.00, in addition to applicable county fees;[21] the cost in other states can run even higher. A U.S. passport costs $97.00.[22] Replacement naturalization papers cost $380.00 and can take up to a year to obtain.[23]

Many older Americans do not have ready access to these documents proving citizenship. According to a survey sponsored by the Center on Budget and Policy Priorities, individuals over the age of 65 are much less likely to have citizenship documents than those under 65.[24] The financial costs of obtaining these documents needed for photo IDs are particularly burdensome to older voters who live on fixed incomes.

In addition to the costs of the underlying documents required for photo ID, applicants for photo ID must incur the burden and costs of transportation to various government offices, often multiple times.[25] This can be a significant burden to the many senior citizens for whom public transportation is difficult to access. Older Americans are far more likely to have disabilities than other citizens,[26] making it more difficult for them to travel and to navigate the procedures required to obtain photo ID.

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[20] U.S. State Dep't, Frequently Asked Questions about the New Travel Document Requirements, http://www.travel.state.gov/travel/cbpmc/cbpmc_2225.html#8 (last visited Jan. 28, 2008).

[21] Ind. Code § 16-37-1-11; 16-37-1-11.5.

[22] U.S. Dep't of State Bureau of Consular Affairs, Passport Fees, http://travel.state.gov/passport/get/fees/fees_837.html (last visited Jan. 28, 2008).

[23] U.S. Citizenship and Immigration Serv., Application for Replacement Naturalization/Citizenship Document, http://www.uscis.gov/n-565 (last visited Jan. 28, 2008); U.S. Immigration Assistance Ctr., Naturalization Frequently Asked Questions, https://www.immigration-bureau.org/c_faq.htm (last visited Jan. 28, 2008).

[24] Robert Greenstein *et al.*, *supra* note 12, at 3; *accord* Families USA, *Citizens Update: Administration Creates Additional Barriers to Medicaid Enrollment* 6 (2006), http://www.familiesusa.org/assets/pdfs/DRA-Citizenship-Update.pdf.

[25] For example, the Indiana Bureau of Motor Vehicles turns away 60% of applicants for photo ID because they do not have the required supporting documents. *See* Brief for Petitioners Indiana Democratic Party *et al.*, *Crawford v. Marion County Election Bd.*, No. 07-25, at 13 (U.S. 2007) (citing record evidence).

[26] For example, 72% of Americans 80 and older in 2002 reported having disabilities, as compared to 18% of all Americans. AARP Brief, *supra* note 2, at 28 (citing U.S. Census Bureau, Table 1, Prevalence of Disabilities by Age, Sex, Race, and Hispanic Origin: 2002, *available at* http://www.census.gov/hhes/www/disability/sipp/disab02/ds02t1.pdf.

For some older Americans, especially people of color, it may be extremely difficult or impossible to obtain the documents needed for photo ID. Many minority citizens born before and during the 1960s were born outside of hospitals because of lack of access to health care.[27] One study found that three out of four nonwhite infants born in December 1939 and January 1940 were born at home, and that 23% of all nonwhite births outside of hospitals were unregistered.[28] Thus, older minority citizens are significantly less likely to have access to a birth certificate on file with the state.

Older women who have taken their husbands' surnames may face the additional hurdle of proving that their citizenship documents refer to them. The Brennan Center's national survey found that only 48% of voting-age women with ready access to their U.S. birth certificates have a birth certificate with their current legal name—as opposed to a name they had before marriage, divorce, or other name change—and only 66% have ready access to *any* type of citizenship document with their current legal name.[29]

The *Crawford* Case Before the U.S. Supreme Court and Indiana's Voter ID Law

On January 9, 2008, the Supreme Court heard oral argument in *Crawford v. Marion County Board of Elections*, a case challenging the constitutionality Indiana's voter ID law. The most restrictive voter ID requirement in the country, Indiana's law requires all voters at the polls to present a current government-issued photo ID with an expiration date. Because of its expiration date requirement, Indiana's law excludes many forms of government-issued photo IDs, including veterans' IDs, Congressional IDs, many student IDs, and work IDs.

Although many older Americans do not have the forms of ID required by Indiana's law, its impact on older Americans is mitigated somewhat by the state's absentee balloting rules. Like many pending voter ID proposals, Indiana's voter ID law applies only to voters who appear at the polls and specifically excludes individuals who vote by absentee ballot. Unlike many states, Indiana allows all citizens aged 65 and older to vote absentee.[30] Thus, a senior citizen without voter ID can cast a valid ballot in Indiana if she votes absentee.

Voting absentee, however, is not an adequate substitute for the right to participate in the political process in person. Many older Americans object to being excluded from the civic ritual of voting at the polling place and being relegated to a second-tier voting mechanism. Moreover, unlike those who vote in person, those who vote absentee must apply for, receive, and complete their ballots well in advance of Election Day. Not only is this an added burden, but it also deprives those voters of full information about the elections since they must mail their ballots before late-breaking information about the candidates and campaigns. Absentee ballots are typically less likely to be counted than regular ballots. And absentee voters must navigate confusing instructions without the assistance of poll workers.

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[27] *See id.* at 23 (citing S. Shapiro, *Development of Birth Registration and Birth Statistics in the United States*, 4 Population Studies 86, 99 (1950) (citation omitted)).
[28] *See id.* (citing same).
[29] *Citizens Without Proof, supra* note 12, at 2.
[30] *See* Ind. Code § 3-11-10-22(c).

Indiana's law has one additional feature supposedly designed to reduce its burden on voters who are indigent or have religious objections to photo IDs. Specifically, a voter without acceptable photo ID may cast a provisional ballot at the polls that will count so long as the voter travels to the circuit court clerk's office or the county election board within ten days of the election and swears an affidavit that he either has a religious objection to being photographed or is an indigent who is unable to obtain the required ID without paying a fee.[31] Indiana does not allow voters to execute those affidavits at the polls on Election Day.

This provision is of minimal benefit to Indiana's poor citizens, since it creates an overly—and gratuitously—burdensome process for them to have their ballots counted. Indigent voters who do not have state-issued photo IDs do not drive and may not be able to afford the cost of transportation (or the time) to make a second trip to vote. This creates a two-tier voting system based on wealth; while most voters need only go to one government office or public place to vote, indigent voters must go to two.

Older Americans Injured by Indiana's Law

Because *Crawford* was filed before the 2006 elections in an effort to block Indiana's law from going into effect, the record in the case was developed before the law was in effect in an election. Nonetheless, there is evidence that Indiana's law has already harmed older Americans.

First, the plaintiffs in the case include a number of older Americans who do not have and were unable to obtain the requisite ID and thus could not vote in person in Indiana. One plaintiff is Thelma Ruth Hunter, an 85-year-old woman who has resided and voted in person in Indianapolis her entire life but has no photo ID. She was born at home in Tennessee, and to her knowledge, no state record of her birth exists. At the time of the district court hearing, she had been unable to obtain a "delayed certificate of birth" from Tennessee and thus could not obtain an Indiana photo ID.[32] Other older plaintiffs include: Imogene Chapman, an 84-year-old woman who has worked at the polls in Marion County for 15 years and has no state-issued photo ID; Theresa Clemente, a 78-year-old Indiana resident who tried but was unable to obtain an Indiana photo ID after spending $28.00 for a certified copy of her birth certificate from Boston; David Harrison, a 75-year-old military veteran who has neither photo ID nor an original birth certificate and cannot afford to secure a birth certificate without charitable assistance; Lois Holland a 69-year-old pollworker who has no photo ID and no birth certificate; Ernest Pruden, a 74-year-old former poll worker who has neither the requisite photo ID nor a birth certificate from North Carolina, where he was born; and Barbara Smith, a 71-year-old woman who only has government-issued photo ID without an expiration date.[33]

Several older individuals associated with the Indiana League of Women Voters, who submitted an *amicus* brief in the case, were also injured by the law. One such individual is 92-year-old Mary Wayne Montgomery Eble, the daughter of a suffragette with a strong family tradition of voting and civic participation at the polls. Ms. Eble has no photo ID, and she lives in

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[31] Ind. Code § 3-11.7-5-2.5. A citizen with photo ID but who did not present it at the polls may also have her provisional ballot counted if she presents it at one of these offices within the ten-day window.
[32] *Indiana Democratic Party v. Rokita*, 458 F. Supp. 2d 775, 778 (S.D. Ind. 2006).
[33] *Id.*

a rural county with no public transportation, forty-five minutes away from the nearest state office that issues photo IDs, and one hour away from the place she would have to go to obtain a certified record of her birth. Ray Wardell, a 78-year-old Korean War veteran, was required to cast a provisional ballot in a recent election because he had no photo ID after his wallet was stolen and the state motor vehicles office refused to issue him a photo ID based on his Medicare card.[34] For his provisional ballot to count, he would have had to obtain a photo ID and present it to the county clerk or the election board within ten days of the election.

In addition to voters facing the prospect of future disenfranchisement, there is evidence of older Americans who were actually disenfranchised in a recent election. The bi-partisan Marion County Board of Elections, one of the respondents in the case, asserted in their brief that at least 32 provisional ballots were not counted in a 2007 municipal election in Indianapolis because the individuals who cast those ballots did not present the required ID. Most of those individuals had voted in the same precincts for many elections.[35] In a follow up report, the *New York Times* identified two of the disenfranchised citizens, and both were older. Specifically, Mary-Jo Criswell, age 71, was unable to vote using her bank card with a photograph, and Valerie Williams, age 60, was barred from voting in the lobby of her retirement home using her telephone bill, a Social Security letter with her address, and an expired Indiana driver's license.[36]

These affected individuals are only a small portion of the Indiana citizens injured by the state's photo ID law. While the parties to the *Crawford* case disagree on the number of Indiana citizens affected by the law, even under the state's minimalist interpretation of the evidence, at least 43,000 Hoosiers lack the photo IDs required to vote and thus could be disenfranchised by the law. (According to the petitioners, the number of Hoosiers without IDs is ten times that.)

The Baseless Justification for Indiana's Law

Like other voter ID proponents, Indiana justifies its restrictive voter ID law as a measure to prevent voter fraud. But photo ID does not stop vote-buying, ballot tampering, absentee ballot fraud, or even voting by non-citizens—the types of election misconduct that do occur. The only type of fraud that photo ID can prevent is voting in the name of another registered voter at the polls, or impersonation fraud.

The Brennan Center has extensively studied allegations of voter fraud over several years and has found no evidence that impersonation fraud is anything but an anomaly. Our recent report, *The Truth About Voter Fraud*, contains the most comprehensive analysis of public allegations of voter fraud.[37] It finds that almost all of those allegations—many of which are repeatedly raised by proponents of voter ID—have either been proved incorrect or are unsubstantiated and unlikely to reflect voter fraud. Instead, much evidence that purports to

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[34] Brief of League of Women Voters of Indiana, *Crawford v. Marion County Election Board*, Nos. 07-21, 07-25, at 9-12 (2007), available at http://brennan.3cdn.net/65eaef0b4162702f06_4xm6iibjy.pdf.

[35] Brief of Respondent Marion County Election Board, *Crawford v. Marion County Election Bd.*, Nos. 07-21, 07-25, at 16-17 (2007), available at http://brennan.3cdn.net/ebbb2f5f83bad24a92_jsm6b9ki5.pdf.

[36] Ian Urbina, *Voter ID Laws Are St to Face a Crucial Test*, New York Times, Jan. 7, 2008, at A11.

[37] Justin Levitt, *The Truth About Voter Fraud* (2007), http://brennan.3cdn.net/e20e4210db075b482b_wcm6ib0hl.pdf (reviewing allegations of voter fraud cited by state and federal courts, multipartisan and bipartisan federal commissions, political party entities, state and local election officials, and authors, journalists, and bloggers).

reveal voter fraud can be traced to far more common causes—including clerical and typographical errors, computer matching errors, jumping to unwarranted conclusions from information in the voter rolls or from mailings, and voter errors.[38]

Over the years, there have been only a handful of substantiated cases of individual ineligible voters attempting to defraud the election system. But by any measure, impersonation fraud is extraordinarily rare. That is not surprising, because it is irrational. Each voter fraud in connection with a federal election risks five years in prison and $10,000 in fines, in addition to state penalties.[39] In return, the fraud-feasor stands to gain only one marginal vote.

The conclusion that impersonation fraud is extremely rare is supported by the record in the *Crawford* case. Indiana conceded that that it had never prosecuted a case of in person voter fraud and that it was not aware of any actual incidents of in person voter fraud in Indiana. What is more, there was no showing that Indiana's existing procedures or less draconian rules elsewhere were inadequate to address any existing problem.

In fact, in all the briefs submitted before the Supreme Court, the law's supporters did not cite a single proven incident anywhere in the country of a fraudulent vote that could have been prevented by photo ID.[40] Despite the fact that the Department of Justice has had a program dedicated to voter fraud since 2002, out of the more than 400 million votes that were cast since 2000, the law's supporters cited only nine *unproven* allegations of impersonation fraud.[41] These paltry numbers make clear that impersonation fraud is not a serious problem, and they suggest that the existing measures in the states to protect against such fraud are sufficient to prevent threats to election integrity.

Recommendations for Congress

The Supreme Court's decision in *Crawford* is likely to reverberate far beyond Indiana. A decision to uphold Indiana's voter ID law will bolster efforts across the country to enact new ID restrictions. For the reasons I have provided, that could harm the voting rights of millions of older Americans.

Fortunately, the Supreme Court does not have a monopoly on protecting voting rights. Where the Constitution has been insufficient to protect voting rights in the past, Congress has stepped in and achieved excellent results.[42] Regardless of how the Supreme Court rules in *Crawford*, there are steps that Congress can do to protect all Americans, and especially older Americans, from disenfranchising voter ID requirements. These steps include:

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[38] *Id.* at 7-11.
[39] 42 U.S.C. § 1973i(c), (e); 42 U.S.C. § 1973gg-10.
[40] This conclusion is based on the Brennan Center's detailed analysis of all 250 alleged reports of fraud described in all the briefs supporting in the case. See Justin Levitt, *Analysis of Alleged Fraud in Briefs Supporting Crawford Respondents*, Dec. 31, 2007, http://www.truthaboutfraud.org/pdf/CrawfordAllegations.pdf.
[41] *Id.*
[42] Most notably, the Voting Rights Act of 1965 provides more protections for minority voters than the Constitution.

- *Resist restrictive ID and proof of citizenship requirements.* First and foremost, Congress should resist any attempt at the federal level to make photo ID and proof of citizenship a pre-condition of voting or voter registration.

- *Prohibit onerous state documentation requirements.* Congress should also enact protections to guard against voter disenfranchisement as a result of restrictive state-imposed photo ID or proof of citizenship requirements.

- *Reduce the costs and burdens associated with photo IDs.* Congress should make it easier for indigent and older Americans to obtain federal photo IDs and citizenship documents.

- *Repeal onerous provision of REAL ID Act.* The REAL ID Act of 2005,[43] which is scheduled to go into effect this year for states that do not obtain extensions, imposes a series of burdensome federal requirements on state photo ID cards. Among those is a requirement that each citizen show documentary proof of citizenship and that the state verify that documentation with the Department of Homeland Security before the individual is issued a driver's license or other photo ID. This will make it substantially more difficult for older Americans to obtain state-issued photo ID cards. The National Governors Association, the National Council of State Legislatures, and the American Association of Motor Vehicle Administrators have estimated that it will cost states at least $11 billion to implement the REAL ID Act over the first 5 years.[44] And a number of states have rejected the Act. To prevent a disaster, Congress should repeal the onerous requirements of the REAL ID Act.

- *Resources for voter and poll worker education on ID.* A significant number of voters are asked to provide photo ID at the polls even though such ID is not required by state law. While there has been no reliable empirical research into how many of these Americans have been disenfranchised as a result, the potential for problems is huge. Congress should provide resources for state and local election officials to educate their voters and poll workers about what ID is necessary as well as what ID is not required to vote and should require states to post accurate information about ID requirements at every polling place.[45]

Accessibility and Usability of Voting Systems

Although my testimony today addresses only voter identification, the Brennan Center has also done extensive work on two other issues of significant concern to older Americans: the accessibility and usability of electronic voting systems.

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[43] Making Emergency Supplemental Appropriations Act for Defense, the Global War on Terror, and Tsunami Relief, 2005, Pub. L. No. 109-13, 119 Stat 231 (codified in relevant part at 49 U.S.C. § 30301 note (2005)).
[44] *See* http://www.ncsl.org/print/statefed/Real_ID_Impact_Report_FINAL_Sept19.pdf.
[45] For more information, see Wendy R. Weiser and Jonah Goldman, *An Agenda for Federal Election Reform* (2007), at http://www.federalelectionreform.com/pdf/Federal%20Agenda%20Policy%20Paper.pdf.

According to the 2000 Census, there were 19.1 million Americans of voting age who have trouble seeing; 30.8 million who have trouble hearing; and 28.3 million who have physical difficulty, including trouble grasping or handling small objects. Not surprisingly, the elderly are disproportionately represented in this group. All of these disabilities make it more difficult to vote privately and independently on any voting system.

In 2006, the Brennan Center released a four-part series of studies providing a comprehensive empirical analysis of the electronic voting systems used in the United States. I have submitted copies of two of those reports—one dealing with voting system accessibility[46] and one dealing with voting system usability[47]—with my testimony.

With respect to the technologies currently in use, those reports found that none of the current voting systems fully satisfies HAVA's requirement that disabled voters be able to vote privately and independently. They also found that all of the current voting systems could be improved to ensure that voters' choices are accurately recorded. Many features that would make voting systems more accessible are new to the market or still in development.

With respect to the way in which voting machines are used, the reports found that, regardless of the specific technology used, there is still much each jurisdiction can do to ensure that elderly voters' choices are accurately recorded and counted. The reports laid out a number of basic usability and accessibility principles that officials should adopt when making decisions about using voting machines, ranging from where machines should be placed in the polling place to the type of ballot design that should be employed.

Just as important, election officials should work with older voters in their communities to assess how accessible and usability their machines are, and what might be changed to ensure that voters can use them. Good usability and accessibility testing of that includes older Americans is essential to ensure that their intended votes are accurately recorded.

Thank you very much.

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[46] Lawrence Norden *et al.*, *The Machinery of Democracy, Voting System Accessbility*, Oct. 10, 2006, at http://www.brennancenter.org/content/resource/the_machinery_of_democracy_voting_system_accessibility

[47] Lawrence Norden et al., *The Machinery of Democracy: Usability of Voting Systems*, Aug. 28, 2006, at http://www.brennancenter.org/content/resource/the_machinery_of_democracy_voting_system_usability.

The CHAIRMAN. Thank you very much.

Before turning to questions for the panel, we would like to ask our two Senators, Senator Salazar, Senator McCaskill, for any comments they wish to make.

OPENING STATEMENT OF SENATOR KEN SALAZAR

Senator SALAZAR. Thank you very much, Chairman Kohl and Ranking Member Smith, for giving this Committee the opportunity to hear from this excellent panel of witnesses.

The right to vote we all know in this Capitol is fundamental to our democracy. In the past few weeks we have seen Americans vote in primaries and caucuses from Iowa to Florida. As we know, next Tuesday we will see them voting in an additional 24 States. According to all these polls Americans are voting in record numbers.

Too often, following an election stories begin to emerge regarding the long lines at the polling places, lack of access for disabled individuals, or issues with voting machines. Reports show—and we know from our own experiences—that senior voters are particularly impacted.

As we move forward with the 2008 election and beyond, there are a few principles that should never be forgotten.

First, every American that is eligible and registered to vote must have access to the ballot box.

Second, elections must be transparent and exhibit the highest level of security.

Third, mandatory requirements that are burdensome and may inadvertently disenfranchise voters should be avoided.

Fourth, every vote must count.

I believe these principles will enhance American confidence in the election system and alleviate some of the barriers that seniors face in the election process.

Colorado's senior population has grown 26 percent since 1990. The 2000 census counted almost half a million persons over age 65 in my State of Colorado. I am proud to say that more than 80 percent of these seniors are registered to vote, higher than the national percentage.

Still, seniors in my State of Colorado face challenges similar to those faced by seniors across the country. According to the Colorado Legal Center for People with Disabilities, several reports were filed following the 2006 election claiming that seniors were unable to cast votes due to long lines at the polling place. Other reports claim that many seniors were unable to vote due to lack of transportation and difficulty reading the ballots.

Myself was in some of those very long lines at several polling places in Colorado, where seniors had to stand outside sometimes until 10 or 11 o'clock at night when the polling places had closed at 7. It was an imposing and undue hardship on many of them and, indeed, some of them had to leave their polling line and forego their right to vote. I think this is wrong.

There are many efforts underway in Colorado to try to address some of these concerns. For example, the Colorado Legal Center for People with Disabilities is working with the State parties. The Centers for Independent Living and the Colorado Cross-Disabilities Coalition to increase and improve transportation assistance for sen-

iors on election day. These efforts are incredibly important and I encourage other groups to join the cause.

The increasing number of seniors across the country support the need for policy solutions to the problems that seniors face voting.

I want to thank Chairman Kohl and Senator Smith for putting a focus on this particular issue. I would hope that one of the outcomes of the hearing is that we might be able to take some concrete action to try to make sure that we have a good election in this November.

For example, Mr. Karlawish, your comment about universal mobile polling places is something that perhaps we could do, Chairman Kohl, with a letter that we might author out of this Committee as a result of this hearing that we could send over to the Election Advisory Commission, asking them to look at how we might be able to implement some of those solutions.

So again, I thank you very much for this hearing and I thank the witnesses for their great testimony this morning.

The CHAIRMAN. Thank you.

Senator McCaskill.

OPENING STATEMENT OF SENATOR CLAIRE MCCASKILL

Senator MCCASKILL. Thank you very much. I also thank you and the Ranking Member for this hearing. It is very important.

You know, I have kind of been confused by this massive effort in our country for voter ID laws. They passed one quickly in Missouri, immediately preceding the November 2006 general election.

I am, I hope, not one around here to resort to ugly partisan politics. I think we need to get away from that.

But the facts are the facts. I know who pushed this law in Missouri and I know why they pushed it. It was very similar to the Indiana law and our Missouri Supreme Court threw it out of court, threw the law out before the election so it did not go into effect.

If in fact these laws have been introduced in 31 States, you would think there would be a massive amount of evidence that fraud by misidentification is rampant in this State, in this union, in this country. I have yet to see any evidence that there is a significant amount of fraud in this country based on misidentification at the polls.

When I was the State auditor I actually did an audit of one of the election boards in St. Louis. We did find a few problems, but it was more likely someone voting that had a felony record that shouldn't have, not that they had somebody else's ID or they weren't who they said they were. Or someone who actually—they hadn't cleaned up the rolls and somebody who had used their IDs to vote two different places on one day. Infinitesimal amount.

But we didn't find—and I am not aware of anywhere where there has been found, that people are going to the polls and pretending they are somebody they are not to try to vote.

Now on the other hand, we can all tell lots of stories about people who want to vote who do not have this ID. Frankly, are going to be confused and discouraged by the requirement that they get it. Most of those are seniors.

The most important point I want to make in this opening statement is one out of five African-American seniors in this country do

not have the documentation because their mothers were not allowed to deliver them in a hospital.

Now really, do we want to make these men and women whose parents were not allowed to give birth in a hospital because of the color of their skin, do we really want to make it harder for them to go and cast their vote in this grand and glorious democracy? I do not think we do.

I think we should be doing the opposite of what many of these laws are doing, making it easier in nursing homes, easier for those who have been disenfranchised.

The idea that we are reverting to some kind of public policy that is going to put stumbling blocks between those who are least advantaged in our society and the ballot box is absolutely repugnant to me.

I appreciate all of your testimony and I appreciate the hearing today.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you.

Senator Wyden.

OPENING STATEMENT OF SENATOR RON WYDEN

Senator WYDEN. Thank you very much, Mr. Chairman.

I think Senator Smith may have touched on it, but I guess it is fair to say the two of us are the country's first mail-in United States Senators.

What has been so striking in this discussion is, at the outset, people said vote-by-mail would be beneficial to Republicans. Then I happened to win the election so Democrats thought it was a good idea and Republicans didn't think it was a good idea.

Finally, the people of our State basically indicated that they had enough of all the nonsense, put it on the ballot and Democrats and Republicans alike said this works, this makes sense, it saves money, it is convenient, it is accessible, there is essentially only upside and downside.

Now, I gather—and I may have not picked up on all of your testimony. Dr. Karlawish.

Dr. KARLAWISH. Karlawish.

Senator WYDEN. I understand you had a reservation about vote-by-mail because you were interested in a more mobile kind of system where, in effect, you could get out and see people.

Now, provision was made in the Oregon system through the county elections department for people from the elections department, one Democrat, one Republican, to in effect go and see those kinds of individuals. We have found that there has not been any particular controversy associated with either side of the system, the vote-by-mail system nor the going to visit people.

Does that help address the concern that you have that people from the counties have done an objective kind of fashion so as to ensure integrity for the franchise is addressed?

Dr. KARLAWISH. So your State presents a unique situation which is there is no polling place to go to. Wrapping around that fact, in a long-term care setting what you want to make sure is, given the nature of the residents there and their disabilities, that their ability to get their absentee ballot is facilitated.

That when it arrives it arrives with election officials it isn't stored in a box somewhere so it can be stolen. That assistance with completing it is available by elections officials, and that election officials take it away from the long-term care facility.

Short of that, what you have is a setup for either not getting your absentee ballot or having someone else get your absentee ballot, or unscrupulously assist you with it or otherwise destroy it, et cetera. So——

Senator WYDEN. On that count we have had no problem with anything resembling an institutional setting. In other words the people, say, at a long-term care facility—I was director of the Gray Panthers for a long time and know those folks—have helped make this really flow seamlessly from an institutional setting.

I thought your point with respect to older and disabled folks by themselves was an interesting one because, there, someone might have a question about whether they were getting a ballot, whether they needed assistance. That is why the provision that I described seemed to be particularly useful for them.

Does that affect your judgment?

Dr. KARLAWISH. The ideal system is one where people who we trust go out and deliver ballots. Deliver them, assist people who want assistance, and take them back for counting. That is the ideal system.

Senator WYDEN. I think we have got every one of those features. For purposes of taking back for counting, that is essentially the postal system. That is essentially what older people have found the most convenient to them, that they can put a stamp on something if they are in a senior housing project or something of that nature.

Dr. KARLAWISH. But in a nursing home—I am not kidding you, but the average resident is not keeping a set of stamps and keeping their mail.

So what you would like is a system where at the nursing home they show up and say we have got all the absentee ballots here for all the residents here who are registered. OK? We being two people from the Oregon State Electoral Commission are going to be in a room and those who want to come to this room to fill out their ballots, come one, come all. Or those who can't come to this room we will go to your room and help you fill it out.

We will do this a couple days before election day so that there is time to catch people who missed that day. We will then take those filled out ballots back to the Oregon Electoral Counting Commission and count them.

Senator WYDEN. We are talking past each other. We have virtually every one of those features——

Dr. KARLAWISH. That is fantastic.

Senator WYDEN [continuing.] In the Oregon vote-by-mail system. So you will back it in the future when we want to take it nationwide?

Dr. KARLAWISH. I think that—I actually like—your system as it is essentially like Australia's system, because its paper ballots, et cetera.

If you can assure that elections officials are going to facilities without triggers like there has to be more than 20 absentee ballots or a request to come, et cetera, and doing what I described other-

wise, that is a great system. Put a stamp on it and let us get it out there.

Senator WYDEN. Any of you other panelists want to comment on it? We have had it for a decade. No allegations of fraud and abuse. I think Senator Smith will recall in our first campaign, particularly low-key, quiet, you know, affair that—when I prevailed by 18,220 votes. We always say who is counting in these kinds of instances.

Senator Smith was constantly accosted about whether there was fraud and the like. To his great credit, he said there wasn't any. The system worked well.

So we have got 10 years worth of history. I think it is fine to debate what to do in the future, but my view is if the country had this November what has worked for Oregon for a full decade we could take care of this problem.

I know this November, for example, there are people who are going to show up at various polling places once again, after this debate has gone on and on and on, and they are going to be told, no, they don't vote there. They are registered somewhere else. They are going to be traipsing all around, hither and yon. At some point after you go through this for several hours you give up.

With our vote-by-mail system you don't have any of that. If you have any confusion about where you live or any kinds of questions with respect to the initial contact you have got several weeks to work it out.

So I want to give you other panelists to weigh in with—an opportunity to weigh in with a ringing endorsement of the Oregon vote-by-mail system.

I see my Chairman has his light on and I probably have taken more than my share of time. Would any of you other panelists or members like to weigh in? I would be interested in your thoughts as well.

Ms. MARKOWITZ. Well, the Secretary of State of Vermont, and also the immediate past president of the National Association of Secretaries of State. I will tell you that, you know, nationally we are really looking closely at vote-by-mail.

There are other States that are beginning to experiment with it more broadly. Like I know in Washington State there are some counties there who are conducting all mail elections.

In Vermont in particular we are not quite ready for it. In part it is because we need to wait until our voter rolls are cleaned up. The Help America Vote Act for the first time required us to put in place a State-wide voter registration data base.

Because of the rules of the Federal Motor-Voter laws, many of the towns that had kept the list had voter checklists, people who hadn't been taken off because they hadn't given—hadn't notified the town that they had moved to a new place and registered in a new place.

So until those voting rules are clean, it actually is expensive for us. We have looked at it. We would be sending out a lot of ballots to people who are moved.

I suspect though that as time goes on and the Help America Vote Act really comes into kind of fruition—you know, it takes some years of investment before you get the return—that vote-by-mail will become more realistic for more places.

Right now the way I look at it in Vermont is we make it very easy for people to vote by mail, to ask to be sent a ballot by mail and return it by mail. It is one of the choices in our bag of tricks to make it easy and convenient for voters.

I have been working with Jason on—Dr. Karlawish, excuse me—on developing a pilot project to bring mobile polling to Vermont this next election to see if that is another tool that will make a significant difference, both in access to voting and the integrity of the process.

Senator WYDEN. Other panelists? Vote-by-mail?

Well, thank you all very much. I hope that we will go beyond model projects and demonstration exercises.

I think the country says to itself, at a time when we seem to be capable of changing our Blackberries and getting an updated, you know, model every 60 days, how can it be that we haven't figured out a way to preserve something that our country is all about, that the founding fathers felt was so sacred.

We think we have found it in Oregon. Certainly there are some logistical questions about communities that may not have the voting rolls up to date and the like. That will be true for any system. That will certainly be true for any system that once again this fall is going to have people, you know, turned away, ballots not counted, things of this nature.

But when you have something where the fundamentals are sound, where it is convenient, you save money, people feel that it preserves the paper trail, which I know all of you feel so strongly about, it just seems to me to be a shame that we don't put it in place for the country.

So I thank you.

Thank you for the extra time, Mr. Chairman.

The CHAIRMAN. Thank you, Senator Wyden.

Senator Smith.

Senator SMITH. Thank you, Mr. Chairman.

I would echo Ron's views on vote-by-mail. It does work for Oregon and it is a good model for other States as they look for ways to get elections better.

You know, I generally agree with what Senator McCaskill said, that we are arguing around the edges. We don't want to in any way prohibit lawful, constitutionally living people from voting.

I am reminded, though, that this really is a problem in terms of undermining confidence in the governments that are elected in close elections where evidence exists that somebody did something wrong.

Recently in a neighboring State to Oregon there was a gubernatorial election that one candidate had won the first two recounts. In the third recount the current Governor won by I believe 150 votes.

There was an inescapable fact that in one county there were more votes cast than there were registered voters. Not by a little, but by a lot. I hear people groan about that all the time. That is not fair to the winner or the loser, frankly. It does undermine the ability then to go and govern.

As I think, Wendy, about some of your comments, I don't know of any issue since I have been a U.S. Senator that has been more

divisive in this body than the issue of illegal immigration. I don't want an impediment to someone voting to require documents that makes it impossible for them to vote.

But there is a practical issue. I am really asking for your knowledge of the law and something that I am hoping to learn from you.

We have Motor-Voter. We have many States who give driver's licenses to illegal aliens without any proof of their legal right to vote. Or is there something in the State law that requires, before you go to Motor-Voter, that they have to prove that they are legally in the United States?

I ask this question because seniors regularly say to me, "I am outraged at the thought that my vote will be diluted or added to by someone who is not here constitutionally, lawfully voting."

Ms. WEISER. I think the answer is simple: Federal law—actually the Motor-Voter law itself—prohibits States from registering people who aren't lawfully eligible to vote, including noncitizens, as do other Federal criminal laws.

Senator SMITH. So Motor-Voter doesn't automatically register driver's license applicants to vote.

Ms. WEISER. That is right. They must actually affirmatively choose to register to vote at the motor vehicles office. It is not an automatic registration. They are prohibited from filling out the voter registration form unless they are citizens and eligible to vote in the State.

Senator SMITH. They have to produce the documents you say that they can't produce to get to register.

Ms. WEISER. To register to vote there is no documentation requirement, except in one State, in Arizona, which has recently required proof of citizenship in order to register to vote. This has been causing huge problems in Arizona and is currently in the courts. But everywhere else, you are supposed to swear to your eligibility before an election official or on your registration form.

Senator SMITH. But swearing and proving may be two different things. I mean, it is a crime to swear to a falsehood. I acknowledge that. It is a serious Federal offense. But it doesn't mean they are proving they are constitutionally lawfully voting then.

Ms. WEISER. It is true that there is no proof of citizenship required in order to register to vote across the country. Photo ID requirements that are being put in place across the country also don't require proof of citizenship, and so they don't do anything to prevent this problem that you are suggesting people are afraid of, of noncitizens voting.

Senator SMITH. Do you have a suggestion for how we strike this balance? Because I don't know that we will ever get it perfect, but we need to get it nearly perfect for the sake of the integrity of our democracy.

Ms. WEISER. Well, right now there has been a pretty good balance struck by Congress and across the country and we can see the results. We actually don't have any proven cases, or almost any proven cases of in-person voter fraud, the kinds of fraud targeted by these ID laws.

Of the about 250 allegations of voter fraud that were submitted before the Supreme Court—we investigated all of them—most of them were either debunked or otherwise were unsubstantiated. I

think there were only nine unsubstantiated allegations and all the other allegations were not reflective of in-person voter fraud.

So whatever problems you are seeking to address do not get addressed by these kinds of ID bills.

Senator SMITH. That is very helpful. Thank you.

Another legal question I would like to ask, I think to you, Michael. You talk about mental incapacity. If someone cannot express their volition, is there a legal point at which they don't vote? They don't get to vote or someone doesn't get to vote for them?

Mr. WATERSTONE. Practically or legally?

Senator SMITH. Legally.

Mr. WATERSTONE. Actually, Secretary Markowitz and Dr. Karlawish, I think have actually done more work in this area than I have——

Senator SMITH. Any of you. I am just really curious because this would be a rare instance. But I mean, if somebody has mental incapacity——

Mr. WATERSTONE. Yes.

Senator SMITH [continuing.] They cannot manifest their volition, their choice, what do you do?

Mr. WATERSTONE. There are——

Senator SMITH.Do they not vote?

Mr. WATERSTONE. There are a number of States that expressly disenfranchise certain categories of people with mental disabilities. Some States provide that people that under guardianship are automatically disenfranchised.

Actually, in one case a federal district court in Maine held that this violated both the Equal Protection clause and the Americans with Disabilities Act. There was recently a case in the Eighth Circuit that came out the other way on that.

So that is the legal frontier at which that occurs, States that attempt to disenfranchise certain categories of people. In terms of how that capacity assessment can and should be done correctly and what questions should be asked, that is really an area that Dr. Karlawish has researched.

Dr. KARLAWISH. Yes. I think the issue of the capacity to vote is one that its assessment resides, and should reside if a State wants to deal with that issue, in the courts in the context of, say, guardianship hearings and here is why.

Canada, the entire country, has no provision for what it means to be competent to vote. The State of Illinois as well has no provision for what it means to be competent to vote. You think, well, what is going on here, you know, in Canada.

Well, the answer is is that voting capacity actually is ultimately a performative capacity. What I mean by performative capacity—it is a weird statement—is it is something that someone ultimately has to do.

So someone says, you know, "I want to vote" and then proceeds to pick. If somebody needs to assist them picking, they read the ballot to them and they say, "Which is your choice?" If they can't perform that act and make a choice they can't vote. So it works itself out functionally.

As for the issue of deeming someone not competent to vote, that is I think a separate matter for the courts if the courts in a State choose to want to do that. In this country it is State by State.

But I want to again remind. Illinois has no provision for that. Canada dropped it in the 1980's.

Senator SMITH. They have had problems in Chicago with that very issue, I think. Just kidding.

I appreciate that and your answers have been great. I think you all very much for your being here.

I ask these questions in part because these are—as many of you have noted, this is an issue that is going to grow as our society ages. The more of the blanks we can fill in and get it right, the more valid will be election results in terms of a day of decision and a moving forward in another chapter in our democracy.

But if our elections are filled with loopholes and allegations of fraud, which I suppose will always happen in some place, some corner of the country, it does get in the way of we the people manifesting our will.

I just thank you all for your service in this area and for your contribution today.

The CHAIRMAN. Thank you very much.

Senator McCaskill.

Senator MCCASKILL. Thank you, Mr. Chairman.

I want to tell the secretary of state that my son goes to college in Vermont, but he did go with me and vote absentee for next Tuesday before he came back to college. So if he shows up when you all have your primaries——

Ms. MARKOWITZ. We will watch for him.

Senator MCCASKILL [continuing.] Put him in jail.

I am—it was interesting to hear from you, Ms. Weiser, that what you said in response to a question was essentially what I have found. That is that this myth, this mythical problem that is out there about in-person voter ID just simply isn't happening, that someone is fraudulently using an ID or trying to be someone they are not.

Does anyone on the panel—do they know of any example that has occurred in this country, where someone has showed up without a picture ID and tried to pretend they are someone else and tried to vote?

Ms. MARKOWITZ. Well, in Vermont we had one instant.

Senator MCCASKILL. One. I found one.

Ms. MARKOWITZ. It was—and actually, when you hear it you will chuckle because it wasn't nefarious. It was a fellow who came and voted in the morning and then he went home.

It turns out his dad wasn't feeling so well so he went out to do some chores for his father. He was going to pick up his prescriptions and, you know, some groceries and then stop to vote for him and—because he wasn't going to be able to make it down.

A fellow came in to check in and he said, "Well, I am just going to vote the way my father told me to for him." He just didn't get it, that you can't vote for somebody else. It is true, that is not, you know, logical to everybody.

The Attorney General's office did not prosecute in that case. He didn't actually cast the ballot. He was recognized after he had gone

into the ballot box, though, and so the ballot he had taken was spoiled.

Senator MCCASKILL. I want to ask if any of you are aware of cases like this. I do think that when someone comes into a nursing home and tries to prey on the members and cast their ballots, there are mechanisms within the system that catches that.

I happen to have lived a real life. When I was a very young assistant prosecutor in Kansas City back in the late 1970's there was an owner of a very large senior center nursing home that came to the prosecutor's office and said I want you all to prosecute this man. He comes around every election and goes up and down the hall and votes everyone and the nursing staff and everyone realizes he is doing them.

He is in fact marking the ballot or telling them who to vote for. He is preying on these elderly people. Most of them don't know what is happening. He is, you know, he was doing it in a massive way. I mean, he was not just going to one or two people. He was trying to get at least 20 or 30 votes out of every nursing home.

So the owner of the nursing home came to the prosecutor's office and guess who got the file? I actually did a jury trial in the courtroom of voter—absentee voter fraud against this man who had made a career out of delivering so many votes for his party every election in nursing homes.

It was an interesting case. It was a jury trial. He pled not guilty. In fact there were two of them, he and his partner, who was a woman who did this. Unfortunately, half of our witnesses died before we could get the case to trial. But they were convicted and they were disenfranchised. These were big activists in the party of their choice.

So I have seen first hand that if there is abuse there are mechanisms out there in the community that brings it to the attention of the authorities, particularly if it is being done in a methodical way.

So I really believe that if—now, are there other instances that you all are aware of? Doctor, are you aware of instances like that where that is ongoing in some of these nursing homes and senior centers?

Dr. KARLAWISH. Yes. I would say if you just type into Lexus-Nexus long-term care/nursing home election election fraud, and make it a broad search of all newspapers, you will find a ream of local newspaper reports of just the kind of stuff you are talking about.

If you go to our Web site, pennadc.org, and click on Facilitating Voting as People Age—we have a reference to several of those stories.

Whether they are true or not is, I think, really not the issue. The issue is that the local nursing home becomes the lightening rod for accusations of fraud, usually by a disgruntled loser of a close local race.

I cited that, for example, earlier in my testimony, just in Philadelphia a guy lost by 120 votes for a council race. He cites a bunch of absentee ballots where they all bear similar markings that look like one person filled them all out at a local long-term care facility. He cites fraud. He wants redress. He is angry. Whether he is right

or wrong isn't the issue. The point is that nursing homes are this lightening rod for fraud.

Personally and, well, conceptually, I don't think that waiting for accusations of fraud and an investigation of it is the way to prevent that fraud. Because really, the ability to get to trial, such as you so skillfully did, is really tough to do. If that is the—.

Senator MCCASKILL. No, I was just the low assistant on the totem pole. I got the file because I was not getting homicides and burglaries and robberies.

Dr. KARLAWISH. Look where it got you.

Senator MCCASKILL. Well—.

Dr. KARLAWISH. You know, when I look at that—and I think though—and if you then look at that problem, the problem is that it is only one side of the problem. If that is your only focus it tends then to lead to ways that, ultimately I am afraid, could stigmatize and disenfranchise nursing home residents. Because the other side is the story of the people who wanted to vote who didn't make it in time for registration——

Senator MCCASKILL. Right.

Dr. KARLAWISH [continuing.] Never had the chance to get their absentee ballot ordered. When the ballot showed up they weren't helped to fill it out. Or they weren't registered for an absentee ballot, because most States are not like Oregon, and they couldn't get to the polling site that is on the other side of town where their nursing home—you know, because they are in a nursing home that is on the other side of the city.

So that is why I think a system that addresses both the fraud that you prosecuted successfully, as well as the people who went to vote. A third of the nursing homes in both the entire State of Virginia and the city of Philadelphia, one-third of the nursing homes reported that there were some residents who wanted to vote but could not vote because of these kind of mistakes and errors.

I want a system that addresses both issues. That model is out there. It is done in Australia. It is done in Canada. There are setups in the State of Maryland. Sounds like Oregon may have something like that, although that is fairly recent because we didn't capture that in our search of the laws that went back a few yeas ago done by Charlie Sabatino and colleagues at the American Bar Association.

That system is a system of mobile polling, where we don't rely on a well-meaning person who wants to come in and gather the votes, and potentially steal the votes, or an overworked busy social worker or activities director who has got a lot of other things on "typically" her plate to deal with in addition to getting people registered and voted. Getting them to the polls if they happen to be registered at another part of town.

I want a system where we come in, we get them registered, we help them cast their ballots, we bring those ballots back and we count them. That is the system we need in this country.

Senator MCCASKILL. Well, that certainly makes sense. I think if we could do that, and especially as my generation ages and we have more and more and more and more and more and more people that are in these assisted living centers and long-term care facilities it is important.

By the way, we can find out where they all are because most of them are getting some kind of services——

Dr. KARLAWISH. Right.

Senator MCCASKILL [continuing.] Through the government in one way or another.

So I think the work that we are doing here is very important, Mr. Chairman, and I appreciate the hearing and I appreciate your opportunity to allow me to ask questions.

Thank you very much all of you.

Mr. WATERSTONE. Mr. Chairman, just one point——

The CHAIRMAN. Go ahead.

Mr. WATERSTONE [continuing.] I want to make. I would hope that the efforts to develop mobile polling are not tied to efforts to have States adopt universal absentee balloting or postal voting. The reason simply is that universal postal voting, there is a whole other set of issues which I am not at all accomplished or skilled to talk about.

But my understanding just as a citizen is that some people have strong views that they shouldn't do it. People have to go to the polling place. I wouldn't want to get this important issue lost in the other issue of is it good to have all postal voting or not. In other words sort of a baby-bathwater problem.

The CHAIRMAN. The issues are separate. They are very separate, right. We shouldn't confuse one with the other.

Mr. WATERSTONE. Right.

The CHAIRMAN. We talked this morning about the Oregon system now quite often. I think you, Ms. Markowitz, said you didn't think your State was ready for it. I didn't quite understand what you were saying.

Ms. MARKOWITZ. In order for an all vote-by-mail system to work—the way it works in Oregon is everyone on the checklist gets a ballot. That means that your voter checklist has to be very accurate and up to date.

Frankly, in Vermont we are still getting up to speed there. It is going to take some years of—the way that the Federal Motor-Voter law works is that when somebody moves, unless they have given you written permission or verbal permission to take their name off of your checklist, or unless you get a notification that they registered in a new location, they have to stay on your checklist until they have missed two general elections. OK? So that is a long time.

But pretty soon we are going to be there. You know, we are going to be able to drop off these folks who we know have moved. So in some of our larger communities that have a lot of transient population, they might have, oh, 5,000 on the voter registration rolls that they know have lived somewhere else.

Now, under our new Help America Vote Act statewide voter registration data base all new registrants aren't going to have that problem. We have a system in place so that there is sort of an email notification within the State when somebody registers in a new place. There is a duplicate check capacity. But it is the backlog of old stuff that was imported into our fancy new system.

So for the moment it is not practical. I don't have a town clerk who will—because we run our elections by town—who would feel confident in sending out ballots on the existing checklist because

they all know that we haven't yet cleaned up our rolls. We have got folks on the checklist who they knew moved, but who they are not under Federal law able to take off the checklist yet.

The CHAIRMAN. So you are suggesting that while it may work in a State like Oregon with its particular geography and demographics, all across our country it would not be practical today.

Ms. MARKOWITZ. Well, every State has its own unique history, practices, traditions and laws. So it is very successful in Oregon. I think we can all learn from that. There probably are places where it would work quite well, but not everywhere.

The CHAIRMAN. Anybody disagree with that?

Mr. WATERSTONE. If I could just add one point to that. When we are talking about absentee voting or mail-in voting, it is also important to remember that absentee balloting or ballots that people fill out at home are not inherently in and of themselves accessible.

The ability to cast a secret and independent ballot, to the extent someone can and wants to, is a value that is protected in the polling place. If we are talking about voting in less traditional places, that is something we need to think about also, even in the absentee format. There is work being done on that, experimenting with HTML voting, internet voting. I know in Europe they have worked on text message voting.

So as we are looking ahead in this and thinking about perhaps changing the traditional role of the polling place, I think we need to remember that secret and independent ballots are something that many people who vote absentee are able to do. We need to think about extending that value to the extent we can to all citizens.

The CHAIRMAN. Anybody have any strong arguments with respect to Dr. Karlawish and what he talked about mobile voting. I think we all understand what it is and he went into it in some great detail. Is that the place we really want to get to?

Ms. BOVBJERG. If I may just jump in on disability and voting more broadly. What we heard from advocates for disabled people was this sense that the American thing to do, the thing that the general population does, is what they want to be able to do, too.

So in thinking about different ways of providing access, including alternative methods, it is just important to remember that if the general population is going to the polls, those polls are supposed to be accessible to all Americans, including people with some form of impairment.

So if voting by mail is done—if the general population is voting by mail as in Oregon, that is a little different. But that is not necessarily what disability advocates would see as being full access.

The CHAIRMAN. I see.

Senator SMITH. If I may just add one thing, that I think from our work that we have done after the 2000 and 2004 elections, one of the issues that I haven't heard discussed here is that voters themselves want alternatives. Older voters want alternatives. They don't want to be able to vote only at the polls or only absentee. They want some alternatives.

Early voting, for example, that goes on for 20 days or something, allows them to choose a day with good weather to go vote. Whereas they don't have a choice on election day as to what the weather is

like. If it is icy and snowy they may not go. So that gives them options.

So that they want the alternatives. They want the alternatives that exist for everybody else. But it is not—for example, we just finished some work on bilingual voting, particularly elderly Chinese voting. Voters in Boston and Los Angeles actually prefer to do absentee voting because it gives them more time to go over the ballot and they sometimes have translation issues. So they really don't—I mean their preference is to get an absentee ballot, not to go to the polls and vote.

So I think the issue here is the alternatives that are available and people have choices that they themselves can exercise.

The CHAIRMAN. I have a bill—I would like your comment on it—that would establish weekend voting as preferable to voting on a Tuesday. You all are somewhat expert on elections, but interested in your opinion on that.

Would we get a much higher participation in this country if we had weekend voting as opposed to voting on the first Tuesday in November?

Ms. MARKOWITZ. You might have an easier time getting poll workers.

The CHAIRMAN. Easier time what?

Ms. MARKOWITZ. Getting poll workers.

The CHAIRMAN. Yes. Poll workers. But——

Ms. MARKOWITZ. This is something that we have heard——

The CHAIRMAN [continuing.] In terms of the——

Ms. MARKOWITZ [continuing.] A lot about——

The CHAIRMAN [continuing.] In terms of our participation in this country and, you know, where we are and where we want to get to, without respect now to disabled or people in long-term care settings.

If we had weekend voting, you know, the argument being the first Tuesday in November is no longer a time when everybody can get out to vote. They are all too busy, or so many people are too busy. Would weekend voting in your opinion significantly increase participation in this country?

Ms. MARKOWITZ. I believe it has that potential. What is interesting in Vermont is we hold our local elections in March, the first Tuesday in March and—but the way we do it is in town meeting, where people come and they stay for most of the day and debate issues and vote on issues and on the local issues.

Some years ago we permitted communities to move town meeting to Saturday or Sunday before that Tuesday. We did find an increase in some towns, but in some towns we saw no change at all.

The difference though between our experience of town meeting and this proposal is the commitment of time. You know, when you come to town meeting you have to be prepared to stay 4 hours or more. When you go to vote you are going in and out.

I think a weekend election would help with election administration. I think it is true it would make it easier to find volunteer poll workers. But there are a lot more people who aren't working, and so it would make it more convenient.

It might spread the work out. You know, the other challenge, you know, when you see the lines at the end of the day because every-

body is clustering to come to vote when they are done with work. There are slower times, you know, 10 in the morning, 2 in the afternoon. Weekend voting might help smooth out some of those issues as well. So I think it is a fine idea.

The CHAIRMAN. Ms. Weiser.

Ms. WEISER. If I may just add one more item on the table. We have talked about a range of barriers to older Americans and Americans with disabilities. One that isn't on the table is voter registration and the voter registration system.

I did want to flag that the Motor-Voter law was intended also to make it easier for the many Americans who use disability agencies and other social service agencies, to register to vote. That has not been implemented very well across the country. There are really a range of other steps that can be taken to make registration more accessible for many older Americans, too.

The CHAIRMAN. Any other comments from the panel? Or anything at all with respect to our discussion this morning?

You have been very, very helpful. It has been a very informative panel and we thank you so much for coming.

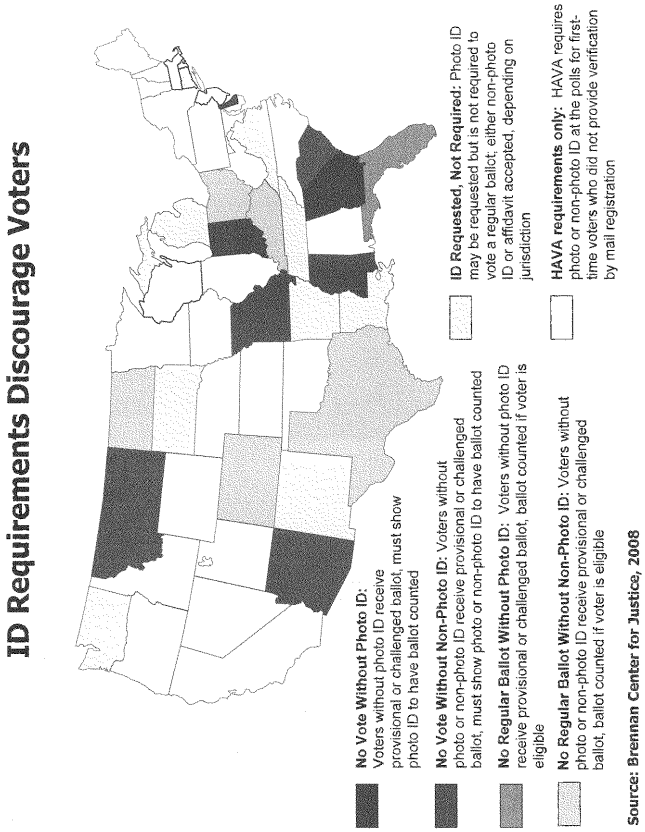
Mr. WATERSTONE. Thank you.

Ms. BOVBJERG. Thank you.

With that, the Committee is adjourned.

[Whereupon, at 12:16 p.m., the Committee was adjourned.]

APPENDIX


ID Requirements Discourage Voters
No Vote Without Photo ID: Voters without photo ID receive provisional or challenged ballot, must show photo ID to have ballot counted
No Vote Without Non-Photo ID: Voters without photo or non-photo ID receive provisional or challenged ballot, must show photo or non-photo ID to have ballot counted
No Regular Ballot Without Photo ID: Voters without photo ID receive provisional or challenged ballot, ballot counted if voter is eligible
No Regular Ballot Without Non-Photo ID: Voters without photo or non-photo ID receive provisional or challenged ballot, ballot counted if voter is eligible
ID Requested, Not Required: Photo ID may be requested but is not required to vote a regular ballot; either non-photo ID or affidavit accepted, depending on jurisdiction
HAVA requirements only: HAVA requires photo or non-photo ID at the polls for first-time voters who did not provide verification by mail registration
Source: Brennan Center for Justice, 2008

VOTING RIGHTS &
ELECTIONS SERIES

BRENNAN CENTER FOR JUSTICE at NYU School of Law

CITIZENS WITHOUT PROOF:

A SURVEY OF AMERICANS' POSSESSION OF DOCUMENTARY PROOF OF CITIZENSHIP AND PHOTO IDENTIFICATION

Summary

A recent national survey sponsored by the Brennan Center for Justice at NYU School of Law reveals that millions of American citizens do not have readily available documentary proof of citizenship. Many more – primarily women – do not have proof of citizenship with their current name. The survey also showed that millions of American citizens do not have government-issued photo identification, such as a driver's license or passport. Finally, the survey demonstrated that certain groups – primarily poor, elderly, and minority citizens – are less likely to possess these forms of documentation than the general population.

From November 16-19, 2006, the independent Opinion Research Corporation conducted a telephone survey of 987 randomly selected voting-age American citizens.[1] The survey included several questions sponsored by the Brennan Center, asking whether respondents had readily available documentary proof of citizenship or government-issued photo identification, and if so, whether it contained current information:

> 1) Do you have a current, unexpired government-issued ID with your picture on it, like a driver's license or a military ID?
>
> 2) If yes, does this photo ID have both your current address AND your current name (as opposed to a maiden name) on it?
>
> 3) Do you have any of the following citizenship documents (U.S. birth certificate/U.S. passport/U.S. naturalization papers) in a place where you can quickly find it if you had to show it tomorrow?
>
> 4) If yes, does [that document] have your current name on it (as opposed to a maiden name)?

[1] Scholars recognize that many telephone surveys underrepresent low-income and minority households. *See, e.g.*, Stephen J. Blumberg et al., Telephone Coverage and Health Survey Estimates: Evaluating the Need for Concern About Wireless Substitution, 96 AM. J. PUBLIC HEALTH 926 (2006); U.S. BUREAU OF THE CENSUS, STATISTICAL BRIEF: PHONELESS IN AMERICA (1994), at http://www.census.gov/apsd/www/statbrief/sb94_16.pdf. Although the results of this survey were weighted to account for underrepresentation of race, they were not weighted to account for a likely skew toward higher-income households. Because the survey found that low-income households were less likely to have documentary proof of citizenship or photo ID, it is therefore likely that the survey results actually underestimate the total number of American citizens who do not have readily available documentation.

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November 2006

Survey results: proof of citizenship

As many as 7% of United States citizens – 13 million individuals – do not have ready access to citizenship documents. Seven percent of the American citizens surveyed responded that they do not have ready access to U.S. passports, naturalization papers, or birth certificates.[2] Using 2000 census calculations of the citizen voting-age population, this translates to more than **13 million** American adult citizens nationwide who cannot easily produce documentation proving their citizenship.[3]

Citizens with comparatively low incomes are less likely to possess documentation proving their citizenship. Citizens earning less than $25,000 per year are more than twice as likely to lack ready documentation of their citizenship as those earning more than $25,000.[4] Indeed, the survey indicates that at least **12 percent** of voting-age American citizens earning less than $25,000 per year do not have a readily available U.S. passport, naturalization document, or birth certificate.[5]

Documentation proving citizenship often does not reflect the citizen's current name. Many of those who possess ready documentation of their citizenship do not have documentation that reflects their current name. For example, survey results show that only 48% of voting-age women with ready access to their U.S. birth certificates have a birth certificate with current legal name[6] – and only 66% of voting-age women with ready access to *any* proof of citizenship have a document with current legal name.[7] Using 2000 census citizen voting-age population data, this means that as many as **32 million** voting-age women may have available only proof of citizenship documents that do not reflect their current name.

---

[2] Unless otherwise indicated, the margin of error for these survey results, to a 95% confidence level, is ±2%.
[3] We note that 135 respondents indicated that they had *both* a U.S. birth certificate and U.S. naturalization papers. This most likely indicates confusion on the part of the respondents, who might not have understood what a "naturalization certificate" is. Because these 135 individuals most likely do possess some documentary proof of citizenship, whether birth certificate or naturalization papers, they have been included for purposes of these results with survey respondents who indicated that they do possess citizenship documents. If these 135 respondents were excluded from the total sample, the remaining population would have revealed an even larger portion (nine percent) without documentary proof of citizenship.
[4] The survey did not yield statistically significant results for differential rates of possession of citizenship documents by race, age, or other identified demographic factors.
[5] The margin of error for this particular result, to a 95% confidence level, is ±5%.
[6] The margin of error for this particular result, to a 95% confidence level, is ±5%.
[7] The margin of error for this particular result, to a 95% confidence level, is ±4%.

Survey results: photo identification

As many as 11 percent of United States citizens – more than 21 million individuals – do not have government-issued photo identification. Eleven percent of the American citizens surveyed responded that they do not have current, unexpired government-issued identification with a photograph, such as a driver's license or military ID.[8] Using 2000 census calculations of the citizen voting-age population, this translates to more than **21 million** American adult citizens nationwide who do not possess valid government photo ID.

Elderly citizens are less likely to possess government-issued photo identification. Survey results indicate that seniors disproportionately lack photo identification. **Eighteen percent** of American citizens age 65 and above do not have current government-issued photo ID.[9] Using 2005 census estimates, this amounts to more than **6 million** senior citizens.

Minority citizens are less likely to possess government-issued photo identification. According to the survey, African-American citizens also disproportionately lack photo identification. **Twenty-five percent** of African-American voting-age citizens have no current government-issued photo ID, compared to eight percent of white voting-age citizens.[10] Using 2000 census figures, this amounts to more than **5.5 million** adult African-American citizens without photo identification. Our survey also indicated that sixteen percent of Hispanic voting-age citizens have no current government-issued photo ID, but due to a low sample size, the results did not achieve statistical significance.[11]

Citizens with comparatively low incomes are less likely to possess photo identification. Citizens earning less than $35,000 per year are more than twice as likely to lack current government-issued photo identification as those earning more than $35,000. Indeed, the survey indicates that at least **15 percent** of voting-age American citizens earning less than $35,000 per year do not have a valid government-issued photo ID.[12]

Photo identification often does not reflect current information. For many of those who possess current, valid government-issued photo ID, the documentation does not reflect their current information. For example, survey results show that ten percent of voting-age citizens who have current photo ID do not have photo ID with both their current address and their current legal name. The rate is higher among younger citizens: as many as **18 percent** of citizens aged 18-24 do not have photo ID with current address and name; using 2004 census tallies, that amounts to almost **4.5 million** American citizens.[13]

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[8] This figure is consistent with official government estimates. The 2005 Carter-Baker Commission, for example, cited the U.S. Department of Transportation and the U.S. Census Bureau in finding that approximately twelve percent of the national voting-age population does not possess a driver's license. Commission on Federal Election Reform, Building Confidence in U.S. Elections, at 73 n.22 (2005).
[9] The margin of error for this particular result, to a 95% confidence level, is ±6%.
[10] The margin of error for this particular result, to a 95% confidence level, is ±8%.
[11] The margin of error for this particular result, to a 95% confidence level, is ±7%.
[12] The margin of error for this particular result, to a 95% confidence level, is ±4%.
[13] The margin of error for this particular result, to a 95% confidence level, is ±7%.

BRENNAN
CENTER
FOR JUSTICE

THE TRUTH ABOUT VOTER FRAUD

Justin Levitt

Brennan Center for Justice *at New York University School of Law*

ABOUT THE BRENNAN CENTER FOR JUSTICE

The Brennan Center for Justice at New York University School of Law is a non-partisan public policy and law institute that focuses on fundamental issues of democracy and justice. Our work ranges from voting rights to redistricting reform, from access to the courts to presidential power in the fight against terrorism. A singular institution—part think tank, part public interest law firm, part advocacy group—the Brennan Center combines scholarship, legislative and legal advocacy, and communications to win meaningful, measurable change in the public sector.

ABOUT THE BRENNAN CENTER'S VOTING RIGHTS AND ELECTIONS PROJECT

The Voting Rights and Elections Project works to expand the franchise, to make it as simple as possible for every eligible American to vote, and to ensure that every vote cast is accurately recorded and counted. The Center's staff provides top-flight legal and policy assistance on a broad range of election administration issues, including voter registration systems, voting technology, voter identification, statewide voter registration list maintenance, and provisional ballots.

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ACKNOWLEDGMENTS

The author would like to thank his Brennan Center colleagues for their contributions to this paper—particularly Deborah Goldberg and Wendy Weiser of the Brennan Center for their helpful comments and Margaret Chen for her extraordinary research assistance. The Center thanks the Carnegie Corporation of New York, Educational Foundation of America, Ford Foundation, JEHT Foundation, Open Society Institute, Rockefeller Family Fund, and an anonymous donor for the generous support that made this paper possible. The statements made and views expressed in this paper are solely the responsibility of the Brennan Center.

THE TRUTH ABOUT VOTER FRAUD

I. INTRODUCTION

Allegations of election-related fraud make for enticing press. Many Americans remember vivid stories of voting improprieties in Chicagoland, or the suspiciously sudden appearance of LBJ's alphabetized ballot box in Texas, or Governor Earl Long's quip: "When I die, I want to be buried in Louisiana, so I can stay active in politics." Voter fraud, in particular, has the feel of a bank heist caper: roundly condemned but technically fascinating, and sufficiently lurid to grab and hold headlines.

Perhaps because these stories are dramatic, voter fraud makes a popular scapegoat. In the aftermath of a close election, losing candidates are often quick to blame voter fraud for the results. Legislators cite voter fraud as justification for various new restrictions on the exercise of the franchise. And pundits trot out the same few anecdotes time and again as proof that a wave of fraud is imminent.

Allegations of widespread voter fraud, however, often prove greatly exaggerated. It is easy to grab headlines with a lurid claim ("Tens of thousands may be voting illegally!"); the follow-up — when any exists — is not usually deemed newsworthy. Yet on closer examination, many of the claims of voter fraud amount to a great deal of smoke without much fire. The allegations simply do not pan out.

These inflated claims are not harmless. Crying "wolf" when the allegations are unsubstantiated distracts attention from real problems that need real solutions. If we can move beyond the fixation on voter fraud, we will be able to focus on the real changes our elections need, from universal registration all the way down to sufficient parking at the poll site.

Moreover, these claims of voter fraud are frequently used to justify policies that do not solve the alleged wrongs, but that could well disenfranchise legitimate voters. Overly restrictive identification requirements for voters at the polls — which address a sort of voter fraud more rare than death by lightning — is only the most prominent example.

The Brennan Center for Justice at NYU School of Law carefully examines allegations of fraud to get at the truth behind the claims. The Brennan Center has analyzed purported fraud cited by state and federal courts; multipartisan and bipartisan federal commissions; political party entities; state and local election officials; and authors, journalists, and bloggers. Usually, only a tiny portion of the claimed illegality is substantiated — and most of the remainder is either nothing more than speculation or has been conclusively debunked.

This paper seeks to distill our findings: the truth about voter fraud. It first offers a straightforward definition to avoid the common trap of discussing election irregularities that involve neither voters nor fraud as if they showed voter fraud. It then discusses different alternative reasons more credible than voter fraud to explain many of the recurring allegations. The paper then analyzes, scenario by scenario, some of the more common types of alleged voter fraud and their more likely causes and policy solutions. Finally, the paper presents individual case studies of notorious instances of alleged voter fraud, and finds those allegations to be grossly inflated. For more information, analysis, and opinion about voter fraud, by the Brennan Center and others, please see www.truthaboutfraud.org.

II. What Is Voter Fraud?

"Voter fraud" is fraud by voters.

More precisely, "voter fraud" occurs when individuals cast ballots despite knowing that they are ineligible to vote, in an attempt to defraud the election system.[1]

This sounds straightforward. And yet, voter fraud is often conflated, intentionally or unintentionally, with other forms of election misconduct or irregularities.

There are many such problems that are improperly lumped under the umbrella of "voter fraud." Some result from technological glitches, whether sinister or benign: for example, voting machines may record inaccurate tallies due to fraud, user error, or technical malfunction.[2] Some result from honest mistakes by election officials or voters: for example, a person with a conviction may honestly believe herself eligible to vote when the conviction renders her temporarily ineligible,[3] or an election official may believe that certain identification documents are required to vote when no such requirement exists.[4] And some irregularities involve fraud or intentional misconduct perpetrated by actors other than individual voters: for example, flyers may spread misinformation about the proper locations or procedures for voting; thugs may be dispatched to intimidate voters at the polls; missing ballot boxes may mysteriously reappear. These are all problems with the election administration system … but they are not "voter fraud."

> It is more likely that an individual will be struck by lightning than that he will impersonate another voter at the polls.

Conflating these concerns is not merely a semantic issue. First, the rhetorical sloppiness fosters the misperception that fraud by voters is prevalent. That is, when every problem with an election is attributed to "voter fraud," it appears that fraud by voters is much more common than is actually the case.

This, in turn, promotes inappropriate policy. By inflating the perceived prevalence of fraud by voters, policymakers find it easier to justify restrictions on those voters that are not warranted by the real facts.

Moreover, mislabeling problems as "voter fraud" distracts attention from the real election issues that need to be resolved. It draws attention away from problems best addressed, for example, by resource allocation or poll worker education or implementation of longstanding statutory mandates, and instead improperly focuses on the voter as the source of the problem.

III. The Research Landscape

It is easy to find opinion pieces and legislative statements claiming that voter fraud is a substantial concern. But aside from a trickle of news stories of low-grade fraud in a few isolated elections, there are surprisingly few sources recounting specific incidents of alleged voter fraud.

The most notorious such sources are documents prepared by the American Center for Voting Rights ("ACVR"), a controversial organization established in early 2005 and apparently defunct just over two years later.[5] The ACVR produced two reports — one compiling allegations of fraud in Ohio in 2004, and another compiling allegations of fraud in 2004 nationwide.[6] The ACVR has also repeated these and other allegations in *amicus* briefs filed in litigation related to voter identification provisions.[7]

Former *Wall Street Journal* editorial board member and weekly columnist John Fund has also recounted several specific allegations of voter fraud in his 2004 book *Stealing Elections*;[8] two other books by academics, *Dirty Little Secrets* and *Deliver the Vote*, address allegations of fraud from a historical perspective.[9] Hans von Spakovsky, a commissioner on the Federal Election Commission and a former Counsel to the Assistant Attorney General for Civil Rights in the Department of Justice, has similarly recounted allegations of voter fraud in several policy papers and presentations.[10]

Finally, there are a few newspaper articles that seem repeatedly cited in discussions of voter fraud — for example, a 2000 article in the *Atlanta Journal-Constitution* and a 2004 article in the *New York Daily News*.[11] These articles review attempts to match voter rolls to other large lists in an effort to find allegedly ineligible voters; the limitations of such studies are discussed later in this paper.

Similarly, there are surprisingly few sources of information specifically analyzing the allegations of alleged voter fraud to determine the extent to which they show reliable evidence of fraud. In two studies, both focusing more heavily on the political and legal context of voter fraud allegations, Professor Lorraine Minnite has reviewed several incidents.[12] Professor Spencer Overton, a former commissioner on the 2005 Commission on Federal Election Reform, has also reviewed several incidents of alleged fraud in his book *Stealing Democracy*.[13] After careful analysis, both authors find the claims largely overblown.

Among its other work on the subject,[14] the Brennan Center for Justice has developed a methodology for reviewing allegations of voter fraud,[15] and continues to collect analyses of noted allegations at www.truthaboutfraud.org. This paper distills the results of that work, compiling for the first time the recurring methodological flaws that continue to spawn allegations of widespread voter fraud where it does not exist.

IV. Voter Fraud And The Press For Photo ID

The most common example of the harm wrought by imprecise and inflated claims of "voter fraud" is the call for in-person photo identification requirements. Such photo ID laws are effective *only* in preventing individuals from impersonating other voters at the polls — an occurrence more rare than getting struck by lightning.[16]

By throwing all sorts of election anomalies under the "voter fraud" umbrella, however, advocates for such laws artificially inflate the apparent need for these restrictions and undermine the urgency of other reforms.

Moreover, as with all restrictions on voters, photo identification requirements have a predictable detrimental impact on eligible citizens. Such laws are only potentially worthwhile if they clearly prevent more problems than they create. If policymakers distinguished real voter fraud from the more common election irregularities erroneously labeled as voter fraud, it would become apparent that the limited benefits of laws like photo ID requirements are simply not worth the cost.

THE VOTER FRAUD PHANTOM DRIVES POLICY THAT DISENFRANCHISES ACTUAL LEGITIMATE VOTERS, WITHOUT A CORRESPONDING ACTUAL BENEFIT.

Royal Masset, the former political director for the Republican Party of Texas, concisely tied all of these strands together in a 2007 *Houston Chronicle* article concerning a highly controversial battle over photo identification legislation in Texas. Masset connected the inflated furor over voter fraud to photo identification laws and their expected impact on legitimate voters:

> Among Republicans it is an "article of religious faith that voter fraud is causing us to lose elections," Masset said. He doesn't agree with that, but does believe that requiring photo IDs could cause enough of a dropoff in legitimate Democratic voting to add 3 percent to the Republican vote.[17]

This remarkably candid observation underscores why it is so critical to get the facts straight on voter fraud. The voter fraud phantom drives policy that disenfranchises actual *legitimate* voters, without a corresponding actual benefit. Virtuous public policy should stand on more reliable supports.

V. THE TRUTH ABOUT VOTER FRAUD

There have been a handful of substantiated cases of individual ineligible voters attempting to defraud the election system. But by any measure, voter fraud is extraordinarily rare.

In part, this is because fraud by individual voters is a singularly foolish and ineffective way to attempt to win an election. Each act of voter fraud in connection with a federal election risks five years in prison and a $10,000 fine, in addition to any state penalties.[18] In return, it yields at most one incremental vote. That single extra vote is simply not worth the price.

Instead, much evidence that purports to reveal voter fraud can be traced to causes far more logical than fraud by voters. Below, this paper reviews the more common ways in which more benign errors or inconsistencies may be mistaken for voter fraud.

CLERICAL OR TYPOGRAPHICAL ERRORS

In the course of millions of recorded votes and voters, it is virtually certain that there will be clerical errors. Often, what appears to be voter fraud—a person attempting to vote under a false name, for example — can be traced back to a typo.

Errors in the poll books. In a jurisdiction of any significant size, it is unfortunately easy to make an entry in the poll book next to the wrong voter's name. For example, despite having died in 1997, Alan J. Mandel was alleged to have voted in 1998; upon further investigation, Alan J. Mandell (two "l"s), who was very much alive and voting at the time, explained that local election workers simply checked the wrong name off of the list.[19] The same problem may occur when information from a poll book is entered incorrectly into a county's computer system, as in Milwaukee in 2004.[20] Or voters — legitimate voters — may make a mistake: a 1994 investigation of fraud allegations in California, for example, revealed that voters accidentally signed the poll books on the wrong lines, next to the names of deceased voters.[21]

Errors in registration records. Simple typos may also infect voter records, changing a name or an identifying number or an address in a way that interferes with attempts to validate the voter's information against some other source. For example, in Washington State in 2006, Marina Petrienko tried to register to vote for the first time, but a county official mis-typed the year of her birth, entering "1976" into the database, instead of the year on her form: "1975."[22] First-time Illinois voters Mike and Sung Kim "had been mistakenly registered with Kim as their first names" in 2004.[23] And in Milwaukee, Victor Moy was listed on the rolls as living at 8183 W. Thurston Avenue, but actually resides at number 8153.[24] Because such typos may prevent registrations from being externally validated by information in other sources, officials and observers may believe that registrations are fraudulent when they are, in reality, entirely legitimate.

BAD "MATCHING"

The most common source of superficial claims of voter fraud, and the most common source of error, probably involves matching voter rolls against each other or against some other source to find alleged double voters, dead voters, or otherwise ineligible voters.

Errors in the underlying data. Some such matches fail to account for errors or default entries in the underlying data. In New Jersey in 2005, for example, examiners alleged fraud by individuals on the voter rolls in two different places whose first and last names and birthdates matched, including a woman named Mary Johnson.[25] Closer examination, however, showed that some of the matching birthdates in question were January 1, 1880, which was simply a system default for missing information.[26] In reality, the examiners had found only two different women named "Mary Johnson," with no relevant birthdate information at all.

Partial matches. Other matches neglect middle names or suffixes: in the same New Jersey procedure described above, for example, James A. Smith and James G. Smith were presumed to be the same person, as were J. T. Kearns and J. T. Kearns, Jr.[27] Similarly, in New Hampshire, 22 pairs of people who shared the same first and last names were flagged for possible double-voting; in fact, all of the flagged voters had different middle names.[28] And in one of the more infamous examples of inappropriate matching, a vendor preparing a set of voters to be purged in Florida in 2000 found "matches" in the first name if the first four letters were the same on two different lists, and "matches" in the last name if 80% of the letters were the same.[29] The final set of voters to be purged, of course, contained the names of many individuals whose records had been falsely matched.[30]

The "birthdate" problem. Even given an exact match, however, two entries with the same name and birthdate may not represent the same individual. Statistics students are often surprised to discover that in a group of 23 people, it is more likely than not that two will share the same month and day of birth; in a group of 180, two will probably share the same birthdate. In any group of significant size, statistics teaches that there will be many with the same first and last names — and it is likely that at least two such voters will be born on the same day.[31] It should not therefore be surprising, for example, that "Kathleen Sullivan" was most likely listed twice on the rolls of 2004 New Jersey voters not because one woman drove the length of the state to cast a second ballot, but because two women named Kathleen Sullivan happen to share the same birthdate.[32]

Jumping to Conclusions

Those searching for fraud — politicians, pundits, and even occasionally prosecutors — sometimes jump to unwarranted conclusions with a limited amount of information. The "birthdate problem" above — mistaking two different people with the same name and birthdate — is one example. But there are many other circumstances in which observers draw illicit conclusions from data that in fact have a benign explanation.

Dual registration. Registering twice — or mistakenly leaving an old registration on the rolls — is not meaningful evidence of an intent to commit fraud by voting twice. There is no requirement that citizens inform their local election officials before they move, and with approximately 14% of Americans moving each year,[33] it is not surprising to find that many voters are registered under multiple addresses — but vote only once. In New Hampshire in 2004, for example, local officials found 67 individuals on the rolls in both Dover and Durham; each of the 67 had moved from one town to the other, and each voted only once.[34]

FRAUD BY INDIVIDUAL VOTERS IS A SINGULARLY FOOLISH WAY TO ATTEMPT TO WIN AN ELECTION.

It may seem significantly more suspicious to register twice on the same day — but even then, two registrations do not necessarily yield two votes. In 2004, for example, federal prosecutors charged Wisconsinite Cynthia Alicea with double-voting. Wisconsin allows residents to register on Election Day, which Alicea did. Poll workers found an error on the form, and asked Alicea to fill out another, which she also did — but the first form was never discarded. Although Alicea completed two registration forms, following poll worker instructions, she voted only once. Her innocence was eventually proven, but not before prosecutors forced the 23-year-old through an unwarranted trial.[35]

Death records. Voting from the grave offers salacious headlines, and investigators often attempt to match death records to voter rolls in an attempt to produce purported evidence of fraud. Yet in addition to the problems with inaccurate matching identified above, a simple match of death records to voter rolls may conceal citizens who voted before dying, in quite ordinary fashion. In Maryland in 1995, for example, an exhaustive investigation revealed that of 89 alleged deceased voters, none were actually dead at the time the ballot was cast. The federal agent in charge of the investigation said that the nearest they came was when they "found one person who had voted then died a week after the election."[36] Similarly, in New Hampshire, postcards were sent to the addresses of citizens who voted in the 2004 general election; one card was returned as undeliverable because the voter died after Election Day, but before the postcard arrived at her home.[37]

Criminal records. Reports of votes by persons with convictions have often fed claims of voter fraud. Yet without more information, such reports may be deceptive. Many, if not most, convictions are misdemeanors, which in most states do not affect the defendant's voting rights. Wallace McDonald, for example, was purged from the Florida voter rolls in 2000 because of a conviction. Yet Mr. McDonald's crime was not a felony, for which many Floridians forfeit voting rights forever — but merely a misdemeanor, which should not affect voting rights at all. Indeed, Mr. McDonald had been convicted only of falling asleep on a bench.[38] Similarly, in Washington's 2004 gubernatorial election, hundreds of citizens were alleged to have voted illegally because of convictions that were actually juvenile dispositions — which do not disqualify voters.[39]

Other claims of fraud rely solely on the fact that someone was convicted but never look to see whether the accused person had his voting rights restored. Even in Florida, where, until 2007, most persons with felony convictions lost their voting rights permanently, not every person convicted of a felony was ineligible to vote. Reverend Willie Dixon, 70, was purged from the Florida voter rolls in 2000 because of a felony conviction — but Reverend Dixon had already been pardoned for his crime and his voting rights had been restored.[40] In most other states, persons with convictions regain the franchise after release from either incarceration, probation, or parole. Allegations of fraud that rely on a past criminal conviction but fail to investigate whether voting rights were restored will likely prove unfounded.

Returned mail. Voter "caging" is a tactic involving a mass mailing to registered voters to sniff out mailings that are returned undelivered; these undelivered mailings are then used to compile a list of voters allegedly enrolled under invalid addresses. But for many reasons, undelivered mail need not be an indication that a person registered at the given address is not entitled to vote there.[41] A voter may be away from home for work, like a Louisiana Congresswoman challenged because she received her mail in Washington;[42] or for military service, like an Ohio servicewoman challenged because she received her mail where she was stationed, in North Carolina;[43] or for an extended vacation, like an Oregon woman rendered inactive because she was out of the country for a few months.[44] A voter may live with others but be unlisted on the mailbox. Or, like Ohio resident Raven Shaffer, he may receive mail at a post office box or other mail service, and not at his registered residence.[45] Moreover, some mail is simply not delivered, through no fault of the voter: in the 1990 census, for example, *The New York Times* reported that "[a]lthough at least 4.8 million [census] forms were found to be undeliverable by the Postal Service, 1.8 million of those were later delivered by hand."[46] And recent reports found that government records used by Chicago postal workers to deliver mail contained more than 84,000 errors.[47]

Mail sent to a listed registration address may also be returned as undeliverable because the voter has moved — even though the citizen remains wholly eligible to vote without re-registration. Each state has different rules determining when a voter who has moved must inform election officials of her new address. At a minimum, however, federal law provides that if a voter has moved within the same area covered by a given polling place — if, for example, a voter moves from one apartment to another within the same apartment complex, as a 2000 Oregon voter did[48] — she may legitimately vote at that polling place even if she has not yet notified a registrar of her move.[49] Similarly, a voter who has moved within the same registrar's jurisdiction and Congressional district may return to vote at her former polling place without re-registering.[50] Especially in urban areas where there is high mobility within a particular neighborhood, undeliverable mail may simply reflect the recent move of a voter who remains fully eligible to vote.

Unusual addresses. In most states, voters must register at a residential address; those looking for fraud may therefore flag addresses zoned for business use as an indication of fraudulent activity. Broad zoning restrictions, however, do not account for many less traditional — but legitimate — residences. Barbara Taylor was among hundreds of Washington voters challenged in 2005 for this reason. While it is true that the address on her registration was the address of a public storage facility, Taylor explained that she is "a manager for the company and has lived in an apartment on the site for 12 years."[51] In other cases, transient or homeless individuals have registered — as they are legally entitled to do — at shelters or government buildings.[52]

Records compiled for a different purpose. In St. Louis in 2000, officials compared the voter rolls to city property records and alleged that some voters fraudulently registered from vacant lots.[53] The property records, however, were originally compiled for a purpose other than individual identification; an address with multiple plots of land was apparently deemed entirely "vacant" if only one of the plots had no building. Further investigation by local reporters revealed that the supposedly vacant lots where voters were registered in fact contained valid residences.[54]

Voter Mistakes

Even after accounting for the false conclusions above, investigations reveal that ineligible voters do sometimes cast votes. It is important, however, to distinguish those cases in which voters know they are ineligible but vote anyway — real voter fraud — from cases in which ineligible voters mistakenly believe themselves to be eligible. Both scenarios are unquestionably of concern. But it is likely to be more productive to address mistakes with remedies different from those often proposed for fraud.

Of the relatively small number of ineligible voters who mistakenly cast ballots, most are citizens rendered ineligible by criminal conviction. The laws concerning eligibility vary from state to state and can be confusing: different voters are disenfranchised for different convictions for different lengths of time.[55] Moreover, the process of restoring a citizen's right to vote varies as well, from automatic restoration upon release from prison in states like Pennsylvania, Indiana, Ohio, Illinois, and Michigan,[56] to the excruciatingly burdensome application process in Kentucky — which requires all would-be voters to submit a written application accompanied by three character references, an essay explaining why they should be eligible to vote, and a filing fee.[57]

These rules are not merely difficult for voters to navigate: election officials with special training in the rules and regulations governing eligibility routinely get the law wrong. A 2004 survey, for example, found that 43% of New Jersey's county election offices did not follow state law in restoring citizens' right to vote.[58] In New York, a much-publicized 2003 survey found that more than half of the local election officials did not follow state law; when the survey was repeated just two years later, 38% of the local boards of elections still got the law wrong.[59]

It is difficult to expect disenfranchised voters to navigate the election laws successfully when so many election officials with expertise do not. Indeed, in Milwaukee, one voter asked to present identification at the polls showed his Department of Corrections ID card, with "OFFENDER" printed in bold letters across the face — but he was not informed by any poll worker that he might be ineligible to cast a ballot.[60] Such cases show confusion … but not voter fraud.

VI. Types Of "Voter Fraud"

Allegations of "voter fraud" seem to fall into one of several recurring categories. Some would represent actual fraud if the allegations proved true, though the allegations are often unsupported. Some would not actually represent fraud even if they were true. This paper reviews some of the more common assertions of "fraud" below, to substitute more careful analysis for overeager and salacious headlines.

Allegations of Double Voting

Allegations of double voting are among the most common assertions of voter fraud. Consider one set of agitated headlines: "More Double Voting Tied to '04 Election,"[61] "Double Voting Being Investigated,"[62] "Double Voting Fear Rises,"[63] "Hundreds Might Have Double-Voted,"[64] "Exposed: Scandal of Double Voters."[65] Most of these reports are hypothetical — hundreds "might" have double voted — and further research shows reason to question the conclusion that widespread double voting occurred. Other reports appear more certain but are actually more incorrect.

There are a handful of known cases in which admissions, poll book entries, absentee ballots, provisional ballot stubs, or other documentation indicate that one individual has actually voted twice.[66] These cases are extremely rare — not because such documentation is hard to come by (many states require that such documents be retained), but because actual double voting is itself extremely rare. Moreover, the scarcity is expected, given the severity of the penalty (criminal prosecution), and the meager nature of the payoff (one incremental vote).

ALICEA VOTED ONLY ONCE, BUT BASED ON TWO REGISTRATION FORMS, PROSECUTORS TOOK HER TO TRIAL. SHE EVENTUALLY WON HER CASE BUT, BECAUSE OF THE ORDEAL, "SHE'S INCLINED NOT TO VOTE EVER AGAIN".

Instead, it is far more common to see allegations of epidemic double voting that are unfounded. Such claims are usually premised on matching lists of voters from one place to another; upon closer inspection, the match process shows error. Sometimes the interpretation is flawed: two list entries under the same name — even the same name and birthdate — indicate different individuals, as with two Kathleen Sullivans confused for each other in New Jersey in 2004.[67] The opportunity for error increases with the size of the attempted match: when allegations of fraud in 2000 were based on a *nationwide* attempt to match names and birthdates, it is not surprising that 3,273 alleged double voters were found — and not surprising that many, like those attributed to Martha Alexander, the chair of the North Carolina legislature's panel on election laws, were based on flawed assumptions that two people with the same name and birthdate were the same individual.[68] Moreover, sometimes the lists themselves are flawed: because of the occasional clerical error by overworked and undertrained election workers, an individual is marked as voting when she did not in fact cast a ballot, as Missouri investigators discovered in 2004.[69]

Sometimes, merely following a poll worker's accurate instructions can land legitimate voters in unwarranted hot water. In 2004, for example, federal prosecutors were especially attuned to claims of voter fraud, and fixed the weight of the federal government on 23-year-old Cynthia Alicea. Alicea, an eligible resident of Wisconsin, registered on Election Day, as permitted under Wisconsin law. Poll workers found an error on the form, and asked Alicea to fill out another, which she also did. The poll workers, however, never discarded the first form. Alicea voted only once, but based on the two registration forms, prosecutors took the young woman to trial. Though she eventually won her case, because of the ordeal, "she's inclined not to vote ever again."[70]

Exaggerated or unfounded allegations of fraud through double voting include the following:

- In Missouri in 2000 and 2002, hundreds of voters were alleged to have voted twice, either within the state or once in Kansas and once in Missouri. The same analysis acknowledged that the "computer files contain many errors that show people voting who did not actually vote."[71] Of 18 Kansas City cases that reporters followed up, 13 were affirmatively shown to result from clerical errors.[72] We are aware of public sources substantiating only four cases (amounting to six votes within the state), yielding an overall documented fraud rate of 0.0003%.[73]

- In New Hampshire in 2004, citizens were alleged to have voted twice. In fact, on further investigation, many of the voters who were allegedly listed multiple times on the rolls actually represented different people with identical names; others were listed with multiple registrations, but voted only once. We are not aware of any public materials substantiating the claims of double voting.[74]

- In New Jersey in 2004, 4,397 voters were alleged to have voted twice within the state, and 6,572 voters were alleged to have voted once in New Jersey and once elsewhere.[75] Many of these alleged double votes were actually flawed matches of names and/or birthdates on voter rolls.[76] Only eight cases were actually documented through signatures on poll books; at least five signatures appear to match.[77] Even if all eight proved to reveal fraud, however, that would amount to an overall double voting rate of 0.0002%.[78]

- In New York in 2002 and 2004, between 400 and 1,000 voters were alleged to have voted once in New York and once in Florida. These allegations were also prompted by a flawed attempt to match names and birthdates.[79] We are aware of public sources substantiating only two cases, yielding an overall documented fraud rate of 0.000009%.[80]

- In Wisconsin in 2004, dozens of voters were alleged to have voted twice. After further investigation, the vast majority were affirmatively cleared, with some attributed to clerical errors and confusion caused by flawed attempts to match names and birthdates. There were 14 alleged reports of voters casting ballots both absentee and in person; at least 12 were caught, and the absentee ballot was not counted. There were no substantiated reports of any intentional double voting of which we are aware.[81]

Allegations of Dead Voters

Allegations of "dead voters" are also popular, not least for the entertaining pop culture references to be found in the headlines: "Among Voters in New Jersey, G.O.P. Sees Dead People,"[82] for example, or "Dead Man Voting."[83] After further investigation, however, these allegedly dead voters often turn up perfectly healthy.

There are a handful of known cases in which documentation shows that votes have been cast in the names of voters who have died before the vote was submitted.[84]

It is far more common, however, to see unfounded allegations of epidemic voting from beyond the grave, with a chuckle and a reference to Gov. Earl Long's quip ("When I die — if I die — I want to be buried in Louisiana, so I can stay active in politics.") or Rep. Charlie Rangel's update (same idea, but takes place in Chicago).[85]

Here, too, flawed matches of lists from one place (death records) to another (voter rolls) are often responsible for misinformation. Sometimes the interpretation is flawed: two list entries under the same name indicate different individuals.[86] Sometimes the lists themselves are flawed: as Hilde Stafford discovered in 2006, individuals who are in fact quite spry are occasionally listed as deceased on the Social Security Administration's master files.[87] And sometimes, because of clerical error by election workers or voters or both, an individual is marked as voting when she did not in fact cast a ballot, or is marked as voting under the wrong person's name. For example, despite having died in 1997, Alan J. Mandel was alleged to have voted in 1998. On further investigation, Alan J. Mandell (two "l"s), who was very much alive and voting at the time, explained that local election workers simply checked the wrong name off of the list.[88] Indeed, a 2007 investigation of about 100 "dead voters" in Missouri revealed that every single purported case was properly attributed either to a matching error, a problem in the underlying data, or a clerical error by elections officials or voters.[89]

In other circumstances, the match is accurate but reveals nothing illegal about the vote: the voter has died, yes, but *after* casting her ballot. In Maryland in 1995, for example, an exhaustive investigation revealed that of 89 alleged deceased voters, none were actually dead at the time the ballot was cast. The federal agent in charge of the investigation said that the nearest they came was when they "found one person who had voted then died a week after the election."[90]

Exaggerated or unfounded allegations of fraud by dead voters include the following:

- In Georgia in 2000, 5,412 votes were alleged to have been cast by deceased voters over the past 20 years.[91] The allegations were premised on a flawed match of voter rolls to death lists. A follow-up report clarified that only one instance had been substantiated, and this single instance was later found to have been an error: the example above, in which Alan J. Mandel was confused with Alan J. Mandell.[92] No other evidence of fraudulent votes was reported.

- In Michigan in 2005, 132 votes were alleged to have been cast by deceased voters.[93] The allegations were premised on a flawed match of voter rolls to death lists. A follow-up investigation by the Secretary of State revealed that these alleged dead voters were actually absentee ballots mailed to voters who died before Election Day; 97 of these ballots were never voted, and 27

were voted before the voter passed away.[94] Even if the remaining eight cases all revealed substantiated fraud, that would amount to a rate of at most 0.0027%.[95]

- In New Jersey in 2004, 4,755 deceased voters were alleged to have cast a ballot. The allegations were premised on a flawed match of voter rolls to death lists. No follow-up investigation publicly documented any substantiated cases of fraud of which we are aware, and there were no reports that any of these allegedly deceased voters voted in 2005.[96]

- In New York in 2002 and 2004, 2,600 deceased voters were alleged to have cast a ballot, again based on a match of voter rolls to death lists. Journalists following up on seven cases found clerical errors and mistakes but no fraud, and no other evidence of fraud was reported.[97]

Allegations of Fraudulent Addresses

Those claiming voter fraud also point to allegations that voters have been registered at fraudulent addresses such as vacant lots, storage units, or government buildings. As with the allegations above, there are a few cases in which charges that votes have been improperly cast from illegitimate addresses have been substantiated.[98]

More often, however, the allegations are either unsupported or further investigation reveals that the allegedly flawed addresses turn out to be legitimate.

These sorts of claims are often based on postcards that are returned undelivered or undeliverable — but the postcards are an unreliable indicator. Typos during the registration process, like the one listing Victor Moy at 8183 W. Thurston Avenue in Milwaukee instead of 8153,[99] may cause mail to be misdirected. Or, like the post office box used by Raven Shaffer in Ohio, individuals may receive mail at an address different from the legal residence they list as their registration address.[100]

Other unsupported claims are based on attempts to screen registration addresses against lists of vacant lots, or against zoning regulations to find locations dedicated to non-residential use. Here, too, typos may cause legitimate addresses to be flagged as suspicious.[101] Or the underlying lists may be flawed: in Missouri in 2000, lots that were supposedly vacant actually held houses.[102] Sometimes the lists are simply overly broad, and capture voters who list less traditional — but entirely legitimate — residences. Barbara Taylor, for example, was among hundreds of Washington voters challenged in 2005 for this reason. While it is true that the address on her registration was the address of a public storage facility, Taylor — a manager for the storage company — "has lived in an apartment on the site for 12 years."[103] Though her address appeared superficially questionable, her address was in fact entirely legitimate.

Finally, a variant of the above claims concern allegations that large numbers of votes are all tied to one address. There is, however, nothing inherently suspect about multiple votes from one address if multiple eligible voters live there, whether the address is a college dormitory or nursing home or any other group housing arrangement. In New Hampshire, for example, a citizen apparently became concerned because 88 individuals had registered with residences on property owned by Daniel Webster College; on further investigation, the 88 registrations were revealed to be from students at the college — and unsurprisingly, entirely legitimate.[104]

Exaggerated or unfounded allegations of fraud by voters with invalid addresses include the following:

- In Missouri in 2000, 79 voters were registered from addresses alleged to be vacant lots, but further investigation found that properties classified as vacant in fact contained legitimate residences, and that at least one of the voters was apparently the victim of a typographical error.[105] We are aware of no public reports substantiating claims that any votes were cast by individuals fraudulently registered at invalid addresses.

- In New Hampshire in 2004, based on undelivered postcards sent after the election, citizens were alleged to have voted from invalid addresses. Many actually lived at the addresses claimed, but received their mail elsewhere. Others moved after the election but before the postcards arrived. We are aware of only two substantiated cases (including one domestic violence victim, who voted from an old address in order to avoid disclosing her current domicile), with two more under investigation. Even if all four revealed fraud, that would amount to an overall rate of 0.0006%.[106]

- In Wisconsin in 2004, after an attempt to match voters' addresses to a postal service list, 1,242 votes in Milwaukee were alleged to be fraudulent; many of these allegations were later traced to data entry errors or to legitimate residences that were presumed to be business addresses.[107] 5,800 additional Election Day registrants were sent undeliverable postcards, but many of these postcards were returned because the voters legitimately moved after the election.[108] We are aware of no substantiated reports of any votes cast by individuals fraudulently registered at invalid addresses.

ALLEGATIONS OF VOTER FRAUD BY PERSONS WITH FELONY CONVICTIONS

Many close elections have also featured allegations that waves of ineligible people with felony convictions have deliberately overtaken the voting system. There are, however, only a handful of known cases in which people rendered ineligible by convictions cast ballots despite knowing that they were not permitted to do so.[109]

More frequently — though still quite rare — individuals who are ineligible because of convictions have reportedly registered or voted *without* realizing that they were ineligible. In Washington in 2004, for example, there were reports of voting by ineligible persons with convictions, in substantial part because of significant confusion abour the circumstances under which civil rights were taken away or restored.[110] At the time, citizens convicted of a felony were disenfranchised both while in prison and after they had returned to the community on parole or probation. In order to regain the right to vote, these citizens had to complete their sentence — including repayment of all restitution, fees, and fines.[111] Confusion abounded. Many citizens with convictions thought they could vote again once they were released from probation.[112] Some individuals rendered ineligible by conviction were allegedly told by corrections officers that they could vote; other probationers were apparently mailed ballots they thought they could (indeed, should) cast.[113] At least one county elections office provided mistaken information on its website.[114]

Similar confusion was not confined to Washington. A 2004 survey in New Jersey, for example, found that 43% of election offices got the law wrong; the error rate by election officials in New York was 38%.[115] When more than a third of trained election officials do not know the rules, it is not hard to imagine that persons with convictions are also poorly informed. Moreover, given the ease with which poll book entries can be

double-checked against lists of convictions to find ineligible voters, it seems unlikely that ineligible citizens would take the substantial risk of a return to prison for just one incremental vote. On the rare occasions when citizens rendered ineligible by conviction do vote, it is far more sensible to believe that they do so by mistake than that they do so with intent to deceive.

The few examples above concern actual votes — intentional or unintentional — cast by people who are ineligible because of a conviction. More common are allegations of such activity that prove unfounded. Such reports are often based on comparisons of voter rolls with lists of people who have been convicted. Yet these "matches" are subject to the same errors mentioned repeatedly above: typos, clerical errors, individuals who superficially appear to be the same person but are actually different. The notorious 2000 purge of purported felons in Florida is a good example: a system that found roughly similar names and birthdates on voter rolls and conviction records ended up disqualifying thousands of voters who were perfectly eligible to vote, but who were deemed ineligible by the "match."[116] For example, because of the inaccurate matching protocol, eligible citizen Matt Frost was prevented from voting because state officials incorrectly linked him with a similar alias of ineligible voter Shawn Chadwick.[117]

Even when the matching system is not to blame, allegations of ineligible voting may be inflated. As with at least some names on the 2000 Florida purge list, convictions may be mislabeled as disenfranchising felonies when in fact a voter has been convicted only of a misdemeanor.[118] As in Washington in 2004, citizens may be accused of ineligible voting due to juvenile dispositions — which do not affect their voting rights.[119] Or as with at least seven cases in Waukesha, Wisconsin, in 2004, accusations may fail to account for voters who are convicted *after* casting a legitimate vote.[120]

Moreover, even when the individual in question has actually been convicted of an offense that renders him ineligible, few such voters are ineligible to vote indefinitely. Some, like Reverend Willie Dixon of Florida, have been pardoned, and their voting rights restored.[121] Other convictions may be overturned on appeal. Still others, depending on the state, regain the franchise automatically or upon petition, after release from incarceration, probation, or parole. Allegations of fraud that look to convictions without accounting for the restoration of voting rights often miss the mark.[122]

Exaggerated or unfounded allegations of fraud by persons rendered ineligible by conviction include the following:

- In Florida in 2000, a large-scale purge became justifiably notorious for its inaccurate, even haphazard, discarding of the rights of eligible citizens. Despite recognizing the flawed nature of the purge lists, however, reporters used similar lists to claim that 5,643 ineligible persons with convictions actually voted in 2000. These reports used slightly more rigorous match criteria than were used to create the purge lists, but still acknowledged that the underlying data included eligible citizens with misdemeanors, citizens with convictions *after* their valid vote, and convicted persons with names and birthdates that matched eligible citizen voters. It is true that some votes were cast by ineligible citizens, some of whom were told by election officials that they were eligible. We are not aware of any reports of citizens voting despite knowing that they were ineligible.[123]

- In Wisconsin in 2004, after an attempt to match voters to Department of Corrections records, 376 people with allegedly disenfranchising convictions were said to have voted. A follow-up investigation revealed that several were found to be convicted only *after* they voted;[124] one was convicted of a misdemeanor,[125] and in another case, a woman's vote was improperly recorded in her ineligible husband's place.[126] Still another presented an identification card boldly labeled "OFFENDER," but was not told that he might be ineligible.[127] We are aware of sources documenting seven cases in which the voter knowingly voted while ineligible, yielding a fraud rate of 0.0002%.[128]

- In Washington in 2004, evidence submitted in vigorously prosecuted election contest proceedings showed 1,401 votes by individuals rendered ineligible due to convictions. Some of these voters were apparently misinformed by official county election information or corrections officers; most were apparently sent ballots in the mail by the state. We are not aware of any reports that any of these individuals voted knowing that they were ineligible.[129]

Allegations of Voter Fraud by Noncitizens

We are not aware of any documented cases in which individual noncitizens have either intentionally registered to vote or voted while knowing that they were ineligible. Given that the penalty (not only criminal prosecution, but deportation)[130] is so severe, and the payoff (one incremental vote) is so minimal for any individual voter, it makes sense that extremely few noncitizens would attempt to vote, knowing that doing so is illegal.

Although there are a few recorded examples in which noncitizens have apparently registered or voted, investigators have concluded that they were likely not aware that doing so was improper. In one highly publicized case, for example, noncitizens were given voter registration forms by a group helping them through the naturalization process, immediately after successfully completing citizenship interviews with federal officials and receiving letters beginning "Congratulations, your application for citizenship has been approved."[131] Though the actual swearing-in ceremonies were still up to 90 days away, these individuals most likely mistakenly thought it their obligation and privilege to complete the paperwork, and did not intentionally fabricate their citizenship status in front of federal officials who *knew* that they were noncitizens.[132]

Far more common than these incidents of noncitizen voting are allegations of noncitizen voting that prove wholly unfounded. These claims are often premised on matching lists of voters from one place to another, but as with each of the examples above, upon closer inspection, the match process shows error. The interpretation may be flawed, as when two list entries under the same name indicate different individuals. Or the lists themselves may be flawed, with an individual marked due to a clerical error as voting when she did not in fact cast a ballot.

Government citizenship records — as the government itself acknowledges — are also replete with errors or incomplete information. Naturalization documentation may find its way into the government files slowly, or not at all, leaving outdated or inaccurate information for investigators looking for fraud. And this, in turn, leads to flawed accusations that noncitizens have been voting, when the voters in question have in fact become fully naturalized American citizens.

Exaggerated or unfounded allegations of fraud by noncitizens include the following:

- In Washington in 2005, an individual asked county offices to investigate the citizenship status of 1,668 registered voters based on their "foreign-sounding names." There are no reports of which we are aware that any individual on the submitted list was actually a noncitizen.[133]

- In Washington in 2004, documentation appears to show that two votes were cast in King County by noncitizens. There are no reports of which we are aware that either of these noncitizens knowingly voted illegally, although one did ask to rescind his vote shortly after the election. Given these votes, the rate of documented noncitizen votes — without proof of fraud — in King County was 0.0002%.[134]

- In Milwaukee in 2001, journalists analyzed 370,000 voting records from 1992 to 2000, and found four instances in which voters' names matched a list of naturalized city residents, but appeared to have voted before their naturalization dates; there is no indication of which we are aware that any of these four knowingly voted illegally. Even if all four of the matched records accurately represented noncitizen votes, the rate of noncitizen voting among the city records examined would have been 0.001%.[135]

- In Hawaii in 2000, 553 apparent noncitizens were alleged to have registered to vote. On further investigation, 144 documented that they had become citizens. At least 61 individuals affirmatively asked to cancel their registration; the others were stopped at the polls and specifically asked about their citizenship before voting. There are no reports of which we are aware that any noncitizen actually voted. To the extent that noncitizens were actually represented on the rolls, officials attributed the registrations to mistake rather than fraud.[136]

- In Hawaii in 1998, four years after an INS investigation into more than 10,000 names identified fewer than twelve noncitizens whose names matched those on the voter rolls, the INS again investigated claims of extensive noncitizen voting. The agency examined 1,200 noncitizens suspected of voting, but found no evidence that any had voted. A separate proceeding uncovered three noncitizens who had indeed voted in 1998, and three others who were reported to be under further investigation. There are no reports of which we are aware that any noncitizens voted knowing that they were ineligible. But even if all six had voted, the overall noncitizen voting rate would have been 0.001%.[137]

- In California in 1996, 924 noncitizens allegedly voted in Orange and Los Angeles Counties, including 624 allegedly ineligible voters identified by the Task Force of the U.S. House of Representatives investigating the Dornan/Sanchez election. The allegations were based largely on attempts to match immigration lists to voter rolls, but only 71 voters matched name, date of birth, and signature; other matches were less reliable. Most of the identified voters were processed by one nonprofit group registering individuals proceeding through the naturalization process; many were registered immediately after passing an INS citizenship interview, and after receiving a letter indicating that they had become naturalized. At least 372 of the voters were apparently officially sworn in before Election Day. There are no reports of which we are aware that any noncitizens registered or voted knowing that they were ineligible. Even assuming there were no matching errors, and

leaving aside the critical question of intent, if all 552 remaining individuals were in fact noncitizens when they cast their votes, the overall noncitizen voting rate would have been 0.017%.[138]

Allegations of Registration Fraud

There have been several documented and widely publicized instances in which registration forms have been fraudulently completed and submitted. But it is extraordinarily difficult to find reported cases in which individuals have submitted registration forms in someone else's name in order to impersonate them at the polls. Furthermore, most reports of registration fraud do not actually *claim* that the fraud happens so that ineligible people can vote at the polls. Indeed, we are aware of no recent substantiated case in which registration fraud has resulted in fraudulent votes being cast.

Instead, when registration fraud is alleged, the allegations generally fall into one of four categories:

The first type of allegation concerns individuals intentionally submitting forms in the name of someone (or something) ineligible in order to have some fun or — more often — to make a point.[139] Most of the infamous stories of dogs on the rolls fall into this category, including a recent incident in Washington State.[140] Most of the time, these forms are discovered and investigated by local officials before they make it onto the rolls. There are no reports that we have discovered of votes actually cast in the names of such registrants.

The second type of allegation concerns "fraud" that is not actually fraud at all. This includes registration forms submitted by eligible voters, but with errors or omissions.[141] Such mistakes are relatively common, but do not represent fraud. Similarly, there are many jurisdictions in which the registration rolls are inflated with the names of eligible voters who have moved or died or otherwise become ineligible.[142] These lingering entries also do not represent fraud; furthermore, as states build and improve the statewide voter registration databases now required by federal law, it will become easier to remove ineligible voters from the rolls while maintaining safeguards for eligible registrants.

The third type of allegation concerns registration drive workers, who may be paid for their time or on the basis of how many forms they submit,[143] and who intentionally submit fraudulent forms. The allegations may involve forms submitted in the names of fictional voters, as in the case of "Jive Turkey,"[144] or with the names of actual voters but a false address or a forged signature.[145] Most of the cases of registration fraud that are prosecuted fall into this category.[146] If voter registration drives have enough time and are allowed by law to review the forms submitted by their workers, they can often catch these forms and draw them to the attention of local elections officials.[147] These forms actually defraud the voter registration drives, which compensate workers on the expectation that their time will be spent registering new and eligible citizens; the worker herself is interested not in defrauding the government, but in getting credit for work she didn't do.[148] When drives are able to flag these forms for elections officials, the forms are investigated, not processed, and the worker can be investigated and prosecuted. There are no reports that we have discovered of votes actually cast in the names of such registrants.

Finally, the fourth type of allegation involves individuals who change or manipulate the registration of an eligible voter to frustrate her ability to vote.[149] Like the deliberate destruction of forms,[150] these incidents are

rare and most often committed by partisan actors. Most states criminalize the intentional destruction of registration forms or fraudulent submission of forms. Like the allegations of fraud by election officials, these incidents do not concern allegations of fraud by individual voters, and we do not address them in detail here.

Exaggerated or unfounded allegations of voter fraud due to fraudulent registration forms include the following:

- In Florida in 2005, a registration drive was alleged to be submitting thousands of fraudulent registration forms and withholding valid ones, with a box of 179 complete but unsubmitted forms produced as evidence. The charges later proved groundless, and the disgruntled former worker who produced the box was found to have defamed the drive. There are no reports of which we are aware that any votes were cast using any fraudulent registration connected to the drive.[151]

- In Georgia in 2004, 3,000 allegedly fraudulent registration forms — with the same handwriting and with numerous errors — were submitted by a registration drive. Procedures apparently meant to protect the forms from interference seemed to interfere with the group's ability to perform quality control on the forms that were submitted. There are no reports of which we are aware that any votes were improperly cast using the name of any fraudulent registration form.[152]

- In Missouri, in a departure from clear Department of Justice policy, four individuals were federally indicted on the eve of the 2006 election for alleged registration fraud in Kansas City. At least 1,492 other allegedly questionable voter registration forms were submitted to St. Louis, prompting the Board of Elections for the City of St. Louis to send misleading notices to a wide swath of voters who had registered through the same group.[153] Yet the wrongdoers were an isolated few registration workers, and despite the skepticism of some that registration fraud occurs only to let ineligible people vote fraudulently, there are no reports of which we are aware that any votes were cast using any fraudulent registration connected to the drive.[154]

Allegations of Voter Fraud by Dogs

Popular media seem especially drawn to allegations that dogs are voting. These stories have a compelling "news of the bizarre" feel, and offer particular pleasure to punsters: "Prank Lands Voter in the Doghouse,"[155] "Woman Registers Her Dog to Vote; Prosecutors Growl."[156] The fact, however, is that the voter rolls have not been overrun by canines. We are aware of only nine specific reports of dogs found on the voter rolls, including the registration card of "Ritzy Mekler" made infamous by Senator Kit Bond of Missouri.[157]

At least six of the nine canine registrants were placed on the rolls by individuals trying to make a point about the fact that it is possible, if one risks prosecution, to place a dog on the voter rolls.[158] Which is to say, if people no longer registered dogs to show that dogs are on the rolls, dogs would no longer be on the rolls.

We are aware of only two cases — ever — involving ballots actually submitted in the name of a dog: the ballots cast by "Duncan MacDonald" in 2006 and 2007 (but labeled "VOID" and signed with a paw print),[159] and the ballot cast by "Raku Bowman" in 2003 in the Grass Roots Venice Neighborhood Council elections in Venice, California.[160] Only Bowman's vote — in a local election run by volunteers, rather than state or

federal election officials — was counted. Moreover, in order to cast these votes, both owners had to go to significant lengths: swear falsely on a voter registration form, forge a signature there, forge proof of identity, swear falsely again on the absentee ballot request form, forge a signature there, swear falsely again on the absentee ballot envelope itself, and forge a signature there. In an election for federal candidates, that could subject a defendant to up to thirty years in prison on federal charges alone.

ALLEGATIONS OF VOTE-BUYING

We also briefly mention allegations of vote-buying, which are often lumped together with "voter fraud," though they do not usually involve allegations that the voters in question are ineligible. Instead, these incidents involve illegal agreements by *eligible* citizens to buy or sell their votes.

Vote-buying schemes may involve agreements to buy or sell votes for particular candidates, or they may simply involve payments for voting — candidate unspecified — in get-out-the-vote efforts targeted at communities thought more likely to support a particular candidate.[161] Usually, the monetary value of the reward is fairly small: a small amount of cash, for example, or cigarettes, or food. And in virtually every case, a candidate or campaign staff are directly and centrally involved in brokering the illegal deal.

We mention such schemes specifically because they *do* still occur,[162] and are often used to buttress claims that widespread fraud infects the election system.[163] However, for most purposes, it is necessary to distinguish vote-buying from the voter fraud that more typically captures the attention of the public. Because the individuals involved in vote-buying schemes are almost always citizens who are eligible to vote, vote-buying cannot possibly be addressed by most of the remedies proposed to confront voter fraud: photo identification rules, restrictions on registration, and the like. In supporting the need for policies that address alleged fraud by ineligible voters, then, it is misleading to include vote-buying in the list of wrongdoing.

ALLEGATIONS OF FRAUD BY ELECTION OFFICIALS

Similarly, reporters and analysts should be wary of attempts to bootstrap fraud by election officials or other insiders into compendiums of alleged "voter fraud." Election fraud by insiders has been an issue since Senators wore togas. Sadly, there are still occasional reports of wrongdoing by those who are employed to safeguard the process. For example, in 2004, election judge Leander Brooks was convicted of casting at least twenty ballots in others' names in 2002 in East St. Louis, Illinois; his cousin Michael Collins, a former city councilman, had been convicted of registering acquaintances from outside his precinct to vote fraudulently from a neighbor's address in 1995.[164]

Like the allegations of vote-buying above, fraud by election officials should be condemned, and documented acts of such fraud should be prosecuted. But also like the allegations above, such incidents should be clearly distinguished from voter fraud. Most remedies aimed at preventing alleged fraud by ineligible voters depend on honest enforcement of the law by election officials. Conversely, if as above, election officials are willing to pervert the law, policies aimed at policing voters will not be able to stop insiders from corrupting the system.

VII. Appendix

Selected Case Studies

Allegations of widespread fraud by malevolent voters are easy to make, but often prove to be inaccurate. The Brennan Center has analyzed public materials in some of the areas branded as notorious election fraud "hot spots," finding that various election irregularities led to inflated claims of widespread fraud.

In many of these cases, proposals to require restrictive identification documents of voters at the polls were under debate at the time of the election — or were proposed as a result. The cries of "voter fraud" were often used to support the call for restrictive ID.

We examined each of the allegations of fraud by voters to uncover the truth behind the assertions. Further case studies are available at our website devoted to the topic, www.truthaboutfraud.org.

Missouri	In some ways, the recent hunt for voter fraud began in Missouri in the 2000 election, the crucible that proved formative for Attorney General John Ashcroft and Senator Kit Bond, among others. Yet despite all the frenzy, the allegations yielded only six substantiated cases of Missouri votes cast by ineligible voters, knowingly or unknowingly, except for those votes permitted by court order. The six cases were double votes by four voters—two across state lines and two within Missouri—amounting to an overall rate of 0.0003%. None of these problems could have been resolved by requiring photo ID at the polls.
New Jersey	Just before the 2005 election, partisan actors attempted to probe the accuracy of New Jersey's voter rolls by comparing election records for 2004 with death records and with the rolls of other states. The allegations yielded only eight substantiated cases of individuals knowingly casting invalid votes that counted—eight voters who voted twice. Given the number of votes cast in these elections, this amounts to a rate of 0.0004%. None of these problems could have been resolved by requiring photo ID at the polls.
Wisconsin	The 2004 election was hotly contested in Wisconsin, and various irregularities led to inflated claims of widespread fraud. The allegations yielded only seven substantiated cases of individuals knowingly casting invalid votes that counted—all persons with felony convictions. This amounts to a rate of 0.0025% within Milwaukee and 0.0002% within the state as a whole. None of these problems could have been resolved by requiring photo ID at the polls.

MISSOURI

The 2000 election was hotly contested in Missouri, and various irregularities led to inflated claims of widespread fraud. Many of these fraud claims were later used to support the call for restrictive ID requirements. We examined each of the allegations of fraud by individual voters — the only sort that ID could possibly address — to uncover the truth behind the assertions.

THE ALLEGATIONS:

- Invalid addresses: 79 individuals listed as voting in St. Louis City were registered from addresses alleged to be vacant lots. Further investigation found that properties that were wrongly classified by the city assessor's office as vacant in fact contained legitimate residences. Only 14 voters were found to be listed as registered from vacant lots, at least one of whom was apparently victim of a typographical error, and three more of whom moved within St. Louis City and may not have been required to re-register with a new address before voting.[165]

  14 addresses in St. Louis City were allegedly "drop sites" where fraudulent registrations might have been processed.[166] The 14 alleged "drop sites" in St. Louis City were addresses that were determined to be locations other than apartment buildings, nursing homes, or recognizable group homes where more than eight people were registered at each location. Seven of these addresses were actually visited by reporters, and all seven visits revealed that more than eight people properly lived at the address noted.[167]

- Ineligible by conviction: 62 individuals listed as voting in St. Louis City and County matched the name, date of birth, and Social Security number of individuals listed on federal court records of felony conviction, and 52 individuals listed as voting in St. Louis County matched the name and date of birth of individuals listed on county records of felony conviction. It is not clear whether there was any overlap between the list of 62 and the list of 52, nor is it clear whether any of the individuals had had their rights restored before the election. We are not aware of any public reported analysis of poll records to determine whether individuals listed as voting actually voted and were not listed as voting due to a clerical error or mistakenly listed instead of an eligible voter with the same name and birthdate.[168]

- Double voters: 23 individuals listed as voting on the voter rolls maintained by St. Louis City and County matched the name, date of birth, and Social Security number of another individual listed as voting; 45 individuals matched the name and date of birth of another voter. We are not aware of any public reported analysis of these poll records to determine whether individuals listed as voting actually voted twice and were not listed as voting due to a clerical error or mistakenly confused with another eligible voter with the same name and birthdate.[169]

  Based on a computer match of names and dates of birth on voter rolls, 150 individuals from St. Louis — presumably including the individuals above — were listed as voting twice in 2000 or 2002, and 150 other individuals from across the rest of the state were alleged to have either voted twice within the state or once in Kansas and once in Missouri. The same analysis acknowledged that the "computer files contain many errors that show people voting who did not actually vote."[170] Of 18 Kansas City cases that reporters followed up, 13 were shown to result from clerical errors, 2 were uncertain, and 3 appeared to show double voting in Missouri and Kansas — 2 in 2000 and 1 in 2002. (At least two of these were convicted in federal court.) One other case of double voting within Missouri in 2000, and one in 2002, were substantiated using poll records.[171]

- Dead voters: 14 votes in St. Louis City and County were cast in the names of allegedly dead people, based on a computer match of names, dates of birth, and Social Security numbers on the voting rolls against information in Department of Health records.[172] It is not clear whether any of these individuals died after the election. We are not aware of any public reported analysis of poll records to determine whether individuals listed as voting actually voted and were not listed as voting due to a clerical error.[173]

ADDITIONAL ALLEGATIONS OF IRREGULARITIES UNCONNECTED TO INDIVIDUAL VOTER FRAUD:

- "Inactive" purge: In St. Louis, approximately 49,589 eligible voters were removed from the active voter rolls and placed on an "inactive list" after postcards allegedly sent to them were returned as undeliverable. At many polling places, the "inactive lists" were not made available, and these voters were allegedly unlawfully instructed that they could not vote at their regular precinct, but instead had to travel to the central city office to wait on lengthy lines to affirm their registered status, and then return to their original polling places to vote. Some voters were still on line at the central office when the polls closed, and were not able to return to their polling places to vote.[174]

- Polling place time: In St. Louis, the polls were kept open by court order until 7:45pm, 45 minutes past the original closing time. The lead plaintiff requesting this order was allegedly deceased, although later review showed that the plaintiff's name had been typed with an incorrect middle initial; the legal filings also stated that this plaintiff had been unable to vote when he had in fact voted. The effort to keep the polls open was alleged to have been conceived before Election Day. The delayed closing time allowed at least 100 voters to vote who otherwise would have arrived at the polls too late to cast a vote.[175]

- Court order: At least 342 voters in St. Louis City and 891 voters in St. Louis County were allegedly improperly granted a court order allowing them to vote. The effort to seek court orders was also alleged to have been conceived before Election Day. Most of these voters allegedly gave insufficient reasons for obtaining a court order, although the report arriving at this conclusion stated an inaccurately high threshold for obtaining a court order.[176] 143 of these voters allegedly had not been registered by the voter registration deadline; it is not clear if any of the other voters were ineligible to vote.[177]

- Improper election judges: 45 election judges in St. Louis City allegedly not registered to vote were later found to be validly registered; all were thought invalid because of typographical errors.[178]

- Inflated voter rolls: St. Louis City had more names registered on the voting rolls than the voting-age population of the city, and 24,000 names were also listed as registered elsewhere in Missouri.[179]

- Chain of custody: Ballot boxes were allegedly left unattended at 29 precincts.[180]

THE RATE OF SUBSTANTIATED VOTER FRAUD:

- The allegations of fraud related to the 2000 general election, in which 124,752 votes were cast in St. Louis City, 497,577 votes were cast in St. Louis County, and 2,361,586 votes were cast in all of Missouri.[181]

- There were **6** substantiated cases of Missouri votes cast by ineligible voters, knowingly or unknowingly, except for those votes permitted by court order. These six cases were double votes by four voters – two across state lines and two within Missouri. This amounts to a rate of **0.0003%.** None of these problems could have been resolved by requiring photo ID at the polls.

- Even given allegations that were unsubstantiated, the rate of possible fraud remains low. The analysis above lays out the allegations, reasons to question each, and the facts that we now know. But assuming that **all** 278 of the remaining questionable allegations—including 14 voters with allegedly invalid addresses, 114 allegedly ineligible persons with felony convictions, 68 allegedly double voters (at two votes apiece), and 14 votes in the names of allegedly deceased individuals—in fact represent ineligible votes, that would amount to a rate of **0.045%** within St. Louis City and County and **0.012%** within the state as a whole. If all 14 votes in the names of allegedly deceased individuals in fact proved fraudulent and were cast in person, these votes—0.002% within St. Louis City and County and 0.0006% within the state as a whole—might possibly have been resolved by requiring photo ID at the polls.

  Note: this analysis does not include 228 unsubstantiated cases of alleged double voting across the state reported by the *Kansas City Star*, because they did not distinguish between votes cast in 2000 and 2002. In the 2002 general election, 1,877,620 votes were cast in Missouri.[182]

COVERAGE BY EXISTING LAW:

- Proper implementation of the federal Help America Vote Act (HAVA), which was passed after (and to some extent, because of) the 2000 election, would have addressed most of these allegations. HAVA requires states to create statewide electronic voter registration lists with each eligible voter listed uniquely to remove duplicate registrations, and to coordinate those computerized lists with agency records on death and conviction in order to remove ineligible voters. Although the obligation to maintain these cleaned lists predated HAVA, the computerized registrarion rolls — if implemented with suitable controls for accuracy — offer a new and efficient means to do so statewide. Like most states, Missouri did not have a statewide computerized database up and running in 2000, but now that it does, the database should allow the state to sharply reduce even the small number of alleged invalid votes due to allegedly improper registrations.

NEW JERSEY

Just before the 2005 elections, partisan actors attempted to probe the accuracy of New Jersey's voter rolls by comparing them with death records and with the rolls of other states. The reports led to inflated claims of widespread fraud in the 2004 election, of the sort commonly used to support restrictive identification requirements for voters at the polls. We examined each of the allegations of fraud by individual voters—the only sort that ID could possibly address—to uncover the truth behind the assertions.

THE ALLEGATIONS:

- Dead voters: 4,755 votes were alleged to have been cast in the names of dead voters in 2004, based on an attempt to match the first and last name and date of birth from voting records to death records.[183] No follow-up investigation appears to have heen published on the number of votes actually cast in the names of dead voters in 2004, if any. None of the allegedly dead voters actually voted in 2005.[184]

- Double voters: 4,397 individuals allegedly voted twice in New Jersey, and 6,572 individuals allegedly voted both in New Jersey and in either New York, Pennsylvania, Florida, North Carolina, or South Carolina, based on an attempt to match the first and last name and date of birth from one set of voting records to another.[185] Analysis of the list of alleged double voters within New Jersey showed that 2,305 of the entries had different middle names or suffixes, or an error in the date of birth.[186] Data errors in Middlesex county, and the statistical likelihood of finding two different individuals with the same name and birthdate, call into question much of the remainder of the list.[187] Ultimately, the existence of eight double voters was substantiated through original signatures on poll book materials.[188]

THE RATE OF SUBSTANTIATED VOTER FRAUD:

- The allegations of fraud related to the 2004 general election, in which 3,611,691 votes were cast in New Jersey.[189]

- There were eight substantiated cases of individuals knowingly casting invalid votes—eight voters voting twice. This amounts to a rate of **0.0004%**. None of these problems could have been resolved by requiring photo ID at the polls.

- Even given allegations that were unsubstantiated, the rate of possible fraud remains low. The analysis above lays out the allegations, reasons to question each, and the facts that we know. But assuming that **all** 13,419 of the remaining cases in fact involved voter fraud—which is highly unlikely, given the methodological errors revealed in the study of double-voting—that would amount to a rate of 0.61%.

COVERAGE BY EXISTING LAW:

- The federal Help America Vote Act (HAVA) requires states to create statewide electronic voter registration lists, and to coordinate those computerized lists with agency records on death in order to remove ineligible voters. Although the obligation to remove deceased voters from the rolls predated HAVA, the computerized registration rolls — if implemented with suitable controls for accuracy—offer a new and efficient means to do so statewide. Like most states, New Jersey did not have a HAVA-ready statewide database up and running in 2004, but once it does, the database should allow the state both to eliminate duplicate registrations within the state and to cut down on the number of deceased citizens who are still on the rolls.

WISCONSIN

The 2004 election was hotly contested in Wisconsin, and various irregularities led to inflated claims of widespread fraud. At the same time, Wisconsin citizens were debating a proposal to require restrictive identification of each voter at the polls, and the fraud claims were used to support the call for ID. We examined each of the allegations of fraud by individual voters—the only sort that ID could possibly address—to uncover the truth behind the assertions.

THE ALLEGATIONS:

- Invalid addresses: Based on an attempt to match voter roll entries to the U.S. Postal Service's database of street addresses, 37,180 people in Milwaukee were alleged to have registered from invalid addresses. Of these, 31,500 listed accurate street addresses, but had problems with an apartment number. Further review of the remaining allegedly invalid addresses revealed cases in which the list was corrupted; digits were dropped on some entries, making otherwise valid addresses appear fictitious. This review also showed typos turning valid addresses into invalid ones. Though reporters following up on the story could not locate 68 listed addresses, at least 400 addresses were affirmatively proven to be valid. The bipartisan Milwaukee Election Commission ultimately threw out a challenge lodged to 5,619 of the entries, citing insufficient evidence that the registrations were invalid. Still, poll workers were specifically instructed to ask challenged voters for proof of residency, so every voter on the list of 5,619 should have been asked for proof of proper residency.[190]

  1,242 Milwaukee votes were cast from allegedly invalid addresses, based on another computerized match; this match paired voter rolls with U.S. Postal Service and City of Milwaukee property lists, with spot checks of 40 specific addresses.[191] A sample of 300 of the entries showed that about 20% of the invalid addresses were attributed to data entry errors (e.g., "3130 S. 15th Place" became "3130 S. 15th St.," and "S. 68th St." became "S. 63rd St."). At least two other addresses ostensibly deemed business locations were found to be valid residences after an individual spot-check. Furthermore, 75% of these votes were from Election Day registrants, who were required to show proof of residence at the polls.[192]

- Faulty registration cards: In Milwaukee, 10,921 voter registration cards from Election Day voters were allegedly unable to be processed. This allegation turned out to be an error; in fact, 1,305 Election Day registration cards from Milwaukee could not be processed. 548 of these listed no address, and 48 cards listed no name, but voters had to show both proof of name and proof of residence to register on Election Day. 236 cards had missing or incomplete dates of birth, 28 had no signature, 141 listed addresses outside of the city limits, and 23 were deemed illegible. 155 cards were not processed because they had not been given a voter number by the city. It is unclear why the remaining 126 cards could not be processed.[193]
  3,600 address verification cards mailed using information entered from these Election Day registrations were returned as allegedly undeliverable. [194] We are not aware of any further public investigation of these cards. [195]

  2,200 address verification cards from outside of Milwaukee, mailed using information entered from Election Day registrations, were also returned as allegedly undeliverable.[196] 313 of these were from Racine: 207 were returned because the voter moved after the election, and at least 24 addresses were entered incorrectly by election workers.[197] Of the 1,887 returned address verifications of Election Day registrations from elsewhere around the state, 1,198 were returned because the voter moved after the election or was temporarily absent

when the card arrived; 610 showed a valid address but the individual could not be found there; 36 had an incorrect street number; 2 had an incorrect street name; 9 had a missing apartment number; 9 were sent to an address with no mailbox; 2 were sent to vacant addresses; and 21 were returned for some other reason.[198]

- Ineligible by conviction: The organizers of one pre-election jailhouse absentee ballot drive conducted a records check on 400 inmates who had signed up, found 18 ineligible, and alerted election officials; no votes were cast by these ineligible persons.[199]

  376 individuals allegedly rendered ineligible by felony conviction cast ballots, based on an attempt to match voter rolls and information from the Department of Corrections.[200] 96 individuals listed as voting in Milwaukee matched name, address, and birthdate against Department of Correction records, and 182 individuals listed as voting matched only name and address. At least one appears to have been erroneously listed as voting; he is listed as voting but claims that he did not, while his wife is not listed as voting, but did cast a ballot. Another 98 people listed as voting elsewhere around the state matched name, address, and birthdate against Department of Correction records, but at least 7 were convicted after the election, and were eligible at the time they cast their ballot.[201]

  13 voters have been formally charged with fraudulently voting while ineligible; of these, 7 have been convicted, 1 voter was acquitted, 1 case was dismissed upon evidence that the voter was eligible when voting, 2 cases were dismissed for other reasons, and 2 cases were dismissed despite evidence that the voter was ineligible. In one of the latter cases, the voter provided his Department of Corrections identification card at the polls, which had "OFFENDER" printed in bold letters across the face, but was not told that he was ineligible to vote.[202]

  3 others were documented as voting while ineligible but have not been charged. An additional voter documented as ineligible was found in 2006.[203]

- Double voters: A computer glitch in Milwaukee caused at least 314 voters who re-registered before or on Election Day to be listed twice on the rolls, with a notation of voting next to each listing. Each was given only a single ballot.[204]

  83 people allegedly voted twice; 14 allegedly voted both absentee and in person, 9 allegedly voted in Milwaukee and other cities, 59 allegedly voted twice in Milwaukee, and 1 allegedly voted twice in Madison.[205] Of the 59 voters alleged to have voted twice in Milwaukee, most registered twice but voted only once. 51 were cleared by investigators, 1 was acquitted at trial, 1 received no verdict at trial, and 1 was found incompetent to stand trial. Finally, another voter named Gloria Bell believes that she was confused with a woman named Gloria Bell-Piphus.[206]

  Of the 9 voters alleged to have voted both in Milwaukee and in another city, all 9 were cleared of wrongdoing: clerical and scanning errors by poll workers accounted for 6 of the voters, 2 were fathers and sons alleged to be the same person, and 1 had a different middle name and birthdate from his alleged double.

  Of the 14 voters alleged to have voted both absentee and in person, in at least 12 cases, after comparing absentee records to poll records, the absentee ballot was not counted.[207]

- Dead voters: 4 votes were cast in the names of allegedly dead people.[208] These were all absentee ballots, cast by individuals who died within two weeks of the election; it is not clear whether the ballots were cast before the individuals died.[209]

- Impersonation: 1 vote was allegedly cast in the name of an individual who did not vote.[210] Further investigation of the alleged vote cast in the name of another was determined to be a clerical error by a poll worker.[211]

- Fictitious voters: 2 votes were allegedly cast in the name of an individual who could not be verified as an actual individual.[212] These votes were cast in the name of Marquis F. Murff, who could not be verified by a reporter as an actual individual. We are not aware of any further public investigation.[213]

- Underage voter: One ballot was cast by a 17-year-old voter, using his real birthdate.[214]

- Noncitizen: One columnist reported that a ballot was allegedly cast by a Canadian legal permanent resident. We are not aware of any further public investigation.[215]

- Faulty registration: Four individuals allegedly submitted false voter registration applications.[216] 2 Milwaukee residents were convicted for submitting false voter registration applications; 1 person alleged to have supervised two others who turned in false forms was also convicted, but that conviction was overturned. The trial of one other individual accused of submitting false registration applications is still pending. No votes were alleged to have been cast under these registrations.[217]

Additional Allegations of Irregularities Unconnected to Individual Voter Fraud:

- "Extra" ballots: In Milwaukee, there were allegedly 8,300 more ballots cast than individuals processed as voting; the gap was later narrowed to 4,609. The discrepancy was later attributed to administrative error in reconciling poll book logs with ballots, and at least one typographical error in reporting results.[218]

- Election Day interference: In Milwaukee, tires on 20 get-out-the-vote vans were allegedly slashed.[219]

- Uncounted ballots: 238 valid absentee ballots from Milwaukee were counted late.[220]

- Uncounted votes: 600 valid votes were allegedly not counted in Medford due to a computer error.[221]

- Unprocessed registration cards: Eight boxes of valid registration cards were allegedly not processed in order to put voters on the rolls by the time individuals arrived at the polls.[222]

The Rate of Substantiated Voter Fraud:

- The allegations of voter fraud related to the 2004 general elections, in which 277,565 votes were cast in Milwaukee, and 2,997,007 votes were cast in all of Wisconsin.[223]

- There were 7 substantiated cases of individuals knowingly casting invalid votes—all persons with felony convictions. This amounts to a rate of **0.0025%** within Milwaukee and **0.0002%** within the state as a whole. **None** of these problems could have been resolved by requiring photo ID at the polls.

- There were 11 substantiated cases of votes cast by ineligible Milwaukee voters—all persons with felony convictions. There are 8 substantiated cases of votes cast by ineligible voters from other parts of the state — 2 persons with felony convictions, 1 foreign national, 1 17-year-old voter, and 4 absentee ballots cast by deceased voters. That amounts to a rate of **0.004%** within Milwaukee and **0.0006%** in the state as a whole. **None** of these problems could have been resolved by requiring photo ID at the polls.

- Even given allegations that were unsubstantiated, the rate of possible fraud remains low. The analysis above lays out the allegations, reasons to question each, and the facts that we now know. But assuming that **all** 6,877 of the remaining questionable allegations—including 1,150 voter registration cards not processed, 5,356 allegedly flawed addresses, 353 other allegedly ineligible persons with convictions, 8 allegedly double voters (for a total of 16 votes), and 2 votes from the allegedly fictitious individual—in fact represent ineligible votes, that would amount to a rate of **2.2%** within Milwaukee and **0.2%** within the state as a whole. **None** of these votes could have been resolved by requiring photo ID at the polls.

COVERAGE BY EXISTING LAW:

- The vast majority of these allegations would have been addressed by adequate implementation of existing law. Elections officials should have been able to correct incomplete or illegible registration cards on site; the requirement of proof of residence for Election Day registrants should have caught invalid addresses on Election Day. Addresses of voters registering before Election Day could have been carefully investigated before Election Day — by an investigation more thorough than a computer match, and attuned to the possibility of data entry errors. If the investigation revealed questions, as occurred here, the questioned voters could have been validly challenged by election officials, and asked to verify their residence; if an investigation revealed fraud rather than error or a valid change of residence, the case could be referred for prosecutorial follow-through. Similarly, as occurred here, absentee ballots should have been matched against poll records to determine if a duplicate had been cast.

- Proper implementation of the federal Help America Vote Act (HAVA) would have addressed most of the remaining allegations. HAVA requires states to create statewide electronic voter registration lists with each eligible voter listed uniquely to remove duplicate registrations, and to coordinate those computerized lists with agency records on death and conviction in order to remove ineligible voters. Although the obligation to maintain these cleaned lists predated HAVA, the computerized registration rolls — if implemented with suitable controls for accuracy — offet a new and efficient means to do so statewide. Like most states, Wisconsin did not have a HAVA-ready statewide database up and running in 2004, but once it does, the database should allow the state to sharply reduce even the small number of alleged invalid votes due to allegedly improper registrations.

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INTRODUCTION

Traditionally, many voters with disabilities have been unable to cast their ballots without assistance from personal aides or poll workers. Those voters do not possess the range of visual, motor, and cognitive facilities typically required to operate common voting systems. For example, some are not be able to hold a pen or stylus to mark a ballot that they must see and read. Thus, the voting experience for citizens who cannot perform certain tasks – reading a ballot, holding a pointer or pencil – has not been equal to that of their peers without disabilities.

The Help America Vote Act of 2002 took a step forward in addressing this longstanding inequity. According to HAVA, new voting systems must allow voters with disabilities to complete and cast their ballots "in a manner that provides the same opportunity for access and participation (including privacy and independence) as for other voters."[1] In other words, as jurisdictions purchase new technologies designed to facilitate voting in a range of areas, they must ensure that new systems provide people with disabilities with an experience that mirrors the experience of other voters.

This report is designed to help state and local jurisdictions improve the accessibility of their voting systems. We have not conducted any direct accessibility testing of existent technologies. Rather, we set forth a set of critical questions for election officials and voters to use when assessing available voting systems, indicate whether vendors have provided any standard or custom features designed to answer these accessibility concerns, and offer an evaluation of each architecture's limitations in providing an accessible voting experience to all voters.

The report thus provides a foundation of knowledge from which election officials can begin to assess a voting system's accessibility. The conclusions of this report are not presented as a substitute for the evaluation and testing of a specific manufacturer's voting system to determine how accessible a system is in conjunction with a particular jurisdiction's election procedures and system configuration. We urge election officials to include usability and accessibility testing in their product evaluation process.

THE NEED FOR ACCESSIBLE VOTING SYSTEMS

There are many reasons for election officials to be concerned about creating fully accessible voting systems. Not least of these is that such systems are long overdue: even today, millions of Americans cannot vote independently on secret ballots using the voting machines in their precincts.[2] For this reason, many of these citizens have found voting to be an "embarrassing, demeaning and time consuming" experience.[3] It should surprise no one that the majority of such citizens do not vote.[4]

In addition to reasons of fundamental fairness, there are practical reasons for election officials to ensure that their systems are accessible. First, it is legally required. Second, disabled voters represent a very large and growing segment of the population. Put plainly, no matter where their jurisdictions are located, election officials are likely to find that a significant percentage of the citizens they serve are disabled, and the numbers of such citizens will continue to grow for the foreseeable future.

LEGAL ACCESSIBILITY REQUIREMENTS FOR VOTING SYSTEMS

Current accessibility standards reflect evolving standards in federal legislation and an essentially private certification regime formerly led by the National Association of State Election Directors ("NASED") and now overseen by the Election Assistance Commission ("EAC").[5] This section summarizes those requirements and their role in state selection decisions.

The Help America Vote Act

Congress has only recently passed an explicit law requiring a private and independent voting experience for people with disabilities. Under the federal Help America Vote Act ("HAVA"), at least one voting system "equipped for individuals with disabilities" must be used at each polling place for federal elections held on or after January 1, 2006.[6] HAVA requires that such voting systems:

> be accessible for individuals with disabilities, including non-visual accessibility for the blind and visually-impaired, in a manner that provides the same opportunity for access and participation (including privacy and independence) as for other voters.[7]

Specifically, every polling place shall have "at least one direct recording electronic voting system or other voting system equipped for individuals with disabilities."[8] In addition, all voting systems "purchased with funds made available under [HAVA] on or after January 1, 2007" must meet the statute's standard for disability access.[9] HAVA also requires that the voting system provide alternative language accessibility as already required by section 203 of the Voting Rights Act.[10]

The Americans with Disabilities Act and the Rehabilitation Act

While HAVA is the first Congressional statute explicitly to require a private and independent voting experience for people with disabilities, earlier statutes cemented a strong foundation for equal access to the polls for voters with disabilities. The Americans with Disabilities Act of 1990 ("ADA") and the Rehabilitation Act of 1973 prohibit exclusion of the disabled from government services, programs, or activities, including voting and elections. Title II of the ADA provides that "no qualified individual with a disability shall, by reason of such disability, be excluded from participation in or be denied the benefits of the services, programs, or activities of a public entity, or be subjected to discrimination by any such entity."[11] Similarly, Section 504 of the Rehabilitation Act provides that "[n]o otherwise qualified individual with a disability … shall, solely by reason of her or his disability, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance. . ."[12]

Under both the ADA and the Rehabilitation Act, Congress mandated promulgation of implementing regulations. Federal regulations provide:

- Design and construction. Each facility or part of a facility constructed by, on behalf of, or for the use of a public entity shall be designed and constructed in such manner that the facility or part of the facility is readily accessible to and usable by individuals with disabilities, if the construction was commenced after January 26, 1992.

- Alteration. Each facility or part of a facility altered by, on behalf of, or for the use of a public entity in a manner that affects or could affect the usability of the facility or part of the facility shall, to the maximum extent feasible, be altered in such manner that the altered portion of the facility is readily accessible to and usable by individuals with disabilities, if the alteration was commenced after January 26, 1992.[13]

Voting equipment has been found to fall within the expansive definition of "facility" contained in the regulations.[14] Accordingly, election officials must employ means that make voting equipment "readily accessible to and usable by individuals with disabilities."[15] However, existing precedents do not require election officials to provide voting equipment "that would enable disabled persons to vote in a manner that is comparable in every way with the voting rights enjoyed by persons without disabilities."[16] The next few years will likely clarify the precise requirements of both HAVA and these earlier statutes with respect to the accessibility of voting systems, as courts hear challenges to the various choices made by elections officials across the country.

The "Voluntary Guidelines"

The Access Board is a federal agency committed to promulgating accessible design.

In the meantime, federal agencies have issued two sets of voluntary guidelines for voting system design. In 2002, the Federal Elections Commission ("FEC") in conjunction with the United States Access Board issued a set of technical standards and recommendations called the 2002 Voluntary System Standards ("VSS").[17] The "Accessibility" provisions (Section 2.2.7) of the VSS were divided into two categories: those that apply to all voting systems and those that apply only to direct recording electronic ("DRE") voting systems. The "Common Standards" section (2.2.7.1) includes six requirements that address the appropriate height of the voting system, the maximum distance the voter should have to reach to be able to use the system, and the accessibility of the controls to the voter.[18]

The "DRE Standards" section (2.2.7.2[19]) includes requirements for accessible voting systems that can be summarized as follows:

- The voter shall not have to bring in his or her own assistive technology in order to vote privately and effectively using the DRE system.
- The system shall provide an audio output that accurately communicates the complete content of the ballot and instructions; supports write-in voting; enables the voter to edit, review, and confirm his or her selections; allows the voter to request repetition of information; supports the use of external headphones; and provides adjustable volume controls.
- When a system uses a telephone-style handset to provide audio information, it should provide a wireless coupling for assistive devices used by people who are hard of hearing.
- The system should avoid electromagnetic interference with assistive hearing devices.
- The system should allow for adjustments to be made to the display image, specifically the image's contrast ratio, colors, and size of text.
- If the system uses a touch-screen, it should also provide an alternative tactile input option that will be easy to operate for individuals with limited motor skills (*i.e.*, lightweight, tactilely discernible, requiring little force and dexterity, operable with one hand).
- If the system requires a response from the voter within a set period of time, it must alert the voter before time is up and allow the voter to have additional time if necessary.
- If the system uses an audio cue to alert the voter of an error or confirmation, it must also provide a visual cue for voters to accommodate voters with hearing impairments.

- If the system's primary means of voter authentication uses biometric technology that requires the voter to have certain biological characteristics, a secondary means of voter authentication must be made available.

In December 2005, the EAC issued a new set of standards for voting systems, the 2005 Voluntary Voting System Guidelines ("VVSG"). These guidelines reaffirm criteria set forth in the 2002 VSS and push certain standards a step further by insisting that a standard "shall," rather than "should," be followed. In addition, the VVSG's requirements apply to all voting systems, not just DREs, and establish detailed parameters for each recommended accessibility feature. The most important new specifications can be summarized as follows:

- Machines shall be capable of displaying text in at least two font sizes, (a) 3-4 millimeters, and (b) 6.3-9.0 millimeters.[20] Sans-serif fonts are preferable to stylized fonts.[21]

- All machines must be capable of displaying information using a high-contrast display with a ratio of at least 6:1.[22]

- Any buttons and controls on a voting system must be discernible by both shape and color.[23]

- Machines must provide an audio-tactile interface that replicates a standard visual ballot and allows voters to access the full range of features and capabilities in a standard visual ballot. In addition, systems must allow a voter to pause and resume an audio presentation and to rewind the presentation to a previous contest.[24]

- Default volume level for machines should be set between 40 and 50 dB. Voters should be able to adjust volume up to a maximum level of 100 dB in increments no greater than 10 dB.[25] In addition, machines must be programmed to allow voters to vary the speed of an audio presentation.[26]

- Voters should be able to watch and listen to a ballot at the same time.[27]

- For optical scan systems, "if voters normally feed their own optical scan ballots into a reader, blind voters should also be able to do so."[28]

DISABILITY DEMOGRAPHICS

A large proportion of the voting-age population would benefit from a voting system accessible to people with disabilities. According to the 2000 Census, at least 44.5 million adult residents of the United States (ages 21 and above) have some form of disability.[29] Moreover, because many disabilities are associated with advanced age, a rapidly aging population stands to produce dramatic increases in the number of voters with disabilities.[30] The statistics in Table A1 confirm the

magnitude of the voting-age population with disabilities and/or special language needs.

TABLE A1

U.S. VOTING-AGE POPULATION WITH DISABILITIES AND LANGUAGE NEEDS

People over 18 who:	Millions of people
Have trouble seeing[31]	19.1
Have trouble hearing [32]	30.8
Experience physical difficulty, including trouble grasping or handling small objects[33]	28.3
Speak English less than "very well"[34]	17.8
Live in "linguistically isolated households"[35]	9.2

In addition, the accessibility of voting systems affects not only those with permanent disabilities, but also the millions of voters with temporary disabilities or conditions that would not formally be considered disabilities. For example, a voter with a broken arm who has limited use of her hand, or who has forgotten his reading glasses and cannot read small text, or who has minimal reading skills can vote more easily and effectively as a result of more accessible voting systems. With this impact in mind, the VVSG include many requirements for *all* voting systems (not just those considered "accessible") that increase ease of access for people who are already fully able to vote without assistance.

At the same time, a voting system may provide accessibility to voters with various disabilities, yet still not be easy to use. For instance, an audio system may provide accessibility to voters with vision impairments, but if the system's audio jack is hidden on the back of the machine, the system cannot be considered very usable. Similarly, when creating voting systems for individuals with vision impairments, considerations of accessibility alone are not enough. As Mary Theofanos and Janice Redish have described with respect to website accessibility, "the diversity of vision needs and the resulting adaptations that low-vision users require mean that there are no simple solutions to making web sites work for everyone."[36] For the same reasons, it is difficult to make voting systems that work for all voters with vision impairments. Voting machines must enable voters with vision impairments to easily adjust the system to their particular needs to take full advantage of accessibility features.[37]

METHODOLOGY

To assess the various voting system architectures, the Brennan Center's team of consulting experts created a set of accessibility criteria drawn from existing accessibility guidelines (including both those specific to voting systems and general information technology guidelines), such as the VSS 2002,[38] Section 508 of the Rehabilitation Act,[39] and the VVSG (2005),[40] as well as additional considerations developed through team discussions. These criteria are posed as questions that can help election officials and advocates compare specific systems for use on Election Day.

Next, through a combination of group discussions and one-on-one interviews with the authors, the team of consulting experts provided their impressions of systems' accessibility, which are reflected in this report. Experts considered not only how an individual feature might affect accessibility, but also how a system works as a whole. Many voting systems are only accessible if jurisdictions implement certain procedures or modify systems in specific ways. In evaluating systems, the team considered whether certain modifications or procedures are needed to render an otherwise inaccessible system accessible.

In addition, each system was first considered as a self-contained product that did not require the voter to bring her own special adaptive technology. If headsets are needed to hear an audio version of the ballot, for example, those headsets would need to be provided at the polling place in order for that voting system to be considered accessible without effort on the part of the voters. This assumption mirrors the Access Board's definition of a "self-contained product" from 1194.25(a) of the Section 508 Standard:

> Self-contained products shall be usable by people with disabilities without requiring an end-user to attach assistive technology to the product. Personal headsets for private listening are not assistive technology.[41]

Beyond the most basic accessibility features of a system, however, some observers believe that a voting system should allow a voter to use her own assistive technology, if desired (*e.g.*, by supplying standard ports to connect this equipment to the voting system). Others have raised three arguments against such an approach. First, some experts argue that voting systems are intended to be self-contained, and voters should not be required to bring any special equipment to the polling place. Second, very few industry standards presently govern the design of connections for assistive technology. At this time, the only standard jacks included in federal standards (either the VSS or VVSG) are audio jacks for personal headsets. Third, security concerns exist about including ports to connect uncertified equipment to a voting system, and the risks involved in installing the drivers or other software usually needed to allow assistive technology to operate. Without attempting to resolve this debate, we assessed the extent to which each system allows a voter to make use of personal assistive technology to reduce barriers to access.

Last, we offer an introductory sketch of accessibility features currently provided by vendors and an analysis of how those features might help ensure compliance with our accessibility criteria. To obtain this information, we first culled information from any available product information published by vendors. We then conducted initial telephone interviews with vendors and usability experts on the status and utility of available features. Next, we sent each vendor a written summary of all compiled research on their machines. Vendors commented upon those reports, and their changes or comments are reflected here.

VOTING ARCHITECTURE ANALYZED

This chapter analyzes the following six voting system architectures:

- Direct Recording Electronic ("DRE")
- Precinct-Count Optical Scan ("PCOS")
- Ballot Marking Device ("BMD")
- DRE with Voter-Verified Paper Trail ("DRE with VVPT")
- Vote-by-Mail
- Vote-by-Phone

The specific design of these systems varies greatly with each manufacturer's models. With respect to the voter's experience, however, the systems can be categorized based upon the primary medium through which the voter interacts with the system to mark and cast the ballot. We consider the features of each type of system individually, but group the systems based on their primary interface as follows:

1. Computer-Based Interface:
   - DRE
2. Paper-Based Interface:
   - PCOS
   - Vote-by-Mail
3. Hybrid Interface:
   - BMD
   - DRE w/ VVPT
4. Telephone-Based Interface:
   - Vote-by-Phone

ANALYSIS

COMPUTER-BASED SYSTEMS

With certain exceptions, computer-based voting systems provide greater accessibility to all disabled voters than do paper-based systems. As discussed in greater detail below, the flexibility inherent in computer-based systems allows voters to choose and mix features, a capacity that dynamically increases accessibility for voters with disabilities. In particular, computer-based systems facilitate voting for people with visual impairments: The size of text can, for example, be electronically enlarged. Display screens can be set at a high contrast that clarifies and emboldens words and images. Computer-based systems can provide audio versions of instructions for voting and of the ballot itself. Other voters can also reap the benefits of computer-based systems. Voters who are not comfortable reading English can choose to read or hear their ballots instantly in a different language. Voters with limited motor capacity need not handle paper or pencil. Often, voters with disabilities can access these features and vote on their own without the assistance of a poll worker or personal aide.

Computer-based systems permit voters to use a range of visual, auditory, and tactile options simultaneously. For example, a voter who cannot read well may choose to hear instructions read out loud, but can retain the ability to select a candidate visually from the screen based on her recognition of a candidate's name. Drafters of the VVSG have recognized the potential of mixing modes in this fashion and include a requirement that accessible systems allow visual and audio streams to be used simultaneously.[42] If designed to do so, computer-based systems can fulfill this requirement with relative ease.

Despite these considerable advantages, computer-based systems can present certain barriers for people with disabilities. Navigation of computer screens often requires that voters use controls that require hand-eye coordination – a touch-screen or a mouse – to select their choices. To operate these controls successfully, voters must have the visual facility to see a cursor move across a screen or to distinguish between virtual buttons on a display and the complementary motor-control necessary to move a mouse or press distant areas on a touch-screen.

The most popular computer-based DRE systems already provide an auxiliary control pad for voters with visual or mobility and coordination impairments. In theory, voters can discern each part of these auxiliary controls using only their sense of touch. The controls' utility varies from machine to machine. Designers can vary the shape of each control mechanism to allow voters to discriminate between controls without looking at them. Voters can activate such controls with minimal force and without fine motor control. Moreover, a button similar to a computer tab key can allow voters to click their cursor between one selection and another without having to move a mouse or touch a screen.

The following questions should be considered in assessing the accessibility of computer-based voting systems:

1. Can the system be physically adjusted to meet a voter's access needs?

The answers to this question depend on the ease with which a voter or poll worker can: (a) adjust the height of the computer screen, (b) tilt or rotate the screen, or (c) remove the screen and input controls from a tabletop surface so that a voter can hold the system in her lap and even vote outside the polling place, *i.e.*, "curbside."

DREs fall into two categories: Certain systems, including Avante's Vote Trakker,[43] Sequoia's AVC Edge,[44] and Accupoll's Voting System 1000,[45] sit stationary on a table or stand. Voters cannot readily adjust a stand's or table's height, and such machines are only accessible to voters in wheelchairs if precincts set some surfaces at lower heights before polls open. Some of these systems, including Sequoia's AVC Edge,[46] also address height concerns by allowing their screens to tilt upward and downward. With the exception of Avante's[47] machines and the systems once manufactured by Accupoll,[48] such systems are sufficiently portable for a poll worker to set them up curbside if necessary.[49]

Other systems, such as Hart Intercivic's eSlate,[50] ES&S, Inc.'s iVotronic,[51] and Diebold's AccuVote-TSX unit,[52] do not need to rest on a table. These systems can be set up to provide a lightweight tablet (ranging from roughly 10-15 lbs.) that the voter can place on her lap or other suitable surface. This portable module includes the screen and all of the necessary input controls. These systems are also sufficiently portable to allow for curbside voting.

2. Does the system allow voters to adjust the visual presentation of information contained in the ballot or in voting instructions?

Although all computer-based systems could offer a range of malleable viewing options, each DRE model differs in the alternatives it provides for users with vision impairments. The VVSG require that certified systems comply with certain requirements concerning the presentation and adjustability of visual outputs. In particular, the VVSG require that certified systems provide an enhanced visual display that includes a high-contrast presentation, a black-and-white display option, and at least two font size options of a minimum size.[53]

Many models have already met the requirements prescribed in the VVSG. DREs produced by Sequoia,[54] Diebold,[55] Hart Intercivic,[56] ES&S, and Accupoll,[57] have high-contrast electronic image displays with a contrast ratio of 6:1 or greater. DREs manufactured by Accupoll,[58] Avante,[59] Sequoia,[60] and ES&S[61] have electronic display options that allow for either a black-and-white-only display or a color display that provides the voter with a means to adjust colors. These features can be made available to voters using machines made by Diebold[62] and Hart

Intercivic[63] but elections officials must ensure that they are incorporated in the ballot's design when it is initially developed.

DREs made by Accupoll[64] and Avante[65] provide at least two font sizes – one with capital letters of at least 6.3 mm and one with capital letters of between 3.0 and 4.0 mm – using a sans-serif or similar font. Models produced by Diebold,[66] Sequoia,[67] Hart Intercivic[68] and ES&S[69] can also vary font size, but officials must request that this feature be implemented during initial ballot design.

3. Does the system allow voters to adjust the audio presentation of information contained in the ballot or in voting instructions?

Audio outputs can be adjusted in four ways. First, systems can allow voters to adjust the volume of the audio playback. Indeed, the VVSG requires systems to do so.[70] DREs produced by Sequoia,[71] Diebold,[72] Hart Intercivic,[73] ES&S,[74] Avante[75] and Accupoll[76] provide volume adjustability as a standard feature: volume can be amplified up to a maximum of 105 dB SPL and automatically resets to a default level after each voter completes her ballot.

Second, auditory outputs can be recorded in either digitized or computer-synthesized speech. Digitized speech is produced by recording one or more human voices and then playing such recordings back through the computer's digital system. This type of speech is reportedly easier to understand than synthesized speech, a rendering that can sound flat and unfamiliar.[77] Digitized speech is already available on DRE systems manufactured by Sequoia,[78] Diebold,[79] Accupoll,[80] Hart Intercivic[81] and ES&S.[82]

Third, certain systems allow the voter to control the rate of speech in the audio output, as recommended in the VVSG.[83] People who are accustomed to interacting with technology through an audio interface can "listen faster" and thus expedite the otherwise potentially lengthy voting process. This feature is available on Avante's,[84] Sequoia's[85] and Diebold's[86] DRE systems. According to experts, speech control has until now been associated with systems that use synthesized speech. However technologies are now available to allow digitally recorded human speech to be played at different speeds without changing the tone or creating a high-pitched, chipmunk effect.[87]

Finally, the use of different voices for instructions and for ballot selections – for example, a candidate's name – allows some voters to expedite the voting process. Voters accustomed to using audio interfaces can speed up audio recordings so that they can skim text for breaks or keywords that indicate a new contest. In this way, voters "scan with their ears" in the same manner that readers quickly scan and review a page of text.

This feature can be made available on systems manufactured by Avante,[88] Sequoia,[89] Diebold,[90] Accupoll,[91] Hart Intercivic[92] and ES&S,[93] but must be requested by election officials during ballot design.

4. Does the system provide an audio output/tactile input alternative access option to meet the needs of individuals with visual impairments or other difficulties reading?

Voters who cannot see or read information presented on a visual display need an alternate, non-visual way both to receive and to input information into DREs. All major manufacturers of DREs (Avante,[94] Sequoia,[95] Diebold,[96] Accupoll,[97] Hart Intercivic[98] and ES&S[99]) address this issue by providing a version of their ballots through an Audio Tactile Interface ("ATI"). ATIs allow voters to hear candidate choices via an audio ballot, rather than seeing them on a display screen, and to make their choices without any cursor or touch-screen by using separate, tactilely discernible controls.

The 2002 VSS contained detailed criteria for audio ballots, all of which have been reiterated in the VVSG. The audio ballots were required to communicate the complete contents of the ballot via a device affixed to an industry standard connector of a 1/8" jack, provide instructions to the voter, enable the voter to review and edit her input, pause and resume the playback, confirm that the edits reflect her intent, and allow the voter to request repetition of any information provided by the system.[100] Still, those systems manufactured under the VSS have produced complaints of badly worded prompts, poorly recorded or poorly digitized speech, and poor navigation options, any of which can make an audio ballot difficult to understand or follow.[101] Where possible, election officials should conduct testing with voters with visual disabilities to assess the audio ballots available on different machines prior to purchase.

5. Does the system provide controls suitable for voters with limited fine motor skills?

The touch-screen navigation that is required by most DRE systems poses significant barriers to access for persons with limited fine motor skills. Because the boundaries of selections on the screen are not tactilely discernible, and it is relatively easy to make an erroneous selection by touching the screen outside the boundaries of the intended "button," voters who can use their hands but have limited fine motor control face significant difficulties in voting successfully and independently. For example, individuals with tremors or other movement disorders that require them to brace their hand when pointing or pressing a button may encounter difficulties with touch-screens because they cannot rest their hand on the screen to make selections. If a touch-screen requires direct touch from the human body rather than a push from any object made of any material, then individuals who use head sticks or mouth sticks would be unable to use the touch-screen. Thus, for voters without the use of their hands, the touch-screen cannot be used to make selections at all. In all these cases, there must be an alternative input control available.

Manufacturers solve this problem by allowing voters to input selections using the auxiliary control panel originally designed for ATIs. Voters can use the alternate

controls on this device to indicate their choices and, in certain machines, retain the ability either to see their ballot on a display screen or to hear their ballot through earphones. Hart Intercivic's eSlate goes a step beyond and makes its standard control panel accessible to voters with limited fine motor skills: Voters move between selections on an electronic screen by turning a dial; separate buttons exist for selecting a certain candidate or response and for casting a completed ballot.[102]

Certain voters cannot input selections with their hands at all, however, and must use a separate device to input information. Some machines, including those manufactured by Accupoll,[103] Sequoia,[104] Hart Intercivic[105] and Avante,[106] include a "dual switch input option," a jack for a voter to insert such a device. Voters can, for example, attach a sip-and-puff device, which allows them to indicate choices by applying varying amounts of pressure to a straw inserted in the mouth. Other users may use a blink switch that allows them to operate one or two switches by blinking their eyes. In both cases the switches can be used to control the voting machine if it is set up to be controlled with one or two switches.

Switch input devices can present their own usability concerns for certain voters. Such devices require voters to use a control that can communicate a limited number of messages for two types of actions, ballot navigation and selection. A voter using a single, rather than dual, switch input device may not have the ability to scroll backward and forward to revisit earlier answers and might have to restart the ballot completely to change a choice. For this reason, voters benefit from voting systems that can interpret switches that transmit at least two discrete messages: forward/select and backward/select. This flexibility can increase the speed and usability of the voting system for voters using auxiliary devices. Election officials should ensure that dual switch input devices can be used on the system chosen.

6. Does the system allow simultaneous use of audio and visual outputs, in other words, can a voter to see and hear a ballot at the same time?

Many voters, particularly those with low literacy levels, limited English skills, or mild vision impairments, can benefit from both hearing and seeing a ballot. For that reason, the VVSG has required that all audio ballots and ATIs be synchronized with a standard visual output.[107] This feature is presently available on systems manufactured by Accupoll,[108] ES&S,[109] Diebold[110] and Hart Intercivic.[111] According to its representatives, Sequoia plans to implement this feature sometime in 2006.[112]

7. Does the system allow voters to input information using a tactile control device while still receiving visual, rather than audio, output?

Voters with limited fine motor control may not need to listen to an audio ballot and may prefer to enter their selections using an auxiliary tactile control device,

while still receiving their ballot through a standard visual display. This feature currently exists on the DRE systems manufactured by Hart Intercivic,[113] Diebold[114] and Accupoll.[115] According to its representatives, Sequoia plans to implement this feature sometime in 2006.[116]

8. Can a voter choose and change accessibility and language options without the assistance of a poll worker?

One of the advantages of a computer-based interface is that it can provide a range of options and can allow those options to be selected by the voter privately and independently. Similarly, the voter should be able to correct her unintended selection of a feature independently. For example, if a voter who has already made some but not all of her selections decides that she would prefer a larger text size, but must return to a preliminary screen to alter the size of the text to continue voting successfully, such a transition may be prohibitively confusing, require assistance from a poll worker, or lead to failure.

Some vendors have anticipated the need for flexibility and have designed systems that allow voters to choose and switch between features with ease. Accupoll allows voters to switch languages, adjust volume, and magnify or shrink text size at any time.[117] Avante users can change visual and audio settings at any time.[118] Diebold users can select and change visual features at any time, but cannot change audio features without poll worker assistance.[119] ES&S's and Hart Intercivic's systems ask voters to select their preferred features at the beginning of the ballot, but do not allow voters to change features later in the voting process.[120] According to Sequoia's representatives, the updated version of the AVC Edge will allow voters to choose and manipulate all features at all times.[121] With the exception of Hart Intercivic's eSlate and ES&S's iVotronic, computer-based systems require that ATIs be initialized by a poll worker each time a voter requests a change in the settings in use.[122]

9. Is the system's audit function accessible to all voters?

All DREs allow voters to review an electronic record of their cast ballots. Those records can also be read back via audio inputs to blind voters and can be presented in an enhanced visual display to voters with vision impairments.

PAPER-BASED SYSTEMS

Paper-based systems, which include systems that use optical scan ballots and Vote-by-Mail ballots, create barriers to voters with disabilities that are not as easily remedied as those presented by computer-based systems. The barriers imposed by these systems result principally from four features of the voting experience. First, with both optical scan and Vote-by-Mail systems, the paper ballot itself must be printed prior to Election Day and cannot be adjusted to address the needs of a particular voter. For voters with visual impairments, requesting and using large-print paper ballots may sacrifice a measure of their privacy: officials

know who request large-print ballots, and if only a small number of individuals do so, officials can discern voters' personal selections after polls have closed. Like voters with vision impairments, voters who require alternate languages may need to request a different ballot pre-printed in their language and may encounter a similar privacy concern. In sum, despite the use of large-print ballots and assistive devices like magnifying glasses, many voters with vision impairments may still have greater difficulties reading the paper ballot than they would reading an enhanced electronic visual display.[123]

Second, paper-based systems require voters to read the ballot. Some jurisdictions provide recordings of the ballot to facilitate voting for those with visual impairments.[124] Even when made available, auditory instructions for paper-based systems are presently produced by a cassette machine rather than by a computer-based audio system, and voters cannot change the speed of the audio recording nor skip forward or backward with ease. More importantly, voters with visual impairments cannot review their ballots for accuracy once they have been marked without another person reading the contents to them because no paper-based systems allow an auditory review of voters' input. For some voters with visual impairments this barrier can mean an absolute loss of privacy and independence.

Third, paper-based systems require voters to mark the ballot manually. Voters with coordination or vision problems may require significant assistance to complete this task. In addition, voters with cognitive disabilities have an especially difficult time marking ballots that ask voters to follow an arrow across a page and select a candidate. Many voters with learning disabilities may struggle to perform this kind of visual tracking successfully.

Finally, many paper-based systems require voters to feed their marked ballots into a scanner, and voters with impairments relating to vision, mobility, or coordination will experience difficulties in completing these tasks. To initiate and complete scanning, voters must have the visual and physical facility to grasp a ballot, walk across a polling station, and insert their ballot into a scanner. Many voters will find their privacy and independence threatened as they seek the assistance of another person in order to complete the scanning process.

The following questions should be considered in assessing the accessibility of paper-based voting systems:

1. Can the system be physically adjusted to meet a voter's access needs?

For those voters with disabilities that do not preclude them from handling or seeing paper, paper ballots are easy to position so that they can be seen and marked. The polling place need only include a selection of writing surfaces set at varying heights.

However, systems that require a voter to physically handle paper are fully inaccessible to those voters who have such profound motor coordination disabilities that they are unable to grasp or otherwise manipulate a paper ballot. Such voters cannot clutch a ballot handed to them by a poll worker or operate a pen or marking device. Nor can these voters transport a ballot across a polling station and feed the ballot into a tabulator. Because they are unable to execute the basic mechanics of paper ballot voting without considerable assistance, voters with significant motor control impairments are unable to vote in a private and independent manner.

Voters with significant visual disabilities have equally prohibitive difficulties with paper ballots. Without assistance, such voters are unable to read instructions and candidate choices or to mark their selections. No currently available physical adjustment to the paper ballot sufficiently lowers these barriers.

In addition, paper-based systems may pose specific barriers to certain voters who use wheelchairs. Most optical scan systems include a precinct-based scanner into which the voter must insert her ballot to be counted, and these scanners can be inaccessible to voters with high spinal cord injuries. Scanners, including those manufactured by Avante,[125] Diebold,[126] Sequoia,[127] and ES&S,[128] often sit atop a solid ballot box that stands at waist height. The scanner's feeder is situated at the front of the box, and no ballot box provides space under this feeder for a wheelchair. Thus, voters in wheelchairs cannot roll up to a scanner and face it. Instead, voters in wheelchairs must roll up beside a scanner, rotate their torsos, and place the ballot into the feeder slot. Many voters with high spinal cord injuries cannot move in this fashion and thus cannot vote without third-party assistance.

Though they present many of the accessibility concerns inherent in any paper-based system, Vote-by-Mail systems provide unique, physical benefits for voters with certain disabilities, particularly mobility impairments. These are the only systems that do not require travel to a polling place. The voter completes the voting process in her own physical environment with more accessible writing surfaces or assistive devices tailored to that voter's specific needs.

2. Does the system allow voters to adjust the visual presentation of information contained in the ballot or in voting instructions?

Once the paper ballot is printed, the size and contrast of the text can no longer be adjusted. To circumvent this limitation, jurisdictions can print ballots with a range of visual presentations, as any vote tallying system can be programmed to count ballots with enlarged print, different colors and contrast ratios, multiple languages, or other special options. Scanners must be programmed to read such ballots, and the jurisdiction must print any special ballots in advance and make them available upon request. In addition, though Vote-by-Mail systems provide certain advantages for voters with physical limitations, voters with visual impairments may struggle to complete the voting process without assistance. These

voters may not be able to read ballot instructions and candidate choices, or know what they have marked, and may need to sacrifice their privacy and independence to cast their ballots in a Vote-by-Mail system.[129]

3. Does the system allow voters to adjust the audio presentation of information contained in the ballot or in voting instructions?

The advent of BMDs – which allow voters with vision disabilities and voters with limited motor skills to mark a ballot using an auxiliary tactile control – has effectively superseded most efforts to make paper ballots more accessible through audio recordings.[130] Without the kind of interface provided by a BMD, many voters with severe visual or motor coordination impairments cannot mark a paper ballot without assistance from another person. The use of "tactile ballots" with PCOS systems seeks to address this barrier as discussed below, but such devices do not allow voters to review their marked ballots.

4. Does the system provide an audio output/tactile input alternative access option to meet the needs of individuals with visual impairments or other difficulties reading?

Paper-based systems do not have audio output or tactile input, and without some additional component added to the system, cannot provide it. This is true for all of the systems – PCOS and Vote-by-Mail – that require the voter to mark a paper ballot. However, certain small-scale innovations have been developed to help people with visual disabilities to mark paper ballots, including "tactile ballots." In such systems, a paper ballot is accompanied by an overlay with tactile markings and an audiotape with a description of the ballot to guide the voter in marking her ballot. The advantage of using such add-ons is that the marked ballot is indistinguishable from all of the others and, once cast, can be counted in the same manner.

The International Foundation for Election Systems has developed a tactile ballot template that can be used to accommodate voters with visual impairments.[131] These templates are currently in use in Rhode Island, which uses optical scan systems, for blind and visually-impaired voters.[132] When used with a Braille instruction sheet, tactile ballots allow some voters who are both blind and deaf to mark their ballots without third-party assistance.

There are, however, several disadvantages. The sequential audiotapes force voters to proceed through the ballot at the rate of the recorded playback, rendering the voting process slower for voters using these systems than for voters using a digital audio playback. More importantly, blind and certain low-vision voters cannot review the marked ballot, and must trust that it is marked correctly or obtain the assistance of another person to do so, with a consequent loss of independence and privacy.

Because Vote-by-Mail ballots are marked in the voter's home, she must have any special assistive systems already available if she wishes to vote without assistance. For example, a voter might have a system to scan a paper form and have it read back to them. But, as with tactile ballots, voters with severe visual impairments may not be able to review their marked ballots. For voters without any assistive devices, moreover, it may be impossible to vote without assistance.

5. Does the system provide controls suitable for voters with limited fine motor skills?

Paper-based systems do not have controls to mark the ballot and instead require the voter to use a pen or pencil to mark it. Such systems are thus inaccessible to many voters with limited fine motor skills. In addition, all of these systems (including BMD systems) require the voter to place the marked ballot into an optical scanner. Voting systems that require a ballot to be grasped, transported across a polling place, and fed into a scanner create obvious difficulties for voters without fine motor skills.

6. Does the system allow simultaneous use of audio and visual outputs, in other words, for a voter to see and hear a ballot at the same time?

Theoretically, election administrators could provide voters with a scanner of some kind that could convert ballot text into audible speech. No such scanner is currently on the market, however, perhaps because BMDs serve the same essential purpose at a lower cost.

7. Does the system allow voters to input information using a tactile control device while still receiving visual, rather than audio, output?

Unless a voter can use a tactile paper ballot, this feature is essentially inapplicable to paper-based systems, which are not amenable to fully tactile controls.

8. Can a voter choose and change accessibility and language options without the assistance of a poll worker?

Unlike a computer display, paper ballots cannot be dynamically altered to change the size, color, or language of the text at the time when a vote is cast.

With respect to language options, however, if all of the languages used in the precinct are printed on each ballot, the voter can make use of any of these options in a PCOS or Vote-by-Mail system. If not, she must request her desired language either at the polling place (PCOS or BMD) or in advance (Vote-by-Mail). Large text or other special versions must also be requested in the same manner.

Similarly, if a voter needs to change the format of the paper ballot he is using during the voting process, in most cases he must request a new, blank ballot. For example, a voter who discovers that she is having trouble reading the ballot might request a large-print version, if one is available. Similarly, if the voter has already marked the ballot erroneously, she must ask for a new ballot. Unlike most computer-based systems, paper-based systems require a voter to seek and obtain such assistance and to discard all work on the original ballot.

In a Vote-by-Mail system, requesting a new or different ballot can involve a trip to the elections office, requiring significant effort on the part of the voter. In Oregon, however, the only state that currently uses such a system, replacement ballots can be requested by calling a toll-free hotline or a County Board of Elections Office.[133] If a voter calls more than five days before an election, her ballot will be sent to her in the mail. If a voter calls within five days of an election, she must travel to a County Board of Elections Office to pick up her ballot. Such a trip could prove prohibitive for some disabled voters without transportation.

9. Is the system's audit function accessible to all voters?

Any voter who can see and read a paper ballot can audit the ballot simply by looking at it. Voters with vision disabilities or trouble reading may need a machine to translate markings on a paper ballot into an enhanced visual display or audible reading of those markings. No such scanner, other than the BMD systems described below, currently exists.

※ HYBRID SYSTEMS

To determine the accessibility of both hybrid systems analyzed in this section – BMD and DRE w/ VVPT – it is best to think of each hybrid system in terms of the system architectures they combine. BMD systems integrate a computer-based system with a defining feature of paper-based systems: namely, voters use a computer to mark a paper ballot they feed into a scanner to be processed and counted. Similarly, DREs w/ VVPT make use of both computer- and paper-based systems. DREs w/ VVPT incorporate a paper-based system as a means by which a voter can verify her selections prior to casting her vote.

※※ OVERVIEW OF BMD.

Like a DRE, BMD systems allow a voter to make her selections on a computer. BMD systems print the marked ballot for the voter, who must then feed it into a scanner to be counted. BMDs thus provide the significant accessibility features of a DRE, but still require that voters overcome the barriers inherent in scanning paper ballots. Indeed, if the marking process were the end of the voting process, the use of paper ballots coupled with BMDs would present no greater barriers to voters with disabilities than DREs.

ANALYSIS OF BMD

1. Can the system be physically adjusted to meet a voter's access needs?

Once a BMD prints a marked ballot, the system poses unavoidable challenges to voters who cannot transport a ballot across a polling station. Prior to that point in the voting process, however, voters interact with a BMD exactly as they would with a computer-based DRE system. The voter has the same opportunities to (a) adjust the height of the computer screen, (b) tilt or rotate the screen, or (c) remove the screen and input controls from a tabletop surface to hold the system in her lap. ES&S's Automark includes a screen that can be tilted upward and downward,[134] and Populex's BMD system, at 15 lbs., can rest in a voter's lap or be easily transported to allow for curbside voting.[135]

2. Does the system allow voters to adjust the visual presentation of information contained in the ballot or in voting instructions?

BMDs present all ballot information in an electronic format. In theory, voters can adjust this electronic ballot in all the ways one can adjust a DRE's presentation to allow greater access. Both the Automark and Populex BMDs have high-contrast electronic image displays with a contrast ratio of 6:1 or greater.[136] In addition, both machines allow for either a black-and-white display or a color display that provides the voter with a means to adjust colors.[137] Populex provides two font sizes, one with capital letters of at least 6.3 mm and one with capital letters of between 3.0 and 4.0 mm, both in a sans-serif or similar font.[138] The Automark's screen supports large-font displays and font sizes can be varied by the voter if elections officials request that this feature be implemented during initial ballot design.[139] Populex and Automark users can also magnify any part of their ballots by pressing a zoom button at any time.[140]

3. Does the system allow voters to adjust the audio presentation of information contained in the ballot or in voting instructions?

Users can adjust the volume of the Automark and Populex BMDs to a maximum of 105 dB SPL.[141] Volume is automatically reset to a default level after each voter completes her ballot.[142] The Automark BMD also allows voters to accelerate its audio recording in order to expedite the voting process.[143]

4. Does the system provide an audio output/tactile input alternative access option to meet the needs of individuals with visual impairments or other difficulties reading?

Both the Automark and the Populex BMDs come with ATIs and have dual switch input capabilities.[144] On the Automark's ATI, four blue arrow keys are used to move between choices and surround a blue square button that is used to make selections. All buttons are also labeled in Braille.[145] Populex provides a modified

calculator keypad as its ATI.[146] For voters who cannot use a standard ATI, the Automark also provides dual switch input capacity.[147]

5. Does the system provide controls suitable for voters with limited fine motor skills?

BMDs allow voters with limited motor skills to mark their ballots without the assistance of an aide or poll worker. Still, voters who need BMDs to mark their ballots often lack the dexterity necessary to complete the voting process independently once the ballot has been marked. Voters must retrieve their ballots from a BMD, travel to a scanning station, and feed their ballots into a scanner. Thus, many voters with limited motor skills may require a poll worker or aide to handle these tasks, and this assistance could diminish their privacy and independence.

BMD manufacturers have attempted to address the privacy concern by providing a cover sleeve that is placed over the ballot.[148] If a voter cannot clutch a ballot well enough to place it in a plastic sleeve, another person can insert the blank ballot into a privacy sleeve for the voter at the start of the voting process. The top two inches of the ballot protrude from the cover. The person who provides such assistance can then proceed with the voter to the BMD, insert the two-inch overhang into the feeder slot, and allow the machine to draw in the unmarked ballot. The privacy sleeve is left hanging off the lip of the feeder slot and, once a voter has finished marking the ballot, the BMD automatically inserts the marked ballot back into the privacy sleeve.

At that point, the person who is assisting the voter can transport the covered ballot across the polling place to a scanner, insert the front two inches of the ballot into the scanner, and allow the scanner to draw in and count the voter's ballot. According to ES&S and Vogue's representatives, at no point will that person see any of the markings on the voter's ballot.[149] Although cover sleeves may safeguard a voter's privacy, such protection could come at a stiff price for jurisdictions. Managing the use of privacy sleeves places a high burden on poll workers. Not only must workers manage the distribution of sleeves, but they must also shadow any voter who needs a sleeve through every step of the voting process. Nor does the privacy sleeve restore the independence lost by the voter who cannot complete the voting process without assistance.

6. Does the system allow simultaneous use of audio and visual outputs, in other words, for a voter to see and hear a ballot at the same time?

This feature is available on the Automark and Populex BMD systems.[150]

7. Does the system allow voters to input information using a tactile control device while still receiving visual, rather than audio, output?

This feature is available on the Automark.[151]

8. Can a voter choose and change accessibility and language options independently without the assistance of a poll worker?

The Populex system allows the voter to magnify text and adjust the audio presentation at any time.[152] The Automark allows voters to adjust the audio presentation at any time, and a button on its touch-screen allows voters to switch between two font sizes or magnify text.[153]

9. Is the system's audit function accessible to all voters?

Both the Automark and Populex BMDs allow voters to review the marks on their ballots. According to Vogue and ES&S representatives, the Automark BMD is sold with a standard scanner that reviews the darkened bubbles on the ballot's face and translates those marks into an enhanced visual display or an audio rendering of a voter's choices.[154] A voter need only reinsert her ballot to activate this feature.[155] The Populex BMD prints its marked ballots with a barcode that reflects a voter's selections.[156] Voters can swipe this barcode under a scanner that converts its contents into an audio output that can be reviewed with headphones or on an enhanced visual display. To activate these features, a voter needs only the visual and physical dexterity to swipe her marked ballot under Populex's scanner. For voters with limited vision or limited fine motor control this final step may prove difficult and require assistance to accomplish when either system is used.

OVERVIEW OF DRE w/ VVPT

While DREs w/ VVPT provide the accessibility benefits of a computer-based system, the voter must be able to read (or hear) the contents of the VVPT to verify her selections prior to casting her vote. For a voter with limited vision, the VVPT cannot be easily printed in a large-font for two principle reasons. First, in certain models, a VVPT prints into a hard case of a fixed size that may not accommodate a VVPT made larger by a larger font size. Second, ballots printed in a large-font by machines like the ones once manufactured by Accupoll, which printed out the VVPT on loose paper from an inkjet printer are, by definition, longer than other ballots. This may sacrifice the privacy of the voter's ballot selections because the large-font ballot's length would render it immediately distinguishable from other ballots.[157] For these reasons, voters with visual impairments may benefit from reviewing the VVPT via audio or on an enhanced electronic visual display so as to avoid the pitfalls of a large-print ballot.

As discussed below, technologies are just now being made available to allow blind voters to read such VVPTs by translating their text into audio. In the spring of 2005, Accupoll released its version of a barcode scanner that was mounted beside the DRE, read the VVPT barcode produced by the printer attached to the Accupoll DRE, and translated it into audio.[158] According to its representatives, Sequoia plans to release a similar mechanism early in 2006.[159] Scanning technology for VVPTs is still in its nascent development phase; it will be several years before thorough usability testing determines the efficacy of these scanners and their technology is fine-tuned.

ANALYSIS OF DRE w/ VVPT

1. Can the system be physically adjusted to meet a voter's access needs?

To voters with disabilities that do not relate to their vision, DREs w/ VVPT provide essentially the same physical adjustability as DREs, discussed already. It is important to note, however, that if the paper record (*i.e.*, the VVPT) must be read behind a transparent cover as in most models, the position of that paper often cannot be changed. A voter with a narrow field of vision may need to reposition herself to see the paper record, placing the computer screen and possibly the controls out of reach for a time.

2. Does the system allow voters to adjust the visual presentation of information contained in the ballot or in voting instructions?

As with physical adjustments, DREs w/ VVPT systems can be adjusted just as DRE systems, except in that portion of the voting process that involves verification by the voter of her ballot. In all models, the print on the VVPT record is of a fixed size and appearance and is not subject to modification by the voter at any time. One system, Accupoll's AVS 1000, used to print the voter's selections on a full-sized sheet of paper (rather than a small strip) that a voter could handle and bring closer to her face.[160]

VVPT systems manufactured by Diebold, and ones once manufactured by Accupoll, offer an additional display option that may be helpful to voters with cognitive or learning disabilities. In those systems, the ballot screen and the VVPT are displayed simultaneously on a DRE's screen to allow for a side-by-side visual comparison of the two images, thereby simplifying verification for voters who have difficulties reading rows of information on a printed page.

3. Does the system allow voters to adjust the audio presentation of information contained in the ballot or in voting instructions?

Last spring, Accupoll introduced an electronic scanner that, according to company representatives, could read back the text of a VVPT to a voter.[161] Voters could adjust the speed and volume of the Accupoll scanner's playback. The elec-

tronic scanner rested next to a DRE. Each VVPT printed by the Accupoll DRE contained a barcode of the voter's selections, as well as a text version of those selections. A voter thus had to grasp the VVPT and swipe it under the scanner to verify her vote. Accupoll asserted that given the proximity of the scanner to the voting machine, blind voters should have had no trouble detecting the existence of a scanner with their hands and successfully completing the swipe. In theory, the only voters who would not have been able to verify their votes without assistance would have been voters with both physical and visual impairments. As of now, the barcode scanners once offered by Accupoll and promised by Sequoia are the only means for a voter to hear, rather than see, the contents of their VVPTs. Of course, only rigorous usability testing will be able to verify these predictions.

4. **Does the system provide an audio output/tactile input alternative access option to meet the needs of individuals with visual impairments or other difficulties reading?**

Every DRE w/ VVPT can be outfitted with an ATI. If a voter must take action in response to reviewing a VVPT, she can do so by using such an ATI.

5. **Does the system provide controls suitable for voters with limited fine motor skills?**

As long as voters have the visual facility to see a ballot and are provided with an ATI, DREs w/ VVPTs are fully accessible to such voters.

6. **Does the system allow simultaneous use of audio and visual outputs, in other words, for a voter to see and hear a ballot at the same time?**

DREs w/ VVPT allow the voter to see and hear the selections simultaneously during the initial phase of the voting process. Once the voter reaches the point at which she must verify her vote by reviewing the VVPT, however, the audio options are limited. As noted already, Accupoll offers audio rendering of VVPTs, and Sequoia might soon follow suit.

7. **Does the system allow simultaneous use of visual displays and tactile input controls?**

As long as a DRE w/ VVPT includes a set of auxiliary tactile controls, and the controls are programmed to input responses during the VVPT review process, VVPT systems can facilitate the simultaneous use of visual displays and tactile input controls.

8. **Can a voter choose and change accessibility and language options independently without the assistance of a poll worker?**

For DREs w/ VVPT, features selected for the initial computer-based portion of the voting process (*e.g.*, large-print or language options as well as audio options)

are not carried over into the voter's verification of the paper record. In the latter stage of the process, as discussed already, the only accessibility feature that has been on the market and may be in the future is a barcode reader that translates the paper record's contents into audio speech for verification.

VVPT could also encroach on the privacy of those voters who choose a language other than English to vote. In order for a voter to verify her ballot, the paper trail may need to be produced in her language of choice. This would reveal a special language choice on the printout – names of races would not be printed in English – and if the selection of a language other than English is rare in a particular precinct, a voter's privacy could be compromised should officials review ballots during a recount. Election officials could request that machines be configured to print every VVPT with labels written in both English and all other available languages, but this could require a sharp increase in paper use and cost and may be infeasible for other reasons. To date, no company has pre-programmed a machine to do so.

9. Is the system's audit function accessible to all voters?

Any voter that can read a VVPT is likely able to verify the accuracy of its text. As noted above, voters with visual impairments may require an enhanced visual display or audio rendering of their VVPTs in order to verify them. Ideally, enhanced visual and audio renderings of VVPTs would be derived from the same written text available to sighted voters. The only audio scanner once available for VVPTs, Accupoll's, read a barcode, not printed text.[162] It is possible that the barcode, rather than the text, could be counted as the official ballot in the event of a recount. In states where this proves true, voters with visual impairments who use a scanner like Accupoll's will avoid verifying selections that do not reflect the ballot of record in an election.

OCR fonts are standard monospaced fonts designed for "optical character recognition" on electronic devices, such as scanners.

Accessibility experts have suggested two alternatives to Accupoll's barcode scanner. First, certain scanners can read text printed in OCR fonts, and these scanners could prove helpful in reading VVPTs to voters. Scanners understand each letter, convert letters into words, and create a spoken version of a written word. VVPT printers could be programmed to use OCR fonts – indeed Accupoll's printers once did – and OCR scanners could be provided.[163] Second, some printers can read the words they produce, and VVPTs could be outfitted with such printers. Printers take note of each character they write and can sound out those characters into words. The accuracy of these audio renderings improves when there are limited options for what a word could be, such as a when a printer is choosing between two candidates in a race.[164]

OVERVIEW OF TELEPHONE-BASED SYSTEMS

In telephone-based voting systems, voters use a touchtone phone to dial a phone number that connects voters to an audio ballot. Voters press specific telephone keys to indicate their selections, and the system's software interprets the tones of those keys to record choices.[165] Telephone-based systems can be designed in two ways. In one scenario, states can configure their Vote-by-Phone lines to accept calls from any phone so that voters can cast ballots from home using their own equipment. Alternatively, states can limit incoming calls to a discrete set of phones housed at polling places. In this case, voters must travel to the polls to vote and use phones provided by the state. Unless carefully designed, these telephones can be largely inaccessible to voters with disabilities.

The only existent Vote-by-Phone systems, New Hampshire's and Vermont's, follow the latter model.[166] The great accessibility promise of Vote-by-Phone systems, however, lies in the possibility of allowing voters to vote from home on Election Day. At home, voters could use customized phones already configured with any special keypads or other features they might need. Perhaps most importantly, voting from home would save voters from traveling to a polling place. Many disabled voters cannot drive and could escape the cumbersome task of arranging for transportation on Election Day if they could vote from home. In addition, if all voters voted by telephone, states would not need to invest in rendering old polling places accessible to voters in wheelchairs. Thus, when combined with a Vote-by-Mail system for voters with hearing impairments, Vote-by-Phone systems could level the playing field by giving all voters the same remote voting experience.

Unfortunately, all telephone-based systems present significant barriers to voters with hearing impairments. First, the voter's ability to vote by phone depends upon the quality and nature of their adaptive equipment that facilitates full use of the telephone. Although many voters with hearing impairments possess such technology, many voters do not. In theory, jurisdictions using Vote-by-Phone systems that require voters to vote from home could obtain Text Telephones ("TTYs" or "TDDs") to connect with voters that have TTYs in their homes.[167] Only a small proportion of voters who have trouble hearing have access to TTYs, however, and Vote-by-Phone systems would need to be used in conjunction with Vote-by-Mail systems to accommodate many of these voters.

At present, Vote-by-Phone systems do not offer TTY-capabilities as an option on their voting systems.[168] For now, Inspire's Vote-by-Phone system thus comes with "a full-featured Election Management System (EMS) which enables the jurisdiction to configure and print blank paper ballots. These blank ballots could be mailed to, or made available at the polling sites for, those who are deaf and cannot use the telephone."[169] This option may not, however, aid those voters with sight and hearing difficulties.

Second, while Vote-by-Phone systems may provide significant accessibility benefits to blind voters accustomed to responding to audio output using a standard phone keypad, this mechanism may prove cumbersome and unfamiliar for other voters with other accessibility needs: older voters who have vision impairments and are also hard of hearing may not be able to navigate a phone system with ease. Voters with limited mobility may not be able to use the telephone keypad unless it is specially designed for such voters.

ANALYSIS OF TELEPHONE-BASED SYSTEMS

1. Can the system be physically adjusted to meet a voter's access needs?

Standard telephones have a fixed cord length or range of operation, fixed keypad configuration, and fixed keypad size. If states insist that voters use telephones provided at a polling place, they may not be physically adjustable unless auxiliary features are provided. If voters cast ballots from their homes, however, they can use their personal phones. In all likelihood, these telephones will already be configured to accommodate the voter's needs and would not require physical adjustments.

2. Does the system allow voters to adjust the visual presentation of information contained in the ballot or in voting instructions?

All telephone-based systems use an audio, not a visual, ballot.

3. Does the system allow voters to adjust the audio presentation of information contained in the ballot or in voting instructions?

Although existent Vote-by-Phone systems in Vermont and New Hampshire do not allow voters to adjust the ballot's volume and speed, designers could program audio ballots to do so. In addition, many phones allow users to adjust a receiver's volume levels.

4. Does the system provide an audio output/tactile input alternative access option to meet the needs of individuals with visual impairments or other difficulties reading?

All Vote-by-Phone systems transmit information in audio form and ask voters to input information using tactilely discernible controls. However, Vote-by-Phone systems allow voters to access and enter information in only one way. Voters must enter their selections using a standard telephone keypad.[170] According to representatives of IVS, makers of Vermont's Vote-by-Phone system, if a voter cannot use a standard telephone for some reason, no alternative system exists for inputting ballot information using telephones.[171]

5. Does the system provide controls suitable for voters with limited fine motor skills?

A Vote-by-Phone system could be designed in two ways. In one scenario, a voter casts her ballots from home using her personal phone. In this case, the interface for a phone system is, by definition, the voter's own equipment and should be accessible to her.

In a second scenario, currently in practice in Vermont, the voter uses a phone to cast the ballot at a polling station where phones have been provided. Many voters with limited motor skills need a specially designed phone with an interface that is more accessible than a standard 12-key keypad. Indeed, these voters may need telephones to have an alternative switch input available or telephone end units adapted to their particular needs. As long a voter can access the unit, any adaptive technology which is able to replicate the tones of a keypad should be able to operate the Vote-by-Phone system. According to IVS, some of these adaptive technologies cannot meet this requirement, however, because they do not replicate the "distinct sounds generated by the telephone when its buttons are pressed."[172]

6. Does the system allow simultaneous use of audio and visual outputs, in other words, for a voter to see and hear a ballot at the same time?

Telephone-based systems cannot currently provide such a feature.

7. Does the system allow simultaneous use of visual displays and tactile input controls?

Telephone-based systems cannot currently provide such a feature.

8. Can a voter choose accessibility and language options independently without the assistance of a poll worker?

Vote-by-Phone systems have a limited range of accessibility options because they do not have a visual display and are only as accessible as the telephone system used by the voter. As discussed already, this can be prohibitive for voters with hearing impairments who must, in many cases, vote by mail. Nevertheless, these systems do protect the privacy and independence of those voters who can use the telephone through assistive devices or other means.

Like a computer interface, language options can be made a part of the initial steps of the voting process in telephone-based systems, allowing independent and private selection. Election officials should ask that this flexibility be implemented during initial ballot design.

9. Is the system's audit function accessible to all voters?

Vote-by-Phone systems produce a paper ballot, and auditing this ballot presents many of the same accessibility concerns as VVPTs. Once a voter has finished entering her choices, the system prints a marked paper ballot either to a central location, such as the Secretary of State's office, or at the precinct itself. This paper ballot is treated as the ballot of record.[173]

In the central location scenario, the voter cannot see her marked ballot. However, ballots are printed with a barcode that contains a voter's selections. This barcode can be scanned as it prints at the central office, translated into an audio ballot, and read back to the voter over the telephone. The voter can either reject or accept her ballot after hearing the barcode's contents. In jurisdictions where paper ballots, not barcodes, are the ballot of record, voters would review a proxy for a ballot, rather than the physical text that would be counted in an election.

By contrast, when ballots are printed at precincts, sighted voters can read the text printed on their ballots and verify its accuracy. Like with barcode scanners used with VVPTs, voters with vision impairments must have the visual and motor facility to use a barcode scanner to translate their ballots into an audio recording.

KEY FINDINGS

Our report reached several conclusions about the accessibility of each system:

COMPUTER-BASED SYSTEMS: DRES AND BMDS

- Accessibility of Computer-Based Systems: Because computer-based interfaces allow voters to tailor a range of features to their individual needs instantly and without assistance from another person, DREs and BMDs offer the greatest accessibility to voters with disabilities, particularly those with visual impairments.

- Audio and Enhanced Visual Display Capabilities for Voters with Visual Impairments: Unlike paper-based voting systems that do not provide any means for voters to hear rather than see instructions or ballot information, most DREs and BMDs allow voters to hear such information through headphones and to adjust the volume and rate of the audio output. In addition, several systems provide digitized (*i.e.*, real recorded human voice), rather than computer-synthesized, speech, and use different voices for instructions and ballot selections to expedite comprehension and thus the voting process itself. For voters with mild vision impairments who might not need an audio ballot, computer interfaces provide an enhanced visual display that uses bigger and bolder text.

- Alternative Input Devices for Voters with Motor/Coordination Impairments: Navigation of computer screens often requires that voters use controls that require hand-eye-coordination – a touch-screen or a mouse – to select their choices. For voters without the use of their hands or with severe motor impediments, a touch-screen cannot be used to make selections at all. In both cases, there must be an alternative input control available. The most popular computer-based systems already provide tactilely discernable input controls, often as part of the Audio Tactile Interface designed for voters who cannot see. Frequently these tactile controls can be used by individuals with mobility and coordination disabilities so long as the visual display remains active when those controls are engaged. For those voters who cannot use their hands at all to input selections, certain machines include a "dual switch input option," a jack for a voter to insert their own dual switch input device. Voters can, for example, attach a sip-and-puff device, which allows the voter to indicate choices by applying pressure to a straw or any other dual switch compatible with the scanning of the voting system.

PAPER-BASED SYSTEMS

PCOS

- Limited Flexibility to Meet Special Needs: First, with PCOS and Vote-by-Mail systems, the paper ballot itself must be printed prior to Election Day and thus cannot be adjusted to address the needs of a particular voter. In addition, despite magnifying lenses and other assistive devices provided by elections officials, voters with vision impairments still may have greater difficulties reading the paper ballot than they would reading a computer screen that allows fine contrast and size adjustments to be made. Paper-based systems do not have audio output or tactile input, and without some additional component added to the system, cannot provide it.

- Tactile Ballots for Voters with Visual Impairments: Certain small-scale innovations have been developed to help people with visual disabilities to mark paper ballots, including "tactile ballots." However, many voters with visual impairments still cannot review the marked ballot and must trust that it is marked correctly or obtain the assistance of another person to do so, with a consequent loss of independence and privacy.

- Inaccessible Auditory Instructions: If made available at all, auditory instructions for paper-based systems are presently produced by a cassette machine, rather than by a computer-based audio system. In practice, voters with visual impairments can neither change the speed of the audio nor skip forward or backward during the voting process. More importantly, such voters cannot review their ballots once they have been marked without another person reading the contents to them.

- Paper Ballots Inaccessible to Voters with Motor Coordination Impairments: Paper-based systems that require voters to mark the ballot manually present significant challenges to voters with either or both coordination and vision problems. Paper-based systems do not have "controls" to mark the ballot and instead require the voter to use a pen or pencil to mark it. Such systems are thus inaccessible to many voters with limited fine motor skills.

- Scanners Inaccessible to Many Voters with Visual, Mobility, or Motor Coordination Impairments: Systems that require voters to feed their marked ballots into a scanner present barriers not only for voters with impairments relating to vision, mobility, or coordination, but even to non-disabled voters who have coordination difficulties.

Vote-by-Mail Systems

- Vote-by-Mail systems provide unique benefits for voters with mobility impairments. These are the only systems that do not require travel to a polling place; the voter completes the voting process in her own physical environ-

ment with more accessible writing surfaces or assistive devices tailored to that voter's specific needs. Nevertheless, voters with visual or motor coordination impairments still may be unable to vote independently using a paper ballot of any kind, including a mail-in ballot.

HYBRID SYSTEMS

DREs w/ VVPT

While DREs w/ VVPT provide the accessibility benefits of a computer-based system, voters with visual impairments are presently unable to review and verify the contents of the VVPT prior to casting their votes. Voting system manufacturers have just started to release scanners that read back the text of a VVPT to a voter, and those technologies are as yet unproven. In addition, despite assurances from the manufacturer that visually-impaired voters should have no trouble detecting the existence of a scanner with their hands and successfully scanning their VVPTs, voters who have both visual and motor impairments are likely to need assistance in using such technology to read their marked ballots. Of course, only rigorous usability testing will be able to verify these predictions.

BMDs

BMDs greatly augment the accessibility of paper-based systems. Indeed, if the marking process were the end of the voting process, the use of paper ballots coupled with BMDs would present no greater barriers to voters with disabilities than DREs. Moreover, both the Automark and Populex BMDs allow visually-impaired voters to review the marks on their ballots on an enhanced visual display or in audio format. To activate these features, a voter needs only the visual and physical dexterity to use the scanner. For voters with limited vision or limited fine motor control, this may prove difficult and require assistance to accomplish.

TELEPHONE-BASED SYSTEMS

Precinct-based Vote-by-Phone systems provide no greater accessibility than DREs or BMDs, and such systems may remain inaccessible to many voters. In particular, telephone-based systems may prove cumbersome for people with limited fine motor control and hearing impairments, especially those who have poor speech discrimination, or who rely on lip-reading, text, or other visual cues. To make a telephone voting system accessible for these individuals, audio signal enhancement and a text alternative would need to be available. Moreover, none of the currently available Vote-by-Phone systems allows the use of adaptive technologies to assist hearing-impaired voters, such as TTY phones. Finally, it is unclear to what extent other adaptive telephone end units could be used with current systems.

- The future promise of Vote-by-Phone systems lies in the possibility of allowing Election Day voting from home, where voters could use customized phones already configured with any special keypads or other features they might need. Voting from home would save voters from traveling to a polling place. Thus, when combined with a Vote-by-Mail system for voters with hearing impairments, Vote-by-Phone systems could level the playing field by giving all voters the same remote voting experience. But the only existent Vote-by-Phone systems, New Hampshire's and Vermont's, require voters to vote at a polling place.

RECOMMENDATIONS

This report provides a template of key questions and preliminary answers to assess the accessibility of the various types of voting systems. More significant testing must be performed to provide fuller answers. In such assessments, elections officials should keep in mind five general points:

- Assessments must take into account the specific needs of citizens with multiple disabilities. For example, solutions that solve barriers faced by voters with visual impairments by providing an audio ballot do not help a voter who is both blind and deaf.

- To determine accessibility, officials and advocates should examine each step a voting system requires a voter to perform, starting with ballot marking and ending with ballot submission. Systems that may provide enhanced accessibility features at one stage of the voting process may be inaccessible to the same voters at another stage in that process.

- Accessibility tests must take into account a full range of disabilities. When selecting participants for system tests, officials and advocates should include people with sensory disabilities (*e.g.*, vision and hearing impairments), people with physical disabilities (*e.g.*, spinal cord injuries and coordination difficulties), and people with cognitive disabilities (*e.g.*, learning disabilities and developmental disabilities). Given the rising number of older voters, officials should take pains to include older voters in their participant sample.

- All accessibility tests should be carried out with full ballots that reflect the complexity of ballots used in elections. A simplified ballot with only a few races or candidates may produce misleading results.

- Many features that ensure accessible voting are new to the market or still in development. As election officials purchase systems today, they should obtain contractual guarantees from vendors that vendors will retrofit their systems with new accessibility features as such technology becomes available, and that these adjustments will be made at little or no extra cost.

ENDNOTES

[1] Help America Vote Act, 42 U.S.C. § 15481(a)(3)(A) (2002).

[2] Testimony of James C. Dickson, Election Assistance Commission, May 5, 2004 *available at* http://www.eac.gov/docs/EAC%20Testimony.pdf.

[3] *Id.*

[4] *Id.*

[5] Election Assistance Commission, *Voluntary Voting System Guidelines* at 4 (2005), *available at* http://www.eac.gov/VVSG%20Volume_II.pdf, [hereinafter EAC VVSG] (Last visited May 31, 2006).

[6] HAVA, 42 U.S.C. § 15481(a)(3)(D).

[7] HAVA, 42 U.S.C. § 15481(a)(3)(A).

[8] HAVA, 42 U.S.C. § 15481(a)(3)(B).

[9] HAVA, 42 U.S.C. § 15481(a)(3)(C).

[10] HAVA, 42 U.S.C. § 15481(a)(4).

[11] American with Disabilities Act, 42 U.S.C. § 12132 (1990). To establish a violation of Title II of the ADA, a plaintiff must demonstrate that: (1) he or she is a qualified individual with a disability; (2) he or she is being excluded from participation in, or being denied benefits of a public entity's services, programs, or activities, or is otherwise being discriminated against by a public entity; and (3) such exclusion, denial of benefits, or discrimination is by reason of his or her disability.

[12] Nondiscrimination Under Federal Grants and Programs, 29 U.S.C. § 794(a) (1998).

[13] Nondiscrimination on the Basis of Disability in State and Local Government Services, 28 C.F.R. § 35.151(a), (b) (1993).

[14] *American Association of People with Disabilities v. Hood*, 310 F. Supp. 2d 1226, 1235 (D. Fla. 2004).

[15] *Id.*

[16] *American Association of People with Disabilities v. Shelley*, 324 F. Supp. 2d 1120, 1126 (D. Ca. 2004).

[17] Federal Election Commission, *2002 Voting Systems Standards* at 1-2, *available at* http://www.eac.gov/election_resources/vss.html, [hereinafter 2002 VSS] (Last visited June 24, 2006).

[18] *Id., supra* note 17 at §§ 2.10 – 2.12.

[19] *Id.*

[20] EAC VVSG, *supra* note 5 at 54.

[21] *Id., supra* note 5 at D-4.

[22] *Id., supra* note 5 at 54.

[23] *Id.*

[24] *Id., supra* note 5 at 55.

[25] *Id., supra* note 5 at 56.

[26] *Id., supra* note 5 at 57.

[27] *Id., supra* note 5 at 54.

[28] *Id.*, *supra* note 5 at 57.

[29] U.S. Census Bureau, *Profile of Selected Social Characteristics, Table DP-2: 2000, at* http://factfinder.census.gov/servlet/QTTable?_bm=y&-geo_id=D&-qr_name=DEC_2000_SF3_U_DP2&-ds_name=D&-_lang=en&-redoLog=false&-format=&-CONTEXT=qt (Last visited June 26, 2006).

[30] Gregg C. Vanderheiden, *Thirty-Something Million: Should They Be Exceptions?* 32 HUMAN FACTORS 383 (1990), *available at* http://park.org/Guests/Trace/pavilion/30_some.htm.

[31] National Center for Health Statistics, *Summary Health Statistics for U.S. Adults: National Health Interview Survey,* 222 VITAL AND HEALTH STATISTICS at 36, Table 11, *available at* http://www.cdc.gov/nchs/data/series/sr_10/sr10_222acc.pdf.

[32] *Id.*

[33] *Summary Health Statistics, supra* note 31 at p. 50, Table 18.

[34] U.S. Census Bureau, *Summary Table QT-P17: Ability to Speak English, available at* http://factfinder.census.gov/servlet/QTTable?_bm=y&-geo_id=01000US&-qr_name=DEC_2000_SF3_U_QTP17&-ds_name=DEC_2000_SF3_U&-_lang=en&-_sse=on (Last visited June 26, 2006).

[35] *Id.*

[36] Theofanos, M. F. and Redish, J. C., 2005. *"Helping Low-Vision and Other Users with Web Sites that Meet Their Needs: Is One Site for All Feasible?"* 52 SOCIETY FOR TECHNICAL COMMUNICATION at 9 (Feb. 2005) *available at* http://www.ingentaconnect.com/content/stc/tc.

[37] Indeed, the Trace Research and Development Center at the University of Wisconsin has suggested that "by extending and enhancing the usability of mainstream voting machines it may be possible to address the needs of as much as 99% of voters." Gregg C. Vanderheiden, *Using Extended and Enhanced Usability to Provide Access to Mainstream Electronic Voting Machines,* 10 INFORMATION TECHNOLOGY AND DISABILITIES (Dec. 2004), *available at* http://trace.wisc.edu/docs/2005-EEU-voting/index.htm.

[38] 2002 VSS, *supra* note 17.

[39] U.S. Access Board, *Section 508 Homepage: Electronic and Information Technology, at* http://www.access-board.gov/508.htm (Last visited June 26, 2006).

[40] EAC VVSG, *supra* note 5.

[41] Subpart C – Functional Performance Criteria

1194.31 Functional performance criteria.

(a) At least one mode of operation and information retrieval that does not require user vision shall be provided, or support for assistive technology used by people who are blind or visually impaired shall be provided.

(b) At least one mode of operation and information retrieval that does not require visual acuity greater than 20/70 shall be provided in audio and enlarged print output working together or independently, or support for assistive technology used by people who are visually impaired shall be provided.

(c) At least one mode of operation and information retrieval that does not require user hearing shall be provided, or support for assistive technology used by people who are deaf or hard of hearing shall be provided.

(d) Where audio information is important for the use of a product, at least one mode of operation and information retrieval shall be provided in an enhanced auditory fashion, or support for assistive hearing devices shall be provided.

(e) At least one mode of operation and information retrieval that does not require user speech shall be provided, or support for assistive technology used by people with disabilities shall be provided.

(f) At least one mode of operation and information retrieval that does not require fine motor control or simultaneous actions and that is operable with limited reach and strength shall be provided.

[42] EAC VVSG, *supra* note 5 at § 3.2.2.1.f.

[43] Email from Dave Alampi, Avante International Technology Inc., (Jan. 11, 2006) (on file with the Brennan Center).

[44] Email from Michelle Shafer, Vice President of Communications and External Affairs, Sequoia Voting Systems, (Jan. 23, 2006) (on file with the Brennan Center).

[45] Email from Pat Gorman, Vice President of Operations and Deployment, Accupoll Inc., (Jan. 5, 2006) (on file with the Brennan Center). (Note: Accupoll Inc. filed for Chapter 7 bankruptcy on January 30, 2006. To date, no company has bought the rights to their technologies.).

[46] *Id.*

[47] Email from Dave Alampi, *supra* note 43.

[48] Email from Pat Gorman, *supra* note 45.

[49] The VVSG recommend that the size and weight of the system allow for portability and curbside voting. By the standard set out in the guidelines, the DRE models manufactured by Sequoia, Diebold, Hart and ES&S are all portable for curbside voting.

[50] Telephone Interview with Phillip Braithewaite, Vice President of Sales and Marketing, Hart Intercivic, (Jan. 18, 2006).

[51] Email from Rob Palmer, Director of Marketing and Communications, Election Systems and Software, (Jan. 16, 2006).

[52] Email from David Bear, Spokesperson, Diebold Election Systems, (Jan. 16, 2006).

[53] EAC VVSG, *supra* note 5 at §§ 3.2.2.1(b)-(d).

[54] Email from Michelle Shafer, *supra* note 44.

[55] Email from David Bear, *supra* note 52.

[56] Telephone Interview with Phillip Braithewaite, *supra* note 50.

[57] Email from Pat Gorman, *supra* note 45.

[58] Email from Pat Gorman, *supra* note 45.

[59] Email from Dave Alampi, *supra* note 43.

[60] Email from Michelle Shafer, *supra* note 44.

[61] Email from Rob Palmer, *supra* note 51.

[62] Email from David Bear, *supra* note 52.

[63] Telephone Interview with Phillip Braithewaite, *supra* note 50.

[64] Email from Pat Gorman, *supra* note 45.

[65] Email from Dave Alampi, *supra* note 43.

[66] Email from David Bear, *supra* note 52.

[67] Email from Michelle Shafer, *supra* note 44.

[68] Telephone Interview with Phillip Braithewaite, *supra* note 50.

[69] Email from Rob Palmer, *supra* note 51.

[70] Voluntary Voting System Guidelines, *supra* note 5 at 58.

[71] Email from Michelle Shafer, *supra* note 44.

[72] Email from David Bear, *supra* note 52.

[73] Telephone Interview with Phillip Braithewaite, *supra* note 50.

[74] Email from Rob Palmer, *supra* note 51.

[75] Email from Dave Alampi, *supra* note 43.

[76] Email from Pat Gorman, *supra* note 45.

[77] In March of 2003, Manhattan Borough President C. Virginia Fields and the Center for Independence of the Disabled in New York asked 130 disabled voters to use eight different DREs and comment on the machine's accessibility. According to the report, "testers commented that computer generated voices were difficult to understand, while no tester cited difficulty understanding the human voice ballots." Office of the President of the Borough of Manhattan, *Voting Technology for People with Disabilities* at iii (April 3, 2003) *available at* http://www.eff.org/Activism/E-voting/Benavidez/20040518-benavidez-Amicus-Exh_C.pdf.

[78] Email from Michelle Shafer, *supra* note 44.

[79] Email from David Bear, *supra* note 52.

[80] Email from Pat Gorman, *supra* note 45.

[81] Telephone Interview with Phillip Braithewaite, *supra* note 50.

[82] Email from Rob Palmer, *supra* note 51.

[83] *See* EAC VVSG, *supra* note 5 at § 3.2.2.2(c) ix.

[84] Email from Dave Alampi, *supra* note 43.

[85] Email from Michelle Shafer, *supra* note 44.

[86] Email from David Bear, *supra* note 52.

[87] Email from Gregg Vanderheiden (Feb. 28, 2006).

[88] Email from Dave Alampi, *supra* note 43.

[89] Email from Michelle Shafer, *supra* note 44.

[90] Email from David Bear, *supra* note 52.

[91] Email from Pat Gorman, *supra* note 45.

[92] Telephone Interview with Phillip Braithewaite, *supra* note 50.

[93] Email from Rob Palmer, *supra* note 51.

[94] Email from Dave Alampi, *supra* note 43.

[95] Email from Michelle Shafer, *supra* note 44.

[96] Email from David Bear, *supra* note 52.

[97] Email from Pat Gorman, *supra* note 45.

[98] Telephone Interview with Phillip Braithewaite, *supra* note 50.

[99] Email from Rob Palmer, *supra* note 51.

[100] *See* EAC VVSG, *supra* note 5 at §§ 3.2.2.2 (b)-(c).

[101] According to a 2004 report by VotersUnite, for example, "the Diebold speech quality and response time were so poor that elderly voters and others with hearing problems would have serious difficulties understanding the speech of the systems." Similarly, in a letter to the registrar of voters of Santa Clara County, members of the Silicon Valley Council of the Blind criticized Sequoia's DRE voting machines, citing poor sound quality, delayed response time, and awkwardly-positioned Braille. The VotersUnite report also cited complaints that Avante's synthetic text-to-speech system was difficult for many users to understand. Voters Unite!, *Mythbreakers: Facts About Electronic Elections* at 59 *available at* http://www.votersunite.org/MB2.pdf (Last visited June 26, 2006).

[102] Telephone Interview with Phillip Braithewaite, *supra* note 50.

[103] Telephone Interview with Frank Wiebe, Chief Operating Officer, Accupoll Inc. (Oct. 19, 2005).

[104] Email from Michelle Shafer, *supra* note 44.

[105] Telephone Interview with Phillip Braithewaite, *supra* note 50.

[106] Telephone Interview with Dave Alampi, Sales and Marketing at Avante (Oct. 21, 2005).

[107] *See* EAC VVSG, *supra* note 5 at 56.

[108] Email from Pat Gorman, *supra* note 45.

[109] Telephone Interview with Rob Palmer, Director of Marketing and Communications, ES&S Voting System (Oct. 28, 2005).

[110] Telephone Interview with David Bear, Spokesperson, Diebold Election Systems, (Oct. 25, 2005).

[111] Telephone Interview with Phillip Braithewaite, *supra* note 50.

[112] Telephone Interview with Alfie Charles, Media Relations, Sequoia Voting Systems (Oct. 18, 2005).

[113] In its default setting, the eSlate requires all voters to use a standard set of tactilely discernible controls to input selections while viewing a visual ballot.

[114] Telephone Interview with David Bear, *supra* note 110.

[115] Email from Pat Gorman, *supra* note 45.

[116] Telephone Interview with Alfie Charles, *supra* note 112.

[117] Email from Pat Gorman, *supra* note 45.

[118] Email from Dave Alampi, *supra* note 43.

[119] Email from David Bear, *supra* note 52.

[120] Email from Rob Palmer, *supra* note 51.

[121] Email from Michelle Shafer, *supra* note 44.

[122] Email from Rob Palmer, *supra* note 51; Email from Pat Gorman, *supra* note 45; Email from Dave Alampi, *supra* note 43; Email from David Bear, *supra* note 52; Email from Michelle Shafer, *supra* note 44; Telephone Interview with Phillip Braithewaite, *supra* note 50.

[123] According to experts, the case of magnifying lenses highlights the burden certain inflexible assistive devices can place on both election officials and the voter: Lenses are made in different strengths. Officials may need to match lenses to a voter's vision disability and any current glasses they are wearing. Once given to the voter, she must place the lens at an appropriate distance from her eyes and have the facility and coordination to adjust the lens' placement as she reads.

124 *See*, for example, Rhode Island's accessible voting options at *Guidelines for Braille and Tactile Ballots available at* http://www.sec.state.ri.us/elections/voting/blindordisabledvoters/BrailleTactileBallotGuidelines.html (Last visited June 20, 2006).

125 Email from Dave Alampi, *supra* note 43.

126 Telephone Interview with David Bear, *supra* note 110.

127 See a photo of the Sequoia scanner *at* www.sequoiavote.com/photo.php?photo=InsightFrontView.jpg &title=Insight%20Front%20View.

128 Telephone Interview with Rob Palmer, Director of Marketing and Communications at Election Systems and Software (Oct. 28, 2005).

129 In Oregon, for example, where Vote-by-Mail systems have been in use since 1998, it is often difficult for voters with visual impairments to vote privately and independently. According to a 2002 speech by Oregon's Secretary of State Bill Bradbury to the Association of the Bar of the City of New York, the counties' election offices send bipartisan teams to the homes of voters with visual impairments to provide assistance with the Vote-by-Mail process. As of 2002, one county offered ballots in Braille and thirty-five counties offered both the Instruction Pamphlet and ballot on audiotape. However, sending in a team to assist these voters deprives them of their ability to vote privately. At the time of the speech, Secretary Bradbury stated that Oregon was looking for ways to solve these privacy issues: "Instead of sending a team to assist a voter, we could send a person and something as small as a Palm Pilot. The voter could put on earphones and record their ballot electronically, rather than having to tell election officials how they want to vote." Secretary Bradbury's speech is available at http://www.sos.state.or.us/executive/speeches/111802.html.

130 Of course, experts note, not all voters with vision limitations are comfortable, or even able, to use an audio ballot. They may simply be unfamiliar with this kind of technology, or may have difficulty processing instructions from an audio recording.

131 For a full description of the tactile ballot, *see* the International Frontier for Election Systems' web site *at* http://www.electionaccess.org/Bp/Ballot_Templates.htm (Last visited June 26, 2006).

132 *See* Elections and Civics Division of the Office of the Secretary of State of Rhode Island, *Am I Eligible to Vote by Using Braille or Tactile Ballot?, at* http://www.sec.state.ri.us/elections/faq/braille-or-tactile.html (last visited June 26, 2006).

133 State of Oregon Elections Division, *Requesting a Replacement Ballot at* http://www.uhavavote.org/elect_q_a/ ballots/ballot_rep.html (Last visited June 26, 2006).

134 Email from Rob Palmer, *supra* note 51.

135 *See* Populex Digital Paper Ballot System Overview *at* http://www.populex.com/DPB_Overview.htm.

136 Email from Rob Palmer, *supra* note 51; Email from Sandy Morganstein, President and Founder, Populex Corporation (Jan. 13, 2006).

137 Telephone Interview with Liz Miller, Public Affairs Liason, Populex Corporation (Oct. 24, 2005); Email from Rob Palmer, *supra* note 51.

138 Email from Sandy Morganstein, *supra* note 136.

139 Email from Rob Palmer, *supra* note 51.

140 A photo of the Automark unit is available at http://www.automarks.com (Last visited June 20, 2006). Email from Sandy Morganstein, *supra* note 136.

141 Telephone Interview with Rob Palmer, *supra* note 128; Email from Sandy Morganstein, *supra* note 136.

[142] Email from Rob Palmer, *supra* note 51; Email from Sandy Morganstein, *supra* note 136.

[143] Email from Rob Palmer, *supra* note 51.

[144] Email from Rob Palmer, *supra* note 51; Email from Sandy Morganstein, *supra* note 136.

[145] Email from Rob Palmer, *supra* note 51.

[146] Email from Sandy Morganstein, *supra* note 136.

[147] Email from Rob Palmer, *supra* note 51.

[148] Telephone Interview with Richard Vogel, President of Vogue Election Systems (Nov. 1, 2005); Email from Rob Palmer, *supra* note 51; Email from Sandy Morganstein, *supra* note 136.

[149] Telephone Interview with Richard Vogel, *supra* note 148; Email from Rob Palmer, *supra* note 51.

[150] Email from Rob Palmer, *supra* note 51; Email from Sandy Morganstein, *supra* note 136.

[151] Telephone Interview with Rob Palmer, *supra* note 128.

[152] Email from Sandy Morganstein, *supra* note 136.

[153] Email Interview with Richard Vogel, President, Vogue Election Systems, (Jan. 11, 2006).

[154] Telephone Interview with Richard Vogel, *supra* note 148; Email from Rob Palmer, *supra* note 51.

[155] Email from Rob Palmer, *supra* note 51.

[156] Telephone Interview with Liz Miller, *supra* note 137.

[157] Telephone Interview with Frank Wiebe, *supra* note 103.

[158] *Id.*

[159] Telephone Interview with Alfie Charles, *supra* note 112.

[160] From product demo, *available at* http://www.accupoll.com/Presentation/10/.

[161] Telephone Interview with Frank Wiebe, *supra* note 103.

[162] Accupoll maintains that its barcode scanner renders a VVPT accessible to blind voters. In Accupoll systems, a VVPT's text is derived from the barcode printed on it, not from selections stored in the memory card inside a DRE. Thus, according to Accupoll representatives, all voters are treated equally because sighted voters read the barcode's contents and voters with visual limitations hear it. Telephone Interview with Frank Wiebe, *supra* note 103.

[163] Telephone Interview with Gregg C. Vanderheiden, Director, Trace Center, University of Wisconsin-Madison (Nov. 9, 2005).

[164] *Id.*

[165] Telephone Interview with Gail Hart, Vice President of Communications and External Affairs, IVS LLC (Nov. 3, 2005). *See also* the "Vote by Phone" section on the IVS website *available at* http://www.ivsllc.com.

[166] For a description of New Hampshire's vote-by-phone system, *see* New Hampshire Public Radio, *State Tests New Accessible Voting Machines* (March 21, 2006) *at* http://www.nhpr.org/node/10439. For a description of Vermont's system *see* Burlington Free Press (Aug. 11, 2005) *at* http://www.burlingtonfreepress.com/apps/pbcs.dll/article?AID=/ 20050811/NEWS01/ 508110314/1009&theme.

[167] In the mid-1990s, there were over 4 million TTY users, 3 million of whom had some sort of hearing impairment and 1 million of whom had some sort of speech impediment. However, this is only 13% of the 30.8 million adults who reported having trouble hearing. Michigan State University, *What is a TTY, at* http://www.captions.com/tty.html (Last visited June 26, 2006).

[168] Email from Gail Hart, Vice President of Communications and External Affairs, IVS LLC (Jan. 18, 2006).

[169] *See* IVS' website *at* http://www.ivsllc.com (Last visited June 26, 2006).

[170] Email from Gail Hart, *supra* note 168.

[171] Telephone Interview with Gail Hart, *supra* note 165.

[172] *See* the "Vote by Phone" section of IVS' website *at* http://www.ivsllc.com.

[173] Email from Gail Hart, *supra* note 168.

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INTRODUCTION

The performance of a voting system is measured in part by its success in allowing a voter to cast a valid ballot that reflects her intended selections without undue delays or burdens. This system quality is known as "usability."[1] Following several high-profile controversies in the last few elections – including, most notoriously, the 2000 controversy over the "butterfly ballot" in Palm Beach – voting system usability is a subject of utmost concern to both voters and election officials.

Defining Usability. In this chapter, we examine the usability of various voting systems and discuss several ways that election officials can maximize the usability of these systems. By maximizing the usability of a system, we mean ensuring, to as great a degree as possible, that voting systems: (a) effectively (correctly) record voters' intended selections, (b) complete the voting process in an efficient and timely manner, and (c) provide voters with confidence and satisfaction in the voting process.

Analysis. Our discussion of voting system usability proceeds in two stages.

- Effectiveness (or Correctness). We review original research conducted by Dr. David Kimball, which quantifies the extent to which current voting systems correctly record voters' intended selections, *i.e.,* the systems' "effectiveness." Specifically, Dr. Kimball looks at the residual vote rate for each major voting system in the 2004 presidential election. The "residual vote rate," the difference between the number of ballots cast and the number of valid votes cast in a particular contest, is viewed by many experts as the single best measure of the effectiveness of a voting system. Based on the research on voting system and general usability standards, we extract four key findings about the effectiveness of various voting systems. The findings may be found on pages 10–11.

- Efficiency and Voter Confidence. We summarize the limited research available on the efficiency of and voter confidence in the various systems.

Usability Principles. From this work and other research into usability, we then identify a series of usability principles applicable to voting systems which elections officials and advocates should use to assess and improve the usability of voting systems in their jurisdictions. The principles may be found on pages 14–21.

Usability Recommendations. Finally, we provide recommendations to assist election officials in maximizing the usability of their voting systems in the areas of ballot design and system instructions. A full discussion of the recommendations may be found on pages 22–23. They are summarized below:

- Do not assume familiarity with technology.
- Conduct usability testing on proposed ballots before finalizing their design.
- Create plain language instructions and messages in both English and other languages commonly used in the jurisdiction.
- Locate instructions so they are not confusing or ignored.
- For both ballots and instructions, incorporate standard conventions used in product interfaces to communicate a particular type of information or message.
- Do not create ballots where candidates for the same office appear in multiple columns or on multiple pages.
- Use fill-in-the-oval ballots, not connect-the-arrow ballots, for optical scan systems.
- Ensure that ballot instructions make clear that voters should not cast both a write-in and normal vote.
- Provide mechanisms for recording and reviewing votes.
- Make clear when the voter has completed each step or task in the voting process.
- Eliminate extraneous information on ballots.
- Minimize the memory load on the voter by allowing her to review, rather than remember, each of her choices during the voting process.
- Ensure that the voting system plainly notifies the voter of her errors.
- Make it easy for voters to correct their errors.

DEFINING USABILITY

Any usability benefits of a particular type of voting system may be eclipsed partially, if not entirely, by a poor ballot design or confusing instructions.

In December of 2005 the Election Assistance Commission ("EAC") released the Voluntary Voting Systems Guidelines ("VVSG 2005"), which include the first set of usability requirements applicable to voting systems in this country.[2] As part of this work, the National Institute of Standards and Technology ("NIST") has undertaken to develop a set of precise performance criteria and test protocols to measure the usability of specific voting systems.

A consensus among experts as to the definition of usability of voting systems has developed out of usability research in other areas of technology. The International Organization for Standardization ("ISO") defines usability as "the extent to which a product can be used by specified users to achieve specified goals with *effectiveness*, *efficiency* and *satisfaction* in a specified context of user."[3]

Both the draft voting systems of the Institute of Electrical and Electronics Engineers ("IEEE")[4] and the VVSG 2005[5] echo these standards, noting that usable voting systems will *effectively and correctly* record voters' intended choices, operate *efficiently*, and instill *confidence* in the voter that her choice was correctly recorded and that her privacy was assured.

Before reviewing the performance of the various voting systems under the usability guidelines, it should be noted that usability is affected not solely by the type of voting system at issue, but also by the ballot and instructions designed by the vendors or elections officials for a particular jurisdiction. Indeed, any usability benefits of a particular type of voting system may be eclipsed partially, if not entirely, by a poor ballot design or confusing instructions. For this reason, the recent public debate over the strengths and weaknesses of various voting systems may have unduly obscured the importance of what should occur to improve the voting process after elections officials have made their choice of system. Although we do not yet have sufficient data to prescribe a single "best" or "most usable" ballot design for each system, there is a substantial body of research on the usability of forms (both paper and electronic), instructions, and other signage that can be used as guidance. In addition, given the variations in local laws and practices, elections officials should conduct their own usability testing where possible on their chosen system to limit design flaws that lead to voter errors.

The failure of a voting system to protect against residual votes is likely to harm low-income and minority voters and their communities more severely than other communities.

ANALYSIS

EFFECTIVENESS (OR CORRECTNESS)

There are few published studies of usability testings that have compared the effectiveness of different voting systems in accurately recording voter intention in a controlled environment.

Absent such testing, one of the most revealing available measures of voting system effectiveness is what is referred to in the political science literature as the residual vote rate. The "residual vote rate" is the difference between the number of ballots cast and the number of valid votes cast in a particular contest. Residual votes thus occur as the result of undervotes (where voters intentionally or unintentionally record no selection) or overvotes (where voters select too many candidates, thus spoiling the ballot for that contest).[6] Exit polls and other election surveys indicate that slightly less than 1% of voters intentionally abstain from making a selection in presidential elections.[7] Thus, a residual vote rate significantly higher than 1% in a presidential election indicates the extent to which the voting system's design or the ballot's design has produced unintentional voter errors.

Significantly, several studies indicate that residual vote rates are higher in low-income and minority communities and, in addition, that improvements in voting equipment and ballot design produce substantial drops in residual vote rates in such communities.[8] As a result, the failure of a voting system to protect against residual votes is likely to harm low-income and minority voters and their communities more severely than other communities.

This section reviews research previously published by Dr. Kimball, and research that he is publishing here for the first time, on the residual vote rates for various voting systems in the 2004 elections.

METHODOLOGY

For the most part, Dr. Kimball used a cross-sectional analysis to generate the research findings discussed below. In a cross-sectional analysis, a particular characteristic is compared across jurisdictions. Here, for a given election, residual vote rates are compared across jurisdictions using a multivariate statistical analysis to control for factors other than voting system (such as demographics, the level of competition in the election, and other features of the local electoral context). Because of the decentralized nature of election administration in the United States, local elections officials generally make their own decisions about purchasing voting technology, as well as designing and printing ballots. As a result, voting technology and ballot design vary from one jurisdiction to the next, often even within the same state. This report also reviews a smaller number of studies examining residual votes and voting technology over time to take advantage of local changes in voting equipment. Examining both types of studies allows a

difference-in-difference research design to provide a more rigorous estimate of the impact of voting technology.[9]

RESIDUAL VOTE RATES

Table U1 summarizes the rates of residual votes for the relevant voting systems found by Dr. Kimball in the election results for president (2000 and 2004) and governor (2002):

TABLE U1

RESIDUAL VOTE RATES BY TYPE OF VOTING TECHNOLOGY

Technology	Description	Residual Vote Rate In: 2000	2002	2004
Full-face DRE	Candidates listed on a full-face computerized screen – voter pushes button next to chosen candidate. Machine records and counts votes.	1.6%	2.2%	1.2%
Scrolling DRE	Candidates listed on a scrolling computer screen – voter touches screen next to chosen candidate. Machine records and counts votes.	—	1.2%	1.0%
Central-Count Optical Scan	Voter darkens an oval or arrow next to chosen candidate on paper ballot. Ballots counted by computer scanner at a central location.	1.8%	2.0%	1.7%
Precinct-Count Optical Scan	Voter darkens an oval or arrow next to chosen candidate on paper ballot. Ballots scanned at the precinct, allowing voter to find and fix errors.	0.9%	1.3%	0.7%
Mixed	More than one voting method used.	1.1%	1.5%	1.0%
Nationwide Residual Vote Rate		1.8%	2.0%	1.1%

Based on 1755 counties analyzed in 2000,
1270 counties analyzed in 2002, and 2215 counties analyzed in 2004

DIRECT RECORDING ELECTRONIC ("DRE") SYSTEMS

Full-face DRE systems produce significantly higher residual vote rates (1.2%) than both scrolling DRE systems (1.0%) and precinct-count optical scan ("PCOS") systems (0.7%). "Full-face" DRE systems employ a ballot that displays all of the offices and candidates on a single screen, rather than in consecutive, separate screens that the voter touches to select her preferred candidates. As

shown in Table U2, however, two scrolling DRE systems produced a residual vote rate of 0.7% – the same as the nationwide average rate for PCOS systems.

TABLE U2:

RESIDUAL VOTE RATES BY SCROLLING DRE BRAND
2004 PRESIDENTIAL ELECTION

Brand of Voting Machine	Residual Vote Rate
UniLect Patriot (17 counties)	6.8%
VTI VotWare (1 county)	4.1%
Fidlar-Doubleday EV 2000 (8 counties)	2.3%
Hart InterCivic eSlate (8 counties)	1.8%
MicroVote Infinity (20 counties)	1.6%
Advanced Voting Solutions WinVote (10 counties)	1.1%
Diebold AccuVote-TSX (1 county)	0.9%
Sequoia AVC Edge (24 counties)	0.8%
ES&S iVotronic (54 counties)	0.7%
Diebold AccuVote-TS (190 counties)	0.7%
Sequoia DRE with VVPT (17 counties in Nevada)	0.3%
Nationwide Scrolling DRE Residual Vote Rate	1.0%

Based on 353 counties using scrolling DREs in 2004

The performance of full-face and scrolling DRE systems diverges even more as the income level of the voters declines. Stated differently, relative to scrolling DRE systems, full-face DRE systems produced particularly high residual vote rates among voters with incomes of less than $25,000 in 2004. Similarly, full-face DREs tend to produce higher residual vote rates than scrolling DREs in counties with large Hispanic or African American populations. Indeed, only punch card systems produced a higher residual vote rate than full-face DREs in jurisdictions with a Hispanic population of over 30%. *See* Table U3.

While the residual vote rates produced by both scrolling and full-face DREs decrease slightly as the percentage of African American voters increases (1.0% to 0.8%), such rates *increase* significantly as the percentage of Hispanic voters increases beyond 30% of the population (0.9% to 1.4% for scrolling DREs). The reasons for these trends are not clear, but they suggest that additional analysis should be conducted by elections officials and vendors to determine whether and how DREs could be programmed to address the language needs of Spanish-speaking voters more effectively.

TABLE U3:

RACIAL AND ECONOMIC DISPARITY IN RESIDUAL VOTES BY VOTING TECHNOLOGY
2004 PRESIDENTIAL ELECTION

Composition of County	Votomatic Punch Cards	Optical Scan Central	Optical Scan Precinct	Full-Face DRE	Scrolling DRE
Racial/Ethnic					
Less than 10% black	1.8%	1.5%	0.8%	1.3%	1.0%
Between 10% and 30% black	1.7%	1.7%	0.5%	1.2%	0.9%
Over 30% black	2.4%	4.1%	0.9%	1.2%	0.8%
Less than 10% Hispanic	1.8%	1.7%	0.6%	1.1%	0.9%
Between 10% and 30% Hispanic	1.8%	1.1%	0.9%	1.1%	0.6%
Over 30% Hispanic	2.4%	1.9%	1.2%	2.0%	1.4%
Median Income					
Less than $25,000	4.0%	3.3%	1.4%	2.8%	1.3%
Between $25,000 and $32,499	2.3%	1.7%	0.8%	1.3%	1.2%
Between $32,500 and $40,000	2.0%	1.6%	0.7%	1.3%	1.0%
Over $40,000	1.5%	1.2%	0.7%	0.9%	0.8%

Based on 2377 counties analyzed in 2004

Researchers at the Institute for Social Research at the University of Michigan have released preliminary findings from usability testing they conducted on several DRE systems.[40] Their early findings suggest that specific model and ballot design features may lead to different incidences of voter error produced by different manufacturers' DREs. In a laboratory comparison between the Hart InterCivic eSlate and Diebold AccuVote-TS, for example, the authors found that the two manufacturers' approaches to providing the voter with an opportunity to review her selections before casting her vote produce different error rates.

Both machines present the voter with a two-page "review" screen prior to casting the vote. According to the researchers, the eSlate's "review" screen appears more distinct in both color and format from the earlier pages that the voter sees than does the AccuVote-TS review screen. In addition, if the eSlate voter activates the control to "cast" the ballot prior to reviewing both screens, that machine then shows the voter the second review screen rather than casting the ballot immediately. By contrast, the AccuVote-TS allows the voter to circumvent the review process midstream by touching the screen to "cast" her ballot.

The researchers who conducted this testing hypothesize that these two design differences may be responsible for a greater incidence of unintended voter errors from the AccuVote-TS DRE, as voters do not devote as much attention to review-

Preliminary findings demonstrate the critical importance of usability testing of specific models within a type of voting system to reduce unnecessary voter errors.

ing and correcting their selections.[11] Although preliminary in nature, such findings demonstrate the critical importance of usability testing of specific models within a type of voting system to reduce unnecessary voter errors. Although both of these systems are DREs, such differences in ballot design produce very different opportunities for voter error in each of the two machines.

DRE SYSTEMS WITH VOTER-VERIFIED PAPER TRAILS ("VVPT")

Only one state, Nevada, used a DRE system with VVPT in the 2004 election. In addition, Nevada is the only state in the country that includes a "none of the above" option on the ballot for federal and statewide elections. This option reduces undervotes, regardless of the voting system being used, because it allows voters who wish to cast a protest vote to do so without registering a "lost" vote. Because no other states used comparable systems or ballot options, the data are too limited to draw any conclusions regarding residual vote rates. The 17 Nevada counties registered a miniscule residual vote rate of 0.3% in the 2004 elections, but this figure is not directly comparable to that produced by other jurisdictions with different ballot options.

PRECINCT-COUNT OPTICAL SCAN SYSTEMS

With the exception of Nevada's DRE system,[12] the specific voting systems that produced the lowest residual vote rate in the country in 2004 – both at 0.6% – were the AccuVote-OS and ES&S M100 precinct-count optical scan systems. *See* Table U4. In addition, the nationwide average residual vote rate for PCOS systems was lower in 2004 than the average rate for either type of DRE system.

TABLE U4:

RESIDUAL VOTE RATES BY PRECINCT-COUNT OPTICAL SCAN BRAND
2004 PRESIDENTIAL ELECTION

Brand of Voting Machine	Residual Vote Rate
ES&S Optech 3P Eagle (220 counties)	0.9%
ES&S M100 (102 counties)	0.6%
Diebold AccuVote-OS (264 counties)	0.6%
Nationwide PCOS Residual Vote Rate	0.7%

Based on 630 counties using PCOS in 2004

Unlike for scrolling DREs and central-count optical scan systems, residual vote rates for PCOS systems do not appear to correlate significantly with the percentage of African American voters within the jurisdiction. *See* Table U3. But residual vote rates for both PCOS and DRE systems increase significantly with the percentage of Hispanic voters. This conclusion suggests that neither PCOS nor

DRE systems succeed in eliminating the impact of voters' language needs on the extent of residual votes. When compared with other voting systems, however, PCOS systems and scrolling DREs appear most successful at minimizing the correlation between residual votes and the racial, ethnic, or economic composition of a county.

PCOS systems and scrolling DREs appear most successful at minimizing the correlation between residual votes and the racial, ethnic, or economic composition of a county.

Differences in ballot design for optical scan systems produce significant differences in residual vote rates. First and foremost, ballots that required voters to darken an oval produced a residual vote rate of 0.6% in the 2004 election, while those that required voters to connect an arrow with a line to a candidate produced a rate of 0.9%. *See* Table U5. Plainly, the former design is preferable to avoid spoiled ballots. In addition, other ballot design features have been found to affect error rates in optical scan systems.

TABLE U5:

RESIDUAL VOTES IN OPTICAL SCAN BALLOTS BY TYPE OF VOTING MARK
2004 PRESIDENTIAL ELECTION

	Type of Mark	
Where Ballots Are Counted	Darken an Oval	Connect an Arrow
Precinct-Count (641 counties)	0.6%	0.9%
Central-Count (767 counties)	1.4%	2.3%
Nationwide Optical Scan Residual Vote Rate	1.0%	

A recent pilot study of ballots from 250 counties in five states identified seven design recommendations for paper-based optical scan ballots, many of which could apply to other voting systems as well.[13] These recommendations are listed later in this report along with the usabilty principles they support.

VOTE-BY-MAIL SYSTEMS

At present, the state of Oregon is the only jurisdiction within the United States that uses a Vote-by-Mail system ("VBM") as its principal voting system. Accordingly, definitive conclusions about the residual vote rates of VBM systems must await additional studies of that state and of jurisdictions outside the United States, such as Great Britain. Studies of Oregon's experience indicate that the adoption of a statewide VBM system in 2000 had no substantial impact either on voter participation or residual vote rates in Oregon elections. For example, the residual vote rate in Oregon in the 1996 presidential election (before adoption of VBM) was 1.5%, while the residual vote rate in Oregon in 2000 was 1.6%.[14] These figures do suggest that VBM systems may produce significantly higher residual vote rates than either PCOS or scrolling DRE systems.

Although further research must be conducted to determine precise causes of this discrepancy, it may stem from the fact mail-in ballots are scanned and counted using the same technology as the centrally counted optical scan systems used in other jurisdictions. As shown in Table U1, the residual vote rate for such systems in the 2004 elections was 1.7%. By definition, such systems do not allow the voter to be notified of, or to correct, any under- or overvotes she may have unintentionally indicated on her ballot. Therefore, while VBM systems may have other benefits, these systems are not as effective in minimizing residual votes as DRE or PCOS systems.

Typically, a BMD is an accessible computer-based voting system that produces a marked ballot. The ballot is marked as the result of voter interaction with visual or audio prompts. Some jurisdictions use BMDs instead of accessible DREs.

OTHER SYSTEMS

Unfortunately, no data are yet available concerning the actual residual vote rates for Ballot Marking Devices ("BMDs") or Vote-by-Phone systems because few of these systems have yet been used in elections in this country.

LIMITS OF RESIDUAL VOTE RATE STUDIES

Measuring the residual vote rates of top-of-the-ticket races indicates how often voters interact with a particular voting system on Election Day in such manner as to produce an incorrect (or ineffective) vote that does not reflect their intended selections. But residual vote rates reflect only the frequency of voter errors; they do not provide any basis to determine the reason for the voter errors on a particular type of voting system. Moreover, few if any jurisdictions gather data concerning the number or nature of requests for assistance by voters on Election Day, how long it takes for voters to vote, or any other information that would help to assess the efficiency or confidence produced by particular voting systems. For this reason, election officials should consider ways to gather such information on Election Day in selected precincts in order to facilitate future improvements in voting system and ballot design. In the meantime, election results provide an important but limited way to assess the usability of a particular voting system.

KEY FINDINGS

Key findings from the limited available research on the effectiveness of various voting technologies are as follows:

- With few exceptions, PCOS systems and scrolling DREs produce lower rates of residual votes than central-count optical scan, full-face DRE, or mixed voting systems.

- Residual vote rates are significantly higher on DREs with a full-face ballot design than on scrolling DREs with a scrolling or consecutive screen format. The negative impact of full-face ballot design in terms of lost votes is even greater in low-income and minority communities than in other communities.

- PCOS systems produce significantly lower residual vote rates than central-count optical scan systems because the former systems allow the voter to correct certain of her errors prior to casting her ballot.

- VBM systems produce higher residual vote rates than PCOS or DRE systems. VBM systems are comparable in this regard to central-count optical scan systems, which employ the same technology and counting process. Like central-count optical scan systems, VBM systems provide no opportunity for the voter to be notified of, or to correct, any under- or overvotes on her ballot prior to its being counted.

EFFICIENCY AND VOTER CONFIDENCE

The existing research concerning the time each system requires to complete the voting process, the burdens imposed upon voters, and the confidence each system inspires among voters remains extremely limited. We summarize that research below.

DREs

Several studies of DREs since 2000 have provided an overview of potential usability concerns based on limited testing and expert reviews, but scholars have only recently started to conduct fuller usability tests with statistical and analytical significance.[15] In addition, two economists recently analyzed voter turnout in the State of Georgia in 2002 and found a positive relationship between the proportion of elderly voters and a decrease in voter turnout from 1998 levels; the authors hypothesize that this evidence suggests that elderly voters were "apprehensive" about the statewide change in voting technology to DREs.[16]

Dr. Frederick G. Conrad of the University of Michigan, and collaborators Paul Herrnson, Ben Bederson, Dick Niemi and Mike Traugott, have recently completed one of the first major usability tests on electronic voting systems other than vendor testing. They analyze the steps required to complete voting in a single election and suggest that certain DREs require substantially more actions by a voter – *i.e.*, touches to the screen, turns to a navigation wheel, *etc.* – to select a candidate or ballot measure than other DREs. Not surprisingly, they have found that more actions mean more time to complete the voting process, as well as lower voter satisfaction with the DRE in question. In particular, Hart InterCivic's eSlate required 3.92 actions per task and 10.56 minutes on average for a voter to complete the voting process while Diebold's AccuVote-TS required only 1.89 actions per task and only 4.68 minutes to complete the process. Out of the six systems analyzed, participants in that study indicated that they were most comfortable using the AccuVote-TS and least comfortable using the eSlate.[17]

The same research suggests, however, that design elements that decrease efficiency or voter confidence may actually increase the accuracy of voters' selections. For example, eSlate's approach to facilitating the voter's review of her selections

Usability testing may be most valuable in evaluating the performance of a system as a whole and in making clear the tradeoffs elections officials must consider.

prior to voting both adds time to the voting process and increases the likelihood that a voter will catch her errors and correct them prior to casting her ballot. Accordingly, usability testing may be most valuable not in eliminating any one problematic feature of a system, but instead in evaluating the performance of a system as a whole and in making clear the tradeoffs election officials must consider in selecting a system and in designing the ballot and instructions.

In a research project sponsored by the Brennan Center for Justice and conducted by MIT Professor Ted Selker, the authors conducted a one-day simulated election test at a YMCA regularly used as a polling place. The test compared the voting experiences of people with and without reading disabilities on full-faced voting machines and a standard screen-by-screen voting machine. Three machines were tested: one DRE with a full-face ballot (ES&S's V2000 LED); one DRE with a scrolling ballot design and an LCD display (ES&S's iVotronic LCD); and a prototype DRE with a full-face ballot displayed on a lever machine-sized, high-resolution screen (iVotronic LS Full Faced DRE). 48 of 96 participants had been previously diagnosed with a reading disability, and researchers attempted to catch undiagnosed reading disabilities by testing all participants prior to the voting simulation. The results have implications for all voters. Notably, voters with undiagnosed reading disabilities and voters with no disabilities had much higher rates of undervotes on full-faced machines than on scrolling voting machines. This population also had fewer errors on the commercial DRE than on full-faced voting machines. People who had been diagnosed with reading disabilities were able to compensate for their difficulties and had fewer than other participants on full-faced voting machines. All voters took more than 3 minutes to vote but all reading disabled people took longer to vote on the scrolling DRE than the full-faced DRE.[18] These conclusions confirm the evidence of higher incidence of "roll off" produced by full-face lever and DRE voting systems in real elections.[19]

DRES w/ VVPT

Professor Selker and his team at MIT's Media Lab have attempted to assess the extent to which voters who use such machines actually review the VVPT prior to casting their votes. In their testing, the authors found that no VVPT users reported any errors during the voting process though two existed for each ballot they used. At the end of the voting process, testers asked VVPT users whether they believed any errors existed on their paper record even if they did not report them. Only 8% answered yes. In contrast, users of an audio-based verification system reported errors at higher rates. 14% of users reported errors during the voting process, and 85% of users told testers that they believed errors existed in the record although they did not all report them.[20] Additional research needs to be conducted to measure the efficiency of and voter confidence in these systems. But Dr. Selker's research suggests that VVPTs may present significant usability problems that can prevent voters from identifying errors readily.

PRECINCT-COUNT OPTICAL SCAN SYSTEMS

No available research has measured the efficiency of or voter confidence in optical scan systems. This is a significant gap in the literature that hampers sound comparisons between DREs and optical scan systems and also limit public scrutiny of ballot design in these systems.

OTHER SYSTEMS

Unfortunately, no research is yet available that has measured the efficiency of or voter confidence in BMDs or Vote-by-Phone systems because few of these systems have yet been used in elections in this country. In addition, no studies have measured these variables for VBM systems, as used presently in Oregon.[21]

USABILITY PRINCIPLES

As this chapter establishes, the research into the usability of voting systems described in this chapter demonstrates that scrolling DREs and PCOS systems protect voters against their own errors more consistently than other types of systems. Still, only a few studies have compared different ballots directly or definitively determined what makes one form of ballot more usable than another – *i.e.*, less prone to producing errors, more efficient, and more confidence-inspiring.[22] To be sure, usability experts have provided valuable guidelines for elections officials and the EAC that promise to improve the basic usability of voting systems. Still, until new research correlates specific design elements with measurable accuracy, efficiency, and voter confidence, such usability guidelines for voting systems will remain a work in progress. In addition, new research should reflect the performance-based thrust of the EAC's evolving voting system certification standards and study the relationships between specific features and the combined effects of the design choices embodied in a system, rather than just one facet of a design.

For this project, we have assembled the most significant lessons drawn not only from our work with voting systems, but also from other areas in which usability has improved the interaction between humans and technology. We provide the following discussion of specific areas of concern to assist elections officials in designing both the ballots for elections and the protocol for usability testing that should be conducted prior to completing such ballot design.

DO NOT ASSUME FAMILIARITY WITH TECHNOLOGY.

Voting systems should rely as little as possible upon a voter's prior experience or familiarity with a particular type of technology or interface. Computer-based systems present the most obvious concerns for elderly or marginalized voters who may be unfamiliar with ATMs, computers, or other similar technologies. Even optical scan systems that rely upon the voter's familiarity with "SAT-style" bubbles to fill in present parallel problems. Where feasible, elections officials should address this concern in usability testing among likely voters to determine the precise effects of different design elements upon voters with limited familiarity with the technology in question. The results of such testing may also inform the design of voter education and outreach and poll worker training prior to the election. Even without usability testing, elections officials should select their jurisdiction's voting systems and design the ballots for those systems with the recognition that many voters, particularly elderly voters, are not fully familiar with technologies used in ATMs and computers. The VVSG 2005 echoes this general recommendation in one of its specific requirements: "Voting systems with electronic displays *shall not* require *page scrolling* by the voter [*e.g.*, with a scroll bar as against a clearer "next page" button]."[23]

FOLLOW COMMON DESIGN CONVENTIONS.

Ballots and instructions should incorporate standard conventions used in product interfaces to communicate a particular type of information or message and to avoid confusion.[24] For example, the color red is typically used to indicate an emergency or error in need of attention, while green indicates a selection to move forward or activate the function in question. Consistent use of such generic conventions throughout the voting process allows the voter to rely upon her existing experience with those conventions to streamline the process and clarify otherwise ambiguous instructions, but does so without making her success depend upon any specific prior knowledge or experience. Elections officials should be aware of such conventions if they are called upon to select color schemes in designing the ballot for an election in their jurisdictions. All usability guidelines draw on commonly accepted typographic principles. For example, Drs. Kimball and Kropf suggest using text bolding to highlight certain information on the ballot:

- Ballots should use boldfaced text to help voters differentiate between office titles and response options (candidate names).[25]

The Plain Language Guidelines also include typographic principles, such as:

- Use – but don't overuse – highlighting techniques.
- Use 8 to 10 point type for text (*i.e.*, larger than that used in most government forms at the time).
- Avoid lines of type that are too long or too short.
- Use white space and margins between sections.
- Use ragged right margins.
- Avoid using all capitals.

The VVSG 2005 also includes design guidelines that address common design issues such as color, size and contrast for information:

- The use of color should agree with common conventions, *e.g.*, red should be used to indicate errors or problems requiring immediate attention.
- The minimum font size for text intended for the voter shall be 3.0 mm, and should be in a sans-serif font.[26]
- The minimum "figure-to-ground ambient contrast ratio" for text and graphics shall be 3:1.[27]

USE PLAIN LANGUAGE IN INSTRUCTIONS AND MESSAGES.

In the late 1970s, the American Institutes for Research began a Document Design Project to promote plain language and simple design in public documents. That Project, which eventually led to the creation of the Document Design Center, conducted research into language comprehension, how real people write and read, and particular aspects of public documents that created usability problems. From this research came a set of principles called "Guidelines for Document Designers," which were intended to apply across many different disciplines.[28]

These guidelines include principles for creating instructional and informational text, such as:

- Write short sentences.
- Use the active voice.
- Use personal pronouns to address the reader.
- Avoid phrases that are long strings of nouns.
- Avoid nouns created from verbs; use action verbs.
- List conditions separately.
- Keep equivalent items parallel.
- Avoid unnecessary and difficult words.

Usability experts who focus on voting systems use these plain language guidelines in their efforts to ensure that text presented to voters at each stage of the voting process is as easy to comprehend as possible.[29] Although the benefits of most of these simple principles appear intuitively obvious, further research through usability testing of voting systems is necessary to determine the relative impacts of these rules upon the three core elements of usability (accuracy, efficiency, and voter confidence). Dr. Kimball and Dr. Kropf's findings on paper ballots represent a strong first step in this process. Based on their 2005 study, they recommend:

- Voting instructions should be short and simple, written at a low reading level so voters can read and comprehend them quickly.[30]

The VVSG 2005 echoes this suggestion:

- Voting systems "shall provide clear instructions and assistance to allow voters to successfully execute and cast their ballots independently."[31]

LOCATE INSTRUCTIONS SO THEY WILL BE CLEAR.

Proper instructions must be presented in a manner that is helpful to voters, rather than confusing or overwhelming. According to general guidelines, instructions should be placed near the process they describe. When a procedure requires several steps, instructions should be provided at each step, rather than only at the beginning.[32] In addition, research into the impact on usability of different formats for presenting on-line information has demonstrated that, particularly for users with limited literacy, information should be presented in a single-column format rather than a multi-column format to improve readability.[33] According to research conducted by Drs. Kimball and Kropf, voters using optical scan ballots often ignored text that spanned the top of a multi-column ballot. Accordingly, they recommend that:

- Voting instructions should be located in the top left corner of the ballot, just above the first contest. That is where people in Western cultures begin reading a printed page and where respondents will look for instructions on the first task.[34]

Where possible, elections officials should design usability testing that will identify the best approach to provide clear, readable instructions to voters throughout the voting process.

ELIMINATE EXTRANEOUS INFORMATION.

Ballot design should eliminate all extraneous information from the voter's field of vision and minimize visual or audio distractions from the task at hand.[35] Voters may become overwhelmed or confused by such unnecessary material. This phenomenon may explain in part the higher levels of "roll off" produced by voting systems that present the voter with all of the races and ballot questions at once on a single surface.[36] Even for paper ballots, Drs. Kimball and Kropf suggest that designers eliminate information not immediately necessary to vote:

- Ballots should avoid clutter around candidate names (such as a candidate's occupation or hometown).[37]

PROVIDE CLEAR MECHANISMS FOR RECORDING AND REVIEWING VOTES.

Voting systems should clearly indicate where a voter should mark her selections, and provide ongoing feedback to the voter to ensure that she knows which selections she has already made and which remain. This information orients the voter to avoid confusion or lost votes due to such confusion. Drs. Kimball and Kropf suggest a specific guideline to help ensure that a system offers clear and unambiguous feedback to the voter as she marks her ballot:

- To minimize ambiguity about where voters should mark their votes, ballots should avoid locating response options on both sides of candidate names (this is a common problem on optical scan ballots, where two or three columns of offices and candidate names are listed on a single page).[38]

The VVSG 2005 also includes requirements that address this issue:

- "There shall be a consistent relationship between the name of a candidate and the mechanism used to vote for that candidate," *e.g.*, the button for selecting candidates should always be on the left of the candidates.[39]

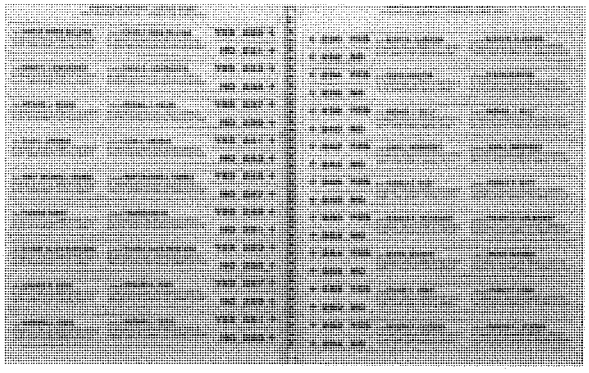
- Voting systems *shall* provide unambiguous feedback to indicate the voter's selection (*e.g.*, a checkmark beside the chosen candidate).[40]

- "Input mechanisms *shall* be designed so as to minimize accidental activation."[41]

A recent study of ballot design changes implemented in Illinois between 2000 and 2002 underscores this point.[42] In Illinois, voters must cast judicial retention votes in each election, using long lists of sitting judges for which voters must vote either "yes" or "no." In 2000, Cook County switched to a butterfly design for their punch card system, and the percentage of people who cast votes in the judicial retention elections dropped significantly.

FIGURE U1

PUNCH CARD BALLOT USED IN 2000

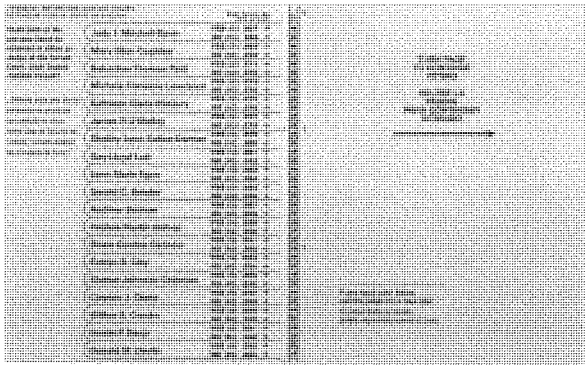


In 2002 Marcia Lausen, of Design for Democracy, and the county election department redesigned the county's ballot. Lausen and her colleagues clarified

where voters should mark their ballots by stacking all of the retention candidates in single columns on left-hand pages only.

FIGURE U2

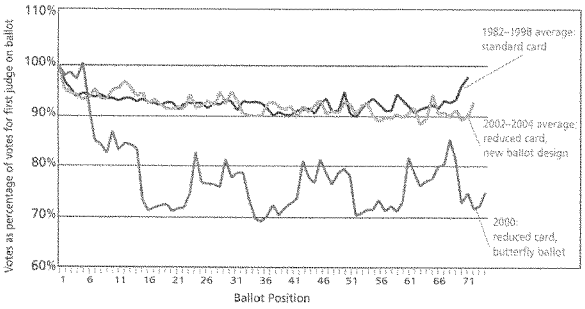
BALLOT DESIGN USED IN 2002



The improvement was dramatic. In the 2002 and 2004 elections, even while retaining the smaller-hole punch card, judicial retention voting returned to its pre-2000 levels with no abnormal loss of voters. Figure 3 shows the votes cast in sequence for Cook County retention judges before, during and after 2000. Note the peaks and valleys that correspond to page changes on the 2000 ballot. Before the change, voters would repeatedly begin again after turning the page, and then give up.

FIGURE U3

VOTES CAST FOR COOK COUNTY RETENTION JUDGES, 1982–2004



Systems that allow voters to review their choices in a clearly presented format, rather than simply asking if they are ready to cast their ballots, can reduce unintentional error.

CREATE CLEAR CLOSURE.

Where applicable, the ballot presentation should make clear when the voter has completed each step or task in the voting process. Whether through clear organization of the ballot or through express messages on a screen, the system should seek to reduce the likelihood of voter confusion or error by instructing how to complete each task and then making clear when each task has been successfully completed. This principle should apply as well to making clear to the voter when she has completed the voting process by casting her vote. Drs. Kimball and Kropf suggest that designers use shading to separate sections of the ballot:

- Ballots should use shading to help voters identify separate voting tasks and differentiate between offices.[43]

REDUCE MEMORY LOAD.

Voting systems should minimize the memory load on the voter, allowing her to review, rather than remember, each of her choices during the voting process. Undue memory burdens may confuse voters and lead to errors or delays. For example, systems that allow voters to review their choices in a clearly presented format, rather than simply asking if they are ready to cast their ballots, can reduce unintentional error. At least one requirement in the VVSG 2005 addresses the problem of memory load and possible confusion if the voter is required to track a contest from one part of the ballot to another:

- Voting systems "should not visually present a single contest spread over two pages or two columns."[44]

Elections officials should consider this principle in selecting a voting system, in developing usability testing to improve ballot design, and in designing the ballot and instructions for their jurisdiction.

NOTIFY VOTERS OF ERRORS.

The voting system should plainly notify the voter of her errors and provide a clear and easy opportunity to correct such errors. In particular, a voter should be informed of any under- or overvotes prior to casting her vote. In paper-based systems such as optical scan systems, this requirement means that the scanner must be programmed to return immediately to the voter for correction any ballot that includes such an error. In DREs, the system should notify the voter of any such error and provide an opportunity and instructions to correct it. Drs. Kimball and Kropf's guidelines include:

- Ballot instructions should warn about the consequences of casting a spoiled ballot *and* explain how to correct a spoiled ballot (required by the Help America Vote Act of 2002).[45]

The VVSG 2005 also requires notification of errors, stressing the importance of noting any under- or overvotes. The guidelines also recommend that all warnings function in a similar manner, not only stating the problem, but doing so in a comprehensible manner and offering options to address it:

- Warnings to the voter should clearly state the nature of the problem and the responses available to the voter.[46]

MAKE IT EASY TO CORRECT ERRORS.

The federal Help America Vote Act requires that voters have an opportunity to correct errors on their ballots.[47] But if correcting errors during the voting process imposes a significant burden on voters, the number of voters who choose not to make corrections increases, leading to higher residual vote rates. Accordingly, the mechanism for correcting errors must be easy both to understand and to execute. In their laboratory research on DREs, Dr. Conrad et al. found that the Diebold AccuVote-TS required the voter to de-select an erroneous candidate selection before touching her preferred candidate on the screen; this extra step caused confusion among participants and led to at least one error.[48] By contrast, other DREs under study did not require that extra step in the error correction process. The VVSG 2005 includes several requirements to provide opportunities for error correction and ensure that voters can extend a warning period if they need more time:

- DREs "shall allow the voter to change a vote within a contest before advancing to the next contest."[49]

- Voting systems "shall provide the voter the opportunity to correct the ballot for either an undervote or overvote before the ballot is cast and counted" and "shall allow the voter . . . to submit an undervoted or overvoted ballot."[50]

- If the voting system requires a response by the voter within a specified period of time, it shall issue an alert at least 20 seconds before this period expires.[51]

RECOMMENDATIONS

Our review of usability research on various technologies, including but not limited to voting systems, points us to several recommendations in the areas of ballot design and system instructions. These recommendations should assist election officials in making purchase decisions and in maximizing a voting system's usability once it is purchased and before ballot designs and instructions are finalized:

- Do not assume familiarity with technology. Where feasible, elections officials should address this concern in usability testing among likely voters to determine the precise effects of different design elements upon voters with limited familiarity with the technology in question. The results of such testing should also inform the design of voter education and outreach and poll worker training prior to the election.

- Conduct usability testing on proposed ballots before finalizing their design. Usability testing of specific models within a type of voting system is critical if election officials are to reduce unnecessary voter errors. Election officials should not assume familiarity with technology or a particular voter interface.

- Create plain language instructions and messages in both English and other languages commonly used in the jurisdiction. Use of plain language that is easy to understand quickly is critical to avoiding voter error. Both DREs and optical scan systems produce substantially higher residual vote rates in jurisdictions with a Hispanic population of at least 30%. This suggests that plain language instructions in both English and Spanish are critical to reduce voter errors, even where Spanish language ballots are not required under the Voting Rights Act.

- Locate instructions so they are not confusing or ignored. Instructions should be placed in the top left of the frame, where possible. In addition, information should be presented in a single-column format rather than a multi-column format to improve readability.

- For both ballots and instructions, incorporate standard conventions used in product interfaces to communicate a particular type of information or message. Consistent use of generic conventions (*e.g.*, red = warning or error) throughout the voting process allows the voter to rely on her existing experience to streamline the process and clarify otherwise ambiguous instructions.

- Do not create ballots where candidates for the same office appear in multiple columns or on multiple pages. Listing candidates for the same office in multiple columns or on multiple pages (as in the infamous "butterfly ballot" used in Palm Beach County, Florida in 2000, or in optical scan ballots that allow a contest to continue from one column to another) produces higher rates of residual votes (both overvotes and undervotes).

- Use fill-in-the-oval ballots, not connect-the-arrow ballots, for optical scan systems. In optical scan systems, residual votes (and especially overvotes) are less common on fill-in-the-oval ballots than on connect-the-arrow ballots. The latter design should not be used.

- Eliminate extraneous information on ballots. Ballot design should eliminate all extraneous information from the voter's field of vision and minimize visual or audio distractions from the task at hand. Voters may become overwhelmed or confused by such unnecessary material.

- Ensure that ballot instructions make clear that voters should not cast both a write-in and normal vote. Write-in lines are a source of many overvotes, as many voters select a candidate whose name is printed on the ballot and then write the same name on the write-in line. Election officials should make sure that instructions clearly state voters should not cast votes in both areas of the ballot. At the same time, state laws should be amended to require that such ballots be counted rather than set aside as spoiled, as long as both the write-in vote and the normal vote are clearly cast for the same candidate.[52]

- Provide mechanisms for recording and reviewing votes. Voting systems should provide ongoing feedback to the voter to ensure that she knows which selections she has already made and which remain. This information orients the voter to avoid confusion or lost votes due to such confusion.

- Make clear when the voter has completed each step or task in the voting process. Whether through clear organization of the ballot or through express messages on a screen, the system should reduce the likelihood of confusion or error by instructing voters how to complete each task and then making clear when each task has been successfully completed.

- Minimize the memory load on the voter, allowing her to review, rather than remember, each of her choices during the voting process. Undue memory burdens reduce accuracy, and may confuse voters and lead to errors or delays.

- Ensure the voting system plainly notifies the voter of her errors. In particular, a voter should be informed of any under- or overvotes prior to casting her vote. In paper-based systems such as optical scan systems, this requirement means that the scanner must be programmed so that the ballot is immediately returned to the voter for correction of either of these kinds of error.

- Make it easy for voters to correct their errors. If voters find it difficult to correct their own errors during the voting process, then the number of voters who choose not to make corrections increases, leading to higher residual vote rates. Accordingly, the mechanism for correcting errors must be easy both to understand and to execute without any unnecessary, extra steps to complete.

ENDNOTES

[1] Although there is no firm consensus on precise benchmarks to measure the usability of voting systems, academics and industry researchers have developed design guidelines in other areas, most importantly in web-browser design, that can increase usability. *See* Sanjay J. Koyani et al., U.S. Dept. of Health and Human Resources, *Research-Based Web Design and Usability Guidelines* (Sept. 2003), *available at* http://usability.gov/pdfs/guidelines_book.pdf.

[2] For a full summary of the VVSG usability requirements, *see* Appendix A.

[3] International Organization for Standardization, *Ergonomic Requirements for Office Work with Visual Display Terminals* at 11, ISO 9241 (1997); *see* Sharon Laskowski et al., National Institute of Standards and Technology, *Improving the Usability and Accessibility of Voting Systems and Products* at 8 (2004), *available at* http://vote.nist.gov/Final%20Human%20Factors%20Report%20%205-04.pdf.

[4] The IEEE has defined a usable voting system as one that allows voters to cast a ballot:

- Correctly – voters correctly use the voting system to register their intended selections with minimal errors.
- Efficiently – voters complete the voting process in a timely manner and without unproductive, unwanted interactions with the system.
- Confidently – voters are confident (1) in what actions they had to perform in order to vote, (2) that their votes were correctly recorded by the system, and (3) that their privacy is assured.

Institute of Electrical and Electronics Engineers, *Usability and Accessibility Standards* §§ 5.3, at 3, *at* http://grouper.ieee.org/groups/scc38/1583/documents_-_p1583/Sections%205.3%20Usability-Accessibility%20(March%2016,%202003).DOC (Mar. 16, 2003); *see* John M. O'Hara, Institute of Electrical and Electronics Engineers, *A Proposed Approach to Testing the IEEE Usability/Accessibility Standards*, *at* http://grouper.ieee.org/groups/scc38/1583/documents_-_p1583/Standards%20Testing%20White%20Paper,%20Rev%201.doc (Apr. 3, 2003).

[5] The 2005 VVSG mirrors the IEEE definition of a usable voting system, explaining that among the basic metrics for usability are:

- Low error rate for marking the ballot (the voter selection is correctly conveyed to and represented within the voting system)
- Efficient operation (time required to vote is not excessive)
- Satisfaction (voter experience is safe, comfortable, free of stress, and instills confidence).

Election Assistance Commission, *Voluntary Voting System Guidelines*, Volume I Version 1.0 at §§ 3.1 (2005), *available at* http://www.eac.gov/VVSG%20Volume_I.pdf, [hereinafter EAC VVSG].

[6] The residual vote rate does not include ballots that are not counted for reasons relating to a voter's ineligibility to vote.

[7] Stephen Knack and Martha Kropf, *Roll Off at the Top of the Ballot: Intentional Undervoting in American Presidential Elections*, 31 POLITICS & POLICY 575-594 (2003); Michael Tomz & Robert P. Van Houweling, *How Does Voting Equipment Affect the Racial Gap in Voided Ballots?*, 47 AMERICAN JOURNAL OF POLITICAL SCIENCE 46, 57 (Jan. 2003).

[8] *See, e.g.*, Robert Darcy and Anne Schneider, *Confusing Ballots, Roll-Off, and The Black Vote*, 42 WESTERN POLITICAL QUARTERLY 347 (1989); Stephen M. Nichols, *State Referendum Voting, Ballot Roll-off, and the Effect of New Electoral Technology*, 30 STATE AND LOCAL GOVERNMENT REVIEW 106-117 (1998); Stephen Knack and Martha Kropf, *Invalidated Ballots in the 1996 Presidential Election: A County-Level Analysis*, 65 JOURNAL OF POLITICS 881 (May 2001) *available at* http://www.vote.caltech.edu/media/documents/knack-kropf32.pdf; Michael C. Herron and Jasjeet S. Sekhon, *Overvoting and Representation: An Examination of Overvoted Presidential Ballots in Broward and Miami-Dade Counties*, 22 ELECTORAL STUDIES 21 (Sept. 2001) *available at* http://elections.berkeley.edu/election2000/HerronSekhon.pdf; David C. Kimball *et al.*, *Unrecorded Votes and Political Representation*, *in* COUNTING VOTES: LESSONS FROM THE 2000 PRESIDENTIAL ELECTION IN FLORIDA at 135 (Robert P.

Watson, ed., 2004) *available at* http://www.umsl.edu/~kimballd/unrep.pdf; R. Michael Alvarez, *et al.*, *Counting Ballots and the 2000 Election: What Went Wrong?* (Feb. 2004) *at* http://www.hss.caltech.edu/~betsy/papers/Chapter1.pdf; Justin Buchler *et al.*, *Punch Card Technology and the Racial Gap in Residual Votes*, 2 PERSPECTIVES ON POLITICS 517 (2004) *available at* http://journals.cambridge.org/action/displayAbstract?fromPage=online&aid=246600.

[9] The data available to examine residual votes in American elections are still limited. Several states still do not collect data on the number of ballots cast in an election, which are needed to compute residual vote rates; instead, these states report the number of votes recorded for the contest at the top of the ballot. This practice requires researchers to seek data from local jurisdictions (counties or towns), which do not gather such data in some cases. In addition, most state and local elections officials do not gather and report data on the number of overvotes and undervotes.

Ideally, election officials would collect data on the number of voters who sign the poll book, the number of ballots cast, overvotes, and undervotes for each contest on the ballot at the precinct level (*i.e.*, the lowest level of aggregation possible). Beginning in 2004, the federal Election Assistance Commission requested that states begin to report this information for each local jurisdiction, and the EAC published the first Election Day Survey in September 2005.

Further, data on polling place conditions and procedures are extremely limited. In the last two years, researchers have started organizing teams of observers to measure polling place accessibility and other conditions. In addition to the huge cost of these studies, however, legal barriers limit their reach. In several states, like California, state law explicitly allows research teams to observe polling places during elections. In other states, like Missouri, state law prohibits researchers from conducting research in polling places. These limitations make it difficult to control for differences in polling place conditions when assessing the performance of voting systems.

[10] The Institute's research has been conducted in association with researchers at the University of Rochester, the University of Maryland, Georgetown University, and the Maryland State Board of Elections.

[11] *See* Fred Conrad *et al.*, *A Laboratory Evaluation of Six Electronic Voting Machines* (July 2, 2005) (A presentation given to the Usability Professionals Association) *available at* http://www.upassoc.org/usability_resources/conference/2005/Conrad.ppt.

[12] As noted already, the results from Nevada may reflect that state's unique ballot options rather than the voting system used.

[13] David C. Kimball and Martha Kropf, *Ballot Design and Unrecorded Votes on Paper-Based Ballots*, 69 PUBLIC OPINION QUARTERLY 508 (2005), *available at* http://www.umsl.edu/~kimballd/kkpoq05.pdf.

[14] Michael J. Hanmer and Michael W. Traugott, *The Impact of Voting by Mail on Voter Behavior*, 32 AMERICAN POLITICS RESEARCH 375 (2004).

[15] For earlier studies that depended principally on surveys of voters, expert review, and limited field testing, *see* Paul S. Herrnson, *et al.*, *Early Appraisals of Electronic Voting*, 23 SOCIAL SCIENCE COMPUTER REV. 274 (2005) (summarizing limited past research and presenting results of analysis of Diebold's AccuVote-TS DRE) *available at* http://theory.lcs.mit.edu/~rivest/voting/reports/EarlyAppraisalsOfElectronicVoting.pdf; Benjamin B. Bederson, *et al.*, *Electronic Voting System Usability Issues*, CHI 2003, at 145-162 (Paper from the Conference on Human Factors in Computing Systems sponsored by the Association for Computing Machinery's Special Interest Group on Computer-Human Interaction) (Apr. 5-10, 2003) (reviewing expert and non-expert subjective comments on usability of electronic voting system used in Maryland, Diebold's AccuVote-TS); Benjamin B. Bederson & Paul S. Herrnson, *Usability Review of the Diebold DRE System for Four Counties in the State of Maryland*, Univ. of Maryland (2003) *at* http://www.capc.umd.edu/rpts/MD_EVoteMach.pdf; Center for American Politics and Citizenship, *An Evaluation of Maryland's New Voting Machines* (Dec. 2, 2002) (summarizing results of exit poll survey in two Maryland counties), *available at* http://www.capc.umd.edu/rpts/MD_EVoteEval.pdf.

[16] *See* Gary H. Roseman, Jr. & E. Frank Stephenson, *The Effect of Voting Technology on Voter Turnout: Do Computers Scare the Elderly?*, 123 PUBLIC CHOICE 39 (2005) *available at* http://www.springerlink.com/index/K362205R35WKL415.pdf. Maryland and Florida have both shifted to DREs in recent years. An examination of the elderly population's voting patterns in these states could help test Roseman and Stephenson's findings.

[17] *A Laboratory Evaluation of Six Electronic Voting Machines*, *supra* note 11, at 27.

[18] Ted. Selker *et al.*, *Comparative Voting Performance of Reading Disabled Voters* (2005), *available at* http://www.vote.caltech.edu/media/documents/readingdisabledwist.doc.

[19] Stephen Ansolabehere and Charles Stewart, III, "Residual Votes Attributable to Technology," *Journal of Politics* 67(2005) at 365-389; David C. Kimball and Martha Kropf, "Ballot Initiatives and Residual Ballots in the 2004 Presidential Election," paper presented at the Southern Political Science Association Annual Meeting, Atlanta, January 2006.

[20] Sharon Cohen, MIT EECS MS thesis, An Active Approach to Voting Verification, http://votingtechnologyproject.org/theses/cohen-thesis_5-05.pdf.

[21] The efficiency of Vote-by-Mail systems must be evaluated differently than in other systems because voters cast ballots at home and at their leisure. Thus, there are no bottlenecks at polling places to consider.

[22] *See* Jonathan Goler, Ted Selker, and Lorin Wilde, *Augmenting Voting Interfaces to Improve Accessibility and Performance* (2006), *available at* http://vote.caltech.edu/reports/chi-abstract-golerselker.pdf; Ted Selker, Matt Hockenberry, Jonathan Goler, and Shawn Sullivan, *Orienting Graphical User Interfaces Reduces Errors: the Low Error Voting Machine*, *available at* http://vote.caltech.edu/media/ documents/wps/vtp_wp23.pdf.

[23] EAC VVSG, *supra* note 5, at § 3.1.6(a) (emphasis added).

[24] *Id.* at § 3.1.4(c)(i).

[25] *Ballot Design*, *supra* note 13, at 516.

[26] EAC VVSG, *supra* note 5, at § 3.1.5(d), (h).

[27] *Id.* at § 3.1.5(i).

[28] *See* Daniel B. Felker *et al.*, American Institutes for Research (AIR) Document Design Project, *Guidelines for Document Designers* (Nov. 1981).

[29] In her work with San Francisco's Ballot Simplification Committee, for example, Dana Chisnell uses these Guidelines in preparing the instructions and digests for the Voter Information Pamphlet ("VIP") published by the Department of Elections. It is the only citizen-written VIP in the country. Most VIPs are written by attorneys who may inadvertently introduce biases into voting materials and who often are not skilled in writing plainly.

[30] *Ballot Design*, *supra* note 13, at 513.

[31] EAC VVSG, *supra* note 5, at § 3.1.4(b).

[32] John M. Carroll and Hans Van der Meij, *Principles and Heuristics for Designing Minimalist Instructions*, *in* MINIMALISM BEYOND THE NURNBERG FUNNEL (John M. Carroll ed., MIT Press 1998).

[33] *See, e.g.*, Michael Summers & Kathryn Summers, *Clear Health Communication on the Web: Making Medical Content Accessible to Low-Literacy Users* at 4 (June 2005) (unpublished paper, on file at the Brennan Center).

[34] *Ballot Design*, *supra* note 13, at 516.

[35] *Id.* at 528.

[36] David C. Kimball, *Assessing Voting Methods in 2002* (presented at the Midwest Political Science Association Annual Meeting) (Apr. 2003) *at* http://www.umsl.edu/~kimballd/dkmpsa2.pdf..

[37] *Ballot Design*, *supra* note 13, at 518; Richard G. Niemi and Paul S. Herrnson, *Beyond the Butterfly: The Complexity of U.S. Ballots*, 1 PERSPECTIVES ON POLITICS 317-326 (2003) *available at* http://www.upassoc.org/upa_projects/voting_and_usability/workshop2004/pol%20persp%20page%20proofs.pdf.

[38] *Ballot Design*, *supra* note 13, at 517.

[39] EAC VVSG, *supra* note 5, at § 3.1.4(c)(iii).

[40] *Id.* at § 3.1.6(b) (emphasis added).

[41] *Id.* at § 3.1.6(d) (emphasis added).

[42] Albert J. Klumpp, *Judicial Retention Elections in Cook County: Exercise of Democracy, or Exercise in Futility* (2005) (unpublished Ph.D. dissertation, University of Illinois at Chicago) (on file with the University of Illinois at Chicago Library).

[43] *Ballot Design*, *supra* note 13, at 517. Design for Democracy, a non-profit dedicated to improving ballot design, has echoed Kimball and Kropf's advice in their Election Design System. *See* Marcia Lausen, Design for Democracy, *Election Design: Models for Improvement* (Peachpit Press 2006).

[44] EAC VVSG, *supra* note 5, at § 3.1.4(c)(i).

[45] *Ballot Design*, *supra* note 13, at 516.

[46] EAC VVSG, *supra* note 5, at § 3.1.4(d).

[47] 42 U.S.C. § 15481(a)(1)(A)(ii).

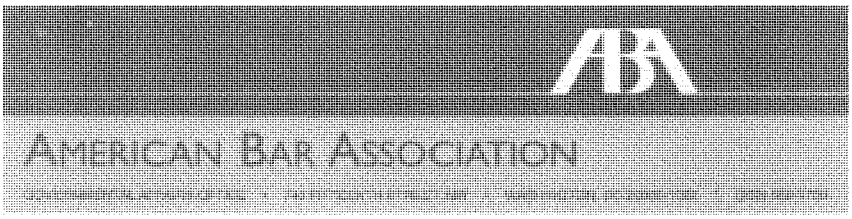
[48] *A Laboratory Evaluation of Six Electronic Voting Machines*, *supra* note 11, at 44.

[49] EAC VVSG, *supra* note 5, at § 3.1.2(f).

[50] *Id.* at § 3.1.2(d), (e).

[51] *Id.* at § 3.1.6(c).

[52] Certain states already provide this protection for voters who mistakenly cast ballots with both a write-in vote and a normal vote for the same candidate. *See, e.g.*, Wis. Stat. Ann. § 7.50(2)(d) (2004).



Statement

of the

AMERICAN BAR ASSOCIATION

to the

SPECIAL COMMITTEE ON AGING

UNITED STATES SENATE

on the subject of

Older Voters -- Opportunities and Challenges

January 31, 2008

Mr. Chairman, Ranking Member Smith and Members of the Committee:

The American Bar Association commends the Senate Special Committee on Aging for undertaking an examination of issues related to voting and disability as Americans age and particularly issues arising from cognitive impairment. We appreciate this opportunity to share our views on these important issues.

The need to address voting by aging citizens who face some level of cognitive or other brain impairment has emerged from the relative shadows and into the light of day because of four salient, intersecting realities:.

- Elections may be decided by very small margins. In 2000, George W. Bush officially won the Florida vote over Al Gore by a margin of 930 votes (out of six million), a virtual statistical tie.
- Older persons vote. Persons over 65 have a higher rate of participation than any other age group. In the 2004 presidential election, 71.8 percent of citizens age 55 and older reported voting. The next highest voting group were those age 45 to 54 years old, with 68.7 percent reported voting. Even in the oldest age category tracked, age 75 and older, 68.5 percent reported voting.
- The number of older persons is growing rapidly. Between years 2000 and 2030, the over age 65 population in the United States is projected to more than double from 35 million to 71.5 million, with the cohort of persons age 85 and over increasing at the highest percentage rate.
- The number of older persons with dementia and other disabilities will similarly expand. The prevalence of disabilities significantly increases with increasing age. The total number of people with dementia in the United States is not known with certainty, but a recent statistical report of the Alzheimer' Association estimates that, as of 2007, 4.9 million people age 65 and over had Alzheimer's disease, with another 200,000 individuals younger than 65 with early onset Alzheimer's. By 2030, those numbers are expected to increase by more than 50 percent. Alzheimer's disease comprises 50 percent to 70 percent of all cases of dementia, so estimates of the total population with dementia of any type could be as much as double the above figures.

The convergence of these numbers brings into focus a variety of questions about the disenfranchisement of persons with brain impairments who have a fundamental right and the threshold ability to vote, although they may need assistance. What kind of assistance may be needed and what kind is appropriate? Can technology help? And who makes decisions about capacity to vote, and by what criteria? Conversely, concerns abound about the potential for fraudulent exercise of the franchise by unscrupulous persons or political organizations taking advantage of groups within this population, especially those living in group settings such as nursing homes.[1]

Both failure to ensure proper access to the polls and failure to protect against the fraudulent manipulation of the vote of vulnerable populations compromises the integrity of elections. And as the above demographic trends continue, so the danger increases.

To address these issues, the ABA Commission on Law and Aging joined together with the Borchard Foundation Center on Law and Aging and the Capital Government Center on Law and Policy at the Pacific McGeorge School of Law to host a working symposium of invited national experts in law and aging, medicine, long term care, voting technology, and elections administration on the topic *Facilitating Voting As People Age: Implications of Cognitive Impairment.* The impetus for the symposium began with the work of Dr. Jason Karlawish and others who took the first steps in raising the questions posed above.[2] The Symposium convened from March 21-24, 2007 to address five key facets of these issues: (1) how aging and cognitive impairments fit into broader issues of access to voting; (2) issues in absentee balloting; (3) voting in long term care settings; (4) defining and assessing capacity to vote; and (5) the implications of voter technology for those with cognitive impairments. Prior to the symposium, the sponsors had commissioned six background papers that provided the starting points for discourse and analysis of each of the key facets.

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[1] *See, e.g.*, Glover v. South Carolina Democratic Party, No. C/A 4-04-CV-2171-25, 2004 WL 3262756 (D.S.C. 2004), *aff'd by* Reaves v. S. Carolina Democratic Party, 122 Fed. Appx. 83 (4th Cir. 2005) (allowing an unsuccessful candidate for the South Carolina state senate to successfully challenge the results of a democratic primary race by alleging voting irregularities including voting fraud with regards to the absentee ballots of nursing home residents); State v. Jackson, 102 Ohio St.3d 380 (Ohio 2004) (considering an evidentiary issue in a criminal case of an Ohio election board employee who allegedly marked nursing home residents ballots contrary to residents' wishes). *Also see*, David Josar & Lisa M. Collins, *State Targets Detroit Ballots*, DETROIT NEWS, Nov. 1, 2005 (reporting on a Detroit City Council candidate who initiated a lawsuit against the Detroit City Council clerk alleging that election officials assisted legally incapacitated persons to vote at a Detroit nursing home).

[2] Jason H. Karlawish *et al.*, *Addressing the Ethical, Legal and Social Issues Raised by Voting By Persons with Dementia*, 292 J.A.M.A 1345 (2004).

The symposium culminated with the adoption of a number of recommendations intended to protect voting rights of people with legal capacity and provide necessary assistance in voting, while protecting the integrity of the voting process. They are published in a special symposium issue of the McGeorge Law Review, Volume 38, Issue 4 (2007), along with several background articles.

The ABA reviewed the results of the symposium and, in August 2007, adopted as policy a careful distillation of the symposium recommendations. These recommendations supplement numerous existing ABA policies related to improving election administration and ensuring access to the polls, and highlight the critical need to address issues impacting the voting rights of a significant, and often vulnerable, segment of our society.

First, the ABA recommends four broad cross-cutting actions that would benefit not only voters with cognitive or other impairments but all voters: (1) the study and development of best practices for ballot design; (2) the use of "mobile polling"; (3) the use of communications accessible to those with disabilities; and (4) the acceptance of alternative forms of identification to facilitate registration and voting.

Mobile polling is the process by which election officials bring a polling station to voters in long-term care facilities or other outreach sites. The polling device used depends on the technology available in the voting district, but it uses some sort of polling device rather than an absentee ballot. It is preferable to reliance on mail-in, paper absentee ballots, because the latter can be hard for anyone with diminished reading ability to understand as well as much more susceptible to abuse. Most states do not yet have the technology to bring accessible portable electronic balloting capability to long-term care settings, but that technology is on the horizon. In the meantime, some twenty-three states currently prescribe responsibilities for absentee voting by nursing home or assisted living residents under some circumstances, and all place responsibilities on election officials to assist.[3]

Acceptance of alternative forms of identification is critical for voters with disabilities, especially those in long-term care settings, who are less likely to have driver's licenses or other standard forms of identification.

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[3] Amy Smith & Charles P. Sabatino, *Voting by Residents of Nursing Home and Assisted Living Facilities: State Law Accommodations*, 26 BIFOCAL 1 (2004), at http://www.abanet.org/aging/publications/bifocal/261.pdf.

Second, the ABA urges governmental entities to ensure that otherwise qualified persons are not excluded from voting on the basis of medical diagnosis, disability status, or type of residence. Voting is a fundamental constitutional right and a hallmark of democracy, therefore the emphasis should be on expanding the franchise and enhancing access to and assistance with the ballot for persons who are capable of voting. In regard to the issue of mental capacity to vote, due process protections are necessary to ensure that the right is never arbitrarily or prematurely forfeited. Any limitations should be narrowly circumscribed in terms of specific functional abilities, rather than on categorical exclusions. State constitutions and statutes that permit exclusion of a person from voting on the basis of mental incapacity, including guardianship and election laws, should explicitly state that the right to vote is retained, except by court order where the following criteria must be met: (1) The exclusion is based on a determination by a court of competent jurisdiction; (2) Appropriate due process protections have been afforded; (3) The court finds that the person cannot communicate, with or without accommodations, a specific desire to participate in the voting process; and (4)The findings are established by clear and convincing evidence.

In contrast to that principle, research has found that state constitutions and election laws often fall far short. The constitutions in all but court order where the following criteria must be met: (1)The exclusion is based on a determination by 12 states bar people with various kinds of mental impairment from voting – for example, those who are *non compos mentis*, admitted to a mental institution, under guardianship, incapacitated, or mentally ill. The categories are sweeping and imprecise.[4] State statutes addressing voter eligibility on cognitive grounds do not necessarily track state constitutional provisions, using different terminology in all but 14 states. Additionally, the vagueness of many of the provisions creates uncertainty concerning capacity. At the same time, election laws in some 29 states do not address voter eligibility due to mental status at all.[5]

In the context of guardianship law, only 19 states have specific statutory provisions that persons under full or limited guardianship *retain* all legal and civil rights not explicitly removed – which would include the right to vote. Along with additional provisions that favor limited

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[4] Sally Hurme & Paul S. Appelbaum, *Defining and Assessing Capacity to Vote: The Effect of Mental Impairment on the Rights of Voters*, *in* SYMPOSIUM, FACILITATING VOTING AS PEOPLE AGE: IMPLICATIONS OF COGNITIVE IMPAIRMENT, 38 MCGEORGE L. REV. (forthcoming 2007).
[5] *Id.*

guardianship, a total of 32 states do appear to allow a judicial determination that a person under guardianship may retain the right to vote.[6] Only a few statutes and cases specifically articulate a *requirement* for the court to determine capacity to vote.[7]

The ABA supports expansion of the approach that requires an individualized determination of capacity to vote in a judicial setting with strict due process protections. This approach would be applicable in any jurisdiction that permits exclusion of a person from voting on the basis of mental incapacity. As to a legal standard for assessing capacity to vote, scant existing case law and statutes provide some guidance,[8] but as a legislative policy principle, the ABA supports a standard that can be applied universally with little potential for discrimination – specifically, whether the person indicates that he or she has a specific desire to participate in the voting process. This provides a low threshold that is most inclusive and most protective of the right. The objective is to *not* treat people any differently in voting rights based on any perceived impairment or other personal characteristic.

Third, the ABA urges that citizens be permitted to opt freely for absentee balloting, permanently or temporarily, including at the time of registration, with the ability to change one's choice thereafter. Implementing this recommendation would serve to expand the option for absentee balloting and suggests the use of a more normal characterization of it as "vote-at-home" balloting. In recent decades, absentee balloting has become a central feature of our electoral landscape. All states now allow at least some categories of voters to cast their votes before election day, most commonly by mail. And, most states now permit "no excuse" absentee voting. However, as of 2004, only 17 states provided for *permanent* absentee status.[9] This recommendation advocates for no-excuse temporary or permanent absentee status, available as an option to choose at the time of registration or at a later time.

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[6] *Id.*

[7] *See e.g.,* Wash. Rev. Code § 11.88.010(5).(the imposition of a guardianship does not result in the loss of the right to vote unless the court determines that the person lacks the capacity to exercise the franchise, and the court's order must specify whether the ward retains voting rights); *also see,* Doe v. Rowe, 156 F. Supp. 35 (D. Me. 2001) (striking down Maine's constitutional provision that automatically excluded from the polls persons under guardianship by reason of mental illness).

[8] *E.g.,* Washington's statute characterizes incompetence to vote as "lacking the capacity to understand the nature and effect of voting, such that she or he cannot make an individual choice" Wash. Rev. Code § 11.88.010(5).[8] Wisconsin similarly looks to whether the person is "incapable of understanding the objective of the elective process." Wis. Stat. § 54.25(2)(c)1.g. The federal District Court in Doe v. Rowe, 156 F. Supp. 35 (D. Me. 2001) adopted a functional standard identical to that found in the Washington statute.

[9] *See,* the survey of absentee balloting law and alternatives in Daniel P. Tokaji & Ruth Colker, *Absentee Voting by People with Disabilities: Promoting Access and Integrity, in* SYMPOSIUM, FACILITATING VOTING AS PEOPLE AGE: IMPLICATIONS OF COGNITIVE IMPAIRMENT, 38 MCGEORGE L. REV. (forthcoming 2007).

It is particularly important to focus on issues related to voting in long-term care settings, broadly defined. The prevalence of dementia in the nursing home population is estimated to range from a quarter to more than two-thirds of the population.[10] The prevalence of dementia in assisted living facilities is even less certain, although one survey of assisted living facilities reported that over one-third of residents had moderate to severe dementia.[11] A diagnosis of dementia, in itself, does not mean that the individual lacks capacity to vote. Some still retain the capability and some do not. However, little is known about how many of these nursing home and assisted living facility residents actually have the capacity to vote. Even less is known about the voting capacity of persons residing in other long-term care settings such as adult homes, community care facilities, and group homes for persons with a variety of disabilities.

Fourth, the ABA urges improving access to voting by residents of long-term care facilities that provide room, board, and any level of personal care to persons in need of assistance. Such efforts should include making mobile polling stations a reality for long-term care residents; and in the interim, utilizing election officials proactively in the role of overseeing absentee balloting in these settings. In addition, there should be training of residents, staff, and others involved in the care of residents regarding the voting rights of persons with disabilities and the resources available to assist in the exercise of those rights. Finally, it is important to clarify that people who provide assistance in voting do not have authority to determine capacity to vote, and that assistance in voting is limited to assisting voters to express the voter's intent. If people who provide assistance are unable to determine the voter's intent, then, to avoid the possibility of fraudulent manipulation, they must decline to mark the ballot for the voter.

Fifth, the ABA urges development and required use of voting systems that achieve universal design, such that all voters can cast ballots privately and independently on the same voting machine, adaptable to accommodate any impairment, including physical, sensory, cognitive, intellectual, or mental. Balloting technology is currently undergoing a major transformation in the direction of electronic systems, such as direct-recording electronic (DRE) voting systems. Electronic systems are still very much in their infancy. Most currently deployed voting systems do not meet current HAVA and ADA disability accommodation requirements,

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[10] Jay Magaziner, *et. al.*, *The Prevalence of Dementia in a Statewide Sample of New Nursing Home Admissions Aged 65 and Older*, 40 GERONTOLOGIST 663, 663 (2000).

[11] Catherine Hawes, Charles D. Phillips, Miriam Rose, Scott Holan, & Michael Sherman, *A National Survey of Assisted Living Facilities*, 43 GERONTOLOGIST 875, 875 (2003).

and they are far from compliant with the U.S. Election Assistance Commission's Voluntary Voting System Guidelines.[12] The premise of this recommendation is that technology's goal is to create *access*, which is different from *assistance*. The more access is facilitated and barriers removed, the less need there is to depend on assistance by another person in the voting booth or with paper absentee ballots, and thus, the less danger there is of fraud or undue influence by persons assisting with balloting.

In his review of evolving voting technology and its implications for voters with cognitive impairments, Professor Ted Selker identified several design approaches that have shown promise but are still under trial and development. Evolving design characteristics with particular promise include: electronic interfaces that focus on one task at a time; simplified navigation through the steps of the voting process with an ability to refer back to instructions; redundancy of information; feedback (audio as well as visual) on selections made with the opportunity to change selections.[13] The ultimate goal is to design effective optional capabilities into all voting stations so that accessibility is truly universal and segregation of voting by disability accommodation is unnecessary.

Sixth, the ABA urges the recruitment and training of election workers to address the needs of voters with disabilities, including physical, sensory, cognitive, intellectual, or mental disabilities. There is a significant need for sufficient numbers of election workers, appropriately trained to meet the needs of voters with disabilities of any kind. If poll workers and other election officials do not understand how to accommodate the increasingly broad range of disabilities voters present at the polls, or they do not understand how to operate the new technologies being introduced in polling sites, then even the best technologies will fall short. Many poll workers serve as volunteers, and training may be brief and informal. Recruitment and training is an essential component to ensuring access to the polls and we urge governments to place a greater emphasis on that task.

While there is no proposed legislation that this recommendation immediately addresses, there are many critical activities underway at the federal, state, territorial, and local government

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[12] Noel H. Runyan, IMPROVING ACCESS TO VOTING: A REPORT ON THE TECHNOLOGY FOR ACCESSIBLE VOTING SYSTEMS, A REPORT BY VOTER ACTION AND DĒMOS (February 2007), at http://www.demos.org/page504.cfm. See the Election Assistance Commission's voluntary guidelines at http://www.eac.gov/vvsg_intro.htm.

[13] Ted Selker, *The Technology of Access: Allowing People of Age to Vote for Themselves*, in SYMPOSIUM, FACILITATING VOTING AS PEOPLE AGE: IMPLICATIONS OF COGNITIVE IMPAIRMENT, 38 MCGEORGE L. REV. (forthcoming 2007).

level to modify voting procedures that this recommendation impacts. For example, at the federal level the 2002 Help America Vote Act has gave the National Institute of Standards and Technology (NIST) a key role in helping to realize nationwide improvements in voting systems. To assist the Election Assistance Commission with the development of voluntary voting system guidelines, HAVA established the Technical Guidelines Development Committee and directed NIST to chair the Committee. NIST research activities have included: security of computers and computer data storage used in voting systems; methods to detect and prevent fraud; protection of voter privacy, and; the role of human factors in the design and application of voting systems, including assistive technologies for individuals with disabilities and varying levels of literacy. However, NIST has not had a focus on cognitive impairments or other brain impairments, a focus that the ABA would encourage.

At the state level, in addition to election improvements, the ABA has had a long history of supporting guardianship reform and long-term care quality regulation, especially through its Commission on Law and Aging. These recommendations have immediate implications for key aspects of guardianship law and long-term care regulation relevant to cognitively impaired elders and other adults.

Access to and integrity of the voting process has never been a more important issue in America than it is today. We recognize the significant challenges faced by the federal, state and local governments in developing and implementing new voting policies and procedures and realize that some of these recommendations would need to be considered in the context of near-, medium- and long-term goals. However, we believe that progress can, and must, be made in ensuring the fundamental right to vote for the growing number of citizens with some level of cognitive impairment but that are still capable of voting, while at the same time preventing manipulation of the vote within this population.

Again, we thank you for examining these important issues and would be happy to provide any additional information or assistance that may be helpful to the Committee's work. Please feel free to contact Charlie Sabatino, Director of the ABA Commission on Law and Aging, at 202-662-8686 or Kristi Gaines in the ABA Governmental Affairs Office at 202-662-1763.

Approved by the ABA House of Delegates on August 13, 2007

AMERICAN BAR ASSOCIATION

COMMISSION ON LAW AND AGING
STANDING COMMITTEE ON ELECTION LAW
COMMISSION ON MENTAL AND PHYSICAL DISABILITY LAW

REPORT TO THE HOUSE OF DELEGATES

RECOMMENDATION

RESOLVED, That the American Bar Association urges federal, state, local, and territorial governments to improve the administration of elections to facilitate voting by all individuals with disabilities, including people with cognitive impairments, by:
(1) Studying and developing best practice guidelines for ballot design to maximize access;
(2) Adapting their laws, practices and technologies to permit "mobile polling" stations;
(3) Ensuring that instructions, signage, and other communications regarding elections are accessible; and
(4) Permitting sufficient alternative forms of identification verification to facilitate registering and voting.

FURTHER RESOLVED, That the American Bar Association urges federal, state, local, and territorial governments to ensure that no governmental entity exclude any otherwise qualified person from voting on the basis of medical diagnosis, disability status, or type of residence. State constitutions and statutes that permit exclusion of a person from voting on the basis of mental incapacity, including guardianship and election laws, should explicitly state that the right to vote is retained, except by court order where the following criteria must be met:
(1) The exclusion is based on a determination by a court of competent jurisdiction;
(2) Appropriate due process protections have been afforded;
(3) The court finds that the person cannot communicate, with or without accommodations, a specific desire to participate in the voting process; and
(4) The findings are established by clear and convincing evidence.

FURTHER RESOLVED, That the American Bar Association urges federal, state, local, and territorial governments to permit citizens to opt freely for absentee ("vote at home") balloting, permanently or temporarily, including at the time of registration, with the ability to change one's choice thereafter.

FURTHER RESOLVED, That the American Bar Association urges state, local, and territorial governments to improve access to voting by residents of long-term care facilities that provide room, board, and any level of personal care to persons in need of assistance. Such efforts should include the following:

(1) Establishing mobile polling stations in long-term care facilities under the supervision of trained teams of local election officials;
(2) Where mobile polling is not available, providing teams of election officials at the local level to conduct absentee voting in long-term care facilities; and
(3) Training residents, staff, and others involved in the care of residents about the rights of persons with disabilities in relation to voting and the community resources available to provide assistance.
(4) Clarifying that people who provide assistance in voting do not have authority to determine capacity to vote, and that assistance in voting is limited to assisting voters to express the voter's intent. If people who provide assistance are unable to determine the voter's intent, then, to avoid the possibility of fraudulent manipulation, they must decline to mark the ballot for the voter.

FURTHER RESOLVED, That the American Bar Association urges federal, state, local, and territorial governments to require and fund the development of voting systems that achieve universal design, such that all voters can cast ballots privately and independently on the same voting machine, adaptable to accommodate any impairment, including physical, sensory, cognitive, intellectual, or mental.

FURTHER RESOLVED, That the American Bar Association urges federal, state, local, and territorial governments to recruit and train election workers to address the needs of voters with disabilities, including physical, sensory, cognitive, intellectual, or mental disabilities.

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