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EXAMINING THE VOTING PROCESS—HOW STATES CAN BUILD ON RECOMMENDATIONS FROM THE BAUER-GINSBERG COMMISSION

HEARING

BEFORE THE

COMMITTEE ON HOUSE ADMINISTRATION HOUSE OF REPRESENTATIVES

ONE HUNDRED THIRTEENTH CONGRESS

SECOND SESSION

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EXAMINING THE VOTING PROCESS—HOW STATES CAN BUILD ON RECOMMENDATIONS FROM THE BAUER-GINSBERG COMMISSION

WEDNESDAY, JULY 23, 2014

HOUSE OF REPRESENTATIVES,
COMMITTEE ON HOUSE ADMINISTRATION,
Washington, DC.

The committee met, pursuant to call, at 10:33 a.m., in Room 1310, Longworth House Office Building, Hon. Candice S. Miller (chairman of the committee) presiding.

Present: Representatives Miller, Harper, Rokita, Nugent, and Brady.

Staff Present: Sean Moran, Staff Director; John Clocker, Deputy Staff Director; Bob Sensenbrenner, Deputy General Counsel; Yael Barash, Legislative Clerk; Erin Sayago, Communications Director; Kyle Anderson, Minority Staff Director; Matt Pinkus, Minority Senior Policy Advisor; Matt DeFreitas, Minority Professional Staff; Khalil Abboud, Minority Deputy Counsel; Thomas Hicks, Minority Senior Counsel; Mike Harrison, Minority Chief Counsel; Greg Abbott, Minority Professional Staff; and Eddie Flaherty, Minority Chief Clerk.

The CHAIRMAN. I am going to call to order the Committee on House Administration's hearing on examination of our Nation's voting process and the recommendations that were released by the Bauer-Ginsberg Commission in January of this year. And the hearing record will remain open for 5 legislative days so that members can submit any materials that they wish to be included therein.

The CHAIRMAN. And a quorum is present, so we will proceed.

I certainly want to thank my fellow committee members for being here today to discuss this very important issue. And the purpose of this hearing is to discuss how States and local election officials can build upon the recommendations that were outlined in the Presidential Commission on Election Administration report, otherwise commonly known as the Bauer-Ginsberg Commission report.

And I certainly want to thank the two co-chairs of the Commission for coming today. And we appreciate your time and your attendance to this. And we appreciate your service as well to the 6-month study that you conducted to identify ways in which our State and local election officials can improve the voting process for every American.

I was a former secretary of state in Michigan, the Chief Elections Official of my State, so I certainly understand the challenges. I like

to think I understand the challenges of election officials and what they face each and every day. It was my duty then, as it is for other secretaries of state, to ensure each and every election runs smoothly, that the voting process is absolutely accessible and understandable to citizens of voting age, and most importantly, that the results were accurate, as accurate as possible, when we go to elect our public leaders.

It was certainly all of our hopes that the Commission's recommendations would assist the States in useful and effective and nonpartisan ways so that every election official is able to meet their mission of a successful election. And since the administration of elections is inherently a State function, I was very hesitant then, as I am now, about Washington mandates, which is why actually, in full transparency—I mentioned this to our two witnesses—when the President created the Bauer-Ginsberg Commission, I didn't believe that a new Federal commission was needed.

However, as I looked at your report, I have to say that I was very—I don't know if I should use the word pleasantly surprised, but I was very encouraged that the report focused on utilizing good local governance over elections, and it made recommendations on different ideas that I think really can help locals improve upon their own voting process.

So we certainly didn't want to have the Commission's recommendations be shelfware. We thought it was a great idea. And I talked to my Ranking Member about having this hearing in a way that we can hopefully amplify some of the recommendations that the Commission has made.

It is certainly my belief that the primary role for Federal Government in election administration is not to dictate to local officials or to place mandates on them, but again simply to help in an advisory way so that State election officials can do their important work to make certain that every American citizen is able to cast their vote and make sure that their votes are counted.

I will just give you one example from my time as Michigan Secretary of State. We actually in our State have a very decentralized type of election system, administration, to the extent that we have over 1,800 various local units, various election clerks that are responsible for administering elections there. Every one of them, previously to what we called a qualified voter file, actually had maintained their own voter registration lists. It wasn't uncommon to go into some small areas, and you would find the clerks had put their voter registration lists in a cigar box in their closet or something.

But at any rate, Michigan is quite a large State. And what we did is we computerized it all. We melded it all together. And we now call it the Michigan Qualified Voter File. We actually eliminated over 700,000 duplicate voter registrations from the file when we were able to do that. We had quite a bit of pushback initially from using that kind of technology. It doesn't seem so high tech today, but at the time it was.

And it has worked really great. It has been a great product. In fact, it was cited by the Ford-Carter Presidential Commission on Federal Election Reform as a national model back in the day. And many other States have certainly used something like that and have improved upon it as well.

I mention that just because we did that without any Federal mandate. We did it without any Federal money. The State of Michigan determined that this was something we wanted to invest in to make sure that our State's election officers were able to accomplish their goal. So we did it ourselves. And many of the recommendations offered by the Bauer-Ginsberg Commission I think were great suggestions and ideas that the States can implement. And again, they can do so without the need for Federal financial assistance.

This report offered a number of recommendations, best practices, practical suggestions, such as online tools to assist election officials with determining how many voting machines should be deployed in which area, depending on the need. Certainly every State and local voting precinct tries to continually improve on their efforts to maintain up-to-date and accurate voter lists, and resources and education materials on how and where to vote, and of course ensuring that their ballot resources are properly deployed. They hope to accomplish these things while also hopefully reducing some of the administration costs that are associated with making all of this information available and streamlining the process.

We are all aware of the challenges election officers face when it comes to administering elections, but particularly when their budgets are facing constraints that force them to prioritize. However, clearly, the States want to have the best voting processes in place and one that fits best with their residents.

The voting process is really not a one size fits all, so even the best-intended Federal mandates I think can backfire when the process used historically in various States does not fit with that mandate. Every State should always strive to utilize good ideas and procedures that work for them, but they are wise to listen to good ideas from other States that can help them improve.

Today we are here to listen to our two witnesses on their experience with this Commission and what they learned from the various State and local election officials from around the country. And we are especially interested in hearing about what they have heard from election officials since the Commission's report was released, especially I think as we are thinking about the upcoming midterm election where many of the voting precincts will be in the spotlight again.

And I will also just take one moment of personal privilege and say that I was very pleased that the President also put on your Commission an individual that in my humble estimation is the best election officer in the Nation, Chris Thomas, who is the Michigan director of state elections. He is widely recognized as certainly really a leader in this field. And I know you had an excellent Commission to work with.

The right to vote is the foundation of the American democratic system, and the Framers of our Constitution tasked each and every one of our States with the immense responsibility of administering and protecting that right. And while we, the Federal Government, always seek better ways to be partners with the State, again we need to keep in mind their challenges and to avoid costly mandates that inhibit, actually could inhibit their ability to protect the integ-

rity of our electoral system. And instead we need to find ways to alleviate their burdens.

Preserving the integrity of our electoral process is certainly of the utmost importance, and I know that again every State and every election officer takes that role seriously.

Again, I want to thank you for coming, the two witnesses. We certainly are all looking forward to your testimony. We have read your opening statements.

And at this time I would like to recognize my ranking member, Mr. Brady from Pennsylvania, for his opening statement.

Mr. BRADY. Thank you, Madam Chairman. First of all, could we put another log on the fire? It is awful hot in here, isn't it? This is not one of the meetings we need to be too hot at. It is a good meeting.

The CHAIRMAN. Particularly on the House Administration Committee.

Mr. BRADY. Yeah. We thought we should be nice and cool in here.

But anyway, I would like to thank my friend Chairman Miller for holding this hearing today. Having an open dialogue is vital to solving the problems that plague our elections, and I thank the chair for calling attention to this issue of critical importance.

I also want to thank our witnesses, Mr. Bauer and Mr. Ginsberg, whose determination and expertise are critically important to fixing our elections.

Following the 2012 presidential election, President Obama set out to improve America's voting experience. In 2012, many voters, regardless of their political affiliation, were faced with unreasonably long wait times to cast their ballot. Other eligible Americans were disenfranchised altogether as a result of outdated voter registration policies.

Clean, efficient, and accurate elections are the cornerstone of our democratic system of government. It is crucial that we assure that all eligible voters have full and unimpeded access to the ballot box. This is why I believe the work of the Commission was so important.

I fully respect the autonomy of the States in administering their elections, but also believe that Congress, and more specifically this committee, has a duty to ensure no eligible voter is turned away for any reason. I will continue to advocate for equal access to the ballot box for all eligible voters.

Once again, thank you, Madam Chairman, and I look forward to the testimony of our expert witnesses.

And thank you for your participation not only in this hearing, but your participation again to making our election process work.

The CHAIRMAN. I thank the gentleman.

[The statement of Mr. Brady follows:]

Ranking Member Robert A. Brady Statement
Committee on House Administration
Hearing on "Examining the Voting Process – How States Can Build on Recommendations from the Bauer-Ginsberg Commission"
7/23/2014

I would like to begin by thanking my friend Chairman Miller for holding this hearing on the Presidential Commission for Election Administration today. Having an open dialogue is vital to solving the problems that plague our elections and I thank the Chair for calling attention to this issue of critical importance. I also want to thank our witnesses, Bob Bauer and Ben Ginsberg, whose determination and expertise are critically important to fixing our elections.

Following the 2012 presidential election, President Obama set out to improve America's voting experience. In 2012, many voters, regardless of their political affiliation were faced with unreasonably long wait times to cast their ballot. Other eligible Americans were disenfranchised altogether as a result of outdated voter registration policies.

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The Commission highlighted several major areas that need to be addressed to improve election administration in America. While I contend there is more we could do to ease the burden on state and local election officials, this is a respectable start.

Voter registration modernization:

Some states must update their methods of voter registration as well as their maintenance of voter rolls. The move to electronic registration is spreading, albeit slowly, with 20 states currently offering online registration and another four having passed but not yet implemented electronic voter registration laws. The benefits of modernizing voter registration are manifold.

1. **Modernizing voter registration is cost effective:** States that have moved to electronic voter registration are saving money. Washington, for instance, reported a cost saving of $125,000.00 in its first year of online registration while Delaware saved $200,000 after making improvements to its registration system.
2. **Modernizing voter registration increases registration rates:** In South Dakota, registration increased by an astounding factor of eight while Delaware has seen more than 80% of their registrations submitted electronically compared to the national average of less than 40%.
3. **Modernizing voter registration make Election Day easier for officials:** Defects in registration, often not discovered until the voter shows up to the polls, are common in antiquated registration systems, and can lead to disfranchisement of eligible voters and wasted time by election officials. Voter registration modernization makes record

keeping and verification easier and allows election officials to devote their time and resources in more impactful ways.

Access to the Polls:

Early voting is crucial to easing the burden on election official on Election Day and ensuring all eligible voters have ample opportunity to cast a ballot so no one will have to choose between voting and working. Currently, more than half the states offer early voting.

The benefits of early voting are obvious. By spreading voting over a longer period of time, election officials and voters are no longer burdened with the same long lines and unreasonable wait times that appear when there's only a one day-long window to cast a ballot. Expanding early voting will also increase turnout as voters are presented with dates and times that are less likely to conflict with unbreakable commitments such as work or child care.

As Chairman and Ranking Member of the House Administration Committee, I have sponsored bills such as the Voter Empowerment Act, the Streamlined and Improved Methods at Polling Locations and Early Voting Act, Voting Opportunity and Technology Enhancement Rights Act, and the Count Every Vote Act, all of which sought to expand and support early voting. It is my hope that early voting is eventually considered a standard of election administration in every state

Update voting machine technology:

Along with better ballot design, updating voting machine technology is critical to the successful administration of elections.

Complicated or overly long ballots can confuse voters and lead to improperly recorded votes. This risk is not just present for voters casting their ballot at machines as poor absentee and provisional ballot design can also distort the intention of the voter.

Obsolete or outdated voting technology presents multiple risks such as machine malfunction, security vulnerabilities, and deficiencies in the auditing process. As such, there is so singular solution to the problem of outdated voting machine technology because there are multiple problems.

It is important to note that in 2002, Congress passed the Help America Vote Act (HAVA), which implemented standards for voting machines such as notifying a voter when they've selected more than one candidate for a single office and providing an opportunity for voters to correct improperly cast ballots. HAVA also created the Election Assistance Commission, which is charged with collecting data and issuing guidance for HAVA compliance as well as accrediting laboratories with the expertise necessary to certify voting machines as compliant. I still believe in the EAC's mission and their ability to fully execute their statutory duties despite current partisan wrangling over the agency's future.

There is ample room for Congress to assist states in this area. We must exercise our oversight authority to either promulgate new standards if they are out of date or enforce currently existing standards if they are sufficient.

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Clean, efficient, and accurate elections are the cornerstone of our democratic system of government. It is crucial that we ensure that all eligible voters have full and unimpeded access to the ballot box. This is why I believe the work of the Commission was so important.

I fully respect the autonomy of the states in administering their elections, but I also believe that Congress -and more specifically, this Committee, has a duty to ensure no eligible voter is turned away for any reason.

I will continue to advocate for equal access to the ballot box for all eligible voters. Once again, thank you Madam Chair and I look forward to the testimony of our expert witnesses.

The CHAIRMAN. I now recognize the gentleman from Mississippi for his opening statement.

Mr. HARPER. Thank you, Madam Chair.

And thank you, Mr. Bauer, Mr. Ginsberg, for your work on this and for your service and for sharing the experiences and giving us much to consider.

The election process is very dear to me, not just because I am an elected official, because it really embodies self-governance and how we do things in this country. So I began working on elections and political campaigns as a college student, like many individuals. Before I came to Congress, I served as a county party chair for about 8 years, was one of those souls down in West Palm Beach, Florida, during the recount in 2000 as a Republican observer. So it is quite a process to watch and participate in.

But I think it is important to participate in the election process, and we wish everyone would. I know from firsthand experience in running numerous elections at the county level that it is not an easy task. Sometimes we don't anticipate as heavy a turnout as it winds up being or misjudge where the turnout will be and misallocate voting machines. Machines break. Finding and training poll workers, who in my home State work about 16-hour days for not a lot of money, can be quite a challenge also.

When everything runs smoothly, few people notice. But when a problem occurs, everybody screams and looks for the problems, whether they may claim fraud or corruption. I believe your Commission primarily grew out of concerns about long lines and some difficulties with voting in the 2012 election in what was really limited to a few jurisdictions. The assumption too many are quick to make is that some kind of voter suppression must have taken place.

To me, long lines at voting precincts mean that a lot of people are voting, and that is always a very good thing. It is interesting how the media portrays people standing in long lines in other countries, whether it was in Iraq or Afghanistan or other countries, that those folks who wait in long lines are heroes, which they are. But long lines of Americans standing in line for a couple of hours is portrayed as a broken system.

Now, this is not to say that we can't do better, and that we should, and that is why I think the focus of your report, we need to look at how we can make it easier for folks to vote. I am all in favor of improving the process. I am not in favor of weakening accountability. I have some concerns about early voting, and I worry about the integrity of electronic voting systems, both for voting and for recapping elections. There were allegations of a serious attempt of hacking of the electronic vote tabulation system during the recent Ukrainian presidential election by another foreign power in order to change the outcome. That is always disturbing.

New technology is great, but we must have sufficient safeguards. And in my view, primitive as it may sound, there is no greater safeguard than a paper ballot.

I appreciate the work you did on the Commission and the report. And again, thank you for your appearances today. We look forward to your testimony.

And I yield back.

The CHAIRMAN. Thank the gentleman.

Any other opening statements?

Let me introduce our witnesses, then. First, we have Robert Bauer, who is a partner at Perkins Coie. In 30 years of practice he has provided counseling and representation on matters involving regulation of political activity before the courts and administrative agencies, of national party committees, candidates, political committees, individuals, Federal office holders, corporations and trade associations, and tax-exempt groups. He served as the White House counsel to President Obama and returned to private practice in June 2011.

In 2013, the President named Bob to be co-chair of the Presidential Commission on Elections Administration. He was general counsel to Obama for America and the President's campaign organization in 2008 and 2012. And he is general counsel to the Democratic National Committee.

And our second witness, again the co-chair of the Commission, is Benjamin Ginsberg, who is a partner at Jones Day in Washington, D.C., where he represents a variety of clients on election law issues, particularly those involving Federal and State campaign finance laws, ethics and gift rules, pay-to-play laws, election administration, government investigations, communications law, and election recounts and contests.

He recently served, as we say, as a co-chair of the Presidential Commission on Election Administration. Prior to joining Jones Day in 2014, he served as national counsel to the Bush-Cheney Presidential campaigns in the 2004 and 2000 election cycles and played a central role in the 2000 Florida recount. In 2012 and 2008, he served as national counsel to the Romney for President campaign, and he has also represented campaigns and leadership PACs of numerous members of the Senate and House, as well as to the national party committee.

So we have two—talk about two experts in a very bipartisan way here before us today. I think this will certainly be interesting testimony.

And I would now recognize Mr. Bauer for his opening statement.

STATEMENTS OF MR. ROBERT F. BAUER, CO-CHAIR, PRESIDENTIAL COMMISSION ON ELECTION ADMINISTRATION; AND MR. BENJAMIN L. GINSBERG, CO-CHAIR, PRESIDENTIAL COMMISSION ON ELECTION ADMINISTRATION

STATEMENT OF ROBERT F. BAUER

Mr. BAUER. Thank you, Madam Chairman, members of the committee, Ranking Member Brady. I am very pleased to be here with my co-chair, Ben Ginsberg. We have become a bipartisan traveling party on this subject. And I am glad to go first. I told your staff before we came, I am always pleased to be Ben Ginsberg's warmup act.

I also would like to say one thing, Chair Miller, about Chris Thomas, because, oddly, I had pencilled in his name to the written testimony to say that he is, in fact, one of the finest election administrators in the country, and a member of our Commission who I think it is fair to say, and Ben will agree with me, performed out-

standingly, and is an important part of the implementation of the recommendations of the report that in the division of testimony that Ben and I have agreed upon Ben will talk about.

But let me just say very briefly—and I have submitted a statement for the record, so I won't duplicate it—but let me say a little bit something briefly about the approach that we took and also some of our experience with the positive reception of the report and how that is shaping how we look at what lies ahead, including the effort to implement this report.

Our outstanding research director, Nate Persily of Stanford Law, was fond of saying throughout our experience with the Commission that we were working not so much on a report as on a project, on a long-term project. And we view the report, in effect, as having kicked something off with its publication; not ending the day it was published, but, in effect, opening up with its publication opportunities to work on these recommendations that are very, very important to us and how we perceive the success of what we have done.

Now, of course, the origin of the Commission's work is fairly traced to the problem of long lines that obviously received a lot of attention when the Commission was established. But the Commission of course was charged with looking at a range of issues that election administrators face. And of great importance to us, and I want to stress it here today, is that it is important that we view election administration as a subject of public administration. Obviously, politics enters into this discussion all the time. But at bottom and throughout our work we tried to focus on election administration as a topic of public administration, and to look at the service that we provided our voters as very similar to the service that our best companies would provide their customers. We have to treat the voters with the same respect and hope to achieve on their behalf the same level of performance and efficiency.

When we think about the problems that we encounter in the voting process, we know that any one problem we identify could have many sources. So if we think about lines, for example, there may be any reason, number of reasons why lines prove to be impermissibly or inappropriately long. That could include the design and administration of polling places, errors in voter registration lists, poor training programs for polling workers. There are a variety of reasons. So the problem has to be attacked at various different points.

Throughout our consideration of the issues, we looked very hard at data. Of great importance to bipartisan election administration is to stay close to the facts, to the data, to the best understanding of how elections are administered and what goes wrong with elections. And that is why we were well served by the senior research director we had, both a political scientist and a law professor, Professor Persily, who helped guide the Commission to the best sources of information that we have about what really takes place in the conduct of elections and what really lies behind some of the problems that our voters confront.

So with those few preliminary observations, let me just add a couple more.

We heard at the outset of our work from a variety of sources, from election administrators around the country, that they were

concerned that one size of reform did not fit all. And we understand that there is a concern with one size does not fit all, that it is possible that what works in one jurisdiction may not work in another. But we are confident, and I think this is true of all of the commissioners, that our recommendations are suitable for the vast majority of jurisdictions.

All election administrators, as the chair well knows, as a former secretary of state, confront a similar set of challenges, from the registration of voters and the verification of eligibility, to polling place management and equipment acquisition, to the successful transmission and tally of the results. And we found that our administrators across the country, whom we heard from in hearings, in formal hearings, and also in the court of testimony that we elicited, all agree that there were fundamental responsibilities that election administrators engaged in that could be addressed with solutions of common application.

Those administrators, we want to stress, I certainly want to stress, I think Ben would agree, deserve all the support that they can get. They are asked to perform at the highest levels, but routinely provided with inadequate levels of support, and in particular inadequate levels of resources. Our elections occur periodically in this country, but the issues of election administration receive generally only infrequent attention. And the Commission, while not making any specific recommendations about the level of resources required, did want to and did stress that at the end of the day States and localities do need resources to carry out the functions that they are engaged in.

And this question of resources is deeply implicated in a second point that I wanted to raise out of the report before this committee, and that is the resources that will be required, the thinking and the planning that will be required to meet the challenge that we face in the next generation of voting technology.

The Commission has described this as a looming technology crisis. It didn't mean to exaggerate, and I don't think it did exaggerate. Election administrators across the country, everywhere, Democratic and Republican, expressed concern that we are facing a major problem with transitioning from the technology currently in use to the technology that we will need in elections still to come. And we have to listen carefully to them. They are the ones who are putting on elections. They are the ones who are ordering the machines, testing the machines, using the machines. And that is what they are telling us.

This importance of resources is matched by the very important question of how election administrators allocate the resources that they have. And here we tried to supplement the report that we issued with the provision of online tools that would assist administrators in the management of the polling place to avoid and anticipate long lines.

The tools that the Commission recommended are still posted online and available on the Cal Tech-MIT Technology Project Web site. They are open source. They are available for improvement. And as Ben will describe shortly, we are going to continue to work with election administrators to make these tools widely available,

to work with them, to improve them, and to try in other ways to be supportive of their efforts to address the lines problem.

And finally, one quick point, because I see that my time has expired. The Commission's focus was on State and local election administration and the means of improving it through administrative reform and best practices. We didn't make Federal legislative recommendations. But we did hear testimony across the board from jurisdictions that there are Federal statutes that protect discrete populations of voters—military voters, language minority voters, disabled voters—that simply are not attracting the level of compliance and the success of compliance that they should.

One notable exception is the MOVE Act, that affects military voters, which seems to have been quite successful by all accounts. But other statutes that we have confronted, the ones that I have cited, have not been similarly as successful as they might be in implementation. And in particular—and here I am channeling Chris Thomas, because nobody expresses this better, in a more informed way or, frankly, more tartly than Chris Thomas—we have a major problem with departments of motor vehicles across the country who are not attending successfully to their registration responsibilities under the National Voter Registration Act. And this is something that we hope will receive attention across the country.

So the Federal Government has established an important presence in these areas and compliance is critically important.

So with that, I would like to close by saying we are pleased with the reception of the recommendations. We hear continued offers to continue to work on those recommendations from State and local election officials. And where we go from here, this phase of implementation is something I would like to turn over to my co-chair, Mr. Ginsberg, to discuss further.

And I would say before I do so, I am not surprised, but it was an absolute pleasure to work with Ben Ginsberg on this. And I would never say so privately, so I thought I would say so publicly.

The CHAIRMAN. Thank you very much. We appreciate that, Mr. Bauer.

[The statement of Mr. Bauer follows:]

The Work and Recommendations
of the
Presidential Commission on Election Administration

Testimony before the House Administration Committee
July 23, 2014

Robert F. Bauer

Thank you for your invitation to testify with my co-chair Ben Ginsberg about the work of the Presidential Commission on Election Administration. I am happy to provide background on the Commission's approach to the task assigned it by the President and the significance of the positive reception we have been very gratified to have had. Ben then will address the recommendations in more detail and, of utmost importance, the program for supporting their implementation.

Of course, the origin of the Commission's work is fairly traced to the problem of long lines at the polls, but the Commission was charged with addressing a wide range of issues that adversely affect eligible voters in achieving access to the polling place. By design, the Commission was structured to address election administration as a topic of public administration, and to think of service to our voters as no different than the "customer service" they expect from our business and other service providers.

And in thinking about any one problem with access to voting, we find that it may have many sources. The same is true of lines: these can develop for a range of reasons, including but not limited to the design and administration of polling places and errors in voter registration lists.

In the Commission's consideration of these issues, it sought always to locate and consider the best data. This a key path to better election administration, and it certainly helped Commission members on a range of issues to arrive at nonpartisan perspectives and solutions. In this work, the Commission was extraordinarily well served by our Senior Research Director, Professor Nate Persily of Stanford Law School, a nationally recognized expert on election law.

I would offer a few more general observations:

While we heard at the outset of our work the concern among administrators that "one size [of reform] does not fit all", we have found general, bi-partisan

agreement that our recommendations are suitable for the vast majority of jurisdictions. Of course, all election administrators confront a similar set of challenges--from the registration of voters and the verification of eligibility, through polling place management and equipment acquisition, to the successful transmission and tally of the results. And since the Report was issued, we have enjoyed the outstanding support, interest and engagement of the state and local election administration community and its leadership.

On this point, Ben and I would agree that election administrators deserve all the support they can get. They are asked to perform at the highest levels—as they should be—but the resources provided to them are routinely inadequate. Elections may occur relatively frequently in our nation, but issues of election administration only infrequently draw public attention. The Commission did not attempt to make specific recommendations about the level of resources required but the issue must be borne in mind when thinking about what is needed for successful election administration.

Certainly this question of resources is deeply implicated in the challenge we face as a country in meeting the challenge of providing for a new and updated generation of voting technology. The Commission has described a looming technology crisis: it did not mean to exaggerate, and it was not, in fact, exaggerating. We heard grave concern on this topic expressed wherever we went in the country—in hearings, and in views brought to our attention throughout the entire period that we solicited expert opinion. We have to respect the work and expertise of the election administration community and listen carefully when they explain that a problem of this magnitude lies ahead for our voters.

The importance of resources is matched by the significance of how administrators allocate the resources they have. Here we have supplemented the analysis of the Report with the provision of online tools that will assist administrators in managing the polling place to anticipate and avoid long lines. These tools are provided on an open-source basis, and we want to reiterate today that these remain available for improvement and refinement, and will be permanently hosted on the web site of the Cal Tech-MIT Voting Technology Project. Administrators throughout the country have been pleased to have access to these tools, and in the manner Ben will describe shortly, we stand ready to work with them on improving and expanding these tools and their use, and in supporting them in other ways in the administration of the polling place.

We should add that the Commission's focus was on state and local election administration and the means of improving it through administrative reform and best practice. We did not make federal legislative recommendations – that was outside of our charge – but we heard, and our Report reflects, much testimony about the extent to which various, and too many, jurisdictions have failed to comply with federal laws enacted to protect particular populations of voters. With the exception of the law protecting military and overseas voters, who have benefited from the general success of the MOVE Act, other statutes have not attracted the level of compliance effort that this Congress or the public expects.

We have emphasized our concern about inattention on the part of public assistance agencies, and in particular Departments of Motor Vehicles, to their registration responsibilities under the National Voter Registration Act. We have also noted inconsistent compliance with provisions of the Voting Rights Act enacted to support language minority voters. And we heard convincing testimony from disability rights groups about the inadequacy of compliance with the relevant provisions of the Americans with Disability Act and HAVA.

The federal government has established an important presence through these enactments, and it is vitally important that we see significant improvement in compliance. The Commission made a point of this in its Report, and I stress it here again today.

As our outstanding Senior Research Director, Nate Persily, has been fond of saying, the Commission work is more a project than just a Report. So in a sense, our work began with the publication of the Report. Ben will now discuss what we continue hope to accomplish, and how, in this next phase—the phase of implementation.

I thank this Committee again for your invitation and for your interest, and I would be glad to answer your questions.

The CHAIRMAN. And the Chair recognizes Mr. Ginsberg.

STATEMENT OF BENJAMIN L. GINSBERG

Mr. GINSBERG. Thank you, Madam Chair, Ranking Member Brady. Thank you for having us here today.

We very much appreciate the opportunity to talk about the Commission and its recommendations and how we plan on implementing its best practices and advice we have for State and local jurisdictions.

It was a pleasure to work with Bob. We did enjoy the opportunity to step out for a bit, bring our perspectives from being in the partisan trenches for many years. The members of our Commission, Chris Thomas and his seven colleagues, provided a great deal of expertise to us. Nate Persily was remarkable in the breadth of research. We held hearings around the country and numerous meetings with interest groups and individuals concerned about the process, and that helped inform the recommendations and best practices that we presented in the report.

Two general points. First, Bob and I are both very proud of what is in the report, the way that we have tried to deal with the situations that State and local officials who put on elections, and attempt to ease the problems which serve as obstacles to duly qualified citizens being able to cast their votes. That was our mission and what we have tried to do in the report. We would urge you to read the report, and this summary of our testimony will touch on some of the highlights.

There are no Federal mandates in the report. We believe the Commission came up with practical solutions for State and local administrators to make the voting experience better for all citizens. The report passed with bipartisan and unanimous agreement.

Secondly, we were certainly acutely aware that the actual implementation of this or any report is the really hard part, especially in an area like election administration that is so decentralized in the our country. Thanks to the Bipartisan Policy Center here in Washington, there is an ongoing plan to implement the Commission's recommendations and best practices, which I look forward to describing in a moment.

The area into which this report delves, elections and voting, is certainly one where there can be conflict between Republicans and Democrats. But it is also a subject where Republicans and Democrats can agree and do agree on the basic principle, that every legally registered voter has the right to be able to cast his or her ballot easily and without barriers. For that reason, there is a positive agenda of reforms that can be made in this area, and we believe that the report provides that blueprint.

For the solutions, the Commission recognized at the outset that our elections are administered by approximately 8,000 different jurisdictions, largely using volunteers who often don't receive proper training. As a result, achieving uniformity or Federal solutions that actually work in our elections has proven challenging.

There are individual specifics included in the written testimony and of course in the report itself. But in terms of a positive agenda moving forward, I particularly urge you to look at long lines, a problem that should not exist, for which we provide practical solu-

tions and recommendations. We found after our study that, in fact, the solutions, as Bob mentioned, are identifiable and solvable. And the report and the Web sites provide tools to be able to do that, as well as the practical, on-the-ground best practices that others who have faced this situation have recommended.

Online registration and two programs that help the States check the accuracy of their voter registration lists against those of other States each received support across the political spectrum. Accurate voter lists is something that the right and the left agree is necessary, whether for the purpose of providing greater efficiency, more accuracy, cost savings, online registration, and the two programs are helpful ingredients to a positive agenda.

Reducing the barriers to voting that Bob mentioned faced by military overseas voters, disabled voters, language minorities, is all an important part of enforcing laws that are on the books and doing the right thing for our citizens. And again the practical recommendations and best practices are included.

The simple proposition is that, as Bob said, we do have two major things to deal with. One is the technology crisis. We did not meet a single State or local administrator who either was satisfied with the machines that their jurisdiction was using at the moment or saw a solution in what was currently available on the market or was pleased with the certification process that makes it much more difficult to be able to move forward with technological advances that have taken place in the rest of society.

And the adequate physical facilities that communities rely on is often schools. Yet there are problems with using schools because of safety concerns. That is a conflict, the rights of voters and the safety of children, that should not be allowed to conflict. The report recommends having in-service training days on election day so that schools can be used. But that is something that State and local administrators, that we wish to try and enable them to achieve.

In terms of the implementation, as I mentioned at the outset, it is really important to get the recommendations and best practices into State and local jurisdictions and being able to use on that level. We are particularly thankful, for that reason, to the Bipartisan Policy Center, which has agreed to house a program whose goal is to get the recommendations and best practices implemented by the States and localities.

Specifically, the center has augmented its staff by bringing on two people very involved with voting issues, one an alum of our Commission, the other a former State election official. They will be working directly with States and localities looking for opportunities to implement legislation, looking for opportunities to go into some of the polling places with historically long lines to be able to implement the solutions to help that serve as a test case for others.

The BPC project will also work on improving the certification process for new technology and look for legislative opportunities on online registration, legislation to ensure the place of schools as voting places, and other improvements that are mentioned in the report.

With that, let me reiterate that there is a positive agenda with which Republicans and Democrats can move forward so that all le-

gally qualified voters can cast their ballots without barriers that all agree should not be there.

Thanks again for having us here today and letting us report to you on our recommendations, best practices, and how we will implement them.

The CHAIRMAN. Thank you very much, gentlemen.

[The statement of Mr. Ginsberg follows:]

TESTIMONY OF BENJAMIN L. GINSBERG
CO-CHAIR, PRESIDENTIAL COMMISSION ON ELECTION ADMINISTRATION
PARTNER, JONES DAY
BEFORE THE HOUSE ADMINISTRATION COMMITTEE
JULY 23, 2014

Thank you for inviting us to testify today on the Report of the Presidential Commission on Election Administration and how States can build upon the Recommendations and Best Practices in the Report.

Two points about the Report. First, both Bob and I are proud of the work of this Commission. The President charged the Commission with making recommendations to the state and local officials who put on our elections to ease a number of problems which serve as obstacles to duly qualified citizens being able to cast their votes. We believe the Commission came up with practical solutions for state and local election administrators to make the voting experience better for all citizens. The Report passed with bipartisan and unanimous agreement.

Secondly, we are acutely aware that the actual implementation of this (or any) Report is the really hard part – especially in an area like election administration that is so decentralized in our country. Thanks to the Bipartisan Policy Center here in Washington, there is an ongoing plan to implement the Commission's recommendations and best practices, and which I look forward to describing in a moment.

The area into which this Report delves -- elections and voting -- is one where there can be conflict between Republicans and Democrats. But it is also a subject where Republicans and Democrats can agree on the basic principle – that every legally registered voter has the right to be able to cast his or her ballot easily and without barriers.

Bob and I brought to the Commission a shared history of being on opposite sides of partisan battles for a lot of years. Our eight fellow Commissioners and Research Director (Nate Persily of Stanford University) were a remarkable combination of professional election administrators and leaders of private sector customer service companies from whom Bob and I learned a great deal and with whom we tremendously enjoyed working. Great participation by elections officials and academicians from around the country added greatly to our understanding of the subject.

From our shared history in the trenches of partisan warfare, we both recognized that there are problems with our system of voting. This Commission presented a unique opportunity for us to address a series of problems that both Republicans and Democrats know are problems about which we need to do something.

Fixing these problems should not be a partisan issue. It is trying to help get right something that very much needs to get right. In fact, it is so important to get right that it deserves doing even if it doesn't satisfy all the issues that one party or another believes need to be fought in this area.

As for solutions, the Commission recognized at the outset that our elections are administered by approximately 8,000 different jurisdictions largely using volunteers who do not receive much training. As a result, achieving uniformity, or federal solutions that actually work, in our elections has proven challenging.

Because of that, our Report's recommendations and best practices fall into two areas. First are common sense solutions for those jurisdictions that do experience challenges in the areas detailed in the President's Executive Order. Second, we address some big picture challenges that virtually all jurisdictions either face now or will face in the not too distant future.

In terms of improving the voters' experience when they cast their ballots, let me touch on several of the Commission's specific recommendations that we believe make up a positive agenda for states and localities to adopt.

Long lines, the issue that initially launched the Commission, presents a problem we wanted to address head on. After conducting four hearings around the country and dozens of meetings with interested groups, researchers in the field and individuals, including those in charge of a number of counties in which the longest lines occurred, the Commission issued a series of recommendations and called attention to a number of on-line tools to deal with a problem that appears both identifiable and solvable.

Long lines resulted most often from a combination of administrative decisions and poor facilities. The Commission proposed a series of practical recommendations and best practices that can be implemented by any jurisdiction which had polling places with long lines. The tools, which are all publicly available at supportthevoter.gov and linked to their permanent site at the Cal Tech-MIT Voting Technology Project, also allow the public to see how elections officials can improve a historically bad situation.

The tools include on-line resource calculators which can help elections officials anticipate needs and manage the flow of voters at the polls; models with which to analyze the historic reasons for wait times at specific polling places and suggestions on how to develop plans to avoid them in the future, and recommendations on how to gain access to industrial engineering tools regularly employed by the private sector to manage customer service queues.

Long lines can also be ameliorated by implementing a series of no-cost or low-cost best practices the Commission saw utilized in jurisdictions around the country: improving the physical design of polling places to maximize the flow of voters; using "line walkers" to address potential problems among voters before they reach a point where they slow a line; greater availability of real-time line length information through an internet feed from polling places in a jurisdiction; the study of voter registration data combined with party/campaign turnout operations to anticipate higher than historic turnout at certain polling sites; pre-testing how long it takes voters to fill out sample ballots to help gauge the time it will take to vote; providing sample ballots to voters before they vote so they can study their choices before entering the voting booth, and being conscious of ballot length, especially in Presidential election years when turnout is historically greatest.

On-line registration -- Whether to help ensure that only duly qualified registered voters vote or to facilitate more people being able to vote more easily, the Commission found agreement and support

across the political spectrum for more accurate voter registration lists. To further that goal, the Commission made two recommendations.

First, the adoption and use of on-line registration for the ease it provides the voter, the enhanced accuracy it provides the system and the efficiencies it can provide to perpetually strained budgets. Supportthevoter.gov also includes on-line tools that can be used by state and local jurisdictions and, where permitted by law, by non-government groups to register voters accurately and easily. These on-line open-source programs can be used and branded by groups and governments to facilitate accurate, convenient and efficient on-line registration.

Second, we recommend that all states join two existing and complimentary programs – the Interstate Voter-Cross Check program and the Electronic Registration and Information Center. Both allow states to share data and synchronize voter lists so they can, on their own initiative, come as close as possible to having an accurate database of all eligible voters.

Military and overseas voters -- Serving in the military or living overseas, and especially serving in the military overseas, should not be a barrier to voting. There has been improvement over the last few years, but it is still not as good as it should be. We provide a series of recommendations and best practices – including specifics on how states and counties can make their web sites better serve these voters and how to fix a simple flaw in federal registration and voting forms to reduce confusion for those serving or living overseas.

Disabled voters – Both policy and law require accessible polling places for the nation's voters with disabilities, a population that will increase as the Baby Boom generation ages. The Report makes numerous suggestions for increasing accessibility to polling places (another reason being able to use schools as polling places is important since schools must meet basic accessibility standards) and for enhanced poll worker training to meet these needs.

Language minorities – For both the disabled and for those with language proficiency issues, we urge local officials to listen to their voters about their local polling place needs. Bilingual poll workers with increased training can make a real difference in the polling place, as can ballots and ballot materials with plain language and design.

Compliance with existing laws – throughout its deliberations, the Commission heard testimony that existing federal laws impacting voting were not being adequately followed.

For the military, it is the Uniformed and Overseas Citizens Absentee Voting Act (UOCAVA) and the Military and Overseas Voter Empowerment (MOVE) Act, which despite the strides, means that many voters covered by these Acts still find difficulties registering to vote, receiving their ballot in time to be voted, or having their voted ballot reach their election office in time to be counted.

Disability rights groups noted concerns with the enforcement of the relevant provisions of the Americans with Disability Act (ADA) and Help Americans Vote Act (HAVA).

For language minorities, the Commission heard from witnesses and experts about failures to comply with Sections 203 and 208 of the Voting Rights Act, which provides assistance to voters.

The federal election statute most often ignored, according to testimony the Commission received, is the National Voter Registration Act (NVRA or "Motor Voter") whose compliance varies widely among the states.

If a law is on the books, it should be enforced.

Early voting – The Commission's goal was to make recommendations that would make it easier for all eligible voters to vote. A majority of states, with both Republican and Democratic state officials leading the charge, now have early voting and told us that early voting is not only here to stay but increasingly demanded by voters. The details of the number of days and hours will vary by state and county and locality, and are decisions best made there. But that early voting does reduce wait times and provide voters with choices is clear.

Data and Testing – Let me also highlight a series of recommendations from the Report that should be self-evident but are not. That is the need for more data and testing in this field. There should be regular post-election audits of machines for their accuracy and performance, and the sharing of that information between jurisdictions to spot problems or make more intelligent purchasing decisions.

We were surprised by the lack of standard data about elections. As it turns out, there is not uniform data on voting from the different jurisdictions. As our political scientist friends tell us, more data uniformly collected about results and process would lead to more and better solutions of many of the problems we have with voting today.

Let me turn to a couple of the key big picture issues.

The state of our voting equipment and technology is an impending crisis on which the Commission felt a need to shine a spotlight. The machines now being used in virtually every jurisdiction – purchased 10 years ago with HAVA funds – will become obsolete in the next 10 years. Voting equipment generally has not kept up with technological advances in our daily lives. The current equipment is expensive and unsatisfactory to virtually every election official with whom the Commission spoke. That's heavily due to a federal certification process that is broken and must be reformed. This is a subject to which few are paying attention and which will not end well on its current path.

Adequate physical facilities in which people can vote is an issue we heard about consistently. We address the elements that go into making a smoothly functioning, accessible polling place. In most communities, those facilities are schools. The Commission strongly recommends the use of schools as polling places, but officials in an increasing number of jurisdictions are citing safety concerns as a reason for not making schools available for voting. Adequate facilities to vote and safety for our children cannot be competing interests. For that reason, the Commission felt a strong need to call attention to the problem and to recommend that to address security concerns, Election Day should be scheduled as an in-service day for students and teachers.

Implementation: As I mentioned at the outset, Bob and I and our fellow Commissioners are proud of the content of this Report. But we recognize that the key to any Report is getting its recommendations and best practices actually implemented.

The Commission officially concluded its business with the presentation of our report to the President. That is why we are particularly thankful to the Bipartisan Policy Center, which has agreed

to house a program whose goal is to get the recommendations and best practices implemented by states and localities.

Specifically, BPC has augmented its staff by bringing on two people very involved with voting issues – Tammy Patrick, a member of the Commission and a former Maricopa County, Arizona elections official, and Don Palmer, the former Virginia Secretary of State. Their job will be to look for opportunities in states to enact the recommendations Bob and I have outlined. Once identified, they will use their considerable expertise to travel to states to assist legislators and elections officials. Bob and I and the other Commissioners have pledged to similarly help states draft and enact legislation under the auspices of the BPC.

In terms of helping with specific issues, BPC will work with the MIT Voting Technology Project to use its expertise identifying the causes of long lines to implement the Commission's recommendations and best practices in polling place that have been historically problematic.

The BPC project will also work with state elections directors, states, voting machine vendors and those who must certify equipment to find a way forward from the technology crisis.

In terms of online registration, the BPC project will identify key states for passing legislation, continue to recommend adoption of the Interstate cross-check and ERIC projects and work to improve the coordination between voter registration lists and the Department of Motor Vehicles databases.

The continued and enhanced use of schools and opportunities for early voting are the other subjects upon which the BPC project will focus.

With that, let me reiterate that there is a positive agenda with which Republicans and Democrats can move forward so that all legally qualified voters can cast their ballots without barriers that all agree should not be there.

Thank you again for having us here today and letting us report to you on the recommendations and best practices of the Presidential Commission on Election Administration.

The CHAIRMAN. Let me just start with a question. And I think it was really sort of the impetus for the President putting the Commission in place, really, was the long lines that we all watched. And I have to tell you, and I don't mean to always talk about my experience as secretary of state, but we all come from our own prism of whatever our personal experiences were. And we are looking at sort of the usual suspects of where these long lines were, because it wasn't all over the country, it wasn't in some of the precincts that had heavy, heavy, heavy voter participation.

And in a State like mine that doesn't have either early vote or same-day registration or any of those kinds of things, it doesn't even have no-reason AV voting, I am not going to say we had no lines anywhere, but there was no reports of anybody—I mean, what we saw on the TV that was happening in one State was really happening in one State, from what I would tell. There were a couple of other areas.

I mean, I talked to some of our other election officials afterward and said, you can just see what happened there. They didn't have enough voting equipment. I mean, it is pretty fundamental things, I think, is my personal opinion. They didn't have enough voting equipment, they hadn't had good education, training for the precinct. The election workers that they had, as you say, many of them, most of them are volunteers or else they just hire them as they need. That is not their full-time job.

They perhaps didn't take into account the number of registered voters in that particular precinct and had them put in the proper numeric order and all of these kinds of things. Again, I think it is sort of a fundamental thing.

So actually, in the case of Florida, not to point on Florida, but I thought the governor of Florida did exactly the right thing, actually, by tasking their secretary of state with taking a look at what had happened there and making some recommendations, which they did. And I looked at that report, and it was very much along the lines of what I am talking about here, the kinds of problems that they found.

But is there anything in particular that you think, as you have looked at that—I mean, again, talking about Federal mandates, you can't mandate good management, obviously—but what kinds of things we could help amplify the Commission's recommendation so that election workers who do experience these kinds of long lines, what can we actually do? Obviously, nobody wants to look at these very long lines.

There was one individual in particular that I know the President pointed to as an elderly person who had to wait for a long time, and she was trying to early vote. And I was just thinking, why didn't they vote absentee or perhaps they could have some line workers come out and, for goodness sakes, offer her a chair or something? I mean, some of these basics kinds of things. Again, it is not really a Federal mandate.

So I am not quite sure what we can do to assist in that area, other than pointing out these very basic things. And what is your, to either of our witnesses in regards to the long line, is there anything that was unbelievably unique that caused these long lines,

other than what most election officers would recognize immediately?

Mr. GINSBERG. It seemed to vary very much by the jurisdictions where there were problems, with some commonalities. But, again, when you have 8,000 different jurisdictions administering elections, uniformity is not one of those things that is going to come naturally.

In the places where there did seem to be long lines, and we held a field hearing in Miami and heard from the administrators of most of the counties that had the line problem, part of it is administrative decision making, part of it is the facilities in which polling places actually take place. And part of it is just kind of what you mentioned, which is, recognizing which particular precincts are going to have a greater influx of voters because of new registrations.

Even in the counties around the country where there were the worst lines, it was not at every polling place, it was only at some of the polling places, and actually a relatively few number of the polling places where there were long lines. It is a problem that should be dealt with.

The resource tools that are at supportthevoter.gov and on the Cal Tech-MIT Web site that Bob mentioned provide a way that not only election administrators, but actually citizens who want to deal with the number of machines available, the historic voter flows, both in terms of raw numbers and when they occur during the day, can all provide that.

The report also goes into commonsense solutions, like providing sample ballots to people beforehand so they can read the ballot before they go into the polling place and help with their decision. Line walkers who go around and spot problems while they are waiting in line before there are people who are actually going through the process and slowing everybody else down.

Providing big central rooms where people can wait to vote. You go in, you take a number, and then you sit in a comfortable place so you don't have to stand on line outside, if the facilities like schools can accomplish that, are all part of the practical solutions that can occur.

The CHAIRMAN. Mr. Bauer.

Mr. BAUER. I agree with what Ben has said.

You asked also as part of the question, who is helping them? And what are the relative roles, Federal Government, the States themselves in the initiative that you described to the Florida governor.

And what I think this Presidential Commission attempted to do was to draw together the best learning and in some cases to encourage new learning about administrative problems that lead to long lines is one of the problems that we looked at and to give in a very uniform, very focused way, to give election administrators a way to think about the problem and the possible solutions.

So, for example, we unanimously found that election administrators should have 30 minutes in mind as the wait time for voters, 30 minutes should be effectively the maximum, not that that is a goal that could always be achieved, because there will be circumstances in which, for reasons beyond the administrator's control, the line wait will be longer than 30 minute. But in those

cases, there ought to be contingency plans that the administrators can put into effect if they know that there is going to be a 30-plus-minute wait.

And Ben is correct that the problem is a problem that is found in pockets around the country. But we found that the total number of voters affected in one way or the other by lines longer than 30 minutes or lines longer than an hour is 10 million voters, and that is a significant number of voters and arguably could expand.

And so what we attempted to do was, as a Presidential Commission, to take the best learning, encourage some new learning, and then through the implementation to push out, in complete cooperation with State and local election officials, as much of the best understanding of administrative practice as we possibly could, drawing on what the Election Assistance Commission has done over the years in counseling on issues like, for example, polling management and poll worker training, drawing in organizations like the one that Chris Thomas chairs, the National Association of Election Directors.

And that is an important function, this function of providing a clearing house and an organizing center for the best possible learning about what to do to solve these problems. And we find in the implementation phase, and I think that Ben has described it, a very positive reception to an ongoing effort like this that brings together the best that both the Federal and the State and local initiatives can offer.

The CHAIRMAN. Thank you. And I absolutely agree that the National Association of Secretaries of State that both myself and Mr. Rokita were former members of, I think he was the president one year, and also the National Association of Election Officers, et cetera, all of this ongoing education and things that they are discussing and helping the locals with, there is no second almost for that kind of a thing.

I did want to also ask a question about the resources needed. You both mentioned about the resources needed. I know I sound like a broken record, back when I was a secretary of state. But back when I was a secretary of state, before I came to Congress, right at that time HAVA had been passed by the Congress, so I wasn't here when it was passed. But all of a sudden we had this huge windfall of dollars that was coming, recognizing that the Federal Government was about to send $4 billion out to the elections officials around the Nation principally to upgrade their voting equipment.

This had never been done before. I think it was, if we would have known the word TARP at the time, we would have said HAVA was like TARP for election officials. It was amazing that all of this money was coming.

And I think the Congress, trying not to mandate, really didn't have much strings attached to it as far as the kind of election equipment that should be purchased or what have you. I mean, I remember, again in Michigan, my successor actually implemented it all. But we put in place—you know, we had over 5,000 precincts in our State, and said you could only purchase either Optical Scan or Optech at that time. And we were going to have uniformity of the kind of equipment that we were going to have out there.

You saw a lot of these States that were buying everything under the sun. I mean, there was no uniformity. And, of course, some of this election equipment is very interesting. And at that time with all the technology and everything, had all the bells and the whistles, you thought you wanted to have all these great computers. But, as you know, computers do break. And so no surprise that there were problems with election equipment that was purchased by Federal dollars.

But now, all of these years later, equipment, you know, it has had its normal life expectancy. And I cannot imagine, with the Federal restrictions that we have on our budget now, that there will be another type of billions of dollars of spending. I mean, if it is for the State and the locals to run elections, how can the Federal Government be looked at as the ones that just gives them all the money for this.

So it is I think incumbent on the locals as well to do some planning with investing in elections to make sure that they do have the money to purchase what is very expensive equipment and all of these kind of things.

What was your thinking as the Commission talked to—did you have the feeling that there is an expectation out there in the country that the Federal Government will forevermore provide funds for election equipment or how was this looked upon?

Mr. BAUER. Ben will be glad to have me answer that one first.

What we did discover was election administrators certainly mourn the passing of HAVA funding, that there was money available for this and now it is very hard to come by. So there is no question that they are in a different position right now, which they find very, very difficult.

And we did not attempt to say where the resources would be located. One of our charges was, as I mentioned in my opening statement, we were not to make Federal legislative recommendations. We didn't delve into the question of where the resources might be found.

But without any question whatsoever, they have to be found somewhere, because, as you know as a former secretary of state, I mean, the equipment is expensive, there has to be money for repair and maintenance. But the acquisition costs alone are going to be very, very significant. And the entire process of identifying the best next generation of equipment entails costs.

And so these administrators are in the first instance, and we heard a good bit of this, troubled that they are having difficulty communicating with their State and local elected officials on this topic. They find that they are last in line in every budgetary conversation, that these are priorities that are by and large shuffled to the bottom of the deck because, understandably, faced with very difficult choices, elected officials have other priorities to attend to, education and road repair and the like. And elections being periodic tend to be treated as something that could be dealt with later or, frankly, made to do without, made to do with less.

And this, in the case of technology development here, and acquisition, is unsustainable over the long run. So I can't say that there are expectations that the Federal Government will do it or that the State government will do it or a combination of both. But the ques-

tion is, where is it going to come from, because without it we are facing a real disaster.

Mr. GINSBERG. I would say that there is a wish but not an expectation amongst the State and local officials that the money come from the Federal Government. But I don't think they expect that. And historically, with the exception of the HAVA influx, it has been a State and local responsibility.

I would say that the bright spot out there is that technology, if it ever gets to catch up through the certification process, can help reduce the cost of systems. I mean, you now have these big, huge stand-alone systems that can only be used for elections. The move to electronic poll books to help out is one. There are software voting programs out there, not a paper ballot, for purposes of historic integrity, but it seems to be where you are going. That can be a much less expensive alternative for States.

The problem is we have kind of tied ourselves into a knot on this whole process, that the lasttime there were a new set of certification standards was 2007, which was before there was such a thing as a tablet computer anywhere. And so the technology available has not caught up to voting systems yet.

That is one way that things can help out. We have got to do something about the certification process so that new and improved technology can be integrated into the system before all machines start running out.

The CHAIRMAN. Thank you very much.

The chair how recognizes the ranking member, Mr. Brady.

Mr. BRADY. Thank you, Madam Chairman.

The only thing I think is worse than long lines is no lines. It is like a double-edged sword. We worry about increase in voter participation. Make it easier. And then we have long lines that cause people a problem when it is time for them to vote.

I have been doing elections too many years in the city of Philadelphia, which is a blood sport, by the way, and I have been fighting with secretary of states forever. You know, I understand that we can't have uniformity throughout the United States because States have their rights. But trying to get our State uniformity with the amount of people that are on the ballot and then they end up throwing ballot questions with "whereas" clauses and people want to sit and read them, if we can get uniformity within the State I think it would be easier. There is no real need to have a ballot question or some other maybe offices that are way-down offices, that are important, especially important for the people that are running in them, but if we could have some uniformity throughout the State so that we don't have a long ballot on one primary and then in the general we have a short ballot.

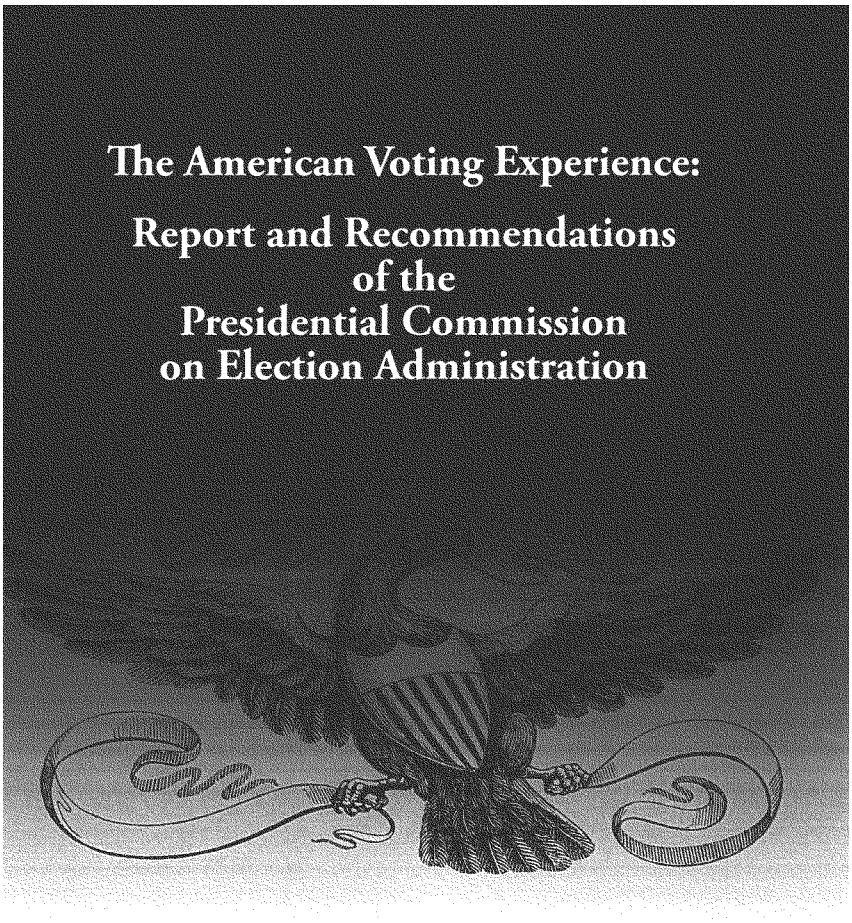
And just this past primary we had a major, major governor's election with a contentious primary. We had 17 percent of the people come out and vote, which is disgraceful, it is embarrassing for a major election for a governor. And it seems to me that if we can make it easier for people to vote, that would eliminate lines and make it easier for them to cast their vote, and that it maybe would help them to want to come out and vote because it is easier for them to do that.

I understand and looked at all the Internet ideas. And I agree with Mr. Harper, maybe early voting isn't always the answer because there is always a fraud factor. Eyeball participation, identification, fingerprint, phone voting are all issues. It is a tough job that you have. And I can't think of two more qualified people that can hopefully come back to us.

And I did read your report. I will also ask unanimous consent to insert the entirety of the Commission's report into the record.

The CHAIRMAN. Without objection.

[The information follows:]



January 2014

Presidential Commission on Election Administration

Robert F. Bauer, Co-Chair

Benjamin L. Ginsberg, Co-Chair

Brian Britton

Joe Echevarria

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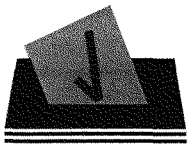
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the Presidential Commission
on Election Administration

January 2014

Dear Mr. President:

We are pleased to submit this Report and Recommendation called for in your Executive Order 13639, which established this Commission on Election Administration and defined its mission.

Our examination spanned six months of public hearings and included consultations with state and local election officials, academic experts, and organizations and associations involved in one form or another with voting or election administration. In connection with testimony provided to the Commission, the Caltech-MIT Voting Technology Project also conducted a comprehensive survey of the views of thousands of local election officials around the country. As a result, the Commission presents its unanimous recommendations, together with an array of best practices in election administration, which will significantly improve the American voter's experience and promote confidence in the administration of U.S. elections.

The Commission's focus in this Report remained resolutely on the voter. We discovered, as officials, experts, and members of the public from across the country testified, that voters' expectations are remarkably uniform and transcend differences of party and political perspective. The electorate seeks above all modern, efficient, and responsive administrative performance in the conduct of elections. As the Commission sets out in its Report, election administration must be viewed as a subject of sound public administration. Our best election administrators attend closely to the interests, needs, and concerns of all of our voters — in large and small jurisdictions, and in urban and rural communities — just as well-managed organizations in the private sector succeed by establishing and meeting high standards for "customer service."

This view of administration will not only reduce wait times where they occur, but also improve the quality of administration in many other ways, from the registration process through the selection and design of polling places, to improved access for particular communities of voters, such as those with disabilities or limited English proficiency, and overseas and military voters. The Commission has found that the problems encountered with election administration overlap and intersect, and improved management at one stage in the process

will yield benefits at later stages. Improving the accuracy of registration rolls, for example, can expand access, reduce administrative costs, prevent fraud and irregularity, and reduce polling place congestion leading to long lines.

Consistent with this approach, the Commission's key recommendations call for:

- modernization of the registration process through continued expansion of online voter registration and expanded state collaboration in improving the accuracy of voter lists;
- measures to improve access to the polls through expansion of the period for voting before the traditional Election Day, and through the selection of suitable, well-equipped polling place facilities, such as schools;
- state-of-the-art techniques to assure efficient management of polling places, including tools the Commission is publicizing and recommending for the efficient allocation of polling place resources; and,
- reforms of the standard-setting and certification process for new voting technology to address soon-to-be antiquated voting machines and to encourage innovation and the adoption of widely available off-the-shelf technologies.

The Commission is grateful for the opportunity to present this Report and Recommendations on issues central to the quality of voter participation and confidence in our democratic process.

Respectfully submitted,

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Introduction

The United States runs its elections unlike any other country in the world. Responsibility for elections is entrusted to local officials in approximately 8,000 different jurisdictions. In turn, they are subject to general oversight by officials most often chosen through a partisan appointment or election process. The point of contact for voters in the polling place is usually a temporary employee who has volunteered for one-day duty and has received only a few hours of training. These defining features of our electoral system, combined with the fact that Americans vote more frequently on more issues and offices than citizens anywhere else, present unique challenges for the effective administration of elections that voters throughout the country expect and deserve.

Other countries exhibit one or another of these features in their election systems, but none have the particular combination that characterizes administration in the United States. Decentralization and reliance on volunteers ensure that the quality of administration varies by jurisdiction and even by polling place. The involvement of officials with partisan affiliations means that the rules or their interpretations will be subject to charges of partisanship depending on who stands to win from the officials' decisions. The sheer frequency and volume of democratic choices from persistent elections tax voters' attention and capacity.

The problems observed in recent elections stem, in part, from these defining characteristics of our electoral system. Long wait times at select polling places result from a combination of mismanagement, limited or misallocated resources, and long ballots. Problems faced by military voters and their dependents in receiving and transmitting ballots, and then having them counted, still remain. Accommodations for voters with disabilities or with limited English proficiency vary widely, dependent on the attention they receive from local officials and compliance with statutory protections. Bloated and inaccurate voter registration lists — the source of many downstream election administration problems — arise in the absence of a national list of voters that is updated when voters move, die or change their names.

Some of the differences in approaches to election administration may be explained by cultural differences between states. For instance, the manner in which early voting is conducted, or whether it is allowed at all, varies considerably between states. Vote-by-mail and no-excuse absentee voting is increasingly popular in the West, while in-person early voting is more popular in the South. The same could be said for provisional ballots, which are used for different purposes in different states. In some states, voters who are permanently registered as absentee must cast a provisional ballot if they show up at the polls. In others, voters can update their address in the polling place by voting a provisional ballot. In still others, provisional ballots serve the narrow purposes for which they were intended under the Help America Vote Act (HAVA), namely as a stop gap measure for the poll worker who gives a provisional ballot to the voter who claims to be registered but whose name does not appear on the rolls.

Although the diversity of election processes spawns problems, the variety of practices localities use to combat them can also be a fruitful source of context-specific solutions. There is no shortage of good ideas when it comes to election administration. The tasks presented to the Commission were to collect the best programs, innovations, and practices from around the country to address current challenges, as well as to identify the next generation of problems that will confront the American electoral system.

After a six-month extensive examination of how elections are conducted throughout the United States, we, the members of the Presidential Commission on Election Administration, conclude that problems that hinder the efficient administration of elections are both identifiable and solvable. This Report sets forth many recommendations and best practices derived from our examination.

Some problems in election administration affect only a limited number of jurisdictions, while others are more broadly shared. In general, we view the recommendations as broad-based solutions to common problems evident on a national scale. In addition to these recommendations, the Commission urges adoption or consideration of other best practices, highlighted throughout the Report in italics, that are usually applicable to focused situations in individual jurisdictions or sometimes particular polling places. These highlighted best practices are not the only ones of potential use or value to jurisdictions around the country, and numerous others worthy of consideration are included in the Appendix.

The key recommendations of the Commission are:

Voter Registration:

Online Registration: The steady trend toward online voter registration should continue as every state should allow eligible citizens to register to vote and to update their registrations via the internet.

Interstate Exchange of Voter Lists: States should update and check their voter registration lists against each other, as is done with the "IVRC" and "ERIC" projects, to ensure that voters are correctly registered at one location, that registration lists are more accurate and not a source of polling place congestion, and that these more accurate lists can assist in identifying individuals who are eligible to vote, but are not registered.

Access to the Polls:

Expansion of Voting Before Election Day: In order to limit congestion on Election Day and to respond to the demand for greater opportunities to vote beyond the traditional Election Day polling place, states that have not already done so should expand alternative ways of voting, such as mail balloting and in-person early voting.

Schools as Polling Places: States should encourage the use of schools as polling places. Because they often provide the best facilities to meet voters' needs, roughly one-third of voters currently vote in schools. To address security concerns, Election Day should be scheduled as an in-service day for students and teachers.

Polling Place Management:

Adoption of Resource Allocation Tools: Local officials should employ a resource allocation calculator, akin to the ones presented at www.supportthevoter.gov, in order to optimize the number of voting machines and staff at polling places, thereby reducing the potential for long lines.

Voting Technology:

> **Addressing the Impending Crisis in Voting Technology**: By the end of the decade, a large share of the nation's voting machines, bought 10 years ago with HAVA funds, will reach the end of their natural life and require replacement. To address this impending challenge and to usher in the next generation of voting machines, the standards and certification process for new voting technology must be reformed so as to encourage innovation and to facilitate the adoption of widely available, off-the-shelf technologies and "software-only" solutions.

This Report focuses not only on the problem of election administration for all voters, but also the effect of administrative failures on discrete populations such as voters with disabilities, those with limited English proficiency, and military and overseas voters. Just as certain problems in election administration are more pronounced in some jurisdictions, they also burden some populations more than others. Inaccessible polling places are a problem for the general population, for example, but they can be a major barrier to participation for those with mobility problems. Similarly, poorly designed and complex ballots pose problems for all voters, but they can prove particularly daunting for voters with limited English proficiency. Any solutions in this realm must be made with an eye toward addressing the problems faced by voters as a whole while also ensuring that the needs of these discrete populations are met. However, the best way to perform this dual task is to "bake in" these targeted solutions to the recommendations applicable to the system as a whole. The Commission's recommendations are proposed with this strategy in mind. They should be adopted not only because they address problems broadly shared, but also because they address more severe challenges faced by particular populations.

I. Definition of the Charge

The Presidential Commission on Election Administration was established by Executive Order on March 28, 2013. Its mission was to identify best practices in election administration and to make recommendations to improve the voting experience.

The Executive Order focused the Commission's work on several areas of concern:

i. the number, location, management, operation, and design of polling places;

ii. the training, recruitment, and number of poll workers;

iii. voting accessibility for uniformed and overseas voters;

iv. the efficient management of voter rolls and poll books;

v. voting machine capacity and technology;

vi. ballot simplicity and voter education;

vii. voting accessibility for individuals with disabilities, limited English proficiency, and other special needs;

viii. management of issuing and processing provisional ballots in the polling place on Election Day;

ix. the issues presented by the administration of absentee ballot programs;

x. the adequacy of contingency plans for natural disasters and other emergencies that may disrupt elections; and

xi. other issues related to the efficient administration of elections that the Co-Chairs agree are necessary and appropriate to the Commission's work.

The charge requires consideration of a multiplicity of election administration problems and contexts. The Commission was asked in considering each of these issues to propose common sense, non-partisan solutions that would prove useful to state and local officials in administering successful elections that meet the needs and legitimate expectations of voters.

The guiding principle for these recommendations, however, is to improve the voter experience. By improving the voter experience, we mean that:

- Voters at all points of contact with the electoral process should find that it is accessible and dependable.
- Voters should not need to wait more than half an hour to vote.
- Ballots should be well-designed and simple to understand.
- The registration process should be efficient and reliable.
- Voter rolls at the polling place should be accurate.
- Voting information provided by officials should be clear and comprehensive.
- Ballots delivered by mail should arrive in a timely fashion and should be tracked from delivery to return.
- Military and overseas voters should receive their ballots on time and be confident that the election authority has received them in time to be counted.
- Polling places should be well-organized, well-equipped, and accessible.
- Well-trained and informed poll workers should supply useful guidance, answer questions, and resolve issues as they arise.
- Accommodations should be made for populations requiring specialized support, such as voters with disabilities or limited English proficiency.

Accessibility and dependability are the criteria for excellence and success in the private sector, and the Commission believes that those goals should also guide the administration of elections.

The Commission was not charged with proposing federal or state legislation or evaluating ongoing and often controversial legislative enactments or proposals. To be sure, several of the problems described in the Executive Order were covered by existing federal legislation, and drawing attention to gaps in enforcement and compliance is within the ambit of this Report. In addition, while not taking on the task of drafting a model state election code, the Commission did uncover instances where state laws require

modernization to accommodate changes in technology or legal developments in other settings. For example, all states should update their laws governing design and font size for ballots to reflect the new technologies of balloting, as well as to incorporate modern lessons concerning the principles of design. Similarly, the experience with Hurricane Sandy made it evident that states must be certain their laws are updated to establish clear procedures for the rescheduling or conduct of elections in the event of a natural disaster. They also must be updated to accommodate voting for first responders from outside the disaster areas and those who are unable to return to their jurisdiction for Election Day due to the emergency.

In formulating its recommendations, the Commission sought out and received extensive testimony, data, and information from election administrators, experts, academics, and the public. It did so through several different channels. In addition to four public hearings the Commission held around the country,[1] subgroups of commissioners were invited to and attended meetings of election officials, interest groups, and academics.[2] Members of the public, moreover, submitted written testimony that was considered by the Commission and posted on its website: www.supportthevoter.gov.

Several people and institutions were helpful in constructing this report. John Fortier and Matthew Weil from the Bipartisan Policy Center and Doug Chapin from the Hubert Humphrey School of Public Affairs at the University of Minnesota ably and expertly advised the Commission in its research. Annie Donaldson and Lynn Eisenberg were extremely helpful in the production of the report.

A group of academic experts on election administration, led by Professors Stephen Ansolabehere, Daron Shaw and Charles Stewart III, provided extensive research that was very helpful to the Commission. They conducted a national survey of local election officials that asked a series of questions related to the Executive Order. The data from that survey and their report are available at www.supportthevoter.gov. Along with Stephen Graves, Mark Pelczarski, Aaron Strauss, and Heather Smith, the academic experts also helped assemble the online "Election Toolkit," which is available through www.supportthevoter.gov and is housed at the Caltech-MIT Voting Technology Project's website. The website presents two sets of tools that election administrators can use: resource allocation tools to avoid polling place congestion and tools to assist jurisdictions in implementing online voter registration. The Commission strongly encourages local officials to examine and improve upon these online tools.

The Commission concludes this introduction with the acknowledgement of a special debt to the state and local election officials who testified in public hearings and gave generous amounts of their time and expertise to the Commission. The country's election officials find themselves second-guessed and heavily criticized when elections run into problems, and praise is not forthcoming in comparable volume — or at all — when the process runs smoothly. At the same time, these officials are all too often given inadequate resources with which to carry out this critical function. Over the months of its preparation of this Report, the Commission arrived at a renewed appreciation of how hard, diligently and effectively the vast majority of the country's election officials work to provide well-run elections for voters — and how difficult the job is. This Report reflects significant contributions from officials around the nation, and the Commission hopes that the recommendations and best practices set out here will contribute to the work ahead in making elections run still better for America's voters.

II. Setting the Stage: Background for the Recommendations

A. Variation in Administration: "Does One Size Fit All?"

At the threshold of its work, the Commission was confronted with what multiple election administrators repeatedly described as the "one size does not fit all" problem.[3] Given the complexity and variation in local election administration, the argument goes, no set of practices can be considered "best" for every jurisdiction. Some reforms that work well in certain contexts will be unnecessary or fail in others. There is certainly merit to this position; no one can doubt the limits of nationwide reforms of the American electoral system when local institutions, rules, and cultures differ considerably.

That being said, most jurisdictions that administer elections confront a similar set of challenges. They must register voters and verify voter eligibility. They must design ballots, find people to staff polling places, and procure machinery to cast and count votes. They must arrange for the results of the votes cast on or before Election Day to be transmitted to a central election office and verified for accuracy. Jurisdictions also must comply with an array of federal requirements concerning accessibility and anti-discrimination. And even amidst the diversity of local jurisdictions, similar types of jurisdictions — by size, legal regimes, cultures, etc. — often share similar problems and can learn from each other about the best solutions to common problems.



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The recommendations in this Report are targeted at common problems shared by all or most jurisdictions. For the most part, they are of a size that should fit all. At the same time, the Report notes best practices that might apply to jurisdictions to a greater or lesser degree depending on their circumstances.

B. The Issue of Resources

The most universal complaint of election administrators in testimony before the Commission concerned a lack of resources.[4] Election administrators have described themselves as the least powerful lobby in state legislatures and often the last constituency to receive scarce funds at the local level.[5] Although local elections may occur quite frequently, issues of election administration draw the attention of the public only every two or four years. Likewise, budget authorities tend to view elections as a periodic need, not a persistent — much less urgent — one. This is despite the fact that some election functions, such as voter registration, demand continual attention, and preparation for the next election must begin as soon as the current election is over. When states and localities experience fiscal pressures, elections tend toward the lower end of the scale of priorities, behind education, public safety, and health care, to name just a few resource competitors.



Election administrators have described themselves as the least powerful lobby in state legislatures and often the last constituency to receive scarce funds at the local level.



In the midst of intense competition for budget dollars, election officials often face significant difficulty in advocating for their cause. Few such officials can articulate service standards that would guide what budgets "should" be for personnel and equipment. Elected representatives who control the purse strings may appreciate what election officials want, but are less sure of what they truly need. As a result, legislators are often disinclined to spend marginal tax dollars on administering elections, as opposed to other areas of local government.[6]

C. The Technology Challenge

The question of resources will become increasingly important in the coming years as jurisdictions look to replace aging voting technology. A large share of the voting machines currently in operation was purchased with federal money appropriated pursuant to the 2002 Help America Vote Act (HAVA). Jurisdictions used that money to replace archaic punch card and other ballot technology with electronic or optical scan voting machines.[7]

Now a decade old, these systems, like much computer technology of that age, are reaching the end of their operational life.[8] Before HAVA, jurisdictions purchased voting technology on a rolling basis across the country; each year a fraction of jurisdictions were buying new voting systems. After HAVA was enacted, and in just a short window of time, most jurisdictions purchased new voting systems, upgrading from paper, lever or punch card systems to optical scan or direct recording electronic (DRE) machines. Few jurisdictions have budgeted to purchase new voting systems, often at a cost of millions of dollars. Without a comparable infusion of federal funds, jurisdictions will be on their own to replace aging machines or to alter the voting process so as to serve more voters with fewer machines.[9]

Compounding the problem is the dissatisfaction of local officials with the array of voting machines currently available — a complaint heard at many hearings. State and local election officials told the Commission that the machines available do not meet the needs (technical, operational, regulatory or otherwise) of the jurisdictions.[10] Indeed, the voting machine manufacturers themselves sympathized with their potential customers' plight.[11] However, the vendors maintain that administrative and legal obstacles currently discourage existing manufacturers (or new market entrants) from investing resources in the development of new equipment that would meet their customers' demands.

Much of the problem is the direct result of both a dispersed market with approximately 8,000 jurisdictions and the fact that the standard-setting process for new voting machines has broken down.[12] The federal standards in operation are now eight years old, and many states require by law that any voting machines used in their localities pass the applicable federal standards.[13] Newer standards (that is, a newer version of the "Voluntary Voting System Guidelines," or "VVSG") were proposed six years ago by the Tech-

nical Guidelines Development Committee of the U.S. Election Assistance Commission (EAC) and the National Institutes on Standards and Technology (NIST).[14] Such standards can only be adopted, however, by the EAC, which, due to a lack of commissioners and the related problem of disagreement over the agency's mission and past direction, cannot currently carry out this task. Some new voting technologies can be certified according to the standards developed in 2005 (or under an "extension clause" to those standards). However, the confusion surrounding the operative guidelines creates uncertainty in an area where those investing in the next generation of voting technology need greater clarity. Without a fully functioning EAC to adopt the new standards, many new technologies that might better serve local election administrators are not being brought to the marketplace.[15]

This lack of up-to-date standards has impeded the inevitable and much-needed transition of the voting process to off-the-shelf technology, such as tablets and laptop computers. Jurisdictions that use electronic voting machines usually deploy machines for a few days per year and then lock them up in storage for the rest. For cash-strapped jurisdictions that wish to keep pace with evolving technology, the purchase of hundreds of expensive, specialized pieces of hardware good for only one purpose — elections — no longer makes sense. The existing legally operational standards were developed five years before the product launch of the first generation iPad. Any firm that wishes to invest in election applications for commercial off-the shelf-tablets or computers does so in an uncertain regulatory environment. The confusion surrounding the standards has had the perverse effect of complicating the move to certification of the very technologies most current and familiar to voters.[16]

The lack of up-to-date standards has impeded the inevitable and much-needed transition of the voting process to off-the-shelf technology.

A divide has also developed between election officials, on the one hand, and the information technology community, on the other, about the use of computer technology in elections. Concerns among the computer science community about the security of computers in the conduct of elections have led to a slow-down in the adoption of new technologies, and a continued reliance on single-use machines that are expensive and

increasingly impractical to buy and maintain. More effective vehicles for practical collaboration between technical specialists and election officials are needed for the development of voting technology that balances security concerns with a consistent focus on innovation. From the frustrations of finding adequate voting equipment technology on the market, promising collaborations have arisen in communities such as Los Angeles County, California,[17] and Travis County, Texas,[18] that may inform the setting of standards for future technologies.

D. Addressing Long Lines— and the Standard for Judging What is "Long"

The image of voters waiting for six or more hours to vote on Election Day 2012, as in the two previous Presidential contests, spurred the call for reform that led to creation of this Commission. Research suggests that, although a limited number of jurisdictions experienced long wait times, over five million voters in 2012 experienced wait times exceeding one hour and an additional five million waited between a half hour and an hour.[19] In some jurisdictions, the problem has recurred for several presidential elections,[20] while in others, a particular confluence of factors led to unprecedented lines in 2012.[21] It became clear to the Commission as it investigated this problem that there is no single cause for long lines and there is no single solution. But the problem is solvable.

The problem of long Election Day lines, it should be emphasized, is a problem largely limited to Presidential elections.[22] Even in Presidential elections, a small share of jurisdictions and typically a small share of polling places within "problem jurisdictions" experience long lines. However, when the population of the problem jurisdictions and polling places are added up, it does mean that several million of our 130 million voters are standing in line for an unacceptably long time.

The causes of long lines are not uniform across jurisdictions that experienced them. One line may be the result of a poorly laid out polling place. Down the street, the line may be due to equipment malfunction. Across town, a strong personality conflict amongst poll workers or disagreement on process can create a bottleneck.

Although isolated incidents can cause long wait times, systemic problems can also in-

crease the likelihood that lines will develop. Lengthy propositions and constitutional amendments can clog the ballot. Poor methodology in resource allocation or turnout forecasting can lead to shortages of staff and machines where they are most needed. Inadequate facilities or insufficiently trained poll workers can increase the "transaction time" for each voter, as can an inaccurate voter list that leads more voters to cast provisional ballots. And of course, the more limited the opportunities to vote, the greater will be the number of voters who will vote during the constricted hours of a single Election Day. All of these factors can result in stress to the foundation of the election and have a direct impact on a large number of voters.



The Commission has concluded that, as a general rule, no voter should have to wait more than half an hour in order to have an opportunity to vote.



Throughout the Report, we address issues and offer recommendations that can address the management of lines. But a key question in the first instance is how to establish the standard for what is properly deemed a "long" line. *The Commission has concluded that, as a general rule, no voter should have to wait more than half an hour in order to have an opportunity to vote.*

Of course, there will be circumstances that strain this goal, such as when a busload of people shows up unexpectedly at a polling location, or a hundred-person line of enthusiastic voters is waiting to greet the poll worker who opens the polling place in the morning. Nonetheless, local officials should be able to plan the allocation of their resources such that during the normal course of the day, nearly all voters can be processed within the 30-minute standard. Any wait time that exceeds this half-hour standard is an indication that something is amiss and that corrective measures should be deployed. Furthermore, knowing that the process will inevitably break down somewhere within a jurisdiction on Election Day — it may not be possible to predict exactly where breakdowns will happen — these corrective measures need to be developed in advance and activated as necessary to handle these situations. Excessive wait times are avoidable if the jurisdiction has undergone proper planning and develops systems to inform the responsible authorities when a breakdown occurs.

E. Disproportionate Impacts and Enforcement of Existing Federal Law

The Executive Order directs the Commission to pay specific attention to the voting difficulties experienced by certain populations. In particular, the Commission is to take account of the problems experienced by military and overseas voters and voters with disabilities or limited English proficiency. These are populations for whom specific federal laws provide protection or assistance. Throughout its review, the Commission heard complaints from advocates for each of these groups that the applicable laws are underenforced.

Military and overseas voters raised concerns about the implementation of the Uniformed and Overseas Citizens Absentee Voting Act (UOCAVA)[23] and the Military and Overseas Voter Empowerment (MOVE) Act.[24] Great strides have been made in facilitating voting by soldiers and others overseas due to these laws. However, many voters covered by these Acts still find difficulties registering to vote, receiving their ballot in time to be voted, or having their voted ballot reach the election office in time to be counted.[25] There is inconsistency in how the states implement and administer the various stop gap measures that federal law provides to ensure military and overseas voters are registered and vote. The Federal Postcard Application (FPCA) is designed to facilitate registration and serve as an absentee ballot request by military and overseas voters, and the Federal Write-in Absentee Ballot (FWAB) serves as an emergency ballot in the event such voters never receive their absentee ballot. But states vary as to the length of time an FPCA is operable and the extent to which an FWAB also serves as a voter registration application. As described below in our recommendations, online voter registration should be pursued by all jurisdictions as a service to all voters. However, military and overseas voters represent the population most likely to benefit from increased use of the internet in the registration process.

Moreover, the Commission heard about the inconsistency of the assistance military voters receive from Installation Voting Assistance Offices tasked by federal law with facilitating voter registration for uniformed personnel.[26] In some instances, the Commission heard, these difficulties may arise from discomfort of some members of the military about getting involved with anything "political." In other instances, similar to the plight of election officials in dealing with local governments, voting assistance may

simply be considered a lower priority than the many other critical responsibilities of unit commanders. Whatever the cause, the law requiring voting assistance for military voters is clear and must be enforced.

For language minorities, the Commission heard from witnesses and experts about failures to comply with Sections 203 and 208 of the Voting Rights Act.[27] Section 203 requires language assistance in communities with large non-English speaking populations. In many instances, such required assistance, either at the polling site or in the ballot materials has not been made consistently or reliably available. Section 208 allows a voter unable to read the ballot to gain assistance in voting from a person of their choosing. Many poll workers are not aware of or do not comply with this provision of federal law.

Language difficulties can affect voter participation throughout the electoral process. If ballot materials and election agency websites are only in English, then voters with limited English will be less able to navigate the registration process.[28] Inadequate supplies of bilingual poll workers or ballots in other languages will make it more difficult for them to vote. These problems are then compounded for certain groups, such as Alaskan Native voters, who face additional logistical problems due to other forms of geographic and social isolation from election authorities.[29]

The issues language minorities face are not limited to inconsistent compliance with federal law. Of central importance is the quality of administration. Limited English proficiency voters should expect support at the polling place that is not defined by the "floor" set by law. From signage to ballots to the availability of assistance from bilingual poll workers, the administration of the polling place should reflect the understanding that limited English proficiency should not be experienced as a limited or second-class citizenship.

Disability rights groups also noted concerns with the enforcement of the relevant provisions of the Americans with Disability Act (ADA) and HAVA. They described the continued inaccessibility of many polling places and voting machines, as well as more direct impediments such as statutory bans on voting faced by those with cognitive impairments.[30] Perhaps the largest share of concerns revolved around training of poll workers and election officials. Advocates stressed the importance of training regarding legal requirements, specifically the right to receive assistance from someone of the voter's

choosing, and the operation of assistive technologies for voting.[31] In addition, they urged targeted training to educate poll workers about how best to interact and to serve voters with a variety of accessibility needs.[32]

However, the election statute most often ignored, according to testimony the Commission received, is the National Voter Registration Act (NVRA or "Motor Voter").[33] Designed to assist prospective voters by facilitating registration, the statute requires Departments of Motor Vehicles (DMVs) and public assistance agencies to provide registration materials and to ensure that their customers have the opportunity to register to vote. By all accounts, states vary considerably in the degree to which such agencies register voters and transfer registration data to election administrators.[34] (Also, as evidenced by the biennial NVRA report issued by the EAC, several states are unable to account for the source for many, if not most, of their new registrations.[35])

DMVs, which are supposed to play the most important registration role in the statute, are the weakest link in the system. Some DMVs appear to disregard the law. Others erect impediments to the seamless transfer of registration data to election offices managing statewide registration lists.[36] This noncompliance leads to preventable inaccuracies in the voter registration lists. Voters who think they registered or updated their address at the DMV show up at polling locations only to find out they are not registered or are in the wrong polling location.

The DMVs do not shoulder all of the blame; the other public assistance agencies required by the NVRA to register voters also often fail to comply with the law. Disability rights groups identified the lack of voting assistance available at state offices for the disabled.[37] Military advocates offer similar criticisms of recruitment centers.[38] As assistance agencies shift their client services to online channels, compliance with the NVRA often drops further because voter registration is left out of the online portals and website designs of these agencies.

When the NVRA was passed two decades ago, the revolution in data sharing and integration was just beginning. Now, Americans experience every day a world in which data-sharing is commonplace and expected. Indeed, the challenge of data-sharing envisioned and required by the NVRA — principally, exchanging names and addresses between agencies — pales in comparison to most modern-day data integration challenges. However, by all accounts, the root of many registration difficulties occurs at the

point where one agency receiving a registration form or updated address fails to transmit that information accurately and seamlessly with the voter registration database held by the election authority.

F. Professionalism in Election Administration

One of the distinguishing features of the American electoral system is the choosing of election officials and administrators through a partisan process. Some are appointed and others elected, but almost all are selected on a partisan basis. Critics have argued that under this arrangement public confidence suffers, as may the quality of administration. Those who run our elections are subjected to competing pressures from partisans and political constituencies, on the one hand, and their obligation to the voting public as a whole, on the other. Defenders of this practice note that the role of elected officeholders, such as Secretaries of State, is embedded in the legal structure and long-standing practice of American election administration. They also note that these officeholders generally perform capably and with accountability under close public scrutiny.



In every respect possible, the responsible department or agency in every state should have on staff individuals who are chosen and serve solely on the basis of their experience and expertise.



Whatever the view taken of the role of elected officials, the Commission found general agreement that election administration is public administration. That means that in every respect possible, the responsible department or agency in every state should have on staff individuals who are chosen and serve solely on the basis of their experience and expertise. The Commission notes that this is often the case in departments across the country, and it is a model to which all jurisdictions should aspire.

Elected officials are well-served having professional support, and it would also bolster the voting public's confidence in the voting process. Professionalism in administration assumes particular importance in a field characterized by scarcity of resources and

increased public demand for a high quality of administration with keen political sensitivities. It is evident to the Commission that the core competencies required of today's election administrator are different from those in the past. The last decade's heightened demand for more professional administration of elections and modernization of the process demonstrates that there is an increasing need for technology acumen, public relations skills, and data savvy.[39]

Indeed, the Commission would go further and urge the integration of election administration in university curriculums of public administration. For the most part, election officials now migrate into their positions from other areas of government or political party service. Once there, certification and training programs run by Secretaries of State, state associations of clerks, or national organizations, such as the Election Center and IACREOT, become the forums for professional development. It is time that election administration is also counted among those fields for which graduate training in a professional school can constitute preparation for a career.

G. Incorporation of Recommendations Made by Other Commissions and Organizations

Before progressing to the principal recommendations, the Commission wishes to acknowledge that it is not the first body convened to examine best practices in election administration. Since the 2000 Election, if not well before, professional organizations of election officials and those in related fields have been making suggestions for improving the U.S. election system. The Commission views this Report as building on and augmenting the important recommendations made by these other organizations in light of recent experience and data.

Because this Report seeks to focus attention on certain important reforms rather than to repeat the entire list of recommended best practices available elsewhere, the Report places in its online Appendix other documents that the Commission urges policy makers to consider. These other reports, recommendations and best practices, while useful, are of a style that focuses often on the (admittedly, very important) "trees" of election administration instead of the "forest."

First, the Commission recommends consideration of the National Association of Secretaries of State (NASS) Report on Natural Disasters[40] and the Congressional Research Service's *Hurricane Sandy and the 2012 Election: Fact Sheet.*[41] The NASS task force was created in response to the problems in the 2012 Election due to Superstorm Sandy.[42] The task force reviewed all state laws concerning elections and disaster preparedness. It highlighted best practices concerning, for example, losses of electricity and internet connectivity in polling places on Election Day, last-minute absentee voting by first responders from outside the affected jurisdiction who respond to the disaster, and plans to reschedule an election in the event the disaster makes voting impossible. Following the recommendations made by NASS would go a long way toward preparing jurisdictions for the next potential disaster that could disrupt an election.

Second, since the famed confusion concerning the 2000 Palm Beach "butterfly ballot," several organizations specializing in design have offered recommendations concerning ballots and other election materials. Working with AIGA, the professional association for design, the EAC produced *Effective Designs for the Administration of Elections*,[43] which provides important design recommendations for multiple stages of the voting process. Another team of usability experts led by Dana Chisnell, Drew Davies and Whitney Quesenbery created a series of "field guides" on a range of election-related design and usability issues. The Commission recommends consideration of the guidelines prepared in the EAC Report and the field guides.

Third, the Election Center, a highly regarded professional organization for election administrators, set forth its recommendations for election reform following the 2004 election.[44] Many of these recommendations go beyond the scope of the Executive Order and also advocate for changes in federal law. However, the Commission suggests consideration of the many recommendations concerning provisional ballots, statewide voter registration databases, electronic pollbooks, early and absentee voting, vote centers, and poll worker recruitment and retention.

Fourth, the EAC, which was created by the HAVA, has provided a series of best-practices documents concerning election administration through its Election Management Guidelines program.[45] Its publication on poll worker recruitment, training, retention and management offers important recommendations in those areas as well.[46]

Fifth, the EAC's Quick Start Guides provide a wealth of suggestions concerning most areas covered by the Executive Order.[47] The Commission urges local and state election authorities to consider the recommendations made by the EAC in these easy-to-use guides for election administration.

Sixth, the Future of California Elections project (FOCE) provided to the Commission a series of best practices recommendations, now posted on www.supportthevoter.gov. Its recommendations concerning limited English proficiency voters were particularly comprehensive and deserve recognition and consideration. As one of the nation's most ethnically diverse states, of course, California has had unsurpassed experience in dealing with voters of limited English proficiency. The Commission urges consideration of the best practices concerning limited English proficiency voters identified by FOCE.

Finally, and of a similar fashion, the National Council on Disability made available to the Commission best practices documents concerning accessibility and disability. The voluminous material includes poll worker guides, polling place and ballot design recommendations, and a host of other documents describing the problems faced by voters with disabilities and potential solutions. The Commission urges consideration of the proposals contained therein, as well.

III. Recommendations and Best Practices

Against this background, the Commission agreed unanimously on the following recommendations that address the specific issues identified in the President's Executive Order.

A. Voter Registration: List Accuracy and Enhanced Capacity

Whether the goal is ensuring that only duly qualified registered voters vote or that more people are able to vote more easily, election officials across the political spectrum recognize the value of accurate and manageable voter rolls. Yet most statewide voter registration systems aggregate county and local lists and registration records that originate on paper. With so many jurisdictions responsible for the registration lists, their quality is uneven and too many records are inaccurate, obsolete, or never entered into the system.[48] To achieve efficiency and accuracy, state and local election officials should consider incorporating the recommendations and best practices discussed below into their standard operations. All these best practices must include stringent privacy and security procedures.



Election officials across the political spectrum recognize the value of accurate and manageable voter rolls.



Accurate voter lists are essential to the management of elections.[49] Keeping track is a Herculean task. On Election Day 2012, the registration system had 191.8 million records and 130.3 million voters managed by officials in 50 states and approximately 8,000 local election offices, with the lists used at 186,000 precincts.[50] The quality of the list can affect the ability of people to vote, of election offices to detect problems, and of courts and others monitoring elections to detect election fraud or irregularities. A list

with many incorrect records can slow down the processing of voters at polling places resulting in longer lines.

State, county, and local election officials face two major challenges. First, the record keeping system is largely based on outdated paper-based registration systems requiring data entry by government employees.[51] Second, 12 percent of people in the United States move every year from one residence to another.[52] This mobility, not surprisingly, leads to: incorrect information in records; obsolete information, such as changes in names or signatures; duplicate or out-of-date records, such as when a person moves but does not notify the election office; and improperly dropped records, such as when a person has not moved but is dropped from the rolls. While no single measure fully captures the "accuracy" of state voter registration lists, the latest research suggests as many as eight percent of registration records (representing 16 million people) are invalid or significantly inaccurate.[53] That figure also masks great variation over time and among states: In some states in recent years, over 15 percent of the records on the registration lists have been inaccurate.[54]

To be sure, the country is now much better off with the statewide voter registration lists mandated by HAVA. Prior to HAVA, counties were in charge of voter registration lists in most states. Voters who moved between counties, even within the same state, often appeared on two (or more) county registration lists for a considerable time.

The statewide lists go a long way toward addressing that problem, but their potential has not yet been fully realized. Local jurisdictions continue to serve as middlemen between voters and the statewide list, as they are often the repositories for forms gathered through registration drives and the like. Moreover, as previously noted, Departments of Motor Vehicles (the agency most often responsible for a voter's registration or updating of records) often fail to integrate the data they receive with the statewide list. Finally, state websites vary considerably in quality and ease of use for voters seeking to check or correct their information.[55]

Recommendation: States should adopt online voter registration.

Online voter registration is rapidly establishing itself in the states as an invaluable tool for managing the accuracy of voter rolls and reducing the costs of list maintenance. As of August 2013, 19 states have authorized or implemented a complete on-line voter

registration system, while five others offer a more limited version.[56] The significant and growing experience of these states has also allowed for examination of the results to date. The data suggest that these systems have performed to expectations and have earned high confidence among voters, as well as support among election officials across the political spectrum.[57]

The Commission received consistently affirmative assessments of the benefits that online registration can provide to the overall objectives of election administration.[58] An online voter registration system:

- reduces the high potential for error that exists with traditional paper-based systems;
- saves jurisdictions a significant amount of money;
- increases the accuracy and currency of the voter rolls, thereby reducing delays and congestion at the polling place; and
- improves the voter experience because voters get immediate feedback when they are registered or when their information (e.g., address, party, etc.) has been updated.[59]

Implementing online registration would address a range of problems the Commission was charged with examining. An accurate voter registration list is often a prerequisite to effective election planning and administration. A list filled with inaccuracies, likewise, produces downstream problems throughout the administration of an election.[60] With the enhanced accuracy and efficiency that online registration systems provide, election administrators are able to respond more effectively to a number of recurring challenges:



Implementing online registration would address a range of problems the Commission was charged with examining.



- **Lines:** Error-ridden voter rolls contribute to congestion and lines on Election Day. Voters whose information is missing from the rolls or incorrectly entered require the time and attention of officials. This necessarily delays the movement of other voters through the polling place.[61]

- **Security:** Online systems also provide additional reassurance of well-maintained, "clean" rolls that protect against the potential or appearance of vulnerability to fraud. As for any web-based system, questions about security will require close attention to ensure that unauthorized changes to voter registration cannot be made. One of the advantages of a properly run online system is that states are able to authenticate the registration immediately and provide protections unavailable in paper-based systems.[62] The voter registering online controls more directly the dissemination of the information than when entrusting forms with personal information to unknown individuals representing parties, candidates, or third party organizations. The voter usually receives an email confirmation that the registration was received and processed. Moreover, as demonstrated by the wide and growing popularity of online registration, voters seem to have confidence in such systems. This is not surprising when an increasing number of voters are using the internet to manage many core functions of their everyday lives.

- **Provisional Ballots:** In 2008, half of the provisional ballots issued to voters nationwide were attributable to problems with the rolls.[63] When voters arrive at the polling place and the poll worker cannot find their names on the list, the voters are given a provisional ballot. Errors in the registration process often cause the list inaccuracies that lead to increased numbers of provisional ballots. Such errors include transcription and data entry problems that lead to misspelling of voters' names, addresses and identifying information. Because it eliminates the middlemen between the voter and the registration list, online registration can help produce lists that lead to fewer disagreements between poll workers and voters about their registration status, and therefore fewer provisional ballots.

- **Overall Effects on Participation:** The ease of online registration makes it more certain that some types of voters will be registered, and then eventually turn out to vote. Studies of online registration show that younger voters are more likely to register when online tools are available.[64] In Arizona, registration rates increased from 29 percent to 53 percent among voters aged 18 to 24 with the adoption of an online system.[65] There is also evidence that turnout may be higher among those registering online than those who register through traditional paper systems. In Arizona in 2008, 94 percent of online registrants voted compared to 85 percent of those who registered by paper.[66]

- **Removing Barriers to Participation by Voters with Disabilities:** Systems that facilitate in-home management of registration are helpful to voters with limited mobility.[67] Online registration systems provide such convenience for voters with disabilities who, once registered, may also use those systems to update their registration records.

- **Cost:** Paper-based management of the rolls is costly and stresses an already burdened administrative infrastructure.[68] County and local election officials spend roughly one-third of their budgets on registration,[69] and the evidence is clear that online registrations provide election officials with significant cost savings over the traditional paper systems. Maricopa County, Arizona, has seen 80 cents in labor cost savings for each online registration and averages 325,000 transactions a year, while Washington State has experienced 18 cents savings per registration received and Delaware has achieved savings of $100,000 over a four-year period.[70]

- **Integration and Promotion:** Online registration allows state election authorities to partner with other state agencies and outside groups to facilitate registration. The portal to the online registration process can be housed on any state or private website. When voters register through those alternate websites, their information in the voter registration file is immediately updated. Organizations, such as Rock the Vote, have been successful in placing online widgets on various websites that facilitate the transfer of voter information to election authorities.[71]

By and large, the experience across all states appears to have mirrored that of Arizona and Washington State, which have led the way nationally in establishing and effectively implementing online registration. State officials report that overall "both the online and automated systems [have] met little resistance; some people voiced security concerns, but in time were generally convinced of the program's reliability."[72] In the majority of the states that have adopted online registration, the legislation establishing the systems has been approved on a bipartisan basis. Indeed, the relevant webinar produced by the National Conference of State Legislatures is titled "Online Registration: the Bipartisan Trend in Elections."[73]

To assist jurisdictions that have not yet moved toward online voter registration, *the Commission has placed as an example on its website (through a link to the Caltech-MIT Voting Technology Project) computer code that facilitates interaction between an outside website and a state's registration system.* Of course, creating an online registration system involves more than just copying this code, which was created by Rock the Vote.[74] But the "widget" available on the website highlights the way that voter information can be entered by a user in one setting and, through a simple platform, seamlessly integrated with a state's registration list. Such systems allow any agency or group with state authorization to provide a secure direct portal to the state's election site. Online registration, therefore, not only facilitates state agencies' efforts to register voters, but it enables outside groups to empower users of their websites to register directly into the state's system. In doing so, it reduces the chances of fraud and other irregularities of a paper-based system, in which outside groups may destroy registration forms or submit fraudulent registrations. The Commission strongly recommends not only that states adopt online voter registration, but that they do so in a way that allows secure and direct data entry by prospective voters through multiple web-based internet portals approved by the state.

Recommendation: Interstate exchanges of voter registration information should be expanded.

The decentralized nature of the administration of American elections may have its most pronounced and demonstrable effects in the registration system. Unlike other countries, the United States does not maintain a list of registered voters at the national level, let alone eligible voters or citizens. The states, therefore, are responsible for maintaining a list of "who" is registered to vote "where" in their jurisdictions. States have historically not coordinated with each other, and federal law does not require them to do so.

Consequently, the millions of voters who move between states each year often appear on more than one state's registration list.

As noted above, prior to HAVA's requirement of statewide voter registration lists, it was fairly common for an individual voter to appear on several local registration lists in different counties within a state. The extraordinary mobility of the American population has combined with decentralized election authority to produce bloated and inaccurate lists. Problems with these lists, as described earlier, make every aspect of election administration more difficult, and are also seen by some as rendering the system vulnerable to fraud.

Every effort needs to be made to facilitate coordination among the states in the development of accurate and up-to-date registration lists. States should also take advantage of other publicly available databases that indicate which voters have moved or died. All these efforts must, of course, remain compliant with NVRA rules concerning voter notification and removal from rolls. Protecting the privacy of voter data must also be a top priority. However, data-matching tools have advanced to the point where seemingly intractable registration problems can be addressed by simple coordination between the states using publicly available databases concerning "who" lives "where." Two existing projects are emblematic of these efforts.



Every effort needs to be made to facilitate coordination among the states in the development of accurate and up-to-date registration lists.



The first is the Interstate Voter Registration Crosscheck Program (IVRC). Twenty-nine states have joined that program.[75] Participating states exchange and compare voting data after a federal election to ascertain whether voters in different states, sharing the same name, birthdate and other information, voted in the same election. Matched records are then forwarded to the participating states that can then cull them to see if any such matches represent attempts at double voting that should be forwarded to law enforcement. To ensure privacy, the project uses a secure FTP site that deletes all participating states' data after running the crosscheck.

The second project is the Electronic Registration Information Center or "ERIC," started by the Pew Charitable Trusts but now independently run by seven participating states.[76] States that participate in ERIC are able to check their voter registration lists against data gathered from other states and several nationally available lists, such as those maintained by the U.S. Postal Service or the Social Security Administration. ERIC provides information to participating states as to which voters may have moved (either between states or within them), which voters may have died, which may have changed their names, and which eligible voters might not be registered. It protects the privacy of voter data by anonymizing each voter's data before that data leaves a state's control, so that no birthdates or like information gets revealed in the process.

The interstate data that ERIC provides to participating states allows those states to account for ongoing changes in voters' names, addresses, and registration statuses and to prepare for upcoming elections. For the 2012 election, for example, ERIC identified more than 750,000 records of voters who appeared to have moved within a state participating in ERIC. It also identified more than 90,000 records of voters who appear to have moved from one ERIC state to another, and more than 23,000 records of deceased individuals still on the rolls. Moreover, it identified 5.7 million potentially eligible but unregistered voters in the participating states.[77]

The Commission endorses state programs to share data and to collaborate in the synchronization of voter lists so that the states, on their own initiative, come as close as possible to creating an accurate database of the eligible electorate. The Commission recommends that these programs be structured to consolidate and integrate all compatible functions. Such projects should strive to improve the accuracy of voter registration records, enhance the ability to detect ineligible voting and prosecute voter fraud, reduce administrative costs, and increase registration rates. Doing so will help achieve management efficiencies and enhance these programs' appeal to the states that have yet to join in these collaborative ventures. Thus far, programs of this kind have shown the ability to safeguard any voter information they receive.[78]

Recommendation: States should seamlessly integrate voter data acquired through Departments of Motor Vehicles with their statewide voter registration lists.

The Department of Motor Vehicles (DMV), known in each state as the agency issuing driver's licenses and state personal identification cards, plays a pivotal role in the registration of America's voters. As a critical actor in the creation and maintenance of each state's voter registration file, the DMV can also contribute to the degree of orderliness and efficiency of operation in each community's polling places on Election Day. The NVRA, enacted more than 20 years ago, mandates that each state's DMV offer an opportunity to register to vote for every citizen applying for a driver's license or state personal identification card or changing an address on one of those documents. If there is any identification document that citizens will keep current, it is the state-issued driver's license or personal identification card. Universally, this NVRA program, commonly known as "Motor Voter," is embraced across political party lines because such a wide swath of the American electorate frequents these offices on a regular basis.

Yet the data compiled biennially by the EAC reflect poorly on the efficacy of Motor Voter. Significantly less than one-third of new registrations are processed through motor vehicle departments. Only seven states and the District of Columbia report total motor vehicle department registrations accounting for more than 50 percent of the total registrations received in the 2011-2012 election cycle.[79] The low level of participation by DMVs leaves no doubt that Motor Voter is not working as intended.[80]

Delaware and Michigan have designed systems that seamlessly integrate the Motor Voter transaction into the DMV driver's license application program in such a manner as to keep a large number of voter records current and to save the DMV money in reduced staff time committed to this program.[81] The Delaware DMV Director and the Election Commissioner together developed an interface called "e-signature."[82] It began because of the number of voters who appeared at polling places believing they had registered at the DMV, but were not on the voter rolls. When citizens go to the DMV for driver's license services, they provide their information to the DMV clerk. By following a script on their computer screen, the DMV clerks now ask citizens if they would like to register to vote or update their information if they are already registered. They view their information on a screen that is also a credit card-style signature device. On that screen, voters certify that they are citizens, select their party affiliations and sign the forms. All

of this information is then transmitted in real-time to the Department of Elections for the voter's county. The election office no longer processes registration applications from the DMV by hand. All information is now entered and transmitted electronically, saving time every day and especially on Election Days.

An improperly functioning DMV can naturally lead to Election Day confusion. Voters who appear at their polling place after moving can find that their voter registration records have not been updated to conform to their new driver's license addresses. As a result, a greater number of provisional ballots are cast, leading to congestion in the polling place and unnecessary post-election verification work for county and local election officials.[83] In other states, the voters are directed to their old polling places to vote, which may be located in another jurisdiction within the state. *The Commission strongly recommends that states follow the Delaware model and adopt procedures that lead to the seamless integration of data between DMVs and election offices.*



An improperly functioning DMV can naturally lead to Election Day confusion.



The Commission notes that the adoption of online registration will provide DMVs with a ready-made portal to facilitate seamless transmission of voter registration data to the election office. An online registration portal can open at a specific point during the driver's license transaction, thus providing the convenient opportunity to register contemplated by the NVRA. Indeed, with online voter registration, a registration widget or portal can be placed on any state website to facilitate registration either by a voter or an administrator who is filling in a voter's information for other purposes.

B. Improved Management of the Polling Place

Securing access to the vote depends on sound polling place management. The issues that election administrators confront in organizing and managing polling locations relate directly in one form or the other to the matters the Commission was charged with examining. The task is not an easy one. With limited resources, election administrators must have suitable and well-designed facilities, effective line management techniques, and the capacity to recruit and train poll workers.

A well-managed polling place can be the most important factor contributing to the quality of the voter experience. Effective polling place management will keep lines short and moving, keep the number of provisional ballots to a minimum, and ensure that the voting machines are working properly. Well-trained poll workers can answer voters' questions with accurate information and respond to the needs of particular communities of voters requiring special support, such as voters with disabilities or with limited English language proficiency.

Over the course of the hearings, the Commission received testimony about excellent programs in place and tested tools for assuring the efficient allocation of resources. More discouragingly, the Commission also heard about recurring problems that election administrators are expected to address without adequate support from the public or private sectors. There is a way forward however, and we have organized our discussion of recommendations and best practices around the following critical points in the management of a polling place:

- Polling place location and design
- Management of the flow of voters
- Poll worker recruitment
- Poll worker training

1. Polling Place Location and Design

The Commission received a substantial amount of testimony indicating that election administrators are too often scrambling to identify suitable facilities to serve as polling places.[84] Not every potential location is adequate to meet the requirements of a polling location. *A polling place must (1) have room to comfortably accommodate voters, (2) provide accessibility for voters with disabilities, (3) have adequate infrastructure such as the capacity for appropriate levels of internet and telephone connection, (4) offer adequate parking, and (5) be located in reasonable proximity to the population of voters that it is intended to serve.* Because there is no such thing as a permanent polling place — it is necessarily set up only for Election Day, then disbanded and turned over to its other standard purposes — facilities generally in use throughout the rest of the year must be identified and

easily converted to their periodic electoral function. Moving polling places often leads to voter confusion and other administrative problems. Therefore, to the extent possible, election administrators hope to retain the same facilities from one election to the next.[85]

Effective polling place management requires, at the outset, that the officials understand the constraints imposed by the facility in which balloting will take place. Each facility should be evaluated to assess parking availability, the path of travel for voters to the actual polling location, and the room itself. *Local officials need to maintain a diagram of every polling place used in the jurisdiction to include at a minimum: room dimensions, location of power outlets, the proposed positioning of voting and voter processing equipment, the entry and exit routes, and signage required by the Americans with Disabilities Act.*

All such layouts should be maintained in the clerk's office, provided to the election official responsible for the polling location on Election Day, and updated before every election. These evaluations can identify where temporary measures need to be taken to guarantee that the polling place is accessible with the placement of curb or threshold ramps, compliant signage, voter call buttons, etc. Some jurisdictions, such as Jefferson County, Colorado, also include an assessment of where voter lines would form to ensure that they would occur inside of the facility so that voters are not waiting in the cold or rain.[86]

Recommendation: Schools should be used as polling places; to address any related security concerns, Election Day should be an in-service day.

With almost no exception, the testimony received from state and local election administrators identified schools as the preferred venue for polling places.[87] They have the needed and desirable space, are inexpensive, widespread, conveniently located, and accessible for people with disabilities. About a quarter of voters nationwide voted in schools in the 2008 and 2012 elections, and close to one third of Election Day voters did so.[88] Recognizing the importance of schools in elections, some states mandate or explicitly authorize their use as polling locations.[89]

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Since the tragic events in Newtown, Connecticut, some states have considered imposing additional limitations on access to schools for voting.[90] It is this concern — security — that has presented the largest obstacle to widespread use of schools.[91] Even in states where schools are authorized to serve as polling places, the Commission heard that many school districts resist using schools as polling places for this reason.[92] This resistance can even extend to cases where the schools appear obligated to make themselves available by statute, but have adopted strategies to avoid being pressed into service.

Sensitive to this issue, some state laws and jurisdictions have focused on the possible use of schools on days when students are not in the classroom. Professional training or "in service" days offer an opportunity for the schools to remain on their academic schedule. If Election Day were an in-service day, students would not be present and teachers could use the day to perform administrative functions and conduct professional training.[93]

The Commission recommends that states authorize the use of schools as polling place locations, while at the same time taking all the steps necessary to address these legitimate security concerns. In the end, there is no better alternative than schools, and there are few locations more familiar and convenient to voters. Most communities do not have adequate alternative sites for polling places. Experience in jurisdictions where schools are used as polling places suggests that if schools are made unavailable, there may be either a crisis of access or a removal of polling places from the proximity of voters. It is known that the farther a polling place is moved from a voter the less likely that the voter will turn out to vote.[94]

State legislators working with school boards and election officials should be able to craft legislatively authorized programs that effectively balance school and electoral administrative needs. The Commission strongly recommends that all states review their state laws and contemporary practices within their jurisdictions to ensure the continued and future use of schools as polling places. The Commission more specifically recommends close attention to the use of professional or in-service training days to enable voting to take place on days when students would not be on location in school.

Recommendation: States should consider establishing vote centers to achieve economies of scale in polling place management while also facilitating voting at convenient locations.

The need to increase the number of schools used as polling places is representative of a larger set of issues concerning the optimal location for polling places to facilitate voting most efficiently. One recent innovation to address this problem is the use of "vote centers." A vote center is "a polling place at which any registered [voter] in the political subdivision holding the election may vote, regardless of the precinct in which the [voter] resides."[95] Because they are intended to make voting more convenient, vote centers are often located in places that are proximate to the everyday activities of local residents, such as in shopping centers. Instead of siting polling places nearest to voters' residences, vote centers are placed along common travel and commuting routes.

Vote centers provide benefits to election administrators and voters alike. Election administrators like them because they can concentrate resources in a large location that can service multiple voters from many different precincts. Voters like them because they are often located in places where they would travel in the normal course of their day.[96] They also help to address the long-standing problem of confusion among voters about their correct precinct polling locations.[97] Polling place confusion accounts for a disproportionately high number of provisional ballots, as voters arriving at the wrong polling place cannot be offered a regular ballot.[98] County-wide vote centers also tend to be established in locations superior in capacity and infrastructure to many used for more traditional precinct locations.

Indeed, jurisdictions that conduct in-person early voting effectively adopt the vote center model, given that early voting almost always takes place at centralized locations rather than in the multitude of polling places available for Election Day. Many jurisdictions with in-person early voting have already established the internet connectivity between polling locations and a centralized database necessary to ensure immediate updating of the list of who voted to prevent double voting. For them, adding Election Day vote centers takes advantage of the early voting infrastructure and computer systems to provide voters with additional options for casting their ballot.

The testimony received by the Commission indicates that vote centers can allow for a more efficient conduct of elections through the consolidation of precincts into smaller

numbers of vote center locations and a reduction in the number of poll workers needed. In Bernalillo County, New Mexico, for example, the number of poll workers required for Election Day was reduced by two-thirds and the county realized substantial savings.[99] There is also some evidence that vote centers may contribute to increased turnout — a measure of the value to voters of having the opportunity to cast their ballots at conveniently located and adequately equipped facilities.[100]

However, vote centers are not appropriate for every jurisdiction, and election authorities need to take a number of key factors into account if and when they transition to them. An insufficient number of vote centers or insufficient staffing and resources could increase, rather than decrease, voter wait times.[101] Moreover, if they are inconveniently located, as compared to neighborhood polling places, any turnout benefit may not be realized and indeed, turnout could decrease. Such considerations are especially important for populations that must use public transportation to reach their voting location. The value of vote centers will depend on residential and transportation patterns. The decision on whether to transition to vote centers will often turn on whether more voters can be better served through large, highly-resourced and conveniently located polling locations or whether a larger number of smaller, traditional polling places can better meet voter needs.

2. Management of Voter Flow

Even with adequate facilities, election officials must efficiently allocate resources. They must position staff and voting machines at polling locations to provide an optimal flow of voters and to minimize the possibility of long wait times. The Commission heard extensive testimony on different techniques that administrators have used to accommodate the flow of voters without the risk of long lines.[102] It also heard from industry leaders about innovative ways they have dealt with long wait times.

For example, many jurisdictions employ "line walkers" to address potential problems among voters before they reach a check-in station where their registration is verified. Doing so allows polling place officials to identify and resolve problems before voters reach the first choke point in the voting queue. Line walkers can identify, for example, which voters on line might be at the wrong polling place, have a problem with their registration, or need to cast a provisional ballot. Identifying such voters as early in the process as pos-

sible ensures that their problems will not result in congestion at the check-in station where research suggests most election lines develop.[103]

Other jurisdictions seek to give voters better information on line length before they go to the polling place, so they can plan accordingly. For example, Orange County, California, and Travis County, Texas, issued internet feeds on Election Day that described wait times at specific polling places.[104] Especially in jurisdictions with vote centers where any voter in the county can vote in addition to their polling place, this kind of publicly available information can help spread out the flow of voters to alleviate congestion.[105]

The private sector employs other techniques to deal with long lines. Whether in restaurants or theme parks, customers are quite familiar with the notion of "taking a number" or "making an appointment" instead of waiting in line. By analogy, voters could be offered a "virtual wait" and an opportunity to spend the "wait time" elsewhere — running errands, or having lunch — with the assurance that upon returning to the polling place, they would be able to cast their ballot promptly. Voters judged to be in line at the point that they would experience an hour's delay prior to voting could be issued cards with a proposed time of return. They could then leave the polling place or the line, should they wish to do so, and return at the appointed time and move through an expedited or special line to vote. This tool would be beneficial for the voters who remained in line as well as those who took advantage of this offer. Lines would be shorter, and the speed and comfort of voting is sure to improve the experience. Additionally, if the polling place had sufficient space, voters could "take a number" when they arrive, and then wait at a central location with chairs until their number was called, rather than having to stand in a long line.



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To be sure, there are imperfections in the analogy between lines at the polls and those at places of business. Voters waiting in line might not be too thrilled to see those with pre-appointments to vote pass them by. Moreover, any favorable treatment in the vot-

ing process due to skill in navigating new procedures might be seen by some as troublesome. As these practices have not yet been adopted by jurisdictions, the Commission would not describe them as "best practices" yet. Pilot programs should be considered that take the lessons learned from industry and apply them to the polling place.

Queuing theory, developed to deal with problems of industrial organization, however, can be helpful in identifying analogous phenomena in the polling place. Literature on that topic emphasizes that lines form when large numbers of people arrive at the same time, when there are too few points of service, and when the transaction time takes too long.[106] Drawing on such literature, experts who testified before the Commission emphasized the stages in the voting process that bear on wait times:

> **Check-in**: The first stage includes the check-in station when voters identify themselves to the poll worker who checks their registration status. At this stage their identification or signature can be checked. If the jurisdiction uses paper ballots, one is given to the voter at this time. Research suggests that most voters who experience long wait times did so at this stage.[107] The factors generating wait times at this stage include inadequate numbers of poll workers, pollbooks, or check-in stations, as well as poor design of polling places and the inaccuracy of registration lists. High rates of provisional ballots can also lead to longer lines, as voters and poll workers attempt to address confusion regarding a voter's registration status and to provide the appropriate ballot.
>
> **Voting Station Entry:** The second stage begins after check-in when voters wait for a machine or privacy booth in order to mark their ballot. Here, inadequate supply of such machines or booths can lead to lines as voters wait for one to become available. The length of time it takes a voter to cast a ballot will affect wait times upstream in the process. The factors affecting how long it takes a voter to vote include the length and complexity of the ballot, the preparation and sophistication of the voter, and the functionality of the voting machine.[108]
>
> **Ballot Casting:** Finally, for jurisdictions that rely on scanned paper ballots for in-person voting, the process of verifying and depositing a ballot can impose delays that migrate back upstream, particularly when ballots are more than one page.[109] In jurisdictions with multiple ballot cards, bottlenecks can form at the optical scan machines and cause delays.

Whether the necessary resources include polling places, poll workers, tables, pollbooks, privacy booths, or voting machines, the problem of long lines is principally a problem of the deployment of resources.[110] If the "one size does not fit all" slogan has any validity in addressing the problem of lines, it is this: local jurisdictions deploy a variety of different equipment to meet their functional demands, and they face a variety of different constraints in terms of the facilities available for voting. Proper deployment of resources in a particular precinct requires detailed planning and knowledge of expected voter turnout, average service times at check-in tables, and the likely flow of voters at peak times throughout the day.

Thousands of service-related businesses across the country deal with similar challenges each day. General knowledge about how to meet these location-specific challenges is well known in the fields of industrial engineering and management science. The challenge is marrying more completely these common management tools with the election process.

If a jurisdiction either does not have sufficient resources or does not devote them to its voting process, then lines can form. Research shows that voters in a small number of states (or localities within states) persistently endure long lines.[111] In these states, a top-to-bottom review of resource allocation and standard operating procedures may be in order. However, for the most part, the problem of long lines usually only afflicts a limited share of the polling places within a county.[112] This suggests that more often, it is the allocation of resources between polling places, rather than the total resources available, that causes long lines. In these cases, local jurisdictions may need to reconsider how resources are allocated, or how the addition of well-targeted resources could ameliorate the bottlenecks that do arise.

Although insufficient resources or their misallocation may be the primary and most obvious reasons for long lines, other factors can also play a significant role in delaying the voter. Statutes that require large numbers of voters to cast provisional ballots slow down the voting process.[113] Inaccurate voting rolls increase the number of unregistered voters or voters in the wrong polling place who must be processed. Polling place changes can also cause lines if voters' confusion leads many to show up at the wrong location.[114] Finally, poorly trained poll workers can drastically slow down the voting process.[115]

Nothing is more important to the success of an election than planning. In most jurisdictions, it is very difficult to make many adjustments to address issues that arise on Election Day, so the validity, accuracy and detail of the plan is critically important. *Planning for an Election Day begins with assessments of the number of registered voters and predictions as to how many of these voters will turn out during the early voting period and on Election Day.*[116] These predictions require accurate data concerning past turnout, as well as the historical pace of registration for past elections. If the jurisdiction is blindsided by the number of voters who show up at the polls, and cannot accommodate unplanned turnout, then long lines will occur. Many allocation decisions need to be made a half-year in advance of an election. *However, the best-prepared jurisdictions react to data gathered in the critical three-month period prior to an election when the factors affecting turnout are most relevant.* In that period the registration lists change considerably and the jurisdiction can learn what share of the voting population is using alternative means of voting, such as absentee ballots.

Predicting turnout is the beginning, not the end, of the process of preventing long lines. Jurisdictions must decide how to allocate their scarce resources between polling places on Election Day and during any applicable early voting period. *To estimate how many poll workers, machines, and voting stations are needed on Election Day, jurisdictions must pretest their ballots to gauge the time it will take an average voter to vote the ballot.*[117] If a voter takes 10 minutes to vote a ballot and the balloting period for a day is twelve hours, for example, then a maximum of only 72 voters can be served on any given voting machine in a day. Similarly, at the check-in station, if it takes three minutes for a poll worker to check in an average voter, then only 20 voters can be checked in per hour, per poll worker. Service times such as these can be estimated by conducting actual pretesting of all aspects of the election under simulated conditions prior to Election Day. Of course, administrators must plan for peak traffic periods and not make the mistake of assuming that voters will apportion themselves evenly throughout the day. The number of voters a machine can theoretically serve if used during an entire day, for instance, is irrelevant if most voters arrive at the polls during a compressed four-hour period.[118]

There is much that states and localities can do to reduce wait times. Most obviously, increasing the number of voters who vote before Election Day can relieve Election Day traffic.[119] However, some states that have adopted in-person early voting have simultaneously reduced Election Day polling places, leading to no net gain from the standpoint of Election Day administration.[120] Even during the period of early voting, moreover,

states must plan for increased turnout. Although voters appear to have a greater tolerance for waiting in line during the early voting period (since they chose to come at that particular time), wait times, on average, were higher in 2012 during early voting than they were on Election Day.[121] Therefore, election officials not only must plan for the glut of voters who wish to vote early, but also must ensure that sufficient resources remain to keep lines short on Election Day. Many states, therefore, limit by statute the number of registered voters per precinct to ensure that polling place consolidation or population growth over time does not lead to turnout that overwhelms polling place capacity.

Well-informed voters can also help reduce wait times. An uninformed voter who sees the ballot for the first time in a polling booth will take longer to vote than one who comes prepared to vote having viewed a sample ballot either on a state's website, through the news media, or perhaps in a mailer. *The sample ballot should be available to all voters no later than the beginning of in-person early voting or three weeks prior to Election Day.* Voters can then have the ballot in hand and the opportunity to make up their mind before entering the polling place. *Moreover, if the law allows, states should reduce the length and complexity of the ballot in Presidential Election years (which are generally the elections in which we experience long lines) to ensure that voters can vote more quickly.*[122] The jurisdiction should also provide voters the information they need, such as polling locations and hours, ballot and candidate information, absentee and UOCAVA ballot information, registration deadlines, and voter identification requirements. The easier it is for voters to obtain election-related information, the more likely they will show up at the correct polling place informed and ready to cast their ballot.

Systems that allow voters to mark a sample ballot prior to Election Day can also reduce the time a voter spends at the polls. In fact, technology now could allow a voter to fill out and download a sample ballot at home. A voting machine can then scan the sample ballot (or its barcode) so as to populate the ballot on the screen for the voter to verify his or her choices. The voter could still make changes to the ballot in the privacy booth, of course. However, a significant amount of the voter's time could be saved by reading the sample ballot and making choices before casting the final ballot itself in the voting booth.

Before experimenting with particular innovations to address long lines, jurisdictions must plan for the pace and volume of voters throughout the voting period. Every election official who is responsible for allocating a jurisdiction's limited voting resources (ballots, voting booths, voting machines, voter check-in tables, pollbooks, qualified election workers, etc.) to polling locations must be able to predict how many voters will show up and how long they will take to vote. This knowledge is required to allocate voting resources efficiently to polling locations and to determine prior to the election if sufficient resources are available or if lines will be an issue due to a lack of resources. While most election officials do this to some degree, testimony showed that some do not. Lines were simply anticipated as part of the election process.[123]

Recommendation: Jurisdictions should develop models and tools to assist them in effectively allocating resources across polling places.

To assist local jurisdictions in planning for the logistical challenges facing them on Election Day, *election officials need greater access to industrial engineering tools that are regularly employed to help manage customer service queues.* We can imagine a number of models for developing richer collaborations between industrial engineers and election officials. In some larger counties and cities, local governments may already employ the needed talent, so the issue may be one of developing inter-agency agreements to allow industrial engineers to consult with the election department as needed. Another model may be collaborations between election offices and universities. Land grant universities particularly would be the logical starting points for such collaborations in many states.

Although we sense a pressing need for a major effort to be made to foster a higher level of engagement between election officials and industrial engineers, important first steps have been taken to develop simple computer applications that demonstrate the value of industrial engineering tools in managing resource allocation for in-person voting. These resource calculators enable administrators to plan for efficient Election Day operations by judging the resources needed to accommodate the projected traffic through the polling place.[124]

To aid jurisdictions in making such calculations, the Commission identified examples of resource allocation calculators to illustrate the types of models jurisdictions can use to better allocate resources between their polling places. None of these is a universally

applicable model for all types of jurisdictions; however, they stand as examples that jurisdictions can modify to suit their particular circumstances. The Commission, having heard impressive testimony on the models now available, is publicizing them and strongly recommending their use. *The Caltech-MIT Voting Technology Project is now hosting these models on its site, and are available through a link from www.supportthevoter.gov. The Commission urges the further development and tailoring of these tools so that they can be adopted across the widest range of jurisdictions.*

The Commission, having heard impressive testimony on the resource calculators now available, is publicizing them and strongly recommending their use.

To be clear, the Commission is not recommending the use of resource calculators as certain solutions to polling place lines. They are tools that, prior to the election, allow the administrator to allocate limited voting resources most effectively based upon predicted turnout and expected time required for voting. Together with other sound polling place management practices, these tools can help ensure that a polling place quickly processes the volume of voters who will pass through on Election Day. They are guides, not answers, but indispensable guides nonetheless. Any kit of best practices would have to include these resource calculators, which, in turn, will continue to improve with experience and further development. It is the hope of the Commission that these models will serve as springboards for better models, adapted and refined for the particular circumstances of individual jurisdictions.

Such calculators, however, are only as good as the data entered into them, and they can only be improved if their predictions are evaluated after each election. Addressing long lines requires systematic procedures to spot when and where long lines occur. *Keeping track of wait times at individual polling places can be done using simple management techniques, such as recording line length at regular intervals during Election Day and giving time-stamped cards to voters during the day to monitor turnout flow.*

After each election, moreover, jurisdictions must evaluate and account for any lines that were reported. *In polling places with a history of long lines, local election officials should*

analyze the reasons for excessive wait times and develop plans based on that analysis for avoiding the problem in the future. The Commission further recommends that, in the interests of coordination and communication among all responsible election officials, the local officials should provide copies of these plans for remedying line problems to the relevant chief state election official.

Recommendation: Jurisdictions should transition to electronic pollbooks.

Numerous witnesses before the Commission testified to the extraordinary value that they have derived from the use of electronic pollbooks.[125] An e-pollbook is an electronic version of the paper pollbook. It is simply a list of eligible voters in the relevant jurisdiction, which traditionally has been organized alphabetically or by address of the voter. The e-pollbooks provide poll workers with the ability to locate a voter's information quickly and accurately, to confirm a voter's registration status, and to prescribe the appropriate ballot. The e-pollbook provides greater flexibility to those who are checking in people to vote, compared to the traditional paper list. In some cases, the e-pollbook has real-time access to the county or state voter list, which allows poll workers even greater flexibility in dealing with voter registration problems that emerge on Election Day.

E-pollbooks can make a singular contribution in resolving registration problems at check-in stations. Preprinted paper pollbooks only contain the names of voters eligible to vote in a specific precinct. If the voter is in line for the wrong precinct or in the wrong polling place and reaches the front of the line, the election worker with the paper pollbook cannot resolve the issue. Thus, the voter must be removed from the line until the issue is resolved—often by contacting the central election office, which may be overwhelmed with other calls. Even in the best of circumstances, the voter is inconvenienced and the capacity of the central election office is taxed.[126]



E-pollbooks can make a singular contribution in resolving registration problems at check-in stations.



E-pollbooks significantly reduce this burden.[127] Some newer implementations of e-pollbooks give poll workers the flexibility to "walk the line," to make sure that those

waiting in line are registered to vote and at the correct polling place. If not at the correct polling place, they can then be directed to the right one. If they do not appear to be registered, these voters can then be taken out of line well before reaching the check-in station, so that their registration-related problem can be solved without holding up the rest of the voters.

E-pollbooks benefit election officials as well as voters. They can help to reduce poll worker errors frequently associated with paper-based voter check-in processes. Poll workers sometimes fail to check-in voters, distribute the wrong ballots, or send voters to the wrong polling place. E-pollbooks can help mitigate, if not solve, each of these problems. E-pollbooks can also be instrumental in gathering data on wait times and traffic, as they can keep track of when voters arrive and check-in. These data can later assist election officials in planning for peak flow times throughout the day. Finally, e-pollbooks can save money otherwise spent each election on the generation of thousands of pages of voter rolls. It is no wonder then, that in the national survey of election officials, e-pollbooks was one of the most frequently identified innovations that respondents desired.[128]

3. Poll Workers

Poll workers represent the primary point of contact with the electoral process for most voters. Effective polling place management requires personnel on location who are well-trained and able to work on what will ultimately be a long and grueling Election Day.[129] They must administer the polling place and provide information as necessary to the voters. One of the signal weaknesses of the system of election administration in the United States is the absence of a dependable, well-trained trained corps of poll workers.[130] Workers report for duty only a few days a year, possibly as infrequently as once. The days are long and the pay is low. Training is spotty and often consists of no more than a couple of hours.[131] The quality of training in approximately 8,000 election jurisdictions varies markedly.[132]

Because many citizens who might otherwise volunteer for poll worker duty cannot take the time off from work, the responsibility falls throughout the United States predominantly on senior citizen volunteers. Surveys show that just under half of the community of poll-workers is retired, and that more than half of poll workers are older than 60.[133]

A survey of local election administrators on the issues specified in the President's Executive Order identifies poll worker shortages as one of the leading concerns.[134] The Commission heard consistent testimony that effective poll worker recruitment, training and staffing are among the most important factors in determining the quality of the voter experience. There is evidence to this effect in studies that show that voter satisfaction and confidence correlate with positive appraisal of poll worker performance.[135]

a. Recruitment

Recruitment of poll workers is a persistent challenge. Election administrators surveyed on the point report considerable difficulties in locating dependable poll workers; across states, large numbers of officials reported that recruitment is "very" or "somewhat" difficult.[136] Several steps could be taken immediately to significantly address the undersupply of poll-workers. *The Commission recommends that election administrators consider the many recommendations made available in the relevant EAC report, Successful Practices for Poll Worker Recruitment, Training and Retention.*[137] The Commission wishes to highlight and recommend two policies in particular: the recruitment of high school and college students and the recruitment of employees from the public and private sector.

Recommendation: Jurisdictions should recruit public and private sector employees, as well as high school and college students, to become poll workers.

Finding a sufficient number of capable poll workers with the free time to work on Election Day can be one of the most difficult challenges election officials face. Retirees are, therefore, a natural resource to draw upon to fill the need. However, jurisdictions facing shortages need to diversify the population pool from which they draw poll workers. To do so will require cooperation from schools and other private and public entities.

However, jurisdictions facing shortages need to diversify the population pool from which they draw poll workers.

Jurisdictions that allow students to work at polling places have generally found that the practice is an effective way to have sufficient staff on Election Day and to expand the future pool of poll workers.[138] Half of the states already allow 16

and 17 year olds to work at the polls.[139] For credit or other recognition, these students are given Election Day off from school (if school is in session) to serve at polling places. With systematic attention to creative programs for encouraging student participation, the pool of available support for poll working could be significantly expanded. As an exercise in civic education, certainly, this alternative has much to be commended.

In recent years, some programs have also been instituted to encourage employers to make opportunities for poll worker service available to their employees.[140] Two states provide by law that employers must afford their employees these opportunities without penalty. *Other states have developed programs to recognize employers for supporting those employees who wish to work on Election Day.* Examples include the "Champions for Democracy" program in Franklin County, Ohio,[141] and in the Kansas City metropolitan area, "Making Voting Popular."[142]

The Commission recommends that each state establish or upgrade programs for encouraging employee service at the polls. State statutory authorization has the evident virtue of clearly setting out state policy in this regard and guarding against the possibility that employees wishing to serve will be discouraged by fear that they will suffer penalties in the workplace. In the end, however, the success of these programs depends on broad community support, including recognition of both the employee's service as a poll worker and the employer's willingness to give the employee the day off for that service. Beyond mere statutory authorization, voluntary initiatives of this nature may establish these programs more firmly within the communities these poll workers serve. Taken together, recognition at law and informal recognition in the community have the combined potential for adding appreciably to the number of poll workers prepared to serve on Election Day.

The public sector also has a significant contribution to make through the encouragement of poll worker service by county employees. County employee participation is authorized and encouraged in some jurisdictions, but not in others. The Commission recommends that jurisdictions throughout the country study and adopt various ways of bringing the county workforce in to support the electoral process. We recognize that certain safeguards might be appropriate, such as disallowing county employee poll worker service if the official to whom they report is a candidate on the ballot. However, for most county employees a day of service as a poll worker does not pose challenges different than those faced by private sector employees.

b. Training

Election administrators must also contend with the difficulty finding adequate time and resources for the training of poll workers.[143] As noted, poll workers are paid little and some show up only for the days on which elections are held. Their availability for training is necessarily limited, and high rates of turnover in some jurisdictions lead to losses of institutional memory from one election to the next.[144]

Given the variety of tasks facing modern poll workers, different poll workers may require different skills. Together, however, the team of poll workers can determine the quality of the voting experience in the polling place. Depending on their familiarity and facility with the check-in process, poll workers can be the critical determinant of the length of a line. Similarly, poll worker familiarity with the voting equipment, especially with features designed to make machines accessible, can determine in the most basic way whether a voter can cast a ballot.[145] Finally, poll workers unaware of various legal requirements, such as those governing provisional ballots, may unintentionally turn away eligible voters.

Poll worker training programs vary widely among jurisdictions and are not generally rigorous or thorough.[146] On average, poll workers receive two-and-a-half hours of training.[147] However, many receive such training only once, while others are retrained for each election. In some cases, the teaching mode is interactive and may include Election Day simulation, while in others it is primarily "lecture" style.[148] A few jurisdictions evaluate poll worker progress in mastering the information, but not all do.[149] Even fewer evaluate poll workers to determine if they can perform their Election Day responsibilities. Given the scarcity of poll workers, many who fail at the most basic tasks are nevertheless retained for Election Day.

Poll worker training programs vary widely among jurisdictions and are not generally rigorous or thorough.

Recommendation: States should institute poll worker training standards.

The Commission strongly recommends that states prescribe statutorily required training regimens and allocate the resources necessary to give those programs the chance to succeed. Online coursework presents a fresh opportunity for more intensive training and can include mechanisms for feedback and evaluation. Working with the state's colleges and universities, election officials can avail themselves of the growing capacity to design and deliver highly effective online courses that go well beyond traditional online and video classes of the past. By taking programs online, jurisdictions can save money and make training materials and interactive tools available to poll workers on a virtually continuing basis.

Because of the variety of voting systems that may be used in a given state, counties may be best situated in some states to train on the specific equipment used in their jurisdictions. *States could support the counties by preparing a template that permits each county to further customize the program suitable for their training purposes, while still achieving uniform application of the state's legal standards.* There are examples, such as in the state of Michigan,[150] or Dallas County, Texas,[151] where significant time and attention has been paid to the development of online training programs that, the Commission was advised, have proven effective.

4. Management of the Polling Place to Address the Needs of Particular Communities of Voters

The President's Executive Order identifies among the issues the Commission must consider problems of accessibility faced by voters with disabilities and with limited English language proficiency. As mentioned in the introduction, the Commission believes that the needs of these voters must be considered at all stages of the electoral process. Indeed, just as election authorities should "bake in" accessibility to each aspect of election administration, this Report attempts to do so by not limiting its discussion of such needs to a separate section. That being said, polling place management presents a range of issues concerning voters with disabilities and limited English proficiency that a discussion of some specific best practices may be necessary.

Recommendation: Election authorities should establish advisory groups for voters with disabilities and for those with limited English proficiency.

As a threshold matter, an election official must work with community groups in order to understand the needs of voters with disabilities and limited English proficiency, as well as to gain assistance and advice as to how to meet those needs. Advisory groups from these communities can play a critical role in fostering cooperation between their members and the election authorities. Their advice is also indispensable as an election authority makes decisions on resource allocation to accommodate accessibility concerns.[152]

Advisory groups play a critical communication function as well. When election authorities need to inform voters with accessibility needs of the resources available, advisory groups can serve as a conduit between their members and the election authorities. *Election authorities must make every effort through their own websites and traditional communication outlets (especially through non-English media) to reach voters with accessibility needs.* However, sometimes the advisory groups through their email lists, websites and communication modes specifically tailored to those with accessibility needs can partner with election officials to reach voters more easily.

Advice from these groups can be particularly useful when it comes to training poll workers and managing polling places. The Commission heard on several occasions how poll workers were poorly trained to deal with voters with accessibility needs and how polling places and election materials were not designed with these needs in mind. If the relevant groups are brought in early enough into the decision-making process, many of these concerns regarding poll workers and polling places can be alleviated.

a. Voters with disabilities



The population of voters with disabilities is large and growing.



The population of voters with disabilities is large and growing. Roughly 35 to 46 million Americans of voting age — amounting to one in seven potential voters — have accessibility needs.[153] The share of the voting population with disabilities will also grow considerably as the Baby Boomer

population ages. Issues of voting and accessibility, therefore, are not ones for a discrete subset of the population. Rather, they are issues that many, if not most, voters may experience at some point in their lives.

Recommendation: States and localities must adopt comprehensive management practices to assure accessible polling places.

Federal law requires that all polling places be accessible to voters with disabilities in accordance with the Americans with Disabilities Act. The Civil Rights Division of the Justice Department has published a pamphlet and checklist (http://www.ada.gov/votingchecklist.htm) that can and should be used to ensure each polling place is accessible to voters with disabilities. *The responsible election official should keep the completed checklist for each polling place on file in the office, and it should be updated before each election.*

For voters with disabilities, the first question is one of physical access, both inside and outside the polling place.[154] Outside the polling place, impediments to access present in a variety of ways, such as parking lots and spaces located far from the polling place, and a lack of navigable space between the parking lot and the polling place entrance.[155] *Within the polling place, elderly voters and voters with disabilities waiting their turn to vote must have access to chairs while waiting and then, when their turn to vote comes, to the machinery.*[156] Corridors and doorways must be wide enough for wheelchair ramps in the location, and the voting machines must not be set too close to a wall and must otherwise be reachable.[157] Over time, the Government Accountability Office has found that significant improvement has been made in the accessibility of polling places. But additional improvement is still required.[158]

Testimony on this issue highlighted the importance of ensuring that poll workers are trained on how to interact with voters with disabilities and how to configure and operate the equipment.[159] Training films already developed by both election officials and organizations representing voters with disabilities are also available on the internet. *The Elections Department of the County and City of San Francisco has provided an extremely helpful video guide*[160] *to setting up an accessible polling place and the Pennsylvania Department of State has an equally helpful video guide for poll workers to educate them about voters with disabilities.*[161] *The Commission regards them as models that other jurisdictions should emulate.*

Recommendation: States should survey and audit polling places to determine their accessibility.

States must routinely audit their polling places to determine their accessibility. Polling places change with each election: some are removed due to consolidation, new ones might be added, and others' architectural features may change. Moreover, as states shift to alternative modes of voting, such as vote centers and early voting locations, or change their voting technology, new accessibility concerns may arise and need addressing. Only a routine audit that evaluates polling places for accessibility can ensure that state authorities are kept up to date about any problems in polling place design affecting voters with disabilities.

The Wisconsin Government Accountability Board performs a survey and audit of polling places that stands as a model. Its *Polling Place Accessibility Survey*[162] asks a series of questions regarding parking, pathways, entrances, interior routes, and voting areas. The Board's 2013 Report[163] was derived from 1,614 polling place audits conducted over the course of 16 elections, which required the visiting of 921 municipalities located in 66 Wisconsin counties. The audit was comprehensive and identified shortcomings that deserved attention. Following the audit, localities then worked to address the problems the audit revealed.

b. Voters with limited English proficiency

Voters with limited English proficiency confront a range of barriers in voting. According to census statistics, approximately 10 million citizens of voting age do not speak English "very well."[164] Language barriers may prevent effective participation at each stage of the voting process: navigating an election website, learning about the registration process, registering to vote, gaining information about the election (sample ballot, polling place location and hours, etc.), navigating the polling place, interacting with poll workers, and finally, casting a ballot. Election authorities must be aware of the challenges faced by voters with limited English proficiency and adapt their communications accordingly.



Language barriers may prevent effective participation at each stage of the voting process.



As noted in the introduction, sections 203 and 208 of the Voting Rights Act provide a series of protections for voters of limited English proficiency. If a language minority exceeds five percent of the voting population of a jurisdiction, it must provide election materials and polling place assistance in that language. Even for voters outside of jurisdictions meeting that threshold, however, voters with difficulty reading English are entitled to voting assistance from a person of their choosing. Compliance with these legal requirements varies considerably by jurisdiction and by polling place. As elsewhere, the Commission urges strong enforcement of these existing federal laws.

Recommendation: Jurisdictions should provide bilingual poll workers to any polling place with a significant number of voters who do not speak English.

A serious problem highlighted throughout the Commission's review of the barriers to access faced by limited English proficiency voters was the inadequate supply of bilingual poll workers. Once again, where adequate assistance is not available at the polls, errors in communication can lead to logjams that contribute to problems such as lines.[165] The Commission recommends that election officials develop and implement plans to work with members of minority language groups in their jurisdictions to address the issue.

As in the case of voters with disabilities, poll workers must exhibit an understanding of the specific issues that limited English proficiency voters face. No voter, for any reason, should be made to feel unwelcome or in any way a "second-class" citizen. To have personnel on hand, properly trained, who can speak the language of the voter is indispensable to establishing a polling place that runs appropriately and treats and supports all voters alike. Election administrators must consider the number of workers necessary to accommodate the language minority population. The should also ensure that poll workers hired to provide language assistance have the necessary skill set to do so effectively and should provide them with all of the tools necessary to be successful. The EAC has published glossaries of election terminology in many languages that can be invaluable in establishing an effective program.[166]

The Commission believes that this recommendation might be considered, and its objective satisfied, in conjunction with its emphasis on the importance of opening up more successful channels of poll worker recruitment in our educational institutions.

Students with bilingual capabilities could be recruited and given credit for their service. The same could be true for bilingual teachers in the school system, who can be a critical resource both for recruiting students and serving as poll workers on Election Day.

Recommendation: Jurisdictions should test all election materials for plain language and usability.

Even in jurisdictions without large non-English speaking populations, steps should be taken to address the barriers that language can place in front of limited English proficient voters. Voting materials and ballots are notoriously complex and difficult to read for all voters. Often this is the fault of an election code that heaps one requirement onto another without consideration for the physical limits of a printed page or the attention and capabilities of a voter. Such laws need to be reformed, but even acting within those constraints, election officials should adapt their materials to make them as easy as possible for voters to understand.

The Commission urges jurisdictions to engage in usability testing of their voting and polling place materials, with particular attention to adopting "plain language" guidelines.[167] Forms and notices that may seem clear to one schooled in the procedures of a polling place will be difficult for many, if not most, non-experts to comprehend. All materials and designs need to be tested before an election to ensure that voters of varying proficiency with English can understand them. This includes not only native English speakers and those who speak foreign languages, but also those with cognitive challenges who can often be confused by directions written in a bureaucratic language.

C. Voting Before Election Day

Voting in the United States has undergone what has been described as a "quiet revolution" in the expansion of the time allotted for voting.[168] Nearly a third of voters in the 2012 Election cast their ballot before Election Day, more than double the rate of the 2000 election.[169] Of the more than 47 million Americans who cast ballots early in 2012, 29 million were cast by mail and 18.5 million early in-person.[170]

Whatever the form and design of in-person or mail voting in any one state, the trend toward increasing the time period for voting is certain to continue. Stated simply, early voting offers Americans opportunities to participate in the electoral process that simply

cannot be afforded by the contained twelve-hour period of the traditional Election Day. Election officials from both parties testified to the importance of early voting in alleviating the congestion and other potential problems of a single Election Day.

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Early voting takes several forms and the type of early voting available varies considerably by region. In the West, vote-by-mail and no-excuse absentee voting predominate, with Washington and Oregon running their elections exclusively by mail. In 27 other states and the District of Columbia, no-excuse absentee voting is available.[171] In some, such as Arizona, California, Colorado, District of Columbia, Hawaii, Montana, New Jersey, and Utah, a voter can permanently register as an absentee voter. In 32 states plus the District of Columbia, some form of early in-person voting is available. Although available in Western states, it is used with greater frequency in the South.[172] In addition to these two paradigmatic forms of early voting, many hybrids also exist, such as where voters can apply for, vote and drop off their absentee ballots at a county office, an early voting site, or at a polling place on Election Day. Indeed, the state of Oregon has "all mail" elections, but 60 percent of their ballots are not returned by mail, they are dropped at drop-boxes provided for voters across the state.[173] Some states also allow for what is cryptically named "in-person absentee voting," where a voter can obtain and cast an absentee ballot before Election Day at an election headquarters with the ballot then tabulated along with all the other absentee ballots received.

The testimony received by the Commission uniformly reflected the view that Americans will continue to expect choices in when and how they can vote prior to Election Day. Some states have proposed legislation to limit the length of time during which in-person early voting would be available. However, in most states discussions concern how early voting should be structured, not whether it would be offered at all. Variations remain in the formats provided for early voting. Some states still require excuses for absentee voting by mail, while Oregon and Washington provide for all-mail elections.

In-person early voting is also characterized by diversity. Early voting states, on average, provide 19 days for voting. But that average does not reflect the considerable variation among states in the number of days, which days, and which hours early voting is available (whether it includes the weekend before the election, for example).[174]

The Commission recognizes that each form of early voting has its critics. Some criticize the practice, in general, for permitting voters to cast ballots at different stages of a campaign with different levels of information about the candidates. In-person early voting, in particular, is criticized because it requires more extensive staffing both for the election authority and the campaigns that monitor polling places. No-excuse absentee voting and vote-by-mail, moreover, often lead to errors in balloting on the part of the election authority or the voter. Ballots can be lost in the mail (either in delivery or return), they can be mailed out or received too late for timely voting, and voters occasionally make mistakes in complying with various signature and other requirements that make an absentee ballot legal. Fraud is rare, but when it does occur, absentee ballots are often the method of choice.[175] Finally, absentee ballots are usually paper ballots, and are therefore not accessible to many persons with disabilities, such as those with visual or dexterity challenges.

What does emerge from evidence about the experience of voters is that their tolerance for wait times is considerably higher with early voting. Having chosen the day and time for voting that is convenient for them, early voters are described as being in a more "celebratory" frame of mind than under the often rushed circumstances they face on Election Day when they must vote at a specific location on a specific day. The Commission has found that in early voting our electoral process is increasingly reflecting the expectations that voters have about the choices that should be available to them in their day-to-day lives. As noted in testimony from the National Conference of State Legislatures, "no state . . . abandoned these early voting options once they've tried them."[176]

Recommendation: States should expand opportunities to vote before Election Day.

Early voting is here to stay,[177] and the Commission recommends that states that have not yet offered voters choice on when to cast their ballot commit to study the alternatives and adopt those that would work best for them. Different states will prefer different types of voting before Election Day, as well as different durations for the early voting

period. However, the bipartisan consensus of election administrators in favor of voting before Election Day was evident in the testimony heard by the Commission and the response of voters around the country when it has been made available.[178]

Whatever its preferred format, early voting addresses many of the current and future challenges to voting in America. As discussed above, polling places are becoming more difficult to locate and staff. Early in-person voting allows election authorities to use the facilities available to them for longer periods of time to relieve some of the traffic that would occur on Election Day. Similarly, for jurisdictions facing a crisis in the acquisition of new voting machines, extending the early voting period will allow the jurisdiction to service more voters per machine.

The benefits of pre-Election Day voting can only be realized, however, if jurisdictions do not, at the same time, overly reduce resources dedicated to Election Day. All things being equal, extending the period for voting should relieve the congestion on Election Day. However, if jurisdictions overcompensate by significantly reducing the number of polling places, staff, and other resources available for Election Day, that may not be the case. *Therefore, the Commission emphasizes that expansion of pre-Election Day voting should not come at the expense of adequate facilities and resources dedicated to Election Day.*

A similar cautionary note applies to vote centers, as well. As noted above, jurisdictions that allow early in-person voting usually have the physical and computer infrastructure to establish Election Day vote centers. However, any management benefits from voting in larger more convenient locations will not be realized if the number of vote centers is inadequate or if insufficient resources are deployed to deal with the larger number of voters a vote center necessarily experiences.

Likewise, expansion of no-excuse absentee or mail balloting must be done with an awareness of the risks and downsides of that method. As a threshold matter, to the extent that these methods rely on the U.S. Postal Service, they depend upon an institution under increased strain and undergoing major restructuring, as highlighted for example by recent consolidation of processing plants and proposed abolition of Saturday mail delivery. Jurisdictions must account for these changes in the schedule for mailing and receiving absentee ballots.

Problems with the mail are indicative of larger challenges with absentee and mail voting. Unlike voting in a polling place, voting by mail requires successful delivery and receipt of the ballot at many stages in the voting pipeline.[179] A jurisdiction must receive the voter's properly executed application for an absentee ballot before the relevant deadline. The voter then must receive the ballot on time and properly execute it by, for example, providing some identifying information and signature.[180] The ballot then must be received by the election office in time to be counted. At each stage of this process, ballots can get lost by fault of the voter, the election administrator, the mail, or someone else.

Therefore, while endorsing the expansion of no-excuse absentee voting, the Commission also encourages the increased use of safeguards. One such safeguard is online tracking of absentee ballots. County election websites should enable voters to verify that their absentee ballot request was received, that their ballot was mailed out, and then later that it was received and counted (and if not counted, the reason why).[181] Barcoding technology has empowered jurisdictions to automate this process and to empower voters to check that their votes have not been "lost in the system."[182] Moreover, jurisdictions that recognize a problem with the absentee ballot or application of a voter should follow up with that voter if sufficient time exists to cure any technical defects that might prevent the voter's vote from being counted.

Furthermore, establishing communication with the local Postmaster is essential to ensure that issues are addressed and that mailings comply with postal regulations. Inconsistent interpretation of these regulations surrounding mailing content and Official Election Material Mailings is an ongoing concern for election administrators. Rejections of election-related mail, rate differentials, and delay of service to the voter have led some to call for simplified pricing and a service regime for Official Election Material, such as a single rate without content restrictions. Finally, some election administrators have advised that officials should retrieve ballots at the post office itself to ensure they are all received by the appropriate deadline.[183]

The Commission endorses expanded use of pre-Election Day voting. Although the Commission considers the trajectory of early voting to be clear and irreversible, different states, of course, will adopt the type of early voting that best fits their needs and capabilities. Whatever the form early voting may take, it must be administered in an equitable manner so all voters can have equal opportunity to vote. Indeed, enabling voters to cast a ballot at a time convenient to them, not the election authority, is the whole point of allowing voting before Election Day.

D. Military and Overseas Voters

Military and overseas voters confront problems similar to other absentee voters, but their geographic distance from local election officials often magnifies the challenges of registering, receiving ballots, returning them, and having them counted.[184] While all voters can benefit from the increased availability of online tools, the internet is the election lifeline for many military and overseas voters, in particular. Any process in the election administration pipeline that relies on the mail is one that necessarily has a disparate impact on overseas and military voters, for whom mail (whether that of a foreign government or the Military Postal Service) is often slow and unreliable.[185] However, jurisdictions vary wildly in the quality of the tools and information on their websites, and the degree to which they specifically seek out and assist uniformed and overseas (UOCAVA) voters.

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Through federal legislation, such as UOCAVA and the MOVE Act, the nation has made great strides in recent years in facilitating participation by military and overseas voters.[186] In particular, the MOVE Act's requirement that ballots be mailed 45 days before an election has helped address the previously intractable problem of overseas voters not receiving their ballots on time.[187] Likewise, the innovations of the Federal Postcard Application (FPCA) and Federal Write-in Absentee Ballot (FWAB) serve as important stop gaps to ensure that service members can register and vote in the event the normal state methods fail.

With these innovations and legal changes have come some problems, however. Because of changes with the MOVE Act, there is great uncertainty as to how long an FPCA remains in effect — one election, a two-year election cycle, or more. Prior to MOVE, requests made through the FPCA would lead to ballot delivery for the next two federal elections. Although the MOVE Act now reduces the requirement to one year, some states still abide by the two-year standard.[188] Some states take the FPCA at face-value

as a "voter registration and absentee ballot application" and utilize it to fully register a covered voter and simultaneously slate the voter to receive an absentee ballot. Other jurisdictions treat the FPCA as a temporary registration mechanism, only registering the voter for the period of time the FPCA designates and then canceling the voter's registration at the end of that time period.

Second, jurisdictions vary in their tendency to count a FWAB simultaneously as a voter registration application — some do and some do not.[189] The FWAB is used by voters who swear and attest that they have made a previous attempt to register and request a ballot and have not received the standard ballot to vote. Yet some jurisdictions reject a FWAB if they do not have a previous request on record.[190] These inconsistencies lead to great confusion among service members and overseas voters over whether their registrations are effective.

Any consistent standard regarding the FWAB and FPCA is better than no rule at all. *Because the FWAB and FPCA were both intended to enable voter registration by military and overseas voters, states should recognize them, at a minimum, as voter registration applications akin to those filed by other voters.* With respect to the FPCA, the MOVE Act's permission for states to treat the FPCA as a ballot application for one year only was motivated by the fact that the extreme mobility of the military population often leads their addresses on voter rolls to become quickly out of date. However, now two soldiers, both using the same form in different states, could have their registrations and ballot requests become inoperative at different times. Unless the MOVE Act is amended to require a fixed period for which a FPCA will serve as a ballot application, states need to coordinate among themselves to establish consistency in the determination of whether a FPCA will enable a military or overseas voter to receive a ballot for one or two years.

Recommendation: States should provide ballots and registration materials to military and overseas voters via their websites.

Looking toward the future, even though the internet is not yet secure enough for voting, we should expect that military and overseas voters will continue to be the testing ground for greater use of the internet for communications between election authorities and UOCAVA voters.[191] Because of the unique needs of UOCAVA voters and the importance of the internet as the primary mode through which election officials communicate with them, it is imperative that jurisdictions provide a targeted website and

assistance for those voters.[192] The websites of state and local election authorities must be improved to provide customized and comprehensive information for military and overseas voters.

A survey of state election websites by the Overseas Voter Foundation has detailed the shortfalls in the quality of materials and instructions for overseas and military voters:[193]

- 26 jurisdictions offer a direct link to military and overseas voter services on their voting/elections homepage.
- Rather than offering their own state-specific instructions, 20 states redirect military and overseas voters to FVAP for instructions on how to vote from abroad.
- 15 states have no on-site option for UOCAVA "voter registration" on the state website (they either redirect the user to FVAP or provide no assistance).
- 13 states have no on-site option for "absentee ballot request" on their state website (they either redirect the user to FVAP or provide no assistance).
- 35 states have no on-site option for use of the Federal Write-in Absentee Ballot (FWAB) (they either redirect the user to FVAP or provide no assistance).
- 19 states provide no extra assistance to military and overseas voters, such as a specific e-mail address, an interactive help desk, or a frequently asked questions (FAQ) section.

Many of the innovations that will assist domestic voters will have payoffs for military voters as well. Like other highly mobile voters, members of the military suffer from a registration system that requires re-registration whenever the voter changes addresses. As they move from one base to another and then another, service members must re-register to vote (if they are moving residences within the U.S.) or notify their home election official of their new mailing address (if they are moving but not changing their legal residence). In either case, the ease with which a voter can navigate the registration process from afar will be a determining factor to overcoming the first hurdle on the way to voting. All the benefits of online registration for domestic voters, therefore, are even greater for military and overseas voters.

The same holds for innovations in voting technology that will allow voters to create and fill in their ballot online, even if they do not cast it over the internet. *However they may transmit their ballot, overseas and military voters would benefit from a system that allows them to create on their attached printer a ballot with a barcode that can be read by the local election administrator.*[194] Doing so should also cut down on the work often required by election officials who must re-mark ballots received from overseas so that the machine counter can read them. As with all other absentee ballots, the voter must verify his or her identity. But the more that the transmission and receipt of such ballots are free from human error, the greater the likelihood that the ballot will be received, cast, and counted correctly.

E. Growing Challenges with Election Equipment and Voting Technology

Perhaps the most dire warning the Commission heard in its investigation of the topics in the Executive Order concerned the impending crisis in voting technology.[195] Well-known to election administrators, if not the public at large, this impending crisis arises from the widespread wearing out of voting machines purchased a decade ago, the lack of any voting machines on the market that meet the current needs of election administrators, a standard-setting process that has broken down, and a certification process for new machines that is costly and time-consuming. In short, jurisdictions do not have the money to purchase new machines, and legal and market constraints prevent the development of machines they would want even if they had the funds.

The most dire warning the Commission heard in its investigation of the topics in the Executive Order concerned the impending crisis in voting technology . . . [which] arises from the widespread wearing out of voting machines purchased a decade ago.

When most people think of the crisis in voting technology, they think it passed with the 2000 election. Ballots became notorious in that election as the cause of many problems. Indeed, the cross-eyed vote counter in Florida remains to this day the poster child of sorts for election dysfunction.

The voting technology crisis the country will soon experience has its roots in the 2000 election, but the nature of the problem is quite different than a decade ago. A large share of the voting machines currently in operation were purchased with federal funds appropriated in 2003 as part of HAVA's provisions assisting in the transition away from punch card ballots and mechanical lever machines toward Direct Recording Electronic (DRE) and optical scan machines.[196] Those machines are now reaching the end of their natural life cycle, and no comparable federal funds are in the pipeline to replace them.[197]

Notwithstanding their budgetary constraints, election officials consistently told the Commission they are dissatisfied with the current offerings of voting equipment and technology, as they consider purchases that will carry them through the next decade. The options available do not meet their needs and do not employ the sorts of advances that have become commonplace in consumer products and other industries.[198] For a number of reasons, the existing election equipment marketplace consists almost solely of complex, single-use, end-to-end systems. For the most part, these systems are not customizable or interchangeable, and employ software that is stagnant. The choices are so unsatisfactory that at least two large jurisdictions (Los Angeles County and Travis County, Texas[199]) have opted to try to build their own systems. Many other jurisdictions are watching those counties with anticipation, while also searching for another solution.

The remaining vendors in the industry are in a difficult position. They face a fragmented market where buying decisions are often left to a multitude of county and local jurisdictions so that a consistent market with which to fund innovation is elusive.[200] While the industry has developed some promising new technologies into their prototypes for the future, bringing those innovations to market is handicapped by the current standard-setting and certification process.

As the Commission heard repeatedly, the current standard-setting and certification process is unworkable and must be fixed.[201] If the system worked as intended, the Technical Guidelines Development Committee (TGDC) of the EAC, working with the National Institute on Standards and Technology, would periodically propose "Voluntary Voting System Guidelines" that would be adopted by the EAC. Because the EAC does not have a quorum of commissioners, though, any proposals from the TGDC cannot be adopted. As a result, the only standards currently operational are ones passed in 2005, which merely supplement the 2002 Voting System Standards promulgated by the Fed-

eral Election Commission at a time before the widespread adoption of many of the technological innovations routinely used today, such as tablet computers.[202]

To be sure, some voting machines are being certified according to an "extensions clause" to the old standards, and new guidelines were drafted as early as 2007. Because many states incorporate and rely on the operative federal guidelines, though, new technologies must pass the 2005 guidelines if they are to be brought to market. Manufacturers of voting machines, however, are caught in a regulatory netherworld where the precise requirements are unclear and the rules going forward are unknowable.

As a result, the extant standards not only fail to incentivize innovation, they arguably discourage it.[203] Although economic factors play a role, the uncertainty surrounding the standards is at least partially responsible for the failure of the industry to make an effective and efficient transition to off-the-shelf technologies, software-only solutions, and "component" products. The 2005 standards were primarily designed for end-to-end products rather than components that can be interchangeable with other products to increase customization, updating technologies, and usability.[204]

Even when it works as designed, the certification process is costly and burdensome. Vendors complain about the length of time and expense (well over $1 million for a new voting machine) of receiving certification from one of the few approved testing labs.[205] Indeed, the certification process even retards improvement of existing, certified equipment as it requires additional certification for even small modifications or upgrades. As a result, the certification process simply does not fit with an election calendar. Because of the time it takes to discover flaws following an election, to develop a "fix," and then to have it certified, it is likely that the known solutions to problems discovered in one election will not be in operation for the next one.[206]

Recommendation: The standard-setting and certification process for voting machines must be reformed.

The existing certification system must be reformed. Having a certification process is fundamental to ensure the accuracy and functionality of equipment, compliance with legal requirements, and other basic standards and guidelines. It is key to addressing comprehensively a wide range of the issues the Commission has been charged with examining. But the current standards and certification process must be reformed to allow

for innovation in voting technologies, faster and less-costly certification of new products, and the certification of component (customizable and interchangeable) products and voting systems, not just end-to-end equipment.

At a minimum, the authority for standards adoption and the certification of testing laboratories cannot depend on a quorum of EAC Commissioners. The EAC has been the subject of considerable partisan and other disagreement about its broader mission. There is little prospect that these conflicts will be fully or significantly resolved, even if a fresh complement of EAC Commissioners were to take office. Either some other body within or apart from the EAC must be in charge of approving standards or the states should adapt their regulations such that federal approval is unnecessary.[207] A move away from federal certification will still require states, with the appropriate independent technical advice, to join together (as they did before HAVA with the National Association of State Election Directors) to endorse standards that give vendors and innovators sufficient guidance.[208]

Whatever form the standard-setting body might take, however, it must address the shortfalls of the existing regime. In particular, it must facilitate the development, certification and adoption of off-the-shelf and software-only products. Software-only products can be integrated with off-the-shelf commercial hardware components such as computers, laptops, tablets, scanners, printers, and even machine-readable code scanners and signature pad products.[209] Tablet computers such as iPads are common components of these new technologies.[210] They can be integrated into the check-in, voting, and verification processes in the polling place.[211] They are also capable of accepting accessibility components (or even personal devices) as plug-ins to assist voters with disabilities. In addition, solutions combining software with off-the-shelf commercial hardware have the added benefit of compatibility with recent trends in some jurisdictions toward using vote centers that require a number of different ballots in one location or require ballot print-on-demand technology.[212]

As mentioned earlier, promising technologies also exist that allow voters to "pre-fill" sample ballots at home, which can speed up the voting process in a polling place. These technologies allow the voter to read and mark a sample ballot that can be scanned at the polling place to populate the actual ballot in the privacy booth. Voters can then change and verify their choices before printing their final ballot and submitting it for counting.[213] Such technologies may improve polling place efficiency. In particular, they

might improve the voting experience for voters with disabilities who may find that their own assistive devices facilitating the creation of such sample ballots function better than what the jurisdiction provides.

The principal objection to some of these recommendations concerns the security advantages of end-to-end systems over component off-the-shelf products. These concerns are well-taken and must be considered by jurisdictions in their procurement decisions. Indeed, the Commission recognizes that most jurisdictions have come to agree with (or at least acquiesce to) scientists and advocates demanding a voter verified paper audit trail (VVPAT) from electronic voting machines. So long as such a paper trail exists, the move toward the types of technologies described here merely alters the type of device that creates the paper ballot, not the discarding of paper altogether. The Commission is convinced that commercial off-the-shelf technology can have security and auditability features built in that rival end-to-end systems. The fact that a tablet or off-the-shelf computer can be hacked or can break down does not mean such technology is inherently less secure than existing ballot marking methods if proper precautions are taken.

Recommendation: Audits of voting equipment must be conducted after each election, as part of a comprehensive audit program, and data concerning machine performance must be publicly disclosed in a common data format.

Post-election audits are a best practice of election administration in general, and especially so when it comes to the performance of voting technology.[214] The Commission recommends that jurisdictions audit their election machinery following each election to ensure both that the vote totals match the votes cast and that any problems related to machinery are reported and resolved. A critical component of this audit must be public reporting of machine performance so that jurisdictions using similar equipment become aware of any problems before they cause an election crisis.

Different types of audits perform different functions. The Commission endorses both risk-limiting audits that ensure the correct winner has been determined according to a sample of votes cast,[215] and performance audits that evaluate whether the voting technology performs as promised and expected. Too often the shortfalls of voting technology are discovered in the heat of a recount once the damage has already been done. Performance of voting equipment can and must be evaluated when election outcomes do not depend on it.

The full benefit of election audits of voting technology can only be realized if jurisdictions publicize their results. It is imperative that jurisdictions using similar machines be able to learn about problems each is experiencing.[216] The voting machine market is dominated by a relatively small number of manufacturers. It is very likely that a problem experienced by one jurisdiction is one soon to be experienced by another using the same or similar equipment. Whether the voting equipment performs as promised or fails in one or another respect, the jurisdiction must publicize the results of its audit so that all similarly situated jurisdictions can promptly learn about and fix any problems.[217]

F. Collection and Distribution of Election Data

The Commission has endeavored to ground its findings and recommendations in the best dispassionate research that has been conducted by government agencies, academic institutions, and private citizen organizations. This research has been illuminating and helpful. At the same time, we have been struck by the gaps that remain in the endeavor to improve election administration through the use of modern management tools — tools that are regularly applied to other critical public services such as health care, transportation, and law enforcement.

Earlier in this report, we identified the need to further develop the field of election administration as a profession. A key feature of most professions is the existence of widely held performance standards about individuals and systems and established ways to assess actual performance against ideals. Indispensable to this aspiration to improve performance are data and measures concerning actual performance.

The scarcity of data concerning voting machine performance that we addressed in the prior section is emblematic of the more general data vacuum in election administration, and thus the struggles to identify which areas of election administration demand top-priority attention.[218] To be sure, jurisdictions generate mountains of data concerning elections, the most obvious of which are the vote totals for candidates. However, candidate vote totals are rarely relevant data for assessing election performance and tracking its improvement. What is needed, instead, are data about how (and when) voters encounter points of service.

The case of Election Day lines is a prime example. The lion's share of our analysis of the "line problem" comes from post-election surveys that, at best, survey a few hundred

respondents in a state. Those data are indispensable and revealing. However, the testimony the Commission heard suggests that long lines were mostly concentrated in a few counties in a state, or even among a limited number of precincts within those counties. We cannot be sure, though, because no comprehensive set of data tracks wait times, arrival times, and resource allocation across all precincts.

In contrast, it has become the norm for businesses that are concerned about customer service to gather and analyze performance data at the point of contact with customers. The parallel "big data" revolution is transforming management in many areas of the private and public sector. This revolution has helped improve customer service and build organizational efficiencies by capturing and analyzing auxiliary data associated with customer transactions. Despite the fact that elections drown in data, and political campaigns have transformed American politics by gathering and analyzing data about their supporters, election administration has largely escaped this data revolution.



Despite the fact that elections drown in data... election administration has largely escaped this data revolution.



Recommendation: Local jurisdictions should gather and report voting-related transaction data for the purpose of improving the voter experience.

Whenever a voter interacts with an election office, there is — or should be — a trace left of that transaction, whether it be registering to vote, requesting an absentee ballot, checking in at a polling place, or casting a ballot. The trace we are talking about is not who the voter voted for, but a series of hows, whens, and whys: How did the voter register? When did the voter check in at the precinct? Why was an absentee ballot rejected? Information like this — the auxiliary data associated with elections — should be an indispensable tool for making elections better.

Traditional methods of data gathering and analysis are already being used by governments at all levels to create a basic data infrastructure that helps policymakers and the public assess the quality of elections at the state and national levels. At the federal level,

this includes the biennial Voting and Registration Supplement of the Census Bureau's Current Population Survey and the Election Administration and Voting Survey (EAVS) conducted by the EAC.

Data from these federal programs, especially those sponsored by the EAC, are indispensable for assessing whether localities are complying with federal voting laws, such as the NVRA, HAVA, UOCAVA, and the MOVE Act. In this regard, it is disappointing that many counties and states still do not report to the federal government basic data, such as the number of UOCAVA ballots rejected because they missed the deadline for return or the number of voter registrations processed by motor vehicle departments. This failure to report in some instances naturally raises the question about compliance with federal voting laws — without the required data, how is anyone to know?

There is much more to using election performance data than simply checking on whether federal voting laws are being followed. Just as important are data that inform us about the positive and negative experiences of individual voters. We cannot learn much about the quality of the individual voter experience from these federal surveys, and must rely instead on state and local data programs.

Unfortunately, local efforts to gather and disseminate performance statistics at a more finely tuned level have lagged far behind the federal programs. All jurisdictions know their election returns; nearly all know how many individuals voted. Together, this information can be useful in allocating resources for future elections and diagnosing problems with voting machines. However, turnout data are rarely disseminated widely, nor analyzed in a publicly accessible way that explains the connection between, for instance, turnout and the allocation of voting booths to polling places.

It is rarer still for local jurisdictions to capture and analyze the auxiliary information that is produced by computerized voting equipment, such as the time-of-day when voters cast their ballots, so that personnel and resources can be managed more efficiently. Rarest of all are the handful of jurisdictions that organize their own data-gathering programs, such as Travis County, Texas and Orange County, California's efforts to record how long the lines are at the polling places at various times on Election Day.[219]

Provisional ballot usage is another fertile area for data collection, analysis, and data-

based progress. By identifying the reasons that provisional ballots are being cast, both those that do not count as well as those that do, jurisdictions can use the other tangential data (how a voter signed up for a permanent early voting list, where they last registered, etc.) to review statutory requirements, administrative procedures, and poll worker training curriculums, and to target outreach messages to stem the rise in costly and delayed provisional voting.

If the experience of individual voters is to improve, the availability and use of data by local jurisdictions must increase substantially. States and localities are usually not equipped to gather the data they need, or to analyze it. However, we see some feasible steps that can be undertaken to help local jurisdictions become more sophisticated consumers of the auxiliary election data they are often already producing, without overwhelming these jurisdictions.

First, local jurisdictions can learn a lot from the state of Wisconsin, which, despite having the most decentralized election administration system in the country, also has one of the most thorough election data-gathering programs.[220] *Second, election machine vendors should add functionality to their voting machines, by creating standard applications that convert raw data from system log files into reports that help election administrators get a better picture of how the overall election system is performing. Third, states and localities should develop partnerships with universities and colleges, where data analytics is a growing and vibrant field. Finally, jurisdictions should more widely disseminate the auxiliary data they do produce, in standardized formats, so that members of the public who are skilled at data analytics can do their own analysis, which can be brought to the attention of local officials.*

Much has been made in recent years of the puzzling gap between the technological revolution in the lives of most Americans and the technological systems voters encounter when they register and when they cast their ballots. A new technological gap is beginning to emerge, between the data analytical capacity that has improved customer service in the private sector, and the lack of data-driven efforts to improve the experience of voters. Without new management capacities and tools that draw on what is available in the private sector, the problems that gave rise to this Commission's creation are guaranteed to recur in the future.

IV. Conclusion

The United States electoral system remains a work in progress, as it has for more than 230 years. Each election reveals weaknesses in the system, which leads to calls for reform, followed by discoveries of different problems. There has never been a perfectly run election in the United States or elsewhere, and perhaps there never will. Any process that depends on human management of hundreds of millions of people, machines or paper will inevitably produce some errors.

The challenge for the system, and for this Commission, is to confront the problems revealed with each election and to institutionalize processes that allow the system to learn from one election to the next. This Report has attempted to highlight the reforms that can make a substantial difference in addressing the most recent set of concerns as well as ones that loom ominously on the horizon. Just as the Executive Order does not describe every problem related to American elections, so too this Report does not pretend to provide the only solutions. For that reason, we have included along with this report an online Appendix including more than 1,000 pages of best practices and other materials recommended by federal agencies, nonprofits, and organizations of election officials. The Commission hopes that the greatest contribution of this report will be to focus institutional energy on a select number of important policy changes, while at the same time spawning experimentation among the thousands of local officials who share the same concerns that motivated the Commission's creation.

Endnotes

1 The Commission held its first public meeting in Washington, DC, on June 21, 2013. At that meeting, the Commission set forth its intended schedule for the next few months. It also received a briefing from Senior Research Director Nathaniel Persily on the scholarly literature concerning the topics included in the Executive Order.

The Commission held four public hearings. The first of these was held in Miami, Florida, on June 28; the second in Denver, Colorado, on August 8; the third in Philadelphia, Pennsylvania, on September 4; and the final hearing was held over two days in Cincinnati, Ohio, on September 19 and 20. At each hearing, the Commission heard testimony from election administrators, academics and other experts, and the general public. On December 3, the Commission held a final public meeting in Washington, DC, which reviewed the hearings and research presented to the Commission over the previous six months.

Each of the public meetings and hearings was webcast. Transcripts and the archived webcast of the hearings and public meetings, along with the materials submitted, are provided in the Appendix, and are available at www.supportthevoter.gov.

2 Members of the Commission attended conferences of various organizations and met with groups interested in the Commission's business. Commissioners attended meetings of the National Association of Secretaries of State, National Association of State Election Directors, the Election Center, the International Association of Clerks, Recorders, Election Officials and Treasurers (IACREOT), National Conference of State Legislatures, and the Future of California Elections.

Groups that invited Commissioners to speak with them included the Heritage Foundation, Brookings Institution, Federal Voting Assistance Program, Reserve Officers Association, Lawyers Committee for Civil Rights Under Law, Bipartisan Policy Center, Republican National Lawyers Association, Pew Voting Information Project, Alaska Federation of Natives, Asian-American Legal Defense and Education Fund, LatinoJustice-PRLDEF, Military Voter Protection Project, Overseas Vote Foundation, Brennan Center for Justice, National Council on Disability, U.S. Postal Service, Election Assistance Commission, and the American Association of Retired Persons.

At a virtual public meeting held by conference call on November 14, a recording of which was made available on the website and a transcript of which is provided in the Appendix, Commissioners summarized these meetings for the Commission as a whole and the public.

3 See Matt Masterson, Deputy Elections Administrator, Office of the Ohio Secretary of State, PCEA Hearing Testimony, Cincinnati, OH, at 19 (Sept. 19, 2013); Mark Andersen, Bay County Supervisor of Elections, PCEA Hearing Testimony, Miami, FL, at 12 (June 28, 2013); Bill Cowles, Orange County Supervisor of Elections, PCEA Hearing Testimony, Miami, FL, at 16 (June 28, 2013); Penelope Townsley, Miami-Dade County Supervisor of Elections, PCEA Hearing Testimony, Miami, FL, at 23 (June 28, 2013).

4 See, e.g., Donald Palmer, Secretary, Virginia State Board of Elections, PCEA Hearing Testimony, Philadelphia, PA, at 4 (Sept. 4, 2013); Marci Andino, Executive Director, South Carolina Election Commission, PCEA Hearing Testimony, Philadelphia, PA, at 6 (Sept. 4, 2013); Scott Gessler, Colorado Secretary of State, PCEA Hearing Testimony, Denver, CO, at 11 (Aug. 8, 2013); Hillary Hall, Boulder County Clerk and Recorder, PCEA Hearing Testimony, Denver, CO, at 65 (Aug. 8, 2013).

5 See, e.g., Elaine Manlove, Delaware State Election Commissioner, PCEA Hearing Testimony, Philadelphia, PA, at 2 (Sept. 4, 2013) (comparing schools, whose "lobby is bigger than me").

6 See John Carbone, International Association of Clerks, Recorders, Election Officials and Treasurers (IACREOT), PCEA Hearing Testimony, Philadelphia, PA, at 40 (Sept. 4, 2013) ("Most election offices are at the bottom of the political feeding chain for funding.").

7 Each state was required by HAVA to submit a state plan to the U.S. Election Assistance Commission (EAC) detailing how it would spend federal funds. Help America Vote Act (HAVA) of 2002, §§ 253-54, 42 U.S.C. §§ 15403-04 (2009). State plans are available at http://www.eac.gov/payments_and_grants/state_plans.aspx. Audits of state plans by the EAC Office of the Inspector General are available at http://www.eac.gov/inspector_general/hava_funds_audits.aspx.

8 See Donald Palmer, Secretary, Virginia State Board of Elections, PCEA Hearing Testimony, Philadelphia, PA, at 4 (Sept. 4, 2013).

9 See Jon Husted, Ohio Secretary of State, PCEA Hearing Testimony, Cincinnati, OH, at 4 (Sept. 20, 2013).

10 See Dana DeBeauvoir, Travis County Clerk, PCEA Hearing Testimony, Cincinnati, OH, at 18 (Sept. 19, 2013); Dean Logan, Los Angeles County Registrar-Recorder/County Clerk, PCEA Hearing Testimony, Denver, CO, at 4 (Aug. 8, 2013). In the nationwide survey of election officials conducted by Ansolabehere, Shaw, and Stewart, 24% of respondents listed "voting technology and voting machine capacity" as an area of election administration in significant need of improvement or update—the highest percentage of any of the categories in the survey. Stephen Ansolabehere, Daron Shaw, & Charles Stewart III, Overview of Local Election Officials Survey 17 (2013); see also Charles Stewart III, PCEA Public Meeting Presentation, Washington, DC, at slide 37 (Dec. 3, 2013).

11 See Eddie Perez, Hart Intercivic, PCEA Hearing Testimony, Cincinnati, OH, at 8 (Sept. 19, 2013); Penelope Chester, Dominion Voting Systems, PCEA Hearing Testimony, Cincinnati, OH, at 6 (Sep. 19, 2013).

12 Matt Masterson, Deputy Elections Administrator, Office of the Ohio Secretary of State, PCEA Hearing Testimony, Cincinnati, OH, at 10 (Sept. 19, 2013); James Long, Wyle Laboratories, PCEA Hearing Testimony, Cincinnati, OH, at 28-29 (Sept. 19, 2013); Kevin Kennedy, Director and General Counsel, Wisconsin Government Accountability Board, PCEA Hearing Testimony, Cincinnati, OH, at 33 (Sept. 19, 2013).

13 U.S. Election Assistance Commission, State Requirements and the Federal Voting System Testing and Certification Program, at 3, available at http://www.eac.gov/assets/1/Page/State%20Requirements%20and%20the%20Federal%20Voting%20System%20Testing%20and%20Certification%20Program.pdf (35 states mandate at least one element of the EAC testing and certification program.) The first and second volumes of the 2005 Voluntary Voting System Guidelines are available at http://www.eac.gov/assets/1/workflow_staging/Page/124.PDF (Volume 1) and http://www.eac.gov/assets/1/workflow_staging/Page/125.PDF (Volume 2); Dana DeBeauvoir, Travis County Clerk, PCEA Hearing Testimony, Cincinnati, OH, at 18 (Sept. 19, 2013).

14 Josh Franklin, National Institute of Standards and Technology, PCEA Hearing Testimony, Cincinnati, OH, at 27 (Sept. 19, 2013). Information about the Technical Guidelines Development Committee is available at http://www.nist.gov/itl/vote/tgdc.cfm.

15 R. Doug Lewis, PCEA Hearing Testimony, Cincinnati, OH, at 31 (Sept. 19, 2013) ("The process is broken. It doesn't work. States now are moving to do their own testing and their own standards and [hire] their own laboratories to do some of this."); James Long, Wyle Laboratories, PCEA Hearing Testimony, Cincinnati, OH, at 28 (Sept. 19, 2013).

16 See McDermot Coutts, Director of Research and Development, Unisyn Voting Solutions, PCEA Hearing Testimony, Cincinnati, OH, at 6 (Sept. 19, 2013); Eddie Perez, Hart Intercivic, PCEA Hearing Testimony, Cincinnati, OH, at 8 (Sept. 19, 2013).

17 Dean Logan, Los Angeles County Registrar-Recorder/County Clerk, PCEA Hearing Testimony, Denver, CO, at 5 (Aug. 8, 2013).

18 Dana DeBeauvoir, Travis County Clerk, PCEA Hearing Testimony, Cincinnati, OH, at 13 (Sept. 19, 2013).

19 Charles Stewart III, Final Report: 2012 Survey of the Performance of American Elections 124 (Draft of Feb. 25, 2013).

20 See Donald Palmer, Secretary, Virginia State Board of Elections, PCEA Hearing Testimony, Philadelphia, PA, at 3 (Sept. 4, 2013); Susan Bucher, Palm Beach County Supervisor of Elections, PCEA Hearing Testimony, Miami, FL, at 14 (June 28, 2013); Charles Stewart III, Waiting to Vote in 2012, 28 Journal of Law & Politics 439 (2013).

21 See Ken Detzner, Florida Secretary of State, PCEA Hearing Testimony, Miami, FL, at 9 (June 28, 2013); Bill Cowles, Orange County Supervisor of Elections, PCEA Hearing Testimony, Miami, FL, at 16 (June 28, 2013).

22 In the 2006 Cooperative Congressional Election Study (CCES), 3.9% of respondents reported waiting more than 30 minutes to vote, compared to 16.6% in the 2008 study and 12.4% in the 2012 study. To take a single state as an example, although the Survey of the Performance of American Elections (SPAE) found that 30.5% of Virginia voters waited more than 30 minutes to vote in 2008 and 27.9% waited more than 30 minutes in 2012, only 1.7% waited more than 30 minutes to vote in the 2009 gubernatorial election, 0.2% in 2013. (Data from the 2006 CCES suggest that 5.3% of Virginia voters waited 30 minutes or more to vote in that midterm election.) See Charles Stewart III, Final Report: 2012 Survey of the Performance of American Elections (2013); Cooperative Congressional Election Survey, available at http://research.yougov.com/services/cces/.

23 42 U.S.C. § 1973ff et. seq., Pub. L. No. 99-410.

24 42 U.S.C. § 1973ff-7, Pub. L. No. 111-84.

25 Pew Charitable Trusts, No Time to Vote: Challenges Facing America's Overseas Military Voters (2009), available at http://www.pewtrusts.org/uploadedFiles/wwwpewtrustsorg/Reports/Election_reform/NTTV_Report_Web.pdf.

26 See Donald Inbody, Senior Lecturer, Texas State University, PCEA Hearing Testimony, Miami, FL, at 30 (June 28, 2013); Office of Inspector General, U.S. Department of Defense, SPO-2010-004, 2009 Evaluation of the DoD Federal Voting Assistance Program (FVAP) (2010), available at http://www.dodig.mil/pubs/report_summary.cfm?id=342.

27 See Taeku Lee, Professor of Political Science and Law, University of California at Berkeley, PCEA Hearing Testimony, Philadelphia, PA, at 46 (Sept. 4, 2013); Michael Jones-Correa, Professor of Government, Cornell University, PCEA Hearing Testimony, Philadelphia, PA, at 48 (Sept. 4, 2013); Jerry Vattamala, Asian American Legal Defense and Education Fund, PCEA Hearing Testimony, Philadelphia, PA, at 71 (Sept. 4, 2013); Will Gonzalez, Executive Director, Ceiba, PCEA Hearing Testimony, Philadelphia, PA, at 78 (Sept. 4, 2013).

28 The EAC has voter glossaries available in six languages other than English, see U.S. Election Assistance Commission, Election Resource Library: Glossaries of Election Terminology, http://www.eac.gov/resource_library/default.aspx?CategoryId=13, as well as voter guides available in eleven languages, see U.S. Election Assistance Commission, Election Resource Library: Voter's Guides, http://www.eac.gov/resource_library/default.aspx?CategoryId=12&pg=1.

29 See PCEA Public Meeting Conference Call, at 14-15 (Nov. 14, 2013) (describing meeting with the Federation of Alaskan Natives).

30 See National Disability Rights Network, PCEA Hearing Submission, Philadelphia, PA, at 2-4. (Sept. 4, 2013); Government Accountability Office, GAO-13-538SP, Voters with Disabilities Challenges to Voting Accessibility (2013), available at http://www.gao.gov/assets/660/654099.pdf.

31 Lisa Schur, Associate Professor, Labor Studies and Employment Relations, Rutgers University, PCEA Hearing Testimony, Denver, CO, at 42 (Aug. 8, 2013); Faith Gross, Legal Center for People with Disabilities and Older People, PCEA Hearing Testimony, Denver, CO, at 64 (Aug. 8, 2013); Kermit Davis, Secretary-Treasurer, Human Factors and Ergonomics Society, PCEA Hearing Testimony, Cincinnati, OH, at 73 (Sept. 20, 2013); Diana Mairose, Hamilton County Developmental Disabilities Services, PCEA Hearing Testimony, Cincinnati, OH, at 75 (Sept. 20, 2013); Cheryl Jansen, Equip for Equality, PCEA Hearing Testimony, Cincinnati, OH, at 77 (Sept. 20, 2013).

32 Resources on accessible voting include the EAC's Election Management Guidelines chapter, "Accessibility." U.S. Election Assistance Commission, Election Management Guidelines, ch. 19, available at http://www.eac.gov/assets/1/Documents/EMG%20chapt%2019%20august%2026%202010.pdf.

33 See Estelle H. Rogers, The National Voter Registration Act at Fifteen 3 (2009), available at http://www.projectvote.org/images/publications/NVRA/THE%20NVRA%20at%20FIFTEEN--A%20Report%20to%20Congress.pdf ("[P]oor training requirements and lack of oversight and accountability of motor vehicle offices have led to problems with noncompliance, failing to forward applications to election officials in a timely manner, and non-integrated applications that violate the mandates of the NVRA."); David Becker, Director of Election Initiatives, Pew Charitable Trusts, PCEA Hearing Testimony, Cincinnati, OH, at 33 (Sept. 20, 2013).

34 See U.S. Election Assistance Commission, The Impact of the National Voter Registration Act of 1993 on the Administration of Elections for Federal Office 2011-2012, A Report to the 113th Congress 47, Table 2b (2013), available at http://www.eac.gov/assets/1/Documents/EAC_NVRA%20Report_lowres.pdf; David Becker, Pew Charitable Trusts, PCEA Hearing Testimony, Cincinnati, OH, at 3 (Sept. 20, 2013).

35 See U.S. Election Assistance Commission, The Impact of the National Voter Registration Act of 1993 on the Administration of Elections for Federal Office 2011-2012, A Report to the 113th Congress, Tables 10-11 (2013), available at http://www.eac.gov/assets/1/Documents/EAC_NVRA%20Report_lowres.pdf.

36 Estelle H. Rogers, The National Voter Registration Act at Fifteen (2009) available at http://www.projectvote.org/images/publications/NVRA/THE%20NVRA%20at%20FIFTEEN--A%20Report%20to%20Congress.pdf.

37 See Paul O'Hanlon, Disability Rights Network of Pennsylvania, PCEA Hearing Testimony, Philadelphia, PA, at 61 (Sept. 4, 2013).

38 See Paul Lux, Okaloosa County Supervisor of Elections, PCEA Hearing Testimony, Miami, FL, at 17 (June 28, 2013); Donald Inbody, Senior Lecturer, Texas State University, PCEA Hearing Testimony, Miami, FL, at 30-31 (June 28, 2013).

39 See Matt Masterson, Deputy Elections Administrator, Office of the Ohio Secretary of State, PCEA Hearing Testimony, Cincinnati, OH, at 10 (Sept. 19, 2013) ("[E]lection officials must be challenged to think of themselves as IT managers."); Merle King, Executive Director, Center for Election Systems at Kennesaw State University, PCEA Hearing Submission, Cincinnati, OH, at 2 (Sept. 19, 2013), available at https://www.supportthevoter.gov/files/2013/09/Merle-King-PCEA-Cincinnati-2013.pdf ("The required core competencies [of election officials] must embrace the reality that every election official is an Information Technology (IT) manager. In addition to competencies related to IT management, additional core competencies in the following disciplines should be defined: Testing and validation of systems, project management, auditing, training, ethics, information security, communication, election law and practice, accessibility and disability mitigation, human resource manage[ment], and an end-to-end knowledge of all the election systems that support elections in that jurisdiction.").

40 NASS Task Force on Emergency Preparedness for Elections, Update on Task Force Findings and Activities (2013), available at https://www.supportthevoter.gov/files/2013/08/NASS-Task-Force-on-Emergency-Prepardedness-for-Elections.pdf.

41 Eric A. Fisher & Kevin J. Coleman, Congressional Research Service, R42808, Hurricane Sandy and the 2012 Election: Fact Sheet (2012), available at http://www.nass.org/index.php?option=com_docman&task=doc_download&gid=1427&Itemid=.

42 More information on the NASS task force is available on the NASS website at http://www.nass.org/index.php?option=com_content&view=article&id=362&Itemid=515.

43 U.S. Election Assistance Commission, Effective Designs for the Administration of Federal Elections (2007), http://www.eac.gov/assets/1/Page/EAC_Effective_Election_Design.pdf.

44 The Election Center, National Task Force on Election Reform, Election 2004: Review and Recommendations by the Nation's Election Administrators (2005), available at http://www.electioncenter.org/documents/Task%20Force%20Final%20PDF.pdf.

45 These guidelines are available on the EAC's website at http://www.eac.gov/election_management_resources/election_management_guidelines.aspx.

46 U.S. Election Assistance Commission, Successful Practices for Poll Worker Recruitment, Training, and Retention (2007), available at http://www.eac.gov/election_management_resources/poll_worker_best_practices.aspx.

47 These guides are available on the EAC's website at http://www.eac.gov/election_management_resources/quick_start_guides.aspx.

48 State law regulation of the voter registration process, including implementation of the NVRA and HAVA mandates, is truly a "patchwork quilt." R. Michael Alvarez & Thad E. Hall, Resolving Voter Registration Problems: Making Registration Easier, Less Costly and More Accurate 2 (Caltech/MIT Voting Technology Project Working Paper No. 87, 2009), available at http://vote.caltech.edu/sites/default/files/wp_87_pdf_4acfa68b61.pdf. A compilation by the National Association of Secretaries of State of statutory requirements and procedures for list maintenance describes the wide variations among states in the use of list maintenance procedures authorized by the NVRA, and how those procedures are implemented. National Association of Secretaries of State, NASS Report: Maintenance of State Voter Registration Lists 4-14 (2009). For example, state laws and regulations vary in how jurisdictions confirm addresses, cross-reference voter registration applications with driver's license databases, remove names upon a change-of-address notification, notify other states when a voter moves into the state, and remove convicted criminals. Id.

49 Stephen Ansolabehere & Eitan Hersh, Voter Registration: The Process and Quality of Lists, in The Measure of American Elections 1, 6, 7 (Barry C. Burden & Charles Stewart III eds.) (forthcoming 2014). An earlier version of the study is available as Stephen Ansolabehere & Eitan Hersh, The Quality of Voter Registration Records: A State-by-State Analysis 1, (2010), available at http://www.vote.caltech.edu/sites/default/files/quality_of_voter_report_pdf_4c45d05624.pdf.

50 Stephen Ansolabehere & Charles Stewart III, Report on Registration Systems in American Elections (2013), available at https://www.supportthevoter.gov/files/2013/06/Stephen-Ansolabehere-Voter-Registration-White-Paper.pdf.

51 Voter registration systems as a whole, even after HAVA, still rely largely on outdated systems that create systemic inefficiencies and raise costs. Pew Center on the States, Upgrading Democracy: Improving America's Elections by Modernizing States' Voter Registration Systems (2010), available at http://www.pewstates.org/uploadedFiles/PCS_Assets/2010/Upgrading_Democracy_report.pdf. In particular, paper voter registration applications and manual data entry increase the risk of clerical error, and many computer systems still rely on rudimentary data matching techniques. National Research Council, Committee on State Voter Registration Databases, Improving State Voter Registration Databases: Final Report, at B-1 to B-5 (2009), available at http://www.eac.gov/assets/1/workflow_staging/Page/52.PDF (discussing matching algorithms); Justin Levitt, Wendy R. Weiser, & Ana Muñoz, Brennan Center for Justice, Making the List: Database Matching and Verification Processes for Voter Registration 4-5 (2006), available at http://brennan.3cdn.net/96ee05284dfb6a6d5d_j4m6b1cjs.pdf (discussing types of clerical and matching errors). Even simple typographical errors can come in a variety of forms. R. Michael Alvarez & Thad E. Hall, Resolving Voter Registration Problems: Making Registration Easier, Less Costly and More Accurate 7 (Caltech/MIT Voting Technology Project Working Paper No. 87, 2009), available at http://www.vote.caltech.edu/sites/default/files/wp_87_pdf_4acfa68b61.pdf (discussing typographical errors found in Ohio's 2009 voter registration list).

52 Press Release, U.S. Census Bureau, Census Bureau Reports National Mover Rate Increases After a Record Low in 2011 (Dec. 10, 2012), available at http://www.census.gov/newsroom/releases/archives/mobility_of_the_population/cb12-240.html.

53 See Stephen Ansolabehere & Eitan Hersh, Voter Registration: The Process and Quality of Lists, in The Measure of American Elections, Table 1 (Barry C. Burden & Charles Stewart III eds.) (forthcoming 2014).

54 See id. at Figure 9.

55 Pew Center on the States, Being Online is Still Not Enough: Reviews and Recommendations for State Election Websites (2011), available at http://www.pewstates.org/research/reports/being-online-is-still-not-enough-85899376525; U.S. Election Assistance Commission, Voter Information Websites Study (2008), available at http://www.eac.gov/assets/1/workflow_staging/Page/64.PDF.

56 The states that have authorized or implemented full online registration systems are Arizona, California, Colorado, Connecticut, Georgia, Hawaii, Illinois, Indiana, Kansas, Louisiana, Maryland, Minnesota, Nevada, Oregon, South Carolina, Utah, Virginia, Washington, and West Virginia. The states utilizing a more limited version of online registration are Delaware, Michigan, New Mexico, New York, and Ohio. National Conference of State Legislatures, Online Voter Registration (2013), available at http://www.ncsl.org/research/elections-and-campaigns/electronic-or-online-voter-registration.aspx.

57 Matt A. Barreto et al., Online Voter Registration (OLVR) Systems in Arizona and Washington: Evaluating Usage, Public Confidence and Implementation Processes 16-23 (2010), available at http://www.pewstates.org/uploadedFiles/PCS_Assets/2010/online_voter_reg.pdf.

58 Wendy Underhill, NCSL Senior Policy Specialist, PCEA Hearing Testimony, Denver, CO, at 52, 55 (Aug. 8, 2013); Scott Gessler, Colorado Secretary of State, PCEA Hearing Testimony, Denver, CO, at 3 (Aug. 8, 2013); Linda Lamone, Maryland State Administrator of Elections, PCEA Hearing Testimony, Philadelphia, PA, at 5 (Sept. 4, 2013); Elaine Manlove, Delaware State Election Commissioner, PCEA Hearing Testimony, Philadelphia, PA, at 10 (Sept. 4, 2013); Donald Palmer, Secretary, Virginia State Board of Elections, Philadelphia, PA, at 4 (Sept. 4, 2013); Josh Franklin, National Institute of Standards and Technology, PCEA Hearing Testimony, Cincinnati, OH, at 27 (Sept. 19, 2013); David Becker, Director of Election Initiatives, Pew Charitable Trust, PCEA Hearing Testimony, Cincinnati, OH, at 30 (Sept. 20, 2013); Heather Smith, President, Rock the Vote, PCEA Hearing Testimony, Cincinnati, OH, at 41 (Sept. 20, 2013).

59 See Rock the Vote, Connected OVR: A Simple Durable Approach to Online Voter Registration (Dec. 2013); Matt A. Barreto et al., Online Voter Registration (OLVR) Systems in Arizona and Washington: Evaluating Usage, Public Confidence and Implementation Processes 5 (2010), available at http://www.pewstates.org/uploadedFiles/PCS_Assets/2010/online_voter_reg.pdf (citing Arizona's use of a confirmation number for online registration transactions); Heather Smith, President, Rock the Vote, PCEA Hearing Submission, Cincinnati, OH, at 1 (Sept. 20, 2013), available at https://www.supportthevoter.gov/files/2013/06/FOCE.23-Rock-The-Vote-PCEA_Aug8-Remarks.doc.

60 Pew Center on the States, Inaccurate, Costly, and Inefficient: Evidence That America's Voter Registration System Needs an Upgrade 6-8 (2012), available at http://www.pewstates.org/uploadedFiles/PCS_Assets/2012/Pew_Upgrading_Voter_Registration.pdf; Jonathan Brater, Brennan Center for Justice, PCEA Hearing Testimony, Philadelphia, PA, at 73 (Sept. 4, 2013).

61 Donald Palmer, Secretary, Virginia State Board of Elections, PCEA Hearing Testimony, Philadelphia, PA, at 4 (Sept. 4, 2013), Jonathan Brater, Brennan Center for Justice, PCEA Hearing Testimony, Philadelphia, PA, at 73 (Sept. 4, 2013); Heather Smith, President, Rock the Vote, PCEA Hearing Testimony, Cincinnati, OH, at 42 (Sept. 20, 2013).

62 Linda Lamone, Maryland State Administrator on Elections, PCEA Hearing Testimony, Philadelphia, PA, at 5 (Sept. 4, 2013).

63 Pew Center on the States, Inaccurate, Costly, and Inefficient: Evidence That America's Voter Registration System Needs an Upgrade 7 (2012), available at http://www.pewstates.org/uploadedFiles/PCS_Assets/2012/Pew_Upgrading_Voter_Registration.pdf.

64 Matt A. Barreto et al., Online Voter Registration Systems in Arizona and Washington: Evaluating Usage, Public Confidence, and Implementation 2 (2010), available at http://www.pewstates.org/uploadedFiles/PCS_Assets/2010/online_voter_reg.pdf ("In Arizona, voters under 34 years old who registered via the Internet turned out at 93 percent in 2008 compared to a turnout rate of 73 percent for younger voters that registered 'offline.' In Washington, the same trend holds whereby young voters who registered online turned out at much higher rates than young voters who did not register online.").

65 Christopher Ponoroff, Brennan Center for Justice, Voter Registration in a Digital Age 2 (Wendy Weiser ed.) (2010), available at http://www.brennancenter.org/sites/default/files/legacy/Democracy/Paperless_Registration_FINAL.pdf.

66 Matt A. Barreto et al., Online Voter Registration Systems in Arizona and Washington: Evaluating Usage, Public Confidence, and Implementation 2 (2010), available at http://www.pewstates.org/uploadedFiles/PCS_Assets/2010/online_voter_reg.pdf; see also Monique Garcia, Quinn Signs Bill Allowing Online Voter Registration in Illinois, Chicago Tribune (July 27, 2013), available at http://articles.chicagotribune.com/2013-07-27/news/chi-quinn-to-sign-bill-allowing-online-voter-registration-in-illinois-20130726_1_online-voter-registration-voter-turnout-quinn-signs-bill (citing Cook County Clerk David Orr for the proposition that "those who register online in other states have proven more likely to vote than those who register through more traditional routes...because they usually wait until closer to Election Day to sign up, when they are paying more attention to issues and candidates.").

67 Heather Smith, President, Rock the Vote, PCEA Hearing Testimony, Cincinnati, OH, at 43 (Sept. 20, 2013); Linda Lamone, Maryland State Administrator of Elections, PCEA Hearing Testimony, Philadelphia, PA, at 11 (Sept. 4, 2013).

68 Elaine Manlove, Delaware State Election Commissioner, PCEA Hearing Testimony, Philadelphia, PA, at 2 (Sept. 4, 2013); Jon Husted, Ohio Secretary of State, PCEA Hearing Testimony, Cincinnati, OH, at 3 (Sept. 20, 2013); David Orr, Cook County Clerk, PCEA Hearing Testimony, Cincinnati, OH, at 20 (Sept. 20, 2013); David Becker, Director of Election Initiatives, Pew Charitable Trusts, PCEA Hearing Testimony, Cincinnati, OH, at 30 (Sept. 20, 2013); Heather Smith, President, Rock the Vote, PCEA Hearing Testimony, Cincinnati, OH, at 42 (Sept. 20, 2013).

69 Caltech-MIT Voting Technology Project, Voting: What Is, What Could Be 51 (July 1, 2001), available at http://www.vote.caltech.edu/drupal/node/10.

70 Pew Center on the States, Upgrading Democracy: Improving America's Elections by Modernizing States' Voter Registration Systems 3 (2010), available at http://www.pewstates.org/uploadedFiles/PCS_As-

sets/2010/Upgrading_Democracy_report.pdf; Washington State Online Voter Registration, at 11, available at https://wei.sos.wa.gov/agency/osos/en/press_and_research/ElectionStatistics/vrdata/documents/electronic%20registrations/2010onlinevoterregistrationinfopacket.pdf.

71 See Rock the Vote, Connected OVR: A Simple Durable Approach to Online Voter Registration (2013).

72 Brennan Center for Justice, Voter Registration in a Digital Age: Arizona 6 n.1 (2010), (quoting telephone interview with Craig Stender (Jan. 27, 2010)), available at http://www.brennancenter.org/sites/default/files/legacy/Democracy/Paperless%20Report%20Appendix_Final%20(Arizona).pdf; see also Brennan Center for Justice, Voter Registration in a Digital Age: Washington (2010) http://www.brennancenter.org/sites/default/files/legacy/Democracy/Paperless%20Report%20Appendix_Final%20(Washington).pdf.

73 See Online Voter Registration: the Bipartisan Trend in Elections, NCSL.ORG (Nov. 12, 2013), http://www.ncsl.org/research/elections-and-campaigns/online-voter-registration-webinar.aspx ("Allowing citizens to register to vote online has proven to be astoundingly cost effective in some cases, and has improved accuracy in our nation's voter rolls. It's also a rare issue in elections administration that appeals to Democrats and Republicans alike."); Christopher Ponoroff, Brennan Center for Justice, Voter Registration in a Digital Age 9 (Wendy Weiser ed.) (2010), available at http://www.brennancenter.org/sites/default/files/legacy/Democracy/Paperless_Registration_FINAL.pdf.

74 See Rock the Vote, Connected OVR: A Simple Durable Approach to Online Voter Registration (2013).

75 The states are Alaska, Arizona, Arkansas, Colorado, Florida, Georgia, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Michigan, Mississippi, Missouri, Nebraska, Nevada, North Carolina, Ohio, Oklahoma, Oregon, Pennsylvania, South Carolina, South Dakota, Tennessee, Virginia, Washington, and West Virginia. See Kris W. Kobach, Kansas Secretary of State, PCEA Hearing Submission, Cincinnati, OH, at 9 (Sept. 20, 2013) (figure and list of states updated to reflect recent additions); Reid Wilson, Here's how to clean up messy voter rolls, The Wash. Post GovBeat (Nov. 3, 2013), available at http://www.washingtonpost.com/blogs/govbeat/wp/2013/11/03/heres-how-to-clean-up-messy-voter-rolls/.

76 The states currently participating are Colorado, Delaware, Maryland, Nevada, Utah, Virginia, and Washington. See Electronic Registration Information Center, available at www.ericstates.org.

77 See Shane Hamlin & Ericka Haas, ERIC: Electronic Registration Information Center, slides 19-21 (2013), available at http://ericstates.org/images/documents/ERIC_July_2013_VR_Conference_Notes.pdf (powerpoint presentation); Delaney Turner, Day Two Recap: Big data in action drives big gains for democracy, IBM: The Big Data & Analytics Hub (Nov. 5, 2013), available at http://www.ibmbigdatahub.com/IOD/2013/blog/day-two-recap-big-data-action-drives-big-gains-democracy.

78 The IVRC uses a secure FTP site, deletes all participating states' data after running the crosscheck, and compares only certain data types (e.g., name, date of birth, address and Social Security number). Kris W. Kobach, Kansas Secretary of State, Photo ID and Electronic Poll Books and Interstate Voter Registration Crosscheck, PCEA Hearing Presentation, Cincinnati, OH, at slides 12-13 (Sept. 20, 2013). ERIC anonymizes the confidential data it receives from states when it leaves state control, rendering it unreadable to unauthorized parties; maintains tamper-proof audit logs; requires states to adhere to security standards-setting agreements; and retains an advisory board of security experts to review and improve systems. Pew Charitable Trusts State and Consumer Initiatives, Electronic Registration Information

Center (ERIC): Frequently Asked Questions (Nov. 2, 2012), http://www.pewstates.org/research/analysis/ electronic-registration-information-center-eric-frequently-asked-questions-85899426025.

79 The states in which over 50% of total registrations come from the DMV are Delaware, Georgia, Kentucky, Michigan, New York, Pennsylvania, and Rhode Island (plus the District of Columbia). U.S. Election Assistance Commission, The Impact of the National Voter Registration Act of 1993 on the Administration of Elections for Federal Office 2011-2012, A Report to the 113th Congress, Table 2a (2013), available at http://www.eac.gov/assets/1/Documents/EAC_NVRA%20Report_lowres.pdf.

80 The Election Assistance Commission's NVRA studies dating back to the 2003-2004 report and the Federal Election Commission's NVRA studies dating back to the inaugural NVRA report in 1995-1996 are available on the EAC website. See U.S. Election Assistance Commission, Research and Data, http://www.eac.gov/registration-data.

81 Pew Center on the States, Bringing Elections into the 21st Century: Voter Registration Modernization 4 n.9 (2009), available at http://www.pewtrusts.org/uploadedFiles/wwwpewtrustsorg/Reports/Election_reform/Voter_Registration_Modernization_Brief_web.pdf. During the 2011-12 election cycle, Delaware processed nearly 75% of its new voter registrations via its motor vehicles department; Michigan processed approximately 90%. This is in contrast to the nationwide rate of 30%. U.S. Election Assistance Commission, The Impact of the National Voter Registration Act of 1993 on the Administration of Elections for Federal Office 2011-2012, A Report to the 113th Congress, Table 2b (2013), available at http://www.eac.gov/assets/1/Documents/EAC_NVRA%20Report_lowres.pdf.

82 See Elaine Manlove, Delaware State Election Commissioner, PCEA Hearing Submission, Philadelphia, PA, at 2 (Sept. 4, 2013) (describing eSignature).

83 See Matt Crane, Arapahoe County Clerk and Recorder, PCEA Hearing Submission, Denver, CO, at 2 (Aug. 8, 2013) (noting increased number of provisional ballots lead to longer wait times).

84 See, e.g., Dawn Williams, Marshall County Auditor and Recorder/Commissioner of Elections, PCEA Hearing Submission, Cincinnati, OH, at 3 (Sept. 20, 2013), available at https://www.supportthevoter.gov/files/2013/09/Dawn-Williams-PCEA-Testimony.pdf (discussing the problem of "facility shortage" in the context of early voting).

85 Resources on polling place management include the EAC's Election Management Guidelines chapter, "Polling Place and Vote Center Management." U.S. Election Assistance Commission, Election Management Guidelines, ch. 9, available at http://www.eac.gov/assets/1/workflow_staging/Page/266.pdf.

86 Judd Choate, Colorado State Elections Director, Remarks at NASED Roundtable, Anchorage, Alaska (July 20, 2013), described in PCEA Public Meeting Conference Call, at 16 (Nov. 14, 2013).

87 Elaine Manlove, Delaware State Election Commissioner, PCEA Hearing Testimony, Philadelphia, PA, at 2 (Sept. 4, 2013) ("Schools. This has become my hot topic. Half of our schools are public polling places in Delaware."); Elaine Manlove, Delaware State Election Commissioner, PCEA Hearing Presentation, Philadelphia, PA, at slide 8 (Sept. 4, 2013), available at https://www.supportthevoter.gov/files/2013/09/Elaine-Manlove-Delaware-PCEA-Presentation.ppt ("We could not conduct elections without these buildings which are accessible, well-located with adequate space and parking."); David Orr, Cook County Clerk, PCEA Hearing Submission, Cincinnati, OH, at 2 (Sept. 20, 2013), available at https://www.supportthevoter.gov/files/2013/09/David-Orr-Testimony-to-Presidential-Commission.pdf ("Elec-

tion authorities need access to schools, park districts and other public buildings to hold efficient elections. Public schools in particular often have the right attributes to make elections run more smoothly."); Doug Chapin, Election Official as Bloodhound: Newby on Searching for Polling Sites, Election Academy, Univ. of Minn. Humphrey Sch. of Pub. Affairs (Oct. 4, 2013), http://blog.lib.umn.edu/cspg/electionacademy/2013/10/election_official_as_bloodhoun.php.

88 R. Michael Alvarez et al., 2008 Survey of the Performance of American Elections, question q7 (2008), available at http://vote.caltech.edu/sites/default/files/Final%20report20090218.pdf; Charles Stewart III, 2012 Survey of the Performance of American Elections, question q6 (2012).

89 These states include Arizona, California, Delaware, Georgia, Hawaii, Illinois, Indiana, Michigan, Minnesota, Mississippi, New Jersey, New Mexico, New York, North Carolina, Ohio, Oklahoma, Pennsylvania, Rhode Island, Tennessee, and Wyoming. National Conference of State Legislatures, Polling Place Requirements (2013).

90 As of July, six states had considered bills to restrict access to schools on election days in 2013, compared to three last year. None passed the legislature. Jens Manuel Krogstad, Iowa joining trend of decreasing school polling places, USA Today (July 16, 2013), available at http://www.usatoday.com/story/news/nation/2013/07/15/iowa-decreases-school-polling-places/2519611/. See also Wendy Underhill, Legislatures Rethinking Schools as Polling Places, NCSL's The Thicket (Feb. 5, 2013), http://ncsl.typepad.com/the_thicket/2013/02/legislatures-rethinking-schools-as-polling-places.html.

91 Elaine Manlove, Delaware State Election Commissioner, PCEA Hearing Testimony, Philadelphia, PA, at 1-2 (Sept. 4, 2013); Wendy Underhill, NCSL Senior Policy Specialist, PCEA Hearing Testimony, Denver, CO, at 50-51 (Aug. 8, 2013).

92 PCEA Public Meeting Conference Call, at 11, 16 (Nov. 14, 2013) (summarizing findings from meeting with the Bipartisan Policy Center (July 2, 2013), NASED (July 20, 2013), and Election Center (August 15-16, 2013)); see also Doug Chapin, School's Out—As a Polling Place? NJ Town Seeks New Voting Locations, Election Academy, Univ. of Minn. Humphrey Sch. of Pub. Affairs (July 30, 2013), http://blog.lib.umn.edu/cspg/electionacademy/2013/07/schools_out_-_as_a_polling_pla.php.

93 Wendy Underhill, NCSL Senior Policy Specialist, PCEA Hearing Testimony, Denver, CO, at 50 (Aug. 8, 2013) (discussing "cases where the students are not in the school but perhaps professional development for the teachers is going on"). Six states (California, Montana, Illinois, Rhode Island, New Mexico, and North Dakota) specify that schools may be closed when used as polling places, and three states specify that schools are to be used as polling places when requested, but that they should not interfere with school functions. National Conference of State Legislatures, Restrictions on Schools as Polling Places (2013); see also Elaine Manlove, Delaware State Election Commissioner, PCEA Hearing Presentation, Philadelphia, PA, at slide 9 (Sept. 4, 2013).

94 Henry E. Brady & John E. McNulty, Turning Out to Vote: The Costs of Finding and Getting to the Polling Place, 105 American Political Science Review 115 (2011); Joshua J. Dyck & James G. Gimpel, Distance, Turnout, and the Convenience of Voting, 86 Social Science Quarterly 531 (2005); Moshe Haspel & H. Gibbs Knotts, Location, Location, Location: Precinct Placement and the Costs of Voting, 67 Journal of Politics 560 (2005).

95 Larimer County, Colorado, "Vote Center Defined," http://www.co.larimer.co.us/elections/votecenter/votecenters_defined.htm. See also Robert M. Stein & Greg Vonnahme, Election Day Vote Centers

and Voter Turnout, available at http://www.nonprofitvote.org/doc_download/164-election-day-vote-centers-and-voter-turnout-stein-and-vonnahme.

96 See Maggie Toulouse Oliver, Bernalillo County Clerk, PCEA Hearing Submission, Denver, CO, at 7-9 (Aug. 8, 2013); Dana DeBeauvoir, Travis County Clerk, PCEA Hearing Testimony, Denver, CO, at 25-28 (Aug. 8, 2013); Leslie Hoffman, Yavapai County Recorder, PCEA Hearing Testimony, Denver, CO, at 65-66 (Aug. 8, 2013).

97 See Dana DeBeauvoir, Travis County Clerk, PCEA Hearing Testimony, Denver, CO, at 26 (Aug. 8, 2013).

98 See id.; Matt Crane, Arapahoe County Clerk and Recorder, PCEA Hearing Testimony, Denver, CO, at 28 (Aug. 8, 2013) (noting that most Colorado counties with vote centers saw a sharp decline in provisional ballots). About 11% of provisional ballots in 2008 were cast due to voters attempting to vote at the wrong location. Daron Shaw & Vincent Hutchings, Report on Provisional Ballots and American Elections, PCEA Hearing Submission, Denver, CO, at 7 (Aug. 8, 2013) (accompanying oral testimony of Daron Shaw). The EAVS survey suggests that showing up at the wrong polling place is the second most common reason for casting a provisional ballot. U.S. Election Assistance Commission, 2012 Election Administration and Voting Survey 13 (2013), available at http://www.eac.gov/assets/1/Page/990-050%20EAC%20VoterSurvey_508Compliant.pdf.

99 See Maggie Toulouse Oliver, Bernalillo County Clerk, PCEA Hearing Testimony, Denver, CO, at 7 (Aug. 8, 2013).

100 See Dana DeBeauvoir, Travis County Clerk, Vote Centers Add Voter Convenience, Reduce Election Day Problems, and Provide Long-Term Cost Savings, PCEA Hearing Submission, Denver, CO (Aug. 8, 2013), available at https://www.supportthevoter.gov/files/2013/08/PCEA-Dana-Debeauvoir-Travis-County-Tx-County-Clerk-Vote-Centers.pdf; Robert M. Stein, Professor of Political Science, Rice University, PCEA Hearing Testimony, Philadelphia, PA, at 33 (Sept. 4, 2013) ("But, if you look at election day vote centers, as practiced in Colorado, Texas — soon to come in some other states like Indiana — it's had a significant effect and nontrivial effect. Five to eight points on turnout.").

101 Matt Crane, Arapahoe County Clerk and Recorder, PCEA Hearing Testimony, Denver, CO, at 29 (Aug. 8, 2013) (noting increase in wait times due to provisional ballots in Arapahoe County after adoption of vote centers).

102 See, e.g., Donald Palmer, Secretary, Virginia State Board of Elections, PCEA Hearing Testimony, Philadelphia, PA, at 4 (Sept. 4, 2013) (noting that "inaccurate or inactive registration often cause[s] delays in a polling place, as [poll workers] try to fix the problem for the voter" and arguing for technological solutions).

103 See Charles Stewart III, Waiting to Vote in 2012, 28 Journal of Law & Politics 439, n.37 (2013) (noting that 68% of early voters and 60% of Election Day voters reported waiting in line primarily at the check-in phase, as opposed to waiting for an available machine).

104 Neal Kelley, Orange County Registrar of Voters, PCEA Hearing Testimony, Cincinnati, OH, at 22 (Sept. 20, 2013) ("[O]ur website allows voters to ascertain their polling place location, provides a map and route information from their home address and more importantly relays information about expected turnout and wait time at their polling place in real time on Election Day."); Dana DeBeauvoir, Travis

County Clerk, PCEA Hearing Testimony, Denver, CO, at 2 (Aug. 8, 2013) ("Initially, we used Twitter reports from citizens to provide information on voting wait times. We now electronically gather information from each polling location that shows how many people have voted and approximately how long someone will have to wait in line. This information is provided on an internet page available for public viewing.").

105 Some jurisdictions utilize a "dashboard" function on their website or downloadable application that is periodically updated with current wait times. See Maggie Toulouse Oliver, Bernalillo County Clerk, PCEA Hearing Testimony, Denver, CO, at 8 (Aug. 8, 2013).

106 Charles Stewart III & Stephen Ansolabehere, Waiting in Line to Vote 15–17 (2013), available at https://www.supportthevoter.gov/files/2013/08/Waiting-in-Line-to-Vote-White-Paper-Stewart-Ansolabehere.pdf; Justin Levitt, "Fixing That": Lines at the Polling Place, 28 Journal of Law and Politics 465 (2013).

107 Charles Stewart III, Waiting to Vote in 2012, 28 Journal of Law & Politics 439, n.37 (2013) (noting that 68% of early voters and 60% of Election Day voters reported waiting in line primarily at the check-in phase, as opposed to waiting for an available machine); David Kimball, Professor of Political Science, University of Missouri-St. Louis, PCEA Hearing Testimony, Cincinnati, OH, at 34-35 (Sept. 19, 2013).

108 See Donald Palmer, Secretary, Virginia State Board of Elections, PCEA Hearing Testimony, Philadelphia, PA, at 3 (Sept. 4, 2013); Marci Andino, Executive Director, South Carolina Election Commission Executive Director, PCEA Hearing Testimony, Philadelphia, PA, at 6 (Sept. 4, 2013). See also Douglas M. Spencer & Zachary S. Markovits, Long Lines at Polling Stations? Observations from an Election Day Field Study, 9 Election Law Journal 13, 13-17 (2010).

109 Charles Stewart III, Professor of Political Science, MIT, PCEA Hearing Testimony, Miami, FL, at 28 (June 28, 2013).

110 Stephen Graves, Professor of Management Science, Mechanical Engineering, and Engineering Systems, MIT, PCEA Hearing Testimony, Philadelphia, PA, at 38 (Sept. 4, 2013); Shane Hamlin, Washington Deputy Director of Elections and ERIC Chair, PCEA Hearing Testimony, Cincinnati, OH, at 31-32 (Sept. 20, 2013).

111 Charles Stewart III, Waiting to Vote in 2012, 28 Journal of Law & Politics 439, 455 (2013).

112 Id. at 452-55.

113 Susan Bucher, Palm Beach County Supervisor of Elections, PCEA Hearing Testimony, Miami, FL, at 14 (June 28, 2013); Bill Cowles, Orange County Supervisor of Elections, PCEA Hearing Testimony, Miami, FL, at 16 (June 28, 2013); Matt Crane, Arapahoe County Clerk and Recorder, PCEA Hearing Testimony, Denver, CO, at 29 (Aug. 8, 2013).

114 Marci Andino, Executive Director, South Carolina Election Commission, PCEA Hearing Testimony, Philadelphia, PA, at 6-7 (Sept. 4, 2013); Tom Schedler, Louisiana Secretary of State, PCEA Hearing Submission, Philadelphia, PA, at 23 (Sept. 4, 2013), available at https://www.supportthevoter.gov/files/2013/09/Tom-Schedler-LA-SOS-PCEA-Testimony.pdf.

115 Barry C. Burden & Jeffrey Milyo, The Recruitment and Training of Poll Workers: What We Know from Scholarly Research, PCEA Hearing Submission, Cincinnati, OH, at 12 (Sept. 20, 2013), available at https://www.supportthevoter.gov/files/2013/09/Barry-Burden-Jeff-Milyo-The-Recruitment-and-

Training-of-Poll-Workers.pdf; Marci Andino, Executive Director, South Carolina Election Commission, PCEA Hearing Testimony, Philadelphia, PA, at 6 (Sept. 4, 2013); Nina Ahmad, Chair, Philadelphia Mayor's Commission on Asian-American Affairs, PCEA Hearing Testimony, Philadelphia, PA, at 76 (Sept. 4, 2013); Carolyn Gele, SEIU, PCEA Hearing Testimony, Miami, FL, at 38 (June 28, 2013).

116 Doug Chapin, The Secret to Fixing Long Lines? Math. [Yes, Math.], Election Academy, Univ. of Minn. Humphrey Sch. of Pub. Affairs (Nov. 12, 2012), http://blog.lib.umn.edu/cspg/electionacademy/2012/11/the_secret_to_fixing_long_line.php; Doug Chapin, Report on Anchorage Ballot Problems Highlights importance of Turnout to Election Planning, Election Academy, Univ. of Minn. Humphrey Sch. of Pub. Affairs (July 9, 2012), http://blog.lib.umn.edu/cspg/electionacademy/2012/07/report_on_anchorage_ballot_pro.php; Kevin Kennedy, Director and General Counsel, Wisconsin Government Accountability Board, PCEA Hearing Testimony, Cincinnati, OH, at 6 (Sept. 20, 2013); David Orr, Cook County Clerk, PCEA Hearing Testimony, Cincinnati, OH, at 19 (Sept. 20, 2013).

117 Dana Chisnell, Field Guides to Ensuring Voter Intent: Designing Usable Ballots 27 (2013), available at https://www.supportthevoter.gov/files/2013/08/Field-Guide-Vol-01-20130620.pdf.

118 The standard models used in operations research and industrial engineering tend to recommend the allocation of more equipment to meet service demands than these simple baseline calculations. For instance, Edelstein and Edelstein recommend, as a rule of thumb, allocating twice as many machines to polling places as these baseline models would suggest. See William A. Edelstein & Arthur D. Edelstein, Queuing and Elections: Long Lines, DREs, and Paper Ballots, Proceedings of the 2010 Electronic Voting Technology Workshop/Workshop on Trustworthy Elections (EVT/WOTE '10), available at https://www.usenix.org/legacy/events/evtwote10/tech/full_papers/Edelstein.pdf.

119 Ken Detzner, Florida Secretary of State, PCEA Hearing Testimony, Miami, FL, at 2 (June 28, 2013); Bill Cowles, Orange County Supervisor of Elections, PCEA Hearing Testimony, Miami, FL, at 16 (June 28, 2013); Robert M. Stein, Professor of Political Science, Rice University, PCEA Hearing Testimony, Philadelphia, PA, at 28 (Sept. 4, 2013).

120 Charles Stewart III, Professor of Political Science, MIT, PCEA Hearing Testimony, Denver, CO at 39 (Aug. 8, 2013); Charles Stewart III & Daron Shaw, Lessons from the 2012 Election Administration and Voting Survey 9-11 (2013).

121 Charles Stewart III, Waiting to Vote in 2012, 28 Journal of Law & Politics 439, 460 (2013).

122 Steve Trout, Oregon State Elections Director, PCEA Hearing Testimony, Denver, CO, at 6 (Aug. 8, 2013); Sarah Johnson, Colorado Springs City Clerk, PCEA Hearing Testimony, Denver, CO, at 30 (Aug. 8, 2013); David Orr, Cook County Clerk, PCEA Hearing Testimony, Cincinnati, OH, at 18 (Sept. 20, 2013).

123 Penelope Townsley, Miami-Dade County Supervisor of Elections, PCEA Hearing Testimony, Miami, FL, video 9 at 51:06 (June 28, 2013) ("There may be an assumption that because of the long lines...there was poor planning, but I can tell you that my historical analysis told me that I was going to have a 30 percent Election Day turnout for the general election. I planned for 35 percent and above. We actually had 31 percent. I had long lines. So the issue was entirely not planning.").

124 See Stephen Graves, Professor of Management Science, Mechanical Engineering, and Engineering Systems, MIT, PCEA Hearing Testimony, Philadelphia, PA, at 33 (Sept. 4, 2013); Doug Chapin, Aaron

Strauss' Election Day Resource Calculator, Election Academy, Univ. of Minn. Humphrey Sch. of Pub. Affairs (Aug. 13, 2013), http://blog.lib.umn.edu/cspg/electionacademy/2013/08/aaron_strauss_election_day_res.php.

125 Donald Palmer, Secretary, Virginia State Board of Elections, PCEA Hearing Testimony, Philadelphia, PA, at 4 (Sept. 4, 2013) ("The use of electronic poll books in Virginia has dramatically improved the accuracy and integrity of the voter check-in process, with fewer errors and more accurate voter history."); John Carbone, IACREOT, PCEA Hearing Testimony, Philadelphia, PA, at 37 (Sept. 4, 2013) ("[I]f we had the electronic poll books, [we would not have had] backups and lines.").

126 See Penelope Townsley, Miami Dade County Supervisor of Elections, PCEA Hearing Testimony, Miami, FL, at 23 ("[E]lection [D]day polling place [in]efficiencies have been largely attributed to our outdated voter check-in process. The paper-base[d] process significantly impacted wait times at some precincts, as voters had to be manually located on hardcopy precinct registered pages and often waited inordinate periods of time for poll workers to make phone calls to the department to determine voter eligibility.").

127 See Stephen Ansolabehere, Professor of Government, Harvard University, Election Administrators Survey, PCEA Hearing Presentation, Cincinnati, OH, at slides 5-7 (Sept. 20, 2013) available at https://www.supportthevoter.gov/files/2013/09/Steve-Ansolabehere-Survey-Presentation-PCEA.pdf (noting that electronic poll books were one of the most desired technologies among election administrators).

128 Stephen Ansolabehere, Professor of Government, Harvard University, PCEA Hearing Testimony, Cincinnati, OH (Sept. 21, 2013).

129 Marci Andino, Executive Director, South Carolina Election Commission, PCEA Hearing Testimony, Philadelphia, PA, at 6 (Sept. 4, 2013) ("Hundreds of thousands of [well-trained] poll workers are needed on election day to effectively run polling places across the country."); Thad Hall, J. Quin Monson & Kelly D. Patterson, Poll Workers and the Vitality of Democracy: An Early Assessment, 36 PS: Political Science & Politics 647 (2003) ("Poll workers have a multitude of duties on Election Day ranging from setting up and closing down voting machines to determining when to check a voter's identification to deciding when to allow a voter to cast a provisional ballot.").

130 Doug Hill, Executive Director, County Commissioners Association of Pennsylvania, PCEA Hearing Testimony, Philadelphia, PA, at 52 (Sept. 4, 2013) ("Getting training and keeping poll worker[s] is, by far and always, our biggest hurdle."); Marci Andino, Executive Director, South Carolina Election Commission, PCEA Hearing Testimony, Philadelphia, PA, at 6 (Sept. 4, 2013) ("Poll workers are valuable resources, but they are basically volunteers who receive limited training, they work a few days every other year, and in some cases they earn less than minimum wage."); Barry C. Burden & Jeffrey Milyo, The Recruitment and Training of Pollworkers: What We Know from Scholarly Research, PCEA Hearing Submission, Cincinnati, OH, at 5 (Sept 20, 2013) (showing the difficulty that states have in attracting poll workers).

131 Elaine Manlove, Delaware State Election Commissioner, PCEA Hearing Testimony, Philadelphia, PA, at 6 (Sept. 4, 2013) (stating that pollworker training typically lasts two and a half hours); see also Stephen Ansolabehere, Daron Shaw & Charles Stewart III, Overview of Local Election Officials Survey 19 (2013); Charles Stewart III, Professor of Political Science, MIT, PCEA Meeting Presentation, Washington, DC, at 22 (Dec. 3, 2013). The small number of hours of training revealed in the 2013 survey reported by Ansolabehere, Shaw, and Stewart is consistent with results reported in surveys conducted

in the past. See, e.g., Eric A. Fischer & Kevin J. Coleman, Congressional Research Service, RL34363, Election Reform and Local Election Officials: Results of Two National Surveys 50 (2008) ("On average, pollworkers received 3.5 hours of training in 2006.").

132 See David C. Kimball, et al., Poll workers and Election Administration: The View from Local Election Officials 14-16 (2009), available at http://www.umsl.edu/~kimballd/dk_bb_June09.pdf.

133 U.S. Election Assistance Commission, 2012 Election Administration and Voting Survey: A Summary of Key Findings 14 (2013).

134 Stephen Ansolabehere, Daron Shaw & Charles Stewart III, Overview of Local Election Officials Survey 15 (2013); Charles Stewart III, Professor of Political Science, MIT, PCEA Meeting Presentation, Washington, DC, at slide 20 (Dec. 3, 2013).

135 Thad Hall, J. Quin Monson & Kelly D. Patterson, Poll Workers and the Vitality of Democracy: An Early Assessment, 37 PS: Political Science & Politics 647 (2003) (noting that poll worker error "generated news coverage that could undermine the public's confidence in the electoral process.").

136 U.S. Election Assistance Commission, 2012 Election Administration and Voting Survey: A Summary of Key Findings 14 (2013).

137 U.S. Election Assistance Commission, Successful Practices for Poll Worker Recruitment, Training, and Retention (2007). For additional EAC resources, see U.S. Election Assistance Commission, Poll Worker Best Practices, http://www.eac.gov/election_management_resources/poll_worker_best_practices.aspx.

138 Elaine Manlove, Delaware State Election Commissioner, PCEA Hearing Testimony, Philadelphia, PA, at 15 (Sept. 4, 2013) ("In Delaware...we employ 16 and 17 year old poll workers. I think it's one of the best things we've ever done.").

139 As of 2007, 27 states and the District of Columbia have programs whereby students age 16 and older may serve as pollworkers. Those states are Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, District of Columbia, Georgia, Hawaii, Indiana, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Nebraska, New Jersey, Nevada, North Dakota, Oregon, Rhode Island, South Carolina, Vermont, Washington, West Virginia, Wisconsin, and Wyoming. U.S. Election Assistance Commission, Compendium of State Poll Worker Requirements, at iv-a (2007), available at http://www.eac.gov/assets/1/Page/Poll%20Worker%20Requirements%20by%20State.pdf.

140 Elaine Manlove, Delaware State Election Commissioner, PCEA Hearing Testimony, Philadelphia, PA, at 13 (Sept. 4, 2013) ("[W]e also in Delaware use corporate poll workers. . . . Corporations share one of their employees with us for the day.").

141 See Press Release, Franklin County Board of Elections, Champions of Democracy Poll Worker Training Starts Monday (Feb. 17, 2013), available at http://vote.franklincountyohio.gov/assets/pdf/press-releases/2012-02-17-1.pdf; Press Release, Columbus Chamber of Commerce, Chamber Encouraging Participation in Champions of Democracy Program (Aug. 1, 2012), available at http://www.columbus.org/news/press-releases.dT/chamber-encouraging-participation-in-champions-of-democracy-program/.

142 See Johnson County Election Office, Making Voting Popular—Bi-State Outreach Program, available at http://www.jocoelection.org/workers/MVP-Program.htm.

143 Marci Andino, Executive Director, South Carolina Election Commission, PCEA Hearing Testimony, Philadelphia, PA, at 6 (Sept. 4, 2013) ("While this model for staffing polling places is necessary, it also creates issues, such as difficulty in finding poll workers, inadequate training of poll workers, [and] poll workers who are uncomfortable with the technologies that have been deployed.").

144 Elaine Manlove, Delaware State Election Commissioner, PCEA Hearing Testimony, Philadelphia, PA, at 17 (Sept. 4, 2013) (discussing turnover rates for poll workers).

145 Clyde Terry, National Council on Disability, PCEA Hearing Testimony, Philadelphia, PA, at 58 (Sept. 4, 2013) (discussing the importance of training poll workers in use of the equipment and in basic disability etiquette and awareness).

146 Barry C. Burden & Jeffrey Milyo, The Recruitment and Training of Poll Workers: What We Know From Scholarly Research, PCEA Hearing Submission, Cincinnati, OH, at 15-16 (Sept. 20, 2013).

147 See id.; Elaine Manlove, Delaware State Election Commissioner, PCEA Hearing Testimony, Philadelphia, PA, at 16 (Sept. 4, 2013) (noting that training is typically two and a half hours).

148 Lisa Schur, Associate Professor, Labor Studies and Employment Relations, Rutgers University, PCEA Hearing Testimony, Denver, CO, at 42 (Aug. 8, 2013) ("[A] two year study found that the interactive training methods were more effective than just having poll workers look at lectures.").

149 Barry C. Burden & Jeffrey Milyo, The Recruitment and Training of Poll Workers: What We Know From Scholarly Research, PCEA Hearing Submission, Cincinnati, OH, at 16 (Sept. 20, 2013).

150 Sally Williams, Director, Election Liaison Division, Michigan Secretary of State, PCEA Hearing Testimony, Cincinnati, OH, at 47 (Sept. 19, 2013).

151 Poll Worker Training Information, DallasCountVotes.org, http://www.dallascountyvotes.org/training-and-education/poll-worker-information/.

152 EAC's Election Management Guidelines chapter, "Building Community Partnerships," provides a resource for working with community groups. U.S. Election Assistance Commission, Election Management Guidelines, ch. 12, available at http://www.eac.gov/assets/1/Documents/EMG%20chapt%2012%20august%2026%202010.pdf.

153 Lisa Schur, Reducing Obstacles to Voting for People with Disabilities: White Paper prepared for Presidential Commission on Election Administration 1 (2013).

154 Government Accountability Office, GAO-13-538SP Voters with Disabilities: Challenges to Voting Accessibility 1 (2013), available at http://www.gao.gov/assets/660/654099.pdf.

155 Id., at 9.

156 National Council on Independent Living, Position Statement on Polling Location Wait Times (2013); Jim Dickson, National Council on Disability Rights, Remarks at the Roundtable on Voting Accessibility at 6 (July 11, 2013); Deborah Vagins, ACLU, & Kathy Hoell, SILC, Remarks at the Roundtable on Voting Accessibility (July 11, 2013), summarized in PCEA Public Meeting Conference Call at 13 (Nov. 14, 2013); see also Dana Farmer, Disability Rights Florida, PCEA Hearing Testimony, Miami, FL, at 46 (June 28, 2013).

157 Lisa Schur, Associate Professor, Labor Studies and Employment Relations, Rutgers University, PCEA Hearing Testimony, Denver, CO, at 41 (Aug. 8, 2013) ("Among those who said they had difficulty getting inside the polling place, the most common problems were that there were steps, or that there was a long walking distance.").

158 Government Accountability Office, GAO-13-538SP, Voters with Disabilities: Challenges to Voting Accessibility 7 (2013), available at http://www.gao.gov/assets/660/654099.pdf.

159 Hillary Sklar & Fred Nisen, Disability Rights California, Best Processes to Reduce and Eliminate Accessibility Barriers for Voters with Disabilities, Presentation to the PCEA at 13-14 (Aug. 6, 2013), available at https://www.supportthevoter.gov/files/2013/06/FOCE.12-DRC-Barriers-and-Best-Processes-Voters-with-Disabilities.pdf.

160 City and County of San Francisco, Department of Elections, Pollworker Training Videos, http://sfgov2.org/index.aspx?page=837.

161 Pennsylvania Deparment of State, Election Officials' Training to Assist Voters with Disabilities (undated), available at http://www.dgsweb.state.pa.us/CMSUploads/vod/cms_asx_generator.asp?videoname=090108_program_state_electiontrainingwithdisabilities.wmv.

162 Wisconsin Government Accountability Board, Elections Division, 2009 Polling Place Accessibility Survey (2009) available at http://gab.wi.gov/sites/default/files/page/2009_polling_place_accessibility_survey_pdf_86432.pdf.

163 Wisconsin Government Accountability Board, Elections Division, Impediments Faced by Elderly Voters and Voters with Disabilities (2013), available at http://gab.wi.gov/sites/default/files/publication/65/2013_accessibility_report_pdf_44525.pdf.

164 U.S. Census Bureau, "Citizenship status by age by language spoken at home and ability to speak English for the population 5 years and over," 2010-2012 American Community Survey 3-Year Estimates.

165 James Tucker, Attorney, Wilson Eisner, PCEA Hearing Testimony, Denver, CO, at 73 (Aug. 8, 2013) ("[Language assistance] is something that consistently across the board we've seen election officials fail, sometimes intentionally, sometimes they just don't know any better, sometimes they're just completely under staffed and don't have the resources.").

166 U.S. Election Assistance Commission, Glossaries of Election Terminology, http://www.eac.gov/election_management_resources/glossaries_of_election_terminology.aspx.

167 The Greenlighting Institute, Recommendations 1 (2013), available at https://www.supportthevoter.gov/files/2013/06/FOCE.07-Greenlining.Recommendations.docx; Whitney Quesenbery, Center for Civic Design, Accessibility as Innovation: Creating a Voting System for Everyone, PCEA Hearing Submission, Philadelphia, PA, at 4-5 (Sept. 4, 2013), available at https://www.supportthevoter.gov/files/2013/09/Whitney-Quesenbery-Accessibility-as-Innovation-PCEA.pdf; Future of California Elections, Report and Recommendations for the PCEA 14 (2013), available at https://www.supportthevoter.gov/files/2013/06/FOCE-PCEA-report-FINAL.pdf.

168 Paul Gronke, Professor of Political Science, Reed College, PCEA Hearing Testimony, Denver, CO, at 47 (Aug. 8, 2013).

169 Id. at 40 ("Early voting rates climbed rapidly, growing by approximately 50% in each cycle from 2000 until 2008, finally leveling off in 2012.").

170 2012 Election Administration and Voting Survey datasets, available for download at http://www.eac.gov/research/election_administration_and_voting_survey.aspx (as analyzed by Charles Stewart III with data supplemented by local officials). Discrepancies with the Voting and Registration Supplement to the Census Current Population Survey are attributable to the different definitions the surveys and respondents may have for what constitutes an absentee or an in-person early vote, as well as the completeness of state reporting to the EAC or other sampling error in the CPS. The 2012 CPS data indicate that roughly 18 percent voted by mail or absentee and 13 percent voted in person early. See Census Bureau, Voting and Registration Supplement, Current Population Survey, available at http://dataferrett.census.gov/ (as analyzed by Paul Gronke).

171 Alaska, Arizona, California, Colorado, District of Columbia, Florida, Georgia, Hawaii, Idaho, Illinois, Iowa, Kansas, Maine, Maryland, Montana, Nebraska, Nevada, New Jersey, New Mexico, North Carolina, North Dakota, Ohio, Oklahoma, South Dakota, Utah, Vermont, Wisconsin, and Wyoming all offer no-excuse absentee voting. See National Conference of State Legislatures, Absentee and Early Voting, http://www.ncsl.org/research/elections-and-campaigns/absentee-and-early-voting.aspx#no_excuse.

172 The states with some form of early in-person voting include: Alaska, Arizona, Arkansas, California, Colorado, District of Columbia, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Louisiana, Maine, Maryland, Montana, Nebraska, Nevada, New Mexico, North Carolina, North Dakota, Ohio, Oklahoma, South Dakota, Tennessee, Texas, Utah, Vermont, West Virginia, Wisconsin, and Wyoming. See id.

173 Steve Trout, Oregon State Elections Director, PCEA Hearing Testimony, Denver, CO, at 21 (Aug. 8, 2013).

174 Paul Gronke, Professor of Political Science, Reed College, PCEA Hearing Testimony, Denver, CO, at 47 (Aug. 8, 2013) ("Most states begin early in-person voting 10 to 20 days before Election Day, and most end the Friday, Saturday, and some even the Monday before election day. More than one third of the states require early voting on at least one Saturday or Sunday.").

175 Id. at 48 (Aug. 8, 2013) ("It's true. I tell reporters ever[y] election cycle, where vote fraud occurs is most often associated with absentee voting, but it's also true that the frequency of vote fraud is miniscule.").

176 Wendy Underhill, NCSL Senior Policy Specialist, PCEA Hearing Testimony, Denver, CO, at 51 (Aug. 8, 2013).

177 See Dean Logan, Los Angeles County Registrar-Recorder/County Clerk, PCEA Hearing Testimony, Denver, CO, at 15 (Aug. 8, 2013) ("[I]t's clear that the voters today and certainly in the future are going to expect options."); see also Robert M. Stein & Greg Vonnahme, Voting at Non-Precinct Polling Places: A Review and Research Agenda, 10 Election Law Journal 307 (2011) (finding more positive voter experiences in states with early voting); Connie Schmidt, CERA Administrator, Election Center, PCEA Hearing Testimony, Cincinnati, OH, at 17 (Sept. 20, 2013) (noting the benefits of early voting).

178 See, e.g., Ken Detzner, Florida Secretary of State, PCEA Hearing Testimony, Miami, FL, at 2 (June 28, 2013) (explaining Florida is one of the states that offers both early voting and no-excuse absentee voting and touting the expansion of early voting opportunities that passed in 2013 as one method to deal with

wait times in Florida); Jon Husted, Ohio Secretary of State, PCEA Hearing Testimony, Cincinnati, OH, at 2 (Sept. 20, 2013) (explaining his support of expanding no-fault absentee voting to alleviate the lines during 2004 election and that "absentee voting has continued to grow in popularity with voters and elections officials alike."); Maggie Toulouse Oliver, Bernalillo County Clerk, PCEA Hearing Testimony, Denver, CO, at 7 (Aug. 8, 2013) ("The success of our election process is heavily dependent on early voting."); see also Paul Gronke, Professor of Political Science, Reed College, PCEA Hearing Testimony, Denver, CO, at 47 ("Early voting options were added to states across the nation [between 1986 and 2010] without much debate, primarily as a means to increase accessibility and convenience. Other than high profile adoptions at the election cycles in 2000 and 2004, this truly has been a quiet revolution, dramatic yet bipartisan.").

179 See Charles Stewart III, Losing Votes by Mail, 13 N.Y.U. Journal of Legislation and Public Policy 573, 579-80 (2010).

180 Id. at 597-98.

181 Amber McReynolds, Denver Director of Elections, PCEA Hearing Testimony, Denver, CO, at 69 (Aug. 8, 2013) (describing Denver's TRACE system for mail ballot tracking); Nicholas Martinez, Miami Downtown Development Authority, PCEA Hearing Testimony, Miami, FL, at 47-48 (June 28, 2013) (describing Miami's intelligent mail barcode for election mail); Seth Flaxman, PCEA Hearing Testimony, Philadelphia, PA, at 80-81 (Sept. 4, 2013) (testifying to local election officials' demand for intelligent mail barcode tracking); U.S. Election Assistance Commission, Voter Information Websites Study 11 (2008), available at http://www.eac.gov/assets/1/workflow_staging/Page/64.PDF.

182 See Press Release, U.S. Election Assistance Commission, EAC Issues Best Practices for Voter Information Websites (Nov. 24, 2008), available at http://www.eac.gov/eac_issues_best_practices_for_voter_information_web_sites_/. Orange County's website, for example, allows voters to track and verify the status of their absentee ballots. Neal Kelley, Orange County Registrar of Voters, PCEA Hearing Testimony, Cincinnati, OH, at 23 (Sept. 20, 2013).

183 Candace Grubbs, Butte County Clerk-Recorder/Registrar of Voters, Comment at Election Center National Conference, Savannah, GA (Aug. 15, 2013), summarized in PCEA Public Meeting Conference Call, at 20 (Nov. 14, 2013).

184 See Josh Franklin, National Institute of Standards and Technology, PCEA Hearing Testimony, Cincinnati, OH, at 27 (Sept. 19, 2013) (describing obstacles facing overseas voters). In 2008, civilian absentee ballots were returned at a 13% greater rate than UOCAVA ballots. Charles Stewart III, Professor of Political Science, MIT, PCEA Hearing Testimony, Denver, CO, at 39 (Aug. 8, 2013).

185 See Donald Inbody, Senior Lecturer, Texas State University, PCEA Hearing Testimony, Miami, FL, at 29-31 (June 28, 2013) (outlining problems with mail and military voters); Paul Lux, Okaloosa County Supervisor of Elections, PCEA Hearing Testimony, Miami, FL, at 17-18 (June 28, 2013) ("Voters in forward deployed areas receive mail less frequently and have problems getting mail out when the decision is do we send casualties or supplies in the helicopter versus mail. Guess who wins?").

186 See R. Doug Lewis, Executive Director, The Election Center, PCEA Hearing Testimony, Cincinnati, OH, at 9 (Sept. 20, 2013) ("In terms of military and overseas voters, we have made gigantic improvements . . . ."); Donald Inbody, Senior Lecturer, Texas State University, PCEA Hearing Testimony, Miami, FL, at 33 (June 28, 2013) ("The MOVE Act was clearly successful, two things, one the 45 days, giving

more time for the turn around process, the second one was the changing of how you treat the FPCA."); Dan Nolan, Vice President of Strategic Planning and Government Operations, SOE Software, PCEA Hearing Testimony, Cincinnati, OH, at 4 (Sept. 19, 2013) (praising the MOVE Act for authorizing UOCAVA voters to receive ballots electronically); Overseas Vote Foundation, OVF and US Vote 2012 Post-Election Survey Report 2 (2013), available at https://www.overseasvotefoundation.org/files/OVF_ElectionReport_2013_web.pdf.

187 In one survey, 22% of overseas voters reported that the ballots they requested were either missing or late. Donald Inbody, Senior Lecturer, Texas State University, PCEA Hearing Testimony, Miami, FL, at 30 (June 28, 2013); Overseas Vote Foundation, OVF and US Vote 2012 Post-Election Survey Report 2 (2013), available at https://www.overseasvotefoundation.org/files/OVF_ElectionReport_2013_web.pdf.

188 Overseas Vote Foundation, OVF and US Vote 2012 Post-Election Survey Report 6 (2013), available at https://www.overseasvotefoundation.org/files/OVF_ElectionReport_2013_web.pdf.

189 Id. at 7.

190 See Donald Inbody, Senior Lecturer, Texas State University, PCEA Hearing Presentation, Miami, FL, at slide 5 (June 28, 2013) (noting one-third of FWABs are rejected, usually because the voter is not registered).

191 See Independent Review, Final Report for the Interim Voting Assistance System (IVAS) (2006) (discussing earlier efforts of online assistance for military voters).

192 Orange County, California, has a web portal allowing military and overseas voters to register, verify and update military or overseas status, print a ballot, and request future ballots, among other features. Neal Kelley, Orange County Registrar of Voters, PCEA Hearing Testimony, Cincinnati, OH, at 23 (Sept. 20, 2013). Wisconsin's voter portal website securely delivers absentee ballots to service members overseas, among other services. Kevin Kennedy, Director and General Counsel, Wisconsin Government Accountability Board, PCEA Hearing Testimony, Cincinnati, OH, at 7 (Sept. 20, 2013). See also Paul Lux, Okaloosa County Supervisor of Elections, PCEA Hearing Testimony, Miami, FL, at 18 (June 28, 2013) (advocating expanded electronic delivery and return of ballots to UOCAVA voters, though not "pure internet voting"); Donald Inbody, Senior Lecturer, Texas State University, PCEA Hearing Testimony, Miami, FL, at 31 (June 28, 2013).

193 Overseas Vote Foundation, State Website UOCAVA Support Summary 1 (2013).

194 See Donald Inbody, Texas State University, PCEA Hearing Testimony, Miami, FL, at 31-32 (June 28, 2013) (recommending printable barcoded ballots as a good practice for military voters); Linda Lamone, Maryland State Administrator of Elections, PCEA Hearing Testimony, Philadelphia, PA, at 5 (Sept. 4, 2013) (describing Maryland's use of barcoded electronic ballot delivery for military voters).

195 According to testimony received at the Denver hearing, the National Conference of State Legislatures "has identified voting technology as the coming crisis in elections." Wendy Underhill, NCSL Senior Policy Specialist, National Conference of State Legislatures, PCEA Hearing Submission, Denver, CO, at 3 (Aug. 8, 2013).

196 Each state is required by HAVA to submit a state plan to the EAC detailing how it will spend federal funds. State plans are available at http://www.eac.gov/payments_and_grants/state_plans.aspx.

197 See Jon Husted, Ohio Secretary of State, PCEA Hearing Testimony, Cincinnati, OH, at 5 (Sept. 20, 2013) ("The next time we go to the polls to elect a president, these machines will be twelve years old. That's a lifetime when it comes to technology. The cost of this falls on already strapped local governments."); Donald Palmer, Secretary, Virginia State Board of Elections, PCEA Hearing Testimony, Philadelphia, PA, at 4 (Sept. 4, 2013) ("Virginia faces an issue that many states across the nation face. How do we transition and upgrade to the next generation of voting equipment as aging equipment, purchased after the enactment of HAVA, reaches the end of its lifespan[?]").

198 See, e.g., Stephen Ansolabehere, Professor of Government, Harvard University, PCEA Hearing Testimony, Cincinnati, OH, at 56 (Sept. 20, 2013) (discussing results from survey of local election officials indicating wide dissatisfaction with available technology); Dean Logan, Los Angeles County Registrar-Recorder/County Clerk, PCEA Hearing Testimony, Denver, CO, at 15 (Aug. 8, 2013) (describing Los Angeles County's "very outdated voting system"); Kevin Kennedy, Director and General Counsel, Wisconsin Government Accountability Board, PCEA Hearing Testimony, Cincinnati, OH, at 33 (Sept. 19, 2013) ("[W]e're not serving the voter with the type of equipment that's available. We're not serving the election official with the type of equipment that's available."); Donald Palmer, Secretary, Virginia State Board of Elections, PCEA Hearing Testimony, Philadelphia, PA, at 4 (Sept. 4, 2013) ("The lack of innovation often results in states and localities paying for expensive but antiquated equipment."); Dana DeBeauvoir, Travis County Clerk, PCEA Hearing Testimony, Denver, CO, at 36 (Aug. 8, 2013) ("We're extremely unhappy with what the market has offered us."); Sarah Johnson, Colorado Springs City Clerk, PCEA Hearing Testimony, Denver, CO, at 37 (Aug. 8, 2013) (lamenting that voting machines "haven't been upgraded in years"); Kenneth Bennett, Information Technology Manager, GIS, Ballot Management, and Election Tally Systems Division, Los Angeles County Registrar-Recorder/County Clerk's Office, PCEA Hearing Testimony, Cincinnati, OH, at 15 (Sept. 19, 2013) (describing the difficulty of finding effective voting systems for large jurisdictions); see also Stephen Ansolabehere, Daron Shaw & Charles Stewart III, Overview of Local Election Officials Survey 17 (2013); Charles Stewart III, PCEA Public Meeting Presentation, Washington, DC, at slide 37 (Dec. 3, 2013).

199 Dean C. Logan, Towards a Voter-Oriented Voting System: General Voting System Principles for Los Angeles County (2011), available at http://www.lavote.net/Voter/VSAP/PDFS/VotingSystemPrinciples.pdf; Dana DeBeauvoir, Travis STAR Voting System: Draft Flow of Polling Place Operations, available at https://www.supportthevoter.gov/files/2013/09/Dana-Debeauvoir-STAR-Voting-System-Diagram.pdf.

200 See Kathy Rogers, Senior Vice President of Government Affairs, Election Systems & Software, PCEA Hearing Testimony, Cincinnati, OH, at 4-5 (Sept. 19, 2013) (describing the diversity of current and future market demands across jurisdictions); Dana DeBeauvoir, Travis County Clerk, PCEA Hearing Testimony, Cincinnati, OH, at 20-21 (Sept. 19, 2013) (noting the difficulty for vendors in creating innovative systems given uncertain revenue streams); R. Doug Lewis, Executive Director, The Election Center, PCEA Hearing Testimony, Cincinnati, OH, at 31-32 (Sept. 19, 2013) (stating that political constraints, not voter demands, drive election system manufacturing choices).

201 R. Doug Lewis, Executive Director, The Election Center, PCEA Hearing Submission, Cincinnati, OH, at 4 (Sept. 20, 2013), available at https://www.supportthevoter.gov/files/2013/09/Doug-Lewis-Testimony-for-Presidential-Commission-on-Elections.pdf ("Much has been reported by states and local jurisdictions, as well as the voting equipment manufacturers, that indicate there is a continuing problem with improving and updating voting equipment. We hear continuously that the current process stifles innovation and is so convoluted that voting equipment is out of date before it gets through testing let alone before it gets purchased or implemented by a local jurisdiction."); Dana DeBeauvoir, Some of the

Challenges That Can Be Addressed with a New Type of Voting System, available at https://www.supportthevoter.gov/files/2013/09/Dana-Debeauvoir-Challenges-That-Can-Be-Addressed-w-New-Voting-System.pdf ("The use of proprietary software and a difficult certification process has created a disincentive for vendors to maintain updated versions of software."); Kenneth Bennett, Information Technology Manager, GIS, Ballot Management, and Election Tally Systems Division, Los Angeles County Registrar-Recorder/County Clerk's Office, PCEA Hearing Submission, Cincinnati, OH, at 2 (Sept. 19, 2013) ("We saw a dysfunctional regulatory environment. We saw a voting systems market that was not offering products that would support our elections."); Matt Masterson, Deputy Elections Administrator, Office of the Ohio Secretary of State, PCEA Hearing Testimony, Cincinnati, OH, at 9-10 (Sept. 19, 2013) (describing the problem of stretching existing IT systems amid uncertainty as to what new systems will be available).

202 Kenneth Bennett, Information Technology Manager, GIS, Ballot Management, and Election Tally Systems Division, Los Angeles County Registrar-Recorder/County Clerk's Office, PCEA Hearing Submission, Cincinnati, OH, at 4 (Sept. 19, 2013), available at https://www.supportthevoter.gov/files/2013/09/Kenneth-Bennett-Written-Testimony-PCEA-Cincinnati-2013-.pdf ("In light of [technology] trends in the general population, future voters are increasingly more likely to be engaged and interconnected technologically . . . . They will expect technology to be a ubiquitous utility. . . . [W]e find [some] voters who expect technology to improve the voting experience and improve the administration of election[s], by making it more efficient, convenient, informative, and accessible."); Eddie Perez, Hart Intercivic, PCEA Hearing Testimony, Cincinnati, OH, at 8 (Sept. 19, 2013) (describing the public's desire for voting systems that use "familiar, accessible technology"); Marci Andino, Executive Director, South Carolina Election Commission, PCEA Hearing Testimony, Philadelphia, PA, at 12 (Sept. 4, 2013) ("Voters want to be able to vote using their personal electronic device, whether it's a smartphone or an iPad or some other type of tablet. And I would like to see that incorporated into the next generation of voting systems.").

203 Josh Franklin, National Institute of Standards and Technology, Cincinnati, OH, at 26-27 (Sept. 19, 2013) (testifying that the current standards are not adapted to new technologies states want to use, and that because of fears of wasting money on new systems that could be made obsolete by subsequent standards, new standards are needed to drive innovation); Merle King, Executive Director, Center for Election Systems at Kennesaw State University, PCEA Hearing Testimony, Cincinnati, OH, at 30 (Sept. 19, 2013) (arguing that static standards restrict the certification process's ability to adapt to new threats).

204 David Wallick, Everyone Counts, PCEA Hearing Testimony, Denver, CO, at 74-75 (Aug. 8, 2013) (advocating software solutions instead of single-use products, and arguing that slow certification procedures hinder the implementation of off-the-shelf technology); McDermot Coutts, Director of Research and Development, Unisyn Voting Solutions, PCEA Hearing Testimony, Cincinnati, OH, at 6 (Sept. 19, 2013) (describing the problem of standards not keeping pace with technology); Dana DeBeauvoir, Travis County Clerk, PCEA Hearing Testimony, Cincinnati, OH, at 13 (Sept. 19, 2013) (stating that standards are one factor pushing officials back to inefficient paper-based voting systems).

205 Brian Hancock, Director, Voting System Testing and Certification, U.S. Election Assistance Commission, PCEA Hearing Submission, Cincinnati, OH, at 3 (Sept. 19, 2013), available at https://www.supportthevoter.gov/files/2013/09/Brian-Hancock-Testimony-for-Presidential-Commission-9.19.13.pdf ("The EAC continues to respond to both real and perceived criticisms of our current process. These criticisms have included: Time –Testing still takes too long. Cost – Testing remains too expensive. Relevance – Time and cost factors may contribute to State and local jurisdictions seeking alternatives to this process in order to run effective elections, even though they may support the EAC program in principle."); Don-

ald Palmer, Secretary, Virginia State Board of Elections, PCEA Hearing Testimony, Philadelphia, PA, at 4 (Sept. 4, 2013) ("The current process is expensive and time-consuming."); R. Doug Lewis, Executive Director, The Election Center, PCEA Hearing Testimony, Cincinnati, OH, at 31-32 (Sept. 19, 2013) ("[T]esting takes forever and standards development take[s] forever."); John Wack, Format Developer/ Researcher, Voting System Standards, National Institute of Standards and Technology, PCEA Hearing Testimony, Cincinnati, OH, at 44 (Sept. 19, 2013) (expressing frustration with the time it currently takes to update the standards); James Long, Wyle Laboratories & Brian Hancock, Director, Voting System Testing and Certification, U.S. Election Assistance Commission, PCEA Hearing Testimony, Cincinnati, OH, at 35-37 (Sept. 19, 2013) (discussing the cost of testing); see also Josh Franklin, National Institute of Standards and Technology, PCEA Hearing Testimony, Cincinnati, OH, at 26 (Sept. 19, 2013) ("Currently I think there are two voting system test labs and one . . . awaiting EAC accreditation."); Brian Hancock, Director, Voting System Testing and Certification, U.S. Election Assistance Commission, PCEA Hearing Testimony, Cincinnati, OH, at 38 (Sept. 19, 2013) (noting that with a manufacturer declaration of conformity process, some testing could be done more quickly by non-specialized hardware labs).

206 Matt Masterson, Deputy Elections Administrator, Office of the Ohio Secretary of State, PCEA Hearing Testimony, Cincinnati, OH, at 10 (Sept. 19, 2013) (testifying that "you're talking about a one maybe two month window" after an election to submit modifications for certification).

207 R. Doug Lewis, Executive Director, The Election Center, PCEA Hearing Testimony, Cincinnati, OH, at 31 (Sept. 19, 2013) ("States now are moving to do their own testing and their own standards and [hiring] their own laboratories to do some of this."); Kevin Kennedy, Director and General Counsel, Wisconsin Government Accountability Board, PCEA Hearing Testimony, Cincinnati, OH, at 33 (Sept. 19, 2013) ("The reason why states including Wisconsin are stepping outside of the system is because we have to."); Lori Edwards, Supervisor of Elections for Polk County, PCEA Hearing Testimony, Miami, FL, at 45 (June 28, 2013) (urging the Commission to "resist the temptation of centralization and uniformity" with regard to technology standards).

208 Kevin Kennedy, Director and General Counsel, Wisconsin Government Accountability Board, PCEA Hearing Testimony, Cincinnati, OH, at 33-34 (Sept. 19, 2013); Donald Palmer, Secretary, Virginia State Board of Elections, PCEA Hearing Testimony, Philadelphia, PA, at 4 (Sept. 4, 2013) ("The states need a timely certification process that enhances competition and the development of new technologies."); R. Doug Lewis, Executive Director, The Election Center, PCEA Hearing Testimony, Cincinnati, OH, at 31 (Sept. 19, 2013).

209 This mirrors the Travis County, Texas approach. See Dana DeBeauvoir, Travis STAR Voting System: Draft Flow of Polling Place Operations, available at https://www.supportthevoter.gov/files/2013/09/Dana-Debeauvoir-STAR-Voting-System-Diagram.pdf.

210 In fact, iPads have been used to display and mark ballots in pilot programs for voters needing special assistance. They may be combined with a number of accessibility tools such as headphones for screen reading, alternate input devices (e.g., paddles, "sip-and-puff" devices, keyboards) and their screens can be magnified for visibility enhancement. See Steve Trout, Oregon State Elections Director, PCEA Hearing Testimony, Denver, CO, at 12 (Aug. 8, 2013).

211 Joseph Lorenzo Hall, Senior Staff Technologist, Center for Democracy & Technology, PCEA Hearing Testimony, Cincinnati, OH, at 41 (Sept. 19, 2013) (extolling the benefits of "[o]ptical scan voting systems, ballot marking devices, poll books that you can walk through a line. They would require only quick

interactions with voters and allow voters to mark ballots and register and check in very quickly.").

212 See John Carbone, IACREOT, PCEA Hearing Testimony, Philadelphia, PA, at 40 (Sept. 4, 2013) (detailing benefits from using technologies such as iPads, including making it easier to "vote anywhere").

213 See Kenneth Bennett, Information Technology Manager, GIS, Ballot Management, and Election Tally Systems Division, Los Angeles County Registrar-Recorder/County Clerk's Office, PCEA Hearing Testimony, Cincinnati, OH, at 12 (Sept. 19, 2013); Drew Davies, Oxide Design Co., PCEA Hearing Testimony, Cincinnati, OH, at 46 (Sept. 20, 2013) (describing one such "pre-fill" system using voters' own mobile devices); Linda Lamone, Maryland State Administrator of Elections, PCEA Hearing Testimony, Philadelphia, PA, at 5 (Sept. 4, 2013) (explaining Maryland's new mark-and-print ballot tool); Dianne Golden, Association of Assistive Technology Act Programs, PCEA Hearing Testimony, Cincinnati, OH, at 42 (Sept. 19, 2013) (describing potential benefits of such pre-fill systems for voters with disabilities).

214 See Brennan Center for Justice, PCEA Hearing Submission, Philadelphia, PA, at 27 (Sept. 4, 2013), available at https://www.supportthevoter.gov/files/2013/11/Testimony-of-the-Brennan-Center-for-Justice-before-the-PCEA.pdf. More than half of states conduct some form of post-election auditing, and risk-limiting audits are being conducted by a few states as a way to further test their results and procedures. Verified Voting, Post-Election Audits (2012), available at https://www.supportthevoter.gov/files/2013/09/VerifiedVoting-Post-Election-Audits.pdf.

215 See P.B. Stark & D.A. Wagner, Evidence-Based Elections, http://www.stat.berkeley.edu/~stark/Preprints/evidenceVote12.pdf; Philip B. Stark, Conservative Statistical Post-Election Audits, 2 Annals Applied Statistics 550 (2008), available at http://www.stat.berkeley.edu/~stark/Preprints/conservativeElectionAudits07.pdf; Lawrence Norden et al., The Brennan Center for Justice, Post-Election Audits: Restoring Trust in Elections (2007), available at http://www.brennancenter.org/sites/default/files/legacy/d/download_file_50227.pdf.

216 The Brennan Center has proposed a national database, accessible by election officials and others, that identifies voting system malfunctions and trends. See Lawrence Norden, Brennan Center for Justice, Voting System Failures: A Database Solution (2010), available at http://www.brennancenter.org/sites/default/files/legacy/Democracy/Voting_Machine_Failures_Online.pdf.

217 For machines that are EAC-certified, the EAC's Quality Monitoring Program can alert election officials to any anomalies. More information is available at http://www.eac.gov/testing_and_certification/quality_monitoring_program.aspx.

218 See generally Heather Gerken, The Democracy Index (2012).

219 See Dana DeBeauvoir, Travis County Clerk, PCEA Hearing Testimony, Denver, CO, at 2 (Aug. 8, 2013); Neal Kelley, Orange County Registrar of Voters, PCEA Hearing Testimony, Cincinnati, OH, at 22 (Sept. 20, 2013).

220 Kevin Kennedy, Director and General Counsel, Wisconsin Government Accountability Board, Pew Voting in America Conference 2012: The Price of Elections (Dec. 18, 2012), available at http://www.pewstates.org/uploadedFiles/PCS_Assets/2012/KevinKennedy.pptx.

Mr. BRADY. Thank you.

And I did read your report, and it is an in-depth and a good report. But I guess, how do you implement it? How do we try to get people to buy in? There are people that like long lines and people that don't. But what they don't understand is that we are still infringing on people's rights, ensuring they have the ability, making it easier for them to vote. And by making it easier for them to vote, we can increase the voter participation, for whatever, or whoever they are voting for.

So I guess I just support what you do. I don't have a crystal ball, nor do any of us have a crystal ball to know what we could possibly do. There are things out there, there are things that we can implement, hopefully, to make it happen. I don't ever have a problem with long lines. We seem to be okay with long lines. It is inconvenient. But when we have long lines, we have participation, so that doesn't really cause me a problem as much as no lines. That has been my problem. So I commend and appreciate what you do.

I would also like for unanimous consent to insert, in the entirety, to insert a letter from the Federation of American Women's Clubs Overseas into the record.

The CHAIRMAN. Without objection.

[The information follows:]



serving overseas Americans and the international community since 1931

July 21, 2014

The Honorable Candice Miller, Chairman

The Honorable Robert Brady, Ranking Minority Member

Committee on House Administration

1309 Longworth House Office Building

Washington, D.C. 20515-6157

Re: Committee Hearing on July 23 concerning the recommendations from the Bauer-Ginsberg Commission

Dear Chairman Miller and Representative Brady,

I am writing in my capacity as U.S. Liaison for FAWCO, with some 70 independent member organizations in 38 countries around the world, representing close to 15,000 overseas Americans, and as President of AARO (Association of Americans Resident Overseas), based in Paris and representing some 1,000 Americans around the world.

Our two organizations have, for over a decade, been going to Washington for our annual Overseas Americans Week with position papers advocating improvements in voting procedures and technology to make it ever easier, more secure and reliable for military and overseas (UOCAVA) voters to exercise their democratic right to vote. We have also, since its creation, been staunch supporters of the Election Assistance Commission, set up precisely to facilitate implementation of those improvements.

As noted by the Washington Post in an article about the Commission's report, "One of the most important things about the report is that it unabashedly identifies our voting difficulties as a national problem that requires a national solution." We therefore applaud the effort of your Committee to help states find ways to implement its recommendations.

We also, because of the specific population we represent, wish to stress the importance for the vast population of military and overseas voters (the latest State Department estimates put the latter at over 7 million), of some of the Commission's recommendations. In particular, we note:

- (page 60) "Because of the unique needs of UOCAVA voters and the importance of the internet as the primary mode through which election officials communicate with them, it is imperative that jurisdictions provide a targeted website and assistance for those voters. *The websites of state and local election authorities must be improved to provide customized and comprehensive information for military and overseas voters.*
- (page 61) "All the benefits of *online registration* for domestic voters (…) are even greater for military and overseas voters.

  "The same holds for innovations in voting technology that will allow voters to create and fill in their ballot online, even if they do not cast it over the internet. *However they may transmit their ballot, overseas and military voters would benefit from a system that allows them to create on their attached printer a ballot with a barcode that can be read by the local election administrator.*

…/…

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"Doing so should also cut down on the work often required by election officials who must re-mark ballots received from overseas so that the machine counter can read them. As with all other absentee ballots, the voter must verify his or her identity. But the more that the transmission and receipt of such ballots are free from human error, the greater the likelihood that the ballot will be received, cast, and counted correctly."

- (page 25) "Such standards can only be adopted, however, by the *EAC,* which, due to a lack of commissioners and the related problem of disagreement over the agency's mission and past direction, cannot currently carry out this task. (…) Without a fully functioning EAC to adopt the new standards, many *new technologies that might better serve local election administrators* are not being brought to the marketplace. This lack of up-to-date standards has impeded the inevitable and much-needed transition of the voting process to off-the-shelf technology."

As you examine ways in which the states can improve the voting process, I urge you, on behalf of the organizations I represent, to remember the several million military and overseas voters who face particular challenges and for whom technological progress in every state and territory is of crucial importance. Not only must every state maintain a technologically advanced website and be strongly encouraged to implement new technologies but the body that was created to oversee such technological change must be funded and staffed and allowed to do its job. We are encouraged by the recent nomination of the remaining complement of Commissioners and hope the Commission will very soon be functioning again as it should.

Thank you for all you do to make voting easy, secure and reliable for all voters, within and outside the United States.

Very sincerely,



Lucy Stensland Laederich, FAWCO U.S. Liaison and AARO President (2012-2016)

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Mr. BRADY. I appreciate it, Madam Chairman.

And I guess I don't have any questions because I am really looking for answers. I think you have done the best that you could do.

And I would like to also real quickly piggyback on what our chairman said. Is there anything that we could do? Is there something we could do as our committee and in our positions here, whatever resources you may need, whether it be intelligence, whether it be funding, whatever we could do to try to make these long lines shorter and make these no lines more participative.

I appreciate it. Thank you.

The CHAIRMAN. Chair now recognizes the gentleman from Mississippi.

Mr. HARPER. Thank you, Madam Chair.

And thank each of you for your comments. I think we are all in agreement that everybody who wants to vote, who is legally entitled to vote should be able to vote. And those long lines create a sense of excitement on election day, and it is something that is very special.

And having dealt with elections certainly on a county level, every election, no matter how well you plan, how well you train, there is going to be some confusion. And it may be as simple as the problem of having a split precinct where sometimes, despite your best training, they don't know which ballot to take. So we see those issues that go on from time to time, too.

And early voting, what we see is, yes, you can say it may ease the long lines. But I have had many people in States where they have early voting that say things happen during the last week or two of an election that may change a mind or new information. And so you lose that to go up to the election day, which sometimes is a concern for me.

And certainly I spoke in my opening statement about how important it is to have integrity and accountability of elections. Election day is a special day. It is something that I think as Americans we like that excitement. And I certainly understand the purpose of early voting. Certainly increasing voter participation is an argument in favor. But it does concern me that that early voting can take away from election day itself.

So if one accepts that election campaigns serve a valid role, both to influence and educate voters over a relatively short period of time, then early voting can shorten or even subsume rather than enhance that role. Could each of you comment on that? I will start with you, Mr. Ginsberg.

Mr. GINSBERG. Sure. Early voting is interesting to look at from a nationwide perspective, because there are regions of the country that engage in early voting a lot more than other regions. New England, for example, does not believe in it, much for the reasons that you state about the sense of community.

And there are different types of early voting. And absentee ballot is early voting. That actually is where there are more instances of fraud. In-person early voting is still eyeball-to-eyeball contact, so not as objectionable from the fraud and security angle.

I think overall there is now no-excuse absentee voting in 27 States around the country, pretty evenly split between Republicans and Democrats in positions of authority as election officials in the

States, and early in-person absentee balloting in 32 States, again pretty evenly split between Republicans and Democrats.

To us, that reflected something that the voters wanted and asked for in those different States. And the State and local officials, without a Federal mandate of any sort, implemented it in their States.

I share your personal concerns about election day being a special day, but I have also seen from this that both Republican and Democratic State and local officials alike have decided that early voting is something that their citizens are demanding and they have implemented it.

Mr. HARPER. Mr. Bauer.

Mr. BAUER. I agree with Ben that what we are dealing with here is voter expectation. Voters want voting to begin to mesh with the way they live their lives generally. They live their lives a certain way, and our voting system in many respects lags behind their expectation in the efficiency with which it is delivered and the ease of access that it offers. And so I think that election officials around the country, Democratic or Republican, are under tremendous pressure to offer multiple forms of voting before election day.

So I think that the way we looked at it is essentially that voting is special, that is a special act, but it cannot be, in light of voter expectation, crammed into a single day, Tuesday, any longer. That is not what voters expect, and that is not the message they are sending to their elected officials.

Mr. HARPER. I want to thank each of you for the many, many hours you have spent on this. And we have I think some common goals that we can work towards. And so thank you for all of your hard work.

And with that, I yield back.

The CHAIRMAN. I thank the gentleman.

And before I recognize the gentleman from Florida for his questions, you were talking about early vote. I know the entire Nation is always looking at New Hampshire, whose motto is "Live Free or Die," to Dixville Notch. Every Presidential, they go to Dixville Notch, where there are eight registered voters. They don't have early vote. But it is an interesting thing. We all wait to see what Dixville Notch is going to do there with their voting.

At this time the chair now recognize the gentleman in Florida.

Mr. NUGENT. Thank you, Madam Chair.

And I certainly hope that Florida is not in the limelight again in regards to voting issues. We kind of have been that way over the last few election cycles. But I think that the governor recognized the fact that some policies that were put in place weren't working, and that he tasked the secretary of state to come up with a report, which he did in February of 2013, much to the same conclusions that you all have come up with.

And Florida does early voting, absentee voting, early absentee voting, I mean, in-face absentee voting, I guess it is. And the number of voters turning out, though, still seems to lag behind where it should be, even though we have put in place—like on early voting. Part of the problem was that they had to have it at either—it had to be a supervisor of elections office or substation-type office, annex office. And they have expanded that now to a number of community buildings that early voting can take place.

I mean, how do you get people to come out to vote? And I think that is the question that Mr. Brady was asking. I would rather have people in lines voting than nobody voting or underutilizing the precincts that are put up.

We talk about convenience of voting. I think we have made it really convenient. It would be interesting to see what happens in this election with the changes that were made in 2013. But I am not optimistic that is going to increase the number of voters coming out to vote.

So, I mean, do you have any thoughts on that? As you went through this process did anything come forward? I mean, I have heard about convenience, but I don't know how else to make it more convenient.

Mr. BAUER. I suppose it is fair to say that all of the Commissioners have asked, would have heard and would believe that there are a variety of factors that bear on turnout, and that the one thing we could do is to address one factor we hope wouldn't bear on turnout, and that is that there would be maladministration of the electoral process, and that frustration with access would be one of those factors. We wouldn't say for a moment that if you remove all of those barriers, that we would predict that somehow turnout would rise up to the levels that you would like to see and that we would like to see. There are other factors that certainly are going to bear on turnout, and so removing those administrative obstacles would not be sufficient themselves. But here is one thing you wouldn't want to hear from voters, that they had wanted to vote, and somehow they couldn't. They couldn't because their name was not on the rolls, or they couldn't because they were in line for 3½ hours, and their child care was no longer available, so they had to peel off from the line and couldn't vote any longer. Those things you wouldn't want to hear.

So just in that one sense, that is what we were focused on, but certainly it is true there are a variety of reasons why we have different turnout levels in different types of elections. It varies by State, and it is a complex question to which we can only make the limited contribution we hope to make with the recommendations in this report.

Mr. NUGENT. One of the things that I worry about as you move more into technology in regards to voting is the ability to compromise that. We see this across the board, whether it is Target or whatever. There are ways to access information, and what you worry about is that is massive fraud that could be perpetrated. So I want to make sure that as we move forward on the technology end of it, that we actually have the fraud protection in place, because we use these things all the time for a lot of things that we think we are safe on, whether it is transactions with banks, whatever else. You know, we tend to trust that, you know, we are safely doing it, and what we are hearing is that that is not necessarily the case. And so I worry that as we move forward in the technology end of it as it relates to elections, that we really have the ability to protect those, A, results and those voter rolls from fraud.

Mr. GINSBERG. The Commission certainly came to agree with you on that. I would say that among the more robust debates we heard was the technology security debate, and for purposes of the report,

we came out in favor of online registration and the use of electronic poll books in the polling places just because it is much more efficient and just as accurate as mounds and mounds of paper to check people in in a much quicker way. But we certainly did not express an opinion on voting online, because the balance of the debate was that we are just not ready for that yet.

Mr. NUGENT. Cybersecurity would obviously be an issue. You know, we are being attacked by hackers from all over the world. Can you imagine some of the state actors that would love to influence an election, particularly a national election would be very tempting to them, I would think.

And, Madam Chair, I yield back. Thank you.

The CHAIRMAN. Thank the gentleman.

The chair now recognizes the former secretary of state from Indiana Mr. Rokita.

Mr. ROKITA. Thank you, Madam Chair. I appreciate that recognition, and thank you to both you gentlemen for your leadership. It is greatly appreciated.

I have been saying for years that the problems associated with Florida's election really had nothing to do with secretaries of state or local election officials, but really it was sheriffs of the State that were the problem.

Mr. NUGENT. If the gentleman would yield on that.

Mr. ROKITA. Very briefly.

I associate with the gentleman. I mean, as Secretary of State, I often had this question. You are almost to the point, and I am being facetious, of course, here and embellishing, but you can roll out of bed and vote, and yet voter turnout doesn't go up, and that is because we have a cultural issue. People don't value perhaps the experience, and we have to ask ourselves why, and it seemed like that might have been beyond the technical nature of your Commission.

In fact, and I know you shied away from photo ID, and I don't want to get into that debate here, but I often use that as an example of how it would—in Indiana it actually increased voter turnout when we went to that, because people saw that the administrators valued the process enough to say, hey, you know, we are going to ask the same kind of questions we ask when you go to a video store, which we used to do at the time, or when we get on a plane and do those same things. And when I think constituents and voters and the public see that we place those kind of—that high level of interest and value in the process, you will see more turnout.

But speaking of value, in the technology section I didn't see, and maybe it was somewhere else—I did not see that you mentioned voting centers as a solution to this. Was that talked about, and, Ben, you are nodding your head?

Mr. GINSBERG. We did talk about it. We talked about them favorably. They seemed to be an innovation that is working in a number of States. Particularly States that have adopted early voting have gone to voting centers.

Mr. ROKITA. There is no wrong place to vote, so if there is a big line on one side of town for one reason or another, you can immediately start through the social media and everything else, and through apps, redirect people. You have got to use technology the

right way to make sure it is secure, make sure your coworkers can fairly critique and properly challenge a voter. But the idea that we can use technology now so there is really no wrong place to go, I think, is very valuable.

Secondly, Mr. Bauer, thank you for your work again. You use the example where the max shouldn't be more than 30 minutes to wait in line, and then you said unless there are some things outside of our control. What are examples of what is outside our control?

Mr. BAUER. An example, and we heard this from election administrators, is that the polls open, and there are already 700 people waiting to vote. They have been there for an hour or so waiting for the polls to open. They wanted to vote early. Or in the early afternoon, there is a get-out-the-vote surge on one side or the other, and seven buses pull out, and voters start coming out to vote. So that would be a challenge for administrators, that over that period of time, there is likely to be a build-up of voters.

Mr. ROKITA. Unless you had vote centers, which is in our control.

Mr. BAUER. There are a variety of ways of addressing that, including vote centers, but in a case where they realize that they are looking at longer lines, there are steps that they can take. They need contingency plans so that the problem doesn't mushroom. And our only point by setting up the 30 minutes was to establish a framework for them to think about how our voters experience the voting.

Mr. Nugent points out we have problems with turnout. We don't want voters to walk away thinking that either the system isn't functioning properly, or it is not functioning properly because no one is paying attention to their own interests and their own requirements for voting. And so as long as the voters perceive, and there is evidence to suggest this, that the administrators are responding to the problem—they may not be able to deliver a 7–minute wait time, but they are clearly responding to the problem—that is reassuring to the voter. It will enhance voter confidence.

Mr. ROKITA. Like at a grocery store when you open up a new line or something like that.

Mr. BAUER. Pardon me?

Mr. ROKITA. Like at a grocery store when you open up a new line.

Mr. BAUER. Absolutely correct.

Mr. ROKITA. That goes to your point about how we live our lives today and what we can do to adapt.

Mr. BAUER. Precisely.

Mr. ROKITA. I completely agree with that.

My question turned more on, you know, what is really outside our control, and what is really inside our control, I guess, is what I was trying to get from you. Do you have any other examples? What is an act of God that we should, you know, reasonably expect could cause——

Mr. BAUER. Power—well, I am not sure I would refer to a power outage as an act of God.

Mr. ROKITA. Act of the EPA.

Mr. BAUER. A separate hearing no doubt. I would imagine a weather event with flooding, a power outage. One of the things that we addressed in our report, for example, is that there are, in

fact, real weaknesses in contingency planning for natural disasters. You know, that has been taken up, by a way, by a task force of the National Association of Secretaries of State that has been looking at that. But we need election administrators to have a playbook that they can turn to when administrative problems beset the polling place.

Mr. ROKITA. Understood. Thank you.

Madam Chair, I know my time is expired, but I notice that the red light has been on for others, so just let me finish with one more question now.

In Florida, wasn't it true that—and I apologize if you testified to this already. In Florida in 2012 in the general election, weren't there 11 or so constitutional amendments on the ballot?

Mr. GINSBERG. There were.

Mr. ROKITA. Yes, right?

And everyone reading those, like the ranking member says——

Mr. GINSBERG. I am not sure everyone was, but certainly some people were.

It does make sense for States, and we heard this from numerous State and local officials, to recognize that the heaviest turnout is going to occur in Presidential years, and, therefore, if you are going to put constitutional amendments on a ballot, the general election in a Presidential year is probably not the right time to do it.

Mr. ROKITA. Or get ready to spend a lot more on an election so that you can properly size the process for the——

Mr. GINSBERG. Well, the other recommendation that we have——

Mr. ROKITA [continuing]. Or stop being a referendum State. These were constitutional amendments, but other States might have the same kind of problem if they are a referenda State, right?

Mr. GINSBERG. Providing sample ballots so that people can read all those before they go into the polling place and not take up the line is another way to deal with the situation where you do have a lot of constitutional amendments on the ballot, so you don't have to read it for the first time while you are waiting.

Mr. ROKITA. I yield 30 seconds to the gentleman from Florida, and my time is expired. Thank you.

Mr. NUGENT. I can talk firsthand in regards to the constitutional amendments that were on the ballot. They did all the things that you talked about. Supervisor of Elections office sent out ballots early, sample ballots, all the constitutional amendments that was in the press.

But it is so overwhelming, and I think the State of Florida has recognized that, and they changed the law in regards to limiting the amount of information on a constitutional amendment to 75 words, I believe, but also limiting the number of initiatives that can be on a ballot, because that was just overwhelming in regards to voters, because even if you have all that preinformation, you still get there and you pull it out, and you go, hold on a second, I want to read this one more time before I cast my vote. And a lot of folks were doing that, because, you know, I saw it when I went to vote. It was holding—it was gumming up the works, let's say. And I think States need to be cognizant of that. And I think Florida has finally figured that one out. Like I said, I hope Florida is not the

poster child of election issues in the future, but as it is still a rapidly growing State, we do have our growing pains.

So I want to yield back and thank the gentleman from Indiana.

The CHAIRMAN. Thank you.

I am going to recognize myself for a second round of questions here. And, you know, just one thing that Mr. Rokita was mentioning or saying about an act of God or various things that happen that is outside-the-box challenges of election officials. I was just thinking about when Sandy happened and what happened in New Jersey. They actually had a very successful election. That was unbelievable, the challenges.

And one personal experience. We all remember where we were on 9/11. Many cities were having their election that day, including the city of Detroit, and, of course, New York actually was having their election. They cancelled their election that day.

But in Detroit I was down at the voting precincts with Chris Thomas. We are talking about Chris Thomas, and we went in the first voting precinct. They had the TVs on. You watched that plane go into the first tower, and like everybody else we thought, well, what is that? Was that an accident, what happened, et cetera. And then by the time we got to the second voting precinct, the next plane came into the second tower.

And Chris Thomas and I went out and sat in his car, because he was driving around that morning, and we sat there and looked at each other and said, good Lord. Should we cancel the election? Who knew, right? We called the mayor of Detroit. They were closing the Ambassador Bridge. They were closing the Windsor Tunnel. You are wondering about people being out that day or whatever, but I just remember him and I looking at each other thinking if there is anything that sets us apart from these—I won't use the word that we thought about it that day—it is our democracy and our ability to vote. And we are going to carry on with the elections. But we weren't really sure if that was the right call or not at that time, but it turned out all right.

But some of the things, the challenges that election officials do deal with each and every day, it is an amazing thing.

I just have a question. I am going to pick up on what everybody has talked about, the long lines and everything. I remember when I first saw this Commission being a construct of the Commission, if the President is smart, he will put somebody from Disney on there, because nobody does lines better than Disney anywhere in the world. And you did have somebody on there, and I think the Commission went down and visited Disney, and you even have a term, the "queueing theory," I believe it is called, getting in the queue, in the lines, and customer service, et cetera, et cetera.

Is there anything that you really found from Disney that you thought could have application to the line situation, the long-line situation?

Mr. GINSBERG. I think our visit informed us that the whole field of industrial engineering which deals with queueology and lines really has a lot to offer election officials. And, in fact, Chris was among those who told us about this, that there are industrial engineers in city and State government who don't do things around

helping the polling places in their jurisdictions with problems, but certainly could. So I think that we were greatly informed by that.

There are also just kind of tricks of the trade that we saw, things like informing people of how big the lines are so that you can sort of gauge what the best time to vote is. We did have a revelatory moment in Dumbo's Flying Circus actually where it got a lot of 5- and 6-year-olds, who you don't want to put standing in line for 30 minutes. So rather than that, you can go up when you first get there, get a time that you will be able to use the ride, and then there is a big playground where you can just sort of set 5- and 6-year-olds loose. Now, that is a—to take that to a voting center, that would be the central place where there are chairs. So you would go in, see how long the line is, be told an approximate time to vote, and then be able to vote in comfort, something like a jury room while you are waiting to get called for jury duty. That is the kind of practical solution that——

The CHAIRMAN. Like the FastPass or whatever they called it in Disney.

Mr. GINSBERG. Or FastPass.

The CHAIRMAN. Mr. Bauer.

Mr. BAUER. Yes. We were really struck by what we saw of Disney's constant reevaluation of how well they are doing. That was very inspiring to the election administrators that they were continually thinking through what they had done before to make the experience a good one for their customers and how they might still improve upon it. It is just a continuous effort on their part to think through by close contact with their customers. They survey them regularly and intensively how they can make this experience work best for them, reduce the lines, and make sure the problems when they are detected are addressed. And so, yes, it was an example again of how powerful sound administrative practice can be.

We also, we did spend a day there. We were a little late leaving because it was difficult to peel Ben Ginsberg away from the souvenir stand.

Mr. GINSBERG. Let me say that I thought Bob did amongst his best thinking wearing mouse ears.

The CHAIRMAN. All right, gentleman. We are going to get back to a serious question here.

You know, this committee has had some hearings about military vote. And you mentioned about the military vote, and I think we all agree that certainly the brave men and women that are our ambassadors for liberty and freedom and democracy need to make sure that they have the ability to vote conveniently, and that their votes arrive in time to be counted accurately, et cetera.

We have talked to the Department of Defense through FBAP and other types of things, you know, really trying to understand what they have done to try to expedite and improve all of that kind of a process. What is your Commission recommendation on something, again, that we could really help amplify the message to the State and local election officials in regard to military vote?

Mr. BAUER. One of the more positive messages we heard, and I touched on this in my opening statement, is that the Congress' persistent attention to military voting issues over the years, and we had testimony about it over a very long period of time, the different

statutory enactments that Congress has worked with in trying to improve the military voting experience has paid off. And there was widespread agreement that the MOVE Act, which significantly improved the delivery of ballots to military voters in time for them to be able to participate in the election, has worked very well.

Having said all of that, the challenges there are really significant, and we can see opportunities for the Federal Government to continue to look at the effective circulation, for example, of registration information to military voters to make sure that voters actually have what they need in the way of information about how to participate. There are offices, for example, on bases that are meant when the onboard military personnel—meant to describe for them the registration opportunities and give them the means to register, and there was some suggestion in the testimony, significant suggestion in the testimony, that these are not being staffed as effectively and not performing as effectively as they might.

So there is certainly room for Congress to continue to attend to what it has done here, kind of a legal framework it is set up for here, because as always, the success of these lies in the details, and I think the details are going to require Congress' continued attention.

Mr. GINSBERG. On the State and local level, if you are serving in the military overseas or just living overseas, your point of contact with voting is going to be your State or county Web site, really, from the secretary of state or the county election official. There was great variation in terms of the quality and usefulness and user-friendly nature of those sites. So there are some best practices that we have suggested and examples that we have pointed out of sites that seem really good because members of the military and people living overseas will be able to use them more efficiently if they are up to speed.

The CHAIRMAN. Just one final question or perhaps comment, because Mr. Rokita and I actually introduced a bill called the Voter Registration Efficiency Act. Back in Michigan we really were sort of the genesis of motor voter, because we were one of three States in the Nation where the secretary of state who did the elections also did the motor vehicle administration, so we had all the databases. And you are much more likely to change your registration, or become registered to vote initially, or change your voter registration address if you are coming in to do a driver's license change than you are perhaps to go to your local voter registration place and change it.

So in Michigan we always had, I think, always in the 90 percentile of everybody who was registered to vote—or eligible to register to vote were registered to vote, but we never did any better than the national average in participation either. So, again, for all kinds of reasons, the same kind of reasons every State has, I suppose.

But one of the things is we, of course, want to make sure that nobody votes more than once, even in different States. And the thing that really brought this to our attention, there was a lady that was running for Congress actually from Maryland a couple of years ago who voted twice in two different elections in two different

States, and subsequently her nomination did not go so well when that came to light.

But at any rate, there are a number of people, probably not through negligence—just because we call them snowbirds in Michigan, right? Maybe they are in Florida, or maybe they are in Arizona or wherever they are—that don't change their voter registration, but register to vote in a new State. We were looking at some examples where there, you know, could be hundreds of thousands just in one State of individuals who are registered in more than one place.

So, anyway, our legislation just said if you go to a State to register, the DMV, or the secretary of state or whatever it is in that particular State would ask you, are you registered to vote in any other State? Just ask that simple question, which we thought could really weed out. But we had a little bit of pushback from AMVA, from the Association of Motor Vehicle Administrators, because they said, listen, this registering to vote is not—that is not our job here. And they were concerned about all of that.

But I do think that—I am not sure if your Commission—I guess that is my question: Did the Commission look at anything like that, talking about utilizing databases to be able to weed out duplicate voter registrations, or do you think that we are on the right track with thinking about that kind of legislation, or would that be helpful, or did you look at it?

Mr. GINSBERG. We did talk about it. Certainly urging States to tie into voter registration databases with the motor vehicle databases will make changes of address problems that occur on voter rolls—would reduce it tremendously. And that is something we do talk about and recommend, really led by Chris Thomas, who did talk about the Michigan experience.

We also urge States to join two programs that exist which do compare their databases. There is the Interstate Voter Crosscheck Program that was started in Kansas, and the ERIC Project that was originally funded by Pew. And I think it is now 29 States belong to the Interstate Crosscheck Program, and I believe it is 11 belong to the ERIC program. Those are both complementary interchanges of databases designed to stop precisely that. So it both serves to stop duplication of voter registrations in multiple States, and provides a much more accurate list of eligible people who are not registered to vote so that they can be contacted to register.

Mr. BAUER. I completely agree with Ben on that. I think the list exchanges that we endorsed we endorsed as fulfilling a variety of purposes from preventing the problem that you identified to also identifying voters eligible to vote who could be encouraged to vote and hadn't been.

The CHAIRMAN. Thank you very much.

Ranking member have any other questions?

Mr. BRADY. One real quick statement. We are talking about elections. I want to thank my friend from Florida for educating me. I didn't know what a chad was. I thought it was Chad Everett, was the only chad I know. There are dimpled chads, pregnant chads, hanging chads. Thank you, and thank your State for that.

The CHAIRMAN. Any other questions from the gentleman from Florida?

Mr. NUGENT. I will pass.

The CHAIRMAN. Gentleman from Indiana.

Mr. NUGENT. One last thing.

Thank you very much for visiting Disney. Hopefully you spent a lot of money, because the State of Florida really does appreciate that. Thank you very much.

The CHAIRMAN. It all emanates in Florida, you know?

I certainly think I speak on behalf of the entire committee. This has been a really interesting hearing, and, again, we appreciate both of you taking the time to come into the hearing today and testify and answer the questions, and certainly for your service, as we all have said, on the Commission. It is very good work, and we are looking forward to trying to help amplify the message and the recommendations, et cetera.

I know you mentioned, I think you called it the Bipartisan Policy Center that is working with the local election officials, so if there is something that we can do to assist with them, we certainly want to be able to do that and look forward to your suggestions and input on that.

At this time, without objections, I would mention that all Members have 5 legislative days to submit to the chair additional written questions for the witnesses. We would ask the witnesses to respond if they can do so so that the answers may be made part of the record.

And with that, the hearing is adjourned. Thank you.

[Whereupon, at 12 p.m., the committee was adjourned.]