MEETING

STATE OF CALIFORNIA

SECRETARY OF STATE

THE FUTURE OF VOTING IN CALIFORNIA:

THE PEOPLE, THE EQUIPEMENT, THE COSTS

SECRETARY OF STATE

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APPEARANCES

I. Introductory Remarks

Evan Goldberg, Chief Deputy Secretary of State
Rebecca Martinez, Madera County, County Clerk-Recorder
Jill LaVine, Sacramento County, Registrar of Voters
Austin Erdman, San Joaquin County, Registrar of Voters
Dean Logan, Los Angeles County, Registrar - Recorder/County Clerk
Gail Pellerin, Santa Cruz, County Clerk

II. Heading into 2010: Taking Stock of the Post-HAVA Voting System and Election Administration Environment

Brian Hancock, U.S. Election Assistance Commission

Lowell Finley, Office of the California Secretary of State

Doug Chapin, Pew Center on the States

III. Existing Voting Systems in California

John Groh, Election Systems & Software
Eric Coomer, Sequoia Voting Systems
Marcus MacNeill, Hart Inter Civic
McDermot Coutts, Unisyn Voting Solutions
Curt Fielder, DFM Associates

IV. New Developments in Voting and Election Administration

Bob Carey, Federal Voting Assistance Program
Gregory Miller, Trust the Vote/Open Source Digital Voting Foundation
Efrain Escobedo, Los Angeles County, Voting Systems Assessment Project
Bill O'Neill, Runbeck Election Services

Sandy McConnell, King County Elections, State of Washington

APPEARANCES CONTINUED

V. Public Comment
The following people and organizations provided comments at the pubilc hearing.

Gail Work, San Mateo Democratic Central Committee
Brent Turner
Mimi Kennedy, California Election Protection Network
Alan Dechert, Open Voting Consortium
Judy Alter, Protect California Ballots
Jim Soper
Judy Bertelsen
Tom Courbat, Save R Vote
Kim Alexander, California Voter Foundation
Frank Welte, California Council of the Blind
Eva Waskell
Dagmar Zakim
Joan Quinn, Wellstone Progressive Democratic Club of Sacramento
Lori Shepherd, Disability Rights California
Christina Tobin, Californians for Electoral Reform

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PROCEEDINGS

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: Good morning. My name is Evan Goldberg. I'm the Chief Deputy Secretary of State under California Secretary of State Debra Bowen.

I'd like to thank those of you who are speaking today, those of you who are here in the audience, and

those of you who are watching on the Internet for joining this hearing.

The weekend storms -- you wouldn't know it by looking outside in California -- but the weekend storms on the east coast have wrecked a little havoc on our agenda. Both Secretary Bowen and Brian Hancock with the Election Assistance Commission were snowed into Washington, and both of them had their flights canceled. We do have two people who did make it out from D.C., so at least two of the four were able to escape.

But Secretary Bowen felt it was important to go ahead with the hearing today even in her absence because so many people had made plans to travel here from other parts of the country or other parts of the state. And she did not want to cancel the hearing at the last moment. But she is watching and certainly extends her apologies for not being able to be here.

Before we begin, I would like to introduce the

county election officials with me here on the dais: Jill LaVine from Sacramento County; Austin Erdman from San Joaquin County; Becky Martinez from Madera County; Dean Logan from Los Angeles County; and Gail Pellerin from Santa Cruz County.

Some of you may have heard or seen that Orange County Registrar Neal Kelley was scheduled to be here. He was but had to cancel last week, and he sends his regrets for not being able to be here.

The purpose of the hearing today is really three-fold. We want to take a look at the current voting system marketplace, not just in California, but also across the country to a certain extent, also at the next generation of voting systems and methods and what they may look like. And finally ask the question if we can't get the answer of what California can do or should do to drive the marketplace to develop products and options that serve the interests of the state's voters.

It has been eight years since the enactment of the federal Help America Vote Act. And that sweeping 2002 law had a profound effect of how people cast their ballots not just in California but also across the country. One of the effects it had was to create a bit of a seller's market for the voting system industry, because many, if not all, jurisdictions across the country had to modify or

1 replace their voting systems prior to 2006 in order to
2 comply with the federal law.
3 Since HAVA's enactment, millions of dollars of
4 taxpayer money have been spent to buy and maintain new
5 systems. The voting system industry itself has been
6 through some change. There has been an expansion and then
7 some contraction as well. While there are new potential
8 market participants on the horizon, there are also some
9 questions about their viability given the either real or
10 perceived market barriers to entry. There are new
11 technologies that may be talked about dealing with open
12 source and disclosed source. And at the same time, the
13 state of Washington just recently joined the state of
14 Oregon as an all-mail ballot state.
15 As Secretary Bowen noted in the background paper
16 published for the hearing, even if the appropriate public
17 policy answer or answers to the challenges were obvious,
18 which I don't think they are, the reality is that any
19 solution or solutions that come forward in the next
20 several years are going to be greatly influenced by the
21 current and projected financial status of the federal,
22 state, and county level.
23 So that's a snapshot of why Secretary Bowen
24 wanted to gather all of us here to begin talking about
25 these issues.

Before I call up the first panel, I'm going to have some housekeeping notes. But before I get to that, I'd like to ask any of the registrars up here with me if they'd like to say anything before we get started.

MR. ERDMAN: Yes.

In discussing the future of voting systems, we must first look into the past and then know where we are today, before we can look into the future. We must be informed by and learn from our history of voting systems.

Technological advances in voting include the use of Greek tokens, Italian round black and white balls, mechanical lever machines, paper ballots, punch cards, optical scanners, and the direct reporting electronic voting machines.

Today's new voting systems are driven by finance and security. As we look back, we see each advancement in voting was a refinement of some real and perceived historic issue. In other words, each advancement or enhancement attempted to solve a problem. In some cases, fixing one problem led to other issues. Like advancements in voting rights, voting technology has also advanced to address issues and problems.

For instance, the initial move from voice voting, calling out loud one's voice yea or nay, to secret paper

ballots addressing the problem of voters being influenced

by external pressures such as threats and intimidation. Secret paper ballots gave each citizen the comfort of voting without everyone knowing how they cast their vote.

Pre-printed ballots solved the problem of interpreting handwritten voters in the mid-1800s, solving the issues of secrecy, one person, one vote.

In the late 1890s, lever machines solved the problem of human misconduct during the tabulation of vote.

In the 1960s, punch card voting addressed the tabulation issues associated with manual tally and enhancements at the results of speed and time when voters and press thought computers could speed the results on election night.

Problems interpreting voter's intent in 2000 when inspecting Votomatic ballots -- dimpled hanging chads come to my mind -- gave rise to an increase in optical scan and touch screen voting. By this time, optical scan usage grew to address problems of increased number of names on ballot as well as addressing voter confidence levels with

those who didn't feel comfortable with punch cards.

Touch screen voting was promoted to address many problems, including the challenges of disabled voters, ballots size, ballot and printing costs. Touch screen voting systems introduced unlimited ballot size, reducing costs due to ballot printing, ballots produced in multiple

languages, which encompass the five percent ethic population speaking different languages.

We were now able to easily address challenges of voters with disabilities, such as visual impairment. Voters could listen to their ballots and vote unassisted for the first time in history and severely physically disabled who could use alternative devices designed for use with a touch screen voting machine, such as sip-and-puff, which allowed the group of voters to control the tough screen itself. My point is that every advancement in voting has its roots grounded in solving some perceived problem or issue.

So in looking toward the future of voting systems, we need to ask ourselves some pointed questions

in order to determine what problems we are trying to solve. What do we perceive is our primary voting-related problem today? Should we be developing a voting system that utilizes web security encryption or personal digital assistance, PDAs? Do we have standards in place so vendors can design such a system?

This last question is more of a rhetorical one, but of utmost concern. If the vendors could design a system, we do not have the necessary standards of laws, rules, and regulations in place to move forward. I submit this is our next step, our problem to address.

There are no consistent standards between states and feds, between the states and the states, or even between the states and the county. Each county operates differently, in some cases very differently. While many states and counties today are awash in debt, in fact, our federal, state, and local government revenues are shrinking while cost to conduct elections continue to rise.

So is technology our challenge? I would submit

that it is not the issue. There is plenty of technology to go around.

A couple of challenges in my office -- and I assume others can relate -- are rapidly shrinking budgets and the loss of vendor support. Inconsistency and changing state and federal regulations cause stress for vendors and in some cases are causing vendors to be unable to survive.

Vendors are going out of the business, which is increased market share for those that have survived.

The voting system industry has moved from one of sales dominated brought on by Prop 41 to the Help America Vote Act, HAVA; to post-HAVA service industry as the moneys provided by HAVA for the purchase of new equipment has nearly all been spent to comply with the federal requirements.

As the time went on, expanding federal and state requirements post-HAVA slowed the voting technology introduction, which has increased cost to vendors, states, and counties. Eventually, this conundrum has put vendors

at risk, on the ropes, and some out of business.

Constant change to federal and state regulations has led to the inability of vendors to adapt to their products or effectuate fixes to their products in order to comply with the most current regulations. Vendors have been put in the precarious position to not necessarily come up with the right fix, but rather the cheapest fix.

I don't believe that technology is the issue we have here today as our primary concern. The problem that beckons us is: Can we afford it? I propose that we cannot without help.

Moreover, we do not have consistent standards as a foundation for more technology. I believe we need to address the real foundation issues with consistent standards as a first step and then lay embrace to new technology, new consistent regulations, and election code.

In the terms of election systems, we have a prime opportunity here during this economic downturn when budgets are shrinking to focus on cost-saving technology. Those technologies may not be highly technical, but they can ease the economic problem that we have today.

Perhaps it's time to look at vote by mail, because it addresses the real world economic problem we're all experiencing. The cost of all-mail voting is significantly less than polling place voting, easier to administrate, no lugging around machines to hundreds of different polling places, with faster results.

In the mean time, perhaps we should be addressing regulations and code consistency between state and federal laws and county procedures so when we come out of this economic doldrum, we have a strong consistent foundation for the vendors on which to build new technology and technological future. I submit the next technology evolution isn't very technologically advanced at all. It would allow us the opportunity to build a stronger foundation based on more consistency and common sense and election law for future election systems.

While this will take time and commitment, in the end, state and federal regulations will support the entire election system, including the interest of voters, vendors, election administrators, such as myself.

While the states and feds get our house in order, we must address the economic problem faced by the counties and states across the country. We have solutions which can save a large percentage of our administrative cost, but only if we have the political will to change the

regulations under which we conduct elections.

Implementing vote by mail provides a reasonable cost-effective solution to our current economic crisis while addressing the needs of disabled voters without the cost of, in some cases, thousands of dollars per vote. As technology is becoming more refined and expensive, our financing resources are diminishing obviously, each going in the opposite direction.

So let's prepare now for the future by providing a consistent foundation of regulation to govern and administer election while this is happening, look forward towards cost-saving measures that are here and now, and that we can implement in today's environmental time.

During this time, we must build a strong legislative foundation for the evolving new technology. Using these years of downturn economy to get our election code together, so that when we come out of this, we can build and implement new voting systems, instead of dragging 20th century laws, rules, and regulations into the 21st century.

That's the problem we should be working on now, for we can currently afford the change from laws that now

exist, but we can't afford to ignore the problem in order to properly serve the public.

In conclusion, we have different equipment. We

interpret things differently. We do things differently. We need to find the political way to say if something works, let's look at it with bipartisan eyes and adopt ideas that make sense. We can build a secure and new technology for voting, but we can't reach that goal on antiquated regulations. The future of voting is up to all of us. The future of voting requires a new regulatory foundation to allow for fair, accurate, transparent, and comprehensive representation.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: Thank you.

MR. LOGAN: Good morning.

First, I want to thank Secretary Bowen and her staff for putting on this hearing today and for the speakers who are going to be here taking the time to address the issues today.

I think we can all agree that elections in the

21st century hold great promise. We're witnessing greater participation and greater diversity in our electorate, a stronger democracy with greater transparency and accountability.

More importantly, we are currently on the cusp of major challenges that will modernize the voter registration process and voting technologies. So this is a timely discussion.

We're also seeing all around us emerging democracies tackle some of these same issues, some of them dipping their toes for the first time into the process of developing a voting system that serves in the democratic process. So again, the conversation is not only timely, but a significant contribution to the critical dialogue we need to be having about the electoral process, both its process and the challenges.

The scale and diversity of Los Angeles County presents, as I'm sure you all know, many challenges to the conduct of elections. And I wanted to just take just a moment to put that into perspective a little bit in terms

13 of the hearing that we're having today.

14 Los Angeles County is the nation's largest

15 elections jurisdiction and one of the most diverse and

16 complex election operations in the country, serving over

17 4.3 million registered voters. Our electorate is larger

18 than the voting population in 38 of 50 states in the

19 union. Additionally, the county provides election

20 information in six different languages in accordance with

21 the Federal Voting Rights Act. We serve arguably the

22 broadest spectrum of socioeconomic demographics in a

23 society that's highly and more frequently mobile.

24 Many of these complexities are not unique to L.A.

25 County and are challenges that are faced by election

1 officials all over the country. But they are compounded

2 not only by the size, geography, and diversity of our

3 jurisdiction, but also the current state of our voting

4 system.

5 L.A. County operates with the InkaVote Plus and

6 micro computer tally voting systems that have served the

7 voters of L.A. County for more than 30 years with

integrity and accuracy. But the design of these systems and the age of the technology do not offer the technical and functional elasticity necessary to continue to meet the current and future needs of our electorate. The diversity, the innovations, and the improvements and accessibility and efficiency are just not available in the current technology we're operating under.

Over the past decade, the environment and the demands have become increasingly complex, challenged by a growing and diverse electorate and aging voting system, a slough of regulatory environment that has limited voting system development, and the recent phenomenon of special vacancy elections.

So we embarked a couple of months ago on a voting systems assessment project that you'll hear about later today to try to address the current and future needs of L.A. County. This project is premised on the belief that for too long the acquisition of voting systems has been

about election officials reacting to the regulatory environment and the voting systems market rather than the

3 market and the regulatory reacting to the needs of the
4 voters.
5 So I hope that in our discussions today we will
6 hear how regulators and voting system vendors are reaching
7 out to identify the needs of voters, to identify the
8 principles that voters want of voting systems to be held
9 to, and to ensure that we are including voters in the
10 conversation and in the decisions that are made.
11 Finally, I think that it's fair to say that in
12 the last decade the conversations about voting systems
13 have been disproportionately about systems and
14 technology -- we've heard other people speak about that --
15 and a little less about the people who use those systems.
16 They've also been reactive to looking at spending
17 a lot of resources and a lot of time looking at how voting
18 was conducted in the past, looking at past elections to
19 determine what went wrong, what could have been done
20 better. But we have not spent a lot of resources and a
21 lot of time thinking about the future electorate and what
22 the expectations of the future electorate will be, what a
23 system that allows for voting in a democratic process can
24 be built on to ensure that we're encouraging future voters
25 to participate and to actively be involved in the

electoral process.

So I hope we'll hear today some discussion in that regard. And I hope that we focus on the dynamics of our electorate, the fact we're trying to serve a very diverse group of individuals here in the state in our individual counties and throughout the country, whether that be seniors who need accessibility and readability of ballots, persons with disability, heightened awareness for their fair treatment and the privacy of their votes, a growing busy professional population that expects greater mobility and options for voting rather than a single method of voting, a culture and ethnic diversity that requires increased language accessibility and information so that the voting process is less intimidating and accessible, and also that serves varying education and literacy levels.

As we have this discussion, I hope we will all be reminded that as we sit here today there are students sitting in college that will be the voters showing up to vote at the next election. We have high school seniors who will be voting this fall in the 2010 gubernatorial election. We have sixth graders who will be voting in the 2016 presidential election. And we need to be sure that this dialogue includes them and that we're meeting their needs as well as the current needs of our electorate as we

have the discussion.

I look forward to hearing from the panels. And again want to thank the Secretary and speakers for this opportunity.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: Thank you.

Ms. Martinez.

MS. MARTINEZ: I'll be making comments on behalf of Neal Kelley, Registrar of Voters for Orange County, who could not be here with us this morning.

According to Volume I of the 2005 VVSG, or Voluntary Voting System Guidelines, in the category of durability it states, "All voting systems shall be designed to withstand normal use without deterioration and without excessive maintenance cost for a period of ten years."

This estimate will not hold true for those jurisdictions that have been faced with unusually high numbers of special elections. The use of the equipment creates increased concerns over wear and tear and ongoing maintenance. There is very little information available

on plans for long-term sustainability of voting systems beyond their expected published life cycle.

The certification of these systems is critical, and there should be equal concern on changes needed to

keep the systems operational. For example, changes in technology and the associated requirements for re-certification; if manufacturers refuse to update their voting systems accordingly or make excessive financial demands for so doing, then it is likely that this equipment could become obsolete and their procurement costs will never be resolved.

Of course, this has been voiced before, but with respect to changing requirements, manufacturers must honestly declare their products are unable to meet a requirement.

If parts are no longer manufactured, perhaps due to no fault of the original equipment manufacturer, in the near future, many election jurisdictions, especially those using direct recording electronic voting systems, may need to replace their current voting systems as equipment

purchased to comply with the Help America Vote Act of 2002 nears the end of its expected life cycle.

As companies are faced with significantly reduced demand, we can expect higher costs for ongoing services as well as future procurement of voting equipment and support services. We must work with vendors to do everything possible to seek proactive contract provisions, such as guarantees on part life cycles and/or manufacturing.

In Orange County, we have embarked on an

ambitious plan to make sure our system stays operational and exceeds state and federal requirements. This strategy will continue to become more difficult as technology changes and the requirements stay the same.

Thank you.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: Thank you very much.

MS. PELLERIN: I don't have any prepared comments, but I want to thank the Secretary of State and their staff for hosting this today. And I look forward to hearing from the panelists. Thank you all for being here.

I think it's the start of a very important discussion.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: Ms. LaVine.

MS. LA VINE: Thank you very much for the opportunity to be here and for the wonderful panels that have been assembled. And I'm looking forward to hearing from them as we have this new technology and we see it out there and we think, okay, how can we use it for our voting system? It's very exciting. At the same time, how do we meet the needs of all the voters?

And, of course, as every panel member has talked about the budgets, how do we meet them and be able to afford this new technology? And can we not afford the new technology?

So I'm very interested in hearing some of these comments today. And I'm very pleased to be here. Thank you.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: First panel is up.

But before we begin, do a couple of housekeeping

things.

First, if everybody could turn their own personal electronic devices to stun, that will be appreciated by the panelists and audience members.

A reminder, this hearing is being broadcast on the internet on the Secretary of State's website. It's also being taped by the California Channel for later broadcasting.

For people in the audience who would like to speak during the public comment portion, there are sign-in cards. They were at the table when you came in. If you missed them, I believe they are in the back.

We will take speakers in the order in which they signed in. Anybody who would like to submit written testimony is free to do so, and we will post that up on the website following the hearing. The e-mail address is votingsystems -- one word -- votingsystems@sos.ca.gov. If you missed it, that is on the website.

The hearing is being transcribed and a

transcription will be posted once that is completed as

2 well. So that's a reminder that any comments made in
3 print or verbal will become part of the public record.
4 Those of you who have seen Secretary Bowen run
5 hearings in the past when she was in the Legislature and
6 subsequently in this office know that she runs very
7 interactive hearings. And I believe all of us on the dais
8 intend to follow that lead. So all the panelists have
9 been told that while they are certainly free and
10 encouraged and we would love them to make prepared
11 remarks, they should also be prepared for us to interrupt
12 their presentation with questions.
13 And just a reminder to everybody up here, please
14 don't feel you have to wait until end. Grab my eye if you
15 want to ask a question.
16 So with that, let's begin with our first panel.
17 As I mentioned, Mr. Hancock with the Election
18 Assistance Commission did not make it out. Mr. Finley
19 from the Secretary of State's Office will be I believe
20 presenting his PowerPoint prior to his presentation.
21 But I'd like to start with Mr. Chapin from the
22 Pew Center on the States.
23 MR. CHAPIN: Thank you, Evan. Thank you to the
24 panel. Thank you to everyone here today.
25 I will say on the drive up from San Francisco

this morning you have a beautiful state, rolling green hills. As someone who just escaped Washington, D.C., the lack of white was a remarkable site. So it really is a pleasure to be here, not just because you don't have 30 inches of snow on the ground, but there have always been so many interesting and lively debates in the golden state about elections.

I confess after having listened to the open remarks, I'm a little concerned that they've stolen lots of my thunder. It's clear that the folks here in California, especially the Secretary and the county registrars, are already out there at the leading edge thinking about the challenges of voting technology and what it means for elections. So I will try very briefly to move through some remarks and then give you the perspective of not just my team on the elections team at the Pew Center on the States, but many of my colleagues at the Pew Center on the States about how to cope with this new and challenging and I would argue exciting environment for state and local government.

Very quickly, just to sort of set the stage as to who I am and why I'm here. For nearly eight years, I was director of electionline.org, which was originally a grantee of and then a project of a few charitable trusts.

25 Election Line was the nation's only non-partisan,

1 non-advocacy source of comprehensive, unbiased and
2 reliable information about state and local election
3 administration and election reform.
4 With that, I have almost eight years of cliff
5 knowledge in meetings like this about this election
6 administration process. I am not an election official,
7 all though some of the folks to my right, your left, will
8 say I play one on TV from time to time.
9 Someone who is interested -- I describe myself as
10 an election geek but not an election official, but someone
11 who really believes election administration is a crown
12 jewel, if not the crown jewel, in the public
13 administration crown in terms of the services we provide
14 to our citizens.
15 In 2009, I became Director of Election
16 Initiatives for the Pew Center on the States. That
17 includes the artist formerly know as Election Line, but
18 also Make Voting Work, which was an ambitious effort on
19 behalf of Pew and the Jet Foundation to inject millions of

20 dollars for research into the field. Research was
21 intended to be conducted not just about election
22 administration, but with the partnership of election
23 administrators to identify those issues, those
24 opportunities, those potentials for reform going forward.
25 And most recently, all of that work, the Election

1 Line work and the Make Voting Work work has boiled down
2 into a number of key initiatives on which we are very
3 active right now.
4 The first, military and overseas voting. We were
5 active supporters of the federal MOVE Act. My colleagues
6 are in direct contact with legislators and election
7 officials across the country to help them implement the
8 federal requirements of the MOVE Act, but also to
9 encourage them to expand those same protections to
10 military and overseas voters in state and local elections
11 as well.
12 We are also active in something called the Voting
13 Information Project. We partnered with a small silicon
14 valley company named Google and state and local election

15 officials across the country to make basic information
16 about the voting process. Where do I vote? What's on the
17 ballot? How do I check my registration? Make that
18 available in ways that voters can find it and use it,
19 including the latest technology, including mobile
20 technology.
21 We have now on the order of a dozen states, plus
22 Los Angeles County, which is big enough to be another
23 state, which are participating with us. And we're looking
24 forward to working with many more states in advance of
25 2010 and 2012.

1 And then finally and most ambitiously, we're
2 involved with a project that we called Voter Registration
3 Modernization. You already heard a lot of the rhetoric
4 about how our current election system is a creature of the
5 20th century. One could argue that voter registration is
6 a creature of 19th century. We have a paper-based heavily
7 voter initiated system which too often is far too costly,
8 ineffective, and inaccurate for not just election
9 officials, but for the voters they serve.

10 We're committed to working with election
11 officials, to working with experts in the policy and
12 technological arena to find new ways to do voter
13 registration so that the resulting system is the 21st
14 century system, which is cost effective, accurate, and
15 efficient for election officials, but especially for
16 citizens, both as voters and as taxpayers funding those
17 services.
18 With that background, let me take a quick step
19 back. And I think the opening remarks have done a great
20 job of encapsulating this. A very brief history of voting
21 technology from 2000 to present.
22 Talk a little bit about the challenges which are
23 facing election officials and taxpayers across the
24 country.
25 And then finally some insights from my other

1 colleagues and the government performance group at Pew on
2 how state and local governments are thinking about
3 choosing services, choosing products, choosing technology,
4 not something I'm recommending that you do, but certainly

5 that California think about as it begins to resolve some
6 of these policy questions that I will describe later.
7 Very briefly, the history of voting technology,
8 starting in 2000, we've had almost a lifetime of voting
9 technology in the last ten years. The events of the 2000
10 presidential election highlighted lots of different
11 issues. But front and center throughout the entire
12 debate, certainly in Washington, I know in many state
13 capitols like California's, was voting technology. And
14 the resulting act, the Help America Vote Act, while again
15 it confronted a number of issues, provisional voting,
16 voter registration database and the like, it was largely a
17 federal investment in voting technology at the state and
18 local level. Significant not so much for the investment
19 in technology, but for the fact there was an investment at
20 all.
21 For the first 220-plus years of the
22 United States, the federal government had never spent dime
23 one in direct support of State and local election
24 administration. So the fact that the Congress was willing
25 to authorize nearly $4 billion in support of improvements

in election technology at the state and local level was a major shift in the relationship between the federal government, state, and local election officials, and their voters.

It did, however, create a seller's market. There were deadlines on when these new technologies were supposed to be built in. There were very specific mandates, access for disabilities, second chance voting for undervotes, accuracy standards, and the like.

And as a result, states not used to having all of this federal money and nervous that it might go the way of other funding moved very quickly into the market. And so sellers really had very much the upper hand.

As those systems were bought, however, and as we learned more about systems, over time, it became much more of a buyer's market. Not so much that buyers were getting good deals, but that buyers were willing to be far more critical of the technology they had purchased, the services they were being rendered, and the price they were paying in order to get that.

So we've really now reached a market where both sides, sellers and buyers, are tremendously challenged by the lack of money, the lack of guidance, and in many places the lack of time to make those changes going forward.

Three really basic I think characteristics of the current voting technology market, if you will, or situation for state and local governments.

First is we're still not entirely sure what exactly a voting system is supposed to do. We have had discussions about security. We have had discussions about accuracy. As recent as last week, the State of Illinois had its primary. And there, the State had just implemented a new vote requiring that voters be notified when their ballot is undervote.

That was very unpopular with lots of local clerks and also with lots of voters who we heard from on and after primary day. So there is not yet any consensus on what a voting system is and what a voting system should do.

I think you see that in the ever-evolving nature of the federal standards, the ever-evolving nature of the relationship between the federal government, states, and localities on how to test this and certify voting technology on what exactly to test and certify. The federal standards cover voting machines but don't always cover voter registration depending on how the system works. So there's lots of uncertainty about what is

24 required to be in a voting system. And then once that's
25 required, what that system should do.

1 As a result, we have a market that's very much in
2 flux. Again, you've heard that after the sort of the
3 golden days when there were lots of new vendors or
4 established vendors in the market for voting technology
5 were very much in a position of flux in the market right
6 now. You have some of the smaller vendors pulling back
7 with smaller and smaller client bases. Two of the larger
8 voting technology vendors have proposed to form an even
9 larger vendor, which has set off reactions in Washington
10 and around the country. But we're not sure about what
11 we're buying. We're not sure about who to buy technology
12 from.
13 And then finally, there's no money. My
14 colleagues at the Pew Center on the States just wrote a
15 report called "Beyond California," which looks at how
16 states like California and others like it are coping with
17 the nearly catastrophic loss of revenue and the lack of
18 fit between revenue that's coming in and commitments of

19 revenue going out. And so states are faced and therefore
20 localities are faced with very tight incredibly lean
21 fiscal times. And so we don't know necessarily what
22 exactly we want. We don't know exactly who we should buy
23 it from. And most importantly, we don't know where the
24 money will come from to buy it.
25 So three thoughts going forward. I have the good

1 fortune now that the Election Initiatives Team is part of
2 the larger government performance group at the Pew Center
3 on the States to be very close to both intellectually and
4 physically -- just around the corner from me in
5 Washington -- the folks on the Government Performance
6 Project. And my colleagues at the Government Performance
7 Project are very familiar to some of you with their
8 rankings of state government on a variety of functions.
9 But they are heavily embarked and very interested in a new
10 look at procurement, how state and local government
11 advertises for, seeks, and allows business to compete for
12 products and services in the public sector.
13 And so knowing that I would be here and knowing

14 that while I couldn't really weigh in on the policy
15 decisions of what a voting machine should do, what I could
16 do was at least give you some insight from around the
17 country about how jurisdictions, states, and localities
18 are working through that challenge of using a smaller
19 amount of money to buy an ever-growing number of products
20 and services.
21 First, I'm reminded of that great line from
22 Benjamin Franklin. My kids, because of their snow, we
23 just watched lots of movies. We watched 1776. And
24 Benjamin Franklin has that great line about we all must
25 hang together or we will all certainly hang separately.

1 That's the advertisement for a look at group purchasing,
2 group buying power.
3 Increasingly, counties are banding together.
4 States are banding together to look at a way to combine
5 their purchasing power to get more clarity for vendors,
6 but also give them more purchasing power in the process.
7 You see that in everything from joint purchasing
8 agreements to cooperative efforts like we have on the east

9 coast and the Midwest on electronic polling where
10 jurisdictions agree to cooperate on what a system will do
11 in order to give them all the opportunity to get the
12 economies of scale.
13 You do see more of an interest at the state and
14 local level in buying fewer products and buying more
15 services. My GPP colleagues talk about how more and more
16 jurisdictions are using debit cards, electronic fund
17 transfer for social services: Food stamps, assistance to
18 women and children and the like. So you have vendors
19 competing not for the little swipe boxes or the cards that
20 clients will use, but actually for the service of clearing
21 the funds, moving the funds, taking the funds from the
22 vendor to the client and then paying them out to the
23 providers of food and other services.
24 And so you see jurisdictions taking the same
25 things that they bought as products and make them into

1 services. And as such, redefining the relationship in a
2 way that gives them the kind of durability that they're
3 looking for, giving them the kind of predictability they

4 want, and gives them the kind of cost containment that
5 they desperately need.
6 Finally, when you have more difficult projects --
7 and I don't want to suggest that voting can be equated to
8 buying a school bus or buying text books or doing real
9 straight-forward services, that they do tend to be more
10 complex.
11 You are starting to see jurisdictions think about
12 the way in which they procure technology. Big IT
13 projects, whether they're databases or voting machines or
14 what have you, are very tricky animals. Governments don't
15 move as fast as the private sector. Regulations don't
16 much as fast as the private sector. And the dollars
17 certainly don't go as far as the private sector. So
18 increasingly governments are trying to find a way to get
19 some sort of cost certainty without locking themselves
20 into a solution which is obsolete the day the keys are
21 handed over to the government office.
22 So you're seeing more and more what my GPP
23 colleagues call the bake-off strategy; where you get a
24 jurisdiction advertises for a product or a service, and
25 based on that initial advertisement, picks outs a handful

of vendors. And depending on your jurisdiction and the size of your budget, you can decide how big you want that handful to be. And then each of those vendors or service providers is given an opportunity to essentially pilot the service that they will be asked to provide. And then based on that pilot, known as the bake off, the jurisdiction can then decide which of the vendors to use or whether or not to extend the agreement with one of those individual vendors.

Now, how that will work in practice in the voting arena, I don't yet know. It's new to the IT arena. It's certainly new to the voting arena. But that along, with the other two ideas, I think is worth considering as the state of California wrestles with the policy issues of what the system ought to do. Perhaps the procurement process itself can be used to help you, help the vendors, and help voters decide what they want voting technology to do, how long they want to do it, and what exactly the cost will be.

I'm delighted to have gotten through this presentation without being interrupted, but I will thank you all for your time. I'll take as many questions as you have the time and the inclination to ask.

We are online everyday at www.electionline.org.

If you want to see more or hear more about the

work that we do, my e-mail is dchapin@pewtrusts, with an "s", .org. You can also find us online at www.pewcenteronthestates.org.

Thank you for the opportunity to escape the snow. Thank you for the opportunity to talk to you about something I care a lot about. And thank you for your good work, both the folks on the dais and all of you out there, for caring as much as you do about something that I care a lot about, and that's the right and the opportunity of Americans to cast a ballot.

Thank you.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: Ms. LaVine.

MS. LA VINE: Doug, thank you very much for your comments. And I do enjoy your Election Line. Like I said, I always want to go there and see if your name is there or if it's not there. It's good to know.

But you were talking about defining a voting system. This has gotten to be a bigger problem I think for us. Because as we move to a more mail-oriented, the vote by mail, we need different equipment. We need the

envelope sorters. We need the envelope openers. We see different opportunities. But yet to define a voting system, we don't know what needs to be certified in the system.

And when we applied for the grants, they say that's not part of the voting system. But yet we can't do a lot of what we need to do unless we have some of this other equipment.

So how do we define -- like you say, how do we define the voting systems so we can get the grant money we need and the certification process clean and ready to go so we can have all these pieces and parts? Do you have any idea?

MR. CHAPIN: I don't. In many ways, it's the policy variation on the chicken and egg problem. Which comes first: The established practice or the policy governing the practice.

I think all of you on the dais have been very astute in noting the field of election administration, especially policy, has been very reactive. We tend to be

17 driven by crisis. Help America Vote Act was a result of
18 the 2000 Presidential election and also somewhat
19 troublesome primary in Florida in 2002. A lot of the
20 debates we've seen about security and accuracy have come
21 from external shocks.
22 I think that in many ways some of the debates
23 you're having and the friction that's emerging as
24 jurisdictions move to more vote-by-mail, move to do
25 different -- is, while frustrating for those of you who

1 are experiencing the friction, I think it's helpful long
2 term, that it becomes part of the dialogue between
3 regulators and the regulated in terms of what is a voting
4 system. If enough jurisdictions believe that vote by mail
5 is the way they want to go, I think that is a very useful
6 discussion to have with the folks holding the purse
7 strings either in the Legislature or something like the
8 Modernization Board.
9 Does that mean that everything that an election
10 official wants to do should automatically be part of the
11 regulation? Not necessarily. But I do think that

expecting laws that were written before the Internet was what it was, before mobile technology was what it was, before our fiscal house took a major hit, is dangerous.

So I think that the regulations themselves need to evolve, if not as quickly as the technology, at least not so slowly as to be left far behind.

MS. LA VINE: Thank you.

MS. PELLERIN: I would add to that just in addition to defining the voting system, but also providing the funds necessary to maintain that voting system, house that voting system, repair the voting system, you know, the long-term effect. So much of the initial purchase was all about getting the equipment. But it was quite an effort to get some funds to actually house it and take

care of it. So I'm looking at that as well right now.

MR. CHAPIN: That is a huge challenge. Not everyone has the terrible misfortune of the Louisiana parishes who saw hundreds of thousands if not millions of dollars of voting machines flooded and ruined.

But just finding a place to put even these

7 smaller voting machines is an issue.

8 And I do want to return to durability. Those of

9 you who follow elections as closely as we do, lots of

10 nostalgia for lever machines in New York. And the wrap on

11 lever machines is they are 19th century technology and

12 80-year-old voting machines.

13 And I was talking to someone from New York about

14 that, and he said, "Doug, you realize they've been around

15 80 years." Yes, they weigh 800 pounds. Yes, the biggest

16 security danger is they fall on somebody while they're

17 being moved. But they are -- they bounce, right.

18 So everything you do, from how a machine works --

19 and we're not just talking source code, open/disclosed,

20 whathaveyou -- is it mechanical? Is it software? Is it

21 weather resistant? Will it withstand cold? What happens

22 when the power goes out? There are opportunities to think

23 about what a voting system will do.

24 Our colleagues at Google say all the time

25 creativity loves constraint. I would say that you all

1 have an opportunity to be stupendously creative right now

given the level of constraint you're facing.

MR. LOGAN: My question is along the same lines. You talked about with regard to voting systems we don't know what we want. We don't know who to get it from or how to pay for it, which is pretty profound when you think about the amount of resources and time and focus that's been placed on voting and elections in the past decade.

So I guess my question is, from your standpoint being with an organization that has the ability to see the national perspectives, how are people going about answering those questions? And are they engaging with voters and prospective voters to answer those questions?

Because my perception is that we're spending a lot of time talking about what we don't want, who we don't want to get it from, and how we don't want to pay for it. But I don't hear a lot of discussion about the flip side, the proactive side of that.

Are you aware of efforts that are in place or models that are effectively getting an answer to those questions?

MR. CHAPIN: Not much. And part of the challenge of voting technology is that there isn't -- while we test for certification, while we test for acceptance and the like, when it comes to actually user testing, we do user

testing on election day when we are shooting with real ballots.

It's hard to do that kind of -- in some ways, that is the good face to put on the reactivity we see, that the negative reaction, for example, that Illinois policy makers got to the second chance undervote notification I think is an opportunity for them and their election officials to think through the process.

The challenge you have -- and notice that I use the second person, not the "we," but the "you" -- is the challenge I think that you have is to figure out how is it possible to test what voters will see on election day without having them test it for the first time on election day when it's too late for them.

I don't know if there's more room for citizen involvement. We're certainly seeing a greater interest as you know in the pacific northwest in usability testing for paper ballots and the like. You're starting to see folks sit down at shopping malls and focus groups and the like to look at paper ballots.

News flash: Women read instructions; men don't. Right? So that paper ballots have to be designed accordingly. That's the good news.

The bad news is those things tend to be expensive. So the trick will be how do we allow folks in

your position to find out now just what voters want, but how they interact with the technology without requiring the kind of multi-hundred-thousand, multi-billion-dollar focus group that's usually involved.

I really think that there is a lot to be said for trial and error and muddling through. The trick is to be willing to collect the data and analyze it as it comes in and make decisions accordingly. Whether or not you can convince folks in the media and otherwise that's a valid process and not a symptom of an unhealthy election process is another matter entirely.

But I think finding your way forward and working with real voters to determine what works and what doesn't is the only way forward.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: Doug, let me ask you a couple quick ones.

In looking back, would you say voters and policy makers expect too much, demand too much? We're not specific in our demands?

And on the flip side, do voting system vendors

21 promise too much or try to be all things to all people?

22 MR. CHAPIN: I don't know if voters expect too

23 much or policy makers expect too much.

24 Election administration is a remarkably arcane

25 field. I don't want to suggest that other areas of public

1 administration are. Election administration is very

2 arcane.

3 And I worked with a law partner once who said

4 that the one thing that every member of Congress thought

5 he or she was an expert on was elections because they just

6 won one. Right?

7 And so voters, people who vote, they vote. They

8 know how it works. But all of you know and probably all

9 of you in the audience know when I talk to international

10 visitors, the one thing that every jurisdiction in the

11 United States has in common is that they like what they do

12 and they can't believe anybody else could do it

13 differently.

14 And so I think in many ways the effort we began

15 in 2002 with the Help America Vote Act is really just the

first step in a process of getting people to understand what elections are.

I do think that the administrative aspects of elections have been underappreciated, not by voters because that isn't necessarily something they need to be paying attention to. But to policy makers, we tend to view it as a political science rather than a public administration issue.

To the extent we can factor in things like cost, where the machine is stored, how and when we write the

contract, the more we focus on it as an administrative issue and less a political science issue, how many people turn out, will their rights be protected, I think that's important. Not that the political science isn't important, but I think the administrative is underappreciated.

As for vendors, I think vendors are finding their way as much as anyone else. No one could have expected voting machines to be even in 2002. HAVA was not terribly specific on what voting machines should be. They pretty

11 much just said people should have them.

12 The only specificity that existed was as part of

13 the disability requirement touch screen direct reporting

14 electronic machines were specifically listed as a system

15 that would be accessible to voters with disabilities. And

16 many jurisdictions, because that was the only specificity

17 they had, they were nervous about the length of time

18 they'd have access to the money, went ahead and bought

19 that. And vendors, believing they had the right system,

20 were all too willing to sell it to them.

21 The challenge is that the market isn't set up in

22 such a way for vendors to change their offering quickly.

23 And it's not really clear how they will be getting

24 feedback from voters and election officials on what those

25 election systems ought to do. What we all know what we

1 think we want voting systems to do and voting machines to

2 do. But I don't think we know how that translates either

3 into a request for proposal or specifications for a given

4 technology.

5 MS. PELLERIN: One thing that HAVA did make quite

clear was the deadline for implementation. And that was, what? January 1, 2006; right? Which I thought was way too soon. The technology wasn't there. The certifications weren't there. And I had advocated for that to be extended, because I think it was too much too soon.

MR. CHAPIN: There is some there. One of the criticisms is usually when you have mandates, you want to have mandates followed by clarification of how those mandates apply and then funding to put them in place. And HAVA did that almost backwards. You had a deadline and then an agency that was supposed to clarify those deadlines, which didn't come into being until 2004, and then federal funding that didn't begin to hit the streets until I think mid-2004 for a 2006 deadline.

So it isn't surprising that jurisdictions have struggled with that, and as a result, are still figuring out how to spend what HAVA money they have left. It's a challenge.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: You

mentioned the idea of counties and states working together for purchasing power. Are there examples you can share of places where that is happening? Or are they doing it via joint RFP or most favored nation status clauses or something?

MR. CHAPIN: In the past, we've seen -- Ohio, for example, created the equivalent of like a GSA list for its counties in terms of here are the vendors from whom you could buy, using it more as an analogue I think from other areas where jurisdictions are coming together to get purchasing power on a fairly well-defined set of services or products.

I've asked my colleagues at the GPP to give me a little more meat on that that we can share with you all if you are interested.

But the concept of banding together is I think -- that's the first challenge. You all will have to decide whether or not there is a common basket of products or services with which you're willing to band together with other jurisdictions to buy. And once you do that, think about how buying or advertising for that would work.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: Thank you.

MR. CHAPIN: Thank you.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: Mr.

Finley.

MR. FINLEY: Thank you very much.

(Thereupon an overhead presentation was presented as follows.)

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: Let me interrupt. I want to make sure I'm the first person to interrupt.

(Laughter)

MR. FINLEY: Well, actually you just interrupted Brian Hancock, who I'm going to be presenting for first. And let me get up the appropriate slides here.

MR. ERDMAN: Doug, a quick question.

Is Congress willing to fund sources back to the states at this point in time? Are they -- we've heard that they are not willing to fund HAVA any further at this point. Is there any possibility that Congress would be willing to fund the states or the counties regarding new technology?

MR. CHAPIN: I think there is always a possibility. I think you have to look at what else they have on their plate and ask yourself how likely that is.

I know I do see my friend and colleague Bob Carey from the Department of Defense. He could talk more about

his efforts to secure funding for the work he's doing from Congress.

I can't be encouraging about the possibility, but I can't dismiss the possibility out of hand. I would not, however, count on federal assistance to do the kind of stuff we're talking about.

MR. ERDMAN: Thank you.

MR. FINLEY: I'm Lowell Finley. And I'm the Deputy Secretary of State here in California for voting systems technology and policy.

Before talking about our state testing and approval process, I'm going to give as well as I can the presentation that Brian Hancock, who heads the testing program for the Election Assistance Commission, wanted to give. But he was unable to attend.

Fortunately, he did prepare a PowerPoint presentation. There's room for interpretation here. And I'm going to try to do my best to present it as Brian would. If I take liberties any place, just recognize that what you hear orally is not necessarily Brian's views or

those of the EAC.

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MR. FINLEY: At this point, the EAC has certified four voting systems. All of those certifications were made during 2009 after the EAC had been working for several years to first take over the certification process and then develop its own testing protocols, certify

voluntary -- voting system testing laboratories and actually go through the process of application, test design, testing, and certification of systems.

So the four at this point that have been certified include two vendors who currently have systems in California: ES&S and Premier, formerly Diebold, and of course, currently ES&S.

But these are not the systems that are approved for and in use here in California. The ones that we have were approved under the early testing and certification regime, which was run by the National Association of State Election Directors. And those systems were tested to 2002 voluntary voting systems guidelines.

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MR. FINLEY: The EAC testing process has these five basic steps of application by the vendor:

Development of a test plan -- and this involves the voting system testing laboratory;

The creation, submission, and review of test cases;

The actual testing of the voting system;

And the development and review of the test report.

And the test plan and test reports are documents that can be viewed on the EAC's website as they become

available. Certain portions are not made public. They're treated as appendices because they contain information that the vendor and the EAC considered to be proprietary to the vendor or things that may be too sensitive from a security standpoint to fully disclose.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: Lowell, let me jump in and ask you: On the test plan, is that developed by the EAC or the voting system vendor or

in collaboration or they contract with a third party?

MR. FINLEY: The test plan is developed by the voting system testing laboratory, which has been certified by the EAC but is selected by and paid for by the voting system vendor. And they develop that test plan according to a set of standards that the EAC developed in advance to make sure that a certain list of things are adequately tested.

Now, there is a feature here where he's suggested that the process may actually be a lot messier. But for some reason, it doesn't come up. I don't know the magic of making this appear, so we'll just move along.

--o0o--

MR. FINLEY: Before 2010, the challenges that the EAC faced with its testing system were first and foremost the problem of the time it was taking to certify voting systems. And this is nothing that isn't familiar to

anyone here in this room, I imagine. It took a long time for them to get going.

The first systems that went through the process

took a long time to get through. But as I said earlier, four systems were certified last year over at the very beginning of 2010.

The second issue was the cost, which escalated significantly from what it had been under the earlier testing regime.

There were inconsistencies in the eyes of the EAC between the testing and review methods that were used by the various voting system testing laboratories in that first round. And they took steps in an attempt to address that.

And the final point was the relative efficiency of the different labs. And here, Brian Hancock wanted to say these have largely been addressed by the EAC. I'm not in a position to explain precisely how he believes they've done that. So we'll move along from there.

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MR. FINLEY: The challenges that Mr. Hancock believes face the EAC testing program moving forward are first of all dealing with commercial off-the-shelf, or COTS, components of voting systems, and secondly, quality assurance.

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MR. FINLEY: On the COTS issue, COTS is defined for our purposes here as commercial readily available hardware or software products. For example, operating systems or printers. And the issue is that the problem has emerged because various COTS components tend to have very short life expectancies. And the example given here is that by the time the EAC had completed the testing of ES&S's Unity 3.2 voting system, every single one of the Dell PC computers that was part of that system was no longer being made by Dell.

--o0o--

MR. FINLEY: The EAC naturally is concerned that if this is the case with the Dell computers and with other components, the benefit of their certification program may be called into question because jurisdictions literally cannot comply. They can't buy something that literally complies with the tested system.

That jurisdictions can purchase COTS, PCs, or other components that appear to be or are represented as being equivalent and identical will find unexpected compatibility issues when they actually attempt to put those into use.

So to address these problems, the EAC is looking to systems that the Department of Defense is attempting to

develop to deal with similar problems.

One is just keeping track of what is going on in the COTS marketplace so that they have a good sense in advance of when they're going to face these problems.

Another is to determine how long COTS products that are in the field may last, how maintainable they are.

Developing relationships with the COTS manufacturers in order to learn their product development life cycles so that planning can be made for future upgrades.

And, finally, working with manufacturers to see if for purposes of voting systems use they may be willing to adopt some design freezes and continue to make models that had been certified for at least three to five years.

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MR. FINLEY: On the quality management and assurance front, there are several definitions that Mr. Hancock thought were useful here.

One was an ISO definition, which is very general, speaking of totality of characteristics that bear on the ability of a product to satisfy its stated or implied needs.

Others involve conformance to requirements. That is, meeting specific written specifications; here, the voluntary voting system guidelines. Or a general fitness

for use standard ensuring that a product can be used as it was intended, which I presume he meant to say here involves testing of alternative COTS products to determine whether they are equivalent in use and don't present unexpected compatibility or functionality problems.

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MR. FINLEY: Here, Mr. Hancock intended to talk about the approaches that they're attempting to develop so that they can, after certification of systems, continue to monitor quality assurance issues. And these include conducting inspections of the manufacturing facilities as well as systems in the field and reviewing anomaly reports for manufacturers and from the field. That is from the users of the products, both voters and the voting systems customers, the jurisdictions that conduct the elections.

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MR. FINLEY: And this is just a general series of

18 statements about what's required to have effective quality
19 management. Obviously, it requires planning, identifying
20 what standards are that you want to ensure are met,
21 evaluating the overall performance of the systems, and
22 monitoring the system's performance in actual use.
23 --o0o--
24 MR. FINLEY: And I guess this is sort of
25 self-explanatory. For this to work, it requires customer

1 satisfaction, preferable in quality management to prevent
2 problems as opposed to discover them during inspection.
3 Management has responsibility for quality, and it
4 comes at a cost; either the cost of conformance to deliver
5 products that meet the requirements or the costs that are
6 encountered when the product does not meet the expected
7 requirements and there are failures.
8 --o0o--
9 MR. FINLEY: There is a question about how you
10 place a value on failures when quality assurance is not
11 good. He's listed here some figures, estimates that have
12 been made for the cost when certain other technologies are

down: Automated teller machines, telephone ticket sale systems, et cetera. And then asks: How do we value the cost of the voting system being down? How is that measured?

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MR. FINLEY: I'm just going to flip through these.

Again, this is additional ways to attempt to break down the quality management problem into component parts, including assessing how much it costs to correct problems when they're identified internally before delivering a product to the customer and how much the cost is to deal with it if they're not detected until after the

product is in the field.

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MR. FINLEY: So to recap. It costs money. There isn't much money around, as you've been hearing. And if you want to get it from the horse's mouth other points he may have wanted to raise or you have other follow-up questions, this is the information for reaching Mr.

Hancock.

Now I would like to switch over to a brief description of our testing and approval process here in California.

MR. LOGAN: Lowell, can I ask you a quick question? This is somewhat awkward, because you're presenting on behalf of Brian.

But recognizing that your involvement and the Secretary's Office with the EAC, it strikes me in that presentation that it presents a lot of questions about -- so here are the problems associated with the shrinking market and the fiscal condition we're in and poses a lot of questions that keep many of us up at night.

I'm just wondering are you aware of efforts they're taking from a regulatory standpoint to advise both the vendors and the elections community on what are the appropriate contingency plans that deal with those issues that are identified?

MR. FINLEY: We are -- well, there have been a couple of public meetings to try to coordinate approaches

3 to addressing the cost of voting system testing and
4 certification. And part of that includes working toward
5 sort of common approaches to some problems and areas in
6 which it may be possible to reduce testing programs where
7 there is a great deal of overlap, where the states,
8 including California, might be able to look at the test
9 plans that are developed and look at how successful
10 they've been and how thoroughly they've been implemented
11 in some of these first cases and consider moving at some
12 point to doing less of some of the kinds of testing that
13 we've been doing up to now.
14 In terms of identifying broader solutions to some
15 of these issues, we have not had the level of
16 collaboration that I think would be ideal up to this
17 point, I think just because of how busy both agencies are.
18 But I think that's a desirable step.
19 MR. LOGAN: Okay.
20 MR. ERDMAN: Lowell, you stated earlier in your
21 comments that the vendors hire the separate vendor to do
22 their overall review of their voting systems. Why isn't
23 NIST or one of the other agencies, federal agencies,
24 involved in voting systems certification?
25 MR. FINLEY: Well, NIST, the National Institute

of Standards and Technology, is involved, but in the development of the standards themselves as opposed to the testing program.

And generally speaking, my understanding is that NIST does not itself conduct testing of programs. It develops standards for various industries so that they can manufacture the common standards.

And then here in the voting system area, they were specifically designated by Congress to assist the EAC in developing the next generation of voting systems standards.

I think there are legitimate questions about the degree of independence and autonomy that NIST is able to maintain in its relationship with the election assistance commission.

And, for example, this is something where in the past NIST has been called upon to submit its budgets for the research work that it does to the EAC for approval. And that may present some problems to the extent that the EAC does not like the direction that NIST's research or recommendations might be heading.

And actually, the new proposal, the new budget proposed by the Obama administration, would change that arrangement so that NIST would receive its funding directly for the work that it does in connection with the

voting systems.

MR. ERDMAN: But isn't the funding coming from the vendor to support the system during the inspection?

MR. FINLEY: Yes. When you do look at the STLs, the voting system testing laboratories -- and these are companies like iBeta -- they are paid by the voting system vendor. And this is something that's been a matter of controversy. Many urged that the link be broken so that vendors would contribute, for example, to a pool but the EAC would select and assign testing laboratories for various systems. But currently that is the way the system is set up.

The only constraint I'm aware of is that a vendor is not permitted to change labs in mid-stream during the testing of a particular system. So there was an attempt at least to control the possibility the vendor would see that things were not going well in their relationship with the laboratory and they were not going to like the results and then moving over to a different company.

MR. CHAPIN: And actually -- really quickly and

21 I'll give Lowell a minute to find his other presentation
22 so he can actually be himself.
23 One thing that's interesting to point out as we
24 talk a lot about federal voting standards and we talk
25 about the federal testing process, those are voluntary.

1 What makes the federal voluntary standards mandatory is
2 state law. And so a lot of -- at least in the past and
3 we'll be interested to see around the country, some states
4 have thought about whether or not they want to hitch
5 themselves to the federal testing wagon or whether or not
6 they want to consider as they do the kind of definitional
7 discussion about what a voting system should be, how it
8 should work, and how we should test and pay for it to take
9 their own lead on that process.
10 So I, without giving a thumbs up or thumbs down
11 to the federal process, just wanted to point out that the
12 federal government has a bigger role than it used to in
13 testing and certification. But what makes that testing
14 and certification mandatory is usually state law, and not
15 federal law. So the federal government runs the process.

16 But what makes it necessary rather than just desirable is
17 state and occasionally local law.
18 MR. LOGAN: Do you know how many states currently
19 require compliance with voluntary voting system standards?
20 MR. CHAPIN: If memory serves -- and this is I
21 want to say low 40s. And that's something I think we
22 can -- in addition to the other stuff I promised, I'll see
23 if I can't pull that as well.
24 MR. LOGAN: Are you aware of any that have
25 revoked that requirement within the state law having

1 adopted it?
2 MR. CHAPIN: There are none that have explicitly
3 revoked it.
4 I know some states in the effort to get new
5 technology implemented have agreed to wave it or to -- on
6 a case by case basis. I don't want to say it hasn't
7 happened, but no state leaps to mind as having revoked
8 state requirement.
9 MR. FINLEY: Earlier you may have noticed the
10 title slide for my presentation was up on the screen. And

in moving to the other presentation and trying to come back, I have lost it somehow.

So the good news is there were only five slides and no colors or beautiful graphics. I'll just proceed without it and adopt Mr. Chapin's approach and just go for the old-fashioned style presentation.

The California process begins after the federal process is complete. So when a system has received certification by the Election Assistance Commission, the vendor is free at that time to submit an applicant for testing and certification for approval for use of their system here in the state of California.

The application form is available on our website and gives a very detailed sense of what is required and what goes on in the testing program. The elements that

the vendor submits are first a full description of the system and its components. And this includes:

Very precise information of the specific versions of every piece of hardware and firmware and software in the system;

A technical data package which is the documentation that makes it possible to take those components and build them into a voting system and answers many of the technical questions about the way the system is designed.

Third, a set of proposed use procedures for use of the system here in California. This is one of the things that we require for every voting system so that the voter -- the elections officials have a single document they can go to for the information they need to actually use the system in their offices and in the field, rather than being asked to look at multiple different manuals that the vendor might otherwise have them look to.

The fourth, the vendor is required to submit information about the ownership of the company. It's required to submit information on the certification status of this particular version of their voting system in other states and any reports of problems with that system that have occurred in other states.

Then the next and obvious requirement is to

submit a full working model of the voting system, including all accessibility equipment for voters with disabilities.

And, finally, an escrow deposit for the vendor to pay for the cost of voting -- of testing their voting system.

The next step is the development of a test plan. We work with consultants who have been involved in the testing of most of the voting systems here in California for a number of years. They work with our excellent staff on the Office of Voting Systems Technology Assessment. Many of you have dealt with them at one point or another; Ryan Macias, Jason Hayes, and Miguel Castillo. And together, with the vendor, they put together a testing schedule and test plan. The standard schedule for that is approximately 17 weeks. A template, a gap chart sort of schedule is used. And together, the vendor and the consultants and staff put together a schedule for every aspect of the testing.

The vendor has the option if they want to try to speed up the process to agree to simultaneous testing of different parts of the system on parallel tracks, which can speed the process, but it can also -- if problems develop on one of those testings tracks, namely that the vendor has spent money for part of the testing. They will

end up having to abandon if they abandon the application or if the system is found deficient.

The test process; we actually build the trusted system from the ground up starting with the computers, installing their operating system, hardening it, installing the applications.

And then functional testing is done on the system. This includes exercising the capacity of the system to create ballots, and then to have those ballots printed and pre-marked by the vendor so that when you're dealing with paper ballots, there is a set where you know what the expected outcome is and you prepare that against the test run.

And the test elections that are run are specifically designed to test the capacity of the system to meet specific requirements of California law. And this can include things like rotating the names of candidates in each race, different forms of primary elections, allowing for the option for some parties to allow undeclared voters or state voters to participate in the primaries, where others don't, for example.

The next step -- and I think this is one that gets at something that Doug was talking about, is volume testing. And this is something that California first

25 developed. We have a detailed protocol for bringing in a

1 large number of units instead of just from a single test
2 system and having real people who are not specially
3 trained on the system vote on those systems all day, just
4 like it was an election day. And this is videotaped.
5 Detailed notes are taken. And problems can be identified,
6 both inaccuracies and errors in systems, but also
7 usability problems. And, in fact, in several different
8 test runs, changes have come about as a result of that.
9 The new elements that we have here in California
10 and in our testing process are review of the source code
11 by experts and red team testing or penetration testing.
12 This is an attempt by people with expertise to essentially
13 break into and tamper with the voting systems just to test
14 how well they are designed to protect themselves and
15 whatever security features are built into the system.
16 And, finally, we conduct very detailed testing of
17 the accessibility features using voters with a range of
18 disabilities. And again every step of their voting
19 process is monitored, including by video cameras from

20 several different angles. And we produce very detailed
21 reports on how effectively each system meets accessibility
22 needs.
23 MR. ERDMAN: Lowell, is there standards for that
24 for testing for ADA issues? Is there a specific
25 guideline, or is it only what the vendor presents?

1 MR. FINLEY: Starting with the 2007 top-to-bottom
2 review of voting systems that were in place here in
3 California at that time, our accessibility testing has
4 been to the 2005 voluntary voting system standards. And
5 even though at the time none of those systems was required
6 to meet those standards, they were the first set of
7 meaningful standards in our view that had been developed.
8 And we thought it was appropriate to measure the systems
9 in use against those standards. And we continue to use
10 those at this time.
11 MR. ERDMAN: Does that require sip and puff?
12 MR. FINLEY: Yes. It requires some effective
13 means of allowing voters with a broad range of
14 disabilities to use the equipment. And that includes

voters with very limited or no use of their hands, for example, so that sip-and-puff controls and other peddle controls and that sort of thing are tested as part of the systems.

MR. ERDMAN: Are these required on all the systems now that are being presented to your office?

MR. FINLEY: Well, again, if we're talking about a system, any system that comes to us at this point it will have been tested at the federal level to the 2005 voting systems standards. Any system after those that went through this first round -- actually, one of them --

two of them did meet the 2005 standards, the Microvote system and the Unisyn system.

For various reasons, we don't expect any of the four systems listed in Mr. Hancock's presentation in the current version EAC approved are actually going to be brought forward for testing here in California, with the one possible exception, the Premier system.

This is a long way of saying that by the time we get any significant flow of new symptoms coming to us for

10 testing, we expect they will have been certified against
11 the 2005 standards. And we will certainly hold them to
12 those standards here.
13 MR. ERDMAN: Are there newer standards coming
14 down the pike. You have 2005 standards. We're in 2010.
15 Is there something new coming down the pike that's going
16 to require these vendors? And when would that be?
17 MR. FINLEY: There is something new coming down
18 the pike. When it will trickle out is really hard to
19 predict at this point.
20 For some time, that next iteration of the
21 standards was informally referred to as the 2007
22 standards. And as you say, we're three years past that.
23 There has been controversy within the various
24 advisory groups that are involved in the development of
25 the standards on key questions such as whether there

1 should be open-ended vulnerability testing of the systems
2 and some others. And the process has slowed down a great
3 deal. I don't expect that we'll see a new set of
4 standards any time within the next couple of years.

MR. ERDMAN: Who controls the standards that are coming down? In other words, based on this other information, who is not releasing the information or the new standards that may need to be in place?

MR. FINLEY: Well, the drafts of the standards are available on the website of the Election Assistance Commission.

And, in my view, the current draft that was developed at the staff and advisory level but never approved by the EAC Commissioners is likely to be as stringent as any set of standards is. The question is whether there's going to be some backing off on some of those standards.

There is an Official Standards Board that's advisory to the EAC. There's an Advisory Board with fewer members. And then there is the Technical Guidelines Development Committee, which is advised by the National Institute of Standards and Technology. So there are many groups involved.

The key is that once they finish their work, the Election Assistance Commissioners will have to actually

vote on whether they're going to adopt those standards or modify them.

MR. LOGAN: Is there usability testing done on the standard interface between a 95-plus percent of the voters how they're going to interact with the voting system? Is that tested in the certification process or demonstrated? And if so, what is the criteria for that? Is that just internal testing? Or does that require focus groups with average voters from different age groups, different backgrounds, literacy level, that type of thing?

MR. FINLEY: Yeah, I don't think that the state-of-the-art on general usability testing is very far advanced. So I don't believe there are detailed standards. And until very recently, there wasn't any testing of accessibility features at the federal level at all. All that was required was that the vendor submit some kind of report on testing or assessments they had done internally of their own product.

So there's movement in terms of greater focus in that area. And there are organizations of experts on universal usability questions that are involved in some of these Advisory Committees that are trying to advance the questions of overall usability and what kind of error rates result as a result of the deficiencies in that area, as well as just difficulty in understanding the interfaces

for various voters. But a lot more needs to be done in that area.

MR. LOGAN: So that's not currently a criteria that's required for approval here in California or for the federal certification?

MR. FINLEY: Only in the most general terms in 2005 standards.

MR. LOGAN: And with regard to the disability standards and testing, I think you touched on this, that the multiple iterations of those standards and the fact that they're in constant development, if you were developing a new voting system now in hopes of having it in place in the future, how does a development team know which standards to build their system to? Because am I correct that these 2007 standards that have not yet been adopted, depending on when you bring forward a system for certification, you may have to meet those standards; correct?

MR. FINLEY: That's correct. Although, in the past, they've made phase-ins. So even when a set of standards was released, it may be released with an effective date that is a year or two later. And that's

23 explicitly been done to allow for the useful life of
24 systems that are already in place to be used up. But this
25 is a problem with any set of new standards how the vendors

1 know what to design for.
2 In this particular area, I don't think it's as
3 big a problem as it might sound, because there are indeed
4 expert consultants on these general questions of usability
5 and interfaces. They're expert not just on average
6 voters, but on different breakdowns of different
7 demographics, age groups, et cetera.
8 And a great deal is known, but I don't think was
9 incorporated into the design of most of the voting systems
10 that were available at the point that the HAVA money was
11 distributed and spent.
12 But so I think working with those kinds of
13 consultants toward best practices that are currently known
14 and them doing actual testing of the systems in terms of
15 how they stand up next to existing systems in terms of
16 error rates, lost votes, that sort of thing is also a way
17 of testing how effectively the interface is designed.

MR. LOGAN: Is there a process or has there been discussion again in terms of new development of allowing for there to be parallel testing during development process so that you don't have to fully break your product and bring it in and have it then be rejected and have to go back to the drawing board? Are there mechanisms that would allow a new development product to come forward on a step-by-step basis and have some of that red team testing

and source code review done during the development process with the idea being that at the end of the development process you're 70, 80 percent of the way there towards approval?

MR. FINLEY: Well, informally, that's something that already happens at the EAC level. Systems are often submitted and problems are identified during the testing of the review of the source code and they're sent back to the vendor. The vendor makes modifications so that the build of the system that is first submitted and the build that eventually is certified is often many decimal points removed so that there have been changes.

The same effectively occurs at the state level, but only to the extent that we're tied down by the fact that our systems need to have already met EAC certification. And we can't therefore require changes without then having to send that system back through the EAC.

But we do meet with vendors when they ask as they're developing a new generation of system just to get our general views on the technology and the approach that they're developing. And that's about the best we can do at this point.

And you also asked about testing in stages. That's something we've been willing to discuss with

vendors. It could be helpful, but it could also be a problem because if there are any changes in what is initially tested and what is finally going to be part of it, there has to be a repeat round of testing of that component of the system so it can get expensive.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: Let me ask you to delineate a bit between the state and federal

process. I think some people have a perception perhaps the state process is completely duplicative of the federal process. Does the state process duplicate anything of what the EAC does or are the EAC results accepted and the state test beyond that?

MR. FINLEY: Well, for the most part, we test beyond what the EAC has done. The first is in testing to unique requirements of California law for the way our elections are conducted. A good example of that is the primary ballot that we use. The primary election that we use is actually based on the gubernatorial recall election when there was a huge number of candidates seeking to replace the Governor when he was recalled. So we exercise systems to see if they can meet fairly extreme circumstances. That's just one example.

Variations in the way primary rules can change, we test for that.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: And

the other three primary differences are volume testing, source code review, and red team penetration testing?

MR. FINLEY: The volume testing is still unique to us. The EAC has now started to do source code review on what I consider to be a meaningful level. There were just general notations about source code review process. But whenever those were probed, the indications were that there hadn't been a serious review.

We still do more in the area of penetration or red team testing than the EAC. As I said earlier, that's a point of controversy in terms of the new standards under consideration.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: What are the goals of the state testing, especially talk specifically about the red team testing? I know many people have pointed out over the years there are no standards for a system to meet.

MR. FINLEY: Well, that's right. And this is an area where our strong belief is that you can't have a standard and be conducting a meaningful testing for security, because the ultimate question in security testing is: Can somebody break this? Can somebody who's serious about it and has any kind of knowledge and resources, can they effectively tamper with or break the system?

And the fact that a system might meet a set of 100 specific tests does not mean that there is not a technique that someone can use to circumvent or use a different route to attacking that system.

So the most effective form of testing is to have people with expertise in the area just try out everything that they can think of.

And that's also an involving art. Security features are an evolving art. The methods of hacking are also evolving constantly.

There's good example of that with a system we don't use here in California, but an older version of Sequoia technology is used in New Jersey. A team of researchers here at U.C. San Diego developed a brand-new method of tampering with the software in that machine. And this was literally a brand-new method of hacking that no one had ever thought of before and effectively demonstrated they could hack that system, which had previously been considered to be either completely unhackable or one of the most difficult to attack.

MS. LA VINE: Lowell, since you have no standard for the hacking test, do you have a qualification requirement for these test consultants you use?

MR. FINLEY: We evaluate the qualifications of the consultants very carefully. And effectively our

standard is to use consultants who by reputation in the industry and by way of comparison to the academic experts that we assembled for the top-to-bottom review have the capability to deliver the sort of highest level of expert analysis of source code and penetration testing attempts. These are people who are used routinely by the defense department, highly sensitive industries, and others who really need to know whether their systems are secure or not.

MS. MARTINEZ: Lowell, was all of that red team testing, was it done in a sterile environment? Or was there any testing done in a polling place setup or environment?

MR. FINLEY: We did not do testing in a polling place setup. And I know that this has been a criticism of the testing approach. It's important to understand what it is we're trying to test for. We're trying to test what has been built into the system, into the design of the product that protects it, as opposed to administrative and physical security and surveillance security measures that might be taken by the election administrators, by poll

22 workers. Because we want to know if there are
23 vulnerabilities that are going to be easily attacked and
24 exploited if any of those administrative security measures
25 break down.

1 And we want to -- the standards are or the
2 requirements are that the voting systems themselves be
3 secure. And that's what we're testing for first. But
4 with full recognition that security as an overall task is
5 heavily dependent on effective administration by the
6 county officials and the poll workers that you train and
7 employ.
8 MR. LOGAN: In some cases to address those
9 vulnerabilities, you have adopted and required use
10 conditions on the voting systems to try to mitigate those;
11 correct?
12 MR. FINLEY: Yes. We have required certain
13 procedures at the election administration level that we
14 believe are necessary, both in terms of two-person rules,
15 that kind of security, but also attaching seals to
16 critical components of the system so that they're tamper

evident, that sort of thing.

MR. LOGAN: Is there research or assessment or review of those on a regular basis to indicate the effectiveness of those conditions or the impact of those conditions if they may cause side effects to the operation or are they effectively dealing with the vulnerabilities that were identified?

MR. FINLEY: That's a very good question, and the answer is no, we have not. We don't have the budget or

the staff to be conducting those kinds of formal studies. We have relied on feedback from county elections officials and poll workers that often contact us directly. Obviously, that kind of systematic study would be a useful thing.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: Any other questions for Mr. Finley or Mr. Chapin? I think we're prepared to break for panel two, unless we have any further questions.

MR. LOGAN: Can I ask one more real quickly for both of you?

A lot of what has been discussed this morning seems to be systematic of an environment where we have a shrinking market and shrinking availability of competitive systems, which obviously -- I mean, from a county that is in need of a new system is a concern to me. What, if anything, are the regulatory agencies doing to either advise election official on what to do if there's not something that's going to be available to you that will meet the requirements that have been set forth? Or conversely, what's being done to encourage or incent or to provide incentives for the development or expansion of the markets?

MR. CHAPIN: I don't know what, if anything -- I mean, it's too bad Brian Hancock isn't here. I think the

EAC has its hands full just in promulgating the standards and in accrediting the laboratories. I don't know what, if anything, they're doing to help states and locales deal with noncompliance.

I mean, maybe I'm an optimist, but again this seems like a perfect time when you're in an environment

where there are fewer dollars, fewer vendors, and an urgency to get things done. It seems to me that you all want to be able to tell the vendors what you want and they want to be told what you're asking for, and you both need to agree on a price. It seems to me like you all have a mutual interest to get this figured out and move forward.

MR. FINLEY: We don't have any sort of formal programs in place to try to come up with interim solutions here in California that really is the function of the county level. And the role the Secretary of State has been to respond when a vendor comes forward with a new system by testing it but not to develop them. And there is no mandate for that in the statutes or funding obviously.

However, the Secretary of State has been very interested in the possibility of effective development of open source voting systems, the development of systems on a nonprofit model, perhaps grant funded, government funded at various levels of government as an alternative to the

current marketplace with the problems that it has.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: Great. Thank you very much, both of you, Mr. Chapin, Mr. Finley.

I'd like to call up our second panel, which consists of the representatives from the five voting systems vendors who have approved systems for use in California and systems that are in use in at least one county.

All five of the vendors have been asked to talk about their perspectives on the product life span, maintenance and repair costs, product development, and the effect industry consolidation may have on the marketplace on the future of product choices.

Joining us today on the panel will be: John Groh with Election Systems and Software; Eric Coomer from Sequoia Voting Systems; Marcus MacNeill with Hart Inter Civic; McDermot Coutts of Unisyn Voting Solutions; and Mr. Curt Fielder of DFM Associates.

And, shockingly, we are running a bit behind schedule. We are likely for transcription purposes and lunch breaks going to have to break partway through this panel. We'll try to give people heads-up. 12:30ish to 12:45ish will be a likely break.

So gentleman, thank you all for coming today far and wide. We greatly appreciate it.

I'd like to start in deference with Madera County with Mr. Fielder.

MR. FIELDER: Thank you.

First, I just wanted to say that the DFM is not actively selling a voting system in the state of California today. We have three counties that still continue to use our system. And we were basically grandfathered in.

I thought that what I would do is give you a little of the history of voting systems in California to use my time, because I've been around for the whole thing. I have been involved in elections in California since the early '60s.

And I remember an incident when Dean Logan was giving the statistics of Los Angeles County that I used to go visit Mr. Ben Heit who was the registrar of voters in Los Angeles County in the early 60s. And his voter file consisted of three million tap cards.

On election night, to accumulate the totals for the results of the election for Los Angeles County, they had a mechanical adding machine for every candidate that was on the ballot. And when that precinct's ballots returned from that precinct, came in, they would go to the machine for that candidate, add in the number -- push the

25 numbers and pull the handle. If at any time you wanted to

1 know how many votes a candidate had at a particular time,
2 you would go to this adding machine and there was this
3 number. And that is the way they were doing it in the
4 early 1960s.
5 It's 12:00. That means it's time for me to take
6 my pill.
7 I also remembered an incident I think it was in
8 1964 -- 1964 I went to the workshop for the County Clerks
9 Association. And Ralph Epperson, who was the County Clerk
10 of Los Angeles County, had used the Votomatic system, and
11 he was the first county in the state of California to use
12 that system. So he stood up before the group and made an
13 announcement he had 100,000 voters and how many people
14 voted and what the turnout was and just how the election
15 went using Votomatic for the first time.
16 And after he spoke, Ben Heit got up and says he
17 hired 100,000 people to work at the polls on election day,
18 it was the number of registered voters Ralph Epperson had.
19 And he suggested if Ralph sent his voters down to Los

20 Angeles to work the polls, Ralph wouldn't have to have an
21 election and Ben Heit wouldn't have to hire 100,000 people
22 to work the polls.
23 Anyway, I got involved in elections in 1962 when
24 all the ballots in California were counted manually. I
25 was an engineer working at North America Aviation, and a

1 group of us decided, why can't we use computers to count
2 these ballots? And we developed a concept that used a
3 punch card ballot with the names printed on the ballot.
4 I went to see Mr. Heit, and he told me what I had
5 to do. And that was basically you have to get approval
6 from the State Voting Commission. The State Voting
7 Commission at that time consisted of the Governor, the
8 Attorney General, and the Secretary of State. And they
9 had a procedure for getting voting systems approved. You
10 file an application. They hired a consultant to evaluate
11 the system. They gave you an amount of money you had to
12 deposit. And you were on your way.
13 I got approved in the state of California for
14 $1500. And it became a fairly successful product. It was

15 sold throughout many counties in California. It was sold
16 nationwide. I ended up selling my company to Diamond
17 International, which was the predecessor of Sequoia. They
18 have gone through many morphings.
19 And voting systems were treated differently then.
20 There was the Votomatic system that Dr. Harris at Berkeley
21 developed and InkaVote system that I developed, both use
22 the IBM card as the basic ballot. The voting system
23 vendors at that time -- the voting system stopped at the
24 end of when the voter processed it. They had a box of
25 cards. They took them to the county data processing

1 department, who read them through their county main frame
2 and counted the ballots and printed out the results.
3 The counties developed their own ballot counting
4 software. It was not part of the system that came from
5 the vendors. And one of the first things that I
6 recognized as all these counties were redeveloping this
7 software every election, some of them didn't get it done
8 in time. I remember an incident when Fresno didn't count
9 the ballots for three days because their IT department

10 didn't have the program ready.

11 So we developed a general purpose ballot counting

12 software when I was at Diamond International that, when we

13 had it mostly completed and we were happy with it, we

14 decided we would invite the California counties in for a

15 demonstration and a presentation. We had 300 people

16 attend that meeting in San Francisco, because they didn't

17 have a solution to their problem. And everybody was

18 having the same problem.

19 We ended up marketing that software throughout

20 California. It counted thousands of ballots in many of

21 the counties in California.

22 It was never certified. They did not certify

23 software at that time. They certified hardware. So the

24 IBM mainframe that counted the ballots was certified, but

25 the software we used was not certified.

1 And over the years, that software basically

2 evolved. And I think that all I have heard here today is

3 we're missing the point of how to get a good voting

4 system. They have to evolve. Nobody can write

specifications and cover all the bases. You have to try it. You have to see what happens and fix it and then go.

And, you know, our software evolved over a period of time that I truly believe that we have the best ballot counting software in the world that is now used by three counties. But it has evolved over 40 years of things that we have learned.

And, you know, every year we would make revisions to the software. And we would distribute it. We didn't have to go through certification. We didn't have to go through testing. We tested it. We were confident. I know of never having a problem.

One of the reasons that we have dropped out of this business is because we can't fix problems. We know things that will make Becky's ballot counting better. But to open it up for us to have to go through certification, economically, it's not worth it. Becky can't afford it. How much does it cost to go through certification in California for Becky to have to pay that?

There's three counties in California that still use our system. And we haven't made a change to it since

all this stuff has gone into effect. There's little things we would like to do, but we think it works very well today. But we are not actively selling it now, because the process is too complicated. If the process was the way it was in 1961, if it was the way it was today, I wouldn't be sitting here because I wouldn't be in this business. And I don't know why these gentleman are in the business. I question their sanity, to be honest with you.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: They may not be.

MR. FIELDER: Okay. We think we can develop a good system. We can develop a system probably better than anyone out there, but we are not willing to play that game. It is too difficult. We cannot in advance anticipate everything that can go wrong. And you don't want to get into a multi-hundred-thousand dollar certification and run into a problem that causes you to have to start all over again. Who pays for all of that?

And, you know, I'm not really aware of what was broken that we're trying to fix yet. I haven't been convinced. In all my years involved in elections, I have never seen any of these things happen or even be suspicious of happening.

All right. That's my time.

MS. LA VINE: Can I ask a question?

So you were with the DataVote and then the Votomatic. Since you were there, what was the competition like. Why did they move from the Votomatic? Just money? Time?

MR. FIELDER: Why did what?

MS. LA VINE: Why did you go from DataVote to Votomatic.

MR. FIELDER: I don't know of anybody that went from DataVote to Votomatic. I don't know of anybody making that switch.

But I do know I followed Votomatic around all over the country selling the ballot counting software, because, you know, we had a better solution. And we counted ballots for all the other voting system. PollStar, you used PollStar for how many years? Did PollStar provide you any ballot counting software?

MS. LA VINE: It was before my time, Curt.

MR. FIELDER: Before your time. No, they didn't. They used our software.

MS. LA VINE: I know we used your software. We had the Votomatic system for over 30 years.

MR. FIELDER: And Sacramento County was one of

the first to buy my software when Bill Durley was the registrar of voters. Do you remember Bill Durley?

MS. LA VINE: No.

MR. FIELDER: Okay. Any other questions?

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: Thank you, Mr. Fielder, very much.

Let's go to Mr. Groh, ES&S. Thank you.

MR. GROH: If you wait just a second, I'll see if I can get my PowerPoint to not have the same fate as Mr. Finley's. They may need to reset the PowerPoint.

(Thereupon an overhead presentation was presented as follows.)

MR. GROH: Good morning. My name is John Groh, and I'm with Election Systems and Software based out of Omaha, Nebraska.

I would like to thank everybody in the audience, the voters, and citizens of California who are participating in this, because this is really what we're doing this far. It's represented by the individuals you see up here in front and by the individuals who actually

are responsible for running and managing your elections.

And I'm one of those suppliers that serves the community of election administrators. And so I'm going to give you an approach from our perspective of the people, the equipment, and the cost challenges and try to touch a little bit on what is the future of voting. But as you've heard, historical, nostalgia and going back in time are

also one of the things that also we need to be considerate of.

Election Systems and Software, we're located in 16 states in the United States. We have over 400 citizen employees that also are voters that are based around the United States.

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MR. GROH: In California, we have voting systems in 32 counties. We have about 10,332 voting systems that are in California currently, without recognizing Los Angeles County where two of us share that voting system that's there and both of us work in there.

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MR. GROH: The issue with people from our perspective is one that it has complexity and simplicity to it. The voter and the poll worker would like to have this become a very simple system, one that's easy for them to use. But if you look up and down the hierarchy of the stream of people that have to be involved with managing and getting the system ready and a little bit of what Lowell Finley and Doug Chapin and Lowell for Brian Hancock covered, there is a large degree of individuals and entities or groups that are involved in this. And that runs from the voters all the way down to the bottom of the voting system suppliers.

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MR. GROH: In this, we also are challenged with the fact that there is a federal system that must interface with the state system that eventually must interface with the voter. And I hope I get some of the same questions that were asked of Lowell Finley and also Doug around the costing element of this and how the certification process runs, because I'm sure from some of

us up here as panelists you will hear from our perspective those issues and the challenges that we have.

But suffice it to say when you take these two triangles that must work separately and then we move over to the state level, there's time involved in that element and cost involved in the element. But it really begins with the people involved. And there are lots and lots of people that are involved here.

When we talked about a little bit of the voluntary voting system guidelines and the development of it, if I go back and look at the history of that, the 1900 and 2002 voting system standards that were developed by a group of national associations of state election directors were the people who were behind that federal election commission. These were people that did this for free. All of the work they put into doing the evaluation and review, they were not paid for doing that. And so, you

know, a lot of times -- there's an adage when something is for free, you get what you've paid for. And that was one of the challenges.

As we moved over to the 2005 voluntary voting system guidelines that came under the EAC, there was one thing that I'll correct Lowell on a little bit or point out. The EAC is certified for suppliers during their tenure of doing certification all happening in 2009. We were one of those companies that were certified. But our system was not certified to the '05 we were on a drag-over or a work in process from the 2002, as was the Premier. Only the Microvote and the Unisyn product were the ones that were certified under the 2005. I have products that are in there right now for the '05, but are going to take time.

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MR. GROH: When ES&S looks at the issues here, we know that one of the things we have to consider is along with the future is also the past and the present. And part of that is because of this evolution of voting system guidelines or standards that states have used as an interim for.

When we have a large number -- and as I've mentioned to you, we have about 11,000 units that are here in California, but we have 85,000 units across the

United States. Those are all legacy systems. And these are systems that the administrators and the counties and the state governments that purchased them expect to use for some period of time.

So our challenge becomes how do we make sure that when we introduce new products and somebody doesn't want to purchase the entire new system or doesn't have the funding for it, how do we make it compatible backwards?

And, today, the way the rules are written -- and remember, you all make the rules. It's not some arbitrary group. The rules can be changed based upon what the needs of state government and county government are. So I would also make sure is that you have an effective voice in that, because you are part of that rulemaking process.

But in there, there needs to be some consideration for backward compatibility. Because without it, the only choice that the counties are going to have in an environment now where funding is not readily available and the economies do not allow us to say we'll have unlimited funding, they want to use their old system, but they may want to buy something new.

What comes to my mind is the discussion about vote by mail. In this vote by mail process that's coming along, people are going to want high-speed ballot tabulation systems that can read ballots that have been

mailed and processed through a postal system. That means they're going to be folded. Folded ballots are a challenge. We have a product that we have available for testing today that accomplishes that or meets that need. But if a county wants to purchase that today, it will not be able to work and be compatible with the backwards system or the system they have. So their accessibility voting system or their current precinct system doesn't have a way to link it up. They would either have to run parallel voting systems, and that would mean code two elections and run two elections, or we need to have a way that we can test the new system to the new standards. Assure by testing that will work with the old and allow a 2002 and '05 to work together.

We need to think in terms of this, because as we go to the next level of voting system that's been talked about the '07 -- I've heard it now maybe by 2011, we don't think it will hit before 2012 -- as a vendor. Those are going to need to be compatible with '05, because if you made 2005, which is products you will want those to work.

But a little bit here on in the future, you know,

we have funding is a major issue. New federal voluntary voting system guidelines are a fact of life. That's the evolution of making the product better, using the newer technologies.

But the challenge is what is the election community -- what do the voters want? And so what you heard this morning from the panelists were I have voters with disabilities that want accessibility. We want to have an all-mail or all postal election, so that's a challenge.

Younger people are going to say, why can't I vote over the Internet? Why can't I vote early? Why can't I vote from my computer at my university or vote from home on my computer? Those are the new challenges we're going to meet for the future, but you need to combine them together. But we also have the canvassing and audit component of this need to go thought through.

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MR. GROH: So what we're dealing with, there are more ways to vote, and that's requiring more solutions.

17 It's a multi-channel voting process. There's going to be
18 no single perfect voting solution that everybody is going
19 to say that works 100 percent for everybody all of the
20 time. You now have to have this flavor. We're really
21 turning into a Baskin-Robbins world of voting in that they
22 want different ways and different processes to vote.
23 The ballots then become more challenging. Lowell
24 mentioned the challenge when they had the Governor's
25 recall. The potential of having 300 candidates on a

1 ballot had never before been addressed. They had to
2 circumvent the federal rules and federal testing, because
3 no one had ever tested could it handle a candidate or race
4 that had that kind of combination of candidates.
5 Voter registration and voter ID, that seems to be
6 the major issue of this year. Everything I see in D.C.
7 comes out is talking about voter registration and voter
8 registration solutions.
9 California is working on a new Cal voter process
10 right now that is going on that will affect the voting
11 because that's the mechanism by which a voter knows where

I'm going to vote, can look up where they vote, can request a ballot, and knows which ballot needs to be sent to them or mailed to them if you're using an all-mail system.

Poll locations are changing. They're consolidating polls.

Poll worker technology, even though we are working to make it simpler and easier to use for the poll worker, because that's the challenge we hear from everyone, we're still challenged with the fact that it has to be secure, it has to be accurate, and has to be reliable. And again, those are all undefined terms from any kind of voluntary voting system guidelines. But we know those are working their way into what they are going

to test and what they're looking at.

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MR. GROH: The future that we see is taking technology that we're all hearing is buzz words today. The kind of things that we hear that, imagine this or imagine that. And so as Apple develops new products or

Google provides new ways of delivering information or Microsoft or Dell develops new computers, we, too, are caught in the wake of that, of trying to embrace those new technologies.

So the newest things, what's new to us? Well, one of them is digital scan. The digital scan technology is the same thing you have with your television sets where you converted from an analogue signal that was not as clear, not as complete as a digital could be. And we've converted over to digital.

We're doing the same thing in the tabulation. The scanning of a ballot is much more reliable. We can read the marks better so that if a voter is making a minimal mark, we have a process on ours called intelligent mark recognition. As a voter makes checks through their ballot as opposed to fill the oval completely in on a paper ballot, the digital scan will say I recognize how this voter is making their marks and I'm going to call a checkmark if I'm seeing it throughout a ballot a vote,

because that seems to be the pattern this voter is using,

2 or an X or smiley face, whatever they would put on there.
3 Ideally, we'd like them to fill the oval in completely
4 because it takes away any of that false reading of a vote
5 or creating a vote.
6 We also are coming up with things in true grip
7 technology and online ballot adjudication for this postal
8 ballot. When you get hundreds of thousands of ballots
9 that are going to come in and return to a jurisdiction
10 that have folds in them and we know the voters will not
11 fold them in triple and put them back in a business
12 envelope in a lot of cases. They'll fold them eight or
13 nine times and put them in a three-by-five envelope. So
14 these ballots are going to have some handling that has the
15 ability to destroy the ballot.
16 So we've looked at true grip technology put on
17 our process so that it will hold and take care of feeding
18 at the same rapid speed that you demand of running 300,
19 350 ballots a minute through the system.
20 In turn, because we've gone to digital, we're
21 looking at offline adjudication. The law doesn't allow
22 that yet, but we're one step away. Everyone will
23 adjudicate a ballot. So ballots that are sorted out of a
24 system where there is an overvote where no votes are seen
25 on it because they circled the candidate's name, which the

voting system does not now how to tabulate that or recognize voter intent, those are sorted out today and an adjudication group would look at each one of those ballots individually.

As we kick those out with our new high-speed scanning system, we also are creating a report that will go along with the stack of ballots for adjudication to tell the Adjudication Committee or Board what is wrong with each ballot. So it isn't that the ballot -- there's something wrong with it, but can I find out what it is. It will say there is an overvote for Governor. There is undervotes on the following races. And they can see them to adjudicate.

The next level is with the digital, the ballot image is completely captured, its exact image or facsimile image of the ballot could be pushed to an Adjudication Committee, and they can look at it online and could then remark or define what the voter intent is by making other marks on the ballot would that feed into the system.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: It's still a human set of eyes making the judgment.

MR. GROH: Yes.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: When you say online adjudication, you're not talking about technical set of rules that apply.

MR. GROH: They can look at the ballot.

Thank you for asking that clarification.

Yes, it's the humans that would have taken the paper ballot and looked at it. It's just now increasing the accessibility of being able to have them instead of having to handle the ballot, they can now look at on a computer screen in front of an adjudication board. So it's the online or -- and online from the standpoint of being on a computer that would be at the voting center that would be secure in that environment where they can look at the ballot.

But, again, that's not available today. But that's some of the things about what's the future and what's coming.

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MR. GROH: As I look over into the cost challenges, we've talked a little bit about this legacy. That will have a cost. If we do not make things backwards compatible, the challenge for a county will be, do I throw my current voting system away in its entirety and buy

21 something completely new? And I know everybody would be
22 willing to do that if funding was available. Or do I buy
23 an incremental component or an add-on piece that I want to
24 go with it that is the future of the current technology or
25 has been test to the most current or future technology

1 testing that will work with my current system so that when
2 I'm ready to take that other system and sunset it, I still
3 have a component in here that I can use going forward.
4 SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: Let me
5 ask you, is the biggest challenge backward compatible
6 technical, regulatory, or financial? I'm not clear.
7 MR. GROH: The biggest challenge is right now the
8 rules. The rules allow it's technically feasible. It's a
9 challenge that can be tested and taken care of. But the
10 way that HAVA worked is it sunsetted the 1990 voluntary
11 voting system guidelines, which should be. They're way
12 too old and they do not meet today's kind of technology
13 environment.
14 But the 2002 products are still very current
15 products and things that have been tested under there.

16 And, in fact, that's what most of America is voting on is
17 2002 tested solutions. Because the way HAVA worked, as we
18 talked about this earlier, it did not match up with the
19 development of new standards. The 2005 voluntary voting
20 system guidelines were behind the deadline of when you had
21 to have a new voting system in place and installed. And,
22 in reality, it was 2004 was the initial deadline. They
23 allowed everybody to ask for an extension to make a
24 decision. But that was just so they could get the latest
25 2002 voluntary voting system standards, or VVSS, put into

1 place.
2 Another major challenge in this though working on
3 the legacy systems is my second bullet point here, the
4 engineering change orders. And that was made -- the point
5 was made a little bit in Lowell Finley's presentation
6 about testing of a voting system and the time it takes to
7 test. And all of a sudden when you now have it tested and
8 it's ready and available for the market to look at it and
9 purchase it, Dell no longer makes the computer. We don't
10 have control over what Dell does from a model standpoint

11 or what Microsoft does, if you're using Microsoft Windows
12 as your platform or any of the other commercial
13 off-the-shelf kind of things that are going to change.
14 We have the same problem in our parts. The
15 components that goes in these voting systems to fix or
16 repair or maintain the voting system are going to require
17 replacements parts. But the initial microchip or EPROM or
18 power cord or battery or screen or case, or named anything
19 else, power source in this probably what we initially
20 built it around and designed it around, four or five years
21 later, that part is no longer manufactured. There is an
22 end of life. The manufacturer is already making something
23 newer, bigger, and better.
24 So we're going to need to have the ability to do
25 some testing where we can put in those engineering change

1 order parts or you're going to have a system that you
2 cannot buy components for that are certified components.
3 And we know that's not what you want. The perception is
4 you want parts that you can put in, fix your unit, and
5 know it's a certified system.

So that is something that Lowell Finley and actually Jill LaVine have offered to sit on a group that we're putting together. We see it as an industry challenge that is very, very much in our interest to have some rules known, what are going to be the regulations around that to deal with it.

We're putting together a cross-functional team of ad hoc members that will meet three or four times to present to the EAC some backwards compatible engineering change order processes so it makes it uniform across all the states. Because of all of our 55 states that we deal with -- and that's the 50 states, plus all of the territories that the United States covers -- we would prefer they all do it uniformly so we only have to send out one engineering change order process to everybody. If we have to do it 55 different ways, there is a cost that makes it very inefficient, ineffective. And you, the citizens that pay taxes, are the ones that ultimately end up paying for it. It's not free.

And err goes that's how we get $4,000 toilet

seats on space shuttles. We know it doesn't cost that much. But it's the process of all the checking that has to go on into that and the inefficiencies in it. We know that's one of the things we're going to need to work on.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: The regulatory issue aside, does the overall system have an end of life? I try to draw the analogy to a car. You can keep throwing parts into a car and keep it running, but at some point either the whole thing is going to collapse or being more expensive to do that. What's the assessment? I'll go down the line.

MR. GROH: From our perspective, we've been in this for over 40 years. Our collective companies that have been organized and pulled together have over 40 years experience.

The reality is we still have punch cards that are out there being used that were not developed by ES&S but were developed by companies that we have acquired and brought into our family of companies.

But in looking at that, we don't do any development work and no enhancements on punch card. We do have 1990 standard technology equipment that's being used out there.

HAVA, though, is an attempt to then sunset that by giving them the funds to purchase something new. I

think it was Ms. Martinez that said earlier that she wished -- or someone up on the dais had said that they wish that HAVA had had an extended life so you didn't have to spend the money until 2010 or 2008 so you can let some of these new technologies catch up.

We, as the Election Technology Council, which is made up of a group of the vendors, we all were advocating that, because this created an abnormal bubble. Some people refer to it as a seller's market. It was also a seller's hell, because we had so many people delayed and delayed and delayed and wanted it at the tail-end, we all know the varies of putting a new system in place: Acceptance testing, install, poll worker and election administrator training, voter education, all of those things were compressed. And people were working on something brand-new.

And for us, we were very inefficient at it. We spent double and triple the money that we would have wanted to have spent on doing that because we had to throw people at and it was the only thing that we had to put after it. We didn't have time. We couldn't say let's move the election out two months so we can get better ready for it. And that's one of the functions of

elections is it doesn't move. That first Tuesday in November comes, it does not move.

But there should be a sunset on these technologies, because there is something new that is better, more accurate, more secure, and more reliable.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: But from an operational standpoint, you don't think the product will ever become a '58 Chevy and just collapse one day?

MR. GROH: It collapses by the standpoint you can no longer get certified parts for it.

If I look at the systems that are still out there under 1990 -- and we have many, many counties are furious at us because they feel like we're abandoning the product. We cannot buy the components that go inside of it from someone. You cannot get them.

And so if you use the analogy of the automobile, you know, the 1956 and '57 type automobiles are from the 40s on, they were built so we could work on them in our backyard. You can work on them in your garage. You can

no longer do that with the technology today. It's also more safe, better gas mileage. It provides a better solution for us. That's why we're buying new vehicles. But it's really that we run out of parts.

And, you know, there is legislation at the federal level. I had the term up here, ROHAS, which is the hazardous materials standards that are coming in.

That will completely change our parts solution, because the parts that are being built today will no longer be able to be built. They'll have to take led and mercury and different hazardous elements out of them so they will in and of that nature develop a new product that I'll have to submit for an engineering change order to get a change through.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: Does everybody feel as long as you can get replacement parts, they'll run forever?

MR. COOMER: I'm not sure I'd say that. Will it technically run forever? Possibly. I actually have a 1941 Oldsmobile It has --

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: Should have chosen a different analogy.

MR. COOMER: It doesn't have seatbelts. And finding parts for it is troublesome at best.

And, you know, voting systems, we talked about the lever machines. And, you know, those were in use for 100 years. But tell a special needs voter they have to use that machine to cast their vote, and you're looking at disenfranchisement right there.

So I think things do inherently have an end of life where they are no longer usable. Whether you can make them run or not I'm not sure is the right question to

ask.

MR. MAC NEILL: I agree with those comments, Evan. The way that at Hart we're trying to combat this is to stay as far as ahead of it as we possibly can. So we're out there making the investment. We're spending the money to buy the certified parts so that we can continue manufacturing new systems, supplying parts to our county customers for as long as possible.

But I agree with John. That's where that the breaking point is going to come. But it's not something that we've arbitrarily set. There is an end of service or end of life date on our current systems.

On the contrary, we think they're going to continue to run for a long period of time. But the way that we're trying to ensure that is to be out there on the market buying as many parts as possible to ensure that we can continue to build and supply parts for the systems we have.

MR. COUTTS: To expand a little bit on what Eric said, our systems will continue to run for as long as we can get parts for them, as long as the context they are running in doesn't change. The moment you start changing the rules, the moment you say, I'm sorry, your kids cannot lie down in the back of your Ford Country Squire while driving up to Disneyland, then we have to change

something.

But from a pure durability standpoint, as long as we can get the parts, they'll continue to run.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: Even if -- maybe I was asking the wrong question. Even the part replacement was on your dime?

MR. COUTTS: That's a business decision.

MR. GROH: And the thing is, even if it was on our dime, we don't control the parts, you know, mechanism. The mechanics of how we put together our systems -- and I won't speak for everyone, but I think it's uniform for the industry. We are beholden and follow whatever the computer industry is going to do. Our marketplace is just not big enough.

Maybe give you some perspectives. The pre-HAVA period that was, you know, where you might have ten to 15 percent of the counties across the United States would replace their voting system. Then you had this HAVA period which will never come to exist again unless the federal government has something like HAVA II, takes lessons learned from it. So you can't use a HAVA period as a normal period. That was a very abnormal time.

Let's look at post-HAVA. What we have in the 2010 environment, we look at there's going to be between 1500 and 5,000 voting systems sold in the United States or

in the 55 territories. That's what our market estimate is. So you take just the upward end, 5,000 units that would be there, and you start dividing that into some numbers I'm going to show you here. For certification, spending $3 million and 14, 15 months to get through a federal certification, that jacks the price up inordinately. And that gets passed onto everybody. Nobody can cover that for free.

We're looking at 2011, we think the market is going to be about 4,000 units; and in 2012, about 2,000.

Just recently, there were some large scales that were coming about in this year, but you had the state of Maryland underfund a very large acquisition they were going to make changing out their DRE system going to a paper system. And they went through the process for a year and a half and then pulled out at the last minute.

So if I continue on with things that I think are important to you as I look at these cost challenges for all of us -- because it effects all of us -- it's these legacy systems and looking back towards and then working forward through time with the 2005 and whatever the next one will be. It was going to be the 2007, and that seems highly unlikely. We're going to need some guidance and plans from the EAC or instructions so that we know what are the rules as we look forward.

We all want to plan to build new technologies. But I can't start building them until somebody has given me the blueprint and says this will be the blueprint we're going to test them under when you bring it for product certification. We take between 18 and 36 months to develop a new product, once we know and understand what the needs or the requirements are around that.

Then after it's designed and built, it will take us about another 24 months to get through all of the certifications. That's the federal level. We can do about two to three states a month. And you then ramp that out or run that out, that's how long it will take to get a single product through the entire process or through the certification. That doesn't include the fact of maintaining your add-on replacement systems that counties are going to need, who all of a sudden have population growth. They want to buy 40 of the same kind of unit they have. Guess what. You open it up, it's not identical and not the same, because we have probably a different power cord or a different start-up mechanism or off/on switch that would be on this. And so all of those things need to be managed in this process for us.

MR. ERDMAN: John, can I step in here a minute?

Have we thought about aftermarket vendors or aftermarket, you know, going to get parts for these

machines that we currently have or the systems that we currently own? As you were discussing earlier about your vehicle, you know, '44 whatever, you are now buying aftermarket parts to make your vehicle run today. Why can't we buy or why can't you manufacture or get your manufacturer to manufacture aftermarket parts that will give us the extra life with our systems that we currently own today?

MR. GROH: It's a logical question. And maybe I'll tackle it from two directions.

One is you, meaning the counties and the state, you're fully capable to go out and source those parts and get them. The difficulty is you're going to run into the same challenge we have. How do you know it's a certified part? If a county buys it and it hasn't been tested with the product or understand it's compatible that it fits in there and doesn't change anything or have an unintended

consequence, you don't know if it's going to be a viable voting system.

From the perspective of ES&S and other vendors, we don't control that parts channel. That parts channel is one that is serving the television, the computer, the iPod, the game industry. That's where we're getting our components from. That's who's giving us the new technology pieces and components in there.

So when they choose to no longer make a twelve-inch touch screen and only make 15 or when there is no longer 512 kilobyte PCMCIA card, you can only get it in two gigabytes, we still need to get that component or part tested with it.

We try to make guesses and buy parts ahead. But if we over guess and buy too many, we have an inventory that will be obsolete and we will throw it away. It doesn't help you or help us.

So we're trying to balance how many should we buy. And no matter what our guess is, I can tell you one thing: We're going to be wrong. We're going to be too

13 low or too many, but not right on the number. These are
14 things we must deal with.
15 MR. ERDMAN: Isn't that inherent in business?
16 MR. GROH: Yes.
17 MR. ERDMAN: Doesn't matter who you are.
18 MR. GROH: It's a business decision you have to
19 make. Because if you don't maintain your profitability
20 level, you're no longer in business. And that doesn't
21 do -- from our perspective, you know, we don't want to
22 experience that. I don't want to jump out of an airplane
23 without a parachute on. I'm not going to hit the ground
24 and survive.
25 We also know our customer would like to have us

1 be around, because they have made an investment in that
2 product. And they want us around to service it. So we
3 want to make sure that we can maintain and be there to
4 serve them.
5 So there are business decisions that affect the
6 profitability around that. And those are the tough
7 choices we have to make. When we say that we can no

longer support a product, it's because the ability to serve it by getting the parts or reliably getting the parts or going through a certification on the parts may be a constraint or hurdle we can't go through.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: So to what extent are you at -- what I infer is I believe you're at the mercy of the part manufacturer.

MR. GROH: Yeah.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: Aren't you driving the train? Do you know X number of units you have in the field that have Y number of a certain component and you know the life of that component?

MR. GROH: Yeah, you can make some decisions. But I can tell you it's not an exact science. You cannot predict exactly what that's going to be.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: Tell me when in business it is.

MR. GROH: So you do the best you can. But when

you run out, you run out.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG:

Ms. Pellerin.

MS. PELLERIN: I have an interesting scenario. We had originally purchased touch screens and the optical scanners for our polls in Santa Cruz County and we had 165 of each. And we decided we really needed 30 additional ones for training and availability to be sent out on election day should there be an equipment malfunction. We borrowed 30 from Monterey, because they had originally purchased a full touch screen deployment for their county. And then when the top-to-bottom review came, they were down to one per polling site. So they have a warehouse full of these units.

So because of economic conditions, they've asked us to purchase those units, so we did, and used up the rest of our Prop. 41 money and HAVA money to pay for those. In the mean time, we had some touch screen -- just the piece of a touch screen break and ordered seven additional ones from Sequoia and found out we're getting refurbished parts versus new parts. And it's costing me more than the whole touch screen unit I bought from Monterey.

And I'm kind of thinking there is probably other counties that have warehouses full of equipment that is

now no longer being able to be used. And eventually what they do convert -- or I mean, there is a lot of equipment there that we can maybe use some of those parts.

So I was thinking I would probably start talking to Sequoia and started talking to some counties. It gets complicated when you look at how was that equipment originally purchased. And, you know, it could be a little more difficult. But it seems like there is a lot of equipment out there that maybe we can break it down and use some of those parts.

MR. GROH: And we, likewise, are doing the same thing. You're using a very outside of the box approach to thinking about this. We do scavenge systems. And when we take trade-ins, we take and try to reuse components and parts in there, but we still need to go through, one, removing them, testing them, putting them in inventory. If it was a part now that is different than was certified in your state, I want to make sure that part is certified across the whole spectrum of all the counties we serve. Otherwise, we have to continue to look at a part unique to a state or county.

And that addresses a little bit this group I was talking about was trying to bring some uniformity into the change orders so that is common across the whole U.S. So that when I pull a part out, I can use it everywhere to

repair our model 100 or OS or TSX or iVotronic, that I know the part will work, because everybody has accepted the engineering change order in it. But if they haven't, then I have to be very, very cautious about where do I install it, where do I put it in. That raises the cost of the component, doesn't add any more value. It's not a more valuable component because we put all that extra time and management of the components in our inventory.

MS. PELLERIN: Unfortunately, before HAVA, before we bought a new system, we were customers of DFM, and Curt and the Mark-A-Vote system. And our parts consisted of pencils and the Mark-A-Vote pens. And they were really quick and easy to get that order out there when the pens dried up. And it's just a whole different environment, especially for a county our size to manage this level of technology. And it does break a lot more than the Mark-A-Vote pens went dry.

Things are not always -- plus, we're deploying these out to poll workers who really aren't used to dealing with the equipment, and they do things that end up

21 causing problems and we have to repair them.

22 MR. GROH: Well, and the challenge -- the worst

23 thing we have with the voting systems is that they're used

24 so infrequently. And by doing such, when they are put

25 into storage, if there is not a maintenance routine and

1 this is higher level of technology. It has to be taken

2 care of different than if I use my laptop versus maybe a

3 typewriter scenario versus a pen. They're all writing

4 devices, let's say, that I can put words on paper with.

5 But I have to have much different preventative maintenance

6 program with my laptop than I would on a pencil versus on

7 a typewriter.

8 And so, in turn, when these aren't used with

9 enough frequency and they're put away, they're put away in

10 working condition. But they sit for six or eight months.

11 Things go dead and things happen that you need to go bring

12 it back out and have preventative maintenance on.

13 HAVA also challenged everybody with the fact that

14 maintenance on these new voting systems is going to be

15 much different than it was on the older technology. Use

the car analogy. '57 Chevy was much easier to maintain than a 2010 Chrysler D300 or Mercedes or whatever. None of us can work on those. It's computerized and you need highly-skilled technical people.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: Just for planning purposes, I think we're going to break after Mr. Groh at about 1:00, if that's all right.

Let me ask you quickly -- and we'll go after the break to Hart and Sequoia and Unisyn. I believe all three of those vendors talked about going open source in the

future.

Briefly, what's ES&S's thought on that, either potential future systems or new systems --

MR. GROH: If I can, I'm going to try to -- let me wind that into a couple other slides here, because it's a couple after that that I want to talk about.

You know, in the cost challenge, what Evan actually brought up as you come up with a new voting system and what are you going to use for the platform or source code, what's going to make it run and operate given

11 its instruction.

12 This becomes part of the product development and

13 the product development life cycle. If you remember,

14 prior I said we take between 18 months to 36 months to

15 develop a new product. And that's when we have a sight on

16 a very clear target what we know it is going to meet. We

17 don't want to take something into certification and hope

18 it passes certification. We want to know it will.

19 And we know that by testing it against what are

20 the test grips and the test plans and so forth that we

21 know it's going to be subjected to, because then we want

22 to design and build it so we can pass the test.

23 We don't want to come into that test environment

24 thinking it's a Spanish test and have the instructor tell

25 us, no, I've switched it. It's going to be a history

1 test. That's a lot of what we've experienced as we've

2 evolved through the EAC process. Tests have been modified

3 and changed or added on or the 2005 VVSP has morphed.

4 It's no longer the way it originally was. It's been

5 modified to handle things that they didn't know at the

very beginning. Well, each morph of that causes us some heartburn.

So try to answer a little bit about this open source. We're looking and have put together an open source product in our 2005. It's built on a Linux platform. With the COTS now, this commercial off-the-shelf ruling the EAC is playing with what they're going to do -- if Brian Hancock had been here, he could explain it from their perspective.

To give you some metrics, ES&S's product today operates on a proprietary source code that we have developed. We've written it line by line specific and unique for the voting system.

Our source code on our Unity system, which is mostly what is out there is being used, has about three million lines of code that are on that. Those three million lines of code in today's test environment are reviewed, line by line, one and zero throughout the entire component of it. And that is all escrowed. It has a hash code or a weight measurement to it so you can tell if it's

been changed at some future point by that hash marking.

Going to Linus, we will now be submitting if they're going to test and want to review commercial off-the-shelf software or components, that Linus source code has 100 million lines of code. It was not built for the election industry. It was built for the broad-based community wide and large.

We will need to use a segment of that or their version of that Linus, and we need to lock it down. We can't make it available to the world market to say, hackers and IT geeks or computer software geeks, get on this and see if you can make changes and make improvements to it. Because the minute they make a change, we need to take it back and resubmit it for a certification at a federal level and back to the state level. And you can't make those kinds of changes right before election. You need to know this 24 months in advance.

So our challenge a little bit is understanding what they want and how they want open source to operate and work, because the premises of open source is that it's available for everybody to view to make sure there is not something that was not intended to be in there or a back door or a trojan horse or the way people will talk about this that was inserted into the software.

Well, now the EAC is going to be reviewing 100

million lines of code. And I know what we paid to have them do three million. And I don't think we can absorb the burden of 100 million lines of code. But we try to go to an open source software version.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: Okay. It's more of a philosophical question whether the company believes in open or disclosed source. Because it's not an issue -- yes, the EAC cost is a cost. I don't know see how that goes up or down based on if something is disclosed. Yes, you have to go back through a second bite, I understand. True open source model where there are changes made, yes.

MR. GROH: But as we've submitted now, our '05 products to be certified under the 2005 VVSG, we will be submitting the Linus platform. That's what we've built our product on. That will be submitted for a source code review. They're going to review 10 million lines of code that I don't have control over. So we've got control over what we took and what we used it and as we used it.

But Linus is built in the open market. It's a pure open source product out there. That's the challenge we have.

And they're to -- the way that we think they're going to review 100 million lines of code, just like they

25 did the three million that we submitted before, that's

1 going to complicate the cost component and the time
2 component of it.
3 SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: Let me
4 ask you a different question on a different piece of the
5 future, which is the status of the Justice Department
6 investigation and discussions. And so the question I
7 think is: In what form is ES&S going to go forward
8 whether decisions have been made about which pieces will
9 be moved to other vendors potentially?
10 MR. GROH: Let me leave that one until the end,
11 because I think it begins to wander outside of what I
12 really was presenting up here, but I know it's a probing
13 question or one on everybody's mind.
14 SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: I
15 think we're at the end. I'm sorry I've taken a lot of
16 time in questions, but I think I would like to move to
17 that piece before we break.
18 MR. GROH: Quickly, I'll put these two things up.
19 Here's an example of what historically had been

the certification cost, to give you some kind of a metric.

--o0o--

MR. GROH: This is to give you a little bit of what the times were. And this goes back this time as we were talking early in 20, 30 years ago, $1500 and you were certified. The bottom here we talk about the man hours up

to our current work.

--o0o--

MR. GROH: So in here, we end up with these people, products, and procedures. And we've got lots of moving here in here.

And so we also know that America's democracy is a very diverse in its size. States are different sizes and the number of counties. Nebraska has 93 counties in geography in a small population. The needs of California and the needs of Nebraska are a little bit dissimilar, but we try to build a product that will serve that entire population base, geography base, needs base, technology base, ethnicity base, those kinds of things that are there along with politics that are in it.

The other thing is to support our democracy, the one thing that has been brought up that I think everyone would agree is on this need for something to fund it. And again it's funded through taxpayer's money. All of it is -- everyone here pays taxes. And so that's where it's coming from. We all want to spend it in the most efficient and effective way possible. And that's why we would promote as my company that we work together to make this more effective and efficient.

We believe that we have a needed seat at the table to make some of these decisions. They shouldn't be

made without having some input from us, because we're the ones that have the cost stick. We're the ones that will then effect those costs.

So the last piece -- I'll try to make a comment. Let me frame this.

September 1st of last year, ES&S announced that had we had acquired the voting system division called Premier Election Solutions from Diebold Corporation, two months or about a month-and-a-half after that

10 announcement, the United States Department of Justice
11 antitrust group opened a review or investigation. And
12 that has been ongoing since that time and is currently
13 active today.
14 ES&S has been involved in that from day one. The
15 day after they made the announcement, we were in
16 Washington, D.C. We have met with and have been meeting
17 with every week, providing information and data and
18 material so that the Department of Justice can make an
19 informed decision from our perspective.
20 We know they've contacted states and counties,
21 and they've heard from a lot of the citizens.
22 From our perspective, as ES&S, we made the
23 decision to make that acquisition because there were going
24 had to be or had the potential to be a whole group of
25 counties and states that would have been left or had the

1 potential of being left without a vendor to support them.
2 The financials that are readily available for
3 anybody who chooses to dig and probe deep enough for them,
4 because Diebold is a public company, you can see the fact

their election division was loosing money and loosing it at a very, very highly severe and unsustainable rate. It was in excess of usually a million dollars a month. They could not continue and nor could they maintain to keep that going forward.

So we were able to keep the business intact. We were able to keep a wide layer and majority of people so that the customer base could be served. Those are things that are within our control.

What's not within our control is what the Department of Justice and the antitrust division will do.

We will work with them. We will reach a conclusion with them that will satisfy what their needs are or what they think they need to fulfill. But the one thing we've instructed all of our associates and employees and in our communication with counties, the only thing we can control is how we operate and run our business going forward.

So we've been communicative to our customer base. We fulfilled and ran elections last November. There were elections that took place in November. There is

preparation for 2010 that's preventative maintenance, new installs, training that needs to go on that we are handling. And we're doing that in the best capability we can, understanding that we do have that little bit of noise off in our distant right ear that continues to be there. And until they have made a decision, it does give us concern and time for pause. But we will come through that on the other side and continue to be a company that will support our marketplace, whatever that is we're able to serve as a market.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: But no decision has been made on potentially which pieces of the company to divest from?

MR. GROH: No. None -- a decision would be something that would be definitive that I could announce. I have nothing that I could announce to anybody here with finality.

There are -- let me try to maybe frame it in clothing. We're trying on different sets of pants to see what fits. But, remember, to make it fit, somebody else has to be willing to take on that other piece of it.

And that probably is the biggest challenge that I don't think the Department of Justice and maybe some of the States Attorney Generals really understand.

If you remember back to my market size, next

year -- or this year you're looking at a market that might be upwards to 5,000 voting systems total. That doesn't have a lot of enticement for somebody to get into this business. If you remember back, all of these numbers that you have to manage and juggle that are the interim chips. To ante up to stay and remain in this business is an awesome amount of cost management.

And I think we were referred to affectionately as being crazy people. And I probably did get a weekend pass to get out of Nebraska Hospital for the Insane, and they let me come out here to speak to you. But I need to be back Thursday for more medication. But we will do the best that we can with the environment we can work in.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: Can I interrupt the pants remark to mean you've offered for sale but have no purchasers?

MR. GROH: We are under a nondisclosure with the Department of Justice. We've adhered to that pretty -- we take it as Nebraskans nondisclosure agreement pretty serious. We're a conservative state. We've not made definitive statements.

I know there have been things that have been

leaked. That maybe the ways and the means D.C. works. But we don't talk about it, because we were told not to and we've signed an agreement that we can't.

I think there are rumors and innuendo and some factual and additions to it that are out there, and you'll just have to sort through those or contact the Department of Justice and see if you can get information from them.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: If you talk at all about the offer or request made to some counties that have the Premier system to make a commitment to purchase a potential upgrade, how that syncs with the possibility of trying on pants?

MR. GROH: Well, the one thing that we do know for certain and with the Department of Justice in the philosophical agreement or approach we've taken to this that they will not remove us from having the ability to maintain our customer relationship with the existing customers, because that would be pulling the rug out from them.

So that's where we have recently, because of some

press that has been put out -- in the New York Post had an article I think was on January 11th that caused a lot of confusion. I know that Senator Schumar has had a couple of press releases that have been misinterpreted. That has caused us to put out some information to the customer base to let them know that we'll still be able to maintain their voting system. We'll still have parts and components for it. We'll still support their elections

the way they choose to hire or engage with us to do that.

They may have in the future an alternate choice they can go to that also would offer the same, but that again is for the buyer to make that decision.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: Correct.

But I think my question goes to is a county being asked to make a decision in the dark essentially? In other words, if they're provided with another bid sheet -- but upgrade sheet and told to make a decision in X amount of hours about whether they're to go to a system that has not been approved --

13 MR. GROH: I think, Evan, the piece you're
14 referring to when we made the acquisition, we had a
15 product that had just recently been certified under the
16 EAC's certification process and 1.2 is what it's referred
17 to in the election parlance. And that now once it's
18 received federal certification, you take it on the state
19 level and get it certified at the state level, and we are
20 doing that across the United States.
21 California is one of the states that has several
22 counties. In fact, a large degree of number of counties
23 that want that assured 1.2 certification to go through,
24 because there are enhancements and upgrades that are in
25 that that help and make their voting system operate

1 better. And those are lessons learned from 2006, in 2008,
2 that have been applied.
3 But in the process of getting certified in that
4 federal certification, there were hardware changes that
5 had to take place to the voting system. So if it is truly
6 going to be an upgrade to the EAC's new certification
7 requirement, we would be required and the state would have

a decision to make to require each one of those voting systems to have the hardware enhancement made to that or the hardware change or modification the way that it needed to be addressed to get through their certification.

These are really kind of minor modifications, but they're still things you have to open up the voting system itself and put in different shielding in there for electromagnetic transfer interference that might come out of it and different elements like that. We've shared all of this with Lowell Finley's office. We've asked them if they would make a decision to not require it, which would then remove the cost for the counties. But again, he has to make that through an informed decision.

But parallel to that, we've also gone out to all of the counties and appraised them for their unique counties. This would be the hardware improvement cost if they wanted to take the upgrade to the 1.2 once we receive that certification in California and they required the

federal changes to be made. This is what it would cost them to get those hardware upgrades.

So that's a letter that we have sent out and tried to poll all of our customers to get an awareness of what that would be, because these are going to require ports and components that need to be acquired or built to fit in and do that upgrade.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: My understanding though is the request for an answer was within a very short time, 48 or 72. And, again, I know you can't speak to the second half of this. But if another entity potentially going to own that product in the future when a county would have a choice to buy it from an alternate --

MR. GROH: Well, the first thing is it was an unscientific poll. Was not a sign this document and you are committing to it.

We were looking for a general direction or reception of what the county felt they would do. And by knowing that would allow us to plan. And off the cuff, I'm going to guess about half of the counties said yes, they would pay for the hardware upgrade so it would meet and be acceptable at the federal level and the state level. And the other half said no, I'll continue to operate the system the way I'm operating it today and

won't take the enhancement.

So we know that. But at the time reality hits and you really are going to do it, we need to go out and ask them again.

We just wanted to get a general idea. Because if they all said no, that would be a pretty good indication that that would not be a good business decision for us to go forward with that certification and all of the costs and the time and elements that's involved in it if no one was going to take it.

If we can find out from the state that they would allow it not to have the hardware upgrade -- because we don't care. The systems are going to operate the way they exist today in the market. If they don't choose to have the upgrade, they're going to use them in the 2010 election the way they are. So if they would forgo that and forgive that or give a grandfathering to that, we go back to the counties and say we don't have to do the hardware upgrade. You'll only need -- you can get the software upgrade that goes along with your software license agreement.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: Thank you.

I've been monopolizing the time. Does anybody else have any?

MR. ERDMAN: Just with the ES&S acquisition of Premier, what is the truth about plans for Premier and the equipment we now own with the OS and TSX?

MR. GROH: Well, I'm not sure if I fully track -- if I'm starting to answer this incorrectly. You know, we have the products. We will support those products. We will do enhancements to them that would require us to take them back for certification.

But what we do know, just like our ES&S side of it, there are products within that family that's in the assure product line that we cannot resubmit back to the EAC for certification, because those were brought in under work-in process under the 2002. The 2002 voluntary voting systems standards were retired December 14th of 2007 -- was it -- and you no longer can submit to that. You can only submit and have things that will be submitted under '05.

We know there are products within that Assure family that were never built because we didn't know what the '05 standards were at that time. These were designed and built and some of them in the late 1990s; 1998, 1999.

They won't meet them. So we can't take them back and re-submit them.

What you're really going to see is for us to reach the '05 standards, what we'd really like if you're

going to do a 2011, tell us what it is, because I don't want to get through a certification on that to have you release another voluntary voting system guidelines out of EAC, because all of the work I've done basically is throw away. I can't understand why anybody would spend their own money, their own county's money, to buy a certified product that you know there is a new certification standard released. Let's wait and see if I can get the new one. So timing on certification is going to be a big issue with the EAC.

MR. ERDMAN: Okay.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: Thank you.

And I apologize again to everybody, because we are running very late. We're going to break now until -- I have 1:10. We're going to break until 1:45.

When we come back, Mr. Carey I believe from the Federal Voting Assistance Program -- we are going to take him out of order. My apologiies to Mr. Carey, because I know he has a subsequent commitment. That's what we will begin with when we come back at 1:45.

MR. GROH: And then you will go down the rest of this panel?

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: Yes, I will.

(Thereupon the Panel recessed at 1:10 p.m.)

AFTERNOON SESSION

1:51 PM

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: I think we're going to reconvene in about 30 seconds if people will find their seat. Thank you.

Thank you, and welcome back to the continuation

of today's hearing. We are going to go a little bit out of order and move Mr. Carey up from panel three to panel two due to a time commitment.

So welcome, Mr. Carey. Bob Carey from the Federal Voting Assistance Program.

MR. CAREY: Thank you very much. I very much appreciate the Secretary's Office moving things around so I can catch a flight out today, because I'm going to be testifying out in Minnesota tomorrow on their MOVE Act compliance legislation in order to be able to move up their primary so they get ballots out 45 days prior.

I became Director of the Federal Voting Assistance Program in July of last year. Prior to that, I was executive director of a group that did a lot of work on military voting rights.

First of all, I voted in a voting place when I was 18 and again when I was 40. Spent ten years in active duty. And in the interim, I've had overseas time as well. So I've been overseas volunteer, civilian voter, and

military voter as well.

I realize a lot of folks have some issues about what's going to happen with the MOVE Act. The Federal Voting Assistance Program has some programs in order to be able to help state and local election officials comply with the elements of the MOVE Act as well as go over some of the questions people have about it.

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MR. CAREY: Quick research on the background about 2008 military voting. If you go online to fvap.gov, we have a legislative initiative. We decided to delineate what we think each state should do in regards to its laws regarding military and overseas voters in order to be able to maximize the opportunity for these voters. And the one for California is online as well.

Now, in a letter we sent out in November of last year, we identified about 130,000 military personnel who claim California as their state of legal residence, and then about 110,000 military dependents who also have the same rights for military voting as the military voters do, and then about 450 overseas citizens.

Now, what was reported to the Election Assistance Commission was only 104,000 UOCAVA ballots were transmitted. That's about a 20, 25 compliance registration rate of the total eligible voters, which sort

of goes against what we're seeing in terms of reported voter registration rates of greater than general populations. And we're wondering how many of these voters are actually utilizing state and local forms rather than the federal postcard application, which is the only thing that most local elected officials are able to use in order to be able to identify those military voters.

Of those, 63 percent were returned to California, which compares to 42 percent of the vote by mail ballots were returned to California in 2008.

The two big recommendations that FVAP made was for all elections. California currently has a 60-day prior, but there is no actual requirements that the actual absentee ballot, printed absentee ballot with the candidates and the races on that same absentee ballot, be sent out under current California law. If the absentee vote by mail ballot is not available or sample ballot not available, they can send out a separate with a list of candidates.

The average age in the military is about 27. And about 55 percent of the military is in the 18 to 24 cohort. So most time these are the first-time voters. And that can be daunting enough to go through a 260-page voting assistance guide to figure out how your state is

25 going to require you to be able to exercise your right to

1 vote. Then on top of that, get to write in a list of
2 candidates you have to transcribe over and follow all the
3 instructions, it gets very difficult. And you're going to
4 probably see a lot of spoiled ballots.
5 We recommend for that the vote by mail ballots be
6 the 60 days prior is great. That's actually much more in
7 line with the real mail turn-around time for most military
8 and overseas voters.
9 They're also recommending universal use of the
10 FWAB. Right now, California law is only for the federal
11 general elections. We recommend that the California law
12 be changed to -- it's all federal elections -- because say
13 you're a losing candidate. Say I think most of you are
14 going to vote for my opponent. And this is a primary.
15 And there is nothing that says in the FWAB it has to be
16 accepted for the primary. Therefore, I'm going to
17 challenge on the basis they didn't have all the UOCAVA
18 because they sent -- even though the local elected
19 officials have by tradition accepted them.

And we also don't believe the state-run absentee ballot is helpful. It confuses the voter. Having states adopt federal write-in absentee ballot is a much better way to make sure voters get that opportunity.

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MR. CAREY: What we see in 2008. People talk

about registration failure, about absentee ballot undeliverable failures, and about ballots being cast and not counted. But the overwhelming incidents of failure is in ballots being sent out and not returned. A large part of that is ballots returned after the deadline or because they get to the voters too late.

We have work to do. Federal Voting Assistance Program has a lot of work to do to get them to understand the availability and the usefulness of the federal write-in absentee ballot. 2008, about 28,000 were used nationwide. But you know almost 300,000 ballots were sent out and not returned. And so, you know, we want as many of those as possible at least having a federal write-in absentee ballot sent in.

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MR. CAREY: So what are we doing? We're going to focus on that ballot delivery and return. And I'm going to talk about what online ballot and delivery the state is going to adopt.

We're also working with the military postal system to basically have all the ballots come back by express mail. And then also doing a big outreach program on how voters need to use the FWAB more.

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MR. CAREY: Also going to change the goals. In

the past, the production goals have been how many voter assistance workshops we did. That's all well and good, but if the voters aren't increasing their voting success, we're not doing our job. So we're going to focus our metrics on voting success primarily in absentee ballot return rate. If we return for that, the voter participation and the voter registration will improve as well.

Realize also the actual overseas citizen

population is a very ill-defined population. We're working to see how we might be able to get that up as well. And then we also have our report coming of the next state by state index of adoption of the legislative initiatives. And we hope to be able to get all states up to 75 percent.

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MR. CAREY: The second point is what I really wanted to stress. We're going to basically --

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MR. CAREY: We're reorganizing our office, and we're going to have an Election Official Assistance Office. We want to provide the same that we do to the voters. So election officials know how these laws impact them and to try to see if we can help them get to compliance rather than having DOJ talk to them.

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MR. CAREY: So that's why we're looking at having assistance to the election official being one of our first mission areas.

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MR. CAREY: We're going to basically take the online federal postcard application and the online federal write-in absentee ballot for federal candidates and turn it into Turbo Tax or tax refund. The online federal should be out by April. And the online federal write-in absentee ballot populated with federal candidates online for federal candidates should be out by June.

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MR. CAREY: So this is the big thing I thought might be useful for the state and local election officials. We basically want to take our money -- we want to go out with a request for proposals to all the election vendors, say we want you to have a deliverable online ballot system that is specific for the state. And we're going to develop a list of vendors that we think are qualified to do that with minimum functionality.

Then we'll ask the states to bring back the statements of work say yes, we want to participate in something like that. We'll complete that statement of work amongst the vendors, choose a vendor, and then the

states will be part of that vendor selection process. And then hopefully it will be a much more seamless process for the voter and for the state both. And again --

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MR. CAREY: -- I think we've gone over the MOVE Act. Have to be out 45 days prior to. California is already well ahead of that; the ballots have to be transmitted electronically. Understand, faxing a ballot -- a blank ballot is compliance with the MOVE Act. Realize it's not going to help the UOCAVA. Very few of them have access to a fax machine, especially amongst the military. Very, very few of them have access to a fax machine. If all you're going to do is fax, you might as well save your money. And you have -- sorry -- November 2010 election, all federal election, have to send the federal write-in absentee ballot.

--o0o--

MR. CAREY: Just there's my personal address and personal e-mail if you want to contact me.

MS. PELLERIN: Do they have access to a computer, like if we sent them a PDF image?

MR. CAREY: Yeah.

MS. PELLERIN: That's a better method?

MR. CAREY: Almost they have daily access to -- they have an account. Twenty-five percent of the junior

marines don't have an e-mail account because the marines are very flat, very first-term oriented organization. But I mean, they all have access to the recreation commuter terminals or U.S. open computer terminals where there's g-mail accounts and easily get access to those sort of things.

MS. LA VINE: Can you go back to the ballot marking online system? Just a little more explanation. So you're looking at going out to bid for -- just describe it.

MR. CAREY: Okay. So we have research and development money, the federal budget. And what we've already put out -- you can -- we put a press release on our website and on federal business opportunities -- fedbizopps.gov, request for information we put up and sort of describes this.

We want to have a set of minimum functionality. The minimum functionality is an online ballot delivery and marking mechanism. So voters basically put in, go -- they say, I want to get my ballot. They click on California. Now it takes them to the website that California has identified with the vendors that California has chosen.

It's not going to be hosted federally. It's

24 hosted at the state or vendor level. You don't want it
25 hosted federally. If you host it federally, you in all

1 the DoD, at triple costs. And just 'cause that's built
2 for defending information against being cracked by
3 Al-Qaeda for hosting voting systems.
4 The voter then -- and the minimum functionality,
5 we want that portal to be able to have online ballot
6 delivery and online ballot marketing. So that when you
7 put any of your randomization requirements, undervoting
8 and overvoting controls -- the voter marks all the races
9 that they want to vote in and prints it out hard copy for
10 them. So still be hard copy wet signature postal mail
11 return. This is not Internet voting; electronic ballot
12 delivery and marking.
13 From the programmatic point of view how this
14 would work, we will put out -- well, I can't say we will.
15 We plan on putting out a request for proposals. And in
16 that request for proposals, it will say -- it will give
17 that minimum functionality. We'll have a source selection
18 committee we'll be recruiting from the state to sit on

19 that source selection committee as well. They will then
20 come out with a list of vendors. Like an indefinite
21 delivery contract or a broad purchase agreement, zero
22 dollars to some type of minimum value contract. The state
23 will then be invited to bring in their statements of work.
24 The states will say, we want X, Y, and Z. And then we'll
25 then give that to the vendors to compete. I mean, at this

1 point this, is like a one, two-week turn-around.
2 And again the states will be allowed to
3 participate in that vendor selection process. It has to
4 be actual federal money, federal contracts. It has to be
5 a federal contact implementing decision, but really want
6 to maximize the state's input. If I could, I'd turn it
7 over to the state to decide, but I can't.
8 And so then vendor selection will come back to
9 the state, and the state can accept or reject it. If the
10 state accepts it, we'll pay for the contract for that
11 minimum functionality. If the state wants to add on a
12 functionality, that's between them and the vendor. But
13 hopefully the baseline architecture that we've already

paid for will cover most of those fixed capital costs so that additional functionality will be a margin cost to the state.

And then, you know, we'll open it up to the voters. And we're combining this with our voter outreach plan with fvap.gov. Go to FVAP, I want to get my ballot, and they click on the state.

Does that explain it?

MS. LA VINE: Yeah, that does. Thank you. I just didn't know what it was paying for.

MR. CAREY: The minimum -- I do not expect all 56 states -- territories to say they want to participate,

which means to the extent they don't, we should have more money available for each and every state or territory that does participate.

But right now, I have the budget for all of -- each and every one of them will participate, so that's sort of driving down my minimum functionality that I can provide. To the extent I can add onto that, I will.

MR. ERDMAN: Are you developing a

one-size-fits-all type --

MR. CAREY: No. Exactly, what we're trying not to do. This right here, this online federal postcard application, we aim to run that as a backup system at the federal level as a one-size-fits-all. That's just the absentee ballot application and the registration form. As far as the actual ballot delivery wizard and online marking, we want to have this defined at the state level.

MR. ERDMAN: So putting a PFD out of our -- maybe our sample ballot that's on the web and mailing it to us, as long as they have the additional forms, et cetera, so that when they mail it back, then that's when you're --

MR. CAREY: The oath forms and that sort of stuff.

But, I mean, what we want is to actually have the online markability. So not only do they get their ballot -- they don't need their letter ballot in the PDP

form. Here's your races. Do you want to vote for president? Do you want to vote for Senator? Who do you want to vote for? Representative -- who did you want to

vote for? Dog catcher? And then say, I'm done. And now it generates the PDF in the ballot with all the names already filled and all the marks already made.

MR. ERDMAN: So you want web interactive?

MR. CAREY: Yes. Now, it will also have the ability to just transmit a plain blank ballot in a PDF form, but again at the state level defined at the state level.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: Would it be the feds or the states who could impose, say, security requirements if they were concerned about the ballots, wanting to ensure security of the ballot or the paper or ensure there are multiple ballots being returned? Would it all be effectively like a vote by mail program, i.e. signature goes to the election official in the particular county. They verify one ballot comes back of Evan Goldberg and that's it?

MR. CAREY: The minimum functionality we are like a vote by mail system. You're already going to have the federal postcard to verify the voter identification. If a state wanted to add on additional functionality such as that, that would be fine. I mean, that would be at the

state's expense and they would have to negotiate that with the vendor.

Just from an operational perspective, having log-in requirements is difficult for most of these voters. Having log-in and additional voter verification system is going to be difficult for many of these voters. To the extent you can have it available without that and just rely upon the federal postcard application and the signature you already have on file, that will maximize the opportunity for the voter.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: Are there -- I believe there are 21 states that allow an overseas ballot to be -- as long as it's postmarked by election day, it can be counted within X amount of days after the election day. I had heard that was talked about being added into the MOVE Act and didn't end up there. Do you have thoughts on the pros or cons of such a policy?

MR. CAREY: In our legislative initiatives letter to all the states, we recommend in addition to the 45 days prior to the election mandated by the MOVE Act they provide up to 15 days after the election. The data we have from the military postal system is that essentially for remote -- it's easy to get a piece of mail over to Kuwait or Korea. You can get a piece of mail over to them in six to ten days. It's that last mile that's really

difficult. The average mail delivery to the carrier out at sea is like 30, 35 days. The average mail delivery time to that combat post in Iraq or Afghanistan can be 25, 35, 45 days.

So to the extent that you can allow for the ballot to be returned after the election, you're going to ensure that many more ballots. I mean, in Minnesota, you know, everyone knows about the Senator's recount. More ballots arrived after the deadline then the margin of victory Senator Franken had.

And you know there is probably a lot of people that say if I had been allowed to have my ballot -- I postmarked my ballot in time. It wasn't that I did anything wrong that prevented the ballot from getting to me in time. It's just they sent it -- it full takes three weeks to get to me and three weeks to get back. I sent it before election day. So in that regards, having ballots being deliverable after election day can really help a lot of these voters.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: You mentioned the lack of access to fax machines. In

22 California, I know there is a law that allows people to
23 fax back their ballots. Do people not use that because
24 they don't have access to machines or not use it because
25 they don't want to give up their right --

1 MR. CAREY: They don't have access. Defense
2 times -- they do -- bunch of newspapers, Army Times, Air
3 Force Times, Marine Corps Times, they did an online survey
4 of 2300 military personnel, military readers. And they
5 found 71 percent of the voters, the only way they would
6 give up their right to a secret ballot was in order to be
7 able to have their vote counted. So we were thinking
8 about moving from that, especially since we're going to
9 have these online systems.
10 But there are 17 people down in Haiti from Boston
11 who on January 19th were able to get to the embassy at
12 7:30. Polls closing at 8:00. Fill out their ballots.
13 Have it mailed -- we were able to turn it in 15 minutes
14 before the polls closed. We were able to turn it around
15 and fax it to local election officials in time for it to
16 be counted.

17 You know, it sort of made me believe the
18 electronic transmission service we need to keep around for
19 a little while because sometimes -- now if that locals had
20 allowed the ballot to be e-mailed directly to them, they
21 wouldn't have had to e-mail to us for us to convert to fax
22 and send it to them by fax.
23 I would love to get out of this business. You
24 know, my people -- to put assistance out of work. But
25 that requires our being able to convince the states to

1 have to allow for more direct to the voter interaction
2 electronically.
3 MS. LA VINE: How would you validate the voter is
4 an eligible voter?
5 MR. CAREY: Just like you have a regular
6 registration form followed by absentee ballot application
7 and the absentee ballot with the signature. So we send in
8 the federal -- military and overseas voter first send in
9 the federal postcard application. If you get that and in
10 order for them to be able to use the federal write-in
11 absentee ballot, they have had to have sent in the federal

12 postcard application at least 30 days prior to your
13 election or your absentee ballot delivery deadline,
14 whichever is later, before they can use the federal
15 write-in absentee ballot. So you have the federal
16 postcard application with the signature and the voter
17 verification information to be able to validate the
18 ballot.
19 MS. LA VINE: So we would have to -- okay. I was
20 thinking how would they know when they go online they are
21 an eligible voter and they could select a ballot to vote.
22 If they have already filled out the application or they --
23 MR. CAREY: We recommend that you basically not
24 have voter verification within the online application.
25 Basically, you just allow for ballot on demand and that

1 you just do it by address. And that way if you want to
2 have an initial functionality, I understand. But if you
3 want to have that ballot on demand would probably be the
4 easiest way for those voters.
5 MR. ERDMAN: So have you worked out the details
6 regarding this particular issue on how states should be

doing it?

MR. CAREY: I'm not understanding your question.

MR. ERDMAN: Do you have one that's working today?

MR. CAREY: Working what?

MR. ERDMAN: A military person can go out to vote and vote by e-mail or whatever, get it back to the state?

MR. CAREY: By postal or e-mail?

MR. ERDMAN: Well, you're suggesting that you currently have it by postal. But do you have an online web application that is currently working?

MR. CAREY: L.A. Couny's is pretty good. I like L.A. County's. The only thing is missing is online marking. But the fact they have the online ballot on demand system, you put in your address and you put the complete ballot -- dog catcher to president, I think is pretty gushy. Gushy is a technical term meaning really whizbang.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: Thank

you very much. Best of luck. So thank you again.

Let's bring the other panel back up. Thank you, gentlemen, for being so accommodating.

Mr. Coomer or Mr. MacNeil, you want to draw straws?

MR. COOMER: I think I'm all set up here.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: Straws are on then.

MR. COOMER: I'm from Sequoia Voting Systems. I just want to start by saying thanks to the Secretary of State for having this meeting and allowing us to participate.

I've got just a short presentation. Basically just sort of at a high level talking about the future of electronic voting systems and currently the challenges that we face in various jurisdictions.

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MR. COOMER: Product landscape, we deal with the complexity of laws and regulations, budgetary constraints. A lot of this is reiterating comments that have already been made. Definitely involving certification requirements and public perception and distrust of the system in general.

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MR. COOMER: The product life span; some

questions that need to be addressed or kept in mind when discussing this is obviously the maintenance and upkeep costs, again changing requirements and laws. We mentioned earlier Illinois state changed to their statutory regulations about notifying of an undervote. That statutory regulation went into effect about a year ago, and we had already had a system in there and certified and had never even considered supporting this kind of functionality. And we had to go in, make modifications, and then get a special dispensation from the state to allow the system to be used without a federal certification.

And then again as has been brought up a couple times today, but auxiliary equipment upgrades including labor, parts, and other COTS components; again looking at the certification requirements that they're certifying a system as a whole. That system you buy today has a certain laptop it's been tested on. That laptop will not be in existence ten years down the road and stay a ten-year life span for the product.

--o0o--

MR. COOMER: Then we have the security life span. What's safe today may not be safe tomorrow. A good example of this is a FIPS 140-2 level military standards were cracked at the end of 2009. These were certified USB

drives as secure and crypted devices. And there was a fundamental flaw and they were compromised.

So immediately one of the vendors has been coding up a fix to plug that hole, and the other two are sort of staying mum about the issue.

And again the encryption or requirements is secure, but the way it was implemented it was not. And it still got certified. We have the same in the voting industry. Systems are tested. They've been certified. Vulnerabilities come to light after the fact. And there needs to be a way of addressing those, short of requiring a full recertification.

The time lines just don't work for every time a vulnerability is found to have to re-certify the entire system. Providing for things like security patches against the system as certified is the system that's supposed to be run. So even if a vulnerability is found and there is a suitable patch, most jurisdictions do not allow that patch to be applied in their statutes.

In addition, I'm a firm believer in community

21 review, aggression/regression testing. And we are in full
22 support of not necessarily open source, but disclosed
23 source. We have begun making all of our voting system
24 software source code available for public download and
25 review and in the name of testing. We have a very open

1 license for that. The code can be modified for testing
2 purposes as well.
3 MR. LOGAN: Can you expand on community review?
4 What do you mean by that? And in what capacity does that
5 play out?
6 MR. COOMER: That goes into the disclosed source,
7 making it available for community activists, academic
8 types to have full access to that code. Very similar to
9 the top-to-bottom review, except that we're not limiting
10 the participants in that regard. So any academic or any
11 concerned citizen can download the source, can compile,
12 can run it, and do their own testing of it.
13 SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: Is
14 that associated with systems you have under development or
15 that's with your existing system?

MR. COOMER: Systems currently under development.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: Any thought of giving it --

MR. COOMER: I have been thinking a lot about that. I would like to get to that point, but we're focusing right now on the current system that's in development.

Again, the idea here is for a system that does not get certified. It's in the process of development where we can actually use the feedback that we get and

then make modifications as are necessary or as we see fit.

MR. LOGAN: Are you aware of any regulating bodies from any states that you do business in that are taking advantage of that as a precursor to the certification process? Are you getting feedback from regulated bodies?

MR. COOMER: We haven't got any feedback yet.

And the other thing is that I have a work in progress and we've hosted a small portion of the code. And it's really for the ballot layout engine. We are in

the next two weeks hosting the main security authorization component of the entire system, and I'm hoping that we're going to get more feedback there, because that's really the part that people are going to be most interested in looking at.

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MR. COOMER: Product development standpoint. Again, not just disclosed source, but trying to adopt a common data format. You know, there have been efforts in the past EML certification to put together a standard data definition put together by the Oasis group. It's gotten limited adoption. And part of that was an immature data standard for U.S. elections. But that seems to be changing. We're trying to adopt as much of that as possible in our current system that we're developing.

Again, focusing on transparency with disclosing our source and really focusing on making the results truly auditable on a ballot-by-ballot basis to support things like small batch statistical audits in addition to doing full recount of one percent of the precinct being --

actually set the system up to do small catches. You get a better statistical understanding of your results and better coverage that way as well.

And then really the focus of common data formats and transparency and really building a system to be interoperable again. You know, voting doesn't start with the voting system. It starts with a voter registration system and then the voting system and then all the way up to state reporting systems.

And obviously there are four vendors sitting here at this table. We all have a different system, but we all operate in California. California has a different reporting system. If we all could adopt a common data format, it could a lot easier.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: How would you peg the chances of that happening?

MR. COOMER: I don't know. There are four of us up here. Maybe we'll talk about it afterwards.

But I think at this point -- and maybe it's five years from now. I think at some point the EAC is probably

going to require that. It would seem an obvious thing for them to do, at least to support some kind of standard output. Regardless of how we treat our data internally, it's a simple matter of having the will to do it to require a certain standard and then forcing the vendors to do that.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: How difficult of an adjustment is that? I mean, is it more people have the standard they have and they like it and they don't like to change? Or is it a major financial and technical undertaking?

MR. COOMER: No, I don't think it's a major technical or financial undertaking, but you have to have a standard to conform to before you adopt that standard. So getting everybody in agreement on what that standard should be I think is where the real difficulty is.

I think somebody said earlier that every county knows they do it perfectly and the right way and can't understand why every other county doesn't do that, too. And I think you're going to have similar problems there.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: Can I back you up to the auditability issue? You mentioned the system would have the capability to pull smaller washes across a wider range of precincts so you can electronically sort -- you can pull those ballots

annually. And the whole focus there is being able to tie on a one to one basis an electronic vote record done to an actual physical paper ballot. That's the nut that is to be cracked. And I think we've done that in the current system that's under development and we would support that.

MS. PELLERIN: I think countries do talk to each other a lot about new ideas and how to approach things. I think we have a really good network of folks and share a lot of best practices. And I know that I have a lot to learn from my colleagues in other counties, and I take advantage of that.

MR. COOMER: That's the other thing. We are in active development of a new system, and we have been going around to not only our current customer base but hopefully future customer base. And we've been doing the little dog and pony show, because now is the time to actually get the feedback of what the election officials and the jurisdictions want to see in that system. So we're eliciting active feedback in that regards as well.

MR. LOGAN: Are you doing all that with voters?

MR. COOMER: Small voter focus groups, but mostly concentrating on the actual election officials at this point.

MR. LOGAN: Will your data from the small focus groups with voters, that be available?

MR. COOMER: Yes.

Again, just a couple benefits of the operability: Flexibility and open exchange of data, increased choice of jurisdiction, and hopefully we'll help drive innovation in the marketplace.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: Great. Thank you.

Mr. MacNeill.

(Thereupon an overhead presentation was presented as follows.)

MR. MAC NEILL: So thank you to the Secretary of State's Office, election officials, members of the audience. Appreciate the opportunity to speak to you today.

My name is Marcus MacNeill with Hart InterCivic based in Austin Texas. My role is Vice President of products and partnerships. And also one of the company's principal owners, having lived in the Bay Area for

19 20 years, I can always say it's a pleasure to come back to
20 California.
21 So in 2012, Hart is going to celebrate its 100th
22 anniversary. We provide assistance serving nearly 20
23 million registered voters in 350 jurisdictions, including
24 two of the five largest U.S. counties. In California, we
25 proudly serve nine jurisdictions including, Orange, San

1 Mateo, Sonoma, Yolo, Humboldt, Nevada, Madara, Lake, and
2 the city of Long Beach.
3 In my prepared remarks, I'll speak to elements of
4 our product strategy, including investments we're making
5 in our next generation. However, the majority of my
6 comments will be reserved for the investment we're making
7 to ensure long-term sustainability of today's Hart voting
8 system, which is version 6.2.1, including a recommendation
9 that I believe would be substantially beneficial to
10 stakeholders.
11 So Hart has a long history of product innovation
12 and leadership, including the first federally certified
13 digital ballot -- online digital ballot adjudication and

14 the calibration free DRE, which is still used in some
15 jurisdictions in California for early and election day
16 voting. And, of course, to provide security and
17 independent voting for disabled.
18 Our product strategy is built for the future,
19 while preserving and optimizing our customer's existing
20 investments. Like most technology companies, we're in a
21 phase where we need to invest in bringing new election
22 management and voting system products to market for the
23 relatively small percentage of jurisdictions who have a
24 mandate or a compelling need to procure a new system,
25 while continuing to invest in the current Hart voting

1 system for which there are tens of thousands of units
2 deployed in the field today.
3 This is why, despite an increasingly
4 unpredictable and uncertain market, we announced at the
5 Election Center Conference in August 2009 we're developing
6 the next generation of the system. The new system will be
7 certified to meet 2005 based voluntary voting system
8 guidelines and also incorporate a diverse set of

9 requirements gathered from voters with different needs,
10 election officials, state investigations, including
11 California's top-to-bottom review, and market at large.
12 The three key design principles for our next
13 generation system are: One, long-term deployment and
14 operating efficiency; two, full transparency, both what we
15 do and how we do it; and three, affordability, adoption,
16 and total cost of ownership.
17 However, while our customers are certainly
18 excited about our new product development, they are much
19 more concerned right now about the longevity and support
20 of their current Hart voting system. As such, our new
21 system development effort does not establish an end of
22 life or end of service for the current Hart voting system.
23 Let me talk a few minutes about our sustaining
24 efforts with regard to the current system. Following the
25 2008 general election, we launched a comprehensive program

1 designed to help our customers derive greater value from
2 their current investments.
3 The five core program elements include: Ensure

system longevity. And we're doing that by proactivity having long-term part buys by qualifying part replacements and suppliers to ensure that we're able to manufacture and supply parts to our customers.

Number two, best practices. Our goal has been to enable our customers to be self-sufficient. To this end, we significantly stepped our efforts up to capture and share best practices which help our customers continue to improve upon their success. An example of that is providing guidance on how to implement the Pew Center's recommendation for ballot design.

Election services -- number three, we've greatly enhanced our implementation and training services, but in a way that's really reflective of the advanced needs of our customer base. Our customers in general have used our system now for several elections so their trainings have evolved to be less about sort of efficiency and more about really advanced techniques for auditing and troubleshooting and that sort of thing.

Number four, value added products. We're bringing to market new election-related products that operate outside the certified system. An example of that

is we recently launched an electronic poll offering in the state of Texas.

And five, what I call targeted software changes on a state-by-state basis. We're persuing incremental software changes in response to changing state requirements or being specific to customer needs for increased efficiencies.

And it's really -- the last point -- targeted software changes that I want to explore further. Hart recognizes and understands the state of California does not allow incremental software changes to a certified voting system unless the modified system, the entire system, has been certified by the EAC and the state. You've heard that topic discussed at length here. The challenge we collectively face is the majority of jurisdictions have neither the desire, the need, nor the funds to replace their systems. They've made the investment and become proficient in operating their current systems. And certainly for our customers, they plan to continue using what they have for years to come.

Consider this. When Boeing, its customers, and the FAA identify an opportunity to improve safety or efficiency, the approach isn't for Boeing to implement the change and require its customers to buy new airplanes. Rather, an established process is followed to review the

proposed change, assess its impact, test its effectiveness, and then monitor its roll out and use.

I believe the same can be done for voting systems. I want to be clear. I'm not advocating an approach for delivering major software changes. I'm talking about targeted discrete changes proposed by multiple stakeholders that, if implemented, stand to measurably improve userability.

I'm also not advocating an approach that's reckless or bypasses state testing and certification elements already in place. For example, I propose that software changes be reviewed by a federally accredited voting system test lab, just as hardware changes must be today.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: And I just ask you, isn't major in the eye of the beholder when it comes back to pay? You can't just simply test the fix. You need to -- depending on the fix, sometimes you have to test the fix and how it impacts other areas of the voting systems, which again comes back to a time and money question.

MR. O'NEILL: It depends on the size of the fix.

23 This would be in the quasi sort of view. It is a
24 collaboration between our customers and the state and the
25 bodies that are going to be involved in looking at that

1 and making a determination that says here's a particular
2 change.
3 For example -- and it may have been a change
4 recommended by the TTBR team. In 2007, where the TTBR
5 team could look at that and say this is actually an area
6 where we think a software change could be made, that it's
7 discreet enough that it could be done in this particular
8 way and in a lot of cases could be delivered and fulfilled
9 as part of our annual support and maintenance that our
10 customers face, much like a traditional software industry
11 deployment of a change. But obviously one that bears with
12 it the same kind of regulatory oversight, testing,
13 approval, et cetera.
14 MR. LOGAN: Isn't it actually, I mean, somewhat
15 of a catch-22 in that Evan's point's well taken in terms
16 of what do you term is major and the time and costs
17 associated with that.

But isn't it also true right now those kind of upgrades and fixes that address potential vulnerabilities and make systems more efficient aren't being pursued for the same reason because of time and cost, because there's not the time or the cost available either from the vendor's standpoint or from the county standpoint to go through and complete the federal certification process.

MR. O'NEILL: Right. But in some of these cases,

some of these changes are things -- to be quite honest with you, we've already made the changes. We've already tested the changes. We know they work. And we are hamstrung in our ability to fulfill the changes in a way our customers can easily consume them. I'm not looking at this as what the vendor says go and it just flows down stream. It's one of where the vendor can come to the state, whatever the process ends up being, to say here's a set of changes we'd like to make. Let those changes be reviewed. In fact, they could be reviewed by the subset of the TTBR team. And the ones that we can gain agreement on, then we can decide how to pursue those.

The feedback from my customers -- from Hart's customers is, you know, there is these two little things, if we could do it, would make that system that much more useable. I would be able to generate the reports that much faster. There are things like that where, as somebody who has been a life-long product manager for 20 years, I'm trying to respond to that and come up with ways that still satisfy the oversight needs.

MR. LOGAN: You're saying those things in many instances have already been done. You've made them. But they're not being implemented because it's cost prohibitive for you or for your customer to go through the complete certification.

MR. O'NEILL: It would not make sense to go through a complete recertification just for those changes, that's correct.

MR. ERDMAN: Are you looking for administrative fixes as we had back ten years ago?

MR. O'NEILL: Can you elaborate on that?

MR. ERDMAN: Well, back in the days of

Mark-A-Vote when we ran into glitches, we were able to ask the Secretary of State to make specific changes that were not really major changes within the software, but changes that would fix the product or help us get it through.

MR. O'NEILL: Yes. Every vendor will tell you there are certain things our customers do in our system today where they follow use procedures, and they do it the way the system allows them to do it. But if we were in a position to make targeted discrete software changes, they would not have to follow as many steps to accomplish that same task.

And, again, we're not talking about in our case, for example, going in and dropping in a whole new version of ballot now, which is our central count solution. But making selective changes to the application that are applicable to the entire install base and are clearly in the category of a limited change that could be tested. The rest of system can be regressed and to ensure that

that particular change is going to deliver some pretty premium value for our customers.

MR. ERDMAN: Would you start from the beginning and go all the way through that testing procedure at least to show everybody that it works? Or are you talking about just take my word for it, I'm going to install this particular software?

MR. O'NEILL: I'm proposing the process that would involve -- and, in fact, could involve members of the TTBR team at the very beginning of the process actually looking at the proposed software design change to address that particular situation in the code.

For example, there were several things that came out in the top-to-bottom review that ended up as being use procedures. There are items in there -- and I've had this conversation with a few members of that team -- where we've verbally agreed the most effective way of dealing with this issue is to make a software change, but we're not in the position to go do that. That's a great situation where I'd like to be able to go up and design what that change is going to be, have that be looked at, and provide feedback, and come to some agreement that's what's going to be done. We go to the VSTL for testing and approval, and then we have a way of rolling that change out. In doing it, of course, according to a cycle

that makes sense according to the election calendar.

MR. ERDMAN: You're saying it has to go through the feds before the state at this point?

MR. O'NEILL: Like de minimis hardware changes are done today where that particular change itself goes to the voting system test lab, an accredited test lab, for review, and that test lab issues a letter that says, you know, we've tested this change and we've looked at this test change and tested it relative to the rest of the system to say some change is acceptable or this change is not going to impact the rest of the system.

MR. ERDMAN: Thank you.

MR. O'NEILL: So that pretty much covers what I was going to say.

In conclusion, my message is this. We're committed, of course, to helping our customers in California conduct secure, accurate, and reliable elections. Hart Voting System, the longevity is their primary concern and a concern of ourselves to do everything we can to help our customers continue to use the systems that they enjoy.

So I encourage you to consider ways of safely, reliability enabling incremental changes in order to, as Curt alluded to earlier, intelligently evolve these systems versus being in a mode where our customers would

have to effectively replace the systems they have today.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: And can I ask you a question? What's Hart's view on disclosed or open source? How does Hart define? And secondly, is that only applicable to the new systems you have in development, or is there a thought of applying it to the current systems on the market?

MR. O'NEILL: First and foremost, like Eric said with Sequoia, it's absolutely a part of our new system development, full disclosure of source. We, too, have talked about going back and making previous source code available. It's something we could do. It's just been our focus has been on the new system development and supporting our current customers. But, yeah, certainly supporting of disclose source.

And I would also make a comment that with regard to newer systems, the development of our new voting system hardware, I'll say there's nothing necessarily about that hardware design that would preclude supporting an open source voting system project onto that hardware. So we

are looking at that hardware from the perspective of Hart developed software or potentially like what you see in an industries situation where you can support that open source voting system onto the hardware.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG:

Interesting. Thank you.

Mr. Coutts, thank you very much.

MR. COUTTS: I haven't said anything yet.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: Well, you're here. You came back after lunch. Thank you for both of us.

MR. COUTTS: Well, once again, I'd like to thank everybody for allowing us to come and talk to you.

Mr. Fielder's definition, we at Unisyn are more insane than most. We've gone through the 2005 certification system and completed it. Took about eight months of total time and about a million dollars to complete. We had a very good lab. I think we've blazed the trail so everybody who comes after us will have an easier time with the certification process.

16 And we are currently working with the Wiley
17 Laboratories to start talking about making some of the
18 incremental changes Mark has talked about where we can
19 make the incremental changes and send it as de minimis or
20 delta changes to the federal certification process and
21 have them go through and make a report saying this is what
22 changed. This is what we did, and it still works. And
23 from that process, hopefully the states will allow the
24 VSTLs to say, yes, this works and to accept it.
25 We took a lot of information away from the red

1 team test that the state of California did. And we
2 brought that in re-envision a digital scan system for our
3 new product, the Open Elect, when we did that with an eye
4 for security, auditability, and also for transparency.
5 The problem with security, as has already been
6 alluded, security is a moving target. There is always
7 going to be somebody out there doing something different,
8 new, something amazing. Somebody I can't conceive who
9 have got nothing else better to do.
10 So from that perspective, a system where the

VSTLs can react to a change to the software where we are reacting to a software vulnerability is only going to help us and help everybody else.

As far as auditability, we have a number of tools that we have implemented in our system, including a verification tool that is external to our system where our system, anybody can log into the system using a read-only password. And we have an application which will verify the check in of the entire system. It will allow you to verify the check in value of the entire election definition at the same time.

As far as transparency is concerned, we've been making a lot of steps towards transparency. The biggest step is we will be releasing our tabulation and rank choice voting code from the 2005 from the source in the

near future.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: Did you say open or disclosed?

MR. COUTTS: Open source. Those portions of the code will be open sourse, an open source project.

Everything else will be disclosed.

I really don't know what else to add other than what's been already said here about interoperability. Interoperability is going to be the key of voting systems moving forward. This is going to be how we are going to make systems better. We all have things we can bring to the table. We all know different things. We've all done different things out there in the field. We've seen -- between us all, we've seen everything that's going to happen so far. But still we can start talking before we can interoperate. A lot of that is going to be segmented in a way that people can't use it, the way we can't use it. And that's where we're all going to be poor for it.

So I really believe that the interoperability initiative needs to be pushed forward as much as we can. And we need to have the ability to react to, to go through ten million hoops in order to get a system we can deploy out to the world. People know what they want. People have told us what they want. We want to give it to them.

And I really have not much more to add.

MR. LOGAN: I just have a couple of general hopefully quick questions. If I can go down the line for the four of you who have systems that are currently in development, if you could just briefly comment on whether or not the principles by which you're developing the system, look at sustainability from a different standpoint, not so much the sustainability of the parts or the hardware or the code, but the sustainability of the user interface in terms of looking to the future electorate in terms of what their expectations are going to be of the voting system, both from a systems standpoint on your side, whether or not there was research or development dialogue about that in developing the principles about which you're doing development.

MR. COOMER: Yeah. I mean, that's actually been a large focus. I mean, really what you have to get down to is something that's scaleable and adaptable. We've adopted modern standardization practices of UI focus groups that we've given our UI architecture to. And really looking at it from a standpoint of, you know, adopting common standards.

Software is software. You open up Microsoft Word, you tend to know how to use it, because it's sort of designed in a standardized way. We've taken that to the development of all of our architectural and all of our

software, including the tabulator as well.

MR. O'NEILL: I'd say in a very similar fashion, I mean, we've obviously modernized the approaches we've taken to building the system with the lessons learned about what it means for both hardware sustainability and the software itself. We've been literally for the last two years out talking to both our customers, to non-customers, to disabled groups, to voters, showing them working concepts of the system, really getting down to the root of what we think these systems are going to need to be able to do in the future.

When we talk about efficiency, particularly efficiency in a voting place, clearly now we are headed towards a model where it's not just about reducing the cost of that polling place setup, but really using the administration of that environment of making it very, very simple for election judges and poll workers to set up and use and really thinking about from the voting system components themselves, thinking about ways in which these systems can do more than one thing.

I think one of the outcomes of the systems that were built during the HAVA years, as I call them, is that there are a lot of pieces of equipment that do very discrete kinds of things. So we're looking at ways in

25 which we can bring some of those functions together to

1 serve a greater variety of needs without having to add
2 additional equipment and additional cost.
3 MR. COUTTS: We're using a similar approach.
4 We're using focus groups and talking to people, trying to
5 make sure we have a consistent user interface for all of
6 our products.
7 The thing that is now emerging and I think with
8 Mr. Jobs' announcement of the iPad, the interface
9 standards for touch screens are now going to be making a
10 big leap forward. And we're all going to have to be
11 watching that very closely as things move.
12 MR. GROH: From my standpoint, from ES&S, the
13 biggest challenge is the fact we have a tremendous number
14 of legacy products in the field, which we've talked about.
15 And I think you understand from our perspective up here.
16 But the other thing we have to meet is these
17 voluntary voting system guidelines. And the 2005
18 guidelines were not -- they were not put out and set in
19 concrete. They have evolved and made numerous changes to

20 it. They've made changes to it after we submitted a
21 product for certification. So you get it thrown back to
22 you, because they said we've changed and want to add to or
23 enhance the standards. But we didn't know that at the
24 time that we were submitting it.
25 So the real challenge is we can go off and do a

1 lot of things that we think are technologically feasible.
2 They're very novel. They're very user friendly. They
3 satisfy some of these things that we could call
4 interoperability or usability.
5 But this 2011 component or the next iteration of
6 voluntary voting system guidelines, we need some direction
7 on this. You know, the biggest one right now that keeps
8 us up at night is what is going to be the accessible voter
9 features they're going to put into this, because that
10 still has not satisfied the entire world of voters with
11 disability. You get many, many camps that put their foot
12 into this or put an orr in the water that have a point of
13 view or outlook, and we need to know that. We need to
14 have some standard that we're trying to hit or some

15 target. And that really for us becomes the big challenge.
16 We have, as all of us have said up here, they
17 have incredibly smart people that work in these companies
18 from technology development. We just can't roll that out,
19 because somebody else just as smart will tell you all the
20 things that they see wrong with it.
21 And then my last comment also on the piece on
22 this open source/disclose source so forth, the real
23 challenge as was mentioned in the very first
24 presentation -- I think Doug Chapin said the candidate who
25 wins thinks he knows a lot about elections because he's

1 won one. Well, when people will look at source code or
2 disclosed source or open source, they're looking at the
3 point of view how they think voting should operate or how
4 it operates in their jurisdiction or how they vote. We're
5 building products that have to meet election rules across
6 the entire 55 or 56 -- I think Bob was mentioning the
7 district of Colorado would put in there. So you have 56
8 jurisdictions that have unique election laws and rules.
9 We have to build that in there, because we can't design a

10 product for California and do it economically unless it's
11 going to be a $50,000 voting device. It needs to be
12 spread out and used across the U.S. And that also creates
13 a real challenge.
14 And then we talked about getting the states to
15 come up with and agree on some common format. This would
16 help us tremendously. But we can only do so much in
17 trying to get that accomplished.
18 SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: Well,
19 the challenge on the latter is where you set the floor. I
20 think everybody would like all 50 states, the ESC and
21 every vendor and election official, would like to have a
22 common standard or format as long as it's as high as they
23 want or where they want it.
24 Let me ask you -- and this is a question I think
25 for the next panel. But let me ask you this, too, which

1 is we've talked about new systems in development. We've
2 talked about the replacement parts of your current system,
3 and we talked about the lack of federal, state, and local
4 money. So since all three of those are a reality, who

5 is -- how do you expand your market share in California?
6 How do you get a county to flip? If the current system is
7 going to operate forever, assuming there are enough
8 replacement parts and there really isn't going to be
9 another HAVA, is it a matter of convincing the current
10 client not that that's a bad thing? How do you --
11 MR. GROH: From our standpoint, we find people
12 that want to be the first early adopters, and there are
13 counties or individuals that operate counties that want to
14 be the first to have something brand-new or novel or
15 unique, because they want to demonstrate their leadership.
16 That's a clear path we all gravitate towards to try to
17 find those people that would be early adopters.
18 What we've been experiencing through the HAVA
19 environment and the way HAVA came out and the kind of
20 timelines and deadlines they put in, actually what you're
21 getting is they're wanting to have product obsolescence by
22 the fact they won't certify anymore to that set of
23 standards. So if you -- and to pass the 2002 with no eye
24 on the 2005 because you didn't know what the 2005 was, it
25 more than likely will not meet it without having some

major enhancement to it.

And it's difficult to put money in a backwards product. It's trying to keep that old car running one more mile or one more year. We all know it begins to really cost you a lot and it doesn't function the way that you want it to. So it's going to be this standpoint of people who are early adopters, technology is going to change and is going to be obsolete. Have some plan on some things that the new next thing that's going to come along that will drive everybody to it. Or government is going to fund it and then change the rules. That's what we look at will be the drivers on it.

MR. COOMER: I also think you have to build value consistently. I mean, if it's valuable enough, even if it has to take a couple years to pull the money together, you know, if there is actual value there, somebody will buy it.

These systems, it's not just a matter of, you know, making a system to meet the latest standards; you know, it's focusing on usability and decreasing cost of operations. We've spent a lot of time and again we've gone around to all the jurisdictions. I work elections. I work in the warehouse. I work in the polling place. I see how the operation side of it transpires. So I'm trying to add value into our system that will reduce the

cost from that standpoint and build value into having a jurisdiction make that decision to spend the money.

MR. ERDMAN: You defined we have a moving target with security. We have a moving target with certification. We have a moving target with components, off-the-self, COTS, and we have a moving target with accessibility. And as you bring in the value added keeping things affordable and in our guidelines and longevity, how do you propose we will go forward with this as vendors?

And anyone can field the answer or go from left to right.

MR. COUTTS: Well, at least, the VVSG is exactly that, a guideline. It's defining the bare minimum that you must have as an end to end system. It is trying to encompass the common denominator of all 50 states and six territories. So when we look at the VVSG, it's just a starting point.

Being out in the field like Eric, I'm also out on election day working the elections, seeing what happens, what doesn't happen, what can be made better. And in many cases, it's a county by county difference. In some cases,

23 it's you look at it and say this would make everybody's
24 life easier. So from the standards point, it's only a
25 starting point, or at least that's the way we look at it.

1 MR. O'NEILL: I guess my response is the simple
2 response is that's the function of the product manager;
3 right? We're all product managers up here. It's our job
4 to manage that funnel and make decisions about where you
5 start in terms of the guidelines, how much to invest on
6 top of that, whether or not you truly are attempting to
7 build something that scales across all 56 or your focus is
8 on the states where you currently do business. That's
9 what we're consistently doing.
10 And I think you can see in the comments we've
11 made here today is what we're trying to say to you as
12 election officials, to the state, to the public, to the
13 EAC. What we're recommending here is saying yes, we
14 absolutely need to keep the peddle down on developing new
15 systems and incorporating everything we've learned and
16 applying that and bringing forward new technology, but not
17 at the expense of where those systems are today.

Technology is a living, breathing thing. It needs to evolve on a particular scale. And there are many jurisdictions out there, the majority of jurisdictions in the U.S. that are satisfied with the system they have. They have efficiency in using the system. They want to keep that system. Other jurisdictions for various reasons may want to make a move. So be it.

But our first priority at Hart is making sure

that our current customers who have made that investment in that system that we're doing everything we can to help them continue with that system. And that's a priority.

MR. COOMER: I would just say you can't make these standards in a vacuum. I think we all sort of reiterated this time and again; there needs to be a system in place, a framework for making changes, targeted small changes. Again, whether it's a vulnerability that comes out of the blue or it's a budget that gets through testing, I mean, it happens. There's no system out there that's perfect. Or if it's a change to the statutory regulation, there has to be a way of addressing individual

targeted changes that aren't onerous on the part of vendor, cost prohibitive on both sides of the fence. I think we need to get those sorts of frameworks in place. And that's going to make the landscape much better.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: Thank you all very much for your time and your comments and your thoughts. Thank you for the four of you and for your patience today. Thank you, all of you, for coming.

We'll start with Ms. McConnell, if you don't mind. And I think it's a question everybody here has is how did you do it?

MS. MC CONNELL: Well, just a minute. Okay. Thank you for having me.

My name is Sandy McConnell. I'm with King County election in the state of Washington, the real Washington. I'm program manager of election operations, which was and still is, but with very big change in duties -- my responsibilities were managing polls and poll workers. So I was very invested in seeing King County elections go to entirely vote by mail system.

My work group also functions and operates the ballot drop-off locations, regional voting centers, ballot design and layout, and insertion and delivery of mail ballots.

Okay. I think first we should talk a little bit about why voting by mail is right for the King County voters.

The need for new equipment was fast approaching, as I'm sure many jurisdictions here can appreciate. It was either to invest in both precinct count equipment and central count equipment or select one system to fine tune and improve. The desire to reduce the tremendous effort to operate polls with a very low turnout was also -- during some special elections, turnout was as low as three to seven percent at the polls, with some polling places resulting in no votes cast.

Polling equipment was becoming burdensome to purchase, maintain, and distribute to poll workers. We

have an increasing real and perceived risk to place ballots and equipment in the homes of poll workers for

overnight stays.

To reduce the error rate we continued to experience at the polls was a paramount decision. We were having extreme difficulty finding and training an estimated 4,000 poll workers with an ever-increasing skill set required.

King County conducted all poll voting -- conducted a canvass of all the votes cast at our polls prior to certification. The errors continued to show voters receiving wrong ballot styles. Voters required to vote a professional ballot which was not required. Poll workers allowing persons to vote when they may not have been eligible. Those are the errors that we are able to identify.

Not able to accurately measure the number of persons that have been disenfranchised due to being discouraged because of the polling process.

It was particularly true when we began using our accessible voting units, the touch screen equipment at the polling places. Poll workers had an extreme difficulty setting the equipment up, assisting the voters. And this could have definitely resulted in disenfranchisement.

I want to make the point that I know poll workers

do not intentionally make these errors. Despite receiving up to twelve hours of training prior to election, the skills and responsibility level required was becoming too much for those persons who are available to be poll workers.

We also had the desire to join the 37 other counties in the state to conduct elections entirely by mail. Currently, there is only one county that remains in Washington that still uses polls.

The number of registered voters on permanent absentee ballot status was increasing with each election. The number of ballots cast by mail was far exceeding the number of ballots cast at the pools. In elections with the lowest turnout, the percentage of votes cast by absentee voter was up to 87 percent. The trend was absentee voters were determining the outcome for contesting measures on the ball. The lower the total election turnout percentage was, then the percentage of voters casting their ballot by mail was even higher.

I do have some historical information available on our website. I have it with me today. And it's difficult to make a comparison whether turnout has increased since going vote by mail. Currently, with only one year as voting entirely by mail, it is too soon to say that there is an increase in turnout. In Washington state

and King County, the type of election years as well as the contests are more indicative of turnout.

We received the same recommendation and endorsements and supported by various stakeholders groups and other committees: To focus our efforts on one single common system that the majority of the voters preferred and to increase the accountability we were experiencing in our absentee ballot system.

So now I get to your question: How do we do it? Okay. We knew it needed to be a collaborative and inconclusive effort. We formed a transition leadership team.

And I just want to give you a bit of history. I started in elections in King County ten years ago. And I remember my very first day was organizing poll worker equipment, and I was, like, this is wasteful. I was just appalled by how much effort I was putting into this. And I thought, wouldn't it be great if everything was vote by mail, because I, as a voter, had been voting by mail for ten years prior to that.

So we needed to have all of the staff though get

to that point. And we certainly needed all of the voters to get to that point of acceptance.

So it took about five years of actual active, active, active movement towards voting by mail. We

started in early 2005. When most of the counties in Washington state moved from one election to the next, they were vote by mail. We knew that wasn't going to be a much different challenge for King County.

So we formed this leadership team. And we needed to have a section of people, a group of people who just focused on voting by mail. And that team consisted of a coordinator, a functional analyst, a fiscal specialist, a communications coordinator, all solely dedicated to the transition to voting by mail, because the rest of your staff, they have to continue to conduct elections.

The rest of the transition leadership team consisted of numbers from our election management team from all functional areas, and they served as the subject matter experts.

Our first endeavor was establishing policies that

addressed security, accountability, and ones that eliminate barriers to casting a private and independent ballot. Voting by mail is an easy and convenient method, but it's not for all.

For the security, we established a security plan that including everything from designing our facility with controlled access, yet allowing the election processes to be observed. I'm not suggesting that you need to build a new facility to conduct elections by mail. But since we

were in the stage of moving our entire office in order to be a consolidated department, it was a good time to design the building for that function.

To use your current space, it's just a matter of repurposing the space. Less election equipment distribution space is needed. You have very little equipment and maybe need more space for ballot processing.

We also hired an independent security review company that completed a security review of our entire process, from our equipment to our facility.

For accountability, those voters who were already

12 receiving ballots in the mail, we wanted to enhance
13 confidence and accountability. So we needed to offer them
14 some fun games, not just receiving their fun ballot in the
15 mail. We decided that we would have online ballot
16 tracking. And that was a tool that voters can use to
17 track their ballot for three steps in the process.
18 The first step is when you go online, you put
19 your name and your birth date in. And it tells you where
20 your ballot is in the process. Your ballot -- the first
21 step is that your ballot has been assembled and put into
22 the post office mail system. They're going to deliver it
23 to you. So then you're going to start watching for it.
24 Then the second step is when you have voted and
25 returned your ballot packet to us, that we indicate that

1 your ballot has been returned.
2 And then the third step is that we tell you that
3 your signature has been verified and that you have been
4 completed with voting. Or a message may come up that your
5 ballot has been challenged, and you will receive
6 communication regarding the next step to get your vote

counted. We begin this message as soon as we start receiving ballots. And then voters have 20 days post-election to cure any issue in a primary or general. And they have 14 days in a special election. And I can get more into how we go about doing that.

For voters that were not familiar or not comfortable with the voting by mail concept, communications and information was paramount to gain their trust and acceptance. We learned about their fears and concerns from focus groups and tracking caller's comments during elections. An ongoing outreach effort was launched to reach those persons and address those concerns.

Some of the things we tried:

To increase the number of registered voters by getting them to try it. And so in the primary of 2006, we launched a program at the polls called, "Try It, You'll Like It." And we hired ambassadors to encourage poll voters to sign up and receive an absentee ballot for the upcoming general election. And they were also able to

answer questions of any poll voter who may have had a

concern.

We also did a big push through media, political parties, and direct mailing to poll voters to update their signatures. That was a multi-purpose educational outreach effort. You needed to notify the poll voters that we were going to go to an all mail voting system in the future and their signature would be used for the purpose of verifying their identity.

An internal goal was to also clean up our missing signatures in our voting records as well as to update signatures for those who may have once signed with hearts, flowers. And when you sign your voter registration application when you're 18, it differs greatly when you're a voter when you're 45. And in an all-mail voting system, these signatures need to match. And the better your signature files are, the less signature miscomparisons you will have when ballots are received.

We also use the phased-in approach. It wasn't as quick as some smaller counties in our state who just were able to conduct elections in a two-system poll and mail to just all voting by mail. We thought with a county as large as us, a phase-in approach would be best.

So we conducted the city of Seattle's March of 2007 special election entirely by mail. Washington had a

provision that allowed any jurisdiction requesting an election to request it to be entirely by mail. So we worked with the city of Seattle to have them request to have their election conducted entirely by mail.

And so again, that was a two-fold reason: To gain public and stakeholder confidence and to try out some of our plans and to meet some of these requests by poll voters.

We also did a tremendous amount of outreach with stakeholder groups in order to address their key concerns. We needed to meet with the jurisdictions for which we conduct elections, political parties, elected officials. We discussed things that were key messages for them, such as how voting by mail may change how and when they target their voters. And this was very effective. We were able to explain our election process in a voting by mail system. And they, in turn, shared some of the strategy changes that they would approach. And many ended up really feeling it was an easier approach to target just that one group of voters.

We also conducted and had numerous -- we did PSAs. And some of those are on our website. And I wish we had more time. I have some with me. But for the sake of time, I won't show them.

And we did a lot of notification at polling

places. We did transit ads, all with the effort of maybe it's time to update your signature. We're going vote by mail soon. We're going vote by mail soon.

Keep in mind, this is, like, 2007, 2008 and we still weren't going vote by mail. I'll get to those delays in a minute.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: Sandy, can I jump in real quick? How was it set up in the state prior to any -- in other words, did state law have to be changed and the county had to opt and the other counties --

MS. MC CONNELL: Pierce County was the other one.

The law changed at a state level that allowed a county to opt in. And also during that time, many of the county codes -- I mean, the legislative code needed to be changed to allow for the different rules, regulations. You know, a tremendous effort was put into the state of Washington to see that this moved in this direction.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: Prior

to the change, how many voters were assigned to each polling place?

MS. MC CONNELL: It varied. We had -- that was another thing that was kind of a transition. I remember about ten years ago we had 625 polling places. Slowing dropped that down to about 525. And by the time 2008

rolled around, we had dropped it to 393. So we're already starting to do the take-away, the take-away, the take-away. Getting them kind of going.

Even minor changes to poll voters was very difficult for them to accept. What do you mean by polling place is closed? But those were also communication skills that we needed to really hone in and really letting people know how do you let people know your polling place has changed in more than just one or two ways.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: Do you provide any in-person polling opportunities either prior to or on election day?

MS. MC CONNELL: In our current system?

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: In the

15 current system, just in the county office.

16 MS. MC CONNELL: Yes. And I will get to that in

17 just a minute.

18 Okay. So, again, reaching those poll voters and

19 letting them know that we're going to vote by mail.

20 One of the examples I'm going to give, in the

21 general election of 2008, which was a presidential

22 election -- I don't need to remind you -- it was one of

23 our largest poll turnouts in years. It was 27 percent.

24 You know, that was just like wow, even though we had like

25 an 89 percent or 90 percent turnout in the countywide for

1 the election.

2 We handed out "I voted" stickers. And this was

3 something that poll voters had been requesting for years

4 and we kept denying. We thought it's one more supply,

5 it's one more supply. You don't need a sticker saying you

6 voted.

7 As an added bonus to poll workers and voters,

8 we're decided to give out "I voted stickers, except they

9 said "Farewell to Polls." It was one last reminder this

is the last time you're going to vote at the polls. It said, "Farewell to Polls, I Voted in 2008."

Again, one of those efforts so that every effort you make as an outreach, try to have it meet more than one reason.

We also had newspapers run stories on long-term poll workers as a human interest story in that election. Big elections, the newspapers really try to run a lot of voting stories. And since we were -- that was the last election that King County would use polls, they did human interest stories on long-term poll workers, which was really fun.

MR. ERDMAN: How you did you convince the legislators? Was it dollars? Was it voter turnout stats? Or was it something else?

MS. MC CONNELL: I really believe it was a move

across the entire state that the voters were speaking for it. It was a huge percentage of voters were -- in 2005, we were at 62 percent had permanent absentee ballot status. I think also Washington state had a long history

of absentee ballot voting. From 1990, you could have permanent absentee voting, where I know many states in the country still require you to have an excuse.

So it was an easy transition. It was clearly something that voters were really requesting.

MR. ERDMAN: Did you see your numbers increase once you went to all vote by mail? Did you see more voters actually vote?

MS. MC CONNELL: That's a difficult question, because we only have one year. And like I said, 2009 is an election that is held for all of the cities and special districts, such as water, sewer, schools, those types of elections, which have typically been lower elections anyway, particularly in a primary.

We did see about three or four percent. I think it will continue to increase. I'm really confident it will. And I think the more people who find that voting by mail is easy, that you'll see that increase.

MR. ERDMAN: Did you look at your poll voters? Are they still turning out on your vote by mail or was there a dropoff in just that segment of poll voters?

MS. MC CONNELL: We did not identify those particular poll voters. Once we went entirely by mail, those voters became --

MR. ERDMAN: So you didn't do any scientific research --

MS. MC CONNELL: Correct.

MR. ERDMAN: -- for the political scientists?

MS. MC CONNELL: No.

I will tell you, just for those who are not familiar with King County -- I guess I should have given a little bit of history. We have 1.1 million registered voters. We mail absentee ballots or mail ballots now 20 days prior to an election. And we have up to five elections in a year. We always have a primary in August. And we always have a general in November. But we have the option of three other special elections in the spring. And we mail our military ballots 30 days prior or we also do in large number of e-mail ballots to requests.

So the mail ballot may not meet the needs of the voter with the disability or a particular challenge that mail ballots creates a barrier to voting. And that is something that you need to really look at in building confidence for everybody. Meeting the needs of your voters with disability, that means you're also meeting your needs of your community.

So establishing voting centers that were not precinct-based specifically designed for voters with disabilities. We worked closely with our Disability Advisory Committee to make sure that we were meeting the needs of those voters. We had previously established the Disability Advisory Committee prior to placing our accessible voting units at all our polling places, which began in early 2006. So this was a committee that we had a good rapport with, met with frequently, so they were a tremendous source of helping us making sure that we still met the needs of voters.

We looked at best practices and modeling for these voting centers after some of the nation's largest early voting centers, because essentially that's what they're doing. Voting centers by statute must open 20 days prior to an election.

We formed a consulting group that would report to our county legislative body to recommend placement and the number of voting centers. The group consists of members of our Disability Advisory Group, Minority Language Coalition, county council staff, political party members. And we established a criteria of what a voting center needed to do. And I have that criteria. But primarily,

24 we needed a secure location and obviously accessible and
25 primarily accessible to public transportation, because we

1 thought if you're really addressing those needs, public
2 transportation is probably the most important thing you
3 can offer.
4 And so after the group met and determined the
5 locations and the number, once it went to our county
6 legislative body, that number was therefore set at three.
7 It had originally been suggested about 17. But due to the
8 operating costs, three were chosen. We have one that
9 operates in our office 20 days prior, and it operates
10 during office hours. And our other two locations
11 originally operated four days prior, including election
12 day, from 10:00 a.m. to 5:00 p.m., but on election day
13 from 7:00 a.m. to 8:00 p.m., and that has been reduced
14 just due to budget issues.
15 Also, we were operating those accessible voting
16 centers on a Friday, Saturday, Monday, Tuesday, and the
17 lowest turnouts were on Friday and Saturday by a huge
18 number. And I have all that information available. We

track the number of voters for every election, if anybody ever needs that information.

But on some Saturdays -- and we had been told that by the research we did prior that Saturday is the lowest number of voters to show up.

We also wanted to offer a service that was popular at polls and that was returning your absentee

ballot without postage. So we established a ballot drop-off location. We formed a partnership with the county library system and we placed free-standing, unstaffed ballot return boxes. And when I say boxes, they're more like small garden sheds. They were very, very large. We knew if we were only going to have a limited number in our county, they needed to have the ability to hold capacity.

Another partnership was formed with the city of Seattle neighborhood service centers. And voters could return their ballots through the center's secure payment depository boxes.

This was another one of those phased-in projects

we did. We started implementing the ballot drop box locations in the primary of 2008 and prior to going to vote by mail.

In 2009, we had 19 locations. Ballots were collected on a daily basis. They were extremely popular. In our last election in November of 2009, 21 percent of persons casting a ballot did so by dropping their ballot packet in a ballot drop box.

MS. PELLERIN: Do you pay the postage on the ones that are returning in through postal service?

MS. MC CONNELL: No. First class stamp is required.

MS. PELLERIN: But you provide the drop centers. That's an alternative.

MS. MC CONNELL: Now the unfortunate news. But unfortunately King County had a difficult budget year in 2010. I don't know if anybody else did. But each county department was asked to make a significant cut in their budgets. Each county department needed to look at cutting services that were not mandatory.

And King County elections had very few options to offer and that would not compromise our ability to still conduct elections. The drastic reduction in ballot drop boxes was identified. So beginning in February this year, we now only have two locations. And also identified was to reduce the number of accessible voting center hours. So that was also a reduction.

Again, those are non-mandatory by state --

MS. PELLERIN: At the voting center, that's where people could drop off a ballot or get assistance? Or what if they needed a second ballot?

MS. MC CONNELL: Yes. That's exactly what I'm talking about accessible voting center. Obviously, the most important function it does is it provides that opportunity to a person with a disability to cast a private and independent ballot.

But also you have to allow for a person who

failed to recognize until it was too late to get another replacement ballot and they could go and cast a ballot also. The only option for voting at our accessible voting

centers was on our touch screen equipment.

MS. PELLERIN: How do you secure that overnight if it was open?

MS. MC CONNELL: What we did was worked with the sites that they had to surrender control of our rooms and we changed out the keys, and we were the only persons allowed to have the keys during those five days that we occupied.

We put tamper evidence seals over the doors and traced them.

All of our equipment was set up in the room though, which was really a nice option to have.

And we put a lot of effort into planning our accessible voting centers. Unfortunately, I wish we could have more. But because we don't hire just on a poll worker status, we hired staff that we trained for about a week prior. They're trained in how to meet the needs of a person with a disability. They're fully trained on all of the equipment. They can trouble shoot all the problems. They are interacting on laptops at all of the locations onto our election management system.

So as a voter who comes in, it's not like, oh, I

can't find you in the poll book. You can do actual research. They're able to go into the statewide voter database and find out what county they are registered to vote in and maybe assist them that way.

The other great option is that because these are regionally based, that you are providing that person who may not be in your database the opportunity to still cast a provisional ballot. But it would be more fine tuned to the address for which they give you. And we do that through a very unique way as well. And that is we use our touch screen equipment that is not certified to cast provisional ballot, but they cast their ballot that goes onto the piece of paper. They tear the piece of paper off and place it in a provisional ballot envelope, and we would hand count those.

For King County, that it was a huge, huge improvement. In 2008, we had 32,000 provisional ballots cast. That's a lot of research and work to be done because of voting at polls. And a voter may have gone to a wrong voting location. A voter may have not have had proper identification. Or a voter may simply kind of got caught up in the wave of I'm going to vote, too, but forgot you had to register to vote first. And now we have between maybe eight, ten, twelve provisional ballots.

MS. PELLERIN: Do you have same day registration?

MS. MC CONNELL: No. Our registration cutoff is eight days prior to election.

MR. LOGAN: Can you talk about -- I want to take us back to the earlier discussion, because I know that part of your transition to going to vote by mail was contingent on your ability to acquire new vote counting equipment that, because of your size, to count a million vote by mail ballots, you need high speed readers. And there wasn't anything available that was certified through the EAC for that purpose. So I know you went through a process that was similar to I think what was described by the earlier panel in terms of some sort of provisional certification through the Secretary of State in Washington. Can you walk us through that a little bit and how that was a critical element in your ability to implement the vote by mail?

MS. MC CONNELL: Sure. Like you said, we had equipment that was about ten years old. It wasn't that the equipment wouldn't not necessarily do the job. But we didn't have components for high-speed delivery on that. The feeders were not to be found anywhere in the nation.

22 And so we were limited to about 30 to 40 tabulators, and
23 we were also limited because of the tabulation laws in the
24 state of Washington that we can only begin counting
25 ballots on the election morning at 7:00 a.m.

1 So we had desire to look into -- and I think John
2 Groh -- we were one of the first counties to be kind of
3 one of those leaders. And we needed new equipment. And
4 we needed high-speed scanners. And this allowed us to do
5 pre-processing of ballots prior to election day. So as
6 soon as ballots are gone through the signature
7 verification and opening process, then they are scanned.
8 And tabulation actually doesn't occur until 8:00 p.m. on
9 election night. So the results are not.
10 This equipment was not certified. It is the --
11 well, it was the Diebold -- then it was Premier. But
12 during that process, because remember it was five years in
13 our transition time that we did purchase the Premiere
14 election system high-speed central count digital scanners
15 with the 1.2 suite. This was not certified federally. We
16 had various ones that did not have them. I think could

17 have been political, could have been numerous reasons.
18 But it seemed that the election equipment was not going to
19 be certified by 2008.
20 So we went ahead and had our -- continued having
21 our own internal -- again I mentioned briefly about we had
22 a security review. We also had set up parameters of how
23 we wanted to have that equipment work for us. That is we
24 did our own volume testing. We did our own stress
25 testing. And then we involved the state for state

1 certification, and we did -- we were granted a provisional
2 state certification to begin conducting -- using that
3 equipment for our first election, which was February of
4 2009.
5 SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: Thank
6 you.
7 MS. MC CONNELL: I'm almost done.
8 SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: If you
9 have a key take-away -- I know we've taken your time with
10 many questions. But if you don't mind wrapping up, that
11 would be great.

MS. MC CONNELL: So I think a really important piece is when to transition, and it was establishing that critical path. And we responded to the event that occurred and made an adjustment to that as needed.

But you do not abandon your plan once that is established. Once you've identified your assumptions, that must be met. In order to have success, you really need to stay with it. They can be legislative changes that must occur, your equipment upgrades and certification; system integration, which was extremely important to us.

And I'm going to jump down to some of our huge successes, since we are -- I'm very proud of that I want to talk about. And one of the things is your materials

have to be really, really clear. Now your broader scope of voters, those who may have limited reading, English skills, we really adopted and utilized every one of the concepts and principles of design for democracy and did our ballot design. Please go on our website and look at a sample website. It's beautiful.

Our ballot instructions -- and not only had it include how to mark your ballot to have your ballot count, but also how to return that, because now it's more than just making those marks accurately. It's getting that ballot back to us.

We re-designed our envelopes. And also go on the website and look at them. They're great. We used colors so they're very noticeable in the mail stream and hopefully in the voter's mailbox and then later when they're on the kitchen table and they can't find them.

Voting by mail also cleans up your voter registration files tremendously, because you are in constant contact with your voters. You send them a ballot. When it comes back it's undeliverable, there's your opportunity to know that something is up with that voter's address. And also when a voter doesn't receive their ballot in the mail and everybody else is, then they can call and say, "I didn't get mine," and then you have that opportunity to clean up their record and send them a

new ballot.

Just want to talk about our accountability because --

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: Sandy, I apologize. We're going to have to follow up. But thank you very much.

MS. MC CONNELL: All right.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: Mr. O'Neill.

MR. O'NEILL: I'm Bill O'Neill with Runbeck Collection Services.

I'll go fairly quickly, because I know there's a lot of questions out there.

And so Runbeck has been in business for about 33 years printing ballots. We now have a Ballot on Demand system we've been selling for about two years in various states throughout the country.

Kind of the key to Ballot on Demand which is why I was asked to be here -- and I want to thank Secretary of State's Office for inviting us to speak about this -- is our ballot printing solutions being adopted by a lot of counties throughout the country. Ballot on Demand is really an optimal way to print ballots. What it does is gives counties and election officials the flexible solution to print their permanent daily ballots, military

overseas, duplicate ballots, provisionals, counter ballots, test ballots, et cetera, on demand on their site as needed as opposed to stocking a lot of excess ballots or an overage of ballots to make sure they have enough to meet the voter's needs. It helps to eliminate when using Ballot on Demand pre-ordering ballots, stocking the shelves, keeping in some cases hundreds of ballots on hand in the event that voters come in and want to vote.

What it also does is it reduces paper consumption. It reduces toner usage. It reduces a lot the environmental impact from printing ballots, et cetera. Human errors that happen when picking and pulling off-of-shelves sometimes will grab the wrong ballot. Sometimes they'll give the wrong ballot to the voter and not know it. And through using Ballot on Demand, the way our system works, they can get a ballot directly from the counter and it requests the right ballot for that voter.

It provides the ability of print ballots within 48 hours of completing their election programming of ballot layout, which for military and overseas ballot as we heard about pretty critical, because you can mail them a ballot that will come back and be tabulated in the system. That's the same as every other ballot that gets sent out. If they finish their election programming within 48 hours a jurisdiction can be printing ballots.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: Bill, quick question. It's not a voting system though; right? It's an add-on to the voting system.

MR. O'NEILL: Correct. So what the ballot printing system -- it's nothing more than a printer with the capability to print official ballots that can be tabulated in an ES&S or Premiere or Sequoia or Hart system. It doesn't do any tabulation. We're right in the middle. We started as a ballot printing operation. Found a need in-house of printing small runs of ballots and decided to come up with a system that would meet that need.

So it doesn't do anything with tabulation. It doesn't do anything with ballot layout and design. It takes an output of the ballot of the ballot programming that the counties do, and we just take that in a PDF form and make it ready to print.

It frees up space. The counties currently are limited with space and time. So they'll stock ballots on their shelves and have a ballot volt where they keep all

21 their ballots. It eliminates the need for that. Instead,
22 it can be replaced with a ballot printing system.
23 And it allows more flexibility when ordering
24 election day ballots. You no longer have to order 110
25 percent or 105 percent because you're concerned what voter

1 turnout will be. The 2008 presidential election -- I
2 don't know if you knew -- but it was one of the largest
3 turnout elections in the country for many, many years.
4 And counties were doing supplemental orders consistently
5 to make sure they had enough ballots because it was really
6 picking up momentum.
7 With Ballot on Demand, you don't have to do the
8 supplemental orders and incur those additional charges.
9 You can print it on site. The county has the capability
10 of restocking their own ballots.
11 There is, again as I mentioned, a lot of
12 environmental benefits to it. The common usage of it is a
13 county will use it in early vote centers. We have a lot
14 of counties in Florida that have early vote centers, 26
15 centers. They'll roll one of these out. They don't have

the manage ballots on site at 26 different centers, so it saves them the cost of ordering enough ballots to stock 26 vote centers.

Same thing in Colorado. They use super-centers or over-the-counter ballots or daily requests that come in from counties. They don't have to stock their shelves anymore. They get the data request in. It's generated straight through our system. They get 212 requests; they print 212 ballots and they can get them out that day.

Counties can print, as I mentioned,

over-the-counter ballots so they don't have to pick and pull. And then a county can order the minimum precinct quantities at 75 percent and know they have a backup if they need to print more ballots.

As an example, we've got several case studies that are available on our website, and I've got some white papers that speak to this. In 2006, Maricopa and Pima Counties used our system. Maricopa printed 1.8 million ballots roughly for early voting. They ended up using 617,000 of those. So they had an overage or stock left on

11 their shelves of 1.2 million ballots that weren't used.
12 In 2008, that number was zero. There permanent absentees,
13 et cetera, were nonexistent because they used our methods.
14 Pima County, same thing. They printed 871,000
15 ballots in 2006. They used 219,000 ballots. So they had
16 652,000 ballots sitting on their shelves, had to be boxed,
17 label, stored, destroyed. Just an amazing quantity.
18 That worked out to a total of about 1.8 million
19 ballots between those two counties that did not get
20 printed and stored for 2008. That's about 55 tons of
21 paper. That's about 1320 trees, and there's more
22 calculations that you can do down to carbon emissions and
23 other things.
24 It was a cost savings of the ballot printing
25 alone of about $485,000 for those two counties for one

1 year. That $485,000 is ballot cost only, does not include
2 destruction of ballots, storage of ballots, administrative
3 overhead, et cetera.
4 We have -- and I'll skip onto there is about 25
5 counties serving about 9.9 million voters that are

currently using our Ballot on Demand system. So you can take those numbers from Pima and Maricopa and extrapolate across the country as counties are adopting this and using this Ballot on Demand. The savings just kind of becomes exponential throughout the country.

So just a quick summary and I'll wrap it up.

Reduce cost; ballot printing within 48 hours of finishing ballot layout, design.

Significant reduction of paper usage, reduction in administrative and overhead for managing ballot.

Saves tree and reduces emissions from all of the production of ballots, as well as reduction in ink and over consumables and harmful items that are used in the print production process.

Transportation costs are lower. Storage costs and needs are lowered.

Reduction of hazardous substances, and it just kind of goes down the line.

So, again, the Ballot on Demand is not a new thing. I think the way we do it is new, better, and

different, faster, better, of course. But it's been around for a while, but I think it's starting to take on a lot more interest now because the number of voters that are voting absentee is certainly increasing exponentially. Thank you.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: Thank you.

MR. LOGAN: Does your system require security paper to print the ballots, or is it numbered stocked? Is there any way to account for that the number of ballots that were printed matched up with the number of ballots issued? Or what's the security involved in that?

MR. O'NEILL: How our software works is it tracks every ballot request. Every ballot that gets printed, it stores who requested that ballot and when it was printed and how many were printed.

Working with Secretary of State's Office, it's different in every state. But here in California, counties are required to monitor their stocks. So we will send them 15,000 sheets of certified ES&S paper with the corner cut and all ready to go with stubs if they want it. Then that stock is tracked on a regular basis against how many they've printed. So they can say I've printed 15. I've thrown away two pieces of paper. I now have 14,883, if I do the math right. So it becomes a manual process to

stock that. But our system will track every ballot request, so at the end of the election -- in Florida, we did it daily. Every day the polling places run a report and say this is our data. This is how many we printed. We started with 15,000 sheets of print. We printed 200. Now we have 14,800.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: I know you're approved by the Secretary of State as a ballot printer. Do you have any other interaction with EAC at any other level?

MR. O'NEILL: We don't. Most of our interaction is at the state level. So we work with the Secretary of State's Office in each state. They all have various requirements, but EAC hasn't gotten involved, which kind of brings me -- I know they they're very interested in Ballot on Demand and kind of where it's heading and the cost benefits and other things. So we'll probably be reaching out to them.

On the cost side, there's new technology. If people want to bring it on, there's different ways to look at that. Some counties are looking at if we do a cost benefit analysis, does it make sense fiscally for a county to do it. Are they going to save money on the system on

the ballot printing, et cetera, enough to justify it over a course of a year or two years?

The other thing, we are looking at working with EAC and talking to Secretary of State's Office. Is HAVA funding available for this, because it is a very tough budget time for everyone.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: Thank you.

MS. LA VINE: Just a comment that Sacramento County is working towards this empty ballot shelf, and we're going to order the contract. And we're looking at savings close to $200,000 per major election just in our ballot printing and labor costs associated with that. So we are looking forward to that.

MR. O'NEILL: Sacramento County has been using the system about a year and a half now, yeah. It's a different paradigm to not stock ballots on the shelves.

MS. LA VINE: To walk into your absentee ballot room and the shelves are empty.

MR. O'NEILL: It's not a comfortable feeling.

MS. LA VINE: You have to take baby steps on that one.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: Thank you, Mr. O'Neill.

Mr. Miller, thank you very much for being here.

MR. MILLER: Good afternoon, county election officials. And I guess virtually Madam Secretary has been

watching over the internet today.

My name is Gregory Miller. I'm the Chief Development Officer of the Open Source Digital Voting Foundation. I want to thank the Secretary and the DS for holding this hearing and for the DS's endurance since I have recognized we are crossing the six-hour barrier here shortly. So I appreciate everyone's endurance.

Many of you may not have heard much about us. We've been intentionally under the radar. I hope in the next 15 minutes to sort of rectify that and tell you a little bit about who we are and what we're doing.

Again, thank you for asking me here today to provide some background and purpose and work and status.

The Open Source Digital Voting Foundation was conceived in a conference room of a venture capital firm over three years ago in the Silicon Valley as we attempted to assemble a world-class team of technologists to address this perplexing problem of trustworthy voting machines. A goal was established to build election and voting systems that could be accurate, transparent, trustworthy, and secure in a manner that could avoid the pitfalls of voting systems industry.

At that time, we suspected and in the past two years have validated our suspicions and probably yours, too, that the voting system market is rather

dysfunctional. However, we believe it has the potential to be re-invented in a manner that allows the businesses of voting systems to flourish while delivering our four goals of accuracy, transparency, trust, and security.

Two of us felt so deeply about this that we left the comfort and security of our paid positions in the tech sector in the venture capital community to pursue a project that we hope to deliver real solutions. Today,

we're a team of eight.

We had three problems to solve before we could say for certain what we envisioned had any hope of reality.

First: We needed to establish whether it was possible to combine the structured discipline of high assurance engineering with the unstructured sometimes chaotic approach to open source development. We did. We've developed a core team approach that makes this possible. And of the two aspects of open source philosophy, development and employment, our open source strategy emphasizes deployment. And I can speak to more of that later.

Secondly, we also need to ensure that whatever we developed would amount to technology that elections jurisdictions could actually adopt, adapt, and deploy. We didn't want to end up with the Smithsonian so to speak, so

we realized that although the entire population of U.S. citizens is the intended beneficiaries, the real stakeholders frankly are you. The elections

4 administrators, managers, officials, and technicians who
5 are charged with delivering accurate and fair public
6 elections wherein there is a certainty that all ballots
7 are counted as cast. We did this by creating a
8 stakeholder community comprised of domain experts like you
9 to drive the requirements and specifications of our work.
10 And third, we needed to be certain if we can
11 deliver on the first two challenges and this project could
12 be properly funded in a sustainable manner to deliver
13 results. We've done this as well.
14 So what exactly are we about and what are we
15 trying to achieve? In past three years of traveling
16 around the country attending countless meetings, speaking
17 with election officials, volunteering at polling places,
18 observing election processes, recruiting advisors, meeting
19 activists, and immersing ourselves in the world of
20 elections technology, policy, and law has taught us an
21 enormous amount. And, yet, we think we've just danced on
22 the tip of the iceberg.
23 But there's one very clear mandate that's emerged
24 in this work and that's become our charter. Specifically,
25 our charter is to restore trust in how America votes by

fostering the design and development of open source elections and voting systems technology as publicly-owned critical democracy infrastructure that is accurate, transparent, trustworthy and secure.

In other words, we've reached a conclusion that the blueprints and specifications of the underlying technology on which elections and voting processes must run is or should be a national asset. Something too critical to our democratic processes to be privatized and attained as a black box priority trade secret. This technology should be publicly owned, developed and maintained in a transparent manner. But equally important is our belief as true capitalists at heart there needs to be a flourishing industry for voting systems implementation, service, and support.

We believe that by taking the heavy lifting of the research and development to develop such trustworthy systems off the shoulders of the private sector where the evidence is compelling that today's business models just simply cannot sustain the kind of innovation, research, and deployment required to build the kinds of viable, profitable, necessary business, a business that will be based on their real domain expertise and competency. That is the systems's integration and deployment and technical support aspects of voting systems. In other words, with

the technology complete, these vendors, both legacy and new entrants, can focus on differentiating their business in how they package, deliver, deploy, and support finished systems. And that's principally our vision.

The Foundation is supporting projects that result in publicly available election technology framework addressing the entire ballot ecosystem from voter registration through election certification and audit. The framework is being designed using the latest software architectural principles to ensure easy extension and modification for any election jurisdiction to adopt, adapt, and deploy. These are the same principles that have delivered products from companies like Apple and services from Google.

The flagship effort of the OSDV Foundation is something we call the Trust the Vote project, a technology research and development effort sustained by a full-time senior technical staff and contributed to by volunteer and paid developers with the support of advisors and elections and voting technology policy and process and is essential to this work and different from any other open source effort. The TTV project is driven by the stakeholder

23 community. As I suggested, comprised of elections
24 jurisdiction officials from all over the nation who direct
25 the requirements and specifications under which the core

1 development team designs and develops technology.
2 So a little bit about our milestone and current
3 status. I apologize. I had lots of pretty animations and
4 pictures for you, but what connects my map to your display
5 was stranded in the snowstorm in Washington.
6 Let me say a little bit about what we've done.
7 I'm pleased to report to you today that the state of the
8 Trust the Vote project is viable, sustainable, adoptable,
9 and deployable. Let me explain how and why.
10 The Foundation receives generous support from the
11 Silicon Valley philanthropists, as well as pursues grants
12 from elections jurisdictions and other non-government
13 organizations. And we all receive public support through
14 individual donations.
15 But what really makes this viable is our growing
16 network of collaborators. Again, I should have a slide
17 for you. But all these I understand will be available on

the website this evening for you.

The stakeholder community stands to directly benefit from the results of the Trust the Vote project is driving the requirements and specifications as I suggested. But adding to this, a growing list of technology corporate supporters who are actually working with us in various R&D capacities or currently considered in supporting our work. These are not vendors who have

any intention of ever delving into the market of voting machines, but who, like us, believe there is a tremendous opportunity and good will in bringing new innovation to what again we consider critical democracy infrastructure. This includes companies like Sun Microsystems, Oracle, Red Hat and HP Labs, to name a few.

With this kind of momentum and traction, the Trust the Vote project in our opinion is a very viable alternative to the future of America's elections and voting technology infrastructure. The project is sustainable, an important thing for you to consider. The Trust the Vote project is charged by its backers and

Foundation Board to deliver open source elections technology. However, this is not an ongoing enterprise. We're not a vendor. We have absolutely no commercial intents, no interest whatsoever. It is a multi-year project, but it has a life cycle. Once complete, this technology will be maintained in a repository with a licensed server to enable any systems integrator or any elections jurisdiction itself to download the source tree and deploy it on approved hardware. I'll say more about hardware in a moment.

The repository will require minimal maintenance effort by a very small custodial team. This team will manage ongoing certification support, which I'll speak

about in a moment, while coordinating contributions of extensions and localization that should result in deployment and use of voting systems based on this open source technology.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: Can I jump in and ask a question? When do you estimate this will be available?

MR. MILLER: The project is underway right now, and current pace should have a fully deployable system by 2016. However, our engineers are telling us that it all depends upon how much resources we apply. We have the ability to accelerate that significantly, and there are several things we're introducing this year that are already ahead of schedule.

So the idea is that the technology base will remain open and supported indefinitely long after the dissolution of our core team of the people involved in this initial development.

Now, a large part of the ongoing value and sustainable from our perspective of this technology base stems directly from its openness. The ability of a wide range of commercial enterprises to deliver systems integration deployment and services to support to those elections organizations such as yours that wish to use their assistance in deploying these open source space

systems. All this is built-in requirements and specifications contributed again by the intended

3 beneficiaries, elections jurisdiction. I'll speak in a
4 moment about that community itself.
5 We think of this as technology by the people, for
6 the people. And it's our idea of a digital democracy at
7 work.
8 That's why we believe what we're doing is
9 sustainable. We also think it's adoptable. Adoption is a
10 very important part of this. One of our first and
11 foremost goals of starting this project was to introduce
12 technology that could be embraced for real applications in
13 election. We believe we've addressed this again by way of
14 our stakeholder community. It's under their advice and
15 comment and direction and scrutiny that all of our
16 development is taking place right now.
17 So the growing community is driving our design
18 development work. That's very different again from most
19 open source projects. But what it does provide for us is
20 task approval of the resulting work product, because these
21 same jurisdictions that are engaged in giving us the
22 advice are ideally putting themselves in a position to
23 eventually acquire this technology. This is not -- I want
24 to be clear -- this is not one of these blue ribbon
25 customary advisory panels. It's not there principally for

PR purposes. This group is actually materially engaged in real work and advising what we're doing.

It's deployable. Finally, returning to the mention I made a moment ago about hardware, I want to make sure that you understand we have no dilutions of the challenges to producing publicly-owned technology intended to be used in public elections. I want to be clear today that an important objective of our work embraces and doesn't diminish or dismiss the challenge and requirements to successfully achieve federal and state certification of our technology. We appreciate the investment required to do so, and we're prepared to make it.

We understand the challenges and have the two-pronged approach for this.

First, we're starting already to have discussions with NIST about how to bring testing and certification methods into the 21st century, shifting away from the monolithic voting systems model to a componentized unit level testing model. This won't happen overnight. We understand that this is going to be a process. But the good news is the discussions we're having are very productive. They recognize that, but they need a working model of something to inform the discussion.

So we believe the technology will provide that excellent vehicle to advance that cost. And we know we

can't rely on any radical shift of those regulatory processes, so we have a second prong. Our second prong is very simply we will identify and integrate our software technology to a referenced hardware base to provide this monolithic system for purposes of achieving federal certification as it stands today.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: Sorry. As a practical matter, that means new hardware needs to be built or an existing vendor needs to license you.

MR. MILLER: Actually, not. So what we are doing is building a software architecture framework that will run on commodity hardware. So we're right now, for example, testing scanners from HP and we're putting any software and new operating systems on them that we've been building. We're looking at commodity of personal computers. We have a device builder that tests those machines for their, if you will, virginity to qualify if they're actually empty and there is nothing on them, and we load the device for that machine.

So this software technology framework is

21 predicated on what has been referred to as COTS, or
22 commercial off-the-shelf systems.
23 MR. ERDMAN: Question. When new technology is
24 developed, how will you incorporate it into your software
25 and make it work?

1 MR. MILLER: So we are building a framework that
2 is meeting the requirements as they're handed to us. The
3 framework is being designed to be very malleable and
4 extensible, because we recognize one size does not fit
5 all. So every jurisdiction in the country has a different
6 way of doing things. Our goal is to build a framework
7 that can be tuned and adjusted. That framework will
8 represent a reference model that we will seek
9 certification for.
10 Any addition or change to that framework will
11 have to, under a unit level testing model, be tested.
12 Under the monolithic model will have to integrate it into
13 a version which we grab and we go through another testing
14 process. That's currently the vision for how that will
15 work.

16 Contributions can come from anywhere. This is
17 the difference between a development license and
18 deployment license, something I haven't spoken about yet.
19 But the idea is anyone could take a development license,
20 do anything they want it with, recognizing of course what
21 we do may well deviate from this reference we have in our
22 repository that is the, if you will, gold or certified
23 version of that tree.
24 MR. ERDMAN: Sounds like you're going to have
25 vendor buy-in, too; correct?

1 MR. MILLER: Tell me more what you mean by vendor
2 buy-in.
3 MR. ERDMAN: You have four vendors up here that
4 sell their wares in California. They would have to
5 somehow get together with you if they're going to use this
6 open sort of software; is that correct?
7 MR. MILLER: Certainly, no compulsion on our
8 part. We would love to. We've already been having some
9 discussions with a couple of vendors about the possibility
10 that our software architecture might fit onto their

11 hardware. These are very early discussions. We're very
12 early in the process.
13 But buy-in, I guess what I'd have to say to that
14 is that that architecture is there, open, available for
15 inspection. If they find the feature and function set as
16 defined by the requirements given to us by our stakeholder
17 community is software they would like to put on their
18 machines, they're free to do so, absolutely. That's the
19 point of this project.
20 MR. ERDMAN: Do they pay you a license fee?
21 MR. MILLER: No, sir.
22 MR. ERDMAN: They just upload it and put it on?
23 MR. MILLER: No, sir. We are building open
24 source technology that will sit in a repository free for
25 anyone to take a deployment license to. To be clear, if

1 you like it the way it is and it works for you out of the
2 box, that's great.
3 If you want to make changes to it or
4 modifications to it, you have a choice. You can ask us to
5 do that for you. We will gladly do so. We would like you

6 to make a donation to the Foundation to defray the cost
7 recovery of doing that. But we would like you to; it's a
8 request. And we will work with you to make the
9 modification.
10 We have some jurisdictions who we're talking to
11 who intend to make the modifications themselves. They
12 have their own internal IT staff to do so.
13 As for the vendors, they will make that same
14 deployment license -- we're having to develop an entire
15 new open license, by the way. The open source license
16 that exists today for open source projects that you're
17 familiar with, like Firefox or Linux or whatnot, actually
18 don't function in this world. In other words, that is to
19 say, there are many jurisdictions in this country that for
20 a variety of legal reasons cannot accept the GPL today as
21 it exists, the general public license.
22 So we are working with our licensing counsel to
23 develop a new class of open source license that's been
24 specifically defined for governments under their federal
25 and state procurement statutes to be able to accept. It's

1 a project this open source industry has needed to do for
2 sometime. It's one of the unintended consequences, but
3 perhaps windfall benefits from this project that license
4 structure will be put into place so those licensees can be
5 held.
6 MR. ERDMAN: Would you control the downloads or
7 would they be accessible to anyone to go download at any
8 time, including a hacker?
9 MR. MILLER: Our goal -- and we actually invite
10 everyone to take a look at this code. The idea is that
11 the more people, the more eyeballs you have on the code,
12 the less opportunity there is for hidden doors and trap
13 doors and back doors and things of that nature. We're not
14 concerned about who downloads it. The question is what do
15 they do and how does that code reconcile with the tree
16 itself.
17 Our vision, as I suggested earlier, is that this
18 life cycle of this project will reach a conclusionary
19 state where they go into a maintenance mode. There will
20 be a repository that will be set up on the internet. It
21 will have a licensing server in our ideal vision. We've
22 done a lot of work around this in our experience in
23 Netscape. What we want to do is make that server
24 available for people to go to it, meet the requirements of
25 the license agreement, download the source tree and do

with it what they will.

MR. ERDMAN: Okay. Thank you.

MR. MILLER: So there are several specific milestones we've been through. I can run through them for you.

I actually function better in the question-answer mode. I'm also mindful of our time.

But I sort of left off with about the ability for us to have a deployable system and the notion that a big part of our project is around certification. And we are beginning to work with NIST and states on what certification models ought to look like going forward.

I think you heard from others today. We echo the sentiment that the methods of monolithic systems certification is frankly, with all due respect, broken. And we think we have a way of moving that forward into a world that would allow for unit level testing, which would mean much tighter testing cycle times, quicker to get things out, the ability to do exception handling and not have to pull the whole thing back in.

So we had a number of things happen last year in terms of achievements and accomplishments. We seem to be picking up pace as we go. And I'll just run through a few of them for you.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: Greg,

I apologize. Let me ask you to address this and then wrap up, conclude it in your wrap up in the next minute or so.

MR. MILLER: Sure.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: And perhaps you covered this at the beginning when I was in and out a little bit, but open or disclose source is not better by definition; is that correct?

MR. MILLER: I'm sorry. Say it again.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: By definition, is open source better than closed source?

MR. MILLER: I believe that disclose source is the better step. Open source is a step better.

The problem that we have today that we identified three years ago was transparency. Was the ability for anyone to be able to look at the system, inspect it, have accountability loops, have audit trails, whatnot.

Frankly, we had advisors who just two years ago were being threatened with lawsuits if they dare to examine source code to help us determine whether or not

certain thresholds for auditing had been achieved. Gosh, that can't work.

We also want to point out too that the open source movement, if you will, has some applications that are better than others. Coming from the venture capital community, I happen to think this is one aspect that is

government IT and specifically something that I consider again critical democracy infrastructure. It's a great application for open source, because you have the level of transparency. You have the assurance that you can achieve the kinds of goals you want in terms of accuracy, trustworthiness, and security.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: Thank you very much.

And Efrain Escobedo, Voting Systems Assessment Project. Thank you as well.

MR. ESCOBEDO: Thank you. And, you know, thanks to the Secretary of State's Office for convening this hearing and addressing a very critical issue that hits home specifically for L.A. County and some of the projects

that we're actually embarked in now, which I think intersects very well. So we thank you for the opportunity to share that. And thanks for the audience of our distinguished panelists, including my boss.

What I was going to ask -- I promise two things. I'd get the distinguished honor of being the last guy who needs to shut up so we can move on to the next stage and probably one of the more critical parts of the hearing, which is public comment. But I was going to ask you if you may be able to get my PowerPoint up. I do have the cable. And didn't try it, but I think we need to do the

plug-in thing.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: Indulge you again.

MR. ESCOBEDO: I'm with the L.A. County Registrar-Recorder County Clerk's Office. I'm one of the two lead staffers working on what we call L.A. County's Voting System Assessment Project. I think, if anything, our participation here I think adds a very important element, which is what do the counties have to say. I

10 know on the dais side we've had counties asking questions,
11 but I think our perspective and sort of our situation
12 might shed some light and help to contextualize what we've
13 been talking about here today, especially for a lot of our
14 viewers joining us on the webcast.
15 In that regard, I think L.A. County is a perfect
16 example of where in this current environment we've gone
17 through the whole litany of how the regulatory process is
18 or is not working, where the stumbling blocks, where the
19 challenges in terms of what counties are facing fiscally,
20 and even in terms of their experiences and having
21 implemented HAVA after 2002, having to move from one
22 system to another. Being a state like Florida, which has
23 had three systems in three different presidential
24 elections and invested over 60 million in that effort and
25 now looking to see whether they're going to use the same

1 system for the next upcoming presidential or where things
2 are at.
3 L.A. County took the approach back after 2002 of
4 sitting and waiting, trying some things out, but really

waiting to see where technology was going to go. And I think very astutely was waiting around to see where things was going to go. And I think the answer to that is the fact we're still on our legacy system. So we haven't found a system that we have identified. We're meeting with a lot of the vendors, seeing what's out there. We don't think there's still actually a system available for L.A. County.

(Thereupon an overhead presentation was presented as follows.)

MR. ESCOBEDO: So we now are facing this current regulatory environment, which we've been hearing a lot about.

And again just to reiterate what I was saying, L.A. County finds itself still not on a new system, still trying to find different patches and work around to continue to be compliant, keep the system that's worked for us thus far that's been very reliable, that's helped our electorate exercise their right to vote. But at the same time, with an eye towards modernization and what's next and how we prepare for the future needs of our

voters, we certainly are in a bind.

So please excuse me for any redundancy in my comments. I think we've belabored a lot of points where the regulatory environment is and what systems are available, what the costs look like.

What I wanted to share with you, and Registrar Logan covered that in his initial remarks, was just to give you a sense of when we're talking about Los Angeles County not having a voting system that's able to meet its current needs and its future needs of what kind of scale we're talking about. Really, what we talking about is akin to having one state in the union not being able to move to a new voting system and a state that reflects a lot of the diversity.

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MR. ESCOBEDO: I'm going to put up some stats and move through them very quickly so you can contextualize what our voting systems assessment project is and provide you some of our feedback as to what we've heard today and what we think needs to happen to help us move forward.

As a jurisdiction, we cover over 4,000 square miles. We serve 88 cities. And for L.A. County, it's particularly important because for a lot of these cities, we serve as the elections official as well. And we conduct a lot of the municipal elections. So that in

itself presents a lot of different needs. That includes school boards, water districts, a lot of different special districts that are contained within the county.

We serve over 500 political jurisdictions just within the county. And of course recognize for our cultural and ethnic diversity, which means providing a lot of assistance for different minority languages, more specifically, six different languages other than English, and after 2010, potentially another two. So we'd be looking at may be eight languages other than English.

Being compliant with the Help America Vote Act, and I think the evolution of our voting system and its add-ons have been in response to those directives.

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MR. ESCOBEDO: A snapshot of what the county's diversity looks like. We are 41 percent white as of 2008 American counties surveyed. One-third of the citizen voting age population is Latino. And 13 and 12 respectively among Asian and African America population. So in itself with the square footage that -- square mileage that we cover and our diversity, it's again akin to a state that has a lot of different counties that might

have different geographic needs and culture and ethnic needs.

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MR. ESCOBEDO: A snapshot of 2008 in terms of the capacity when we're looking at systems and trying to figure out how do we obtain a system that's secure for us, how do we obtain a system that is auditable that is transparent, but more importantly, that's usable for the diversity that we have and that can handle more capacity.

We're looking at 4.3 million voters, about 4800, close to 5,000, different precincts and polling places. And in 2008, had to tabulate 3.3 million ballots.

Of those cast, a huge share, close to a million, of those vote by mail. That's of the one million vote by mail ballots that we issued. And then some stats on early voting that will be available on the website.

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MR. ESCOBEDO: I made reference to the size of L.A. County being larger than a lot of the states in the union.

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MR. ESCOBEDO: A little chart towards when we talk about preparing for the future, this is just voter registration in millions over the past several decades. As you can see, we're serving 4.3 million now. If this trend continues, we'll break five million and continue to have to serve an increasingly large voter population.

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MR. ESCOBEDO: As far as our voting system, I talked about our legacy voting system, InkaVote Plus. It's technology that was developed in the 1960s on IBM mainframe technologies. We still use the small IBM 312 card ballots, because those provide the high speed processing on the readers that we use.

In the 90s, we upgraded that and developed our tabulation, our micro tally computer system, MTS on the DOS computers. In 2000, 2003, and 2006, we continue to make enhancements to stay compliant and to provide other voting and independent voting experience for our voters. But that's where we're at right now.

So it's obviously a legacy system that we frequently share with folks. There's probably one regulatory change or in California with our party primary system, one party away from qualifying and not being able to be used. We currently have six qualified parties. We have one more party, and we might not be able to manage a partisan primary that was with cross-over voting as we have here in California.

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MR. ESCOBEDO: Just a quick snapshot of what logistics look like for L.A. County in our central tabulation area. The trays on the left-hand side of the picture, those are ballots. Just to give you a sense of

processing 3.3 million, it's certainly a logistical feat and something that when we're talking about what ballots are we using and how we're going to process these, it's a real calculation when it comes down to logistics, space, how do we process all that.

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MR. ESCOBEDO: So, knowing that -- and after

today I was hoping we were going to come here and find a new voting system for L.A. County. But knowing we're not there yet, what is it we're doing? And since we haven't moved to a new system, what have we been doing?

Well, the first thing we've been doing is really tacking stock of what the experience has been like over the past decade with regard to voting systems and electoral reform. I think it's safe to say especially after a lot of discussion today that we probably haven't gotten to where we thought we might get to after HAVA in 2002. That we're still struggling with where we need to go, what our voting systems are going to look like. And more importantly -- this is where the voting system assessment project comes into play -- what is it that voters actually need?

We heard a lot of discussions and I think a lot of them mentioned rightly so about voters needing to be included or we're focus grouping voters or we talked to

our stakeholders. But the question that I was looking for -- the answer I was looking for is how are we

complying and sharing that data? And I think Doug Chapin who was here earlier from the Pew Center and the recent report on data and democracy is a good prelude to that is we can talk to people, but until we start compiling data and using it to inform our decisions, then, you know, we're really kind of in the same sense of a crap shoot of we'll try this on response to this regulatory change and this legislative change, but not really addressing the core value, which is what is it that voters need, what data do voters have that will guide the principles of how you develop a system.

I think that's where our approach, the Voting System Assessment Project, really comes into play is, for L.A. County, we need to have verifiable data on what our diverse constituency wants. How do they define things like usability? How do they define accessible voting systems? How do they define flexibility in terms of having options and ease of voting? What does that mean when you say I want voting to be easy for me? What does that mean? And we're hoping that through that and compiling the data it will help us address very important issues.

And one I want to raise now in particular, which

is we talk a lot about security. Certainly that's what we're addressing. We're talking about assess. That's definitely what we're addressing.

But one of the things we also want to address for our project is low voter participation. We can talk about how many votes we lose through technology, but how many more votes are we losing because we don't have systems that are welcoming or that are easy to use for voters that are not participating.

So are we asking those questions of, you know, what kind of a system is going to be more friendly towards voters. And how many ballots are we losing from the people that decide to stay home than the people who are actually coming out and voting.

We're hoping this project helps us do that. And the way we're doing that is the voting system assessment project is seeking to accomplish some very concrete goals. And that first is citizens and stakeholders define the needs to be met by a voting system.

So earlier, Mr. Chapin and a couple of the panelists have made mention that one of the biggest tasks out there is we actually have to define what we want from elections. How do we define an accessible election and how do we define elections?

I think some of the vendors mentioned some of the

efforts they're doing in focus groups and going to the elections officials. I think a lot that rests on election officials to ask those questions since we're directly connected to our electorate to go out and figure out those things. So through this project, we're hoping the citizens and the stakeholders can give us the data and input we need to begin to formulate what principles look like. What is it that our voters in L.A. County value in a voting system?

So the second bullet is along that same vain where that input that they provide defines the overarching principles for some sort of procurement or development strategy, whatever it might be.

And today we heard a little bit about, you know, the possibilities of having public/private partnerships for development where vendors might be as opposed to where nonprofits and government might go. So we have a lot of different creative ways we might go. But what's going to define the overarching principle of what it has to accomplish. For us, it's going to our voters and our stakeholders.

So included in that I think is also assessing the current state of our voting system. And a lot of the tasks we showed about how we migrated or moved our voting system is part of that assessment and where is it now.

And then lastly hoping that this model provides an actual platform for partnerships with other elections officials, with regulators, to really sit down and say here we have one of the largest county jurisdictions in the country, so we created a space. Can we all sit down and figure out what those creative partnerships might be. If we're at the point where we need creativity, maybe this is the platform where we can inject that and comes up with ideas and respond to what the citizens and stakeholders are telling us they want, as opposed to trying to develop something and see how they can adapt to that type of a system.

So our mission simply is establish at least for this first phase a participatory approach that initiates the process of voting system development with public input to ensure that the people element is well balanced with

those of technology and regulations. So let's start with what the voters want, and then let's make sure we use the regulatory system and technology to meet those needs rather than vice versa or some approach to that.

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MR. ESCOBEDO: Our goal is we'll compile data from citizens, but also poll workers, advocates, our own line staff who interact and turn the wheels in the whole machinery, technology experts, and any other stakeholder

identified to inform the development of that and come up with some guiding principles that will say, okay. So all those smart people that are out there, all the different vendors, anyone who is out there who's going to take a stab at this and work with us on this, but we've already covered the premise of where the voters are and what it is they want.

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MR. ESCOBEDO: Just a quick outline of the activities that we're engaged in to try to collect this data. It's different types. A focus group is not going

to give it all to you. You need to go to different settings and try different conversations.

The different formats we're doing is kick off stakeholder symposium which, in September of last year, we partnered with Caltec and MIT and their voting technology and hosted a kick-off event where we invited close to a couple hundred people, had 70 turn out, different community leaders, regular voters, and advocates and had an initial discussion about what do you think voting systems should be and how do you define some of these very basic terms before we engage in a discussion as what's accessibility mean to you? What does equitability mean to you? What does transparency mean to you? So we can all have some sort of common definition of these things before

we engage.

The next phases are having key informant discussion with poll workers, with registrar of voters staff, city election officials, and technology and policy experts as well to start taking this data and having them digest and see how they react to what the voters are

saying.

Continue with community forums, where we can engage some of our community organizations. We have a very proven and established model of what we call our community voter outreach community, which is comprised of about 200 different interest groups and community organizations which we hope to work with and go into their communities and hear those discussions and their organizations, not only in our setting.

And then your traditional opinion research of focus groups, potentially surveys once we've gathered a lot of data.

And also we talked a lot about the future generation and some heard statistics about, in 2016, we'll see sixth graders that are in school now heading to the polls for the first time, what might they expect. So to that vain, we're engaged in partnering with different schools. We worked with student poll worker programs to also gather students and start to compile that data and

work with them in that way.

So it seems like a drawn-out process. It's probably a lot messier than drafting an RFP, floating it, and sitting back and watching vendors bring things to the table. But I think it's the first and very appropriate step in defining a vision for what we want from elections and making sure that voters have a say in that.

I think it's very obvious in a lot of the presentations today, and I'm sure what we will hear in public comments, that voter trust is probably the first hurdle we have to cross over, because the reality is that, after 2000, we are functioning in a very politicized and highly critical and skeptical environment when it comes to voting systems, how secure they are, and whether they will protect the voters' independent right to vote. So this is the step that we're taking.

And we brought some handouts. We encourage you to connect with us and look forward to more of these kinds of venues and forms to have these kinds of discussions.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: Thank you very much.

Questions? Comments?

One quick one. Any danger that we develop the system and look around and it's perfect system you'd like to have and then look around for somebody to sell it,

there's nobody to sell it to you or the system you want isn't available?

MR. ESCOBEDO: As long as our 4.3 million voters like it, we'll be very happy.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: Okay. Thank you, again. And thanks to all the panelists for your time today.

I'd like to move on to the public comment portion of the hearing. Again, my apologies that we are running behind today. If anybody has not filled out a speaker card, please feel free to do so. There should be some in the back.

I will announce the order of the speakers in advance, so folks can come down to this microphone and be prepared to speak when the person in front of you concludes their remarks.

I'd like to be able to accommodate everybody today, so I would encourage people not to be repetitive. If somebody has made the comments you intend to make, you may want to give your name and associate yourself with their remarks. This will help ensure as many people as possible get to speak and the broad range of comments are presented.

Again, want to remind everybody that any comments

25 you make today or in written testimony you provide does

1 become part of the public record.
2 Again I'd like to remind everybody and encourage
3 everybody to please be respectful of everybody's time,
4 opinions, and point of view that may be different from
5 yours.
6 So let's begin the public comment portion of the
7 hearing. Gale Work is first, followed by Mr. Brent
8 Turner, followed by Ms. Mimi Kennedy.
9 MS. WORK: Hello. My name is Gale Work, and I'm
10 the Chair of the Election Integrity Committee for the San
11 Mateo County Democratic Central Committee. I'm also the
12 founder of Grassroots for Bowen which was back in 2006.
13 And in listening to the speakers today, I'm glad
14 to hear that we agree that election reform is needed. And
15 thanks to Secretary of State Bowen for providing this
16 public forum.
17 I'm going to be speaking to some of the systemic
18 issues that have not been addressed today.
19 First, I want to comment that those of us who

volunteer to observe elections and provide citizen oversight are faced with serious challenges in exercising our legally designated rights as observers. In a large majority of counties in California, observers are being blocked from observing, even official credentialed party observers. They cannot see or hear election operations

sufficiently to do their job. And they're often not provided with the documents needed to reconcile the tally.

This lack of oversight and inability to reconcile the numbers along with the accelerated privatization of elections is cause for grave concern among those who love democracy.

Privatization of election systems is happening rapidly and without the knowledge of the general public, candidates, elected officials, and perhaps even the political parties. This outsourcing of our democratic process is fragmented, poorly documented, and involves companies that may have conflict of interest with the voters.

Who is accountable for performance and

transparency?

We need election-related jobs to stay in California within our local employee systems with careful attention paid to who is doing these tasks and whether they have conflict of interest with the voters.

We need sunshine and transparency on any privatization of elections with plenty of time for public comments and influence in the decision-making process.

These elections belong to the voters, not to private corporations or to invisible interests that may have undisclosed agendas.

Several systemic factors are challenging the integrity of our election systems. First is the fact that we've allowed the media to call the election winners. Rather than waiting for the votes to be counted, the media jumps in and pressures election officials to report as early as possible on the unofficial tally. This unofficial result is considered to be final by the public, effectively allowing the media to have undue influence over our elections.

Instead, we need to wait until all the votes are counted, even if this takes time, to ensure accuracy in the results. If a candidate is given sufficient time to review the results as this count is taking place, rather than being rushed through a media circus, this can prevent an election challenge to be made as needed.

Second, our polls and poll workers will be eliminated or reduced even further if we allow this sub-standard vote by mail to continue to grow. Vote by mail processes start about 45 days before the election and continue 28 days after, leaving a chain of custody period of up to 73 days when the ballot is not observed by citizens and subject to manipulation. Voters are forced to trust county officials and private vendors without sufficient public oversight. And far too much is at stake to take this kind of risk. We need checks and balances.

While we hope we can trust election officials most of the time, it would be naive to think we can trust them all of the time. And one rigged election is enough to alter the results.

Volunteer observers are doing their civic duty. They do not have the leisure time to provide the long chain of custody security for a 73-day period for vote by mail. This isn't practical.

Instead, we need the ballots counted at the polls on election night by poll workers, and we need a shortened chain of custody period. This is the gold standard that's practiced in many countries all over the world. Why is our country allowed machines to have so much control over elections when hand-counted paper ballots at the precinct is proven the best for citizen oversight.

Third, ballot fraud is an issue that challenges election integrity. And vote by mail leaves fraud capacity wide open.

For example, Jeffrey Garland, who is the executive director of Connecticut's Election Enforcement Commission, noted that absentee ballot fraud has been a persistent problem in his state for years and in Hartford alone has resulted in the arrest of eight sitting politicians. This was from a Wall Street Journal article.

So what are the solutions? This hearing seems to

assume that we need to purchase privately produced solutions, and I believe this is a limited perspective. We don't necessarily need to buy solutions. Procurement is not the only solution, and it often challenges security of the tally.

Here are some fresh ideas I'd like to propose.

Number one: Schedule the election on an established holiday and encourage more civic volunteerism to increase poll worker availability.

Number two: Make election day a holiday.

Number three: Work with our federal government that's currently doing election reform planning and encourage high school seniors to get community service credit for volunteering.

Number four: Eliminate vote by mail, unless the voter has no ability to get to the polls on election day. This would increase transparency and civic engagement.

Number five: Implement hand-counted paper ballots at the precinct to provide chain of custody security and citizen oversight.

Number six: Extend the time for the canvass to reduce the time pressure on reporting. If our canvass went from 28 days to 35 days, it would provide a lot of relief both on the security side as well as the operations side.

Number seven: Reprioritize what's important to the voter from speed of reporting and convenience, which we currently focus on, to chain of custody, transparency, observer access, checks and balances for security of the tally.

Number eight: Increase citizen oversight and citizen engagement. Volunteerism and public service is alive and well even in this very difficult economy. So by partnering with civic organizations, you can raise public participation. If we just took a fraction of the many millions of dollars that goes into the machinery and used it instead to connect the citizens of California, I think we could fill many of the gaps.

Fund and implement scanners for transparency projects across many counties. Fund and implement a hand-count test for June and November's elections this year.

Finally, I want to close with a comment I made a few years ago, which is that we have a revolving door that remains unregulated, leaving our county election officials tempted with fat consulting contracts from the private vendors. Or private vendors that are hired to or elected to run our elections. This revolving door needs to be

stopped to prevent conflict of interest, while county officials are in charge with protecting the integrity of

our elections. This revolving door policy is subject to corruption and greed, as we saw with the collapse of the financial system recently. We have to really watch out for this kind of a situation that's very risky.

So to protect our elections, we really have to eliminate the risks of financial incentives to look the other way when security risks are apparent.

Thank you very much.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: Thank you.

Mr. Turner.

And, again, I don't like to limit people's time. On the other hand, I just do want to point out we probably will be losing members of the dais. My apologies we got to the public comment portion of the hearing late.

Mr. Turner, good afternoon.

MR. TURNER: Thank you. Good afternoon. And thanks to the Secretary of State for having this event.

I just wanted to add a few things. Obviously, we've heard a lot. My role in this is an election reform. For the past five or six years, an issue was to make sure the words open source were brought to every proceeding like this. So I think at this point my work is almost done.

There is obviously distinctions to be made

between the vendors that come up and talk about disclosed source and those that are purporting to move toward open source. And also to the other groups that are here speaking about open source, naturally I think first and foremost we want to clarify there are standards available and we want to hit those standards. When we speak about open source -- and it's not just words that can be thrown around with licensing attached and so forth and still be in the realm of what the international community deems as open source. The air force, the DoD, so forth, they are running open source systems. I think we need to look to them for some clarity on these points.

Also I wanted to mention to you that the fellow

that I think is known as the father of the certification process, a fellow by the name of Roy Salton, mentioned to me in speaking about a fellow that is known as the father of the open source voting community movement, Alan Dechert, he said that as long as you have any sort of proprietary or even disclosed source in your systems, that the certification process will remain broken. And the father of the certification process, Mr. Salton, coined the current certification process as broken years back.

So now we're still in the same situation. The activists are still showing up. I think the divide between people that think that we're going to revert to

hand counting and those of us who now continue to support open source voting with mandatory paper ballots, I think that divide is now closing.

So I look to your panel and the registrars to move California into the Premier position on this issue and lead the rest of the country like we've been requesting for the past however amount of years that we show that leadership. I know there are a lot of issues

attached, but I look to you for that leadership.

Thank you.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: Thank you, Mr. Turner.

Ms. Kennedy, followed by Mr. Alan Dechert and Dr. Judy Alter.

MS. KENNEDY: Hi. Thank you.

I think we've come a long way in four years. And it's wonderful to see and I'm glad to meet our public officials.

I'm an L.A. voter. I was very glad Dean talked about the buy-in of the voters. He has a heavy activist population in that big county that's as big as the state. And I think he's been very good in trying to be responsive and in fact being responsive.

I think it's very clear to us here that a competitive business model is quite inappropriate for

trying to serve public officials in a democracy.

There's been a lot of talk about we can vote for president to dog catcher, and every time we get to dog

4 catcher, it feels as if the vote is something like
5 American Idol. And it doesn't matter that much as long as
6 the voters enjoy their voting machines and they like the
7 process and they all get out and participate.
8 But, in fact, we know that these elections are
9 hard fought and there is a lot of money going into this
10 more than ever since the recent Supreme Court decision.
11 So the security aspect of the elections is very
12 important. And here in California, we have the right of
13 citizen oversight. And in the last four years, that's
14 become apparent to me as being a fundamental principle
15 that if we all start thinking about, we will make better
16 decisions.
17 Easy citizen oversight. We're asking for easy
18 voting accessibility. Very important. But the buy-in for
19 the voter now, what the voter wants, and what the voter
20 needs is not just to know that we were able to vote, but
21 increasingly that that election reflected what our
22 community and our county, our state, and our nation really
23 wanted.
24 And I think if we can use the California Code --
25 and L.A. has been good about it for citizen oversight.

But in our county, as it stands now -- and this is what you're trying to solve -- we have four or five I think different private corporations. And they all are down to the same ones since ES&S has taken over Premier. That with their private business model control voter registration database, absentee vote by mail systems, and so much of it when anything goes wrong, if we look at aggregate numbers as activists after an election, we wonder who's responsible for this going wrong. And we don't really know who's accountable. And when we try to find out, we find that there might be a private database at which we are to stop and we can no longer try to find out.

So I'm in sympathy with you guys. It is very hard to know what you're legally responsible for now under the present system.

I had great hopes and I still do for open source. But this is either ironic. One of our activists went to the main page at Trust the Vote and they have a hacked main page with Cyialis and Viagra all over the main page. It's the same kind of stuff I've got often sometimes around my activism around elections.

So it's serious business. Security is important. Easy citizen oversight. And I do think that interoperability and lack of obsolescence is very good for

human beings. I would love to see -- Dean, we've talked about this before and Secretary Bowen has said maybe it would be okay -- at least in a few precincts a pilot hand-counted sort and stock project, just once. More to do. But maybe in June. Maybe in November.

But I think it would be good to employ the human beings. And I think you get more poll workers if they knew humans were also counting the vote, at least at the polls. I know it leaves us with 25 percent vote by mail processes still so far privatized.

That's when I am here today: Think of easy citizen oversight. And if you don't want it or the vendor doesn't want it, you have to ask yourself, why? That's where we activists are.

Thank you so much. I think we've come a long way. Thank you.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: Thank you.

Mr. Dechert, followed by Dr. Alter and Mr. Soper.

MR. DECHERT: I'm Alan Dechert, the founder of Open Voting Consortium and also glad to hear the word

22 "open source" getting into the talk about election systems
23 fairly regularly.
24 But it's actually not how I got involved in
25 elections. When I watched the 2000 process, the thing

1 that put -- the thing that got me going was the fact that
2 you have election officials trying to discern voter intent
3 on ballots. And this is an age when technology should be
4 available so that we're not asking election officials to
5 discern voter intent. In fact, they should not be
6 required to discern voter intent; they should not be
7 allowed to discern voter intent.
8 The only thing I heard today that really
9 addressed that at all was the fellow with the federal
10 project for absentee ballot where he's talking about the
11 machine marked or the fillable PDF file for absentee
12 voting. That's where we want to go with all systems is
13 that the issues that we see with ballots, even though the
14 percentage is small, we know that sometimes elections are
15 decided by incredibly small percentages. And then you're
16 left with election officials discerning voting intent,

17 which turns out to be the election is decided that way.

18 Or in the case of 2000, thrown to the Supreme

19 Court. We should never see that again, and there is no

20 excuse. The technology is available to have machine

21 marked unambiguous ballots.

22 Now there will have to be some transition, of

23 course, because right now people are used to hand marking

24 ballots. But the population is changing. Our recent

25 college graduates, they grew up with computers. The

1 people in the 50 to 90 age range right now, maybe some of

2 them aren't quite comfortable with it. But over time, the

3 kids growing up today, they grow up with computers. It's

4 going to make perfect sense for them to fill out their

5 choices on a computer screen and print out their ballots.

6 And that's where you're going to get to the most accurate

7 systems and get to a point where you have real voter

8 confidence in the result of the election.

9 We had an election in Minnesota. And Mark Richie

10 is claiming this was so great because it proves how well

11 the election worked, but it took six months to count the

12 vote and seat a Senator. And even at that, you have
13 complaints on the other side that, well, some of those
14 ballots weren't counted right.
15 So we have no excuse for continuing with
16 hand-marked ballots indefinitely. We need to move to a
17 system of machine marked ballots.
18 I also want to point out that I've seen four
19 Secretaries of State now. I got involved in this right
20 when the ink was dry on the Supreme Court decision. In
21 fact, Jill LaVine is here. It was nine years ago,
22 February 13th, that we pulled together a meeting in the
23 registrar's office in Sacramento County that I started
24 talking about this. People said, well, what are you
25 talking about? Where's your system? So we had to build a

1 system to show people. And we're still a long way from
2 having the kind of system that is a really transparent and
3 can instill voter confidence.
4 Another thing I heard today was the need for a
5 standard data format. Well, it's there. I mean, the
6 EML -- I think the fellow from Sequoia mentioned it. But

we're moving toward greater acceptance of the EML, which there is an international group called Oasis that has created this standard.

I think part of the reluctance is that standard was developed in Europe, but so some of it is kind of shoe horn for U.S. elections. But it can be adapted. It is being adapted. We're up to EML 6 now. And there shouldn't be any more confusion about what standard to go to. It's the election markup language, the EML. And I hope to hear that in the future as well that we're moving to a real standard here.

Another thing that I did not hear today and I've asked to -- I've brought up this question before. I never heard an answer. And that is, where I vote, for example, there's 230 poll sites. What I heard from our election officials is that in February there were a total of nine ballots cast on the accessible voting machines. That means that 95 percent of poll sites that have these systems, nobody -- nobody used them.

And I think that we need to look at why these

systems aren't being used. I mean, the fact is -- and we need to own up to the fact that disabled voters by and large, they vote at home. And we need to have accessible voting that is -- for example, the fillable PDF file, for example. People that -- for example, a blind person, they have special readers that are -- ability for their computer to read the text to them. And they use these systems at home. And there should be much greater concentration on accessible voting at home. Because that's where they vote. And we're just denying the reality of the situation.

Now, part of the fact that is very -- the accessible voting machines have made setting up poll sites very cumbersome. As we've heard from some professionals here that it's hard to train people. It's hard to get people to learn how to work these systems. That's driving us to absentee voting, and it shouldn't. We should look at, for example, maybe the voting centers for accessible voting and to work on making more assessable voting systems use at home.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: Mr. Dechert, I don't want to be rude, but if you could wrap up, I think the other public commenters -- we have about ten more to go.

MR. DECHERT: Right now, what I see election officials in California doing is waiting for the federal government and the EAC and the vendors to provide solutions. And I think that the government needs to be much more proactive, much more aggressive in being prescriptive for what they want. And I'm of the view that a consortium of the state and the counties and hardware makers, vendors, and consultants is the way to go.

Thank you.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: Thank you.

Dr. Alter.

DR. ALTER: Thank you for the opportunity.

May I ask two questions? Why is the cutoff date for written comment for this hearing?

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: I don't think we have set a cutoff date.

DR. ALTER: So we have this week at least?

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: Yes, you do.

MS. ALTER: Okay.

I'm Judy Alter, the Director of Protect California ballots, a nonpartisan group of citizens who want to observe every step of our election process, especially counting the votes on our ballots. We say

uncomputerized and unprivatized. My group works statewide, but we're primarily now in Los Angeles and we're known for doing citizen exit polls as well.

Any use of software keeps us from observing the processes, and we cannot ensure that the steps are carried out correctly following the laws and that the numbers are added up accurately. That's true for the registration. That's true for the absentee. It's true for election night.

Even open source software technically non-proprietary does not allow citizens who are not computer programmers to observe the vote count. We cannot even ensure that the open source software soon to be in use on election day is the exact software written and certified.

Election officials cannot defend the use of software as fast when we, the citizen, do not know if votes are added up accurately. How can this office in the California government take upon itself the right or the privilege to continue to disregard the principle of any

democratic election public counting of votes? Do we not need to amend our California Constitution to say that we will not count our votes in public? That's the logical conclusion of computer-counted elections. Citizens no longer have the right to have votes counted in public.

Yes, we are among the many citizens who want to return to hand-counted paper ballots, counted at the precincts, video-taped, witnessed by various party observers. My understanding is that every precinct in California has about the same number of assigned voters. The average number of actual election day ballots in L.A. County predicts ranges from 300 to 600 --

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: I'd don't mean to interrupt --

DR. ALTER: This is timed for two minutes.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: You're at two minutes.

DR. ALTER: It's timed for two minutes. I asked a question.

A second shift of citizens can be sworn into

count as occurs in New Hampshire. The citizens need not be paid. We can use the just system method of securing enough citizens to count. Seniors, students, anyone who can count to ten and read, count ballots, especially if you use sort, stack, count method of voting. Not having enough people to count ballots by hand in our large county cannot continue to be used as an excuse to continue to hold non-democratic elections where the counting cannot be observed.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: Thank

you very much.

Mr. Soper, followed by Ms. Judy Bertelsen and Tom Courbat.

MR. SOPER: Good afternoon. My name is Jim Soper. I'm a senior software consultant formally with Digital Equipment Corporation, also the author of a website called, "Count it as Cast."

Try to be respond, what I would to see the basis of everything is paper ballots. Paper ballots. Start there.

As an engineer, I want to see redundancy. I want to see as many ballots counted as possible as soon as possible. And I want machines to check the hand count, and I want hand count to check the machines. Redundancy. That's what I want to see.

Piece of information -- Evan, you asked about the difference between open source and disclosed source. And at the beginning of this morning, there was talk about cost, cost, cost. The difference between open source and disclosed source is that Mr. Miller, Mr. Dechert are talking about, it's open source, which is anybody can download it and sell it or do whatever they want to it.

Disclose source means a private company still owns the right to that source code, and they can force you to use their service.

And you have been watching the service and maintenance costs get jacked up again and again and again. I know this is happening, and you're trapped. If you have disclosed source, you have more assurance that the code doesn't have any secret backdoors in it. If you have open

source, if one company is treating you poorly, you can find another service company that's still using the same source code.

For you as election officials, this is an enormous cost savings in the long term. And I hope you're aware of that. There is a distinction.

I am in favor of getting as much data out as possible as early as possible as widespread as possible.

I would like to compliment the Secretary of State and the staff for having started an initiative to get the detailed precinct reports off of the tabulators and on to the internet. We've started a pilot project. This is excellent. This is getting information out as soon as possible and to be encouraged.

There was another project called the Humboldt Transparency Project. This is in the same vain. In this case, you take scanners. You take pictures of the ballots and you get them up on the Internet as soon as possible. There are questions that need to be hashed out over time to protect privacy and so on. These are serious

questions.

But I had to observe a small election with 3,000 votes -- 3,000 ballots STB election that was privately run. It was a mess. They did put everything up on the internet.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: Can I ask you to wrap up?

MR. SOPER: We were able to look at the image of the ballot and check the transparency.

My confidence in the outcome increased enormously because of that. So I would encourage getting as much information out as possible as soon as possible starting with paper ballots.

Thank you.

MR. BERTELSEN: I'm Judy Bertelsen, a member of the Voting Rights Task Force in Alameda County. And I want to thank Secretary Bowen and the staff for holding this hearing.

My main focus is going to be on transparency. Much of the equipment used in California's counties is proprietary and therefore not transparent. And furthermore, recounts require prohibitive costs borne by candidates or citizen groups. Few are willing to risk mortgaging their home in order to secure the large amount of money in a short amount of time that's required to

cover a recount.

Our elections are not audited. The one percent manual tally is done with a wide range of uneven quality, and the one percent manual tally doesn't audit the election results. At best, serves as a spot-check in a few precincts with no provisions for extending the tally even when anomalies are found.

However, we have bright spot in Humboldt County where Carolyn Crnich, County Clerk-Recorder-Registrar, and group of citizen volunteers have shown that where there is a will, there is a way, even in these days of very tight budgets.

The Humboldt Election Transparency Project made images of the actual ballots available publicly at a website. The software they developed is available to anyone who wants to use it free of charge. Contrary to the myth that huge costs are needed to provide transparency, Humboldt County purchased a relatively low-cost off-the-shelf scanner. The system was financed out of the regular budget, because that's what they valued, so that's what they spent their money on.

This project opens the possibility for any candidate to check the voting of his or her race to decide

if it makes sense to request an official recount. Citizens who believe in hand-counted ballots can hand

count the ballot images and compare their results with the announced results. Citizens who have written their own programs can analyze election data and compare their results with the announced results.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: Ms. Bertelsen, can I ask you to wrap up?

MS. BERTELSEN: Okay. Just the transparency project isn't a substitute for real audits, and we still need real audits, but it's something we can have right now. And Humboldt County proves that.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: Thank you very much.

MS. BERTELSEN: Hope it will be extended through the rest of the state.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: Mr. Courbat, followed by also Kim Alexander and Mr. Frank Welte.

MR. COURBAT: Good afternoon. My name is Tom

Courbat. I'm the founder of Save our Vote in Riverside County. And I'd like to again thank the Secretary of State for putting on this event.

Helen Keller once said, "Security is mostly a superstition. It does not exist in nature, nor do the children of men all a whole experience it."

We keep talking about the security of our

systems. We keep trying to get more security. And when do we have enough security, one of my Board members asked me. And my response was, well, there's enough security when the public is satisfied that you're taking all the steps possible to prevent any kind of hacking into the system.

I want to talk about three things quickly, because I know we're short on time.

One, escalating costs. Some of you have some handouts there. You will see a graph that shows that the costs in Riverside County before we implemented electronic voting was $4 million dollars. After electronic voting, it went as high as $19 million. We have continuously

bought, replaced, bought again, maintained, et cetera. This is a never-ending cycle that if we continue to believe that the only solution is more technology, we'll spend the money.

Number two, number two is the inability to comply with the conditions of recertification. Now, I can only speak from one county's perspective. But if this is going on in Riverside, you can bet it's going on in many of the other 57 other counties. And that is Riverside was out of compliance with eight of the 20 conditions that they had any control over. That's 40 percent.

Well, my question is if you have to be in

compliance with all of the conditions of recertification and you're not, what are the consequences? So far, the consequences have been zero. And if there are no consequences, it's like running down a freeway at 130 miles an hour. You know no one is going to pull you over, so you do it, because you can.

Lastly, transparency; if we can't see it, we have no way of verifying or validating that what we're being

told is the outcome is, in fact, the outcome. We have requested California Public Records Act requests on numerous occasions. Save our Vote has produced six reports on six elections. Last time, our last effort, we copied 25,000 documents. But the key documents that we needed -- and I'll wrap here in the next 30 seconds.

The key documents we needed were spreadsheets. We were denied those spreadsheets. And, in fact, they were given to us in PDF form, which if you tape them all together would be five feet wide but two stories high. They made up a policy after the fact in January saying effective November the prior year, we can't give them out in anything but PDF.

Lastly, what I'd like to say is this. The future of voting in California, which is what this is all about, will, we hope, take into consideration the vital role of election integrity advocates. We are the grassroots

volunteers who can provide a unique insight to the registrars of voters and to the Secretary of State that these insights are not available from any other source.

We're not giving you anecdotal information. We're giving you video. We're giving you photos. We're asking, can we please come together and can we please form a partnership, because the information we have you won't get from your poll workers. You won't get from the poll captains. Our views are unique. And if we validated them, it can help make your system better.

I thank you very much for your time.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: Thank you for your time.

Ms. Alexander, followed by Mr. Welte and Eva Waskell.

MS. ALEXANDER: I'm Kim Alexander, president of the California Voter Foundation, a nonprofit, non-partisan organization I refounded in 1994 to advance the responsible use of technology in the democratic process.

One of the biggest problems facing California voters is the lack of standardization in the voting process, something that was addressed by this panel earlier today. We have 15 counties in essentially 58 different voting systems. Every aspect of the process large and small varies from county to county. Some

counties allow voters to look up the registration status online. Some don't. Some promote vote by mail voting; others don't.

The variation of polling place practices and poll workers training is mind-boggling. A 2008 study by the State Auditor on poll worker training found that there was a lot variation in many areas where that training occurred, despite the Legislature and Secretary of State's efforts over several years to standardize training across counties.

The lack of standardization continues today as counties begin to acquire new devices to aid in their voting system, such as ballot sorting and automatic signature verification machines. One was recently acquired by Sonoma County, and it's my understanding that several other counties have similar systems in operation, and none of these are subject to state certification standards or testing. There are no uniform procedures in place to say how these machines should be calibrated or what to do in the case of a false negative, or worse, a falls positive.

It is enormously disturbing to me after watching counties spend hundreds of millions of dollars on questionable voting equipment, some of which was purchased before it was certified by either the state or federal

government, to continue acquiring new equipment without that equipment being required to meet any kind of statewide standard.

Clearly, some of this variation is a function of the several attempts made in recent years by state policy makers to make voting easier and more convenient for Californians, whatever their intended effects, these efforts have also had the inadvertent effect of making the voting process more complex and confusing for voters. No voter attempting to register, cast a vote, or understand election results can be exactly sure of what to do or what to expect.

The other vitally important consequence of this bewildering complexity is a loss of accountability. When things go wrong, is it an accident? Is it incompetence, or is it someone trying to shave the electoral outcome by manipulating the process?

California voters are unnecessarily and unfairly disenfranchised because they got caught in a rabbits waring of pulls and missteps.

The development of uniform standards and procedures for election processes in the polling place

23 operations across the state could ensure a more
24 predictive, positive, and consistent experience for
25 California voters and provide a bases is for holding

1 election officials accountable. Greater uniformity would
2 also make it easier for voters education groups to give
3 voter accurate and precise information about what to
4 expect from their experiences as voters.
5 However, elections are one of the trickiest areas
6 of public policy to reform. First of all, they're
7 perennial; they take place every two years, sometimes more
8 frequently. It's not an ongoing problem. It's a problem
9 that rises and falls. Some crisis occurs. People are
10 outraged. Time passes. And the issues are forgotten
11 until they are raised again.
12 It's also considered a soft area of government.
13 It's not a life or death situation. It's like libraries
14 and parks, not fire and law enforcement or hospitals.
15 Funding for elections is easier to withhold, because
16 what's the down side? Nobody dies and no one losses their
17 jobs if people don't vote.

Another reason why elections are hard to reform is because unlike every other area of public policy, election reform is an area where every politician as expert, as was mentioned today. It's hard to build consensus.

We need to overcome these barriers and grow up our voting system on a big scale and replace what we're doing now with something that's efficient, that equally

enfranchises all voters, something less provincial, and more inviting, where the rules are the same up and down the state, instructions and procedures of are the same, so we can all follow along and make sure that the process is working properly.

I have additional comments, but I'll leave it there and invite you to read my paper which was distributed to the panel called "The California Voters' Experience: What Works for Them, What Does Not Work, and Where To Go From Here." Also available on our website at www.calvoter.org.

Thank you.

SECRETARY OF STATE CHIEF DEPUTY GOLDBERG: Thank you very much.

Mr. Welte, followed by Ms. Waskell, and Ms. Zakim. And I apologize for mispronouncing that name.

MR. WELTE: Thank you. My name is Frank Welte, and I'm the Director of Advocacy and Governmental Affairs for the California Council of the Blind.

This is difficult without a podium.

The California Council of the Blind is a largest and oldest organization of Californians who are visually impaired. Since 1934, the Council has been working to improve the conditions for blind and visually impaired Californians.

The right to vote privately and independently is a core principle of our public, but it is a right that was denied to blind Californians through our state's history until just a few years ago. Many visually impaired Californians are still waiting to exercise this right to vote primarily -- excuse me -- privately and independently on account of the failure of many city and county

governments to provide accessible voting equipment.

Some advocates siting security concerns posed by the use of newer electronic voting systems have tried to discourage their implementation. This is unacceptable to Californian's blind citizens, because modern electronic voting machines provide spoken instructions and feedback. They allow blind people to vote privately and independently, something that no other voting method allows.

We regard our right to a private independent vote to be a non-negotiable right. People who can see would reject out of hand any voting system that would take away their right to a secret ballot. So how can anybody in good conscious deny the same right to their fellow citizens who happen to be blind?

Voting security is important, to be sure. So security procedures should be adopted that will provide both security and accessibility without disenfranchising

any registered voters.

Some folks are promoting the notion of an all

vote by mail system. The California Council of the Blind has concerns about potential accessibility barriers and disenfranchisement in all vote by mail systems. We do not think the voting centers often proposed as part of these systems are a viable option for voters who are blind or visually impaired. We heard earlier that the 17 voting centers promised in Seattles' King County suddenly became three, only one of which was open during the 20-day voting period.

Transportation is always an issue for those that cannot drive. Many with the most severe visual impairments do have transit. But when limited voting centers are available, they often encounter long rides, which most other voters don't have. Those that are limited to taking buses or trains have to worry about the distances to travel and the number of transfers needed if the only option is a long way away.

There are many problems with an all vote by mail environment. Those with no vision will not be able to read ballots at all and would have to rely on family members or paid readers if available and affordable to read their ballots.

In a perfect world, that would not an issue. How

will the voter know that the choices are marked correctly? Those with low vision may not be able to read their ballots at the regular print size. The font type would need to be at the very least 18 points size with no italics or fancy type faces. Arial is a recommended font to use.

Also, there are many issues with tracking and making sure that one marks a ballot correctly. Because of tracking errors, the wrong candidate might be marked accidentally. Because of these access barriers, we regard the all voting by mail systems to be unconstitutional. Voters with visual impairments would not be able to have the right to a secret and private ballot.

Let's compare this situation with that which was recently experienced by blind voters in Los Angeles County where they were able to use electronic voting equipment. People with low vision were able to read their ballots in large font. Blind people were able to access their ballots through audio. This was much better system.

Again, let's remember that the right of all Californians to vote privately and independently is non-negotiable, and it must be a fundamental characteristic for any voting system adopted in the state of California.

Thank you.

SECRETARY OF STATE ASSISTANT CHIEF DEPUTY BRETSCHNEIDER: Thank you.

Next we'll hear from Eva Waskell, and after that, Dagmar Zakim.

MS. WASKELL: I will be brief.

My name is Eva Waskell. I'm an independent election integrity strategist looking at this conference from the perspective of 25 years of attending conferences like this, sitting through the development of the standards. Been here, done that.

As I sat here during the first session and heard talk about market share, marketplace, procurement, finance, procurement this, business concerns, bake-off strategies, customers and clients, I was thinking of the emphasis on the business aspects. And what I have not heard in the last 25 years -- and I know I haven't heard it in the last 45 years since computers were first years used to count votes here in California in the mid-60s -- is not an emphasis on the fast, the cheap, and -- the production triangle: Fast, cheap and good; you can only

21 get two of them. In my opinion, we've chosen again and
22 again the cheap and the fast, and we haven't had good.
23 What's missing -- and I saw it here in the
24 conversation today instead of the focus on the business,
25 what I would like to see sitting right here at some

1 point -- and it would be a first. It would be nice if
2 California could do it is a first in the history of
3 computerized elections -- is to have to gain trust -- and
4 we've talked about that as something citizens want -- is
5 to have citizens sitting here with the wealth of
6 information, some of which Tom Courbats mentioned. And I
7 track voter integrity in elections all over the country.
8 There are citizens groups like Tom's doing magnificent
9 work getting vital election data for you that that you can
10 get from no other source. And I would like to see those
11 citizens at the table with the triangle of trust,
12 transparency, and openness. And that's it. No business.
13 No procurement practices. Just talking in-depth for the
14 very first time about those three things with a citizen
15 focus.

And I don't see you as customers. I don't see you as clients. I see you as public servants with this huge trust that you have to prove that election results are accurate, to work with citizens.

And so what would work for me as a citizen is to see, as Tom Courbat said, a partnership and some basic recognitions that citizens are innately curious about what goes on behind the scenes of elections, most of which they cannot see. They do have a right to access to this and a right to know what's going on. That's a new focus. And I

would like to see citizens and election officials bring some of that kind of dialogue and conversation to this, which will build trust.

You can talk about procurement and business aspects. They're important. I'm not saying don't talk about them. But there has never been a public open dialogue between citizens and election officials. And that's something I think California could be a leader in. And I'm a very, very strong supporter for the Humboldt transparency project.

Thank you.

SECRETARY OF STATE ASSISTANT CHIEF DEPUTY BRETSCHNEIDER: Dagmar Zakim. And after, that we'll have Joan Quinn.

MS. ZAKIM: Hi. My name is Dagmar Zakim. I want to comment about Mr. Groh's talking about what voters wanted. I want to reiterate what Eva Waskell said, and that is that voters want to be heard and want to be at the table, to sit at the table, and share their own particular concerns. And that includes trust, transparency, and openness in the voting systems.

And to restore the confidence, I think one of the really effective mottos we have is the Humboldt transparency system, which created a critical independent verification process. And this would allow the election

officials to really do their job and not have to worry if you have an independent verification system that works separately from what you do.

And with this model, the Humboldt system actually was able to with the open source was able to show that

there are 144 votes that would not have been counted. And this was actually supported by Debra Bowen. What I would suggest is there would be other such pilot programs that would be run through California at a very low cost.

And one of the things that I wanted to ask about and was that there was a $3.3 million settlement with the ES&S. And I don't know where that funding relies and where that money has been spent or not. But I would certainly suggest that could be possibly a source for funding some of these pilot programs that we are sure that the public at large that their voices are heard.

And so I will end with the words of Ronald Reagan that it's trust and verify. Thank you.

SECRETARY OF STATE ASSISTANT CHIEF DEPUTY BRETSCHNEIDER: Thank you.

Joan Quinn. After that, Lori Shepherd. And our last speaker today is Christina Tobin.

MS. QUINN: I'm Joan Quinn.

May I have your name please? Mr. Goldberg didn't bother to stay.

SECRETARY OF STATE ASSISTANT CHIEF DEPUTY BRETSCHNEIDER: Sure. I'm Jennie Bretschneider, Assistant Chief Deputy.

Evan Goldberg had to step away from the dais. He has two young children to pick up from daycare by 6:00 so I stepped --

MS. QUINN: As a citizen, there's plenty of us here that have things to do also. And what's your name and what is your --

SECRETARY OF STATE ASSISTANT CHIEF DEPUTY BRETSCHNEIDER: Jennie Bretschneider, Assistant Chief Deputy, Secretary of State.

MS. QUINN: Could you spell your last name, please?

SECRETARY OF STATE ASSISTANT CHIEF DEPUTY BRETSCHNEIDER: I'll give you my card after the hearing.

MS. QUINN: Thank you.

May I suggest -- I wanted Evan Goldberg here to listen to this -- that the vendor's time he limited. We listened to ES&S's presentation that went on ad nauseam in my opinion. He could have been limited to less than a quarter of the time. But there was no limitation at all. Oh, but the citizens are limited. And so public testimony started at 4:30. It's 5:30 now. I've got a class at 6:30. So I'd like to leave, too. But if I'm going to

make my public statement, I was forced to stay. I've been here since 10:00 in the morning listening to unlimited testimony by vendors, but I worked my butt off to get Debra Bowen elected. And this is how public citizens are treated? To start our testimony at 4:30 and our Chief Assistant -- Chief Deputy can't bother to stay? Well, he's not the only one that has something to do. We all do, too.

Okay. This is going to be brief.

Is there some kind of universal law that mandates technology must be used because it is available, no matter how expensive or unreliable? And unreliable that is it's desired that votes be counted as cast. Are you aware that Germany's highest courts have found electronic voting can't be used in Germany, because it violates German citizens' voting rights.

Vote by mail; more expensive, increases vulnerability to voting manipulation. And not one thing has been said here signature recognition software. Are you aware that the only available signature recognition software was designed by a convicted felon named Jeffrey Dean? No mention of signature recognition software. We're so eager to jump into voting by mail because it's supposedly cheaper and easier.

25 But my understanding by experts that I believe

1 and I trust, it is not. I'm a Sacramento County resident,
2 and I'll go fight voting by mail tooth and mail.
3 And has there been once again a comparison of
4 using paper ballots hand counted to vote by mail or
5 electronic voting machines? No, there hasn't.
6 And it's interesting. Why would California or
7 any state accept test results on voting machines from labs
8 that are paid by the very vendors whose products they are
9 testing? The last time I checked, no lab had actually
10 done anything to change the machine. I mean, he who pays
11 the piper calls the tune.
12 And I've researched the legislative history of
13 California Election Code. And the California Election
14 Code all through the ages has provided that our elections
15 be open to public scrutiny, which is not been possible
16 with the use of electronic voting machines. And our codes
17 need to be enforced.
18 Thank you.
19 SECRETARY OF STATE ASSISTANT CHIEF DEPUTY

BRETSCHNEIDER: Thank you.

Lori Shepherd.

MS. SHEPHERD: My name is Lori Shepherd, and I'm from Disability Rights California. We're a statewide organization who advocates for the rights of Californians with disabilities. And we have a mandate under HAVA to

ensure: One, that increase the number of voters with disability; and secondly, to ensure that people's constitutional rights to a secret ballot are upheld so people have a right to mark their ballot privately and independently without the help of others, unless they choose.

And I appreciate all the presentations by the vendors and appreciate that they're working on trying to create more features for us. It's our view that as it stands now there's not one single voting system that's accessible to all voters with disabilities. It's not we're a finicky groups, but there are a wide range of disabilities and disability needs and issues. So to expect that one voting machine as it stands now is going

15 to meet all of our needs hasn't happened.

16 One of the things that I found recently to be

17 interesting was that our needs are listed as special needs

18 in some places in voting documents, and I wasn't aware

19 until then that I had a special need.

20 I think on election day when we go to the polling

21 places, we have the same need as everybody else, which is

22 to cast a secret ballot. When we get to the polling

23 place, there's separate machines for people with

24 disabilities who can't use paper ballots. And those

25 machines are always usually stuck away somewhere in a

1 corner or sometimes not turned on. Poll workers not

2 really well instructed on how to turn them on.

3 In fact, in the six vote -- I'm a voter who

4 couldn't use a paper ballot. And in the six elections

5 that I tried to vote, I was only successfully only able to

6 vote once.

7 And so I think that's also -- we recognize a

8 concern for security. But to have a separate -- to give

9 us separate machines, separate systems is pretty

de-humanizing, which brings up a whole vote by mail. And I understand why people may look at vote by mail as being very attractive. But there's some of us who cannot mark paper ballots. So we are not going to be able to vote by mail unless we give up our right to mark a ballot privately and independently. And having that right taken away from me in the 2008 election I really understand how important that right is to all citizens.

I was really hoping Ms. McConnell had come up with a way when she was saying they had gone to all vote by mail they had figured out a way for people with disabilities to be able to mark paper ballots. And I was pretty disappointed during her presentation when it appeared that when she said, well, an all vote by mail system won't work for people with disabilities. So again had to set up a separate system.

And, again, it's not that we have special needs. We have the same need as everybody else, which is to cast a secret ballot on election day.

Thank you.

SECRETARY OF STATE ASSISTANT CHIEF DEPUTY BRETSCHNEIDER: Thank you.

Our last speaker, Christina Tobin.

MS. TOBIN: Hello. My name is Christina Tobin. I'm from Mill Valley. And I just wanted to follow back Eva Waskell independent national story. And I couldn't agree more with her on the concept there should be citizens up representing the people here in the room, the people out there watching today.

I'm a former national ballot access coordinator for the Ralph Nader campaign 2008. I've been endorsed by the Libertarian party for California Secretary of State. I'm the founder of the Free and Equal Elections Foundation and Equal and Equal, Inc., and also a newly appointed Board member to Californians for Electoral Reform.

I will be focusing right now on instant run-off voting. Instant run-off voting has been used in San Francisco since 2004. And this year Oakland, San Leandro, Berkeley, and Berkeley will be using instant run-off voting. Los Angeles, Pasadena, Long Beach, Sacramento, and San Jose are all also considering to use

it as well.

This question was intended for Mr. Evan Goldberg, who unfortunately isn't here today, but many of us citizens still are. Will California request that the federal online ballot marking program have the ability to create a ranked ballot as we, California's for Electoral Reform, Free and Equal Elections, Fair Vote anticipate an eventual change to the state law to use instant run-off voting, IRV, and Congressional elections as well as state elections?

So to answer the question from Mr. Goldberg, who unfortunately isn't here, we still are -- you, too, up there on the panel -- California needs to request the ability to create a ranked ballot as we CFER, Fair Vote, Free and Equal, do anticipate an eventual change to state law and to use IRV in Congressional elections as well as state elections. So if you'd like to learn more about California's for Electoral Reform, go to cfer.org or freeandequal.org or fairvote -- that's F-A-I-R voteorg.

Thank you very much.

SECRETARY OF STATE ASSISTANT CHIEF DEPUTY BRETSCHNEIDER: Thank you.

We've now finished our agenda for today. I'd like to thank the elected officials and the panelists and the audience for participating. And a special thanks to

those of you who were able to stay with us to the end. I know it turned into a day-long hearing and was very long, but I think it was a very good dialogue. So thank you very much for staying with us.

As I mentioned earlier, anyone who would like to submit written comments may do so. You can mail those to the Secretary of State or send us an e-mail to votingsystems@sos.ca.gov. This webcast will be archived on the Secretary of State's website so you can watch it any time.

Thank you very much for your attention. And this hearing is now adjourned.

(Thereupon the Secretary of State meeting adjourned at 5:37 p.m.)

CERTIFICATE OF REPORTER

I, TIFFANY C. KRAFT, a Certified Shorthand Reporter of the State of California, and Registered Professional Reporter, do hereby certify:

That I am a disinterested person herein; that the foregoing hearing was reported in shorthand by me, Tiffany C. Kraft, a Certified Shorthand Reporter of the State of California, and thereafter transcribed into typewriting.

I further certify that I am not of counsel or attorney for any of the parties to said hearing nor in any way interested in the outcome of said hearing.

IN WITNESS WHEREOF, I have hereunto set my hand this 5th day of February, 2010.

TIFFANY C. KRAFT, CSR, RPR

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