United States Election Assistance Commission
Roundtable Discussion

Design Counts in Elections

1225 New York Avenue, NW

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Washington, DC 20005

Thursday, August 11, 2011

VERBATIM TRANSCRIPT

The following is the verbatim transcript of the United States Election Assistance Commission (EAC) Roundtable Discussion "Design Counts in Elections" held on Thursday, August 11, 2011. The roundtable convened at 9:01 a.m., EDT and adjourned at 4:49 p.m., EDT.

ROUNDTABLE DISCUSSION

MS. LAYSON:

Good morning and welcome to the EAC's Design Counts in Elections roundtable discussion. My name is Jeannie Layson and I'm the Communications Director at the EAC. This roundtable is one in a series aimed at preparing for the 2012 federal election cycle. And for those of you who are counting, general election day is exactly 453 days from today.

Election officials share the goal of providing a positive experience that will give voters confidence that their votes were cast and counted as they intended. Implementing best practices in ballot and polling place design contributes to a voter's positive experience and ensures that the process is accessible and convenient to the widest possible audience. Today, we will strive to take the guesswork out of designing ballots and polling place signs by using simple design principles and considering best practices. Small changes can come with few costs, yet yield huge benefits for the American electorate.

The Help America Vote Act of 2002 requires EAC to conduct a public study about ballot designs used in elections for federal office. And the study must consider the following: What will be number one; the most convenient, accessible and easy to use for voters, individuals with disabilities including the blind and visually impaired, and voters with limited proficiency in the English

language. Number two, yield the most accurate, secure and expeditious system for voting and tabulating voting election results. Number three, be non-discriminatory and afford each registered and eligible voter an equal opportunity to vote and have that vote counted. And last, number four, be efficient and cost effective for use.

In 2007 EAC released its "Effective Designs for the Administrative of Federal Elections" report and the report's resources include voter information materials, ballot design practices for several voting systems, sample images and design specifications. It includes input from election officials, voters, poll workers and other experts. The report addresses the design planning process, insights into designing ballots and much more. EAC also developed an image library containing thousands of camera ready images. These images can be customized for local jurisdictions and then sent to the printer for production, a service that saves election officials time and money. EAC has already provided CDs of the report to thousands of elections officials across the country, and election officials can give EAC a call toll free at 866-747-1471 or go to eac.gov to request the image library.

Thank you to Commissioners Bresso and -- Gineen Bresso and Donetta Davidson and Executive Director Tom Wilkey for their leadership and support for this series of discussions. And thank you to Emily Jones, who managed all of the logistics for today's roundtable, and also, to Karen Lynn-Dyson and Matt Weil, who are EAC's subject matter experts on election design.

This roundtable will be a two-way conversation. Tweet comments or questions using the hash tag BReady2012. That's the letter "B" Ready 2012, or submit a question via the web cast. Go to eac.gov for instructions. And for those in attendance, the Twitter file is located on the big screen to your right.

And now, I turn it over to our moderator, Merle King, who is the Executive Director for The Center of Election Systems at Kennesaw State University in Georgia. Merle, please begin.

DR. KING:

Well, thank you, Jeannie. Welcome, those in attendance and those that are following this roundtable on the webcast, today.

What I'd like to do is to, really, compliment the EAC for recognizing the importance of looking at the human factor-related issues in elections. Often, those of us that work in elections focus on the technology, which is important, but after each election there always seems to be a collection of human factor issues that are often very hard to diagnose and to fully understand how they occurred, why they occurred, and then, how to mitigate them going forward. In the management of IT, often, we say that the best kind of problems and mistakes to have are those that catch fire and smoke, because they remove the ambiguity about what caused them. But, when we deal with human factor issues in elections, often, it takes months and years of analysis to figure, how did we get to this error, how did it manifest itself, and then, more importantly, what can we do to mitigate it and keep it from occurring in the future. And, that's in large part what today's roundtable is about. It's about looking at things that can be done now, things that

can be done in the near future, and in the long run, that will remove many of the human factor errors that occur in elections. So, it's a great concept, and I compliment the EAC for recognizing the importance of this topic.

What I'd like to do is to begin by asking the members of this roundtable to introduce themselves. And, I'm going to start with Ron, in just a moment, and we'll kind of wheel around the table. And then, I'd like to talk about a little bit of ground rules, if you will, about how we kind of manage this discussion over the day. And then, we'll move right into the first topic and the first presentation.

So, with that, Ron, if you would begin by giving us a brief introduction, who you are, your role in elections, and your experience.

MR. GARDNER:

Thank you Merle, it's a pleasure to be here, and, I must say, an honor to be here, with so many distinguished people that are experts in this field.

My name is Ron Gardner and I am attorney. I am the Director of Field Services for the National Federation of the Blind. I'm also a public member of the United States Access Board, which is really my entrée into the Election Assistance Commission and this topic matter. I, also, for a few years, was the Director of the Professional Development and Research Institute on Blindness at Louisiana Tech University. I happen to be blind. I also happen to be hearing impaired. I am not a technical expert. I'm a consumer, and I am passionate, and I'm pleased to be here.

DR. KING:

Great, thank you Ron. Elizabeth?

MS. DEITER:

I'm Elizabeth Ensley Deiter and I also go by Libby. I'm the Shawnee County Election Commissioner, which is the county for Topeka, Kansas. And my county is a medium-sized county, about 105,000 registered voters. I'm also the president-elect of the International Association of Clerks, Recorders, Election Officials and Treasurers, IACREOT. And this year, I am honored to be their representative to the U.S. Election Assistance Commission. And I am very honored to be here, so thank you.

DR. KING:

Thank you, Elizabeth. Drew?

MR. DAVIES:

I am Drew Davies. I own Oxide Design Co, a communications and information design firm. I'm here because I also serve as the design director of AIGA's Design for Democracy Program. We are the authors of the EAC's "Effective Designs" document that we will be discussing here, today. And certainly, as has been said before, it's an honor to be here.

DR. KING:

Thank you Drew.

MS. QUESENBERY:

I'm Whitney Quesenbery. In my commercial professional life, I'm a user experience researcher. In my election's life, I run a volunteer group called Usability and Civic Life, which mobilizes user experience professionals to help with election problems. I, also, serve as the chair -- subcommittee chair for human factors and

privacy on the TGDC as we drafted both the current VVSG 2005 and the version that's working its way through the process, now. I served briefly on the Design for Democracy Board. And I'm always awed that anybody will listen to what I have to say about elections, because there's so much to know about it.

DR. KING:

Thank you, Whitney. Amy?

MS. BUNK:

My name is Amy Bunk. I'm the co-chair of the Plain Language Action and Information Network. We're an inner agency -- federal inner agency group dedicated to promoting clear language across the Federal Government. I am also -- in my real job, I'm the Director of Legal Affairs and Policy at the Office of the Federal Register. We're part of the National Archives, so anything I say here, today, is that of my own, my own voice and not that of my federal agency. I'm here to discuss plain language, and I am a voter, so, I guess I'm a constituent. Thank you.

DR. KING:

Thank you. Larry?

MR. HERRERA:

Hello, my name is Larry Herrera and I'm the appointed City Clerk for the City of Long Beach. My role in the City of Long Beach is to conduct municipal elections, as well as support the legislative affairs of the city council. My experience in elections began in 1988 and I've learned a lot during that period of time. And I look forward to the ideas and the dialogue that we will have today with the rest of the panel.

DR. KING:

Okay, thank you. Wendy?

MS. UNDERHILL:

I'm Wendy Underhill and I am an analyst with the National Conference of State Legislatures, and I follow election issues that are of interest at the legislative level. I write a newsletter called "The Canvas" where we look at things that we think are of interest to legislators in this area. Ballot design had not come to my attention before the invitation to come today, and so, that was a good opportunity for me to learn about a new subject area. And the thing that most surprised me about this was how much incredible work has been done on what is good ballot design and how it can be put into practice all across the nation. So, that's very exciting. I was asked to be sort of a reality check, and so, I will tell you what it is, I think, legislators are interested in, what hasn't caught their attention yet, and maybe, some ways that we can catch their attention. And I made a promise to myself I'd try to use plain language while I'm here today for your benefit.

[Laughter]

DR. KING:

Thank you. Well, thanks to all of you for being here today and your willingness to participate.

If I could cover just a couple of small ground rules, I heard Emily briefing you on the microphones. We have two microphones on the table, one which is controlled by our colleagues behind the screen that are managing the web cast. And they will turn it off and on, so it's not necessary for you to trigger your mikes. The second

set of microphones are used by our transcriptionist and they're there to pick up conversation, so that's why there's two microphones. I would ask everybody to put their Wifi devices on silence if they would. That will help, unless you're expecting a really, really important call, maybe. And we have some hard breaks that are built into our program today, and that's necessary for our colleagues that are managing the webcast to make sure there's time to reload, if you will, in between. So, we'll try to work very close to managing those hard breaks, and lunch will be a hard break. You may have noticed that there was a document that describes all of the best dining that's available within a couple minutes walk of here. If not, I have one up at the front, and when we break for lunch, that may be valuable to you. Again, we remind those that are following us on the webcast, they can follow at the hash tag BReady2012, and also, follow along at the eac.gov website, today.

The last thing that I want to mention, in terms of our format for this roundtable today, and Jeannie mentioned it early, is, everybody here has a story, has a narrative about elections. And each one of these narratives represents a different viewpoint and it's an important viewpoint. So, in order for us to make whole cloth out of this, we need that participation and need those viewpoints. At the very end of our session today, one of the things that I'll be asking you to do is to make some summary statements. And, because this is a full day roundtable, often, by the time we get to four in the afternoon, this 9 a.m. start is a long ways behind us. But, it's an opportunity for you to make sure that the important

takeaways, the things that you consider to be most relevant, it gives you a chance to kind of summarize those. So, even as we go through today, things occur to you that may have applied to an earlier topic, hold that, and we'll have a chance to roll back around, and pick that up as we go forward.

All right, the first topic that we're going to deal with is the role of design in elections. And, clear communication and better experiences build trust and increased participation in elections. The role of design in elections came to the attention of the general public, for the most part, after the 2000 Presidential election. We learned some words, butterfly ballot. We learned about the impact that ballot design can have on the perception of voters and on the perception of the outcome of elections. We heard firsthand accounts from voters who found ballots confusing, instructions in the polling place confusing. With the growth of vote-by-mail we have an additional venue, now, in which instructions and election-related material are being presented to voters. And ballot and polling place design continue to be important issues to every election official, whether it's at the county, or the municipality level. Regardless of how ballots are presented to voters, there are basic design, good design principles that we can implement to ensure voters have a successful experience in casting their votes.

One of the EAC's major projects was to study the impact of design on elections and to gather a collection of best practices from election officials and usability and accessibility experts, and I believe that's a part of that AIGA effort that Drew referred to in his opening comments. The result was the EAC's 2007 "Effective

Designs for the Administration of Federal Elections" report, which covers ballots for a variety of voting systems and voter information materials in English and in other languages. This report is available at eac.gov, and camera-ready images are also available to election officials by sending a request to the EAC. You can go to the EAC's website today, if you'd like, and you can get the link to download those materials.

So, today we'll begin by discussing the role of design in elections, and the importance of plain language and the legislative landscape in the States, and how to make sure election materials are accessible to all voters, including those with disabilities and those living overseas, or away from home, serving the military.

So, with that introduction I'd like to ask Whitney Quesenbery to begin the first presentation this morning, and Whitney, with that.

MS. QUESENBERY:

Thank you. So, what I'd like to talk about this morning is not just some of the guidelines that are general good best practice principles, but kind of where we've come from, and where we've gotten to, some -- I'll show you some before and after, on some redesign projects, and then, at the end I'd like to talk a little bit on some of the barriers and challenges that we have in the election world that you can't really think about how to improve design without thinking about that whole system.

So, to start, I'd just like to put something on the table which is the notion that good design, plain language, usability, all those words that we use to talk about creating materials that voters can use effectively, start with people. It's easy to think about starting

with that giant fat book that Larry Herrera has in front of him, which is his election code. And it's easy to think about starting from technology, or starting from the challenges of just managing an election. But ultimately, elections are a human ecosystem; there are candidates, there are voters, there are election officials. And the system has to serve everybody. So -- and even when you get to looking at the design itself, you have to think about visual design, information design, the writing of the information, the actual language that's used, the interaction making sure that the voters understand what they need to do, or election workers understand what they need to do. And those all have to work together.

Just to show that this is not a problem of touch screens and it's not a problem of paper, there's a photo on the screen that's from an article in 1998, so pre-2000, from Susan King Roth, called "Disenfranchised by Design." And it's a photograph of a woman who, in her narrative she says, is relatively short, standing at a lever machine, reaching way up over her head to try to pull the top row of levers. And, it shows that the ballot questions are a good foot over her head way out of her sightline. So, she might not be visually -- she might not have a visual disability, but that voting system has created a visual disability for her.

So, how far have we come? The photo on the screen is a picture of a poll worker sitting outside of a polling place with a sign that says "Vote here." It's a plain, simple language, but once inside that polling place, a lot of those things change.

A lot of presentations, like this, start with a picture of the Palm Beach County butterfly ballot, but I'd like to start with a

different picture. This is a picture of the page for the judicial retention ballot for Chicago, in 2000. It's also a butterfly ballot. It has about nine race -- contests, on either side of the page, so, 18 in total. These are contests in which you vote "yes" or "no" to retain the Judge. And, as you weave down the punch holes, it goes "yes" for the first one on the left, "yes" for the first one on the right, "no" for the first one on the left, "no" for the first one on the right. It's a crowded, noisy screen, with the instructions for voting in Spanish and English underneath each candidate's name. And I love elections, and it's just overwhelming. One of the beginning actions by Design for Democracy, which was started in Chicago -- or this group was started in Chicago, was to work with the Chicago elections department to redesign it, because they said, "We're not going to have a new voting system by 2012 -- or 2002, and we would like not to be the next Palm Beach County." So, they worked on it within the constraints of using the same voting system, within the constraints of the current laws, and redesigned this ballot so that it now has much less noise on the page. Each Judge candidate is clearly culled out. The "yes" and "no's" are connected, and they're connected visually through shading. These was one law change that was required for this, but names of the Judges are now in mixed case, capital first letter, lower case the rest of the letters, and that actually required a legal change. It seemed incredible to us at the time, in the design field, to think that something as small and as basic as writing in what we would think of as normal text would require a law change, but it does, and it continues to, in many, many States.

Also, as part of this project, they redesigned the instructions for using the punch card. The instruction sheet that the county had been using is in a kind of confusing order. The instructions zigzag across the page. It's not entirely clear which illustration goes with which, and at the bottom there's a big block of shouting of capital letters, about what you should do after voting. When they finished redesigning it, it had, essentially, the same words, but in two languages, with clear steps outlined in a simple linear form, with the warning instructions about making sure that you've checked your ballot correctly, in red, at the bottom, so that a voter can simply work through the process, and it was clear and organized. There's another thing, here, which is that the highlights and the title of this are in a red background, and that was because the way they designed the voting system, they used color to tell people what kind of information this was; blue for certain kinds of information, red for instructions, and so on. So, at a glance you could begin to see what kind of information you were getting, and, more importantly, election officials could very quickly and easily tell which pieces of information went together.

Another project that's got a before and after is something that I worked on myself. It was the instructions for the Minnesota absentee ballots. This project happened after the 2008 election, which, I'm sure everybody in the room can recall quite well. They aren't bad instructions. They're on a single 8-1/2 x 11 piece of paper. They've got some very, very large blocks of text on them. They do have some illustrations. But, nonetheless, a lot of absentee ballots in that election came back with mistakes on them

that made them impossible to be counted, either disqualified then, at the beginning, or it caused under votes or over votes. And so, Beth Fraser of the Secretary of State's Office approached us to work on rewriting them. And what we said was, we can't rewrite them without thinking about how they're presented. And I have to really give Beth amazing -- a lot of credit for her willingness to dive into a process that was somewhat different from her as a lawyer who is used to working in legislative markup. She started getting, sometimes, two and three drafts a day as we flew back and forth trying to think about what the process was, the four different styles of absentee ballots that have to be managed, and how to make sure that this instructions would have to work for a voter who might be overseas, was certainly not standing next to a poll worker, and which had, as every State does, the unique features of Minnesota; that your absentee ballot has to be witnessed, that you can register with your absentee ballot. I've never met a jurisdiction, yet, that doesn't have one. And, yes, we have this extra special thing here, and all of those have to be managed, as well. So, we ended up with something that had a, get ready, what are all the things you need, walk through the steps. And we cut the amount of words on the page by about 50 percent.

The last one is a current project that I'm working on with Drew here, actually, which is thinking about redesign concepts for New York State's ballots. New York State, in 2010, switched from lever machines to paper ballots, and bought ballot marking devices for accessibility and, well, they got through the election. There were a lot of complaints about how small, crowded, tiny type, and

how difficult the ballots were to use, even though they still used the rows of columns of the lever machines that the citizens were -- that voters were used to. So, like every State, there is an election law that says exactly what those ballots need to look like. It dictates the rows of columns. And so, we set about to say, what could we do by following the EAC's best practices guidelines that would improve these ballots without requiring legal changes, and then, what legal changes might be required to make them just that much better. So, this is a kind of two-step process. What you're seeing on the screen is the second step of that, which is, it includes some things that would require a legal change, like upper and lower case, like writing the instructions in less than a small novel, but it will still work in the voting systems in use, in New York State. It adds shading, it takes away some of the noise, it suggests that we don't anymore need to have lever numbers in the squares, because there are no levers anymore. And it looks at things like hierarchy of type to make sure that the most important information is the boldest and most easiest to see on the page.

So, this sort of process of working from a kind of simple design, how to work within the constraints of the current systems, we can still produce a lot of effect. When I -- in 2009 -- 2008-2009, I worked on a project with the Brennan Center, which we called Better Ballots. We worked with, myself, as the designer, the legal experts at the Brennan Center, and some political scientists, and we looked at elections that had had anomalous results. We went back to that and said, can we look at the ballot and try to figure out what happened, what changes could we make -- what simple

changes, what radical changes could we make that might improve -- might have stopped that problem from happening. And often, they were small things. So, one of the things that we did was say, what if we just took the ballot as it was and just made those changes, not start into a whole redesign project, but just make those simple changes, could that happen? Now, will a simple change like changing capital letters in a name to a lower case -- mixed case letters in a name turn an election around? Probably not on its own, but they can accumulate, so that you end up with a few little changes can add up to some big changes. And, it also means that they can be done over time and can be managed by the election department.

So, I'd like to talk about a few of the best practices that might make designs easy -- ballots easy to read, so we don't get voters holding their chin and peering at the ballot with a quizzical look on their face, as the woman in this picture is.

The first, and I think the simplest to say, and the hardest to do, is simply make the text large enough. It's the single -- when I've been testing materials in New York State, it's the single complaint we hear, whether we're testing that or not. We see people hold that ballot right up to their face to try to see it. It is a lot to get on a piece of paper. It's one of the reasons plain language is important because that can help reduce the number of words you need to fit on the paper, which gives you the space to make it large enough.

I'm going to -- in this section, I'd like to talk a little bit about some of the research that backs up these assertions that this is

good design. I've been talking to some authors who are -- and researchers, who are working on readability issue. One of them is Karen Shriver, who is the author of "Dynamics and Document Design." The other is Ginny Redish, Janice Redish, who is the author of "Letting Go of the Words," good writing for the web, and asked them to help me sort through some of the research for some of the, kind of, key takeaways. One is that when people test different sizes of type, we find that people prefer a larger type, 12 points, which is, amazingly enough, about 3.0 millimeters, which is the TGDC -- the VVSG minimum font size is often a preferred size. There's some recent research out that suggests that when text is harder to read, people read more slowly and, therefore, more carefully. But, they're usually talking about long-form narrative reading, not instructions that you're using on the way to a quick action. But even at 12 points, we haven't really reached preference. Older adults actually prefer 14 point size. People with low vision who are, nonetheless, using their own native vision, prefer 14 to 16 points, which gets us close to the 6.0 millimeter size of the VVSG.

It's not just font size. If you look at the picture of the back of the ballot, on the screen, which has instructions and the ballot question in Spanish and English, it's a lot of text, and it's very tightly fit, in order to fit it on the page. Line spacing is very important in how well people can track across the screen, and how well they can read. It helps low literacy readers read better, it helps low vision readers read better, because it separates the lines and words so that you can read across them and track across it more

easily. The study -- the research studies are very consistent about these guidelines, there's not a lot of controversy, and some of these studies go back to the 1930s.

We've talked about upper and lower case letters, but I'd like to talk a little bit about why they're important. When you write a name like, Kathy M. Flanagan, in all upper case letters, if you drew a box around the outline of the shape, you get a solid bar. And that seems very bold, but if you look at the same words written in upper and lower case, you'll see that you get a kind of notched city skyline effect. Those notches make it easier for people's eyes to track across the screen. In the research, body text, in upper case, can slow reading speed by 13 to 20 percent of time. So, when you take the most important instructions, put them in tightly spaced, small upper case letters, you've tripled -- you know, you've put a triple barrier in the way of that actually being read, and, in fact, a lot of people just turn it off. In social media these days, and in online reading, all caps is seen as shouting. So -- and we are kind of shouting. We're saying, "Don't forget this, check your stuff, do this right." But, when people get shouted at, their ears close, and so, we're talking louder to someone who doesn't understand English, instead of rephrasing and talking in a way that helps people really understand it. So, using mixed case helps people track along the space. It helps with word recognition. It also takes up less space. So, as we're worried about how much space we have on the back of the ballot to fit all that stuff, all that information, upper case just takes up more room. Familiarity is an issue. There's some research that suggests that part of why we find mixed case easier

to read is because it's more familiar to us, but it is more familiar to us. We don't write novels or write, you know, letters in all upper case, so, why do we write our materials in it.

The next point is to align the text on the left instead of centering it. Alignment is really important, not just for the lines, but because that the text itself is a visual element on the screen or on the page. So, when you align it, you create a strong start point so that as the reader reads, their eye can come back to that beginning point at each time. It's not just aligning the text. It's aligning up the text with the other elements on the page. So, for instance, if you're looking at a column of names and you've got say the title "Representative in Congress," the number of the district, how many to vote for, you want that to line up with the ovals that they have to mark, or with the controls that they have to mark on the screen, so that the whole visual presentation creates a strong direction to start here and keep moving down that line. This applies to ballot identification headers, to contests and candidates, to ballot questions and to instructions. In the Design for Democracy presentations, that I've seen, they say there is one place where centered text is appropriate, it's on wedding invitations and wine bottles, neither of which we're creating.

[Laughter]

MS. QUESENBERY:

Another guideline for the best practices is to pick a single font and stick with it. That doesn't mean all the text is the same. I think that a lot of the design of ballots comes from an era when we didn't have -- we were, essentially, working with a typewriter. We didn't

have bold. We didn't have fonts. We didn't have weight and italics. We couldn't do those things, and so, upper case was the only thing we had to do. But, time has moved on and our printing technology and our screen technologies have moved on, and we can, too. The guidelines suggest a sans-serif font. And I know that in the first round of the VVSG discussions, that was a controversy with people who read standard guidance for narrative text, which suggested that, in printed material, a serif font, that is, a font with those little feet on the bottom of it, was appropriate for body text. But we're not writing long novels, we're writing short bursts of text. And we're also writing, often, in relatively small text, and in relatively low resolution. So, the less -- the less dots you have to make up the letter, the fewer lines you want in that letter, the less noise you want. So, a sans-serif font is easier to read at small size, and is easier to read on screen. And, there's actually -- there's research that shows that people actually prefer sans-serif fonts on screens. It's also easier for low vision readers, because it reduces the amount of noise on the screen, unless you focus on the letter shapes. There's also research that suggests that instead of using different fonts to make things look different, that if you use different sizes and weights, so, a light, thin font. In the picture on the screen, the title of the race, "President and Vice President of the United States" is in a bold text, as is the candidate names, but their party is in a normal weight, in fact, a thin weight font right underneath it. So, you can use size and weight for emphasis, just as well as you can use different fonts.

The second area of best practices is a set of guidelines that look at how we use design for organization and meaning. The picture on the screen is a picture of people lining up to vote, and also, people sitting at the registration table getting their ballots and signing in. I'm sure that when you think about organizing a polling place you think about how to manage the traffic flow through it, so that you wouldn't put the registration table at the back, right? You would put the voting machines way up at the front. You would make something that helps people flow through that and be able to get out of the room well. So, we need to do the same thing in the ballots themselves.

The first is one that I think has been very difficult for election officials because the systems often don't support color or shading, but color and shading are another tool that we can use to create a hierarchy of importance. We can use them to separate instructions from contests, contests from each other. We can use them to highlight selections on a touch screen. We can use them to emphasize important information. But the important thing about using these tools is that they're used consistently and precisely. So, if you have decided that instructions are marked by a very dark bar with light text on it, don't use that same text formatting for something else, right? Not that anyone will be able to take a test and tell you what you've done, but it does add up to a sense of an orderly and well organized design, just as you want an orderly and well organized polling place.

The other guideline that I think is a little easier, is to think about how we place the instructions to guide the voters through the

ballot. David Kimball and Martha Croft, who are political scientists, did some research to look at the location of instructions on paper ballots, and their feeling was that you had fewer mistakes, fewer residual votes on ballots, where, the instructions, rather than being spread across the top of the ballot where they looked more like a decorative header were in that first column, so that they were the first thing. They invited readers -- voters to read them first. But, they also were in a clear location where they could get back to them. But we also assume that people will remember what they read at the top of the screen. In the best practices they suggest at the end of -- right after the last contest on the page that you either have a "Continue voting next side" or "Turn the ballot over," but that those instructions be at the point where someone needs them. This is especially important for an audio ballot. You've listened to a lot of noise and a lot of talking by the time you get there. What you need is the instructions exactly where you need it, when you need it. The bottom picture on the screen is a checklist from an absentee ballot. It's at the bottom of the form. After you filled out your address, get your witness to sign it, then you get the checklist that said, "Have you remembered to do all the following?" Now, what do you do with this next.

Layout has been, not only, does it reinforce organization and meaning, but, it can actually impact the voting patterns. There's a picture of a ballot on the screen from Kewaunee County in Wisconsin, in 2002, in which the Governor/Lieutenant-Governor's contest starts at the bottom of the first column, and then, the candidates continue to the top of the second column. This is a

recipe for over votes. This is an over vote inducing ballot. It encourages people to vote for somebody in the group at the bottom, and then, because there's a new header that says, "Governor" -- it says, "Continued" but it does give you a new header to say, "Oh, it must be the next group of choices, I'll make a choice here" and now, you've over voted. Sadly, sample ballots in Ohio, in 2008, also suggested splitting of a column in the sample ballot delivered from the State. And, I guess that's a chance for me to say something else that's really important, which is, the more that we use standardized templates, the more carefully we have to test and check those templates against, not only, the needs of our own State, but, best practices and usability testing with voters in our own jurisdiction, because if we're encouraging everybody to do something, we want to make sure that we're encouraging them to do something that's actually effective,

Another contest where a contest was hidden below the instructions was King County, 2009, where the instructions take up most of the first column, but way at bottom is the first initiative. And that initiative had very serious under votes. This led to a legal change that said you can't do that anymore in the State of Washington. So, that was a serious enough problem that it actually got legislators interested in it.

So, I'd like to talk a little bit about what holds us back from doing good design. The photo on the screen is a woman using a tablet-based computer with tactile controls and audio ballot to vote. It's from the Trace Center. That photograph is from a design they did, a demonstration project they did in 2000. So we're nine years,

ten years down the road from that, and maybe it's time for us to be able to actually put into practice some of the things that we know. But it's easy for me to say that, and it's harder to do, and I thought I'd take a look at some of the things that hold us back from doing what we know we need to do.

The first one we've talked about is legislation. Not only does legislation often enshrine instructions, in New York State, we had a situation in 2010 where the instructions on the back of the ballot followed the legal requirement. They printed the text that the legislation required. And I'm going to get the directions wrong, so I'll just say one direction, it said to mark the oval to one side of the candidate. The ballot, however, had the oval on the other side of the candidate's name. So, the instructions were just plain wrong. And I think the only saving grace was that they were on the back of the ballot in eight point type and probably no one read them. So, we need a way, when technology changes, when our design changes, we need a way to be able to keep the legislation up-to-date with those changes, or to keep us ourselves up-to-date with legislation changes, so that we're not locking ourselves into problems. But, the other problem is, this set of instructions can -- I have trouble, I mean, I'm a designer and I have a trouble imagining what those instructions will look like when presented to a voter. They're in full markup, so, both new text and old text is all mixed in there. I would like to suggest that if you're negotiating new legislation for ballot design rules, or election design rules, that part of that process should be mocking up the results of that legislation so that the people who have to vote on it, the people who have to

comment on it can comment on it and can think about what you're implementing with full knowledge about what the impact of that legislation will be. That was actually what led us to do the concept ballot for New York State. It was to help support the idea of what would changing this law mean, would it be worth it, right, would all the work of getting something through legislation actually produce an improved ballot or not?

The other problem is that election departments don't have enough design resources. In the past, it wasn't as much of a problem. One of the programs that I like to cull out, there's a woman on the screen in a bright green sweater with a beautiful smile on her face. Her name is Jenny Greeve. She's the past election -- AIGA election design fellow in the State of Washington, and she has been running a program where young designers, often just out of school, or just out of their first job, spend a year or two with an election department working on things like templates. Jenny redesigned the voter education forms. She created a library of images and graphics that worked with the election system -- with the voting systems in use, in Washington, that are now available to all the local officials. And she brought her professional knowledge about how to think about design problems. The picture below it shows three election workers and a different design fellow working with a paper mockup trying to think about how to reorganize a ballot to make it work best. There are tools and techniques that we can bring, but I think one of the important things about the design fellowships is that they put a designer in the election department. So that they're not just kind of flying in and saying, "Here's how to

do it" and flying out. They're actually engaging, day to day, hour by hour, with the challenges and problems of elections, and essentially, teaching, by being there.

The last one is near and dear to my heart, which is, we don't spend enough time learning from voters. Now, this seems strange to say to election officials, who spend day in and day out thinking about voters, but there's a difference between engaging with people as advocates, engaging with them as candidates, and engaging with them in the kind of controlled experiment that you might see in usability testing. We like to say that everything gets usability tested. The only question is, are you there to learn from it, and is it happening before or after the election? Because it will be -- I think one of the saddest things that happened in 2000 wasn't that the butterfly ballot caused problems. It was that the problems were caused by an election official trying to do the right thing, trying to make the text bigger, so that the elderly voters in Palm Beach County would be able to read it better, and by making one design change you triggered a design problem. And I'm also -- I don't know this, but I'm quite sure what happened is those pages were reviewed and read and looked at by all the people who review and read and look at election materials, but no one sat down, put them on the punch card puncher and tried to actually use it. Because if that had happened, I'm sure we would have found that problem earlier.

It's easy to talk about big research, and to think about a really big project like the Design for Democracy project, or like some of the research that NIST is doing in support of better election

design, and think, how can I possibly do this? Well, usability testing does not have to be expensive. It can be simple. The photo on the screen is a poster, again, that Jenny made, where they were working on the voter education form and they went out to a farmer's market, they set up a table under an umbrella, they put up a sign that said, "Study = Cookies "and they handed out chocolate chip cookies to anybody that would sit down and fill out that form and let them watch them do it, so they could learn how to improve it.

The project we did with Minnesota included two rounds of usability testing. The first round we worked with the University of Minnesota's research lab and some volunteers, professional volunteers from the area, learned a lot, made a lot of changes. And then, we wanted to do a second round, and no one was available. And Beth Fraser said, "Well, we were there with you. Couldn't we do it?" And they did. So, with one project under their belt, they were able to do a second project to use that to improve -- further improve what we were working on and come up with what I thought was a pretty good project.

I think the last thing I'd like to say is that this isn't just -- this isn't just something that's good because it's good. Voters can actually tell the difference. In a NIST study that's reported in a "Report of Findings" in the NIST internal report 7556, "Use of Language in Ballot Instructions," Ginny Redish and Dana Chisnell tested, head to head, a traditional version of ballot instructions against a plain language version. What they found was that there was a marginal improvement in performance. Some, but not widely better, but when they asked people which ballot they preferred, that

was a very strong preference. 82 percent of the voters preferred the plain language version, nine percent preferred the traditional version, and nine percent had no preference between them. We know that how well you think something is -- if you think something is -- if something looks complicated, you think it's complicated. If something looks not well thought out, it reduces the trust in the elections. So, good design doesn't just help voters perform better, it doesn't just help us have fewer errors or fewer questions, it actually helps increase trust and confidence in elections, and I think that's really important.

I have one more thing to add, which, I don't have a slide on because I didn't really know how to write the slide, but I know that one of the constraints is the constraints of the systems themselves. And I don't know the answer to that problem, but I do want to say one thing that's been very frustrating to me as a design advocate has been the way the screens and the materials are treated as some sort of State secret. We were working on some error messages in New York State, and it was almost impossible to get anybody to tell us what those messages say now. I don't know why this is true. It's a public device. It's a public document. Why should it be so difficult for us to be able to talk with the election officials, with a group of advocates, with the designers working on the problem about exactly what the constraints of that system are, and what it says now, and how we can work to improve it.

So, finally, I have a picture of three people standing at privacy booths to mark their ballot. One is very short and her elbows are high, one is kind of medium height and leaning -- one is

very tall and has to lean almost doubled over, and one is kind of standing at the right height. It's to remind us that we come in all shapes and sizes, and that even as something as simple as a portable table to mark your ballot has an impact on the human factors of elections.

Thank you.

DR. KING:

All right, thank you Whitney. That's very, very thought provoking. I want to remind everybody who is following us on the webcast that Whitney's presentation, as well as the other presentations that will be made today, will be available at the www.eac.gov website. And I think, in the case of Whitney's presentation, the photographs are very powerful and provide excellent examples.

MS. QUESENBERY:

And are fully described.

DR. KING:

And are fully described, obviously.

I want to start by asking a couple of follow-up questions of Whitney, and then, kind of open it up to the group as a whole.

One of the things that we know about election procedures, and again, I'll reference Larry's inch-and-half thick California election code Bible sitting on his table, is that election procedures evolve and everything we do at some point had a purpose. And that purpose sometimes gets disconnected over the years, and we continue to do that procedure. But I want to come back and ask about the recommendation for using mixed case for candidate names, and maybe get the perspective of some of the election

officials about why many jurisdictions have traditionally used upper case, and may still continue to use upper case, in part, because it's in code, but if you could begin with any insights into why that got started.

MS. QUESENBERY:

My suspicion is that that got started because it seemed like it would make it important. I mean, the candidate name is one of the most important things on the ballot, and if you are working with a printing system that allows you to have one size of -- one font and no bolding, it's the only choice you have to make it more important.

That said, I will also say that if you have one word in the sentence that needs to be important, and you can't bold it, and it's just one word, it's still an effective tool if that's the only tool you have. But research shows that the bolding is better, and if your tools now allow you to use bolding, I would urge you to do so. But I think it's a holdover from past technology.

DR. KING:

Okay, I know in the 2008 Presidential election there was questions about use of John McCain, how his name would be presented on the ballot, whether it was a large "C," to begin the M-c portion or a small "C." And one of the things that I suspect in the presence of Scottish surnames and Italian and Spanish surnames is that it removed the risk of election officials having to make a decision about representing it in upper case or lower case because there was no choice to make in the code.

MS. QUESENBERY:

But it also changes something that's McCain to -- you know it changes the way you see that word. I mean, think about the hash tag for this thing. It's BReady 2012. When I first saw it, it was written in all upper case, and I went, "BREADY? Huh, what's BREADY? Oh, BREADY, I see." Right? So, mixed case can help you disambiguate words as well as -- and, you know, candidates and their parties get to check their names on the ballot. I think that's probably the one thing that does get checked well.

DR. KING:

Um-hum, okay, another question that I have -- and I noted that the document that is being referred to was a 2007 publication -- and in recent years there's been a growth in the awareness and the importance of understanding cognitive disabilities, particularly in light of traumatic brain injury and post-traumatic stress syndrome and its impact on voters.

MS. QUESENBERY:

Um-hum.

DR. KING:

Has there been an assessment of the design principles that you've illuminated in your presentation, how they may mitigate those disabilities?

MS. QUESENBERY:

Sure, I'll hold some of this for Amy, but I'd say that I think that plain language is usability for cognitive disabilities. One of the things you can do to help people who are struggling to read, for any reason, whether it's a visual problem, that is, a lot of what we think as reading problems turn out to be visual tracking issues, how your

eyes actually work, how well you understand English, how well you understand election terms, or any other kind of problem, that the simpler and more direct the language, the easier it is to understand. The fewer jargon words you use, the easier it is to understand. But also, doubling up queues, so, having a color and a word and a shape helps people who are -- who read and understand visually, who read and understand through visual concepts. The more queues you can provide, the better off we are.

DR. KING:

Okay, and then, I have one last question of Whitney. Then, I am going to turn to Elizabeth and Larry and get some election official perspective on this.

In many of the scenarios that you talked about, there seem to be a three-step process; crisis, and then analysis, and then solution. And the question really is, do we have to do step one in that process?

[Laughter]

DR. KING:

Can we skip it? And if so, how do we identify the warning signs…

MS. QUESENBERY:

Sure.

DR. KING:

...that that's coming?

MS. QUESENBERY:

So, I think it's human nature that we often do wait for crisis. I mean, our lives are busy at best of times, frantic at other times, and so, I think we often do look for the squeaky wheel. And if the

squeaky wheel is a crisis, it gets a lot of attention, and if it's a crisis, then it gets legislative attention; it gets attention of people who might not care so much about election administration. But, usability testing is the canary in the mineshaft, right? It's how we tell what things will be.

I have a quick illustration of the difference between usability and quality testing. I did a set of buttons for the Usability in Civic Life project, and we had a our URL on it and we did a lot of testing for how big the buttons should be, we made mockups, we put them on people's lapels, we walked around the room to see whether we had them -- whether they were readable or not. It wasn't until the box of 1,000 buttons arrived that someone noticed that the URL was wrong. So, we had done all the usability testing, but we hadn't done our quality testing.

So, I think part of it is adding something to our process, and as little as possible to our process, that lets us check things in action. Maybe it's even having someone in your own department who didn't design the ballot walk through the ballot as if you were a voter. Just that much could help you see something. When I was in design school, they used to tell us to hold our work up to a mirror and look at it backwards, just to give ourselves a new perspective on it. And I know that almost every election department has relationships with the parties, with advocacy groups, with citizen groups. When we've even looked for professional volunteers to help with projects, people are often quite eager to do so. So, I think unlike some other context where it might be more difficult, finding people to be willing to help isn't that hard. The trick is creating a

situation in which we can kind of create the situations -- the circumstances for crisis in a teapot where we can control it.

DR. KING:

Okay, if I can, let me tip that question to Elizabeth, and then to Larry. In the redesign work that you did in your jurisdictions, what were the drivers of that? What was it that one day made you sit down and say, this is important, we need to allocate time and resources to this?

MS. DEITER:

Well, I was the driver for it. We have always tried to make our ballot as readable and official looking as we possibly could, and we were going about it all wrong. I actually heard a session at one of our conferences, it was Design for Democracy, as it happens, that gave a presentation. I got so excited, because the tie in between getting professionals in the graphics world, who have actually studied these things, and getting them to look at ballots, was really exciting. And I realized we've been doing this all wrong all these years, all capital letters, because that's really important and centering everything. And so, I was very excited to hear them speak and actually put some facts to what we had been trying to do. And so, then I went back and we relooked at all of our ballots and all of our -- we're slowly also doing all the forms in our office, which is huge, probably have over 200 forms, some of which I can't control. And this is a slow process. It isn't going to happen overnight on it. But we didn't have the crisis with ours. But, it's still a case of just -- it's important, as election officials or any public official working with -- directly with the public, it's our job to

communicate, and to make it as easy as possible for people to understand what they're supposed to be doing. We're giving instruction, and so, we're always looking for that way to make the instruction clear, easier to understand. And it just made sense that the research that's been done in design, in the private sector, by graphic artists, we need to start applying to the public sector too.

MS. QUESENBERY:

May I ask a question? Elizabeth, have you found it effective to be able to work incrementally? I mean, I think one of the things that I've heard is, we can't possible martial the resources to do this all at once. And I always say, you don't have to.

MS. DEITER:

There are advantages and disadvantages. The disadvantage is it takes forever, and the advantage is we can afford it that way. It also, then, is a case of, in some ways with my staff, like pulling teeth. "Okay, now you've gave me this form, this is the old style. We need to redo this." "Oh, okay." "Back to the drawing board, redo it the style that we need to do it in." You know, we started this project four years ago. We're still working on it. So, it isn't something that happened overnight. I believe Larry has more to tell us. I'd be interested in going to a design company. And I assume that can -- you know, you give somebody all your designs for them to do, you can get things done a little bit faster on that. So there are advantages and disadvantages to both. I'll be anxious to hear that.

DR. KING:

Larry?

MR. HERRERA:

Thank you, Merle. Well, I want to say it's indeed a pleasure to be here this morning because I think I am rubbing shoulders with people who inspired us, back in 2006, to take that incremental step of redesigning our ballots.

When I began in elections, in 1988 I think, as Whitney said, not only were vendors somewhat secretive, but I think elections administrators back then, we were the ones who saw the issues with the voting systems. And one of the -- one attorney in Long Beach always tells me the elections officials' prayers is, let there be wide margins, right, because closer margins would require -- give incentive for more scrutiny of the process, over votes, and under votes, the accuracy of the systems. So, I would say that back in 1988, as elections officials, we could begin to see the cracks in the ship. And then, as we got through the mid '90s, at least, in my experience where I was, said there's got to be a better way, there's got to be a better way. And then, what happens? Florida 2000 comes along, and now, everybody is paying attention. And I think the stress level for some elections officials went up a little bit. But I do believe that when there's a fire there's probably something good that will come out of that, because it will make you address the ambiguities in your systems.

What I'm trying to say is, I think there's been a trend amongst election administrators, at least the ones that I know where they are -- they have begun to pay more and more attention to the design requirements of the ballot, the sample ballot, as well as the polling places, and I think that's a good thing. Back in the

mid ‘90s I would have said there would have been more of us circling the wagons; we know what’s best for the voters, don’t tell us what to do, there’s never been a problem with our vote results, just leave things alone, we’ll take care of it.

So, I think that my point, and I think when I get back to the office we’re going to show this presentation with our staff, and see if we can peel the onion back a little bit more. But I think one takeaway I have from this is that we have, as election administrators, needs to embrace the design community. We need to pick our team and, of course, our team is our elections vendor, our printer, but we need to embrace the design community and the language community, I would say, to come up with best practices for our jurisdictions. Every jurisdiction is different, and that makes the opportunity for improvement even more rewarding.

One of the takeaways I think I have from today is that I’d like to discuss the possibility of some best practices legislation that could be taken into consideration by an elected official at the State level, where they would say -- work with Whitney and others, to say, “This is what a model draft of some legislation would look like.”

And so, I find it very rewarding, and it’s a pleasure to be here this morning.

DR. KING:

Okay, great. Wendy’s taking note of that, that model legislation.

I want to come back and ask a question of both Elizabeth and Larry, and it’s for the benefit of the election officials who may be listening to the webcast today. We heard Elizabeth talk about this incremental approach; that it’s not just the ballots, it’s the

hundreds of pieces of material, both, electronic as well as printed. But if you were to recommend a starting point for other election officials to begin this process, are the ballots the obvious place to start, or are voter instructions? What kind of recommendation? I'll ask Elizabeth first, and then Larry, where's the starting point?

MS. DEITER:

I would say the ballots are, because that is what the voter is dealing with at the voting place and is probably taking the most note of, probably not as much the signs in the voting place, but to the ballot that they will be dealing with. So, to be able to work on those first, if you can through the statutes, I think that would be the most helpful.

DR. KING:

Larry?

MR. HERRERA:

We, in Long Beach, in the City of Long Beach, as I'll share in my presentation later, we started with the ballot. But the first thing that we did was, we realized our strengths and our weaknesses of the voting system that we had back in 2 -- probably prior to 2006. And we came to the realization I think that, and I think our community wanted this, we came to the realization, again, that we had to do more with about the same number of -- same amount of resources that we had used in the past, and we had to do more to, how would you say, make every vote count., get rid of under votes and over votes, make sure that voters with different abilities could mark their ballots accurately. And we did that analysis of our system and said, you know, there's a problem here, there's a hole. And from that

standpoint, then, that led us to the next stage, which was to pick our team; who would be our vendor, who would be our printer, who would be the people that we would rely on to help us create a vision for a new voting system. And, as I will speak later in my presentation, is that, you know, first of all, you've got to define that vision of whatever the value is, and then, secondly, you need to get the support. So, what we did was, we engaged -- I engaged my elected officials, my bosses, to generate some support for, at least, looking at what we had, deciding whether or not something needed to be done, and then moving forward from there.

So, I think one of the first things you can do -- we started with the ballot, actually, but before that there was some preliminary steps, and that was creating support for change, and creating a vision of value. And I'll talk a little bit about that later, but that's what worked for us.

DR. KING:

Okay very good. I want to get Ron's input on this question, and then, I remind everybody, we've got this 10:30 hard break, and we need to get Amy's presentation in.

So, Ron, you had a comment?

MR. GARDNER:

Yes I do, thank you very much, Ron Gardner. I'm a member of the U.S. Access Board.

First of all, Whitney, I'd like to say that I appreciate your description of the photos that were in your presentation. I feel Iike I followed your presentation very, very well, even though I can't see and don't even know where the screen is, quite frankly. I especially

liked your description of the first one where, as I recall, you said there was a person who was short, who couldn't even reach the levers, or who couldn't read the questions, and in the very last photo there were three people of different sizes, and one seemed to be just the right size, but one too tall, and too short.

There are other kinds of people in our population and you did a wonderful presentation on ballot design, and so forth, but many people will be using electronic screen readers or other technology to be reading and casting ballots on these very well designed ballots. Your understanding that whether you have McCain with a small "C" or a big "C", it can kind of glob it up for the visual reader, multiplied by a hundred, is what happens when things are read by a screen reader, either through non-visual access, or as something as blown up, if you will, for a screen reader that presents the information in a very, very large type. And I'm not talking 12 to 16 point.

MS. QUESENBERY:

Yeah.

MR. GARDNER:

I'm talking more like 25, 40 points.

MS. QUESENBERY:

Right.

MR. GARDNER:

So, one thing that I need, we need, to consider, as you say, right justify or left justify or making sure that the selection box is in the right place, is making sure that as it's presented through the screen reader, that the right box for that low-vision user is in the right

place. And, if the person is using a different type of screen reader that is converting the text to speech, it has to flow. In other words, it can't say, "President, Vice President, Senator, Congressman, Washington, Lincoln, Franklin and Smith."

MS. QUESENBERY:

Right.

MR. GARDNER:

That doesn't help anybody. So, the design for people with disabilities, and I think that's what we're talking about, needs to be thought of for all of our voters. And I just throw that out.

MS. QUESENBERY:

Yeah, I completely agree. I would say that one of the reasons why I think you see a lot of presentations on visual design of ballots and not a lot of presentations on the audio design of ballots is how hard it is to get access to understand how the audio ballots actually work.

MR. GARDNER:

If I may?

DR. KING:

Um-hum.

MR. GARDNER:

There are several companies around the country, I see them on the Internet, who can help with this. I happen to think the best one is located at the International Braille and Technology Center, which is in Baltimore, Maryland, at the headquarters of the National Federation of the Blind. Their website is nfb.org and I'm -- we have experts there that can help, and I know will help. You give them a

ballot, they'll not only test it for you with different screen readers, but they can also suggest recommendations and help with the actual design at the frontend, instead of having a ballot and then having to recreate it and backfill.

DR. KING:

Okay, thank you. I'd like to ask one more question, and then, we're going to swap out our speakers up here. And it has to do with generational and cultural differences as they apply to ballot design. And, I think it's easy to oversimplify the cultural, and that is, you just put whatever minority languages are required for your jurisdiction, but obviously, it's more than that. Is there a reflection, Whitney, on your part, or from other members of the panel, about things that election officials may want to take into account regarding generational and cultural issues?

MS. QUESENBERY:

I don't know if it's generational, cultural, or a combination of generation, culture, education, and civic engagement. But when we do testing around election materials, I'm -- there's always people who seem like deer in the headlights when faced with some of the election terms and finding ways to say what we need to say, in as simple language as possible. And I'll just leave it at that, because I think Amy is going to cover a lot of that.

And I think Elizabeth said something important in one of your statements, which was, you wanted to make the ballot well designed and official looking, and I think finding a neutral officialness is important. I know that there are a lot of projects in the US Government, right now, a lot of them are thinking about

plain language, but I think they're dealing with the very same issues that we're dealing with in elections. How do you make a mortgage disclosure form? This is an inherently complex problem. It's got as much jargon, maybe more jargon than elections, and how do we make that clear so that people understand the financial decisions they are making. How we do we make the same thing clear in elections? In testing instructions, it's often very small word changes that make a big difference. Do you say, "Return your ballot, get your ballot back, or correct your ballot"? It turns out that you get very different reactions to those. You know, do they think we're bossing you around? Do they think we're helping you? And finding that, I think, is as much about testing with your own population in your area as anything else. But I think also clean, simple language, clean simple design transcends a lot of the cultural issues.

DR. KING:

Okay, thank you. Larry, you're the last commenter.

MR. HERRERA:

Merle, briefly, I think that the cultural issues are always there. I can recall a meeting, back in the mid 1990s, where we spent probably an hour-and-a-half engaging the community as to whether or not a circle in Spanish should be circulo or ovalo. And we had arguments on both sides of the tents. And I think the best advice I could give is that from time to time it's necessary to engage your community, your candidates on the translations of their -- of their titles and of their candidate statements to other languages. And invite the community from time to time to participate in that

discussion. But what they need to understand, going in, though, is they're going to have to make a decision and take it from there.

DR. KING:

Okay, well thank you. I'm going to ask if our speakers could swap out, and let me see if I can help with the technology here.

The Chairperson of the Plain Language and Information Network, Amy Bunk, will provide us with an overview of plain language use in government organizations. Amy is the Director of Legal Affairs and Policy for the Office of the Federal Register, United States National Archives and Records Administration. I hope I have all that.

Amy?

MS. BUNK:

It's a mouthful, thank you. I'd like to start by saying I have no pictures in my presentation, unfortunately. I think use of pictures is really good and I like that a lot.

I'm just going to give you a general background on plain language. My focus is on the federal executive branch of U.S. Government, so that's what I'll be focusing on today. It's just very general, and hopefully, some of the ideas you can use in developing ballots in elections.

So, what is plain language? Plain language focuses on your audience. So, it's reader or audience-based communication. It should -- using plain language should be able to get your audience to find what it needs, to understand what it needs, and to act appropriately, with that understanding.

I was asked to provide a little bit of history on plain language in the Federal Government. You'll find statements from federal officials back to -- as far back as World War II on plain language. The current plain language movement in the Federal Government traces back to the Nixon Administration, when the President said that the Federal Register should be written in layman's terms. At that time the Federal Communications Commission issued its citizens broadband radio rules. These were regulations that used active voice, were in a question and answer format, used personal pronouns, and gave clear instructions. They're most likely one of the first regulations to be written in plain language. Also, in the '70s, President Carter issued a couple Executive Orders intended to make government regulations more cost effective and easy to understand. So, in the '70s, we saw the first initial push, big push for plain language in the Federal Government.

By the 1980s, we had a bit of a setback maybe in plain language. President Reagan rescinded President Carter's Executive Order, and so, the federal agencies were sort of left on their own to determine whether or not to continue the push for plain language. One federal agency that did was the Social Security Administration. They began writing their notice documents in plain language. They believed it was a priority.

There was another big upsurge, then, in the '90s, with the plain language movement in the Federal Government with President Clinton issued a Presidential Memorandum that told federal agencies to write regulations and their other documents in plain language. Vice President Gore started presenting the No

Gobbledygook awards to federal employees who got rid of bureaucratic speak in their documents in favor of plain language. The Securities and Exchange Commission issued its Plain English Handbook. That handbook is still available on the SEC's site and is a great resource for how to draft documents in plain language, so I highly recommend that. Veteran's Benefits Administration began their reader focused writing campaign with their employees. They trained all their employees in how to write in plain language and started writing their letters to vets in plain language. Also, my group was formed. At the time it was called the Plain English Network. We, in the early 2000s, changed our name to the Plain Language Action and Information Network, PLAIN for short.

And, in the early 2000s, the Bush Administration didn't have a formal plan for a plain language, so we see sort of an ebb and flow of the plain language in the Federal Government. Again, a lot of federal agencies continued the push for plain language and had very active plain language programs in place. The Federal Aviation Administration, the U.S. Citizenship and Immigration Services, Food and Drug Administration, the National Institutes of Health. Two of these groups, the Citizenship and Immigration Services and National Institute of Health, both have plain language awards programs for their employees. And that's certainly a good way to motivate staff to get them to write clearly.

Last October, October 13th to be exact, the Plain Writing Act of 2010 was enacted. This is the first Act that focused on plain language writing within the Federal Government. There are a few other Acts that suggest it, but this one really set out a plan for

federal agencies to begin providing communication to citizens in plain language. What the Act requires is that federal agencies use clear communication that the public can understand. Now, what they call -- there's certain particular documents that the Act focuses on. Those are covered documents under the Act. Those documents are those that are needed to get federal benefits or services or for filing taxes. I might want to add here at this point that the IRS, the Internal Revenue Service, has had a plain language program that probably began in probably the '90s and it is still very active. Other documents that are covered under the Act are those that provide information about federal benefits and services or those that explain how to comply with requirements administered or enforced by the Federal Government.

So, under the Act, there's certain deadlines and certain requirements that agencies have to meet. There was a requirement just last month on July 13. What federal agencies needs is a senior official for "plain writing." They also need contact points for the public on plain writing, not necessarily your senior official, but day-to-day people, who can actually do the groundwork plain writing. They have to explain, and train agency staff in the Act. That's a requirement that really started on the 13th because I don't think training was ever done. They have to set up procedures to oversee implementation of the Act and post a compliance plan on their plain writing page of their website. Also, OMB, the Office of Management and Budget, was required to issue guidance on the Act, and they did so in April. And one of the interesting pieces of that guidance is that agency -- while agency regulations aren't

covered by this Act, OMB, in their guidance, said that the preamble statements, those statements that agencies publish that explain their regulations, have to be in plain language.

So, starting October 13th agencies must begin using plain writing in any new or substantially revised document that falls under the Act. They have to begin writing annual compliance reports and post those reports on their plain language webpage. They also have to have a mechanism to take public comments on how they're doing, whether or not they're actually writing their documents in plain language.

As I mentioned, regulations aren't covered under the Act, but there are three Executive Orders that specifically discuss that agency regulations and supporting documents that need to be written clearly. The most recent was issued by President Obama. It's Executive Order 13563. It's entitled "Improving Regulation and Regulatory Review." That one states in the first paragraph that regulations need to be in plain language.

For those of you who do follow federal rulemaking there's a website, regulations.gov, and there's an interagency work group that works on the public facing side of that regulations.gov where the public can actually comment on regulations, and there's an internal federal side of that which is called the Federal Docket Management System, and they've issued a best practices guide for federal agencies who are posting on regulations.gov, which talks a lot about writing regulations in plain language. So, there' s a very -- there's a lot of support within the Administration for writing in plain language, especially with OMB, and for us -- for those of us at

federal executive branch agencies, we really do need to pay attention to OMB because they are the boss of us.

I'd just quickly like to give you some examples. Most of these examples -- the first two examples are from the 1990s. The second one, I think, is on mortgage disclosure. What, hopefully, you'll see from these examples is that both the government and the public really do benefit when documents, letters, ballots, mortgage disclosures are all written in plain language. What it shows is a customer focus. They communicate more effectively, it eliminates barriers, it reduces time spent explaining, so it saves the federal agency money cost in explaining or revising those documents later, and it improves compliance.

The first example is from BVA, Veteran's Benefits Administration. The VA needs to go out and send out letters to veterans to get beneficiary information. They need that in case the vet dies. They need to be able to get information and have a valid beneficiary. What they were finding was that they weren't having a good response rate, and it was costing thousands of dollars to find the vets. So, they did a little test, and what they found was that with the plain language letter they got a higher response rate with lower costs. So, the originally letter was about a 35 percent response rate. The plain language letter, it was a 58 percent response rate. And so, what you see, in this example, is that the agency needed their response and that's what they were looking for. In other cases you might be writing a letter, maybe, not to get a response. So, you're explaining to people what to do, but you don't

want them to call in. And you'll find out, they'll call in less, if you write clearly.

This next example is from the Bureau of Alcohol, Tobacco and Firearms. It's actually from a Bureau that split off in the 2000s under the Homeland Security Act, so this is actually an example from the Alcohol, Tobacco, Tax and Trade Bureau. And what they do is they write regulations on labeling beer. And they -- in the '90s, they rewrote those regulations into plain language. And then, they went out and tested both beer industry insiders and other related industry people, who were not necessarily familiar with beer labeling regulations, and what they found was that comprehension based on correct answers was higher, even for the beer industry insiders, with the plain language version. So, what you'll see is your industry people may be familiar with your regulations. They just may not understand them as fully as they could if they were rewritten in plain language. So, after the correct examples and comprehension for beer industry insiders was up about almost 20 percent, 19 percent. For other industry insiders it was up 27 percent with the plain language version of the regulations.

Finally, HUD, and Urban Development, in the mid 2000s, decided it would try and rewrite the good faith estimate to save borrowers, people looking for mortgages, money. And what they did, is, they went out and they did seven rounds of testing on various different forms -- versions of the good faith estimate, with participants correctly identifying the lower cost form -- or the lower cost mortgage on the last form that they used, with about 85

percent accuracy, and what they estimated was, this would save people looking for mortgages about $700.

What's interesting about this example is that under the Dodd-Frank Act, the big financial reform Act which created a new federal agency, the Consumer Financial Protection Bureau, they've also been tasked with rewriting the good faith estimate form. And right now, they're actually posting different versions of this form on their website, knowbeforeyouowe.org, and taking public comment. So, even if you've got a plain language version of a very difficult form to use, it can always be done better. And so, plain language is really -- it doesn't stop once you issue your final document. It can continue on, and it may continue on past your agency's authority to change that form.

And finally, just some tips and a little reminder that plain language, again, is audience focused. So, write for your audience. It's not baby talk. It's not stripping out unnecessary words or just editing or polishing, it's really focusing on your audience and what they need to know. So, write for your audience. Who is your audience? What does your audience need to know? What do they already know about the topic? And what questions will they have? It's not, you know, if Whitney's in the cube next to me, it's not what questions Whitney has because she's an expert in usability, it's what questions somebody else has. So, that's always a good thing to focus on.

Use active voice. Be transparent. Show your intention upfront. Don't say things like, "New regulations were proposed." Who proposed them? Was it the Office of the Federal Register?

Was it the Department of Transportation? Put the actor first. So, say, “The Department of Transportation proposed new regulations.”

Organize to help your reader. Because you forgot something and you remembered it at the very end of the document, don’t just stick it at the end of the document. Think about where your reader is going to need to know that information. If it’s back up at the top, go back and add it in where it needs to be. So, organize your writing and answer questions where the reader will ask them. Again, just putting stuff at the bottom because you remembered it at the end isn’t, necessarily, focused on your reader.

Simpler is better. I got this sentence from an attorney at a federal agency, and it says, “The spherical object used for recreational purposes, sometimes identified by individuals as a ‘ball,’ was struck by the male humanoid who responded to, and was given by his progenitors the moniker of, “Jack.’” “Jack hit the ball,” so, say things simply. That’s particularly true in documents, and in areas where you don’t have a lot of room.

Use short sentences, one topic per sentence. Avoid complexity and confusion. Try and keep your sentences down to 20 words or fewer.

Keep it short. What’s on the screen, now, this is from an agency preamble, so this is the summary of the rulemaking. What they did was they just set out the text of an Executive Order, and so, they just, verbatim, copied and pasted the text. It’s just a wall of words. It’s not very useful. Honestly, if I want to read the Executive Order I’ll go back and look at the Executive Order. I’m not going to go through and read the agency cut and paste of the Executive

Order. So, really, get to the point, keep it short. From the wall of words, we've gone to one sentence and it just says, "This rule meets the requirements found in Sections 3(a) and 3(b)(2) of Executive Order 12988." That's the Civil Justice Reform Executive Order. It's one that requires plain language. If I were writing a regulation, I would probably add a couple sentences that explains how my regulation meets the requirements, that it, specifically, says what time the bridge opens, and who can pass over the bridge, or how to get the bridge closed.

Avoid jargon and acronyms. Don't use obscure, archaic language. Use terms that the audience is familiar with. If you're writing to the family of a patient, don't say, "The patient is being given positive pressure ventilatory support." Say, "The patient is on a respirator." If you're using acronyms, define your acronyms. I've been trying to do that throughout my presentation, and hopefully, I've done that all right. I have a sentence here that says, "You may use your transportation worker identification credential at port authority checkpoints." And, in parens, I have TWIC, as it's commonly called, the TWIC card. They're using it at ports for access to ports.

Just some resources. My group, PLAIN, has monthly meetings. The second Wednesday of each month we meet in D.C. As I mentioned, we're a group of volunteer federal employees, but our groups -- our meetings are open to everyone and anyone. We now have a call-in number. We have a website. It's www.plainlanguage.gov. I forgot to mention earlier, but the text of the Act, the Executive Orders that I mentioned, the OMB guidance

that I mentioned are all available on plainlanguage.gov. We also have the Federal Plain Language Guidelines and those guidelines are available for download for anybody. If you need a set of plain language guidelines, we've worked extensively on revising them lately, had comments given to us from experts in the field, like Whitney, on testing. And so, a lot of the tips are right in the guidelines and there's more information there.

Thank you very much for inviting me to speak.

DR. KING:

Okay, thank you, Amy. As I said earlier, we have a hard break at 10:30, and so, when we return from the break we're going to pick up with a discussion of the ideas that Amy has introduced. And we'll be back here at 10:45, thank you.

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[The roundtable panel recessed at 10:14 a.m. and reconvened at 10:33 a.m.]

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DR. KING:

Okay, thank you so much and welcome back. This is the Roundtable on Election Design, and again, thank you for those of you who are joining us on the web. And we encourage you to follow us on Twitter and visit the EAC website to get access to the presentations that are being made today, as well as other material.

We'd also encourage you to submit any questions. We try to incorporate questions that are presented by our webcast audience, and you can do that by twittering at eac.gov or there's an online form at the website www.eac.gov. So, thank you.

Right before break we were talking about plain language and Amy gave us a great overview of the Federal Government's initiatives in this process. And what we want to do now is kind of drill down to the election level, and particularly, if we can take it to the local elections office. And I have a question that I'm presenting on the screen behind me, and I'm going to ask Drew to weigh in on this question first, but I'd like to just touch on what I believe is the importance of this question. Already, today, we've seen many excellent, excellent suggestions for election officials on how to begin the process of evaluating and improving polling place instructions, ballot instructions, ballot content. And one of the obvious step zeros, if you will, is, election officials must first be able to recognize there's a need for that, that within their jurisdiction there are indicators or precursors that exist that will instruct them that now is the time to begin evaluating these things.

So, my question is what are the behavioral or operational indicators that there could be an issue regarding ballot design in an election? And I'm going to ask Drew to kind of tee that question off, and then, I'm going to ask the rest of the panel to weigh in on it. Drew?

MR. DAVIES:

Yeah, thanks Merle. I will let some other people take some of the real details about behavioral or operational issues on this, but what I would say is I think all of us understand that election design is a constantly evolving process, so no election official probably thinks they've made it all the way to the finish line at any given moment. Some of them are further along the path towards great design than

others. But I do think the main opportunity we have, just as you mentioned earlier Merle, is to try and avoid that step one where there's a huge crisis that happens, and then, we have to evaluate it and go back and fix it, and instead recognize that if we all understand election design is an evolving process take the opportunity before there's a crisis to just continually evaluate your materials.

Whitney made a great point earlier that there's a really minimal requirement of time or resources to do even basic usability testing of what you're doing, and I think one of the easy ways that we can try and avoid that crisis step is by doing even just the most minimal amount of testing. Any election official anywhere in the country can take one of the ballots they're planning on using for the upcoming election, paper ballot, electronic, et cetera, and take that even to a couple of the people within their office that have not -- that weren't actively involved in the design, ideally, take outside that office to a few other people, and rather than asking someone, say, to read over a ballot, ask them to fill that ballot out as if they were voting and see if we can identify those issues before they turn into crises. So, like you said, there's a -- it's really easy to find something that's smoldering and bursting into flames and try and put out that fire, but if we can really avoid those issues in the first place I think all of us have the opportunity to keep doing that initial evaluation, however minor it is, to try to identify those issues before they become major problems that cost of millions of dollars in recounts and lawsuits and what not.

DR. KING:

Okay, thank you. For -- and Larry has joined me at the table here, but for Larry and Elizabeth, do you have any reflections on, again, what might be precursors that election officials could assess within their organizations that might indicate that now is the time?

MS. DEITER:

Do you want to go ahead?

MR. HERRERA:

Okay, thank you. Thank you, Merle. I think operationally, I'll just say operationally, a thing that came to our attention in -- from '88 forward, were the number of over votes and under votes that took place during the election. And what was important about that is it would show drop off from the top of the ticket down to the bottom of the ballot. It would tell you whether or not there were any calibration issues with your equipment, as well. But it would, at least, give an indication that something was happening with the ballot. What would really promote further review of your ballot design though is if you would actually publish those over vote and under vote reports, which is something that we've done for many, many years. Likewise, publishing the returns that include ballots cast by precinct for not only poll workers but vote-by-mail voters, which is something that is done in California. So, the more Sunshine you put on the reporting of the results the more you are pushed towards addressing issues before they come up.

But, I think behaviorally, one of the things that I had the benefit of, and this happened just when I was beginning my work in elections in 1988, was, we adopted something that Edwards Deming preached back in his day, and that was that you adopt a

philosophy of continuous improvement, a philosophy of continuous learning, and that you drive out fear in the workplace. And so, behaviorally, what I would try to -- what I would submit is make sure, as an elections official, you have instilled those kinds of philosophies; continuous learning, continuous improvement, and driving out fear in the workplace, so that that employees in your department are free to speak up, speak their minds, and, not only that, you Sunshine with the community. So behaviorally, I think that's very key to any of what we're talking about as elections officials. And operationally second, though, is looking at those over vote and under vote reports.

DR. KING:

Okay, Elizabeth?

MS. DEITER:

Well, ideally, of course, we want to catch any misunderstandings long before the election starts, but that doesn't always happen. And actually, one of the greatest things for being able to make sure that you get the correct information out, has been early voting. Larry has actually been in the elections four years longer than I have, but I've been an election commissioner since my 20th year. And when I started, we didn't have voting in the office. You had absentee voting and you mailed out ballots and then you waited until Election Day. And when we started voting in the office, just a few years later, listening to the questions of voters that we realized, okay, we need to get extra emphasis on our training for Election Board workers for Election Day, or we need to send out an extra

notice to the Board workers reminding them, “You’ve got to remind them about this.”

There are also things that don’t have anything to do with our design. For instance, we had a ballot that a school district had put three questions on, and when voters came in the office, they started asking us questions, and we were able to figure out that the school district was telling people, “Well just vote for one of those,” whichever your favorite was. And that is not what the election was set up for. They did get to vote on all three. And so, we were able to get the information out. We were able to send news releases out to the press, as well as have it at the voting place that, no, they have all three questions they’re able to vote on all three of them. And -- but listening to questions from the Board workers, sometimes even during the day Election Day we can get additional information out to the voting place. Now ideally, like I say, we want to have all of this taken care of ahead of time. Sometimes things come up much closer to the election than that. And we have really enjoyed having the voting in office where we’re hearing the voters ourselves. And our Board workers are right there in front of us and we can see what it might it is what might bring up extra questions.

DR. KING:

Yeah, I want to comment on Elizabeth’s observation of one of the benefits of early or advanced voting. As an administrator, when you’re attempting to do what Larry mentioned, which is collect data about anomalies on Election Day, it’s always third party. If you’re lucky, it’s only third party. But it’s often like the telegraph game, it’s reported by the voter to a precinct worker, to the precinct worker to

the poll manager, from the poll manager to an election official, and then, back to the vendor. And by the time you get it you never actually see the phenomena, because often the phenomena is effervescent, it ceases to exist once it's occurred. And again, one of the advantages of early voting, something we would encourage all election officials to do, is be observant, see what happens, see if there are behaviors being manifested by your voters that could be impacted by improved language on the ballot, the ballot instructions, polling place instructions.

Whitney?

MS. QUESENBERY:

I was going to say, in 2004, I think, in Chicago, when they were bringing in their new system, they ran a series of usability tests, not so much to work on the design of the system, but to think about voter education, poll worker education, the kinds of things they were going to have to watch out for. So, any usability testing or any other method of observing feeds into exactly what you said, Elizabeth.

DR. KING:

Okay, Ron?

MR. GARDNER:

Thank you. With Whitney's suggestion, there, I just was sitting here wanting to insert this as I heard the conversation. I just think that public training, along with the poll workers and the election office itself need this training. How it's going to be done I'm not exactly sure, but I can tell you that there are organizations for people with disabilities. There are very well organized organizations, if you will,

for blind people, people who are blind or visually impaired. Boy, a simple telephone call gets their attention. And I can tell you from experience, they're all too happy to come over and do some quick training, do some quick explanation. But, when I hear Larry talking about, "Man, let your staff ask questions," there are going to be questions about this new voting procedure for people with disabilities and allowing our poll workers to -- asking people with disabilities to serve as poll workers, number one, and doing the training that is going to take -- for all poll workers. But I think the training beforehand and making it available through the press and the media and getting attention is important.

DR. KING:

Okay, I'd like to follow-up, Ron, with another question that Drew introduced, dealing with testing and the criticality of testing incrementally, as well as system testing, of, not only our voting systems, but all the ancillaries. And we know, in the disability community, that it is clearly not monolithic, that it's very diverse. And we also know that having sighted voters test audio ballots is not necessarily an effective way to eliminate errors. Could you give some recommendations regarding the testing of some of these usability issues that we've discussed from the perspective of disabled voters? And this goes back to Amy's suggestion is that you develop your plain text for your audience. And, of course, that we realize is that the voters are not this homogenous group, they're a very, very diverse group, and so, your perspective on that.

MR. GARDNER:

Well, thank you for the question. First of all, I think it's interesting and important to know, for all of us, that age-related macular degeneration is one of, if not the leading cause of disability among seniors. Well, look at the population we have today, and we have more seniors than ever. That tells you that blindness and visual impairment is very, very prevalent among seniors, and they're the, by and large, the ones that are reading the paper and becoming involved. But age-related macular degeneration is a late onset, so this is a sighted person who has become blind or visually impaired in later life, and self-identification is really a problem. That's why I think getting this out in the press early is a good thing to do so that if they don't want to self-identify they can still have an opportunity to learn about what the ballot process, the voting process, the poll worker process is going to be. Use the media. The National Federation of the Blind and other organizations have newspaper reading facilities. It converts text to speech, and I can get any of about 400 newspapers or magazines, you know, with the convenience of my telephone. So, don't underestimate using the press. People who want to vote are going to look for a way to do it.

Now, as far as the ballot goes, and I'll be brief, as you use screen readers -- so, a screen reader is a piece of software that's converting the printed ballot, or whatever you're going to use, to an audible form, or to a large print form, if you will, for low vision users. That doesn't always go, it doesn't follow chronologically with the printed ballot. If we're left justifying, as opposed to right justifying, if we're trying to make something down a column in the center, if all of the boxes we're going to fill in or mark are all in a column, those

are going to have to be looked at and tested to see if it follows logically, as it's being presented through the headphones. And I think that pretty much is true for people with low vision, as well as people who are blind.

And let me just add here that statistics are whatever they are, but they show -- those statistics show that there's only seven percent of people who are blind who are totally blind. So, 93 percent of people with vision impairments have some vision, but the percentage who can really use, what most people call large print, is very, very small. In other words, in the area of legally blind, you're already past being able to read 14 or 16 print. So, we're talking about low vision accessibility that is going to put one or two words across the screen, or maybe five words across the screen at a time, and so, developing that ballot so that a person with low vision can get the contest, the names, where to mark it, how to indicate the selection, and how to verify it, that's very critical. And I'll tell you -- and I'm going to say more about this in my presentation, later, but, navigation for a screen reader is critical. And what I mean by that is, as a sighted person reads down a ballot, and you spend a lot of time here talking about plain language and columns or left, or whatever you're going to do to make it appear and make it easier, that is also very critical as we prepare these ballots for people with disabilities.

I lost my train there but, as we mentioned, it's not just blind and low vision people who are going to have to be thought of beforehand for the voting. As Whitney I think said, we've got people with ambulatory disabilities in wheelchairs and making sure

we've got enough room, people with hearing impairments. I can tell you, I've never voted once where the polling place was like church. I mean, it is noisy in there. People are excited. They're taking part in their civic activity and duty. It's not quiet. So, if you have a hearing impairment, you're going to have difficulty hearing the poll worker, or hearing whatever you need to hear.

Also, if you're a blind user and you're using the headphones, it's not going to matter how much work you put into that ballot if you can't hear. So, you've got to be able to adjust the volume through those headphones with good quality speech, on the fly. Navigation is critical, as I mentioned. You've got to be able to read the instructions. Just as a quick anecdote, but when I use a talking ATM, just for an example, you know, this one I came to and it had the most beautiful instructions and they told me where every key was, what it was for, how it did it, how to use the machine. And every time I made a selection if it was -- each time I made the selection it went back up and read me those two minutes worth of instructions. And after hearing those instructions about ten times, who cares what's in my bank. We need to make sure that the navigation pieces are there to allow the voter to be in control. If I want to skip those instructions, if I want to go back and read the last line or skip ahead to the next contest, many of you are aware of DAISY requirements or EPUB 3 requirements, and my understanding is that those are going to be merged. But that's how people with blindness are able to navigate. It's much like the dictionary. It's the thumb tabs on a dictionary, you can get to

different places immediately. Those are the things I think that have to be thought about in preparing our ballots.

DR. KING:

Excellent…

MR. GARDNER:

Sorry for the length of the answer.

DR. KING:

No excellent points. I wanted to just take a quick aside and ask either Drew or Whitney to give us a good working definition and distinction between accessibility and usability, because often, we use those terms interchangeably.

MS. QUESENBERY:

I'll do that. We've been talking a lot about laws and regulations. There's actually a well cited international standard for usability that says that something is usable if the people for whom it's intended can use it efficiently, effectively and with satisfaction. NIST and the VVSG for elections said that's confidently and accurately is how we interpreted that. The International Standards Organization a few years ago took a huge move and brought all of the accessibility, design and usability standards into one suite of standards and defined accessibility as usability for people with a broader range of abilities and disabilities.

Can I just do one other thing?

DR. KING:

Sure.

MS. QUESENBERY:

One question we've been asked when I was on the TGDC is how we were going to manage the human performance tests for voting systems, which, I think is still working through the system, but the idea is that as part of testing a voting system, you would actually test it with voters to see if they can actually use it correctly. And, someone said, well, we'd have to have a whole set of standards for people with disabilities. And we said, no, actually, they should be able to mark their ballot just as accurately and with just as much confidence as anyone else. It might take them more time to do so, because audio time is different than visual time, but the end result should be the exact same accuracy, the exact same confidence that you've been able to interact with that ballot and mark that ballot accurately. So, for me, they're a continuum, and it's about how wide a curve you draw.

MR. GARDNER:

Navigation tools is high on that continuum…

MS. QUESENBERY:

Yep.

MR. GARDNER:

...for sighted people and for blind people.

MS. QUESENBERY:

Um-hum.

DR. KING:

Okay, thank you. Larry brought up a point that I wanted to ask Jeannie if she would respond to, regarding, I think, Larry's point was one of the things that we need to be better at is collecting data about the performance of our ballots, performance of ancillary

materials, performance of under votes, over votes, as a way of kind of taking an indirect look at the quality of our ballot designs. And I was hoping Jeannie would comment a little bit about the clearinghouse function here at the EAC.

MS. LAYSON:

Thank you, Merle. We have several outlets in which we can collect that kind of information and we certainly do want it. One is through our voting system reports clearinghouse, where we take, you know, any information about voting system performance, and that could include some of the issues that you brought up earlier, Mr. Herrera, submitted by a local, State, or any Federal Government official. We certainly would like to have that information, and we also use that information to share -- we share it with our test labs, and that also informs our testing process. So, we are constantly trying to gather and share that information. We post it all on the website for election officials to access.

Also, we just launched a new tool online called the Election Exchange, which was an initiative by Commissioner Donetta Davidson to join together, maybe, new election officials with more seasoned election officials to exchange information in five specific areas; contingency planning, pre-election and post-election planning. So, pre-election would certainly cover the area of ballot and polling place design materials.

So there are several ways that the EAC has to collect and share that information, so I would encourage the election officials watching today to please go to our website. You can find links to the Election Exchange on the homepage, and if you just search for

the voting system reports clearinghouse you'll pull that up. But we would love to get more of that information from election officials.

DR. KING:

Okay, thank you. I want to now shift over to Wendy and I'm going to ask you to begin a brief discussion of the State legislatures' role in ballot design. And, as a prefacing statement, as an election official, we often -- well, one, legally, we have to rely upon the guidance given to us in the code, but we also rely on it as a buffer between some of the inventive and imaginative things that jurisdictions ask us to put on ballots, things that would produce unusual behavior in the voting system, to say the least. And so, sometimes I think the State, the code serves as a buffer, it slows things down in a good way, but it may also serve as an impediment to actual design.

So, the question that I've posed here is in the context of plain language. How can election officials incorporate plain language principles, when so much of the wording of the ballot may be dictated by code within the State? And are there initiatives to inform and guide State legislatures on the impact of the ballot language and the instructions that go with the ballot? And if you can give us a sense of what may be occurring within the State legislatures, perhaps, what could be occurring, and if election officials are interested in initiating from the bottom up, how might they go about doing that.

MS. UNDERHILL:

Thank you, Merle, that was a lot of questions all wrapped into one and I don't know if I can do them all.

But, the one thing you said that I really appreciate is that the fact that legislation can go slowly can be a benefit. Mostly what I've heard in the last few weeks as I've been talking about this with people is that State law impedes good ballot design. And I know that there's many, many ways that that's true, but I appreciate that you saw sort of the upside of that.

So, as far as plain language, I have not heard of or come across efforts at the State level. And Amy, you may be tracking this better than I have, but this is a new idea for me that we have a federal plain language initiative. I am going to go home and look for this and see if such a thing exists, but my guess is that it has not risen to legislative levels anywhere. And part of why, I guess, that is that ballot design, in general, hasn't been a high priority item recently for legislators. We have to start by looking at them as very busy people, most of whom are underpaid at the State Capitol and have other jobs that are their bread and butter, and they have things going on 24/7, and they are responding to crises, and they all have other things besides election law that they do. This week I talked with a representative from Utah in preparation for this. I asked her how much of her attention goes to elections issues, and mind you, she serves on an elections committee, and the answer was 25 percent of her time is on elections issues. Then, you take that 25 percent, and you look at the issues that are hot for legislators right now, and implementing the federal MOVE Act is one of those, and voter ID in many States has been a hot issue. Now, we've reduced her ability and all the other legislators to think about ballot design down to just a little tiny fraction of the time they

have. So, in general, I would say ballot design hasn't been high on the list of legislators, and that's kind of the role of local election officials, and perhaps State level election officials to bring that forward. And I'd be happy to talk about ways that maybe that would work.

I can tell you that this year, 2011, ten States have produced legislation -- have enacted legislation that has a relationship to ballot design, and I've defined, have a relationship to ballot design in a pretty broad way. One State took out a line, a literal line across a page. Another changed the wording from above to below for something. We've changed from using the word substance to ballot summary. These are the kinds of the things that I've seen this year. They've been all the small changes. And small changes are good, but I think we're looking here for a broader approach to this. And I'd be interested in whether model legislation at some point would be useful. I see a smile down here from Larry.

I'll stop there, but I'm happy to talk more about what we've got this year, where we were ten years ago when there was a lot more legislation, I guess, that's probably not a surprise, and ways we might have more of an impact in terms of ballot design at the legislative level.

DR. KING:

Okay, let me turn to Amy. Amy, are you aware of initiatives beyond the federal level that may be of interest to election officials who might be watching on the webcast today?

MS. BUNK:

Yeah, Whitney and I were just listing out the States that we know that have had or still have plain language initiatives. Washington State, Oregon, Florida, and Arizona have all done plain language initiatives.

I'd like to comment that one of the problems that we have at the federal level, and I assume it's at the State level too, is that a lot of the legislation isn't written initially in plain language. Probably the best way to get that changed is for citizens actually to comment more on it. So, the more involved people are in commenting to their legislators, whether it's on the federal level, or at the State level, that they don't understand the law, maybe we can have some movement on that, as well.

DR. KING:

Okay, Wendy?

MS. UNDERHILL:

I do want to add that so far I haven't seen any lobbyists out there asking for bad design, so you actually got a great product to bring forward because I don't see where the opposition comes from. And you've also got the ability to do demonstrations like we've had today with these presentations where you show designs that are confusing, and then, designs that are useful. So, I think quickly, you know, in this case, the picture is worth 1,000 words can help you when you forward to your legislators.

DR. KING:

Thank you, I do remind people who approach me about ideas to improve the voting system in my State, and I always remind them that the only thing that the legislators have in common is that they

were all elected on the current system. And so, when you go to them and let's say, "Let's change this up," you need to have those before and after. And all kidding aside, I think it's very important that you help them connect the dots of what are the intended consequences, what are the potential unintended consequences of this.

Larry?

MR. HERRERA:

Merle, one of the -- on the previous question, one of the operational things you can do to encourage better ballot design, one of the things that we've done, whenever we've changed voting systems, or practically any system in government that is meant to interact with people, is, we bring in what I would call the canaries in the coalmine, and subjects for that test are the candidates themselves. They're campaign managers, they're campaign staffs. And, you know, we share with them this is what that's going to look like. This is what the new voting system is going to look like. You're not picking any arguments because they could be your bosses in the future, but we try to bring them in and have them comment on it, and then, take that into account before we finalize things.

DR. KING:

Okay, a question that I'd like to ask, pose back to the group, I've heard the term plain language used interchangeably with plain English, and, obviously, in jurisdictions that have minority language requirements there must not only be plain English, but perhaps, plain Spanish, plain Vietnamese, plain Mandarin, et cetera. Can anybody comment on initiatives that they're aware of that attempt to

push the benefits of plain language beyond the majority language, beyond English?

MS. QUESENBERY:

Well, I would say, one thing about the importance of plain language in the English version is that it makes translation a lot easier. I worked on a project with Port Chester introducing cumulative voting at the local level there, and we got comments back from the people doing the Spanish translations that when the sentences are in simple, active voice, not tangled up and complicated instructions, and don't use complemented words, it's much, much easier to translate. So, there's a follow-on effect for everybody. I think that goes along with your question about plain language and cognitive disabilities.

DR. KING:

Okay.

MS. BUNK:

Well, and also, how long it takes to translate, how accurate the translation is, with all the measures to determine whether or not you were writing in plain language, initially.

DR. KING:

All right, the next question that I have for the panel, and it really kind of ties in with Wendy's observation that when you're attempting to propose a change, being able to show the before and after conditions, being able to make it tangible for people to see the benefits that may accrue, due to changes in language and design of the ballot, are there metrics that are useful in assessing the readability and the clarity of voting materials and voting language?

Are there ways in which a more, perhaps, quantitatively focused organization might be able to measure the degree to which their current materials are ineffective, and then subsequently, as Wendy points out, kind of show the after effect? Are there tools that jurisdictions may want to look at?

Drew?

MR. DAVIES:

Well, most of these details I'm going to pass back over to Whitney. There are, is the short answer, and they're measured on a lot of different scales, in terms of quantitatively, and then, qualitatively, as Whitney mentioned in her presentation. We're doing two core parts when we're trying to improve election design, and one of them is, certainly, the accuracy of the vote, and the other is what we're doing with voters in terms of trying to increase their participation, make them feel confident about their vote, make the process easier. And that's the qualitative part of that process, as well. For the details, I'll let Whitney speak a little bit, measuring those pieces.

MS. QUESENBERY:

I'm going to pass the buck here too, to Amy…

[Laughter]

MS. QUESENBERY:

...but I would actually say that unlike a lot of the commercial projects I work on, one of the things about elections is that you do have quantitative results every single election and that's actually one of the places to look. I think Larry mentioned going back and looking at residual votes, under votes and over votes, numbers of questions. Elizabeth mentioned thinking about the kinds of

questions people have to ask and how can you mitigate that. The ultimate test of an election is the election itself, and to me, that's the gold standard for the quantitative. I think that also ties into what Jeannie was saying about having better reporting on what's happening during elections, so that you have some idea how you're doing against other jurisdictions. Is your error rate or your under vote rate good or bad?

DR. KING:

Amy?

MS. BUNK:

I guess, just speaking generally about how you can measure whether or not you're writing in plain language, again, like I was talking about with the VA, are you looking for a response to that letter? Are you getting the responses to that letter? Are you trying to mitigate people calling in, or having people look online, or fill out a form? How well did they fill out that form? How well did they fill out that ballot? Did they actually vote the way they intended to vote?

We were talking earlier, and there's a woman in my office, she's a staff attorney at the Federal Register, and we were talking about voting, and she was talking about an election where she was reading a ballot initiative, and she read it at least twice before she went in, and then read it again and voted, and didn't vote the way she wanted because it wasn't clear. So, you can always ask voters, you know, what was your intended result? And then, you know, if there's a way, just go back and see, you know, five people wanted to vote a certain way, and did they vote -- did you have that

many people vote against it. It can be difficult. It's all about reporting and trying to figure out the numbers.

DR. KING:

Okay, Elizabeth?

MS. DEITER:

Merle, I wanted to comment on some of the plain language. And I really appreciate Amy's first comments, that you have to pay attention to your audience, because when I think of, you know, are we changing all the laws into being plain language? There are some things that are very technical and needs to be technical. We need to keep it that way. If it's being written for attorneys, and if it's being written for election officials, to tell them exactly what it is we need to do, then we need to have it technical.

I think the real challenge comes when the law is being written for something that the public needs to deal with. Certainly, when we're dealing with the public, it needs to be in plain language. No matter which way you're doing it, it needs to be as clear and accurate as you can possibly make it. And what I think some of the problems are when you get to that stage, which is the public stage, when they look at the ballot, but what it says on the ballot is dictated by law, which was written, really, perhaps with attorneys or election officials in mind, then you've skipped that step and you aren't communicating with people the way you need to communicate with them.

DR. KING:

Okay, Whitney?

MS. QUESENBERY:

I want to respectfully disagree with Elizabeth, a little bit. Just because it's being written for a scientist or a lawyer does not mean it doesn't -- can't be in plain language. Plain language is for the audience. So, you can untangle sentences and have a clearer law that is just as technical. We, actually, went through this when we were working on the VVSG, because one of the resolutions we passed was that the guidelines themselves should be usable. And there was a lot of discussion about the more technical sections of the VVSG, and how could you be clearer and still be technical. Well, I've read a lot of technical documents in my time, and I can tell you that there's clear ones and there's not clear ones. So, when we say plain language, we don't mean simple language, so we're not talking, you know, writing for the lost common denominator.

MS. DEITER:

Actually, we're not disagreeing.

MS. QUESENBERY:

Okay.

MS. DEITER:

And, that was what I was saying, you know. You may still have to keep the technical side in certain instances, and in other instances be able to be able to pass that technical side and still explain the process. So, no, we're actually not -- we're not disagreeing on that.

MS. QUESENBERY:

Okay, good.

MS. DEITER:

And, one example is that, at times, when we have gotten reviewed with the Secretary of State's office, the legislation that passed that year, at times, we have been given the statute itself, and at times, we have gotten a reworded version. I always prefer to go back to the statute itself. Now, that isn't what I'm going to give to the public. I'm not going to hand them all of H.R. 27304 and make them read the whole thing, no. But, as the election official, that's what I want, because someone may have interpreted that differently when they were summarizing it, in a way that, as an election official, I need to know those details. So, it is a case of speaking to your audience and what your audience needs. So…

DR. KING:

Thank you. Ron had a comment.

MR. GARDNER:

I did. As we talk about considering our audience to whom this plain language is being sent, I just want to remind us that also means the 54 million people with disabilities.

MS. QUESENBERY:

Yep.

MR. GARDNER:

So, whether it's the ballot or whether it's the pre-election process, it needs to be accessible.

DR. KING:

Okay very good. I think, looking at the clock, that we need to move on now to our next presentation. Larry Herrera, from Long Beach, is going to discuss his experience with redesigning ballots for the City of Long Beach. And then, again, we have a hard break at

noon, so we'll work towards that goal. And we may need to come back after lunch to finish up the discussion of this. But I will take down my presentation and bring back...

Thank you, Larry.

MR. HERRERA:

Thank you, Merle. Just to let you know a little bit about the City of Long Beach, the City of Long Beach is one of 488 cities in California, amongst its 58 counties. The city was founded in 1897 by charter. Our population is about 462,000. We're the seven largest city in California and the 39th largest city in the nation. We have approximately 243,000 registered voters. We conduct municipal elections for four citywide offices, nine council districts and ten college and school district offices. I serve at the pleasure of the mayor and the city council, nine members of the council and the mayor elected at large. We also have an elected city attorney, city prosecutor, and city auditor.

My experience in elections began at the county level in 1998, and continued until about 2002, when I began my tenure in Long Beach. When I arrived in Long Beach a couple of things I noticed very quickly is that we had a legacy election system similar to the one we had replaced at my county position in 1999. It was basically a converted punch card system. It was converted to optical scan. Some of the issues that it faced were the listing of contests was limited. You could go only on the front and the back of an IBM card, and if you needed to have more real estate for the printing of your contests and candidates you had to go to multiple cards. In my county position, we, at one point, had six IBM style

cards, which, when we multiplied against our 220,000 registered voters, it was like 1.1 million, 1.4 million cards that we had to order. And when there was a partisan primary in June of each year, we had to do a multiple set of those kinds of cards.

One of the biggest areas of concern for use of those systems, however, had to do with the variable accuracy. One of the things that needed to take place, was, we required ballot inspection by Board volunteers who worked for us, one day, every two years or -- every two years to inspect those cards to make sure that the voters' intent was actually captured -- accurately captured by the optical scan devices. To clarify a hesitation mark or a checkmark or consistency of the markings across the ballot, they would use a blue highlighter to underscore that's what the voter meant. For write-in candidates, which was of particular interest to the City of Long Beach, there was limited space. It was a small line on an IBM card, and I will show that to you in a minute.

We conduct our elections -- our April primary, in April of even numbered calendar years, and, if necessary, there's a June runoff that falls on the same date as the statewide primary election for the partisan offices in California. In California, of the 58 counties, 57 of the counties conduct municipal elections for cities. The Registrars of Voters, basically, conduct elections for the cities throughout the State. However, in Los Angeles County, the 88 cities that are there, our county voting system has limited capacity to take on 88 cities, all school districts, special districts, and those kind of jurisdictions. It's just a capacity issue that they face. So, as a result, of the 88 cities, about 60 have to rent a voting system on

Election Day for their municipal elections. And they've been doing that for a long, long time. Back in 2006, our cost per registered voter was about $5.60. And, as of the most recent election in 2010, it was about $5.40 per registered voter. So, typically, our elections for citywide election will run between a million and $1.2 million. And, in a year like 2012, it will run us about $900,000. So, that's not -- the picture that you see down there, that's not me. But it just kind it -- it's supposed to show you how -- the paper that we had to deal with in order to back up this legacy system.

As I said, our election system was out of date. One of the things that it required were something called a header and an ender card. And what the header card did is each time you would put a deck of cards into the scanners, you had to make sure that you had the right header card with the right precinct so that the ballots would be allocated to the candidates in that ballot group, appropriately, and correctly, and accurately. And the interesting thing is, is that you had to do this 376 times on Election Night, beginning at, let's say, 9 o'clock and continue to the wee hours of the morning. Yes, the card readers were fast. They would read between 500 and 800 ballots per minute, the speed of light practically, and then, you had to have an ender card which was the pink ballot. These are IBM cards, by the way, which I think I first saw in about 1976 in graduate school, when we were using punch card machines to program things like statistical package for the social scientists. So, that was interesting to see that come back at us. And again, in my county position, we used a similar kind of a system. We moved from that

to a larger ballot, optical scan ballot. And then, in Long Beach we went from this.

So, here is the challenge that we faced when it came to ballot design. You'll see that these cards, the top portion of the card is, basically, the stub, and then, you would have the candidates' names, their ballot titles, and then to the right you would see the ovals, or the circulos, or the ovalos, in Spanish, that people would mark. And because Long Beach, beginning in 2006, was advised by the Justice Department that we needed to produce bilingual ballots, that's what we began to do at this time. So, the real estate became even more cramped. Again, we would tell people to turn the card over. However, it didn't always happen, and in a couple of cases, we found that there were no markings on the backside. And, there were a couple of explanations for that; the wrong header card was used or the cards were put in backwards, so on the recounts we discovered those errors. Likewise, in marking these, you know, the hesitation marks and the consistency marks were an issue. But again, you had to depend on your volunteers to determine what the voter intent was, based on the Secretary of State's vote count standards.

So, we felt, at the time, that it was time to move on, for the City of Long Beach to have a modern voting system. And, as I said earlier, we had to gain support for this. Unfortunately, prior to 2002 there were numerous election lawsuits in Long Beach; the voters getting the wrong ballot, ballots being lost, of candidates being elected to office, and then taken out of office. There were all kinds of issues with that, so it was already on our -- my radar screen in

2002, that if I was going to use this voting system, I was going to keep an eye on it to see how well it worked, and as soon as it began to show its cracks, we were going to do something about that. The mayor that I worked with, at the time that I came in, in 2002, I mean, I wanted a change right away, because I knew some of the issues associated with this, but she was wise and she said, "Keep the vendor on point, give them a chance." And so, we did. 2004 was a small election, the margins were wide, fine, no problem. But then, 2006 came along, and issues began to arise with the vendor at the time.

So, what we did was, we created support amongst the city council to take a look at coming up with a new voting system. And, in the summer of 2006, after the 2006 June election, we immediately embarked on doing some RFIs. We didn't do RFPs, we did RFIs, and we had the vendors including the county, including the private contractor who we used before, to come in and demonstrate what a voting system could do to improve Long Beach. And so, we made our pick, and in January of 2007, we signed a contract for a new voting system, for an election that would be conducted the following May. It was during the selection process that we came across some information, I believe it was put out by the Brennan Center, and we saw this idea of graphic designs on ballots, and we thought, wow, that would be cool if we could do something like that. How do we do that? How do we do that? Well, at the time, our vendor didn't have the ability to put graphic designs on the ballot. And we kind of scratched our head and said, "What should we do? How can we make this happen?" And we --

after looking at the Brennan Center, and after picking our team, our elections vendor, and our printer, we contacted the Secretary of State's site -- Secretary of State, and we met up with the new Assistant Secretary of State, Lowell Finley, who had worked long and hard to deal with the certification issues of election systems in California, and certification and decertification, and we asked Lowell, we said, "Lowell, what can we do to make a ballot look like this?" And he checked the elections code and he read to us, "Well, it's pretty tightly worded, that you have to do it the way the elections code says." And we said, "Oh." He said, "But there's an option." He said, "You are a charter city, are you not?" We said "Yes, we are a charter city." "Well, you can adopt your own local rule that will allow you to design the ballot as you deem fit." The light went on, we met with our city attorney, and lo and behold, we were not able to get the vendor to change the software in order to allow for instructions to be in the left-hand column, so to speak, but we were able to put it on the ballot stub. And that was an idea that we arrived at, collaboratively, along with our printer. And you can see there on the top, where we have the steps, we have the hands, we have the instructions. And they're in English, and -- I believe they're in English and Spanish. I can't see that image too well, but they're in English and Spanish. And we began to use this ballot in May of 2007. And I said earlier, it's a pleasure being here, because there was -- because we saw that graphic at the Brennan Center, I think there was also some research that the PEW Center did, as well, we were able to do this. And from what I can tell, it's been the best thing that we've done in a long, long time.

So then, the next question is, if you start with the ballot, what do you do about your voter pamphlet, you know, because that's going to lead people to the polls, and when they get to the polls, they're not going to see a pamphlet there, they're going to see something that looked like this in 2006, and what the heck is that? And, as my -- the Registrar of Voters, who was my boss back in the '80s, Ken Pettit used to say, you know, the problem with sample ballots that look like this is they look like a piece of luggage that's traveled around the world and has every international stamp on it.

[Laughter]

MR. HERRERA:

And, yeah, that's the best we could do at the time. And we thought, well, we're going to be compliant with the DOJ request, to be bilingual in different languages, and this and that. And so, that was the front of the ballot, that was the back of the ballot and somewhere in there this little -- down here in the left-hand corner, that's how you would fill out the card to request a vote-by-mail ballot and, you know, things are on the left and the right. So, what we did was, we conducted an RFP and we decided, "Hey, we're not design experts. Let's bring somebody in to help us give this sample ballot the distinctive look that, maybe, with all the other mail that the residents and the voters of our city get, this might stand out a little bit more." And, after the RFP, we had a couple of -- what you'll see on the screen, you'll see the results of the RFP and that -- some of that work. We have the city landscape, which is the port, the harbor area of the City of Long Beach, and we have blue skies, and we have the city seal on the bottom, just to make it look official.

What we've tried to do is clean it up, not make it as busy. On the front, advise people, you know, vote by mail if you can, use a polling place. And, you know, when you compare the two -- let's see, if I can go backwards here -- I mean, what is a little bit more attractive, the first or the second? So, in our minds, we thought we began to make a new leap forward.

And again, this was done very quickly between January and April of 2007, and kind of goes to the next item, as a part of the sample ballot look, that we put graphic instructions. And I have to really say that, you know, with the suggestion from the Secretary of State's Office by Lowell Finley, that we were a charter city, and we could do this on our own, this is what led to this page being created in English and Spanish. One of the things that's taken place since we first published this, you'll notice, in the first column it says, "Write-in" and we had somebody actually script writing. Well, later on, we've come around to realize that they should actually print, so, we've got a print graphic there, instead, with a pencil. So, we're very proud of this page.

And what we also did was, and I borrowed this from the Registrar of Voters in Orange County, Neal Kelley, he had an instruction that said, "These are the things you should not do with your ballot. Don't put your telephone number on there, don't sign it, don't draw a bear on it." And, we found that this would help people correctly mark their ballots.

So, one of the questions that we had was, you know, what resources do we have to assist with this redesign? And we had a budget, yes, but we had this philosophy of continuous

improvement. And we used something that we learned at the Kennedy School back in 2004, is that we created a model, a public value model. So, we had our vision of a better ballot. We identified the value it would bring to the table; accurate votes, voter friendliness, those kinds of things. We generated the support of our council who had to approve all these expenditures. And then, finally, we had to develop the capacity between the voting system, our printing vendor and our polling place workers and our staff to deliver a good ballot. And I have to say that in whatever we did in elections or in other areas of our office, this model for elections administrators is something that I find a lot of the newer registrars are really employing. Dean Logan in Los Angeles County is doing a great job there. He's got a big tiger by the tail that he's going to -- he's wrestling with over the next few years, but he's doing well, and if you visit his office nowadays, it's a 180 degree difference from the way the office used to be. And he's really doing a good job there.

We, also, in Long Beach, what we use are the candidates as well as the public, and in some of our candidate briefings we have, we call the elections Long Beach model. And this is kind of based on some business school design ideas, when it comes to organizational design, but we identified the goals, the policies, the systems, the technology, the procurement process, poll workers, Election Day operations, and other things that take place to make the election happen. And, in here, under systems and technology, you'll see ballot groups and ballot design as something that we've incorporated in this elections model. This is very simplistic, there's a lot more to it than just a star like this. But, it's something that we

find is a good way to communicate to with candidates, our staff as well as the public. And what we do is, we would show this to people and if they see something, "Well, you're not talking about this element of an election," we might consider adding that to the star as we go along. So, this is something that our staff worked on and we share openly with everybody.

So, one of -- my slides are a little different, but jumping around a little bit, I mean, in that, you know, when we look at what role does design play to make sure we have a good ballot and all that, so we want to make sure that we provide the same look for a printed ballot, whether you vote by mail or in the polling place. We have local authority. We applied to the Secretary of State to be a printer of ballots on demand, so that if somebody walked into our office, where they need a replacement ballot, we could print that on demand. That's something that will save us money in the future, because, in California, you could mail out your permanent vote-by-mail ballots, you know, roughly 30 days before Election Day, and you can count on 25,000 pieces of mail going out, but you don't know how many are going to come back. And ask, using the card, I would also like to vote-by-mail, we'll be able to print those on demand in our office and save our city quite a bit of money by not having the vendor do that.

This card that you see here kind of goes back to the reality that, you know, when you look at design, you have to realize that we as election administrators are not design experts. And so, when we did our RFP back in 2006, to design a new ballot, we had to face a unique problem in Long Beach, and that happened to be

with the runoff election of the city, which fell on the same day as the statewide primary, and when it fell on the same day as the statewide primary, that means you have two voting systems. You had the county's voting system and the city's voting system. So, we had to educate our voters that they had to vote the city ballot, which looked like this, and then, they had to vote the county ballot that looked completely different. And so, our design team, our designers, professional designers helped us come up with a card that would go out to 156,000 households just reminding people that they're voting two ballots on Election Day, and here are the simple rules that they should follow. Again, this is not the ballot itself, but it is an example of how a design team can come up with something a little bit more attractive, a little bit -- much more noteworthy than anything that, you know, perhaps an elections official could come up with. And we think -- this resulted in 2000 -- in that election, that this resulted in our turnout being about 10 percent higher than what turned out at the county poll, which was kind of interesting. So, the "Two Vote Tuesday" program, as we call it, was something that was launched in collaboration with our design team.

So, you know, what design principles do we apply to voter registration materials? We realize that election officials are not trained in design and marketing, but we do know the statutory requirements, you know. After an RFP, you know, we did hire a professional design and marketing team with the aim of improving our image. And what the professionals did was, is, they give us options that were compliant with State law and city law. So, those were some of the things we did that we executed in Long Beach.

And another question, to what extent do vendors play an important role in ballot design? We are fully vendor dependent. However, we do work with our vendor to push for more flexibility as they release new versions of the software. And since that time, our vendor has been -- has created the ability to put instructions on different places on the ballot. And then, secondly, we also know that you have to pick a good printer, as well. And so, you know, that's something that has really helped us well in our -- in the City of Long Beach.

Here was a question that was asked. Is good technology transferrable from one application environment to another? And I like to use the Netflix example. On the left side of the screen you'll see what the first Netflix package used to look like back in 1999, I think it was. And you wouldn't notice it now, but now they've moved to something that -- its 13 iteration. And what I look forward to doing is figuring out a way with our vote-by-mail ballots, and perhaps, with our sample ballots, that we can kind of be innovative in that regard and be more cost effective, be more voter friendly by trying to go through that. And so, what I've done for some of you who might be interested later, is, I've put in a link in here that kind of shows the different iterations of the Netflix packaging. It went to that, to that, to that. Then they tried using plastic, which I don't think that will work too well because the plastic expands when it goes into an airplane. So I just showed this to illustrate, you know, what will the vote-by-mail ballot, what will the sample ballot look like, you know, years from now. And I look forward to ideas from this panel, as well as others as to how we can improve our ballot

going forward, because I do think there's a way to continuously improve what we do.

One of the questions that was asked was, what resources exist for State and local officials to improve ballot design? And in a way, in our city, there were none. We only had our existing budget, but we had our philosophy of continuous improvement and what we strove for is to keep our costs flat as possible and reallocate existing resources in a way that it would provide what we have today, which is a cleaner ballot, a cleaner sample ballot, and improved accuracy.

With respect to accuracy, in the first election that we used the new ballot we probably had to inspect quite a few. It slowed down the tabulation process that first time. And I would say that, you know, we probably had to inspect, you know, 80 percent, 85 percent of the ballots the first time, because we were new with the software, we were really trying to apply as best as we could the Secretary of State's vote counting standards. The most recent election, we only had a one percent review requirement. In other words, 99 percent of the ballots that were submitted on election night were as the voters marked them. So, as they become more familiar with this ballot, they've been better at marking them and the accuracy is probably -- it's just unbelievable. When we do our random sample, when we do the hand count, went through the polls on election night, it matches 100 percent what was submitted and reported on election night. So, we're real proud of that.

The side benefits of this is that voters have told us they would rather vote this ballot rather than marking an IBM card,

where you have to circle in or fill in a bubble that has a number on it, not a candidate name, but a number on it. Likewise, the polling place workers like this ballot. We're central tally, full paper ballot, all the way. Poll workers say "We don't have to carry those machines around," none of those kinds of things. And so, it has had its benefits.

You know, my suggestion for anybody who's interested in trying to not wait for State legislation is to take a look at your county or city charter to determine, you know, with your counsel, as to whether or not it provides flexibility in ballot design. We were able to do that. And what you see in quotation marks, here, is the language from our municipal code which, basically, says, "Notwithstanding the elections code, the City Clerk can modify the ballot design." And that's what kind of opened the floodgates for us. So, we will continuously, you know, take whatever savings we get by not having to do recounts, by not having to deal with elections contests and those kinds of things, to provide services at an equal or lesser value and conduct the elections as best we can in Long Beach.

And I want to say, for my friends back in California, the 58 counties, they, many times, have told me, they said, "You're very fortunate that you have that local flexibility." They do not. So, their challenges are a little bit steeper than ours. They have partisan ballots and primaries that they have to conduct. They have different election systems. In California, I think, only 11 counties use a voting system like ours, so the other counties have to use different types of voting systems. So, it's a little bit more difficult for

some of them to, perhaps, do what we've done. But, you know, we feel very proud that, you know, we were able to take advantage of Lowell Finley's advice, the Brennan Center's graphic, to bring these changes to Long Beach, and I think it's worked well for us.

DR. KING:

Okay, Larry, thank you, and excellent timing. You're right up on our lunch break. I have several questions that I'm going to hold until after lunch, and not the least of which is going to be, how can a county or a municipality without a Long Beach, California resource pool, how can they take from your experience and move forward? But, we'll hold that until after lunch.

I do want to remind those that are watching, today, that all the presentations are available from the EAC's website, there will be a link there, and we encourage you to go to them, I think, particularly, as we've seen many of these sort of graphic rich presentations.

So, with that, I'm going to ask that we adjourn for one hour and return right at 1 o'clock and get back to work, thank you.

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[The roundtable panel recessed for lunch at 11:59 a.m. and reconvened at 1:02 p.m.]

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DR. KING:

Okay, we're back. For those of you that are in the room, thank you for joining us and for those of you that are following on the webcast, we also welcome you back.

Prior to lunch, we had seen a presentation by Larry Herrera, Clerk for Long Beach, California, on his experience and the experience of the city, in kind of evolving their voting system, as well as the resulting ballots in the last iteration. And I'd like to start back with that topic, and then, a little bit later this afternoon we'll move onto a discussion with design considerations and removing barriers to accessibility in voting systems.

So, I'd like to start, Larry, by asking you a question dealing with something you said in your presentation about the vendor providing options for you. And I think one of the concerns that jurisdictions have with moving forward with any change to the voting system, is that they end up with a single option, that it's either option "A" and there is no option "B." I was wondering if you could discuss about how the decision to either require options from the vendor that permit a phased implementation, or whether that was the vendor's solution, but give us some insight into how that condition arose.

MR. HERRERA:

When we reviewed the vendor proposals and presentations, one of the things that we looked for was, number one, was accuracy in tabulating the votes. We also looked for an audit trail in the system. We looked for transparency in the system. And, as we went through that process, one of the topics that came up was, what is the flexibility potential with, you know, ballot design. And essentially, I think there's four companies out there, nowadays, that do that. That's a question that you have to put to them at the RFP process. Once you've selected a vendor, you know, sometimes if

they have legacy systems you might be locked into that system until they come up with a different release, or a new version of that, which, as the vendors will tell you, it's very difficult to do, because they've got to go through, perhaps, federal and State certification, depending on what their State requirements are. And so, that's another hurdle that you have to get over.

I think that we were fortunate in that we were selecting a voting system, and since we had a preview of what the flexibility was, we also were able to collaborate with our printer to determine what additional flexibilities could be provided. The best I can say is that clerks or elections officials in a State or in a county, as a part of their user groups, you know, perhaps, make these suggestions for design flexibility to the vendors as a part of their annual conferences in their State, or as a part of their user group meetings. It seems that only if there's a market for it, might the vendors respond. And to the extent that anything could be done to speed the review of the voting system, either at the federal or the State level, in particular, with respect to ballot design functionality, that might be something that the vendor community would work on through those different bodies, those reviewing bodies, as long as it does not jeopardize the accuracy of the vote. So, that kind of would be my take on it. But we were fortunate in that we were selecting a system, and we were looking for that kind of flexibility. And knock on wood, so far it's turned out okay.

DR. KING:

Okay. In terms of the number of vendors, was it both a voting system vendor as well as a design vendor? Was it…

MR. HERRERA:

Actually there were three parts to it. We had the design vendor, a Long Beach company which was good for the local economy. We had a ballot printer, certified ballot printer, and then we have the voting system printer -- the voting system vendor. That vendor also printed ballots. But, we looked at the best of breed, so to speak, and the printing company had a more robust printing technology, which we felt was better suited to our needs, not only for that, but for production of the sample ballot. And so, we kind of integrated -- and they were used to working with the vendor, as well, so we kind of integrated everything into one. The voting system would produce the ballot, the basic design, and then, it would go to the printer who would kind of wrap it up, and all this through the filter of our marketing company, a Long Beach company, which did really well for us in many ways.

DR. KING:

Thank you. A question that I'd like to pose to the entire panel has to do with the design principles that we've discussed so far, as they're applied to various technologies. And at one extreme, we may have a jurisdiction that's a hundred percent vote-by-mail, in which case, virtually everything looks the same to every voter. In other jurisdictions we have hybrids. We may have DREs that are used for accessibility in precinct count, optical scan for most in-precinct. And then, in others, they may be primarily DREs with printed ballots only used for mail in absentee and provisional. So, when we're looking at the design principles, whether we take them forward as our two election officials here have done and

implemented, are there things that are universal across those technology platforms? And conversely, are there things that get quirky as they're applied in different environments?

So, let me throw that question out to the panel. And I see Elizabeth already nodding her head, so I'm going to start with her.

MS. DEITER:

Well, I'm not sure I would go with the word quirky, but there are differences between the two systems. We have both the touch screen and we have the optical scan in each precinct. And the shape and size of the paper ballot is different from the shape and size of the computer screen used for the DREs. And to give the vendors a break, they were trying to develop a software that you only have to enter the information in once. So, you enter the information in once, and if you do it in the way you want to, to have your paper ballot appear, it may very well not appear that way on your touch screen. And, in fact, if people were to look very closely at our November general ballot, you would find that once we got down to the Judges on the ballot, everything else is left justified with the oval. The oval on the paper ballot cannot be so close to the timing marks so that vendors may end up marking the timing marks, because that's how the machine reads the paper ballot. So, the oval is indented one. So, everything we have is indented one, until we get to the Judges, when you have a long explanation required by statute. So, we had a long explanation. When we put a hard return in for a paper ballot on the touch screen, then it's putting a hard return in when it doesn't need one. And so, you have a phrase that goes only partially across the screen, and then,

starts again on a next line over farther and it looks -- it's not easy for reading. So, we had to take all the hard returns out, which mean we couldn't left -- completely left justify with the oval on the paper ballot. Now, it isn't a major issue, it's just not by readability guidelines a best practice for it. But it's a limitation that we have to deal with.

And the other option would be to have -- to enter them in twice, which we can't do with the same race. We can do that with instructions and we do that with instructions. We have the instructions that are going to be on the touch screen and we have the instructions that are going to be on the ballot, which is very time consuming on our part, but you can't do that, enter in races twice, or else your equipment is going to figure it twice. And so just the way everything is configured on the screen is different on a DRE than it is on the paper ballot.

But, like I say, you know, how much effect does that have? Well, we're talking about a single indention. It's not as good as we would like it to be. I don't think it's going to throw anybody. But there are differences, and you have to figure out your equipment and its limitations. And we have older equipment as well, you know. The newer equipment may take that into account, but ours is much older and so it doesn't. And I'm not going to go out and buy new equipment just because of an indention, although we do need to purchase new equipment, but for very different reasons. So, yes, you have to know your equipment and how it handles different situations and test it out and look at it ahead of time.

DR. KING:

Okay, Whitney?

MS. QUESENBERY:

Yeah, I think that's a really great example of an operational problem and implementing a good best practice guidelines, but I would say that the best practice guidelines are kind of -- still hold, in either case, which is, make sure that the way you mark the ballot isn't confused with the instructions or the name of the candidates. And so, I actually started thinking they were really quite different, but the more I've worked in elections with this very constrained design problem, the more I think that the basic principles are all the same. There's some differences in how they're implemented, and we add a third. So, we've got a paper ballot, an on-screen ballot, and we have a big screen and a little screen, and then, you've got the audio ballot and you've got -- so you've got audio tactile, audio visual, enhanced visual and plain. So, you've got all these different variations. But the principles that guide how you make the decisions for each of them should be the same.

DR. KING:

Okay.

MS. DEITER:

And Merle, I'm glad she brought up the audio ballot. The audio ballot is actually, for our system, the strictest in what we can do. The instructions on how to use the machine are already put in there. We don't -- we can't change that, and so, we are limited. And, it starts out with the instructions as to what the voter should be doing, if they want to skip to the next race, or return to the last one, that sort of thing. And recognizing that, then we have to work that

into our Board worker training. And part of the training is, the second somebody requests to use the audio ballot they need to open up their listing. And we have printed out for them exactly what the voter is being told on the audio ballot, so that if two minutes later, or five minutes, they say, “I can’t remember, what was it that said to be able to go back to the line,” that the Board worker can actually assist them, because, although they didn’t hear it, they know what it was it said. So, we have the written instructions where the election Board worker which are identical to the audio instructions that the voter has received. And that has been a big help for people as well.

Another thing on the audio ballot, now, there is some discussion. Many people encourage the use of the -- I guess, is it an international computer voice on...

MR. GARDNER:

There are some that are more...

MS. DEITER:

…speaking? There are some that favor that. I happen to favor -- I use radio announcers, local radio announcers. They are professionals, they are trained in speaking, and we have a lot better response as far as pronunciation of candidate names. I also can give them the list of our candidates and their telephone numbers, and if they come to a name they’re not familiar with, they just give them a call, “How do you pronounce your name?” We have -- we’ll have about 900 candidates for precinct committee officials on our ballots, and so, they’ve just got it in their hands, they can pronounce it, they can call them up and make sure that they can

get that accurate. So, for accuracy that has really helped us and it is far less expensive for us than having to go through a different vendor to have the computer voice. So, those are a couple more technology and the audio ballot issues.

DR. KING:

Well, I've got Wendy next, and then Drew. But, I just wanted to follow-up real quick, just for clarity, when you're talking about the vendor supplying the instructions for audio, that's just the navigation instructions?

MS. DEITER:

Yes, that's correct.

DR. KING:

Okay, very good. Wendy, and then Drew.

MS. UNDERHILL:

I was going to add that the State of Indiana did pass a bill this year, and it's been enacted, that did include separate directions for touch screen and paper ballots. And I thought that was a step in the right direction until I heard from you, Whitney, that, in fact, good practice is good in any case. So, here we have a State that is trying to do the right thing to be forward leaning on this, and it could be that really what they needed to do was say, "Use best practices in general, and let it speak to both."

I also wanted to add that I've heard that most local officials are going to be looking at buying new equipment in the next few years, that we've got equipment in many places that's good through the year 2012, but getting it through -- that same equipment through 2014 might be tough. HAVA money has run out for a lot of

folks. State legislatures will need to be coming up with this money. At the time you're asking a State legislature to come up with money, that's a good time to talk about ballot design, because the vendors are then in competition for that money, a good time to talk with them about it. So, it's not good that we don't have the money on hand. I don't know where the States are going to come up with this money, but it is an opportunity when we come to put together, "We need new equipment, we need better ballot design" and the vendor -- it could go out in the RFP to the vendor that that's part of the requirement.

MS. QUESENBERY:

In Indiana, they had the actual instructions that had to go on the ballot in the law? If that's true, it's probably good that they did separate instructions, because otherwise -- because the interaction is different and you would actually want the instruction to match what the system does.

MS. UNDERHILL:

Um-hum.

MS. QUESENBERY:

So...

MS. UNDERHILL:

Okay, we'll look into that.

MS. QUESENBERY:

Yeah.

DR. KING:

All right, Drew.

MR. DAVIES:

I just wanted to follow-up real quick on what Whitney was saying in response to your original question.

When, for instance, Design for Democracy originally drafted the "Effective Designs" document for the EAC, there's a lot of technical information in that. It's not always operationally implementable, you know. It's certainly not universal. But what Design for Democracy, and then some other groups have done, and Whitney did a great job of in her presentation, is taking out those top level points. And I think those really are universally applicable no matter what kind of system you're working on, a touch screen, really the plain language works for audio, as we mentioned, paper ballots, mail in, et cetera. So, things like Design for Democracy's top ten design guidelines list and the pointers that Whitney gave in her presentation this morning, I think, can be used across the board in election materials.

DR. KING:

Um-hum, yes, Larry.

MR. HERRERA:

It just kind of dawned on me, right now, that if it's true that States, counties, local jurisdictions will be looking to replace their equipment in 2014 or 2016, I think it will be important for the State Associations of Election Officials, the EAC and other interest groups to begin promoting that idea, that equipment replacement is necessary at this point in time, because the equipment that we have now, I'm not speaking for Long Beach, but -- maybe for Long Beach as well, but the equipment that we have now is -- how did it come about? How did it come about that we came up with touch

screens? How did we come up with verified voter paper -- paper ballots, those machines that kind of confirm what somebody voted on electronically? How is it that we have these paper and we have, you know, the DREs, basically? And if we look at, that it seemed kind of as a result of the HAVA money being made available. Funds were available to create a market. Vendors responded with the best technology at the time. Moving on down the road -- and this was all pre-iPad and iPhone stuff, and looking down the line, I think the case needs to be made now that that has to happen.

And one way for, at least, if I could make a humble suggestion, is for counties to look at this is to look at consolidating the procurement of these machines. In some States every county buys its own voting system. In others, there's one voting system. There's economies of scale associated with that. There may be some loss of local control that people would be concerned about, but there could be a way to reduce your overhead associated with support of the procurement of a voting system and, you know, five, six years from now, perhaps, it would cost less than what it did in 2000, when a lot of these systems were rolled out. So, consolidation of RFPs on down the road, creation of what we call in California, joint power of authorities, where you could form to execute a governmental function those kinds of things might be feasible. And for those counties that have legacy equipment, now, that are perhaps not able to come up with funding, perhaps looking at an interim RFP where, let's say, five or six counties get together and say, "We're jointly going to do this for our region in the south part of the State." That could be an option, as well.

DR. KING:

Okay, very good. I wanted to come back and comment on something that Elizabeth said, and kind of throw it out for discussion, that there's almost a cascading chain of events when you begin to build a ballot, and the election management system upon which you're building the ballot will usually be biased towards a technology. For example, it may be biased towards an optical scan ballot, so that as a designer what you're seeing when you ask for previews of work in process that you see the ballot represented as an optical scan ballot, when, in fact, it's going to then cascade down to a DRE implementation, cascade down to an audio ballot, and then, cascade to permutations of the optical scan ballot which may be an online sample ballot for voter education, may be a UOCAVA delivered ballot, and there's a distillation process that goes often through this that begins to either add value or begin masking features of the system. And I'm curious what the design experts might reflect on regarding the need for designers of ballots to be able to accurately see work in progress of how that end product is actually going to look when it's implemented, as opposed to the constant state of surprise that we're often in when we look at an implemented ballot and say, "Boy, that's not how it looked when we were designing it." So, let me throw that question out.

MR. DAVIES:

Well, you're absolutely right. The ideal scenario is being able to address all of those things simultaneously. There's so many variables I won't be able to thoroughly answer this question exactly, but there are some -- first, I think designers and even election

officials that are designing materials do need to just keep in mind what you said. It is easy to fall into that trap. Having even worked in some of the software that the vendors put out, I've fallen into that trap where you are working, you're being shown your work in an optical scan ballot view, and it allows you to stop considering what it might be doing in other spaces.

Moving beyond that, I think people do -- you know, a lot of election officials need to be having some discussions and negotiations with election vendors about the ability to make edits as necessary between those systems. Like you said, you've got some efficiencies by putting data in one, inefficiencies in that you can't control those systems back and forth, and that's an issue that may or may not ever be able to addressed to the vendor, but a discussion you can certainly have.

To a point Whitney made earlier, it would be ideal to have a little more sunlight shed on all these materials along the way, so that everyone is aware of what they are, and how they function, and what they look like when they do that, and it's more difficult than you might think to even get those views as we move along the way. So, it's certainly an issue we need to address, but there are some roadblocks along the way.

DR. KING:

Okay, Whitney?

MS. QUESENBERY:

I would say, this is actually not a challenge unique to elections. If you think about a commercial website designer, they have to worry about Firefox and Internet Explorer and iPad and Android and

audio versions, and will it work on slow connections, and so on. And so, the notion of managing a single source to multiple output is not easy in any field, but it's certainly not unique to elections.

And the other thing I would just like to put in a pitch for is that this is a really good reason to do usability testing. Often, I feel on projects that, I mean, it's nice that I'm coming in to do testing, but I'm a big walking deadline, you know, "By this date, we're going to have to have all four versions of the -- you know, all four systems up and running, so we can test it with voters, so we have to have them all going." And, if you know that you're going to be testing your absentee ballot, your UOCAVA ballot, your audio ballot, your DRE, and your ballot marking device, and your op scan ballot, on this day you're going to have voters coming in who are going to use all of them, then it kind of forces you to periodically, as you're working, have to come together and make sure you see all those things altogether early enough. So, that's the other kind of advantage of usability testing is that it kind of forces you into good process.

DR. KING:

Okay, what about colors? I know that we talked about applying good design to all products that we're producing. Going back to the difference in media, and now, we're talking not only about ballots, which may be presented on the web as a part of voter education, but certainly voter education materials have to be printed, they have to be presented on the web, what are some of the considerations, in terms of different media, regarding these design principles, the use of color, the cost of, for example, if you're using -

- as Whitney has pointed out, if you're using kind of a universal design -- not a universal design, I'm sorry, a design standard that specifies colors, colors don't cost any more on the web, but when you begin, then, to go to printed media, you begin to see a cost impact. What are the reflections of this group regarding the impact of moving through different media and maintaining your design standards? Ron?

MR. GARDNER:

I'm not sure this is the answer you're looking for, because it's the reverse end but, I mean, the cost, really, is in the printed ballot. But, there are people with low vision, people who are visually impaired, for whom, you know, black letters on a white piece of paper or a white screen simply isn't going to work, no matter how big you get it, and you really do have to allow the change of contrast, the change of color. So, you hit on a very, very good point. But if you think about it, to me, it's commonsense that things like that would be considered because we do that for sighted people, as well. I know some paper is brighter, some paper is cream colored, some paper -- and it depends on what you're trying to portray. And I think that, you know, making different colors available says to your voter, you know, "We value you and we're trying to make this right."

As to the question about additional cost for colored ballots or making them a light blue instead of a pink, I don't know.

DR. KING:

Okay.

MS. QUESENBERY:

Well, you have a wonderful example of the use of color and how it's not just decorative, but functional, so maybe I'll…

MS. DEITER:

I do have some of the images that I sent to you. There is one in there that just has a color header. And I warn everybody, these are older ballots of ours. They have not gone through the process that we later used on designing ballots, but simply the use of color header, right here. And the top two, a red and a blue one, that color header that we added on, the reason why we had it was because we had a special election. The same question had to be posed to the people living within the city limits of the City of Topeka, the same question had to be posed to the people living outside the city limits, but within the county. And, actually, the header is not so much for the voters, because they're only going to see the one ballot that they get. It's for Board workers and office staff to get the right ballot to the right person. And so, that we could also make sure that those ballots got tabulated correctly for -- and they're actually coded differently, but to get the right ballot to the right person, one was red, one was blue. And it really -- and we did that with the outer envelopes going out, as well. I understand that contrast -- having a major contrast is very important in people being able to read the ballots. The color was really just in the header. We don't normally use color because of the expense. Once you start talking about a two color or three color print job, you're certainly truly increasing the cost to produce. Now, I'd have to say that there are probably a significant number of jurisdictions in the United States that do use color when it comes to a partisan primary

election. And, again, it is for getting the correct ballot to the correct voter. We will use color if we have multiple ballots at the voting place. The training that I've tried to constantly instill in my Board workers, for us, is if for some reason we have a special situation in the election that requires a second ballot, then, we will have color on that, and we do regularly on the Sherwood Improvement district.

I did bring with me another limitation that can be with equipment, is for our equipment, once you determine the size of the ballot, all the ballots have to be the same size. So, even though we may have a special election going on at the same time for Sherwood Improvement district, which has three candidates, that ballot is going to be the same size as the ballot that everybody else gets for all the candidates, which may be an 18-inch ballot. So, we may have an 18-inch ballot with three candidates' names on it. But, at least it's still clear, it's useable, it's readable, people can correctly mark it. But, you know, you do get some limitations through your equipment.

But, that is just a picture of some of the colors that we use. I'd have to say that there are probably more counties that do use color when they have multiple ballots for partisan elections, but we do not, just because of the expense. We only use it if we can truly justify a complicated situation where it helps clarify it.

DR. KING:

All right, thank you. I'm going to go to Larry and then back to Drew.

MR. HERRERA:

In terms of the cost, earlier I had put up that our cost per registered voter is $5.40 and the cost for a ballot is about $1.60. So, that's

printing one ballot legal size, both sides. And, if we were to start with a ballot, that's probably the number one place where you begin. So, your cost is there. Then, you move down to the sample ballot. Your sample ballot for us is about four cents a page. So, then, that's the second area where you invest a little bit of money. Instructions, two cents a page, those are, basically, for polling place workers, and perhaps, vote-by-mail materials and things like that. So, in terms of the pyramid, we invest our money primarily in the ballot itself. The use of color in California is controlled by the Secretary of State's watermark, so we use whatever watermark color they have us utilize.

But, in terms of cost, once you've done those three, whatever you've done in those paper versions, it's immediately transferrable to the web. And so, the cost for putting it to the web is practically nothing, and then, it's viewed thousands and thousands of times every election.

DR. KING:

Okay, thank you. Drew?

MR. DAVIES:

As the design voice, here, on the panel, I just wanted to make a couple of notes about color related to what you were saying. From a design standpoint, we would tell you, cost aside, there's a few things to keep in mind about color as you're designing all election materials, primarily, things like printed ballots, though. One is that even if cost were no issue, color should be being used functionally to actually further a goal to make a ballot easier to use rather than even if you didn't have to pay for color, you could print ballots in full

color, it shouldn't be used to be printing pictures of bears and kittens in the header of your ballot to dress it up and make it seem more fun.

Secondly, it should be used -- color should be used consistently. So, where a color is used for one to denote one thing, it should be used consistently to continue denoting that. So, if you've got primary ballots, the blue one is for Democrats, the red one is for Republican primary ballots, you shouldn't, then, also be using red to indicate the instructions on that ballot, because it starts to become confusing for a voter as it moves forward.

And, third, no matter what, color shouldn't be being used as the only designation of a distinction of an item on a page. So, same example, blue headers on a Democratic primary ballot, red headers on a Republican primary ballot, those ballots shouldn't just say "Primary ballot" on the top of them in separate colors. They need to say "Democratic primary ballot," "Republican primary ballot" as some backup of ways to work with that color for a collection of voters that have difficulty or impossibility distinguishing between colors on a ballot.

DR. KING:

Whitney?

MS. QUESENBERY:

And the last thing I'd throw in is really watching contrast on colors. There's -- in the accessibility guidelines one of the new ways to deal with people who have color deficiencies, can't see particular colors, or see particular colors of shades of gray, is to look at the contrast. And there's some formulas and there's some great tools

online that lets you look at the color of the letters and the color of the background, and make sure there's sufficient contrast between them, that someone who -- so, if you had, for instance, dark red text -- I'm sorry, dark red background and dark black, text, if you were fully red/green colorblind that would appear as black text on a black background, so making sure that there's enough difference in the value, not hue.

DR. KING:

Okay. The last question that I have on this topic really has to do with two things, one, look and feel, and unintended consequence. I have two children, recent college graduates, which, among other things, means that I get daily credit card solicitations in their name. And they're coming from the same company that I have my credit card with. And so, I have a quick method of being able to distinguish between my statement and solicitations. I just look at the franking on the envelope and if it's a bulk mail, I know it's a solicitation and it goes in the garbage, and if it's first-class postage, I know it's something I need to open. So, it's an easy way for me to validate that what I'm receiving is, in fact, what I'm expecting.

One of the things that we see in each election cycle, and more so in recent years, is the engagement of political organizations, parties, candidates in developing, for lack of a better term, kind of, pseudo-election materials. They can be ballots. They can be voter registration packages. There are things that are developed to advance an issue within that group. And, as the years have gone by, they've gotten very, very good. And my question is, does that put pressure on election jurisdictions? And

Larry, looking at your materials really sharp and, for lack of a better term, commercial looking. They do not look like my father's election office, you know. They don't have code form numbers down at the bottom and those kinds of things.

So, one of the questions is, is there potential confusion on the part of voters between what we would think of as the official documents coming out of an office versus unofficial election materials being generated by different organizations? And then, second, is that putting pressure on us as election officials to step up to a competition, a design competition, here, in fact, people are producing some pretty good looking products that maybe we wish we had thought of? So, let me throw that question out, two questions. First, are you are concerned about externally produced documents being confused with documents in your office, as you upgrade? And the second, how can voters clearly and quickly distinguish between official election materials sent out by your office versus solicitation or advertisements?

MR. HERRERA:

Well, let's see, I think -- I've always been one to take a look at what the private sector is doing, in terms of communications, in terms of marketing, in terms of serving the customer. And when we, in elections, whenever we've looked at how to better serve the customer, we've looked internally and externally. It was probably maybe in, I don't know, maybe 1995 or '96, when this Internet stuff was taking off, and we thought, well, you know, we ought to do is our website should be www.sbdemocracy. And back then, you couldn't get .gov, so we got .com. And we made our 800 number

sbcdemocracy, or we tried to, you know, do that kind of -- now, you look later, you know, 12 -- 12, 15 weeks later, whatever the time is, and that's what everybody is doing. And so, yes, there is a little bit of -- there was a little bit of reluctance to kind of go in that direction, because you didn't know what the trend was going to be.

When we began to design our materials in 2007 for the new sample ballot and the new voter notification cards, those kinds of things, there was a little bit of concern whether they'd think this was from a department store or somewhere along those lines. So, we tried to make it unique to our community. Long Beach is one of the most diverse communities in the United States, and so, we tried to show that diversity on the cards that would come home. And I think in one of my slides, up there, I did show that. Secondly, we wanted to highlight a city landmark, which is our waterfront, those kinds of things. But most importantly, we thought we should put that city seal someplace on the document. Any of the materials that we would mail to the homes, vote-by-mail, or in the sample ballot materials, there would always be that official letter from us saying, "Dear Voter: This is your sample ballot. If you have any questions, please call us at this number." And so, that's how we tried to mitigate any of those concerns. Now, as to whether or not anybody confused our sample ballot with a Penny Saver, we looked at the kind of paper and the cardstock that we used on the cover, as to whether or not anybody, you know, anybody never even paid attention to it because they thought it was that. We didn't get a lot of those complaints. One unintended consequence was, there were maybe a couple remarks saying, you know, "What's going on

here? This is not what government should be doing. You're not the private sector," you know. So, that was like an unintended result of doing this, you know.

MS. QUESENBERY:

They didn't want you to mail sample ballots?

MR. HERRERA:

No, the look and feel -- the look and feel was more commercial than it was the more -- sorry about that -- no…

MS. QUESENBERY:

You should be ugly, because you're government.

MR. HERRERA:

Yeah, we shouldn't look that way because it doesn't look official, so there were some of those comments. But I think, by and large, you know, as election officials, to the extent that we can anticipate, you know, look down the road as to what our culture -- how our culture has become, that's something to keep in your peripheral vision, you know. Now, we've got this thing called "cloud technology." What is that going to mean for elections, you know, ten, 15 years from now? So, we embraced this commercial design and if we went back -- we could go back. We could flip the switch back and look just like everyone else, but I think it wouldn't -- it's just not our culture to do that. We have a look and feel that we like.

DR. KING:

Okay, Elizabeth?

MS. DEITER:

Well, after we worked on designing our ballot, we had worked with a design group very, very helpful for us. We still -- we did our own

design, so I'm sure that there will be lots of comments on it on ways to improve it. But the -- about the last thing that we touched on when we were working with a design group was official notices from the office and to make them official. And one, really, is the seal of the office. I mean, that is something commercial ventures really don't have. Candidates don't have their own seal, normally. And so, we developed a header and a footer to each of our documents, if we're going to send it out, whether it's a sign, or whether it's a postcard, to the voters, because we've had to move their voting place. And we went through a lot of different possibilities, put them out on a table, had everybody in the office give their opinion, had the mailman give his opinion, had the fellow who developed the water -- delivered the water gave his opinion and anybody else who walked in the office, and chose a header that we liked, and then the footer is our seal. I may add onto it my name and the office and a way to contact us, as part of it. And then, what the design company had also mentioned is that you're also training the voters, so they recognize that is yours. If we're getting a document or a notice from the election office, this is what it's going to look like. And so, then we try very hard to keep putting that header and that footer on everything that we do. And it's always a challenge, because we're always finding more documents and notices that we have to send out that we need to make sure that's on.

DR. KING:

Okay thank you. Larry?

MR. HERRERA:

I just remembered we have our candidates they come to us and they say, you know, “I want to educate the voters on how to vote this ballot and can I have the image?” And at first, you’re a little reluctant to do that. But like they say, sometimes imitation is the form of flattery. So, as long as they provide disclaimers that this is not an official ballot, it’s produced by the campaign, according -- and this can be done under California law, we let them use it. And it does, in a way, further the voter education. In other words, they’re not sending out materials to voters that say, “Check the box or punch a hole.” They’re saying, “Mark your ballot this way.” And in Long Beach, we have a kind of a unique write-in provision which is sometimes called term limits, but basically, what it provides is that you can serve two full terms on the city council, but after that, your name cannot appear in the primary election printed on the ballot, you have to run as a write-in candidate. So, what a lot of write-in candidates have done over the last few years is they do a lot of voter education, “This is how you write my name on the Long Beach ballot.” And so, we have a space for that now and, you know, we can catch all those and tabulate them just right on election night. But -- and when Election Day comes around, people know how to mark their ballots, and so that helps. So, if we’re outreaching 243,000 people in each campaign, as going after their voters, that just kind of reinforces our message.

DR. KING:

Okay. Ron first, and then, I’m going to come back to Drew.

MR. GARDNER:

Just real quickly, I've heard, you know, the beautiful design, the bear and the kittens on the whatever, all the way down to ballots that our grandfathers used to use. And I'm okay with whatever design, but keep in mind that when you're designing ballots for people with disabilities, what method are you going to be using and how is it going to be accessible to them? If there are graphics, those graphics need to be labeled, because most technology and software today does not self-identify if it's a graphic. So, if you're going to have bears and kittens, you got to label those type things. You might even say that it's on the California State watermark. Those things are easy to do and the computer people know how to do it.

The other thought escapes me right now, so I'll turn it back to you.

DR. KING:

Okay. One of the questions that I did want to pose, and Drew I thought you might help with this, both Larry and Elizabeth talked about the use of the seal. And I think in the private sector that would be part of a branding strategy. And, again, because jurisdictions that will be watching this broadcast and looking for a starting place, and I think one of the things that I've heard consistently said here is that you need to have a plan, you need to have a design standard going forward, could you comment on the importance of identifying that brand early, consistently, using that brand, having standards for the use of that brand?

MR. DAVIES:

Yes, in eight hours of time I will do that.

[Laughter]

MR. DAVIES:

In a 90-second summary of that, you started touching on the really important points, I think, what each city, county or State has that's the one thing they know they can distinguish themselves officially with, is some form of seal that, basically, imagine in the corporate world, that stands in as your logo. I mean, that is the visual that identifies who you are. So, at a base level, when we're talking about building trust that the materials you send out are coming from you, that's the one thing you get to use that nobody else is allowed to use. From a purely branding standpoint, you know, if any county were one of our corporate clients at Oxide, we would tell them, "This needs to be, essentially, on everything you send out into the world." And you are right, there should be some rules around how it's not only used every time, but specifically how it's used; placed here, moved to that spot, never smaller than this size. Libby's program has been a perfect example of how this should be done, where they've set up a couple of standards. These are, essentially, basic graphic design standards where you say, "When we send materials out, the header always -- this bar at the top, it's got these three stars over here in the right-hand corner, and the county seal always appears in the bottom left-hand corner," and those are the guidelines, so that, essentially, over time, as your voters receive those materials from you they begin to recognize immediately that those are coming from you. And that builds that same level of trust and, consequently, participation that we like to talk about. So, we, certainly at Oxide, and through Design for Democracy, have been

encouraging people to find a way to accurately and consistently put that seal mark on the ballot in a way that voters can recognize, as well, as one more way of saying to people, especially first-time voters, or people that are not confident with the scenario, "This really is the official ballot. You are in the voting spot holding the right thing. Now, it's okay to vote." So, definitely, we'd encourage the use of that one main seal that you have, that no one else can use that's yours.

DR. KING:

Okay, Larry?

MR. HERRERA:

One of the things that we've done in Long Beach, Merle and Drew, is that we've actually budgeted for design time. In other words, we've set aside money in our elections budget for the design element of what we do. But I realize that many jurisdictions, and maybe even Long Beach, would have to cut that out some day, due to the budget constraints that we face nowadays, or spend that money on something else related to voting.

But one thing that we've found effective is to engage the local universities, and we've done this a couple of ways. One, we've offered competitions, for example, to create a video on a particular product to come up with a format or a design of something, going to their business schools or their design schools in our area. And then, the ultimate is, during an election cycle, you're going to hire part-time employees to help you with the amount of workload that comes in election season. Make a few of those positions interns, and have them focus on, maybe, taking

some of the design standards that's available on the EAC website and see how they could integrate. But then, engage your community in selecting, perhaps, the best model. And kind of when we've done that, the end result is whether we award a stipend or we hire interns, one thing we can say is that from our community, they work for us, and they provided something that has value. And people support that. At least, in our community that's been supportive, and we will continue to do that. And we have interns who we -- I think for the last election, we hired 40 interns. And it was an influx that helped us not just in the conduct of the elections, but in logistics, warehouse, check-in, check-out, scanning, everything. So, it works out well.

DR. KING:

Okay, Ron?

MR. GARDNER:

This is not intended to be negative, but how many of those interns were people with disabilities? And maybe not last time, but maybe next time, part of those 40 could be people with disabilities.

MR. HERRERA:

I think...

MR. GARDNER:

Our poll workers need to be people with disabilities, as well. Somebody that already understands that technology would be -- you know, we can't have one, I understand, in every single precinct. But unemployment being what it is, multiplied times ten, is what it is for people with disabilities. And so, there are going to be people who want to be poll workers with a disability, and training them is

just -- I mean, training them and training non-disabled poll workers is exactly the same, but it also instills confidence, I think, in those people who will be coming in using your ballots, which are beautiful and designed properly and hopefully the equipment is working, et cetera, et cetera.

DR. KING:

Okay, Larry?

MR. HERRERA:

Just to respond to that, I think that one of the takeaways that you ask that we have today, Merle, is the takeaway is that I don't know that we've done enough to engage our disabled community. And, you know, one of the questions I have for the design experts, if you're using a paper ballot, is there some kind of template or something you could overlay on that ballot, let's say a piece of plastic, so to speak, that would perhaps assist somebody who's vision impaired to vote that ballot accurately? We use paper ballots in Long Beach, so that's kind of a challenge. I don't know how we would do that, but I'd be interested in ideas about that.

And, in terms of outreach to the ADA community, I think that that's something that we will definitely do as a takeaway from today's meeting, and even include the placement of an intern with a disability.

MR. GARDNER:

Thank you.

MS. QUESENBERY:

You might add language minorities to that, as well.

MR. HERRERA:

Oh, we have plenty of those…

MS. QUESENBERY:

You have plenty of those?

MR. HERRERA:

...including me. I'm language challenged in more ways than one.

[Laughter]

MS. QUESENBERY:

I just want to go back to something Libby said, which is about having a template. This is a great opportunity to have a collection of assets that are available and are in the right templates, whether you're working in Word, or you're working in design, whatever software you're using, to create the materials, making sure that you've got that, so it sort of persists beyond each person's ability to do it. So, I'm sure you did templates. I know that one of the things that they did in Washington State was built a statewide library of assets.

But the other thing I wanted to say is that we do a lot of testing at the National Cancer Institute looking at how people read information online. And in the medical community they're also very worried about making sure that you can tell the difference between, you know, NCI and some, you know, not so great organization. In over, I would say, the last five years we have seen the general public get a lot more discerning about looking for things like .gov's in the URL, looking for clear signs that this is official, addresses, and seals, and contact information, and so on, that all of that kind of surrounding the information really does get noticed. So -- and I think that's a distinct shift from when I started doing this work when

people go, “Oh it’s on the web, it must be okay.” They’ve sort of learned a lot more about that.

DR. KING:

Okay, well, I have one final question. And then, we’re going to switch over, and Ron’s going to lead the discussion about barriers in design.

The question, particularly to the election officials, but to others, is, is it important to have a single point of signoff in your organization for design? Or is that delegated or is it understood? How do you manage that conformance to your design goals, the use of the seal, et cetera?

MR. HERRERA:

Well, we always use the seal on everything that we send out. And in our sample ballot, it’s in color and ways it would appear on the city flag. But maybe it’s -- I don’t know if this is a formal signoff, but it, basically, gets a consensus. It’s a consensus amongst staff, the candidates and the council. In Long Beach, we have an elections oversight committee. And so, when we come up with any ideas for improvement, we docket an item on the council agenda to refer to the elections oversight committee, the item is then brought to the committee, and we unveil it at that point of time. And so, I think the signoff is pretty much by consensus. Maybe it’s kind of seeing which way the wind is blowing in some respects, but the ultimate signoff comes from the City Clerk for the City of Long Beach. Believe me, if there was an uprising about using something for some specific reason, a good reason, we’d probably consider doing something a little bit differently. So, you know, it kind of -- through

the collaboration, you know, internal and external, that's a way we get signoff in Long Beach.

DR. KING:

Okay, Libby?

MS. DEITER:

Well, I guess, I'm the final signoff. Just as he said with the City Clerk, there's a lot of collaboration, yes. There's a lot of working together between, you have to work out the laws, you have to work out the equipment vendor, the design groups, and getting public input, the whole works. But ultimately, I was the one that made the decision, "Okay, this is what we're going to go with, and this is what we're going to continue using." And I'm responsible for my office. And if there is, you know, the uprising, as you say, I'm the one they're going to turn to. And that's fine. And, in some ways, it really does take, finally, having one person saying, "This is what we're going to do" because it is so easy to return to the old way, pull out that form that we used last time and someone has to push it and say, "No, this is what will represent this office and represent me." And then, if people don't like it they can tell me, and they do all the time. But you have to have somebody who takes responsibility for it, whether it's your office or design or anything else.

DR. KING:

Okay, thank you. Before we move to Ron and his discussion, I'd like to welcome a new member to our panel, Josh Franklin, if you'd like to briefly introduce yourself.

MR. FRANKLIN:

Hello, my name is Joshua Franklin. I'm a computer engineer here at the EAC, working in the testing and certification division. I've been listening to the discussion all day, very enlightening, and I look forward to participating.

DR. KING:

Okay, thank you Josh. Ron, I think one of the things that's come out so far in the discussion, today, is that there needs to be not only an initial awareness to what the barriers are for voters with disabilities, but ultimately, there has to be strategies for addressing those. I would like you to start off our discussion on how to use design strategies to better address the needs of voters with disabilities. And with that, I'll turn it over to you and let you get started.

MR. GARDNER:

Well, thank you, Merle. I will say first off, to answer that specific question I really believe that one of the requirements for the governor position, to be elected governor in every State should be that that person has served as the election official for their State.

[Laughter]

MR. GARDNER:

Gary Herbert happens to be our governor, but he also used to be our State election official. He gets it. He understands it. So, when we bring issues, he's with us. If your State -- if our State legislature needs to do something about the voting, you know, having that information with the right people, I think, helps a lot. That's not always possible I understand, but at least in our State, it seemed to have worked.

I'd like to also recognize the expertise, technically and academically, and so forth, of the people that you've invited to be on this roundtable. What I've learned today from Whitney and Elizabeth and others has just been very important. But I would like to remind folks, remind us all that, really, we're talking about usability. We're talking about usability by everyone. Oftentimes, when we think about the education of a child and we talk about, well, we teach that child to read and write and do arithmetic, but if the child happens to be blind, we say we need to teach the child to read Braille. Well, if you just take that word Braille out, it's very, very important, but really, what we're doing is teaching the child to read. His medium is different, he's reading Braille, but he's still learning to read, because literacy is the outcome. So, my suggestion is, right at the get-go, when we talk about accessibility and usability, it's really usability for everyone. The ultimate goal is still the same. And I know, really, the difficult part is how to get there. I also serve on the TGDC and the Board of Advisors for the Election Assistance Commission, and I can tell you that I've learned a lot, I've tried to have input, but there are no easy answers, because the vendors do it differently, we have different precincts. But, I still like the idea of universal design. Universal design, when it can be worked in, is really, I think, going to solve a lot of our problems.

There are some resources that I would like to refer to. There's a Quick Start -- one of the Quick Start Guides that was prepared by the Election Assistance Commission. Staff, Matthew Weil had a lot to do with that, and also Dave Baquis from the U.S.

Access Board. It answers a few questions. I think it needs to be updated, especially, as we talk about ballot design, but it is available through the Election Assistance Commission.

I'd also like to refer, again, to the National Federation of the Blind website, it's www.nfb.org, and then, you can go on into HAVA and ballot design or wherever you get there. But many of the ideas that we've talked about today, and I'm going to try not to be too redundant on a lot of those, are more information and discussion is available there on that website.

There's also the International Braille and Technology Center which is located in that same building in Baltimore, Maryland. But there are true experts. There are blind people there. There are people with low vision, there, who are experts in this field, both in the engineering and in the testing and in the usability. Use that resource would be my suggestion. If you're wondering how to get your official seal so that a blind person knows it's your brand and your official seal, run it by the folks there, because they really can -- they know how to make it authentic to blind people or people visually impaired.

We've talked -- I know we're talking about ballot design, but poll workers are part of the process. And if there's a takeaway, it is that disabilities are having more and more impact in society because those people with disabilities are being able to participate in society. There are more than just wheelchairs that use the curb cuts, and that's my point. If it's good for a wheelchair, it's good for all of us. And the same thinking needs to be applied to our ballots. If we can really think what that end goal is and then go to work on,

for example, non-visual access. How is a person with a non-visual access choice going to have that information presented?

There are few things that are within our control, and a few things that will be within the control of the vendor, based on the technology or machine that you're using. But one thing that is important is, you know, as simple as it is, volume control. It is very, very frustrating when you think all is in place, and you, as election officials, have worked your hearts out and you have a beautiful ballot and everything is working, except that because of the noise level in the room, the person who is blind or visually impaired simply can't hear this beautiful audio ballot that you've received. So, a good working solution to the volume control, I think, is something that is critical. And allow that volume control to be adjustable on the fly, because as I read the first line, I'm going to know whether I want to go up or down. But maybe, I read the instructions, and then realize, you know, I've got to turn this up. So, anywhere in that ballot, maybe a group of people came in the precinct, the polling place, and the noise level went up. But whatever it is, be able to adjust the volume control on the fly.

We've talked quite a bit about navigation, so I'm going to try to keep this part brief. But, again, if it's good for people with disabilities it's good for the public and vice versa. When you think of your favorite novel, you think of it as a book that's got a table of contents, it's got page numbers, and it's got chapter headings. It may have broken down into parts. You know the designer of that book worked with the writer of that book to put together a complete package that the end user was going to love. Had the publisher

taken the manuscript that was written, line after line after line, and taken that to the publisher and it got published, nobody much reads that book. So, I think if we could really give some thought, I know there's some controversy around this, but really give some thought to how we implement design, how we put those chapter markers or part markers, how we can skip from contest to contest, how we can go from the names of the Judges and there, you know, are oftentimes, you know, many, many names for Judges, but you don't need to hear what office they're running for every time. You just want to go down the name of Judges. On the other hand, you want to make sure that the contest is very well spoken, or easily accessible, when there are other contests. The contest is really the important part, with two or three candidates, as opposed to Judges, who may all be running for five or six positions on the Supreme Court, or whatever it happens to be.

Navigation needs to include navigation just as a sighted person would do it. In other words, there's nothing more frustrating than hearing the instructions, and then making a selection, going to the next contest and having to wait to hear all those instructions again. Now, part of this may be out of your control, but best practice requires that navigation be instantaneous and precise, just like it is for sighted people. In other words, if I'm reading down a long ballot, and up here, for Senator, there's a guy by the name of Joe Schmoe, and down way low on the ballot there's a name Jane Schmoe and you recognize the name, "Gee, where did I see that before? And are they related?" A sighted person just goes back up and finds, you know, Joe Schmoe. A blind voter should be able

to do the same thing, to jump from contest to contest easily. I happen to like a normal keypad. Everybody knows how to dial a telephone, and many of the machines, today, have those buttons as the navigation tool. There's a way that you can manipulate it. For example, if you were reading a book, it would be going from chapter to chapter, or heading to heading, and quickly get back to what you want to see.

Now my example is meaningless, but the concept is very important. It's important as you go back and decide whether or not you've cast the ballot as you intended -- pardon me -- that you've marked the ballot as you intended before you cast it, in other words, the authentication before the casting. If you have to go back up and be forced to read all of the instructions again, fewer people are going to feel like authenticating or checking their ballot.

Let me see, some of this I'm just going through because it's been discussed during the day. I think one barrier is, and we've talked about it, but one barrier is the sense of security, that you're really taking part in the right election on the right machine in the right city in the right precinct, and having that gold seal from your State with the watermark, or whatever it is, is also important to the blind person. So figure out, or allow yourself the pleasure of working through that so that blind people also have that authentication. But, in addition to that, keep in mind that a blind person standing at your accessible voting equipment here doesn't know who's behind them. And there are such good intentioned poll workers at our locations. They just want to be there and help you and do everything. And they're well intentioned. But can you

imagine how nervous it would make you feel if the poll worker were standing right on your shoulder watching you mark your ballot. And, a blind person or a visual impaired person feels the same way. Your machine and your ballot, as beautiful as it is, should have an option so that that blind person who is reading an audible ballot can blank out the screen. I can do my entire ballot without looking at one word, because I'm getting it through my headphones or, you know, my neck loop or whatever it is that the person is using. So, blanking out the screen is something that many voters find very critical.

You also need an indication that -- or should have, or I suggest, that we have an indication that if you have done nothing for 20 seconds, you may be thinking about Joe Schmoe and whether he's the brother of Jane Schmoe, but if you've done nothing for say 20 seconds that machine is going to remind you, "Hey, are you still there? Your last vote was X, the next contest is Y." You don't need to be that specific just, "Hey are you there?" Giving the person -- you know it's kind of like the music. You know you're on hold because you can still hear their music. Make sure that there's some indication that the voter is really confident that his or her process is working. And sitting there, hearing nothing in response is very, very disconcerting. But a voter has every right to sit there and consider for as long as they want, keeping in mind politeness and courtesy and all that.

We've talked about color and contrast. We talked a lot about it for paper ballots. That's one situation in which doing it

electronically is instantaneous. I think most of the vendors today have that as an option, to have different color and contrast.

Reach ranges, that's more the polling place design rather than the ballot design, the way you mark for people with dexterity disabilities. I think if there's a takeaway for me today -- oh, before I get to that wonderful takeaway, here's one. In the design of your ballot, you don't want to be over descriptive. You don't want to interpret the ballot for the person using the audio ballot. A quick example, I went with the United States Access Board to St. Louis a few years ago, and one of the things we were looking at is the St. Louis Arch. Well, how can you be there looking at it without wanting to go up in it? And so, we went up in it and when we came back down we were discussing it. And then, a video was shown. And here's a guy -- during the creation of this St. Louis Arch, there was a guy, literally, hanging from a cable 650 feet in the air, welding a piece of metal to this thing. And it was incredible because, I guess, it was taken from a helicopter, but the picture was showing this guy dangling and the earth was miles away. At least, that's what it looked like. There were gasps in the audience. And it was audio described. Here's what was audio described, "There's a man wearing a yellow hardhat wearing a green and yellow checked shirt. He appears to be welding." That was the audio description. It completely misses the point. What we don't want is a radio broadcaster, Elizabeth, who interprets this ballot, too much. We want it to be consistent, and we really want the information to come from the ballot. So, while it's okay to say, "There are seven contests on this ballot," that's okay because that's

what you're going to have as a sighted reader, you can see there are seven contests, but too much interpretation gets in the way. And that's why I favor, quite frankly, the computer voice. Technology has been marvelous and computer voices are very, very understandable. By the way, we're suggesting instant navigation and instant volume control. Also, instant speed control on your computerized voice, so you can go faster or you can go slower. Many, many people find that they want to go faster because the computer can talk as slow as you want it to, but it can also speed up which makes it more conversational and intelligible, so, option to control the speed.

So, I believe that as we consider our ballots, we consider ways to include people with disabilities throughout the system as poll workers. There are times when, you know -- hire in your offices people with disabilities. They're capable. They've been to college just like everybody else. I guess, what I'm trying to say it is a really great time to be a blind guy. And, I mean that with all sincerity, because the technology is so great, the technology is here and now, and we truly can compete on terms of equality. But we have to have those opportunities. And the public's perception is, "Oh, here's another person with a disability, let's sort of manage them and take care of them." So real inclusive, and I know everybody means well, but talking about it and really living it are two different things. Include people with disabilities in your discussions and on your staffs in the poll -- in the decision making and in the ballot design.

I think that's really what I have, Merle. And I'll turn it back to you unless you have questions.

DR. KING:

Okay, well, there's definitely going to be questions, because I have one coming out of the shoot.

I think you make an eloquent case, Ron, that the goal is to increase usability for all voters, in that, accessibility concerns is one method, one path to that. From an election official's perspective, because we're always trying to set priorities, we have limited resources, among them time, are there universal design principles that are applied to either the ballot, to instructions, to polling place materials, that you could recommend to election officials?

And I made a note of two things as kind of a starter. One, I think I heard you say that navigation methods are critical, whether it's for sighted or unsighted voters, and that plain language is critical. Are there other design principles that election officials should put on their priority list?

MR. GARDNER:

Yes, I believe so, and thanks for asking that. DAISEY -- it's called DAISEY, and I can't tell you what that acronym stands for, but DAISEY formatting is what gives blind and low vision individuals the ability to skip around have that navigation. My understanding is that the DAISEY formatting and EPUB 3 formatting, which is another version of doing the same thing, it's putting the chapter headers in, it's putting the page numbers in. It's allowing you to skip to a specific page or a specific topic, a specific contest. It's two different ways of doing the same thing. And my understanding

is that those two are merging and will be, basically, one design format this fall, so it's not too far down the future. But can you imagine being a college student and being given a 700 page textbook in print, and -- with no page numbers, with no chapter headings? The point is, there, it's the same for us with the navigation. So, it's DAISEY and EPUB 3. Those are coming together and will help, so that's one.

Did you -- what was the other question?

DR. KING:

Really, just the design principles, things that are kind of universal, design principles that would, if you will, be a rising tide for all ships.

MR. GARDNER:

We talked this morning about whether the "C" in McCain should be a capital or a small "C." And the same principle in, you know, the letters with the little feet versus the other ones, those same principles apply but, I think, less so to computer software that makes print to text -- converts print to text. But sometimes the name, just take Herrera, that's not going say -- it is not going to say Herrera the same way on an English ballot with an English robot computer saying it. I don't know what it's going to say, but it's only going to say what text is there. And so, you, as designers, are going to have to figure out and maybe talk with the candidates themselves, because as we have Asian names and Indian names and Spanish names, the computer is going to say those differently than we do in the spoken word. And so, that concept of programming in the name, so that it sounds like what the person is seeing, even though it may be misspelled in the program itself,

nobody cares, it will say Juan Herrera rather than Juan Herrera. And I think that's a principle that is pretty universal.

Other questions?

DR. KING:

I had one question about the nfb.org website that you referred to. I think one of the things that local election officials are always interested in is developing local resources. Often they feel more comfortable with talking with the folks that are in their community. For the organizations that you mentioned, and specifically, National Federation for the Blind, are they prepared to make local referrals, if possible, at least down to the State level, so that election officials who might be watching today, that want to reach out would be able to get assistance within the context of their State, at least, so that there would be some, perhaps, on ground knowledge of the laws, statutes, rules and regs in that State?

MR. GARDNER:

The answer is yes, there are two primary organizations, all of blind people. In other words, they are blind people who elect their leaders and they're dealing with blindness issues. So, it's the National Federation of the Blind and American Council of the Blind. Those are the two primary organizations. And then, there are a smattering of others that deal with low vision, and so forth.

Each one of those organizations are pretty much organized in each State. And, boy, if they were to get -- I know, in our State, if we got a call from our election official saying, "Hey, come on up, we're having this meeting on ballot design," we would have 15 people ready to go and they would have good, solid information

that would be helpful. Is that the case in every single State? I doubt it. But one thing you can do is e-mail me. I know our organization very well, and I know the strengths and weaknesses of our affiliates around the country. But locally, there is going to be -- there will be blind people and visually impaired people that will be able to help and answer questions right there with you as you go through it.

DR. KING:

All right, very good. I'll open up the discussion to the panel. Any questions that you'd like to pose to Ron or comments that you'd like to make regarding barriers to voters?

Wendy?

MS. UNDERHILL:

My own mother is visually -- well, she can't read, and she also can't manage a computer at this point, so there's an overlay of two disabilities. So, I'd be interested in how -- but her brain is working fine in the background -- in how a person with those kinds of overlaying disabilities can be assisted.

MR. GARDNER:

That is an excellent question. We touched on my response a little bit earlier in the day, but one of the largest causes of disability among older -- among seniors is age-related macular degeneration. That type of blindness is -- allows grandma to walk around unassisted, and she's always complaining that she can't read and her vision is going, but as she walks across the floor she reaches down and picks up a toy that was left in the middle of the floor. There's still usable vision, but it's not the vision that she can read

with, and so, just understanding different types of vision and low vision.

I think that the -- that's one of the reasons why I advocate for the telephone keypad to make the navigation possible. Most people know what a telephone keypad feels like, even though most people are using cell phones and they're all different now. But, you know, we all still kind of remember that familiarity of the telephone keypad and, you know, two goes up and eight goes down and, you know, or the -- visa versa, excuse me. Where it gets a little difficult for 80-year old grandma who can't see the screen, can't see the ballot, is, which one is she going to do because they oftentimes do not want to self-identify. They think of themselves as non-disabled people, and to admit poor vision is something they're just not ready to do, and yet, their poor vision is still there and they want to vote. So, how are we going to help them? I think just recognition on the part of you folks and your staffs, but help them understand that using this accessible machine is in no way a putdown. And when she can learn, 85 year old grandma can learn that we're using these same little buttons here, and all you have to do is put on the headphones, I haven't found, in my experience, that people are put off too much by that.

The problem with overlays, quite frankly in my experience, they are more complicated than simply an audio ballot. That may not always be the case. I think they're more expensive, quite frankly. But I think that older people really have to figure out which one they're more comfortable with. And I know you're going to make the print ones in larger print. She still won't be able to read it.

So, she's got to feel comfortable coming and know that there's going to be a machine she can use. And when we do the mail-in ballots, she's got somebody, her next door neighbor, her grandchild, whatever, that will come over and read the ballot to her and that's her issue. That's certainly one way that people do it. But if you're coming to the polling place, that machine also needs to be accessible. And low vision will work for a lot of people, it won't work for all. And that's why we have to also have the non-visual access.

DR. KING:

Okay, Whitney?

MS. QUESENBERY:

This actually came up as a discussion in the TGDC, and one of the things that we talked about was not the specifics of the technology, but that if we take the accessible voting machine and we label it as the machine for people with disabilities, we've put it in a corner, and if we label it as the machine with some extra capabilities, if you're more comfortable hearing it, then we can change the conversation around that machine. I think the more people use it, the better poll workers will be at setting it up. I know this has been a problem that we've had reported, and we've certainly seen it in my jurisdiction, which is, there's just not many people using it, so their chance to practice with it, and their chance to actually deploy it is very low. When you have more people using that machine, you have more votes cast on that machine, so you have fewer privacy problems, fewer security problems on the machine. So, one of the things we might think about, as an election community, is how do we make

that not the accessible thing in the corner, but an option for anyone who, for whatever reason, would like to use it.

MR. GARDNER:

It's a great question. I don't know that I have the silver bullet answer. But I will say that one of the things you said, I think, comes close, and that is training, trial runs. In the State of Utah, we were deciding that very first run of electronic voting machines, I don't know, a small grant was given to the University of Utah, and they kind of created this model and we had different machines and published it in the paper. I could not believe, I mean, Utah is a very small population State, we got thousands of people that came that were interested in learning about the electronic voting equipment, and which they thought was the best. This was back in the day that we were still testing which one we wanted to buy. But thousands of people came. And you know who came in droves, were seniors. They wanted -- Whitney, in answer to your question, they wanted to see how it was going to work and if they could still do it. And we found that that was just hugely successful.

Now getting back to the one in the corner, in Utah, I have to say that my understanding, and I may be wrong on this, but I think I can go to any one of the machines. All I have to have is the card that says you know, "This guy -- make this audible, instead of visual," and it does something else to the machine.

MS. QUESENBERY:

I think that's true, because in Utah, you have a DRE with VVPAT, but if you're in a system that's using optical scan plus ballot marking device, that's a whole different situation.

MR. GARDNER:

Yeah. Again, having poll workers with disabilities, having it not be over there in the corner, have it be smack in the middle, have it look as much like the other polling places as you can. Folks, a lot of it is simply public awareness, public awareness, that 54 million of us have a disability of one kind or another and that it's okay. We're not defective sighted people. We're just people that happen not to see well, or happen not to walk well. It's what we, in our organizations, face every day, but it is what it is and I think we're making progress. But I really appreciate the fact that you even raised the question about not wanting to have it be the one over in the corner. That's a very negative connotation.

DR. KING:

Let me, if I can -- and Larry, I'll get to you in just a moment -- I need to kind of cast the net a little wider here, and I'm hoping, maybe, Whitney, and Drew, and Ron, can identify some other organizations. In addition to vision impaired voters, we know that there is an emerging awareness of cognitive disability is very important, mobility issues in the polling place, literacy, which is often overlooked as an impediment to voting. And, as a resource for our county and local election officials who may be watching, what organizations might they access or seek out to get referrals, possibly local referrals to assist them in better understanding how to create usability within these groups?

MR. GARDNER:

Now, you name some other people that you wanted to hear from and I'll go with that.

DR. KING:

We'll start with you Ron, and then we'll work around.

MR. GARDNER:

All right, the United States Access Board has an excellent staff and I think contacting them. Their website is access-board.gov, I believe. Our staff there is excellent in answering questions like that and being in contact with people with disabilities. The American Association for People with Disabilities, AAPD, they specialize in all disabilities, as does the Access Board. It's not just vision and blindness. But there will be people in that organization. And I think they're pretty well organized around the country, as well. Their headquarters are here in Washington, D.C. Their executive director is just a brilliant person and I'm sure can provide some feedback to you.

There are mobility organizations. They're quite different and quite varied around the country, but I think they all, basically, have the same goal in mind. There are hearing organizations for the deaf, the American Association for the Deaf. Gosh, we've got one of our staff members, here, and he could give me some other names, but those are some of the organizations.

Now, there are also professional organizations. There's -- there are some that really believe, academically, we can solve this problem. I, generally tend, even though I used to be one, I generally tend not to rely too heavily on the academic saying, "Here's how I'm going to solve the problem for those people" and she's never been through it in her life. There is some real value to going to the people who are using these accessibility and usability

options. But they certainly have suggestions and they can help you work around it and probably have contacts, as well.

DR. KING:

Okay.

MS. QUESENBERY:

I'd throw in Lighthouse.

MR. GARDNER:

Lighthouse, Lighthouse is in many, many States.

MS. QUESENBERY:

Lighthouse has been very interesting in New York, because they've been working with Madison Avenue on accessibility to print materials for people who are still using reading vision, so that's been quite interesting. Almost every community has close to it, somewhere, a library for the blind, which also includes many other. It's a great way -- the staff there will be able to walk you through how people use assistive technologies, because I think one of the things that it's important to know how people are going to interact with the various election technologies, but it's also a chance to get to see what daily life looks like, and try out that technology in a place that's there. ATAPs, the Assistive Technology Centers, there's one in each State, at the government level, and they can often help connect you with people if you're looking for voters who you can work with who have disabilities. There are a number of non-profits. I happen to know of one in Texas called AccessWorks, run by Knowbility, that specializes in doing accessibility and remediation work, where their staff are people with disabilities. So,

there's some non-profits scattered around the country. There might be one in your community.

MR. GARDNER:

You've just reminded me of one and it's partly what you referred to, but I think every State has as governor's committee on disabilities or employment of disabled workers. But, it's usually given the governor's committee…

MS. QUESENBERY:

Right.

MR. GARDNER:

…of something or other.

MS. QUESENBERY:

Right.

MR. GARDNER:

And they -- the genesis of that group in each State really came from the cognitive area.

MS. QUESENBERY:

Um-hum.

MR. GARDNER:

Generally speaking the cognitive disability groups.

MS. QUESENBERY:

Yeah.

MR. GARDNER:

Of course, there's The Arc…

MS. QUESENBERY:

I was going to say…

MR. GARDNER:

...that also deals with cognitive disabilities.

MS. QUESENBERY:

Right.

MR. GARDNER:

And I interrupted, so go back to Whitney.

MS. QUESENBERY:

I was going to say, while you might not want to talk to university researchers, who, really, are looking way out into the future, universities, themselves, have offices that work with their students with disabilities. And many of them have outreach facilities, so they can be a resource for you to connect to both understanding the situation and connecting to their students.

There's one more that just floated through my brain, I can't remember what it is. Oh for older adults, AARP, of course.

MR. GARDNER:

Oh certainly, American Foundation for the Blind.

MS. QUESENBERY:

And if you're looking at people with recent disabilities, VA centers are a great source. I mean, we know that there's the operation military -- sorry, say the name of the proper project, the Military Heroes project.

MS. LAYSON:

It is the Military Heroes.

MS. QUESENBERY:

Yeah, right, which is looking at election-related issues for service persons who have recently been wounded, because those are people who were functioning adults who had a cataclysmic injury

that might have resulted in either a cognitive or physical disability, and that's a very different situation. Well, anybody who's had a recent change in life is a different situation.

DR. KING:

I think one of the things that my takeaway from this, is, we need to come back with a list that includes the URL of these organizations, the names and the telephone number. And we'll get that posted off of the EAC's website, because this is an impressive list.

I'm going to ask Larry if he would like to have the last word on this topic, and then, we're going to move onto UOCAVA.

MR. HERRERA:

Just briefly, and maybe not in a lot of detail, for Ron, but in Long Beach, we offer two ways for vision and other persons to vote if they happen to be disabled. And one is assisted voting, curbside voting, which means somebody helps you fill out your ballot, there, at the poll or at the curb. But when it comes to -- we're an all paper ballot jurisdiction, so everything we do is on paper. Is it possible that -- let me back up. We also offer magnifying glasses and I don't know to what extent those are effective for people with low vision, but to what extent might it be possible to design, let's say, a plastic template that you would put over your ballot that somebody could read in Braille perhaps, and then, appropriately mark their ballot using a pen? Is something like that feasible or is that just...

MR. GARDNER:

In my humble opinion -- I'll take the second one first. In my humble opinion, I have not seen a template that really works either with Braille or, you know, counting the spaces. It's still got to be -- the

contests and the names have to be identified. And it's just difficult. I've not seen one where it really has worked well. Whitney, have you?

MS. QUESENBERY:

I haven't. I've seen some experiments that looked promising, but none of them really seem to be something that's more than a Band-Aid.

MR. GARDNER:

Yeah, and maybe we'll get there someday. I just -- I don't think it exists. I think the touch screen is so much more advanced and easier, it's more universal, and so it's going to be easier to modify for next year's election. These templates are going to change and be different for every precinct and every, you know, every school district or wherever the election is being held, city, county, whatever. So, the template, I know people think it's an easy fix and if it worked I think would be, but I don't think it's realistic.

Your other question about lenses, magnifiers, I think it's great when you have a low vision poll worker and he happens to be sitting at the desk using a magnifying glass, I think it's great, and if the voter wants to use it. I think that's great too if the voter wants to bring their own magnifying glass. But the percentage of people that are going to be reading through those types of lenses are going to be fewer I think. They're either going to want the large print because they're able to do that and they'll bring magnifiers, or they'll want the screen reader magnifier or they'll want an audio ballot.

One quick word on the curb assisted voting. It's fabulous and it works for some people. My opinion is that we still need to head toward independent voting, secret ballot that can be verified independently. And it ceases to become a secret ballot. I've -- you know, in years past, my wife has done a lot of voting for me, and I kind of blamed her when it didn't go my way sometimes.

[Laughter]

MR. GARDNER:

But, we really are hoping to head more toward a secret ballot rather than the assisted ballot. Thank you.

DR. KING:

Thank you. Libby, you had a quick comment.

MS. DEITER:

Well actually, I did about the Braille. However, I think you answered my question that the audio actually can take care of quite a few more people.

And then, another couple of comments, the touch screen that we use was purchased with HAVA funds, so it is much more recent than our optical scan. And I was very glad -- I was checking off mentally as you were mentioning the things that are required with touch screens the volume control, the blank screen, that we do provide those. So I'm glad to see that equipment even purchased prior to the last voting guidelines still has quite a bit of that which is very useful and private for people.

Our curbside voting can still be private. It does not have to be that somebody loses their privacy.

MR. GARDNER:

I see.

MS. DEITER:

And, in fact, the touch screen itself can lift off of its cradle and be taken out to the voter. So, it doesn't -- people don't have to lose their privacy in that respect.

And, let's see, I had several different comments. Also, the people that do our audio ballots can no more be allowed to editorialize on the ballot than can I editorialize on the paper -- on the printed ballot or the computer voice. So, you know, they aren't adding any extra words there, so just a piece of information on that.

MR. GARDNER:

Merle, I know you wanted the last word to be about 20 minutes ago, but let me add one quick thought, and that is, the write-in ballot, the write-in candidate, how does a blind person do a write-in candidate? It's an issue that lots of people smarter than I am are struggling with. But there is always the fail/safe, you know, how you can -- how we text, other than the Androids and the iPhone. But if you're a blind person you can still use that keyboard and spell whatever you want to spell right on that ten digit, or whatever it is, keyboard. And when we're talking about grandma still has the light functioning in the back there somewhere, you might be surprised how much -- how they can figure out that alphabet and do a write-in candidate. That's one way, I'm sure there are others, but write-in candidates are still possible on the electronic machines.

DR. KING:

Okay. Before we move to Josh and UOCAVA, I did want to mention another usability issue and that is in supporting unwritten

languages, Native American Indian languages that require special consideration. I know we've talked about the goal of usability, and I think it's appropriate that we mention the importance of that group, particularly in the Western States.

With that, Josh Franklin has joined us and Josh is working on a project I believe that deals with UOCAVA related voting systems and I thought you might make a few comments. And we're going to take a hard break at 3 o'clock, so we may come back to discuss your comments. But I'll turn it over to you.

MR. FRANKLIN:

Sure, hello, I'm Josh. What I think Merle was referring to was the Survey of Internet Voting and Associated Risk document that we've been working on for about a year-and-a-half since the snowpocalypse. The document is supposed to assist the EAC in our mandate for developing electronic absentee voting guidelines. What we have done is documented all of the projects or nations that have utilized some form of Internet -- some Internet voting system. We tried to classify all of them, retrieve all of the source documents, look for the different standards used, both security and usability/accessibility. There was definitely a focus on security though and the different risk assessment methodologies used to implement these voting systems. We have about a 400 megabyte file that we're going to post on the EAC website.

MS. QUESENBERY:

Not in one piece we hope.

[Laughter]

MR. FRANKLIN:

We're going to figure out the best way to put it out there. It's a lot of -- there's a lot of source documentation and it's hard to collate it all, and so, we're trying out a great way to put it up there.

And we're hoping that it just won't inform the EAC, but also help other nations and possibly jurisdictions that are looking into, not just return of voted ballots, but blank ballot distribution systems and online marking systems.

Yeah, I think that's a summary of the project.

DR. KING:

Okay, let me begin with a follow-up question. And I think you are correct that the primary emphasis on the UOCAVA systems has been functionality and security.

MR. FRANKLIN:

It has.

DR. KING:

But, in your experience, and what you've seen submitted from vendors, discussed at the TGDC, where is the discussion, vis-à-vis, usability? Has that got a place at the table?

MR. FRANKLIN:

In terms of all three types of systems; the online ballot marking, the blank ballot distribution, and Internet voting systems?

DR. KING:

Yes.

MR. FRANKLIN:

For the online ballot marking and blank ballot distribution systems, I have not seen much discussion at all, and I don't think that there

are any standards that exist that are best practices or guidelines. Does anyone know of any?

MS. QUESENBERY:

Specifically, for elections, no.

MR. FRANKLIN:

Yeah, there was a meeting in Chicago with FVAP this past March, I believe, yeah, Dana Chisnell was there.

MS. QUESENBERY:

Dana was there, but we got invited the week before.

MR. FRANKLIN:

Yeah, yeah.

MS. QUESENBERY:

And no one with a disability was invited.

MR. FRANKLIN:

That is true. And the guidelines -- FVAP had a discussion going that was talking about security considerations that could be recommended, but also usability and accessibility recommendations that could be given. But, to date, I don't know of any guidelines that exist for those purposes.

But for Internet voting systems, it's actually quite interesting. There was a lot of information found that many countries, specifically, did Internet voting for accessibility reasons, such as, Australia had three different projects and, in large part, because they don't have polling place electronic voting systems. And so, their method of providing accessibility to voters was through an Internet voting system. We saw quite the same thing in Canada, as well, in the town of Markham and Peterborough. I believe Norway

actually created a whole list of accessibility and usability guidelines for their new Internet voting system that they're going to be piloting this August.

I think you had a question Ron?

MR. GARDNER:

Yes, is that -- Josh is that -- are they using WCAG II?

MR. FRANKLIN:

I'm unsure, sir.

MR. GARDNER:

In other words it's not -- they're not going back and redeveloping the wheel, they're using that WGAG II for the Internet accessibility?

MS. QUESENBERY:

I believe -- in Australia, I believe so. Australia has a universal requirement to vote, so they also have a universal -- they have a governmental duty to provide the opportunity to vote.

MR. FRANKLIN:

I'm not sure, sir, but I can definitely figure that out and get that information to you.

Sharon Laskowski was telling me that many of the Norwegian accessibility requirements were based off of a subset of new requirements that a U.S. Government organization was releasing soon.

MS. QUESENBERY:

Access Board.

MR. FRANKLIN:

Oh yeah, the Access Board.

DR. KING:

In the interest of the plain language lot, what is WGAG 2?

MR. GARDNER:

Josh, take it over.

MR. FRANKLIN:

Sir, I'm actually quite unfamiliar with that. My schooling and focus has been on information security, so my sincere apologies.

MS. QUESENBERY:

This is one of the...

MR. GARDNER:

Whitney or Elizabeth know.

MS. QUESENBERY:

This is one of the problems with the world is that we don't...

MR. FRANKLIN:

Me?

MS. QUESENBERY:

Yes -- no not you, but that we have people who say, "I do information security" and we don't think about access is part of security. WCAG is a standard from the Worldwide Web consortium, the www. It's run buy a project called the WAI, which is the Web Accessibility Initiative, and it stands for Web Content Accessibility Guidelines. It -- WCAG is important here because the Access Board is in the midst of a refresh of Section 508, which is the federal accessibility guidelines, and there was considerable work done to ensure that this international standard harmonized with our national guidelines.

MR. FRANKLIN:

And I completely agree. A denial of availability, I guess, is definitely a security issue. If the user can't use the machine, that is an availability issue. It's a denial of service.

DR. KING:

I want to follow on with something that Whitney just said, that I do think is very important.

The security community got involved in elections early on, and made, I believe, a correct and insightful point, which is, that security cannot be engineered after the product into voting systems. You cannot shoehorn it back into it. I think we have a growing awareness that usability has exactly that same attribute and constraint, in that coming back into systems and attempting to overlay usability features and capability just doesn't work, and it needs to be a part of the design function.

I'll tell you what, I'm looking at the clock, and we're right up against our 3 o'clock break. I have a few more questions that I'd like Josh to weigh in on the UOCAVA, but I am going to ask Josh and Libby to change positionsm because I think there's some things that we're going to ask Libby to talk about in our last session that will start at 3:15. Let's take a 15-minute break. And to those of you who are following us on the webcast, we'll be back at 3:15. And againm encourage you to go to the EAC's website at www.eac.gov and all of the presentations and additional materials related to this topic will be at that website, thank you.

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[The roundtable panel recessed at 2:55 p.m. and reconvened at 3:15 p.m.]

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DR. KING:

It's 3:15. I'd like to welcome back the roundtable members and welcome back those who are joining us on the webcast. And we're in our final session today. It's been a great productive session, so far. And this is the part where we are now going to try to look at some of the things that we've talked about in the context of events that have occurred within election jurisdictions, some examples and some strategies that election officials might take in going forward.

Before I ask Libby to begin this discussion with her experiences in Topeka, Kansas, I want to come back to Josh and explore one topic related to the UOCAVA initiative. And I think every State, in the light of the MOVE Act, right now, is -- has or is looking at their UOCAVA materials. And the UOCAVA materials might represent a great starting point for redesign, that if you're looking at something that is required, but also looking at something that you can kind of get your arms around, in terms of a finite problem, that the UOCAVA materials including, of course, the ballot but also the instructions, anything else that goes forward, it may be a great point.

So, Josh, if you could mention, perhaps, your perspective what you've seen and any insights you might have.

MR. FRANKLIN:

Sure, there have been -- there are two major points that I would like to address there, being the actual materials sent to the voter, and then, the process of sending back these materials.

The balloting materials that get sent out vary from State to State, and sometimes from jurisdiction to jurisdiction, and there are

-- it's just a hodgepodge of information in there, sometimes. I've personally only seen three, that being Georgia, I think Ohio, and San Diego's. But they're all a little bit different and I don't think that they were always designed with usability in mind.

With that being said, sometimes there are three to four different sets of instructions on the insides of the packages, two separate envelopes. There is the actual ballot. The three or four sets of instructions could be something like how to print off your ballot, how to fill out your ballot, how to send it back. And each one of those instructions may have been made at a different time and so, sometimes they look vastly different.

There are also some issues that I've heard a lot, lately, about all these new blank ballot distribution systems and online marking systems that States have been enacting to help be MOVE Act compliant, such as -- mainly like the act of downloading a blank ballot and printing it in a different country on a different computer is actually a little bit more difficult than you think. There are varying operating systems. There are varying browsers, readers. There are many different things that can cause problems, paper format and size.

One of the main real world best examples I have of this is Dr. Claire Smith's story. She's from the Overseas Vote Foundation. She was in Germany when she needed to -- during the election. She got a little bit caught up in her work for OVF and she ended up needing to request a ballot a little bit late. She finally got her ballot, and she went to print it and ended up printing a ballot three inches

by four inches, which is kind of small, and that definitely causes some problems.

I would actually think that many different UOCVA voters, be them, you know, just Expats or military voters, families of military -- family members of military voters have similar issues. I think a lot of that stems from the “A” series paper size and the letter paper size. Here, in North America -- here, in Canada and the United States, we use the letter paper size, which is this, which we all know and love, whereas -- this is our agenda here, whereas the “A” series or the A4 paper size is pretty much used by the rest of the world. It’s a little bit longer and a little bit less wide. And it causes, actually, a lot of havoc when you’re trying to open up a ballot that’s been made here in the U.S. or Canada, and trying to print it off in, say, with different settings. It often causes the margins to go crazy. It causes resizing issues to happen. And so, it’s a big issue. But I think a lot of people assume that when they are printing off their blank ballots or printing off their marked ballots, these ballots are going to be tabulated by an optical scan machine, when in fact, to the best of my knowledge, there’s always this transcription process where the ballots are taken in, and then written, and their votes are transcribed to a real preprinted ballot of the -- on the correct ballot stock that the optical scans are, frankly, made to read.

And so, there are definitely a lot of interoperability issues, and this is where the guidelines for the blank ballot distributions systems, and online marking systems might come in really good -- in handy, because, then, if ever single election jurisdiction sent out a PDF in the exact same way or maybe just an image, like a PNG

or a JPEG in the exact same way, that might help reduce voter confusion on the issue. The common data format that's being generated, right now, will also help that out in a huge, huge way because although it's only for defining -- the current stage of the common data format is only for defining a blank ballot, it's going to be defining a blank ballot in the same way every single time, and that's a huge, huge deal.

DR. KING:

Okay, thank you. Yes, Wendy?

MS. UNDERHILL:

I spoke with Bob Carey earlier this week. He's from the Federal Voting Assistance Program, out of the Department of Defense, and if I can remember correctly his number one take home, for me, was that there are at least four ways that a ballot needs to be used in military and overseas situations, and we might think that it's a good idea to print it out, but in some places, there's no printers. Many Internet cafes don't have that, that's fine. Yet, in other situations there is no Internet café, and actually, getting it to and from the voter via over land mail is the only way to do it. So, that old-fashioned system is still sometimes the operable system. And then, in addition, we have that idea that you could fax something back. Well, it turns out when you're at the frontline, fax machines are a little hard to find. And so, that's why his agency is interested in the potential for Internet voting.

But, if we're talking usability, I would say, if you can't get your ballot back, that's a usability issue.

DR. KING:

Okay, thank you. I'm going to now ask Libby if she would take us through some of the things that have been accomplished in Shawnee County, Kansas. And that, hopefully, will be a starting point for further discussion about what local election officials can do to get the process started in their jurisdictions.

MS. DEITER:

All right, thank you, Merle. It really started when I went to an IACREOT conference and we had some speakers from Design for Democracy. They had been recommended through -- had worked with the project with the EAC, and had started developing guidelines for readability in ballots. And they made such a clear point on it, why should you bother doing it. They were talking about research that had been done, over the years, how a person reads. And if you start centering words, then a person's eyes stop, and then have to move over to the center of the column in order to read it, whereas, if you left justify it, their eyes go straight down the column. Every time you change a font, then a person's eyes stop, their brain stops, they readjust, they study the words, and it takes longer. And so, the recommendations that came out of that is to making your ballot easier to read made so much sense. And I realized I'd been doing everything completely wrong, all along, absolutely in the attempt to make the ballot look official, using the "yelling," as you say the all capital letters, for something that was very important. And -- but this was based on study, and how they know people read.

And so, I took that back to the office with me and we decided we were going to work on that, as well. Now, I didn't have any

funding to do that. It's just something that we tried to start to institute. And I have since gotten to see other presentations at conferences. I will always tell you that you do need to participate in your professional associations. You learn so much from them, and in this respect, I certainly learned more about ballot design. And we went in and we did it ourselves. And I have -- there's a picture on the screen for you, and it's a picture of our old ballot, and it's a picture of our new ballot. And, you know, we tried very hard to make our ballots look very readable, but the old ballot uses a lot of centering, it uses a font style with lots of serifs, the New Times Roman, and it -- it's not left justified. It looks a little cluttered.

Now, on the new ballot, and I do apologize because this is a very dark picture, it was the best that we could get for sending here, but on the newer ballot, we could use some shading, and we treat everything in a similar manner. If it is instructions, then it is shading. If they are candidates where we really want people to notice that they need to vote in this area, there is no shading, and it has a white background there. It is also left justified. And those are three things; use left justify, use a font which does not have the serifs to them, such as aerial, but there are several fonts in that area, and to use upper and lower cases makes a ballot that much easier for people to read, for their eyes to follow as it goes down. And that does not -- it doesn't cost you anything to do that. That's just simply how you're setting up your ballot.

And so, we started that, but to get the story behind it, the first time we did it we were very uncomfortable with that concept, the whole concept. We had a mail ballot election coming up, so we

decided, well, we'd implement part of it. And I think the part that we implement was perhaps the font on that. So, we did that, didn't like it. Nobody in the office felt comfortable with it because it was something new. We just weren't used to looking at -- we weren't used to a ballot looking like that. We thought the old ballot looked official, because that's the way we had always done it. And so, we had to slowly work our way into it. Well, from there we decided, well, we'll try again on the next ballot. On the next ballot we'll institute a little bit more. And you might even notice with our newest ballot, we still have not left justified the heading. We need that space in there for a unique mark stamp which is required by law. So, we went ahead and simply centered, it's -- probably our last vestige of the way we used to do things is still left up on there, but, in general, the rest of the ballot is all left justified, and it justifies with the oval itself. I mentioned, earlier, that on our ballots we can't move the oval to the far left, partly because it would interfere with timing marks, or could interfere with timing marks if voters were not careful of coloring in the oval. So, we were able to do it at very little expense, but a lot of time. And here it is, four years later, and we are still working on all of our documents and all of our ballots.

We have a lot of documents. Our latest has been instruction at the voting place. We have a myriad of laws that we have to tell people out; no electioneering within 250 feet of the entrance of the voting place, positively no smoking. There are just a variety of things, and so we had just a mess of little signs, with, really, very little instruction to the Board workers as to where that information is

supposed to go. They were supposed to use their best judgment in putting it out.

And we are just working on a sign combining some of that information, so it's in one spot letting people know, for instance, where the official entrance to the voting place is. We could have a building -- we use a variety of buildings. Let's say it's in a community center. There may be ten entrances to the community center, but there is only one that is our official entrance. It will be handicapped accessible. It is what we put on our voter registration certificates that we mail out to the voters, so that they know which door to go to. And, as they come up to the voting place, park in a parking lot and look at a building with, you know, possibly several different entrances to it that we could put a sign there that says, "This is the voting place entrance. There's no electioneering within 250 feet of the entrance of it. There is no smoking permitted. And it is unlawful to remove a ballot from the voting place." So, we've started breaking our signs what should be at an entrance, what should be on the inside. By being able to put it on the heading, the Board workers know where it should go. And then, again, the information on it goes back to the standards left justify, a font which is large enough for people to read, a font which is easy enough for people to read, and using upper and lower case on it. So, we're still working on it.

Now, I was really excited about this meeting, particularly, because of having people here with the plain language. That is actually one presentation I had never seen before. And we do have a gentleman on our IT team who does work with that, and so, he

was in on some of the discussions of how we should word things. Signage at the voting place, there are some signs which the statute say we have to have at the voting place. There are -- but when you're starting in most instruction, we may have a little bit more leeway than what the statute say we have to have on the ballot. So, for instance, on the Kansas ballot we are required to say, "Notice if you tear, deface or make a mistake and wrongfully mark any ballot, you may get a replacement ballot." It's a whole paragraph. I'm proud that Kansas actually has a requirement that getting a replacement ballot is available to any voter, and it is part of the ballot, both on the audio ballot, as well as the paper ballot. But the -- I'm glad that they have it there, but it's a very wordy paragraph. And we have been recognized in the past for using the word "defaced." It's in there. Well, this is in the law, so that's what we have to have. It is not what we have to have on a sign. On the sign, and we went back to the Secretary of State's Office information and instruction, so on our sign we did change that phrasing and we use, "A ballot can be replaced by asking the Election Board." It's a little bit more straightforward and very much shorter. So, if people need help with something, they should ask the Election Board, and that's the message we're trying to get out.

I would like to say to election officials who are starting to work on this, that there's all sorts of discussion, all sorts of judgment on some, of whether it's words, or how something should be set up to work with other groups and not be -- I can say not be nervous about it, but I was actually very nervous about bringing any of these signs here, particularly with experts dealing with plain

language, because that is one area I've never particularly dealt with. And -- but you get a group together and there will be discussion, and there will be people that say, "Well, no, that isn't very clear, this is much clearer."

I was very relieved on one of our voting place signs because I thought that the people dealing with plain language would not like having the statute listed. And we had long discussions in the office whether or not we should list the statute after one of our explanations. And I determined that we should. And I was very relieved in talking with Whitney, because she said I put it in the right spot, I put it at the very end, and I did list it. And we've discussed some of that. It shows authority there. It isn't because I'm just telling you to do it. It's because there's a reason. The statute, the law says that it has to be done. And we have people who are voting who aren't even attorneys who are familiar with statutes, and they'll stand there and they'll look it up and they'll call me and say, "Well, now how does this apply?" And we should be open for any kind of discussion like that. So, providing them with a tool that they can check to make sure I'm doing what I'm supposed to be doing is also very helpful. So, I do list statutes. And then, I'm glad to know that that's actually a good idea. So -- and they have discussed some of that.

But it's a work in progress. It does not happen overnight. And it doesn't just happen with only one or two people looking at things. You need to have -- bring in a large group. And I probably could do -- well, and I'd be interested in hearing more suggestions as to what I could do with my signage and various notices. I do

have one which I brought, which I think is actually kind of funny, because anytime I've ever shown it to a person, who's in graphic design, and I ask them, do they like the notice, they say, "Well, I don't know."

[Laughter]

MS. DEITER:

And I've never gotten one to say they liked it, but they haven't given me a real reason why, not to like it.

But there is something that I think is very, very important, particularly on our touch screens. In certain situations where we have very long ballots, and we have an older model of touch screen, there is a scroll bar which may appear on one side, so that you can scroll down and see, for instance, a summary of everybody that you voted for on this long ballot. Well, I'm afraid people may not notice the scroll bar, or may not understand how they're supposed to use it. So, every election, we check to make sure that our large print version, or that the regular version doesn't have a scroll bar. But if it does have a scroll bar, then, we post a sign, and this is on the inside of the door to the touch screen, and it says, "Stop. In order to view the summary of the votes that you wish to cast on this ballot, you'll need to use the scroll bar." And we show them how to use the scroll bar. "Ask your Board worker for help if you need assistance." I watch voters walk up to the voting machine, and if I have this stop sign, and the sign does use for an icon just a large red stop sign on it, and they all stop. And so, for me, I'm thinking, all right, this is what I really want. I want them to read it because this is really important, and they shouldn't just go

up and automatically think that they know everything about the screen.

So, you'll have things like that that come up, whether it's with your equipment vendor, or whether it's with your design experts, or whether it's with your Board workers and your staff, that not everybody is going to agree on it. And a lot of it is working with the public. And, you know, it could be that this is a design that might work, right now, and ten years from now it might not work either. We were discussing earlier some icons, and I think icons may actually change faster than some of the other phrases, even, and we have to always keep up on it. So, at least all I can tell you is, at the moment, in my county, that has been very successful of making people stop and read the sign to see whether -- to make sure that they use the equipment correctly.

Like I say, we did not really have money for it. Oh, and for hiring any kind of assistance, so we've had to do it ourselves. And I would like to say that one thing that was rather interesting, even though I involved my staff at every single point, their opinion on which header to use, their opinion how we put together the signs was always part of the process, even so we can go back in a moment's notice and someone will try to pull out an old form that doesn't have a header and the footer on it ,or is not in, you know, the proper format that we all agreed, all bought in to using, and want to use the old one. And I'll say, "Well, now, where did that come from? Why are we doing that?" "Oh, well, this is what we've been using." And so, it is constantly trying to keep up on it. And probably the advantage of going out and hiring a design company

is, you would be able to give them everything that you have and get it done at once, I would think, as opposed to slowly piecemealing it over time, and still having things come up that haven't been formatted and haven't been looked at. But we were able to do it. Certainly, the ballots themselves, the three things, left justified, using san-serif font and upper and lower case, that's actually fairly simple to do. So, I would encourage anybody.

And if I can give you only one take home, is, there is no downside. You are not going to get an article written in the newspaper that says, you know, "That election commissioner was trying to make it so that everybody can read the ballot better, what a terrible thing." You aren't going to have that. You get good reviews from the public. You get good reviews from the press. You get people who appreciate being able to use your equipment with more accuracy and your ballots with more accuracy. And so, there is no downside. This is a wonderful thing that you can do for the public. And you don't have to do it in a way that is very expensive.

I do want to put a couple comments. I mentioned that there's a lot of discussion back and forth, and you'll have some people that don't like this part or they don't like that one. You always have to balance out what the statute says you have to do, perhaps what your Secretary of State's Office requires, the limitations of your equipment, as well as the recommendations of your graphic artist. We were in on some of the very first of the graphic art working with ballots, and in some of the discussions, if it was purely up to the graphic artist, we would have had a ballot that was 20 pages long, because they really like a lot of space and big

font in there. And ballots cost a lot of money. And you wouldn't be able to do that. As well as anybody that has worked with additional page ballots you get the other complications, "Well, I got in the mail my first, second and fourth page but I didn't get the third page mailed to me." Well, how can you prove that? And it becomes difficult when you have multiple ballots, although many jurisdictions have that on a regular basis. If you can possibly avoid that and still keep within large enough print, clearly written, then that's a good thing.

The other thing was putting a line between races. Most of the public is used to the fact that you get write-in lines, and so, if they see a line, they will write on it. So, you have to try to avoid -- in our case, rather than putting a line, we use color, and make sure that we had a space between the last of the race, before you start going onto the next race, but avoiding extra lines, because they will not only mark for the candidate they're interested, but also write their name in. And you can't do that.

So, those were just some of our experiences. And I shall stop there.

DR. KING:

Okay, those are great experiences. I have two questions. First Ron, and then Drew.

MR. GARDNER:

Thank you. Elizabeth, I'll start where I think you started, and that is, with preparing the location, putting up your signs. The Access Board has regulations or regulatory authority over that type of setting, so you'll want to check what's called the ADAG, the

regulations under the Americans with Disabilities Act. It helps us remember that the signs need to be in a certain location from the ground, within certain number of inches, so that when they're Brailled, not if, but when they're Brailled, they can actually be found. I remember helping a university student who went to the university, and tried to get the classroom numbers Brailled, and so, his college did that out of respect for him and his request. And so, sure enough, right at the very top of the door was the classroom number, which was Brailled. It just didn't help a lot of people.

[Laughter]

MR. GARDNER:

The other thing I wanted to say is, in the same regard, even though you can't be hauling in thousands of chairs and so forth, being aware that there are some people that can't stand for long periods of time. And so, as the line gets longer, simply a place to sit, as they await their turn.

Noise levels, we addressed them earlier, but if you can't hear what the poll worker is telling you, and once you get there, you can't really hear the equipment that's talking to you. Noise levels can be adjusted a lot -- you know by several ways. Start the line further back, have the tables a little further removed. You know, I'm not saying you have to get Persian rugs, but if you're in a gymnasium, you know, a couple of runners for people to walk on and so forth, rather than a noisy gym floor.

Those are just some of the things that came to mind. And I'll tell you, I appreciate the attitude that I hear about engaging people

on all these aspects and letting them be a part of the decision, "them" meaning us, all of us. And I applaud you for that, thank you.

MS. DEITER:

Thank you.

DR. KING:

Thank you. Drew?

MR. DAVIES:

I mostly wanted to take a moment to say that I couldn't be more proud of Libby and her team, partially, because she was one of the only ones listening to us from Design for Democracy, when we were giving those presentations.

MS. DEITER:

That's not true.

MR. DAVIES:

That's not true. However, you and your team were certainly one of the ones that had the courage to go ahead and recognize that there's a lot of research behind these recommendations, that they could really improve the process for your voters and to have the courage to take -- you know, implement the hard work that you know it was going to do a lot of these changes.

And for the election officials that are watching today, I just wanted to reiterate a couple of the points of your experience that I think could be helpful for them, based on and what we've talked about here today can help ease the entry point for a lot of people looking to start what you did. And the primary ones are really that you did this with your team, no significant outlay of dollars or resources outside of the office to do that. There are a lot of election

officials, no doubt, that really do not have the dollars to say, “Well, let’s bring in a bunch of outside consultants or designers,” or what not. So, that can be a barrier to even starting this process, and you did that without outside dollars. No real -- yeah, no other outside resources of significance coming in. Certainly, the time, internally, took a bit of extra to put together, but also, then, that you did this process incrementally. What we’re learning more and more is that each one of these pieces is just another building block as you move forward. So, no election official in the country could even imagine that they would undertake all of these pieces to improve usability and accessibility, and what not, in their entire election design process, but you’re a living proof that you can put these pieces in place, incrementally, whether that’s over weeks or over months or over years, like you’ve done it, and see continued improvement as you put each building block into place towards that goal. And I think that’s -- it’s great to have you as an example that that dream can come true, but I want to use it as a reminder to all the election officials watching that there’s a great opportunity to do that. You don’t have to bite off the entirety of every accessibility issue, at once, you can really start addressing them one at a time; signage in the right places, volume control here, left justified text on a ballot there, whatever those pieces are each one makes a difference.

So, thank you Libby.

DR. KING:

Okay, we have a question from a viewer that I’d like to put before this panel, and Ron, it may be right up your alley.

But the question is, how does a screen reader assist a voter in actually marking the ballot?

MR. GARDNER:

Well, that's a good question. It depends on what technology is being used. But a screen reader is actually converting the text that is on the ballot. And we've done some forethought, we've figured out our left justified and all those kinds of things. But the screen reader reads the text that is on the ballot, and then, you're given the choice of hitting a certain button when that's the one you want to select. So, the machines vary, but the audio ballot generally describes whether you're hitting George Washington, Abraham Lincoln, or Mickey Mouse. And it will tell you that you voted for Mickey Mouse and it will confirm it back for you. So the screen reader is what is talking to the computer saying, "Okay, here's what's on the paper ballot. Now, I'm going to give it to the blind voter," or whatever.

There are, also, others that use DRE, and in that sort of machine, there are others that know more about this than I do, but there are ballots which are marked, and electronically -- Whitney help me describe the scanners in the DRE machine.

MS. QUESENBERY:

Well, so a DRE is a direct reporting electronic, and you're interacting with the computer, and your vote is being stored in the computer. A ballot marking device, you're interacting with the computer to tell it how you want to vote, and then, it's printing out a ballot, which is the same as the ballot you might mark by pen. And if you've got a paper ballot, that's, generally, going to a precinct, a

scanner which is, you know, like a fancy scanner that's reading that ballot, and usually, has a screen where if there's a problem on the ballot, the ballot's blank or there's marginal -- marks it can't understand, or under votes or over votes, it can tell you about those before you cast, which is really one of the things that happened in 2000 in Palm Beach. If people had had a precinct based scanner that would have said, "Hey, you've marked names on both side of that butterfly ballot," they would have gotten that notification and could have fixed their ballot before it got cast. So, there's a screen there that is usually just messages you can interact with, to tell you what's wrong, but otherwise, that ballot just gets cast and the paper is deposited in a box just like you walked up and dropped a paper in the box. Does that…

DR. KING:

Yeah, very good.

MR. GARDNER:

Thank you.

DR. KING:

Thank you. I have a question for all the panel, but particularly, perhaps the election officials, and it has to do with identifying prospective employees with skill sets that would be valuable in the process that we've described today. In my previous life as a department chair, I would meet with people from industry and they would tell me what they needed in employees, and it was always stuff that, even with their budgets, they couldn't generate themselves. It was things like creative problem solving abilities and things. And so, when I looked at some of the skills that we may be

asking employees in our election office to bring to the party, in the future, they're not widespread, and I thought, particularly, the plain language, the ability to write succinctly, to write clearly.

So, my question to the election officials, and to everybody here at the panel, is, what suggestions could you give other election officials about how to identify these skills in existing employees or how to recruit these skills in future employees? And I'll just throw that question out. We've identified a needed skill. How do we get it into our shops?

MS. QUESENBERY:

Well, there's one thing you didn't mention, which is training. I mean, I think you -- Libby has, basically, undergone an informal self-education process. And I know that -- I mean, you met Design for Democracy at an IACREOT...

MS. DEITER:

Um-hum.

MS. QUESENBERY:

At a convention where there's training and there's lots of other opportunities for training. So, I think this isn't unlike commercial companies that have to train their own staff on accessibility and on usability.

MS. DEITER:

Well,, and I think probably one of the largest challenges is for many, many election officials their offices are really very small, you know. They don't have a lot of choice to be able to say, "Well I really want somebody who is specialized in the area of graphic arts," or whatever it is. I mean, first you want a reliable, honest

employee who has a service attitude, and frequently, a service background, to work with the public. And if you can get that, so you have people who want to work with the public, and from there, work with training. And then, also you can bring in all sorts of talent, whether it is working with the disabilities associations in your State, whether it is working with graphic art groups that, you know, that's their profession, they've been doing it in the commercial world for a long time, or even working with other election officials, so you're learning from them, whether it's at a conference, or your State professional association, or what, you can bring in all sorts of talent and -- to be able to assist you.

There's one thing really wonderful about election officials, is, I've called people from all over the United States, "We're starting to implement this here. I understand, in your State, you've implemented this before." I've never had any one of them turn me down on assisting. And I can tell you that even though quite a few of the election officials are elected, and many of them on a partisan basis, I could tell you, I have no idea what party I'm dealing with. It is always a sense of this is the election, they take it so seriously, the basics of democracy that it is -- I've always gotten assistance from anybody I have ever asked for. So, it is a wonderful area to bring in talent from other locations. Many local -- many county offices are really quite small, so you have to be able to do that.

DR. KING:

Okay.

MR. DAVIES:

Merle?

DR. KING:

Yes, Drew.

MR. DAVIES:

The far end of that discussion is, certainly, that AIGA Design for Democracy has election design fellows placed as full-time employees, at this point in time, in Washington State, and Oregon. This requires an election office to have the resources to put on an additional employee, but a lot of election offices aren't going to have the ability to know even who would be a good design and usability person to put on. And what this election design fellow's project does, is it allows AIGA to, actually, recruit and vet those people, and make recommendations about people that could be a design fellow in an office, and really assist hand-in-hand with that process of finding the right people, putting them onboard and getting them started with your team. So that's a resource that Design for Democracy offers, if people are looking to really add to staff with someone that's a fully qualified information design usability partner.

DR. KING:

And, for the two States that you referenced, are those fellows working at the State level or in county jurisdictions?

MR. DAVIES:

They're, generally speaking, working at the State level.

DR. KING:

Okay.

MR. DAVIES:

Yeah.

DR KING:

Okay, Jeannie had something she wanted to add.

MS. LAYSON:

Yes, Whitney mentioned training, and certainly, that would be the best option, but the reality is, I think, that no one has any money for that, right now. So, one of the most important things I think the EAC can do is to try and find out where these resources are, some of the ones that Mr. Gardner mentioned, some of the ones that you mentioned, Whitney, and also, learn by example, like you were speaking about, Libby, how you worked with different groups and you were able to be very creative in how you move forward. And that's something that the EAC has to do, as well, because we're very small like a lot of you. And one of the examples is, Amy Bunk, who we had here, today, with the Plain Language Network. That is, actually, an initiative by the Federal Government, done by volunteer employees, to try and promote the use of plain language in the Federal Government. Well, I found out about Amy and her organization through the Federal Web Managers Council, which is another great resource, free resource, for people like me, in small agencies, who don't have experts and don't have extra funding to get training and all those kinds of things. So, that's one of the things the EAC wants to do, especially in this area, because we do have so many people out there, like Libby, like Mr. Herrera, who have already gone through this process, and did it with very few resources. So, we want to make sure that we're able to bring those experiences to the forefront and share that information with other

election officials, especially, right now, when budgets are so tight. So, that's part of EAC's role as a clearinghouse.

DR. KING:

Okay, one of the things that Libby has certainly referenced, a couple of times, is the incremental approach. And one of the things that we're experiencing, right now, that Larry mentioned earlier, is, we have voting systems that were all replaced sometime in the last decade and they're all aging at the same place. And so, in many jurisdictions, rather than looking at staggered replacement, we're looking at a situation where, certainly, large counties, and maybe, entire States, have to be replaced. And in the development of the ballot materials, the ancillary materials, it seems to me that one of the advantages of this iterative approach is that you're never finished, and that, actually, would seem to be a strength here, in that there is no point in the future where you have to replace everything because you're constantly evaluating, constantly improving, and constantly replacing pieces that have become outdated or ineffective. So, I felt like, in fact, your approach is a very strong approach and would be one that we could encourage jurisdictions to look at. You don't need to address everything at the same time.

But I am interested in hearing what the priority should be, so if a jurisdiction were to say that, "Yes, I'd like to get started. Where do I begin?" What is the long hanging fruit where they can get the most bang for their buck, the most impact coming out? So, let me throw that question out to the panel.

MS. DEITER:

I keep speaking first. I'd say, number one, you have to have your voting place as handicapped accessible. And you do have the guidelines from the Department of Justice, that we do have to have every single one of those checked. And, in fact, we go out in between -- I say, in between, elections -- we have elections every year. But, in the spacing of them, there's a period where we go out and we recheck, even, every single voting place. Even though it was -- met the guidelines two years ago, we've got to make sure it still meets them because businesses have added on another doorway, another -- they change the entrance. They do -- they'll do things. We can have a building, even if it's a school, yes it's handicapped accessible from the school's point of view, and students coming in the front door, but the voting place isn't at the front door. The voting place is at the back door, the voting place, and it's just a very small area. So now, that -- it was their supply room that isn't usually a place where students are coming in. And so, we have to look at that. That's absolutely number one. You absolutely have to have your voting place handicapped accessible, and your equipment handicapped accessible.

And then, it's a case of getting your signage. And, at least Larry and I both started with our ballots and went on to signs and instructions from there.

DR. KING:

I'd like to ask Larry, why did you start with the ballot?

MR. HERRERA:

We started with the ballot, primarily, because of the problems with the other ballot; the alignment, the optical scan itself was, at least in

that system, it was somewhat worrisome. When you had to put in 376 header cards twice, once for the polls, and once for the vote-by-mail, that was a tedious process that relied on verbal instruction. And, you know, there wasn't a lot of documentation because, at least, in our city, we contracted out for the voting system with a private vendor. We started with the ballot.

And just to, kind of, make clear, our system is not an optical scan, it's a digital scan. If there's any long hanging fruit, I would say that if you have an optical scan ballot, which, I think is what we see on the screen there, if there's a way to get local authority to give you the flexibility to put some graphic design on that, and then, work with your printer to find some way either to put it on the stub -- in other words, I don't see the stub on this ballot here, but it's....

MS. DEITER:

We're not required to have a stub in Kansas.

MR. HERRERA:

Okay.

MS. DEITER:

That's why we have the unique mark stamp.

MR. HERRERA:

Okay.

MS. DEITER:

And this is a two-year old ballot. I do want to mention, we do have graphic art on our current one.

MR. HERRERA:

Good.

MS. DEITER:

And I think that's an excellent point. I'm glad you mentioned it because we had wanted graphic art from the beginning and couldn't find it. And I kept saying, "But I know the EAC has it. I know they do, because I've been there, I was on the Advisory Board." I went to the website and I couldn't find it. And so, then about, what, three years ago, perhaps, the EAC redid their website and I said, "Well, I know it's there, I just haven't been able to find it. And now, that they've redone their website, I'm sure I'll be able to find it." I still couldn't find it. And, we finally just recently got some graphics from another county, again, working with other election officials. And it wasn't until I was talking with Jeannie, and I explained, you know, "I just -- I can't seem to find it. There must be something wrong with me that I can't find it on the website." And she said?

MS. LAYSON:

Well, that's a perfect example of why usability testing is so important, isn't it?

[Laughter]

MS. LAYSON:

It has been on our website. And as I mentioned at the beginning of the roundtable, we do have a large collection, an image library of camera-ready images; polling place signs, mock-up ballots for several different kinds of voting systems, rolling DREs, optical scans. But it was not easy to find that information and figure out how to request it, because we don't post those images on the website. We don't want people downloading them and making fake ballots, and so forth. So, that information is available on the

website. I'm going to make that link very prominent on the homepage, so election officials can find it and make sure that they know that information is available. So, thank you for being a good usability tester for me.

[Laughter]

MS. DEITER:

Well, I'm very relieved, because I thought something was wrong with me, because I knew the EAC had it. I just couldn't find it.

MR. HERRERA:

And I just wanted to add, is, that when I saw that graphic design, back in 2006, it was on an optical scan ballot. Well, how did they get it there? So, I think the low hanging fruit is exactly what Libby has gone through, is, you work with your vendor, you work with your printer, to somehow spray those graphics on that ballot, okay, and then, next to them, someplace are the ovals for people to mark their ballot. So, that's kind of like the low hanging fruit.

I would say the next low hanging fruit, and I'm hoping that what was said earlier about, perhaps, voting system funding being made available in these out years, is that you begin to send a message now to the vendor community. If you can deposit a check at your bank, and it scans the amount of the check written in handwriting, why can't you have -- move from optical scan to another technology that will give you that improved accuracy? I'll just mention, again, the digital scanning technology has really evolved to the point where, again, we no longer have to enter how much a check was written for, in handwriting, when you deposit it to any of the big banks. And, in my mind, that might be low hanging

fruit that's really way out there, but as an elections administrator community, we need to be sending that message, now, saying, you know, maybe it's time to move on from optical scan to something else.

DR. KING:

Whitney?

MS. QUESENBERY:

I'm one of the people that said, "I don't know" to the sign with the stop sign. But, it actually illustrates two points about making priorities. This exists because there's a problem with the voting system, right? And you're not going to throw the voting system out and just fix it, and it's not going to happen overnight. So, one place to start is with any problems, the problems you're already seeing, whether you can fix them in the ballot, or fix them in voter education, or fix them in signage. And I think that's what really gave me pause, was, why do we need a big stop sign. But, if you need it, you need it, and figuring out a way to do it. Also, I like this because it vindicates the decision by the VVSG to not allow scrolling…

[Laughter]

MS. QUESENBERY:

…because if your experience is that you're really having problems with that, it really does vindicate that solution. But I think that's part of what gave me pause about that was going, "Well, why do you need it?" But then, when you think, again, you think, well, if you did need it, it's good you did it. So, I think the place I would start is with the thing that's causing friction, or causing pain.

And also, the second thing which we always do, in commerce, which is that balance between low -- the things we know we need to do, and what we have the resources to do. So, do you do a lot of little things that you can do, for "free", by using internal resources, and hold off on the big thing? Or, do you bite the bullet and do the big thing that's going to take a lot of internal resources and a big effort, but it will be a big thing when it gets done? And I think that's, really, as much up to, you know, where you are, and where your office is, as anything else.

DR. KING:

Okay, I want to comment, both Whitney and Libby have said about the scrolling issue, that is a method of illustrating the importance of testing. And I think one of the weaknesses in the elections community, on testing, is that we often compartmentalize our testing, so that when we test for usability we test for usability, and when we test for security we test for security, and when we test for functionality, et cetera. And what we often fail to do is to roll back up that testing procedure, and look at the interplay between the goals of the system. And, in an effort -- and it's the same technology that you use in your jurisdiction. In an effort to improve the usability of the instruction screens, a decision was made to increase the font size. There was no rational motive to maintain the small font size, because all voters benefit from greater readability. The font size was increased and, as a result, the block in which those instructions are displayed was expanded accordingly. And one of the unintended consequences is that when that block of instructions expands, it compresses the other blocks on the DRE

screen, including the scroll block, so that the scroll arrow up and the scroll arrow down are now superimposed on each other, which means it doesn't scroll. Each time you press that area of the screen, it simply chatters.

So, it's an excellent illustration. As we improve our usability of systems, we must go back and check its impact on functionality, and other aspects of the system, and that testing must be integrated. When I saw that scroll error I thought, well, that's something familiar.

MS. DEITER:

One more comment, though, on the scroll, because we have not had it where it's compressed the scroll itself, but I know -- and I've used -- taken out to students and schools and such, when showing different types of ballots, that they're going to have no matter, you know, where they go across the United States, and I use one which was a California ballot dealing with a recall of the governor. And at the same -- it has the recall question across the top, and then, it has everybody running for governor. And if my memory serves me, I think it was, like, 135 people wasn't it? So, how does a machine without a scroll…

MS. QUESENBERY:

Paging.

MS. DEITER:

Okay. And I would think you could get into more discussion about difficulties with paging, too. But anyway, thank you, I was wondering how a particularly large ballot…

MS. QUESENBERY:

The accessibility reason for not using scrolling is that it's -- if you have dexterity -- a disability with dexterity, it's harder -- first of all, touch screens don't always let you press and scroll. But, even if it was a touch screen where you could actually move the scroll bar, it requires a lot more physical dexterity to do it than to just have a bottom. So, it could be placed at the top and bottom of the screen, and say, "Scroll up, scroll down." Or, it could appear across the middle of the bottom of the screen to say, "See more," you know. It doesn't have to be -- it doesn't have to say "Next page," but having that control being a single tap control helps.

MS. DEITER:

Okay, thank you.

DR. KING:

We've had a comment come in from a viewer on the webcast, and I want to ask Jeannie if she would share that comment with the roundtable.

MS. LAYSON:

Sure, we've had a gentleman named, and I'm sure I'm not going to get his last name correct, but his name is Cliff Tylick (ph)?

MS. QUESENBERY:

Tylick, I know him.

MS. LAYSON:

Yes, yes, Cliff has sent in a couple of -- five links, actually, that he is recommending to election officials, in terms of finding resources to help with election design, usability. And he says, "Reach out to the community. Find your local chapters of the Usability Professionals' Association, the Society for Technical

Communication or Interaction Design Association. You will find people who will volunteer," we love that word volunteer, "as a public service, to help your employees improve ballot design and language. They will even help do the work," he says. So, that's according to Cliff. But, he's given some great website addresses. One of them, obviously, is the plainlanguage.gov, which we heard about earlier from Amy, also howto.gov, which is the Web Managers Council, and three others, stc.org, stc.

MS. QUESENBERY:

Society for Technical Communications

MS. LAYSON:

Yes, usabilityprofessionals.org and ixda.org, which is the Interaction Design Association.

MS. QUESENBERY:

Interaction Designers, right.

MS. LAYSON:

So, we appreciate Cliff sharing those resources with us, and I will also tweet those, as well.

MS. QUESENBERY:

I should just say that Usability and Civic Life is a project that started in UPA, and is now -- draws on members from AIGA, from IXDA, from the information architects and from technical communications people. So, Usability and Civic Life is the project that's been helping mobilize those interested volunteers.

MR. DAVIES:

Yeah, and I'll just add...

MS. QUESENBERY:

AIGA.

MR. DAVIES:

…that AIGA, particularly Design for Democracy of AIGA dfd.aiga.org is also in the business, as it were, of helping people find local resources that are qualified, and may very well be volunteering time as part of their civic participation. So, I think that's a great resource to find other information designers.

MS. QUESENBERY:

Actually, they may both be a little out of date by now, but both AIGA and UPA's websites have directories of members, professional members who are interested in working in this area or volunteering in this area listed. And you can find them by State, so you can find people in your local area.

MS. LAYSON:

So, thank you very much Cliff.

DR. KING:

I have one more question, dealing, now, from the election officials' perspective. We've looked at assessing the indicators that we may need to engage in ballot voting material design. We've looked at strategies for getting started. We've looked at resources. We've looked at examples. We've looked at criteria that constitute equality and improvement.

The last piece, to me, is, how do we communicate this, now, to the voters? What is our voter outreach strategy to the communities that we serve, to make sure that the new material is available, it is seen, preferably before Election Day? And, I'd like to get some suggestions from this group about how information can

be disseminated to the voters, in time for them to be comfortable and effective in the use of those materials.

Larry, I'm going to start with you.

MR. HERRERA:

Okay, we had, maybe, a several pronged approach to advising voters about the new system coming onboard.

First, we started with the city council, and we made sure that they understood what we were going to be doing, and how it was going to work. We, actually, did what we call a strategic plan in some ways. It was just a document, basically, that said, "Here's how it's going to work." And once we did that, we then began to work with the media and we got some local publicity. We've got a couple of local papers in the area there. And then, we began to do -- we would go to district -- council district offices, upon request, to meet with people in their district as to how this would work and what the benefits would be. We also did short videos on the new system and how it would work, and what it would look like when the votes were being tabulated. And, if people had questions, here's where they could go. Obviously, our website was a tremendous value.

We also took advantage of some technology, it's called enotify, where people could sign up and receive automatic updates, kind of like the way Twitter is now, back then. People could learn how this was going to work if they had any questions. And, we also took some steps to promote early voting. In other words, we felt if we could get more people to vote by mail, the turnout would go up, and that would be a good thing. As a result, in the last election, almost

50 percent of the people that voted voted by mail, and they voted our big ballot.

And I hadn't done this earlier but -- I think I have one here. Here it is. Actually, what would happen is, we would notify people as to when the ballots were coming, and what the envelopes would look like when they would come. Again, our sample ballot looked like this, so this was prominently displayed so that people could know things were coming. And so, we just got out in the community and began advertising, so to speak. And we tried to make sure that -- assure everybody that every vote would count, and remember the polls close at eight, postmarks are not acceptable, those kind of things.

So, we started with the council, we moved forward with the media, we did our own video -- internal videos, and put those over our cable system, as well as on the Internet, and that seemed to have gotten the word out, quite well.

DR. KING:

Okay, thank you. Libby, any insights?

MS. DEITER:

I don't think I can improve on Larry's version. You know, government does have an advantage of the news release. And if industry tried that they'd say, "No, take out an advertisement." But, we can send out a news release, and actually, in our area, they do a very good job of disseminating information for us, as well as Election Board workers at the voting place, as well as the website, and word of mouth works very well too. When you get that committee together of the important players to -- and I have to

admit that I didn't have a formal committee for mine, but I would certainly recommend it because -- and I don't know why I didn't, because we do that on everything else. Get them involved in it and they also help get the word out about what's going on.

But, I can tell you the public really appreciates it when they can understand things better, when they can read it better. And it's just a very positive experience all the way around.

DR. KING:

Okay, any other comments on that topic? All right, well, we are making excellent progress. For those of you who've viewed roundtables before, we do an excellent job of staying on schedule, and I appreciate everybody's help in that regard, today.

But we do come to the part of the roundtable that's very important for me, because it gives each member of the roundtable an opportunity to make a summarizing statement. And the purpose of that statement is for you to share with the participants of the roundtable, and the folks that may be joining us on the webcast, is to summarize what you think are the important takeaways, the key things that you want to make sure that we understand about the issues that we've talked about today. And it's a way to kind of reach back through what's been a very productive day, and to maybe, pick an item that occurred to you over lunch, while you were reflecting on the morning's discussion.

And I always like to do this in the reverse order of the introductions, so that means, Wendy, we'll start with you, and we'll work our way back around the table, and Ron, we'll sort of end with you. But, we'll really end with Jeannie, up here, at the front. But, if

you would, take a couple of minutes and just reflect back and summarize what you think are the critical takeaways, today.

Wendy?

MS. UNDERHILL:

I've learned a huge amount today. We started with Whitney and Amy's presentations on writing clearly and usability. And both of those are things that I think, probably, interact with our lives on an everyday basis, and they also are supported by what my mother has always told me, which is, "Say what you mean and mean what you say." So, I appreciate the extra effort that went in on that and the amount of resources that are available to us so that we can do that is rather astounding.

I also had the thought, perhaps, that in the context of ballot design there were too many people trying to do it, in that, we have State legislatures that have a role, and then, we have the Secretary of States' Offices, and then, we have local election officials. And I was thinking of that as "many cooks spoil the broth." But I've decided that we could change that to a more positive perspective which is, "many hands make light work." We've got volunteers, as we heard from Drew, who might be able to help out, and the EAC is helping out. And I know some State-level officials are trying to make available resources. So, instead of feeling that the local election official has to be burdened with this key part of building democracy, in fact, there are many hands that could come into that.

Which brings me to my third thought, which comes from Larry, he gave us a thing, you called it a public value model, and at first, he had a vision and then, there were three subsets. I'm just

reminding you of this, one was value, and one was, who is your support, and your capacity. And the support piece of that one of those is your State legislatures. We, sometimes, think of things that are in code as a deterrent to good ballot design, but there are people there, in your State Capitols, who could possibly fix those things if they knew that it needed to be fixed, and if the right approach was there.

So, I thought I might I just offer a couple of ways that those who are about ballot design might be able to get support at that level. And one is to recognize that one size does not fit all, in this context. Every State is going to have a different history and tradition and, therefore, a different approach from the design side of things. I like that the design principles are absolutely universal. Well, I don't know if they're absolutely universal, but in our nation, they're close enough. So, we've got that as overarching, but each State has a different set of issues to address, and that means that when you go to your State, you need to have your message ready to go. And that message might be, first, get rid of the archaic requirements that are in State law. But then, there has to be a positive side, too, and I might propose the State could require usability training -- excuse me -- usability testing, before ballots went live. But that would have to be determined what was the number one thing, and maybe number two, and three. Maybe, you need a menu, and you're glad if you get one of those things, and if you get two or three that's even better. Know what that message is first, know what that menu is.

Then, in terms of who goes forward to your legislature, I would propose it be local election officials. We've heard from two today, and who better to make the case than the folks who are responsible for that ballot. And I think Libby, you've mentioned more than once that your professional organization in your State, and maybe, nationally have been helpful, so I would propose that that would be a great place to take this message forward, if you could.

And the last thing I'd offer about going to the legislature is to have cost estimates for anything that you might be asking for, but remember that cost could work to your advantage here. There is no extra money to be found that we can see. It's not a place to go for a lot of extra money, right now, but it could be that you're making the case that changes in law could save money at the local level, possibly save it at the State level, too. So, if you can think about that fiscal piece, you might get something pretty useful coming out.

And I'll leave it at that.

DR. KING:

Thank you, an excellent summary.

MS. UNDERHILL:

Thank you.

DR. KING:

Larry?

MR. HERRERA:

Well, I think the first takeaway that I have is that in some ways I think there are something like 4,000 counties in the United States,

5,000 counties in the United States, and I wish every one of those elections administrators and their Secretary of State would have a dialogue like this. But, that's probably not going to happen in the near future.

But, that being said, I just think that the future is bright, you know, despite everything that's happening, now, in our country, and in our States. I think the future is bright for elections, because I'm hopeful that the elections coming next year, years after that, that there will be a re-engagement of interest in the voting process, in excising the right to vote. And usability could open that door.

The great takeaway here is that the EAC is a great resource to find a lot of this information, and hopefully, at minimal cost, that a lot of counties can afford. I think what that does for me coming here today, and if you're watching perhaps, is that you should revisit the idea of usability for all of your residents, for all of your voters and, in particular, here in Long Beach, the ADA community, the disabled community. So, I think the future is bright, EAC is a great resource to find a lot of good ideas, and I think I will revisit what we're doing in our city to improve the voting process.

I think, lastly, I would hope that the State Associations of Election Officials would invite professionals such as Drew and Whitney, and those of their ilk, to attend their statewide conferences and make usability a topic of discussion, and perhaps, not just as a keynote speaker, but as some breakout sessions where things can actually be -- barriers can be identified, resources necessary to bridge those barriers can be identified, and perhaps, some collective thought could be given to creating usability

guideline standards and flexibility for local officials through State legislation.

And, I just think that those are the takeaways that I had today. And I just want to say, with everybody here, it's been great to be here, and I look forward to progress over the next few years.

DR. KING:

Thank you very much Larry. Whitney?

MS. QUESENBERY:

Well, I was thinking back to the year 2000 when I got elected to the Board of Usability Professionals' Association and they said, "You're going to do outreach. Go do something about elections." And I had no idea what to do. And roll forward a couple of years, to when Sharon Laskowski's staff did the first -- their first work under HAVA, which was, basically, a literature review of what we knew about human factors in voting system. And it was an excellent report, but the bibliography was awfully small, because we didn't know a lot. And I think the most positive thing that I'm seeing across the years and today, is the way we're bringing together people with different skills basis, different knowledge basis, to work on this problem together. I think I'm -- I'm not hearing as much adversarial noise. I'm hearing a lot of talk about cooperation, and hearing about really interesting projects, not just the two we focused on today, but as I talk to other election officials. And that too gives me hope, as well.

I guess, if I had to say one thing to someone starting out on a project, it's that I, too, get very nervous when I have to show my work to the people I respect, and to election officials because, well, it's scary. It's scary to do that. It's scary to take those first steps.

But I've also never seen a plain language or, for that matter, a design project that gets it right on the first try. You kind of peel the onion, you untangle the sentences, and you get rid of the big words, and then you keep working on the meaning, and you keep getting closer to the audience. And so, you might do that in the course of a project where you're iterating the design, but you might do that over the course of several years, as you continuously work on, you know, the constant process of making anything we do as best as it can be. It lets you build on success.

So, I will urge anybody who is thinking, I don't have the resources, I don't have the skills, to just use the resources that are there, and try to get started and see where that takes you.

DR. KING:

Okay, thank you, Wendy. Libby?

MS. DEITER:

The takeaway I want people to have is that they can do it themselves. They can get involved in improving and clarifying the information they have out, whether it's on their ballots, or whether it's with their instructions. And there are all sorts of resources that they can tap into.

I also want to -- well, there's no downside to it. There's just no downside. Are you ever going to get somebody who calls up and say, "You know, I really want you to make this more confusing?"

[Laughter]

MS. DEITER:

No, you aren't going to. It is always an improvement, and so, we can always keep working on it.

That leads me to my next thought, which Larry had talked about a little bit earlier, and Merle had just said, the job is never done. And I wonder ten years from now, are we going to look back at some of the icons and things we're working with right now and say, "You know, I can't believe we liked that"? And I thought it was kind of amusing to see one of the ballots that had the old fashioned, you know, arm with the pointed hand on it. I like it from a historical point of view, but they say it's not a particularly good icon now. And yet, there are some computer screens that use a different version of a hand, you know. And maybe -- who knows, maybe that will come back, as that's what people are used to seeing and wanting again. So, it isn't going to end. It's something we always have to be aware of, and how to communicate with the very people we're working with. So -- but we can do it and we need to do it.

DR. KING:

Thank you, Libby. I'm going to go to Drew, and then we'll work our way down.

MR. DAVIES:

All right, let's see, over the course of the day I wrote down about three key points that seemed really important to me, and then I have one overarching thought process.

One is, I want to keep in mind and I -- we talked about plain language speaking to the audience, so I'm going to assume most of the people that are getting really good takeaways from here are election officials or people related to that. So, speaking directly to

that audience, I want to keep in mind, first and foremost, that we're talking about the evolution of election design, here, rather than just the concept of ballot design. And a lot of what people have been saying, here, today, have helped me to continue to reiterate that in mind. We're talking about improving accessibility, we're talking about a way of finding signage at the front doors, we're talking about ballots, we're talking about the process of voting, sending out sample ballots, voter information, et cetera. So, I do want us all to keep in mind that we're about evolving the entire election process, rather than just talking about ballots.

The second point is -- really, was said best by Larry, and I can't remember if you said you borrowed this from someone else or not, but you talked about a philosophy of continued improvement. And I think one of the best takeaways from today that we've talked about, several times, is that this is going to be an incremental, constantly evolving process. So, we are in a state of continued improvement and we need to embrace that philosophy of continued improvement, and look at this as an evolution of the usability of our materials, the accessibility of our voting.

Third, particularly to election officials, you are not alone. There's help out there. There are understood -- Larry also said this, you are really good. You know elections. You know the law. You know all of those technical pieces. No one could possibly expect you to know design or usability or plain language. These are not -- not all of us can know all of those things. So, I would encourage people to look for those outside resources, get design support, don't assume that you have to be an expert in it. And I

don't mean, necessarily, even design support, as in, you need to hire a designer, but design support, as in, look for learning opportunities at IACREOT, call other election officials and ask them for the experiences they've had, watch webcasts of roundtables like this one. Look to the EAC for all those pieces -- those resources that they provide. You don't have to enter this fray alone, or as if you're the first one sort of making the forage.

The big picture message that I think all of us know, but I want to reiterate, at least for myself, is that, evolving election design is really important. It's -- I have a personal dream that every eligible voter confidently and accurately votes in every election. I imagine in the back of all of our heads, it's sort of a personal dream, that everyone that goes into being an election commissioner or local election official, sort of, hopes, even if they never exactly articulate it. So, when I do all of this election design work, I'm always working towards that goal, and it sort of, may be unattainable goal, but that's the brass ring that I'm shooting for. And so, a lot of these parts can seem really difficult, or maybe unnecessary, or it can seem awfully easy to stick with the status quo, or have a sense that your whatever voting system you've implemented is working just fine, so there's probably no need to improve it. And I would suggest that there's always room for that evolution, because of how important this is. And if we know every incremental change we can make, one piece of accessibility, one left aligned piece of type, one color use, is that one more voter that just voted accurately and confidently, then we just took one more step towards that goal.

So, I don't want to miss an opportunity to remind myself, and remind everyone here, that evolving election design is really, really important, and there are not a lot of us working towards it, so thanks for everyone keeping that goal in mind, and working really hard towards that ultimate goal.

DR. KING:

Okay, thank you Drew. Josh?

MR. FRANKLIN:

I'm not an election official, but I do get to work in the election industry, and I have an opportunity to see a lot of the different systems and some of the software components of these election systems. And it's obvious to me, today, that there's a lot of great input shared here.

But I don't know if we're quite the correct audience, I guess, I would say. I've been to a couple conferences over the past couple of years, and I would be really interested in knowing or just getting to have the manufacturers interact with some of this. There's just this huge surge of research that seems to be going on, right now, in terms of usability and accessibility, and I'd like to see how the manufacturers are addressing this, and seeing this research, and seeing what they are thinking about implementing and not implementing. Like, is it possible for, in the next generation of election management systems and their ballot layout managers or whichever individual software component that a LEO may be using, is it possible to do a lot of this -- a lot of these good ballot design principles by default? I think that would be quite interesting.

Obviously, there is not a single template that you can plug and play, but you can start from a really great beginning point.

And then, another point would be, as sort of an outsider looking in at some of this stuff, is there a single package that a LEO could use to begin all of this? Like, is there something that maybe the EAC could put together to disseminate to individuals? I know that we have a lot of different documents, but it would be interesting if some of the newer and most pertinent information could be collated in a certain way, and kind of sent out to all the different local election officials. Is there a dissemination strategy for all of the information that was shared here, today, I guess, is sort of my question.

DR. KING:

And a LEO is?

MR. FRANKLIN:

Local election official, sorry.

DR. KING:

Thank you. Ron?

MR. GARDNER:

Thank you. Since this is probably my last shot to talk to this group, I just want to tell you about my microwave. My microwave -- like most Americans, my microwave will heat up food, and I can have little snacks, and that's really a cool thing, until we got a new one and it was a touch screen. And now, you know, when you push one button, the whole screen changes. So, it's not like you can just mark one certain place and I can go up and push five, each time and get five seconds worth of heat, or three and get three minutes

worth, for the popcorn. It just doesn't really work that way. That's a real bummer. However, what is really great, there is justice, because we bought a new washing machine, and it's all touch screen, and I don't have to do the laundry.

[Laughter]

MR. GARDNER:

Now, why am I'm talking about that? Well, I'm bringing that up for this reason. The technology to include us all in the voting process already exists, and it's becoming cheaper and cheaper -- not cheaper and cheaper -- less and less expensive all the time. This is reality. We are here. The time is now. The low hanging fruit is the technology that exists everywhere. I know we're still using paper ballots, but the time is coming when we're going to be voting with our Androids or iPhones. I don't know when, but I know the time has come that we have developed a car that a blind man drives with non-visual access. The car doesn't drive itself. The driver still has to push on the accelerator, push on the brake when appropriate, steer the wheel turning left and right, and he does it completely blind, and drove it around the Daytona International Speedway. And just to make sure the public really believed it, a van went in front of it and threw out boxes, randomly, that the blind driver had to drive around, and did so, safely, around the course of the Daytona Speedway. Why are we talking about that and my microwave? Now is the time. It really does exist. I think this technology is the low hanging fruit.

As Merle said, we can't shoehorn it in later. We can't shoehorn in security, and we can't shoehorn in accessibility and

usability. While we're on accessibility and usability, I just think it helps us all. You know, we're all part of the American public. And, as part -- as a human being in that public, we either have a disability, or we're within one or two degrees of relationship of a person that has a disability, and we all want to vote. We really handled a lot of the civil rights issues in our history, and this is one that I believe we've, now, come to that, we're really getting it done, so that all of us get to take part in the voting process. We are part of the public and now, we're part of the voting public. And I just commend the EAC, and those at NIST, and all of the grants and the academics who are really making this possible, because not too many years ago I was in my 50s, and had never cast a secret ballot. I can do that now.

I also want to say that if you think about our poll workers, nine times out of ten, they're senior citizens. I mean, that's been my experience at least. Senior citizens usually have, you know, this little irk or ache or disability or can't hear as well or can't see as well. We're already using them. Recognize that people with disabilities do a good job, and include them. Include them on your staff. Include them in your intern programs. Include them in your university courses. Include people with disabilities, because we bring experience with us. We bring knowledge, we bring experience and we bring enthusiasm. I think that's one of my biggest takeaways.

I would like to probably end by saying, I remember several years ago, the only person with a disability that you ever saw out on the street was probably a beggar on the street corner, homeless

and asking for money in his hat. And all of a sudden, we got curb cuts, and people stood around saying, “Where did all these people with disabilities come from?” Well, it’s because they couldn’t get there until we had the curb cuts. The technology exists, we can get there, and we’re very, very close.

And, it’s one of the reasons that I want to end with this point. I know there is controversy in our Congress, right now, specifically, in one committee, about whether funding ought to continue for the Election Assistance Commission. Regardless of which party you’re in, I have to say that my vote goes toward not only keeping it, but increasing its funding. The Election Assistance Commission is doing a good job for all Americans, for all election officials. The academic research is being done, the technology is being developed, the manufacturers are using it, the buyers are using it, and now, people with disabilities, and all Americans are using it. It couldn’t have happened this way without HAVA and the Election Assistance Commission. I applaud them and their staff, and I urge us to contact Congress and say, you know, “This is a very important piece of our American life that we simply need to keep, that we simply do not need to cut, and we need to keep.”

With that, I appreciate the honor of being with you all, and appreciate participating.

DR. KING:

Thank you, Ron. Jeannie?

MS. LAYSON:

Thanks to everybody for participating. You turned out to exceed my expectations, which were already very high, so thank you very

much. And again, I have to thank Commissioners Gineen Bresso and Donetta Davidson, and my boss Executive Director Tom Wilkey, for their support in letting us put together these kinds of discussions and roundtables, especially Mr. Wilkey, who is a former election official, understands how important it is to make the most of our platform, here, at the federal level, to pull together resources that will truly help locals. And that's the point of these roundtables, especially as we prepare for 2012, and for what for everybody is going to be a tough budget cycle. So, we all need to work together as an elections community and pull our resources and share expertise, like we've done here today.

I'd also like to thank Brian Whitener, who works in my office. I couldn't do any of this without Brian. He's a huge help to us. He's a huge help to the EAC, and to any of our stakeholders, and also, to Emily Jones, who I mentioned this morning, but she really makes all of this happen, and puts all of this together. She's responsible for all of the logistics.

The next roundtable we're going to have is on contingency planning. And that will be next month in conjunction with National Preparedness Month. And we're going to have some election officials come in and talk about everything from contingency plans for hurricane season, tornadoes, all kinds of things. So, we hope that that will be useful to the election community, as well.

And, again, I want to urge election officials -- and again, thank you Libby, for making sure that I knew that it's hard to find instructions for how to request the images that we talked about today. That will save election officials a lot of time and money. You

can call the EAC toll free at 866-747-1471 or go to eac.gov. As soon as I get back upstairs I'm going to make sure this information is available on the homepage, front and center, so that everyone can find it. Just shoot us an e-mail and we'll be glad to send that CD to you, the image library to you. We also have the Election Exchange tool. I want to encourage election officials to sign up for that. You can share your expertise in a wide variety of areas. And I also want to encourage new election officials to check that out. There are peers there who are willing to offer advice and expertise on these different areas.

So, again, please visit our website eac.gov. And thank you for joining us today.

DR. KING:

Okay, and I'll have the final word then, as my privilege as moderator.

I thank all of you. I think I want to echo Larry's sentiment of optimism, and also Libby's. Things are getting better. We're in a much, much better position than we were four years ago, and four years before that, and four years before that. And that's because of the work of people like you all that are at the table.

What I heard today was really three things, it seemed repeated in different versions. And the first was people, that people are not only the focus of this process, they are the start of this process. And those people are voters, they're our staffs and our coworkers, they're our partners, they're consultants, they're vendors, and that people are both process and goal in this function that we've looked at today.

The second is that all of us share the common goal of improved elections. And improved elections have many different dimensions. One of those is certainly improved usability and the pathway to usability is through accessibility.

And finally, is the need for a plan. And even if it's a simple plan, even if it's that one-page plan that Larry talked about, we need to get started. And we get started with things that are simple, that are straightforward and we build on those successes, incrementally.

So, again, I thank everybody here at the EAC for hosting this roundtable today. I thank the participants for your preparation and your contributions. And I thank the technical staff who made the webcast and the transcription possible.

And with that, we'll adjourn the roundtable. Have a pleasant trip home, thank you.

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[The EAC "Design Counts in Elections" Roundtable adjourned at 4:49 p.m.]

bw/add