Comments for NIST Panel Presentation, "Trends in Voting Systems" – February 26, 2013

Hello, my name is Dana DeBeauvoir. I live in Austin, Texas, and I am the County Clerk in Travis County.

I hope you don't mind that I make a short statement. Our time is so brief and the topic so broad, that before we begin a discussion that could take us anywhere, I want to make sure I get a few points out there.

As you may have heard me say over the last few years, the structure of how voting systems are designed, certified, and sold is a failed and backward system. I object to having in 2013 pretty much the same choices I had in the 90's. I object to the certification process being used rightly AND wrongly as an excuse as to why we cannot evolve our process and secure more innovative products. And, I object to the high costs of purchasing, storing, and maintaining bulky specialized, proprietary hardware.

Unfortunately, we are trapped in a system that discourages competition and starves out innovation, and we must break free. We need to take a sledgehammer to this current model where we are hamstrung by vendors who would rather maintain the status quo than slog through an over-complicated, over-expensive, and outdated certification process.

The new trend of adopting Vote Centers is going to drive home the point that optical-scan alone will not give us enough the flexibility and security we need to meet the demands of the future. Previous VVPAT systems failed to join together the respective strengths of paper and electronic methods. We need a voting system that uses the best of both paper and electronic – paper to prove up the electronic counts and electronic tallies to provide fast, accurate results.

This marriage needs to join electronic voting's capacity to handle multiple ballot formats for Early Voting and Vote Centers and clarity of voter intent with a paper ballot that is voter-verified and can be easily used to audit race results. Without both, we will find ourselves stuck with systems that are too limited to deal with the realities of joint elections, dense urban areas, and the demands of the modern voter.

We need to change the very way we are doing business so that we are not stuck picking from what a handful of companies are willing to let us have. Why aren't companies like Microsoft, Oracle, and Adobe at the table? Or companies like Apple, HP, Sony, or Samsung? Designing a voting system may not be as *fun* as designing Halo 4 or Madden NFL to run on a PlayStation, but what can be more *important* than working on something that secures the foundation of our democracy. I can't imagine these companies couldn't be persuaded to have some skin in this game. We need the best minds of this nation to help us figure out how we obtain usability, security, efficiency, and low costs. We need their help to incorporate modularity, open source standardized data formats, quality software that can be regularly upgraded, and the use of over-the-counter hardware. We need to ask them what we need to change to give this business more competitive interest in the marketplace. And, we need everyone looking over everyone else's shoulder to make sure we get this right.

There is an old saying that goes - "The best way to get something done is to take the first step." So, a little more than a year ago, back in my own County, I brought together a group of about 40 community members that included activists, business, and technology leaders. I asked them to tell me what they wanted for the future. I showed them the latest voting systems on the market. They were not impressed. I had in experts to explain the world of elections and certification and security and vendor woes and all of the other reasons why their choices were so limited and antiquated. Then, they were really not impressed. What that group told me was they did not want to have to compromise, and that they believed I could make it so they didn't have to. So, that is the goal I have been seeking.

I teamed up with Dan Wallach, an inspired and highly-respected professor at Rice University, and a critic of current election systems – including the one used in Travis County. Instead of disagreeing, we decided to

work together to imagine a system that answered his technical concerns and my practical needs. Last Easter, with Dan's help, we coordinated a meeting between my staff and some of the best technical and usability experts in the country. I think at least two of them are here today – Josh Benaloh and Phil Stark. After a mostly pleasant and sometimes tense weekend, we emerged with a framework that could be used to prepare an RFP. (The system, we call STAR stands for SECURE, TRANSPARENT, AUDIBLE, AND RELIABLE.) It is one that imagines the best electronic system and the best paper system and then incorporates them together so that the paper ensures the integrity of the technology, and the technology protects the accuracy of the paper.

Why an RFP? Because, I think the best way to get this out of the realm of the theoretical is to put the details down in writing. If the devil *is* in the details, then I want that devil exposed and exorcised by as many critical eyes as I can find. I want to give people specifics to react to so that they will have to provide specific constructive criticism in return.

I have as handouts diagrams of how the voter would experience the latest draft of our system, a sample of what a new ballot might look like, a partial list of issues this new system can resolve, and a suggestion of how software design and certification could be improve. I am hopeful that you will look this over and let me know if you have any comments on what we can do to make this better. My email address is on each of the handouts. These will also be posted on our web site.

And, please know that this system is not just looking at software and hardware, but how a better process can resolve problems like incorrectly determining the intent of the voter, eliminating the issuance of wrong ballot styles, and reducing the chance of tampering with ballots as they are transported from the polling place to the counting station. We want this system to have the ability to produce election results that can be downloaded in formats useful to our customers and that meet the hopefully soon-to-be-developed national standards for providing election data so that returns can be rapidly and accurately collected statewide and nationally. It also provides ways to do new and better audits like community based on-site parallel monitoring and risk-limiting paper ballot audits. It is also about having a system that maximizes transparency and allows elections administrators to prove to anyone – be they a computer scientist; a losing candidate; or a no-nonsense, non-techy grandmother – that every ballot is accurately counted.

Finally, I want to encourage us to draw attention to how a better designed voting system relates directly to what President Obama discussed in his inaugural address and in the State of the Union speech. Better designed voting systems will make voting easier for voters and reduce lines in large elections. For example, having voting systems that cost-effectively maximize efficiency and flexibility will allow administrators the ability to vote any eligible voter in a county at any polling location. This means counties can more easily offer early voting, mega-voting stations, and election day vote centers. Please, let's not miss the chance to get our message out and catch the momentum during this moment when the national spotlight is shining again on election reform. This may be just what we need to enact real change in this process.

I need:
- Modularity,
- A narrowed, streamlined, and more open certification process managed by someone – perhaps a new and improved EAC,
- State-approved pilot projects with federal funding to support innovative new approaches,
- A way to reduce costs and increase scalability by using more efficient off-the-shelf hardware, and
- Access to the latest in security, audit tools, and software development.