
Testimony to the New York State Senate Standing Committee on Elections

Bo Lipari

Committee Member

New York State Citizens' Election Modernization Advisory Committee

November 30, 2009

My name is Bo Lipari, a long time resident of New York State. I'm the former Director of New Yorkers for Verified Voting, and a member of the New York State Citizens' Election Modernization Advisory Committee, created by the Legislature to advise the State Board of Elections on the selection of new voting systems. I'm speaking today as a long time election integrity advocate, not as a representative of either of those groups.

New York State was wise to do a pilot of our new voting systems. It provides an opportunity to work out the kinks in new systems, procedures for managing them, allows us to learn from the inevitable mistakes, and to apply what we learn in the future. In my opinion, New York's just concluded pilot was extremely valuable and revealed some important areas that need improvement. Certainly, privacy and ballot design issues often came up. However, given my limited speaking time I will submit comments on those two issues with my written testimony. Today I will discuss another pilot experience from which important lessons can be learned - the failure of some of the new voting machines and how New York can benefit from this failure.

Questions Raised in NY-23 Congressional Race

The NY-23 Congressional race had national attention, with 9 of 47 pilot counties holding elections in this race. Despite assurances from vendors, some of the new machines were inoperable on Election Day. In cases where machines failed, paper ballots were treated according to New York State emergency ballot rules, assuring that all votes were counted. Indeed, this is the great strength of New York's new voting system - it ultimately relies on the marked paper ballot which contains a software independent record of voter intent.

I do not agree with those who claim "impossible" results - there is simply not enough data available from pilot districts to justify such sweeping claims. But all of New York's voters have a stake in knowing what happened, so why not take a full look? After all, wasn't that exactly the point of the pilot program - to take a detailed look at what happened, from soup to nuts, in full view of the public?

We know what went wrong - a bug caused some machines to hang on certain vote combinations in multiple candidate elections. As a retired software engineer, I seriously question vendors' in-house testing, which absolutely should have turned up a simple defect like this. It also indicates that the state's certification testing has some big holes, something which the State Board needs to be looking at very closely.

The good news is that New York's required pre-election testing was robust enough to discover the mistake, but recovery procedures failed to identify all machines that needed a corrective patch. And the fact that some counties found the problem in pre-election testing while others did not, indicates that not all counties performed adequate testing. The explanation given by the State Board is reasonable and I have no reason to doubt it, but a much fuller accounting of the events surrounding the machine failures is in order and would silence critics.

Given that the pilot revealed a serious equipment failure, the State Board of Elections should release a complete and detailed description of the events including: full details of each county's pre-election testing; procedures used to identify problem machines; an analysis of why these procedures failed; the process used to develop, approve and apply a patch to machines; the county, state and vendor personnel involved in developing, approving, and applying the patch.

This was a pilot - it was inevitable there were going to be flaws. But the whole point of conducting it was to make sure that problems are identified and corrected. If we're serious that the purpose of the pilot was to find flaws in equipment and gaps in procedures prior to a state wide roll out, then we can only do so with a full collection of data, analysis of that data, and full publication of that data so that it can be independently reviewed by the public.

I ask the Senate Elections Committee to task the State Board of Elections with providing a full analysis of the *entire* pilot program and the performance of the new systems, and provide a complete set of data from all pilot Election Districts to the public for independent analysis. In order to perform a meaningful analysis, the State Board should provide the public with the following data from all participating pilot districts:

- The number of voters signed in to each Election District poll book.
- The number of ballots distributed to voters at each poll site.
- The number of absentee ballots counted at each poll site.
- The number of absentee ballots counted at the County Boards.
- The number of emergency ballots counted at each poll site.
- The number of emergency ballots counted at the County Boards.
- For each machine in each Election District:
 - Totals from tally tapes for all races.
 - Public counter numbers before election open and after election close.
 - Viewable images of tally tapes.
- For all races, from each Election District:
 - Election night totals initially reported from polling places to County Boards.
 - Election night totals reported by Election Management System after import from poll site memory cards.
 - Certified election totals.
 - Results of required 3% audit.

Conclusion

New York State has worked hard to make the process of using the new HAVA compliant voting systems the most rigorous in the nation. As part of that rigor, the pilot program was meant to be a test run to help us learn from mistakes. Now the State Board of Elections is at a critical juncture - New Yorkers want and need to know the full details of the pilot. What went right, what went wrong, what are we going to do better next time?

Thank you.

Bo Lipari

Member, New York State Citizens' Election Modernization Advisory Committee

Testimony of Bo Lipari
Committee Member
New York State Citizens' Election Modernization Advisory Committee

Privacy Issues Raised During the
New York State Voting Machine Pilot Project

A recurring report from many pilot counties was that voters felt their privacy was violated while marking and scanning ballots. Not only was this a recurring theme in media reports from pilot counties around New York State, but the State Board of Elections reported on it at the November 10, 2009 Commissioners meeting.

Some of the privacy issues reported noted:

1. People standing in the polling place could see over a voter's shoulder while they were marking ballots.
2. Ballots were exposed to view while carrying completed ballots from the privacy booth to the scanner.
3. Poll workers stood too close to the scanner while voters were scanning their ballots.

Privacy Problem Causes

Certainly some of the reports of privacy violations have to do with the difference between the old lever machines, where the voter was fully hidden by a curtain, and paper ballots, which must be moved from a privacy booth to scanner. But many reports have real causes such as improper polling place setup, or failure to use privacy sleeves. Some of the causes of the issues noted above are, respectively:

1. Privacy booths were positioned in a way that permitted others in the polling place to see into the booth.
2. Privacy sleeves, which cover completed ballots in transit to the scanner, were not offered to voters.
3. Poll workers, in most cases in attempting to be helpful, stood too close to the voter while they were scanning their ballots. This was exacerbated when privacy sleeves were not used, so that returned ballots were exposed.

Possible Solutions

To some extent these problems will be resolved with time, as the paper ballot system becomes more familiar to voters and poll workers. Insofar as they are not caused by unfamiliarity, some solutions are readily suggest themselves and should be easy to implement. Suggested solutions to issues noted above, respectively:

1. In polling places with sufficient room, position privacy booths so they are a minimum of 15 feet away from tables, lines of voters, or other persons. In polling places with less room, position privacy booths so they face a wall or other barrier, not facing out to the public area.
2. Train poll workers in the proper use of privacy sleeves, and ensure they are provided to all voters.
3. Require that poll workers stand a minimum of 6 feet away from a voter scanning a ballot, and that they only approach the scanner at a voter's explicit request, and only when the ballot is properly inserted in a privacy sleeve.

Testimony of Bo Lipari
Committee Member
New York State Citizens' Election Modernization Advisory Committee
Ballot Design Issues Raised During the
New York State Voting Machine Pilot Project

Frequent reports from around the state indicate that much needs to be improved about New York State's ballot design. Difficulty reading the small print needed to fulfill New York's full face ballot requirement was a common complaint. Other required symbols on the New York ballot caused confusion among voters. But not all problems related to ballot design. An important, yet still unresolved issue is how voter marks are interpreted when ballots are being reviewed, audited, or recounted.

Small Type, Small Icons

Many voters reported that the printed letters on the ballot was too small to read easily. Moreover, New York's requirement that each candidate on the ballot have a party icon next to their name, and the small size of these icons, caused some voters to mistake the party icon for the marking circle. As a result they filled in the gap in the icon which the scanner will not register as a vote.

New York's Full Face Ballot

All these ballot design issues could be easily fixed but for one thing - New York State's requirement that the paper ballot display all races in a row and column format, the so-called 'full face ballot'. It is the full face ballot which forces a layout that guarantees a small typeface and symbols so small they are mistaken for marking circles.

Add this to ballot user interface research, which soundly condemns the full face ballot on usability grounds, and it is clear that one of the questions raised by the pilot is whether the time has come for New York's ballot requirements to change, and the full face ballot eliminated.

Definition of a Valid Vote

In Putnam County a Court granted a motion for a 100% hand recount of the paper ballots in the Republican County Sheriff's race. Independent observers report that the recount was well managed, with two teams each consisting of 2 Democrats and 2 Republicans inspecting each ballot and agreeing on the voter intent. Only 5 or 6 votes out of a total of 4,517 cast on the scanners were changed as a result of the hand recount, leaving the outcome unchanged. All of these were the result of ballots marked in a way that the scanner did not recognize, but which clearly indicated the voter's intent to the recount teams. In this case there was no dispute about voter intent, but is vitally important that the State Board of Elections establish what a valid vote is, particularly for write-in votes which can be difficult to interpret.

The State Board of Elections has made a start at this with regulation 6210.13, "Standards for Determining Valid Votes", but it does not go far enough. Critically needed in the regulations are illustrations, but at the present time the official version only has a blank section 6210.16, "Ballot Examples for Counting Paper Ballots". The Board needs to get that illustration section completed and make sure the standards for interpreting ballots are disseminated and understood around the state.

New York's scanners are required to accept a reasonably large range of marks – check marks, crosses, partially or overly filled in bubbles should all correctly register. If the mark is partially recognized by the scanner, it will return the ballot to the voter noting that it is ambiguous and giving them a chance to correct it, but there will always be some voters who mark ballots in ways the scanner can't register. Presumably, as voters become more accustomed to using paper ballots they will mark them more consistently, but there clearly is a need for a specific definition of what constitutes a valid vote.