CALTECH/MIT
VOTING TECHNOLOGY PROJECT
A multi-disciplinary, collaborative project of
the California Institute of Technology - Pasadena, California 91125 and
the Massachusetts Institute of Technology - Cambridge, Massachusetts 02139

TITLE A Data-Centered Look at the Election of 2008

Name Charles Stewart III
University MIT

Key words:

VTP WORKING PAPER 88
September 2009
A Data-Centered Look at the Election of 2008

Charles Stewart III

Technology, Diversity, and Democracy Symposium
Pasadena, California

September 16, 2009

It is a great honor to be able to talk with you today about the quality of elections in the United States. The reason why we are gathered here today is that all of us --- even those of us out of town --- are dedicated to making Los Angeles County a model for the rest of the nation in running elections. Of course, I know some people here believe LA is already a model to be emulated, but I also suspect that others have different ideas. As someone who has tried for many years to develop objective measures of how well elections are conducted across this country, I appreciate how difficult it is to run elections here --- Los Angeles is the voting equivalent of the reverse 3 1/2 somersault off the three-meter diving board. That such a diverse and knowledgeable group as this would show up to launch an endeavor to improve voting in LA County is remarkable.

My expertise is in trying to use data to identify where election problems lie in America, especially at a broad level --- such as comparing states with each other or comparing counties with each other. I know that the purpose of today’s conference is to think about LA County, but there are lessons to be learned from looking across the country. So, what I thought I would do today is look at the election of 2008 to ask what do the data tell us about the experience of voters nationwide on Election Day? At the end, I’ll also say some words about where California fits into national trends --- not to put anyone on the spot, but rather, to get us thinking about where the special challenges are in improving elections here.

About the quality of election data: not so good
Before talking about the election of 2008, let me say a word about what we know about elections in the U.S. and what we think we know about elections in the U.S. To get into this exercise, travel back with me to November 2000. Before the recount in Florida started, what did we know about voting technologies, and what did we think we knew about voting technologies --- especially punch cards?

On the day after Election Day, it was noticed that well over 29,000 of the 463,000 ballots cast in Palm Beach County seemed not to contain a vote for President. These “missing” 29,000

---

1 This essay is a text version of remarks made after lunch at the Technology, Diversity, and Democracy Symposium held on the Caltech Campus on September 16, 2009. Because it was an after-lunch talk, and not an academic address, this paper is largely devoid of citations. Readers interested in the data that underlies the remarks concerning the 2008 survey on election can find the final report at the VTP web site: vote.caltech.edu. Please note that the remarks here are based on the analysis of updated versions of the survey dataset, and therefore may vary slightly from the initial report.

2 Kenan Sahin Distinguished Professor of Political Science and Head of the Department of Political Science, MIT. Also the MIT director of the Caltech/MIT Voting Technology Project.
votes are what we now call the “residual vote.” Stated another way, these 29,000 missing votes amounted to 6.4% of the turnout in Palm Beach County. We would say that Palm Beach’s residual vote rate for the presidential ballot was 6.4% in 2000.

Was this a large or small number? Was this rate typical or atypical for counties that had punch card voting machines? Was this number typical or atypical for counties that had other types of voting equipment?

The fact is that in November 2000, almost no one in American could tell you whether a 6.4% residual vote rate in Palm Beach County was big or small, unusual or typical. The reason is that almost no one had ever done the simple calculation of dividing “missing” votes by turnout and then compared the results with other counties, or with the same county across time.

In retrospect, it is stunning that the effectiveness of punch card machines had never been assessed through the use of performance criteria such as the residual vote rate, which is so easy to calculate. This is an example of the disconnect between what we thought we knew --- before November 2000 we thought punch card machines performed fine, thank you very much --- and what we might actually know by developing simple performance statistics and then managing our elections so as to improve our measured performance.

As an aside, Florida has 67 counties. Seventeen of those counties had higher residual vote rates in 2000 than Palm Beach. One of those, Duval County, the home of the largest city in the state, had a residual vote rate of 9.2% --- almost one vote in ten in Jacksonville failed to be counted. (Florida’s overall residual vote rate, excluding Palm Beach County, was 2.6%). Nationwide, the Voting Technology Project discovered, once we gathered the necessary election returns, that the average residual vote rate of counties that used punch cards was 2.5%, compared to 1.5% for counties that used optical scanners and 1.8% for counties that used hand-counted paper.

What I just told you was a story in which we actually had the data available to us to help gauge the quality of voting machines, if we had only used it. Of course, election administration involves a chain of procedures, it doesn’t begin and end with voting machines. People must be notified there is an election, they must be told where to vote, they must be registered and checked in, all before election machines are even used. We need to measure performance at each link in the chain, not just near the end. Unfortunately, measures of how well the election system is working before voters get to the machines are virtually non-existent. Almost no one has systematically audited registration lists, for instance. We know almost nothing about how many people go to vote and can’t find the voting station, or how long people have to wait in line to vote, or how well voting places are run.

---

As a further aside, LA Counties residual vote rate in 2000 was 2.7%, which was about one percentage point higher than the California rate of 1.6%.

Another side: the residual vote rate is just one measure of how well voting machines perform. It has the advantage of being unobtrusive. However, as a raw number, a residual vote rate is impossible to interpret. As this example illustrates, I hope, the residual vote rate is only useful as a comparison --- with other voting machines, with other election jurisdictions, or across time.
Because we do not have very good measures about how well elections are run, we rely on stories we tell each other, and such stories are often distorted, even when they carry a grain of truth. For instance, were long lines a problem in 2008? How do we know? In the minds of many, long lines were a big problem in 2008, if you read the newspapers. By one accounting, virtually every newspaper in America ran a newspaper story in 2008 about long lines in the local polls.

An enterprising student collected these stories together at one website, and I tried to read them all. (I know, I should get out more often.) Two things struck me as I read these stories. First, the stories about long lines almost always focused on a single precinct in a community. Second, a disproportionate number of these stories were about predominantly African American precincts and made note of the fact that the lines had begun forming in the wee hours of the morning.

If we rely only on newspaper accounts, what do we learn about long lines in 2008? I think we learned two things. First, if you drive around long enough, you will always find one precinct in town with long lines. However, having one precinct with a long line is not the same thing as saying that all precincts have long lines. Second, we might take away from these stories a conclusion that the problem of long lines in 2008 was more a matter of African American excitement about voting for Barak Obama, rather than an indication that polling places in minority communities may be under-served. (I’ll come back to this point later.)

All is not lost. As many of you know, a couple of years ago the Pew Center on the States started a project called the Make Voting Work Initiative. This Initiative is aimed precisely at the problem of not knowing enough about how well elections are being run in the United States. This initiative is the sort of program that makes the heart of an election data geek like me go pitter-pat. Thanks to Pew, and some other funders, teams of election officials and academic researchers are working on measures to help us understand how well elections are being run in the United States, with an idea toward improving elections based on evidence. Many of the gaps in our knowledge about how well elections are being run that I mentioned before --- such as how good the election data bases are, or how easy polling places are to locate, or how accurately votes are being counted --- these gaps are being filled. Some people in this room, in fact, are working on these projects.

The 2008 Survey of the Performance of American Elections
I would like to turn our attention, then, to one data gathering project in particular that I have led as a part of this Pew initiative to make voting work, and discuss what we have found out about elections in 2008. That was the 2008 Survey of the Performance of American Elections.

Before leaping into the results, let me tell you how we designed the survey. We interviewed at least 200 respondents in each state, and were able to interview 400 respondents in 10 states. In all, we interviewed 12,000 respondents. We asked questions about all aspects of voting --- from how easy it was to find the polling place to how confident you were that your vote was counted as cast. We asked questions of people who voted on Election Day, who voted early, and who voted by mail (both traditional absentee voters and newer “mail-only” voters). Our sampling frame was registered voters, so we also found people who were registered, but
who did not vote. We asked these people why they didn’t vote. Finally, we asked everyone a bunch of questions about their attitudes toward a number of currently proposed election reforms, such as voting by Internet, automatic registration, and the like.

Before we conducted this survey in the week following the November 4 election, we also conducted pilot surveys in November 2007, among the states with gubernatorial elections that year, and in all the states that participated in Super Tuesday in 2008. Finally, we were able to calibrate our results with similar surveys that were conducted in 2008, which had even larger samples than ours, but which asked a more limited number of questions about elections.

The main headline from the survey is that voters overall expressed satisfaction with their voting experience. Among the 63% of voters who voted on Election Day:

- 2% said it was difficult finding their polling place;
- 2% said they encountered a registration problem when they went to vote;
- The average voter waited 15 minutes to vote;
- 2% said they encountered voting equipment problems;
- 2% said their polling place was not run well;
- less than 1% said the performance of polls workers was poor;
- and 5% said they were not confident that their vote was counted as cast.⁵

Among the 18% of voters who voted early (but in person), the results were very similar:

- 3% said it was difficult finding their polling place;
- 2% said they encountered a registration problem when they went to vote;
- the average voter waited 20 minutes to vote;
- 2% said they encountered voting equipment problems;
- 1% said their polling place was not run well;
- less than 1% said the performance of polls workers was poor; and
- 5% said they were not confident that their vote was counted as cast.

Finally, among the 19% of voters who used absentee ballots or other wide voted by mail:

- 2% said they encountered problems receiving their mail ballot;
- 2% said they encountered problems marking their mail ballot;
- 1.5% said they found the instructions difficult to follow in marking their ballots; and
- 8% said they were not that their vote was counted as cast.

Of those who reported not voting, 2% reported a problem requesting, but not receiving, an absentee ballot.

Overall, then, voters were generally satisfied with how the election was conducted and where they voted.⁶ It is ironic that people who voted early reported waiting much longer to vote

---

⁵ Because there is so much controversy over whether electronic voting machines diminish the confidence that voters have in the honesty of the count, it is telling that this percentage did not vary according to the type of voting machine the respondent used.

⁶ In the Q&A, the point was made that the small percentage of voters who reported problems voting in November 2008 may still be “too much.” After all, when there are recounts, the margins are often much less than 1%. The
than those who voted on Election Day, since early voting is often justified based on its greater convenience. (Of course, there may be other measures of convenience aside from the length of the line.) Finally, it is worth noting, and worrying about, that voters who used the mails were significantly less likely to express confidence in the quality of the vote tally than those who voted in person --- either on Election Day or in person.

These are the general set of findings. The results of the survey drew attention to three topics that election reformers should be concerned about: the length of lines, showing voter identification, and confidence in the quality of the vote count.

_Voter identification_

The voter identification issue can be divided into two sub-issues, (1) whether people have the form of identification required under law, and (2) whether they were asked for identification according to the state law.

With respect to having identification, there are two forms of racial disparity that emerged in the survey. First, 97% of Whites said they had a driver’s license, compared to 84% of African Americans and 90% of Hispanics. This disparity grew when we inquired about whether the license was up-to-date. (We judged this by asking follow-up questions concerning whether the name on the license was the legal name of the voter, whether the address on the license was the current address of the voter, and whether the license was expired.) Here, we found that 86% of Whites had an _up-to-date_ driver’s license, compared to 66% for African Americans and 74% for Hispanics.

We also asked respondents whether they were _required_ to show _photo identification_ in order to vote. We also followed-up with people who said they were required to show a photo ID to vote, in order to make sure they were actually _required_ to show the ID, rather than showing it out of convenience.

Two interesting patterns emerged. First, we divided respondents according to the state laws governing what kinds of identification must be shown at the polls. In 2000, 23 states had what is called the “HAVA minimum,” that is, they required first-time voters who had registered by mail to show _some_ form of ID (it could be as minimal as a piece of mail), but otherwise did not have an identification requirement. At the other extreme, three states required all voters to show some form of official photo identification.

Among voters living in “HAVA minimum” states, 16% stated they were nonetheless _required_ to show a _photo_ ID in order to vote. If this number is even close to being a correct estimate of what is happening on Election Day, a significant number of voters are being met with an improper request for identification. On the other hand, 20% of voters in the “photo ID required” states were _not_ asked for a photo ID. Again, if this estimate is a correct gauge of what is happening in these three states, 20% seems pretty large.

---

The point is very well made. In emphasizing the high degree of satisfaction with the 2008 election, I am in part trying to counter an assertion that is sometimes made that elections in the U.S. are conducted no better than those in places like Iran and Afghanistan.
More intriguing, when we look at racial disparities in who is required to show photo identification, the differences are quite large in the “HAVA minimum” states and non-existent in the “photo ID required” states. For instance, 29% of African Americans report being required to show photo ID in the “HAVA minimum” states, compared to 14% of Whites. In the “photo ID required” states, there was no difference in rates between Whites and Blacks.

**Line length**
As mentioned before, the wait to vote on Election Day was much less than the wait to vote at early voting centers. Almost 2/3 of voters stated that the wait was primarily to check in, not to gain access to a voting machine or voting booth. So, the bottlenecks appear to be mostly a matter of clearing the registration table, not voting machine capacity.

As with voter identification, there were racial differences in line lengths on Election Day. On average, African Americans waited twice as long to vote on Election Day as Whites --- 27 minutes vs. 13 minutes.

It has been suggested by many --- remember the story I told earlier about newspaper accounts of Election Day lines --- that the long lines faced by African Americans was due to excitement among the Black community about voting for an African American presidential candidate. Certainly, newspaper accounts of lines forming well in advance of the polls opening are consistent with this. However, these racial disparities also showed up in our pilot studies of November 2007 and Super Tuesday 2008. In addition, another large national survey in 2006 (the Cooperative Congressional Election Study) found the same racial differences in the last midterm election. Therefore, while there may be some truth to the notion that lines were longer in 2008 for African Americans because of the “Obama effect,” there appears to be something systemic about the experience of African American voters that goes beyond one election.

**Confidence that one’s vote will be counted as cast**
Finally, there is the matter of whether voters were confident that their vote was counted as cast. The issue of voter confidence has loomed large over the past decade. Most broadly, disputes over the fairness of elections can raise legitimacy issues about the government.

As I mentioned before, one interesting finding in our survey is that users of DREs (electronic voting machines) on the whole did not report they were less confident their vote would be counted as cast than voters who used paper (whether scanned or hand-counted). Another important finding is that absentee/mail voters are much less confident about their vote being counted as cast, compared to in-person voters. This is significant because of the strong trend toward mail-in voting in the U.S. Mail-in voting seems to be growing because of its perceived convenience, lower costs, and ease of administration, but are we gaining these advantages at the cost of less confidence that the right person is declared the winner?

A final interesting finding about confidence is that partisanship and race played a factor in determining whether voters believed their vote was counted as cast in 2000. Confidence was strongly related to the combination of the voter’s partisanship and who won the state. In other words, Democrats in states won by Obama were much more confident their votes were counted as cast than Republicans in those same states, and vice versa. Nationwide, Democrats were more
confident their votes were counted as cast than Republicans. And, perhaps not surprisingly, African Americans and Hispanics were more likely to be confident than White voters.

The differences in confidence were smaller than similar results that have been found in other elections, especially in 2006, so there is some cause for celebration here. Overall, though, it is troubling that voter confidence should continue to be related to one’s partisanship and who wins. After all, one of the hallmarks of a democracy is that the losers are willing to accept the fact that they lost. Things are not so bad as to say that the losers in 2008 doubt whether the election was properly counted, but one measure of the success of election reform efforts will be when we can drive partisan differences in confidence to zero.

Where is California in all of this?

Where did California and LA County fit, in terms of the survey results from 2008? Unfortunately, we don’t have enough evidence to separate out LA County from the rest of the state, but because LA County is such a significant part of the state, I think some local lessons can still be drawn from an attention to how California fared compared to the rest of the nation in 2008.

Compared to the rest of the nation, California voters reported a slighter higher rate of difficulties in 2008. For instance, 4% of California voters reported difficulties finding their voting place, compared to 2% nationwide. These are very small differences, but worth pondering nonetheless.

One area where California voters did better than nationwide was with waiting in line --- California voters waited only 7 minutes, on average, to vote on Election Day, compared to 15 minutes nationwide. However, like the rest of the nation, African Americans reported waiting longer than Whites or Hispanics --- 29 minutes on average, compared to 7 minutes for Whites and 9 minutes for Hispanics.

California seems to have had shorter lines on Election Day because of the large number of absentee ballots cast in some (but not all) counties. Analysis of the survey results in California clearly shows that lines were shorter in the counties with a higher percentage of absentee voters. LA County had longer lines than average,\(^7\) which seems to be accounted for entirely by the relatively low absentee voting rate in the county.

A significant minority of California voters reported being asked for photo identification, even though California has one of the most relaxed ID requirements in the nation. Overall, 26% of California voters were asked for a photo ID. This ranged from 21% for white voters, 36% for African American voters, and 46% for Hispanic voters.\(^8\)

\(^7\) Previously I noted that the survey does not contain enough responses from LA County to allow us to draw inferences about LA that are separate from the state as a whole. Line length is one exception, because the LA County average line length was reported to be significantly longer than the statewide average. As mentioned in the text, in a statistical sense, this difference is accounted for simply by the relatively small rate of absentee voting in the county, which increases significantly the number of people who have to get to the polls on Election Day.

\(^8\) As an aside, I also mentioned in my oral remarks that one reason why so many voters in states without stringent ID requirements may still be asked for identification is that ID requirements are so universally accepted as the way
Conclusion
A systematic look at the performance of American elections in 2008 suggests some clear bright spots and areas of concern nationwide.

The bright spot is simply that most people report positive experiences voting, and that for the most part, good experiences fall on people of all income, education, and racial groups. While California voters reported slightly higher rates of voting problems, the absolute percentages were still very low, and may be no more than a reflection of the fact that elections in California are among the most complicated to manage in the nation, owing to its long ballot, highly mobile population, and language diversity.

The biggest notes of caution in the 2008 survey are related to lines, voter identification, and voter confidence. It is clear that African Americans waited longer to vote than whites and Hispanics, and that this disparity is not due to excitement about voting for Barak Obama. And, it looks like when states have lower voter identification requirements, a significant minority of poll workers use their discretion to ask some people, and not others, for a photo ID --- and when this discretion is used, racial disparities emerge. Finally, we have not yet escaped the trap of voter confidence being tied to who is declared the winner.

On these issues, California seems to be much like the rest of the nation.

The results from the 2008 Survey of the Performance of American Elections suggest where special attention should be paid as the citizens of Los Angeles County go about revising their voting process. I list four, very briefly:

1. Attention should be paid to developing, implementing, analyzing, and acting on objective measures of election system performance.
2. Special attention should be devoted to understanding the degree to which the “public service” aspect of running voting sites in LA County might vary according to the demographic characteristics of voters.
3. Special attention should be paid to the training of poll workers, so that the implementation of identification and other election laws is uniform across voters --- not because LA County has a special problem with this, but because we know the nation has a problem with this, and we want LA County elections to be a model for the nation.
4. Special attention should be paid to reassuring absentee voters --- because this is a rapidly growing segment of the voting public --- that their votes were counted as cast.

Thank you for your time. Good luck as you move forward in making elections in Los Angeles a model for the nation.

elections should be run. When we asked respondents whether they favored laws to require voter identification in order to vote, majorities of all partisan, racial, and income groups agreed. Majorities favored such laws in each state. Because so many voters support voter identification laws, it doesn’t seem unusual to find that a significant minority of voters may be asked for identification contrary to their own state law.