

New Mexico Canvass Data Shows Higher Undervote Rates in Minority Precincts where Pushbutton DREs Were Used

Summary

Undervotes (UV) represent ballots on which no vote was registered for a specific contest. For example, undervotes in the presidential race occur when ballots register no vote for president.

Surveys show, and experts agree, that a 0.5% UV rate is normal in presidential contests. This means that one out of every 200 people who cast a ballot in a presidential election chooses not to vote for president. Undervote rates higher than 0.5% in the major contest on a ballot suggest that votes have not been counted, either through a mistake of the voter or a mistake in tabulation.

It is normal for the UV rates to be higher in down-ticket contests, with the rate increasing the further down ticket the contest. Undervote rates in down-ticket contests may reflect the level of voter interest in the contest. For example, the charts shown in this document consistently show a spike in the UV rate for Amendment 3, suggesting that voters were less interested in that amendment than in the other Amendment questions.

Analysis of New Mexico data for the November 2004 election shows:

- ◆ Paper ballots tabulated by optical scan systems have virtually identical presidential UV rates for all ethnicities.
- ◆ Across all voting systems, Hispanic precincts averaged more than 3% higher presidential UV rates than Anglo precincts. Native American precincts averaged more than 5.5% higher presidential UV rates than Anglo precincts.
- ◆ The statewide disparity between the presidential UV rates for different ethnicities occurred entirely on Danaher Shouptronic and Sequoia Advantage pushbutton paperless electronic voting machines.
- ◆ Down-ticket UV rates are consistently higher in minority precincts than in Anglo precincts, suggesting that entire ballots may have been uncounted in minority precincts, particularly on Danaher Shouptronic and Sequoia Advantage machines.

Method

I obtained official November 2004 canvass data from the New Mexico Secretary of State and 2000 census data from the New Mexico legislature. I identified the type of election equipment used in each precinct by using data from the New Mexico Secretary of State and telephone contact with each County Clerk's office. Most counties used different equipment for different voting categories (early, election day, and absentee voting).

There were 1396 precincts, each reporting canvass data by the three voting categories, yielding 4188 separate sets of canvass numbers. I selected the sets for the precincts in which 75% or more of the voting population was of a specific ethnicity.

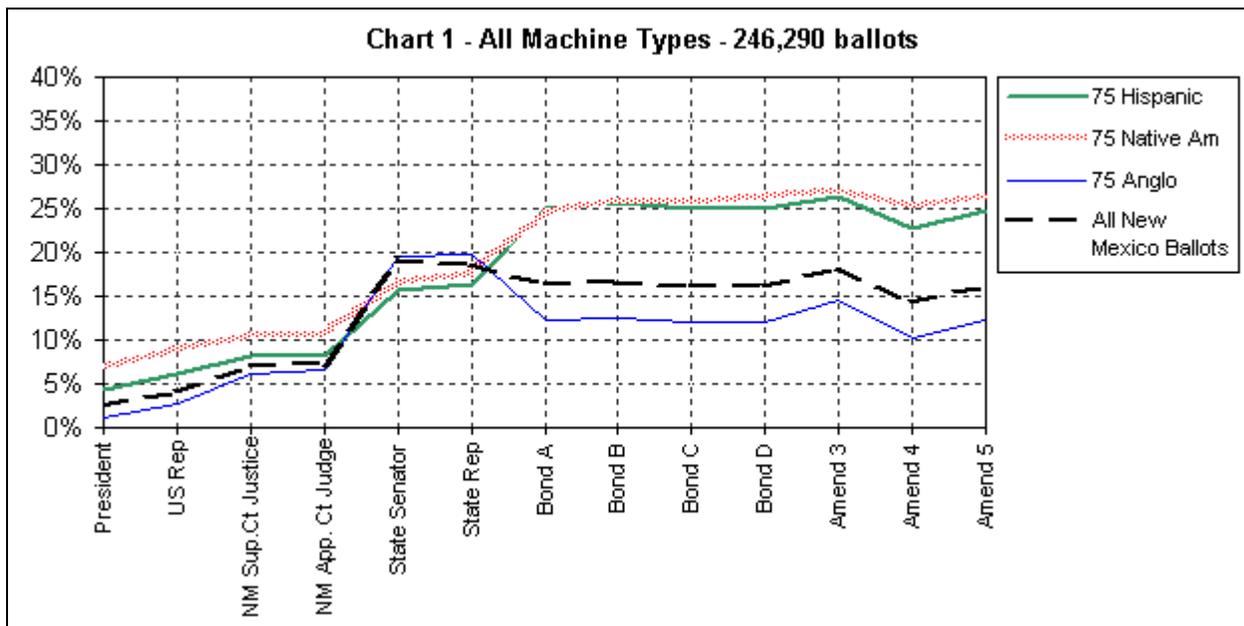
The charts in this document show the statewide UV rates (called “All New Mexico Ballots” in the charts) as well as the UV rates, by machine type, for ballots cast in precincts with:

- ◆ 75% Hispanic population
- ◆ 75% Native American population
- ◆ 75% Anglo population

Across all machine types, a total of 246,290 ballots were cast in precincts having a predominant (at least 75%) ethnicity.

Results

Chart 1 shows that, in all precincts with a predominant ethnicity, the presidential undervote (UV) rate was significantly higher in Hispanic and Native American precincts than in Anglo precincts. The UV rate in minority precincts was significantly higher in down-ticket contests as well, except for State Senator and State Representative contests.



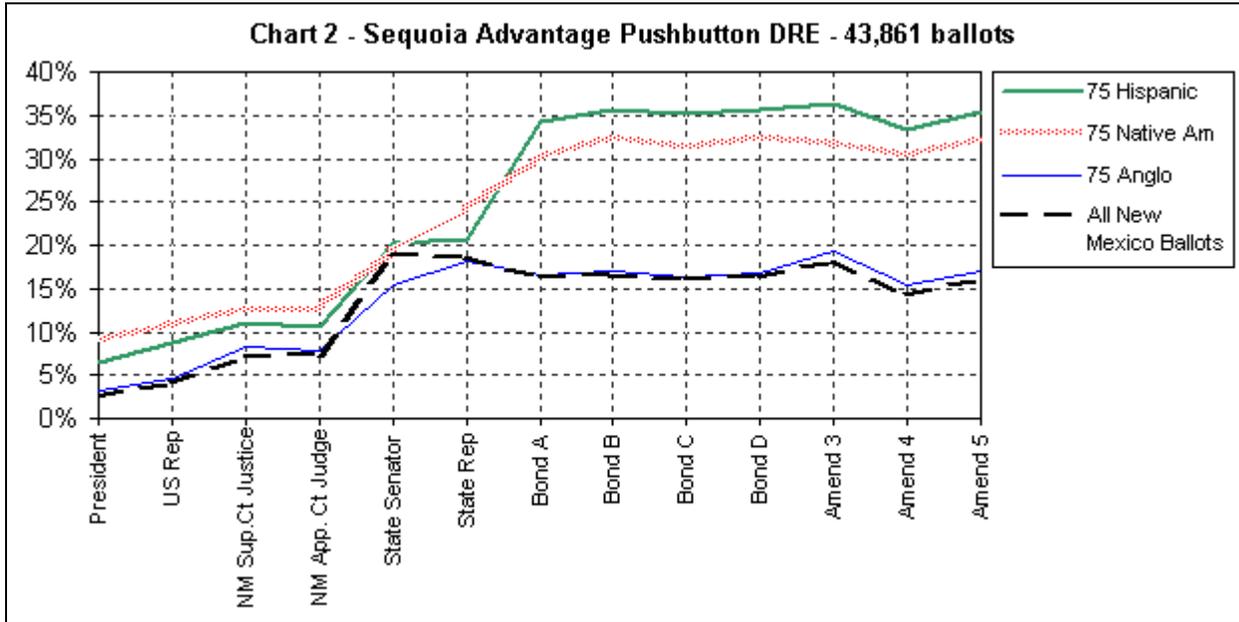
Average Presidential UV rate - all precincts with a predominant ethnicity

7.05% in Native American precincts

4.42% in Hispanic precincts

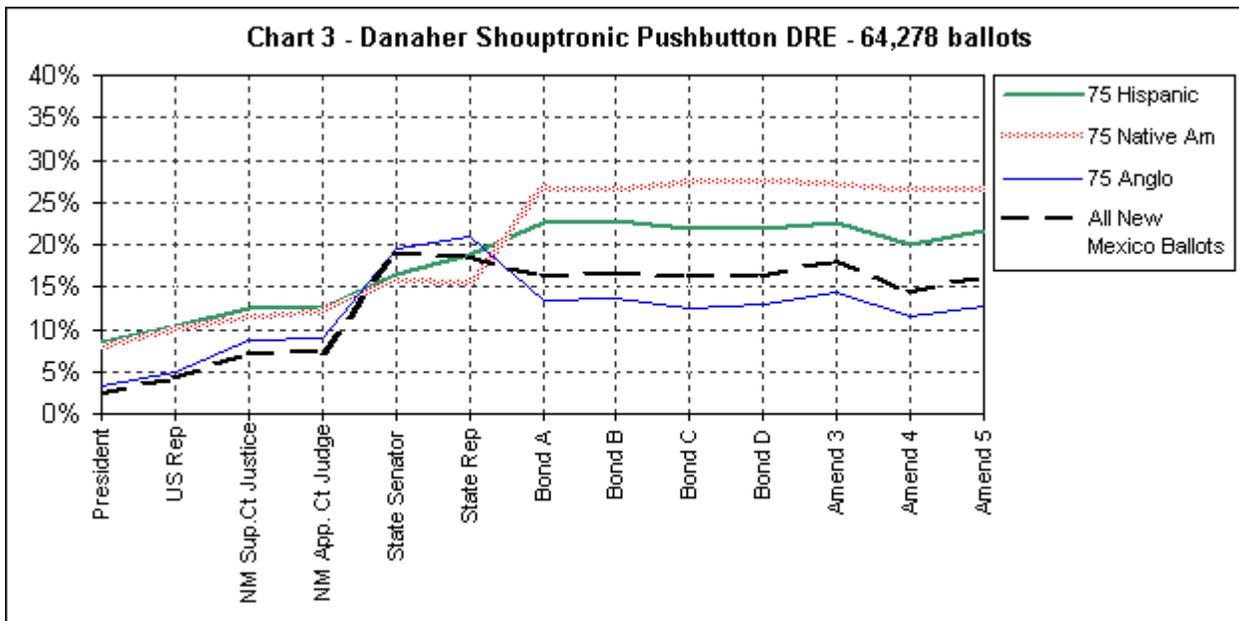
1.11% in Anglo precincts

Charts 2 through 6 show that the statewide disparity between the presidential UV rates for different ethnicities occurred entirely on Danaher and Sequoia pushbutton paperless electronic voting machines.



Average Presidential UV rate - Sequoia Advantage:

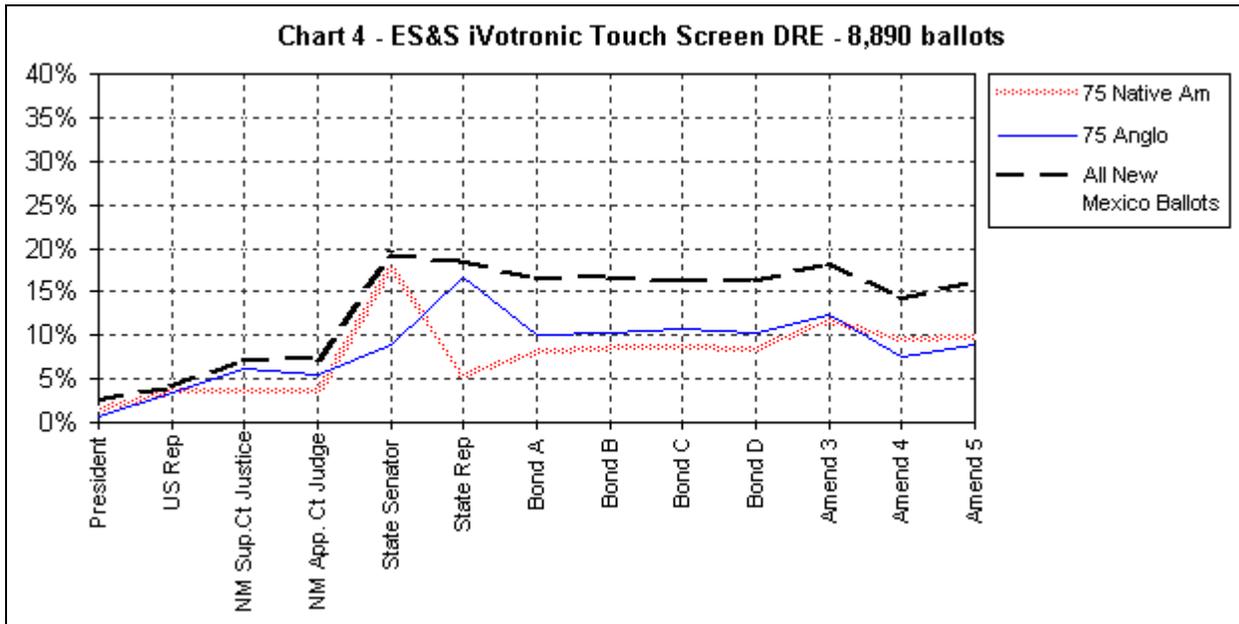
- 9.10% in Native American precincts
- 6.24% in Hispanic precincts
- 3.24% in Anglo precincts



Average Presidential UV rate - Danaher Shouptronic:

- 8.00% in Native American precincts
- 8.39% in Hispanic precincts
- 3.18% in Anglo precincts

In contrast to UV rates shown in Charts 2 and 3, the three ethnic groups have virtually identical UV rates when ballots were cast on paper or touch screen voting machines. This is shown on Charts 4, 5, and 6.



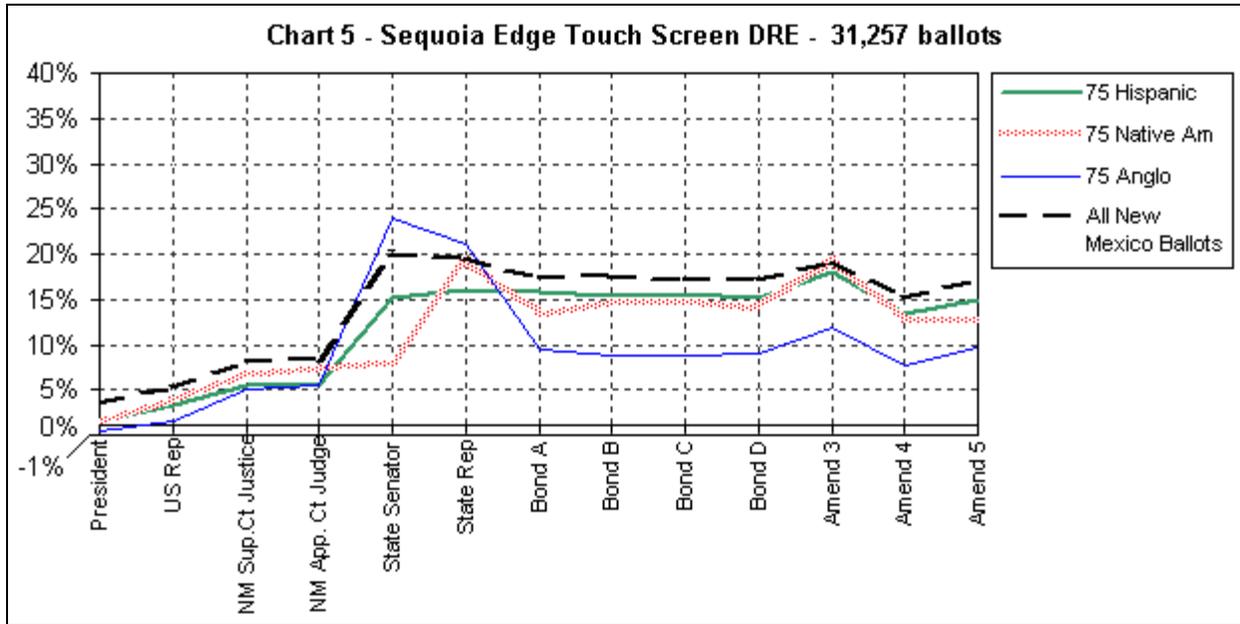
Average Presidential UV rate - ES&S iVotronic:

1.54% in Native American precincts

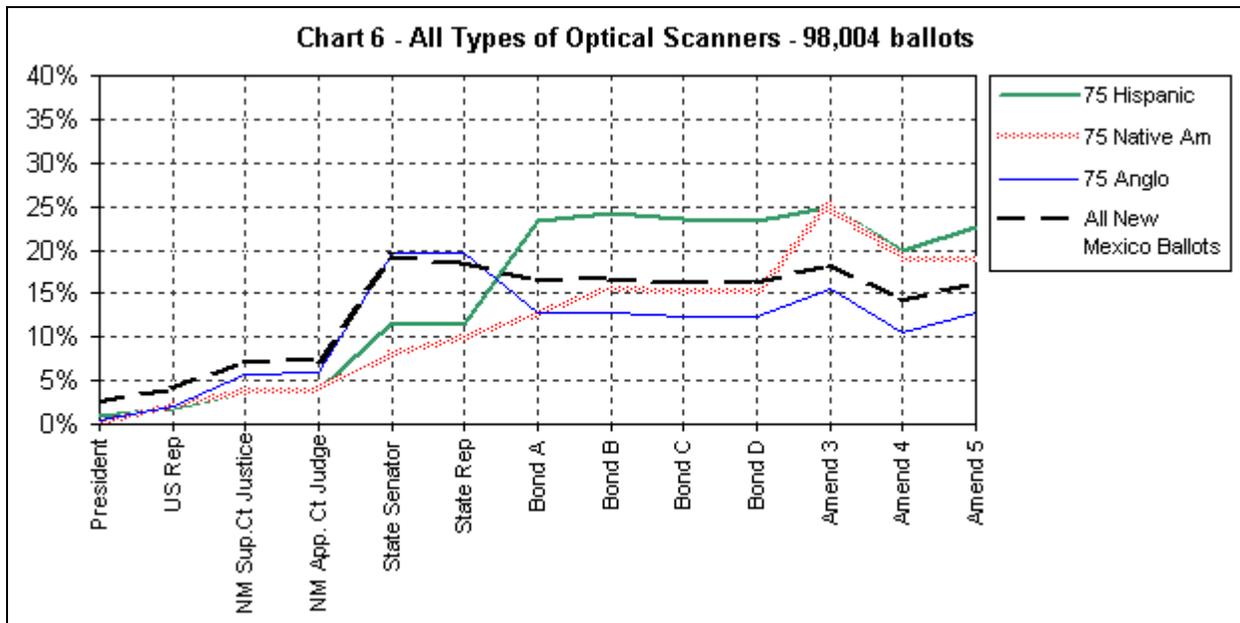
0.75% in Anglo precincts

Note: The iVotronic was used only in San Juan County, where no precincts are predominantly Hispanic.

Chart 5 shows similar UV rates for all ethnic groups, but caution and further research are needed to interpret the results produced by the Sequoia Edge touch screen DREs. In predominantly Anglo precincts using this machine, 110 **more** presidential votes were recorded than the number of ballots cast, causing the UV rate to be calculated as a negative percentage. These unexplained, extra votes are known as “phantom votes” and they call into question the votes recorded and the results produced by these machines.



Average Presidential UV rate - Sequoia Edge:
 0.49% in Native American precincts
 0.56% in Hispanic precincts
 -0.51% in Anglo precincts



Average Presidential UV rate - All Optical Scanners:

0.33% in Native American precincts

0.86% in Hispanic precincts

0.48% in Anglo precincts

Data Sources

The data used for this report was derived from several sources.

- ◆ All data concerning the 2004 election results is drawn from the Certified results contained in the Access file General_04.mdb provided by the New Mexico Bureau of Elections.
- ◆ The demographic data was drawn from the New Mexico State Legislature website (<http://legis.state.nm.us/lcs/redmapsfinal.asp>) and is based on 2000 census data.
- ◆ Voting technology data was drawn from the New Mexico Secretary of State's website (<http://www.sos.state.nm.us/Election/VotingMachines.html>) and confirmed by telephone with each of the County Clerks' offices in the state.

Acknowledgments

My appreciation to Warren Stewart, whose help in obtaining the data used for this report was crucial and whose collaboration on the initial analysis led to our report posted here: www.votersunite.org/info/NewMexico2004ElectionDataReport-v2.pdf.