

Spokane County Election Data Analysis

Using records from the Clear Ballot equipment used in the election, which was provided me in response to a records request, I have reconstructed the 2020 general election, and plotted out the data. I am sharing the analysis I did with the data provided to me from the County Auditor's office.

First let me explain what I did, the steps I took, and how I calculated the data. I requested from your office the Statement of Votes Cast by Box for certain races, and the Card Inventory Report. As you know, the SOVC shows the vote totals for each candidate for each batch of ballots. The Card Inventory Report contains the time and date each batch was scanned. Batches are labeled the same on both records. They all start with VBM (Vote By Mail) and then a number representing the batch number.

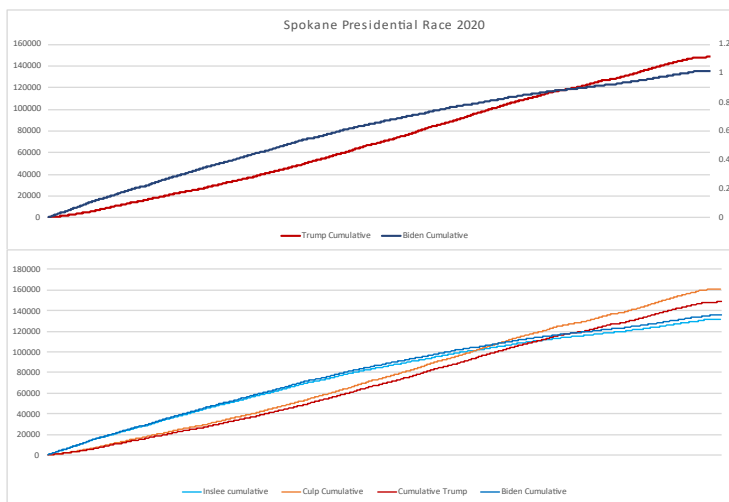
I transferred the vote counts to a spreadsheet and added the date and time from the Box Inventory report. This was done very carefully, because the SOVC is in order of batches, but they are not in the same order they were scanned in. So, I took my time and made sure all the date and time entries were matched with the correct Box ID number. Finally, I sorted the spreadsheet by date and time, to see the way the votes came in over time.

There are 4 main things I looked at:

- The first is the cumulative vote totals over time for each candidate.
- The cumulative margin of victory.
- The margin of victory for each batch (or box)
- And the cumulative ratio of Democrat to Republican votes.

Each of these is explained in more detail below.

Cumulative Vote Totals



The top chart represents the total votes for Biden (blue) and Trump (red) over a period of a few weeks. Spokane started scanning ballots On October 20th, and the last scan was on November 24th.

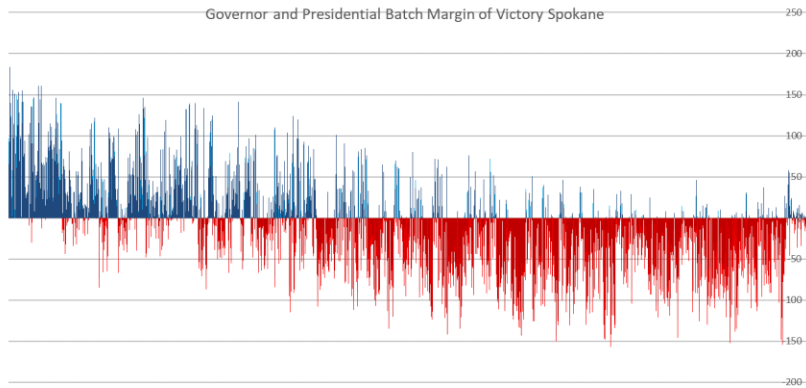
The lower chart is the Presidential candidates (same as above) plus the cumulative vote totals for Inslee and Culp.

The first thing that stands out to me is the fact that even though Trump and Culp both won the county, they were behind in votes until the end of the race. Loren Culp was behind in votes for the first 11 days of scanning. He took the lead for the first time on October 31st. Trump didn't take the lead over Biden until the second of November and 4:41pm.

Because we vote by mail, the tabulation system we use is considered a central tabulator. Meaning the ballots are all scanned at one central location. If the ballots are being processed as they are received back to the

Auditor's office over several days, they should be completely random. What I'm going to show you next does not look random.

Margin of Victory Per Batch



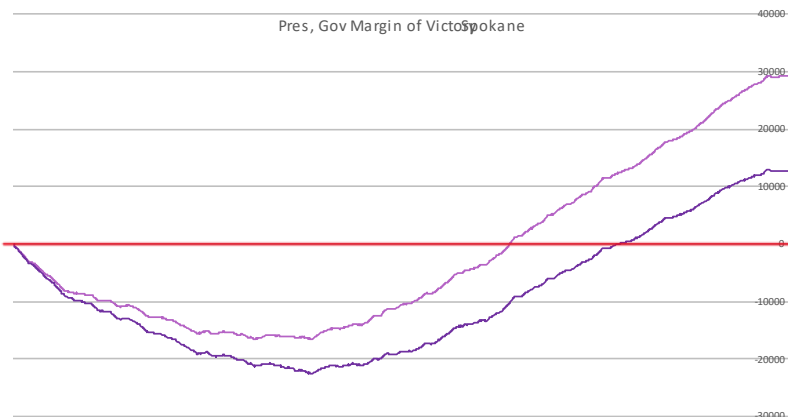
Each line represents one batch of ballots. Most batches in Spokane are 200 ballots. Some are less if there weren't enough ballots to make a full batch at the time.

Blue lines going up represent a democrat victory for that batch. Red lines going down represent a republican victory for the batch. The longer the line, the larger the margin of victory. A small line means that

batch was only won by a few votes. Remember, these are organized in the same way that the county scanned them into the Clear Ballot system during the election.

Notice there is a strong presence of long blue lines at the beginning of the election, and it shifts to republican victories later in the election. Most of the ballots cast in the first week of the election were democrat votes. That seems unlikely considering with mail in ballots, people just return it when it's convenient for them. They don't coordinate together as to when they will be returning their ballots. It is random, and one would expect the results to also be random.

Cumulative Margin of Victory



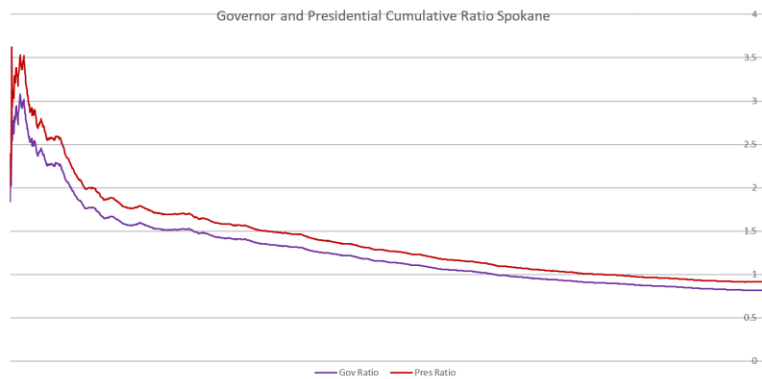
These are the margin of victory for the Presidential race (lower dark purple line) and the Governor's race (upper light purple line).

The red line is 0. Typically this would be a steady incline up to the final margin of victory for the winner.

Instead this dips way down below 0, when the democrat candidate was in the lead, then rapidly changes towards a republican win.

In the case of the presidential race, Biden was ahead by almost 10,000 more votes than the final number of votes trump won by. Biden was ahead by almost double the amount Trump eventually won by. I have many concerns about this, and I hope it has you wondering as well.

Cumulative Ratio



The final ratio of Democrat to Republican votes for the Presidential race was 0.913797. To calculate this, divide the number of Democrat votes to the number of Republican votes after each batch is added to the counts. If it were a tie, the result would be 1.

This shows us the ratio of Democrat votes to Republican votes started off favoring the Democrats significantly, even though

Republicans won the county wide race. According to the law of large numbers, if these ballots were being processed randomly upon arrival, it should have settled in at the final ratio much sooner. In fact, it never really appears to flatten out at all, because the Democrats had such a strong start.

I have completed this same analysis for other races in the county as well and will attach those results to this letter for your review.

After reviewing this information, I hope you are asking yourself how this could happen. Did the Democrat voters coordinate to all turn in their ballot early? Did republicans mostly wait for election day to vote?

In the logs provided by the county, there are 19,961 resolver tool records which state the ballot was "remade" and the user column shows the scan server as the source of the change.

Is it possible that the early votes were altered or counted according to a desired result? Did the election workers complete almost 20,000 adjudications?

There is a feature in the Clear Ballot system which allows the machine to adjudicate ballots on its own, without action from an election official. As far as I can tell from the logs, this feature was enabled for the 2020 election. I am not able to get confirmation of this, as either nobody knows, or nobody wants to talk about it. If so, this could be manipulated to control the outcome of an election.

I know what you are thinking... "When we conduct a recount, the results don't change." To that I would argue that if we are only looking at the ballot images for recounts or audits, we are not going to catch things like this. The resolver tool "rewrites the ballot" which is the same as remaking the ballot image. The record is changed.

There are several other possibilities, which I would be happy to discuss further if you have any interest. Feel free to contact me with any questions you may have. Thank you for your time.

