Sandy City
Council Office

Memorandum

April 20, 2021

To: City Council Members

CC: Mike Applegarth, Council Executive Director

From: Dustin Fratto, Council Office Assistant Director
             Liz Theriault, Council Communications and Policy Analyst

Subject: Questions about Ranked Choice Voting

We have received some questions about the error rates, voided ballots, and voter experience in relation to RCV. While we have reached out to a couple of jurisdictions similar in size to Sandy, I think it is going to be difficult to get anything from them other than anecdotal evidence. However, we have also identified a handful of studies that provide either observational data or experimental data related to these questions.

Anecdotal Data:
For example, Liz had the opportunity to speak with an election official from Berkley, CA (population 120k) this morning. While Berkley has been conducting RCV elections since 2010, unfortunately they did not have any "hard data" to provide us with. Anecdotally, they have experienced very few ballot and voting issues over the past few election cycles as compared to when they began using RCV. They believe that this has been due to their voters become familiar with RCV over the years. In the beginning they had run into instances of voters marking only one candidate. Overall, they have few complaints from voters. As for candidates, Berkley's experience has been "if they win, they like it. If they lose, they hate it."

Liz also had the opportunity to speak with Berkley election officials regarding voter outreach and education. In 2010 Berkley began their outreach process in July. Their experience was that very few voters paid attention to the educational materials until after Labor Day. This experience tends to support the argument that Sandy does have time to conduct an effective educational campaign.

We have also reached out to a few other municipalities similar in size to Sandy, but as of today haven't been able to make contact.

Observational Data:
We would like to note that some observational data on the questions we've identified exists within the materials that Zach and Monica sent out early this morning.

2017 municipal election in Minneapolis, MN (Population 420k):

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- Minneapolis experienced an over-vote rate (a voter assigning multiple candidates the same rank or voting for multiple candidates in a traditional election) of only 0.2%.
- Only 0.27% of votes skipped a ranking.
- 92% of voters classified RCV elections in Minneapolis as simple.
- 66% of voters supported continued use of RCV in future Minneapolis elections.

2018 municipal election in Santa Fe, NM (Population 85k):
- 15.7% of Santa Fe voters found RCV somewhat or very confusing while over 84% of voters found it not too or not at all confusing.
- Only 1% of voters reported that they were very unsatisfied with their voting experience, while 81% reported that they were very satisfied.
- Over 70% of Santa Fe voters supported using RCV in future municipal elections.
- Santa Fe experienced an increase of registered voter turnout from the previous 3 traditional elections (average of 29.1% turnout) in the 2018 RCV election (38% turnout).

2004 and 2006 municipal elections in San Francisco, CA (Population ~775k in 2006):
- Produced voided ballot rates slightly lower than previous traditional elections.
- Produced no noticeable difference in over-vote rates when compared to prior traditional elections.

2018 Maine U.S. House of Reps.
- From the 2016 traditional election to the 2018 RCV election the average voided vote rate decreased from 3.55% to 2.2% (Could be skewed due to 2016 being a presidential election).

Experimental Data:
I'd also like to draw your attention to an experiment and resulting academic paper that was produced by the University of Louisiana, Lafayette right before the 2020 election. Keep in mind this data is not observed through a real election, instead it was an artificial experiment examining the question of voting error across multiple ballot types. The experiment included 6,313 subjects and 12,616 cast ballots across 4 U.S. states.

We would encourage you to review the following sections in the academic paper.
1. The Experiment
2. Prior Findings and Expectations
3. The Experiment Results
4. Interpretation of Results

To summarize the results of the experiment:
- Both RCV and Grade ballot types resulted in lower percentage of voided votes that traditional ballot types: Traditional = 8% (6.9% invalid and 1.1% blank), RCV = 6.5% (5.7% invalid and 0.8% blank), and Grade = 5.8% (5.4% invalid and 0.4% blank). However, both RCV and Grade ballots resulted in a higher number of mismarked (at least one violation of ballot instructions), but not necessarily voided votes: Traditional = 6.9%, RCV = 15.4%, Grade = 8.8%.

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- Under each of the three ballot types, younger voters (age 18-34) tended to have the highest percentage of voided votes, followed by middle aged voters (age 35-54), while older voters (age 55+) tended to have the lowest number of voided votes.

- Across all ballot types white voters tended to have a lower percentage of voided votes than other race cohorts (black, Latino, Asian, other).

- Across all ballot types female voters tended to have a lower percentage of voided votes than male voters.