To: Charter Review Committee
From: Preston Jordan
Date: 21 April 2009

Re: At-large plurality election effects

Numerous, if not most, city councils and school boards are elected through at-large plurality elections. This is true of Albany's City Council and School Board. In such elections, voters are provided a number of votes equal to the number of seats and can cast one vote for each candidate of interest. The candidates with the most votes (a plurality) are elected to the available seats. This election method is also known as "bloc voting" or "first past the post."

At the last meeting of the Charter Review Committee, charts showing the results of the past four Albany City Council elections as well as of the elections of all the at-large city councils in Humboldt County in November 2008 were distributed. The results in the Albany elections were made anonymous. While a small amount of research would connect specific candidates to specific results, these results were made anonymous to promote consideration of the inherent effects of such elections rather than their partisan outcomes.

The analysis of the Humboldt County elections results distributed are the first such analysis of at-large plurality outcomes based on general election ballot level information in the history of the United States. This was made possible due to the work of volunteers and the participation of Humboldt County's Registrar in the Humboldt County Election Transparency Project. This project has made scanned images of all ballots cast available on the web along with image-processing software to decipher votes from these images and tables of the votes deciphered from each ballot.

The remainder of the memorandum discusses what can be learned from the results presented at the last meeting in terms of representation outcomes, as well as discussing some additional effects of plurality at-large elections.

Bullet Voting

Typically only the number of votes garnered by each candidate in plurality at-large elections are presented by government elections officials. These data affords calculation of the percentage of the total vote received by each candidate.

If all voters cast all the votes available to them, the percentage of voters supporting each candidate could also be calculated from these data. However, many voters do not cast all their available votes. They cast fewer votes. This is known as "bullet voting." The results from Humboldt County indicate up to half of the voters bullet voted.

In jurisdictions outside of Humboldt County, such as in Albany, the proportion of votes cast as bullet votes cast is unknown. Consequently it is impossible to calculate the number of voters participating in an election from the number of votes cast. While election officials do normally report the number of voters casting a ballot, this is not the same as the number of voters participating in a particular election appearing on a ballot. The latter is less than the former, and particularly so for local elections, which typically draw lower voter participation rates than county, state and federal elections on the same ballot.

A means around this is to utilize the number of votes cast regarding a simultaneous ballot measure in the same jurisdiction. A chart of the number of votes cast in office elections versus simultaneous measure elections distributed at the last meeting shows that almost as many or typically more voters participate in elections for major office (mayor and council) than in measure elections. These results were drawn from all municipal elections in Alameda County back to 2004 and all municipal elections in Humboldt in November 2008.

This provides a means for estimating voter participation in Albany elections back to 2002. This in turn allows estimating the proportion of voters casting a bullet vote. Like in Humboldt County, the estimate resulting from this approach indicates up to approximately half of the participating voters in the past four Albany Council elections cast bullet votes.

Anecdotally, voters choose to bullet vote for two main reasons. Their preference for candidates fewer than the number of available seats may be so strong that they do not want to risk electing a less preferred candidate by casting a vote for such. Alternatively, they may not feel sufficiently knowledgeable to use their full franchise.

Vote Share Versus Voter Support

The data available for the November 2008 Humboldt County election allows precise calculation of the percentage of voters supporting each candidate, and more interestingly the percentage of voters supporting winning candidates.

At-large plurality does not feature a threshold for election, such as the majority threshold required by many/most municipalities to fill a single seat office. The requirement for winning office is for a candidate's rank by vote percentage to be equal to or less than the number of seats available. The percentage of voter support required to gain office thus varies from election to election depending upon how many candidates are running for office and how many votes each candidate garners. In theory, candidates garnering voter support just more than 100% divided by the number of candidates can win depending upon how evenly the vote splits between candidates.

The Humboldt County results show a candidate was elected with the support of as few as 42.53% of the voters. The Albany estimates indicate three of the last ten winning candidates

garnered the support of about 45% of the voters, and six of the last ten garnered the support of less than a majority of voters.

Bloc Voting

At-large plurality elections allow the largest bloc of voters, whether a majority or not, to elect its representatives to a greater portion of the available seats than the bloc is a portion of the electorate. This diminishes or excludes representation for other groups. For this reason, at-large plurality voting has been struck down by the courts for use in some cities in the Central Valley under the California Voting Rights Act (see http://www.modbee.com/local/story/443042.html and http://articles.latimes.com/2009/jan/04/local/me-madera4 for instance).

The Humboldt County data allows the first ever definitive calculation of the prevalence and strength of voting blocs in actual elections. Voting blocs electing multiple winning candidates ranged from one fifth to more than two thirds of the electorate. In the most disproportional case, a voting bloc of 37.67% of the voters provided 74.5% of the support for one of its two winning candidates, helping to secure 100% of the available representation for this bloc. Five of twelve winning candidates in Humboldt County received more than half their support from voting blocs that also elected another winning candidate. These blocs constituted just 20% and 40% of the voters.

Due to the lack of ballot level data in Alameda County, there is no means to perform similar calculations for Albany's elections. There is no reason to believe Albany's City Council and School Board elections do not follow similar patterns, though. In particular, the 2006 City Council election was generally recognized as having above average polarization with two pairs of popularly perceived diametrically opposed candidates. One pair of candidates won both available seats. The estimated percent voter support for each candidate suggests that a minority voting bloc elected both these candidates, and provided an even higher percentage of one of the candidate's support than the highest measured in Humboldt County. This is conjectural, but illustrates the difficulty of truly understanding the outcome of Albany's elections given the available information.

Second Preference Voting

Another widely recognized consequence of plurality elections, whether they are to fill a single or multiple seats, is that a vote for a preferred candidate can cause the election of a least preferred candidate as compared to a vote cast for the second preferred candidate. This is because the vote for the second preferred candidate could cause their election. In this manner, voters can hurt their own interests by voting for their most preferred candidate.

The strength of this effect in practice cannot be measured from election data alone, and therefore the charts handed out at the last meeting do not touch on this consequence of at-large plurality

voting. Some perspective on the prevalence of this effect can be garnered from comparison of polling data to election data, but even this is colored by voters' knowledge of how voting for their preferred candidate can be against their interest in some circumstances. This is beyond the scope of the current analysis, but is a generally recognized aspect of plurality voting. For instance, this effect is referred to by some as "vote for the lesser of two evils," which means vote for the more preferred of two less preferred but more popular candidates.

Vote Splitting

Plurality elections also create the prospect of split voting. This occurs when more candidates with similar positions run than seats available. In this case supportive voters spread their votes across these candidates at the risk of none of them being elected.

The 2008 Albany Council election offers a possible example of the impact of vote splitting. Five candidates came within 400 votes of each other, estimated as 7% of the vote. Of these five candidates, four appeared to have broad similarities in the platforms they put forward. This was evidenced by these four candidates garnering endorsement by the Green Party (although other groups only endorsed three of these candidates).

Only one of these four candidates won the election. While it is again highly conjectural, if only three of these four candidates had run the probability seems high that two of these candidates might have won office due to the aggregation of voter support.

A more complex analysis of ballot level data than provided in the charts distributed at the last meeting could provide some perspective on the prevalence of vote splitting in at-large plurality elections. This would underestimate the impact of the prospect of vote splitting, however, because it would ignore the role of this prospect in determining how many and which candidates run.

Candidates are aware of the phenomena of vote splitting and factor it into their decision whether to run. For instance, at least one potential candidate for the Albany City Council has confirmed that the risk of vote splitting was a significant factor in their choosing not to run, despite garnering significant voter support in previous elections.

It may seem that the stronger candidates would always choose to run, but this presumes the outcome ahead of the election. The purpose of an election is to determine which candidates are stronger. The process of campaigning leading up to an election is often dynamic with initially strong candidates becoming less popular and initially weaker candidates gaining voter support and winning.

For many elections, such as in Albany, the deadline to file for candidacy is in advance of the active campaign phase. A prospective candidate's decision not to file at this time based on vote

splitting considerations denies voters a greater range of choice and stilts electoral competition. Such competition is the best process for eliciting an understanding of the desires of the broadest section of the electorate and putting these desires into action. Indeed, the process of competitive elections is at the heart of democracy.

Candidate avoidance of vote splitting is evident in the ratio of candidates to seats. Of the four past elections in Albany analyzed, three had twice as many candidates as seats and one had fewer than twice as many candidates as seats. Of the five elections in Humboldt County analyzed, two had twice as many candidates as seats and two had less than twice as many candidates as seats. A ratio of two or less generally minimizes the risk of vote splitting. Only one election, out of the nine analyzed, had a candidate to seat ratio greater than two.

Like the "lesser of two evils" effect for voters, a candidate's choice to run can harm their own interests in at-large plurality systems due to vote splitting. The choice to run can diminish the prospect of any candidate with a similar perspective from winning. Thus candidates sharing similar views tend to preselect among themselves who will run, and thus who voters will get to consider. This selection is not taken through a formal process of any sort, but is rather informal and often likely involves little discussion among potential candidates. For instance, prospective candidates follow who has filed to run and at what point in time in making their own determination whether to file.

In this manner, vote splitting creates a significant component of electoral determination made from informally from the top, meaning by the candidates during the election filing period, than formally from the bottom, meaning by the voters through the election. This is counter to the constitutional principal of power deriving from the people.