

# Treasure State 2020 Pre-Election Poll

## METHODS NOTES

---

### Survey Information

**Data collection period:** September 14 – October 2, 2020

**Data collected by:** Human Ecology Learning & Problem Solving (HELPS) Lab  
Montana State University-Bozeman

**Researchers:** Dr. David C. W. Parker, Dr. Eric D. Raile, and Dr. Elizabeth A. Shanahan  
Department of Political Science  
Montana State University-Bozeman

---

### Brief Description of Survey Methods

The Treasure State 2020 Pre-Election Poll was conducted by the HELPS Lab of Montana State University-Bozeman between September 14 and October 2, 2020. The population for the poll was Montana voters who registered by August 20, 2020, and were deemed active by the Montana Secretary of State. We stratified the sample by state house districts, and then drew a random sample of 9,000 voters proportionally from these strata. Sampled individuals received a questionnaire by mail and were asked to return the questionnaire via a prepaid business reply envelope. Respondents returned 1,787 surveys, a response rate of 20.2% based on 8,836 deliverable addresses.

At the time of obtaining the voter file, the population size was 611,920. We adjusted the overall survey margin of error (MoE) for design effect owing to our subsequent use of weights in calculating results. This adjustment has the consequence of making the margin of error substantially larger than it otherwise would be. Our subsample for presenting results, after screening out non-interested and unlikely voters, was 1,615 individuals. This resulted in a MoE of **+/- 3.9** percentage points, using a confidence level of 95% and a response distribution of 50% (the most conservative estimate) with the given population size. We note that this figure is an overall approximation given sampling stratification and different response options and response patterns for specific questions. We have combined certain categories in presenting results to avoid very small cell sizes.

This poll was funded by over 100 individual donors to the Montana State University Alumni Foundation and by Montana State University. If you have questions concerning the survey methods, please contact the HELPS Lab ([helpslab@montana.edu](mailto:helpslab@montana.edu)).

## Use of Mail Questionnaires

The researchers chose to distribute and collect questionnaires via postal mail for a number of reasons. Postal surveying tends to be less intrusive and more convenient for respondents, cheaper, and less labor intensive than surveying by phone. Further, mailing addresses were available for the entire population, while phone numbers were not. Postal surveys tend to produce a better response rate than web or web-mail hybrid data collection methods. A high initial response rate was important given the single contact with potential respondents. A downside of using this method is that it requires collection of data over a longer time period, so events happening during the data collection period might change the results in the aggregate.

## Item Language

The language for items on the questionnaire was largely based on standard items used by organizations that include the American National Election Study, the Pew Research Center, Gallup, and the General Social Survey. The researchers randomly sorted potential respondents into three groups for distribution of three different versions of the questionnaire. These different versions changed the order in which political candidates and figures appeared, with an effort made toward balancing the partisan ordering of options within and across questionnaires.

## Weighting Procedures

To mitigate non-response bias in the sample, the researchers chose to weight the sample using iterative proportional fitting, or raking. Raking generates weights that adjust the sample in subsequent analyses so that the sample more closely resembles the target population, in this case active registered voters in Montana. Weights are generated by forcing sample margins to approximate population margins for key demographic characteristics. The researchers generated weights using age, education, gender, media market, and 2016 presidential vote choice. Population margins for education and gender were obtained using data from the U.S. Census Bureau's 2018 Current Population Survey Voter Supplement. Population margins for 2016 presidential vote choice were based on vote returns retrieved from the Montana Secretary of State's website. Population margins for media market and age came from public data also available from the Montana Secretary of State.

## HELPS Lab Information

The HELPS Lab is a fee-for-service facility at Montana State University-Bozeman that enables the collection of high-quality data for researchers employing a variety of social and behavioral methods. The HELPS Lab is open to the broader community of researchers and organizations, with an emphasis on providing tools necessary for researchers to study interactions between human systems and other complex phenomena like ecosystems and public health. The HELPS Lab facilitates the collection of high-quality data via web, mail, personal, and phone surveys; computer-based experiments; interviews; and focus groups. The HELPS Lab also handles data entry, cleaning, and documentation, as well as tasks such as transcription and assistance with sampling.