



at the UNIVERSITY of CHICAGO

### **AP VoteCast Methodology**

AP VoteCast is a survey of the American electorate conducted in all 50 states by [NORC at the University of Chicago](#) for [The Associated Press](#) and [Fox News](#). The survey of an estimated 120,000 registered voters is conducted Oct. 31 to Nov. 6, concluding as polls close on Election Day.

AP VoteCast combines interviews with a random sample of registered voters drawn from state voter files; with self-identified registered voters conducted using NORC's probability-based [AmeriSpeak®](#) panel, which is designed to be representative of the U.S. population; and with self-identified registered voters selected from nonprobability online panels. Interviews are conducted in English and Spanish. Respondents receive a small monetary incentive for completing the survey. Participants selected from state voter files are contacted by phone and mail, and have the opportunity to take the survey by phone or online.

### **VoteCast National Survey**

The VoteCast survey of voters and nonvoters nationwide is compiled from results of the 50 state-based surveys and a nationally representative survey of about 3,000 registered voters conducted on the probability-based AmeriSpeak panel. It includes approximately 28,000 probability interviews completed online and via telephone, and 95,000 nonprobability interviews completed online. The margin of sampling error is estimated to be plus or minus 0.8 percentage points for voters and 1.8 percentage points for nonvoters.

### **VoteCast State Surveys**

In 25 states, VoteCast is based on roughly 1,000 probability-based interviews conducted online and via phone, and roughly 3,000 nonprobability interviews conducted online. In these states, the margin of sampling error is estimated to be plus or minus 3.5 percentage points for voters and 8.8 percentage points for nonvoters.

In 25 additional states, VoteCast is based on between 750 and 1,000 nonprobability interviews conducted online. In these states, the margin of sampling error is estimated to be plus or minus 8.7 percentage points for voters and 19.2 percentage points for nonvoters.

Although there is no statistically agreed upon approach for calculating margins of error for nonprobability samples, these margins of error are estimated using a calculation called the root mean squared error and other statistical adjustments. Unlike a standard error, a root mean square error does not easily translate into a traditional statistical confidence interval for the vote count for an individual candidate or the vote differential between two candidates. However, a mean square error is a measure of uncertainty that incorporates the variability associated with the poll estimates, as well as the bias associated with the estimates derived from a nonprobability sample.

As with all surveys, VoteCast is subject to multiple sources of error, including from sampling, question wording and order, and nonresponse.

## **Sampling Details**

### *Probability-based Registered Voter Sample*

In each of the 25 states in which VoteCast includes a probability-based sample, NORC obtained a sample of registered voters from [Catalist LLC](#)'s registered voter database. This database includes demographic information, as well as addresses and phone numbers for registered voters, allowing potential respondents to be contacted via mail and telephone. The sample was stratified by state, partisanship, age and race. In addition, NORC attempted to match sampled records to a registered voter database maintained by [L2](#), which provided additional phone numbers and demographic information. After the matching, NORC had phone numbers for 86 percent of sampled records, including cell phone numbers for 60 percent of records with a phone number. Prior to dialing, all probability sample records are mailed a postcard inviting them to complete the survey either online using a unique PIN or via telephone by calling a toll-free number. Postcards are addressed by name to the sampled registered voter if that individual is under age 35; postcards are addressed to "registered voter" in all other cases. Telephone interviews are conducted with the adult that answers the phone following confirmation of registered voter status in the state.

### *Nonprobability Sample*

Nonprobability participants are provided via the Harris Panel, including members of its third-party panels. Digital fingerprint software and panel-level ID validation is used to prevent respondents from completing the VoteCast survey multiple times.

### *AmeriSpeak Sample*

During the initial recruitment phase of the AmeriSpeak panel, randomly selected U.S. households were sampled with a known, non-zero probability of selection from the NORC National Sample Frame and then contacted by U.S. mail, email, telephone and field interviewers (face-to-face). The panel provides sample coverage of approximately 97 percent of the U.S. household population. Those excluded from the sample include people with P.O. Box-only addresses, some addresses not listed in the USPS Delivery Sequence File and some newly constructed dwellings.

## **Weighting Details**

VoteCast employs a four-step weighting approach that combines the probability sample with the nonprobability sample, and refines estimates at a subregional level within each state. The 50 state surveys and the AmeriSpeak survey are weighted separately and then combined into a survey representative of voters in all 50 states.

### *State Surveys*

First, weights are constructed separately for the probability sample (when available) and the nonprobability sample for each state survey. These weights are adjusted to population totals to correct for demographic imbalances of the responding sample compared to the population of

registered voters in each state. The adjustment targets are derived from a combination of data from the U.S. Census Bureau's November 2016 [Current Population Survey](#) Voting and Registration Supplement, Catalist's voter file and the Census Bureau's 2017 [American Community Survey](#). Prior to adjusting to population totals, the probability-based registered voter list sample weights are adjusted for differential non-response related to factors such as availability of phone numbers, age, race and partisanship.

Second, all nonprobability sample respondents receive a calibration weight. The calibration weight is designed to ensure the nonprobability sample is similar to the probability sample in regard to variables that are predictive of vote choice, such as partisanship or presidential approval, that cannot be fully captured through the prior demographic adjustments. The calibration benchmarks are based on county level estimates from a multilevel regression and poststratification model that incorporates all probability and nonprobability cases nationwide.

Third, all respondents in each state are weighted to improve estimates for substate geographic regions. This weight combines the weighted probability sample (if available) and the calibrated nonprobability sample, and then uses a small area model to improve the estimate within subregions of a state.

Fourth, the survey results are weighted to the actual vote count following the completion of the election. This weighting is done in 10-30 subregions within each state.

#### *National Survey*

The national survey is weighted to combine the 50 state surveys with the nationwide AmeriSpeak survey. Each of the state surveys is weighted as described. The AmeriSpeak survey receives a nonresponse-adjusted weight that is then adjusted to national totals for registered voters derived from the U.S. Census Bureau's November 2016 Current Population Survey Voting and Registration Supplement, the Catalist voter file and the Census Bureau's 2017 American Community Survey. The state surveys are further adjusted to represent their appropriate proportion of the registered voter population for the country and combined with the AmeriSpeak survey. After all votes are counted, the national data file is adjusted to match the national vote for members of the U.S. House of Representatives within each state.