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Study Methodology

AP VoteCast is a survey of the American electorate conducted by NORC at the University of Chicago for The Associated Press and Fox News. The survey is funded by AP. In 2024, AP VoteCast covered presidential primary elections in three states across three election dates. For all three elections, interviews were conducted via phone and web. The surveys concluded when polls closed on Election Day.

- The Iowa Republican caucus on January 15: The survey was conducted January 8 to January 15, 2024.
- The New Hampshire Republican and Democratic primaries on January 23: The survey was conducted January 18 to January 23, 2024
- The South Carolina Republican primary on February 24: The survey was conducted February 20 to February 24, 2024.

Respondents who completed the survey three days or more before Election Day (for example, January 8-12 for Iowa) were asked if they would be willing to be re-contacted for a follow-up survey. Those who consented were contacted during the final three days of the field period and re-asked their intent to vote and vote choice. The vote intent and vote choice provided in the re-contact survey were used for the final estimates. If a respondent did not complete the re-contact survey, their original intent to vote and vote choice responses were retained. Respondents were re-contacted using their preferred mode -- a call from a NORC interviewer or a text or email with a link to complete the short re-contact survey online.

AP VoteCast combines a random sample of registered voters drawn from state voter files with a sample of self-identified registered voters selected from nonprobability online panels. Interviews with the probability and nonprobability samples were conducted in English and Spanish. Respondents received a small monetary incentive for completing the survey. Participants in the probability sample selected from state voter files were contacted by phone and mail and had the opportunity to take the survey by phone or online. All interviews from nonprobability sample sources were completed online.

VoteCast interviewed both voters and non-voters in the presidential primaries. Eligibility to complete the survey was based on the type of caucus or primary held in the state. There were three types of caucuses/primaries:
• Iowa (Closed): Though Iowa has a closed caucus, state residents are allowed to register to vote or change their party registration at the caucus. Because of this, all registered voters were eligible for the survey. They were asked whether they intended to vote in the Democratic caucus, the Republican caucus, or neither. Those who said they intended to vote in the Republican caucus completed the full survey. Those who said they intended to vote in the Democratic caucus or did not intend to vote in either completed a set of demographic questions for weighting purposes.

• New Hampshire (Semi-closed): In semi-closed states, respondents were first asked if they are registered as a Democrat, Republican, in another party, or not affiliated with a party. Those who said they were not affiliated with a party were then asked whether they would vote in the Democratic primary or Republican primary. Those registered as Democrats or those who said they would vote in the Democratic primary were eligible and completed the full survey, including their vote choice in the Democratic primary. Those registered as Republicans or those who said they would vote in the Republican primary were eligible and completed the full survey, including their vote choice in the Republican primary. Those registered in another party or did not respond to the registration or party primary questions were not eligible for the survey.

• South Carolina (Open): In open states, all registered voters were eligible. Respondents were first asked if they voted in the Democratic primary election, which was held a week before the Republican primary election. Those who said they voted in the Democratic primary completed a set of demographic questions for weighting purposes. Those who did not respond to the party primary question were not eligible for the survey. All others were eligible and completed the Republican primary full survey.

The table below shows the total completed probability interviews among registered voters classified as eligible based on the type of primary or caucus.
While the numbers above include those who were only asked the demographic questions for weighting purposes, the public dataset only includes voters and nonvoters who were asked the full survey. Voters were defined using a likely voter model for each state. Appendix A includes the likely voter model definition for each state.

For those who were screened into the survey as eligible based on being a registered voter in the state, the interview completion rates were 93.5% for the probability sample drawn from the state voter files and 94.8% for the nonprobability sample. Due to quality control checks, 1.6% of respondents were removed from the final sample of completed interviews prior to weighting.

The following tables reflect the number of interviews with voters and nonvoters who completed the full survey.

<table>
<thead>
<tr>
<th>State</th>
<th>Interviews with Primary Voters and Non-Voters</th>
<th>Probability Interviews</th>
<th>Non-Probability Interviews</th>
<th>Web Interviews</th>
<th>Phone Interviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iowa</td>
<td>2,658</td>
<td>1,717</td>
<td>941</td>
<td>2,440</td>
<td>218</td>
</tr>
<tr>
<td>New Hampshire (GOP)</td>
<td>2,174</td>
<td>1,547</td>
<td>627</td>
<td>1,932</td>
<td>242</td>
</tr>
<tr>
<td>New Hampshire (Dem)</td>
<td>1,313</td>
<td>953</td>
<td>360</td>
<td>1,116</td>
<td>197</td>
</tr>
<tr>
<td>South Carolina</td>
<td>3,122</td>
<td>2,400</td>
<td>722</td>
<td>2,848</td>
<td>274</td>
</tr>
</tbody>
</table>
Although there is no statistically agreed upon approach for calculating margins of sampling error for nonprobability samples, these margins of sampling error are estimated using a measure of uncertainty that incorporates the variability associated with the poll estimates, as well as the variability associated with the survey weights as a result of calibration. After calibration, the nonprobability sample yields approximately unbiased estimates.

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 three states, NORC obtained a sample of registered voters from Catalist LLC’s registered voter database. This database included demographic information, addresses, and phone numbers for registered voters, allowing potential respondents to be contacted via mail and telephone. Noncoverage is limited to registered voters who register to vote immediately prior to the election (e.g., states with same day registration laws) and are therefore not on the voter rolls at the time of sampling.

The sample was stratified by state, partisanship (either party affiliation on the voter file or the Catalist vote choice index variable), past primary participation, age, and race. In addition, NORC attempted to match sampled records to a registered voter database maintained by L2, which provided additional phone numbers. After the matching, NORC had phone numbers for 90% of sampled records, including cell phone numbers for 87% of records with a phone number. Prior to dialing, all probability sample records were 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 were addressed by name to the sampled registered voter if that individual is under age 35; postcards were addressed to “[STATE] Registered Voter” in all other cases. For sampled voters who did not respond online, additional outbound dialing was conducted for sampled records based on their predicted response propensity. Telephone interviews were conducted with the adult who answered the phone. Both online and telephone respondents provided confirmation of registered voter status in the state.

Nonprobability Sample

Nonprobability participants were provided by Dynata, Cint, and Prodege, including members of their third-party panels. Beyond each sample provider’s protocols described below, NORC also applies a digital fingerprint software and panel-level ID validation to prevent respondents from completing the VoteCast survey multiple times. Nonprobability respondents provided confirmation of their registered voter status in the state. A response rate cannot be calculated for nonprobability samples. While there is no way to quantify the size of the non-covered population for an opt-in panel, the primary population least likely to be included was those without internet access. Interviews were conducted in English and Spanish.

Dynata used router technology to recruit participants, and all available panelists age 18 and older in each state were recruited. In Iowa, among the 595 panelists who touched the pre-screener instrument, 315 went on to complete the full survey. In New Hampshire, among the 790 panelists who touched the pre-screener instrument, 494 went on to complete the full survey. In South Carolina, among the 652 panelists who touched the pre-screener instrument, 211 went on to complete the full survey. Panelists recruited for a specific state were only allowed to complete the survey if they said they were registered to vote in that state. Dynata’s system used built-in technology that uses digital fingerprinting, geolocation clues, and checks at enrollment to confirm identity and to identify suspicious behavior to prevent respondents from completing the survey more than once.

Cint’s suppliers invited respondents to the survey using email invites and panelist recruitment. Before sending them into the survey, Cint targeted and pre-screened respondents age 18 and older on the basis of registered voter status and state location using zip codes. In Iowa, among the 945 panelists who touched the pre-screener instrument, 328 went on to complete the full survey. In New Hampshire, among the 1,070 cases who touched the pre-screener instrument, 156 went on to complete the full survey. In South Carolina, among the 1,099 panelists who touched the pre-screener instrument, 158
went on to complete the full survey. Respondents recruited for a specific state were only allowed to complete the survey if they said they were registered to vote in that state. To ensure the final sample did not include any respondents who completed the survey more than once, Cint removed duplicates by participant ID and cookies.

Prodege invited its members to the survey using invitations sent by email and through the panelist portal. Before sending them into the survey, Prodege targeted and pre-screened respondents age 18 and older on the basis of age, gender, education, income, race/ethnicity, state, and registered voter status. In Iowa, among the 1,345 panelists who touched the pre-screener instrument, 298 went on to complete the full survey. In New Hampshire, among the 755 panelists who touched the pre-screener instrument, 337 went on to complete the full survey. In South Carolina, among the 1,470 panelists who touched the pre-screener instrument, 353 went on to complete the full survey. Respondents recruited for a specific state were only allowed to complete the survey if they said they were registered to vote in that state. To prevent respondents from completing more than once, Prodege verified panelists using email double opt-in verification, physical address verification, device fingerprinting, mobile verifications, and CAPTCHA while continuously monitoring their users to avoid panelists duplication. From there, they managed how many surveys were sent to each user, and only allowed each user to enter the survey once.

**Weighting Details**

VoteCast employed a four-step weighting approach for each of the three state surveys.

First, weights were constructed separately for the probability sample and the nonprobability sample. These weights were adjusted to population totals to correct for demographic imbalances of each sample compared with the population of registered voters eligible to vote in the primary contest. The adjustment targets were derived from a combination of data from the U.S. Census Bureau’s November 2022 Current Population Survey Voting and Registration Supplement, the Catalist voter file, the 2022 AP VoteCast Survey, and the Census Bureau’s 2022 American Community Survey. The variables used were tailored to each state based on whether the state was conducting an open, semi-closed, or closed primary.

In South Carolina, all registered voters were eligible to participate, while in New Hampshire and Iowa eligibility depended on party registration. Appendix B lists which variables were used in each state.
Prior to adjusting to population totals, base weights for the probability sample were created as the inverse of the probability each registered voter was sampled from the registered voter list.

Second, non-probability sample respondents received a calibration weight. The calibration weight was designed to ensure the non-probability sample was similar to a probability sample in regard to variables that were predictive of vote choice that cannot be fully captured through the prior demographic adjustments. The calibration benchmarks were based on estimates derived from the probability sample. Appendix C lists which calibration variables were used in each state.

Third, all respondents in each state were weighted to improve estimates for substate geographic regions. This weight combined the weighted probability sample and the calibrated non-probability sample, and then used a small area model to improve the estimates within subregions of a state. We created 8 to 20 regions (county groupings) for each state based on vote choice in previous primary elections in each county. We then used these groupings to generate model-based estimates of vote choice among likely voters.

For each state, there was a separate small area model predicting percent of vote share for each main candidate in the race. The combined sample weight was ratio adjusted to agree with the small area estimates by region (within state) and vote choice (for the main candidates); this ratio adjustment only applied to likely voters with a known vote choice. All other respondents retained their original combined sample weight.

The following variables were used as potential covariates in the models: 2016 Republican Presidential primary election results for Republican elections, 2020 Democratic Presidential primary election results for Democratic elections, population density, median income, percent below poverty line, percent unemployed, percent college degree, portion on public assistance, percent insurance coverage, percent non-Hispanic white, percent non-Hispanic Black, percent Hispanic, percent citizen, percent 18-34 years old, percent 45-64 years old, percent 65 and older, percent living in a rural area, percent living in a suburban area, percent renters, and percent who have not moved in last year. For each state, we included in the models at least one political measure and one measure of socioeconomic status.

Fourth, the survey results were weighted to the actual vote count following the completion of the election. This weighting was done in 8-20 regions (county groupings) within each state.
Using Weights

AP VoteCast is designed to be analyzed using weighted data. The data file includes different weights for different types of analyses. For this dataset, all analysis should be done at the state level (e.g., percent of South Carolina primary voters who voted for Donald Trump). The weights are not designed to be used for overall measures across states.

To reproduce estimates in each state, limit analysis to LIKELYVOTER=1, the state of interest (using P_STATE) and cases that are not missing REPVOTE2024 (for Republican elections) or DEMVOTE2024 (for Democratic elections).

The data file includes weights that represent results at two different stages of data collection.

- **FINALVOTE_STATE_WEIGHT** should be used to produce estimates that are adjusted to reflect the final vote counts with demographic, geographic, and calibration adjustments. Certified vote count data was provided by AP. AP VoteCast recommends using these weights for most analyses.

- **POLLCLOSE_STATE_WEIGHT** can be used to produce estimates prior to any adjustments to final vote counts. These weights are provided for transparency of the methodology to permit comparison of the survey’s estimates at poll close but prior to adjusting the survey outcome to match the final vote count. These weights include demographic, geographic, and calibration adjustments.
About The Associated Press-NORC Center for Public Affairs Research

The AP-NORC Center for Public Affairs Research taps into the power of social science research and the highest quality journalism to bring key information to people across the nation and throughout the world.

- The Associated Press is an independent global news organization dedicated to factual reporting. Founded in 1846, AP today remains the most trusted source of fast, accurate, unbiased news in all formats and the essential provider of the technology and services vital to the news business. More than half the world's population sees AP journalism every day. www.ap.org.
- NORC at the University of Chicago is one of the oldest and most respected, objective social science research institutions in the world. www.norc.org.

The two organizations have established The AP-NORC Center to conduct, analyze, and distribute social science research in the public interest on newsworthy topics, and to use the power of journalism to tell the stories that research reveals.

Contact

For more information, visit www.apnorc.org or email info@apnorc.org.
Appendix A – Likely Voter Models

Respondents are classified as voters based on the following criteria:

- The respondent says they will definitely vote to LVB; or
- The respondent says they will probably vote to LVB, and say they voted either in the 2022 midterm election or the 2020 presidential election; or
- The respondent says they already voted to LVB.
Appendix B – Weighting Variables by State

Iowa – Closed state with same-day party registration: party registration*age*gender, party registration*race/ethnicity, neighborhood education, self-reported party identification*education, age*gender (geographic level), number of registered voters in the household, likely voter*party registration, likely voter*self-reported party identification.

New Hampshire – Semi-closed state with party registration: party registration*race, neighborhood education, self-reported party identification*education, gender (geographic level), number of registered voters in the household, party registration*age*2022 primary election (Republican primary for the Republican election and Democratic primary for the Democratic election) participation.

South Carolina – Open state: self-reported party identification*age*gender, age*gender*2022 Republican primary election participation, self-reported party identification*race/ethnicity, race/ethnicity*2022 Republican primary election participation, neighborhood education, self-reported party identification*education, self-reported party identification*geographic region.

2 These variables were used for final forced weights. Poll close weights excluded the 2022 Republican primary election participation dimensions.
Appendix C – Calibration Variables by State

Iowa – Likely voter*(age*gender, race/ethnicity, education*self-reported party identification, geographic region*age*gender, number of registered voters in the household, party registration, self-reported party identification).

New Hampshire (GOP) – Does/does not consider self to be a supporter of the MAGA movement; does/does not think Joe Biden was legitimately elected president.

New Hampshire (Dem) – Political ideology; opinion on whether abortion should be legal/illegal.

South Carolina – None