

## Study Methodology

This survey was conducted by The Associated Press-NORC Center for Public Affairs Research, with funding from The Energy Policy Institute at the University of Chicago (EPIC). Staff from NORC at the University of Chicago, The Associated Press, and EPIC collaborated on all aspects of the study.

Data were collected using both probability and non-probability sample sources. Interviews for this survey were conducted between September 8-24, with adults age 18 and over representing the 50 states and the District of Columbia.

The probability sample source is AmeriSpeak®, NORC's probability-based panel designed to be representative of the U.S. household population. During the initial recruitment phase of the 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.

Panel members were randomly drawn from AmeriSpeak, and 2,174 completed the survey – 2,034 via the web and 140 via telephone. Interviews were conducted in English. The final stage completion rate is 29.3 percent, the weighted household panel response rate is 19.10 percent, and the weighted household panel retention rate is 75.1 percent, for a cumulative response rate of 4.2 percent. The overall margin of sampling error for the AmeriSpeak sample is +/-2.9 percentage points at the 95 percent confidence level, including the design effect.

Dynata provided 3,294 non-probability interviews with adults age 18 and over. The Dynata sample was derived based on quotas related to age, race and ethnicity, gender, and education. Interviews were conducted in English and via the web only. For panel recruitment, Dynata uses invitations of all types including email invitations, phone alerts, banners, and messaging on panel community sites to include people with a diversity of motivations to take part in research. Because non-probability panels do not start with a frame where there is known probability of selection, standard measures of sampling error and response rates cannot be calculated.

Once the sample has been selected and fielded, and all the study data have been collected and made final, a raking process is used to adjust for any survey nonresponse as well as any noncoverage or under and oversampling in both probability and non-probability samples resulting from the study specific sample design. Raking variables for both the probability and nonprobability samples included age, gender, census region, race/ethnicity, and education. Population control totals for the raking variables were obtained from the 2021 Current Population Survey. The weighted data reflect the U.S. population of people age 18 and over.

In order to incorporate the nonprobability sample, NORC used TrueNorth calibration, an innovative hybrid calibration approach developed at NORC based on small area estimation methods in order to explicitly account for potential bias associated with the nonprobability sample. The purpose of TrueNorth calibration is to adjust the weights for the nonprobability sample to bring weighted distributions of the nonprobability sample in line with the population distribution for characteristics correlated with the survey variables. Such calibration adjustments help to reduce potential bias, yielding more accurate population estimates.

The weighted AmeriSpeak sample and the calibrated nonprobability sample were used to develop a small area model to support domain-level estimates, where the domains were defined by race/ethnicity, age, and gender. The dependent variables for the models were:

- Q6C: How much influence, if any, does each of the following individuals or groups have when it comes to informing your views on climate change? Religious leaders

- Q5A: In the past five years, how much influence, if any, have the following had on your views about the science on climate change? Recent extreme weather events, like hurricanes, droughts, floods, unusual heat, or wildfires
- Q16C: Transportation is the largest source of U.S. greenhouse gas emissions. Do you support, oppose, or neither support nor oppose the following policies to shift U.S. vehicles from gasoline engines to electric ones? Providing tax incentives, cash rebates, or other financial incentives to encourage consumers to buy more electric vehicles
- Q1B: How important are the following issues to you personally? Health care

These were found to be key survey variables, in terms of model fit. The model included covariates, domain-level random effects, and sampling errors. The covariates were external data available from other national surveys such as health insurance, internet access, voting behavior, and housing type from the American Community Survey (ACS) or the Current Population Survey (CPS).

Finally, the combined AmeriSpeak and nonprobability sample weights were derived such that for the combined sample, the weighted estimate reproduced the small domain estimates (derived using the small area model) for key survey variables.

The overall margin of error for the combined sample is +/- 1.7 percentage points at the 95 percent confidence level, including the design effect. The margin of sampling error may be higher for subgroups.

For more information, email [info@apnorc.org](mailto:info@apnorc.org).

### **About the Associated Press-NORC Center for Public Affairs Research**

Celebrating its 10<sup>th</sup> anniversary this year, 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 (AP) 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. Online: [www.ap.org](http://www.ap.org)
- NORC at the University of Chicago is one of the oldest and most respected, independent research institutions in the world.

The two organizations have established The AP-NORC Center for Public Affairs Research 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. In its 10 years, The AP-NORC Center has conducted more than 250 studies exploring the critical issues facing the public, covering topics like health care, the economy, COVID-19, trust in media, and more. Learn more at [www.apnorc.org](http://www.apnorc.org)

### **About the Energy Policy Institute at the University of Chicago (EPIC)**

The Energy Policy Institute at the University of Chicago (EPIC) is confronting the global energy challenge by working to ensure that energy markets provide access to reliable, affordable energy, while limiting environmental and social damages. We do this using a unique interdisciplinary approach that translates robust, data-driven research into real-world impacts through strategic outreach and training for the next generation of global energy leaders.

[epic.uchicago.edu](http://epic.uchicago.edu) @UChiEnergy