

TECHNICAL OVERVIEW OF THE AMERISPEAK® PANEL NORC'S PROBABILITY-BASED HOUSEHOLD PANEL

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Funded and operated by NORC at the University of Chicago, AmeriSpeak® is a probability-based panel designed to be representative of the US household population. Randomly selected US households are sampled with a known, non-zero probability of selection from the NORC National Frame and address-based sample, and then contacted by US mail, telephone interviewers, overnight express mailers, and field interviewers (face to face). AmeriSpeak panelists participate in NORC studies or studies conducted by NORC on behalf of NORC's clients.

In 2017, the AmeriSpeak Panel expanded to 27,000 households and will expand to 30,000 households in 2018. The AmeriSpeak Panel includes sample support for surveys of various segments through AmeriSpeak Latino, AmeriSpeak Teen, and AmeriSpeak Young Adult (which includes an oversample of African Americans, Hispanics, and Asians age 18-34). AmeriSpeak also supports large-sample size surveys and surveys of low-incidence populations through AmeriSpeak Calibration, which combines probability-based AmeriSpeak and non-probability online samples using calibrating statistical weights derived from AmeriSpeak.

Sample Frame

In order to provide a nationally representative sample, AmeriSpeak leverages the NORC National Frame, which provides sample coverage for over 97 percent of the U.S. households. The 2010 National Frame used a two-stage probability sample design to select a representative sample of households in the United States. The first stage—the sampling unit—is a National Frame Area (NFA), which is either an entire metropolitan area (made up of one or more counties) or a county (some counties were combined so that each NFA contains a population of at least 10,000). The largest NFAs with a population of at least 1,543,728 (0.5 percent of the 2010 Census U.S. population) were selected with certainty; these areas have a high-population density, and are dominated by tracts with street-style addresses. These areas contain 56 percent of the population within 8 percent of the geographic area of the United States. The remaining areas were stratified into areas where street-style addresses predominate, and the remaining areas, which are less likely to have street-style addresses. The latter stratum (“rural” areas) comprises 81 percent of the geographic area, but only 14 percent of the population.

Within the selected NFAs, the second stage sampling unit is a segment, defined either in terms of Census tracts or block groups, containing at least 300 housing units according to the 2010 Census. A stratified probability sample of 1,514 segments was selected with probability proportional to size. For most of the 1,514 segments, the U.S. Postal Service Delivery Sequence File (DSF) provided over 90 percent coverage of the segments in terms of city-style addresses that are geo-codeable. For the 123 segments where the DSF provided insufficient coverage, we enhanced the DSF address list with in-person listing. The National Frame contains almost 3 million households, including over 80,000 rural households added through the in-person listing.

The National Frame involves addresses in almost every state. For the remaining states, AmeriSpeak added some address-based sampling (ABS) addresses in 2016 and 2017 from the USPS DSF to assure AmeriSpeak sample representation for all US States and Washington, DC.

In 2017, a targeted address-based sample was added to AmeriSpeak recruitment in order to develop a new Latino Panel with adequate representation of Spanish-language-dominant Hispanics. Census tracts with high incidence (at least 30%) of Spanish-dominant Hispanics were targeted for this recruitment. Furthermore, within these Census tracts, households that were flagged as Hispanic based on consumer vendor data (that are typically used for direct-mail marketing) were oversampled. This new AmeriSpeak Latino Panel contains approximately 5,400 Hispanic panelists with 24% of those panelists being Spanish-language dominant. As of August 2017, 13% of AmeriSpeak Panel (including the Latino Panel) recruited adults were sourced from the ABS and 87% from the National Frame. Proper weights allow the full use of the combined sample.

Sample Selection for Panel Recruitment

The 2014-2017 AmeriSpeak Panel sample consists of nationally representative housing units drawn from the 2010 NORC National Sample Frame and 14% from address-based sampling (which was primarily to develop AmeriSpeak Latino). The 2010 NORC National Sample Frame is stratified based on segment (Census tract or Census block group) characteristics such as age and race/ethnicity composition of the segment, and then, a stratified simple random sample of housing units is selected. Specifically, based on Census tract-level data, segments were classified as having a higher concentration of 18-24 year old adults or not, and a higher concentration of Hispanics, non-Hispanic African Americans, and other. Based on these strata definitions, 6 strata (2 based on age times 3 based on race/ethnicity) were used to oversample housing units in segments higher in young adults and/or Hispanics and non-Hispanic African-Americans. This is referred to as the initial sample or first stage of panel recruitment.

In the second stage of panel recruitment, initially sampled but nonresponding housing units are subsampled for a nonresponse follow-up (NRFU). At this stage, consumer vendor data are matched to housing units, and housing units that are flagged (based on consumer vendor data) as having a young adult (18-34 years of age) or minority (Hispanic and non-Hispanic African American) are oversampled for the NRFU. Overall, approximately one in five initially nonresponding housing units are subsampled for NRFU. However, as mentioned previously, selection of housing units for NRFU is a stratified simple random sample based on consumer vendor data. Due to NRFU, these initially nonresponding housing units have a much higher selection probability compared to the housing units that were recruited during the first stage of panel recruitment. Note that a small fraction of initially nonresponding housing units are not eligible for NRFU due to these housing units being classified as “hard refusals” or having an appointment for a call back from NORC.

In summary, there are two reasons why the sampling design for AmeriSpeak Panel recruitment deviates from Equal Probability of Selection Method (EPSEM) sampling: (a) oversampling of housing units in segments with a higher concentration of young adults and minorities results in the sample selection probabilities being higher for housing units in these segments; and (b) the nonresponse follow-up effort results in initially nonresponding housing units having a much higher selection probability. Furthermore, oversampling associated with NRFU results in higher selection probabilities for initially nonresponding housing units that are flagged (based on consumer vendor data) as having a young adult or minority.

AmeriSpeak Panel Recruitment Procedures

Recruitment is a two-stage process: initial recruitment using less expensive methods and then non-response follow-up using personal interviewers. For the initial recruitment, sample units are invited to join AmeriSpeak online by visiting the panel website AmeriSpeak.org or by telephone (in-bound/outbound supported). English and Spanish language are supported for both online and telephone recruitment. Study invitations are communicated via an over-sized pre-notification postcard, a USPS recruitment package in a 9”x12” envelope (containing a cover letter, a summary of the privacy policy, FAQs, and a study brochure),

two follow-up post cards, and also contact by NORC's telephone research center for sample units matched to a telephone number.

The second-stage non-response follow-up targets a stratified random sub-sample of the non-responders from the initial recruitment. Stratification is based on consumer vendor data and stratification variables from the initial recruitment stage in order to increase sample representation of young adults (18-34 years of age), non-Hispanic African Americans, and Hispanics. Units sampled for the non-response follow-up are sent by Federal Express a new recruitment package with an enhanced incentive offer. NORC field interviewers then make personal, face-to-face visits to the respondents' homes to encourage participation. NORC field interviewers administer the recruitment survey in-person using CAPI or else encourage the respondents to register at AmeriSpeak.org or call the toll-free AmeriSpeak telephone number to register.

Recruiting Non-Internet and "Net Averse" Households

Under certain conditions, AmeriSpeak gives respondents a choice regarding their preferred mode for future participation in AmeriSpeak surveys. For the 2014-2017 recruitment, 82% of panelists were enrolled in AmeriSpeak to receive online surveys, while 18% of the panelists agreed to participate in AmeriSpeak telephone mode surveys. For the 2016 and 2017 recruitment, respondents provided an option of online or telephone modes include: persons without internet access, persons whose only internet access is via a smartphone, and persons with internet access but unwilling to share an email address. A recruited household can consist of both web-mode and phone-mode panelists residing in the same household.

Impact of Non-Response Follow-up

The non-response follow-up (NRFU) reduces non-response bias significantly by improving the representativeness of the AmeriSpeak panel sample with respect to certain demographic segments, including but not limited to rural and/or lower income households, cell-phone only households, persons age 18 to 34, African Americans, Hispanics, and persons without a high school degree or have only a high school degree (no college). Even though NRFU panelists are more reluctant to complete surveys, the addition of NRFU panelists reduced absolute bias on average 35-40% when compared to the initial stage recruits (among examined surveys). Compared to panelists recruited in the initial stage, panelists recruited via the non-response follow-up campaign are more politically conservative, are less knowledgeable about science, report less interest in current events and topics in the news (such as climate change and energy resources), and are less likely to read a print newspaper (more likely to read the news online and use social media). They are also more likely to attend church, be against gun control, and more likely to eat at a fast food restaurant than the initial stage recruits. Accordingly, NRFU panelists make the substantive estimates in any AmeriSpeak study more representative and accurate.

AmeriSpeak Panel Recruitment Response Rate and Other Sample Metrics

The AAPOR RR3 (response rate) for the 2014-2017 panel recruitment 33.7% (weighted to take into account selection probabilities).¹ The estimated cumulative AAPOR RR3 for client surveys is 10% to 20% (varying according to study parameters and taking into account all sources of non-response including panel recruitment, panel household attrition, and survey participation).² NORC documented the AAPOR response rate calculation methodology for 2014-2015 recruitment.³

¹ The response rate calculation incorporates the selection probabilities of the samples for the initial recruitment and non-response follow-up stages, as calculated by the US Bureau of the Census for the American Community Survey.

² A properly calculated AAPOR response rate for panel-based research takes into account all sources of non-response at each stage of the panel recruitment, management, and survey administration process. A common misapplication of the term "response rate" in online panel surveys is represent the survey-specific cooperation rate as the "survey response rate."

³ See "Response Rate Calculation Methodology for Recruitment of a Two-Phase Probability-Based Panel: The Case of AmeriSpeak" authored by Robert Montgomery, J. Michael Dennis, Nada Ganesh. The paper is available at amerispeak.norc.org on the "research" page.

Key statistics with respect to the 2014-2017 recruited households are as follows: 52% recruited via the non-response follow-up recruitment using overnight Federal Express mailers and face-to-face methodology (with NORC field staff visiting households); 18% indicated a preference for the telephone mode of data collection for participating in AmeriSpeak studies; 22% of the recruited households are non-Internet; 80% are cell-phone only or cell-phone mostly; 18% are African-American and 24% Hispanic; and 36% have household income below \$30,000 (compared to CPS benchmark of 26%).

Mixed-Mode Data Collection

Panelists may participate in two to three AmeriSpeak Panel studies per month via online (computer, tablet, or smartphones) or by CATI phone. CATI phone mode respondents represent a population currently under-represented in web panels that exclude non-internet households or “net averse” persons. NORC’s telephone interviewers administer the phone mode of survey questionnaires using a data collection system supporting both the phone and web modes of data collection, providing an integrated sample management and data collection platform. For panelists using smartphones for web-mode AmeriSpeak surveys, the NORC survey system renders an optimized presentation of the survey questions for these mobile users. For general population client studies, approximately 20% of the completed interviews are completed by the telephone mode.

Panel Management Policies

NORC maintains strict rules to limit respondent burden and reduce the risk of panel fatigue. On average, AmeriSpeak panel members typically participate in AmeriSpeak web-based or phone-based studies two to three times a month.

Because the risk of panel attrition increases with the fielding of poorly constructed survey questionnaires, the AmeriSpeak team works with NORC clients to create surveys that provide an appropriate user experience for AmeriSpeak panelists. AmeriSpeak will not field surveys that in our professional opinion will result in a poor user experience for our panelists and in panel attrition.

ABOUT NORC AT THE UNIVERSITY OF CHICAGO

As one of the world’s foremost independent research institutions, NORC at the University of Chicago delivers objective data and meaningful analysis to help decision-makers and leading organizations make informed choices and identify new opportunities. Since 1941, NORC has applied sophisticated methods and tools, innovative and cost-effective solutions, and the highest standards of scientific integrity and quality to conduct and advance research on critical issues. Today, NORC expands on this tradition by partnering with government, business, and nonprofit clients to create deep insight across a broad range of topics and to disseminate useful knowledge throughout society.

Headquartered in downtown Chicago, NORC works in over 40 countries around the world, with additional offices on the University of Chicago campus, the DC metro area, Atlanta, Boston, and San Francisco.

ADDITIONAL RESOURCES

To learn more about AmeriSpeak or to share an RFP, please contact AmeriSpeak at AmeriSpeak-BD@norc.org. Information about AmeriSpeak capabilities and research papers are available online at AmeriSpeak.NORC.org.