

Foresight



BY AARP & NORC

TECHNICAL OVERVIEW OF THE FORESIGHT 50+® PROBABILITY-BASED RESEARCH PANEL

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This report summarizes the procedures for creating the Foresight 50+ Panel, a probability-based panel designed to be representative of the U.S. household population age 50 or older. A joint effort by AARP and NORC at the University of Chicago, Foresight 50+ draws from NORC's AmeriSpeak household panel. As of this writing, the Foresight 50+ Panel currently contains 26,816 active panelists, which makes it the largest high-quality research panel of Americans aged 50 and over. Foresight 50+ combines the commercial expertise of AARP with the trusted science of NORC to amplify the voice of this influential group of Americans. The panel is constructed integrating two separate approaches to recruitment. The methods for both approaches are based on probability, employ a rigorous sample design and recruitment methodology, and are designed to be representative of the 50+ U.S. population, including all 50 states and the District of Columbia. In this report, we first provide basic information about the construction. We then discuss the integration of the panelist from each of these approaches to create the Foresight 50+, focusing on how the Foresight 50+ panel weights are developed. We will refer to the two approaches to sampling for and recruiting panelists as "Approach A" and "Approach B."

Recruitment Approach A

As of this writing, 79.1% (n=21,202) of the Foresight 50+ Panel was recruited through Approach A. This will also be the approach for new recruits to the Foresight 50+ Panel going forward. The sampling frame for this approach is a household frame, and the recruitment that occurred is of household members 18+, but only those 50+ become part of the Foresight 50+ Panel. U.S. households are randomly selected with a known, non-zero probability from the NORC National Frame as well as supplemental address-based sample frames, and then recruited by mail, telephone, and by field interviewers face to face. The National Frame is a multistage probability sample that fully represents the U.S. household population. The primary sampling units (PSUs) in the first stage sample selection are 1,917 National Frame Areas (NFAs), each of which is an entire metropolitan area (made up of one or more counties), a county, or a group of counties with a minimum population of 10,000. A total of 126 NFAs are selected in the first stage, including 38 certainty NAFs, 60 urban NAFs, and 28 non-urban NAFs. The largest 38 NFAs, those with a population of at least 1,543,728 (0.5 percent of the 2010 Census U.S. population), were selected into the National Frame with certainty.

Within the 126 selected NFAs, the secondary sampling units (SSUs) are area segments defined from Census tracts or block groups, where each segment contains at least 300 housing units according to the 2010 Census. Within the certainty NFAs, a sample of 896 segments was selected using systematic PPS sampling, where the size of a segment is the number of housing units. Implicit stratification was achieved by sorting the segments by location (NFA, state, and county), principal city indicator, and ethnic and income indicators. From each urban and rural NFA, a sample of 8 and 5 segments was selected, respectively, using systematic PPS sampling where the measure of size is the number of housing units per segment. A total of 618 segments are selected from the non-certainty NFAs. Overall, a stratified probability sample of 1,514 segments was selected into the National Frame in the second stage sampling.

Within the selected segments, all housing units are listed using the U.S. Postal Service Delivery Sequence File (DSF). In the 123 segments where the DSF coverage is deemed inadequate, the DSF address list is enhanced with an in-person field listing to improve coverage. The final National Frame, consisting of all listed households in the sample segments, is estimated to provide over 97 percent coverage of the U.S. household population. It contains almost 3 million households, including over 80,000 rural households that are added through in-person listing. In addition to NORC's National Frame, the DSF is used as a supplemental sample frame in four states. Although nationally representative, the National Frame does not include households from Alaska, Iowa, North Dakota, and Wyoming. Since 2016, the annual panel recruitment sample has included a small address-based sample (ABS) from these four states to assure presence in all U.S. States and Washington, D.C.

For panel sample selection, National Frame segments are stratified into six sampling strata based on the race/ethnicity and age composition of each segment. Areas with a higher concentration of young adults, Hispanics, and non-Hispanic African-Americans are oversample to improve their representation in the panel. In more recent recruitment sampling, we have also used two-phase designs where commercial vendor data are used to stratify the second phase sample to improve the efficiency of targeting hard-to-reach populations.

Recruitment to the panel using this approach is a two-stage process: (i) initial recruitment using four USPS mailings, telephone contact, and both pre (\$5) and post (\$25-\$50) incentives, and (ii) a more elaborate nonresponse follow-up (NRFU) recruitment that includes an invitation packet sent via Federal Express, additional incentives, and in-person field visits by NORC field interviewers. Once the households are located, the field interviewers administer the recruitment survey in-person using CAPI or else encourage the respondents to register online or by telephone. This is considered the highest effort, and highest response rate probability panel survey in the United States.

A sample household is considered recruited or responded if at least one adult in the household joins the panel. The weighted household response rate (AAPOR RR3) is about 6% for initial recruitment and 28% for NRFU recruitment. For all recruitment years, the cumulative weighted household response rate is 21.9%; for recruitment years with NRFU, the cumulative weighted household response rate is 23.0%.

Recruitment Approach B

As of this writing, 20.9% (n=5,614) of the panel were recruited using an alternative approach to achieving a nationally representative probability-based methodology. The proportion of the panel using this approach is growing smaller over time, as the use of this approach ended in 2019. From 2015 to 2019, these panelists were recruited annually via a stratified random sample from a national household address file that was assessed to have over 96% coverage of all 50+ households in the U.S. The six sampling strata were defined by age (50-59, 60-69, 70+) and AARP membership status. Sample households were recruited through a series of mailings, phone contacts (for those households with a phone number), and online contacts (for those households with an email address). The major recruitment steps were:

- Step 1 – All households received postal mail inviting them to join the panel by either a) going online to a specific website or b) calling a toll-free number. Included in this invitation was a pre-paid incentive of \$1.
- Step 2 – All households for which an email address was appended and verified received an email invitation to join the panel (in addition to the postal mail invitation outlined in Step 1).
- Step 3 – Households that did not respond in Step 1 or Step 2, excluding those who refused, AND where a phone number was available, received a series of reminder phone calls.
- Step 4 – All those who did not respond in Step 3 (excluding those who refused) AND all those from Step 1 and 2 without a phone number or email available, received a second postal mail invite that included a registration card to be mailed back.
- Step 5 – All those who did not respond in Step 4 (excluding those who refused) receive a third and final postal mail invite in the form of a large postcard urging them to respond and letting them know this was their final opportunity to join the panel.

In 2021, when Foresight 50+ was created with the integration of panelists using these two approaches. Explicit consent was requested of panelists who were recruited using Approach B to join this integrated panel. At that point, 5,900 of the 12,205 respondents originally recruited through Approach B gave consent and are currently part of the Foresight 50+ Panel.

Foresight 50+ Panel

Foresight 50+ panelists complete a profile survey, which collects basic demographic information about them. To integrate the two approaches, panel weights were developed such that the combined panel collectively represents the U.S. population aged 50 and over. In this section, we focus on the procedures for developing the Foresight 50+ panel weights. The weighting steps involve the following:

- Compute a panelist panel weight;
 - For panelists from recruitment approach B, their final panel weight included migration nonresponse adjustments
- Compute an integrated weight for the two combined approaches

Approach A Pre-Integration Panel Weights

To develop the panel weights for Recruitment Approach A, NORC first computed the panel weight as the inverse of the probability of selection from the NORC National Frame (the sampling frame that is used to sample housing units for Foresight 50+) or other address-based sample frames (supplemental panel samples were selected from frames developed from the USPS Delivery Sequence Files). The sample design and recruitment protocol for recruited panelists using this approach involve unequal sampling rates across the sampling strata and additional subsampling of initial nonresponding housing units for in-person nonresponse follow-up (NRFU). The panel weights reflect all the variations in panel sample selection probabilities. The panel weights are then adjusted to account for unknown eligibility and nonresponse among eligible housing units. These adjustments were conducted using weighting classes defined by some household characteristics provided by commercial data vendors, including partisan score, political party identification, the presence of young adult(s), and minority status. To produce the final household weights, the household-level nonresponse adjusted weights are post-stratified to match the number of households per census division obtained from the most recent Current Population Survey (CPS). Final household weights are assigned to each eligible adult in the recruited household. These person-level weights are then adjusted to compensate for nonresponding adults within a recruited household. Finally, the nonresponse adjusted person-level panel weights are raked to population totals associated with the following variables:

Variables & the Variable Categories for Approach A Recruitment Non-Response Raking

Age: 50-59, 60-64, and 65+

Gender: Male and Female

Census Division: New England, Middle Atlantic, East North Central, West North Central, South Atlantic, East South Central, West South Central, Mountain, and Pacific

Race/Ethnicity: Non-Hispanic White, Non-Hispanic Black, Hispanic, and Non-Hispanic Other

Education: Less than High School, High School/GED, Some College, and BA and Above

Housing Tenure: Home Owner and Other

Household phone status: Cell Phone-only, Dual User, and Landline-only/Phoneless

Age x Gender: Female, 50-64 Male, 50-64 Female, 65+ Male, and 65+ Female

Age x Race/Ethnicity: 50-64 Non-Hispanic White, 50-64 All Other, 65+ Non-Hispanic White, and 65+ All Other

The external population totals are obtained from the Current Population Survey, except for Household Phone Status, which is determined by the National Institutes of Health bi-annual survey on wireless substitutions.¹ The weights adjusted to the external population totals are the *final panel weights* for panelists recruited through Approach A.

¹ Blumberg SJ, Luke JV. Wireless substitution: Early Release of Estimates from the National Health Interview Survey, January-June 2021. National Center for Health Statistics. November 2021. Available from: <https://www.cdc.gov/nchs/nhis.htm>

Approach B Pre-Integration Panel Weights

The panel weights for Recruitment Approach B are computed as the ratio of population size to the number of panelists within each of the six sampling strata. Both population and sample sizes are totals across the five recruitment years. The panel weights are then adjusted to compensate for those who refused during the migration recruitment (meaning they were originally recruited through Approach B, but declined to join the integrated Foresight 50+ Panel). The adjustment cells are defined by age, gender, race/ethnicity, and education. The weights are raked to population benchmarks by age, gender, race/ethnicity, education, housing tenure, telephone status, and census division, the same set of variables outlined above that are used to rake the panelist recruited using Approach A.

Integration of Panel Weights to Produce Final Foresight 50+ Panel Weight

In the final step, the panel weights for Approach A and the panel weights for Approach B are combined to produce the final integrated panel weights for the Foresight 50+ Panel. The weight combination is accomplished using a combination factor, k , which is proportional to the relative effective sample size of those recruited for each approach, where the effective sample size is defined as the nominal sample size divided by the weighting effect per panel. A different k is used for different combination cells defined by age, gender, race/ethnicity, and education. The resulting Foresight 50+ panel weights sum to the total U.S. population aged 50 and over for each of the combination files.

The Foresight 50+ Panel is regularly refreshed to reflect the most recent sample as well as the target population. Panel refreshment involves adding new panelists, removing panelists who dropped out of the panel, imputing missing data on key variables, and recomputing panel weights. As noted earlier, all panelists added to the panel going forward are recruited using Approach A.

The current Foresight 50+ Panel consists of a representative cross-section of the U.S. 50+ population. As of March 2022, the Foresight 50+ Panel contains a total of 26,816 panelists. Of all the panelists, 40% are men and 60% are women; 34% are 50-59 years of age, 36% are 60-69 years of age, and, 30% are 70 or over; 69% are non-Hispanic white, 14% are non-Hispanic black, 10% are Hispanic, and 7% other races; 6% have less than high school education, 17% have a high school education, 36% have some college or associate degree, and 41% have a bachelor's degree or higher, 31% are AARP members and 69% are nonmembers.

ADDITIONAL RESOURCES

To learn more about Foresight 50+ Panel, please email Foresight50-bd@norc.org or visit Foresight50.NORC.org.