

Foresight



BY AARP & NORC

DEBT SURVEY 2023 AARP

FORESIGHT 50+ PROJECT METHODS AND
TRANSPARENCY REPORT

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STUDY INTRODUCTION

NORC conducted the Debt Survey 2023 on behalf of AARP using NORC's *Foresight 50+®* Panel and Dynata and Prodege for the sample source. The former is a probability-based panel and the latter two are non-probability panels. This research was done to support better understanding debt among older Americans AARP sponsored and funded the study.

The survey was offered in English and Spanish and was administered in two modes for the Foresight 50+ respondents depending on the preference of the respondent provided during the panel recruitment: 1) self-administered by the respondent online via the Web; or 2) administered over the telephone by a live interviewer. For non-probability respondents, all completed interviews were self-administered by the respondent online]. Final data was weighted using NORC's *TrueNorth* Calibration methodology.



AAPOR Transparency Initiative

This *Foresight 50+ Project Methods and Transparency Report* provides complete information on how the survey was executed, including any information disclosure to meet the requirement of the AAPOR

Transparency Initiative. NORC at the University of Chicago is a Charter Member of the AAPOR Transparency Initiative, which fosters open science of survey research by acknowledging those organizations that pledge to practice transparency in their reporting of survey-based research findings. More on the Transparency Initiative can be found here: <https://www.aapor.org/Standards-Ethics/Transparency-Initiative/FAQs.aspx>

SURVEY OVERVIEW

Study Target Population: General Population Age 50+ with debt
Sample Units (Probability cases only): 21,302
Overall Completed Units: 7,387
Probability Completed Units: 5,189
Nonprobability Completed Units: 2,198
Observed Eligibility Rate: 74.3%
Survey Field Period: May 3, 2023 - May 22, 2023
Median Duration (minutes): Web 26 minutes, Phone: 50 minutes

Definitions of the above categories:

Study Target Population: The total set of individuals of interest to which the researcher intends to generalize their conclusions.

Sample Units: The number of panel members selected into the study sample.

Completed Units: The number of sample units that completed the interview based on the study-specific definition of what constitutes a complete interview. This number excludes any cases where an interviewer finished a survey, but the case was removed due to data quality concerns (the process for such removal is detailed later in this report).

Expected Eligibility Rate: The percentage of the sampling population who are expected to meet study eligibility criteria.

Observed Eligibility Rate: The percentage of the sample members who were eligible for the study among those who answered the screening questions.

Survey Field Length: the period from the earliest to the latest contact dates of cases sampled for the survey.

Duration: Length of time for completed interviews. Interview length is calculated differently depending upon whether the interview was conducted over the phone or via the web. For telephone mode, it is the time from when the respondent picks up the telephone until they hang up the telephone. For web interviews, it is the time from when they first connect to the web system to the time they log off the system or become inactive. In the case of multiple contacts, this number represents the sum of those contacts.

STUDY-SPECIFIC DETAILS

Sampling

A general population sample of U.S. adults aged 50+ was selected from NORC's probability-based Foresight 50+ Panel for this study. Respondents with debt met the screening criteria. An oversample was also collected for Blacks, Hispanics, and ages 75+ to achieve efficient sample size for analysis of these groups. In order to help achieve the oversample size, sample of respondents from a Dynata's and Prodege's non-probability panels was also included. The overall study target population is U.S. adults aged 50 plus with debt.

The probability sample for this specific study is selected from the Foresight 50+ Panel using sampling strata based on age, race/Hispanic ethnicity, education, and gender (36 sampling strata in total). Sample selection takes into account the expected differential survey completion rates across the sampling strata. The size of the selected sample per stratum is determined such that the distribution of the complete surveys across the strata matches that of the target population as represented by census data. If a panel

household has more than one active adult panel member, only one adult panel member is selected at random. When panelists are selected for a Foresight 50+ survey, the selection process, within each sampling strata, favors those who were not selected in the most recent previous Foresight 50+ survey. This selection process is designed to minimize the number of surveys any one panelist is exposed to and maximize the rotation of all panelists across Foresight 50+ surveys.

The Foresight 50+ Panel is the nation's largest high-quality research panel of Americans aged 50 and older, created by the joined forces of AARP and NORC at the University of Chicago. Foresight 50+ panelists are sourced from the AmeriSpeak Panel, NORC's probability-based panel. For more detailed information on the Foresight 50+ panel recruitment and management methodology, please see the Appendix ("Technical Overview of the Foresight 50+® Panel Probability-Based Household Panel") attached to this Foresight 50+ Project Methods and Transparency Report.

For the non-probability sample, we defined quota buckets for demographic strata to reflect known population distributions and worked with the sample providers to slowly release sample over the field period to adequately fill each. The quota buckets and the number of interviews in each are given later in the field section of this report.

The oversamples in this project have the following sample sizes:

Non-Hispanic African American Oversample

Completed Sample Units (n): 1,597

Completed Probability Sample Units (n): 694

Completed Nonprobability Sample Units (n): 903

Hispanic Oversample

Completed Sample Units (n): 1,642

Completed Probability Sample Units (n): 518

Completed Nonprobability Sample Units (n): 1,124

Age 75+ Oversample

Completed Sample Units (n): 1,237

Completed Probability Sample Units (n): 871

Completed Nonprobability Sample Units (n): 366

Field

A small sample of English-speaking Foresight 50+ web-mode panelists were invited on April 6 for a pretest. In total, NORC collected 100 pretest interviews. The initial data from the pretest was reviewed by NORC and delivered to AARP.

The following changes were made before fielding the Main survey to collect the surveys interviews used for the final data:

- S1 – changed description of auto title loan item and also programmed item so that it always appeared immediately after the regular car/motorcycle/other vehicle loan item
- QA2 – removed “managing your money wisely” item
- QA5, A8, B8 – changed the scales to 6-point scales: Strongly agree, Agree, Slightly agree, Slightly disagree, Disagree, Strongly Agree
- B9, B10, D9 – updated question stems to focus on “the past 12 months” and changed the scales to reflect question stem change
- C4 and C5 – added “none of the above” response option
- D18 – added a separate item “Your credit card company gave you this information”

- E2 – added other (specify) and changed the “none of the above” item to “I have not looked for information about how to reduce or manage debt in the past 12 months”

Pretest interviews are not included in the final data.

For the main survey, a sub-sample of Foresight 50+ web-mode panelists were invited to the survey on May 3 in a soft-launch. The initial data from the soft-launch was once again reviewed to confirm that there are no processing or programming errors. Once reviewed, the remainder of sampled Foresight 50+ panelists were invited to the survey on May 5 and May 9.

Sample from Dynata and Prodege were fielded on May 3 to May 22.

In total, NORC collected 7,387 final Foresight 50+ interviews, 7,227 by web mode and 160 by phone mode. 1,504 final Foresight 50+ interviews were collected through Dynata, and 694 final Foresight 50+ interviews were collected through Prodege. This does not include interviews that may have been removed for data quality purposes (see below).

This final collection of survey completers includes specific oversamples of Non-Hispanic African Americans (1,597 of completions), Hispanics (1,642 of completions), and age 75+ (1,237 of completions) to ensure adequate sample size of those groups for analysis. These oversampled groups are weighted down to match their respective proportion in the population in the weighting process (see description of that process later in this report).

Minimum quotas were set for the nonprobability sample, broken out in the following ways:

**Nested Quota Cells and Number of Completes
for Nonprobability Sample
by Race/Ethnicity, Age, Education, and Gender (Unweighted)**

Ethnicity	Age	Education	Gender	# of Completes
Hispanic	50-64 yrs	Some college or less	Male	231
			Female	340
		Bachelors or Above	Male	75
			Female	110
	65-74 yrs	Some college or less	Male	91
			Female	117
		Bachelors or Above	Male	37
			Female	44
	75+ yrs	Some college or less	Male	24
			Female	35
		Bachelors or Above	Male	12
			Female	8
Non Hispanic African American	50-64 yrs	Some college or less	Male	165
			Female	226
		Bachelors or Above	Male	55
			Female	83
	65-74 yrs	Some college or less	Male	77

			Female	115
			Male	24
		Bachelors or Above	Female	42
			Male	28
	75+ yrs	Some college or less	Female	60
			Male	9
		Bachelors or Above	Female	19
			Male	27
Any Race/Ethnicity	75+ yrs	Some college or less	Male	49
			Female	66
		Bachelors or Above	Male	29
			Female	27

Panel & Survey Sample Performance

This section ***only*** applies to Foresight 50+ part of the sample. It is not possible to measure sample performance rates for nonprobability sample, since we do not know how many were invited to the survey or any information about how the panel was built. It is also not relevant, since there is no advantage of a high response rate when the panel nor the sample is not based on probability.

To meet requirements in the AAPOR Transparency Initiative, we offer performance outcome measures of both the Foresight 50+ Panel and the Foresight 50+ sample selected from the Foresight 50+ Panel. The Foresight 50+ Panel is a household panel, so recruitment and retention rates are household rates. The survey sample is an individual-level sample pulled from the Foresight 50+ panel, so those are individual-level rates.

Panel Outcome Measures	
Weighted Household Panel Recruitment Rate (WPRcr)	Weighted Household Panel Retention Rate (WPRet)
15.0%	71.6%

Weighted Household Recruitment Rate (WPRcr): The weighted AAPOR RR3¹ at the household level for Foresight 50+ panel recruitment. A recruited household is a household where at least one adult successfully completed the recruitment survey and joined the panel.

Weighted Household Retention Rate (WPRet): The weighted percent of recruited households that remain on the panel and are available for sampling for this survey. Unavailable panelists are those who have temporarily or permanently asked to be removed from the panel or from receiving surveys.

Survey Sample Outcome Measures				
Screening Completion Rate (ScrC)	Incidence/Eligibility Rate (I)	Interview Completion Rate (IC)	Survey Completion Rate (SurC)	Weighted Cumulative Response Rate

¹AAPOR RR3 and other response rate calculations can be found here: <https://www.aapor.org/Education-Resources/For-Researchers/Poll-Survey-FAQ/Response-Rates-An-Overview.aspx>.

				(WCR)
33.3%	74.3%	98.4%	32.8%	3.5%

Screener Completion Rate (ScrC): The percent of eligible sample members invited to the survey who completed the screener question(s) to identify whether they are eligible for the survey, whether or not they screened out of or into the survey. 21,302 panelists were invited to the survey, and 7,093 completed the screener questions to determine eligibility for the survey.

Incidence/Eligibility Rate (I): The percent of those who completed the screener questions(s) who, based on their responses to the screener question(s), is determined to be eligible to take the survey. Of the 7,093 invited panelists completed the screener questions to determine eligibility for the survey, 5,273 were determined eligible for the survey based on their response.

Interview Completion Rate (IC): The percent of eligible sample members who completed the survey interview. Of the 5,273 invited panelists who were determined to be eligible for the survey, 5,189 completed the survey. To be an interview completer, a respondent had to go through the entire survey and meet the standards of data quality review, as discussed later in this report.

Survey Completion Rate (SurC): The overall completion rate at the survey stage of those invited, taking into consideration that not all invited were eligible. To achieve this, this includes the screener completion rate and the interview completion rate ($SurC = ScrC \times IC$)

Weighted Cumulative Response Rate (WCR): The overall survey response rate that accounts for survey outcomes in all response stages (e.g., screener completion rate and interview completion rate), *plus* it includes panel outcome measures such as panel recruitment rate and panel retention rate. This overall rate is weighted to account for the sample design and differential inclusion probabilities of sample members. ($WCR = SurC \times WPRet \times WPrecr$)

Gaining Cooperation of Foresight 50+ Panelists for the Study

If invited, Foresight 50+ panelists can take the survey online through the password-protected mobile app, the password-protected Web portal, or by following a link in the e-mail invitation sent to them.

To encourage study cooperation, NORC sent the initial invitation and email reminders to sampled web-mode panelists on the following dates:

- Monday, May 8, 2023
- Thursday, May 11, 2023
- Wednesday, May 14, 2023
- Friday, May 16, 2023
- Sunday, May 18, 2023

To administer the phone survey, NORC dialed sampled panelists who prefer to take surveys on the phone from May 5 to May 18. Although most panelists who have stated a preference to take the survey on the phone do take them in that mode, they also have the option of taking the survey online via the web portal or the mobile app or can ask the interviewer to e-mail them an invite instead. These rare phone-preferred panelists who end up taking the survey online are coded in the data based on the mode they took the survey, not their previously stated mode preference.

Panelists were offered the cash equivalent of \$3 for completing this survey.

The incentive provided to nonprobability sample is unknown to us. The method for getting completes does not necessarily involve reminders. Since probability is not involved, a higher response rate is not relevant for non-probability sample.

Data Processing & Data Quality Review

NORC prepared a fully labeled data file of respondent survey data and demographic data for AARP.

NORC applied cleaning rules to the survey data for quality control. In total, 53 cases were removed from the final set of completed interviews based on three cleaning rules. Descriptions of the cleaning criteria and the counts from each are below (counts are overlapping).

- Removing Speeders (i.e., those that completed the survey in less than one-third the median duration)
 - 47 removed for speeding
- Removing Respondents with High Refusal Rates (i.e., those that skip or refused more than 50% of the eligible questions)
 - 14 removed for high refusal rates
- Removing Straight-liners (i.e., those that straight-lined eligible grid item questions)
 - 1 was removed for straight-lining all grid question they were shown.

Of those 53 cases removed:

- 44 cases were marked with one of the three flags above
- 9 cases were marked with two of the three flags above
- 0 cases were marked with all three flags above

Foresight 50+ is a probability-based panel, where respondents must be chosen by us to join, where access to surveys is controlled by the panelist secure log-in information to a web portal or app. E-mails, text invitations, or interview-operated telephone calls go directly to the address/number of the recruited panelist. When being called by phone, the panelist is requested by name. The way Foresight 50+ surveys are programmed and panelists are invited, panelists cannot take the survey more than once, and each panelist is always identifiable based on a unique ID. For these reasons, surveys of Foresight 50+ Panelists not suffer the problem of “bots,” fabricated profiles, non-invited respondents, or individuals or members of the household repeatedly and illegitimately taking the same survey.

Eighteen cases were removed for giving gibberish or poor-quality responses to open ended questions.

Two attention check questions were asked of Dynata and Prodege respondents in their battery of demographic questions. Any Dynata or Prodege respondents who failed either attention check were not allowed to participate in the survey.

Relevant ID was used as a way to prevent the possibility of the same respondent from different sample sources taking the survey multiple times.

Statistical Weighting & TrueNorth Calibration



The final weights that are delivered with the data are developed through three stages. First, probability and nonprobability sample weights are developed separately. Second, small area estimation is leveraged to model core estimates of the survey within to nonprobability sample. Finally, the two samples are combined to create the final weights. These final two stages make up NORC's TrueNorth® Calibration.²

Stage 1: Core Probability and Nonprobability Weights

There are four unique steps to the development of core probability weights and two for core nonprobability weights. The four core probability weight steps are as follows:

² More on TrueNorth Calibration can also be found here: <https://amerispeak.norc.org/us/en/amerispeak/our-capabilities/truenorth.html>.

Foresight 50+ Panel Weight: Weights developed for all panel members to account for their probability of selection into the sample of panel recruits, panel recruitment nonresponse adjustments, and poststratification adjustments of the recruited panel to match population benchmarks. The explanation on how panel weights are developed for Foresight 50+ can be found in the “Technical Overview of the Foresight 50+® Probability-Based Research Panel” in the Appendix of this report.

Probability Base Weight: The Foresight 50+ Panel Weight is then adjusted to account for the sample selection probability from the panel under the study sample design. The base weight is a product of the Foresight 50+ Panel Weight and the inverse of selection probabilities associated with sample selection from the panel.

Nonresponse Adjusted Probability Weight: The nonresponse adjusted weight is created by adjusting the base weights for respondents to compensate for nonrespondents within nonresponse weighting classes defined by age, race/ethnicity, gender, and education. Within each weighting class, the nonresponse adjusted weight is the product of the base weight and the inverse of the weighted response rate.

Probability Weight is the nonresponse adjusted weight calibrated to population benchmarks through raking ratio adjustments. This survey includes a screener question to define the targeted study population of general population age 50+ with debt, and no known or reliable benchmarks are available for this target population. As a result, raking adjustments for this study involve two steps. The first is a raking adjustment of screener completes to align them with population benchmarks for the general population age 50+. Once screener completes are adjusted to population benchmarks of those invited to answer the screener questions, we use the weighted counts of the survey eligible respondents to define the benchmarks for the target population for our study. The nonresponse adjusted weights for survey completes are then raked to align them to estimated benchmarks derived from the screener completes. The raking variables are detailed after the description of the core nonprobability weight.

The two nonprobability sample weights are developed in the following stages:

Nonprobability Base Weight: There are no known probabilities of selection for nonprobability sample cases. As such it is common in other hybrid (probability and nonprobability) sample combination schemes to simply give nonprobability cases a base weight of 1. Under TrueNorth, the nonprobability sample weights are developed through statistical matching and propensity weighting. Statistical matching involves matching each nonprobability sample unit to one or more probability sample units based on a set of matching variables. The matching process divides the probability sample into two sets: the set of units matched to the nonprobability sample unit and the set not matched. The matched set is then used as a reference sample to develop the propensity weights for the nonprobability sample units. Propensity weighting is carried out in the following steps: (1) concatenate the matched probability sample and the nonprobability sample; (2) create a dichotomous indicator variable, 1 for nonprobability sample units and 0 for matched probability units; (3) fit a logistic regression model to predict the probability of inclusion for the nonprobability sample units; and (4) weight the nonprobability sample unit as the reciprocal of the predicted probabilities.

Nonprobability Weight: The base weight is then raked to the same population benchmarks as those used for raking the probability sample.

Probability and Nonprobability Raking Targets: The benchmarks used for raking both probability and nonprobability samples are:

Region x Race/Ethnicity: Northeast and Non-Hispanic White, Midwest and Non-Hispanic White, South and Non-Hispanic White, West and Non-Hispanic White, Northeast and Non-Hispanic Black, Midwest and Non-Hispanic Black, South and Non-Hispanic Black, West and Non-Hispanic Black,

Northeast and Hispanic, Midwest and Hispanic, South and Hispanic, West and Hispanic, Northeast and All Other, Midwest and All Other, South and All Other, West and All Other
Education x Race/Ethnicity: Less than High School and Non-Hispanic White, High School/GED and Non-Hispanic White, Some College and Non-Hispanic White, BA and Above and Non-Hispanic White, Less than High School and Non-Hispanic Black, High School/GED and Non-Hispanic Black, Some College and Non-Hispanic Black, BA and Above and Non-Hispanic Black, Less than High School and Hispanic, High School/GED and Hispanic, Some College and Hispanic, BA and Above and Hispanic, Less than High School and All Other, High School/GED and All Other, Some College and All Other, BA and Above and All Other

Age x Race/Ethnicity: Age 50-54 and Non-Hispanic White, Age 55-59 and Non-Hispanic White, Age 60-64 and Non-Hispanic White, Age 65-69 and Non-Hispanic White, Age 70-74 and Non-Hispanic White, Age 75-79 and Non-Hispanic White, Age 80+ and Non-Hispanic White, Age 50-54 and Non-Hispanic Black, Age 55-59 and Non-Hispanic Black, Age 60-64 and Non-Hispanic Black, Age 65-69 and Non-Hispanic Black, Age 70-74 and Non-Hispanic Black, Age 75-79 and Non-Hispanic Black, Age 80+ and Non-Hispanic Black, Age 50-54 and Hispanic, Age 55-59 and Hispanic, Age 60-64 and Hispanic, Age 65-69 and Hispanic, Age 70-74 and Hispanic, Age 75-79 and Hispanic, Age 80+ and Hispanic, Age 50-54 and All Other, Age 55-59 and All Other, Age 60-64 and All Other, Age 65-69 and All Other, Age 70-74 and All Other, Age 75-79 and All Other, Age 80+ and All Other

Race/Ethnicity x Gender: Male and Non-Hispanic White, Female and Non-Hispanic White, Male and Non-Hispanic Black, Female and Non-Hispanic Black, Male and Hispanic, Female and Hispanic, Male and All Other, Female and All Other

Age x Gender: Male and 50-74, Female and 50-74, Male and 75+, Female and 75+

Age x Region: Northeast and 50-74, Midwest and 50-74, South and 50-74, West and 50-74, Northeast and 75+, Midwest and 75+, South and 75+, West and 75+

Age x Education: Less than High School and 50-74, High School/GED and 50-74, Some College and 50-74, BA and Above and 50-74, Less than High School and 75+, High School/GED and 75+, Some College and 75+, BA and Above and 75+

Age x Race/Ethnicity: Non-Hispanic White and 50-74, Non-Hispanic Black and 50-74, Hispanic and 50-74, All Other and 50-74, Non-Hispanic White and 75+, Non-Hispanic Black and 75+, Hispanic and 75+, All Other and 75+

Age x AARP Membership: 50-59 and AARP Member, 50-59 and AARP Non-Member, 60-69 and AARP Member, 60-69 and AARP Non-Member, 70+ and AARP Member, 70+ and AARP Non-Member

These population benchmarks are obtained from the Current Population Survey.³

Any extreme weights are trimmed based on a criterion of minimizing the mean squared error associated with key survey estimates.

Stage 2: TrueNorth Small Domain Modelling Calibration

At the core of the TrueNorth calibration method is a small area modeling⁴ procedure conducted in the following steps:

- First, we identify a set of three key response variables from the survey using a machine learning approach called gradient boosted tree modelling. This method is used to identify the key response variables that are associated with the largest bias in the nonprobability sample and also are highly correlated with other response variables.
- Second, we define a set of domains in the data, where each domain is a specific, relevant subgroup for data analysis and reporting. The domains used for this study are Race/Ethnicity (3),

³ 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>

⁴ Rao J, Molina I. Small Area Estimation. 2nd ed. Hoboken, NJ: Wiley; 2015. doi:10.1002/9781118735855

Age (3), Gender (2), Education (2). The demographic groups included in TrueNorth calibration for this study include Non-Hispanic Black age 50+, Hispanic age 50+, and all other race/ethnicities age 75+. Overall, this study used 28 unique domains.

- Third, we fitted domain-level small area models for each of the response variables identified earlier using the weighted probability sample and nonprobability sample domain-level estimates as input. These estimates are weighted estimates where the weights are the final probability and nonprobability weights, respectively. The model included covariates, domain-level random effects, and sampling errors. The covariates were external data available from the American Community Survey (ACS).
- Fourth, the fitted small area models provide predicted values for each domain and for each response variable, which are then used for the final weighting step described below.

Stage 3: Final Combined Study Weight

The final combined probability and nonprobability sample weight was derived by raking both samples together, using the same benchmarks noted earlier, plus the predicted values for each domain for each response variable modelled in the small area modelling process.

Additional Oversample Weights

This survey includes an oversample of Non-Hispanic African Americans, Hispanics, and age 75+, which were weighted down to their proportions in the overall population in the final main study weights. Some survey packages are not able to recognize weight variations and do not leverage the full potential of an oversample when testing for statistical significance. The basic SPSS package (without the additional Complex Samples Module) has this limitation, while SAS, Stata, and most R packages do not. Since we are delivering this data in an SPSS format, we have included additional weight variables to address this.

The oversample variable for Non-Hispanic African Americans and Hispanics in the delivered data has the following variable name: RACETHWT.

The oversample variable for ages 75+ in the delivered data has the following variable name: AGEWT.

The weight values in an oversample weight variable scale up the oversampled group(s) to their actual unweighted sample size. Analyzing the data using this weight variable should only occur when analyzing the oversampled group or any subgroup that is wholly composed of the oversampled group, or when comparing the oversampled with a group outside of that oversample. It is inappropriate to use the oversample weight variable when analyzing the overall survey sample or any subgroup that overlaps (does not fit completely within or without) an oversampled group. Using this weight variable in this inappropriate way will lead to incorrect results that are skewed toward the results of the oversampled groups. It is important to note that, when analyzing the oversampled group, results will be the same whether one is using the oversample weight variable or the main weight variable. This difference is limited to the margin of error attained in data from the oversample and non-oversampled groups. Without the use of this weight, the margin of error for the oversampled group would be (typically) much larger than the true value, and the margin of error for the non-oversampled group would be lower. In addition, as the main weight will reduce the effective sample size of the oversampled group, it can be the case that using this weight would lead to significant rounding errors, particularly in oversampled of very small populations (e.g., 5%).

Screeners Weights

The survey also includes a screener weight variable. The variable weights screener completes such that they are representative of U.S. adults aged 50+.

The screener weight in the delivered data has the following variable name: SCREENERWT.

SPSS Weighting Variables		
Weighting variable type	Name in SPSS	Purpose
Main weight	MAINWT	Used when analyzing the entire study population
Oversample Race/Ethnicity weight	RACETHWT	Used ONLY for analyzing results of or within the oversampled race/ethnicity groups (Non-Hispanic African Americans, Hispanics)
Oversample Age 75+ weight	AGEWT	Used ONLY for analyzing results of or within the oversampled age group (Age 75+)
Screening weight	SCREENERWT	Used ONLY for analyzing screener completes

Benchmark Comparisons

The following table shows the weighted and unweighted estimates for key demographics and compares them to population benchmarks.⁵

Demographic Category	Subcategory	Unweighted (%)	Weighted (%)	Benchmark (%)
Age	50 - 54	17.2	20.3	20.2
	55 - 59	20.0	19.8	19.5
	60 - 64	19.4	19.1	19.5
	65 - 69	15.2	14.6	14.4
	70 - 74	11.4	12.1	12.3
	75 - 79	11.4	6.9	6.7
	80 Plus	5.4	7.1	7.4
Race/Ethnicity	Non-Hispanic White	52.8	68.4	66.9
	Non-Hispanic Black	21.6	12.1	12.1
	Hispanic	22.2	14.0	14.0
	Non-Hispanic Asian/Pacific Islander	1.4	3.0	4.4
	Non-Hispanic Others	2.0	2.5	2.6

⁵ Because we trim the weights to remove extreme weights and hold down weight variation, the final study weights may end up deviating from exact populations benchmarks by small but acceptable amounts. Even without trimming, there can be a limit in the ability to perfectly match benchmarks along all variables and categories included in the raking procedure. Our goal is to rake as close as possible before trimming.

Education Status	Less than High School	2.8	7.5	10.6
	High School Equivalent	18.9	32.2	30.5
	Some College/Associate Degree	45.1	27.3	26.5
	Bachelor's Degree	18.8	18.3	18.3
	Graduate Degree	14.5	14.7	14.0
Sex	Male	45.5	47.5	47.3
	Female	54.5	52.5	52.7

As a part of the AAPOR Transparency Initiative, it is incumbent on us to state that there are no perfect studies, and all research and methods have their limitations. The purpose of this document is to make apparent, for this study, some possible limitations, the steps taken to minimize them, and the potential or known sources of measurable or estimated error whenever possible. However, there is always going to be some unmeasured and unknowable error with all forms of public opinion research, including ours.

Design Effect and Sampling Margin of Error Calculations

	Design Effect	Margin of Error
Overall Study	2.34	+/-1.88 ppts
Non-Hispanic African Americans	1.93	+/- 3.67 ppts
Hispanics	2.96	+/- 4.48 ppts
Age 75+	2.38	+/- 4.63 ppts

Under TrueNorth calibration, combined probability and nonprobability sample yields approximately unbiased estimates. The margins of error reported here reflect the sampling variation of the probability sample as well as the TrueNorth model-assisted calibration procedures that generate the combined sample weights. As such, it is reasonable for analysts using this data to employ standard methods for approximating margins of error and statistical significance, although there is no statistically agreed upon approach to doing this when utilizing nonprobability samples.

HOW TO DESCRIBE FORESIGHT 50+, AARP, AND NORC @ THE UNIVERSITY OF CHICAGO

For purposes of publication, when describing the Foresight 50+ Panel and its methodology, we recommend using the following language:

AARP and NORC at the University of Chicago joined forces in 2021 to create **Foresight 50+®**, a probability-based panel designed to be nation's largest, high-quality, representative research panel of the U.S. population aged 50 and older. Randomly selected US households are sampled using area probability and address-based sampling, with a known, non-zero probability of selection. Foresight 50+ goes the extra mile to recruit a panel that represents every segment of America's diverse 50 and over population. Foresight 50+ features a rigorous recruitment process, with multiple follow ups—including sending field interviews to the door to ensure a high response rate. The result is a scientific rigorous and representative panel that includes some of the hardest to reach populations like rural and lower-income households, Spanish speakers, and less-educated people

For more information, email Foresight50-bd@norc.org or visit Foresight50.NORC.org

If editors or reviewers are requesting anything more specific or any other detail, please reach out to us to make certain you are using accurate language.

For a less technical, panel-specific description of **Foresight 50+**, we recommend:

AARP is best described as follows:

AARP is the nation's largest nonprofit, nonpartisan organization dedicated to empowering people 50 and older to choose how they live as they age. With nearly 38 million members and offices in every state, the District of Columbia, Puerto Rico and the U.S. Virgin Islands, AARP works to strengthen communities and advocate for what matters most to families with a focus on health security, financial stability, and personal fulfillment. AARP also works for individuals in the marketplace by sparking new solutions and allowing carefully chosen high-quality products and services to carry the AARP name. As a trusted source for news and information, AARP produces the nation's largest circulation publications, AARP The Magazine and AARP Bulletin. www.aarp.org

NORC at the University of Chicago is best described as follows:

NORC at the University of Chicago conducts research and analysis that decision-makers trust. As a nonpartisan research organization and a pioneer in measuring and understanding the world, NORC has studied almost every aspect of the human experience and every major news event for more than eight decades. Today, NORC partners with government, corporate, and nonprofit clients around the world to provide the objectivity and expertise necessary to inform the critical decisions facing society. www.norc.org

Please refer to the full name "NORC at the University of Chicago" when first mentioning us. Using simply "NORC," thereafter, is fine. Our name is now only the acronym and does not need to be spelled out.

APPENDIX

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

Updated March 1, 2022

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 NFAs, 60 urban NFAs, and 28 non-urban NFAs. 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.⁶ The weights adjusted to the external population totals are the *final panel weights* for panelists recruited through Approach A.

⁶ 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.