



## Fannie Mae National Housing Survey – Technical Notes

*Updated January 2023*

The National Housing Survey (NHS) is a monthly attitudinal survey, launched in June 2010, which polls the adult general population of the United States to assess their attitudes toward owning and renting a home, purchase and rental prices, household finances, and overall confidence in the economy.

Each respondent is asked approximately 100 questions, making the NHS one of the most detailed attitudinal longitudinal surveys of its kind – tracking shifts that occur among homeowners and renters in the United States.

### Survey Methodology

Each month, approximately 1,000 American adults (age 18 and older) who make or share in their household's financial decisions participate in the NHS. Participants are sampled via the probability-based [AmeriSpeak® Panel](#) administered by NORC at the University of Chicago. From June 2010 to December 2022, the NHS was administered via telephone survey using random digit dialing sampling. Methodological and technical details from that period are available [here](#). Since January 2023, most participants complete the self-administered survey online (~95%), with a small percentage opting to complete via telephone with a live interview administrator (~5%). Data collection occurs during the first three weeks (approximately) of each month and results are weighted to the U.S. Census Bureau's [American Community Survey](#)-based population benchmarks to ensure the sample accurately represents the U.S. population. The NHS is available to respondents in both English and Spanish.

### National Housing Survey – Monthly Reports and Topic Analysis

On a monthly basis, the Home Purchase Sentiment Index along with additional key indicators of Americans' attitudes from the monthly survey are released publicly. Additionally, a special topic analysis, providing deeper insights into one or more issues based on the compilation of three-monthly surveys, is typically released on a quarterly basis.

The three-month studies that make up any given topic analysis are identical in wording and placement of questions.

Our most current and previous National Housing Survey topic analyses can be found at: <http://www.fanniemae.com/portal/research-insights/surveys/national-housing-survey.html>

### Sample Design

In 2022, Fannie Mae conducted a pilot study of the NHS to assess the comparability of the predominantly self-administered online AmeriSpeak® Panel survey to the interviewer-administered random digit dial (RDD) telephone survey. Our research partner PSB Insights fielded the pilot from September to December 2022 – generating four months of comparison data. The pilot results showed few statistical differences between modes in HPSI components and other key measures, so the



decision was made to transition the survey to be fielded via the AmeriSpeak® Panel. Pilot study results are available here. Beginning in January 2023, the National Housing Survey is conducted exclusively with the AmeriSpeak® Panel.

The AmeriSpeak® panel is designed to be representative of the U.S. household population, including all 50 states and the District of Columbia. U.S. households are randomly selected with a known, non-zero probability from the NORC National Frame as well as address-based sample (ABS) frames, and then recruited by mail, telephone, and by field interviewers face to face. The NHS is administered in two modes depending on the preference the respondent provides during the AmeriSpeak® panel recruitment: 1) self-administered by the respondent online via the Web; or 2) administered over the telephone by a live interviewer. Most respondents (~95%) complete the survey online. For the main survey, the total invited sample is split into three separate batches along with two additional sample batches targeting harder-to-reach populations (young adults ages 18-34, Asian American/Pacific Islanders, and low-income individuals); each batch is invited to the survey in one-week intervals.

If invited, AmeriSpeak® panelists can take the survey online through the password-protected AmeriSpeak® Mobile App, the password-protected AmeriSpeak® Web portal, or by following a link in the e-mail invitation sent to them. To encourage study cooperation, NORC sends the initial invitation and email reminders to sampled web-mode panelists.

To administer the phone survey, NORC dials sampled panelists who have indicated they prefer to take surveys on the phone and a human interviewer administers the survey. Typically no more than 5% of respondents complete the survey via phone each month.

Panelists are offered the cash equivalent of \$3 for completing the survey, and a three-month exclusion rule ensures that the same person does not participate in the survey more than a maximum of four times during a 12-month period. However, given the size of the panel most are unlikely to participate in the survey more than once per year.

Additional information about the AmeriSpeak® panel design and a detailed technical overview can be found at: <https://amerispeak.norc.org/us/en/amerispeak/about-amerispeak/panel-design.html>

### **Financial Decision Maker Screening**

To provide a more meaningful indication of Americans' attitudes about the housing market, household finances, and broader economic issues, the National Housing Survey screens respondents to include only those who are sole or joint financial decision-makers in their household. Respondents who reply that they are not the sole or joint financial decision-maker in their household are not permitted to complete the survey. As a result, the audience described in the National Housing Survey is not identical to that of the United States population as determined by Census Bureau data.



## Data Quality Control and Weighting

Each month, the results of the National Housing Survey are carefully compared to the 1-year American Community Survey estimates, released in September of the previous calendar year. Weights are updated as needed each January and are reflective of the American Community Survey from two years prior. For example, the 2023 National Housing Survey is weighted to the 2021 American Community Survey, which was released in October 2022. Age, gender, race, ethnicity, income, education, and housing status are all examined to ensure that the overall monthly sample does not differ in large or unexpected ways from the American Community Survey 1-year estimates on these important dimensions. Results are also compared against historical results from the National Housing Survey on the same demographic measures to ensure stability over time.

Weighting is used to account for known biases resulting from probability of selection into the AmeriSpeak® panel, probability of selection into the sample, and non-response. The final NHS weight variable is a product of three weights:

- AmeriSpeak® Panel Weights: 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.
- Study Specific Base Weights: Sampling weights developed for a study sample selected from the panel to account for their selection probabilities under the sample design. The base weights are a product of the AmeriSpeak® Panel Weights and the inverse of selection probabilities associated with sample selection from the panel.
- Study Specific Final Weights: These are final weights developed for all completed cases. The final weights are adjustments of the base weights to address survey nonresponse through a weighting class method. Raking adjustment are then applied to the non-response adjusted weights to align the survey sample to specific population benchmarks. The final weights may be trimmed to reduce the influence of extreme weights on survey estimates.

Population benchmarks are based on the following categories:

Variables	Categories
Gender	Male, Female
Age	18-34, 35-44, 45-64, 65+
Race/Ethnicity	Non-Hispanic White, Non-Hispanic African American, Hispanic, Non-Hispanic Asian, Non-Hispanic Other
Household Income	<= \$24,999, \$25,000-\$49,999, \$50,000-\$99,999, \$100,000+
Education	Less than High School Degree, High School Degree, Some College/Associates Degree, College Graduate/Post Graduate Degree
Housing Status	Mortgage Borrowers, Outright Owners, Renters, Boarders who do not pay rent or own their home



The statistics in this release are estimated from sample surveys and are subject to sampling variability as well as non-sampling error, including bias and variance from response, non-reporting, and under-coverage.

## 2023 Updated Weighting Targets

In January 2023, the National Housing Survey weighting scheme was updated to reflect population estimates from the 2021 American Community Survey and account for the sampling accuracy of the new online survey mode. Existing weighting categories have been collapsed into broader segments (as detailed in the table below). Additionally, the NHS began to use AmeriSpeak® panel profile data to fill in or impute respondent “don’t know” responses to demographic weighting questions and removed “phone type” as a weighting target. These decisions were made to ensure continued relevancy of the weighting scheme as the NHS sample collection transitions from phone to largely online, as well as to improve weighting efficiencies across future waves.

Categories	2010-2022	Beginning in 2023
<b>Gender</b>	Male, Female	Male, Female
<b>Age</b>	18-20, 21-24, 25-29, 30-34, 35-39, 40-44, 45-49, 50-54, 55-59, 60-64, 65-69, 70-74, 75+	18-34, 35-44, 45-64, 65+
<b>Race/Ethnicity</b>	White, Black, Hispanic, Asian, AIAN, Other (Middle Eastern, Other), Don’t know, Hispanic	Non-Hispanic White, Non-Hispanic African American, Hispanic, Non-Hispanic Asian, Non-Hispanic Other  “Don’t know” responses are filled in from panelist profiles or imputed
<b>Household Income</b>	<\$10,000, \$10,000-\$14,999, \$15,000-\$24,999, \$25,000-\$34,999, \$35,000-\$49,999, \$50,000-\$74,999, \$75,000-\$99,999, \$100,000-\$149,999, \$150,000-\$199,999, \$200,000+	<= \$24,999, \$25,000-\$49,999, \$50,000-\$99,999, \$100,000+  “Don’t know” responses are filled in from panelist profiles or imputed
<b>Education</b>	Less than High School Degree, High School Degree, Some College/Associates Degree, College Graduate/Post Graduate Degree	Less than High School Degree, High School Degree, Some College/Associates Degree, College Graduate/Post Graduate Degree  “Don’t know” responses are filled in from panelist profiles or imputed
<b>Housing Status</b>	Mortgage Borrowers, Outright Owners, Renters, Boarders who do not pay rent or own their home	Mortgage Borrowers, Outright Owners, Renters, Boarders who do not pay rent or own their home
<b>Phone Type</b>	Landline only, Cell phone only, Both landline and cell phone	Removed from the NHS weighting scheme in the 2023 update



## Survey Questions

The questions presented in the National Housing Survey Monthly Report as part of the Home Purchase Sentiment Index and additional key indicators are below and are printed exactly as they are asked in the survey. Please note that in the topic analyses, all the questions appear in the report exactly as they are asked in the survey.

Expected home price and home rental price changes are calculated by creating an average of all responses, using a 0 percent change for those respondents who say that home prices would stay the same, and excluding outliers beyond two standard deviations.

To analyze the movements of the average home price expectation each month, we have calculated the standard error between the means based on responses to the following questions:

- Question 15: During the next 12 months, do you think home prices in general will go up, go down, or stay the same as where they are now?
- Question 16, 17: IF DOWN/UP: By about what percent do you think home prices in general will go (down)/(up) on the average over the next 12 months?

Based upon this data, the standard error between the means in any given month to date is +/- 0.4 or less. Any movement in home price change expectations outside this range can be considered a statistically significant change.

In July 2022, a question to measure respondent sexual orientation was added to the NHS, followed by an update to the question measuring a respondent's gender in January 2023. Both questions follow the [U.S. Census Bureau's](#) best practices for measuring these respondent traits.

**Question 512:** Which of the following best represents how you think of yourself?

- 1) Gay or lesbian
- 2) Straight, that is not gay or lesbian
- 3) Bisexual
- 4) Something else, please specify

**Question Gender 1:** What sex were you assigned at birth on your original birth certificate?

- 1) Male
- 2) Female

**Question Gender 2:** How do you describe yourself?

- 1) Male
- 2) Female
- 3) Transgender
- 4) Do not identify as male, female, or transgender



## The Home Purchase Sentiment Index Components

The HPSI is constructed from consumers' answers to the six NHS questions detailed below. The six questions solicit consumers' evaluations of housing market conditions and address topics that are related to their home purchase decisions. The questions ask consumers whether they think that it is a good or bad time to buy or to sell a house, what direction they expect home prices and mortgage interest rates to move, how concerned they are about losing their jobs, and whether their incomes are higher than they were a year earlier.

$$HPSI = \frac{Q12 + Q13 + Q15 + Q20B + Q112B + Q116}{6} + 63.5$$

**Question 12:** In general, do you think it is a very good time to buy a house, a somewhat good time, a somewhat bad time, or a very bad time to buy a house?

- 1) Very good time
- 2) Somewhat good time
- 3) Somewhat bad time
- 4) Very bad time
- 5) Don't know (**SKIP ONLINE/ VOLUNTEERED ON PHONE**)

**Question 13:** In general, do you think it is a very good time to sell a house, a somewhat good time, a somewhat bad time, or a very bad time to sell a house?

- 1) Very good time
- 2) Somewhat good time
- 3) Somewhat bad time
- 4) Very bad time
- 5) Don't know (**SKIP ONLINE/ VOLUNTEERED ON PHONE**)

**Question 15:** During the next 12 months, do you think home prices in general will go up, go down, or stay the same as where they are now?

- 1) Prices will go up
- 2) Prices will go down
- 3) Prices will remain about the same
- 4) Don't know (**SKIP ONLINE/ VOLUNTEERED ON PHONE**)

**Question 20B:** During the next 12 months, do you think home mortgage interest rates will go up, go down, or stay the same as where they are now?

- 1) Rates will go up
- 2) Rates will go down
- 3) Rates will remain about the same
- 4) Don't know (**SKIP ONLINE/ VOLUNTEERED ON PHONE**)





**Question 112B:** How concerned are you that you will lose your job in the next twelve months? Are you very concerned, somewhat concerned, not very concerned, or not at all concerned that you will lose your job in the next twelve months?

- 1) Very concerned
- 2) Somewhat concerned
- 3) Not very concerned
- 4) Not at all concerned
- 5) Don't know (**SKIP ONLINE/ VOLUNTEERED ON PHONE**)

**Question 116:** How does your current monthly household income compare to what it was twelve months ago? Would you say it is: **READ CHOICES**

- 1) Significantly higher now
- 2) About the same vs. twelve months ago
- 3) Significantly lower now
- 4) Don't know (**SKIP ONLINE/ VOLUNTEERED ON PHONE**)

**Additional Key Indicators**

**Question:** During the next 12 months, do you think home prices in general will go up, go down, or stay the same as where they are now?

- 1) Prices will go up
- 2) Prices will go down
- 3) Prices will remain about the same
- 4) Don't know (**SKIP ONLINE/ VOLUNTEERED ON PHONE**)

**Question:** IF SELECT HOME PRICES WILL GO DOWN: By about what percent do you think home prices in general will go down on the average over the next 12 months? **OPEN END NUMERIC**

**Question:** IF SELECT HOME PRICES WILL GO UP: By about what percent do you think home prices in general will go up on the average over the next 12 months? **OPEN END NUMERIC**

**Question:** During the next 12 months, do you think home rental prices in general will go up, go down, or stay the same as where they are now?

- 1) Prices will go up
- 2) Prices will go down
- 3) Prices will remain about the same
- 4) Don't know (**SKIP ONLINE/ VOLUNTEERED ON PHONE**)

**Question:** IF SELECT HOME RENTAL PRICES WILL GO DOWN: By about what percent do you think home rental prices in general will go down on the average over the next 12 months? **OPEN END NUMERIC**

**Question:** IF SELECT HOME RENTAL PRICES WILL GO UP: By about what percent do you think home prices rental in general will go up on the average over the next 12 months? **OPEN END NUMERIC**



**Question:** If you were going to move, would you be more likely to: **READ CHOICES, RANDOM ROTATE CHOICES**

- 1) Rent
- 2) Buy
- 3) Don't know (**SKIP ONLINE/ VOLUNTEERED ON PHONE**)

**Question:** Do you think it would be very difficult, somewhat difficult, somewhat easy, or very easy for you to get a home mortgage today?

- 1) Very difficult
- 2) Somewhat difficult
- 3) Somewhat easy
- 4) Very easy
- 5) Don't know (**SKIP ONLINE/ VOLUNTEERED ON PHONE**)

**Question:** Looking ahead one year, do you expect your personal financial situation to get much better, somewhat better, stay about the same, get somewhat worse, or get much worse?

- 1) Much better
- 2) Somewhat better
- 3) Stay about the same
- 4) Somewhat worse
- 5) Much worse
- 6) Don't know (**SKIP ONLINE/ VOLUNTEERED ON PHONE**)

**Question:** In general do you think our economy is on the right track or is it off on the wrong track?

- 1) Right track
- 2) Wrong track
- 3) Don't know (**SKIP ONLINE/ VOLUNTEERED ON PHONE**)

### **Oversamples of Recent Fannie Mae Homebuyers**

In Q1 of each year beginning in 2014, interviews are also conducted among an oversample of approximately 1,200 recent homebuyers from Fannie Mae's book of business, to delve deeper into topics on home buying and homeownership. These homebuyers have taken out a purchase loan in the previous year that was acquired by Fannie Mae. Oversample interviews are conducted through self-administered online survey hosted by PSB Insights. Interviews are spread over the three months of Q1, with about 400 interviews conducted each month in addition to the standard monthly interviews. The interviews conducted as part of the oversample are not included in the monthly data set for the NHS and HPSI monthly press releases, and are analyzed separately.

Each year's oversample data is weighted to ensure it is representative of all recent homebuyers on Fannie Mae's book of business.





## Release Date

The National Housing Survey Monthly Report is released on or around the 7<sup>th</sup> day of every month.

For more information about the National Housing Survey monthly reports and topic analyses, please visit: <http://www.fanniemae.com/portal/research-insights/surveys/national-housing-survey.html>