2021 RHFS Survey Methodology

Survey Design

For purposes of this document, the following definitions are provided:

- Building—a separate physical structure identified by the respondent containing one or more units.
- Property—one or more buildings owned by a single entity (person, group, leasing company, and so on). For example, an apartment complex may have several buildings but they are owned as one property.

Target population: All rental housing properties in the United States, circa 2020.

Sampling frame: The RHFS sample frame is a single frame based on a subset of the 2019 American Housing Survey (AHS) sample units. The RHFS frame included all 2019 AHS sample units that were identified as:

1. Rented or occupied without payment of rent.
2. Units that are owner occupied and listed as “for sale or rent”.
3. Vacant units for rent, for rent or sale, or rented but not yet occupied.

By design, the RHFS sample frame excluded public housing and transient housing types (i.e. boat, RV, van, other). Public housing units are identified in the AHS through a match with the Department of Housing and Urban Development (HUD) administrative records.

The RHFS frame is derived from the AHS sample, which is itself composed of housing units derived from the Census Bureau Master Address File. The AHS sample frame excludes group quarters housing. Group quarters are places where people live or stay in a group living arrangement. Examples include dormitories, residential treatment centers, skilled nursing facilities, correctional facilities, military barracks, group homes, and maritime or military vessels. As such, all of these types of group quarters housing facilities are, by design, excluded from the RHFS.

In some cases, nursing homes are co-located with other non-group quarter housing unit types, such as “assisted living” or “independent living” housing units. Since these units are
“in scope” in the AHS sample frame, they are deemed “in scope” for the RHFS sample frame. However, it can be difficult to separate the group quarters units from the housing units (i.e., non-group quarters) when reporting total units for the RHFS property. Census Bureau field representatives do their best to ensure the property information collected in the RHFS reflects only the housing units portion of the property. Moreover, due to the often complicated and unique financial structure of these type of properties, it makes little sense to attempt to administer the RHFS questionnaire to them. Properties identified as assisted living facilities are counted in the RHFS for purposes of total rental units, and are flagged as “assisted living”, but little information is collected about the property.

Finally, the 2021 RHFS sample was selected from the 2019 AHS, but surveyed in 2021. The 2019 AHS sample is selected in late calendar year 2018 and includes new housing units built and ready for occupancy as of late 2018. As such, the RHFS sample will not include any rental properties built between late 2018 and 2020. The total number of rental units in 2+ properties built in 2019 was 321,000 and the number built in 2020 was 348,000[1].

**Sampling unit:** Buildings with at least one unit that is either rented or vacant-for rent.

**Sample design:** The 2021 RHFS was sampled from all rental units as identified in the 2019 AHS sample. AHS cases were stratified based on building size. Building size was based on the number of units in the building as reported by the AHS respondent. AHS respondents reporting single-family attached or detached were put in the single unit building strata. Multiunit buildings were further categorized into four pre-defined strata based on the number of units (2-4, 5-24, 25-49, 50 or more).

Within each stratum, eligible buildings were sorted by geographic variables, including census region, state, urban/rural status, county, and zip code to obtain a stratified systematic sample. The within-stratum sampling rates were determined to result in an expected coefficient of variation (CV)[2] of 10 percent for the aggregated stratum estimates at the national level.

Table 1 below shows the frame size and the final sample sizes by stratum. The sample size incorporates an oversample of buildings that was based on the results from the 2018 iteration of this survey. This oversample was needed to account for non-response, ineligible properties, and sampled units that change strata after being selected from the frame. After data collection is completed, Table 1 will contain the number of completed interviews in both the original and final stratum. Units in the 25-49 units stratum were
selected with certainty because the target sample size exceeded the number of units in the frame for this stratum. The owners and/or property managers of the sampled buildings were contacted and asked about specific financing and property-related characteristics.

Table 1. 2021 RHFS Sample Size by Stratum

<table>
<thead>
<tr>
<th>Stratum</th>
<th>Frame Size</th>
<th>Sample Size</th>
<th>Completed Interviews by Original Stratum</th>
<th>Completed Interviews By Final Stratum</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 unit</td>
<td>11,404</td>
<td>1,250</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>2-4 units</td>
<td>5,003</td>
<td>1,750</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>5-24 units</td>
<td>8,956</td>
<td>5,750</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>25-49 units</td>
<td>1,805</td>
<td>1,805</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>50+ units</td>
<td>4,571</td>
<td>955</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Total Sample</td>
<td>31,739</td>
<td>11,510</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**Frequency of sample redesign:** The RHFS sample is reselected approximately every three years.

**Sample maintenance:** There are no sample maintenance procedures since the sample is selected from a new frame each iteration.

**Data Collection**

**Data items requested and reference period covered:** RHFS collects data on the financial, managerial, and physical characteristics of rental housing properties nationwide. The reference period of the survey was all twelve months of 2020.

**Key data items:** Key data items for RHFS are the definition of the property and the presence of a mortgage.

**Type of request:** Voluntary

**Frequency and mode of contact:** The 2021 RHFS includes single-family residential and multifamily residential properties with at least one housing unit intended for
Data collection will be conducted from June 2021 through November 2021. The reference period of the survey is all 12 months of 2020. Data collection is conducted in two phases. During Phase I, cases that include respondent contact information will first receive a letter inviting them to self-respond online using the Census Bureau Respondent Portal. The Census Bureau Respondent Portal allows respondents to complete surveys online. Respondents will create an account or login to an already existing account. They will link to the RHFS by using the authentication code provided to them in the initial letter sent from the Census Bureau. During Phase 2 field staff will begin searching for property owners and managers for cases that did not include sufficient respondent contact information and conduct interviews. Additionally, field staff will contact cases that did not self-respond during Phase 1 and conduct interviews.

**Data collection unit:** Data were collected from owners, managers, or knowledgeable agents of rental housing properties.

**Special Procedures:** There are no special procedures for the survey.

**History of Survey Program:** Click [here](#) for information regarding RHFS sampling methodologies.

Data users should exercise caution when making comparisons between the 2015 and 2018 Rental Housing Finance Survey estimates. The 2015 sample design used separate frames for single and multi-unit addresses. Single unit rentals were selected from a frame of eligible rental units identified in the 2013 American Housing Survey (AHS) sample and multi-unit addresses were selected from a frame based on a list of basic street addresses on the Master Address File (MAF) located in 2013 AHS sample Primary Sampling Units (PSUs). The 2018 sample design used a single frame based solely on addresses of rental units identified in the 2017 AHS. The 2017 AHS was based on the new sample that was redesigned in 2015, while the 2013 AHS was based on the previous AHS sample design. Thus, the post-stratification of unit control totals had very different distributions across survey years. The differences between 2015 and 2018 RHFS estimates of rental properties can be largely attributed to the differences in the post-stratification of unit control totals and the increase in average property size as measured in units per property between the 2015 and 2018 RHFS sample designs.

https://www.census.gov/construction/chars/xls/mfu_design_cust.xls

[2] CV is defined as the stratum standard error divided by the stratum total