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American Housing Survey

# Investigation of Large Changes between the 2013 and 2015 American Housing Surveys

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Version 1.0

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# **1. Introduction**

## **1.1 Background**

Since 1973, the American Housing Survey (AHS) has collected data on a wide range of housing topics under the sponsorship of the Department of Housing and Urban Development (HUD). The AHS is a panel survey that visits the same housing units in each wave of the panel. From 1985 to present, the AHS is biennial, with each wave collected in odd-numbered years.

The AHS drew a new sample in 2015 and was substantially redesigned. This redesign included changes in the sampling, questionnaire, editing, and weighting methodology. A “bridge” sample consisting of 6,000 housing units interviewed in 2013 were carried into the 2015 interviewing process to allow Census and HUD to study the impact of these redesign changes.

## **1.2 Investigation of Large Changes**

The purpose of this document is to identify and explain differences between the 2013 and 2015 American Housing Survey (AHS) estimates that can be attributed to changes from the 2015 re-design of the survey.

This analysis focuses on changes in the questionnaire, editing, and imputation of the AHS data. This document will first summarize the overall changes in the AHS re-design, then detail specific analysis of large changes Census has researched.

Census plans to continually investigate large changes in estimates based on its own findings and those of the data user community, and will update this document as the analysis progresses. If there are any questions regarding potential data discrepancies that are not covered in this document, they can be e-mailed to [ahsn@census.gov](mailto:ahsn@census.gov).

# **2. Changes in AHS Redesign**

In addition to drawing a new sample in 2015, there were a number of notable changes to the questionnaire, editing, and processing. This section aims to cover the overall global changes a user should take note of in 2015, while the next section will cover specific examples of large changes.

## **2.1 Geography**

Because the AHS panel prior to 2015 crossed such a long period of time, the geographic boundaries used were not always consistent with the most recent definitions. When the AHS drew a new sample in 2015, all geography was brought into alignment with the 2015 Census and OMB standards.

One of the largest changes is that the 25 metropolitan areas represented as part of the 2015 sample are the same as the OMB standards issued in 2013. For this reason, AHS estimates for certain metro areas like New York may not be comparable from 2015 to earlier years. For more detail on the geographic boundaries used in each year, see [Summary of the Differences between the 2015 and 2013 AHS Metro Areas](#).

## **2.2 Sampling and Weighting**

There were a number of changes to sampling and weighting methodology in the 2015 redesign, including the use of a new sampling frame. One example of a large change potentially attributable to a weighting change would be the AHS estimates of “other vacant” units. Prior to 2015, this estimate was controlled to the HVS in the AHS weighting, but HUD and Census decided to remove this control in 2015, resulting in a large change in the estimate.

These changes are largely out-of-scope for the purposes of this document. More detail on the 2015 weighting methodology can be found in the [Source and Accuracy Statement](#).

## **2.3 Questionnaire Changes**

HUD and Census made a number of questionnaire changes in the 2015 redesign to streamline and update the survey. These included the addition of new questions, modification or deletion of existing questions, and changes in question ordering. Census cognitively tested all significant changes to the questionnaire, and core content was kept intact where possible. Census will cover question changes with the most significant changes in section 3 of this document. More detail on question changes can be found by comparing the questionnaires published with each year’s data on the AHS site.

## **2.4 Dependent Interviewing**

One significant change that could potentially impact a number of core variables in 2015 involves the use of prior year data to inform the questionnaire wording, which Census refers to as “Dependent Interviewing”. In some cases, Census will not re-ask a question if there is a valid response present from a prior year. In others, the question wording is altered to verify whether the prior year’s response is still accurate rather than re-asking the question.

The American Housing Survey has used some form of dependent interviewing since 1987, though the widespread use of the methodology began after the survey moved to a fully automated questionnaire in 1997. More detail on changes to dependent interviewing techniques can be found in the historical changes documentation published for each survey year on the AHS web site.

Because a new sample was drawn in 2015, there was no prior year data available to use dependent interviewing techniques. Census also decided to not bring forward prior year data for the 6,000 cases in the bridge sample to ensure they were receiving the full 2015 questionnaire.

Census has studied the impact of dependent interviewing in the AHS and has found that in some cases the technique increases the stability of responses and increases response rates over time.

## **2.4 Editing Changes**

Similar to the spirit of the questionnaire changes made in the redesign, Census also made improvements to the processing and editing of data in some places. Specific improvements that were found to have impacted data are covered in section 3 of this document.

There were broad changes to the standard hot deck imputation Census applies to a number of core variables in the AHS. Census made improvements to the way donor cases were sorted geographically to ensure donors would be chosen from cases in closer geographic proximity.

Census also acquired administrative records from tax assessment data compiled by CoreLogic in 2015. These were used in editing and imputation for the first time with the 2015 data. Section 3 covers all specific situations where administrative records were used and could have an impact on the data.

## **2.5 Changes in Demographic Data Collection and Editing**

From 2005 through 2013, the AHS locked its demographic questionnaire and editing procedures to match those of the 2005 Current Population Survey (CPS). Because the AHS interviews the same housing units each year, changing the demographic questionnaire or edits between survey years is difficult. The AHS used the re-design as an opportunity to update its demographic data to match the 2015 CPS methodology. This includes changes to the relationship answer categories, the addition of a second parent line number, and additional supplemental race questions, veteran status questions, and updated nativity answer categories. The programs used to edit and impute demographic data were also updated to match the 2015 CPS edits.

Although the majority of the 2015 AHS will match CPS methodology in the same year, AHS intentionally differs from CPS in a few ways. First, it did not adopt any additional supplemental education questions and also further restricted its education questions to only apply to household members 18 years or older (householders under 18 are still included).

Additionally, the AHS split the demographic section of its questionnaire into two pieces in the instrument. Core questions on age, race, origin, sex, and relationship remain in the same place as earlier survey years – near the beginning of the questionnaire. Demographic questions not considered part of the AHS “core” – education, veteran status, and disability status – were split into a supplemental demographic section after the AHS core content.

Details on the ordering and wording of AHS demographic questions are located on the AHS web site.

## 2.6 Answer List Randomization

In 2015, Census randomized the answer list order for a selection of questions in order to study and remove potential bias caused by their ordering. The questions with answer list randomization are located in the table below. In cases where “other” or “none” are options, they remained in their positions at the end of the list, but all other options were randomly ordered.

In analysis of the randomization results, Census found that there is typically a slight bias towards the first response, but the category selection is distributed fairly evenly. The question ordering in the table below is what was used in 2013 and earlier, so data users may want to take this into account when looking at shifts in responses to these questions after the re-design.

The one exception to the trend showing a slight bias in earlier question wording was the question on supplemental heating, which showed an increase in the second response. This is covered in more detail in section 3 of this document.

Variable	Question Text	Answer List
SHTEQP1	<p>Do you also have or use another kind of working heating equipment in your unit such as...?</p> <p>-Read answer categories -Enter all that apply, separate with commas</p>	<ol style="list-style-type: none"> <li>1. Wood burning, pot belly, pellet or Franklin stove(s)</li> <li>2. Portable electric heater(s)</li> <li>3. Built-in electric unit(s)</li> <li>4. Room heater(s) burning kerosene, gas or oil</li> <li>5. Something else</li> <li>6. None</li> </ol>
WHYOWN	<p>Which of the following reasons is why the owner(s) own this unit? Because...</p> <p>-Read answer categories -Enter all that apply, separate with commas</p>	<ol style="list-style-type: none"> <li>1. It was a previous usual residence</li> <li>2. It is used for recreational purposes</li> <li>3. It is for investment purposes</li> <li>4. Owner(s) wish to sell it but have not yet been able to</li> <li>5. It was inherited</li> <li>6. Some other reason; specify</li> </ol>
WHYPMTCH	<p>Your mortgage payment can change if the amounts you owe for property taxes or homeowners’ insurance change. Did your mortgage payment change for any of the following other reasons...?</p> <p>-Read all categories -Enter all that apply, separate with commas.</p>	<ol style="list-style-type: none"> <li>1. Lender modified mortgage to prevent foreclosure?</li> <li>2. Mortgage no longer allows you to decide how much to pay?</li> <li>3. The minimum payment choice increased?</li> <li>4. Mortgage changed from interest only to interest plus payment in order to reduce mortgage balance?</li> <li>5. Mortgage changed from fixed rate to adjustable rate or vice</li> </ol>

		<p>versa?</p> <p>6. The adjustable interest rate changed?</p> <p>7. Anything else?</p>
HOWVARY	<p>Why do the payments in the [1st, 2nd,...] mortgage or loan [obtained in Month Year] change?</p> <p>-Read all categories -Enter all that apply, separate with commas</p>	<p>1. You can choose your payment amount known as a "payment option" mortgage</p> <p>2. You are paying only interest on the loan now, but will have to start paying down the loan balance later, known as an "interest only" mortgage</p> <p>3. There will be a large payment due at the end of the loan term, known as a "balloon" mortgage</p> <p>4. Your payments vary according to a set schedule that does not depend on changes in interest rates, known as a "graduated payment" mortgage</p> <p>5. Your interest rate can change with market rates, known as an "adjustable rate" mortgage or ARM</p> <p>6. The payments you make for taxes and/or insurance change</p> <p>7. Other, specify</p>
REFNREAS	<p>Homeowners refinance for many reasons. I am now going to read you a list of reasons people give for refinancing. Please tell me if any of these reasons apply to you. Did you refinance your [1st,2nd,...] mortgage or loan:</p> <p>-Read all categories -Enter all that apply, separate with commas</p>	<p>1. To get a lower interest rate?</p> <p>2. To reduce the mortgage payment?</p> <p>3. To reduce the payment period for the mortgage?</p> <p>4. To increase the payment period for the mortgage?</p> <p>5. To receive cash or increase the outstanding balance of the loan?</p> <p>6. For the option to suspend or temporarily reduce mortgage payments?</p> <p>7. Anything else?</p>

## 2.7 Coding Changes

Census made a few global formatting changes in 2015 that would not impact the estimates, but may require adjustments to programs used to analyze earlier years of AHS.

### *Streamlining of Variables and Datasets*

Variables and datasets are largely streamlined in the 2015 AHS compared to 2013 data. Where possible, variables were condensed and coded in a similar manner to those in the American Community Survey (ACS). The number of datasets was also reduced and the various types of non-response values were condensed into two codes – M for missing and N for not applicable. A more detailed overview of these types of changes can be found at [Getting Started with the Public Use File: 2015 and Beyond](#).

### *Changes in Variable Formatting*

Categorical variables with 10 or more categories were of a numeric type in 2013 and earlier. Starting in 2015, all of these variables are coded as character types with a leading zero (1 becomes “01”, etc.). These changes are reflected in the new [AHS E-Codebook](#).

### *Changes in Edit Flag Formatting*

In 2013 only variables that were directly edited or imputed had edit flags, and they were not always named consistently with the variable. In 2015, nearly every variable has an edit flag which will always follow the naming convention with a J in front of the variable name. Variables that are not edited or imputed will have value of 0 for all cases, and variables that are recodes of other variables will have an imputation flag value if at least one of the components was edited or imputed. This will cause certain recoded variables with a large number of components – such as ADEQUACY or TOTHCAMT to have high imputation rates.

In many cases, these variables are flagged as imputed because they received a fuel cost that came out of a model, even if they gave valid responses to most of the questions. To determine why the edit flag was set for these variables, users can look at the edit flags for individual variables going into the recode.

## 3. Investigated Changes

Census continues to investigate large changes in the data. This section explains changes in the data that Census is already aware of and will be continually updated as research into the large changes using the bridge sample continues.

Census is currently aware of and investigating a large increase in single attached units, a large decrease in condominiums, and large changes in self-reported housing assistance between 2013 and 2015, and will add the results of their findings when possible. Data users are encouraged to



contact Census at 301-763-3235 or [ahsn@census.gov](mailto:ahsn@census.gov) with questions on large changes not mentioned in this document.

### 3.1 Increase in Item Non-Response Rate for Disability Questions

With the addition and removal of content, some of the existing content was re-ordered. The largest example of this is in the demographics content. Core demographic questions that have always existed in the survey, such as sex, age, and race, were kept near the beginning of the questionnaire when roster information was also collected. Other supplemental demographic items, such as education and disability status, were split into a later section of the questionnaire. Due to their new position in the 2015 questionnaire, the six disability variables have a decreased response rate compared to earlier survey years. This can be explained by the percentage of “sufficient partial” cases that do not finish the questionnaire, but give enough data to be used in AHS estimates. An example of this is shown for raw responses to the hearing difficulty question (PHEAR) in table 1 below.

**Table 1.** Distribution of Raw Responses to Hearing Difficulty Question: 2013 and 2015

Person has difficulty hearing	Raw Count (%)			
	2013		2015	
Total	297,811		212,890	
Yes	6,803	(2.3)	7,256	(3.4)
No	288,723	(97.0)	200,723	(94.3)
Don't Know	712	(0.2)	502	(0.2)
Refused	1,552	(0.5)	1,218	(0.6)
Missing	21	(0.0)	3,191	(1.5)

<sup>1</sup>Does not include cooperatives or condominiums.

### 3.2 Increase in Item Non-Response Rate for Unit Size

One example of this is in the unit size question, which typically has a high number of “don’t know” responses. Because valid responses are brought forward and verified in later survey years, there are more opportunities for a unit that has been in the survey for many iterations to give a valid response. Over time, this increases the item response rate. Because unit size is being asked for the first time in 2015, the initial number of non-response values is high. This accounts for the decrease in item non-response rate for this question. After 15 survey cycles, the number of unreported unit size values was at 9.9% in 2013. The percentage of not reported increases to 18.4% in 2015 when the question is asked for the first time. Further analysis of the raw responses

show that for the vast majority of those unreported in 2015, the respondent specifically gave a “Don’t know” response. Unit size is a more extreme example, but this trend can be found in a number of dependently interviewed variables in 2015.

### 3.3 Public Sewer Editing and Imputation Changes

In 2013 and earlier, the AHS imputed public sewer status based on an assumed percentage of units using a public sewer considering its urban/rural status. Census found there was not enough evidence for this assumption and removed the imputation for 2015 processing. This allowed for some public sewer status values to remain as not reported in the final data. Census is investigating an improved imputation methodology to implement in 2017 processing.

### 3.4 Changes in ADEQUACY Coding

In 2013, HUD’s housing adequacy measure was only reported for regularly occupied housing units. Because most of the questions going into this measure (cracks, leaks, signs of pests, etc.) are asked for vacant and usual residence elsewhere housing units, the new coding now also includes these as eligible. The one exception to this are vacant units that are ineligible for utility service questions, which remain ineligible for a housing adequacy status.

### 3.5 Changes in Utilities Editing and Imputation

Census made changes in imputation methodology that could cause significant impact on utilities, mortgage, and public sewer estimates.

Prior to 2015, utility costs were imputed based on cost data for units that gave valid responses. In 2015, the AHS stopped asking for gas and electric bills in most circumstances and moved to assign cost values to them based on consumption modeled from external data obtained from the Residential Energy Consumption Survey. Tables 2 and 3 below show the comparison between 2013 and 2015 for electric and gas heating costs, respectively.

**Table 2.** National Monthly Cost Paid for Electricity: 2013 and 2015

Monthly Cost Paid for Electricity	National Estimate (%)			
	2013		2015	
Less than \$25	2,384	(2.1)	430	(0.4)
\$25 to \$49	9,673	8.4)	7,005	(5.9)
\$50 to \$74	18,495	(16.0)	19,824	(16.8)
\$75 to \$99	21,721	(18.8)	24,879	(21.1)
\$100 to \$149	30,070	(26.0)	36,173	(30.6)
\$150 to \$199	14,317	(12.4)	16,001	(13.5)

\$200 or more	10,011	8.6)	8,525	(7.2)
Included in rent, other fee, or obtained free	9,104	(7.9)	5,311	(4.5)
<b>Median</b> (dollars)	101		104	

**Table 3.** National Monthly Cost Paid for Gas: 2013 and 2015

Monthly Cost Paid for Gas	National Estimate (%)			
	2013		2015	
Less than \$25	12,484	(17.7)	7,128	8.9)
\$25 to \$49	21,986	(31.1)	25,254	(31.4)
\$50 to \$74	12,741	(18.0)	23,298	(29.0)
\$75 to \$99	6,770	(9.6)	9,689	(12.1)
\$100 to \$149	5,263	(7.5)	5,289	(6.6)
\$150 to \$199	1,520	(2.2)	1,333	(1.7)
\$200 or more	879	(1.2)	1,189	(1.5)
Included in rent, other fee, or obtained free	8,984	(12.7)	7,166	(8.9)
<b>Median</b> (dollars)	44		53	

### 3.6 Changes in Editing for Year Built and Lot Size

Census implemented the use of administrative records in the editing and imputation of year built and lot size in 2015. Data for lot size were completely replaced by administrative data where a direct match was possible, while administrative data for year built was used to assist in the assignment or imputation of un-reported values. A comparison of the 2013 and 2015 estimates for lot size and year built can be found below in Table 4 and 5 respectively.

**Table 4.** National Estimates of Lot Size: 2013 and 2015

Lot Size	National Estimate (%)			
	2013		2015	
1-unit structures <sup>1</sup>	84,989		87,783	
Less than 1/8 acre	13,860	(16.3)	13,830	(15.8)

1/8 up to 1/4 acre	22,119	(26)	29,124	(33.2)
1/4 up to 1/2 acre	15,195	(17.9)	17,688	(20.1)
1/2 up to 1 acre	9,191	(10.8)	7,995	(9.1)
1 up to 5 acres	18,253	(21.5)	12,860	(14.6)
5 up to 10 acres	2,780	(3.3)	2,510	(2.9)
10 acres or more	3,592	(4.2)	3,776	(4.3)

<sup>1</sup>Does not include cooperatives or condominiums.

**Table 5.** National Estimates of Year Built: 2013 and 2015

Year Built <sup>1</sup>	National Estimate (%)			
	2013		2015	
2010 to 2013 / 2015	2,053	(1.8)	3,825	(3.2)
2005 to 2009	6,913	(6.0)	7,669	(6.5)
2000 to 2004	8,117	(7.0)	8,773	(7.4)
1995 to 1999	7,971	(6.9)	8,414	(7.1)
1990 to 1994	6,290	(5.4)	7,220	(6.1)
1985 to 1989	7,867	(6.8)	8,099	(6.8)
1980 to 1984	6,704	(5.8)	8,386	(7.1)
1970to 1979	21,543	(18.6)	17,522	(14.8)
1960 to 1969	13,267	(11.5)	13,060	(11.0)
1950 to 1959	11,906	(10.3)	12,853	(10.9)
1940 to 1949	6,642	(5.7)	5,925	(5.0)
1930 to 1939	4,816	(4.2)	3,773	(3.2)
1920 to 1929	4,467	(3.9)	4,608	(3.9)
1919 or earlier	7,297	(6.3)	8,163	(6.9)
<b>Median (year)</b>	1,975		1,976	

<sup>1</sup>For manufactured/mobile homes, oldest category is 1939 or earlier.

### 3.7 Changes in Monthly Housing Cost Calculation

Census changed the way monthly housing costs are calculated in 2015. In prior years, private mortgage insurance (PMI) and other mortgage costs were subtracted from the calculated housing cost. This was due to an earlier survey design when these items were both included in monthly mortgage payment and asked separately and therefore could lead to double counting. In 2015, these items were instead added to the total housing cost (see Table 6).

**Table 6.** National Total Monthly Housing Costs: 2013 and 2015

Total Monthly Housing Costs	National Estimate (%)			
	2013		2015	
Less than \$100	631	(0.5)	486	(0.4)
\$100 to \$199	3,125	(2.7)	2,259	(1.9)
\$200 to \$249	3,310	(2.9)	2,389	(2.0)
\$250 to \$299	3,677	(3.2)	3,042	(2.6)
\$300 to \$349	3,935	(3.4)	3,449	(2.9)
\$350 to \$399	3,815	(3.3)	3,797	(3.2)
\$400 to \$449	3,829	(3.3)	3,927	(3.3)
\$450 to \$499	3,978	(3.4)	4,073	(3.4)
\$500 to \$599	7,945	(6.9)	8,468	(7.2)
\$600 to \$699	7,851	(6.8)	8,512	(7.2)
\$700 to \$799	7,936	(6.9)	8,282	(7.0)
\$800 to \$999	14,419	(12.4)	15,548	(13.1)
\$1,000 to \$1,249	14,182	(12.2)	15,183	(12.8)
\$1,250 to \$1,499	10,017	(8.6)	10,685	(9.0)
\$1,500 to \$1,999	11,861	(10.2)	12,513	(10.6)
\$2,000 to \$2,499	5,815	(5.0)	5,972	(5.0)
\$2,500 or more	7,434	(6.4)	7,567	(6.4)
No cash rent	2,091	(1.8)	2,140	(1.8)
<b>Median</b> (excludes no cash rent) (dollars)	891		917	

### 3.8 Bias in Supplemental Heating Variables

As covered in section 2, Census randomized the answer list order for the supplemental heating question in 2015. Unlike the other questions with randomized answer lists, analysis showed that supplemental heating was unique because the answer choice in the second position was selected more than any other. For all other randomized answer lists, the first position was selected most frequently. In addition, the difference between the first position and positions 3 and 4 was significantly larger than for the other answer lists.

The table below shows the distribution of the answer ordering for each choice that was selected.

	Wood burning, pot belly, Franklin stove, etc.	Portable heaters	Built in electric units	Room heaters burning kerosene
Position 1	696	3,411	702	491
Position 2	1,211	3,703	1,081	733
Position 3	560	2,891	451	339
Position 4	561	2,997	420	338

After further analysis, Census believes that some respondents are answering the supplemental heating question as if it's a yes or no question, rather than responding with their supplemental heating type.

Census believe this because the question (“Do you also have or use another kind of working heating equipment in your [home] such as...?”) is worded as if it requires a binary (yes or no) response. In addition, the AHS field interviewers ask these questions to respondents without showing them the answer list on their computer screen, so they would not see the valid response categories when answering. Given that all other binary questions in the instrument use a 1 for “yes” and a 2 for “no”, and that 78% of households being asked the supplemental heating questions gave a response of 6 (for “none”), Census believes that this significant increase in choosing positions 1 and 2 are caused by this interpretation of the question.

Census did not feel confident publishing supplemental heating estimates based on these findings, so these data were pulled from the 2015 public use files. Census suggests using caution when analyzing supplemental heating estimates from prior years, which did not randomize the answer list order but used the same question text. The AHS implemented cognitively tested changes to this question in 2017 to resolve this issue.

### 3.9 Changes in Percentage of Housing Units with Mortgages

Before 2015, the AHS controlled the percentage of housing units with mortgages to the rate reported in the most recent national American Community Survey. In 2015, Census determined that there was no justification for controlling the mortgage rate estimates in this way and if

Census were to decide to control to ACS it would be preferable to incorporate this into the weighting rather than the editing process. This control mechanism was removed in 2015, which caused a large change compared to earlier years. Table 7 below shows the shift from 2013 to 2015.

**Table 7. National Mortgages Currently on Property: 2013 and 2015**

Mortgages Currently on Property	National Estimate (%)			
	2013		2015	
None, owned free and clear	27,491	(35.6)	30,415	(42.2)
Regular mortgage(s) only <sup>1</sup>	45,382	(58.8)	39,881	(55.3)
At least 1 home equity line of credit mortgage(s) only	3,907	(5.1)	1,461	(2.0)
Reverse mortgage only	419	(0.5)	357	(0.5)
Regular and/or home-equity mortgage <sup>2</sup>	47,741			
Home-equity lump-sum mortgage	2,029			
1 regular or home-equity lump-sum mortgage				37,779
2 or more regular or home-equity lump-sum mortgages				2,101
At least 1 regular or home equity lump-sum mortgage(s) and at least 1 home equity line of credit				2,245

<sup>1</sup>Regular mortgages include home-equity lump sum mortgages, but exclude home-equity credit lines and reverse annuity mortgages.

<sup>2</sup>Figures may not add to total because more than one category may apply to a unit.

### 3.10 Decrease in Homeowners Under 25

Census is aware of a sharp decrease in homeowners under 25. Some of this decrease can be attributed to a known issue in the processing of AGE that cause a large number of people to show as 3-7 months older than their age at the time of interview, though even when accounting for this the number of householders under 25 still decreases.

The table below shows the impact of householder age when accounting for the change. The column showing estimates without the age calculation error is an approximation of how much the estimates could change and does not represent an official revised estimate.

Age of Householder	2013 AHS	2015 AHS (Current, With Error)	2015 AHS (Without Error, Rounded)	2015 ACS

Total	115,900,000	118,300,000	118,290,000	118,208,212
Less than 25 years	5,139,775	3,725,453	4,347,000	4,421,155
25 to 29 years	8,463,666	7,700,840	7,955,000	8,019,512
30 to 34 years	10,715,930	10,185,438	10,141,000	10,185,438
35 to 44 years	20,056,941	20,667,667	20,441,000	20,626,181
45 to 54 years	23,014,495	23,704,469	23,534,000	23,247,416
55 to 64 years	21,659,816	24,039,702	23,638,000	23,038,125
65 to 74 years	14,556,212	16,205,843	16,292,000	16,523,432
75 years and over	12,244,838	12,060,467	11,942,000	11,942,000

**3.11 Larger Change in Other Vacant Estimates**

Census is aware of a significant change between 2013 and 2015 estimates for seasonal and year-round vacant units. Prior to 2015, these estimates were controlled to the HVS in the AHS weighting, but HUD and Census decided to remove this control in 2015, resulting in a large change.

While this change impacts seasonal and year-round estimates individually, it does not impact AHS estimates of total vacant units. More details regarding this change can be found in the Break-In-Series documentation on the AHS web site.

**3.12 Change in Classification of Alternative Structure Types**

Between 2013 and 2015, there were changes in the classification of a small number of housing units the AHS considers as “alternative structure types”. These are housing units that don’t fit into traditional single family, multifamily, or mobile/manufactured home structure types – such as house boats, or permanently occupied RVs, caves, and tents that otherwise fit the AHS definition of a housing unit (direct access and separateness).

These alternative structure types are considered valid housing units when occupied, but not part of the housing stock when vacant. For 2015, these housing units are classified as a non-interview type B, and thus not put onto the public use files and identified.