

HOUSING IN AMERICA: 2003 AMERICAN HOUSING SURVEY RESULTS

The American Housing Survey (AHS) is conducted every odd-numbered year for the nation, and surveys for 47 individual metropolitan areas are conducted every 4 to 6 years in the even-numbered years. The AHS has been a joint effort of the Department of Housing and Urban Development (HUD) and the Census Bureau since 1973. AHS national surveys provide information about U.S. housing during the 10-year span between the decennial censuses. Not only is the AHS more current and more frequent than the decennial census, it collects more information. The AHS is a representative sample of housing units in the United States and includes data on renters and homeowners, household composition and income, housing conditions and structural characteristics, neighborhoods, financing and housing costs, monthly housing expenses, and the overall availability of affordable housing. The national survey is conducted through personal visits to or telephone interviews with approximately 60,000 housing units every 2 years, and each metropolitan survey generally involves interviews or visits with up to 5,000 housing units every 4 to 6 years. A unique and important aspect of the AHS is that the survey revisits the same housing units each time, chronicling the history of America's housing. The survey adds newly constructed housing units each survey year so that the sample represents all housing in the United States.

HUD and the Census Bureau released the results from the 2003 national survey in microdata form in June 2004. The tabular report for 2003 will be available soon. These data are the basis for this article, which presents selected results from the 2003 survey describing the housing of American families. Because the AHS is a sample, the estimates are subject to sampling variability. This article also explains the many ways to access this rich data source. The Census Bureau is now conducting the 2004 metropolitan surveys in 12 areas: Atlanta, Cleveland, Denver, Hartford, Indianapolis,

Memphis, Oklahoma City, Pittsburgh, Sacramento, St. Louis, San Antonio, and Seattle. Those data will be available in early summer 2005.

Selected Housing and Family Information From the 2003 National AHS

The American housing stock consists of nearly 121 million housing units, of which approximately 15 million are vacant or for seasonal use. According to AHS data, American families are homeowners by a ratio of 2 to 1; generally live in single-family housing; occupy fairly new homes; live in suburbs of metropolitan areas; live in homes that have between four and six rooms, three or more bedrooms, one or more complete bathrooms, and few deficiencies; and pay approximately 21 percent of their incomes toward housing costs.

The composition of America's housing stock is shown in Exhibit 1. America's housing stock is estimated to be 120,777,000 units in 2003, up 1.4 percent from the 119,117,000 estimated in the 2001 AHS. Of these units, almost all (97.1 percent) are used year-round, and more than 9 percent are vacant. Of the 105,867,000 occupied units, 68.2 percent are owner occupied. This homeownership rate is an increase from the 68.0 percent rate of 2001.

Exhibit 1. Composition of the Housing Stock

Housing Type	Units	Percent
All types	120,777,000	100.0
Year round	117,219,000	97.1
Seasonal	3,558,000	2.9
Year round types	117,219,000	97.1
Occupied	105,867,000	87.7
Vacant	11,352,000	9.4
Occupied types	105,867,000	87.7
Owner occupied	72,254,000	59.8
Renter occupied	33,614,000	27.8

Exhibit 2 shows that the predominant type of American housing is the single-family unit, which accounts for 75.4 percent of the nation's housing stock. The most popular single-family unit is the detached unit, accounting for 74.8 million housing units (61.9 percent of the stock), followed by a manu-



factured (mobile) home (9.0 million housing units, or 7.4 percent of the stock) and the attached unit (7.2 million, or 6.0 percent of the stock).

Exhibit 2. Housing Stock by Type

Type of Housing Unit	Units	Percent
Single-family detached	74,813,000	61.9
Single-family attached	7,255,000	6.0
Multifamily	29,751,000	24.6
2–4 units	9,900,000	8.2
5–9 units	5,982,000	5.0
10–19 units	5,479,000	4.5
20–49 units	3,955,000	3.3
50 or more units	4,435,000	3.7
Manufactured (mobile)	8,958,000	7.4

Approximately 30 million housing units, or 25 percent of the total housing stock, are in multifamily buildings. The most prevalent multifamily size category is the two- to four-unit building, which includes approximately one-third of all multifamily units. Approximately 4 million housing units are in the largest (50 or more units) multifamily structures, representing approximately 15 percent of the multifamily housing stock.

As Exhibit 3 demonstrates, American housing stock is fairly new. Approximately 32 percent of the units have

Exhibit 3. Year Structure Built

Year Built	Units	Percent
2000–03	6,262,000	5.2
1995–99	8,881,000	7.4
1990–94	7,196,000	6.0
1985–89	8,879,000	7.4
1980–84	7,586,000	6.3
1975–79	12,324,000	10.2
1970–74	11,193,000	9.3
1960–69	15,484,000	12.8
1950–59	13,410,000	11.1
1940–49	8,123,000	6.7
1930–39	6,340,000	5.2
1920–29	5,470,000	4.5
Pre-1919	9,628,000	8.0

been built since 1980, and the median construction date is 1970. This median means that half of the housing units have been built within the past 33 years. Houses are also durable: 9.6 million units (8.0 percent of all housing units) were built in 1919 or earlier and are more than 80 years old.

Exhibit 4 shows that housing is generally located in metropolitan areas (91.2 million units, or 75.5 percent of the stock). In metropolitan areas, approximately three-fifths of these units are located in suburban areas outside central cities. Housing units located outside metropolitan areas account for nearly one-fourth (24.5 percent) of American housing. Since 2001, the proportion of units in nonmetropolitan areas has increased by 2.6 percentage points, although the relative shares of central city and suburban areas have remained stable.

Exhibit 4. Location

Location	Units	Percent
Metropolitan	91,185,000	75.5
Inside central cities	35,079,000	29.0
Suburban	56,105,000	46.5
Outside metropolitan areas	29,592,000	24.5
Northeast Region	22,602,000	18.7
Midwest Region	27,893,000	23.1
South Region	44,659,000	37.0
West Region	25,623,000	21.2

Regionally, the South has the greatest number (44.7 million) and percentage (37.0 percent) of housing units. The Northeast has the fewest, with 22.6 million units, or 18.7 percent of all housing units. These percentages are little changed from the 2001 AHS and show decreases in the West and Midwest of about 0.2 percentage point, no change in the Northeast, and an increase in the South of 0.4 percentage point.

Exhibit 5 shows the distribution of housing units by number of rooms per housing unit. The greatest number of housing units (28.0 million, or 23.2 percent) has five rooms; slightly fewer housing units have either four rooms (23.4 million, or 19.3 percent) or six rooms (24.6 million, or 20.4 percent). The size distribution of housing has not changed much from the size reported in the 2001 AHS, although the proportion of units with seven or more rooms has increased by 0.6 percentage point, at the expense of the units in the four- to six-room range.

The proportion of units with fewer than four rooms has remained constant at about 10.7 percent.

More than 70 million American homes (58.2 percent) have three or more bedrooms. Housing units containing three bedrooms are most popular and account for 48.8 million (40.4 percent) of all housing units (see Exhibit 6). Approximately 1.2 million housing units (1 percent) do not have a separate bedroom. The distribution is nearly unchanged from 2001 AHS results. Virtually all housing units (98.2 percent) have bathrooms; only 2.2 million households report having no bathrooms. More than 48 million households have one complete bathroom and nearly 53 million have two or more bathrooms—a slight increase in the number of bathrooms reported in the 2001 AHS. (See Exhibit 7.)

American housing units have few deficiencies—especially owner-occupied units. Exhibit 8 shows the incidence of selected deficiencies for all occupied housing units and then distinguishes between owner- and renter-occupied housing units. Of the approximately 106 million occupied units in the United States, about 1 million have holes in the floors; the incidence is lower for owner-occupied units (0.6 percent) than for renter-occupied units (1.7 percent). Open cracks or holes in interior walls are more prevalent—5.2 million occupied units reported this deficiency—and the incidence for renters (7.6 percent) is more than twice that of owners (3.7 percent). Electrical deficiencies are very rare: only 73,000 households reported no electrical wiring, and 640,000 reported exposed wiring. The lack of electrical outlets in one or more rooms occurs in

Exhibit 5. Number of Rooms

Rooms	Units	Percent
1	520,000	0.4
2	1,425,000	1.2
3	10,943,000	9.1
4	23,363,000	19.3
5	27,976,000	23.2
6	24,646,000	20.4
7	14,670,000	12.2
8	8,286,000	6.9
9	3,900,000	3.2
10 or more	5,048,000	4.2

1.5 million homes, and this deficiency, although uncommon for both renters and owners, is seen half again as frequently in rental units.

The distribution of monthly housing costs is shown in Exhibit 9. Housing costs for renters include contract rent, property insurance, and utilities; housing costs for owners include mortgage (or installment loan) payments, property insurance, real estate taxes, fees (association, condominium, or cooperative), park fees for manufactured (mobile) homes, land rents, routine maintenance, and utilities. For all housing units, the median monthly housing cost is \$691 per month, with owners having a cost of \$757 and renters having a cost of \$648. Median housing costs vary significantly among regions. The South has the lowest median monthly housing cost (\$602), the Midwest has the second lowest (\$638), the Northeast has the second highest (\$775), and the West has the highest (\$866). A higher percentage of owners (19.3 percent) have housing costs of \$1,500 or more per month compared with renters (3.9 percent). At the lower end of the distribution, 18.4 percent of owners have monthly costs of under \$300, while only 15.1 percent of renters pay this little. This difference may be explained by the fact that nearly 4 out of 10 owners have no mortgage debt and therefore no monthly mortgage expenses. Exhibit 9 also shows that 1.8 million households pay no cash rent for their housing units. Although

Exhibit 6. Number of Bedrooms

Bedrooms	Units	Percent
0	1,205,000	1.0
1	14,414,000	11.9
2	34,813,000	28.8
3	48,822,000	40.4
4 or more	21,523,000	17.8

Exhibit 7. Number of Bathrooms

Bathrooms	Units	Percent
0	2,243,000	1.9
1	48,162,000	39.9
1.5	17,645,000	14.6
2 or more	52,727,000	43.7



Exhibit 8. Selected Housing Deficiencies (Occupied Units)

Deficiency	All		Owner Occupied		Renter Occupied	
	Units	Percent	Units	Percent	Units	Percent
Holes in floors	976,000	0.9	420,000	0.6	556,000	1.7
Open cracks or holes (interior)	5,228,000	4.9	2,664,000	3.7	2,564,000	7.6
Broken plaster or peeling paint (interior)	2,339,000	2.2	1,102,000	1.5	1,236,000	3.7
No electrical wiring	73,000	0.1	44,000	0.1	29,000	0.1
Exposed wiring	640,000	0.6	388,000	0.5	252,000	0.8
Rooms without electrical outlets	1,487,000	1.4	838,000	1.2	649,000	1.9

Exhibit 9. Monthly Housing Costs (Occupied Housing Units)

Cost (\$)	All		Owner Occupied		Renter Occupied	
	Units	Percent	Units	Percent	Units	Percent
No cash rent	1,760,000	1.7	NA	NA	1,760,000	5.2
Less than 100	1,123,000	1.1	781,000	1.1	342,000	1.0
100–199	6,263,000	5.9	4,943,000	6.8	1,319,000	3.9
200–249	4,550,000	4.3	3,704,000	5.1	846,000	2.5
250–299	4,634,000	4.4	3,839,000	5.3	795,000	2.4
300–349	4,412,000	4.2	3,421,000	4.7	991,000	2.9
350–399	4,347,000	4.1	3,036,000	4.2	1,311,000	3.9
400–449	4,417,000	4.2	2,777,000	3.8	1,639,000	4.9
450–499	4,644,000	4.4	2,529,000	3.5	2,115,000	6.3
500–599	8,902,000	8.4	4,492,000	6.2	4,410,000	13.1
600–699	8,539,000	8.1	4,215,000	5.8	4,325,000	12.9
700–799	7,891,000	7.5	4,119,000	5.7	3,773,000	11.2
800–999	12,139,000	11.5	7,420,000	10.3	4,718,000	14.0
1,000–1,249	10,230,000	9.7	7,409,000	10.3	2,822,000	8.4
1,250–1,499	6,772,000	6.4	5,643,000	7.8	1,128,000	3.4
More than 1,500	15,245,000	14.4	13,925,000	19.3	1,319,000	3.9
All	105,867,000	100.0	72,254,000	100.0	33,614,000	100.0

absolute monthly housing costs indicate that renters pay less than owners do, the situation reverses when these absolute magnitudes are converted to fractions of income spent on housing. Overall, the median housing cost burden (proportion of income spent on housing) is 20.7 percent, but renters pay a median of 27.5 percent of their incomes, while owners pay 18.0 percent. As might be expected, median monthly housing costs increased by approximately 5 percent from costs reported in the 2001 AHS.

One new feature of the 2003 AHS is its use of race categories compatible with the 2000 decennial census. That census was the first in which respondents were allowed to indicate whether they are of more than one race. Because the AHS is a sample survey, its ability to produce statistically reliable estimates for extremely rare characteristics is limited. Accordingly, the AHS data set does not identify all 31 possible combinations of the five race categories, limiting it to only 17 (plus two composite categories). Exhibit 10 shows the distribution of householders by race and tenure. By far, the largest proportion of householders (98.9 percent) indicated only a single race. Of those that indicated more than one race, the most common was White with American Indian, Alaska Native, which includes 679,000 households, or 0.64 percent. The most common three-race combination was White with Black and American Indian,

Alaska Native, of which there are 67,000 households, or 0.06 percent. Note that estimates involving small proportions of the population are subject to relatively larger errors for statistical reasons. Thus, this exhibit should be used with caution.

The tables presented in this article have only skimmed the surface of the information available from the AHS. The hard-copy report will contain nearly 500 pages of detailed tables about America's housing units. In addition to including chapters on all housing units and occupied housing units, the report has separate chapters covering owner-occupied units, renter-occupied units, African-American households, Hispanic households, and elderly households. Each chapter contains a set of up to 25 tables covering general housing characteristics, height and condition of the buildings, size of the units and lots, equipment and plumbing, fuels, housing quality indicators, neighborhoods, household composition, recent movers, reasons for moving, income, housing costs, value, price, amount, and source of downpayments, number of rooms, square footage, detailed tenure, income details, detailed housing costs, value, structure type and climate, journey to work, and units in structure. In addition, the microdatabase can be used to create customized or user-specified tables and to perform multivariate analyses.

Exhibit 10. Race of Householder by Tenure (Occupied Units)

Race	All		Owner Occupied		Renter Occupied	
	Units	Percent	Units	Percent	Units	Percent
White only	87,512,000	82.66	63,141,000	87.39	24,370,000	72.50
Black only	13,005,000	12.28	6,192,000	8.57	6,813,000	20.27
American Indian, Alaska Native only	664,000	0.63	341,000	0.47	323,000	0.96
Asian only	3,177,000	3.00	1,810,000	2.51	1,367,000	4.07
Hawaiian, Pacific Islander only	294,000	0.28	147,000	0.20	147,000	0.44
Identified two-race combinations ¹	1,125,000	1.06	587,000	0.81	538,000	1.60
Identified three-race combinations ²	81,000	0.08	30,000	0.04	51,000	0.15
Other combinations of two to five races	10,000	0.01	5,000	0.01	5,000	0.02
All	105,867,000	100.00	72,254,000	100.00	33,614,000	100.00

¹ The two-race combinations identified by the AHS are White/Black; White/American Indian, Alaska Native; White/Asian; White/Hawaiian, Pacific Islander; Black/American Indian, Alaska Native; Black/Asian; Black/Hawaiian, Pacific Islander; American Indian, Alaska Native/Asian; and Asian/Hawaiian, Pacific Islander.

² The three-race combinations identified by the AHS are White/Black/American Indian, Alaska Native; White/Asian/Hawaiian, Pacific Islander; and White/American Indian, Alaska Native/Asian.



Accessing Housing Information

HUD and the Census Bureau have given high priority to making the AHS accessible. Users may download AHS information in tabular and microdata formats. A full array of media is used: the tabulations are available in hard copy, PDF file, CD-ROM, and downloadable Internet files; and the microdata files (in ASCII or SAS formats) are available on CD-ROM or are downloadable from the Internet. Copies of the printed versions are available from HUD USER (1-800-245-2691). The national AHS reports can be purchased from the Government Printing Office (202-512-1800), and the metropolitan area reports can be obtained from the Census Bureau (301-763-4636). Both the Census Bureau and HUD maintain Internet sites, and HUD operates an AHS electronic mailing list for the AHS user community. The URL for the HUD AHS website is www.huduser.org/datasets/ahs.html. The following items are available for downloading:

- The 2003 microdata files in SAS and ASCII formats.
- Summary statistics for the 2003 AHS.
- Line-by-line comparisons of 1997, 1999, and 2001 estimates and the 2003 initial estimates for a wide array of housing and occupant characteristics.
- The codebook for the survey, which has been revised for the 2003 survey and released as a PDF file.
- Links to the Census Bureau website.
- Microdata in downloadable format for the 1995, 1997, 1999, 2001, and 2003 national surveys and the 1995, 1996, 1998, and 2002 metropolitan surveys.

- Information for ordering reports and documents from HUD USER (P.O. Box 23268, Washington, DC 20026-3268).

The URL of the Census Bureau AHS website is www.census.gov/hhes/www/ahs.html. This site provides the following items:

- PDF file versions of AHS national and metropolitan reports from 1975 through 2002. The 2003 national report will be added as soon as it is released.
- Other AHS and housing reports.
- Internet access to the microdata files for extracts and analyses using automated systems. The national surveys for 1997, 1999, 2001, and 2003 and the metropolitan surveys for 1998 and 2002 are available through the FERRETT system, which allows users to download SAS data sets and ASCII extracts. User-specified tables can also be created through FERRETT. The 1993 and 1995 national surveys are available for extracting and downloading through the Data Extraction System.
- A description of the surveys, historical changes in the surveys, definitions of concepts and variables, sample design and sizes, estimation weights, and survey results in brief formats.
- Information for ordering reports and documents from Customer Services (Census Bureau, Washington, DC 20233-8500).

HUD operates an Internet mailing list to provide information and to create a forum for exchange of information within the AHS user community. Subscription instructions can be found at www.huduser.org/emaillists/ahslist.html.