American Housing Survey

• Sponsor: HUD
• Collector: Census Bureau
• Purpose: Household survey of housing conditions and housing markets
  – More detailed housing data than Census
  – Analyzing the flow of households through housing
AHS: From the interview protocol...

This survey provides information about:

- The cost of housing for the American public.
- The availability of housing for different segments of the American public, such as the elderly, low income, and different minority groups.
- Trends in housing market. For example:
  - What type of housing (single family homes, condominiums, townhouses, manufactured/mobile homes, etc.) are people buying?
  - What type of fuels and appliances are being used?
  - Is the quality of housing in this country improving or getting worse for most people?
  - Is the cost of owning and maintaining a home changing?
  - Is the cost of renting changing?
AHS: Target Population

• All Housing Units
  – Apartments
  – Single-family homes
  – Mobile homes
  – Assisted living units
  – Vacant units

• 50 States and District of Columbia
AHS: Sampling Plan

- Stratified multistage probability sample of housing units
- Use Frame and Primary Sampling Units (PSU) developed for CPS
- Since 1985, use sample selected from 1980 Census
- Same core sample since 1985, providing a panel on flow of households through housing
- Additions of new housing units follows CPS procedures
AHS: Sample Characteristics

- National sample covers on average 55,000 housing units
- Each metropolitan area sample covers 3,000 or more housing units
- Weights derived by controlling survey to independent estimates of housing units, based on Census 2000
AHS: Sample Characteristics

National Sample
- Odd-numbered years
- Throughout the country
- (Includes the 6 largest cities -- every other time)
- Chicago, Detroit, Los Angeles, New York, Northern New Jersey, Philadelphia
- About 50,000 homes

41 Metro Areas
- Even-numbered years
- on a rotating basis
- about 13 each year
- About 3,000 homes per metro
AHS: Coverage Issues

• Units constructed without permits in permit-issuing areas
  – New Structure
  – Conversions/Mergers

• Mobile Homes
AHS: Data Collection

- National data - odd years
- Metro data – even years
  - 47 Metropolitan Areas
  - 6 year rotation
  - 6 largest metro areas every 4 years
- Data collection begins late spring
- Lasts 3-7 months
AHS: Data Collection

- Personal visit or telephone interview using laptops.
- Questions are asked of any knowledgeable adult (16+ years) household member.
- If vacant then questions asked of landlord, rental agent or knowledgeable neighbor.
AHS: Data Collection

• Content areas include:
  – Household
  – Housing Unit
  – Equipment and Facilities
  – Housing costs
  – Housing and Neighborhood Quality
  – Previous residence for recent movers
  – Alterations and Replacements
Subjects Included in the American Housing Survey

**Housing Units and Householders**
- Citizenship of householder
- Cooperatives and condominiums
- Duration of vacancy
- Hispanic origin
- Housing units
- Last used as a permanent residence
- Occupied housing units
- Owner or manager on property
- Population in housing units
- Previous occupancy
- Race
- Rental vacancy rate
- Seasonal units
- Suitability for year-round use
- Tenure
- Vacancy status
- Vacant housing units
- Year householder immigrated to the United States
- Year householder moved into unit
- Year-round housing units

**Household Characteristics**
- Adults and single children under 18 years old
- Age of householder
- Elderly (age 65 and over)
- Family or primary individual
- Household composition by age of householder
- Household moves and formation
- Nativity
- Nonrelative
- Other relative of householder
- Own never-married children under 18 years old
- Persons other than spouse or children
- Single children under 18 years old
- Subfamily
- Years of school completed by householder
Housing Units Occupied by Recent Movers
• Change in housing costs
• Choice of present home and home search
• Choice of present neighborhood and neighborhood search
• Location of previous unit
• Person’s previous residence
• Present and previous units
• Previous home owned or rented by someone who moved here
• Reasons for leaving previous unit
• Recent mover comparison to previous home
• Recent mover comparison to previous neighborhood
• Recent movers
• Structure type of previous residence
• Tenure of previous unit

Plumbing Characteristics
• Complete bathrooms
• Flush toilet and flush toilet breakdowns
• Plumbing facilities
• Sewage disposal and sewage disposal breakdowns
• Source of water and water supply stoppage

Utilization Characteristics
• Bedrooms
• Lot size
• Persons per room
• Persons
• Rooms
• Square feet per person
• Square footage of unit

Structural Characteristics
• Common stairways
• Elevator on floor
• External building conditions
• Foundation
• Light fixtures in public halls
• New construction
• Site placement
• Stories in structure
• Stories between main and apartment entrances
• Units in structure
• Water leakage during last 12 months
• Year structure built
**Equipment and Fuels**

- Cooling degree days
- Electric fuses and circuit breakers
- Fuels
- Heating degree days
- Heating equipment and heating equipment breakdowns
- Kitchen appliances

**Housing and Neighborhood Quality**

- Age of other residential buildings within 300 ft
- Bars on windows of buildings
- Cars and trucks available
- Condition of streets
- Description of area within 300 feet
- Gated communities
- Mobile homes in group
- Moderate physical problems
- Nearby buildings vandalized or with interior exposed
- Neighborhood conditions
- Overall opinion of structure
- Overall opinion of neighborhood
- Selected deficiencies
- Selected amenities
- Severe physical problems
- Trash, litter, or junk on streets or on any properties

**Financial Characteristics**

- Amount of savings and investments
- Annual taxes paid per $1,000 value
- Cash received in primary mortgage
- Condominium and cooperative fee
- Cost and ownership sharing
- Current line-of-credit
- Current total loan as percentage of value
- Current interest rate
- First-time owners
- Food stamps
- Households with home equity loans
- Income
- Items included in primary mortgage payment
- Lenders of primary and secondary mortgages
- Lower cost State and local mortgages
- Major source of down payment
- Median monthly housing costs for owners
- Monthly housing costs
- Monthly payment for principal and interest
- Monthly housing costs as percentage of income
- Mortgage origination
- Mortgages currently on property
- Other activities on property
- Other housing costs per month
- Payment plans of primary and secondary mortgages
Financial Characteristics
• Primary mortgage
• Property insurance
• Purchase price
• Real estate taxes
• Reason refinanced
• Remaining years mortgaged
• Rent reductions
• Rent paid by lodgers
• Repairs, improvements, alterations in last 2 yrs
• Routine maintenance last year
• Term of primary mortgage at origination or assumption
• Total outstanding principal amount
• Type of primary mortgage
• Use of cash from refinancing
• Value
• Value–income ratio
• Year unit acquired
• Year primary mortgage originated

Alterations and Replacements
• Adding or replacing: roof, siding, doors, windows, insulation, pipes, plumbing, fixtures, wiring
• Additions: inside bathrooms, kitchens, bedrooms, other
• Changing unfinished areas to finished rooms: bedrooms, baths, other
• Installing: carpet, flooring, paneling
• Remodeling: bathrooms and kitchens
• Renovations: bedrooms, bathrooms, other
• Repairs due to a major disaster
• Replacing or adding outside: driveway, fence, patio, pool, shed
• Replacing or adding inside: central air, heating equipment, septic, water heater, dishwasher, disposal
Neighborhood Quality and Problems

- 68.7% of households rate their neighborhood 8 or better, out of 10.
- 6.7% live in gated communities (walls or fences).
- Whether neighborhood has crime, odors, noise, litter, and whether it is bothersome.
- Satisfaction with public transportation, shopping, schools, police.
- Neighborhood buildings abandoned or with bars on windows.
AHS: Non-Response

• Non-Interviews
  – Type A – eligible but refused, not home or language (10% of sample)
  – Type B – not eligible for interview but may be in future. Currently non-residential, vacant mobile home site, unit under construction
  – Type C – not eligible for sample. Demolished, relocated, building permit but never built

• Use variable “STATUS” to identify
AHS: Non-Response

• Item Non-Response
  – Answer not known by respondent
  – Respondent refuses to answer
AHS: Missing Data

• Critical items imputed using the cold or hot deck procedure
• Non-critical items coded with reason missing
AHS: “Cold Deck” Allocation

Tenure

• Randomly distributed to meet known distribution
AHS: “Hot Deck” Allocation

- Number of rooms is imputed from Tenure, vacancy, and # of floors
- Allocation Flag
  0 = unchanged
  1 = edited
  2 = allocated
AHS: Weighting

- Housing Unit weights for National Sample
- Product of 9 factors dealing with
  - Probability of selection (initial sampling rate)
  - Adjust for non-response
  - Adjust for non-self-representing PSUs
  - Adjust for new and old construction
  - Control to Census Bureau HU Estimates
AHS: Geographic Areas

United States

- Regions
- Metropolitan statistical areas
  - Central cities
  - Suburbs
- Urbanized areas
- Rural areas
- Places grouped by size
- Confidential id’s Tracts
Working with Longitudinally Linked AHS Data

• Same as CPS, the physical housing unit, and not the household is the object of the sampling plan

• A public use control number, scrambled from the master file control number, can be used to match record of housing unit over time
PUF / IUF

- All Records
- State/MSA
- Top Coding
- Collapsed Categories
- No Administrative
- All Records
- Tract
- Full Distribution
- Full Distribution
- Details of Collection
American Housing Survey (AHS): Using the Internal User File (IUF)

The American Housing Survey (AHS) is sponsored by the U.S. Department of Housing and Urban Development (HUD) and the data are collected by the Census Bureau. The first national survey was conducted in 1973 and the first metro area was surveyed in 1974. To date surveys have been conducted in 48 metro areas.

Accessing the AHS

The AHS data are available to the general public in SAS and ASCII format. The Public Use Files (PUFs) are available at [http://www.huduser.org/portal/datasets/ahs.html](http://www.huduser.org/portal/datasets/ahs.html). At this site users can download:

1) Datasets of all AHS surveys dating back to 1997;  
2) Order datasets of AHS surveys conducted prior to 1997 on CD-ROM (till 1989 – years previous are available at the National Archives);  
3) The codebook that provides the name and detailed information on each variable for each survey year (to access each year’s codebook, click on that year’s survey link on the webpage mentioned above and then click on the “Codebook to the American Housing Survey” link);  
4) The survey questionnaire/booklet in both English and Spanish; and  
5) Information on topcoded and bottomcoded variables and the methodology used in the coding.

Why Use the Internal User File (IUF)?

The AHS PUFs include most of the data collected on the AHS, but in order to maintain the privacy of the respondents, many items are not released on the PUF, are recoded and/or topcoded or bottomcoded (i.e., really high and really low values are coded to a single value) and the level of geography available is limited and some of it is masked. The following table shows the differences between the PUF and the IUF.
<table>
<thead>
<tr>
<th>Public Use File (PUF)</th>
<th>Internal Use File (IUF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Topcoded/Bottomcoded and Perturbed (Age) data to protect the privacy and confidentiality of respondents</td>
<td>Non-topcoded/bottomcoded data and age is not perturbed</td>
</tr>
<tr>
<td>Some variables, such as amenities available in the community, may be recoded to a single Yes/No variable</td>
<td>All individual variables collected in the survey are available</td>
</tr>
<tr>
<td>Other variables, such as some variables tracking details on why an unit was not interviewed, are not available</td>
<td>All variables in the interview are available</td>
</tr>
<tr>
<td>Merged/Masked geography</td>
<td>Detailed geography (including 1980 census tract)</td>
</tr>
<tr>
<td>Recoded/Collapsed information on home improvement</td>
<td>Detailed information on home improvement at the job-level</td>
</tr>
<tr>
<td>No information on sampling frames</td>
<td>Detailed information on sampling frames</td>
</tr>
<tr>
<td>In some metro areas some cases may be dropped for disclosure purposes, as the population count in certain areas may no longer meet Census’ threshold for disclosure (post-Hurricane Katrina New Orleans. for</td>
<td>All cases are available</td>
</tr>
<tr>
<td>Not recoded/computed variables that are used to create the publication tables</td>
<td>A file including the recoded/computed variables used to create tables are included</td>
</tr>
<tr>
<td>No information from MASTER file</td>
<td>MASTER file which includes detailed information on sampling frame, geography, etc. is included</td>
</tr>
</tbody>
</table>
AHS: Research Questions

American Housing Survey
User Conference

Opportunity To Hear AHS-Based Research

The inaugural Department of Housing and Urban Development American Housing Survey (AHS) Users Conference will be held on March 8, 2011. This day-long conference will present early results from the newly released 2009 AHS datasets. More than a dozen analysts from academic, private, and government organizations will present their findings on a wide range of housing topics, providing insights into the value of the AHS data.

Registration for this conference is now closed.

Keynote Speaker

John C. Weicher is Director of Hudson Institute’s Center for Housing and Financial Markets. He’s held several policy positions at HUD. From 2001 to 2005 he served as Assistant Secretary for Housing and Federal Housing Commissioner, from 1989 to 1993 he was Assistant Secretary for Policy Development and Research; from 1975 to 1977 he was Chief Economist, and from 1973 to 1974 he was a division director in the Office of Economic Affairs. Those last three positions were all in PD&R, and in those positions he was responsible for managing the AHS.
Briefs and Research Papers

Valuing Housing in Measures of Household and Family Economic Well-Being (Kathleen Short and Amy O’Hara, March 2008) [PDF]
AHS References [PDF]
Housing Data between the Censuses: June 2004 [PDF]
Housing Data between the Censuses: March 2004 [PDF]
1995 AHS "A Quality Profile" - H121/95-1 [PDF]
These Old Houses - 2001 [PDF]

Contact the American Housing Survey Branch by email or by phone at 301-763-3235 or 1-888-518-7365, or visit ask.census.gov for further information on American Housing Survey Data.

Source: U.S. Census Bureau, Housing and Household Economic Statistics Division
Last Revised: February 03, 2010

This symbol □ indicates a link to a non-government web site. Our linking to these sites does not constitute an endorsement of any products, services or the information found on them. Once you link to another site you are subject to the policies of the new site.
Resources

- HUD
- Census Bureau
- Harvard’s Joint Center for Housing Studies
American Housing Survey

The American Housing Survey (AHS, formerly Annual Housing Survey) can answer many of your questions about U.S. people and homes.

The AHS is the largest, regular national housing sample survey in the United States. The U.S. Census Bureau conducts the AHS to obtain up-to-date housing statistics for the Department of Housing and Urban Development (HUD). An introductory booklet created by Census Bureau provides an overview of housing data and tells you where to find these data. You can download the PDF version from: http://www.census.gov/prod/2004pubs/acsar04-1.pdf

The AHS contains a wealth of information that can be used by professionals in nearly every field for planning, decisionmaking, market research, or various kinds of program development. It gives you data on apartments, single-family homes, mobile homes, vacant homes, family composition, income, housing and neighborhood quality, housing costs, equipment, fuels, size of housing unit, and recent movers. National data are collected every other year, from a fixed sample of about 50,000 homes, plus new construction each year. The survey started in 1973, and has had the same sample since 1985, letting you see homes and households changing over the years. In some metropolitan areas we have additional samples every 4-6 years, to measure local conditions.

• AHS 2009 Seattle Data

TOPIC AREAS
• 50th Percentile Rent Estimates
• American Housing Survey
• Annual Adjustment Factors
• Assisted Housing: National and Local
• CENCH
• Consolidated Planning
• Data Sets
• Fair Market Rents
• Geographic Information Systems
• Government Sponsored Enterprise Data
• Housing Affordability Data System
• Housing Facts
• Income Limits
• Infographics
• Low-Income Housing Tax Credit
• Manufactured Home and Subprime Lender List
• Metropolitan Area Look-Up
Housing on www.census.gov
American Housing Survey (AHS)

What's New
View the most recent reports, briefs, and data on American Housing Survey for the past 6 months

Briefs and Research Papers
View briefs (short reports) and research papers on American Housing Survey

Definitions and Terms
Find definitions to American Housing Survey-related terms

How American Housing Survey Data are Collected
Find out more about the Surveys used to obtain American Housing Survey Data

American Housing Survey Data
- National Data
- Metropolitan Data
- Data Corrections

AHS Data Access
Obtain American Housing Survey reports and tables.

Links to Related Sites
Find other agencies or organizations which provide American Housing Survey data and information

More American Housing Survey Data
- Order our Products

Data Quality and Processing

Contact the American Housing Survey Branch by email or by phone at 301-763-3235 or 1-888-518-7365, or visit ask.census.gov for further information on American Housing Survey Data.
American Housing Survey
The Center's research highlights important new data released from the American Housing Survey (AHS). The 1.3 million foreign-born first-time homebuyers, ...
www.jchs.harvard.edu/media/AHS_2002.htm

[PDF] AMERICA'S RENTAL HOUSING
File Format: PDF/Adobe Acrobat - View as HTML
Source: JCHS tabulations of the 2003 American Housing Survey. Income Quintiles: ■ Bottom ■ Lower Middle ■ Middle ■ Upper Middle ■ Top. $140000 ...
www.jchs.harvard.edu/publications/.../rh05_americas_rental_housing.pdf

[XLS] SON 2008 Sources - Harvard University's Joint Center for Housing ...
File Format: Microsoft Excel - View as HTML
117, 23, 2, JCHS tabulations of the 2005 American Housing Survey. 118, 23, 3, JCHS tabulations of the 2005 American Housing Survey. ...

[XLS] SON 2010 Sources - Harvard University's Joint Center for Housing ...
File Format: Microsoft Excel - View as HTML
80, 6, JCHS tabulations of US Census Bureau, American Housing Survey. ... 117, 5, Housing Vacancy Survey: JCHS tabulations of the American Housing Survey. ...
www.jchs.harvard.edu/publications/markets/.../son2010_source_list.xls

[PDF] Seniors Population Aged 85 and Over: 1995-2050
File Format: PDF/Adobe Acrobat - Quick View
cmg & prep food seeing enting & extng home e hearing bathing using stairs. Millions. Source: Joint Center tabulations of the 1995 American Housing Survey ...
www.jchs.harvard.edu/.../presentations/.../seniors_housing_september99.pdf