American Community Survey and Puerto Rico Community Survey

2018 Subject Definitions

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General Information

Contact List: To obtain additional information on these and other American Community Survey (ACS) subjects, see the list of Census Contacts on the Internet at http://www.census.gov/about/contact-us.html.

Scope: These definitions apply to the data collected in both the United States and Puerto Rico. The text specifically notes any differences. References about comparability to the previous ACS years refer only to the ACS in the United States. Beginning in 2006, the population in group quarters was included in the data tabulations.

Historical Census Comparability: For additional information about the data in previous decennial censuses, see http://www.census.gov/prod/www/decennial.html.

Why We Ask: For additional information about the Federal Uses and why we ask specific questions, see https://www.census.gov/programs-surveys/acs/operations-and-administration/2014-content-review/federal-uses.html.

Weighting Methodology: The weighting methodology in the 2006 ACS was modified in order to ensure consistent estimates of occupied housing units, households, and householders. For more information on the 2006 weighting methodology changes, see the user note titled "Modification Made in 2006 ACS Weighting Methodology-Family Equalization" on the ACS website (https://www.census.gov/programs-surveys/acs/technical-documentation/user-notes/2006-03.html). There were no significant changes to the 2007 or 2008 weighting methodology. Beginning in 2009, the weighting methodology has changed to include the use of controls for total population for incorporated places and minor civil divisions.

For subject definitions from previous years, visit http://www.census.gov and search for "ACS Code Lists, Definitions, and Accuracy."

Living Quarters

Living quarters are classified as either housing units or group quarters. Living quarters are usually found in structures intended for residential use, but also may be found in structures intended for nonresidential use as well as in places such as tents, vans, and emergency and transitional shelters.

Housing Unit

A housing unit may be a house, an apartment, a mobile home, a group of rooms or a single room that is occupied (or, if vacant, intended for occupancy) as separate living quarters. Separate living quarters are those in which the occupants live separately from any other individuals in the building and which have direct access from outside the building or through a common hall. For vacant units, the criteria of separateness and direct access are applied to the intended occupants whenever possible. If that information cannot be obtained, the criteria are applied to the previous occupants.

Both occupied and vacant housing units are included in the housing unit inventory. Boats, recreational vehicles (RVs), vans, tents, railroad cars, and the like are included only if they are occupied as someone's current place of residence. Vacant mobile homes are included provided they are intended for occupancy on the site where they stand. Vacant mobile homes on dealers' sales lots, at the factory, or in storage yards are excluded from the housing inventory. Also excluded from the housing inventory are quarters being used entirely for nonresidential purposes, such as a store or an office, or quarters used for the storage of business supplies or inventory, machinery, or agricultural products.

Occupied Housing Unit – A housing unit is classified as occupied if it is the current place of residence of the person or group of people living in it at the time of interview, or if the occupants are only temporarily absent from the residence for two months or less, that is, away on vacation or a business trip. If all the people staying in the unit at the time of the interview are staying there for two months or less, the unit is considered to be temporarily occupied and classified as “vacant.” The occupants may be a single family, one person living alone, two or more families living together, or any other group of related or unrelated people who share living quarters. The living quarters occupied by staff personnel within any group quarters are separate housing units if they satisfy the housing unit criteria of separateness and direct access; otherwise, they are considered group quarters.

Occupied rooms or suites of rooms in hotels, motels, and similar places are classified as housing units only when occupied by permanent residents, that is, people who consider the hotel as their current place of residence or have no current place of residence elsewhere. If any of the occupants in rooming or boarding houses, congregate housing, or continuing care facilities live separately from others in the building and have direct access, their quarters are classified as separate housing units.

Vacant Housing Unit – A housing unit is vacant if no one is living in it at the time of interview. Units occupied at the time of interview entirely by persons who are staying two months or less and who have a more permanent residence elsewhere are considered to be temporarily occupied, and are classified as "vacant."

New units not yet occupied are classified as vacant housing units if construction has reached a point where all exterior windows and doors are installed and final usable floors are in place. Vacant units are excluded from the housing inventory if they are open to the elements, that is, the roof, walls, windows, and/or doors no longer protect the interior from the elements. Also excluded are vacant units with a sign that they are condemned or they are to be demolished.

Comparability **–**The ACS estimates of occupied housing units and vacant housing units differ from those obtained from the 2010 Census. For more information, see "Comparing 2010 American Community Survey 1-Year Estimates of Occupancy Status, Vacancy Status, and Household Size with the 2010 Census – Preliminary Results" on the ACS website. Go to http://www.census.gov and enter the paper title in the search box.

Group Quarters

Group Quarters (GQs) are places where people live or stay in a group living arrangement that is owned or managed by an entity or organization providing housing and/or services for the residents. These services may include custodial or medical care, as well as other types of assistance, and residency is commonly restricted to those receiving these services. People living in GQs usually are not related to each other. GQs include such places as college residence halls, residential treatment centers, skilled nursing facilities, group homes, military barracks, correctional facilities, workers' dormitories, and facilities for people experiencing homelessness. GQs are defined according to the housing and/or services provided to residents and are identified by Census GQ type codes.

In January 2006, the American Community Survey (ACS) was expanded to include the population living in GQ facilities. The ACS GQ sample encompasses 12 independent samples; like the housing unit (HU) sample, a new GQ sample is introduced each month. The GQ data collection lasts only 6 weeks and does not include a formal nonresponse follow-up operation. The GQ data collection operation is conducted in two phases. First, U.S. Census Bureau Field Representatives (FRs) conduct interviews with the GQ facility contact person or administrator of the selected GQ (GQ level), and second, the FR conducts interviews with a sample of individuals from the facility (person level).

The GQ-level data collection instrument is an automated Group Quarters Facility Questionnaire (GQFQ). Information collected by the FR using the GQFQ during the GQ-level interview is used to determine or verify the type of facility, population size, and the sample of individuals to be interviewed. FRs conduct GQ-level data collection at approximately 20,000 individual GQ facilities each year.

A list of the GQ facilities (and their respective type codes) that are in scope for the 2018 ACS can be found in the 2018 Code List on the ACS website. Go to http://www.census.gov and enter "ACS Code Lists, Definitions, and Accuracy" in the search box.

***Question/Concept History* –** Though the ACS was expanded to include the population living in GQ facilities in 2006, the ACS began field testing early. The pretest in 2001 allowed the ACS to determine whether or not the new processes, type codes, and procedures would produce the desired outcome for the 2006 ACS GQ data collection operation.

In 2001, the ACS GQ operational staff and other ACS staff implemented a number of changes in the GQ operation, the greatest of which was developing an automated Group Quarters Facility Questionnaire (GQFQ). The staff developed the GQFQ based on the decennial Other Living Quarters (OLQ) questionnaire used in the 2004 Census test. However, in order to make that questionnaire script fit with the ACS operation, the developers made some modifications, such as dropping the listing component and adding the ability to capture multiple GQ types within the GQ sampled.

Along with the introduction of an automated GQFQ, the ACS made the decision to use the revised GQ definitions planned for the 2010 Census, even though the definitions of GQ types were still evolving. The pretest used a draft version of the GQ definitions that existed at the end of November 2004. Since these definitions will continue to evolve over the next several years, the ACS needed a GQFQ that could easily adopt future revisions to the definitions. Thus, the developers designed a flexible GQFQ. It was through this flexibility that group quarter types have been able to be added or dropped (e.g. YMCA/YWCA and hostels).

***Comparability* –** The total group quarters population in the ACS may not be comparable with the 2010 Census because there are some 2010 Census GQ types that were out of scope in the ACS. These include domestic violence shelters, soup kitchens, regularly scheduled mobile food vans, targeted non-sheltered outdoor locations, crews of maritime vessels, and living quarters for victims of natural disasters. The exclusion of these GQ types from the ACS may result in a small bias in some ACS estimates to the extent that the excluded population is different from the included population. Furthermore, only a sample of GQ facilities throughout the United States and Puerto Rico are selected for the ACS. ACS controls the GQ sample at the state level only. Therefore, for lower levels of geography, particularly when there are relatively few GQs in a geographic area, the ACS estimate of the GQ population may vary from the count from the 2010 Census.

When comparing the 2018 ACS data with previous ACS data, the data should be compared with caution at the National and State levels. It should not be compared below the State level because the weighting for the group quarters (GQ) population is not controlled below the state level. Because of this, users may observe greater fluctuations in year-to-year ACS estimates of the GQ population at sub-state levels than at state levels. The causes of these fluctuations typically are the result of either GQs that have closed or where the current population of the GQ is significantly different than the expected population as reflected on the sampling frame. Substantial changes in the ACS GQ estimates can impact ACS estimates of total population characteristics for areas where either the GQ population is a substantial

proportion of the total population or where the GQ population may have very different characteristics than the total population as a whole. Users can assess the impact that year-to-year changes in sub-state GQ total population estimates have on the changes in total ACS population estimates by accessing Table B26001. Go to https://data.census.gov/ and enter the table number. Users should also use their local knowledge to help determine whether the year-to-year change in the ACS estimate represents a real change in the GQ population or may be the result of the lack of adequate population controls for sub-state areas.

When comparing ACS GQ data across the years when group quarters data were collected, it must be noted that beginning in 2008 military transient quarters, YMCA/YWCA and hostels were no longer in scope. These data were collected in 2006 and 2007.

Since the 2011 ACS, the GQ population has been supplemented using whole person imputation into not-in-sample GQ facilities. This increased the reliability of substate estimates for the total GQ population and characteristics of the residence population. State-level estimates were relatively unchanged by the new methodology.

Housing Variables

Acreage (Cuerda)

The data on acreage were obtained from Housing Question 4 in the 2018 American Community Survey (ACS). This question was asked at occupied and vacant one-family houses and mobile homes. The data for vacant units were obtained by asking a neighbor, real estate agent, building manager, or anyone else who had knowledge of the vacant unit in question.

This question determines a range of acres (cuerdas) on which the house or mobile home is located. A major purpose for this question, in conjunction with Housing Question 5 on agricultural sales, is to identify farm units. In previous ACS questionnaires and in Census 2000, this question was used to determine single-family homes on 10 or more acres (cuerdas). The land may consist of more than one tract or plot. These tracts or plots are usually adjoining; however, they may be separated by a road, creek, another piece of land, etc.

In the ACS prior to 2004 and in Census 2000, acreage was one of the variables used to determine specified owner- and renter-occupied housing units.

Question/Concept History – The 1996-1998 question asked, "Is this house or mobile home on less than 1 acre, 1 to less than 10 acres, or 10 or more acres." Since 1999, the question wording was changed to ask, "How many acres is this house or mobile home on?" and the second response category was modified to "1 to 9.9 acres." (In the Puerto Rico Community Survey, the question wording was changed to ask about cuerdas instead of acres.)

Comparability – Data on acreage in the 2018 ACS can be compared to previous ACS and Census 2000 acreage data.

Agricultural Sales

Data on the sales of agricultural crops were obtained from Housing Question 5 in the 2018 American Community Survey (ACS). The question was asked at occupied one-family houses and mobile homes located on lots of 1 or more acres (cuerdas). Data for this question exclude units on lots of less than 1 acre (cuerda), units located in structures containing two or more units, and all vacant units. This question refers to the total amount (before taxes and expenses) received in the 12 months prior to the interview from the sale of crops, vegetables, fruits, nuts, livestock and livestock products, and nursery and forest products produced on "this property." Respondents new to a unit were to estimate total agricultural sales from the 12 months prior to the interview, even if some portion of the sales had been made by previous occupants of the unit.

This question is used mainly to classify housing units as farm or nonfarm residences, not to provide detailed information on the sale of agricultural products. Detailed information on the

sale of agricultural products is provided by the Census of Agriculture, which is conducted by the U.S. Department of Agriculture/National Agricultural Statistics Service (see http://www.agcensus.usda.gov).

Question/Concept History – On the 1996-1998 ACS questionnaires, there were just two response categories to indicate whether or not the amount of sales was over $1,000. Since 1999, the question has included a series of response categories for the amount of the agricultural sales.

Comparability – Data on agricultural sales in the 2018 ACS can be compared to previous ACS and Census 2000 agricultural sales data.

Bedrooms

The data on bedrooms were obtained from Housing Question 6b in the 2018 American Community Survey (ACS). The question was asked at both occupied and vacant housing units. The number of bedrooms is the count of rooms designed to be used as bedrooms, that is, the number of rooms that would be listed as bedrooms if the house, apartment, or mobile home were on the market for sale or for rent. Included are all rooms intended to be used as bedrooms even if they currently are being used for some other purpose. A housing unit consisting of only one room is classified, by definition, as having no bedroom.

Bedrooms provide the basis for estimating the amount of living and sleeping spaces within a housing unit. These data allow officials to evaluate the adequacy of the housing stock to shelter the population and to determine any housing deficiencies in neighborhoods. The data also allow officials to track the changing physical characteristics of the housing inventory over time.

Question/Concept History – The 1996-1998 ACS question provided a response category for "None" and space for the respondent to enter a number of bedrooms. From 1999-2007, the question provided pre-coded response categories from "No bedroom" to "5 or more bedrooms." Starting in 2008, the question became the second part of a two-part question that linked the number of "rooms" and number of "bedrooms" questions together. In addition, the wording of the question was changed to ask, "How many of these rooms are bedrooms?" Additional changes introduced in 2008 included removing the pre-coded response categories and adding a write-in box for the respondent to enter the number of bedrooms, providing the rule to use for defining a "bedroom" as an instruction, and providing an additional instruction addressing efficiency and studio apartments - *"If this is an efficiency/studio apartment, print '0'."*

Limitation of the Data – The Census Bureau tested the changes introduced to the 2008 version of the bedrooms question in the 2006 ACS Content Test. The results of this testing show that the changes may introduce an inconsistency in the data produced for this question as observed from the years 2007 to 2008. For more information, see "Evaluation Report Covering Rooms and Bedrooms" from the 2006 ACS Content Test. Go to

http://www.census.gov and enter "2006 ACS Content Test Evaluation Report Covering Rooms and Bedrooms" in the search box.

Comparability – Caution should be used when comparing ACS data on bedrooms from the years 2008 and after with both pre-2008 ACS and Census 2000 data. Changes made to the bedrooms question between the 2007 and 2008 ACS involving the wording as well as the response option resulted in an inconsistency in the ACS data. This inconsistency in the data was most noticeable as an increase in "No bedroom" responses and as a decrease in "1 bedroom" to "3 bedrooms" responses.

Computer and Internet Use

The 2008 Broadband Improvement Act mandated the collection of data about computer and internet use. As a result, three questions were added to the 2013 American Community Survey (ACS) to measure these topics. Data about computer and internet use were derived from answers to Question 8, Question 9, and Question 10 on the 2018 ACS, and are asked of all occupied housing units.

The computer use question (Question 8) asked if anyone in the household owned or used a computer and included four response categories for a desktop or laptop, a smartphone, a tablet or other portable wireless computer, and some other type of computer. Respondents selected a checkbox for "Yes" or "No" for each response category. Respondents could select all categories that applied.

Respondents who checked "Yes" for the some other type of computer category are asked to write in descriptions of their other computer type(s). These are mostly used for internal purposes and to verify whether the household has some other type of computer, although some people may write in a type of computer that can be reclassified as a desktop or laptop, a smartphone, or a tablet or other portable wireless computer.

Question 9 asked if any member of the household has access to the internet. "Access" refers to whether or not someone in the household uses or can connect to the internet, regardless of whether or not they pay for the service. Respondents were to select only ONE of the following choices:

Yes, by paying a cell phone company or Internet service provider– This category includes housing units where someone pays to access the internet through a service such as a data plan for a smartphone; a broadband internet service such as cable, fiber optic or DSL; satellite; dial-up; or other type of service. This will normally refer to a service that someone is billed for directly for internet alone or sometimes as part of a bundle.

Yes, without paying a cell phone company or Internet service provider– Some respondents may live in a city or town that provides free internet service for their residents. In addition, some colleges or universities provide internet service. These are examples of cases where respondents may be able to access the internet without a subscription.

No access to the Internet at this house, apartment, or mobile home- This category includes housing units where no one can connect to or uses the internet using a paid service or any free service.

If a respondent answers "Yes, by paying a cell phone company or Internet service provider" to Question 9, they are asked to select the type of internet service in Question 10. Respondents select a checkbox for "Yes" or "No" for each of five types of service: a.) cellular data plan for a smartphone or other mobile device, b.) broadband (high speed) Internet service such as cable, fiber optic, or DSL, c.) satellite, d.) dial-up or e.) some other service. Respondents could select "Yes" for all categories that apply.

If a respondent selected "Yes" to the "some other service" category, they are asked to write in a description of the type of internet service. These codes are primarily used internally and to verify whether the household has some other service, although some people may write in a type of internet service that can be reclassified into one of the other categories such as broadband or satellite service.

These data are used by a variety of government agencies, local communities, and other data users. The Federal Communications Commission (FCC) use these statistics to measure the nationwide development of broadband access, as well as the successful deployment of the next generation of broadband technology. These data also allow the FCC to develop measures to increase access to broadband technology and decrease barriers.

The National Telecommunications and Information Administration (NTIA) use these data to provide grants that help expand public access to broadband service and fund broadband education and support, particularly to groups that have traditionally underutilized broadband technology.

State and local governments can use these data to evaluate access to broadband in their communities, and institute policies and programs to increase access for areas with less connectivity. Businesses and non-profits can use these statistics to analyze computer and internet usage in their communities.

Question/Concept History – The computer and internet use questions were added to the ACS in 2013 and were mandated by the 2008 Broadband Improvement Act. In 2016, questions 8 (computer use) and 10 (type of internet service) were revised to improve the measurement of internet subscriptions and cellular data planes, as well as adjusting response categories for types of computers to account for changes in the types of computers available and the terminology used to describe them.

Limitation of the Data – These questions are not asked for the group quarters population, so do not include data about people living in housing such as dorms, prisons, nursing homes, etc.

***Comparability* –** Data prior to 2013 are not available because 2013 was the first year that these questions were collected using the ACS. For more information, go to http://www.census.gov and enter "Comparing ACS Data" in the search box.

Caution should be used when comparing pre-2016 estimates due to question revisions. Observed changes may be due to the revised wording used in the questions and improved measurement rather than a change in use. For more information, go to http://www.census.gov and enter "Computer and Internet Use in the United States: 2016" in the search box.

The Current Population Survey (CPS) has periodically collected data about computer use since 1984 and about internet use since 1997. Both surveys exclude those living in group quarters. However, users should note CPS data are not necessarily comparable to ACS data in several important ways. First, unlike the ACS, some CPS questions are asked at the person level. In addition, the CPS questions and answer categories have changed multiple times over the years. Therefore, comparable data may not be available for certain questions during some years. In addition, some questions may appear to have similar wording as the ACS questions, but may not have been asked of the same type of people. Finally, weighting procedures differ between the two surveys.

Condominium Status and Fee

The data on condominium housing units were obtained from Housing Question 15 in the 2018 American Community Survey (ACS). The question was asked at occupied housing units.

Condominium Status – Condominium is a type of ownership that enables a person to own an apartment or house in a development of similarly owned units and to hold a common or joint ownership in some or all of the common areas and facilities such as land, roof, hallways, entrances, elevators, swimming pool, etc. Condominiums may be single-family houses as well as units in apartment buildings. Renters don't always report condo fees, as they may be collected as part of the rent. Therefore, ACS data are only shown for owner-occupied condominiums.

Condominium Fee – A condominium fee normally is charged monthly to the owners of the individual condominium units by the condominium owners' association to cover operating, maintenance, administrative, and improvement costs of the common property (grounds, halls, lobby, parking areas, laundry rooms, swimming pool, etc.). The costs for utilities and/or fuels may be included in the condominium fee if the units do not have separate meters.

Data on condominium fees may include real estate taxes and/or insurance payments for the common property, but do not include real estate taxes or fire, hazard, and flood insurance reported in Housing Questions 19 and 20 (in the 2018 ACS) for the individual unit.

Amounts reported were the regular monthly payment, even if paid by someone outside the household or remain unpaid. Costs were estimated as closely as possible when exact costs were not known.

The data from this question were added to payments for mortgages (both first, second, home equity loans, and other junior mortgages); real estate taxes; fire, hazard, and flood insurance payments; and utilities and fuels to derive "Selected Monthly Owner Costs" and "Selected Monthly Owner Costs as a Percentage of Household Income" for condominium owners. These data provide information on the cost of home ownership and offer an excellent measure of housing affordability and excessive shelter costs.

By listing the condominium status and fee separately on the questionnaire, the data also serve to improving the accuracy of estimating monthly housing costs for mortgaged owners.

Question/Concept History – Since 1996, the ACS included the question on condominium status with one that asked for condominium fees. The words "or mobile home," and an instruction for renters to enter the amount of the condominium fee only if the fee was in addition to rent, were added starting in 1999.

Comparability – Data on condominium status and fee in the 2018 ACS can be compared to previous ACS and Census 2000 condominium status and fee data.

Contract Rent

The data on contract rent (also referred to as "rent asked" for vacant units) were obtained from Housing Question 17a in the 2018 American Community Survey (ACS). The question was asked at renter-occupied housing units, and vacant housing units that were for rent, and vacant units rented but not occupied at the time of interview.

Housing units that are renter occupied without payment of rent are shown separately as "No rent paid." The unit may be owned by friends or relatives who live elsewhere and who allow occupancy without charge. Rent-free houses or apartments may be provided to compensate caretakers, ministers, tenant farmers, sharecroppers, or others.

Contract rent is the monthly rent agreed to or contracted for, regardless of any furnishings, utilities, fees, meals, or services that may be included. For vacant units, it is the monthly rent asked for the rental unit at the time of interview.

If the contract rent includes rent for a business unit or for living quarters occupied by another household, only that part of the rent estimated to be for the respondent's unit was included. Excluded was any rent paid for additional units or for business premises.

If a renter receives payments from lodgers or roomers who are listed as members of the household, the rent without deduction for any payments received from the lodgers or roomers was to be reported. The respondent was to report the rent agreed to or contracted for even if paid by someone else such as friends or relatives living elsewhere, a church or welfare

agency.The respondent was to exclude subsidies paid by a local housing authority or other agency.

Contract rent provides information on the monthly housing cost expenses for renters. When the data is used in conjunction with utility costs and income data, the information offers an excellent measure of housing affordability and excessive shelter costs. The data also serve to aid in the development of housing programs to meet the needs of people at different economic levels and to provide assistance to agencies in determining policies on fair rent.

Median and Quartile Contract Rent – The median divides the rent distribution into two equal parts: one-half of the cases falling below the median contract rent and one-half above the median. Quartiles divide the rent distribution into four equal parts. Median and quartile contract rent are computed on the basis of a standard distribution. (See the "Median Standard Distributions" section in Appendix A.) In computing median and quartile contract rent, units reported as "No rent paid" are excluded. Median and quartile rent calculations are rounded to the nearest whole dollar. Upper and lower quartiles can be used to note large rent differences among various geographic areas. The median contract rent explanation is comparable to the description used for Median Gross Rent. (For more information, see "Median" and "Quartile" under "Derived Measures.")

Aggregate Contract Rent – Aggregate contract rent is calculated by adding the contract rents for all renter-occupied housing units in an area. Aggregate contract rent is rounded to the nearest hundred dollars. This explanation is comparable to the description used for Aggregate Gross Rent. (For more information, see "Aggregate" under "Derived Measures.")

Aggregate Rent Asked – Aggregate rent asked is calculated by adding the asking rents for all vacant-for-rent and rented, not occupied housing units in an area. Aggregate rent asked is rounded to the nearest hundred dollars. (For more information, see "Aggregate" under "Derived Measures.")

***Question/Concept History* –** Since 1996, the ACS questionnaires provided a space for the respondent to enter a dollar amount. The words "or mobile home" were added to the question starting in 1999 to be more inclusive of the structure type. In 2004, contract rent was shown for all renter-occupied housing units and rent asked was shown for all vacant-for-rent housing units in an area. In previous years (1996-2003), it was shown only for specified renter occupied and specified vacant-for-rent housing units. In 2005, the combined vacancy status category of "rented or sold, not occupied" was split into two categories: "rented, not occupied" and "sold, not occupied." Beginning in 2005, then, the rented, not occupied housing units were combined with vacant-for-rent units to form the universe of vacant rental units used in publication tables.

***Comparability* –** Data on contract rent and rent asked in the 2018 ACS should not be compared to Census 2000 contract rent and rent asked data. For Census 2000, tables were not released for total renter-occupied units or total vacant-for-rent housing units. The universes in Census 2000 were "specified renter-occupied housing units" and "specified vacant-for-rent housing units" whereas the universes in the 2018 ACS were "renter- occupied

housing units" and "vacant-for-rent and rented, not occupied housing units". Thus comparisons cannot be made between these two data sets.

Food Stamp/Supplemental Nutrition Assistance Program Benefits (SNAP)

The data on Food Stamp benefits were obtained from Housing Question 14 in the 2018 American Community Survey (ACS). The Food Stamp Act of 1977 defines this federally-funded program as one intended to "permit low-income households to obtain a more nutritious diet" (from Title XIII of Public Law 95-113, The Food Stamp Act of 1977, declaration of policy). Food purchasing power is increased by providing eligible households with coupons or cards that can be used to purchase food. The Food and Nutrition Service (FNS) of the U.S. Department of Agriculture (USDA) administers the Food Stamp Program through state and local welfare offices. The Food Stamp Program is the major national income support program to which all low-income and low-resource households, regardless of household characteristics, are eligible. In Puerto Rico, the program is named the Nutrition Assistance Program (NAP).

On October 1, 2008, the Federal Food Stamp program was renamed SNAP (Supplemental Nutrition Assistance Program).

Respondents were asked if one or more of the current members received food stamps or a food stamp benefit card during the past 12 months. Respondents were also asked to include benefits from the Supplemental Nutrition Assistance Program (SNAP) (or Nutritional Assistance for Puerto Rico (NAP)) in order to incorporate the program name change.

Question/Concept History – The 1996-1998 ACS asked for a 12-month amount for the value of the food stamps following the Yes response category. For the 1999-2002 ACS, the words "Food Stamps" were capitalized in the question following the Yes response category, and the instruction "Past 12 months' value – *Dollars"* was added. Since 2003, the words "received during the past 12 months" were added to the question following the Yes response category. Beginning in 2008, the value of food stamps received was no longer collected; the wording of the question was changed from "At anytime during the past 12 months" to "In the past 12 months," and the term "*food stamp benefit card*" was added.

Adding the text "food stamps benefit card" to the question text and removing the dollar amount portion of the question resulted in a statistically significant increase in the recipiency rate for food stamps because of a decrease in item nonresponse rate.

Limitation of the Data – Beginning in 2006, the population in group quarters (GQ) was included in the ACS. Many types of GQ populations have food stamp distributions that are very different from the household population. The inclusion of the GQ population could therefore have a noticeable impact on the food stamp distribution. This is particularly true for areas with a substantial GQ population.

The Census Bureau tested the changes introduced to the 2008 version of the Food Stamp benefits question in the 2006 ACS Content Test. The results of this testing show that the changes may introduce an inconsistency in the data produced for this question as observed from the years 2007 to 2008. For more information, see "Evaluation Report Covering Receipt of Food Stamps" from the 2006 ACS Content Test. Go to http://www.census.gov and enter "2006 ACS Content Test Evaluation Report Covering Receipt of Food Stamps" in the search box.

Comparability **–** The Food Stamp/SNAP question was not asked in Census 2000. Because of the wording change on the 2008 ACS questionnaire, you cannot compare data before 2008 to data after 2008. However, you can compare 2008 data to 2009 and later.

Gross Rent

The data on gross rent were obtained from answers to Housing Questions 13a-d and 17a in the 2018 American Community Survey (ACS). Gross rent is the contract rent plus the estimated average monthly cost of utilities (electricity, gas, and water and sewer) and fuels (oil, coal, kerosene, wood, etc.) if these are paid by the renter (or paid for the renter by someone else). Gross rent is intended to eliminate differentials that result from varying practices with respect to the inclusion of utilities and fuels as part of the rental payment. The estimated costs of water and sewer, and fuels are reported on a 12-month basis but are converted to monthly figures for the tabulations. Renter units occupied without payment of rent are shown separately as "No rent paid" in the tabulations.

Gross rent provides information on the monthly housing cost expenses for renters. When the data is used in conjunction with income data, the information offers an excellent measure of housing affordability and excessive shelter costs. The data also serve to aid in the development of housing programs to meet the needs of people at different economic levels and to provide assistance to agencies in determining policies on fair rent.

Adjusting Gross Rent for Inflation – To inflate gross rent amounts from previous years, the dollar values are inflated to the latest year's dollar values by multiplying by a factor equal to the average annual Consumer Price Index (CPI-U-RS-All items) factor for the current year, divided by the average annual CPI-U-RS-All items factor for the earlier/earliest year.

Median Gross Rent – Median gross rent divides the gross rent distribution into two equal parts: one-half of the cases falling below the median gross rent and one-half above the median. Median gross rent is computed on the basis of a standard distribution. (See the "Median Standard Distributions" section in Appendix A.) In computing median gross rent, units reported as "No rent paid" are excluded. Median gross rent is rounded to the nearest whole dollar. The median gross rent explanation is comparable to the description used for Median and Quartile Contract Rent. (For more information, see "Median" under "Derived Measures.")

Aggregate Gross Rent – Aggregate gross rent is calculated by adding together the gross rents for all renter-occupied housing units in an area. Aggregate gross rent is rounded to the

nearest hundred dollars. This explanation is comparable to the description used for Aggregate Contract Rent and Aggregate Rent Asked. (For more information, see "Aggregate" under "Derived Measures.")

***Question/Concept History* –** Since 1996, the ACS questionnaires provided a space for the respondent to enter dollar amounts. The words "or mobile home" were added to the rent question starting in 1999 to be more inclusive of the structure type. Since 2004, gross rent has been shown for all renter-occupied housing units. In previous years (1996-2003), it was shown only for specified renter-occupied housing units.

***Comparability* –** Data on gross rent in the 2018 ACS should not be compared to Census 2000 gross rent data. For Census 2000, tables were not released for total renter-occupied units. The universe in Census 2000 was "specified renter-occupied housing units" whereas the universe in the 2018 ACS is "renter occupied housing units," thus comparisons cannot be made between these two data sets.

Gross Rent as a Percentage of Household Income

Gross rent as a percentage of household income is a computed ratio of monthly gross rent to monthly household income (total household income divided by 12). The ratio is computed separately for each unit and is rounded to the nearest tenth. Units for which no rent is paid and units occupied by households that reported no income or a net loss comprise the category "Not computed."

Gross rent as a percentage of household income provides information on the monthly housing cost expenses for renters. The information offers an excellent measure of housing affordability and excessive shelter costs. The data also serve to aid in the development of housing programs to meet the needs of people at different economic levels and to provide assistance to agencies in determining policies on fair rent.

Median Gross Rent as a Percentage of Household Income – This measure divides the gross rent as a percentage of household income distribution into two equal parts: one-half of the cases falling below the median gross rent as a percentage of household income and one-half above the median. Median gross rent as a percentage of household income is computed on the basis of a standard distribution. (See the "Median Standard Distributions" section in Appendix A.) In computing median gross rent as a percentage of household income, units reported as "No rent paid" or renters reporting no income are excluded. Median gross rent as a percentage of household income is rounded to the nearest tenth. (For more information on medians, see "Derived Measures.")

***Comparability* –** Data on gross rent as a percentage of household income in the 2018 ACS should not be compared to Census 2000 gross rent as a percentage of household income data. For Census 2000, tables were not released for total renter-occupied units. The universe in Census 2000 was "specified renter-occupied housing units" whereas the universe in the 2018 ACS is "renter occupied housing units," thus comparisons cannot be made between these two data sets.

Homeowner Vacancy Rate

See Vacancy Status.

House Heating Fuel

The data on house heating fuel were obtained from Housing Question 12 in the 2018 American Community Survey (ACS). The question was asked at occupied housing units. The data show the type of fuel used most to heat the house, apartment, or mobile home.

House heating fuel provides information on energy supply and consumption. These data are used by planners to identify the types of fuel used in certain areas and the consequences this usage may have on the area. The data also serve to aid in forecasting the need for future energy needs and power facilities such as generating plants, long distance pipelines for oil or natural gas, and long distance transmission lines for electricity.

House heating fuel is categorized on the ACS questionnaire as follows:

Utility Gas – This category includes gas piped through underground pipes from a central system to serve the neighborhood.

Bottled, Tank, or LP Gas – This category includes liquid propane gas stored in bottles or tanks that are refilled or exchanged when empty.

Electricity – This category includes electricity that is generally supplied by means of above or underground electric power lines.

Fuel Oil, Kerosene, etc. – This category includes fuel oil, kerosene, gasoline, alcohol, and other combustible liquids.

Coal or Coke – This category includes coal or coke that is usually distributed by truck.

Wood – This category includes purchased wood, wood cut by household members on their property or elsewhere, driftwood, sawmill or construction scraps, or the like.

Solar Energy – This category includes heat provided by sunlight that is collected, stored, and actively distributed to most of the rooms.

Other Fuel – This category includes all other fuels not specified elsewhere.

No Fuel Used – This category includes units that do not use any fuel or that do not have heating equipment.

***Question/Concept History* –** Since 1996, the ACS questions have remained the same.

Comparability – Data on house heating fuel in the 2018 ACS can be compared to previous ACS and Census 2000 house heating fuel data.

Household Size

This question is based on the count of people in occupied housing units. All people occupying the housing unit are counted, including the householder, occupants related to the householder, and lodgers, roomers, boarders, and so forth.

Average Household Size of Occupied Unit – A measure obtained by dividing the number of people living in occupied housing units by the total number of occupied housing units. This measure is rounded to the nearest hundredth.

Average Household Size of Owner-occupied Unit – A measure obtained by dividing the number of people living in owner-occupied housing units by the total number of owner-occupied housing units. This measure is rounded to the nearest hundredth.

Average Household Size of Renter-occupied Unit – A measure obtained by dividing the number of people living in renter-occupied housing units by the total number of renter-occupied housing units. This measure is rounded to the nearest hundredth.

Comparability – Data on household size in the 2018 ACS can be compared to previous ACS data. The ACS estimates of household size differ from those obtained from the 2010 Census. For more information, see "Comparing 2010 American Community Survey 1-Year Estimates of Occupancy Status, Vacancy Status, and Household Size with the 2010 Census – Preliminary Results" on the Census website. Go to http://www.census.gov and enter the paper title in the search box.

Housing Units

See Living Quarters.

Insurance for Fire, Hazard, and Flood

The data on fire, hazard, and flood insurance were obtained from Housing Question 20 in the 2018 American Community Survey (ACS). The question was asked of owner-occupied units. The statistics for this question refer to the annual premium for fire, hazard, and flood insurance on the property (land and buildings), that is, policies that protect the property and its contents against loss due to damage by fire, lightning, winds, hail, flood, explosion, and so on.

Liability policies are included only if they are paid with the fire, hazard, and flood insurance premiums and the amounts for fire, hazard, and flood cannot be separated. Premiums are reported even if they have not been paid or are paid by someone outside the household.

When premiums are paid on other than a yearly basis, the premiums are converted to a yearly basis.

The payment for fire, hazard, and flood insurance is added to payments for real estate taxes, utilities, fuels, and mortgages (both first, second, home equity loans, and other junior mortgages) to derive "Selected Monthly Owner Costs" and "Selected Monthly Owner Costs as a Percentage of Household Income." These data provide information on the cost of home ownership and offer an excellent measure of housing affordability and excessive shelter costs.

A separate question (21d in the 2018 American Community Survey) determines whether insurance premiums are included in the mortgage payment to the lender(s). This makes it possible to avoid counting these premiums twice in the computations.

Median Fire, Hazard, and Flood Insurance – Median fire, hazard, and flood insurance divides the fire, hazard, and flood insurance distribution into two equal parts: one-half of the cases falling below the median fire, hazard, and flood insurance and one-half above the median. Median fire, hazard, and flood insurance is computed on the basis of a standard distribution (see the "Median Standard Distributions" section under Appendix A.) Median fire, hazard, and flood insurance is rounded to the nearest whole dollar. (For more information on medians, see "Derived Measures.")

***Question/Concept History* –** The ACS questions have been the same since 1996.

***Comparability* –** Data on fire, hazard, and flood insurance in the 2018 ACS can be compared to previous ACS and Census 2000 fire, hazard, and flood insurance data.

Internet Use

See Computer and Internet Use.

Kitchen Facilities

Data on kitchen facilities were obtained from Housing Question 7c-e in the 2018 American Community Survey (ACS). The question was asked at both occupied and vacant housing units. A unit has complete kitchen facilities when it has all three of the following facilities: (c) a sink with a faucet, (d) a stove or range, and (e) a refrigerator. All kitchen facilities must be located in the house, apartment, or mobile home, but they need not be in the same room. A housing unit having only a microwave or portable heating equipment such as a hot plate or camping stove should not be considered as having complete kitchen facilities. An icebox is not considered to be a refrigerator.

Kitchen facilities provide an indication of living standards and assess the quality of household facilities within the housing inventory. These data provide assistance in determining areas that are eligible for programs and funding, such as Meals on Wheels. The

data also serve to aid in the development of policies based on fair market rent and to identify areas in need of rehabilitation loans or grants.

Question/Concept History – The 1996-1998 ACS questions asked whether the house or apartment had complete kitchen facilities, requiring that the three facilities all be in the same unit. In 1999, "mobile home" was added to the question, along with the capitalization of the word "COMPLETE" for emphasis. Starting in 2008, the structure of the question changed and combined kitchen facilities with plumbing facilities and telephone service availability into one question to ask, "Does this house, apartment, or mobile home have-" and provided the respondent with a "Yes" or "No" checkbox for each component needed for complete facilities. Also in 2008, the component "sink with piped water" was changed to "sink with a faucet."

Comparability – Caution should be used when comparing ACS data on kitchen facilities from the years 2008 and after with both pre-2008 ACS and Census 2000 data. Changes made to the kitchen facilities question between the 2007 and 2008 ACS involving the wording as well as the response option resulted in an inconsistency in the ACS data. This inconsistency in the data was most noticeable as an increase in housing units "lacking complete kitchen facilities."

Meals Included in Rent

The data on meals included in the rent were obtained from Housing Question 17b in the 2018 American Community Survey (ACS). The question was asked of occupied housing units that were rented and vacant housing units that were for rent or rented but not yet occupied at the time of enumeration. These data only include rental units, which meals are included in the rent, or if occupants contract for either their meals or a meal plan in order to live in the unit. Renters in continuing care or life facilities are included in this category if their contracts cover meal services.

The meals included in rent allows for a measurement on the amount of congregate housing within the housing inventory. Congregate housing is considered to be housing units where the rent includes meals and other services.

Question/Concept History – Since 1996, the ACS questions have been the same. Starting in 2004, meals included in rent is shown for all renter-occupied housing units. In previous years (1996-2003), it was shown only for specified renter-occupied housing units.

Comparability – Data on meals included in rent in the 2018 ACS should not be compared to Census 2000 meals included in rent data. For Census 2000, tables were not released for total renter-occupied units. The universe in Census 2000 was "specified renter-occupied housing units" whereas the universe in the ACS is "renter occupied housing units," thus comparisons cannot be made between these two data sets.

Mobile Home Costs

The data on mobile home costs were obtained from Housing Question 23 in the 2018 American Community Survey (ACS). The question was asked at owner-occupied mobile homes.

These data include the total yearly costs for personal property taxes, land or site rent, registration fees, and license fees on all owner-occupied mobile homes. The instructions are to exclude real estate taxes already reported in Question 19. Additionally, the mobile home costs exclude installment loan payments on the purchase of the mobile home, as respondents are instructed to include these payments in Question 21b about the mortgage payment amount.

Costs are estimated as closely as possible when exact costs are not known. Amounts are the total for an entire 12-month billing period, even if they are paid by someone outside the household or remain unpaid.

The data from this question are added to payments for mortgages; real estate taxes; fire, hazard, and flood insurance payments; utilities; and fuels to derive "Selected Monthly Owner Costs" and "Selected Monthly Owner Costs as a Percentage of Household Income" for mobile home owners. These data provide information on the cost of home ownership and offer an excellent measure of housing affordability and excessive shelter costs.

***Question/Concept History* –** The 1996-1998 ACS questions were the same. Between 1999 and 2002, the question had a lead-in question on whether the respondent had an installment loan or a contract on the mobile home. The question then asked for total costs including any installment loan. Beginning in 2003, the lead-in question was removed and the question about mobile home costs was worded in its current form.

***Comparability* –** Data on mobile home costs in the 2018 ACS can be compared to previous ACS and Census 2000 mobile home costs data.

Monthly Housing Costs

The data for monthly housing costs are developed from a distribution of "Selected Monthly Owner Costs" for owner-occupied units and "Gross Rent" for renter-occupied units. The owner-occupied categories are further separated into those with a mortgage and those without a mortgage. See the sections on "Selected Monthly Owner Costs" and "Gross Rent" for more details on what characteristics are included in each measure and how these data are comparable to previous ACS and Census 2000 data.

Monthly housing costs provide information on the cost of monthly housing expenses for owners and renters. When the data is used in conjunction with income data, the information offers an excellent measure of housing affordability and excessive shelter costs. The data also serve to aid in the development of housing programs to meet the needs of people at different economic levels.

Median Monthly Housing Costs – This measure divides the monthly housing costs distribution into two equal parts: one-half of the cases falling below the median monthly housing costs and one-half above the median. Medians are shown separately for units "with a mortgage" and for units "not mortgaged." Median monthly housing costs are computed on the basis of a standard distribution. (See the "Median Standard Distributions" section under Appendix A.) Median monthly housing costs are rounded to the nearest whole dollar.

Monthly Housing Costs as a Percentage of Household Income

The data for monthly housing costs as a percentage of household income are developed from a distribution of "Selected Monthly Owner Costs as a Percentage of Household Income" for owner-occupied and "Gross Rent as a Percentage of Household Income" for renter-occupied units. The owner-occupied categories are further separated into those with a mortgage and those without a mortgage. See sections on "Selected Monthly Owner Costs as a Percentage of Household Income" and "Gross Rent as a Percentage of Household Income" for more details on what characteristics are included in each measure and how these data are comparable to previous ACS and Census 2000 data.

Monthly housing costs as a percentage of household income provide information on the cost of monthly housing expenses for owners and renters. The information offers an excellent measure of housing affordability and excessive shelter costs. The data also serve to aid in the development of housing programs to meet the needs of people at different economic levels.

Mortgage Payment

The data on mortgage payment were obtained from Housing Question 21b in the 2018 American Community Survey (ACS). The question was asked at owner-occupied units that have a mortgage, deed of trust, or similar debt; or contract to purchase. The question provides the regular monthly amount required to be paid to the lender for the first mortgage (deed of trust, contract to purchase, or similar debt) on the property. Amounts are included even if the payments are delinquent or paid by someone else. The amounts reported are included in the computation of "Selected Monthly Owner Costs" and "Selected Monthly Owner Costs as a Percentage of Household Income" for units with a mortgage.

The amounts reported include everything paid to the lender including principal and interest payments; real estate taxes; fire, hazard, and flood insurance payments; and mortgage insurance premiums. Separate questions determine whether real estate taxes and fire, hazard, and flood insurance payments are included in the mortgage payment to the lender. This makes it possible to avoid counting these components twice in the computation of "Selected Monthly Owner Costs."

Mortgage payment provides information on the monthly housing cost expenses for owners with a mortgage. When the data is used in conjunction with income data, the information offers an excellent measure of housing affordability and excessive shelter costs. The data

also serve to aid in the development of housing programs aimed to meet the needs of people at different economic levels.

Question/Concept History – Since 1996, the ACS questions have been the same.

Comparability – Data on mortgage payment in the 2018 ACS can be compared to previous ACS and Census 2000 mortgage payment data. For Census 2000, tables for both total owner-occupied housing units and specified owner-occupied housing units were released, thus comparisons can be made only when comparing the same universes between the two data sets.

Mortgage Status

The data on mortgage status were obtained from Housing Questions 21a and 22a in the 2018 American Community Survey (ACS). The questions were asked at owner-occupied units. "Mortgage" refers to all forms of debt where the property is pledged as security for repayment of the debt, including deeds of trust; trust deeds; contracts to purchase; land contracts; junior mortgages; and home equity loans.

A mortgage is considered a first mortgage if it has prior claim over any other mortgage or if it is the only mortgage on the property. All other mortgages (second, third, etc.) are considered junior mortgages. A home equity loan is generally a junior mortgage. If no first mortgage is reported, but a junior mortgage or home equity loan is reported, then the loan is considered a first mortgage.

In most data products, the tabulations for "Selected Monthly Owner Costs" and "Selected Monthly Owner Costs as a Percentage of Household Income" usually are shown separately for units "with a mortgage" and for units "not mortgaged." The category "not mortgaged" is comprised of housing units owned free and clear of debt.

Mortgage status provides information on the cost of home ownership. When the data is used in conjunction with mortgage payment data, the information determines shelter costs for living quarters. These data can be used in the development of housing programs aimed to meet the needs of people at different economic levels.

Question/Concept History – Since 1996, the ACS for mortgage status questions have been the same.

Comparability – Data on mortgage status in the 2018 ACS can be compared to previous ACS and Census 2000 mortgage status data. For Census 2000, tables for both total owner-occupied housing units and specified owner-occupied housing units were released, thus comparisons can be made only when comparing the same universes between the two data sets.

Occupants Per Room

Occupants per room is obtained by dividing the reported number of current residents in each occupied housing unit by the number of rooms in the unit. The figures show the number of occupied units having the specified ratio of current residents per room. Occupants per room is rounded to the nearest hundredth.

This data is the basis for estimating the amount of living and sleeping spaces within a housing unit. The data also serve to aid in planning for future services and infrastructure, such as home energy assistance programs and the development of waste treatment facilities.

Comparability – Caution should be used when comparing American Community Survey (ACS) data on occupants per room from the years 2008 and after with pre-2008 data. Changes to the rooms question between the 2007 and 2008 ACS involving the wording as well as the response option resulted in an inconsistency in the ACS data. This inconsistency in the data was most noticeable in a 2006 content test with the revised question showing an increase in "1 room" responses, decrease in "2 rooms" to "6 rooms" responses, and increase in "7 rooms" and "9 or more" room responses, with an overall increase in the median number of rooms reported using the revised question.

Data on occupants per room in the ACS should be compared with great caution to Census 2000 data due to: 1) differences in residence rules and the absence of population controls used to adjust for undercoverage in the reported number of current residents in the ACS used in this measure and 2) differences in the reported number of rooms due to changes in the rooms question between the 2007 and 2008 ACS.

Occupied Housing Units

See Living Quarters.

Owner-Occupied Units

See Tenure.

Plumbing Facilities

The data on plumbing facilities were obtained from Housing Question 7a and b in the 2018 American Community Survey (ACS). The question was asked at both occupied and vacant housing units. Complete plumbing facilities include: (a) hot and cold running water and (b) a bathtub or shower. Both facilities must be located inside the house, apartment, or mobile home, but not necessarily in the same room. Housing units are classified as lacking complete plumbing facilities when any of the two facilities is not present.

Plumbing facilities provide an indication of living standards and assess the quality of household facilities within the housing inventory. These data provide assistance in the

assessment of water resources and to serve as an aid to identify possible areas of ground water contamination. The data also are used to forecast the need for additional water and sewage facilities, aid in the development of policies based on fair market rent, and to identify areas in need of rehabilitation loans or grants.

Question/Concept History – The 1996-2007 ACS questions were stand-alone questions that asked the respondent to answer either "Yes, has all three facilities" or "No" to the question of whether the housing unit had complete plumbing facilities, requiring that the facilities all be in the same unit. Starting in 2008, the structure of the question changed and combined plumbing facilities with kitchen facilities and telephone service availability into one question to ask, "Does this house, apartment, or mobile home have -" and provided the respondent with a "Yes" or "No" checkbox for each component needed for complete facilities. An additional change introduced in 2008 included changing the description of the component "hot and cold piped water" to "hot and cold running water." In 2013, the question changed for Puerto Rico as follows: "hot and cold running water" was changed to "running water" and "water heater" was added to the components, although the presence of a water heater in a home in Puerto Rico was not necessary for the home to be considered to have complete plumbing.

Comparability – Caution should be used when comparing ACS data on plumbing facilities from the years 2008 and after with both pre-2008 ACS and Census 2000 data. Changes made to the plumbing facilities question between 2007 and 2008 ACS involving the wording as well as the response option resulted in an inconsistency in the ACS data. This inconsistency in the data was most noticeable as an increase in housing units "lacking complete plumbing facilities." This increase in housing units "lacking complete plumbing" was most noticeable in Puerto Rico, when a component of complete plumbing was hot and cold running water. Due to the temperate climate there, hot water was not common there; thus many housing units that would have had complete plumbing under "Yes, has all three facilities" did not under the 2008 through 2012 questions. By 2013, the problem with the Puerto Rico complete plumbing had been fixed making 2013 plumbing for Puerto Rico comparable with pre-2008.

Population in Occupied Housing Units

The data shown for population in occupied units is the total population minus any people living in group quarters. All people occupying the housing unit are counted, including the householder, occupants related to the householder, and lodgers, roomers, boarders, and so forth.

Population in occupied housing units provides information on the population within the housing inventory. The data allow the identification of population patterns within areas to assist in developing housing programs. These data also serve to aid officials in tracking the changing population characteristics of the housing inventory over time.

Comparability – Data on the population in occupied housing units in the 2018 American Community Survey (ACS) can be compared to previous ACS data. The ACS estimates of occupied housing units differ from those obtained from the 2010 Census. For more information, see "Comparing 2010 American Community Survey 1-Year Estimates of Occupancy Status, Vacancy Status, and Household Size with the 2010 Census – Preliminary Results" on the Census website. Go to http://www.census.gov and enter the paper title in the search box.

Poverty Status of Households

The data on poverty status of households were derived from answers to the income questions. Since poverty is defined at the family level and not the household level, the poverty status of the household is determined by the poverty status of the householder. Households are classified as poor when the total income of the householder's family is below the appropriate poverty threshold. (For nonfamily householders, their own income is compared with the appropriate threshold.) The income of people living in the household who are unrelated to the householder is not considered when determining the poverty status of a household, nor does their presence affect the family size in determining the appropriate threshold. The poverty thresholds vary depending on three criteria: size of family, number of related children, and, for 1- and 2-person families, age of householder. See the table "The 2018 Poverty Factors" in Appendix A. (For more information, see "Poverty Status in the Past 12 Months" and "Income in the Past 12 Months" under "Population Variables.")

Real Estate Taxes

The data on real estate taxes were obtained from Housing Question 19 in the 2018 American Community Survey (ACS). The question was asked at owner-occupied units. The statistics from this question refer to the total amount of all real estate taxes on the entire property (land and buildings) payable to all taxing jurisdictions, including special assessments, school taxes, county taxes, and so forth.

Real estate taxes include state, local, and all other real estate taxes even if delinquent, unpaid, or paid by someone who is not a member of the household. However, taxes due from prior years are not included. If taxes are paid on other than a yearly basis, the payments are converted to a yearly basis.

The payment for real estate taxes is added to payments for fire, hazard, and flood insurance; utilities and fuels; and mortgages (both first and second mortgages, home equity loans, and other junior mortgages) to derive "Selected Monthly Owner Costs" and "Selected Monthly Owner Costs as a Percentage of Household Income." These data provide information on the cost of home ownership and offer an excellent measure of housing affordability and excessive shelter costs.

A separate question (Question 21c in the 2018 ACS) determines whether real estate taxes are included in the mortgage payment to the lender(s). This makes it possible to avoid counting taxes twice in the computations.

***Question/Concept History* –** Since 1996, the ACS questions have been the same.

***Comparability* –** Data on real estate taxes in the 2018 ACS should not be compared to Census 2000 real estate taxes data. The universe in Census 2000 was "specified owner-occupied housing units" whereas the universe in the ACS is "owner occupied housing units," thus comparisons cannot be made between these two data sets.

Rent Asked

See Contract Rent.

Rental Vacancy Rate

See Vacancy Status.

Renter-Occupied Housing Units

See Tenure.

Rooms

The data on rooms were obtained from Housing Question 6a in the 2018 American Community Survey (ACS). The question was asked at both occupied and vacant housing units. The statistics on rooms are in terms of the number of housing units with a specified number of rooms. The intent of this question is to count the number of whole rooms used for living purposes.

For each unit, rooms include living rooms, dining rooms, kitchens, bedrooms, finished recreation rooms, enclosed porches suitable for year-round use, and lodger's rooms. Excluded are strip or pullman kitchens, bathrooms, open porches, balconies, halls or foyers, half-rooms, utility rooms, unfinished attics or basements, or other unfinished space used for storage. A partially divided room is a separate room only if there is a partition from floor to ceiling, but not if the partition consists solely of shelves or cabinets.

Rooms provide the basis for estimating the amount of living and sleeping spaces within a housing unit. These data allow officials to plan and allocate funding for additional housing to relieve crowded housing conditions. The data also serve to aid in planning for future services and infrastructure, such as home energy assistance programs and the development of waste treatment facilities.

Median Rooms – This measure divides the room distribution into two equal parts: one-half of the cases falling below the median number of rooms and one-half above the median. In computing median rooms, the whole number is used as the midpoint of the interval; thus, the category "3 rooms" is treated as an interval ranging from 2.5 to 3.5 rooms. Median rooms is

rounded to the nearest tenth. (For more information on medians, see the discussion under "Derived Measures.")

Aggregate Rooms – Aggregate rooms is calculated by adding all of the rooms for housing units in an area. (For more information on aggregates, see "Derived Measures.")

Question/Concept History – The 1996-1998 ACS question provided a space for a write-in entry on the number of rooms. From 1999-2007, the question provided response categories from "1 room" to "9 or more rooms." Starting in 2008, the response categories were removed and a write-in box was added for the respondent to enter the number of rooms. Additional changes introduced in 2008 included adding the word "separate" to the question stem, adding an instruction that defines a "room," adding an inclusion instruction to include bedrooms and kitchens in the count of rooms, and changing the current exclusion instruction by removing the word "half-room" and adding the phrase "unfinished basements."

Limitation of the Data – The Census Bureau tested the changes introduced to the 2008 version of the rooms question in the 2006 ACS Content Test. The results of this testing show that the changes may introduce an inconsistency in the data produced for this question as observed from the years 2007 to 2008. For more information, see "Evaluation Report Covering Rooms and Bedrooms" from the 2006 ACS Content Test. Go to http://www.census.gov and enter "2006 ACS Content Test Evaluation Report Covering Rooms and Bedrooms" in the search box.

Comparability – Caution should be used when comparing ACS data on rooms from the years 2008 and after with both pre-2008 ACS and Census 2000 data. Changes made to the rooms question between the 2007 and 2008 ACS involving the wording as well as the response option resulted in an inconsistency in the ACS data. This inconsistency in the data was most noticeable as an increase in "1 room" response and as a decrease in "2 rooms" to "6 rooms" responses.

Second or Junior Mortgage Payments or Home Equity Loan

The data on second mortgages or home equity loan payments were obtained from Housing Questions 22a and 22b in the 2018 American Community Survey (ACS). The questions were asked at owner-occupied units. Question 22a asks whether a second mortgage or a home equity loan exists on the property. Question 22b provides the regular monthly amount required to be paid to the lender on all second and junior mortgages and home equity loans. Amounts are included even if the payments are delinquent or paid by someone else. The amounts reported are included in the computation of "Selected Monthly Owner Costs" and "Selected Monthly Owner Costs as a Percentage of Household Income" for units with a mortgage.

All mortgages other than first mortgages (for example, second, third, etc.) are classified as "junior" mortgages. A second mortgage is a junior mortgage that gives the lender a claim against the property that is second to the claim of the holder of the first mortgage. Any other junior mortgage(s) would be subordinate to the second mortgage. A home equity loan is a

line of credit available to the borrower that is secured by real estate. It may be placed on a property that already has a first or second mortgage, or it may be placed on a property that is owned free and clear.

If the respondents answered that no first mortgage existed, but a second mortgage or a home equity loan did, a computer edit assigned the unit a first mortgage and made the first mortgage monthly payment the amount reported in the second mortgage. The second mortgage/home equity loan data were then made "No" in Question 22a and blank in Question 22b.

Second mortgage or home equity loan data provide information on the monthly housing cost expenses for owners. When the data is used in conjunction with income data, the information offers an excellent measure of housing affordability and excessive shelter costs. The data also serve to aid in the development of housing programs aimed to meet the needs of people at different economic levels.

By listing the second mortgage or home equity loan question separately on the questionnaire from other housing cost questions, the data also serve to improve the accuracy of estimating monthly housing costs for mortgaged owners.

Question/Concept History – Since 1996, the ACS questions remained the same.

Comparability – Data on second mortgages in the 2018 ACS should not be compared to Census 2000 second mortgage data. For Census 2000, while some tables were released for total owner-occupied units, second mortgage was not. The universe in Census 2000 was "specified owner-occupied housing units" whereas the universe in the ACS is "owner-occupied housing units," thus comparisons cannot be made between these two data sets.

Selected Conditions

The variable "Selected Conditions" is defined for owner- and renter-occupied housing units as having at least one of the following conditions: 1) lacking complete plumbing facilities, 2) lacking complete kitchen facilities, 3) with 1.01 or more occupants per room, 4) selected monthly owner costs as a percentage of household income greater than 30 percent, and 5) gross rent as a percentage of household income greater than 30 percent.

Selected conditions provide information in assessing the quality of the housing inventory and its occupants. The data is used to easily identify those homes in which the quality of living and housing can be considered substandard.

Comparability – Data on selected conditions in the 2018 American Community Survey (ACS) can be compared to previous ACS and Census 2000 selected conditions data.

Selected Monthly Owner Costs

The data on selected monthly owner costs were obtained from Housing Questions 13, 15, and Questions 19 through 23 in the 2018 American Community Survey (ACS). The data were obtained for owner-occupied units. Selected monthly owner costs are the sum of payments for mortgages, deeds of trust, contracts to purchase, or similar debts on the property (including payments for the first mortgage, second mortgages, home equity loans, and other junior mortgages); real estate taxes; fire, hazard, and flood insurance on the property; utilities (electricity, gas, and water and sewer); and fuels (oil, coal, kerosene, wood, etc.). It also includes, where appropriate, the monthly condominium fee for condominiums (Question 15) and mobile home costs (Question 23) (personal property taxes, site rent, registration fees, and license fees). Selected monthly owner costs were tabulated for all owner-occupied units, and usually are shown separately for units "with a mortgage" and for units "not mortgaged."

Selected monthly owner costs provide information on the monthly housing cost expenses for owners. When the data is used in conjunction with income data, the information offers an excellent measure of housing affordability and excessive shelter costs. The data also serve to aid in the development of housing programs to meet the needs of people at different economic levels.

Adjusting Selected Monthly Owner Costs for Inflation – To inflate selected monthly owner costs from previous years, the dollar values are inflated to the latest year's dollar values by multiplying by a factor equal to the average annual Consumer Price Index (CPI-U-RS-All items) factor for the current year and dividing by the average annual CPI-U-RS-All items factor for the earlier/earliest year.

Median Selected Monthly Owner Costs – This measure divides the selected monthly owner costs distribution into two equal parts: one-half of the cases falling below the median selected monthly owner costs and one-half above the median. Medians are shown separately for units "with a mortgage" and for units "not mortgaged." Median selected monthly owner costs are computed on the basis of a standard distribution. (See the "Median Standard Distributions" section in Appendix A.) Median selected monthly owner costs are rounded to the nearest whole dollar.

***Question/Concept History* –** Since 1996, the ACS questions have been the same. The ACS collected the monthly cost of electricity and gas, and the 12-month cost of water and sewer and fuel (oil, coal, kerosene, wood, etc.) Since 2004, selected monthly owner costs has been shown for all owner-occupied housing units. In previous years (1996-2003), the question was shown only for specified owner-occupied housing units.

***Comparability* –** Caution should be used when comparing selected monthly owner costs data between the ACS and Census 2000. For Census 2000, tables for both total owner-occupied housing units and specified owner-occupied housing units were released, thus comparisons can be made only when comparing the same universes between the two data sets. Additionally, for Census 2000, tables with full distributions were released for total owner-occupied housing units, but medians were not shown.

Selected Monthly Owner Costs as a Percentage of Household Income

The information on selected monthly owner costs as a percentage of household income is the computed ratio of selected monthly owner costs to monthly household income. The ratio was computed separately for each unit and rounded to the nearest whole percentage. The data are tabulated only for owner-occupied units.

Separate distributions are often shown for units "with a mortgage" and for units "not mortgaged." Units occupied by households reporting no income or a net loss are included in the "not computed" category. (For more information, see the discussion under "Selected Monthly Owner Costs.")

Selected monthly owner costs as a percentage of household income provide information on the monthly housing cost expenses for owners. The information offers an excellent measure of housing affordability and excessive shelter costs. The data also serve to aid in the development of housing programs to meet the needs of people at different economic levels.

Median Selected Monthly Owner Costs as a Percentage of Household Income. This measure divides the selected monthly owner costs as a percentage of household income distribution into two equal parts: one-half of the cases falling below the median selected monthly owner costs as a percentage of household income and one-half above the median. Median selected monthly owner costs as a percentage of household income is computed on the basis of a standard distribution. (See the "Median Standard Distributions" section under Appendix A.) Median selected monthly owner costs as a percentage of household income is rounded to the nearest tenth. (For more information on medians, see "Derived Measures.")

Comparability –For Census 2000, tables were not released for total owner-occupied units. The universe in the ACS is "owner-occupied" whereas in Census 2000, the universe was "specified owner-occupied housing units," thus comparisons cannot be made.

Specified Owner-Occupied and Vacant-for-Sale Units

Specified owner-occupied and vacant-for-sale units include only 1-family houses on less than 10 acres (cuerdas). The data for "specified units" exclude mobile homes, houses on 10 or more acres (cuerdas), and housing units in multiunit buildings.

Specified owner-occupied and vacant-for-sale housing unit information was used to maintain a comparable universe between the American Community Survey (ACS) and earlier census data. Owner costs, owner costs as a percentage of income, and value for owner-occupied and asking price for vacant-for-sale housing units in earlier census data were based on specified owner-occupied and vacant-for-sale housing units; however, beginning in 2004 the ACS no longer published information solely for this universe. Rather, the ACS began publishing information for all owner-occupied and vacant-for-sale and sold, not occupied housing units. The characteristics for a specified owner housing unit as well as a single variable that combines all the characteristics necessary to be a specified unit into one variable are maintained within the ACS Public Use Microdata Sample (PUMS) file. Through 2015

then, comparisons between the two data sets can be made by using the PUMS. In 2016, ACS stopped asking the business or medical office on property question, the lack of which was formerly a characteristic of specified. So, although there is still the single variable that combines all the characteristics for specified owner housing in 2016 on the PUMS, it is not comparable to preceding years which had the requirement of no business or medical office on property.

Question/Concept History – Prior to 1990, much of the owner-occupied housing inventory was comprised of single-family homes, either detached or attached. Therefore, earlier census data provided financial housing characteristics for the specified owner-occupied unit universe. However, the housing market began to change during the 1990's as an increasing number of units in multiunit structures were constructed and sold as condominiums, as well as the increase of mobile homes as an option for lower-income owners to purchase a home. As a result of these changes, the ACS abandoned the concept of the specified owner-occupied universe to ensure housing data was provided for all owner-occupied units.

Comparability – The ACS currently only publishes financial housing characteristics for all owner-occupied units. (ACS no longer publishes tables of the characteristics of vacant units other than the vacancy status and whether the units are temporarily occupied or not.) The 2016 ACS PUMS file will still provide the individual characteristics of a specified owner housing unit, except for business or medical office on property which is no longer asked. The 2016 PUMS will also provide a single variable that combines the characteristics necessary for specified owner housing. However, the absence of a business or medical office is no longer a characteristic for specified. So this single variable for specified owner housing is not comparable to the previous ACS single variable. Census 2000 data provide financial housing characteristics for both all owner-occupied and all vacant-for-sale units and the more restricted universe of specified owner-occupied and specified vacant-for-sale units. So caution must be exercised in comparing specified owner housing from ACS prior to 2016 to Census 2000 to ensure the same universes. Beginning in 2016, the ACS cannot be compared to either Census 2000 or to ACS in previous years due to the elimination of the business or medical office on property question.

Specified Renter-Occupied and Vacant-for-Rent Units

Specified renter-occupied and vacant-for-rent housing units are renter-occupied units and vacant-for-rent units that exclude 1-family houses on 10 or more acres (cuerdas).

Specified renter-occupied and vacant-for-rent housing unit information is used to maintain a comparable universe between the American Community Survey (ACS) and earlier census data. Contract rent, gross rent, and gross rent as a percentage of income in earlier census data were based on specified renter-occupied and vacant-for-rent units; however, beginning in 2004, the ACS no longer published information solely for this universe. Rather, the ACS began publishing information for all renter-occupied and vacant-for-rent and rented, not occupied housing units. The characteristics for a specified rental unit as well as a single variable that combines all the characteristics for specified into one variable are maintained within the PUMS file ensuring that comparisons between the two data sets can be made.

Comparability – The ACS currently only publishes financial housing characteristics for total renter-occupied units. The 2016 ACS PUMS file will still provide the individual characteristics of a specified rental unit. And the 2016 PUMS will also provide a single variable that combines the characteristics necessary for specified rental housing. For Census 2000, tables were only released for specified renter-occupied and vacant-for-rent units. Therefore, comparisons between these two data sets can only be made if the characteristics of a specified renter-occupied or vacant-for rent unit from the 2016 PUMS are used to construct the same universe as Census 2000 or the single variable on the 2016 PUMS that combines the characteristics necessary for specified rental housing is used to produce the comparable universe.

Telephone Service Available

The data on telephones were obtained from Housing Question 7f in the 2018 American Community Survey (ACS). The question was asked at occupied housing units.

The question asked whether telephone service was available in the house, apartment, or mobile home. A telephone must be in working order and service available in the house, apartment, or mobile home that allows the respondent to both make and receive calls. Households whose service has been discontinued for nonpayment or other reasons are not counted as having telephone service available.

The availability of telephone service provides information on the isolation of households. These data help assess the level of communication access amongst elderly and low-income households. The data also serve to aid in the development of emergency telephone, medical, or crime prevention services.

Question/Concept History – For the 1996-1998 ACS, the question asked whether there was a telephone in the house or apartment. A telephone must be inside the house or apartment for the unit to be classified as having a telephone. Units where the respondent used a telephone located inside the building, but not in the respondent's living quarters, were classified as having no telephone. In 1999, the words "or mobile home" were added question to be more inclusive of the structure type. In 2004, instructions that accompanied the ACS mail questionnaire advised respondents that if the household members used cell phones to answer, that the house, apartment, or mobile home had telephone service. Starting in 2008, the structure of the question changed and combined telephone service availability with plumbing facilities and kitchen facilities into one question to ask, "Does this house, apartment, or mobile home have -" and provided the respondent with a "Yes" or "No" checkbox for each component needed for complete facilities. In 2008, the instruction "*Include cell phones*" was added.

Limitation of the Data – The Census Bureau tested the changes introduced to the 2008 version of the telephone service available question in the 2006 ACS Content Test. The results of this testing show that the changes may introduce an inconsistency in the data produced for this question as observed from the years 2007 to 2008. For more information, see "Evaluation Report Covering Facilities" from the 2006 ACS Content Test. Go to

http://www.census.gov and enter "2006 ACS Content Test Evaluation Report Covering Facilities" in the search box.

Comparability **–** Caution should be used when comparing ACS data on telephone service availability from the years 2008 and after with both pre-2008 ACS and Census 2000 data. Changes made to the telephone service availability question between the 2007 and 2008 ACS involving the structure of the question as well as the introduction of an instruction to include cell phones resulted in an inconsistency in the ACS data. This inconsistency in the data was most noticeable as an increase in the number of respondents answering "Yes" to the question.

Tenure

The data for tenure were obtained from Housing Question 16 in the 2018 American Community Survey (ACS). The question was asked at occupied housing units. Occupied housing units are classified as either owner-occupied or renter-occupied.

Tenure provides a measurement of home ownership, which has served as an indicator of the nation's economy for decades. These data are used to aid in the distribution of funds for programs such as those involving mortgage insurance, rental housing, and national defense housing. Data on tenure allows planners to evaluate the overall viability of housing markets and to assess the stability of neighborhoods. The data also serve in understanding the characteristics of owner-occupied and renter-occupied units to aid builders, mortgage lenders, planning officials, government agencies, etc., in the planning of housing programs and services.

Owner-Occupied – A housing unit is owner-occupied if the owner or co-owner lives in the unit, even if it is mortgaged or not fully paid for. The owner or co-owner must live in the unit and usually is Person 1 on the questionnaire. The unit is "Owned by you or someone in this household with a mortgage or loan" if it is being purchased with a mortgage or some other debt arrangement such as a deed of trust, trust deed, contract to purchase, land contract, or purchase agreement. The housing unit is also considered owned with a mortgage if there is a home equity line of credit on it. The unit also is considered owned with a mortgage if it is built on leased land and there is a mortgage on the unit. Mobile homes occupied by owners with installment loan balances also are included in this category.

A housing unit is "Owned by you or someone in this household free and clear (without a mortgage or loan)" if there is no mortgage or other similar debt on the house, apartment, or mobile home, including units built on leased land if the unit is owned outright without a mortgage.

Renter-Occupied – All occupied housing units which are not owner-occupied, whether they are rented or occupied without payment of rent, are classified as renter-occupied. "No rent paid" units are separately identified in the rent tabulations. Such units are generally provided free by friends or relatives or in exchange for services such as resident manager, caretaker, minister, or tenant farmer. Housing units on military bases also are classified in the "No rent paid" category. "Rented" includes units in continuing care, sometimes called life care

arrangements. These arrangements usually involve a contract between one or more individuals and a health services provider guaranteeing the individual shelter, usually a house or apartment, and services, such as meals or transportation to shopping or recreation. (For more information, see "Meals Included in Rent.")

Question/Concept History – From 1996-2007 the ACS questions were the same. Starting in 2008, the instruction "*Mark (X) ONE box.*" was added following the question, and the instruction "*Include home equity loans.*" was added following the response category "Owned by you or someone in this household with a mortgage or loan?" Additional changes introduced in 2008 included revising the wording of two of the response categories from "Rented for cash rent?" to "Rented?" and "Occupied without payment of cash rent?" to "Occupied without payment of rent?"

Comparability – Data on tenure in the 2018 ACS can be compared to previous ACS and Census 2000 tenure data.

Units in Structure

The data on units in structure (also referred to as "type of structure") were obtained from Housing Question 1 in the 2018 American Community Survey (ACS). The question was asked at occupied and vacant housing units. A structure is a separate building that either has open spaces on all sides or is separated from other structures by dividing walls that extend from ground to roof. In determining the number of units in a structure, all housing units, both occupied and vacant, are counted. Stores and office space are excluded. The data are presented for the number of housing units in structures of specified type and size, not for the number of residential buildings.

The units in structure provides information on the housing inventory by subdividing the inventory into one-family homes, apartments, and mobile homes. When the data is used in conjunction with tenure, year structure built, and income, units in structure serves as the basic identifier of housing used in many federal programs. The data also serve to aid in the planning of roads, hospitals, utility lines, schools, playgrounds, shopping centers, emergency preparedness plans, and energy consumption and supplies.

Mobile Home – Both occupied and vacant mobile homes to which no permanent rooms have been added are counted in this category. Mobile homes used only for business purposes or for extra sleeping space and mobile homes for sale on a dealer's lot, at the factory, or in storage are not counted in the housing inventory.

1-Unit, Detached – This is a 1-unit structure detached from any other house, that is, with open space on all four sides. Such structures are considered detached even if they have an adjoining shed or garage. A one-family house that contains a business is considered detached as long as the building has open space on all four sides. Mobile homes to which one or more permanent rooms have been added or built also are included.

1-Unit, Attached – This is a 1-unit structure that has one or more walls extending from ground to roof separating it from adjoining structures. In row houses (sometimes called townhouses), double houses, or houses attached to nonresidential structures, each house is a separate, attached structure if the dividing or common wall goes from ground to roof.

2 or More Apartments – These are units in structures containing 2 or more housing units, further categorized as units in structures with "2 apartments," "3 or 4 apartments," "5 to 9 apartments," "10 to 19 apartments," "20 to 49 apartments," and "50 or more apartments."

Boat, RV, Van, Etc. – This category is for any living quarters occupied as a housing unit that does not fit the previous categories. Examples that fit this category are houseboats, railroad cars, campers, and vans. Recreational vehicles, boats, vans, tents, railroad cars, and the like are included only if they are occupied as someone's current place of residence.

***Question/Concept History* –** The 1996-1998 ACS question provided the response category, "a mobile home or trailer." Starting in 1999, the ACS response category dropped "or trailer" to read as "a mobile home."

***Comparability* –** Data on units in structure in the 2018 ACS can be compared to previous ACS and Census 2000 units in structure data.

Utilities

The data on utility costs were obtained from Housing Questions 13a through 13d in the 2018 American Community Survey (ACS). The questions were asked of occupied housing units. The questions about electricity and gas asked for the monthly costs, and the questions about water/sewer and other fuels (oil, coal, wood, kerosene, etc.) asked for the yearly costs.

Costs are recorded if paid by or billed to occupants, a welfare agency, relatives, or friends. Costs that are paid by landlords, included in the rent payment, or included in the condominium fee are excluded.

The cost of utilities provides information on the cost of either home ownership or renting. When the data is used as part of monthly housing costs and in conjunction with income data, the information offers an excellent measure of housing affordability and excessive shelter costs. The data also serve to aid in the development of housing programs to meet the needs of people at different economic levels and to provide assistance in forecasting future utility services and energy supplies.

***Question/Concept History* –** The ACS questions ask for monthly costs for electricity and gas, and yearly costs for water/sewer and other fuels. Since 1999, the words "or mobile home" were added to each question, and Question 13b, which asked "Last month, what was the cost of gas for this house, apartment, or mobile home?" had an additional response category, "included in electricity payment entered above."

Limitation of the Data – Caution should be exercised in using these data for direct analysis because costs are not reported for certain kinds of units such as renter-occupied units with all utilities included in the rent and owner-occupied condominium units with utilities included in the condominium fee.

Comparability – Data on utility costs in the 2018 ACS can be compared to previous ACS and Census 2000 utility costs data.

Vacancy Status

Before 2013, the data on vacancy status were obtained only for a sample of cases in the computer-assisted personal interview (known as "CAPI") follow-up by field representatives. Data on vacancy status were obtained at the time of the personal visit. Vacancy status and other characteristics of vacant units were determined by field representatives obtaining information from landlords, owners, neighbors, rental agents, and others. Beginning in 2013, vacancy status and other characteristics of vacant units were obtained in the Internet self-response instrument as well as the CAPI.

Vacancy status has long been used as a basic indicator of the housing market and provides information on the stability and quality of housing for certain areas. The data is used to assess the demand for housing, to identify housing turnover within areas, and to better understand the population within the housing market over time. These data also serve to aid in the development of housing programs to meet the needs of persons at different economic levels.

Vacant units are subdivided according to their housing market classification as follows:

For Rent – These are vacant units offered "for rent," and vacant units offered either "for rent" or "for sale."

Rented, Not Occupied – These are vacant units rented but not yet occupied, including units where money has been paid or agreed upon, but the renter has not yet moved in.

For Sale Only – These are vacant units being offered "for sale only," including units in cooperatives and condominium projects if the individual units are offered "for sale only." If units are offered either "for rent" or "for sale," they are included in the "for rent" classification.

Sold, Not Occupied – These are vacant units sold but not yet occupied, including units that have been sold recently, but the new owner has not yet moved in.

For Seasonal, Recreational, or Occasional Use – These are vacant units used or intended for use only in certain seasons or for weekends or other occasional use throughout the year. Seasonal units include those used for summer or winter sports or recreation, such as beach

cottages and hunting cabins. Seasonal units also may include quarters for such workers as herders and loggers. Interval ownership units, sometimes called shared-ownership or time-sharing condominiums, also are included here.

For Migrant Workers – These include vacant units intended for occupancy by migrant workers employed in farm work during the crop season. (Work in a cannery, a freezer plant, or a food-processing plant is not farm work.)

Other Vacant – If a vacant unit does not fall into any of the categories specified above, it is classified as "Other vacant." For example, this category includes units held for occupancy by a caretaker or janitor, and units held for personal reasons of the owner.

Homeowner Vacancy Rate – The homeowner vacancy rate is the proportion of the homeowner inventory that is vacant "for sale." It is computed by dividing the number of vacant units "for sale only" by the sum of the owner-occupied units, vacant units that are "for sale only," and vacant units that have been sold but not yet occupied, and then multiplying by 100. This measure is rounded to the nearest tenth.

Rental Vacancy Rate – The rental vacancy rate is the proportion of the rental inventory that is vacant "for rent." It is computed by dividing the number of vacant units "for rent" by the sum of the renter-occupied units, vacant units that are "for rent," and vacant units that have been rented but not yet occupied, and then multiplying by 100. This measure is rounded to the nearest tenth.

Available Housing Vacancy Rate – The proportion of the housing inventory that is vacant-for-sale only and vacant-for-rent. It is computed by dividing the sum of vacant-for-sale only housing units and vacant-for-rent housing units, by the sum of occupied units, vacant-for-sale only housing units, vacant-sold-not occupied housing units, vacant-for-rent housing units, and vacant-rented-not-occupied housing units, and then multiplying by 100. This measure is rounded to the nearest tenth.

***Question/Concept History* –** The 1996-2004 American Community Survey (ACS) and Census 2000 used a single vacancy status category for units that were either "Rented or sold, not occupied." Since the 2005 ACS, there have been two separate categories, "Rented, not occupied" and "Sold, not occupied." This change created consistency among the ACS, the Housing Vacancy Survey, and the 2010 Census vacancy status response options. The revised categories were incorporated in the calculations of the rental vacancy rate and the homeowner vacancy rate.

Comparability – Do not compare because differences in the design and data collection methods between the ACS and the Decennial Census may materially affect estimates of vacancy rates. For more information on differences in vacancy rates between the ACS and Census, see Comparing 2010 American Community Survey 1-Year Estimates of Occupancy Status, Vacancy Status, and Household Size with the 2010 Census - Preliminary Results on the Census website. Go to http://www.census.gov and enter the paper title in the search box.

Vacant – Current Residence Elsewhere

Also known as a temporarily-occupied housing unit, a current residence elsewhere is a housing unit occupied at the time of interview entirely by people who will be there for 2 months or less. At sample units where all the people are staying less than 2 months, the respondent is asked a subset of the questions from the housing section, including the question on vacancy status.

In Computer-Assisted Telephone Interviews (CATI) and Computer-Assisted Personal Interviews (CAPI), the data for current residence elsewhere were obtained after creating the roster of people staying at the sample unit and after asking the current residence questions. Beginning in 2013, in the Internet self-response instrument, the roster of people is not created. Rather, if no one is living or staying there for more than 2 months, it is established that the home is not the current residence of any household members and the instrument begins the battery of vacant housing questions.

The current residence concept is unique to the American Community Survey (ACS). By using the current residence to decide for whom to collect survey information, the ACS can provide a more accurate description of an area's social and economic characteristics. Most surveys, as well as the decennial census, use the concept of usual residence. Usual residence is defined as the place where a person lives and sleeps most of the time. The census defines everyone as having only one usual residence.

Comparability – Do not compare estimates of vacant – current residence elsewhere between the ACS and Census 2000 because differences in the design, data collection methods and residency rules between the ACS and the Decennial Census may materially affect estimates. For more information on differences between the ACS and Census, see Comparing 2010 American Community Survey 1-Year Estimates of Occupancy Status, Vacancy Status, and Household Size with the 2010 Census - Preliminary Results on the Census website. Go to http://www.census.gov and enter the paper title in the search box.

Vacant Housing Units

See Living Quarters.

Value

The data on value (also referred to as "price asked" for vacant units) were obtained from Housing Question 18 in the 2018 American Community Survey (ACS). The question was asked at housing units that were owned, being bought, vacant for sale, or sold but not occupied at the time of the survey. Value is the respondent's estimate of how much the property (house and lot, mobile home and lot (if lot owned), or condominium unit) would sell for if it were for sale. If the house was owned or being bought, but the land on which it sits was not, the respondent was asked to estimate the combined value of the house and the land. Owners of noncondominium multi-unit buildings who live in one of the building's units, like

duplexes and small apartment buildings, should report the value of the building, the land, and any additional buildings on the same plot of land. For vacant units, value was the price asked for the property. Value was tabulated separately for all owner-occupied and vacant-for-sale and sold, not occupied housing units, as well as owner-occupied mobile homes.

The value of a home provides information on neighborhood quality, housing affordability, and wealth. These data provide socioeconomic information not captured by household income and comparative information on the state of local housing markets. The data also serve to aid in the development of housing programs designed to meet the housing needs of persons at different economic levels.

Median and Quartile Value – The median divides the value distribution into two equal parts: one-half of the cases falling below the median value of the property (house and lot, mobile home and lot (if lot owned), or condominium unit) and one-half above the median. Quartiles divide the value distribution into four equal parts. Median and quartile value are computed on the basis of a standard distribution. (See the "Median Standard Distributions" section in Appendix A.) Median and quartile value calculations are rounded to the nearest hundred dollars. Upper and lower quartiles can be used to note large value differences among various geographic areas. (For more information on medians and quartiles, see "Derived Measures.")

Aggregate Value (Price Asked) –Aggregate value (price asked) is calculated by adding all of the value estimates for owner occupied housing units in an area (and all the prices asked for vacant-for-sale and sold, not occupied housing units in an area). Aggregate value (price asked) is rounded to the nearest hundred dollars. (For more information on aggregates, see "Derived Measures.")

***Question/Concept History* –** The 1996-1998 ACS question provided a space for the respondent to enter a dollar amount. From 1999-2007 the question provided 19 pre-coded response categories from "Less than $10,000" to "$250,000 or more – *Specify*." Starting in 2004, value was shown for all owner-occupied housing units, unlike from1996-2003 in which value was shown only for specified owner-occupied housing units. Changes introduced in 2008 were removing the pre-coded response categories and adding a write-in box for the respondent to enter the property value amount in dollars, and revising the wording of the question to ask, "About how much do you think this house and lot, apartment, or mobile home (and lot, if owned) would sell for if it were for sale?"

***Limitation of the Data* –** The Census Bureau tested the changes introduced to the 2008 version of the value question in the 2006 ACS Content Test. The results of this testing show that the changes may introduce an inconsistency in the data produced for this question as observed from the years 2007 to 2008. For more information, see "Evaluation Report Covering Property Value" from the 2006 ACS Content Test. Go to http://www.census.gov and enter "2006 ACS Content Test Evaluation Report Covering Property Value" in the search box.

Comparability – Caution should be used when comparing ACS data on value (price asked) from the years 2008 and after with pre-2008 ACS data. Changes made to the value (price asked) question between the 2007 and 2008 ACS involving the response option may have resulted in an inconsistency in the value distribution for some areas. In 2007 and previous years, the ACS value question included categorical response options with a write-in for values over $250,000. Beginning in 2008, the response option became solely a write-in.

Caution also should be used when comparing value (price asked) data from the ACS produced in 2008 or later with Census 2000 value data. The 2008 or later ACS provides solely a write-in response option while Census 2000 collected data in categories.

Additionally, Census 2000 tables on value were released for both total owner-occupied housing units and specified owner-occupied housing units, thus comparisons can be made only when comparing the same universes between the two data sets.

Vehicles Available

The data on vehicles available were obtained from Housing Question 11 in the 2018 American Community Survey (ACS). The question was asked at occupied housing units. These data show the number of passenger cars, vans, and pickup or panel trucks of one-ton (2,000 pounds) capacity or less kept at home and available for the use of household members. Vehicles rented or leased for one month or more, company vehicles, and police and government vehicles are included if kept at home and used for non-business purposes. Motorcycles or other recreational vehicles are excluded. Dismantled or immobile vehicles are excluded. Vehicles kept at home but used only for business purposes also are excluded.

The availability of vehicles provides information for numerous transportation programs. When the data is used in conjunction with place-of-work and journey-to-work data, the information can provide insight into vehicle travel and aid in forecasting future travel and its effect on transportation systems. The data also serve to aid in the development of emergency and evacuation planning, special transportation services, and forecasting future energy consumption and needs.

Question/Concept History – The 1996-1998 ACS question provided a space for the respondent to enter the number of vehicles. Since 1999, the American Community Survey question provided seven pre-coded response categories ranging from “None” to “6 or more.”

Comparability – Data on vehicle availability in the 2018 ACS can be compared to previous ACS and Census 2000 vehicle availability data.

Year Householder Moved into Unit

The data on year householder moved into unit were obtained from answers to Housing Question 3 in the 2018 American Community Survey (ACS), which was asked at occupied housing units. These data refer to the year of the latest move by the householder. If the householder moved back into a housing unit he or she previously occupied, the year of the

latest move was reported. If the householder moved from one apartment to another within the same building, the year the householder moved into the present apartment was reported. The intent is to establish the year the present occupancy by the householder began. The year that the householder moved in is not necessarily the same year other members of the household moved in, although in the great majority of cases an entire household moves at the same time.

The year the householder moved into the unit provides information on the specific period of time when mobility occurs, especially for recent movers. These data help to measure neighborhood stability and to identify transient communities. The data also is used to assess the amount of displacement caused by floods and other natural disasters, and as an aid to evaluate the changes in service requirements.

Median Year Householder Moved into Unit – Median year householder moved into unit divides the distribution into two equal parts: one-half of the cases falling below the median year householder moved into unit and one-half above the median. Median year householder moved into unit is computed on the basis of a standard distribution. (See the "Median Standard Distributions" section in Appendix A.) Median year householder moved into unit is rounded to the nearest calendar year. (For more information on medians, see "Derived Measures.")

***Question/Concept History* –** Since 1996, the question provided two write-in spaces for the respondent to enter month and year the householder (person 1) moved into the house, apartment, or mobile home.

***Comparability* –** Data on year householder moved into unit in the 2018 ACS can be compared to previous ACS and Census 2000 year householder moved into unit data.

Year Structure Built

The data on year structure built were obtained from Housing Question 2 in the 2018 American Community Survey (ACS). The question was asked at both occupied and vacant housing units. Year structure built refers to when the building was first constructed, not when it was remodeled, added to, or converted. Housing units under construction are included as vacant housing if they meet the housing unit definition, that is, all exterior windows, doors, and final usable floors are in place. For mobile homes, houseboats, RVs, etc., the manufacturer's model year was assumed to be the year built. The data relate to the number of units built during the specified periods that were still in existence at the time of interview.

The year the structure was built provides information on the age of housing units. These data help identify new housing construction and measures the disappearance of old housing from the inventory, when used in combination with data from previous years. The data also serve to aid in the development of formulas to determine substandard housing and provide assistance in forecasting future services, such as energy consumption and fire protection.

Median Year Structure Built – Median year structure built divides the distribution into two equal parts: one-half of the cases falling below the median year structure built and one-half above the median. Median year structure built is computed on the basis of a standard distribution. (See the "Median Standard Distributions" section in Appendix A.) The median is rounded to the nearest calendar year. Median age of housing can be obtained by subtracting median year structure built from survey year. For example, if the median year structure built is 1969, the median age of housing in that area is 49 years (2018 minus 1969). (For more information on medians, see "Derived Measures.")

***Question/Concept History* –** The 1996-1998 ACS question provided a write-in space for the respondent to enter a year the structure was built. From 1999-2007 the question provided 9 pre-coded response categories, which showed ranges of years, and from 2003-2007 the response categories were updated to provide detail for recently built structures. Starting in 2008, the response category "2000 or later" and the instruction "*Specify year*" with a write-in box replaced the two categories "2000 to 2004" and "2005 or later."

***Limitation of the Data* –** Data on year structure built are more susceptible to errors of response and non-reporting than data for many other questions because respondents must rely on their memory or on estimates by people who have lived in the neighborhood a long time.

***Comparability* –** Data on year structure built in the 2018 ACS can be compared to previous ACS and Census 2000 year structure built data.

Population Variables

Ability to Speak English

Respondent's Ability to Speak English – Respondents who reported speaking a language other than English (question 14a in the 2018 American Community Survey (ACS) were asked to indicate their English-speaking ability (question 14c in the 2018 ACS) based on one of the following categories: "Very well," "Well," "Not well," or "Not at all." Those who answered "Well," "Not well," or "Not at all" are sometimes referred to as "Less than 'very well.'" Respondents were not instructed on how to interpret the response categories in this question.

Limited English speaking households- This variable identifies households that may need English-language assistance. A "Limited English speaking household" is one in which no member 14 years old and over (1) speaks only English at home or (2) speaks a language other than English at home and speaks English "Very well."

After data are collected for each person in the household, the limited English-speaking household variable is calculated by checking if all people 14 years old and older speak a language other than English. If so, the calculation checks the English-speaking ability responses to see if all people 14 years old and older speak English "Less than 'very well.'" If all household members 14 and over speak a language other than English and speak English "Less than 'very well,'" the household is considered part of this group that may be in need of English language assistance. All members of a household are included in this group, including members under 14 years old who may speak only English or speak a language other than English at home and speak English "Very well."

Government agencies use information on language spoken at home and ability to speak English for their programs that serve the needs of those who have difficulty with English. Under the Voting Rights Act, data on language are necessary to meet statutory requirements for making voting materials available in minority languages. This Act directs the Census Bureau, using data about language spoken at home and the ability to speak English, to identify minority groups that speak a language other than English and to assess their English-speaking ability. The U.S. Department of Education uses the language data to prepare a report to Congress on the social and economic status of children served by different local school districts. State and local agencies concerned with aging develop health care and other services tailored to the language and cultural diversity of the elderly under the Older Americans Act.

***Question/Concept History* –** The English Language Ability question has been the same since the beginning of the ACS. "Limited English-speaking households" has been calculated the same way in all years of ACS data collection, but has sometimes been termed "Linguistic Isolation" or "Households in which no one 14 and over speaks English only or speaks a language other than English and speaks English 'Very Well.'"

Limitation of the Data – Beginning in 2006, the population in group quarters (GQ) was included in the ACS. Some types of GQ populations may have ability to speak English distributions that are different from the household population. The inclusion of the GQ population could therefore have a noticeable impact on the ability to speak English distribution. This is particularly true for areas with a substantial GQ population.

Ideally, the data on ability to speak English represented a person's perception of their own English-speaking ability. However, because one household member usually completes ACS questionnaires, the responses may have represented the perception of another household member.

Comparability – Caution should be taken when comparing language data from the ACS and 1980, 1990, and 2000 Censuses across time. Methodological changes to data collection in 2013 may have affected language data. Users should be aware of these changes when comparing data from 2013 or after to data from before 2013, or when using multi-year ACS data containing data from before and after 2013. For more information on comparability of language data, see the user note, "2013 Language Estimates." Though the term "Linguistic Isolation" is no longer used, data under this heading were tabulated in the same way as data under the heading "Limited English speaking households" or "Households in which no one 14 and over speaks English only or speaks a language other than English and speaks English 'Very well.'"

Age

The data on age were derived from answers to Question 4 in the 2018 American Community Survey (ACS). The age classification is based on the age of the person in complete years at the time of interview. Both age and date of birth are used in combination to calculate the most accurate age at the time of the interview. Respondents are asked to give an age in whole, completed years as of interview date as well as the month, day and year of birth. People are not to round an age up if the person is close to having a birthday, and to estimate an age if the exact age is not known. An additional instruction on babies also asks respondents to print "0" for babies less than one year old. Inconsistently reported and missing values are assigned or imputed based on the values of other variables for that person, from other people in the household, or from people in other households ("hot deck" imputation).

Age is asked for all persons in a household or group quarters. On the mailout/mailback paper questionnaire for households, both age and date of birth are asked for persons listed as person numbers 1-5 on the form. Only age (in years) is initially asked for persons listed as 6-12 on the mailout/mailback paper questionnaire. If a respondent indicates that there are more than 5 people living in the household, then telephone center staffers call respondents to obtain date of birth data for the additional household members during the Failed Edit Follow-up (FEFU) operation. In the Internet, Computer-Assisted Telephone Interviews (CATI), and Computer-Assisted Personal Interview (CAPI) instruments, both age and date of birth is asked for all persons. In 2006, the ACS began collecting data in group quarters (GQs). This included asking both age and date of birth for persons living in a group quarters. For

additional data collection methodology, please go to https://www.census.gov/programs-surveys/acs/.

Data on age are used to determine the applicability of other questions for a particular individual and to classify other characteristics in tabulations. Age data are needed to interpret most social and economic characteristics used to plan and analyze programs and policies. Age is central for any number of federal programs that target funds or services to children, working-age adults, women of childbearing age, or the older population. The U.S. Department of Education uses census age data in its formula for allotment to states. The U.S. Department of Veterans Affairs uses age to develop its mandated state projections on the need for hospitals, nursing homes, cemeteries, domiciliary services, and other benefits for veterans. For more information on the use of age data in Federal programs, please go to "ACS Handbook of Questions and Current Federal Uses".

Median Age – The median age is the age that divides the population into two equal-size groups. Half of the population is older than the median age and half is younger. Median age is based on a standard distribution of the population by single years of age and is shown to the nearest tenth of a year. (See the sections on "Standard Distributions" and "Medians" under "Derived Measures.")

Age Dependency Ratio – The age dependency ratio is derived by dividing the combined under 18 years and 65 years and over populations by the 18-to-64 population and multiplying by 100.

Old-Age Dependency Ratio – The old-age dependency ratio is derived by dividing the population 65 years and over by the 18-to-64 population and multiplying by 100.

Child Dependency Ratio – The child dependency ratio is derived by dividing the population under 18 years by the 18-to-64 population, and multiplying by 100.

***Question/Concept History* –** The 1996-2002 ACS question asked for month, day, and year of birth before age. Since 2003, the ACS question asked for age, followed by month, day, and year of birth. In 2008, an additional instruction was provided with the age and date of birth question on the ACS questionnaire to report babies as age 0 when the child was less than 1 year old. The addition of this instruction occurred after 2005 National Census Test results indicated increased accuracy of age reporting for babies less than one year old.

***Limitation of the Data* –** Beginning in 2006, the population living in group quarters (GQ) was included in the ACS population universe. Some types of group quarters have populations with age distributions that are very different from that of the household population. The inclusion of the GQ population could therefore have a noticeable impact on the age distribution for a given geographic area. This is particularly true for areas with a substantial GQ population. For example, in areas with large colleges and universities, the percent of individuals 18-24 would increase due to the inclusion of GQs in the ACS universe.

Comparability **–** Caution should be taken when comparing population in age groups across time. The entire population continually ages into older age groups over time, and babies fill in the youngest age group. Therefore, the population of a certain age is made up of a completely different group of people in one time period than in another (e.g. one age group in 2000 versus same age group in 2015). Since populations occasionally experience booms/increases and busts/decreases in births, deaths, or migration (for example, the postwar Baby Boom from 1946-1964), one should not necessarily expect that the population in an age group in one year should be similar in size or proportion to the population in the same age group in a different period in time. For example, Baby Boomers were age 36 to 54 in Census 2000 while they were age 51 to 69 in the 2015 ACS. The age structure and distribution would therefore shift in those age groups to reflect the change in people occupying those age-specific groups over time.

Data users should also be aware of methodology differences that may exist between different data sources if they are comparing ACS age data to other data sources, such as Population Estimates or Decennial Census data. For example, ACS data are that of a respondent-based survey and subject to various quality measures, such as sampling and nonsampling error, response rates, and item allocation error. This differs in design and methodology from other data sources, such as Population Estimates, which is not a survey and involves computational methodology to derive intercensal estimates of the population. While ACS estimates are controlled to Population Estimates for age at the nation, state and county levels of geography as part of the ACS weighting procedure, variation may exist in the age structure of a population at lower levels of geography when comparing different time periods or comparing across time due to the absence of controls below the county geography level. For more information on ACS data accuracy and weighting procedures, please go to https://www.census.gov/programs-surveys/acs/.

It also should be noted that although the ACS produces population, demographic, and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates the official estimates of the population for the nation, states, counties, cities and towns, and estimates of housing units for states and counties.

Ancestry

Ancestry refers to a person's ethnic origin, heritage, descent, or "roots," which may reflect their place of birth or that of previous generations of their family. Some ethnic identities, such as "Egyptian" or "Polish" can be traced to geographic areas outside the United States, while other ethnicities such as "Pennsylvania German" or "Cajun" evolved in the United States.

The intent of the ancestry question was not to measure the degree of attachment the respondent had to a particular ethnicity, but simply to establish that the respondent had a connection to and self-identified with a particular ethnic group. For example, a response of "Irish" might reflect total involvement in an Irish community or only a memory of ancestors several generations removed from the individual.

The data on ancestry were derived from answers to Question 13 in the 2018 American Community Survey (ACS). The question was based on self-identification; the data on ancestry represent self-classification by people according to the ancestry group(s) with which they most closely identify.

The Census Bureau coded the responses into a numeric representation of over 1,000 categories. To do so, responses initially were processed through an automated coding system; then, those that were not automatically assigned a code were coded by individuals trained in coding ancestry responses. The code list reflects the results of the Census Bureau's own research and consultations with many ethnic experts. Many decisions were made to determine the classification of responses. These decisions affected the grouping of the tabulated data. For example, the "Indonesian" category includes the responses of "Indonesian," "Celebesian," "Moluccan," and a number of other responses.

The ancestry question allowed respondents to report one or more ancestry groups. Generally, only the first two responses reported were coded. If a response was in terms of a dual ancestry, for example, "Irish English," the person was assigned two codes, in this case one for Irish and another for English. However, in certain cases, multiple responses such as "French Canadian," "Scotch-Irish," "Greek Cypriot," were assigned a single code reflecting their status as unique groups. If a person reported one of these unique groups in addition to another group, for example, "Scotch-Irish English," resulting in three terms, that person received one code for the unique group (Scotch-Irish) and another one for the remaining group (English). If a person reported "English Irish French," only English and Irish were coded. If there were more than two ancestries listed and one of the ancestries was a part of another, such as "German Bavarian Hawaiian," the responses were coded using the more detailed groups (Bavarian and Hawaiian).

The Census Bureau accepted "American" as a unique ethnicity if it was given alone or with one other ancestry. There were some groups such as "American Indian," "Mexican American," and "African American" that were coded and identified separately.

The ancestry question is asked for every person in the ACS, regardless of age, place of birth, Hispanic origin, or race.

Ancestry identifies the ethnic origins of the population, and federal agencies regard this information as essential for fulfilling many important needs. Ancestry is required to enforce provisions under the Civil Rights Act, which prohibits discrimination based upon race, sex, religion, and national origin. More generally, these data are needed to measure the social and economic characteristics of ethnic groups and to tailor services to accommodate cultural differences. The Department of Labor draws samples for surveys that provide employment statistics and other related information for ethnic groups using ancestry.

The ACS data on ancestry were released annually on the American FactFinder (http://factfinder.census.gov). Beginning in 2018, these tables are available through data.census.gov. The Detailed Tables (B04004-B04006) contain estimates of over 100 different ancestry groups for the nation, states, and many other geographic areas, while the

Special Population Profiles contain characteristics of different ancestry groups. Go to http://factfinder.census.gov and select "Advanced Search" to enter the table number.

In all tabulations, when respondents provided an unclassifiable ethnic identity (for example, "multi-national," "adopted," or "I have no idea"), the answer was included in "Unclassified or not reported."

The tabulations on ancestry show two types of data– one where estimates represent the number of people, and the other where estimates represent the number of responses. If you want to know how many people reported an ancestry, use the estimates based on people. If you want to know how many reports there were of a certain ancestry, use the estimates based on reports. The difference between the two types of data presentations represents the fact that people can provide more than one ancestry, and therefore can be counted twice in the same ancestry category.

The following are the types of estimates shown:

People Reporting Single Ancestry – Includes all people who reported only one ethnic group such as "German." Also included in this category are people with only a multiple-term response such as "Scotch-Irish" who are assigned a single code because they represent one distinct group. For example, in this type of table, the count for German would be interpreted as "The number of people who reported only German as their ancestry."

People Reporting Multiple Ancestries – Includes all people who reported more than one group, such as "German" and "Irish" and were assigned two ancestry codes. The German line on this table would be interpreted as "The number of people who responded that German was part of their multiple ancestry."

People Reporting Ancestry – Includes all people who reported each ancestry, regardless of whether it was their first or second ancestry, or part of a single or multiple response. This estimate is the sum of the two estimates above (for Single and Multiple ancestry). People can be listed twice in this table. For example, if someone reports their ancestry as "German and Danish," they will be listed once in German and once in Danish, and therefore the sum of the rows would not equal the total population. Interpret the German line of this table as "The total number of people who reported they had German ancestry."

Note that three other tables were available prior to 2014:

B04001 – First Ancestry Reported
B04002 – Second Ancestry Reported
B04003—Total Ancestries Reported

These tables were removed in 2014 because they were less user-friendly than B04004-B04006. The tables were tallies of the number of people reporting each ancestry first, second, and in total, which resulted in double-counting within many ancestry groups. For example, if a respondent reported two different types of German ancestry, they would be tallied twice

under German in B04003. Or, if a respondent had two different types of Arab ancestry, they would be tallied twice under Arab. Thus, table B04006 is a better table to use if a data user is interested in knowing the total number of people who responded that they had German or Arab ancestry, for example.

Question/Concept History – The question on ancestry has been asked on the ACS since 1996. The question wording has never changed, although placement of the question changed slightly. Also, the examples listed below the write-in lines changed in 1999, but have remained the same since then.

The question on ancestry was first asked in the 1980 Census. It replaced the question on parental place of birth, in order to include ancestral heritage for people whose families have been in the U.S. for more than two generations. The question also was asked in the 1990 Census and Census 2000.

The ACS editing system uses answers to the race and place of birth questions to clarify ancestry responses of "Indian," where possible. It also aids in the interpretation of two-word ancestries, such as "Black Irish."

Limitation of the Data – Although some experts consider religious affiliation a component of ethnic identity, the ancestry question was not designed to collect any information concerning religion. The Census Bureau is prohibited from collecting information on religion. Thus, if a religion was given as an answer to the ancestry question, it was coded as an "Other" response.

Beginning in 2006, the population in group quarters (GQ) was included in the ACS. Some types of GQ populations may have ancestry distributions that are different from the household population. The inclusion of the GQ population could therefore have a noticeable impact on the ancestry distribution. This is particularly true for areas with a substantial GQ population.

Comparability – The data are comparable to Census 2000, as long as some caution is used. Response rates to the ancestry question are generally higher for the ACS than for the Census, and data are never generated for missing ancestry responses; therefore, some ancestry groups are reported more heavily in the ACS than in Census 2000.

In 2010, there were two major changes to the coding rules. If up to two ancestries were listed, both were coded, even if one was the specific of the other or if one was American. Also, race groups and Hispanic groups were coded with the same priority as non-race and non-Hispanic groups. For example, "Haitian Black French" would previously have been coded Haitian and French, but now would be coded Haitian and Black.

For more information, see the Ancestry Code List found within the 2018 ACS Code List. Go to http://www.census.gov and enter "ACS Code Lists, Definitions, and Accuracy" in the search box.

Children Ever Born

For the 1996-1998 American Community Survey (ACS), the data on fertility (also referred to as "children ever born") was asked of all women 15 years old and over regardless of marital status. Stillbirths, stepchildren, and adopted children were excluded from the number of children ever born. Ever-married women were instructed to include all children born to them before and during their most recent marriage, children no longer living, and children living away from home, as well as children who were still living in the home. Never-married women were instructed to include all children born to them. The question on children ever born was asked to measure lifetime fertility experience of women up to the survey date.

Data were most frequently presented in terms of the aggregate number of children ever born to women in the specified category and in terms of the rate per 1,000 women.

Beginning in 1999, ACS data on fertility were derived from questions that asked if the person had given birth in the past 12 months (Question 24 in the 2018 ACS). See the section on "Fertility" for more information.

Question/Concept History – The 1996-1998 ACS used a write-in space for the number and a response category for "None." No question addressed "children ever born" after 1998.

Limitation of the Data – The data available for 1996-1998 are only available for a limited number of geographies.

Comparability – The data on children ever born are comparable to data from the 1990 Census and prior censuses. The data are also comparable to the June supplement to the Current Population Survey.

Citizenship Status (U.S. Citizenship Status)

The data on citizenship status were derived from answers to Question 8 in the 2018 American Community Survey (ACS). This question was asked about Persons 1 through 5 in the ACS.

Respondents were asked to select one of five categories: (1) born in the United States, (2) born in Puerto Rico, Guam, the U.S. Virgin Islands, or Northern Marianas, (3) born abroad of U.S. citizen parent or parents, (4) U.S. citizen by naturalization, or (5) not a U.S citizen. Respondents indicating they are a U.S. citizen by naturalization also are asked to print their year of naturalization.

For the Puerto Rico Community Survey, respondents were asked to select one of five categories: (1) born in Puerto Rico, (2) born in a U.S. state, District of Columbia, Guam, the U.S. Virgin Islands, or Northern Marianas, (3) born abroad of U.S. citizen parent or parents, (4) U.S. citizen by naturalization, or (5) not a U.S. citizen. Respondents indicating they are a U.S. citizen by naturalization also are asked to print their year of naturalization.

When no information on citizenship status was reported for a person, information for other household members, if available, was used to assign a citizenship status to the respondent. All cases of nonresponse that were not assigned a citizenship status based on information from other household members were allocated the citizenship status of another person with similar characteristics who provided complete information. In cases of conflicting responses, place of birth information is used to edit citizenship status. For example, if a respondent states he or she was born in Puerto Rico but was not a U.S. citizen, the edits use the response to the place of birth question to change the respondent's status to "U.S. citizen at birth."

U.S. Citizen – Respondents who indicated that they were born in the United States, Puerto Rico, a U.S. Island Area (such as Guam), or abroad of American (U.S. citizen) parent or parents are considered U.S. citizens at birth. Foreign-born people who indicated that they were U.S. citizens through naturalization also are considered U.S. citizens.

Not a U.S. Citizen – Respondents who indicated that they were not U.S. citizens at the time of the survey.

Native – The native population includes anyone who was a U.S. citizen at birth. This includes respondents who indicated they were born in the United States, Puerto Rico, a U.S. Island Area (such as Guam), or abroad of American (U.S. citizen) parent or parents.

Foreign born – The foreign-born population includes anyone who was not a U.S. citizen at birth. This includes respondents who indicated they were a U.S. citizen by naturalization or not a U.S. citizen.

The ACS questionnaires do not ask about immigration status. The population surveyed includes all people who indicated that the United States was their usual place of residence on the survey date. The foreign-born population includes naturalized U.S. citizens, lawful permanent residents (i.e. immigrants), temporary migrants (e.g., foreign students), humanitarian migrants (e.g., refugees), and unauthorized migrants (i.e. people illegally present in the United States).

The responses to this question are used to determine the U.S. citizen and non-U.S. citizen populations as well as to determine the native and foreign-born populations.

***Question/Concept History* –** In the 1996-1998 ACS, the third response category was "Yes, born abroad of American parent(s)." However, since 1999 in the ACS and since the 2005 Puerto Rico Community Survey, the response category was "Yes, born abroad of American parent or parents." In 2008, respondents who indicated that they were a U.S. citizen by naturalization also were asked to print their year of naturalization. Also in 2008, modifications in wording were made to both the third response category (changed from "Yes, born abroad of American parent or parents" to "Yes, born abroad of U.S. citizen parent or parents") and the fifth response category (changed from "No, not a citizen of the United States" to "No, not a U.S. citizen").

Limitation of the Data – Beginning in 2006, the population in group quarters (GQ) was included in the ACS. Some types of GQ populations may have citizenship status distributions that are different from the household population. The inclusion of the GQ population could therefore have a noticeable impact on the citizenship status distribution. This is particularly true for areas with substantial GQ populations.

Comparability – Citizenship can be compared both across ACS years and to Census 2000 data. For more information, go to http://www.census.gov and enter "Comparing ACS Data" in the search box.

Class of Worker

Class of worker categorizes people according to the type of ownership of the employing organization. Class of worker data were derived from answers to question 41 in the 2018 American Community Survey (ACS). Question 41 provides respondents with 8 class of worker categories from which they are to select one. These categories are:

1. An employee of a private for-profit company or business, or of an individual, for wages, salary, or commissions.
2. An employee of a private not-for-profit, tax-exempt, or charitable organization.
3. A local government employee (city, county, etc.).
4. A state government employee.
5. A Federal government employee.
6. Self-employed in own not incorporated business, professional practice, or farm.
7. Self-employed in own incorporated business, professional practice, or farm.
8. Working without pay in a family business or farm.

These questions were asked of all people 15 years old and over who had worked in the past 5 years. For employed people, the data refer to the person's job during the previous week. For those who worked two or more jobs, the data refer to the job where the person worked the greatest number of hours. For unemployed people and people who are not currently employed but report having a job within the last five years, the data refer to their last job.

The class of worker categories are defined as follows:

Private wage and salary workers – Includes people who worked for wages, salary, commission, tips, pay-in-kind, or piece rates for a private, for-profit employer or a private not-for-profit, tax-exempt or charitable organization. Self-employed people whose business was incorporated are included with private wage and salary workers because they are paid employees of their own companies.

ACS tabulations present data separately for these subcategories: "Employee of private company workers," "Private not-for-profit wage and salary workers," and "Self-employed in own incorporated business workers."

Government workers – Includes people who were employees of any local, state, or Federal governmental unit, regardless of the activity of the particular agency. For ACS tabulations, the data are presented separately for the three levels of government.

Employees of Indian tribal governments, foreign governments, the United Nations, or other formal international organizations controlled by governments were classified as "Federal government workers."

The government categories include all government workers, though government workers may work in different industries. For example, people who work in a public elementary school or city owned bus line are coded as local government class of workers.

Self-employed in own not incorporated business workers – Includes people who worked for profit or fees in their own unincorporated business, profession, or trade, or who operated a farm.

Unpaid family workers – Includes people who worked without pay in a business or on a farm operated by a relative.

***Editing Procedures* –** A computer edit and allocation process excludes all responses that should not be included in the universe and evaluates the consistency of the remaining responses. Class of worker responses are checked for consistency with the industry and occupation data provided for that respondent. Occasionally respondents do not report a response for class of worker, industry, or occupation. Certain types of incomplete entries are corrected using the *Alphabetical Index of Industries and Occupations* (https://www.census.gov/topics/employment/industry-occupation/guidance/indexes.html). If one or more of the three codes (occupation, industry, or class of worker) is blank after the edit, a code is assigned from a donor respondent who is a "similar" person based on questions such as age, sex, educational attainment, income, employment status, and weeks worked. If all of the labor force and income data are blank, all of these economic questions are assigned from a "similar" person who had provided all the necessary data.

These data are used to formulate policy and programs for employment and career development and training. Companies use these data to decide where to locate new plants, stores, or offices.

***Question/Concept History* –** Class of worker data have been collected during decennial censuses since 1910. Starting with the 2010 Census, class of worker data will no longer be collected during the decennial census. Long form data collection has transitioned to the ACS. The ACS began collecting data on class of worker in 1996. The questions on class of worker were designed to be consistent with the 1990 Census questions on class of worker. The 1996-1998 ACS class of worker question had an additional response category for

"Active duty U.S. Armed Forces member." People who marked this category were tabulated as Federal government workers. A check box was added to the employer name questionnaire item in 1999 (Question 42 in 2018 ACS). This check box is to be marked by anyone "now on active duty in the Armed Forces..." This information is used by the industry and occupation coders to assist in assigning proper industry codes for active duty military.

Limitation of the Data – Beginning in 2006, the population in group quarters (GQ) was included in the ACS. Some types of GQ populations have class of worker distributions that are different from the household population. The inclusion of the GQ population could therefore have a noticeable impact on the class of worker distribution in some geographic areas with a substantial GQ population.

Data on occupation, industry, and class of worker are collected for the respondent's current primary job or the most recent job for those who are not employed but have worked in the last 5 years. Other labor force questions, such as questions on earnings or work hours, may have different reference periods and may not limit the response to the primary job. Although the prevalence of multiple jobs is low, data on some labor force items may not exactly correspond to the reported occupation, industry, or class of worker of a respondent.

Comparability – Class of worker categories have remained consistent since the implementation of the ACS in 1996. The 1996-1998 ACS class of worker question had an additional response category for "Active duty U.S. Armed Forces member" in order to assist industry and occupation coders in assigning proper industry codes for active duty military. People who selected this category were tabulated as Federal government workers. Active duty U.S. Armed Forces have been coded as Federal government workers from 1996 to 2017.

See also, Industry and Occupation.

Disability Status

Under the conceptual framework of disability described by the Institute of Medicine (IOM) and the International Classification of Functioning, Disability, and Health (ICF), disability is defined as the product of interactions among individuals' bodies; their physical, emotional, and mental health; and the physical and social environment in which they live, work, or play. Disability exists where this interaction results in limitations of activities and restrictions to full participation at school, at work, at home, or in the community. For example, disability may exist where a person is limited in their ability to work due to job discrimination against persons with specific health conditions; or, disability may exist where a child has difficulty learning because the school cannot accommodate the child's deafness.

Furthermore, disability is a dynamic concept that changes over time as one's health improves or declines, as technology advances, and as social structures adapt. As such, disability is a continuum in which the degree of difficulty may also increase or decrease. Because disability exists along a continuum, various cut-offs are used to allow for a simpler understanding of the concept, the most common of which is the dichotomous "With a disability"/"no disability" differential.

Measuring this complex concept of disability with a short set of six questions is difficult. Because of the multitude of possible functional limitations that may present as disabilities, and in the absence of information on external factors that influence disability, surveys like the ACS are limited to capturing difficulty with only selected activities. As such, people identified by the ACS as having a disability are, in fact, those who exhibit difficulty with specific functions and may, in the absence of accommodation, have a disability. While this definition is different from the one described by the IOM and ICF conceptual frameworks, it relates to the programmatic definitions used in most Federal and state legislation.

In an attempt to capture a variety of characteristics that encompass the definition of disability, the ACS identifies serious difficulty with four basic areas of functioning – hearing, vision, cognition, and ambulation. These functional limitations are supplemented by questions about difficulties with selected activities from the Katz Activities of Daily Living (ADL) and Lawton Instrumental Activities of Daily Living (IADL) scales, namely difficulty bathing and dressing, and difficulty performing errands such as shopping. Overall, the ACS attempts to capture six aspects of disability, which can be used together to create an overall disability measure, or independently to identify populations with specific disability types.

Information on disability is used by a number of federal agencies to distribute funds and develop programs for people with disabilities. For example, data about the size, distribution, and needs of the population with a disability are essential for developing disability employment policy. For the Americans with Disabilities Act, data about functional limitations are important to ensure that comparable public transportation services are available for all segments of the population. Federal grants are awarded, under the Older Americans Act, based on the number of elderly people with physical and mental disabilities.

Question/Concept History – In the 2018 American Community Survey (ACS), disability concepts were asked in questions 17 through 19. Question 17 had two subparts and was asked of all persons regardless of age. Question 18 had three subparts and was asked of people age 5 years and older. Question 19 was asked of people age 15 years and older.

Hearing difficulty was derived from question 17a, which asked respondents if they were "deaf or … [had] serious difficulty hearing." *Vision difficulty* was derived from question 17b, which asked respondents if they were "blind or … [had] serious difficulty seeing even when wearing glasses." Prior to the 2008 ACS, hearing and vision difficulty were asked in a single question under the label "Sensory disability."

Cognitive difficulty was derived from question 18a, which asked respondents if due to physical, mental, or emotional condition, they had "serious difficulty concentrating, remembering, or making decisions." Prior to the 2008 ACS, the question on cognitive functioning asked about difficulty "learning, remembering, or concentrating" under the label "Mental disability."

Ambulatory difficulty was derived from question 18b, which asked respondents if they had "serious difficulty walking or climbing stairs." Prior to 2008, the ACS asked if respondents had "a condition that substantially limits one or more basic physical activities such as

walking, climbing stairs, reaching, lifting, or carrying." This measure was labeled "Physical difficulty" in ACS data products.

Self-care difficulty was derived from question 18c, which asked respondents if they had "difficulty dressing or bathing." Difficulty with these activities are two of six specific Activities of Daily Living (ADLs) often used by health care providers to assess patients' self-care needs. Prior to the 2008 ACS, the question on self-care limitations asked about difficulty "dressing, bathing, or getting around inside the home," under the label "Self-care disability."

Independent living difficulty was derived from question 19, which asked respondents if due to a physical, mental, or emotional condition, they had difficulty "doing errands alone such as visiting a doctor's office or shopping." Difficulty with this activity is one of several Instrumental Activities of Daily Living (IADL) used by health care providers in making care decisions. Prior to the 2008 ACS, a similar measure on difficulty "going outside the home alone to shop or visit a doctor's office" was asked under the label "Go-outside-home disability."

Disability status is determined from the answers from these six types of difficulty. For children under 5 years old, hearing and vision difficulty are used to determine disability status. For children between the ages of 5 and 14, disability status is determined from hearing, vision, cognitive, ambulatory, and self-care difficulties. For people aged 15 years and older, they are considered to have a disability if they have difficulty with any one of the six difficulty types.

Limitation of the Data – The universe for most disability data tabulations is the civilian noninstitutionalized population. Some types of GQ populations have disability distributions that are different from the household population. The inclusion of the noninstitutionalized GQ population could therefore have a noticeable impact on the disability distribution. This is particularly true for areas with a substantial noninstitutionalized GQ population. For a discussion of the effect of group quarters data has on estimates of disability status, see "Disability Status and the Characteristics of People in Group Quarters: A Brief Analysis of Disability Prevalence Among the Civilian Noninstitutionalized and Total Populations in the American Community Survey" on the Census website. Go to http://www.census.gov and enter the paper title in the search box.

Comparability – Beginning in 2008, questions on disability represent a conceptual and empirical break from earlier years of the ACS. Hence, the Census Bureau does not recommend any comparisons of 2018 disability data to 2007 and earlier ACS disability data. Research suggests that combining the new separate measures of hearing and vision difficulty to generate a sensory difficulty measure does not create a comparable estimate to the old Sensory disability estimates in prior ACS products. Likewise, the cognitive difficulty, ambulatory difficulty, self-care difficulty, and independent living difficulty measures are based on different sets of activities and different question wordings from similar measures in ACS questionnaires prior to 2008 and thus should not be compared. Because the overall measure of disability status beginning in 2008 is based on different measures of difficulty,

these estimates should also not be compared to prior years. For additional information on the differences between the ACS disability questions beginning in 2008 and prior ACS disability questions, see "Review of Changes to the Measurement of Disability in the 2008 American Community Survey" on the Census website. Go to http://www.census.gov and enter the paper title in the search box.

The 2018 disability estimates also should not be compared with disability estimates from Census 2000 for reasons similar to the ones made above. ACS disability estimates also should not be compared with more detailed measures of disability from sources such as the National Health Interview Survey and the Survey of Income and Program Participation.

The 2018 ACS disability estimates are comparable with the ACS disability estimates from 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, and 2016.

Educational Attainment

Educational attainment data are needed for use in assessing the socioeconomic condition of the U.S. population. Government agencies also require these data for funding allocations and program planning and implementation. These data are needed to determine the extent of illiteracy rates of citizens in language minorities in order to meet statutory requirements under the Voting Rights Act. Based on data about educational attainment, school districts are allocated funds to provide classes in basic skills to adults who have not completed high school.

Data on educational attainment were derived from answers to Question 11 on the 2018 ACS, which was asked of all respondents. Educational attainment data are tabulated for people 18 years old and over. Respondents are classified according to the highest degree or the highest level of school completed. The question included instructions for persons currently enrolled in school to report the level of the previous grade attended or the highest degree received.

The educational attainment question included a response category that allowed people to report completing the 12th grade without receiving a high school diploma. Respondents who received a regular high school diploma and did not attend college were instructed to report "Regular high school diploma." Respondents who received the equivalent of a high school diploma (for example, passed the test of General Educational Development (G.E.D.)), and did not attend college, were instructed to report "GED or alternative credential." "Some college" is in two categories: "Some college credit, but less than 1 year of college credit" and "1 or more years of college credit, no degree." The category "Associate's degree" included people whose highest degree is an associate's degree, which generally requires 2 years of college level work and is either in an occupational program that prepares them for a specific occupation, or an academic program primarily in the arts and sciences. The course work may or may not be transferable to a bachelor's degree. Master's degrees include the traditional MA and MS degrees and field-specific degrees, such as MSW, MEd, MBA, MLS, and MEng. Professional school degrees may include those in medicine, dentistry, chiropractic, optometry, osteopathic medicine, pharmacy, podiatry, veterinary medicine, law, and theology. The order in which degrees were listed suggested that doctorate degrees were

"higher" than professional school degrees, which were "higher" than master's degrees. If more than one box was filled, the response was edited to the highest level or degree reported.

Help text available to people responding by Internet and through personal interviews were instructed that schooling completed in foreign or ungraded school systems should be reported as the equivalent level of schooling in the regular American system. The instructions specified that certificates or diplomas for training in specific trades or from vocational, technical or business schools were not to be reported. Honorary degrees awarded for a respondent's accomplishments were not to be reported.

High School Graduate or Higher – This category includes people whose highest degree was a high school diploma or its equivalent, people who attended college but did not receive a degree, and people who received an associate's, bachelor's, master's, or professional or doctorate degree. People who reported completing the 12th grade but not receiving a diploma are not included.

Not Enrolled, Not High School Graduate – This category includes people of compulsory school attendance age or above who were not enrolled in school and were not high school graduates. These people may be referred to as "high school dropouts." There is no restriction on when they "dropped out" of school; therefore, they may have dropped out before high school and never attended high school.

***Question/Concept History* –** Since 1999, the ACS question does not have the response category for "Vocational, technical, or business school degree" that the 1996-1998 ACS question had. Starting in 1999, the ACS question had two categories for some college: "Some college credit, but less than 1 year" and "1 or more years of college, no degree." The 1996-1998 ACS question had one category: "Some college but no degree."

In the 1996-1998 ACS, the educational attainment question was used to estimate level of enrollment. Since 1999, a question regarding grade of enrollment was included.

The 1999-2007 ACS attainment question grouped grade categories below high school into the following three categories: "Nursery school to 4th grade," "5th grade or 6th grade," and "7th grade or 8th grade." The 1996-1998 ACS question allowed a write-in for highest grade completed for grades 1-11 in addition to "Nursery or preschool" and "Kindergarten."

Beginning in 2008, the ACS attainment question was changed to the following categories for levels up to Grade 12, no diploma: "Nursery school," "Kindergarten," "Grade 1 through grade 11," and "12th grade, no diploma." The survey question allowed a write-in for the highest grade completed for grades 1-11. In addition, the category that was previously "High school graduate (including GED)" was broken into two categories: "Regular high school diploma" and "GED or alternative credential." The term "*credit*" for the two some college categories was emphasized. The phrase "*beyond a bachelor's degree*" was added to the professional degree category.

***Limitation of the Data* –** Beginning in 2006, the population in group quarters (GQ) was included in the ACS. Some types of GQ populations may have educational attainment distributions that are different from the household population. The inclusion of the GQ population could therefore have a noticeable impact on the educational attainment distribution. This is particularly true for areas with a substantial GQ population.

The Census Bureau tested the changes introduced to the 2008 version of the educational attainment question in the 2006 ACS Content Test. The results of this testing show that the changes may introduce an inconsistency in the data produced for this question as observed from the years 2007 to 2008. For more information, see "Evaluation Report Covering Educational Attainment" from the 2006 ACS Content Test. Go to http://www.census.gov and enter "2006 ACS Content Test Evaluation Report Covering Educational Attainment" in the search box.

***Comparability* –** New questions were added to the 2008 ACS Computer-Assisted Telephone Interview (CATI) and Computer-Assisted Personal Interview (CAPI) instruments. Respondents who received a high school diploma, GED or equivalent also were asked if they had completed any college credit. Therefore, data users may notice a decrease in the number of high school graduates relative to previous years because those people are now being captured in the "Some college credit, but less than 1 year of college credit" or "1 or more years of college credit, no degree" categories. For more information, see "Evaluation Report Covering Educational Attainment" from the 2006 ACS Content Test. Go to http://www.census.gov and enter "2006 ACS Content Test Evaluation Report Covering Educational Attainment" in the search box.

Data about educational attainment also are collected from the decennial Census and from the Current Population Survey (CPS). ACS data are generally comparable to data from the Census. For more information about the comparability of ACS and CPS data, please see the Educational Attainment Fact Sheet at https://www.census.gov/topics/education/educational-attainment/guidance/factsheet-acs-cps.html. More information about the comparability of ACS and CPS data can also be found in the paper "Comparison of ACS and ASEC Data on Educational Attainment: 2004" on the ACS website. Go to http://www.census.gov and enter the paper title in the search box.

Employment Status

The data on employment status were derived from Questions 29 and 35 to 37 in the 2018 American Community Survey (ACS). (In the 1999-2002 ACS, data were derived from Questions 22 and 28 to 30; in the 1996-1998 ACS, data were derived from Questions 21 and 28 to 30.) The questions were asked of all people 15 years old and over. The series of questions on employment status was designed to identify, in this sequence: (1) people who worked at any time during the reference week; (2) people on temporary layoff who were available for work; (3) people who did not work during the reference week but who had jobs or businesses from which they were temporarily absent (excluding layoff); (4) people who did not work during the reference week, but who were looking for work during the last four

weeks and were available for work during the reference week; and (5) people not in the labor force. (For more information, see the discussion under "Reference Week.")

The employment status data shown in ACS tabulations relate to people 16 years old and over.

Employment status is key to understanding work and unemployment patterns and the availability of workers. Based on labor market areas and unemployment levels, the U.S. Department of Labor identifies service delivery areas and determines amounts to be allocated to each for job training. The impact of immigration on the economy and job markets is determined partially by labor force data, and this information is included in required reports to Congress. The Office of Management and Budget, under the Paperwork Reduction Act, uses data about employed workers as part of the criteria for defining metropolitan areas. The Bureau of Economic Analysis uses this information, in conjunction with other data, to develop its state per capita income estimates used in the allocation formulas and eligibility criteria for many federal programs such as Medicaid.

Employed – This category includes all civilians 16 years old and over who either (1) were "at work," that is, those who did any work at all during the reference week as paid employees, worked in their own business or profession, worked on their own farm, or worked 15 hours or more as unpaid workers on a family farm or in a family business; or (2) were "with a job but not at work," that is, those who did not work during the reference week but had jobs or businesses from which they were temporarily absent due to illness, bad weather, industrial dispute, vacation, or other personal reasons. Excluded from the employed are people whose only activity consisted of work around the house or unpaid volunteer work for religious, charitable, and similar organizations; also excluded are all institutionalized people and people on active duty in the United States Armed Forces.

Civilian Employed – This term is defined exactly the same as the term "employed" above.

Unemployed – All civilians 16 years old and over are classified as unemployed if they (1) were neither "at work" nor "with a job but not at work" during the reference week, and (2) were actively looking for work during the last 4 weeks, and (3) were available to start a job. Also included as unemployed are civilians who did not work at all during the reference week, were waiting to be called back to a job from which they had been laid off, and were available for work except for temporary illness. Examples of job seeking activities are:

- Registering at a public or private employment office
- Meeting with prospective employers
- Investigating possibilities for starting a professional practice or opening a business
- Placing or answering advertisements
- Writing letters of application
- Being on a union or professional register

Civilian Labor Force – Consists of people classified as employed or unemployed in accordance with the criteria described above.

Unemployment Rate – The unemployment rate represents the number of unemployed people as a percentage of the civilian labor force. For example, if the civilian labor force equals 100 people and 7 people are unemployed, then the unemployment rate would be 7 percent.

Labor Force – All people classified in the civilian labor force plus members of the U.S. Armed Forces (people on active duty with the United States Army, Air Force, Navy, Marine Corps, or Coast Guard).

Labor Force Participation Rate – The labor force participation rate represents the proportion of the population that is in the labor force. For example, if there are 100 people in the population 16 years and over, and 64 of them are in the labor force, then the labor force participation rate for the population 16 years and over would be 64 percent.

Not in Labor Force – All people 16 years old and over who are not classified as members of the labor force. This category consists mainly of students, homemakers, retired workers, seasonal workers interviewed in an off season who were not looking for work, institutionalized people, and people doing only incidental unpaid family work (less than 15 hours during the reference week).

Worker – This term appears in connection with several subjects: employment status, journey-to-work questions, class of worker, weeks worked in the past 12 months, and number of workers in family in the past 12 months. The meaning varies and, therefore, should be determined in each case by referring to the definition of the subject in which it appears. When used in the concepts "workers in family" and "full-time, year-round workers," the term "worker" relates to the meaning of work defined for the "work experience" subject.

Question/Concept History –

Worked Last Week (Question 29 in the 2018 ACS): From 1999-2007, an italicized instruction was added to the question to help respondents determine what to count as work. Starting in 2008, the instruction was removed and the question was separated into two parts in an effort to give respondents – particularly people with irregular kinds of work arrangements – two opportunities to grasp and respond to the correct intent of the question.

On Layoff (Question 35a in the 2018 ACS): Starting in 1999, the "Yes, on temporary layoff from most recent job" and "Yes, permanently laid off from most recent job" response categories were condensed into a single "Yes" category. An additional question (Q35b) was added to determine the temporary/permanent layoff distinction.

Temporarily Absent (Question 35b in the 2018 ACS): Starting in 2008, the temporarily absent question included a revised list of examples of work absences.

Recalled to Work (Question 35c in the 2018 ACS): This question was added in the 1999 ACS to determine if a respondent who reported being on layoff from a job had been informed

that he or she would be recalled to work within 6 months or been given a date to return to work.

Looking for Work (Question 36 in the 2018 ACS): Starting in 2008, the actively looking for work question was modified to emphasize 'active' job-searching activities.

Available to Work (Question 37 in the 2018 ACS): Starting in 1999, the "Yes, if a job had been offered" and "Yes, if recalled from layoff" response categories were condensed into one category, "Yes, could have gone to work."

***Limitation of the Data* –** The data may understate the number of employed people because people who have irregular, casual, or unstructured jobs sometimes report themselves as not working. The number of employed people "at work" is probably overstated in the data (and conversely, the number of employed "with a job, but not at work" is understated) since some people on vacation or sick leave erroneously reported themselves as working. This problem has no effect on the total number of employed people. The reference week for the employment data is not the same for all people. Since people can change their employment status from one week to another, the lack of a uniform reference week may mean that the employment data do not reflect the reality of the employment situation of any given week. (For more information, see the discussion under "Reference Week.")

Beginning in 2006, the population in group quarters (GQ) was included in the ACS. Some types of GQ populations have employment status distributions that are different from the household population. All institutionalized people are placed in the "not in labor force" category. The inclusion of the GQ population could therefore have a noticeable impact on the employment status distribution. This is particularly true for areas with a substantial GQ population. For example, in areas having a large state prison population, the employment rate would be expected to *decrease* because the base of the percentage, which now includes the population in correctional institutions, is larger.

The Census Bureau tested the changes introduced to the 2008 version of the employment status questions in the 2006 ACS Content Test. The results of this testing show that the changes may introduce an inconsistency in the data produced for these questions as observed from the years 2007 to 2008. For more information, see "Evaluation Report Covering Employment Status" from the 2006 ACS Content Test. Go to http://www.census.gov and enter "2006 ACS Content Test Evaluation Report Covering Employment Status" in the search box.

Along with the 2008 ACS release, the Census Bureau produced a research note comparing 2007 and 2008 ACS employment estimates to 2007 and 2008 Current Population Survey (CPS)/Local Area Unemployment Statistics (LAUS) estimates. The research note shows that the changes to the employment status series of questions in the 2008 ACS will make ACS labor force data more consistent with benchmark data from the CPS and LAUS program. For more information, see "Changes to the American Community Survey between 2007 and 2008 and the Effects on the Estimates of Employment and Unemployment"

(https://www2.census.gov/programs-surveys/demo/guidance/labor-force/researchnote-report.pdf).

Comparability – Since employment data from the ACS are obtained from respondents in households, they differ from statistics based on reports from individual business establishments, farm enterprises, and certain government programs. People employed at more than one job are counted only once in the ACS and are classified according to the job at which they worked the greatest number of hours during the reference week. In statistics based on reports from business and farm establishments, people who work for more than one establishment may be counted more than once. Moreover, some tabulations may exclude private household workers, unpaid family workers, and self-employed people, but may include workers less than 16 years of age.

An additional difference in the data arises from the fact that people who had a job but were not at work are included with the employed in the ACS statistics, whereas many of these people are likely to be excluded from employment figures based on establishment payroll reports. Furthermore, the employment status data in tabulations include people on the basis of place of residence regardless of where they work, whereas establishment data report people at their place of work regardless of where they live. This latter consideration is particularly significant when comparing data for workers who commute between areas.

For several reasons, the unemployment figures of the Census Bureau are not comparable with published figures on unemployment compensation claims. For example, figures on unemployment compensation claims exclude people who have exhausted their benefit rights, new workers who have not earned rights to unemployment insurance, and people losing jobs not covered by unemployment insurance systems (including some workers in agriculture, domestic services, and religious organizations, and self-employed and unpaid family workers). In addition, the qualifications for drawing unemployment compensation differ from the definition of unemployment used by the Census Bureau. People working only a few hours during the week and people with a job but not at work are sometimes eligible for unemployment compensation but are classified as "Employed" in the ACS. Differences in the geographical distribution of unemployment data arise because the place where claims are filed may not necessarily be the same as the place of residence of the unemployed worker.

For guidance on differences in employment and unemployment estimates from different sources, go to https://www.census.gov/topics/employment/labor-force/guidance/survey-differences.html

Families

See Household Type and Relationship.

Fertility

The data on fertility were derived from Question 17 in 1999-2002, Question 18 in 2003-2007, question 23 in 2008, and question 24 since 2009 in the American Community Survey (ACS).

The question asked if the person had given birth in the past 12 months, and was asked of all women 15 to 50 years old regardless of marital status. From this question, we are able to determine geographies with high numbers of women with births and the characteristics of these women, such as age and marital status. When fertility was not reported, it was imputed according to the woman's age and marital status and the possibility there was an infant in the household.

Data are most frequently presented in terms of the aggregate number of women who had a birth in the past 12 months in the specified category, and in terms of the rate per 1,000 women.

Total Fertility Rate- This measure estimates the number of children a group of 1,000 women would have by the end of their childbearing years if they all experienced the same age-specific birth rates between ages 15-50 in a given year. This rate is used for comparisons among different population groups—for example, women in different geographical areas--as the rate accounts for differences in the age distribution in those areas.

Question/Concept History – The 1996-1998 ACS collected data on "children ever born." (See the section on "Children Ever Born" for more information.) In 1999, the ACS began collecting data on children born in the last 12 months.

Limitation of the Data – Beginning in 2006, the population in group quarters (GQ) was included in the ACS. Some types of GQ populations may have fertility distributions that are different from the household population. The inclusion of the GQ population could therefore have a noticeable impact on the fertility distribution. This is particularly true for areas with a substantial GQ population.

Comparability – The data on fertility can be compared to previous ACS years, to data from the National Center for Health Statistics (NCHS), and to similar data collected in the Current Population Survey (CPS) before that question changed in 2012. Keep in mind there are differences among these that can lead to differences in estimates. For instance, the NCHS collects administrative records while the ACS and CPS estimates are based on survey data. Also, all of these surveys have slightly different ways of determining the reference period, but generally show births occurring over a period of 12 months.

Field of Degree

Field of degree data are used by the National Science Foundation (NSF) to study the characteristics of the population with science and engineering degrees and occupations.

Data on field of bachelor's degree were derived from answers to Question 12 in the 2018 American Community Survey (ACS). This question was asked only to persons with a bachelor's degree or higher. Eligible respondents were asked to list the specific major(s) of any bachelor's degree received. This question does not ask for the field of any other type of degree earned (such as master's or doctorate).

An automated computer system coded write-in responses to Question 12 into 192 areas. Clerical coding categorized any write-in responses that could not be autocoded by the computer. Respondents listing multiple fields were assigned a code for each field, with a maximum of 10 fields per respondent.

The majors were further classified into a category scheme detailed in Field of Degree Classification table in Appendix A.

Question/Concept History – The field of degree question first appeared in the 2009 ACS. The inclusion of a field of degree question on the ACS was proposed to provide field of degree data annually for small levels of geography and to assist in building a sampling frame for the NSF's National Survey of College Graduates (NSCG).

Limitation of the Data – Beginning in 2006, the population in group quarters (GQ) was included in the ACS. Some types of GQ populations may have field of degree distributions that are different from the household population. The inclusion of the GQ population could therefore have a noticeable impact on the field of degree distribution. This is particularly true for areas with a substantial GQ population.

Comparability – Tables based on 2010-2018 ACS data are not completely comparable to tables based on 2009 ACS data due to slight changes in the field of degree coding and classifications. More information can be found at https://www.census.gov/programs-surveys/acs/technical-documentation/user-notes/educational-attainment-user-notes/acs-2010-field-of-degree-changes.html.

These data may be roughly comparable to the NSCG and the National Survey of Recent College Graduates, although the sampling frame and survey instruments differ between the surveys. Field of degree data also were collected in the Survey of Income and Program Participation (SIPP) from 1984 to 2004. However, these data would not be comparable to ACS due to differences in data collection period, methodology, and collection methods. For example, the SIPP only collects data for respondents who are 15 years and older and does not include group quarters.

Foreign-Born Population

The foreign-born population includes anyone who was not a U.S. citizen at birth. This includes respondents who indicated they were a U.S. citizen by naturalization or not a U.S. citizen. See Citizenship Status.

Foster Children

See Household Type and Relationship.

Grade in Which Enrolled

See School Enrollment and Type of School.

Grandparents as Caregivers

Data on grandparents as caregivers were derived from Questions 25a through 25c in the 2018 American Community Survey (ACS). Data are collected on whether a grandchild lives with a grandparent in the household, whether the grandparent has responsibility for the basic needs of the grandchild, and the duration of that responsibility.

Existence of a Grandparent Living with a Grandchild in the Household – This was determined by a "Yes" answer to the question, "Does this person have any of his/her own grandchildren under the age of 18 living in this house or apartment?" This question was asked of people 15 years of age and over. Because of the low numbers of persons under 30 years old living with their grandchildren, data were only tabulated for people 30 and over.

Responsibility for Basic Needs – This question determines if the grandparent is financially responsible for food, shelter, clothing, day care, etc., for any or all grandchildren living in the household. In selected tabulations, grandparent responsibility is further classified by presence of parent (of the grandchild).

Duration of Responsibility – The answer refers to the grandchild for whom the grandparent has been responsible for the longest period of time. Duration categories ranged from less than 6 months to 5 or more years.

***Question/Concept History* –** This set of questions was added to the ACS in 1999 to comply with legislation passed in the 104th Congress requiring that the decennial census program obtain information about grandparents who have primary responsibility for the care of their grandchildren.

The response categories for length of time caring for grandchildren were modified slightly between the 1999 and 2000 ACS questionnaires to match the 2000 decennial census questionnaire. The question has remained unchanged since then.

***Limitation of the Data* –** Before 2006, ACS grandparents data had a universe of people in households (which was the same as that in Census 2000). Beginning in 2006, the population in group quarters (GQ) was included in the ACS. Some types of GQ populations may have grandparents as caregivers distributions that are different from the household population. The inclusion of the GQ population could therefore have a noticeable impact on the grandparents as caregivers distribution. This is particularly true for areas with a substantial GQ population.

***Comparability* –** The data on grandparents as caregivers can be compared to previous ACS years and Census 2000 (with the potential limitation noted above about areas with a

substantial GQ population). For more information, go to http://www.census.gov and enter "Comparing ACS Data" in the search box.

Group Quarters (GQ)

See "Group Quarters" in the Living Quarters section.

Health Insurance Coverage

In 2017, data on health insurance coverage were derived from answers to Question 16 in the American Community Survey (ACS), which was asked of all respondents. Respondents were instructed to report their current coverage and to mark "yes" or "no" for each of the eight types listed (labeled as parts 16(a) to 16(h)).

a. Insurance through a current or former employer or union (of this person or another family member)
b. Insurance purchased directly from an insurance company (by this person or another family member)
c. Medicare, for people 65 and older, or people with certain disabilities
d. Medicaid, Medical Assistance, or any kind of government-assistance plan for those with low incomes or a disability
e. TRICARE or other military health care
f. VA (including those who have ever used or enrolled for VA health care)
g. Indian Health Service
h. Any other type of health insurance or health coverage plan

Respondents who answered "yes" to question 16(h) were asked to provide their other type of coverage type in a write-in field.

Health insurance coverage in the ACS and other Census Bureau surveys define coverage to include plans and programs that provide comprehensive health coverage. Plans that provide insurance for specific conditions or situations such as cancer and long-term care policies are not considered coverage. Likewise, other types of insurance like dental, vision, life, and disability insurance are not considered health insurance coverage.

In defining types of coverage, write-in responses were reclassified into one of the first seven types of coverage or determined not to be a coverage type. Write-in responses that referenced the coverage of a family member were edited to assign coverage based on responses from other family members. As a result, only the first seven types of health coverage are included in the microdata file.

An eligibility edit was applied to give Medicaid, Medicare, and TRICARE coverage to individuals based on program eligibility rules. TRICARE or other military health care was

given to active-duty military personnel and their spouses and children. Medicaid or other means-tested public coverage was given to foster children, certain individuals receiving Supplementary Security Income or Public Assistance, and the spouses and children of certain Medicaid beneficiaries. Medicare coverage was given to people 65 and older who received Social Security or Medicaid benefits.

People were considered insured if they reported at least one "yes" to Questions 16a to 16f. People who had no reported health coverage, or those whose only health coverage was Indian Health Service, were considered uninsured. For reporting purposes, the Census Bureau broadly classifies health insurance coverage as private health insurance or public coverage. Private health insurance is a plan provided through an employer or union, a plan purchased by an individual from a private company, or TRICARE or other military health care. Respondents reporting a "yes" to the types listed in parts a, b, or e were considered to have private health insurance. Public health coverage includes the federal programs Medicare, Medicaid, and VA Health Care (provided through the Department of Veterans Affairs), as well as the Children's Health Insurance Program (CHIP) and individual state health plans. Respondents reporting a "yes" to the types listed in c, d, or f were considered to have public coverage. The health insurance classifications are not mutually exclusive-- people may be covered by more than one at the same time.

The U.S. Department of Health and Human Services, as well as other federal agencies, use data on health insurance coverage to more accurately distribute resources and better understand state and local health insurance needs.

Question/Concept History – The ACS began asking questions about health insurance coverage in 2008. Because 2008 was the first year of collection, the Census Bureau limited the number and type of data products to simple age breakdowns of overall, private, and public coverage status. The evaluation of the 2008 data suggested that the data were of good quality, so the Census Bureau expanded the data products to include estimates of the specific types of coverage along with estimates about social, economic, and demographic details for people with and without health insurance.

For the 2008 data released (September 2009), there was no eligibility edit applied. The eligibility edit was developed for the 2009 data, and then was subsequently applied to the 2008 data (during spring 2010). Updated estimates of health insurance coverage with this data are available online (https://www.census.gov/data/tables/2009/demo/health-insurance/factfinder-acs.html).

Limitation of the Data – The universe for most health insurance coverage estimates is the civilian noninstitutionalized population. This population excludes active-duty military personnel and the population living in institutional group quarters (GQ) (such as correctional facilities and nursing homes), but includes the population living in noninstitutional group quarters (such as college dormitories). Some noninstitutional group quarter (GQ) populations have health insurance coverage distributions that are different from the household population (e.g. the prevalence of private health insurance among residents of college dormitories is higher than the household population). The proportion of the universe that is in the

noninstitutional GQ populations could, therefore, have a noticeable impact on estimates of the health insurance coverage. Since institutional GQ populations may also have health insurance coverage distributions that are different from the civilian noninstitutionalized population, the distributions in the published tables may differ slightly from how they would look if the total population were represented.

Comparability **–** Health insurance coverage was added to the 2008 ACS, and thus no equivalent measure is available from previous ACS surveys or Census 2000. Because of the addition of the eligibility edit to the 2009 ACS health insurance coverage, data users should be careful as to which 2008 ACS estimates they use to make comparisons. National, state, county and place-level 2008 (1-year) data incorporating the eligibility edit are available (https://www.census.gov/topics/health/health-insurance/guidance/acs-2008-1-year-re-run.html); they are comparable to the 2009 estimates in data.census.gov and American FactFinder (http://factfinder.census.gov). For more information on the logical coverage (eligibility) edits, see "Applying and Evaluating Logical Coverage Edits to Health Insurance Coverage in the American Community Survey"

Because coverage in the ACS references an individual's current status, caution should be taken when making comparisons to other surveys that may define coverage as "at any time in the last year" or "throughout the past year." A discussion of how the ACS health insurance estimates relate to other survey health insurance estimates can be found in "A Preliminary Evaluation of Health Insurance Coverage in the 2008 American Community Survey" (https://www.census.gov/library/working-papers/2009/acs/2009_Turner_01.html)

Hispanic or Latino Origin

The data on the Hispanic or Latino population were derived from answers to a question that was asked of all people (Question 5 in the 2018 American Community Survey (ACS)). The terms "Hispanic," "Latino," and "Spanish" are used interchangeably. Some respondents identify with all three terms while others may identify with only one of these three specific terms. Hispanics or Latinos who identify with the terms "Hispanic," "Latino," or "Spanish" are those who classify themselves in one or more of the specific Hispanic, Latino, or Spanish categories listed on the questionnaire ("Mexican," "Puerto Rican," or "Cuban") as well as those who indicate that they are "another Hispanic, Latino, or Spanish origin." People who do not identify with any of the specific origins listed on the questionnaire but indicate that they are "another Hispanic, Latino, or Spanish origin" are those who identify as Argentinian, Colombian, Dominican, Nicaraguan, Salvadoran, Spaniard, or other Spanish cultures or origins. Up to two write-in responses to the "another Hispanic, Latino, or Spanish origin" category are coded.

Origin can be viewed as the heritage, nationality group, lineage, or country of birth of the person or the person's parents or ancestors before their arrival in the United States. People who identify their origin as Hispanic, Latino, or Spanish may be of any race.

Hispanic origin is used in numerous programs and is vital in making policy decisions. These data are needed to determine compliance with provisions of antidiscrimination in

employment and minority recruitment legislation. Under the Voting Rights Act, data about Hispanic origin are essential to ensure enforcement of bilingual election rules. Hispanic origin classifications used by the Census Bureau and other federal agencies meet the requirements of standards issued by the Office of Management and Budget in 1997 (Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity). These standards set forth guidance for statistical collection and reporting on race and ethnicity used by all federal agencies.

Some tabulations are shown by the origin of the householder. In all cases where the origin of households, families, or occupied housing units is classified as Hispanic, Latino, or Spanish, the origin of the householder is used. (For more information, see the discussion of householder under "Household Type and Relationship.")

Coding of Hispanic Origin Write-in Responses – There were two types of coding operations: (1) automated coding where a write-in response was automatically coded if it matched a write-in response already contained in a database known as the "master file," and (2) expert coding, which took place when a write-in response did not match an entry already on the master file, and was sent to expert coders familiar with the subject matter. During the coding process, subject-matter specialists reviewed and coded written entries from the "Yes, another Hispanic, Latino or Spanish origin" write-in response category on the Hispanic origin question.

Editing of Hispanic Origin Responses – If an individual did not provide a Hispanic origin response, their origin was allocated using specific rules of precedence of household relationship. For example, if origin was missing for a natural-born child in the household, then either the origin of the householder, another natural-born child, or spouse of the householder was allocated. If Hispanic origin was not reported for anyone in the household and origin could not be obtained from a response to the race question, then the Hispanic origin of a householder in a previously processed household with the same race was allocated. Surnames (Spanish and Non-Spanish) were used to assist in allocating an origin or race.

Question/Concept History – Beginning in 1996, the ACS question was worded "Is this person Spanish/Hispanic/Latino?" In 2008, the question wording changed to "Is this person of Hispanic, Latino, or Spanish origin?" From 1999 to 2007, the Hispanic origin question provided an instruction, "Mark (X) the "**No**" box if **not** Spanish/Hispanic/Latino." The 2008 question, as well as the 1996 to 1998 questions, did not have this instruction. In addition, in 2008, the "Yes, another Hispanic, Latino, or Spanish" category provided examples of six Hispanic origin groups (Argentinean, Colombian, Dominican, Nicaraguan, Salvadoran, Spaniard, and so on).

Limitation of the Data – Beginning in 2006, the population in group quarters (GQ) was included in the ACS. Some types of GQ populations may have Hispanic or Latino origin distributions that are different from the household population. The inclusion of the GQ population could therefore have a noticeable impact on the Hispanic or Latino origin distribution. This is particularly true for areas with a substantial GQ population.

Comparability– Changes in estimates may be due to demographic changes, as well as factors including questionnaire changes, differences in ACS population controls, and methodological differences in the population estimates. The ACS question on Hispanic origin was revised in 2008 to make it consistent with the 2010 Census Hispanic origin question. Additional information about the changes in the ACS and their potential effect on the estimates of Hispanic origin can be found in the paper "Changes to the American Community Survey Between 2007 and 2008 and Their Potential Effects on the Estimates of Hispanic Origin Type, Nativity, Race and Language." Go to http://www.census.gov and enter the paper title in the search box.

For more information on comparing 2018 estimates to estimates from previous years, go to http://www.census.gov and enter "Comparing ACS Data" in the search box.

For more information, see the Hispanic Origin Code List found within the 2018 ACS Code List. Go to http://www.census.gov and enter "ACS Code Lists, Definitions, and Accuracy" in the search box.

Household

See Household Type and Relationship.

Household Type and Relationship

The data on relationship to householder were derived from answers to Question 2 in the 2018 American Community Survey (ACS), which was asked of all people in housing units. The question on relationship is essential for classifying the population information on families and other groups. Information about changes in the composition of the American family, from the number of people living alone to the number of children living with only one parent, is essential for planning and carrying out a number of federal programs.

The responses to this question were used to determine the relationships of all persons to the householder, as well as household type (married couple family, nonfamily, etc.). From responses to this question, we were able to determine numbers of related children, own children, unmarried partner households, and multigenerational households. We calculated average household and family size. When relationship was not reported, it was imputed using the age difference between the householder and the person, sex, and marital status.

Household – A household includes all the people who occupy a housing unit. (People not living in households are classified as living in group quarters.) A housing unit is a house, an apartment, a mobile home, a group of rooms, or a single room that is occupied (or if vacant, is intended for occupancy) as separate living quarters. Separate living quarters are those in which the occupants live separately from any other people in the building and which have direct access from the outside of the building or through a common hall. The occupants may be a single family, one person living alone, two or more families living together, or any other group of related or unrelated people who share living arrangements.

Average Household Size – A measure obtained by dividing the number of people in households by the number of households. In cases where people in households are cross-classified by race or Hispanic origin, people in the household are classified by the race or Hispanic origin of the householder rather than the race or Hispanic origin of each individual. Average household size is rounded to the nearest hundredth.

Relationship to Householder

Householder – One person in each household is designated as the householder. In most cases, this is the person or one of the people in whose name the home is owned, being bought, or rented and who is listed on line one of the survey questionnaire. If there is no such person in the household, any adult household member 15 years old and over could be designated as the householder.

Households are classified by type according to the sex of the householder and the presence of relatives. Two types of householders are distinguished: a family householder and a non-family householder. A family householder is a householder living with one or more individuals related to him or her by birth, marriage, or adoption. A nonfamily householder is a householder living alone or with non-relatives only.

Spouse – Includes a person married to and living with the householder. The category "husband or wife" includes people in formal marriages, as well as people in common-law marriages. In tabulations, beginning in 2013, unless otherwise specified, "Spouse" and "married couple" includes same-sex married couples.

Child – Includes a son or daughter by birth, a stepchild, or adopted child of the householder, regardless of the child's age or marital status. The category excludes sons-in-law, daughters-in-law, and foster children.

- **Biological son or daughter** – The son or daughter of the householder by birth.
- **Adopted son or daughter** – The son or daughter of the householder by legal adoption. If a stepson or stepdaughter has been legally adopted by the householder, the child is then classified as an adopted child.
- **Stepson or stepdaughter** – The son or daughter of the householder through marriage but not by birth, excluding sons-in-law and daughters-in-law. If a stepson or stepdaughter of the householder has been legally adopted by the householder, the child is then classified as an adopted child.

Own Child – A never-married child under 18 years who is a son or daughter by birth, a stepchild, or an adopted child of the householder. In certain tabulations, own children are further classified as living with two parents or with one parent only. Own children of the householder living with two parents are by definition found only

in married-couple families. (Note: When used in "EMPLOYMENT STATUS" tabulations, own child refers to a never married child under the age of 18 in a family or a subfamily who is a son or daughter, by birth, marriage, or adoption, of a member of the householder's family, but not necessarily of the householder.)

Related Child – Any child under 18 years old who is related to the householder by birth, marriage, or adoption. Related children of the householder include ever-married as well as never-married children. Children, by definition, exclude persons under 18 years who maintain households or are spouses or unmarried partners of householders.

Other Relatives – In tabulations, the category "other relatives" includes any household member related to the householder by birth, marriage, or adoption, but not included specifically in another relationship category. In certain detailed tabulations, the following categories may be shown:

- **Grandchild –** The grandson or granddaughter of the householder.
- **Brother/Sister –** The brother or sister of the householder, including stepbrothers, stepsisters, and brothers and sisters by adoption. Brothers-in-law and sisters-in-law are included in the "Other Relative" category on the questionnaire.
- **Parent –** The father or mother of the householder, including a stepparent or adoptive parent. Fathers-in-law and mothers-in-law are included in the "Parent-in-law" category on the questionnaire.
- **Parent-in-law –** The mother-in-law or father-in-law of the householder.
- **Son-in-law or daughter-in-law –** The spouse of the child of the householder.
- **Other Relatives –** Anyone not listed in a reported category above who is related to the householder by birth, marriage, or adoption (brother-in-law, grandparent, nephew, aunt, cousin, and so forth).

Nonrelatives – This category includes any household member, including foster children, not related to the householder by birth, marriage, or adoption. The following categories may be presented in more detailed tabulations:

- **Roomer or Boarder –** A roomer or boarder is a person who lives in a room in the household of the householder. Some sort of cash or noncash payment (e.g., chores) is usually made for their living accommodations.
- **Housemate or Roommate –** A housemate or roommate is a person age 15 years old and over, who is not related to the householder, and who shares living quarters primarily in order to share expenses.
- **Unmarried Partner –** An unmarried partner is a person age 15 years old or older, who is not related to the householder, who shares living quarters, and is in an intimate relationship with the householder. For example, a boyfriend or girlfriend.
- **Foster Child –** A foster child is a person under 21 years old, who is placed by the local government in a household to receive parental care. Foster

children may be living in the household for just a brief period or for several years. Foster children are nonrelatives of the householder. If the foster child is also related to the householder, the child is classified as that specific relative.

- **Other Nonrelatives –** Anyone who is not related by birth, marriage, or adoption to the householder and who is not described by the categories given above.

When relationship is not reported for an individual, it is imputed according to the responses for age, sex, and marital status for that person while maintaining consistency with responses for other individuals in the household.

Unrelated Individual – An unrelated individual is: (1) a householder living alone or with nonrelatives only, (2) a household member who is not related to the householder, or (3) a person living in group quarters who is not an inmate of an institution.

Family Households – A family consists of a householder and one or more other people living in the same household who are related to the householder by birth, marriage, or adoption. All people in a household who are related to the householder are regarded as members of his or her family. A family household may contain people not related to the householder, but those people are not included as part of the householder's family in tabulations. Thus, the number of family households is equal to the number of families, but family households may include more members than do families. A household can contain only one family for purposes of tabulations. Not all households contain families since a household may be comprised of a group of unrelated people or of one person living alone – these are called nonfamily households. Families are classified by type as either a "married-couple family" or "other family" according to the sex of the householder and the presence of relatives. The data on family type are based on answers to questions on sex and relationship that were asked of all people.

- **Married-Couple Family –** A family in which the householder and his or her spouse are listed as members of the same household.

- **Other Family:**
  - **Male Householder, No Wife Present –** A family with a male householder and no spouse of householder present.
  - **Female Householder, No Husband Present –** A family with a female householder and no spouse of householder present.

Family households and married-couple families include same-sex married couples, beginning with the 2013 data.

Average Family Size – A measure obtained by dividing the number of people in families by the total number of families (or family householders). In cases where the measures, "people in family" or "people per family" are cross-tabulated by race or Hispanic origin, the race or

Hispanic origin refers to the householder rather than the race or Hispanic origin of each individual. Average family size is rounded to the nearest hundredth.

Subfamily – A subfamily is a married couple (husband and wife interviewed as members of the same household) with or without never-married children under 18 years old, or one parent with one or more never-married children under 18 years old. A subfamily does not maintain its own household, but lives in a household where the householder or householder's spouse is a relative. The number of subfamilies is not included in the count of families, since subfamily members are counted as part of the householder's family. Subfamilies are defined during processing of data. Same-sex married couples are only shown as the householder and spouse, and are not included in subfamilies.

In selected tabulations, subfamilies are further classified by type: married-couple subfamilies, with or without own children; mother-child subfamilies; and father-child subfamilies.

In some labor force tabulations, children in both one-parent families and one-parent subfamilies are included in the total number of children living with one parent, while children in both married-couple families and married-couple subfamilies are included in the total number of children living with two parents.

Multigenerational Household – Multigenerational households are family households consisting of three or more generations. These households include (1) a householder, a parent or parent-in-law of the householder, and an own child of the householder, (2) a householder, an own child of the householder, and a grandchild of the householder, or (3) a householder, a parent or parent-in-law of the householder, an own child of the householder, and a grandchild of the householder.

Nonfamily Household – A householder living alone or with nonrelatives only. Unmarried couples households, whether opposite-sex or same-sex, with no relatives of the householder present are tabulated in nonfamily households.

Unmarried-Partner Household – An unmarried-partner household is a household other than a "married-couple household" that includes a householder and an "unmarried partner." An "unmarried partner" can be of the same sex or of the opposite sex as the householder. An "unmarried partner" in an "unmarried-partner household" is an adult who is unrelated to the householder, but shares living quarters and is in an intimate relationship with the householder. An unmarried-partner household also may be a family household or a nonfamily household, depending on the presence or absence of another person in the household who is related to the householder by birth or adoption. There may be only one unmarried partner per household, and an unmarried partner may not be included in a married-couple household, as the householder cannot have both a spouse and an unmarried partner.

Question/Concept History – Between 1996 and 2007, the question response categories remained the same. In 2008, the "Son or daughter" category was expanded to "Biological son or daughter," "Adopted son or daughter," and "Stepson or stepdaughter." Also "In-law" was expanded to "Parent-in-law" and "Son-in-law or daughter-in-law."

Limitation of the Data **–** Unlike the Current Population Survey (CPS) and the Survey of Income and Program Participation (SIPP), the ACS relationship question does not have a parent pointer to identify whether both parents are present. For example, if a child lives with unmarried parents, we only know the relationship of the child to the householder, not to the other parent. So a count of children living with two biological parents is not available from these data.

Comparability **–** The relationship categories for the most part can be compared to previous ACS years and to similar data collected in the decennial census, CPS, and SIPP. With the change in 2008 from "In-law" to the two categories of "Parent-in-law" and "Son-in-law or daughter-in-law," caution should be exercised when comparing data on in-laws from previous years. "In-law" encompassed any type of in-law such as sister-in-law. Combining "Parent-in-law" and "son-in-law or daughter-in-law" does not represent all "in-laws" in 2008. The same can be said of comparing the three categories of "biological" "step," and "adopted" child in 2008 to "Child" in previous years. Before 2008, respondents may have considered anyone under 18 as "child" and chosen that category. The ACS includes "foster child" as a category. However, the 2010 Census did not contain this category, and "foster children" were included in the "Other nonrelative" category. Therefore, comparison of "foster child" cannot be made to the 2010 Census. Beginning in 2013, the "spouse" category includes same-sex spouses.

Household Size

See Household Type and Relationship.

Householder

See Household Type and Relationship.

Immigrants

See Foreign-Born Population.

Income in the Past 12 Months

The data on income were derived from answers to Questions 47 and 48 in the 2018 American Community Survey (ACS), which were asked of the population 15 years old and over. "Total income" is the sum of the amounts reported separately for wage or salary income; net self-employment income; interest, dividends, or net rental or royalty income or income from estates and trusts; Social Security or Railroad Retirement income; Supplemental Security Income (SSI); public assistance or welfare payments; retirement, survivor, or disability pensions; and all other income.

Receipts from the following sources are not included as income: capital gains, money received from the sale of property (unless the recipient was engaged in the business of selling such property); the value of income "in kind" from food stamps, public housing subsidies, medical care, employer contributions for individuals, etc.; withdrawal of bank deposits; money borrowed; tax refunds; exchange of money between relatives living in the same household; gifts and lump-sum inheritances, insurance payments, and other types of lump-sum receipts.

Income is a vital measure of general economic circumstances. Income data are used to determine poverty status, to measure economic well-being, and to assess the need for assistance. These data are included in federal allocation formulas for many government programs. For instance:

Social Services: Under the Older Americans Act, funds for food, health care, and legal services are distributed to local agencies based on data about elderly people with low incomes. Data about income at the state and county levels are used to allocate funds for food, health care, and classes in meal planning to low-income women with children.

Employment: Income data are used to identify local areas eligible for grants to stimulate economic recovery, run job-training programs, and define areas such as empowerment or enterprise zones.

Housing: Under the Low-Income Home Energy Assistance Program, income data are used to allocate funds to areas for home energy aid. Under the Community Development Block Grant Program, funding for housing assistance and other community development is based on income and other census data.

Education: Data about poor children are used to allocate funds to counties and school districts. These funds provide resources and services to improve the education of economically disadvantaged children.

In household surveys, respondents tend to underreport income. Asking the list of specific sources of income helps respondents remember all income amounts that have been received, and asking total income increases the overall response rate and thus, the accuracy of the answers to the income questions. The eight specific sources of income also provide needed detail about items such as earnings, retirement income, and public assistance.

Income Type in the Past 12 Months

The eight types of income reported in the ACS are defined as follows:

1. **Wage or salary income:** Wage or salary income includes total money earnings received for work performed as an employee during the past 12 months. It includes wages, salary, Armed Forces pay, commissions, tips, piece-rate payments, and cash bonuses earned before deductions were made for taxes, bonds, pensions, union dues, etc.

2. **Self-employment income:** Self-employment income includes both farm and non-farm self-employment income.

Farm self-employment income includes net money income (gross receipts minus operating expenses) from the operation of a farm by a person on his or her own account, as an owner, renter, or sharecropper. Gross receipts include the value of all products sold, government farm programs, money received from the rental of farm equipment to others, and incidental receipts from the sale of wood, sand, gravel, etc. Operating expenses include cost of feed, fertilizer, seed, and other farming supplies, cash wages paid to farmhands, depreciation charges, rent, interest on farm mortgages, farm building repairs, farm taxes (not state and federal personal income taxes), etc. The value of fuel, food, or other farm products used for family living is not included as part of net income.

Non-farm self-employment income includes net money income (gross receipts minus expenses) from one's own business, professional enterprise, or partnership. Gross receipts include the value of all goods sold and services rendered. Expenses include costs of goods purchased, rent, heat, light, power, depreciation charges, wages and salaries paid, business taxes (not personal income taxes), etc.

3. Interest, dividends, net rental income, royalty income, or income from estates and trusts: Interest, dividends, or net rental income includes interest on savings or bonds, dividends from stockholdings or membership in associations, net income from rental of property to others and receipts from boarders or lodgers, net royalties, and periodic payments from an estate or trust fund.

4. **Social Security or Railroad Retirement income:** Social Security income includes Social Security and U.S. railroad retirement pensions and survivor benefits, permanent disability insurance payments made by the Social Security Administration prior to deductions for medical insurance, and railroad retirement insurance checks from the U.S. government. Medicare reimbursements are not included.

5. **Supplemental Security Income (SSI):** Supplemental Security Income (SSI) is a nationwide U.S. assistance program administered by the Social Security Administration that guarantees a minimum level of income for needy aged, blind, or disabled individuals. The Puerto Rico Community Survey questionnaire asks about the receipt of SSI; however, SSI is not a federally-administered program in Puerto Rico. Therefore, it is probably not being interpreted by most respondents in the same manner as SSI in the United States. The only way a resident of Puerto Rico could have appropriately reported SSI would have been if they lived in the United States at any time during the past 12-month reference period and received SSI.

6. **Public assistance income:** Public assistance income includes general assistance and Temporary Assistance to Needy Families (TANF). Separate payments received for hospital or other medical care (vendor payments) are excluded. This does not include Supplemental Security Income (SSI) or noncash benefits such as Food Stamps. The terms "public

assistance income" and "cash public assistance" are used interchangeably in the 2018 ACS data products.

7. **Retirement, survivor, or disability income:** Retirement, survivor, or disability income includes (1) regular income from a company pension, union pension, Federal government pension, state government pension, local government pension, U.S. military pension, KEOGH retirement plan, SEP (Simplified Employee Pension) or any other type of pension, retirement account or annuity such as IRA, ROTH IRA, 401(k) or 403(b); (2) survivor income which is paid to spouses or children of a deceased person; (3) regular income from a disability pension paid to those who are unable to work due to a disability from companies or unions; federal, state, or local government; and the U.S. military.

Do not include Social Security or income that is "rolled over" or reinvested in another retirement account.

8. **All other income:** All other income includes unemployment compensation, worker's compensation, Department of Veterans Affairs (VA) payments, alimony and child support, contributions received periodically from people not living in the household, military family allotments, and other kinds of periodic income other than earnings.

Cash Public Assistance – See "Public assistance income."

Income of Households – This includes the income of the householder and all other individuals 15 years old and over in the household, whether they are related to the householder or not. Because many households consist of only one person, average household income is usually less than average family income. Although the household income statistics cover the past 12 months, the characteristics of individuals and the composition of households refer to the time of interview. Thus, the income of the household does not include amounts received by individuals who were members of the household during all or part of the past 12 months if these individuals no longer resided in the household at the time of interview. Similarly, income amounts reported by individuals who did not reside in the household during the past 12 months but who were members of the household at the time of interview are included. However, the composition of most households was the same during the past 12 months as at the time of interview.

Income of Families – In compiling statistics on family income, the incomes of all members 15 years old and over related to the householder are summed and treated as a single amount. Although the family income statistics cover the past 12 months, the characteristics of individuals and the composition of families refer to the time of interview. Thus, the income of the family does not include amounts received by individuals who were members of the family during all or part of the past 12 months if these individuals no longer resided with the family at the time of interview. Similarly, income amounts reported by individuals who did not reside with the family during the past 12 months but who were members of the family at the time of interview are included. However, the composition of most families was the same during the past 12 months as at the time of interview.

Income of Individuals – Income for individuals is obtained by summing the eight types of income for each person 15 years old and over. The characteristics of individuals are based on the time of interview even though the amounts are for the past 12 months.

Median Income – The median divides the income distribution into two equal parts: one-half of the cases falling below the median income and one-half above the median. For households and families, the median income is based on the distribution of the total number of households and families including those with no income. The median income for individuals is based on individuals 15 years old and over with income. Median income for households, families, and individuals is computed on the basis of a standard distribution. (See the "Standard Distributions" section under "Derived Measures.") Median income is rounded to the nearest whole dollar. Median income figures are calculated using linear interpolation. (For more information on medians and interpolation, see "Derived Measures.")

Aggregate Income – Aggregate income is the sum of all incomes for a particular universe. Aggregate income is subject to rounding, which means that all cells in a matrix are rounded to the nearest hundred dollars. (For more information, see "Aggregate" under "Derived Measures.")

Mean Income – Mean income is the amount obtained by dividing the aggregate income of a particular statistical universe by the number of units in that universe. For example, mean household income is obtained by dividing total household income by the total number of households. (The aggregate used to calculate mean income is rounded. For more information, see "Aggregate income.")

For the various types of income, the means are based on households having those types of income. For household income and family income, the mean is based on the distribution of the total number of households and families including those with no income. The mean income for individuals is based on individuals 15 years old and over with income. Mean income is rounded to the nearest whole dollar.

Care should be exercised in using and interpreting mean income values for small subgroups of the population. Because the mean is influenced strongly by extreme values in the distribution, it is especially susceptible to the effects of sampling variability, misreporting, and processing errors. The median, which is not affected by extreme values, is, therefore, a better measure than the mean when the population base is small. The mean, nevertheless, is shown in some data products for most small subgroups because, when weighted according to the number of cases, the means can be computed for areas and groups other than those shown in Census Bureau tabulations. (For more information on means, see "Derived Measures.")

Income Quintile Upper Limits – Negative incomes are converted to zero for these measures. These measures are the quintile cutoffs, along with the 95th percentile of the distribution. (For more information on quintiles, see "Derived Measures.")

Means of Household Income by Quintiles – Means of household income by quintiles are calculated by dividing aggregate household income in each quintile by the number of

households in each quintile (one-fifth of the total number of households). (For more information on aggregates, see "Aggregate Income." For more information on quintiles, see "Derived Measures.")

Shares of Household Income by Quintiles – Negative incomes are converted to zero for these measures. These measures are the aggregate household income in each quintile as a percentage of the total aggregate household income. (For more information on aggregates, see "Aggregate income." For more information on quintiles, see "Derived Measures.")

Gini Index of Income Inequality – Negative incomes are converted to zero. The Gini index of income inequality measures the dispersion of the household income distribution. (For more information on the Gini index, see "Derived Measures.")

Earnings – Earnings are defined as the sum of wage or salary income and net income from self-employment. "Earnings" represent the amount of income received regularly for people 16 years old and over before deductions for personal income taxes, Social Security, bond purchases, union dues, Medicare deductions, etc. An individual with earnings is one who has either wage/salary income or self-employment income, or both. Respondents who "break even" in self-employment income and therefore have zero self-employment earnings also are considered "individuals with earnings."

Median Earnings – The median divides the earnings distribution into two equal parts: one-half of the cases falling below the median and one-half above the median. Median earnings is restricted to individuals 16 years old and over with earnings and is computed on the basis of a standard distribution. (See the "Standard Distributions" section under "Derived Measures.") Median earnings figures are calculated using linear interpolation. (For more information on medians and interpolation, see "Derived Measures.")

Aggregate Earnings – Aggregate earnings are the sum of wage/salary and net self-employment income for a particular universe of people 16 years old and over. Aggregate earnings are rounded to the nearest hundred dollars. (For more information, see "Aggregate" under "Derived Measures.")

Mean Earnings – Mean earnings is calculated by dividing aggregate earnings by the population 16 years old and over with earnings. (The aggregate used to calculate mean earnings is rounded. For more information, see "Aggregate earnings.") Mean earnings is rounded to the nearest whole dollar. (For more information on means, see "Derived Measures.")

Women's Earnings as a Percentage of Men's Earnings – Women's earnings as a percentage of men's earnings is defined as median earnings for females who worked full-time, year-round divided by median earnings for males who worked full-time, year-round, multiplied by 100. (For more information, see "full-time, year-round workers" under "Usual hours worked per weeks worked in the past 12 months" and "Median earnings.")

Per Capita Income – Per capita income is the mean income computed for every man, woman, and child in a particular group including those living in group quarters. It is derived by dividing the aggregate income of a particular group by the total population in that group. (The aggregate used to calculate per capita income is rounded. For more information, see "Aggregate" under "Derived Measures.") Per capita income is rounded to the nearest whole dollar. (For more information on means, see "Derived Measures.")

Adjusting Income for Inflation – Income components were reported for the 12 months preceding the interview month. Monthly Consumer Price Indices (CPI) factors were used to inflation-adjust these components to a reference calendar year (January through December). For example, a household interviewed in March 2018 reports their income for March 2017 through February 2018. Their income is adjusted to the 2018 reference calendar year by multiplying their reported income by 2018 average annual CPI (January-December 2018) and then dividing by the average CPI for March 2017-February 2018.

In order to inflate income amounts from previous years, the dollar values on individual records are inflated to the latest year's dollar values by multiplying by a factor equal to the average annual CPI-U-RS factor for the current year, divided by the average annual CPI-U-RS factor for the earlier/earliest year.

***Question/Concept History* –** The 1998 ACS questionnaire deleted references to Aid to Families with Dependent Children (AFDC) because of welfare law reforms.

In 1999, the ACS questions were changed to be consistent with the questions for Census 2000. The instructions are slightly different to reflect differences in the reference periods. The ACS asks about the past 12 months, and the questions for the decennial census ask about the previous calendar year.

***Limitation of the Data* –** Since answers to income questions are frequently based on memory and not on records, many people tend to forget minor or sporadic sources of income and, therefore, underreport their income. Underreporting tends to be more pronounced for income sources that are not derived from earnings, such as public assistance, interest, dividends, and net rental income.

Extensive computer editing procedures were instituted in the data processing operation to reduce some of these reporting errors and to improve the accuracy of the income data. These procedures corrected various reporting deficiencies and improved the consistency of reported income questions associated with work experience and information on occupation and class of worker. For example, if people reported they were self-employed on their own farm, not incorporated, but had reported only wage and salary earnings, the latter amount was shifted to self-employment income. Also, if any respondent reported total income only, the amount was generally assigned to one of the types of income questions according to responses to the work experience and class-of-worker questions. Another type of problem involved non-reporting of income data. Where income information was not reported, procedures were devised to impute appropriate values with either no income or positive or negative dollar amounts for the missing entries. (For more information on imputation, see "Accuracy of the

Data" on the Census website. Go to http://www.census.gov and enter "ACS Code Lists, Definitions, and Accuracy" in the search box.)

In income tabulations for households and families, the lowest income group (for example, less than $10,000) includes units that were classified as having no income in the past 12 months. Many of these were living on income "in kind," savings, or gifts, were newly created families, or were families in which the sole breadwinner had recently died or left the household. However, many of the households and families who reported no income probably had some money income that was not reported in the ACS.

Users should exercise caution when comparing income and earnings estimates for individuals since the 2006 ACS to earlier years because of the introduction of group quarters. Household and family income estimates are not affected by the inclusion of group quarters.

Users should exercise caution when comparing medians from the 2018 ACS to medians before 2009. There was a change between 2008 and 2009 Data Products in Income and Earnings median calculations. Medians above $75,000 were most likely to be affected.

Comparability – The income data shown in ACS tabulations are not directly comparable with those that may be obtained from statistical summaries of income tax returns. Income, as defined for federal tax purposes, differs somewhat from the Census Bureau concept. Moreover, the coverage of income tax statistics is different because of the exemptions for people having small amounts of income and the inclusion of net capital gains in tax returns. Furthermore, members of some families file separate returns and others file joint returns; consequently, the tax reporting unit is not consistent with the census household, family, or person units.

The earnings data shown in ACS tabulations are not directly comparable with earnings records of the Social Security Administration (SSA). The earnings record data for SSA excludes the earnings of some civilian government employees, some employees of nonprofit organizations, workers covered by the Railroad Retirement Act, and people not covered by the program because of insufficient earnings. Because ACS data are obtained from household questionnaires, they may differ from SSA earnings record data, which are based upon employers' reports and the federal income tax returns of self-employed people.

The Commerce Department's Bureau of Economic Analysis (BEA) publishes annual data on aggregate and per-capita personal income received by the population for states, metropolitan areas, and selected counties. Aggregate income estimates based on the income statistics shown in ACS products usually would be less than those shown in the BEA income series for several reasons. The ACS data are obtained from a household survey, whereas the BEA income series is estimated largely on the basis of data from administrative records of business and governmental sources. Moreover, the definitions of income are different. The BEA income series includes some questions not included in the income data shown in ACS publications, such as income "in kind," income received by nonprofit institutions, the value of services of banks and other financial intermediaries rendered to people without the assessment of specific charges, and Medicare payments. On the other hand, the ACS income

data include contributions for support received from people not residing in the same household if the income is received on a regular basis.

In comparing income for the most recent year with income from earlier years, users should note that an increase or decrease in money income does not necessarily represent a comparable change in real income, unless adjusted for inflation.

For more information, go to http://www.census.gov and enter "Comparing ACS Data" in the search box.

Industry

Industry data describe the kind of business conducted by a person's employing organization. Industry data were derived from answers to questions 42 through 44 in the 2018 American Community Survey (ACS). Question 42 asks: "For whom did this person work?" Question 43 asks: "What kind of business or industry was this?" Question 44 provides four checkboxes from which respondents are to select one to indicate whether the business was primarily manufacturing, wholesale trade, retail trade, or other (agriculture, construction, service, government, etc.).

These questions were asked of all people 15 years old and over who had worked in the past 5 years. For employed people, the data refer to the person's job during the previous week. For those who worked two or more jobs, the data refer to the job where the person worked the greatest number of hours. For unemployed people and people who are not currently employed but report having a job within the last five years, the data refer to their last job.

Coding Procedures **–** Written responses to the industry questions are coded using the industry classification system developed for Census 2000 and modified in 2002, 2007, 2012 and again in 2017. This system consists of 269 categories for employed people, including military, classified into 20 sectors, plus an additional Census code for the unemployed, with no work experience in the last 5 years or earlier or never worked for a total of 270 Census industry codes. The modified 2017 Census industry classification was developed from the 2017 North American Industry Classification System (NAICS) (http://www.census.gov/eos/www/naics/) published by the Executive Office of the President, Office of Management and Budget. The NAICS was developed to increase comparability in industry definitions between the United States, Mexico, and Canada. It provides industry classifications that group establishments into industries based on the activities in which they are primarily engaged. The NAICS was created for establishment designations and provides detail about the smallest operating establishment, while the ACS data are collected from households and differ in detail and nature from those obtained from establishment surveys. Because of potential disclosure issues, the Census industry classification system, while defined in NAICS terms, cannot reflect the full detail for all categories that the NAICS provides.

Respondents provided the data for the tabulations by writing on the questionnaires descriptions of their kind of business or industry. These write-ins are converted to a code

category through automated coding. Cases not autocoded on both industry and occupation are sent to the clerical staff in the National Processing Center in Jeffersonville, Indiana who assign codes by comparing these descriptions to entries in the most current *Alphabetical Index of Industries and Occupations* (https://www.census.gov/topics/employment/industry-occupation/guidance/indexes.html).

The industry category, "Public administration," is limited to regular government functions such as legislative, judicial, administrative, and regulatory activities. Other government organizations such as public schools, public hospitals, and bus lines are classified by industry according to the activity in which they are engaged.

Some occupation groups are related closely to certain industries. Operators of transportation equipment, farm operators and workers, and healthcare providers account for major portions of their respective industries of transportation, agriculture, and health care. However, the industry categories include people in other occupations. For example, people employed in agriculture include truck drivers and bookkeepers; people employed in the transportation industry include mechanics, freight handlers, and payroll clerks; and people employed in the health care industry include janitors, security guards, and secretaries.

Editing Procedures – Following the coding operation, a computer edit and allocation process excludes all responses that should not be included in the universe, and evaluates the consistency of the remaining responses. The codes for industry are checked for consistency with the occupation and class of worker data provided for that respondent. Occasionally respondents supply industry descriptions that are not sufficiently specific for precise classification, or they do not report on these questions at all. Certain types of incomplete entries are corrected using the *Alphabetical Index of Industries and Occupations*. If one or more of the three codes (industry, occupation, or class of worker) is blank after the edit, a code is assigned from a donor respondent who is a "similar" person based on questions such as age, sex, educational attainment, income, employment status, and weeks worked. If all of the labor force and income data are blank, all of these economic questions are assigned from a "similar" person who had provided all the necessary data.

These questions describe the industrial composition of the American labor force. Data are used to formulate policy and programs for employment, career development and training, and to measure compliance with antidiscrimination policies. Companies use these data to decide where to locate new plants, stores, or offices.

Question/Concept History – Industry data have been collected during decennial censuses intermittently since 1820 and on a continuous basis since 1910. Starting with the 2010 Census, industry data will no longer be collected during the decennial census. Long form data collection has transitioned to the ACS. The ACS began collecting data on industry in 1996. The questions on industry were designed to be consistent with the 1990 Census questions on industry. In the 1990 Census and starting with the 1999 ACS, a check box was added to the employer name questionnaire item that was to be marked by anyone "now on active duty in the Armed Forces..." This information is used by the industry and occupation coders to assist in assigning proper industry codes for active duty military. Prior to 1999, the

1996-1998 ACS class of worker question had an additional response category for "Active duty U.S. Armed Forces member." Other than this exception, ACS questions on industry have remained consistent between 1996 and 2018.

Limitation of the Data – Beginning in 2006, the population in group quarters (GQ) was included in the ACS. Some types of GQ populations have industry distributions that are different from the household population. The inclusion of the GQ population could therefore have a noticeable impact on the industry distribution in some geographic areas with a substantial GQ population.

Data on occupation, industry, and class of worker are collected for the respondent's current primary job or the most recent job for those who are not employed but have worked in the last 5 years. Other labor force questions, such as questions on earnings or work hours, may have different reference periods and may not limit the response to the primary job. Although the prevalence of multiple jobs is low, data on some labor force items may not exactly correspond to the reported occupation, industry, or class of worker of a respondent.

Comparability – Comparability of industry data was affected by a number of factors, primarily the system used to classify the questionnaire responses. Changes in the industry classification system limit comparability of the data from one year to another. These changes are needed to recognize the "birth" of new industries, the "death" of others, the growth and decline in existing industries, and the desire of analysts and other users for more detail in the presentation of the data. Probably the greatest cause of noncomparability is the movement of a segment from one category to another. Changes in the nature of jobs, respondent terminology, and refinement of category composition made these movements necessary.

ACS data from 1996 to 1999 used the same industry classification systems used for the 1990 Census; therefore, the data are comparable. Since 1990, the industry classification has had major revisions to reflect the shift from the Standard Industrial Classification (SIC) to the North American Industry Classification System (NAICS). These changes were reflected in the Census 2000 industry codes. For more information on industry comparability across classification systems, please see technical paper #65: *The Relationship Between the 1990 Census and Census 2000 Industry and Occupation Classification Systems (*https://www.census.gov/content/dam/Census/library/working-papers/2003/demo/techpaper2000.pdf*).* The 2000-2002 ACS data used the same industry and occupation classification systems used for Census 2000; therefore, the data are comparable. In 2002, NAICS underwent another change and the industry codes were changed accordingly. Because of the possibility of new industries being added to the list of codes, the Census Bureau needed to have more flexibility in adding codes. Consequently, in 2002, industry census codes were expanded from three-digit codes to four-digit codes. The changes to these code classifications mean that the ACS data from 2003-2007 are not completely comparable to the data from earlier surveys. In 2007, NAICS was updated again. This resulted in a minor change in the industry data that will cause it to not be completely comparable to previous years. The changes were concentrated in the Information Sector where one census code was added (6672) and two were deleted (6675, 6692). The ACS followed the 2007 code list through 2012, making the ACS 2007-2012 industry codes

comparable. NAICS was updated again in 2012. The changes were used to create the 2012 Census industry code list, which was first applied to the 2013 ACS. The revision included 9 new codes (3095, 3365, 3875, 3895, 4195, 4265, 4795, 5275, 5295), 9 deletions (3090, 3360, 3870, 3890, 4190, 4260, 4790, 5270, 5290) and 19 title changes. These changes make the 2012 Census industry codes only partially comparable with previous years. The ACS followed the 2012 code list through 2017. In 2017, the NAICS was updated again. The 2017 NAICS updated were used to create the 2017 Census industry code list, which was first applied to the 2018 ACS, The revision included 19 new codes ('1691', '3291', '4971', '4972', '5381', '5391', '5393', '6991', '6992', '7071', '7072', '7181', '8191', '8192', '8561', '8562', '8563', '8564', '8891'), 17 deletions ('1680', '1690', '3190', '3290', '4970', '5380', '5590', '5591', '5592', '6990', '7070', '7170', '7180', '8190', '8560', '8880', '8890') and 18 title changes. These changes make the 2017 Census industry codes only partially comparable with previous years.

For more information, see the 2017 Census Industry Code List within the 2018 ACS Code List. Go to http://www.census.gov and enter "ACS Code Lists, Definitions, and Accuracy" in the search box.

See also Occupation and Class of Worker.

Journey to Work

Place of Work – The data on place of work were derived from answers to Question 30 in 2018 American Community Survey (ACS), which was asked of people who indicated in 2018 ACS Question 29 that they worked at some time during the reference week. (See "Reference Week.")

Data were tabulated for workers 16 years old and over, that is, members of the Armed Forces and civilians who were at work during the reference week. Data on place of work refer to the geographic location at which workers carried out their occupational activities during the reference week. In the ACS, the exact address (number and street name) of the place of work was asked, as well as the place (city, town, or post office); whether the place of work was inside or outside the limits of that city or town; and the county, state or foreign country, and ZIP Code. In the Puerto Rico Community Survey (PRCS), the question asked for the exact address, including the development or condominium name, as well as the place; whether or not the place of work was inside or outside the limits of that city or town; the municipio or U.S. county. Respondents also were asked to "enter Puerto Rico or name of U.S. state or foreign country" and the ZIP Code. If the respondent's employer operated in more than one location, the exact address of the location or branch where he or she worked was requested. When the number and street name were unknown, a description of the location, such as the building name or nearest street or intersection, was to be entered. People who worked at more than one location during the reference week were asked to report the location at which they worked the greatest number of hours. People who regularly worked in several locations each day during the reference week were requested to give the address at which they began work each day. For cases in which daily work did not begin at a central place each day, the respondent was asked to provide as much information as possible to describe the area in which he or she worked most during the reference week.

Place-of-work data may show a few workers who made unlikely daily work trips (e.g., workers who lived in New York and worked in California). This result is attributable to people who worked during the reference week at a location that was different from their usual place of work, such as people away from home on business.

In areas where the workplace address was geographically coded to the block level, people were tabulated as working inside or outside a specific place based on the location of that address regardless of the response to Question 30c concerning city/town limits. In areas where it was impossible to code the workplace address to the block level, or the coding system was unable to match the employer name and street address responses, people were tabulated as working inside or outside a specific place based on the combination of state, county, ZIP Code, place name, and city limits indicator. The city limits indicator was used only in coding decisions when there were multiple geographic codes to select from, after matching on the state, county, place, and ZIP Code responses. The accuracy of place-of-work data for census designated places (CDPs) may be affected by the extent to which their census names were familiar to respondents, and by coding problems caused by similarities between the CDP name and the names of other geographic jurisdictions in the same vicinity.

Place-of-work data are given for selected minor civil divisions (MCDs), (generally cities, towns, and townships) in the 12 strong MCD states (Connecticut, Maine, Massachusetts, Michigan, Minnesota, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, and Wisconsin), based on the responses to the place of work question. Many towns and townships are regarded locally as equivalent to a place, and therefore, were reported as the place of work. When a respondent reported a locality or incorporated place that formed a part of a township or town, the coding and tabulating procedure was designed to include the response in the total for the township or town.

Workplace-based Geography – The characteristics of workers may be shown using either residence-based or workplace-based geography. If you are interested in the number and characteristics of workers living in a specific area, you should use the standard (residence-based) journey-to-work tables. If you are interested in the number and characteristics of workers who work in a specific area, you should use the workplace-based journey-to-work tables. Because place-of-work information for workers cannot always be specified below the place level, the workplace-based tables are presented only for selected geographic areas.

Means of Transportation to Work – The data on means of transportation to work were derived from answers to Question 31 in 2018 ACS, which was asked of people who indicated in 2018 ACS Question 29 that they worked at some time during the reference week. (See "Reference Week.") Means of transportation to work refers to the principal mode of travel or type of conveyance that the worker usually used to get from home to work during the reference week.

People who used different means of transportation on different days of the week were asked to specify the one they used most often, that is, the greatest number of days. People who used more than one means of transportation to get to work each day were asked to report the one used for the longest distance during the work trip. The category, "Car, truck, or van,"

includes workers using a car (including company cars but excluding taxicabs), a truck of one-ton capacity or less, or a van. The category, "Public transportation," includes workers who used a bus or trolley bus, streetcar or trolley car, subway or elevated, railroad, or ferryboat, even if each mode is not shown separately in the tabulation. "Carro público" is included in the public transportation category in Puerto Rico. The category, "Other means," includes workers who used a mode of travel that is not identified separately within the data distribution. The category, "Other means," may vary from table to table, depending on the amount of detail shown in a particular distribution.

The means of transportation data for some areas may show workers using modes of public transportation that are not available in those areas (for example, subway or elevated riders in a metropolitan area where there is no subway or elevated service). This result is largely due to people who worked during the reference week at a location that was different from their usual place of work (such as people away from home on business in an area where subway service was available), and people who used more than one means of transportation each day but whose principal means was unavailable where they lived (for example, residents of nonmetropolitan areas who drove to the fringe of a metropolitan area, and took the commuter railroad most of the distance to work).

Private Vehicle Occupancy – The data on private vehicle occupancy were derived from answers to Question 32 in 2018 ACS. This question was asked of people who indicated in 2018 ACS Question 29 that they worked at some time during the reference week and who reported in 2017 ACS Question 31 that their means of transportation to work was "Car, truck, or van." Data were tabulated for workers 16 years old and over, that is, members of the Armed Forces and civilians who were at work during the reference week. (See "Reference Week.")

Private vehicle occupancy refers to the number of people who usually rode to work in the vehicle during the reference week. The category, "Drove alone," includes people who usually drove alone to work as well as people who were driven to work by someone who then drove back home or to a non-work destination. The category, "Carpooled," includes workers who reported that two or more people usually rode to work in the vehicle during the reference week.

Workers Per Car, Truck, or Van – Workers per car, truck, or van is a ratio obtained by dividing the aggregate number of workers who reported using a car, truck, or van to get to work by the number of such vehicles that they used. Workers per car, truck, or van is rounded to the nearest hundredth. This measure also may be known as "Workers per private vehicle."

Aggregate Number of Vehicles (Car, Truck, or Van) Used in Commuting – The aggregate number of vehicles used in commuting is derived by counting each person who drove alone as occupying one vehicle, each person who reported being in a two-person carpool as occupying one-half of a vehicle, each person who reported being in a three-person carpool as occupying one-third of a vehicle, and so on, then summing all the vehicles. This aggregate is used in the calculation for "workers per car, truck, or van."

Time Leaving Home to Go to Work – The data on time leaving home to go to work were derived from answers to Question 33 in 2018 ACS. This question was asked of people who indicated in 2018 ACS Question 29 that they worked at some time during the reference week, and who reported in 2018 ACS Question 31 that they worked outside their home. The departure time refers to the time of day that the respondent usually left home to go to work during the reference week. (See "Reference Week.")

Travel Time to Work – The data on travel time to work were derived from answers to Question 34 in 2018 ACS. This question was asked of people who indicated in 2018 ACS Question 29 that they worked at some time during the reference week, and who reported in 2018 ACS Question 31 that they worked outside their home. Travel time to work refers to the total number of minutes that it usually took the worker to get from home to work during the reference week. The elapsed time includes time spent waiting for public transportation, picking up passengers in carpools, and time spent in other activities related to getting to work. (See "Reference Week.")

Aggregate Travel Time to Work (in Minutes) – Aggregate travel time to work is calculated by adding all of the travel times (in minutes) for workers who did not work at home. Aggregate travel times of workers having specific characteristics also are computed. The aggregate travel time is subject to rounding, which means that all cells in a matrix are rounded to the nearest 5 minutes. (For more information, see "Aggregate" under "Derived Measures.")

Mean Travel Time to Work (in Minutes) – Mean travel time to work (in minutes) is the average travel time that workers usually took to get from home to work (one way) during the reference week. This measure is obtained by dividing the total number of minutes taken to get from home to work (the aggregate travel time) by the number of workers 16 years old and over who did not work at home. The travel time includes time spent waiting for public transportation, picking up passengers and carpools, and time spent in other activities related to getting to work. Mean travel times of workers having specific characteristics also are computed. For example, the mean travel time of workers traveling 45 or more minutes to work is computed by dividing the aggregate travel time of workers whose travel times were 45 or more minutes by the number of workers whose travel times were 45 or more minutes. The aggregate travel time to work used to calculate mean travel time to work is rounded. (For more information, see "Aggregate Travel Time to Work (in Minutes).") Mean travel time is rounded to the nearest tenth of a minute. (For more information on means, see "Derived Measures.")

Time Arriving at Work from Home – The data on time arriving at work from home were derived from answers to Question 33 (Time Leaving Home to Go to Work) and from answers to Question 34 (Travel Time to Work), both in the 2018 ACS. These questions were asked of people who indicated in 2018 ACS Question 29 that they worked at some time during the reference week, and who reported in 2018 ACS Question 31 that they worked outside their home. The arrival time is calculated by adding the travel time to work to the reported time leaving home to go to work. These data are presented with other characteristics of workers at their workplace. (See "Time Leaving Home to Go to Work" and "Travel Time to Work.")

The responses to the place of work and journey to work questions provide basic knowledge about commuting patterns and the characteristics of commuter travel. The commuting data are essential for planning highway improvement and developing public transportation services, as well as for designing programs to ease traffic problems during peak periods, conserve energy, reduce pollution, and estimate and project the demand for alternative-fueled vehicles. These data are required to develop standards for reducing work-related vehicle trips and increasing passenger occupancy during peak period of travel.

Question/Concept History – Starting in 1999, the ACS questions differ from the 1996-1998 questions in that the labels on the write-in spaces and format of the skip instructions were modified to provide clarifications.

Beginning in 2004, the category, "Public transportation" for means of transportation was tabulated to exclude workers who used taxicab as their means of transportation.

The 2004 ACS marked the first time that workplace-based tables were released as a part of a standard census data product.

Limitation of the Data – Beginning in 2006, the group quarters (GQ) population was included in the ACS. Some types of GQ populations have place of work distributions that are different from the household population. The inclusion of the GQ population could therefore have a noticeable impact on the place of work distribution. This is particularly true for areas with a substantial GQ population.

The data on place of work is related to a reference week, that is, the calendar week preceding the date on which the respondents completed their questionnaires or were interviewed. This week is not the same for all respondents because data were collected over a 12-month period. The lack of a uniform reference week means that the place-of-work data reported in the survey will not exactly match the distribution of workplace locations observed or measured during an actual workweek.

The place-of-work data are estimates of people 16 years and over who were both employed and at work during the reference week (including people in the Armed Forces). People who did not work during the reference week but had jobs or businesses from which they were temporarily absent due to illness, bad weather, industrial dispute, vacation, or other personal reasons are not included in the place-of-work data. Therefore, the data on place of work understate the total number of jobs or total employment in a geographic area during the reference week. It also should be noted that people who had irregular, casual, or unstructured jobs during the reference week might have erroneously reported themselves as not working.

The address where the individual worked most often during the reference week was recorded on the questionnaire. If a worker held two jobs, only data about the primary job (the job where one worked the greatest number of hours during the preceding week) was requested. People who regularly worked in several locations during the reference week were requested to give the address at which they began work each day. For cases in which daily work was not begun at a central place each day, the respondent was asked to provide as much

information as possible to describe the area in which he or she worked most during the reference week.

Comparability **–** This data source is comparable to the decennial censuses prior to 2010 for all journey to work variables. Since both the ACS and the decennial censuses are related to a "reference week" that has some variability, the data do not reflect any single week. Since the ACS data are collected over 12 months, the reference week in ACS has a greater range of variation. (See "Reference Week.") No journey to work questions were asked on the 2010 Census.

For more detailed information regarding the difference of place of work and journey to work in the ACS and Census 2000, see "Estimates about Journey to Work from the 2005 ACS, C2SS, and Census 2000" on the Census website (http://www.census.gov/library/working-papers/2007/acs/2007_Jiles_01.html).

For more information, see the Place of Work Code List found within the 2018 ACS Code List. Go to http://www.census.gov and enter "ACS Code Lists, Definitions, and Accuracy" in the search box.

Labor Force Status

See Employment Status.

Language Spoken at Home

Language Spoken at Home by the Respondent – Data on language spoken at home were derived from answers to questions 14a and 14b in the 2018 American Community Survey (ACS). These questions were asked only of persons 5 years of age and older. Instructions mailed with the ACS questionnaire instructed respondents to mark "Yes" on Question 14a if they sometimes or always spoke a language other than English at home, and "No" if a language was spoken only at school, or if speaking was limited to a few expressions or slang. For Question 14b, respondents printed the name of the non-English language they spoke at home. If the person spoke more than one non-English language, accompanying instructions instructed them to report the language spoken most often. If the language spoken most frequently could not be determined, the respondent was instructed to report the language learned first.

Questions 14a and 14b referred to languages spoken at home in an effort to measure the current use of languages other than English. This category excluded respondents who spoke a language other than English exclusively outside of the home.

Write-in responses to Question 14b were categorized into more than 1300 detailed language codes. In 2016, American Community Survey language codes were standardized based on the International Statistical Organization ISO-639-3 standard. Using an automated computer system, the language coding procedure compared write-in responses with a master computer code list – which contained approximately 190,000 previously coded language names and

variants – and then assigned a detailed language category to each write-in response. The computerized matching assured that identical alphabetic entries received the same code. Clerical coding categorized any write-in responses that did not match the computer dictionary. When multiple languages other than English were specified, only the first was coded.

The write-in responses represented the names people used for languages they spoke. They may not have matched the names or categories used by linguists. Whenever possible, the write-ins were matched with an ISO-639-3 standardized individual language; however, language families and geographical terms were used if classifying at the individual language level was not possible. Presenting data for all languages is not sensible due to sample size and confidentiality concerns. The Four Group Classifications and Forty-Two Group Classifications of Languages Spoken at Home with Examples table in Appendix A provides an illustration of the content of the classification schemes used to present language data. These four-group and forty-two group classifications are used in many standardized data products previously disseminated on American Factfinder and now via data.census.gov beginning in 2018 data. However, many more languages are available in the American Community Survey Public Use Microdata Sample (PUMS) and in detailed tables packages. Languages as small as 10,000 speakers may be included in the PUMS dataset. For more information on the Public Use Microdata Sample, please see the PUMS technical documentation.

Household Language – In households where one or more people spoke a language other than English, the household language assigned to all household members was the non-English language spoken by the first person with a non-English language. This assignment scheme ranked household members in the following order: householder, spouse, parent, sibling, child, grandchild, other relative, stepchild, unmarried partner, housemate or roommate, and other nonrelatives. Therefore, a person who spoke only English may have had a non-English household language assigned during tabulations as a result of living in a household with a non-English household language.

Government agencies use information on language spoken at home for their programs that serve the needs of those who have difficulty with English. Under the Voting Rights Act, language is needed to meet statutory requirements for making voting materials available in minority languages. The Census Bureau is directed, using data about language spoken at home and the ability to speak English, to identify minority groups that speak a language other than English and to assess their English-speaking ability. The U.S. Department of Education uses these data to prepare a report to Congress on the social and economic status of children served by different local school districts. State and local agencies concerned with aging develop health care and other services tailored to the language and cultural diversity of the elderly under the Older Americans Act.

***Question/Concept History* –** The Language Spoken At Home Questions have changed only once since ACS began. Examples of languages were listed immediately followed the question "What is this language?" in the 1996-1998 questionnaire. Starting in 1999, the list

of languages was moved to below the write-in box. In 2016, the code list for languages was standardized to match the International Statistical Organization's standard ISO-639-3.

Limitation of the Data – Beginning in 2006, the population in group quarters (GQ) was included in the ACS. Some types of GQ populations may have language spoken at home distributions that are different from the household population. The inclusion of the GQ population could therefore have a noticeable impact on the language spoken at home distribution. This is particularly true for areas with a substantial GQ population.

The language question is about current use of a non-English language, not about ability to speak another language or the use of such a language in the past. People who speak a language other than English outside of the home are not reported as speaking a language other than English. Similarly, people whose mother tongue is a non-English language but who do not currently use the language at home do not report the language. Some people who speak a language other than English at home may have first learned that language in school. These people are expected to indicate speaking English "Very well."

Comparability – Caution should be taken when comparing language data from the ACS and 1980, 1990, and 2000 Censuses across time. Methodological changes to data collection in 2013 may have affected language data. Users should be aware of these changes when comparing data from 2013 or after to data from before 2013, or when using multi-year ACS data containing data from before and after 2013. For more information on comparability of language data, see the user note, "2013 Language Estimates."

The full Language Code List is found within the 2018 ACS Code List. Go to http://www.census.gov and enter "ACS Code Lists, Definitions, and Accuracy" in the search box.

Marital Status/Marital History

The data on marital status and marital history were derived from answers to Questions 20 through 23 in the 2018 ACS. The marital status question is asked to determine the status of the person at the time of interview. Many government programs need accurate information on marital status, such as the number of married women in the labor force, elderly widowed individuals, or young single people who may establish homes of their own. The marital history data enables multiple agencies to more accurately measure the effects of federal and state policies and programs that focus on the well-being of families. Marital history data can provide estimates of marriage and divorce rates and duration, as well as flows into and out of marriage. This information is critical for more refined analyses of eligibility for program services and benefits, and of changes resulting from federal policies and programs.

Before 2008, the marital status question was asked of all people. Beginning in 2008, the question on marital status was asked only for people 15 years old and over. People 15 and over are asked whether they are "now married," "widowed," "divorced," "separated," or "never married." People in common-law marriages are allowed to report the marital status

they considered the most appropriate. When marital status is not reported, it is imputed according to the person's relationship to the householder, sex, and age.

Differences in the number of married males and females occur because there is no step in the weighting process to equalize the weighted estimates of husbands and wives.

Never Married – Includes all people who have never been married, including people whose only marriage(s) was annulled.

Ever Married – Includes people ever married at the time of interview (including those now married, separated, widowed, or divorced).

Now Married, Except Separated – Includes people whose current marriage has not ended through widowhood or divorce (regardless of previous marital history), and who are not currently separated. The category may also include couples who live together or people in common-law marriages if they consider this category the most appropriate. In certain tabulations, currently married people are further classified as "spouse present" or "spouse absent."

Separated – Includes people legally separated or otherwise absent from their spouse because of marital discord. Those without a final divorce decree are classified as "separated." This category also includes people who have been deserted or who have parted because they no longer want to live together, but who have not obtained a divorce.

Widowed – Includes widows and widowers who have not remarried.

Divorced – Includes people who are legally divorced and who have not remarried. Those without a final divorce decree are classified as "separated."

Now Married – All people whose current marriage has not ended by widowhood or divorce. This category includes people defined above as "separated."

- **Spouse Present –** Married people whose wife or husband was reported as a member of the same household, including those whose spouses may have been temporarily absent for such reasons as travel or hospitalization.
- **Spouse Absent –** Married people whose wife or husband was not reported as a member of the same household or people reporting they were married and living in a group quarters facility.
    - **Separated –** Defined above.
    - **Spouse Absent, Other –** Married people whose wife or husband was not reported as a member of the same household, excluding separated. Included is any person whose spouse was employed and living away from home or in an institution or serving away from home in the Armed Forces.

Note that beginning in 2013, same-sex married couples are included in the married spouse present category.

Differences between the number of married males and the number of married females occur because some husbands and wives have their usual residence in different areas. Furthermore,husbands and wives do not have the same weights. By definition, the numbers would be the same.

Median Age at First Marriage – The median age at first marriage is calculated indirectly by estimating the proportion of young people who will marry during their lifetime, calculating one-half of this proportion, and determining the age (at the time of the survey) of people at this half-way mark by osculatory interpolation. It does not represent the actual median age of the population who married during the calendar year. It is shown to the nearest tenth of a year. Henry S. Shryock and Jacob S. Siegel outline the osculatory procedure in *Methods and Materials of Demography*, First Edition (May 1973), Volume 1, pages 291-296.

Marital History – Beginning in 2008, people 15 years and over who were ever married (married, widowed, separated, or divorced) were asked if they had been married, widowed, or divorced in the past 12 months. They are asked how many times (once, two times, or three or more times) they have been married, and the year of their last marriage.

Question/Concept History – The word "current" was dropped from the 1996-1998 marital status question. Since 1999, the question states, "What is this person's marital status?" The American Community Survey began providing the median age at first marriage with the 2004 data. Before 2008, the marital status question was asked of all people and only tabulated for those 15 and over. In 2008, marital status was moved from the basic demographic section, at the beginning of the ACS questionnaire, to the detailed person section - a part of the questionnaire where some questions are asked of only people 15 and over. Data on marital history were first collected in 2008 at the request of the Department of Health and Human Services to provide more detailed annual information on the marital history of the population. The marital history questions follow the marital status question on the questionnaire. Beginning in 2013, same-sex married couples were edited and shown as such, so they have a marital status of "now married" and also have marital history data.

Limitation of the Data – Beginning in 2006, the population in group quarters (GQ) was included in the ACS. Some types of GQ populations have marital status distributions that are very different from the household population. The inclusion of the GQ population could therefore have a noticeable impact on the marital status distribution. This is particularly true for areas with a substantial GQ population.

Comparability – The data on marital status can be compared to previous ACS years and to similar data collected on CPS and SIPP. Marital status is no longer asked on the Decennial Census. For information on comparing ACS data, go to http://www.census.gov and enter "Comparing ACS Data" in the search box. Marriage and divorce rates, derived from the questions asking whether the person got married or divorced in the last 12 months, are not directly comparable to vital statistics collected by the National Center for Health Statistics. ACS estimates are survey based whereas vital statistics use administrative records. Beginning in 2013, the "now married" category includes same-sex spouses.

Means of Transportation to Work

See Journey to Work.

Migration

See Residence 1 Year Ago.

Native Population

The native population includes anyone who was a U.S. citizen or a U.S. national at birth. This includes respondents who indicated they were born in the United States, Puerto Rico, a U.S. Island Area (such as Guam), or abroad of American (U.S. citizen) parent or parents. See Citizenship Status.

Nativity

See Place of Birth.

Nativity of Parent

Nativity of parent indicates the nativity (native or foreign born) of the parent(s) of children living in a family or subfamily with one or more parents present in the household. It applies to "own children," that is, never married children under 18 years of age living with one or more of their parents. (See also "Household Type and Relationship.") The nativity of the child's parent(s) is determined by the citizenship status of the parent(s). A person is considered native if he/she is a native United States citizen at birth, and foreign born if he/she is not a United States citizen at birth. (See also "Place of Birth.")

Limitation of the Data – Nativity of parent does not provide information about children over the age of 18 who may live in the same household as their parents, or children of any age who live apart from their parents.

Comparability – No comparable data were published prior to 2006. However, prior years do include the nativity and relationship data from which "nativity of parent" was created.

Occupation

Occupation describes the kind of work a person does on the job. Occupation data were derived from answers to questions 45 and 46 in the 2018 American Community Survey (ACS). Question 45 asks: "What kind of work was this person doing?" Question 46 asks: "What were this person's most important activities or duties?"

These questions were asked of all people 15 years old and over who had worked in the past 5 years. For employed people, the data refer to the person's job during the previous week. For those who worked two or more jobs, the data refer to the job where the person worked the greatest number of hours. For unemployed people and people who are not currently employed but report having a job within the last five years, the data refer to their last job.

These questions describe the work activity and occupational experience of the American labor force. Data are used to formulate policy and programs for employment, career development, and training; to provide information on the occupational skills of the labor force in a given area to analyze career trends; and to measure compliance with antidiscrimination policies. Companies use these data to decide where to locate new plants, stores, or offices.

Coding Procedures – Occupation statistics are compiled from data that are coded based on the *Standard Occupational Classification (SOC) Manual: 2018* (http://www.bls.gov/soc), published by the Executive Office of the President, Office of Management and Budget. Census occupation codes, based on the 2018 SOC, provide 569 specific occupational categories, for employed people, including military, arranged into 23 major occupational groups, plus an additional Census code for the unemployed, with no work experience in the last 5 years or earlier or never worked for a total of 570 Census occupation codes.

Respondents provided the data for the tabulations by writing on the questionnaires descriptions of the kind of work and activities they are doing. These write-ins are converted to a code category through automated coding. Cases not autocoded on both industry and occupation are sent to the clerical staff in the National Processing Center (NPC) in Jeffersonville, Indiana, who assign codes by comparing these descriptions to entries in the *Alphabetical Index of Industries and Occupations* (https://www.census.gov/topics/employment/industry-occupation/guidance/indexes.html).

Some occupation groups are related closely to certain industries. Operators of transportation equipment, farm operators and workers, and healthcare providers account for major portions of their respective industries of transportation, agriculture, and health care. However, the industry categories include people in other occupations. For example, people employed in agriculture include truck drivers and bookkeepers; people employed in the transportation industry include mechanics, freight handlers, and payroll clerks; and people employed in the health care industry include janitors, security guards, and secretaries.

Editing Procedures – Following the coding operation, a computer edit and allocation process excludes all responses that should not be included in the universe, and evaluates the consistency of the remaining responses. The codes for occupation are checked for consistency with the industry and class of worker data provided for that respondent. Occasionally respondents supply occupation descriptions that are not sufficiently specific for precise classification, or they do not report on these questions at all. Certain types of incomplete entries are corrected using the *Alphabetical Index of Industries and Occupations*. If one or more of the three codes (occupation, industry, or class of worker) is blank after the edit, a code is assigned from a donor respondent who is a "similar" person based on questions

such as age, sex, educational attainment, income, employment status, and weeks worked. If all of the labor force and income data are blank, all of these economic questions are assigned from a "similar" person who had provided all the necessary data.

Question/Concept History – Occupation data have been collected during decennial censuses since 1850. Starting with the 2010 Census, occupation data was no longer collected during the decennial census. Long form data collection has transitioned to the ACS. The ACS began collecting data on occupation in 1996. The questions on occupation were designed to be consistent with the 1990 Census questions on occupation. ACS questions on occupation have remained consistent between 1996 and 2018.

Limitation of the Data – Beginning in 2006, the population in group quarters (GQ) was included in the ACS. Some types of GQ populations have occupational distributions that are different from the household population. The inclusion of the GQ population could therefore have a noticeable impact on the occupational distribution in some geographic areas with a substantial GQ population.

Data on occupation, industry, and class of worker are collected for the respondent's current primary job or the most recent job for those who are not employed but have worked in the last 5 years. Other labor force questions, such as questions on earnings or work hours, may have different reference periods and may not limit the response to the primary job. Although the prevalence of multiple jobs is low, data on some labor force items may not exactly correspond to the reported occupation, industry, or class of worker of a respondent.

Comparability – Comparability of occupation data was affected by a number of factors, primarily the system used to classify the questionnaire responses. Changes in the occupational classification system limit comparability of the data from one year to another. These changes are needed to recognize the "birth" of new occupations, the "death" of others, the growth and decline in existing occupations, and the desire of analysts and other users for more detail in the presentation of the data. Probably the greatest cause of noncomparability is the movement of a segment from one category to another. Changes in the nature of jobs, respondent terminology, and refinement of category composition made these movements necessary.

ACS data from 1996 to 1999 used the same occupation classification systems used for the 1990 Census; therefore, the data are comparable. Since 1990, the occupation classification has been revised to reflect changes within the Standard Occupational Classification (SOC). The SOC was updated in 2000 and these changes were reflected in the Census 2000 occupation codes. For more information on occupational comparability across classification systems, please see technical paper #65: *The Relationship Between the 1990 Census and Census 2000 Industry and Occupation Classification Systems* (https://www.census.gov/content/dam/Census/library/working-papers/2003/demo/techpaper2000.pdf). The 2000-2002 ACS data used the same occupation classification systems used for Census 2000; therefore, the data are comparable. Because of the possibility of new occupations being added to the list of codes, the Census Bureau needed to have more flexibility in adding codes. Consequently, in 2002, Census occupation codes

were expanded from three-digit codes to four-digit codes. For occupation, this entailed adding a "0" to the end of each occupation code. The SOC was revised once more in 2010. Based on the 2010 SOC changes, Census codes were revised resulting in a net gain of 30 Census occupation codes (from 510 occupations to 540 occupations). Most of these changes were concentrated in information technology, healthcare, printing, and human resources occupations. The SOC was revised once again in 2018. Based on the 2018 SOC changes, the Census codes were revised resulting in a net gain of 30 Census occupation codes (from 540 occupations to 570 occupations). The 2018 Census occupation codes were first applied to the 2018 ACS. The 2018 Census occupation codes changes These substantive changes across multiple occupation groups make the 2018 Census occupation codes non-comparable with previous years without the use of the occupation crosswalk and conversion rates. For information on the 2018 SOC and Census occupation codes, please see the 2018 Census Occupation Codes with Crosswalk document, which includes the summary of 2018 changes and the Census 2010 to 2018 occupation codes crosswalk on the Industry and Occupation Code Lists & Crosswalks page (https://www.census.gov/topics/employment/industry-occupation/guidance/code-lists.html).

For more information, see the Census Occupation Code List found within the 2018 ACS Code List. Go to http://www.census.gov and enter "ACS Code Lists, Definitions, and Accuracy" in the search box.

See also, Industry and Class of Worker.

Own Children

See Household Type and Relationship.

Period of Military Service

See Veteran Status.

Persons in Family

See Household Type and Relationship.

Persons in Household

See Household Type and Relationship.

Place of Birth

The data on place of birth were derived from answers to Question 7 in the 2018American Community Survey (ACS). Respondents were asked to select one of two categories: (1) in the United States, or (2) outside the United States. In the ACS, respondents selecting category (1) were then asked to report the name of the state while respondents selecting

category (2) were then asked to report the name of the foreign country, or Puerto Rico, Guam, etc. In the Puerto Rico Community Survey (PRCS), respondents selecting category (1) were also asked to report the name of the state, while respondents selecting category (2) were then asked to print Puerto Rico or the name of the foreign country, or U.S. Virgin Islands, Guam, etc. People not reporting a place of birth were assigned the state or country of birth of another family member, or were allocated the response of another individual with similar characteristics. People born outside the United States were asked to report their place of birth according to current international boundaries. Since numerous changes in boundaries of foreign countries have occurred in the last century, some people may have reported their place of birth in terms of boundaries that existed at the time of their birth or emigration, or in accordance with their own national preference.

The place of birth questions along with the citizenship status question provide essential data for setting and evaluating immigration policies and laws. Knowing the characteristics of immigrants helps legislators and others understand how different immigrant groups are assimilated. Federal agencies require these data to develop programs for refugees and other foreign-born individuals. Vital information on lifetime migration among states also comes from the place of birth question.

Nativity – Information on place of birth and citizenship status was used to classify the population into two major categories: native and foreign born.

Native – The native population includes anyone who was a U.S. citizen at birth. The native population includes those born in the United States, Puerto Rico, Guam, the Northern Marianas, or the U.S. Virgin Islands, as well as those born abroad of at least one U.S. citizen parent. The native population is divided into the following groups: people born in the state in which they resided at the time of the survey; people born in a different state, by region; people born in Puerto Rico or one of the U.S. Island Areas; and people born abroad with at least one U.S. citizen parent. (See also "Citizenship Status.")

Foreign Born – The foreign-born population includes anyone who was not a U.S. citizen at birth. This includes respondents who indicated they were a U.S. citizen by naturalization or not a U.S. citizen. (See also "Citizenship Status.")

The foreign-born population is shown by selected area, country, or region of birth. The places of birth shown in data products were chosen based on the number of respondents who reported that area or country of birth.

***Question/Concept History* –** The 1996-1998 ACS question asked respondents to write in the U.S. state, territory, commonwealth or foreign country where this person was born. Beginning in 1999, the question asked "Where was this person born?" and provided two check-boxes, each with a write-in space.

***Limitation of the Data* –** Beginning in 2006, the group quarters (GQ) population was included in the ACS. Some types of GQ populations may have place of birth distributions that are different from the household population. The inclusion of the GQ population could

therefore have a noticeable impact on the place of birth distribution. This is particularly true for areas with a substantial GQ population.

***Comparability*–** This data source is comparable to the decennial censuses prior to 2010. No place of birth question was asked on the 2010 Census.

For more information, see the Place of Birth Code List found within the 2018 ACS Code List. Go to http://www.census.gov and enter "ACS Code Lists, Definitions, and Accuracy" in the search box.

Place of Work

See Journey to Work.

Poverty Status in the Past 12 Months

Poverty statistics in American Community Survey (ACS) products adhere to the standards specified by the Office of Management and Budget in Statistical Policy Directive 14. The Census Bureau uses a set of dollar value thresholds that vary by family size and composition to determine who is in poverty. Further, poverty thresholds for people living alone or with nonrelatives (unrelated individuals) vary by age (under 65 years or 65 years and older). The poverty thresholds for two-person families also vary by the age of the householder. If a family's total income is less than the dollar value of the appropriate threshold, then that family and every individual in it are considered to be in poverty. Similarly, if an unrelated individual's total income is less than the appropriate threshold, then that individual is considered to be in poverty.

How the Census Bureau Determines Poverty Status

In determining the poverty status of families and unrelated individuals, the Census Bureau uses thresholds (income cutoffs) arranged in a two-dimensional matrix. The matrix consists of family size (from one person to nine or more people) cross-classified by presence and number of family members under 18 years old (from no children present to eight or more children present). Unrelated individuals and two-person families are further differentiated by age of reference person (householder) (under 65 years old and 65 years old and over).

To determine a person's poverty status, one compares the person's total family income in the last 12 months with the poverty threshold appropriate for that person's family size and composition (see example below). If the total income of that person's family is less than the threshold appropriate for that family, then the person is considered "below the poverty level," together with every member of his or her family. If a person is not living with anyone related by birth, marriage, or adoption, then the person's own income is compared with his or her poverty threshold. The total number of people below the poverty level is the sum of people in families and the number of unrelated individuals with incomes in the last 12 months below the poverty threshold.

Since ACS is a continuous survey, people respond throughout the year. Because the income questions specify a period covering the last 12 months, the appropriate poverty thresholds are determined by multiplying the base-year poverty thresholds (1982) by the average of the monthly inflation factors for the 12 months preceding the data collection. See the table in Appendix A titled "Poverty Thresholds in 1982, by Size of Family and Number of Related Children Under 18 Years (Dollars)," for appropriate base thresholds. See the table "The 2017 Poverty Factors" in Appendix A for the appropriate adjustment based on interview month.

For example, consider a family of three with one child under 18 years of age, interviewed in July 2018 and reporting a total family income of $14,000 for the last 12 months (July 2017 to June 2018). The base year (1982) threshold for such a family is $7,765, while the average of the 12 inflation factors is 2.571. Multiplying $7,765 by 2.571 determines the appropriate poverty threshold for this family type, which is $19,964.Comparing the family's income of $14,000 with the poverty threshold shows that the family and all people in the family are considered to have been in poverty. The only difference for determining poverty status for unrelated individuals is that the person's individual total income is compared with the threshold rather than the family's income.

Individuals for Whom Poverty Status is Determined – Poverty status was determined for all people except institutionalized people, people in military group quarters, people in college dormitories, and unrelated individuals under 15 years old. These groups were excluded from the numerator and denominator when calculating poverty rates.

Specified Poverty Levels – Specified poverty levels are adjusted thresholds that are obtained by multiplying the official thresholds by specific factor. Using the threshold cited from the previous example (a family of three with one related child under 18 years responding in July 2017), the dollar value at 125 percent of the poverty threshold was $24,405 ($19,524 x 1.25).

Income Deficit – Income deficit represents the difference between the total income in the last 12 months of families and unrelated individuals below the poverty level and their respective poverty thresholds. In computing the income deficit, families reporting a net income loss are assigned zero dollars, and for such cases, the deficit is equal to the poverty threshold.

This measure provides an estimate of the amount, which would be required to raise the incomes of all poor families and unrelated individuals to their respective poverty thresholds. The income deficit is thus a measure of the degree of the impoverishment of a family or unrelated individual. However, please use caution when comparing the average deficits of families with different characteristics. Apparent differences in average income deficits may, to some extent, be a function of differences in family size.

Aggregate Income Deficit – Aggregate income deficit refers only to those families or unrelated individuals who are classified as below the poverty level. It is defined as the group (e.g., type of family) sum total of differences between the appropriate threshold and total family income or total personal income. Aggregate income deficit is subject to rounding,

which means that all cells in a matrix are rounded to the nearest hundred dollars. (For more information, see "Aggregate" under "Derived Measures.")

Mean Income Deficit – Mean income deficit represents the amount obtained by dividing the aggregate income deficit for a group below the poverty level by the number of families (or unrelated individuals) in that group. (The aggregate used to calculate mean income deficit is rounded. For more information, see "Aggregate Income Deficit.") As mentioned above, please use caution when comparing mean income deficits of families with different characteristics, as apparent differences may, to some extent, be a function of differences in family size. Mean income deficit is rounded to the nearest whole dollar. (For more information on means, see "Derived Measures.")

Poverty Status of Households in the Past 12 Months

Since poverty is defined at the family level and not the household level, the poverty status of the household is determined by the poverty status of the householder. Households are classified as poor when the total income of the householder's family in the last 12 months is below the appropriate poverty threshold. (For nonfamily householders, their own income is compared with the appropriate threshold.) The income of people living in the household who are unrelated to the householder is not considered when determining the poverty status of a household, nor does their presence affect the family size in determining the appropriate threshold. The poverty thresholds vary depending upon three criteria: size of family, number of children, and, for one- and two- person families, age of the householder.

Question/Concept History –

Derivation of the Current Poverty Measure – When the original poverty definition was developed in 1964 by the Social Security Administration (SSA), it focused on family food consumption. The U.S. Department of Agriculture (USDA) used its data about the nutritional needs of children and adults to construct food plans for families. Within each food plan, dollar amounts varied according to the total number of people in the family and the family's composition, that is, the number of children within each family. The cheapest of these plans, the Economy Food Plan, was designed to address the dietary needs of families on an austere budget.

Since the USDA's 1955 Food Consumption Survey showed that families of three or more people across all income levels spent roughly one-third of their income on food, the SSA multiplied the cost of the Economy Food Plan by three to obtain dollar figures for total family income. These dollar figures, with some adjustments, later became the official poverty thresholds. Since the Economy Food Plan budgets varied by family size and composition, so too did the poverty thresholds. For two-person families, the thresholds were adjusted by slightly higher factors because those households had higher fixed costs. Thresholds for unrelated individuals were calculated as a fixed proportion of the corresponding thresholds for two-person families.

The poverty thresholds are revised annually to allow for changes in the cost of living as reflected in the Consumer Price Index for All Urban Consumers (CPI-U). The poverty thresholds are the same for all parts of the country; they are not adjusted for regional, state, or local variations in the cost of living.

Limitation of the Data **–** Beginning in 2006, the population in group quarters (GQ) was included in the ACS. The part of the group quarters population in the poverty universe (for example, people living in group homes or those living in agriculture workers' dormitories) is many times more likely to be in poverty than people living in households. Direct comparisons of the data would likely result in erroneous conclusions about changes in the poverty status of all people in the poverty universe.

Comparability **–** Because of differences in survey methodology (questionnaire design, method of data collection, sample size, etc.), the poverty rate estimates obtained from ACS data may differ from those reported in the Current Population Survey, Annual Social and Economic Supplement, and those reported in Census 2000. For a comparison of poverty rates and analysis of differences between the ACS and the CPS ASEC, see "A Comparison of the American Community Survey and the Current Population Survey" at http://www.census.gov/library/working-papers/2006/demo/SEHSD-WP2006-03.html. For a comparison of poverty estimates from the ACS and Census 2000, go to http://www.census.gov and enter "Comparing ACS Data" in the search box.

Private Vehicle Occupancy

See Journey to Work.

Race

The data on race were derived from answers to the question on race that was asked of all people (Question 6 in the 2018 American Community Survey (ACS)). The U.S. Census Bureau collects race data in accordance with guidelines provided by the U.S. Office of Management and Budget (OMB), and these data are based on self-identification. The racial categories included in the census questionnaire generally reflect a social definition of race recognized in this country and not an attempt to define race biologically, anthropologically, or genetically. In addition, it is recognized that the categories of the race item include racial and national origin or sociocultural groups. People may choose to report more than one race to indicate their racial mixture, such as "American Indian" ***and*** "White." People who identify their origin as Hispanic, Latino, or Spanish may be of any race.

The racial classifications used by the Census Bureau adhere to the October 30, 1997, *Federal Register* notice entitled, "Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity" issued by OMB. These standards govern the categories used to collect and present federal data on race and ethnicity. OMB requires five minimum categories (White, Black or African American, American Indian or Alaska Native, Asian, and Native

Hawaiian or Other Pacific Islander) for race. The race categories are described below with a sixth category, "Some Other Race," added with OMB approval. In addition to the five race groups, OMB also states that respondents should be offered the option of selecting one or more races.

If an individual did not provide a race response, the race or races of the householder or other household members were imputed using specific rules of precedence of household relationship. For example, if race was missing for a natural-born child in the household, then either the race or races of the householder, another natural-born child, or spouse of the householder were imputed.

If race was not reported for anyone in the household, then the race or races of a householder in a previously processed household were imputed.

Definitions from OMB guide the Census Bureau in classifying written responses to the race question:

White. A person having origins in any of the original peoples of Europe, the Middle East, or North Africa. It includes people who indicate their race as "White" or report entries such as Irish, German, Italian, Lebanese, Arab, Moroccan, or Caucasian.

Black or African American. A person having origins in any of the Black racial groups of Africa. It includes people who indicate their race as "Black or African Am." or report entries such as African American, Kenyan, Nigerian, or Haitian.

American Indian or Alaska Native. A person having origins in any of the original peoples of North and South America (including Central America) and who maintains tribal affiliation or community attachment. This category includes people who indicate their race as "American Indian or Alaska Native" or report entries such as Navajo, Blackfeet, Inupiat, Yup'ik, or Central American Indian groups, or South American Indian groups.

Respondents who identified themselves as "American Indian or Alaska Native" were asked to report their enrolled or principal tribe. Therefore, tribal data in tabulations reflect the written entries reported on the questionnaires. Some of the entries (for example, Metlakatla Indian Community and Umatilla) represent reservations or a confederation of tribes on a reservation. The information on tribe is based on self-identification and, therefore, does not reflect any designation of federally or state-recognized tribe. The information for the 2016 ACS Detailed Race tables were derived from the American Indian and Alaska Native Tribal Classification List for the 2010 Census, which was updated through 2009 based on the annual *Federal Register* notice entitled "Indian Entities Recognized and Eligible to Receive Services From the United States Bureau of Indian Affairs," Department of the Interior, Bureau of Indian Affairs, issued by OMB, and through consultation with American Indian and Alaska Native communities and leaders.

The American Indian categories shown in the 2018 ACS Detailed Race tables represent tribal groupings, which refer to the combining of individual American Indian tribes, such as Fort

Sill Apache, Mescalero Apache, and San Carlos Apache, into the general Apache tribal grouping.

The Alaska Native categories shown in the 2018 ACS Detailed Race tables represent tribal groupings, which refer to the combining of individual Alaska Native tribes, such as King Salmon Tribe, Native Village of Kanatak, and Sun'aq Tribe of Kodiak, into the general Aleut tribal grouping.

All Other American Indian Tribes (with only one tribe reported). Includes respondents who provide a response of another American Indian tribe not shown separately, such as Abenaki, Catawba, Eastern Tribes, Kickapoo, Mattaponi, Quapaw, Shawnee, or Yuchi.

American Indian Tribes, not specified. Includes people who provide a generic term such as "American Indian" or tribal groupings not elsewhere classified.

Alaska Native Tribes, not specified. Includes people who provide a generic term such as "Alaska Indian" or "Alaska Native" or tribal groupings not elsewhere classified.

American Indian Tribes or Alaska Native Tribes, not specified. Includes respondents who checked the American Indian or Alaska Native response category on the ACS questionnaire and did not write in a specific group or wrote in a generic term such as "American Indian or Alaska Native."

Two or more American Indian or Alaska Native Tribes. Includes respondents who provided multiple American Indian or Alaska Native Tribes responses such as Blackfeet and Pueblo; or Alaskan Athabascan and Tlingit-Haida; or Paiute and Aleut.

Asian. A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam. It includes people who indicate their race as "Asian Indian," "Chinese," "Filipino," "Korean," "Japanese," "Vietnamese," and "Other Asian" or provide other detailed Asian responses.

Asian Indian. Includes respondents who indicate their race as "Asian Indian" or report entries such as India or East Indian.

Bangladeshi. Includes respondents who report entries such as Bangladeshi or Bangladesh.

Bhutanese. Includes respondents who report entries such as Bhutanese or Bhutan.

Burmese. Includes respondents who report entries such as Burmese or Burma.

Cambodian. Includes respondents who report entries such as Cambodian or Cambodia.

Chinese, except Taiwanese. Includes respondents who indicate their race as "Chinese" or report entries such as China or Chinese American.

Filipino. Includes respondents who indicate their race as "Filipino" or report entries such as Philippines or Filipino American.

Hmong. Includes respondents who report entries such as Hmong or Mong.

Indonesian. Includes respondents who report entries such as Indonesian or Indonesia.

Japanese. Includes respondents who indicate their race as "Japanese" or report entries such as Japan or Japanese American.

Korean. Includes respondents who indicate their race as "Korean" or report entries such as Korea or Korean American.

Laotian. Includes respondents who report entries such as Laotian or Laos.

Malaysian. Includes respondents who report entries such as Malaysian or Malaysia.

Mongolian. Includes respondents who report entries such as Mongolian, Mongolia or Mongol.

Nepalese. Includes respondents who report entries such as Nepalese or Nepal.

Okinawan. Includes respondents who report entries such as Okinawan or Okinawa.

Pakistani. Includes respondents who report entries such as Pakistani or Pakistan.

Sri Lankan. Includes respondents who report entries such as Sri Lankan or Sri Lanka.

Taiwanese. Includes respondents who report entries such as Taiwanese or Taiwan.

Thai. Includes respondents who report entries such as Thai or Thailand.

Vietnamese. Includes respondents who indicate their race as "Vietnamese" or report entries such as Vietnam or Vietnamese American.

Other Asian, specified. Includes respondents who provide a response of another Asian group not shown separately, such as Iwo Jiman, Maldivian, or Singaporean.

Other Asian, not specified. Includes respondents who checked the "Other Asian" response category on the ACS questionnaire and did not write in a specific group or wrote in a generic term such as "Asian," or "Asiatic."

Two or more Asian. Includes respondents who provided multiple Asian responses such as Asian Indian and Japanese; or Vietnamese, Chinese and Hmong.

Native Hawaiian or Other Pacific Islander. A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands. It includes people who indicate their race as "Native Hawaiian," "Guamanian or Chamorro," "Samoan," and "Other Pacific Islander" or provide other detailed Pacific Islander responses.

Native Hawaiian. Includes respondents who indicate their race as "Native Hawaiian" or report entries such as Part Hawaiian or Hawaiian.

Samoan. Includes respondents who indicate their race as "Samoan" or report entries such as American Samoan or Western Samoan.

Tongan. Includes respondents who report entries such as Tongan or Tonga.

Other Polynesian. Includes respondents who provide a response of another Polynesian group, such as Tahitian, Tokelauan, or wrote in a generic term such as "Polynesian."

Guamanian or Chamorro. Includes respondents who indicate their race as "Guamanian or Chamorro" or report entries such as Chamorro or Guam.

Marshallese. Includes respondents who report entries such as Marshallese or Marshall Islands.

Other Micronesian. Includes respondents who provide a response of another Micronesian group, such as Carolinian, Chuukese, I-Kiribati, Kosraean, Mariana Islander, Palauan, Pohnpeian, Saipanese, Yapese, or wrote in a generic term such as "Micronesian."

Fijian. Includes respondents who report entries such as Fijian or Fiji.

Other Melanesian. Includes respondents who provide a response of another Melanesian group, such as Papua New Guinean, Ni-Vanuatu (New Hebrides Islander), Solomon Islander, or wrote in a generic term such as "Melanesian."

Other Pacific Islander, not specified. Includes respondents who checked the Other Pacific Islander response category on the ACS questionnaire and did not write in a specific group or wrote in a generic term such as "Pacific Islander."

Two or more Native Hawaiian and Pacific Islander. Includes respondents who provide multiple Pacific Islander responses such as Native Hawaiian and Guamanian or Chamorro; or Tokelauan and Tongan.

Some Other Race. Includes all other responses not included in the "White," "Black or African American," "American Indian or Alaska Native," "Asian," and "Native Hawaiian or Other Pacific Islander" race categories described above. Respondents reporting entries such as multiracial, mixed, interracial, or a Hispanic, Latino, or Spanish group (for example, Mexican, Puerto Rican, Cuban, or Spanish) in response to the race question are included in this category.

Two or More Races. People may choose to provide two or more races either by checking two or more race response check boxes, by providing multiple responses, or by some combination of check boxes and other responses. The race response categories shown on the questionnaire are collapsed into the five minimum race groups identified by OMB, and the Census Bureau's "Some Other Race" category. For data product purposes, "Two or More Races" refers to combinations of two or more of the following race categories:

1. White
2. Black or African American
3. American Indian or Alaska Native
4. Asian
5. Native Hawaiian or Other Pacific Islander
6. Some Other Race

There are 57 possible combinations (see "Race Combinations" in Appendix A) involving the race categories shown above. Thus, according to this approach, a response of "White" and "Asian" was tallied as Two or More Races, while a response of "Japanese" and "Chinese" was not because "Japanese" and "Chinese" are both Asian responses.

Race Concepts

Given the many possible ways of displaying data on race, data products will provide varying levels of detail. There are several concepts used to display and tabulate race information for the six major race categories (White; Black or African American; American Indian or Alaska Native; Asian; Native Hawaiian or Other Pacific Islander; and Some Other Race) and the various details within these groups.

The concept "race *alone*" includes people who reported a single entry (i.e., Korean) and no other race, as well as people who reported two or more entries within the same major race group (i.e., Asian). For example, respondents who reported Korean and Vietnamese are part of the larger "Asian alone" race group.

The concept "race *alone or in combination*" includes people who reported a single race alone (i.e., Asian) and people who reported that race in combination with one or more of the other major race groups (i.e., White, Black or African American, American Indian and Alaska Native, Native Hawaiian and Other Pacific Islander, and Some Other Race). The "race alone or in combination" concept, therefore, represents the maximum number of people who reported as that race group, either alone, or in combination with another race(s). The sum of the six individual race "alone or in combination" categories may add to more than the total

population because people who reported more than one race were tallied in each race category.

The concept "race *alone or in any combination*" applies only to detailed race iteration groups, such as American Indian and Alaska Native tribes, detailed Asian groups, and detailed Pacific Islander groups. For example, Korean alone or in any combination includes people who reported a single response (i.e., Korean), people who reported Korean and another Asian group (i.e., Korean and Vietnamese), and people who reported Korean in combination with one or more other non-Asian race groups (i.e., White, Black or African American, American Indian and Alaska Native, Native Hawaiian and Other Pacific Islander, or Some Other Race).

Coding of Write-in Entries. The 2018ACS included an automated review, computer edit, and coding operation on a 100 percent basis for the write-in responses to the race question, similar to that used in the 2010 Census. There were two types of coding operations: (1) automated coding where a write-in response was automatically coded if it matched a write-in response already contained in a database known as the "master file" and (2) expert coding, which took place when a write-in response did not match an entry already on the master file and was sent to expert coders familiar with the subject matter. During the coding process, subject-matter specialists reviewed and coded written entries from the response areas on the race question: American Indian or Alaska Native, Other Asian, Other Pacific Islander, and Some Other Race. Up to 30 text characters were collected from each race write-in area, and up to two responses were coded and tabulated from each separate race write-in area.

Question/Concept History

1996-1998 American Community Survey

- The sequence of the questions on race and Hispanic origin was switched. In the 1996-1998 ACS, the question on race immediately followed the question on Hispanic origin. This approach differed from the 1990 Census, where the question on race preceded the question on Hispanic origin with two intervening questions.

- The 1990 Census category, "Black or Negro" was changed to "Black, African Am."

- The 1990 Census category, "Other race," was renamed "Some other race." A separate "Multiracial" category was added. The instruction to "print the race(s) or group below" pertained to both the "Some other race" and "Multiracial" categories.

- The "Indian (Amer.)," "Other Asian/Pacific Islander," "Some other race," and "Multiracial" response categories all shared a single write-in area.

1999-2002 American Community Survey

- The response category “Black, African Am.” was changed to “Black, African Am., or Negro” to correspond with the Census 2000 response category.

- The separate 1990 Census and 1996-1998 ACS response categories “Indian (Amer.),” “Eskimo,” and “Aleut,” were combined into one response category, “American Indian or Alaska Native.” Respondents were asked to “print name of enrolled or principal tribe” on a separate write-in line to correspond with the Census 2000 response category.

- The 1990 Asian or Pacific Islander category was separated into two categories, “Asian” and “Native Hawaiian or Other Pacific Islander.” Also, the six detailed Asian groups were alphabetized; and the three detailed Pacific Islander groups were alphabetized after the Native Hawaiian response category.

- The response category “Hawaiian” was changed to “Native Hawaiian.” The response category “Guamanian” was changed to “Guamanian or Chamorro.” The response category “Other Asian/Pacific Islander” was split into two separate response categories, “Other Asian,” and “Other Pacific Islander.” These changes correspond to those in the Census 2000 response categories.

- The separate “multiracial” response category was dropped. Rather, respondents were instructed to “**Mark [x] one or more races** *to indicate what this person considers himself/herself to be*.” Respondents were allowed to select more than one category for race in Census 2000.

- In the ACS, the “Other Asian,” “Other Pacific Islander,” and “Some other race” response categories shared the same write-in area. On the Census 2000 questionnaire, only the “Other Asian” and “Other Pacific Islander” response categories shared the same write-in area, and the “Some other race” category had a separate write-in area.

2003-2007 American Community Survey Change

- The response category “Black, African Am., or Negro” was changed to “Black or African American.”

Puerto Rico Community Survey, started in 2005

- Separate questions on race and Hispanic origin were included on the questionnaire. These questions were identical to the questions used in the United States.

2008-2013 American Community Survey

- The wording of the race question was changed to read, “What is Person 1’s race? Mark (X) one or more boxes” and the reference to what this person considers him/herself to be was deleted.

- The response category "Black or African American" was changed to "Black, African Am., or Negro."

- Examples were added to the "Other Asian" response categories (Hmong, Laotian, Thai, Pakistani, Cambodian, and so on) and the "Other Pacific Islander" response categories (Fijian, Tongan, and so on).

2014-2018 American Community Survey

- The response category "Black, African Am., or Negro" was changed to "Black or African Am."

Limitation of the data **–** Beginning in 2006, the population in group quarters (GQ) was included in the ACS. Some types of GQ populations may have race distributions that are different from the household population. The inclusion of the GQ population could therefore have a noticeable impact on the race distribution. This is particularly true for areas with a substantial GQ population.

Comparability **–** The data on race in the 2018 ACS are not directly comparable across all years. Ongoing research conducted following the 1990 Census affected the ACS question on race since its inception in 1996. Also, the October 1997 revised standards for federal data on race and ethnicity issued by the OMB led to changes in the question on race for Census 2000. Consequently, in order to achieve consistency, other census-administered surveys such as the ACS were modified to reflect changes required by OMB. The 2010 Census and ACS data collections continue to follow the 1997 OMB Standards.

For more information, see the Race Code List found within the 2018 ACS Code List. Go to http://www.census.gov and enter "ACS Code Lists, Definitions, and Accuracy" in the search box.

Reference Week

The data on employment status and journey to work relate to the reference week, that is, the calendar week preceding the date on which the respondents completed their questionnaires or were interviewed. This week is not the same for all respondents since the interviewing was conducted over a 12-month period. The occurrence of holidays during the relative reference week could affect the data on actual hours worked during the reference week, but probably had no effect on overall measurement of employment status.

Relatives and Nonrelatives

See Household Type and Relationship.

Residence 1 Year Ago

The data on residence 1 year ago were derived from answers to Question 15 in the 2018 American Community Survey (ACS), which were asked of the population 1 year and older. For the ACS, people who had moved from another residence in the United States or Puerto Rico 1 year earlier were asked to report the exact address (number and street name); the name of the city, town, or post office; the name of the U.S. county or municipio in Puerto Rico; state or Puerto Rico; and the ZIP Code where they lived 1 year ago. People living outside the United States and Puerto Rico were asked to report the name of the foreign country or U.S. Island Area where they were living 1 year ago.

For the Puerto Rico Community Survey (PRCS), people who moved from another residence in Puerto Rico or the United States 1 year ago were asked to report the exact address, including the development or condominium name; the name of the city, town, or post office; the municipio in Puerto Rico (county equivalent) or county in the U.S.; and the ZIP Code where they lived. People living outside Puerto Rico and the United States were asked to report the name of the foreign country or U.S. Island Area where they were living 1 year ago.

Residence 1 year ago is used in conjunction with location of current residence to determine the extent of residential mobility of the population and the resulting redistribution of the population across the various states, metropolitan areas, and regions of the country.

When no information on previous residence was reported for a person, information for other family members, if available, was used to assign a location of residence 1 year ago. All cases of nonresponse or incomplete response that were not assigned a previous residence based on information from other family members were allocated the previous residence of another person with similar characteristics who provided complete information.

The tabulation category, "Same house," includes all people 1 year and over who did not move during the 1 year as well as those who had moved and returned to their residence 1 year ago. The category, "Different house in the United States" includes people who lived in the United States 1 year ago but in a different house or apartment from the one they occupied at the time of interview. These movers are then further subdivided according to the type of move.

In most tabulations, movers within the U.S. are divided into three groups according to their previous residence: "Different house, same county," "Different county, same state," and "Different state." The last group may be further subdivided into region of residence 1 year ago. An additional category, "Abroad," includes those whose previous residence was in a foreign country, Puerto Rico, American Samoa, Guam, the Northern Marianas, or the U.S. Virgin Islands, including members of the Armed Forces and their dependents. Some tabulations show movers who were residing in Puerto Rico or one of the U.S. Island Areas 1 year ago separately from those residing in foreign countries.

In most tabulations, movers within Puerto Rico are divided into two groups according to their residence 1 year ago: "Same municipio" and "Different municipio." Other tabulations show movers within or between metropolitan areas similar to the stateside tabulations.

Residence-1-Year-Ago-based Geography – The characteristics of movers may be shown using either current residence-based or previous residence-based geography. If you are interested in the number and characteristics of movers living in a specific area, you should use the standard (residence-based) tables. If you are interested in the number and characteristics of movers whose previous residence was in a specific area, you should use the residence-1-year-ago-based tables. Because residence-1-year-ago information for movers cannot always be specified below the place level, the previous residence-based tables are presented only for selected geographic areas.

Residence 1 year ago is used to assess the residential stability and the effects of migration in both urban and rural areas. This item provides information on the mobility of our population. Knowing the number and characteristics of movers is essential for federal programs dealing with employment, housing, education, and the elderly. The U.S. Department of Veterans Affairs develops its mandated projection of the need for hospitals and other veteran benefits for each state with migration data about veterans. The Census Bureau develops state age and sex estimates and small-area population projections based on data about residence 1 year ago.

Question/Concept History **–** The 1996-1998 questions asked about residence 5 years ago. Beginning in 1999, the time period was changed to that of 1 year ago, which reflects the on-going data collection on the ACS, and allows for annual estimates of migration. Beginning in 1999, a separate write-in line and a skip instruction were added for a foreign country response. This write-in line was moved to one of the answer categories for the residence one year ago question. The migration parts (city, county, and state response areas) were also reordered. Beginning in 2003, the numerical order was changed so that part c of this question would not be displayed in a separate column of the questionnaire.

Beginning with 2008, a write-in space for street address was included and the questions were reworded on both the ACS and the PRCS so that the geographic specificity is maintained for movers within and between the U.S. and Puerto Rico. Municipio of previous residence in Puerto Rico is available for people living in the United States as a result of this change. For more information, see the "Evaluation Report Covering Residence 1 Year Ago (Migration)" from the 2006 ACS Content Test. Go to http://www.census.gov and enter "2006 ACS Content Test Evaluation Report Covering Residence 1 Year Ago (Migration)" in the search box.

Limitation of the Data **–** Beginning in 2006, the group quarters (GQ) population was included in the ACS. Some types of GQ populations have residence one year ago (migration) distributions that are different from the household population. The inclusion of the GQ population could therefore have a noticeable impact on the residence one year ago (migration) distribution. This is particularly true for areas with a substantial GQ population.

***Comparability* –** This data source is not comparable to Census 2000. The ACS asked for residence 1 year ago whereas Census 2000 asked for residence 5 years ago. No migration question was asked on the 2010 Census.

For more information, see the Migration Code List found within the 2018 ACS Code List. Go to http://www.census.gov and enter "ACS Code Lists, Definitions, and Accuracy" in the search box.

School Enrollment and Type of School

School enrollment data are used to assess the socioeconomic condition of school-age children. Government agencies also require these data for funding allocations and program planning and implementation.

Data on school enrollment and grade or level attending were derived from answers to Question 10 in the 2018 American Community Survey (ACS). People were classified as enrolled in school if they were attending a public or private school or college at any time during the 3 months prior to the time of interview. The question included instructions to "include only nursery or preschool, kindergarten, elementary school, home school, and schooling which leads to a high school diploma, or a college degree." Respondents who did not answer the enrollment question were assigned the enrollment status and type of school of a person with the same age, sex, race, and Hispanic or Latino origin whose residence was in the same or nearby area.

School enrollment is only recorded if the schooling advances a person toward an elementary school certificate, a high school diploma, or a college, university, or professional school (such as law or medicine) degree. Tutoring or correspondence schools are included if credit can be obtained from a public or private school or college. People enrolled in "vocational, technical, or business school" such as postsecondary vocational, trade, hospital school, and on job training were not reported as enrolled in school. Field interviewers were instructed to classify individuals who were home schooled as enrolled in private school. The guide sent out with the mail questionnaire included instructions for how to classify home schoolers.

Enrolled in Public and Private School – Includes people who attended school in the reference period and indicated they were enrolled by marking one of the questionnaire categories for "public school, public college," or "private school, private college, home school." The instruction guide defines a public school as "any school or college controlled and supported primarily by a local, county, state, or federal government." Private schools are defined as schools supported and controlled primarily by religious organizations or other private groups. Home schools are defined as "parental-guided education outside of public or private school for grades 1-12." Respondents who marked both the "public" and "private" boxes are edited to the first entry, "public."

Grade in Which Enrolled – From 1999-2007, in the ACS, people reported to be enrolled in "public school, public college" or "private school, private college" were classified by grade or level according to responses to Question 10b, "What grade or level was this person

attending?" Seven levels were identified: "nursery school, preschool;" "kindergarten;" elementary "grade 1 to grade 4" or "grade 5 to grade 8;" high school "grade 9 to grade 12;" "college undergraduate years (freshman to senior);" and "graduate or professional school (*for example: medical, dental, or law school*)."

In 2008, the school enrollment questions had several changes. "Home school" was explicitly included in the "private school, private college" category. For question 10b the categories changed to the following "Nursery school, preschool," "Kindergarten," "Grade 1 through grade 12," "College undergraduate years (freshman to senior)," "Graduate or professional school beyond a bachelor's degree (for example: MA or PhD program, or medical or law school)." The survey question allowed a write-in for the grades enrolled from 1-12.

***Question/Concept History* –** Since 1999, the ACS enrollment status question (Question 10a) refers to "regular school or college," while the 1996-1998 ACS did not restrict reporting to "regular" school, and contained an additional category for the "vocational, technical or business school."

The 1996-1998 ACS used the educational attainment question to estimate level of enrollment for those reported to be enrolled in school, and had a single year write-in for the attainment of grades 1 through 11. Grade levels estimated using the attainment question were not consistent with other estimates, so a new question specifically asking grade or level of enrollment was added starting with the 1999 ACS questionnaire.

***Limitation of the Data* –** Beginning in 2006, the population universe in the ACS includes people living in group quarters. Data users may see slight differences in levels of school enrollment in any given geographic area due to the inclusion of this population. The extent of this difference, if any, depends on the type of group quarters present and whether the group quarters population makes up a large proportion of the total population. For example, in areas that are home to several colleges and universities, the percent of individuals 18 to 24 who were enrolled in college or graduate school would increase, as people living in college dormitories are now included in the universe.

***Comparability* –** Data about level of enrollment are also collected from the decennial Census and from the Current Population Survey (CPS). ACS data are generally comparable to data from the Census. Although it should be noted that the ACS reference period was 3 months preceding the date of interview, while the Census 2000 reference period was any time since February 1, 2000. For more information about the comparability of ACS and CPS data, please see the School Enrollment Fact Sheet on the Census website (https://www.census.gov/topics/education/educational-attainment/guidance/factsheet-acs-cps.html).

Data on school enrollment also are collected and published by other federal, state, and local government agencies. Because these data are obtained from administrative records of school systems and institutions of higher learning, they are only roughly comparable to data from population censuses and surveys. Differences in definitions and concepts, subject matter covered, time references, and data collection methods contribute to the differences in

estimates. At the local level, the difference between the location of the institution and the residence of the student may affect the comparability of census and administrative data because census data are collected from and based on a respondent's residence. Differences between the boundaries of school districts and census geographic units also may affect these comparisons.

Sex

The data on sex were derived from answers to Question 3 in the 2018 American Community Survey (ACS). Individuals were asked to mark either "male" or "female" to indicate their biological sex. For most cases in which sex was invalid, the appropriate entry was determined from other information provided for that person, such as the person's given (i.e., first) name and household relationship. Otherwise, sex was allocated from a hot deck.

Sex is asked for all persons in a household or group quarters. On the mailout/mailback paper questionnaire for households, sex is asked for all persons listed on the form. This form accommodates asking sex for up to 12 people listed as living or residing in the household for at least 2 months. If a respondent indicates that more people are listed as part of the total persons living in the household than the form can accommodate, telephone center staffers call respondents to obtain sex data for the additional household members during the Failed Edit Follow-up (FEFU) operation. In the internet, Computer-Assisted Telephone Interviews (CATI), and Computer-Assisted Personal Interview (CAPI) instruments, sex is asked for all persons. In 2006, the ACS began collecting data in group quarters (GQs). This included asking sex for persons living in a group quarters. For additional data collection methodology, please see https://www.census.gov/programs-surveys/acs/.

Data on sex are used to determine the applicability of other questions for a particular individual and to classify other characteristics in tabulations. The sex data collected on the forms are aggregated and provide the number of males and females in the population. These data are needed to interpret most social and economic characteristics used to plan and analyze programs and policies. Data about sex are critical because so many federal programs must differentiate between males and females. The U.S. Departments of Education and Health and Human Services are required by statute to use these data to fund, implement, and evaluate various social and welfare programs, such as the Special Supplemental Food Program for Women, Infants, and Children (WIC) or the Low-Income Home Energy Assistance Program (LIHEAP). Laws to promote equal employment opportunity for women also require census data on sex. The U.S. Department of Veterans Affairs must use census data to develop its state projections of veterans' facilities and benefits. For more information on the use of sex data in Federal programs, please see "ACS Handbook of Questions and Current Federal Uses."

Sex Ratio – The sex ratio represents the balance between the male and female populations. Ratios above 100 indicate a larger male population, and ratios below 100 indicate a larger female population. This measure is derived by dividing the total number of males by the total number of females and then multiplying by 100. It is rounded to the nearest tenth.

***Question/Concept History* –** Sex has been asked of all persons living in a household since the 1996 ACS Test phase. When group quarters were included in the survey universe in 2006, sex was asked of all persons in group quarters as well.

Beginning in 2008, the layout of the sex question response categories was changed to a horizontal side-by-side layout from a vertically stacked layout on the mail paper ACS questionnaire

***Limitation of the data* –** Beginning in 2006, the population in group quarters (GQ) was included in the ACS. Some types of GQ populations have sex distributions that are very different from the household population. The inclusion of the GQ population could therefore have a noticeable impact on the sex distribution. This is particularly true for a given geographic area, especially areas with a substantial GQ population.

The Census Bureau tested the changes introduced to the 2008 version of the sex question in the 2007 ACS Grid-Sequential Test. The results of this testing show that the changes may introduce an inconsistency in the data produced for this question as observed from the years 2007 to 2008. For more information, please see "Effects of Using a Grid Versus a Sequential Form on the ACS Basic Demographic Data."

***Comparability* –** Sex is generally comparable across different data sources and data years. However, data users should still be aware of methodological differences that may exist between different data sources if they are comparing ACS sex data to other data sources, such as Population Estimates or Decennial Census data. For example, the ACS data are that of a respondent-based survey and subject to various quality measures, such as sampling and nonsampling error, response rates, and item allocation. This differs in design and methodology from other data sources, such as Population Estimates, which is not a survey and involves computational methodology to derive intercensal estimates of the population. While ACS estimates are controlled to Population Estimates for sex at the nation, state and county levels of geography as part of the ACS weighting procedure, variation may exist in the sex structure of a population at lower levels of geography when comparing different time periods or comparing across time due to the absence of controls below the county geography level. For more information on ACS data accuracy and weighting procedures, please go to http://www.census.gov and enter "ACS Methodology" in the search box.

It also should be noted that although the ACS produces population, demographic, and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates the official estimates of the population for the nation, states, counties, cities and towns and estimates of housing units for states and counties. See http://factfinder.census.gov for data.

Social Security Income

See Income in the Past 12 Months.

Subfamily

See Household Type and Relationship.

Time Leaving Home to Go to Work

See Journey to Work.

Travel Time to Work

See Journey to Work.

Type of School

See School Enrollment.

Usual Hours Worked in the Past 12 Months

See Work Experience.

Veteran Status

Data on veteran status and period of military service were derived from answers to Questions 26 and 27 in the 2018 American Community Survey (ACS).

Veteran Status – Answers to this question provide specific information about veterans. Veteran status is used to identify people with active duty military service and service in the military Reserves and the National Guard. Veterans are men and women who have served (even for a short time), but are not currently serving, on active duty in the U.S. Army, Navy, Air Force, Marine Corps, or the Coast Guard, or who served in the U.S. Merchant Marine during World War II. People who served in the National Guard or Reserves are classified as veterans only if they were ever called or ordered to active duty, not counting the 4-6 months for initial training or yearly summer camps. All other civilians are classified as nonveterans. These data are used primarily by the Department of Veterans Affairs (VA) to measure the needs of veterans.

While it is possible for 17 year olds to be veterans of the Armed Forces, ACS data products are restricted to the population 18 years and older.

Veteran Status is:

- Used at state and county levels to plan programs for medical and nursing home care for veterans.
- Used by VA to plan the locations and sizes of veterans' cemeteries.

- Used by local agencies, under the Older Americans Act, to develop health care and other services for elderly veterans.
- Used to allocate funds to states and local areas for employment and job training programs for veterans under the Job Training Partnership Act.

Question/Concept History – For the 1999-2002 ACS, the question was changed to match the Census 2000 item. The response categories were modified by expanding the "No active duty service" answer category to distinguish persons whose only military service was for training in the Reserves or National Guard, from persons with no military experience whatsoever.

For the 2003-2012 ACS, the "Yes, on active duty in the past, but not now" category was split into two categories. Veterans were asked whether or not their service ended in the last 12 months.

Beginning in 2013, the veteran status question was revised in several ways based on recommendations from previous analysis of the question and a change in data needs for the veterans' series. First, VA no longer needed the 12-month distinction in veteran classifications, which resulted in collapsing the response options from five to four categories. Second, the revised question eliminated the lead-in "yes" and "no" for each response option. Finally, the response category for Reservists incorporated information from the instructions in the old version of the question, eliminating the need for the instruction to the question itself.

Limitation of the Data – There may be a tendency for the following kinds of persons to report erroneously that they served on active duty in the Armed Forces: (a) persons who served in the National Guard or Military Reserves but were never called to Federal duty; (b) civilian employees or volunteers for the USO, Red Cross, or the Department of Defense (or its predecessors, the Department of War and the Department of the Navy); and (c) employees of the Merchant Marine or Public Health Service.

Beginning in 2006, the population in group quarters (GQ) was included in the ACS. Some types of GQ populations may have period of military service and veteran status distributions that are different from the household population. The inclusion of the GQ population could therefore have a noticeable impact on the period of service and veteran status distributions. This is particularly true for areas with a substantial GQ population.

Comparability – The ACS has two separate questions for veteran status and period of military service, whereas in Census 2000, it was a two-part question. The wording for the veteran status question has remained the same; however, the response categories have changed over time (see the section "Question/Concept History"). While the response categories differ slightly from those in Census 2000, data from the two questions can still be compared to one another.

For comparisons to Census 2000 and earlier ACS data, go to http://www.census.gov and enter "Comparing ACS Data" in the search box.

The Group Quarters (GQ) population was included in the 2006 ACS and not included in prior years of ACS data, thus comparisons should be made only if the geographic area of interest does not include a substantial GQ population.

For comparisons to the Current Population Survey (CPS), please see "Comparison of ACS and ASEC Data on Veteran Status and Period of Military Service: 2007" on the ACS website. Go to http://www.census.gov and enter the paper title in the search box.

Period of Military Service – People who indicate that they had ever served on active duty in the past or were currently on active duty are asked to indicate the period or periods in which they served. Currently, there are 9 periods of service on the ACS questionnaire. Respondents are instructed to mark a box for each period in which they served, even if just for part of the period. The periods were determined by the Department of Veterans Affairs (VA) and generally alternate between peacetime and wartime.

The responses to this question are edited for consistency and reasonableness. The edit eliminates inconsistencies between reported period(s) of service and age of the person; it also removes reported combinations of periods containing unreasonable gaps (for example, it will not accept a response that indicated the person had served in World War II and in the Vietnam era, but not in the Korean conflict).

Period of military service distinguishes veterans who served during wartime periods from those whose only service was during peacetime. Questions about period of military service provide necessary information to estimate the number of veterans who are eligible to receive specific benefits.

***Question/Concept History* –** In 1999, the response categories were modified by closing the "August 1990 or later (including Persian Gulf War)" period at March 1995, and adding the "April 1995" or later category.

For the 2001-2002 ACS question, the response category was changed from "Korean conflict" to "Korean War."

For the 2003-2012 ACS, the response categories for the question were modified in several ways. The first category "April 1995 or later" was changed to "September 2001 or later" to reflect the era that began after the events of September 11, 2001; the second category "August 1990 to March 1995" was then expanded to "August 1990 to August 2001 (including Persian Gulf War)." The category "February 1955 to July 1964" was split into two categories: "March 1961 to July 1964" and "February 1955 to February 1961." To match the revised dates for war-time periods of the Department of Veterans Affairs, the dates for the "World War II" category were changed from "September 1940 to July 1947" to "December 1941 to December 1946," and the dates for the "Korean War" were changed from "June 1950 to January 1955" to "July 1950 to January 1955." To increase specificity, the "Some other time" category was split into two categories: "January 1947 to June 1950" and "November 1941 or earlier."

Beginning in 2013, the period of military service question was revised to make the categories more meaningful to VA needs. The "September 1980 to July 1990" and "May 1975 to August 1980" categories were collapsed into "May 1975 to July 1990." The "March 1961 to July 1964" and "February 1955 to February 1961" categories were collapsed into "February 1955 to July 1964."

Limitation of the Data – There may be a tendency for people to mark the most recent period in which they served or the period in which they began their service, but not all periods in which they served.

Beginning in 2006, the population in group quarters (GQ) was included in the ACS. Some types of GQ populations may have period of military service and veteran status distributions that are different from the household population. The inclusion of the GQ population could therefore have a noticeable impact on the period of service and veteran status distributions. This is particularly true for areas with a substantial GQ population.

Comparability – Since Census 2000, the period of military service categories on the ACS questionnaire were updated to: 1) include the most recent period "September 2001 or later;" 2) alternate "peace time" periods and "wartime periods" in the list; and 3) update the Korean War and World War II dates to match the official dates as listed in U.S. Code, Title 38. While the response categories differ slightly from those in Census 2000, data from the two questions can still be compared to one another.

For comparisons to Census 2000 and earlier ACS data, go to http://www.census.gov and enter "Comparing ACS Data" in the search box.

Due to an editing error, the veteran's period of service recode (VPS) prior to 2007 was being incorrectly assigned for some individuals. The majority of the errors misclassified some people who reported only serving during the Vietnam Era as having served in the category "Gulf War and Vietnam Era." The remainder of the errors misclassified some people who reported only serving between the Vietnam Era and Gulf War as having served in the category "Gulf War."

The Group Quarters (GQ) population was included in the 2006 ACS and not included in prior years of ACS data, thus comparisons should be made only if the geographic area of interest does not include a substantial GQ population.

For comparisons to the Current Population Survey (CPS), please see "Comparison of ACS and ASEC Data on Veteran Status and Period of Military Service: 2007" on the ACS website. Go to http://www.census.gov and enter the paper title in the search box.

Service-Connected Disability Status and Ratings – Data on service-connected disability-rating status and service-connected disability ratings were derived from answers to Questions 28a and 28b in the 2018 ACS.

Service-Connected Disability-Rating Status – People who indicated they had served on active duty in the U.S. Armed Forces, military Reserves, or National Guard, or trained with the Reserves or National Guard or were now on active duty were asked to indicate whether or not they had a Department of Veterans Affairs (VA) service-connected disability rating. These disabilities are evaluated according to the VA Schedule for Rating Disabilities in Title 38, U.S. Code of Federal Regulations, Part 4.

"Service-connected" means the disability was a result of disease or injury incurred or aggravated during active military service.

VA uses a priority system to allocate health care services among veterans enrolled in its programs. Data on service-connected disability status and ratings are used to measure the demand for VA health care services in local market areas across the country as well as to classify veterans into priority groups for VA health care enrollment.

***Question/Concept History* –** This question was added to the ACS in 2008. For more information, see "Evaluation Report Covering Service-Connected Disability" from the 2006 ACS Content Test. Go to http://www.census.gov and enter "2006 ACS Content Test Evaluation Report Covering Service-Connected Disability" in the search box.

***Limitation of the Data* –** There may be a tendency for people to erroneously report having a 0 percent rating when they have no service-connected disability rating at all.

***Comparability* –** The question was not asked in Census 2000. It was added to the ACS in 2008.

Service-Connected Disability Rating – This question is asked of people who reported having a VA service-connected disability rating. These ratings are graduated according to degrees of disability on a scale from 0 to 100 percent, in increments of 10 percent. The ratings determine the amount of compensation payments made to the veterans. A zero-rating, which is different than having no rating at all, means a disability exists but it is not so disabling that it entitles the veteran to compensation payments.

VA uses a priority system to allocate health care services among veterans enrolled in its programs. Data on service-connected disability status and ratings are used to measure the demand for VA health care services in local market areas across the country as well as to classify veterans into priority groups for VA health care enrollment.

***Question/Concept History* –** This question was added to the ACS in 2008. For more information, see "Evaluation Report Covering Service-Connected Disability" from the 2006 ACS Content Test. Go to http://www.census.gov and enter "2006 ACS Content Test Evaluation Report Covering Service-Connected Disability" in the search box.

***Limitation of the Data* –** There may be a tendency for people to erroneously report having a 0 percent rating when they have no service-connected disability rating at all.

Comparability **–** The question was not asked in Census 2000. It was added to the ACS in 2008.

Weeks Worked in the Past 12 Months

See Work Experience.

Work Experience

The data on work experience were derived from answers to Questions 38, 39, and 40 in the 2018 American Community Survey (ACS). This term relates to work status in the past 12 months, weeks worked in the past 12 months, and usual hours worked per week worked in the past 12 months.

To comply with provisions of the Civil Rights Act, the U.S. Department of Justice uses these data to determine the availability of individuals for work. Government agencies, in considering the programmatic and policy aspects of providing federal assistance to areas, have emphasized the requirements for reliable data to determine the employment resources available. Data about the number of weeks and hours worked last year are essential because these data allow the characterization of workers by full-time/part-time and full-year/part-year status. Data about working last year are also necessary for collecting accurate income data by defining the universe of persons who should have earnings as part of their total income.

Work Status in the Past 12 Months

The data on work status in the past 12 months were derived from answers to Question 38 in the 2018 ACS. People 16 years old and over who worked 1 or more weeks according to the criteria described below are classified as "Worked in the past 12 months." All other people 16 years old and over are classified as "Did not work in the past 12 months."

Weeks Worked in the Past 12 Months

The data on weeks worked in the past 12 months were derived from responses to Question 39 in the 2018 ACS, which was asked of people 16 years old and over who indicated that they worked during the past 12 months.

The data pertain to the number of weeks during the past 12 months in which a person did any work for pay or profit (including paid vacation and paid sick leave) or worked without pay on a family farm or in a family business. Weeks of active service in the Armed Forces are also included.

Usual Hours Worked Per Week Worked in the Past 12 Months

The data on usual hours worked per week worked in the past 12 months were derived from answers to Question 40 in the 2018 ACS. This question was asked of people 16 years old and over who indicated that they worked during the past 12 months.

The data pertain to the number of hours a person usually worked during the weeks worked in the past 12 months. The respondent was to report the number of hours worked per week in the majority of the weeks he or she worked in the past 12 months. If the hours worked per week varied considerably during the past 12 months, the respondent was to report an approximate average of the hours worked per week.

People 16 years old and over who reported that they usually worked 35 or more hours each week during the weeks they worked are classified as "Usually worked full time;" people who reported that they usually worked 1 to 34 hours are classified as "Usually worked part time."

Aggregate Usual Hours Worked Per Week in the Past 12 Months – Aggregate usual hours worked is the sum of the values for usual hours worked each week of all the people in a particular universe. (For more information, see "Aggregate" under "Derived Measures.")

Mean Usual Hours Worked Per Week in the Past 12 Months – Mean usual hours worked is the number obtained by dividing the aggregate number of hours worked each week of a particular universe by the number of people in that universe. For example, mean usual hours worked for workers 16 to 64 years old is obtained by dividing the aggregate usual hours worked each week for workers 16 to 64 years old by the total number of workers 16 to 64 years old. Mean usual hours worked values are rounded to the nearest one-tenth of an hour. (For more information, see "Mean" under "Derived Measures.")

Full-Time, Year-Round Workers – All people 16 years old and over who usually worked 35 hours or more per week for 50 to 52 weeks in the past 12 months.

Number of Workers in Family in the Past 12 Months – The term "worker" as used for these data is defined based on the criteria for work status in the past 12 months.

***Question/Concept History* –** Beginning in 2008, the weeks worked question was separated into 2 parts: part (a) asked whether the respondent worked 50 or more weeks in the past 12 months and part (b) asked respondents who answered 'no' to part (a) how many weeks they worked, even for a few hours.

***Limitation of the Data* –** It is probable that the number of people who worked in the past 12 months and the number of weeks worked are understated since there is some tendency for respondents to forget intermittent or short periods of employment or to exclude weeks worked without pay. There may also be a tendency for people not to include weeks of paid vacation among their weeks worked; one result may be that the ACS figures understate the number of people who worked "50 to 52 weeks."

The ACS data refer to the 12 months preceding the date of interview. Since not all people in the ACS were interviewed at the same time, the reference period for the ACS data is neither fixed nor uniform.

Beginning in 2006, the population in group quarters (GQ) was included in the ACS. Some types of GQ populations may have work experience distributions that are different from the

household population. The inclusion of the GQ population could therefore have a noticeable impact on the work experience distribution. This is particularly true for areas with a substantial GQ population.

The Census Bureau tested the changes introduced to the 2008 version of the weeks worked question in the 2006 ACS Content Test. The results of this testing show that the changes may introduce an inconsistency in the data produced for this question as observed from the years 2007 to 2008. For more information, see "Evaluation Report Covering Weeks Worked" from the 2006 ACS Content Test. Go to http://www.census.gov and enter "2006 ACS Evaluation Report Covering Weeks Worked" in the search box.

Comparability – For information on Work Experience data comparability, please see the comparability section for Employment Status.

Work Status in the Past 12 Months

See Work Experience.

Year of Entry

The data on year of entry were derived from answers to Question 9 in the 2018 American Community Survey (ACS). This question was asked about Persons 1 through 5 in the ACS, and was restricted to those persons who on Question 8 answered that they were in citizenship categories (2) born in Puerto Rico, Guam, the U.S. Virgin Islands, or Northern Marianas, (3) born abroad of U.S. citizen parent or parents, (4) U.S. citizen by naturalization, or (5) not a U.S citizen.

All respondents born outside the United States were asked for the year in which they came to live in the United States. This includes people born in Puerto Rico and U.S. Island Areas; people born abroad of an U.S. citizen parent or parents; and the foreign born. (See "Citizenship Status.") For the Puerto Rico Community Survey, respondents were asked for the year in which they came to live in Puerto Rico.

The responses to this question indicate when persons born outside of the U.S. came to live in the United States.

Question/Concept History – Since 1996, the year of entry questions for the ACS and for the Puerto Rico Community Survey (PRCS) were identical. An instruction was added beginning in 1999 to "Print numbers in boxes." In 2015, this instruction was changed to "If this person came to live in the United States more than once, print latest year."

Limitation of the Data – Respondents were directed to indicate the year they entered the U.S. "to live" (or "to live" in Puerto Rico, for PRCS). For respondents who entered the U.S. (or entered Puerto Rico for PRCS) multiple times, the interviewers were instructed to request the most recent year of entry. For respondents who entered multiple times and did not ask the

interviewer for clarification or who mailed back the questionnaire without being interviewed in person, it is unclear which year of entry was provided (i.e. first or most recent).

Beginning in 2006, the population in group quarters (GQ) was included in the ACS. Some types of GQ populations may have year of entry distributions that are different from the household population. The inclusion of the GQ population could therefore have a noticeable impact on the year of entry distribution. This is particularly true for areas with substantial GQ populations.

Comparability **–** Year of entry was comparable across ACS years. A note of caution when comparing ACS and Census 2000 year of entry data: Census 2000 represents data collected as of April 1, 2000 and thus the "2000" year of entry category accounts only for the first quarter (Jan-Mar) in 2000. In comparison, the ACS represents data collected throughout the entire year and thus the "2000" year of entry category accounts for the entire year of 2000. For more information, go to http://www.census.gov and enter "Comparing ACS Data" in the search box.

Derived Measures

Census data products include various derived measures, such as medians, means, and percentages, as well as certain rates and ratios. Most derived measures that round to less than 0.1 are shown as zero.

Aggregate

See "Mean."

Average

See "Mean."

Gini Index

The Gini is a measure of how much a distribution varies from a proportionate distribution. A purely proportionate distribution would have every value in the distribution being equal (that is 20% of the values would equal 20% of the aggregate total of all the values). This also is known as "perfect equality" – all households have an equal share of income. An example of a distribution that deviates the most from perfect equality would be have every value except one equal to zero, and one value that would be equal to the nonzero aggregate total for all the values. This also is known as "perfect inequality" – one household has all income.

The Gini ranges from zero (perfect equality) to one (perfect inequality), and it is calculated by measuring the difference between a diagonal line (the purely proportionate distribution) and the distribution of actual values (a Lorenz curve). This measure is presented for household income.

Interpolation

Interpolation is frequently used to calculate medians, quartiles, or quintiles and to approximate standard errors from tables based on interval data. Different kinds of interpolation may be used to estimate the value of a function between two known values, depending on the form of the distribution. The most common distributional assumption is that the data are linear, resulting in linear interpolation.

Mean

This measure represents an arithmetic average of a set of values. It is derived by dividing the sum (or aggregate) of a group of numerical questions by the total number of questions in that group. For example, mean household earnings is obtained by dividing the aggregate of all earnings reported by individuals with earnings living in households by the total number of

households with earnings. (Additional information on means and aggregates is included in the separate explanations of many population and housing variables.)

Aggregate. An aggregate is the sum of the values for each of the elements in the universe. For example, aggregate household income is the sum of the incomes of all households in a given geographic area. Means are derived by dividing the aggregate by the appropriate universe. When an aggregate used as a numerator is rounded in the detailed (base) tables, the rounded value is used for the calculation of the mean.

Rounding for selected aggregates. To protect the confidentiality of responses, the aggregates shown in matrices for the list of subjects below are rounded. This means that the aggregates for these subjects, except for travel time to work, are rounded to the nearest hundred dollars. Unless special rounding rules apply (see below); $150 rounds up to $200; $149 rounds down to $100; $100 stays $100 unless otherwise noted. Note that each cell in a matrix is rounded individually. This means that an aggregate value shown for the United States may not necessarily be the sum total of the aggregate values in the matrices for the states. This also means that the cells in the aggregate matrices may not add to the total and/or subtotal lines.

Special rounding rules for aggregates.

- If the dollar value is –$99 through +$99, then the dollar value is rounded to $0.
- If the dollar value is less than –$100, then the dollar value is rounded to the nearest -$100.
- If the dollar value is $100 or -$100, do not change the value.

<u>Aggregates Subject to Rounding:</u>

Contract Rent, Rent Asked
Earnings in the Past 12 Months (Households)
Earnings in the Past 12 Months (Individuals)
Gross Rent*
Income Deficit in the Past 12 Months (Families)
Income Deficit in the Past 12 Months Per Family Member
Income Deficit in the Past 12 Months Per Unrelated Individual
Income in the Past 12 Months (Household/Family/Nonfamily Household)
Income in the Past 12 Months (Individuals)
Mobile Home Costs
Real Estate Taxes (Per $1,000 Value)
Rent Asked
Selected Monthly Owner Costs* by Mortgage Status
Total Mortgage Payment
Travel Time to Work**
Type of Income in the Past 12 Months (Households)
Value, Price Asked

[***Note:** Gross Rent and Selected Monthly Owner Costs include other aggregates that also are subject to rounding. For example, Gross Rent includes aggregates of payments for "contract rent" and the "costs of utilities and fuels." Selected Monthly Owner Costs includes aggregates of payments for "mortgages, deeds of trust, contracts to purchase, or similar debts on the property (including payments for the first mortgage, second mortgage, home equity loans, and other junior mortgages); real estate taxes; fire, hazard, and flood insurance on the property, and the costs of utilities and fuels."]
[****Note:** Aggregate Travel Time to Work is zero if the aggregate is zero, is rounded to 4 minutes if the aggregate is 1 to 7 minutes, and is rounded to the nearest multiple of 5 minutes for all other values (if the aggregate is not already evenly divisible by 5).]

Median

This measure represents the middle value (if n is odd) or the average of the two middle values (if n is even) in an ordered list of n data values. The median divides the total frequency distribution into two equal parts: one-half of the cases falling below the median and one-half above the median. Each median is calculated using a standard distribution (see below). (For more information, see "Interpolation.")

For data products displayed in American FactFinder, medians that fall in the upper-most category of an open-ended distribution will be shown with a plus symbol (+) appended (e.g., "$2,000+" for contract rent), and medians that fall in the lowest category of an open-ended distribution will be shown with a minus symbol (-) appended (e.g., "$100- for contract rent"). For other data products and data files that are downloaded by users (i.e., FTP files), plus and minus signs will not be appended. Contract Rent, for example will be shown as $2001 if the median falls in the upper-most category ($2,000 or more) and $99 if the median falls in the lowest category (Less than $100). (The "Median Standard Distributions" section in Appendix A shows the open-ended intervals for medians.)

Standard Distributions. In order to provide consistency in the values within and among data products, standard distributions from which medians and quartiles are calculated are used for the American Community Survey (ACS). The ACS "Median Standard Distributions" are listed in Appendix A.

Percentage

This measure is calculated by taking the number of questions in a group possessing a characteristic of interest and dividing by the total number of questions in that group, and then multiplying by 100.

Quartile

This measure divides a distribution into four equal parts. The first quartile (or lower quartile) is the value that defines the upper limit of the lowest one-quarter of the cases. The second

quartile is the median. The third quartile (or upper quartile) is defined as the upper limit of the lowest three quarters of cases in the distribution. Quartiles are presented for certain financial characteristics such as housing value and contract rent. The distribution used to compute quartiles is the same as that used to compute medians for that variable.

Quintile

This measure divides a distribution into five equal parts. The first quintile (or lowest quintile) is the value that defines the upper limit of the lowest one-fifth of the cases. The second quintile is the 40th percentile. The third quintile is the 60th percentile. The fourth quintile is defined as the upper limit of the lowest four fifths of cases in the distribution, or the 80th percentile. Quintiles are presented for household incomes.

Rate

This is a measure of occurrences in a given period of time divided by the possible number of occurrences during that period. For example, the homeowner vacancy rate is calculated by dividing the number of vacant units "for sale only" by the sum of owner-occupied units and vacant units that are "for sale only," and then multiplying by 100. Rates are sometimes presented as percentages.

Ratio

This is a measure of the relative size of one number to a second number expressed as the quotient of the first number divided by the second. For example, the sex ratio is calculated by dividing the total number of males by the total number of females, and then multiplying by 100.

Quality Measures

General Information

Measures describing the quality of the American Community Survey (ACS) sample and the data collected by the ACS – including sample sizes, coverage rates, and response rates – are available for 2000 through the current data year on the ACS web page, at http://www.census.gov/acs/www/methodology/sample_size_and_data_quality. The quality measures illustrate the steps the Census Bureau takes to ensure that ACS survey data are accurate and reliable.

Since 2007, the quality measures have also been available through American FactFinder in the B98* series of Detailed Tables. Go to http://factfinder.census.gov and select "Advanced Search" to enter the table number.

Beginning in 2018, quality measures available since 2010 are available through data.census.gov. Go to data.census.gov and enter "B98" for the full list or a specific table ID in the search box.

Sample Size

Initially Selected Housing Unit Addresses – The number of addresses in each state and for the nation that were selected for the ACS sample for a particular year. Each year's sample is systematically divided into 12 monthly samples for ACS interviewing. This initial number includes addresses later determined to be commercial or nonexistent, as well as housing units that are not interviewed due to subsampling for personal visit follow-up, refusals, or other reasons.

Housing Unit Final Interviews – The final number of interviews across all three modes of data collection for the ACS in a given year. This number **includes** occupied and vacant housing units that were interviewed by internet, mail, telephone, or personal visit methods between January 1 - December 31. It **excludes** addresses determined to be nonexistent or commercial, and addresses not selected in the subsample for personal visit follow-up, and addresses that are not interviewed due to refusals or other reasons.

Group Quarters Person Initial Sample Selected – The number of people living in GQs that could be contacted for ACS interviewing in a given year for a given geographic area. Each year's sample is systematically divided into 12 monthly samples for ACS interviewing. This initial number includes people thought to be in group quarters that were later determined to be out of scope or nonexistent, as well as people not interviewed due to the group quarter refusing entry, the person refusing to respond, or other reasons.

Group Quarters People Final Actual Interviews – The final number of actual person interviews for the ACS for those living in group quarters in a given year for a given geographic area.

Group Quarters People Synthetic Final Interviews - The final number of synthetic person interviews for the ACS in a given year, for the nation and by state. See the Group Quarters section for more information.

Coverage Rates

There are two kinds of coverage error: under-coverage and over-coverage. Under-coverage exists when housing units or people do not have a chance of being selected in the sample. Over-coverage exists when housing units or people have more than one chance of selection in the sample, or are included in the sample when they should not have been. If the characteristics of under-covered or over-covered housing units or individuals differ from those that are selected, the ACS may not provide an accurate picture of the population.

The coverage rates measure coverage error in the ACS. The coverage rate is the ratio of the ACS population or housing estimate of an area or group to the independent estimate for that area or group, times 100.

Coverage rates for the total resident population are calculated by sex at the national, state, and Puerto Rico levels, and at the national level only for total Hispanics, and non-Hispanics crossed by the five major race categories: White, Black, American Indian and Alaska Native, Asian, and Native Hawaiian and Other Pacific Islander. The total resident population includes persons in both housing units and group quarters. In addition, a coverage rate that includes only the group quarters population is calculated at the national level. Coverage rates for housing units are calculated at the national and state level, except for Puerto Rico because independent housing unit estimates are not available for Puerto Rico. These rates are weighted to reflect the probability of selection into the sample, the subsampling for personal visit follow-up, and non-response adjustment.

Response Rates

The survey response rate is the ratio of the estimate of units interviewed after data collection is complete to the estimate of all units that should have been interviewed. Separate rates are calculated for housing unit response and GQ person response. For housing units, this means all interviews after mail, Internet, telephone and personal visit follow-up. For GQ persons, this means all interviews after the personal visit. Interviews include complete and partial interviews with enough information to be processed.

All final noninterviews have been grouped into one of the following Reasons for Noninterviews:

Refusal: Even though the ACS is a mandatory survey and households whose addresses are selected and GQ persons who are selected for the survey are required to answer the survey questions, a few are reluctant to cooperate and refuse to participate.

Unable to Locate: If the interviewer cannot find the sample address after using all possible sources, they consider it "unable to locate." For GQ persons, the individual could not be located.

No One Home: Interviewers assign this code if they could not find anyone at the housing unit during the entire month's interview period. There is no equivalent rate for GQ persons.

Temporarily Absent: The interviewers confirm that all household members or the GQ person are away during the entire month's interview period on vacation, a business trip, or caring for sick relatives.

Language Problem: The interviewer could not conduct an interview because of language barriers, was not able to get an interpreter who could translate, and the supervisor or regional office could not help complete this case.

Insufficient Data: To be considered an interviewed unit in ACS, a household or GQ person's response needs to have a minimum amount of data. Occupied housing units and GQ persons not meeting this minimum are treated as noninterviews in the estimation process. Responses for vacant housing units are not subject to a minimum data requirement.

Maximum Contact Attempts Reached: This is a new category introduced in 2016 due to a change in the housing unit personal interviewing process. After the maximum number of contact attempts across all data collection mode has been reached, the interviewer discontinues follow-up attempts for the case.

Other: Unique situations when the reason for noninterview does not fit into one of the classifications described above. Possible reasons include "death in the family," "household quarantined," or "roads impassable."

Whole GQ Refusal: Some group quarters refuse to allow the ACS to interview any of their residents, citing legal or other reasons.

Whole GQ Other: These account for other situations where no one in the GQ was interviewed due to reasons other than refusals.

Allocation Rates

Missing data for a particular question or item is called item nonresponse. It occurs when a respondent fails to provide an answer to a required item. The ACS also considers invalid answers as item nonresponse. The Census Bureau uses imputation methods that either use rules to determine acceptable answers or use answers from similar housing units or people

who provided the item information. One type of imputation, allocation, involves using statistical procedures, such as within-household or nearest neighbor matrices populated by donors, to impute for missing values.

Overall Person Characteristic Allocation Rate – This rate is calculated by adding together the weighted number of allocated items across a set of person characteristics, and dividing by the total weighted number of responses across the same set of characteristics.

Overall Housing Characteristic Allocation Rate – This rate is calculated by adding together the weighted number of allocated items across a set of household and housing unit characteristics, and dividing by the total weighted number of responses across the same set of characteristics.

These rates give an overall picture of the rate of item nonresponse for a geographic area.

Appendix A

Field of Degree Classification

Five-Group Classification	Fifteen-Group Classification	Examples
Science and Engineering	Computers, Mathematics and Statistics	Computer Science, Mathematics, General Statistics
	Biological, Agricultural, and Environmental Sciences	Cellular and Molecular Biology, Soil Sciences, Natural Resource Management
	Physical and Related Sciences	Physics, Organic Chemistry, Astronomy
	Psychology	Psychology, Counseling, Child Psychology
	Social Sciences	Criminology, Sociology, Political Science
	Engineering	Chemical Engineering, Thermal Engineering, Electrical Engineering
	Multidisciplinary Studies	Nutritional Science, Cognitive Science, Behavioral Science
Science and Engineering Related	Science and Engineering Related	Pre-Med, Physical Therapy, Mechanical Engineering Technology
Business	Business	Business Administration, Accounting, Human Resources Development
Education	Education	Early Childhood Education, Higher Education Administration, Special Education
Arts, Humanities, and Other	Literature and Languages	English, Foreign Language and Literature, Spanish
	Liberal Arts and History	Philosophy, Theology, American History
	Visual and Performing Arts	Interior Design, Dance, Voice
	Communications	Mass Communications, Journalism, Public Relations
	Other	Public Administration, Pre-law, Kinesiology

Four and Forty-Two Group Classifications of Languages Spoken at Home with Examples

Four Group Classification	Forty-Two Group Classification	Examples
Spanish	Spanish	Spanish, Ladino
Other Indo-European languages	French (incl. Cajun)	French, Cajun
	Haitian	Haitian
	Italian	Italian
	Portuguese	Portuguese, Kabuverdianu
	German	German, Luxembourgian
	Yiddish, Pennsylvania Dutch or other West Germanic languages	Yiddish, Dutch
	Greek	Greek
	Russian	Russian
	Polish	Polish
	Serbo-Croatian	Serbo-Croatian, Croatian, Serbian
	Ukrainian or other Slavic languages	Czech, Slovak, Ukrainian
	Armenian	Armenian
	Persian (incl. Farsi, Dari)	Iranian Persian (Farsi), Dari
	Gujarati	Gujarati
	Hindi	Hindi
	Urdu	Urdu
	Punjabi	Punjabi
	Bengali	Bengali
	Nepali, Marathi, or other Indic languages	Nepali, Marathi, Konkani
	Other Indo-European languages	Albanian, Lithuanian, Pashto, Romanian, Swedish
	Telugu	Telugu
	Tamil	Tamil
	Malayalam, Kannada, or other Dravidian languages	Malayalam, Kannada
Asian and Pacific Island languages	Chinese (incl. Mandarin, Cantonese)	Mandarin Chinese, Min Nan Chinese (incl. Taiwanese), Yue Chinese (Cantonese)
	Japanese	Japanese
	Korean	Korean

	Hmong	Hmong
	Vietnamese	Vietnamese
	Khmer	Central Khmer (Cambodian)
	Thai, Lao, or other Tai-Kadai languages	Thai, Lao
	Other languages of Asia	Burmese, Tibetan, Turkish
	Tagalog (incl. Filipino)	Tagalog, Filipino
	Ilocano, Samoan, Hawaiian, or other Austronesian languages	Hawaiian, Cebuano (Bisayan), Iloko (Ilocano), Samoan, Indonesian
All other languages	Navajo	Navajo
	Other Native languages of North America	Apache languages, Cherokee, Dakota languages, Tohono O'odham
	Arabic	Arabic
	Hebrew	Hebrew
	Amharic, Somali, or other Afro-Asiatic languages	Amharic, Chaldean Neo-Aramaic, Somali, Tigrinya
	Yoruba, Twi, Igbo, or other languages of Western Africa	Akan (incl. Fanti, Twi), Igbo (Ibo), Wolof, Yoruba
	Swahili or other languages of Central, Eastern, and Southern Africa	Bantu languages, Lingala, Swahili
	Other and unspecified languages	Hungarian, Jamaican Creole English, Unspecified

Poverty Factors

The 2018 Poverty Factors:

Interview Month	Poverty Factors
January	2.53985
February	2.54419
March	2.548884
April	2.553381
May	2.55901
June	2.56493
July	2.571
August	2.57724
September	2.58296
October	2.58781
November	2.59318
December	2.59782

Poverty Thresholds

Poverty Thresholds in 1982, by Size of Family and Number of Related Children Under 18 Years Old (Dollars)

Size of family unit	Related children under 18 years								
	None	One	Two	Three	Four	Five	Six	Seven	Eight or more
One person (unrelated individual)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Under 65 years	5,019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
65 years and over	4,626	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Two persons	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Householder under 65 years	6,459	6,649	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Householder 65 years and over	5,831	6,624	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Three persons	7,546	7,765	7,772	N/A	N/A	N/A	N/A	N/A	N/A
Four persons	9,950	10,112	9,783	9,817	N/A	N/A	N/A	N/A	N/A
Five persons	11,999	12,173	11,801	11,512	11,336	N/A	N/A	N/A	N/A
Six persons	13,801	13,855	13,570	13,296	12,890	12,649	N/A	N/A	N/A
Seven persons	15,879	15,979	15,637	15,399	14,955	14,437	13,869	N/A	N/A
Eight persons or more	17,760	17,917	17,594	17,312	16,911	16,403	15,872	15,738	N/A
Nine persons or more	21,364	21,468	21,183	20,943	20,549	20,008	19,517	19,397	18,649

Source: U.S. Census Bureau

Race Combinations

Two or More Races (57 Possible Specified Combinations)

1. White; Black or African American
2. White; American Indian and Alaska Native
3. White; Asian
4. White; Native Hawaiian and Other Pacific Islander
5. White; Some Other Race
6. Black or African American; American Indian and Alaska Native
7. Black or African American; Asian
8. Black or African American; Native Hawaiian and Other Pacific Islander
9. Black or African American; Some Other Race
10. American Indian and Alaska Native; Asian
11. American Indian and Alaska Native; Native Hawaiian and Other Pacific Islander
12. American Indian and Alaska Native; Some other race
13. Asian; Native Hawaiian and Other Pacific Islander
14. Asian; Some Other Race
15. Native Hawaiian and Other Pacific Islander; Some Other Race
16. White; Black or African American; American Indian and Alaska Native
17. White; Black or African American; Asian
18. White; Black or African American; Native Hawaiian and Other Pacific Islander
19. White; Black or African American; Some Other Race
20. White; American Indian and Alaska Native; Asian
21. White; American Indian and Alaska Native; Native Hawaiian and Other Pacific Islander
22. White; American Indian and Alaska Native; Some Other Race
23. White; Asian; Native Hawaiian and Other Pacific Islander
24. White; Asian; Some Other Race
25. White; Native Hawaiian and Other Pacific Islander; Some Other Race
26. Black or African American; American Indian and Alaska Native; Asian
27. Black or African American; American Indian and Alaska Native; Native Hawaiian and Other Pacific Islander
28. Black or African American; American Indian and Alaska Native; Some Other Race
29. Black or African American; Asian; Native Hawaiian and Other Pacific Islander
30. Black or African American; Asian; Some Other Race
31. Black or African American; Native Hawaiian and Other Pacific Islander; Some Other Race
32. American Indian and Alaska Native; Asian; Native Hawaiian and Other Pacific Islander
33. American Indian and Alaska Native; Asian; Some Other Race
34. American Indian and Alaska Native; Native Hawaiian and Other Pacific Islander; Some Other Race
35. Asian; Native Hawaiian and Other Pacific Islander; Some Other Race
36. White; Black or African American; American Indian and Alaska Native; Asian
37. White; Black or African American; American Indian and Alaska Native; Native Hawaiian and Other Pacific Islander

38. White; Black or African American; American Indian and Alaska Native; Some Other Race
39. White; Black or African American; Asian; Native Hawaiian and Other Pacific Islander
40. White; Black or African American; Asian; Some Other Race
41. White; Black or African American; Native Hawaiian and Other Pacific Islander; Some Other Race
42. White; American Indian and Alaska Native; Asian; Native Hawaiian and Other Pacific Islander
43. White; American Indian and Alaska Native; Asian; Some Other Race
44. White; American Indian and Alaska Native; Native Hawaiian and Other Pacific Islander; Some other race
45. White; Asian; Native Hawaiian and Other Pacific Islander; Some Other Race
46. Black or African American; American Indian and Alaska Native; Asian; Native Hawaiian and Other Pacific Islander
47. Black or African American; American Indian and Alaska Native; Asian; Some Other Race
48. Black or African American; American Indian and Alaska Native; Native Hawaiian and Other Pacific Islander; Some Other Race
49. Black or African American; Asian; Native Hawaiian and Other Pacific Islander; Some Other Race
50. American Indian and Alaska Native; Asian; Native Hawaiian and Other Pacific Islander; Some Other Race
51. White; Black or African American; American Indian and Alaska Native; Asian; Native Hawaiian and Other Pacific Islander
52. White; Black or African American; American Indian and Alaska Native; Asian; Some Other Race
53. White; Black or African American; American Indian and Alaska Native; Native Hawaiian and Other Pacific Islander; Some Other Race
54. White; Black or African American; Asian; Native Hawaiian and Other Pacific Islander; Some Other Race
55. White; American Indian and Alaska Native; Asian; Native Hawaiian and Other Pacific Islander; Some Other Race
56. Black or African American; American Indian and Alaska Native; Asian; Native Hawaiian and Other Pacific Islander; Some Other Race
57. White; Black or African American; American Indian and Alaska Native; Asian; Native Hawaiian and Other Pacific Islander; Some Other Race

Median Standard Distributions

In order to provide consistency in the values within and among data products, standard distributions from which medians and quartiles are calculated are used for the American Community Survey.

Standard Distribution for **Median Age**:
[116 data cells]

Under 1 year
1 year
2 years
3 years
4 years
5 years
.
.
.
112 years
113 years
114 years
115 years and over

Standard Distribution for **Median Agricultural Crop Sales**:
[5 data cells]

Less than $1,000
$1,000 to $2,499
$2,500 to $4,999
$5,000 to $9,999
$10,000 or more

Standard Distribution for **Median Bedrooms**:
[9 data cells]

No bedroom
1 bedroom
2 bedrooms
3 bedrooms
4 bedrooms
5 bedrooms
6 bedrooms
7 bedrooms
8 or more bedrooms

Standard Distribution for **Median Condominium Fees**:
[15 data cells]

Less than $50
$50 to $99
$100 to $199
$200 to $299
$300 to $399
$400 to $499
$500 to $599
$600 to $699
$700 to $799
$800 to $899
$900 to $999
$1,000 to $1,249
$1,250 to $1,499
$1,500 to $1,749
$1,750 or more

Standard Distribution for **Median Contract Rent/Quartile Contract Rent/Rent Asked/Gross Rent**:
[24 data cells]

Less than $100
$100 to $149
$150 to $199
$200 to $249
$250 to $299
$300 to $349
$350 to $399
$400 to $449
$450 to $499
$500 to $549
$550 to $599
$600 to $649
$650 to $699
$700 to $749
$750 to $799
$800 to $899
$900 to $999
$1,000 to $1,249
$1,250 to $1,499
$1,500 to $1,999
$2,000 to $2,499
$2,500 to $2,999
$3,000 to $3,499

$3,500 or more

Standard Distribution for **Duration of Current Marriage**:
[101 data cells]

Under 1 year
1 year
2 years
3 years
4 years
5 years
.
.
.
97 years
98 years
99 years
100 years and over

Standard Distribution for **Median Earnings and Median Income (Individuals)**:
[101 data cells]

Less than $2,500
$2,500 to $4,999
$5,000 to $7,499
$7,500 to $9,999
$10,000 to $12,499
$12,500 to $14,999
$15,000 to $17,499
$17,500 to $19,999
$20,000 to $22,499
$22,500 to $24,999
$25,000 to $27,499
$27,500 to $29,999
$30,000 to $32,499
$32,500 to $34,999
$35,000 to $37,499
$37,500 to $39,999
$40,000 to $42,499
$42,500 to $44,999
$45,000 to $47,499
$47,500 to $49,999
$50,000 to $52,499
$52,500 to $54,999
$55,000 to $57,499

$57,500 to $59,999
$60,000 to $62,499
$62,500 to $64,999
$65,000 to $67,499
$67,500 to $69,999
$70,000 to $72,499
$72,500 to $74,999
$75,000 to $77,499
$77,500 to $79,999
$80,000 to $82,499
$82,500 to $84,999
$85,000 to $87,499
$87,500 to $89,999
$90,000 to $92,499
$92,500 to $94,999
$95,000 to $97,499
$97,500 to $99,999
$100,000 to $102,499
$102,500 to $104,999
$105,000 to $107,499
$107,500 to $109,999
$110,000 to $112,499
$112,500 to $114,999
$115,000 to $117,499
$117,500 to $119,999
$120,000 to $122,499
$122,500 to $124,999
$125,000 to $127,499
$127,500 to $129,999
$130,000 to $132,499
$132,500 to $134,999
$135,000 to $137,499
$137,500 to $139,999
$140,000 to $142,499
$142,500 to $144,999
$145,000 to $147,499
$147,500 to $149,999
$150,000 to $152,499
$152,500 to $154,999
$155,000 to $157,499
$157,500 to $159,999
$160,000 to $162,499
$162,500 to $164,999
$165,000 to $167,499
$167,500 to $169,999
$170,000 to $172,499

$172,500 to $174,999
$175,000 to $177,499
$177,500 to $179,999
$180,000 to $182,499
$182,500 to $184,999
$185,000 to $187,499
$187,500 to $189,999
$190,000 to $192,499
$192,500 to $194,999
$195,000 to $197,499
$197,500 to $199,999
$200,000 to $202,499
$202,500 to $204,999
$205,000 to $207,499
$207,500 to $209,999
$210,000 to $212,499
$212,500 to $214,999
$215,000 to $217,499
$217,500 to $219,999
$220,000 to $222,499
$222,500 to $224,999
$225,000 to $227,499
$227,500 to $229,999
$230,000 to $232,499
$232,500 to $234,999
$235,000 to $237,499
$237,500 to $239,999
$240,000 to $242,499
$242,500 to $244,999
$245,000 to $247,499
$247,500 to $249,999
$250,000 or more

Standard Distribution for Median **Fire, Hazard, and Flood Insurance**:
[19 data cells]

$0
$1 to $49
$50 to $99
$100 to $149
$150 to $199
$200 to $249
$250 to $299
$300 to $349
$350 to $399
$400 to $449

$450 to $499
$500 to $599
$600 to $699
$700 to $799
$800 to $899
$900 to $999
$1,000 to $1,499
$1,500 to $1,999
$2,000 or more

Standard Distribution for **Median Gross Rent as a Percentage of Household Income**:
[13 data cells]

Less than 10.0 percent
10.0 to 14.9 percent
15.0 to 19.9 percent
20.0 to 24.9 percent
25.0 to 29.9 percent
30.0 to 34.9 percent
35.0 to 39.9 percent
40.0 to 49.9 percent
50.0 to 59.9 percent
60.0 to 69.9 percent
70.0 to 79.9 percent
80.0 to 89.9 percent
90.0 percent or more

Standard Distribution for **Median Income in the Past 12 Months (Household/Family/Nonfamily Household)**:
[101 data cells]

Less than $2,500
$2,500 to $4,999
$5,000 to $7,499
$7,500 to $9,999
$10,000 to $12,499
$12,500 to $14,999
$15,000 to $17,499
$17,500 to $19,999
$20,000 to $22,499
$22,500 to $24,999
$25,000 to $27,499
$27,500 to $29,999
$30,000 to $32,499
$32,500 to $34,999
$35,000 to $37,499

$37,500 to $39,999
$40,000 to $42,499
$42,500 to $44,999
$45,000 to $47,499
$47,500 to $49,999
$50,000 to $52,499
$52,500 to $54,999
$55,000 to $57,499
$57,500 to $59,999
$60,000 to $62,499
$62,500 to $64,999
$65,000 to $67,499
$67,500 to $69,999
$70,000 to $72,499
$72,500 to $74,999
$75,000 to $77,499
$77,500 to $79,999
$80,000 to $82,499
$82,500 to $84,999
$85,000 to $87,499
$87,500 to $89,999
$90,000 to $92,499
$92,500 to $94,999
$95,000 to $97,499
$97,500 to $99,999
$100,000 to $102,499
$102,500 to $104,999
$105,000 to $107,499
$107,500 to $109,999
$110,000 to $112,499
$112,500 to $114,999
$115,000 to $117,499
$117,500 to $119,999
$120,000 to $122,499
$122,500 to $124,999
$125,000 to $127,499
$127,500 to $129,999
$130,000 to $132,499
$132,500 to $134,999
$135,000 to $137,499
$137,500 to $139,999
$140,000 to $142,499
$142,500 to $144,999
$145,000 to $147,499
$147,500 to $149,999
$150,000 to $152,499

$152,500 to $154,999
$155,000 to $157,499
$157,500 to $159,999
$160,000 to $162,499
$162,500 to $164,999
$165,000 to $167,499
$167,500 to $169,999
$170,000 to $172,499
$172,500 to $174,999
$175,000 to $177,499
$177,500 to $179,999
$180,000 to $182,499
$182,500 to $184,999
$185,000 to $187,499
$187,500 to $189,999
$190,000 to $192,499
$192,500 to $194,999
$195,000 to $197,499
$197,500 to $199,999
$200,000 to $202,499
$202,500 to $204,999
$205,000 to $207,499
$207,500 to $209,999
$210,000 to $212,499
$212,500 to $214,999
$215,000 to $217,499
$217,500 to $219,999
$220,000 to $222,499
$222,500 to $224,999
$225,000 to $227,499
$227,500 to $229,999
$230,000 to $232,499
$232,500 to $234,999
$235,000 to $237,499
$237,500 to $239,999
$240,000 to $242,499
$242,500 to $244,999
$245,000 to $247,499
$247,500 to $249,999
$250,000 or more

Standard Distribution for **Median Monthly Housing Costs**:
[30 cells]

Less than $100
$100 to $149

$150 to $199
$200 to $249
$250 to $299
$300 to $349
$350 to $399
$400 to $449
$450 to $499
$500 to $549
$550 to $599
$600 to $649
$650 to $699
$700 to $749
$750 to $799
$800 to $899
$900 to $999
$1,000 to $1,249
$1,250 to $1,499
$1,500 to $1,749
$1,750 to $1,999
$2,000 to $2,499
$2,500 to $2,999
$3,000 to $3,499
$3,500 to $3,999
$4,000 to $4,499
$4,500 to $4,999
$5,000 to $5,499
$5,500 to $5,999
$6,000 or more

Standard Distribution for **Median Real Estate Taxes Paid**:
[14 data cells]

Less than $200
$200 to $299
$300 to $399
$400 to $599
$600 to $799
$800 to $999
$1,000 to $1,499
$1,500 to $1,999
$2,000 to $2,999
$3,000 to $3,999
$4,000 to $4,999
$5,000 to $7,499
$7,500 to $9,999
$10,000 or more

Standard Distribution for **Median Rooms**:
[14 data cells]

1 room
2 rooms
3 rooms
4 rooms
5 rooms
6 rooms
7 rooms
8 rooms
9 rooms
10 rooms
11 rooms
12 rooms
13 rooms
14 or more rooms

Standard Distribution for **Median Selected Monthly Owner Costs/Median Selected Monthly Owner Costs by Mortgage Status (With a Mortgage)**:
[23 data cells]

Less than $100
$100 to $199
$200 to $299
$300 to $399
$400 to $499
$500 to $599
$600 to $699
$700 to $799
$800 to $899
$900 to $999
$1,000 to $1,249
$1,250 to $1,499
$1,500 to $1,749
$1,750 to $1,999
$2,000 to $2,499
$2,500 to $2,999
$3,000 to $3,499
$3,500 to $3,999
$4,000 to $4,499
$4,500 to $4,999
$5,000 to $5,499
$5,500 to $5,999
$6,000 or more

Standard Distribution for **Median Selected Monthly Owner Costs by Mortgage Status (Without a Mortgage)**:
[17 data cells]

Less than $100
$100 to $149
$150 to $199
$200 to $249
$250 to $299
$300 to $349
$350 to $399
$400 to $499
$500 to $599
$600 to $699
$700 to $799
$800 to $899
$900 to $999
$1,000 to $1,249
$1,250 to $1,499
$1,500 to $1,999
$2,000 or more

Standard Distribution for **Median Selected Monthly Owner Costs as a Percentage of Household Income by Mortgage Status**:
[13 data cells]

Less than 10.0 percent
10.0 to 14.9 percent
15.0 to 19.9 percent
20.0 to 24.9 percent
25.0 to 29.9 percent
30.0 to 34.9 percent
35.0 to 39.9 percent
40.0 to 49.9 percent
50.0 to 59.9 percent
60.0 to 69.9 percent
70.0 to 79.9 percent
80.0 to 89.9 percent
90.0 percent or more

Standard Distribution for **Median Total Mortgage Payment**:
[21 data cells]

Less than $100

$100 to $199
$200 to $299
$300 to $399
$400 to $499
$500 to $599
$600 to $699
$700 to $799
$800 to $899
$900 to $999
$1,000 to $1,249
$1,250 to $1,499
$1,500 to $1,749
$1,750 to $1,999
$2,000 to $2,499
$2,500 to $2,999
$3,000 to $3,499
$3,500 to $3,999
$4,000 to $4,499
$4,500 to $4,999
$5,000 or more

Standard Distribution for **Median Usual Hours Worked Per Week Worked in the Past 12 Months**:
[9 data cells]

Usually worked 50 to 99 hours per week
Usually worked 45 to 49 hours per week
Usually worked 41 to 44 hours per week
Usually worked 40 hours per week
Usually worked 35 to 39 hours per week
Usually worked 30 to 34 hours per week
Usually worked 25 to 29 hours per week
Usually worked 15 to 24 hours per week
Usually worked 1 to 14 hours per week

Standard Distribution for **Median Value/Quartile Value/Price Asked**:
[28 data cells]

Less than $10,000
$10,000 to $14,999
$15,000 to $19,999
$20,000 to $24,999
$25,000 to $29,999
$30,000 to $34,999
$35,000 to $39,999
$40,000 to $49,999

$50,000 to $59,999
$60,000 to $69,999
$70,000 to $79,999
$80,000 to $89,999
$90,000 to $99,999
$100,000 to $124,999
$125,000 to $149,999
$150,000 to $174,999
$175,000 to $199,999
$200,000 to $249,999
$250,000 to $299,999
$300,000 to $399,999
$400,000 to $499,999
$500,000 to $749,999
$750,000 to $999,999
$1,000,000 to $1,249,999
$1,250,000 to $1,499,999
$1,500,000 to $1,749,999
$1,750,000 to $1,999,999
$2,000,000 or more

Standard Distribution for **Median Vehicles Available**:
[6 data cells]

No vehicle available
1 vehicle available
2 vehicles available
3 vehicles available
4 vehicles available
5 or more vehicles available

Standard Distribution for **Median Year Householder Moved Into Unit**:
[21 data cells]

Moved in 2016
Moved in 2015
Moved in 2014
Moved in 2013
Moved in 2012
Moved in 2011
Moved in 2010
Moved in 2009
Moved in 2008
Moved in 2007
Moved in 2006
Moved in 2005

Moved in 2004
Moved in 2003
Moved in 2002
Moved in 2001
Moved in 2000
Moved in 1990 to 1999
Moved in 1980 to 1989
Moved in 1970 to 1979
Moved in 1969 or earlier

Standard Distribution for **Median Year Structure Built**:
[24 data cells]
Built in 2016
Built in 2015
Built in 2014
Built in 2013
Built in 2012
Built in 2011
Built in 2010
Built in 2009
Built in 2008
Built in 2007
Built in 2006
Built in 2005
Built in 2004
Built in 2003
Built in 2002
Built in 2001
Built in 2000
Built 1990 to 1999
Built 1980 to 1989
Built 1970 to 1979
Built 1960 to 1969
Built 1950 to 1959
Built 1940 to 1949
Built 1939 or earlier