



Data Variables in the Census & ACS

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Let's take an in-depth look at the data variables available in the Decennial Censuses and the American Community Survey.

ACS & Census Content

<u>Demographic *</u>	<u>Social</u>	<u>Economic</u>	<u>Housing</u>
Sex Age Race Hispanic Origin Household Relationship Group Quarters	Families * Education Marital Status Fertility Grandparents Veterans Disability Status Language at Home Citizenship Migration	Income Poverty Benefits – Food Stamps/SNAP Employment Status Occupation Industry Journey to Work Place of Work Health Insurance	Tenure * Occupancy * Structure Type Housing Value Taxes & Insurance Utilities Mortgage Monthly Rent

Items with an “*” and in red were collected in the 2010 Census and the ACS.

You can see that most of these variables are familiar.

Those with an asterisk “*” and in red are collected in both the ACS and the 2010 Census. If you need only these characteristics, it is better to use the Census right now since we are so close to the census date.

Items in blue are only collected in the ACS

Watch the Table “Universe”

- ▶ Every data table has a “universe” that reflects what the data in the table represent.
- ▶ It is important to know the table universe to correctly interpret the data in the table.
- ▶ In each table, the “Total” is the total count of the universe, not the total population for the area.

- ▶ Universe Examples:

B17001 – POVERTY STATUS IN THE PAST 12 MONTHS BY SEX BY AGE

Universe: Population for whom poverty status is determined

B18120 – EMPLOYMENT STATUS BY DISABILITY STATUS AND TYPE

Universe: Civilian noninstitutionalized population 18 to 64 years

B25047 – PLUMBING FACILITIES FOR ALL HOUSING UNITS

Universe: Housing units

Total Population

- ▶ The total population in the ACS is the estimates population of the geographic area. For states and counties, the total population is controlled to the Population Estimates Program (PEP) estimates from the US Census Bureau. www.census.gov/popest/
- ▶ The total population estimates from the Demographic Research Unit will be different due to methodology, assumptions, and time period. www.dof.ca.gov/research/demographic/
- ▶ The total population counts from the 2010 Census is an actual count, not an estimate. For small levels of geography, the census is your best choice for total population.

Which source you use depends on your purpose and the need for current data.

Age and Sex

- ▶ Sex – Male and Female only choices.
- ▶ Age – Asked in two parts: your age and your birthday.

7. What is Person 1's age and what is Person 1's date of birth?

Please report babies as age 0 when the child is less than 1 year old.

Print numbers in boxes.

Age on April 1, 2010

Month

Day

Year of birth

Respondents sometimes round a person's age up if they were close to having a birthday. For most single years of age, the misstatements are largely offsetting. The problem is most pronounced at age 0. Also, there may have been more rounding up to age 1 to avoid reporting age as 0 years. (Age in completed months was not collected for infants under age 1.) Editing procedures correct this problem.

Age heaping is a common age misreporting error. Age heaping is the tendency for people to overreport ages (or years of birth) that end in certain digits (commonly digits "0" or "5") and underreport ages or years of birth ending in other digits. The two-part question helps minimize the effect of age heaping on the final tabulations.

Race Question

9. What is Person 1's race? Mark one or more boxes.

- White
- Black, African Am., or Negro
- American Indian or Alaska Native — *Print name of enrolled or principal tribe.* ↴

- | | | |
|---|-------------------------------------|--|
| <input type="checkbox"/> Asian Indian | <input type="checkbox"/> Japanese | <input type="checkbox"/> Native Hawaiian |
| <input type="checkbox"/> Chinese | <input type="checkbox"/> Korean | <input type="checkbox"/> Guamanian or Chamorro |
| <input type="checkbox"/> Filipino | <input type="checkbox"/> Vietnamese | <input type="checkbox"/> Samoan |
| <input type="checkbox"/> Other Asian — <i>Print race, for example, Hmong, Laotian, Thai, Pakistani, Cambodian, and so on.</i> ↴ | | <input type="checkbox"/> Other Pacific Islander — <i>Print race, for example, Fijian, Tongan, and so on.</i> ↴ |

- Some other race — *Print race.* ↴

Note the three fill-ins.

Note that Hispanic is NOT one of the choices for race.

Race

- ▶ 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.
- ▶ People may select more than one race to indicate their racial mixture, such as “American Indian” and “White.”
- ▶ The ability to select more than one race was introduced in the 2000 census. Therefore, race counts for 2000 and 2010 are not directly comparable to counts for the 1990 census and earlier.
- ▶ Hispanic is an ethnicity, NOT a race.
- ▶ Data are usually reported for 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)

7

The actual race categories required are stipulated by the U.S. Office of Management and Budget

Race “Alone”

- ▶ People who reported a single entry (e.g., Korean or Black) and no other race.
- ▶ People who reported two or more entries within the same major race group (e.g., Asian). For example, respondents who reported Korean and Vietnamese are part of the larger “Asian alone” race group.
- ▶ Data tables will include “alone” in the name, for example, “White alone” or “Some Other Race alone”.
- ▶ The race “alone” groups will include Hispanics unless specifically labeled “not Hispanic or Latino”. So “White alone” will include Hispanics who are also White but “White alone, not Hispanic or Latino” will not include White Hispanics.

8

Most race tables are for “alone” categories.

Race “Alone or in any combination”

- ▶ People who reported a single race alone (e.g., Asian) **AND** people who reported that race in combination with one or more of the other major race groups.
- ▶ Data tabulations are usually referred to as “tallies”.
- ▶ Represents the maximum number of people who reported as that race group, either alone or in combination with one or more additional race(s).
- ▶ The sum of the six individual race “alone-or-in-combination” categories add to **more than the total population** because people who reported more than one race were tallied in each race category.
- ▶ Applies to detailed race groups, such as American Indian and Alaska Native tribes and detailed Asian and Pacific Islander groups. For example, Korean alone or in any combination includes people who reported a single response (e.g., Korean), people who reported Korean and another Asian group (e.g., Korean and Vietnamese), and people who reported Korean in combination with one or more other non-Asian race groups

9

The concept “*race alone or in combination*” includes people who reported a single race alone (e.g., Asian) and people who reported that race in combination with one or more of the other major race groups (e.g., White, Black or African American, American Indian and Alaska Native, Native Hawaiian and Other Pacific Islander, and Some Other Race). The concept “*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 one or more additional 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.

This also applies to detailed race 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 (e.g., Korean), people who reported Korean and another Asian group (e.g., Korean and Vietnamese), and people who reported Korean in combination with one or more other non-Asian race groups

Race – A Look at the Data

Data for California	Alone	Alone or in combination with one or more other races
Total	37,253,956	39,226,788
White	21,453,934	22,953,374
Black or African American	2,299,072	2,683,914
American Indian and Alaska Native	362,801	723,225
Asian	4,861,007	5,556,592
Native Hawaiian and Other Pacific Islander	144,386	286,145
Some Other Race	6,317,372	7,023,538
Two or More Races	1,815,384	
Source: 2010 Census		

10

When comparing the “alone” with “in combination” notice:

The total populations do not match – combination is higher – because persons with multiple races are counted multiple times.

Hispanic or Latino

- ▶ 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.
- ▶ The wording of the Hispanic question and its position on the questionnaire in relation to the race question have changed over time. However, it has been based on self-identification since the 1980 census.
- ▶ In California, we consider Hispanics as a "race group". Therefore, state programs should use the "not Hispanic" race tabulations. If you do not, you will double count Hispanics.

Race and Hispanic Data

Data for California	Race Alone (Hispanics can be any race)	Pct.	Race Alone, Not Hispanic	Pct.
Total Population	37,253,956	100%	37,253,956	100%
White	21,453,934	57.6%	14,956,253	40.1%
Black or African American	2,299,072	6.2%	2,163,804	5.8%
American Indian and Alaska Native	362,801	1.0%	162,250	0.4%
Asian	4,861,007	13.0%	4,775,070	12.8%
Native Hawaiian and Other Pacific Islander	144,386	0.4%	128,577	0.3%
Some Other Race	6,317,372	17.0%	85,587	0.2%
Two or More Races	1,815,384	4.9%	968,696	2.6%
Hispanics	<i>Already counted above</i>		14,013,719	37.6%
Source: 2010 Census				

13

People who identify their origin as Hispanic, Latino, or Spanish may be any race. So if you use a race table that is not Hispanic exclusive and then add in the Hispanics, you will be double-counting the Hispanics.

In general, programs will use the Hispanic exclusive data unless the program targets a specific group, such as American Indians, then it may be more appropriate to count all Amer Indians, including those also Hispanic.

So if your tables have a total that is higher than the population of the area, ask yourself, "where are the Hispanics?"

Housing Units

- ▶ 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.
- ▶ Classified as Occupied or Vacant
- ▶ Occupied Housing Units are also called “Households”.
- ▶ Nontraditional living quarters such as boats, RVs, and tents are considered to be housing units **only** if someone is living in them and they are either the occupant’s usual residence or the occupant has no usual residence elsewhere.



Group Quarters

- ▶ Group quarters are places where people live or stay in a group living arrangement, which are owned or managed by an entity or organization providing housing and/or services for the residents.
- ▶ People living in group quarters are usually not related to each other.
- ▶ There are two types of GQ:
 - Institutional
 - Noninstitutional

15

Group quarters are places where people live or stay in a group living arrangement, which are owned or managed by an entity or organization providing housing and/or services for the residents. This is not a typical household-type living arrangement. 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 group quarters are usually not related to each other.

Institutional Group Quarters

- ▶ Institutional group quarters are facilities that house those who are primarily ineligible, unable, or unlikely to participate in the labor force while residents.
- ▶ They include:
 - Correctional Facilities for Adults and Juveniles (Federal and state prisons, local jails, military disciplinary facilities)
 - Nursing Facilities/Skilled-Nursing Facilities
 - Mental (psychiatric) hospitals
 - In-patient hospice facilities
 - Residential schools for people with disabilities



16

Although the definition by the Census Bureau refers to participation in the labor force, it may be easier to think of this as the occupants are not free to come and go or need care.

NOTE: Persons in Institutional Group quarters are not included in the poverty universe. So if you are looking at poverty data for the elderly, keep in mind that those in skilled nursing homes are not included.

Noninstitutional Group Quarters

- ▶ Noninstitutional GQ facilities that house those who are primarily eligible, able, or likely to participate in the labor force while residents.
- ▶ They include:
 - College/University Student Housing
 - Military Quarters (barracks and ships)
 - Emergency and transitional shelters (with sleeping facilities) for people experiencing homelessness
 - Residential treatment centers for adults
 - Workers' group living quarters
 - Religious group quarters
 - Domestic violence shelters



17

The Census Bureau is in the process of improving the way the estimate the GQ pop in the ACS. If you need a count by type of GQ, you will need to go to the decennial census.

Household Relationship – Householder

- ▶ A household (HH) includes all the people who occupy a housing unit.
- ▶ The Householder is the person, or one of the people, in whose name the home is owned, being bought, or rented.
- ▶ If there is no such person in the household, any adult household member 15 years old and over could be designated as the householder.
- ▶ This person is entered as Person 1 on the questionnaire.
- ▶ Only one person in each household is designated as the householder.
- ▶ Some tabulations display household/family data by race/ethnicity. Households are classified by the race/ethnicity of the householder.

Household Relationship

- ▶ Each member of the household is asked about their relationship to the householder (Person 1).

2. How is this person related to Person 1? Mark ONE box.

- | | |
|---|--|
| <input type="checkbox"/> Husband or wife | <input type="checkbox"/> Parent-in-law |
| <input type="checkbox"/> Biological son or daughter | <input type="checkbox"/> Son-in-law or daughter-in-law |
| <input type="checkbox"/> Adopted son or daughter | <input type="checkbox"/> Other relative |
| <input type="checkbox"/> Stepson or stepdaughter | <input type="checkbox"/> Roomer or boarder |
| <input type="checkbox"/> Brother or sister | <input type="checkbox"/> Housemate or roommate |
| <input type="checkbox"/> Father or mother | <input type="checkbox"/> Unmarried partner |
| <input type="checkbox"/> Grandchild | <input type="checkbox"/> Other nonrelative |

Household Relationship – Spouse

- ▶ The “spouse” category includes a person identified as the husband or wife of the householder.
- ▶ Must be of the opposite sex of the householder. Unless otherwise specified, data tabulations do not include same-sex spouses even if a marriage was performed in a state issuing marriage certificates for same-sex couples.
- ▶ Same-sex spouses are re-classified to “unmarried partners” which is grouped with non-relatives.



20

The ACS does not have a classification for “registered domestic partners”

Household Relationship – Child



- ▶ The “child” category 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 in-laws and foster children.
- ▶ **Own Children**—A child under 18 years who is a son or daughter by birth, a stepchild, or an adopted child of the householder is included in the “own children” category.
- ▶ **Related Children**—Any child under 18 years old who is related to the householder by birth, marriage, or adoption is included in the “related children” category, such as sibling, grandchild, or niece. Children, by definition, exclude persons under 18 years who maintain households or are spouses or unmarried partners of householders.

21

Own children and related children are frequently used in the data tables.

Household Relationship – Other Relatives

- ▶ **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.
- ▶ **Parent**—The father or mother of the householder, including a stepparent or adoptive parent.
- ▶ **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).

Household Relationship – Nonrelatives

Any household member not related to the householder by birth, marriage, or adoption. Includes:

- ▶ **Roomer or Boarder**—A roomer or boarder is a person who lives in a room in the household of the householder.
- ▶ **Housemate or Roommate**—A housemate or roommate is a person aged 15 years 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 aged 15 years and over who is not related to the householder, who shares living quarters, and who has a close personal relationship with the householder. Responses of “same-sex spouse” are edited into this category.
- ▶ **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.

23

The Census Bureau has released data on same sex households from the 2010 census –

<http://2010.census.gov/news/press-kits/same-sex/20110927-same-sex.html> .

Household Type

- ▶ Households are classified by type according to the sex of the householder and the presence of relatives.
- ▶ Household Type – Family or Nonfamily.
- ▶ A family householder is a householder living with one or more individuals related to him or her by birth, marriage, or adoption. The householder and all people in the household related to him or her are family members.
- ▶ A family must have at least two people.
- ▶ Persons in a family household who are not related to the householder are called unrelated individuals. They are part of the household but not part of the family.
- ▶ A nonfamily household is a householder living alone or with nonrelatives only.

24

Run through some examples:

Man – GF – her child (the woman and her child is a sub-family which is not tabulated separately in the ACS or Census)

Man – GF – his child

Same sex partner household

Household Types

Family households

Husband-wife family

Male householder, no wife present

Female householder, no husband present

Nonfamily households

Male householder

Living alone

Female householder

Living alone



25

Typical types of households in data tabulation.

For some tables, there is also an indication in each Family type about the presence of children by age. <5, 5-17 or <18.

In the family household with no spouse present – this **not necessarily a count of single parents** because the relative to make it a family does not have to be a child.

Look for tabulations by family type that show the number of “own children”. For example P38 in the 2010 Census SF1
NEXT PAGE

Family Type by Presence and Age of Own Children
 (Table P38, 2010 Census Summary File 1)

California	Families
Total:	8,642,473
Husband–wife family:	6,213,310
With own children under 18 years	2,942,803
No own children under 18 years	3,270,507
Other family:	2,429,163
Male householder, no wife present:	752,347
With own children under 18 years	350,838
No own children under 18 years	401,509
Female householder, no husband present:	1,676,816
With own children under 18 years	856,882
No own children under 18 years	819,934

26

In the single householder family – this not necessarily a count of single parents because the relative to make it a family does not have to be a child.

Look for tabulations by family type that show the number of “own children”. For example P38

THIS IS THE END OF THE BASICS WHICH ARE IN BOTH THE ACS AND CENSUS. NOW ONTO THE ACS ONLY – SOCIAL CHARACTERISTICS.

Educational Attainment

Respondents are classified according to the highest degree or the highest level of school completed. Persons currently enrolled in school report the level of the previous grade attended or the highest degree received.

11 What is the highest degree or level of school this person has **COMPLETED**? Mark (X) **ONE** box. If currently enrolled, mark the previous grade or highest degree received.

NO SCHOOLING COMPLETED

No schooling completed

NURSERY OR PRESCHOOL THROUGH GRADE 12

Nursery school

Kindergarten

Grade 1 through 11 – Specify grade 1 – 11

12th grade – **NO DIPLOMA**

HIGH SCHOOL GRADUATE

Regular high school diploma

GED or alternative credential

COLLEGE OR SOME COLLEGE

Some college credit, but less than 1 year of college credit

1 or more years of college credit, no degree

Associate's degree (for example: AA, AS)

Bachelor's degree (for example: BA, BS)

AFTER BACHELOR'S DEGREE

Master's degree (for example: MA, MS, MEng, MEd, MSW, MBA)

Professional degree beyond a bachelor's degree (for example: MD, DDS, DVM, LLB, JD)

Doctorate degree (for example: PhD, EdD)

27

The instructions further specified 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.

Educational Attainment

- ▶ Most tabulations on educational attainment have a universe of persons 25 years old and older. However, Table C15001 in the ACS has a universe of persons 18+.
- ▶ Additional education variables include
 - School enrollment and grade level for population 3 years old and older.
 - Field of degree for Bachelor's degrees only.
 - School type – private/public and elementary/secondary/college/graduate school.



Veteran Status

- ▶ 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. military.
- ▶ 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 initial training or yearly summer camps.
- ▶ ACS data on veterans are restricted to the population 18 years and older.
- ▶ Data available for veterans includes age, sex, period of service, race/ethnicity, employment status, poverty status, educational attainment, and income.
- ▶ In the 2008 ACS, a question was added about Service-Connected Disability Status and Rating. It does not include the type of disability, such as PTSD.



Veteran status is not linked to their discharge status.

These data are used by the Department of Veterans Affairs (VA) to plan the locations and sizes of veterans' cemeteries.

Period of service B21002

Since the service-connected disability status and ratings was added in 2008 it is currently only available in the 1-year and 3-year data files.

Disability Status

- 17** a. Is this person deaf or does he/she have serious difficulty hearing?
- Yes
 No
- b. Is this person blind or does he/she have serious difficulty seeing even when wearing glasses?
- Yes
 No

H Answer question 19 if this person is 15 years old or over. Otherwise, SKIP to the questions for Person 2 on page 12.

- 19** Because of a physical, mental, or emotional condition, does this person have difficulty doing errands alone such as visiting a doctor's office or shopping?
- Yes
 No

G Answer question 18a – c if this person is 5 years old or over. Otherwise, SKIP to the questions for Person 2 on page 12.

- 18** a. Because of a physical, mental, or emotional condition, does this person have serious difficulty concentrating, remembering, or making decisions?
- Yes
 No
- b. Does this person have serious difficulty walking or climbing stairs?
- Yes
 No
- c. Does this person have difficulty dressing or bathing?
- Yes
 No

30

Since the disability status was added in 2008 it is currently only available in the 1-year and 3-year data files. It will be available for all levels of geography in a 5-year file beginning with the 2008-2012 file to be released in late 2013.

Disability Status

- ▶ Beginning in 2008, questions on disability represent a conceptual and empirical break from earlier years of the ACS.
- ▶ Disability status 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. A 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.
- ▶ Identified disabilities and their universe:
 - Hearing difficulty (all ages)
 - Vision difficulty (all ages)
 - Cognitive difficulty (5 years old or older)
 - Ambulatory difficulty (5 years old or older)
 - Self-care difficulty (5 years old or older)
 - Independent living difficulty (18 years old or older)



31

Since the disability status was changed in 2008 it is currently only available in the 1-year and 3-year data files. It will be available for all levels of geography in a 5-year file beginning with the 2008-2012 file to be released in late 2013. Disability data in the ACS from 2008 forward is not comparable with pre-2008 data – including the 2000 census.

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.

Self-identified, no doctor certification

Language Spoken at Home and Ability to Speak English

- ▶ Language is tabulated for persons 5 years old and older.
- ▶ It is important to look at language AND the ability to speak English to accurately determine those individuals that may need translation assistance to participate in a program.

14 a. Does this person speak a language other than English at home?

Yes

No → SKIP to question 15a

b. What is this language?

For example: Korean, Italian, Spanish, Vietnamese

c. How well does this person speak English?

Very well

Well

Not well

Not at all

32

Instructions mailed with the American Community Survey 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, they reported the language spoken most often. If the language spoken most frequently could not be determined, the respondent reported the language learned first.

Table B16001 – 39 languages by ability. Only Vietnamese, Korean, Chinese, Thai, Mon-Khmer & Cambodian, Laotian, and Armenian have 50% or more in each group that do not speak English well.

If someone cannot speak/read English and do not complete their ACS survey, the Census Bureau will send out an enumerator with the language skills or they will be sent the questionnaire instructions in another language.

Income in the Past 12 Months

- ▶ “Total income” is the sum of the amounts reported separately for:
 - Wage or salary income (wages, salary, Armed Forces pay, commissions, tips, piece-rate payments, and cash bonuses)
 - 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
 - All other income (unemployment compensation, worker’s compensation, Department of Veterans Affairs (VA) payments, alimony and child support, etc.)
- ▶ Income includes **cash income** only – noncash benefits such as Food Stamps are not included.
- ▶ Income is tabulated for persons 15 years old and over.



START OF THE ECONOMIC CHARACTERISTICS.

Income – ACS versus 2000 Census

- ▶ Caution should be exercised when comparing ACS income data to the decennial census and the ACS from one year to the next.
- ▶ ACS and the 2000 Census do not ask the Income question using the same reference period.
- ▶ The ACS collects data throughout the year on an on-going, monthly basis and asks for a respondent's income over the "past 12 months." So, the 2010 ACS 1-year data reflect incomes over 2009–2010. In Jan 2010, the 12-month period is Jan–Dec 2009 and in Dec 2010, Dec 2009–Nov 2010.
- ▶ Census 2000, however, collected the income data for a fixed period of time -- "during 1999" (the last calendar year).
- ▶ In the ACS, monthly Consumer Price Indices (CPI) factors were used to inflation-adjust income components to a reference calendar year (January through December).

34

The ACS collects data throughout the year on an on-going, monthly basis and asks for a respondent's income over the "past 12 months." Census 2000, however, collected the income data for a fixed period of time -- "during 1999" (the last calendar year).

For example, the 2010 ACS 1-year data reflect incomes over 2009-2010, the 2008-2010 ACS 3-year data reflect incomes over 2007-2010, and the 2006-2010 ACS 5-year data reflect incomes over 2005-2010.

Comparing income for the annual 1-year ACS means there is some overlap in the time periods – 2011 ACS = 2010-2011 and 2010 ACS = 2009-2010.

Measures of Income

- ▶ **Household Income** – 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.
- ▶ **Family Income** – 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.
- ▶ Because many households consist of only one person, average household income is usually less than average family income.
- ▶ **Income of Individuals** – Income for individuals is obtained by summing the eight types of income for each person 15 years old and over. (sometimes called personal income)
- ▶ **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.

35

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.

Earnings are calculated for 16+ because that is the universe for labor force.

Measures of Income

- ▶ **Median Income** – 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, total number of households and families includes those with no income.
- ▶ **Mean Income** – the amount obtained by dividing the aggregate income of a particular statistical universe by the number of units in that universe. (Arithmetic average)
- ▶ 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.
- ▶ **Gini Index of Income Inequality** – The Gini index of income inequality measures how much a distribution varies from a proportionate distribution. The Gini ranges from zero (perfect equality – all households have an equal share of income) to one (perfect inequality – one household has all the income).

36

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.

Gini – Sierra County 0.389 to San Fran 0.507.

Poverty Status

- ▶ The Census Bureau uses a set of dollar value thresholds that vary by family size and composition to determine who is in poverty. These thresholds are available at www.census.gov/hhes/www/poverty/data/threshld/index.html
- ▶ The same thresholds are used for all poverty determinations in the United States. There are no adjustments by geography.
- ▶ Poverty status is determined for families using the total family income in the past 12 months. If the total income of the family is less than the threshold appropriate for that family, then everyone in that family is considered “below the poverty level”.
- ▶ For unrelated individuals over 15 years old, poverty is determined using the individual’s personal income. If the total income of an unrelated individual (in either a family or nonfamily household) is less than the appropriate threshold for one person, then that individual is considered to be “in poverty”.

37

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 2010 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 2010 and reporting a total family income of \$14,000 for the last 12 months (July 2009 to June 2010). The base year (1982) threshold for such a family is \$7,765, while the average of the 12 inflation factors is 2.24574. Multiplying \$7,765 by 2.24574 determines the appropriate poverty threshold for this family type, which is \$17,438. 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.

2010 Poverty Thresholds

Size of family unit	Weighted average thresholds	Related children under 18 years								
		None	One	Two	Three	Four	Five	Six	Seven	Eight or more
One person (unrelated individual).....	11,139									
Under 65 years.....	11,344	11,344								
65 years and over.....	10,458	10,458								
Two people.....	14,218									
Householder under 65 years.....	14,676	14,602	15,030							
Householder 65 years and over.....	13,194	13,180	14,973							
Three people.....	17,374	17,057	17,552	17,568						
Four people.....	22,314	22,491	22,859	22,113	22,190					
Five people.....	26,439	27,123	27,518	26,675	26,023	25,625				
Six people.....	29,897	31,197	31,320	30,675	30,056	29,137	28,591			
Seven people.....	34,009	35,896	36,120	35,347	34,809	33,805	32,635	31,351		
Eight people.....	37,934	40,146	40,501	39,772	39,133	38,227	37,076	35,879	35,575	
Nine people or more.....	45,220	48,293	48,527	47,882	47,340	46,451	45,227	44,120	43,845	42,156

Source: U.S. Census Bureau.

Persons for Whom Poverty is Determined

- ▶ Poverty status is determined for families and for unrelated individuals.
- ▶ **VERY IMPORTANT:** Poverty status is determined for all people **except** institutionalized people, people in military group quarters, people in college dormitories, and unrelated individuals under 15 years old.
- ▶ When calculating the percent of persons in poverty or “poverty rate”, you must use the correct denominator. Both the numerator and denominator when calculating poverty rates should be “persons for whom poverty is determined” NOT the total population.
- ▶ Use data from the same table for the numerator and denominator.

39

What is an unrelated individual?

Persons for whom Poverty is Determined

Subject	California					
	Total		Below poverty level		Percent below poverty level	
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Population for whom poverty status is determined	36,593,372	+/-8,519	5,783,043	+/-74,336	15.8%	+/-0.2
AGE						
Under 18 years	9,157,681	+/-9,562	2,012,585	+/-38,677	22.0%	+/-0.4
18 to 64 years	23,258,720	+/-6,873	3,363,215	+/-39,911	14.5%	+/-0.2
65 years and over	4,176,971	+/-6,408	407,243	+/-10,151	9.7%	+/-0.2
Source: 2010 ACS, S1701						

↓
Denominator

↓
Numerator

The total population from the 2010 ACS is 37,349,363 so 755,991 people are not included in the poverty universe. So the "Total" is the total of the universe for this table, NOT the total population

100%, 150%, 200%...

- ▶ In poverty tabulations in the ACS, “below poverty level” or “persons in poverty” means “below 100% of poverty level”. This level uses the thresholds as specified in the family size by number of children matrix.
- ▶ However, California has a higher cost of living than most of the nation, so several state programs use adjusted levels of poverty. In ACS tabulations, these are called “ratio of income to poverty level”.
- ▶ The poverty ratios show persons by “adjusted” poverty level. So for example for 200% of poverty, instead of being below the number shown in the threshold matrix, the threshold is multiplied by 2 and the result is the threshold used to determine poverty status.
- ▶ In ACS tabulations, pay attention to the labels – in some tables, the ratio of income to poverty levels are in ranges, not cumulative.

Ratio of Income to Poverty

	California	
	Estimate	Margin of Error
Total:	8,507,856	+/-27,357
Under .50	399,437	+/-12,031
.50 to .74	279,306	+/-10,195
.75 to .99	324,562	+/-7,957
1.00 to 1.24	371,885	+/-9,932
1.25 to 1.49	387,699	+/-10,665
1.50 to 1.74	387,544	+/-10,978
1.75 to 1.84	138,856	+/-5,890
1.85 to 1.99	197,743	+/-7,464
2.00 to 2.99	1,273,438	+/-19,677
3.00 to 3.99	1,035,779	+/-16,067
4.00 to 4.99	835,846	+/-13,328
5.00 and over	2,875,761	+/-21,694
Source: 2010 ACS, B17002		

Data are in ranges, not cumulative. You must add up the ranges below your target level.

Labor Force

- ▶ The universe for all labor force data – employment, industry, occupation, earnings – is persons 16 years old and older.
- ▶ 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;
 5. People not in the labor force.
- ▶ For the ACS, reference week is the calendar week preceding the date on which the respondents completed their questionnaires or were interviewed.

43

In the 2000 census, the reference week was “last week” but since most census forms were completed in April and May, the time period is not as spread out as it is for the ACS.

The number employed includes 1 and 3. Unemployed are 2 and 4.

Labor Force



► **Components:**

- Total persons 16 years and older
 - **Labor Force:**
 - **Civilian Labor Force:** Employed + Unemployed
 - **Employed** (or Civilian Employed): all civilians “with a job at work” or “with a job but not at work” (temporary absence)
 - **Unemployed:** civilians who did not have a job and were actively looking for work and were available to start a job.
 - **Armed Forces**
 - **Not in Labor Force:** 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.

44

Employed – 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.

Unemployed – All civilians 16 years old and over 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.

Not in Labor Force – All people 16 years old and over who are not in the labor force. This category consists mainly of students, homemakers, retired workers, seasonal workers interviewed in an off season.

Unemployment Rate

The number of unemployed people as a percentage of the civilian labor force. Be careful to use the right number. This is an extract of 2010 ACS Data Profile 3 – Economic Characteristics.

California	Estimate	Estimate Margin of Error	Percent	Percent Margin of Error
EMPLOYMENT STATUS				
Population 16 years and over	29,159,527	+/-10,611	29,159,527	(X)
In labor force	18,759,274	+/-41,728	64.30%	+/-0.1
Civilian labor force	18,625,515	+/-41,714	63.90%	+/-0.1
Employed	16,243,172	+/-45,906	55.70%	+/-0.2
Unemployed	2,382,343	+/-26,929	8.20%	+/-0.1
Armed Forces	133,759	+/-4,527	0.50%	+/-0.1
Not in labor force	10,400,253	+/-43,179	35.70%	+/-0.1
Civilian labor force	18,625,515	+/-41,714	18,625,515	(X)
Percent Unemployed	(X)	(X)	12.80%	+/-0.1

45

Be careful – in some ACS tabulations, such as DP3 – Economic Characteristics, the percent of the unemployed is the unemployed as a percent of the total population 16+ - this is NOT the unemployment rate.

Occupation

- ▶ Describes the kind of work or activity a person does on the job.
- ▶ 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. This is called the "experienced labor force."
- ▶ Coded based on the *Standard Occupational Classification (SOC) Manual: 2010*. There are 539 detailed occupations and 23 major groups.
- ▶ Census 2000 used the 2000 SOC. Most of these changes between the 2000 and 2010 SOC were concentrated in information technology, healthcare, printing, and human resources occupations.

46

Occupational data are collected from the unemployed to be used the Equal Employment Opportunity/Affirmative Action programs. They are added to the employed data to develop an "experienced labor force" – persons who are currently employed or have been employed in the last five years.

However in ACS tabulations of occupation, the universe is the civilian employed population 16+.

Industry

- ▶ Describe the kind of business conducted by a person's employing organization.
- ▶ 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.
- ▶ Coded based on the *2007 North American Industry Classification System (NAICS)*. There are 269 detailed industries, classified into 20 major industry sectors.

Class of Worker

- ▶ Classifies people according to the type of ownership of the employing organization.
- ▶ Categories include:
 - Private wage and salary workers (for profit and non-profit)
 - Government workers (federal, state, and local)
 - Self-employed
 - Unpaid family workers
- ▶ 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, protection services, and bus lines are classified by industry according to the activity in which they are engaged.

ACS versus EDD data



- ▶ ACS employment data are not comparable to the data available from the Employment Development Department, Labor Market Information Division.
- ▶ The reference week is different – “last week” for ACS and the “week including the 12th of the month” for EDD.
- ▶ EDD’s labor force data are by place of residence as are ACS data.
- ▶ EDD’s industry and occupation data are by **place of work** as these are data collected directly from employers. ACS industry and occupation data are by **place of residence**.
- ▶ This distinction can be very important in a county or city with a high volume of workers who travel into the area to work but live outside the area. San Francisco is a good example of this.
- ▶ The industry data from EDD is first classified by class of worker. The industry data is for private workers only – government workers are grouped together in government.

Place of Work

- ▶ Asked of people who indicated that they worked at some time during the reference week.
- ▶ Refers to the geographic location at which workers carried out their occupational activities.
- ▶ 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 were away from home on business during the reference week.

30 At what location did this person work **LAST WEEK**? If this person worked at more than one location, print where he or she worked most last week.

a. Address (Number and street name)

If the exact address is not known, give a description of the location such as the building name or the nearest street or intersection.

b. Name of city, town, or post office

c. Is the work location inside the limits of that city or town?

- Yes
 No, outside the city/town limits

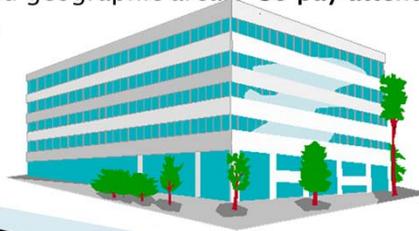
d. Name of county

e. Name of U.S. state or foreign country

f. ZIP Code

Workplace Data

- ▶ 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. **So pay attention to table titles and universes.**



51

Journey to Work

- ▶ There are several characteristics to describe a worker's journey to and from work:
 - Means of Transportation to Work (principal mode of travel or type of conveyance)
 - Private Vehicle Occupancy
 - Workers Per Car, Truck, or Van
 - Time Leaving Home to Go to Work
 - Travel Time to Work
 - Aggregate Travel Time to Work (in Minutes) to calculate average commute times.
 - Time Arriving at Work from Home
- ▶ The universe for most journey to work tables are workers 16 years and older who did not work at home. Or "work at home" is a separate category on the table.



Health Insurance

- ▶ Health insurance coverage includes plans and programs that provide comprehensive health coverage.
- ▶ Other types of insurance like dental, vision, life, and disability insurance are not included. considered health insurance 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. All others are public coverage.
- ▶ The types of health insurance are not mutually exclusive; people may be covered by more than one at the same time.
- ▶ This was added to the ACS in 2008.

16 Is this person **CURRENTLY** covered by any of the following types of health insurance or health coverage plans? Mark "Yes" or "No" for EACH type of coverage in items a – h.

	Yes	No
a. Insurance through a current or former employer or union (of this person or another family member)	<input type="checkbox"/>	<input type="checkbox"/>
b. Insurance purchased directly from an insurance company (by this person or another family member)	<input type="checkbox"/>	<input type="checkbox"/>
c. Medicare, for people 65 and older, or people with certain disabilities	<input type="checkbox"/>	<input type="checkbox"/>
d. Medicaid, Medical Assistance, or any kind of government-assistance plan for those with low incomes or a disability	<input type="checkbox"/>	<input type="checkbox"/>
e. TRICARE or other military health care	<input type="checkbox"/>	<input type="checkbox"/>
f. VA (including those who have ever used or enrolled for VA health care)	<input type="checkbox"/>	<input type="checkbox"/>
g. Indian Health Service	<input type="checkbox"/>	<input type="checkbox"/>
h. Any other type of health insurance or health coverage plan – <i>Specify</i> ↴	<input type="checkbox"/>	<input type="checkbox"/>

Housing: Tenure

- ▶ Occupied housing units are grouped by ownership – called “tenure”.
- ▶ A housing unit is **owner occupied** if the owner or co-owner lives in the unit. They are also classified on whether or not they have a mortgage.
- ▶ All occupied housing units which are not owner occupied, whether they are rented or occupied without payment of rent, are classified as **renter occupied**.

54

START OF THE HOUSING CHARACTERISTICS

Housing: Structural Characteristics

- ▶ Number of Bedrooms
- ▶ Business on Property (*business must be easily recognizable from the outside*)
- ▶ House Heating Fuel (*gas, electricity, coal, solar, etc.*)
- ▶ Kitchen Facilities (*a sink with a faucet, stove, and refrigerator*)
- ▶ Plumbing Facilities (*hot and cold running water, a flush toilet, and a bathtub or shower*)
- ▶ Number of Rooms (*used to calculate overcrowding*)
- ▶ Telephone Service Available
- ▶ Units in Structure or Type of Structure
- ▶ Year Structure Built



55

Kitchen Facilities: need all three to be classified as “complete kitchen” but need not be in the same room.

Plumbing Facilities: if lacking one, classified as “lacking complete plumbing facilities”

Use caution for both when comparing pre-2008 ACS with 2008-current as there was a wording change in the question which resulted in some inconsistencies.

Financial Characteristics for Owner-Occupied Units

- ▶ Condominium Status and Fee
- ▶ Mobile Home Costs
- ▶ Mortgage Status and Payment *(includes everything paid to the lender)*
- ▶ Second or Junior Mortgage Payments or Home Equity Loan
- ▶ Insurance for Fire, Hazard, and Flood
- ▶ Real Estate Taxes
- ▶ Utilities Costs
- ▶ Value *(The respondent's estimate of how much the property (house and lot, mobile home and lot, or condominium unit) would sell for if it were for sale.)*



56

In censuses prior to 2000, financial housing data were provided for specified units. “Specified units” exclude mobile homes, houses with a business or medical office, houses on 10 or more acres, and housing units in multiunit buildings. In the 2000 census, there were tabulations for specified units and for all units. Data from the ACS can be compared to the 2000 census tabulations for all units but not to prior censuses.

Financial Characteristics for Renter-Occupied Units

- ▶ Rent:
 - Contract Rent = monthly rent agreed to or contracted for, regardless of any furnishings, utilities, fees, meals, or services that may be included.
 - Gross Rent = the contract rent plus the estimated average monthly cost of utilities, meals, and fuels if these are paid by the renter.
- ▶ House Heating Fuel
- ▶ Meals Included in Rent
- ▶ Utilities Costs



57

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.

“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.

Monthly Housing Costs

- ▶ 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.).
- ▶ Gross rent is the comparable measure for renters.
- ▶ Both of these are compared to the income for their respective household income to determine the portion of the income that is spent on housing. This is called “Gross Rent as a Percentage of Household Income” and “Selected Monthly Owner Costs as a Percentage of Household Income”.

Resources:

- › User Handbooks on the American Community Survey –
www.census.gov/acs/www/guidance_for_data_users/handbooks/
- › American Community Survey – Subject Definitions
www.census.gov/acs/www/data_documentation/documentation_main/
- › Comparing ACS Data
www.census.gov/acs/www/guidance_for_data_users/comparing_data/
- › Census Questionnaires:
www.census.gov/history/www/through_the_decades/questionnaires/
- › ACS Questionnaires:
www.census.gov/acs/www/methodology/questionnaire_archive/

Questions? Call Us.

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Thank you!