Census Basics and Obtaining Stats from data.census.gov

CENTER FOR PUBLIC AFFAIRS RESEARCH

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Questionnaires for Major Census Programs

- Short form:
    - Basic decennial Census questionnaire sent to most households in 2000 and all households in 2010
    - Records simple demographics like age, gender, race, housing tenure (own or rent)

- Long form:
    - Detailed decennial Census questionnaire sent to a sample of about 1 in 6 households in the 2000 Census but not used in 2010 Census (replaced by ACS)
    - Recorded socio-economic and detailed housing information

- American Community Survey (ACS):
    - Continuous sample survey (forms sent every month) compiled to provide current annual data
    - Nearly identical to long form – allowed 2010 Census to be short form only (simply a headcount)
    - 2019 ACS (and in future years) continues monthly surveying even though decennial census is not yet currently being conducted
    - The ACS is subject to the federal budget so it will only continue if funded into the future

Census Datafiles

- <u>Summary File 1 (SF 1)</u>: Used for both 2000 and 2010 basic demographic data from the *short form*: age, gender, housing tenure (own vs. rent), etc.

  - SF 2 has the SF 1 tables available by race, for detailed racial combinations, tribes, etc.

- <u>Summary File 3 (SF 3)</u>: Not part of 2010 Census, replaced by ACS datasets; has detailed socio-economic and housing data from the 2000 *long form*

  - Also has figures for SF 1 items (age) but they are based on a "weighted" sample, not the official counts

BE CAREFUL – You must go to the right source to get the correct data!

- <u>ACS Datasets</u>: contain data for ACS variables; are based upon the timeframe over which the data was collected

  - 1-year: 2016   5-year: 2012-2016

  - Do NOT Compare ACS datasets to SF 1 from the decennial census

    - Compare SF 1 from 2000 to: ⟶ SF 1 from 2010
    - Compare SF 3 from 2000 to: ⟶ ACS datasets

ACS Datasets Correspond to Geography's Population

Time Period of Data	Population Threshold for Data Release	Nebraska Areas with Data
Annual Estimates (2005, 2006,…2017)	65,000 or more	State; Omaha and Lincoln; Douglas, Lancaster, Sarpy Counties; Omaha, Lincoln, Millard Schools
3-Year Aggregates (2005-2007…2011-2013)	20,000 or more, but no longer produced	All of the above plus regional centers like Kearney, Norfolk, etc.
1-year supplemental estimates (2014, 2015,…2017)	20,000 or more	All of the above plus regional centers like Kearney, Norfolk, etc.
5-Year Aggregates (2005-2009…2013-2017)	No threshold	All areas--counties, cities, townships, census tracts, zip codes, school districts, legislative districts, etc.

Advantages of the aggregated 5-year ACS data

- Figures available for all geographies

  - Only way to compare all counties or cities in a state

- For areas that get annual data, the aggregates based on more completed surveys will be more accurate and have smaller margins of error

  - Especially important for sub-groups—only use the 5-year data for anything race or age specific (Black education; Asian home ownership; child poverty)

  - Will help reduce variability in year-to-year figures

  - Some 1-year tables are not released because of inaccuracy concerns—some of those tables may be available in the 5-year data

- When comparing areas, do not compare a 1-year estimate for say Douglas County with a 5-year estimate for another area
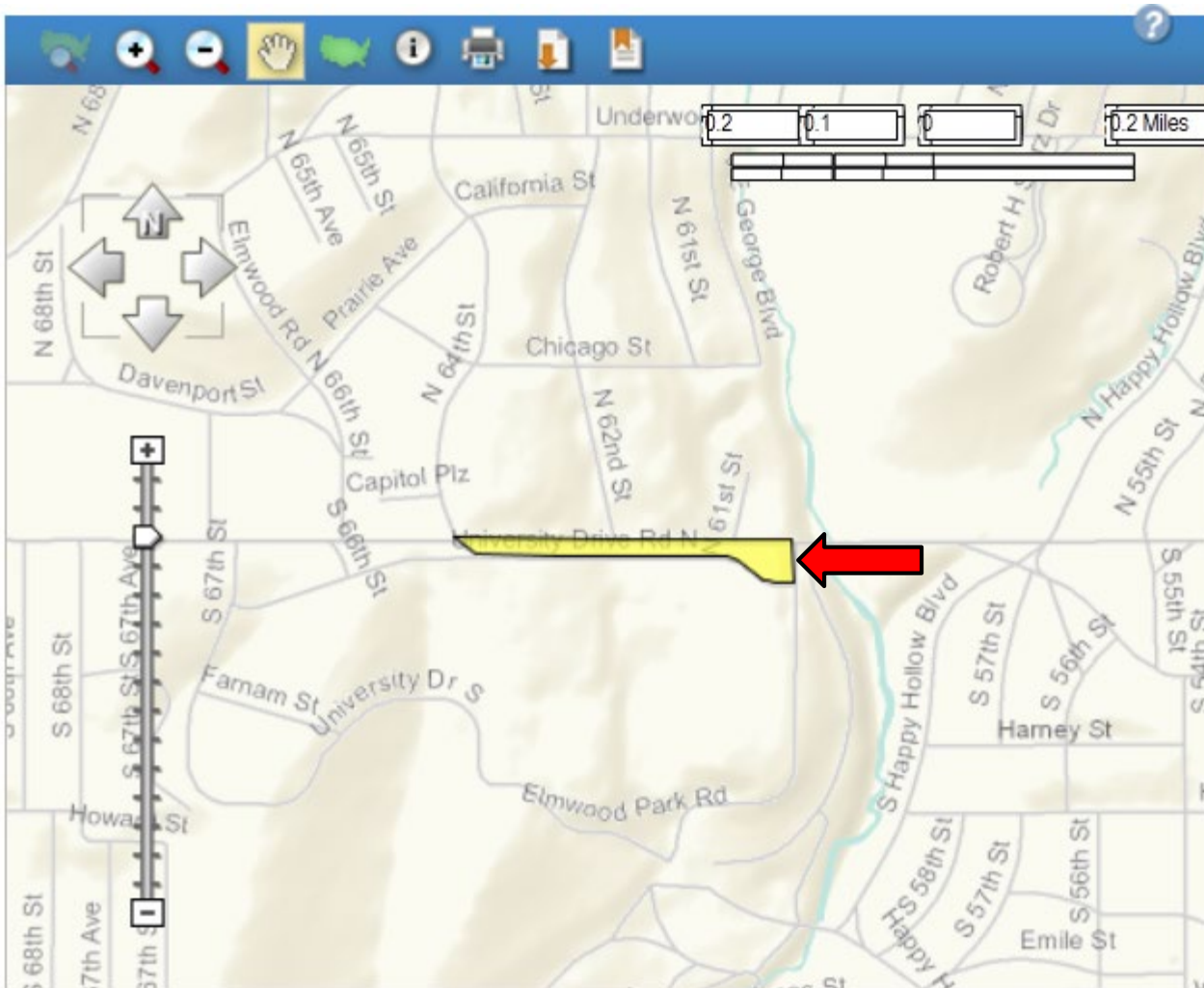
Geography

- Size continuum: large to small, or small to large

- Legal/Administrative vs. Census/Statistical

  – Nation—State—County—City—Township

  – Block—Block Group—Census Tract—Zip Code—PUMA—Metro Area (MSA)—Division—Region

The West North Central Division of the United States

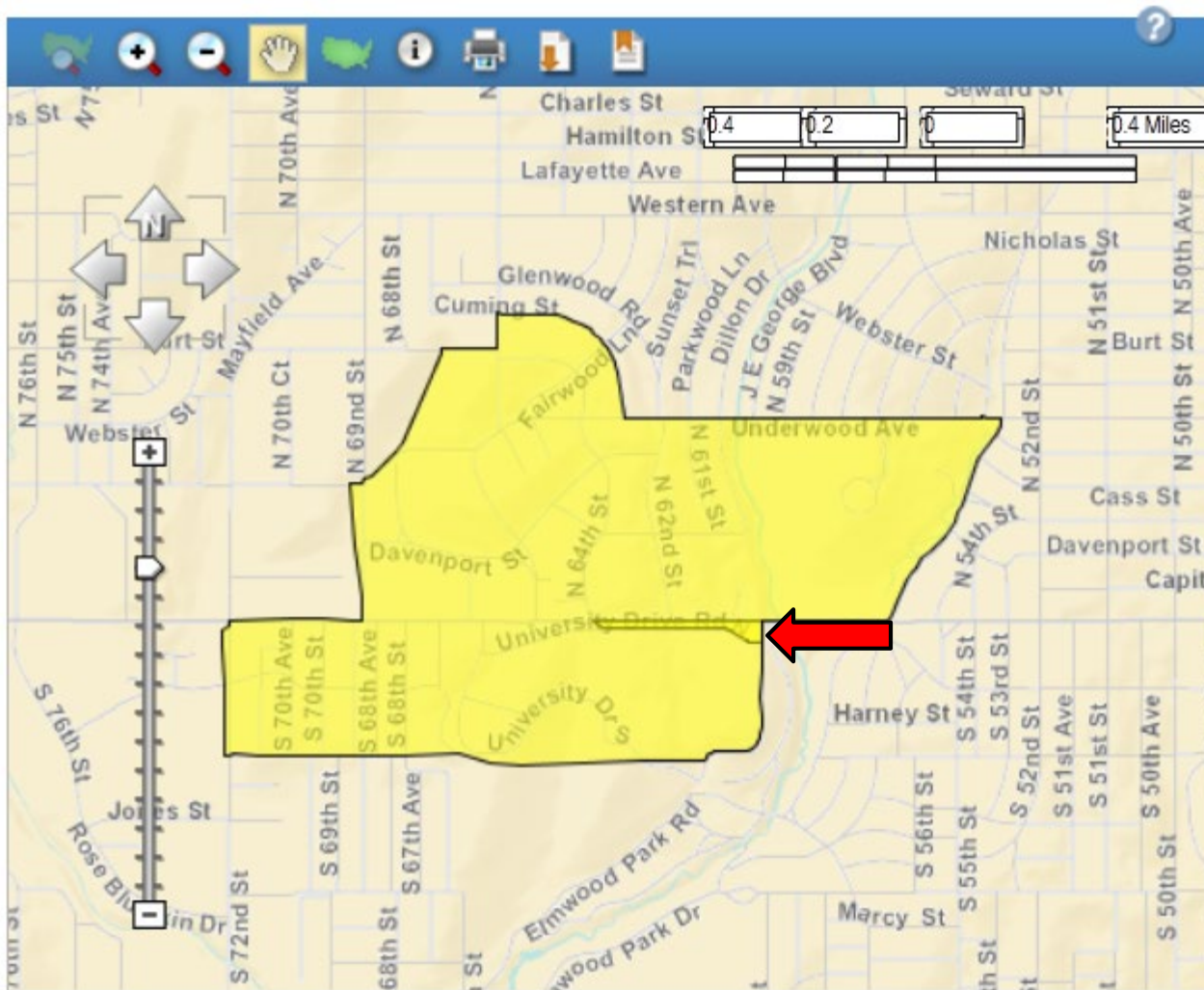# Block 2022 in Block Group 2, Census Tract 47 Douglas County, NE

This is a single block – they are "building blocks" for larger geographies.

Blocks are bounded by physical features like roads, streams, or railroads.
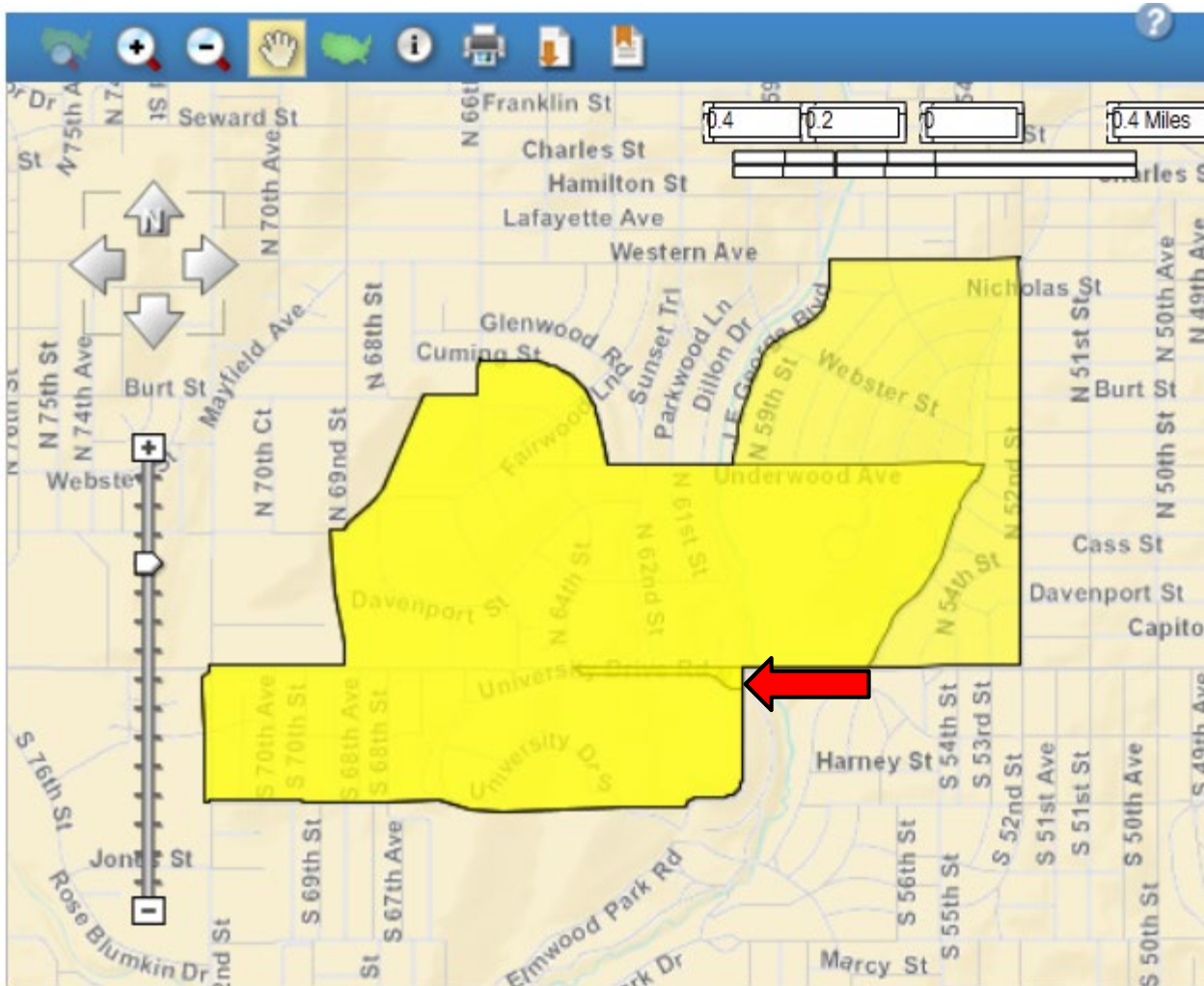
Data available in Decennial Census.

Block 2022 in Block Group 2, Census Tract 47 Douglas County, NE

A group of usually about 15-30 blocks comprise a "block group".

Block group data is available in the ACS but is not very accurate/reliable.

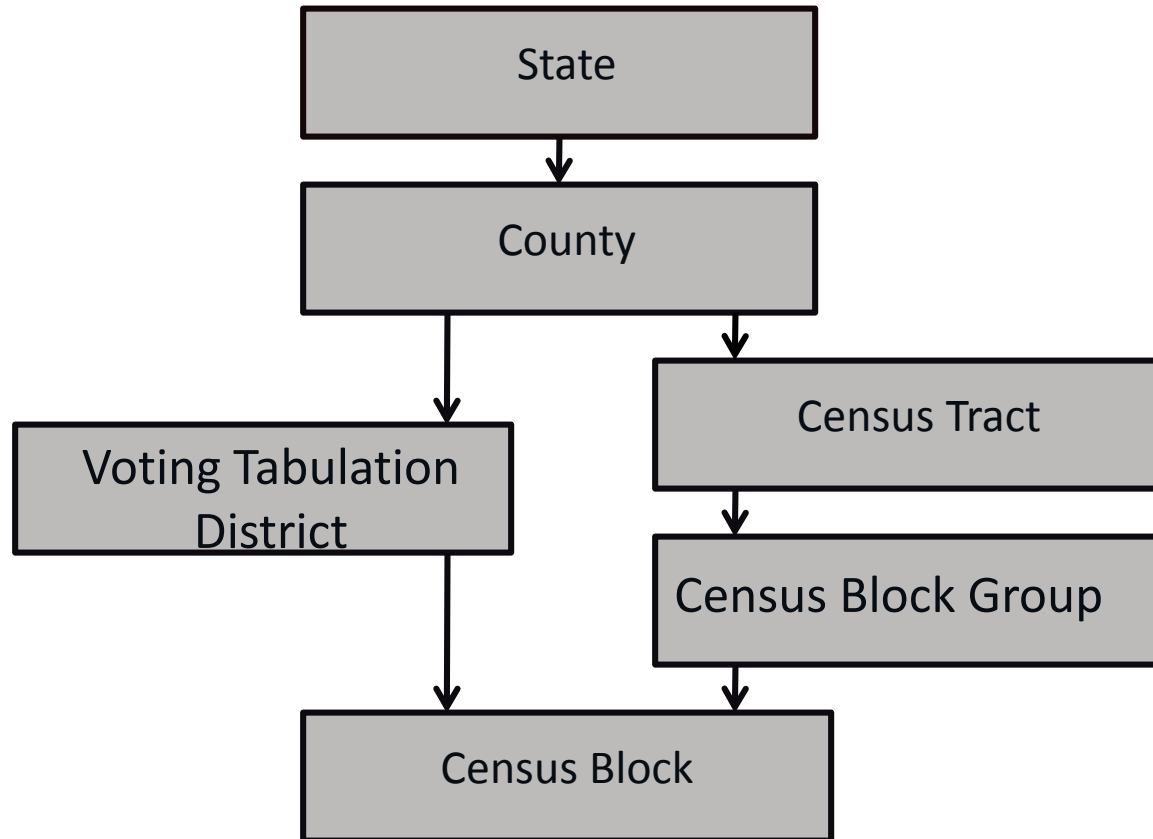# Block 2022 in Block Group 2, Census Tract 47 Douglas County, NE

Two or more block groups comprise a "census tract".

Census tracts typically have ~4,000 people and nest within counties.

Tracts and zip codes are the key geographies for small area analysis.

Census Geography and How it Nests

Important Concepts: Race/Ethnicity

- Race and Ethnicity were asked as two separate questions in 2000 and 2010
  - Same approach in 2020
  - First, each person lists whether they are Hispanic/Latino or not
  - Then, they list one or more races (White, Black, Asian, etc.)
    - The option to select 2+ races was first used in 2000
    - 2020 fill in boxes for White and Black are new; will be best source for numbers of Somali, Sudanese, etc.

Asked in some form since 1790

What is this person's race?
Mark [X] one or more boxes **AND** print origins.

☐ White – Print, for example, German, Irish, English, Italian, Lebanese, Egyptian, etc.

☐ Black or African Am. – Print, for example, African American, Jamaican, Haitian, Nigerian, Ethiopian, Somali, etc.

☐ American Indian or Alaska Native – Print name of enrolled or principal tribe(s), for example, Navajo Nation, Blackfeet Tribe, Mayan, Aztec, Native Village of Barrow Inupiat Traditional Government, Nome Eskimo Community, etc.

☐ Chinese   ☐ Vietnamese   ☐ Native Hawaiian
☐ Filipino   ☐ Korean   ☐ Samoan
☐ Asian Indian   ☐ Japanese   ☐ Chamorro
☐ Other Asian – Print, for example, Pakistani, Cambodian, Hmong, etc.   ☐ Other Pacific Islander – Print, for example, Tongan, Fijian, Marshallese, etc.

☐ Some other race – Print race or origin.
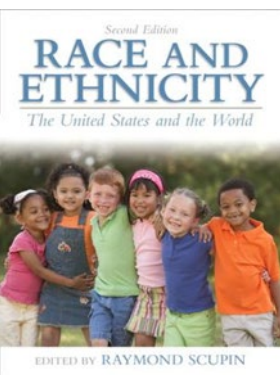
Is this person of Hispanic, Latino, or Spanish origin?
☐ **No**, not of Hispanic, Latino, or Spanish origin
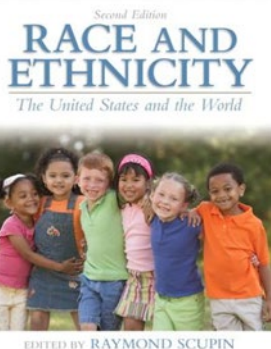☐ Yes, Mexican, Mexican Am., Chicano
☐ Yes, Puerto Rican
☐ Yes, Cuban
☐ Yes, another Hispanic, Latino, or Spanish origin – Print, for example, Salvadoran, Dominican, Colombian, Guatemalan, Spaniard, Ecuadorian, etc.

Asked in some form since 1970

Second Edition
RACE AND ETHNICITY
The United States and the World
EDITED BY RAYMOND SCUPIN

Important Concepts: Race/Ethnicity continued

- Since race and ethnicity are two separate questions, we need to work with the "crosstab" of the two to avoid double counting

    - For example, someone who is Hispanic/Latino and selects a race of Black would be listed in both the ethnicity and race data table

        - Typically we want to view race/ethnicity together

        - For example, compare non-Hispanic Whites and minority populations

    - Best practice is to list Hispanic/Latino, and then all races as non-Hispanic

        - Many grants request data for Whites, Blacks, Hispanics, etc. – this can be problematic

        - Use ACS table B03002 or DP-05 or Decennial Census table DP-1 to get the crosstab
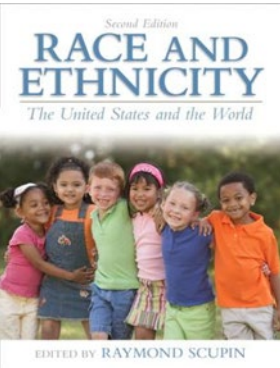
ACS DEMOGRAPHIC AND HOUSING ESTIMATES

Geography: Nebraska **CHANGE GEOGRAPHY**

Year: 2017 **CHANGE YEAR**

Estimates: | 1 Year ⌄ |

HISPANIC OR LATINO AND RACE		
⌄ Total population	1,920,076	1,920,076
⌃ Hispanic or Latino (of any race)	209,917	10.9%
⌄ Not Hispanic or Latino	1,710,159	89.1%
White alone	1,517,634	79.0%
Black or African American alone	87,147	4.5%
American Indian and Alaska Native alone	12,823	0.7%
Asian alone	46,837	2.4%
Native Hawaiian and Other Pacific Islander alone	1,130	0.1%
Some other race alone	1,662	0.1%
⌄ Two or more races	42,926	2.2%

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Key Product Types

- Data Profile:

    - Four profiles containing the most commonly used statistics

    - Social (DP2), Economic (DP3), Housing (DP4), Demographic (DP1 or DP5)

- Comparison Profile:

    - Same as data profile but lists multiple time periods side by side to see changes

    - Similar labeling system – CP2, CP3, etc.

- Subject Table:

    - Very useful as gives key statistics split by age, gender, race/ethnicity, etc.

    - Usually in both numbers and

    - A one stop shop for all aspects relating to education (S1501) or poverty (S1701)

- Detailed table:

    - Gives you the raw figures

    - Often best for downloading many geographies

    - Have to calculate percentages yourself (not done for you like in the others)

Important Concepts: Householder and Relationship

- <u>Householder</u>: the first person on the census form (who fills it out)

  - Supposed to be the person "in whose name the residence is owned or rented"

    - Person in household with "time" might fill out the form: grandparent, adult child

    - Can be male or female; is <u>somewhat arbitrary</u> but makes a big difference for how families and items like poverty are defined/calculated

- <u>Relationship</u>: how other people living in the household are connected to the householder

  - Spouse, child (biological, adopted, step), parent-in-law, roommate, unmarried partner, foster child, etc.

  - A "family" household is where at least one other person is related to the householder

    - One person living alone as well as unmarried partners are not families by definition

    - Median family income doesn't include all households; median household income does

Geography: Nebraska **CHANGE GEOGRAPHY**

Year: 2017 **CHANGE YEAR**

Estimates: 1 Year

HOUSEHOLDS BY TYPE		
Total households	754,490	754,490
Family households (families)	484,989	64.3%
Nonfamily households	269,501	35.7%
Householder living alone	220,493	29.2%

RELATIONSHIP		
Population in households	1,868,061	1,868,061
Householder	754,490	40.4%
Spouse	384,333	20.6%
Child	543,278	29.1%
Other relatives	76,075	4.1%
Nonrelatives	109,885	5.9%
Unmarried partner	43,790	2.3%

Let's use data.census.gov to find median household & median family income.

2017 1-yr ACS: household=$59,970 while family=$75,112 (from B19013 & B19113)

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When you wonder if data is available...

- Use the search functions – key words work well

- Look at the questionnaire – if it wasn't asked, it won't be available!

  - ACS questionnaire archive:

    - https://www.census.gov/programs-surveys/acs/methodology/questionnaire-archive.html

How many automobiles, vans, and trucks of one-ton capacity or less are kept at home for use by members of this household?

☐ None

☐ 1

☐ 2

☐ 3

☐ 4

☐ 5

☐ 6 or more

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)	☐	☐
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 – *Specify* ↙	☐	☐

Population Estimates Program: Overview

- Provides the <u>official</u> head and housing unit counts in non-census years
    - Shows how the population has changed since the Census
    - Has figures by age, sex, race/ethnicity for counties and states
- As of July 1 of the specific year
- Staggered releases throughout the year
    - Large geographies first, most detailed data last
- The current release/vintage always supersedes prior year's releases
    - Can create confusion for why one 7-1-16 estimate will differ from another—cite the source and release date
    - You always have to be going and getting/using the most currently released data
- Estimates differ from projections
    - Estimates are the newest look at our current population
    - Projections predict the population structure in the future

Population Estimates Program: Importance

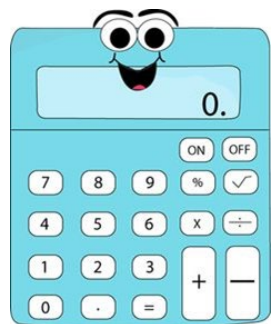- The estimates give us our best look and official figures for how the population has changed since the Census

  - Some grants and $ allocations are calculated based on the estimates

  - On demographics, it is the estimates and not the ACS that are the official population source – use it for age, gender, race

  – Is Nebraska growing more or less than regional/neighboring states and the U.S.?

  – What population components are changing (births, migration)

  – How is the state's population distribution (more growth in metro counties) and age/race structure changing?

  - Migration of baby boomers and those age 20-34 is key

  - Are minority growth patterns continuing?

Important Information

Upcoming Key Data Releases

- September 10, 2019
  - National income, poverty, and health insurance reports from Current Population Survey (CPS)
  - State level health insurance from ACS
  - Supplemental Poverty Measure (national and state rates accounting for noncash program benefits and different costs like child care and medical)
- September 26
  - 2018 one-year ACS (Data Profiles, Detailed Tables)
  - Comparison Profiles and Subject Tables released later on Oct. 17
- December 19
  - 2014-2018 five-year ACS (Data Profiles, Detailed Tables)
- Late December and then March 2020
  - July 1, 2019 population estimates and components of change for states and then counties, respectively

The End
Comments, Q & A

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www.unomaha.edu/cpar