

# Integrating Census Data and Public Policy

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# A Quick History Lesson

- First Census in 1790
- In 1850 questions on social and economic issues added
- In 1940 Census incorporates statistical sampling
  - Short form – went to everyone
  - Long form – went to sample of the population
- Long form discontinued after 2000 and replaced with American Community Survey

# American Community Survey

- Rolling annual survey produces ESTIMATES on characteristics of the population
  - 1 in 40 households annually
- Updates every year!
- Smaller sample size than Census long form
- Larger standard error

# American Community Survey

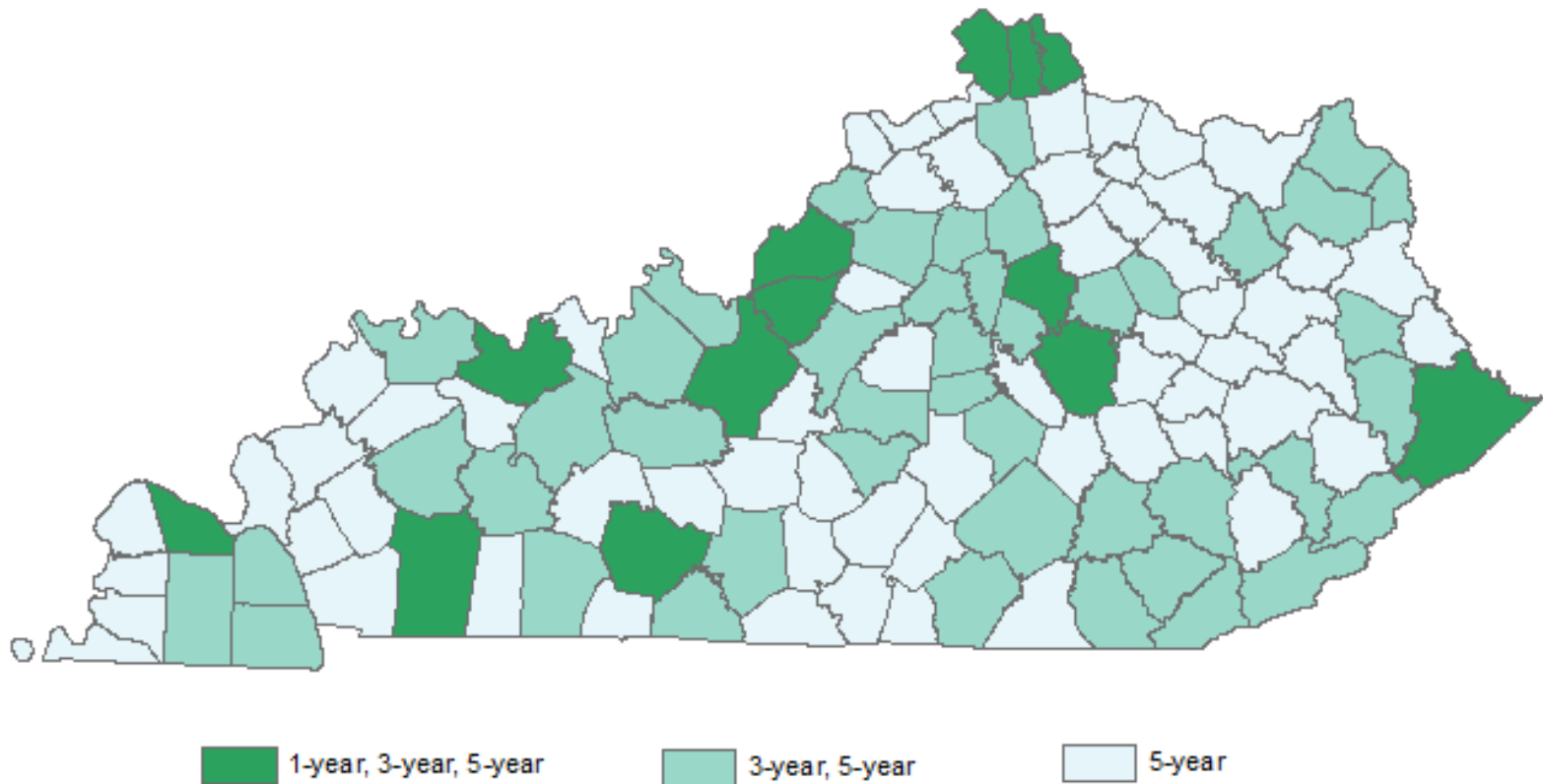
- 1-year, 3-year, 5-year estimates
  - Average survey data to reduce margin of error
  - Data pertain to period of time, not specific point-in-time

Data collected between...	Data pooled to produce	Data published for areas with
January 1, 2012 and December 31, 2012	2012 ACS 1-year estimates	populations of 65,000+
January 1, 2010 and December 31, 2012	2010-2012 ACS 3-year estimates	populations of 20,000+
January 1, 2008 and December 31, 2012	2008-2012 ACS 5-year estimates	populations of almost any size

# American Community Survey

1-year estimates	3-year estimates	5-year estimates
12 months of collected data	36 months of collected data	60 months of collected data
Data for areas with populations of 65,000+	Data for areas with populations of 20,000+	Data for all areas
Smallest sample size	Larger sample size than 1-year	Largest sample size
Less reliable than 3-year or 5-year	More reliable than 1-year; less reliable than 5-year	Most reliable
Most current data	Less current than 1-year estimates; more current than 5-year	Least current
Best used when	Best used when	Best used when
<p>Currency is more important than precision</p> <p>Analyzing large populations</p>	<p>More precise than 1-year, more current than 5-year</p> <p>Analyzing smaller populations</p> <p>Examining smaller geographies because 1-year estimates are not available</p>	<p>Precision is more important than currency</p> <p>Analyzing very small populations</p> <p>Examining tracts and other smaller geographies because 1-year estimates are not available</p>

# American Community Survey



# American Community Survey

Table 1. **Subjects Included in the American Community Survey**

## **Demographic Characteristics**

Age  
Sex  
Hispanic Origin  
Race  
Relationship to Householder  
(e.g., spouse)

## **Economic Characteristics**

Income ★  
Food Stamps Benefit  
Labor Force Status  
Industry, Occupation, and Class  
of Worker  
Place of Work and Journey to  
Work  
Work Status Last Year  
Vehicles Available ★  
Health Insurance Coverage ★

## **Social Characteristics**

Marital Status and Marital History\*  
Fertility  
Grandparents as Caregivers  
Ancestry  
Place of Birth, Citizenship, and  
Year of Entry  
Language Spoken at Home ★  
Educational Attainment and  
School Enrollment ★  
Residence One Year Ago  
Veteran Status, Period of Military  
Service, and VA Service-  
Connected Disability Rating\*  
Disability ★

## **Housing Characteristics**

Year Structure Built ★  
Units in Structure  
Year Moved Into Unit  
Rooms  
Bedrooms  
Kitchen Facilities  
Plumbing Facilities  
House Heating Fuel  
Telephone Service Available  
Farm Residence

## **Financial Characteristics**

Tenure (Owner/Renter) ★  
Housing Value  
Rent  
Selected Monthly Owner Costs

\*Marital History, VA Service-Connected Disability Rating, and Health Insurance Coverage are new for 2008.  
Source: U.S. Census Bureau.

# A Dynamic Survey

- 2008
  - Marital history
  - Health insurance coverage
  - Service connected disability status and rating
  - Disability
- 2009
  - Bachelor's field of degree
- 2013
  - Computer ownership
  - Internet access



# Decennial Census

## Summary File 1 (SF1) 100%

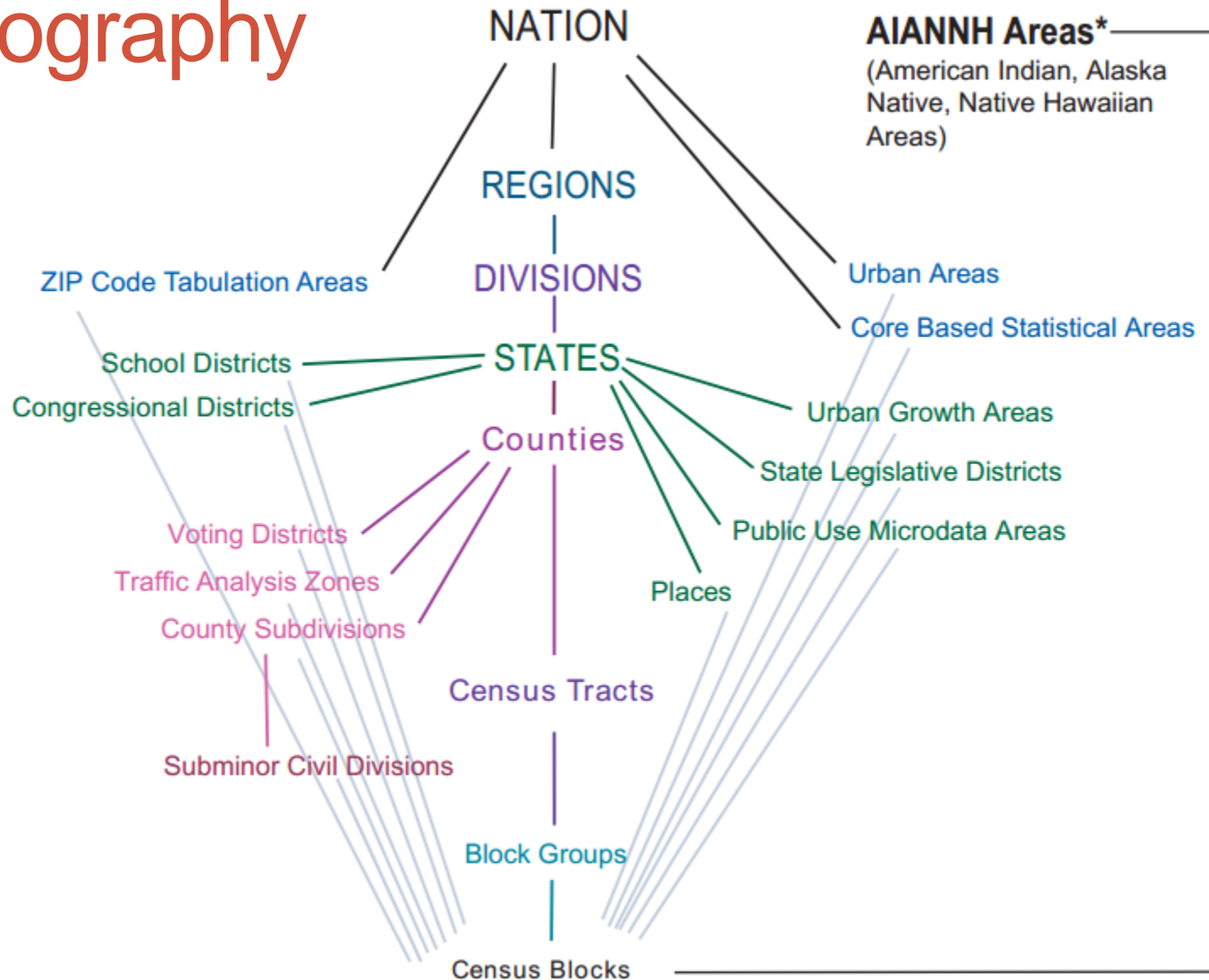
- Demographics

- Total population
- Sex
- Age
- Race
- Hispanic or Latino origin
- Household relationship
- Household type
- Household size
- Family type
- Family size
- Group quarters

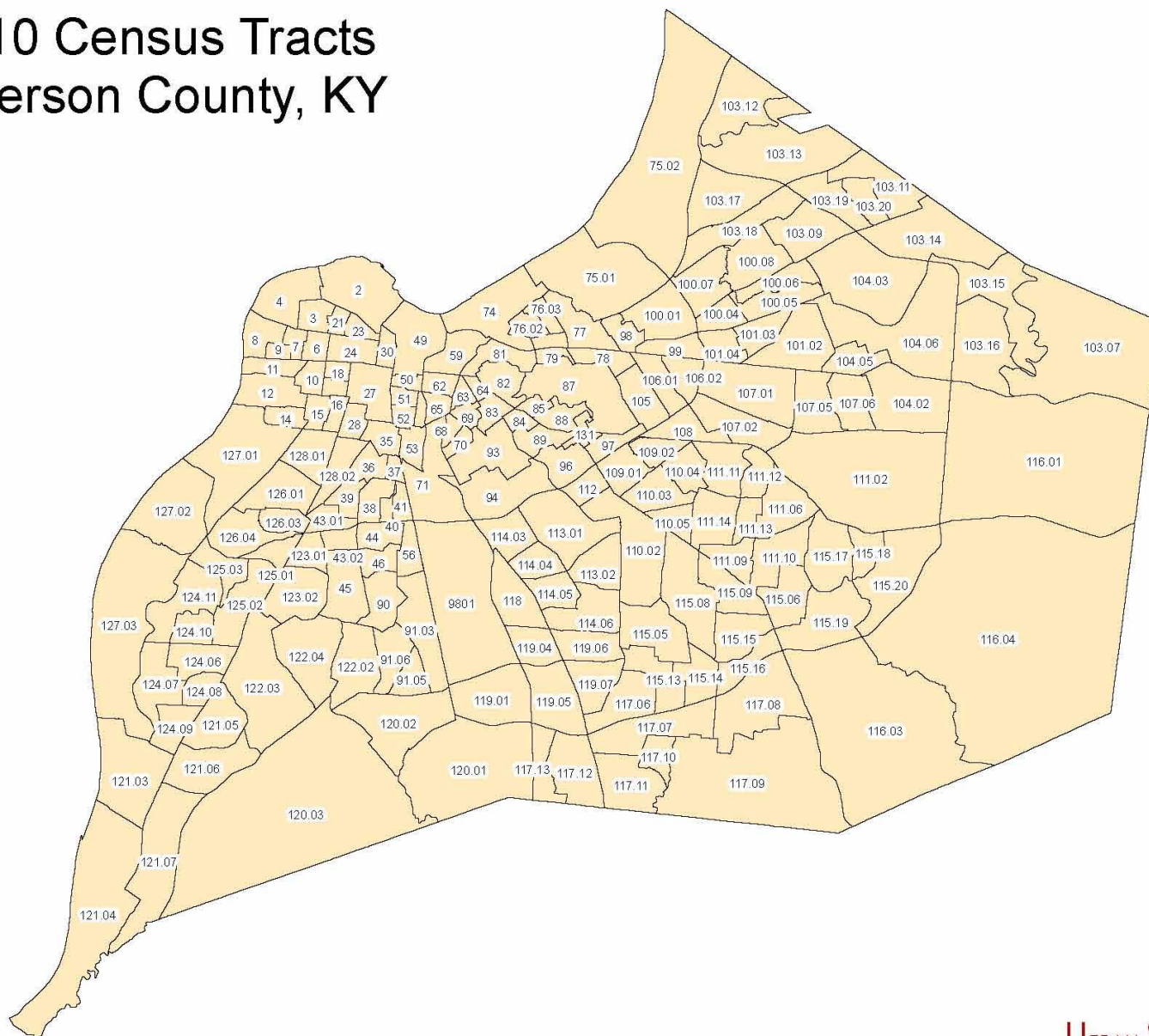
- Housing

- Number of housing units
- Occupancy status
- Vacancy status
- Tenure
  - Owner-occupied
  - Renter-occupied
- Urban/Rural designations

# Geography



# 2010 Census Tracts Jefferson County, KY

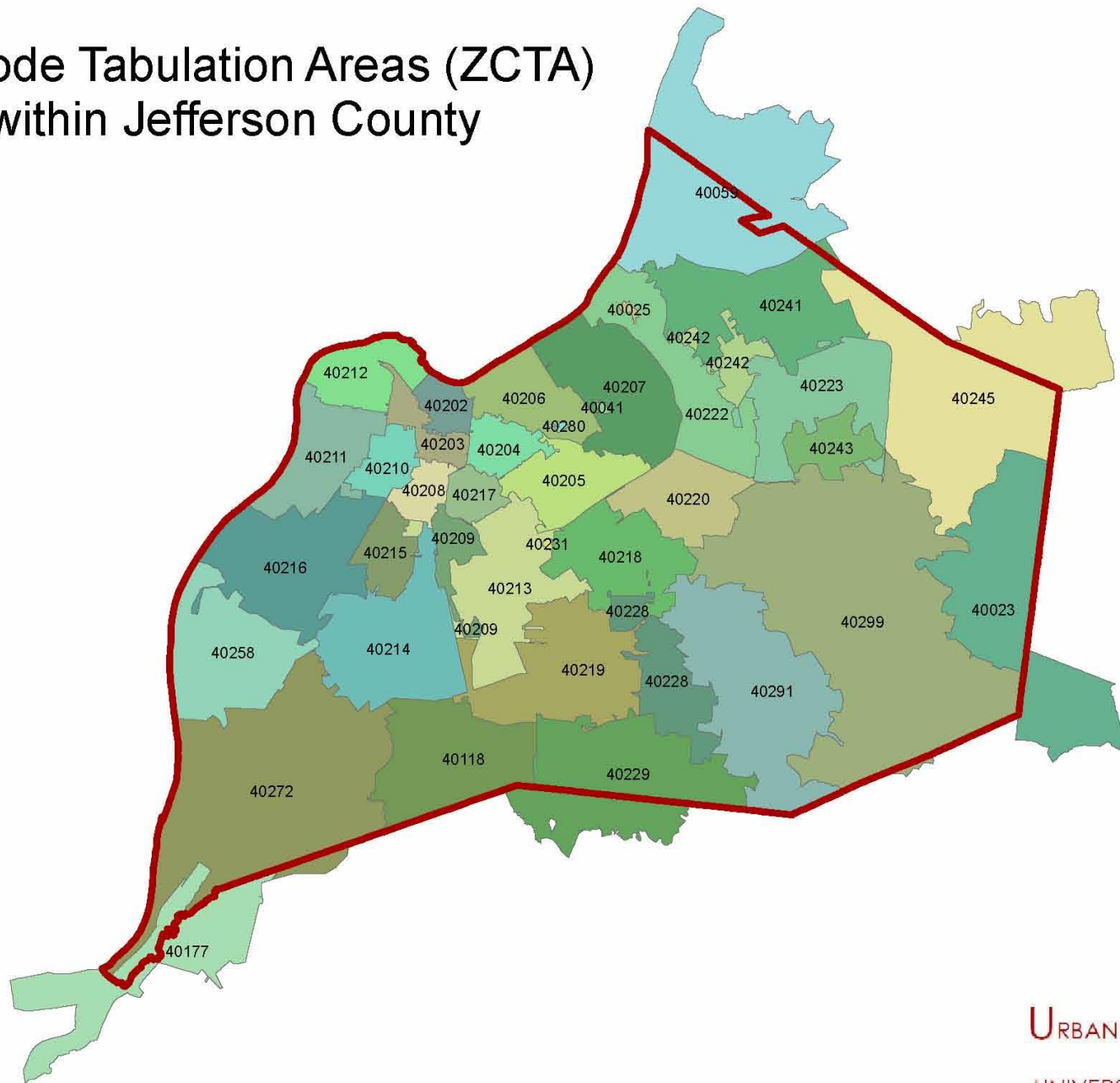


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Miles

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# Zip Code Tabulation Areas (ZCTA) within Jefferson County



# Accessing Data

- American Fact Finder
- Guided search is useful for new users
- Advanced search for experienced users
- Download
  - CSV
  - Excel
  - PDF
  - RTF

<http://factfinder2.census.gov>



## ▼ Community Facts

Find popular facts (population, income, etc.) and frequently requested data about your community.

Enter a state, county, city, town, or zip code:

e.g., Atlanta, GA

GO

## ▶ Guided Search

## ▶ Advanced Search

## ▶ Download Options

U.S. Department of Commerce

United States  
**Census**  
Bureau

AMERICAN  
**FactFinder**



MAIN

COMMUNITY FACTS

GUIDED SEARCH

ADVANCED SEARCH

DOWNLOAD OPTIONS

**Search** - Use the options on the left (topics, geographies, ...) to narrow your search results

Your Selections

"Your Selections" is empty

Search using the options below:

Topics  
(age, income, year, dataset, ...)

Geographies  
(states, counties, places, ...)

Race and Ethnic Groups  
(race, ancestry, tribe)

Industry Codes  
(NAICS industry, ...)

EEO Occupation Codes  
(executives, analysts, ...)

Begin with the menus on the left

I would like to use the latest ACS 3-year estimates but am not sure which counties are available...

I need data for Adair County but am not sure of the most recent data available...

# American Fact Finder

Enter search terms and an optional geography and click GO

Select Topics

CLOSE X

Select Topics to add to 'Your Selections' ?

- + People
- + Housing
- + Business and Industry
- + Governments
- + Year
- + Product Type
- + Program
- + Dataset

☐ Include archived products in your search ?

Enter search terms and an optional geography and click GO

Select Geographies

CLOSE X

List Name Address Map

Select geographies to add to Your Selections ?

Select from: ☒ most requested geographic types ☐ all geographic types

Select a geographic type:

..... County - 050

Select a state:

Kentucky

Select one or more geographic areas and click Add to Your Selections:

All Counties within Kentucky

Statewide, Kentucky, Kentucky

Adair County, Kentucky

Allen County, Kentucky

Anderson County, Kentucky

Ballard County, Kentucky

Barren County, Kentucky

Bath County, Kentucky

Bell County, Kentucky

Boone County, Kentucky

ADD TO YOUR SELECTIONS

Didn't find your geographic type? Click the 'all geographic types' radio button above, or try the Name, Address or Map geography search options instead.

# Pay Attention to the Universe!

B17001	POVERTY STATUS IN THE PAST 12 MONTHS BY SEX BY AGE Universe: Population for whom poverty status is determined 2012 American Community Survey 1-Year Estimates
B17019	POVERTY STATUS IN THE PAST 12 MONTHS OF FAMILIES BY HOUSEHOLD TYPE BY TENURE Universe: Families ⓘ 2012 American Community Survey 1-Year Estimates
B17017	POVERTY STATUS IN THE PAST 12 MONTHS BY HOUSEHOLD TYPE BY AGE OF HOUSEHOLDER Universe: Households ⓘ 2012 American Community Survey 1-Year Estimates
B17006	POVERTY STATUS IN THE PAST 12 MONTHS OF RELATED CHILDREN UNDER 18 YEARS BY FAMILY TYPE BY AGE OF RELATED CHILDREN UNDER 18 YEARS Universe: Related children under 18 years ⓘ 2012 American Community Survey 1-Year Estimates

P16	POPULATION IN HOUSEHOLDS BY AGE Universe: Population in households ⓘ 2010 Census Summary File 1
P22	HOUSEHOLD TYPE BY AGE OF HOUSEHOLDER Universe: Households ⓘ 2010 Census Summary File 1



# Data Comparisons

- Only compare the same type of estimate
  - 5-year estimates to other 5-year estimates
- Non-overlapping periods
  - 2007-2009 estimate to 2010-2012 estimate
- 2000 SF3
  - Some differences in phrasing of questions
  - Period estimates vs. point in time
    - Income, Vacancy rate, college students
  - For most population and housing subjects, comparisons can be made

[http://www.census.gov/acs/www/guidance\\_for\\_data\\_users/comparing\\_data/](http://www.census.gov/acs/www/guidance_for_data_users/comparing_data/)

# Data Limitations

- American Community SURVEY
  - Sampling and Non-Sampling Error
- Margins of Error reported for 90% confidence levels
- Test for reliability
  - Standard Error = Margin of Error / 1.645
  - Coefficient of Variation = (Standard Error / Estimate) \* 100
- Census says use caution when  $CV > 15\%$

# Additional Data Sources



Kentucky State Data Center

426 W.Bloom St. Louisville-40208 | Ph.[502] 852-7990 | Email: ksdcc@louisville.edu

UNIVERSITY OF  
LOUISVILLE

<http://ksdc.louisville.edu/>

- Census Profiles
  - State, ADDs, County, Cities
  - 1980 – 2010
- Population Estimates
- Projections
- Vital Statistics
- Descriptions of all kinds of public databases
- Other useful links
  - Kids Count, Kentucky Health Facts
- Data Requests

# Questions?