Regional Economics
Lecture 5

J. M. Pogodzinski

Assignment 3 – Due March 3, 5pm by email to regionalecon@gmail.com

- **Select two** *racial/ethnic groups* that have reported data from the most recent ACS for the same California County.
- **Construct a table** that gives a side-by-side comparison of the two groups in that county
- **Write a paragraph** that summarizes the most striking similarities and the most striking differences between the two groups in *demographic* and *economic* terms

ACS Assignment

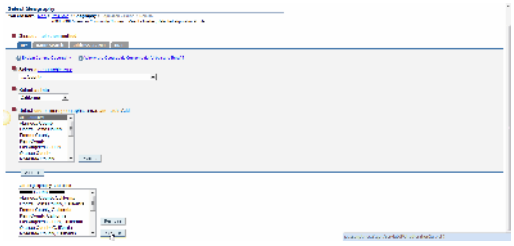
Go to American Factfinder Website

http://www.factfinder.census.gov/home/saff/main.html?_lang=en

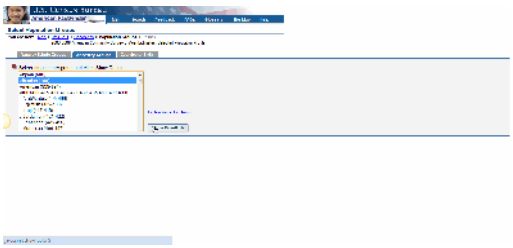
American Factfinder Portal
American Community Survey

ACS – Most Recent Estimates

Selecting the Geography

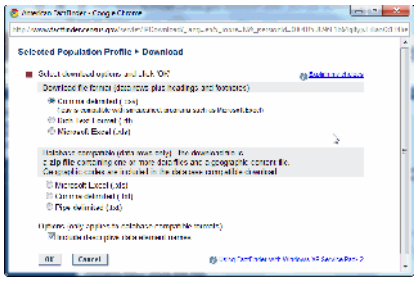


Selecting the Racial/Ethnic Group

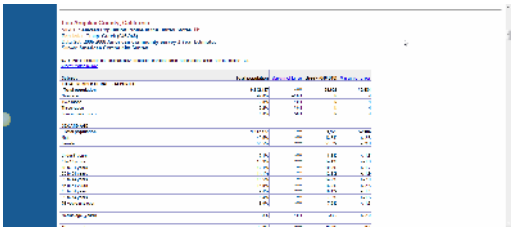


Selecting Another Racial/Ethnic Group

Output Options



Output



Output Downloaded

DISPLAY DOWNLOADED OUTPUT FOR ACS

GCTXLSPresentationDownload

IPXLSPresentationDownload

ESRI Guide to GIS Analysis, Vol. 1

Chapter 1

What is GIS analysis?

- Technology now about 40 years old
- Used mostly to make maps but has greater capabilities for analysis
  - Discover/analyze spatial relationships and patterns

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The most common GIS tasks:

- Mapping where things are
- Mapping the most and the least
- Mapping density
- Finding what's inside (something)
- Mapping change

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Chapters 1 focuses on basic GIS concepts, geographic data and how it is stored, data values and their use.

Chapters 2-4 present key map-building concepts

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Chapter 1

- Frame the question
- Understand you data ("Know the data")
- Choose a method
- Process the data
- Look at the results

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Types of features (variables)

- Discrete features
  - Examples (p. 12, left-hand column) include discrete features that are
    - Points
    - Lines
    - Polygons

    } ← The different types of "vector" GIS data.
  - Give some examples of economic phenomena that vary discretely spatially

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Types of features (variables)

- Continuous (p. 12, right-hand column)
- Give some examples of economic phenomena that vary continuous spatially

Features summarized by areas

- Census economic and demographic variables by census tracts or census block groups
- Economic Census data by zip code

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Vector vs. Raster

Vector

points

lines

polygons

Raster (Note: can convert vector data to raster data)

pixels

satellite or aerial imagery

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Projections and coordinate systems
Types of Attribute Values
- categories
- ranks
- counts
- amounts
- ratios

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Selection of attributes (using SQL statement)

Calculating (computing)

Summarize

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Chapter 2. Mapping Where Things Are
Why map where things are?
What to map?
Preparing you data
Making your map
Analyzing geographic patterns

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Chapter 2. Mapping Where Things Are

Why map where things are?

Economics of location

- economic actors (households, firms, public institutions, infrastructure)

Local publicly-provided goods defined within geographic area

Elements of the theory of Fiscal Federalism suggest that there is a "mosaic" of governments

Different locations are associated with different costs and benefits

What are they?

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Chapter 2. Mapping Where Things Are

What to map?

Economic theory suggests what to map

What are the spatially testable implications of the theory?

Identify economic variables that can be represented by categories. How would you assign category values? Give examples.

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Give an economically relevant example of "mapping the same type of feature"?

For the example you gave above, identify an economically relevant subset of the feature

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Maps of different scales
What is TMI?
Drilling down and having more features appear

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Analyzing geographic patterns