



# Use of GIS by the State Demographer

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# State Demographer

- Michigan's liaison with the U.S. Census Bureau for many programs including population estimates, projections, data dissemination and the decennial census
- Advisor to state leaders, businesses, non-profits, the media, and the general public on issues related to population and the Census
- Lead agent for the State Data Center (SDC)

# Datasets

- Most of the social/population data used to make decisions come from the U.S. Census Bureau
- These data come from a variety of datasets  
Census has some role in creating, maintaining an/or disseminating.
  - ▣ Decennial Census of Population and Housing
  - ▣ American Community Survey (ACS)
  - ▣ Population Estimates
  - ▣ Current Population Survey (CPS)

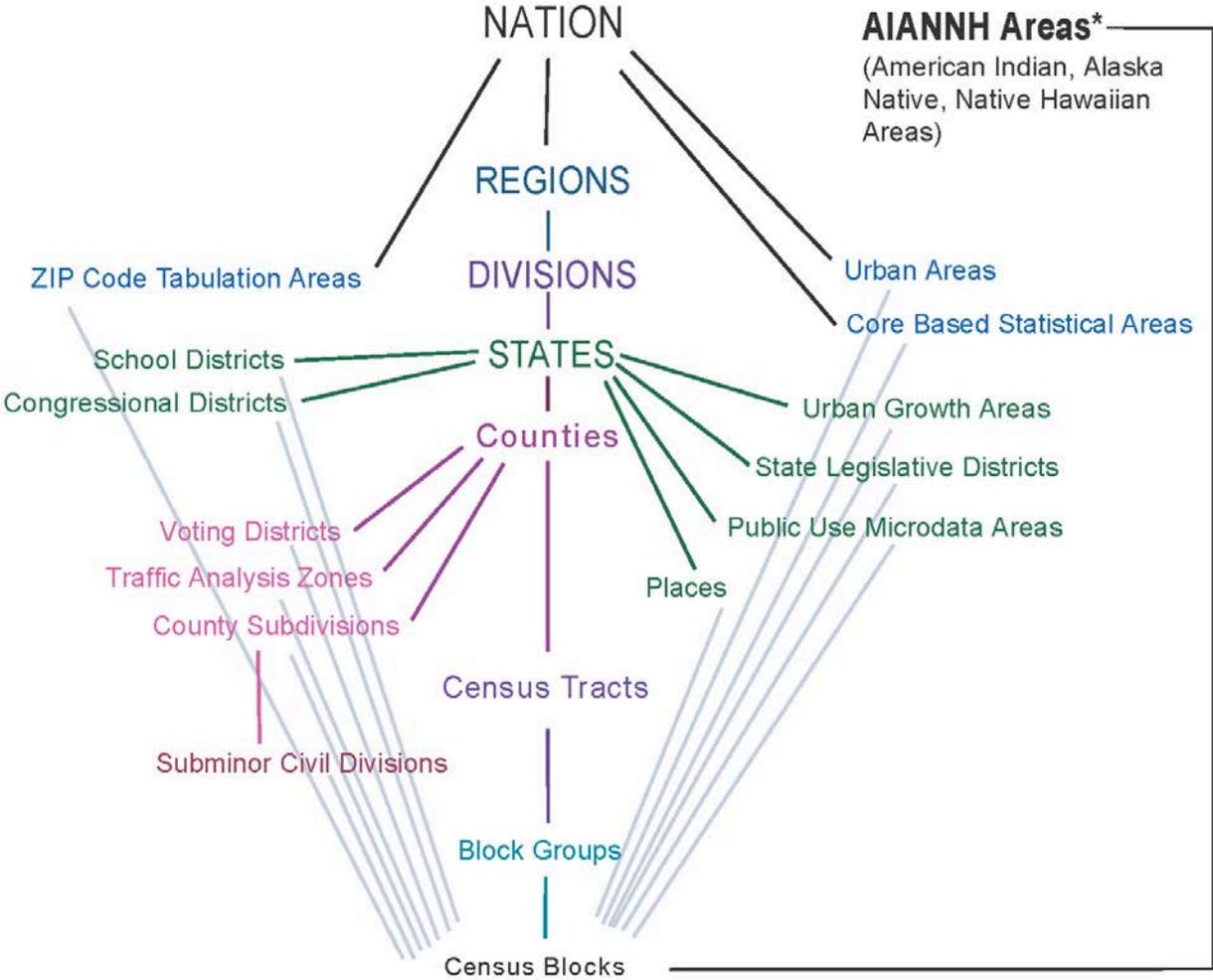
# Where To Get the Data

- Decennial, Population Estimates, and ACS data are all available through the Census Bureau's data retrieval tool, American FactFinder
- CPS data are a little harder to work with
  - ▣ There is a table maker tool on [census.gov](https://www.census.gov) that will allow you to query the data
  - ▣ Census also makes data available through their Data Ferret tool

# Mapping the Data

- The vast majority of data available through the U.S. Census Bureau is already geocoded to allow for mapping with their shapefiles.
  
- Census provides shapefiles for nearly all of their geographies.
  - ▣ Exception are some areas in the population estimates universe
    - Mostly the sub-county areas
  - ▣ Sometimes difficult to locate a particular area due to the peculiarities of census geography

# Census Geography



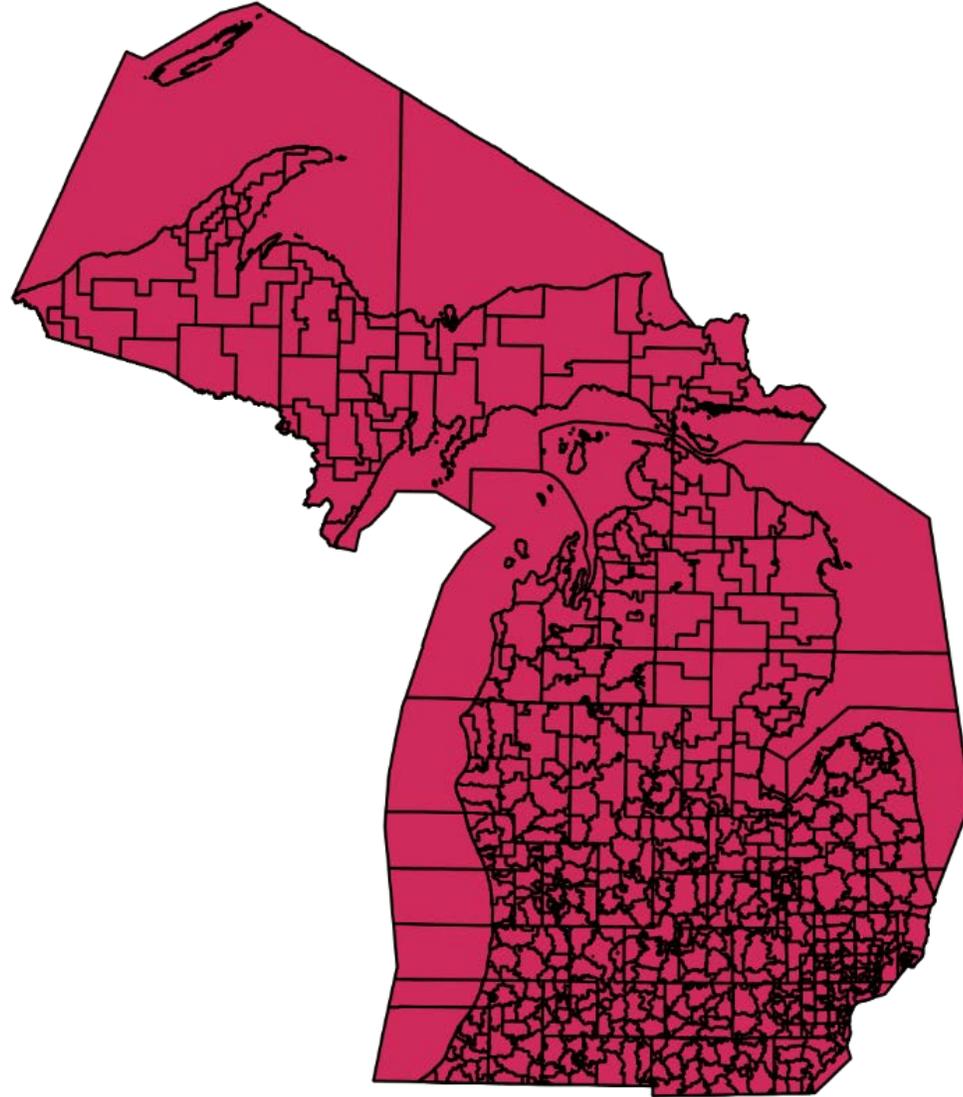
# People and Places

- Data from the U.S. Census Bureau is ostensibly about the people in the state and nation
  - ▣ Every data element is nested within a particular geography
  - ▣ First thing I do when I go to Census for data is select a geographic area

# How I Use GIS

- Converting Geographies
  - ▣ Custom Tabulations
    - Build Custom area from blocks or block groups
  - ▣ Disaggregations/Reaggregations of PUMA data

# Reaggregating PUMA Data

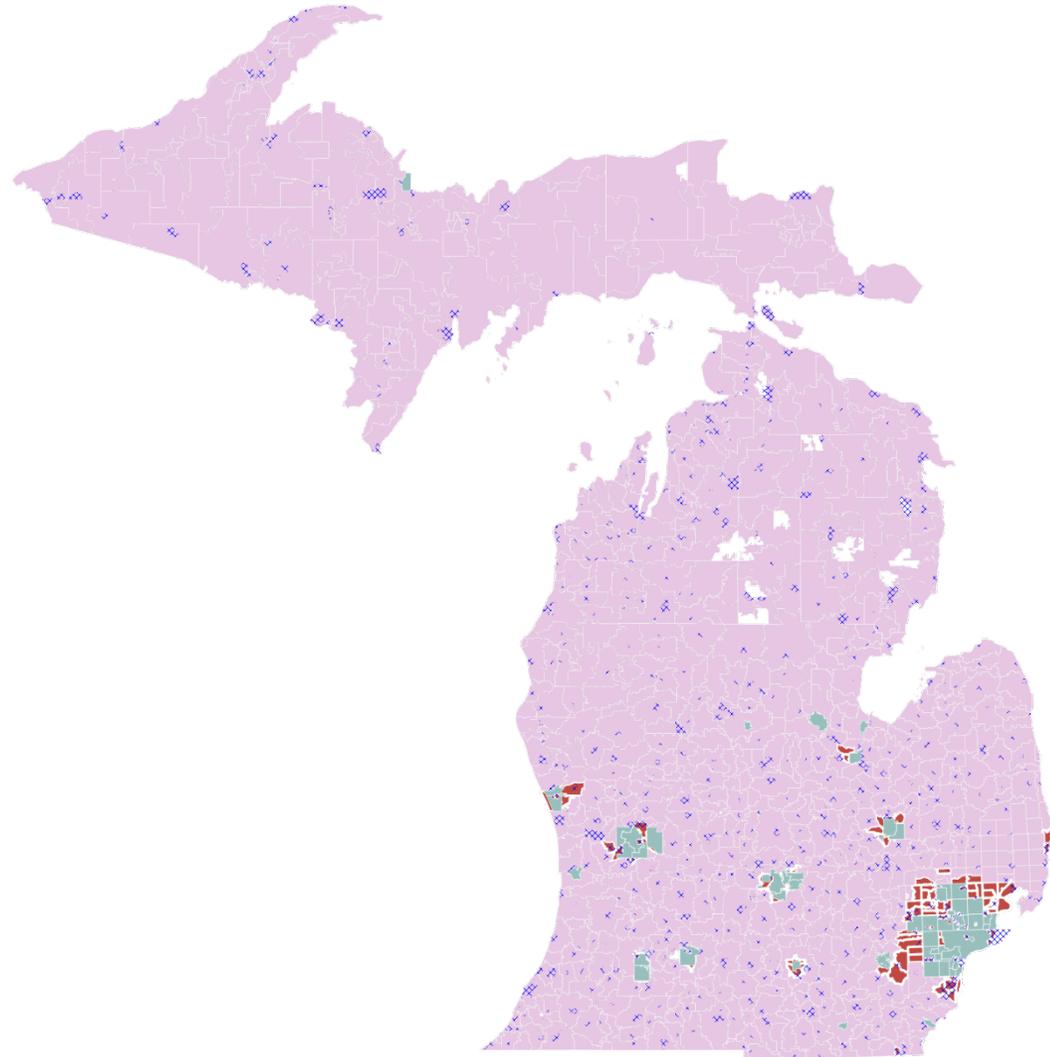


# How I Use GIS

## □ Analysis

- ▣ Reviewing of Census estimates
  - Housing estimates
  - Sub-county population estimates
- ▣ Population change
  - Migration
- ▣ Spatial Correlations

# Defining An Area



# How I Use GIS

## □ Data Dissemination

### ▣ Choropleth maps

■ Poverty

■ Population Distribution

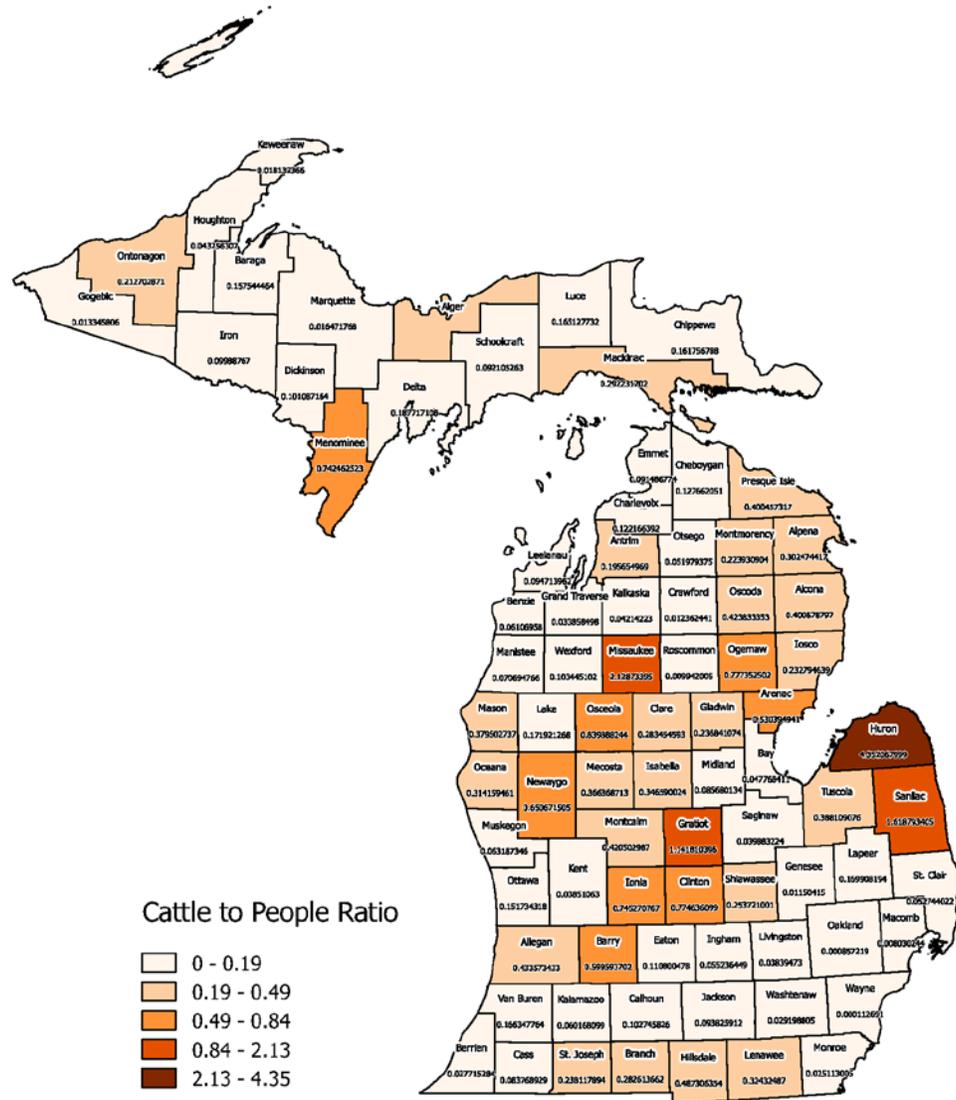
■ Migration

■ Income



Sometimes Just for Fun...





# Thank you

## Questions?

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