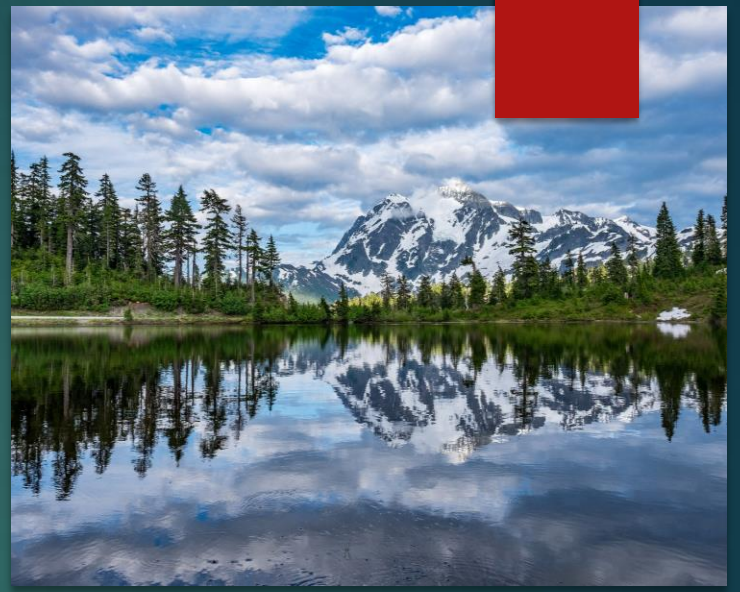
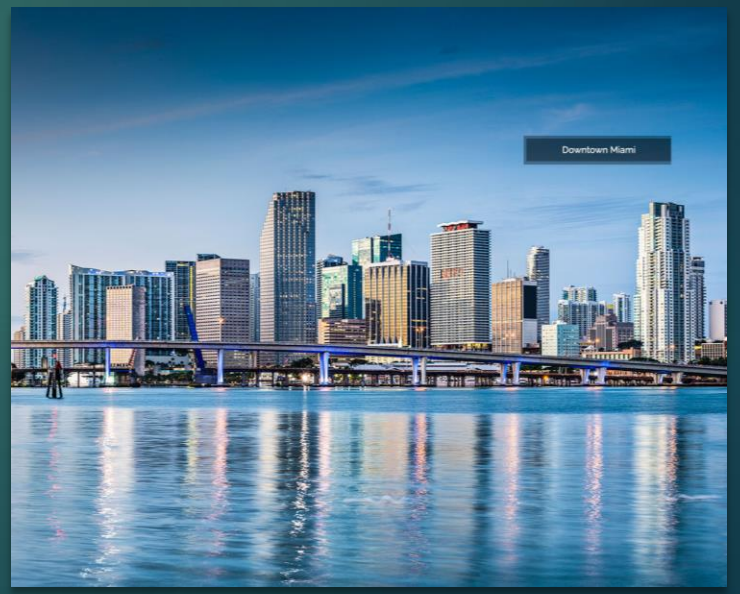
Using Geospatial Data to Acquire Ideal Zone Implementation Plan Codes

TOM PERRY, MICHAELA MACDOUGALL,
ISAAC GRAHAM, TOMAS MOFFATT

Main Goal

- Using social, recreational, economic and population geospatial data for both Tennessee and Florida, the selection of various parameters including age and crime facilitated the finding of optimal ZIP codes within these two states to live in.





https://www.nationalgeographic.com/travel/destinations/north-america/united-states/fun-facts-national-parks/
-http://www.fecr.com/downtown-miami/
-https://www.cartoonstock.com/directory/d/disposable_income.asp

Background

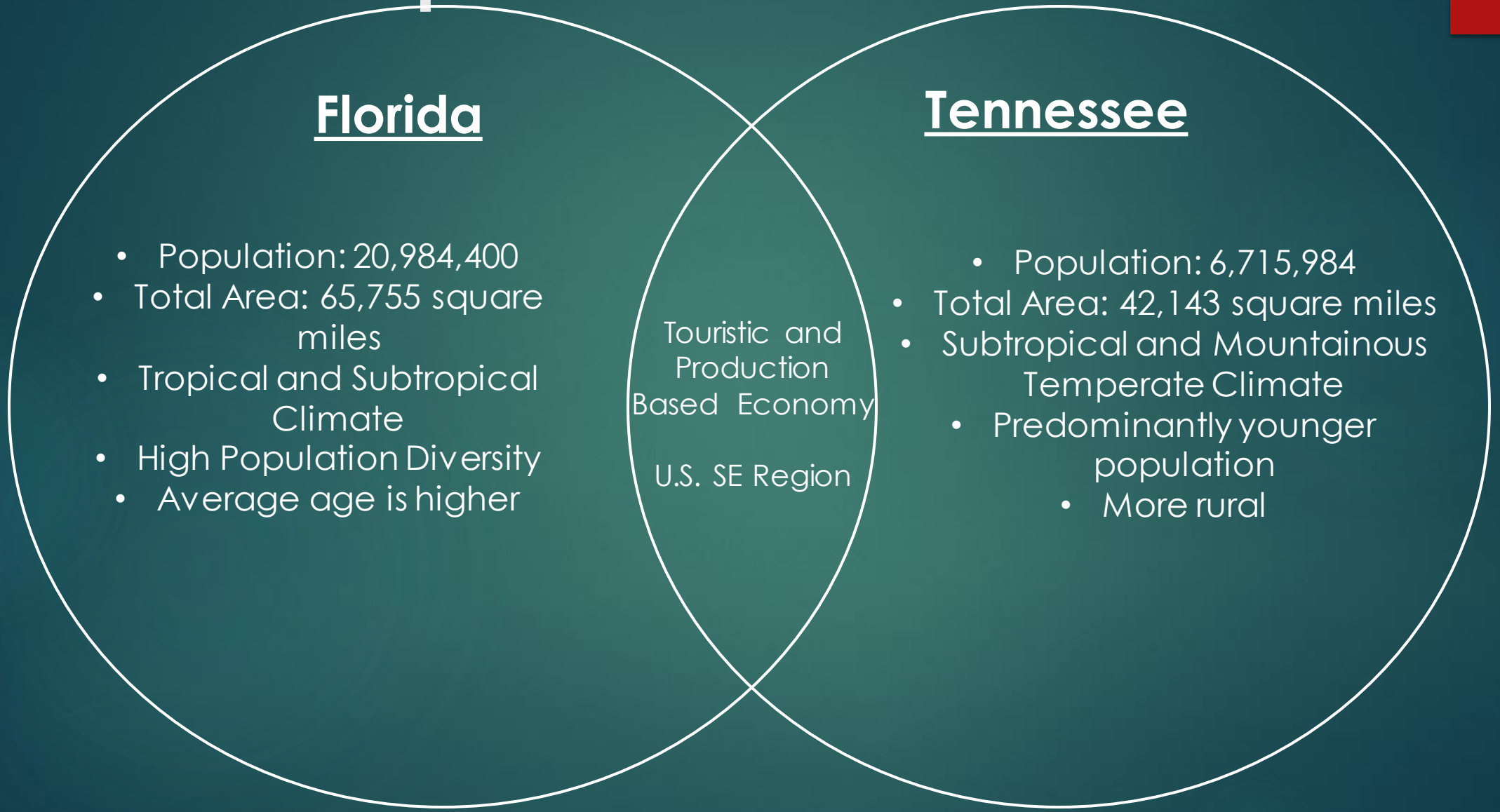
- Florida
  - Warm weather, urban areas, familiarity
- Tennessee
  - Lots of opportunities for outdoor activities

http://theapopkavoice.com/day-florida-becomes-state/
https://www.southernliving.com/travel/top-ten-things-to-do-in-tennessee-video

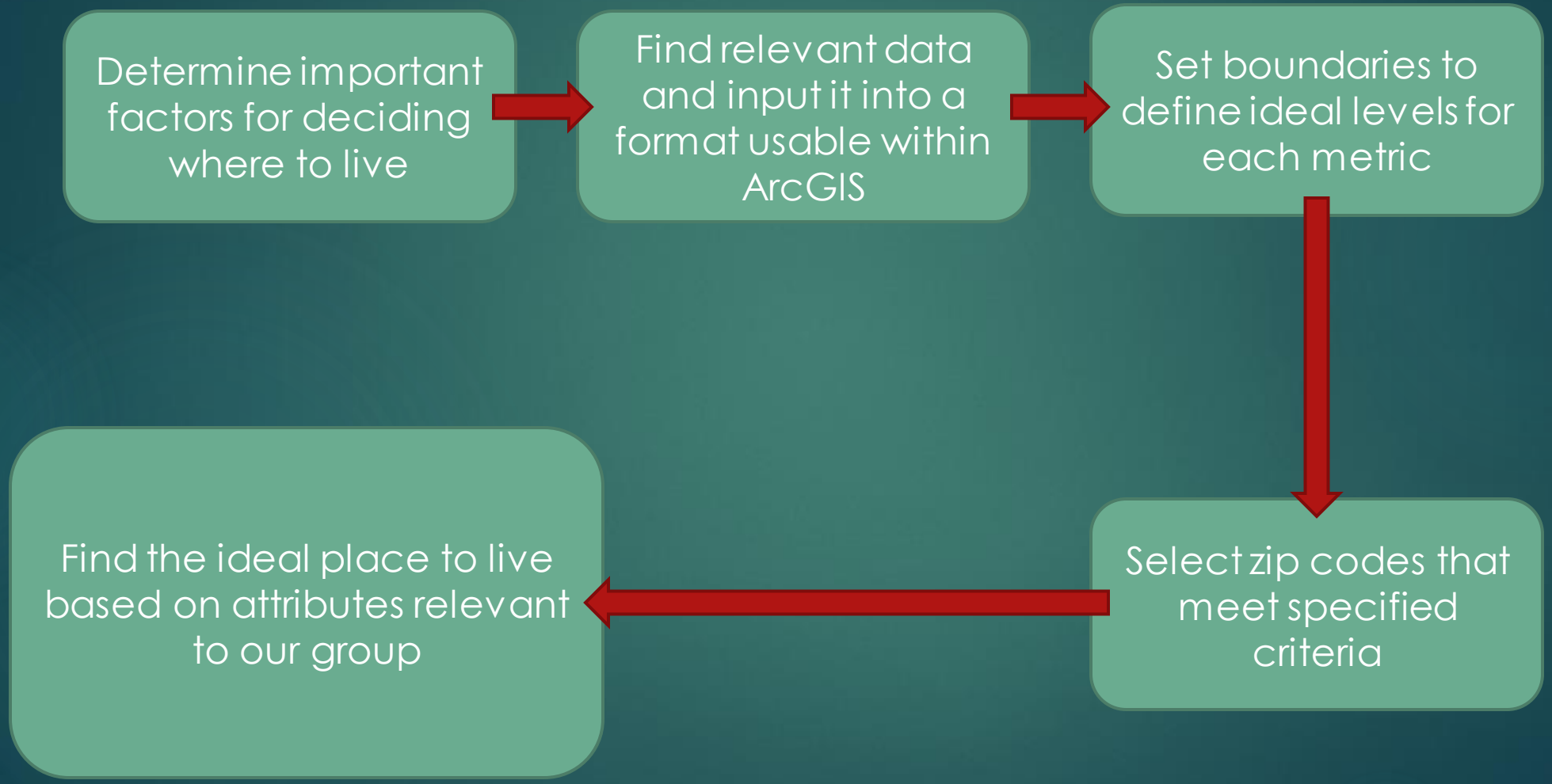
Background Continued

- Measures:
  - Quality of Life:
    - Crime rate, urban areas and population
  - Recreation:
    - State parks, national parks and community centers
  - Economic Conditions
    - Total income, disposable income and net worth

Scope and Characteristics



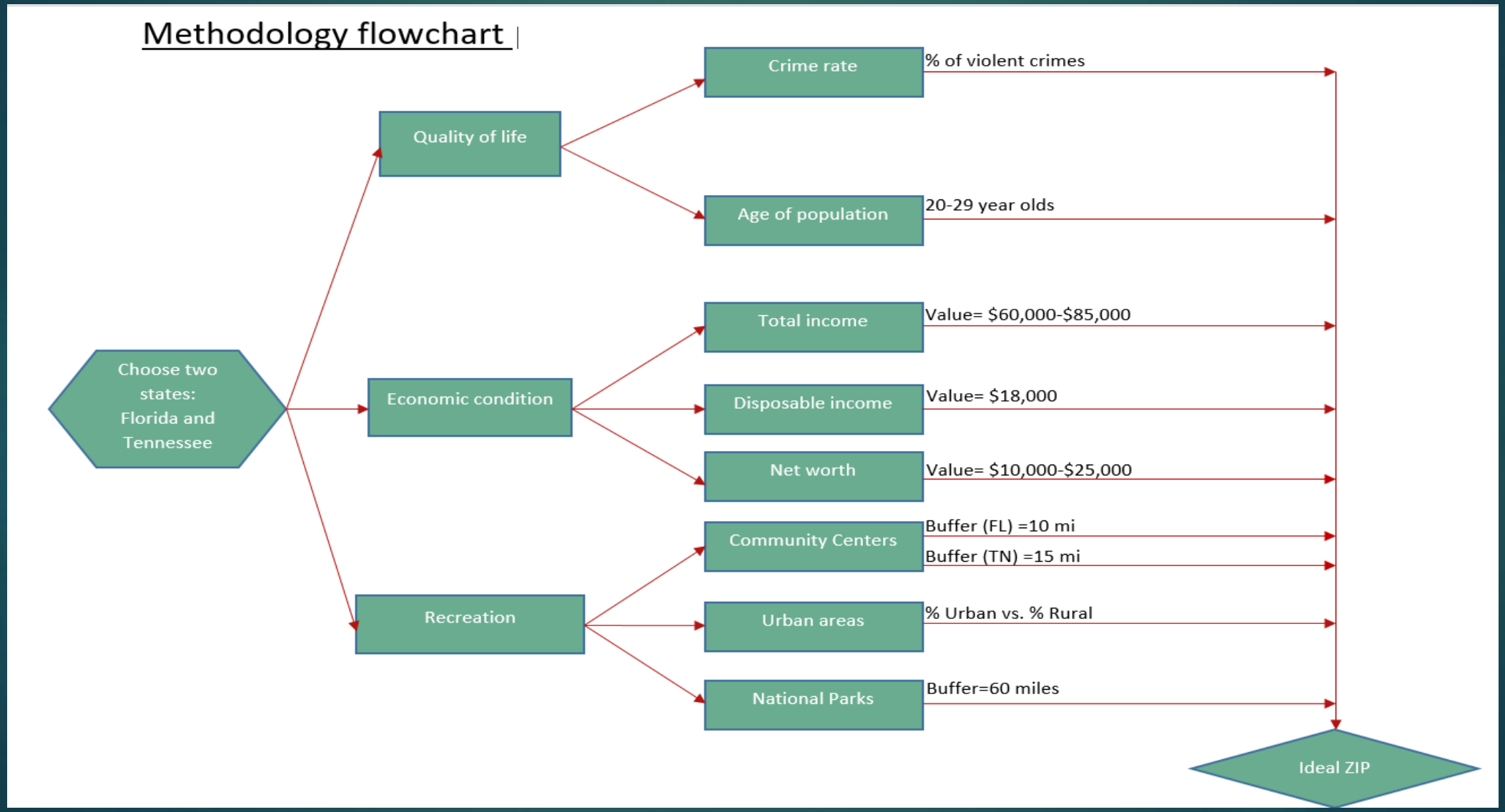
Objectives


Determine important factors for deciding where to live
Find relevant data and input it into a format usable within ArcGIS
Set boundaries to define ideal levels for each metric
Select zip codes that meet specified criteria
Find the ideal place to live based on attributes relevant to our group

Criteria

- Economic Indicators
  - Income
  - Disposable Income
  - Net Worth
- Quality of Life
  - Crime Rate
  - Age
- Recreational Indicators
  - Proximity to community centers
  - Proximity to urban areas
  - Proximity to National parks

Methodology flowchart



Methodology: Economic

- Divided into three categories: Total income, Net worth, and disposable income
- Total income parameter: Between $60,000 and $85,000
- Disposable income parameter: $18,000
- Net worth parameter: $10,000-$15,000

Methodology: Quality of life

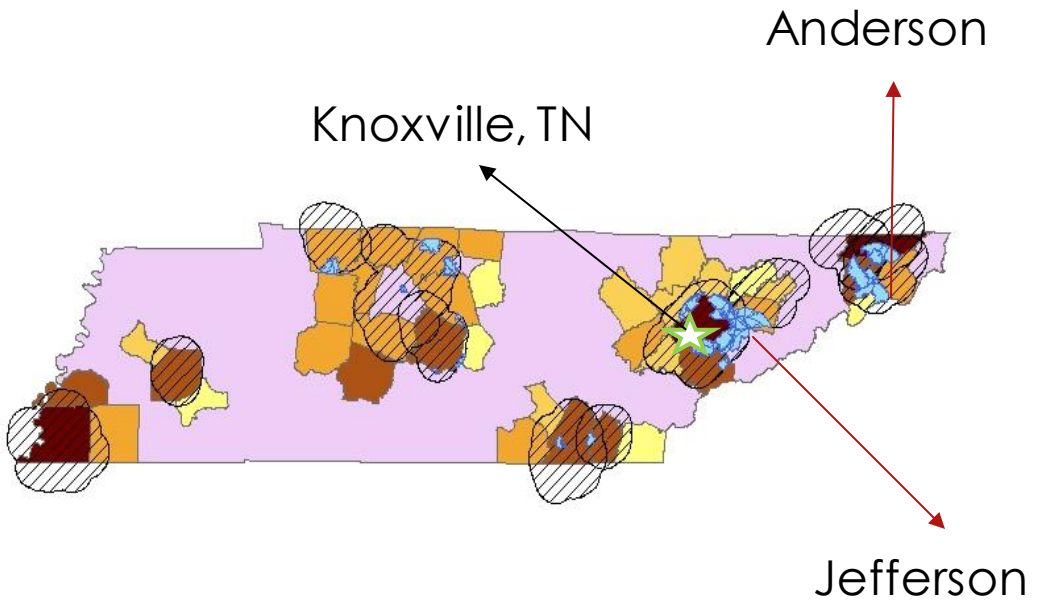
- Crime rate: lower percentage of violent crimes
- Age of population: 20-29 year olds

Methodology: Recreation

- Community centers in the area
  - Florida and Tennessee had different buffer lengths
- National parks: 60 mile buffer
- Urban areas: Percentage of rural population vs. Percentage of urban population

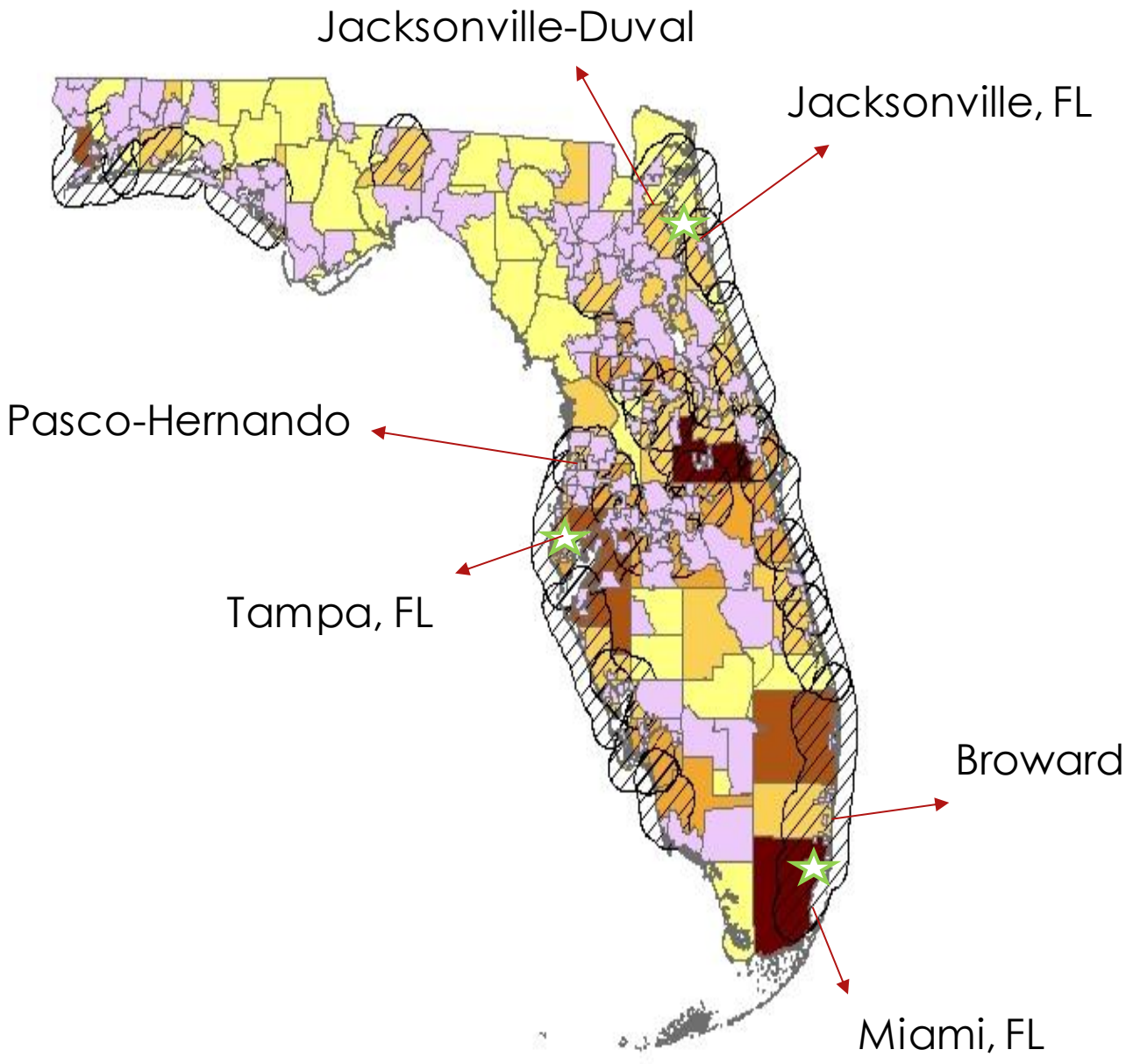
Results - Tennessee

- Jefferson County
  - 37725
  - 37820
  - 37871
- Anderson County
  - 37705
  - 37716

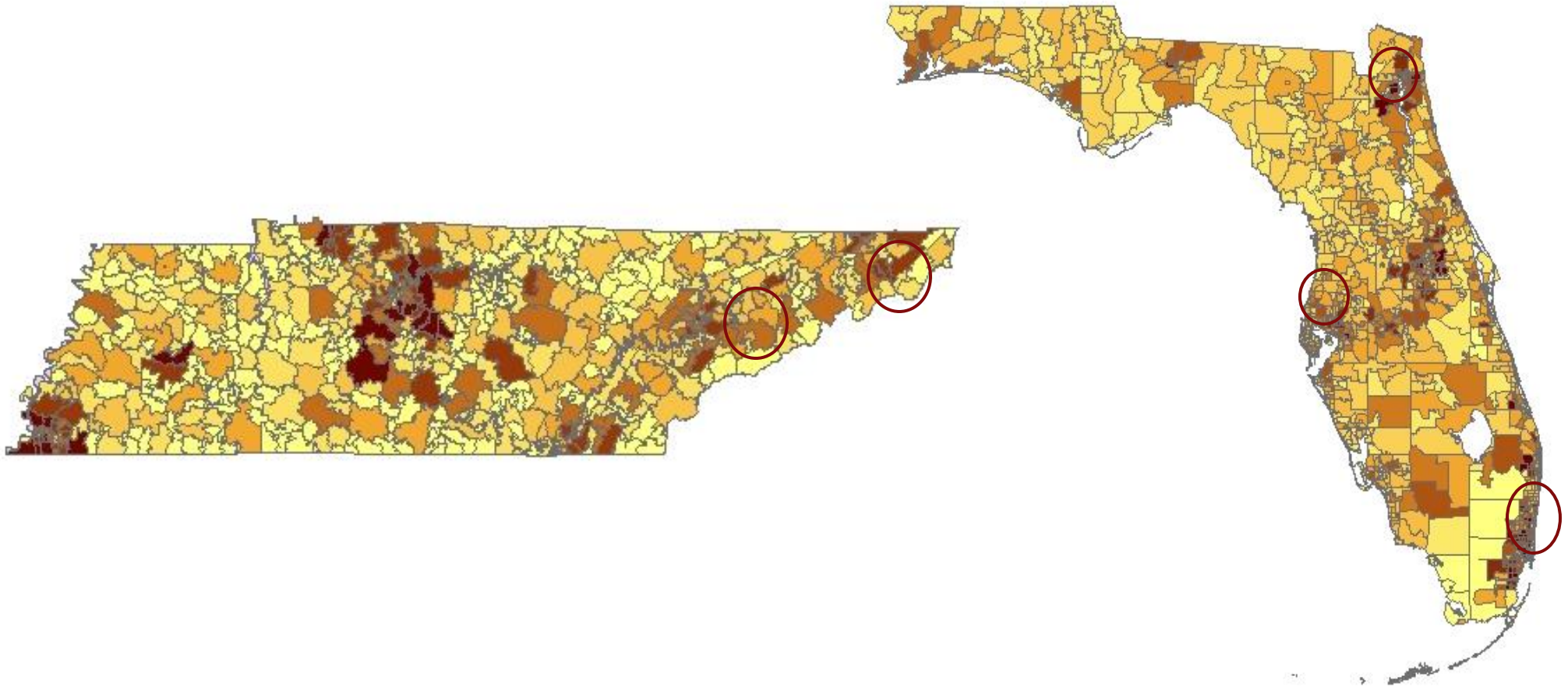


Results - Florida

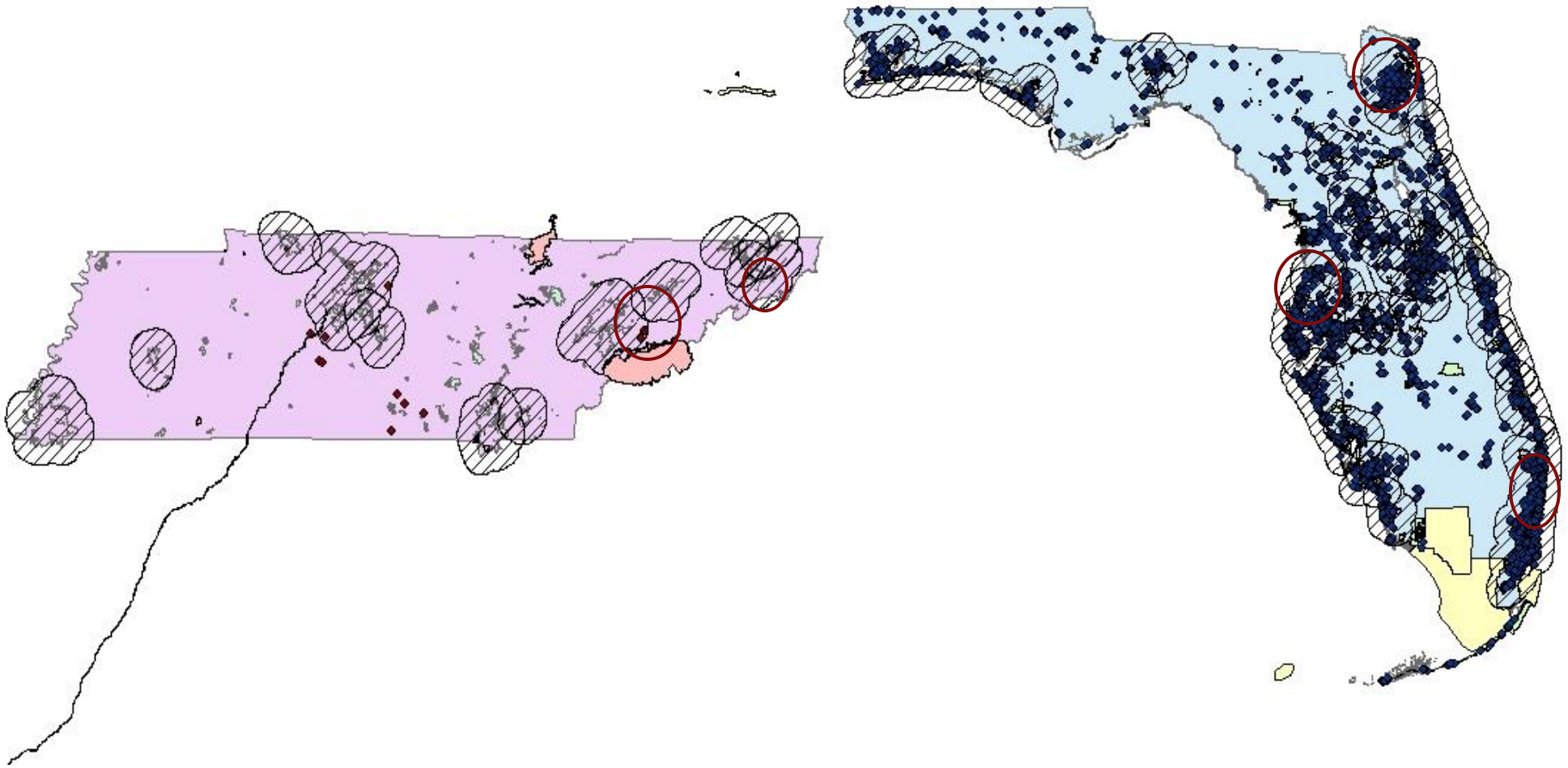
- Pasco-Hernando County
  - 34654
  - 34610
  - 34638
  - 34614
  - 34601
  - 34604
- Broward County
  - 33023
  - 33063
  - 33162
  - 33312
  - 33407
- Jacksonville-Duval County
  - 32211
  - 32219
  - 32220



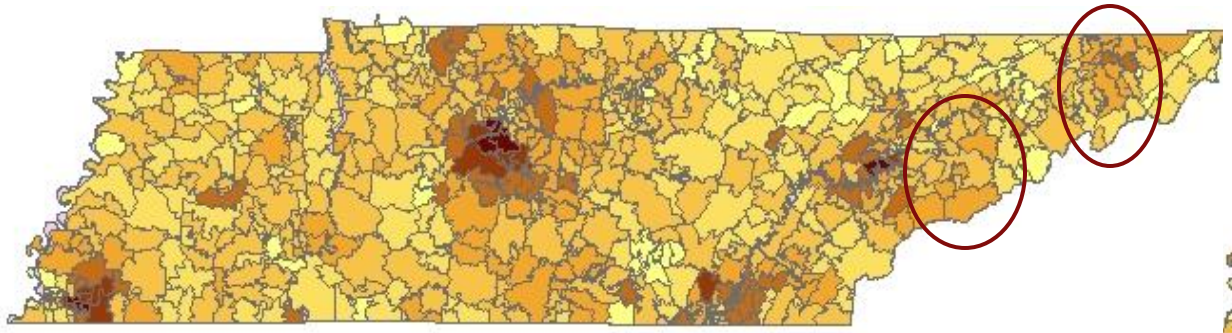
Quality of Life Results



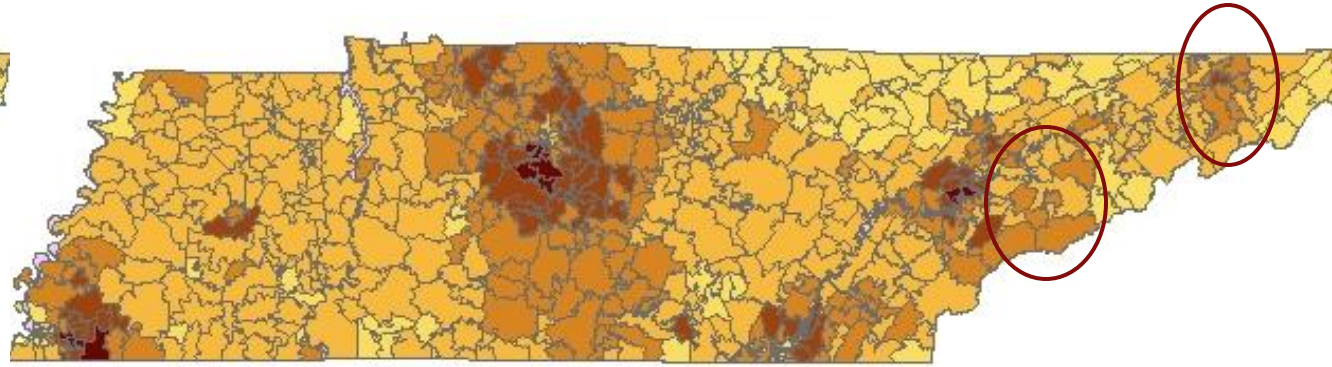
Recreation Results



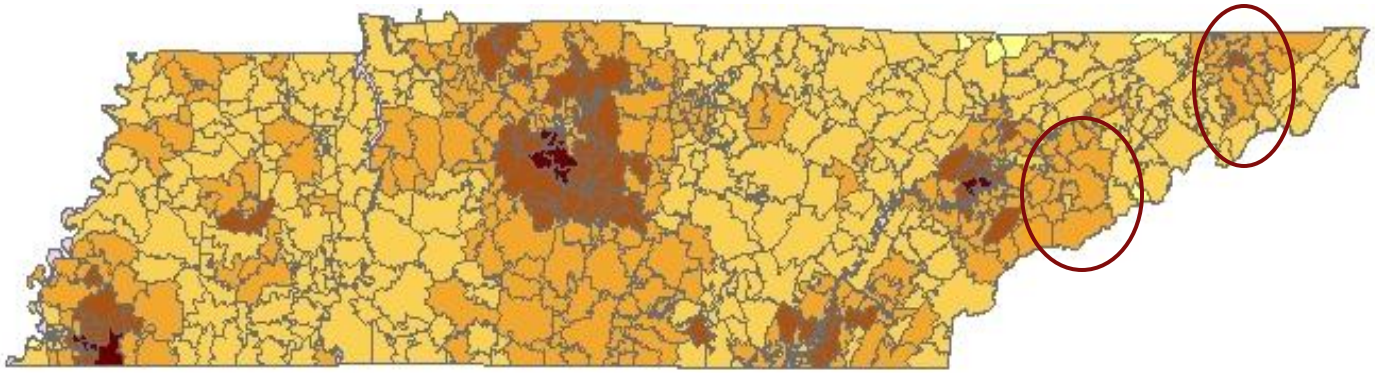
Economic Results - Tennessee



Average
Net Worth



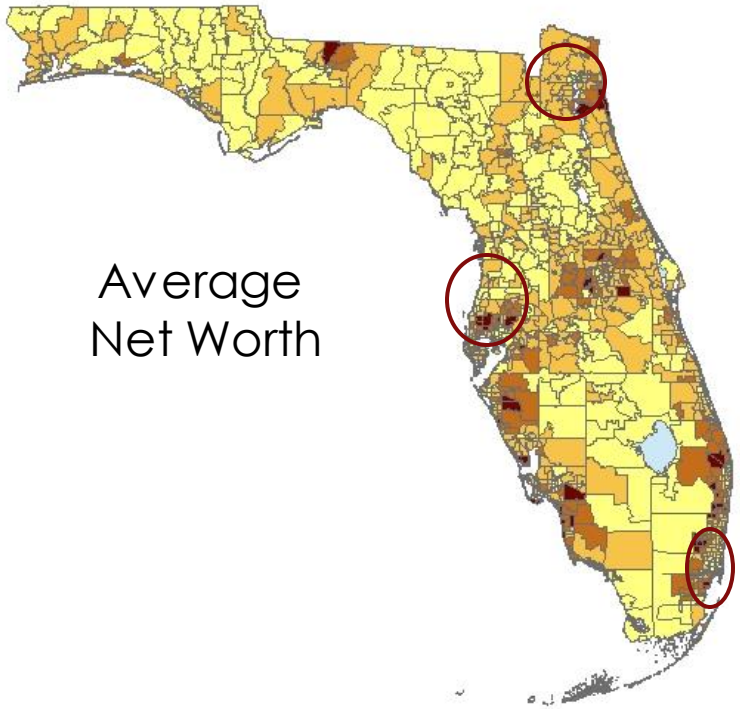
Disposable Income



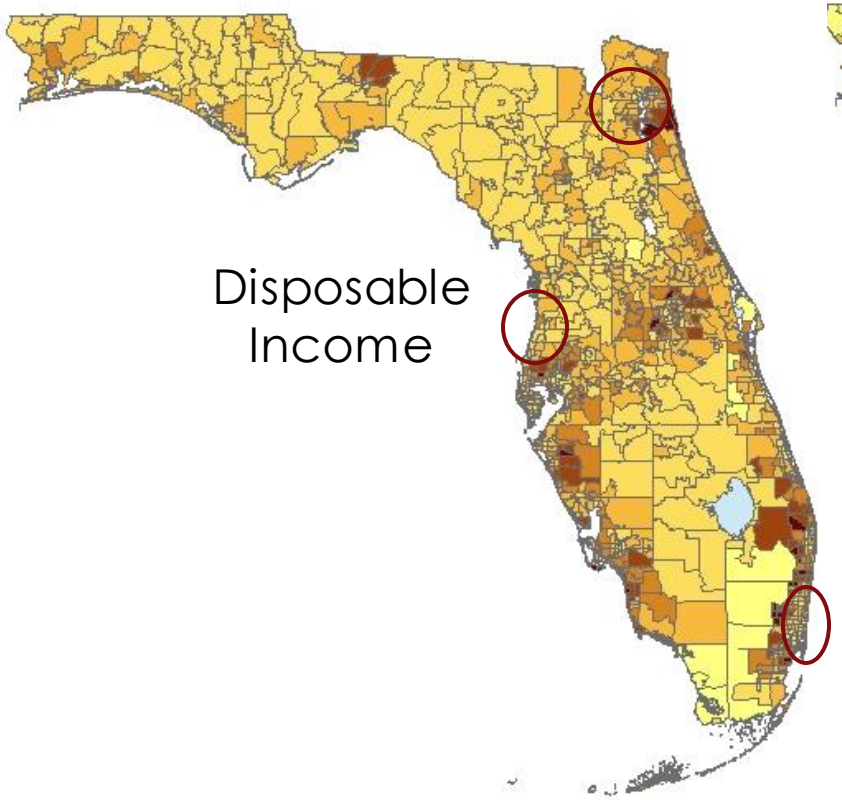
Average Income

Economic Results - Florida

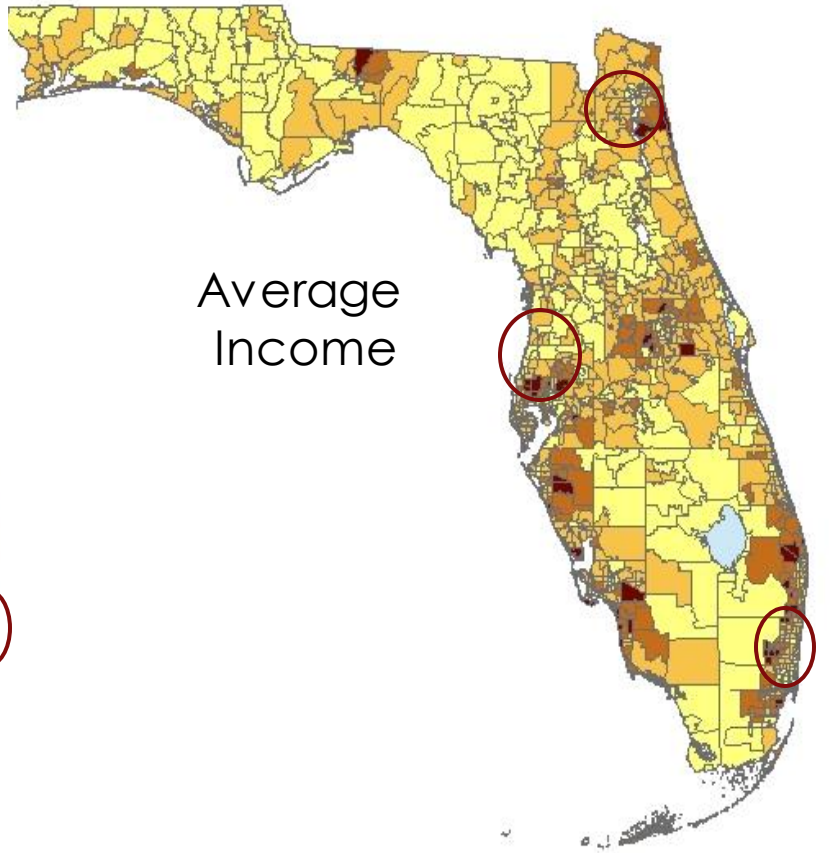
Average Net Worth



Disposable Income



Average Income



Conclusions

- Some of them were zip codes where we expected, some zip codes were where we did not expect
- There are lots of options that meet most parameters
- There are only a few zip codes that meet all of our parameters
  - 5 in Tennessee
  - 14 in Florida