

Louisville Metro Population and Household Projections 2010-2040

Prepared for Louisville Metro

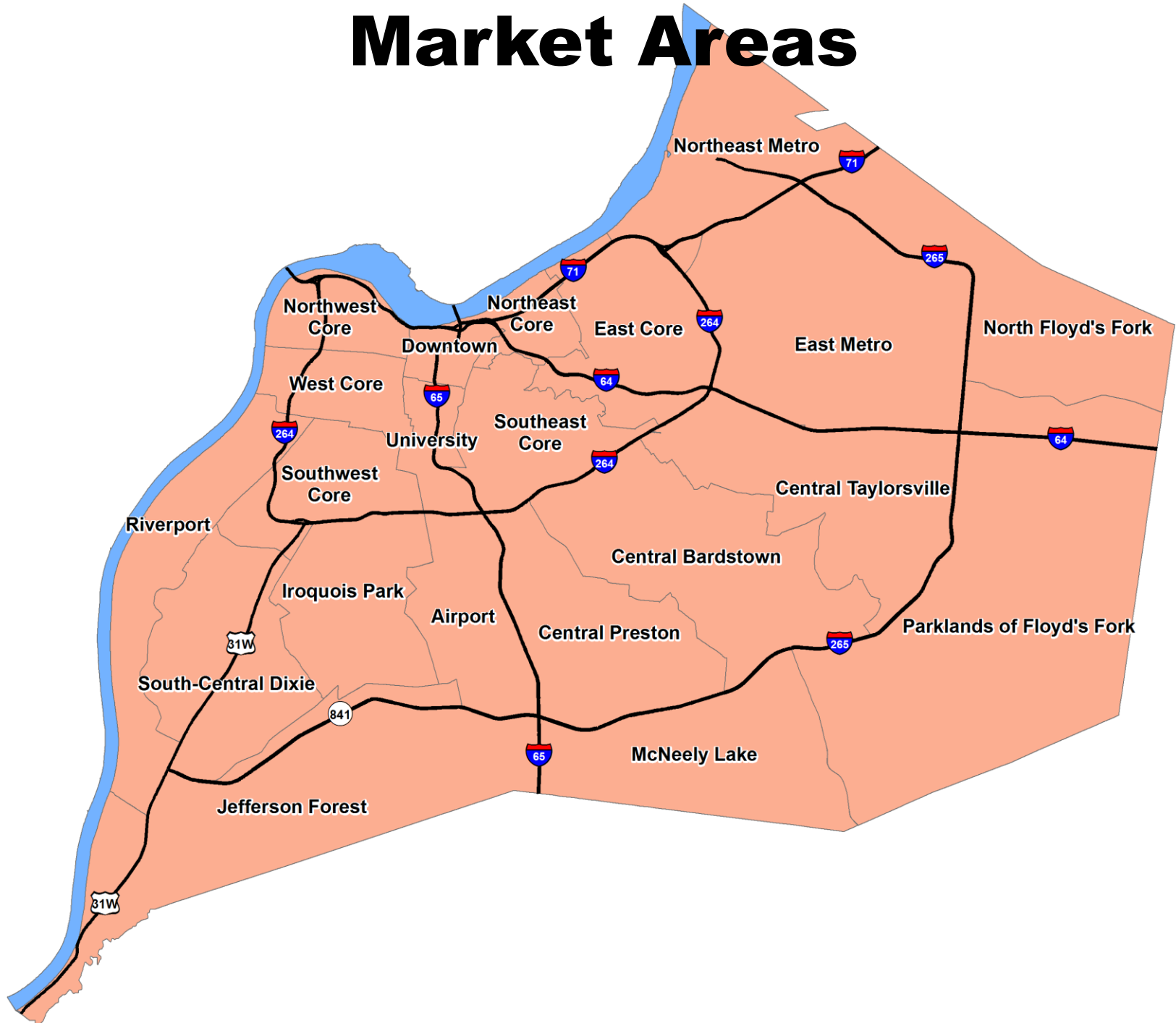
Urban Studies Institute
Kentucky State Data Center

April 16, 2016

Population Projection Methodology

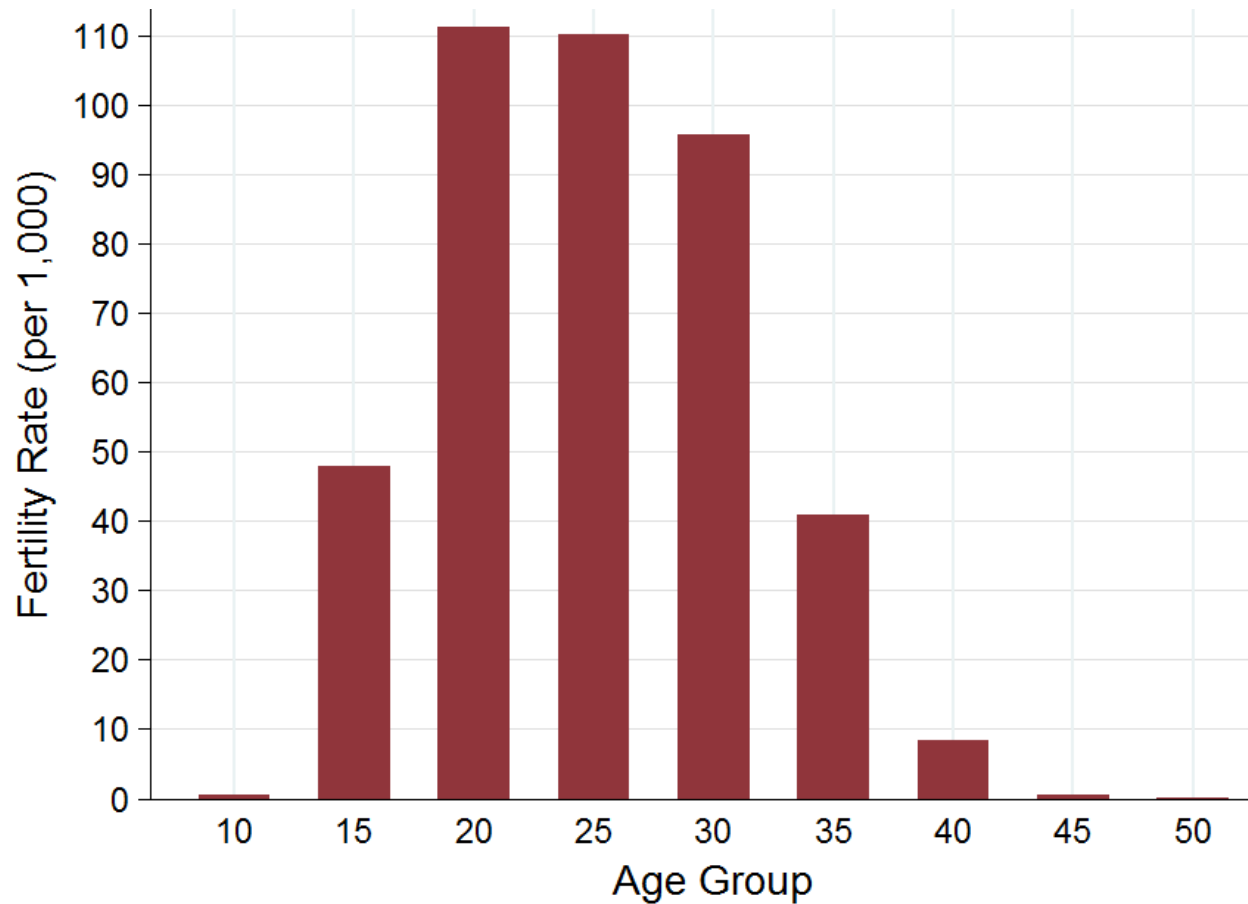
- Generate county-level projection using cohort-component model
 - 5-year age groups “aged ahead” based on existing rates
 - Fertility rates
 - Mortality rates
 - Net migration rates
- Tract-level projections derived from tract age distribution changes between 2000-2010
 - Controlled to county total
- Tract-level projections aggregated to create market area projections

Market Areas



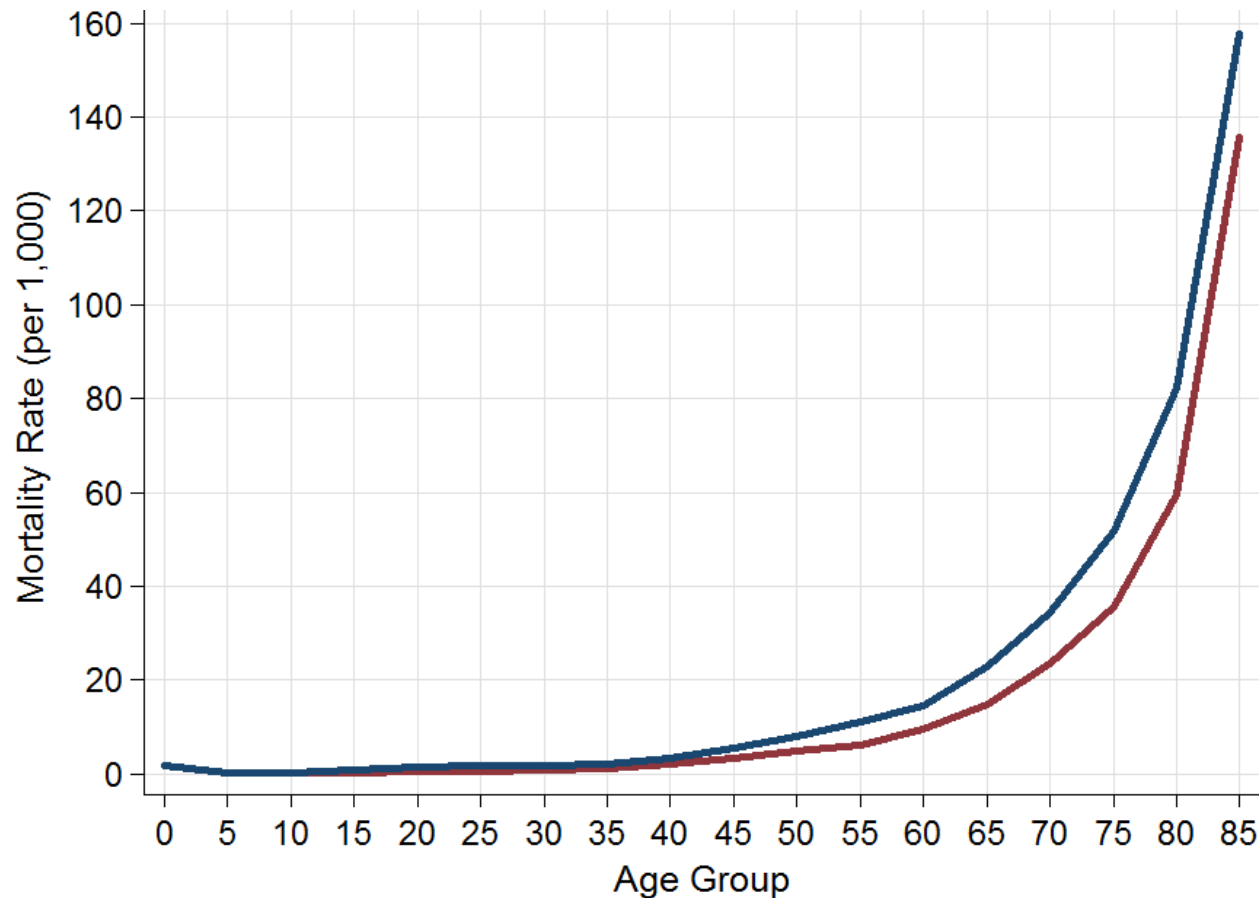
Jefferson County Fertility

- Births 2007-2010
 - Approximately 10,400 births per year
 - Total Fertility Rate: 2.08



Jefferson County Mortality

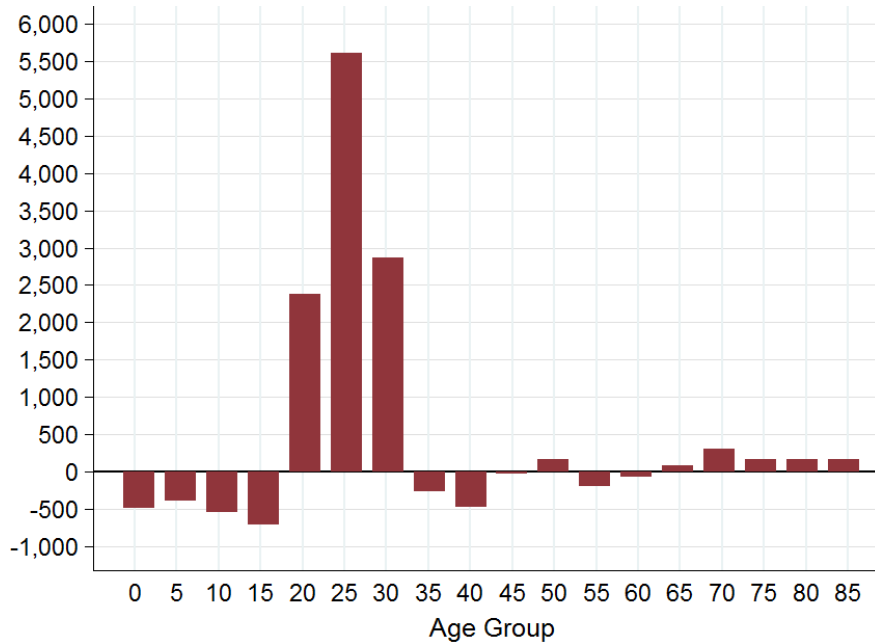
- Deaths 2007-2010
 - Approximately 6,900 deaths per year
 - Life expectancy at birth: Male/74.3, Female/79.6



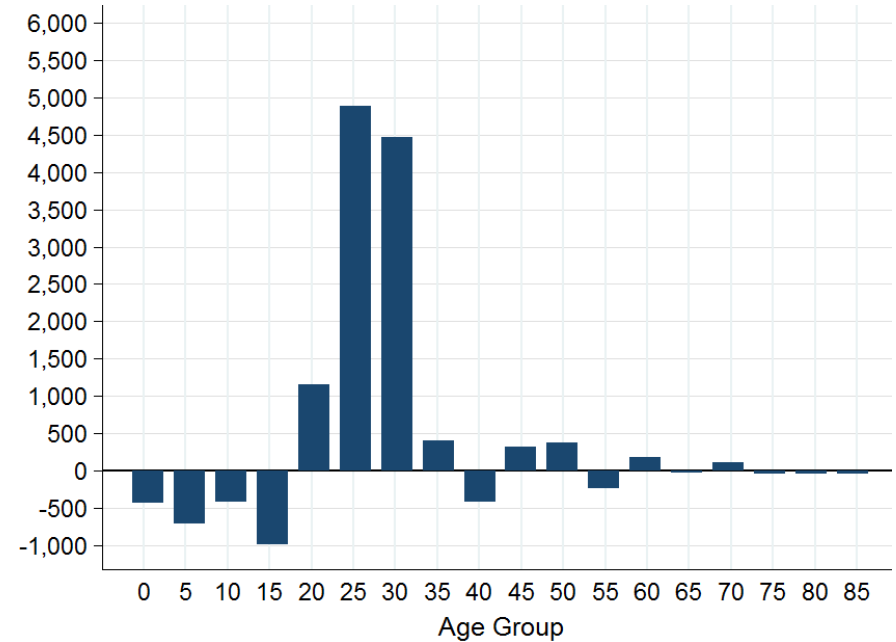
Jefferson County Migration

- Net migration 2000-2010
 - Net migration is in-migration minus out-migration
 - Estimated from Census data

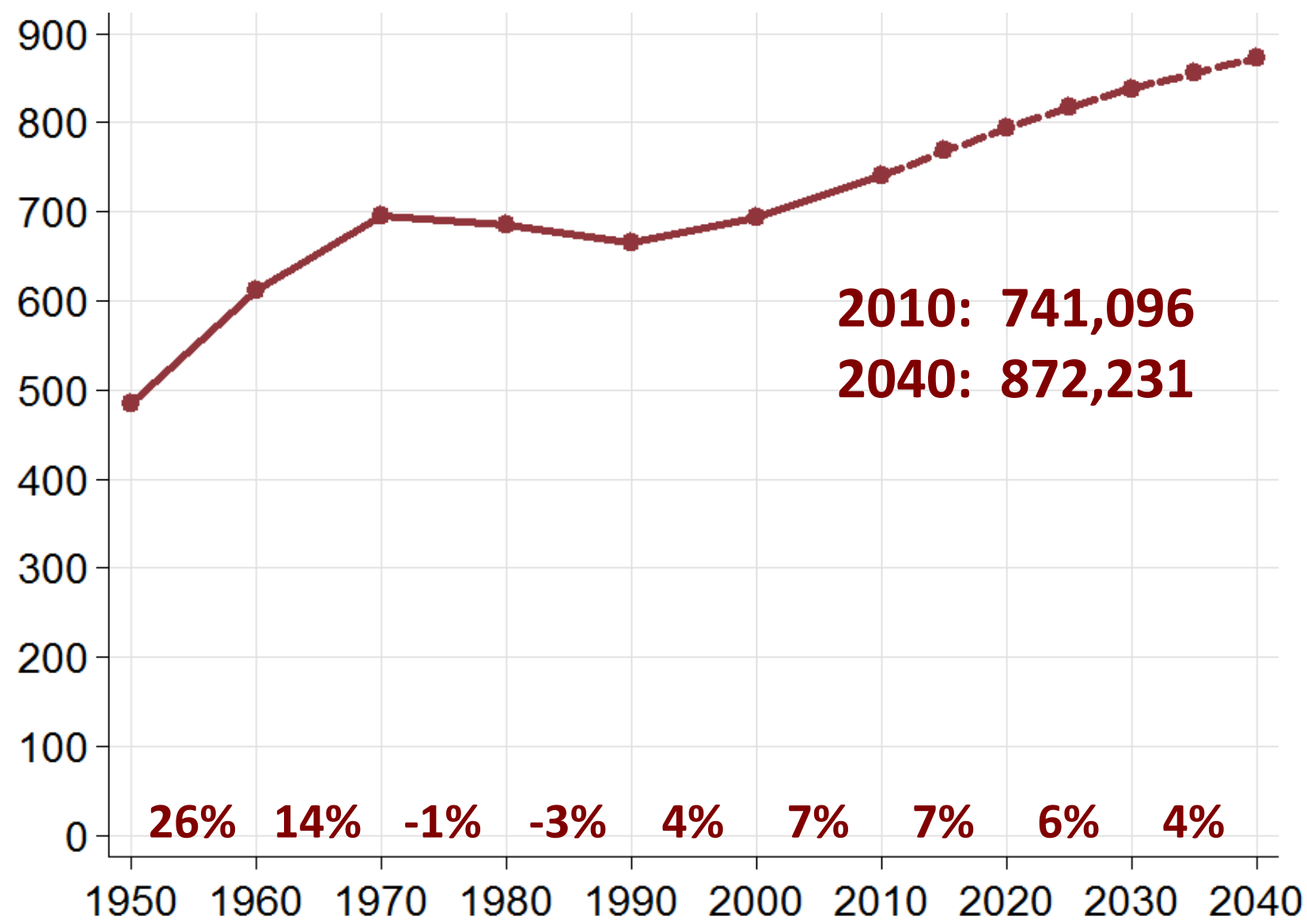
Female



Male



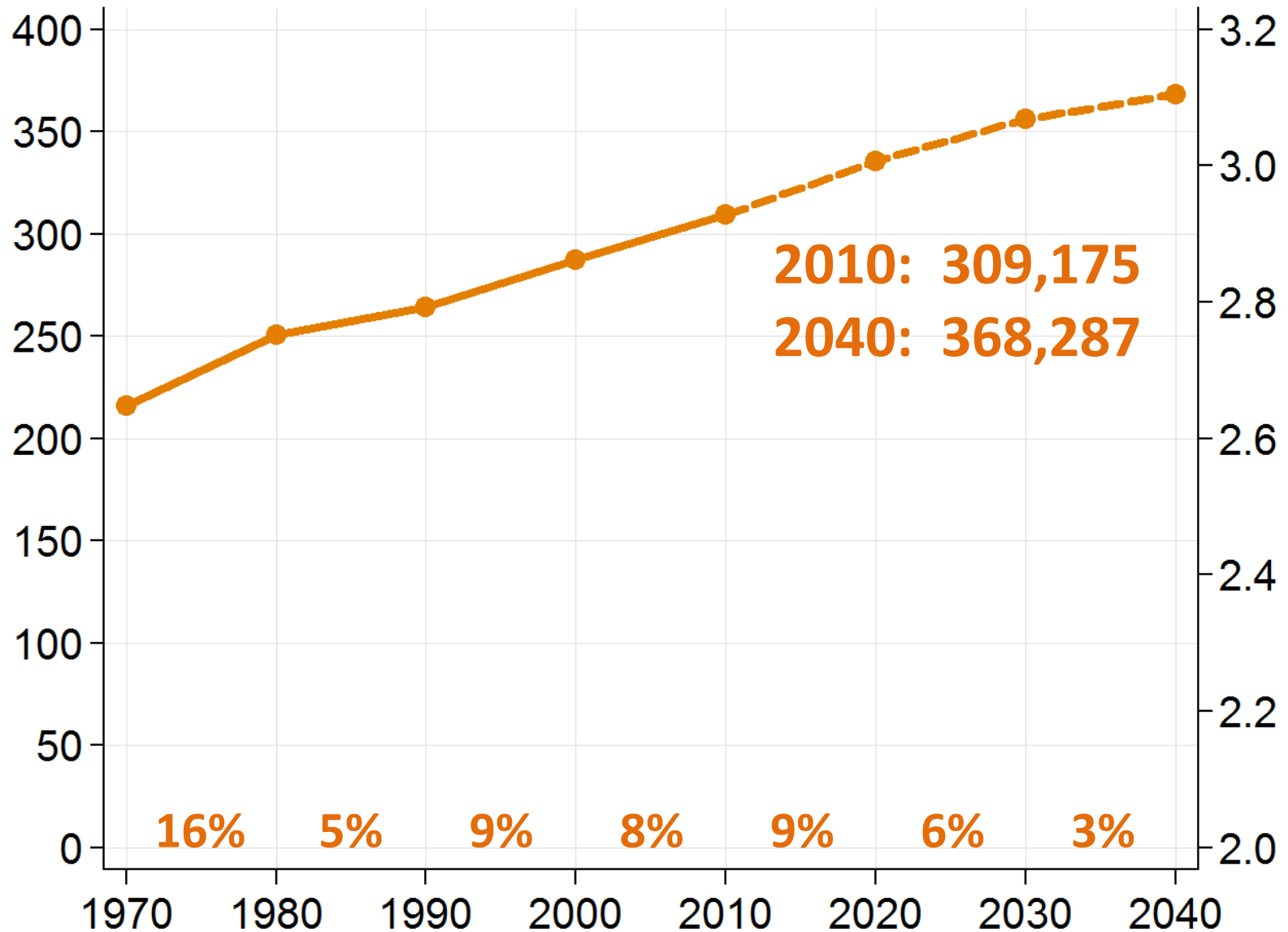
Jefferson County Total Population



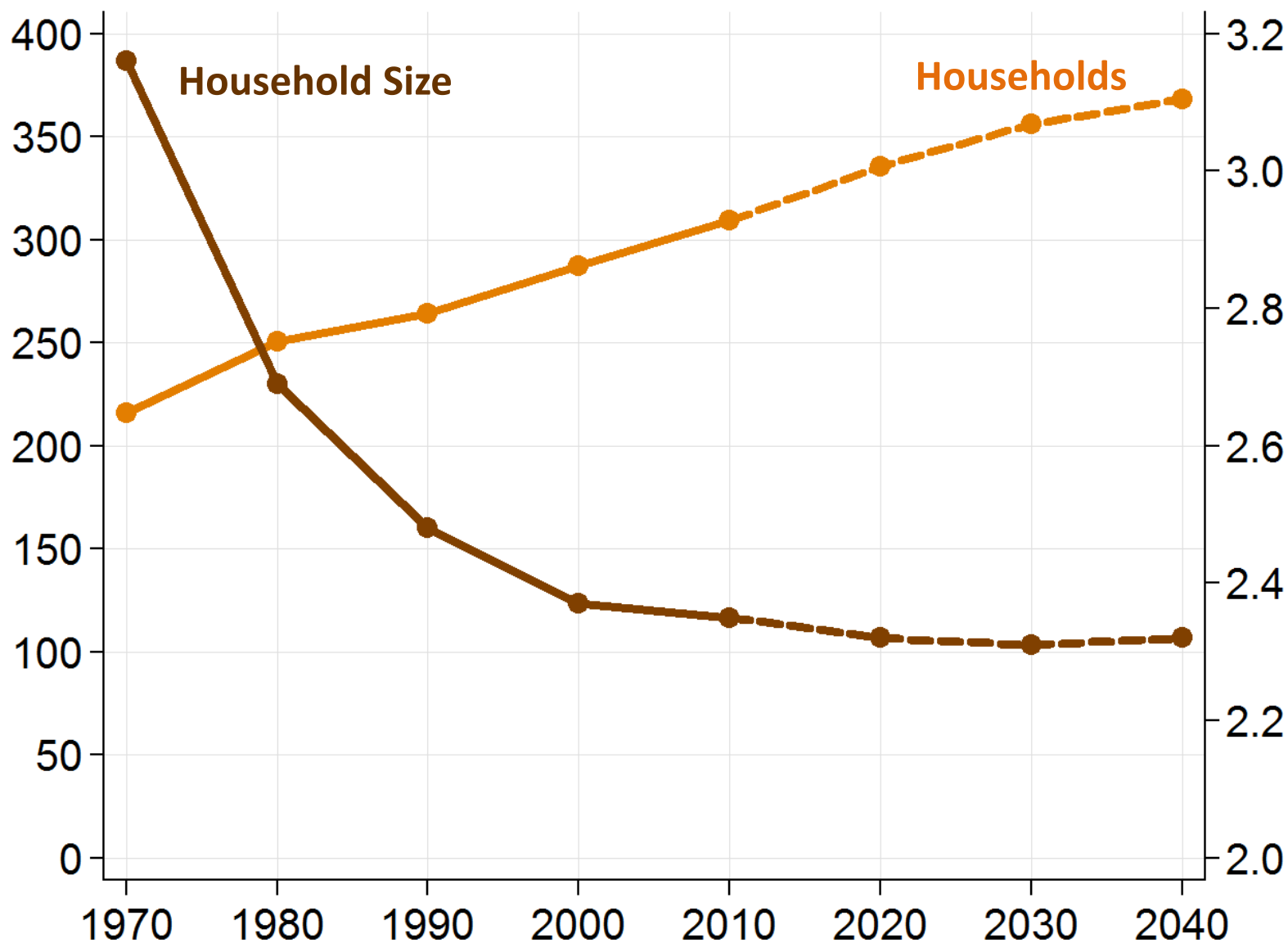
Household Projection Methodology

- Current headship ratio determined for household population in each age group
 - Age 15-24: 17%
 - Age 45-54: 60%
 - Age 75-84: 74%
- Headship ratios applied to projected household populations to determine number of households
- Household size calculated as projected household population divided by projected households

Jefferson County Households



Jefferson County Household Size

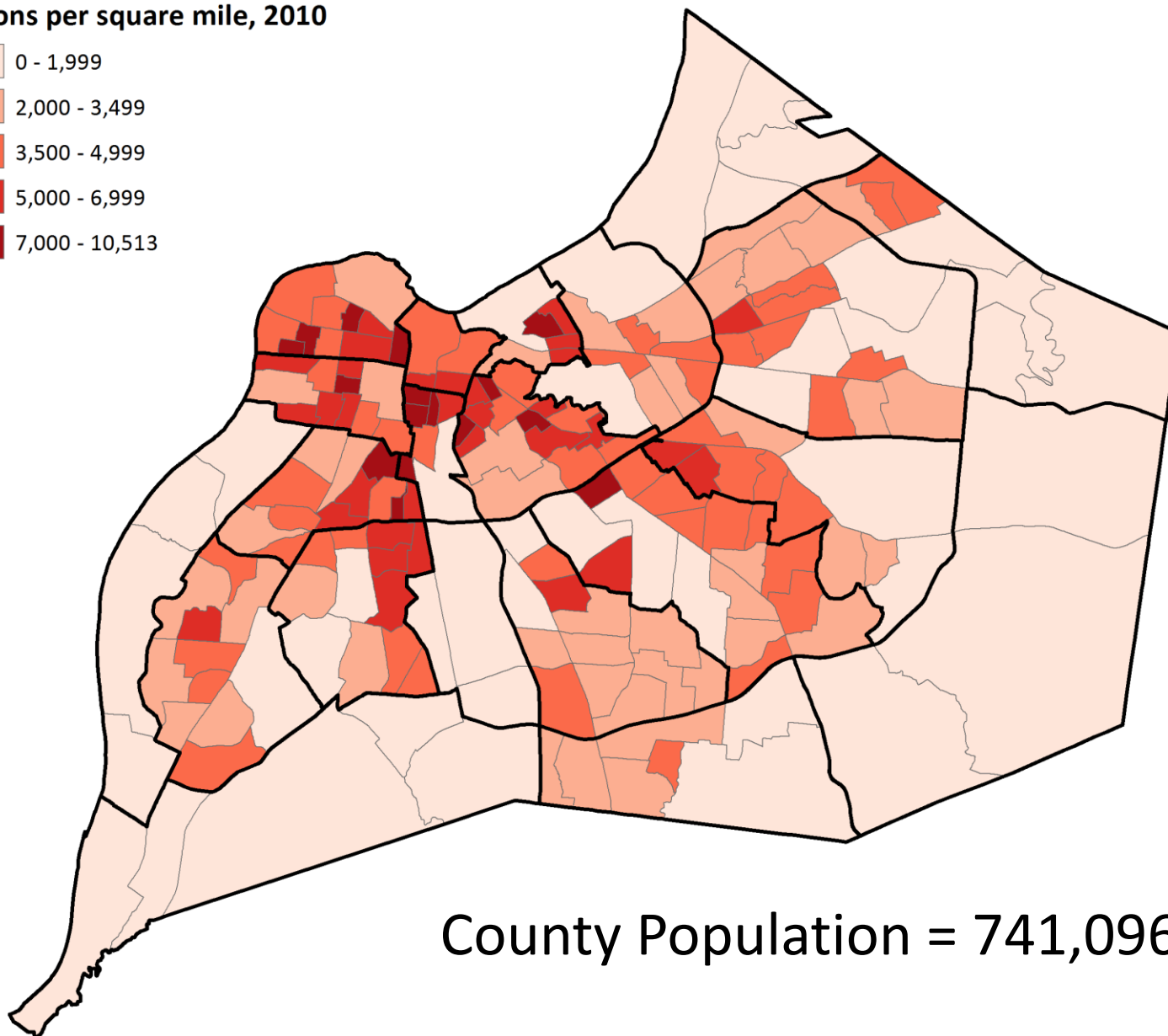
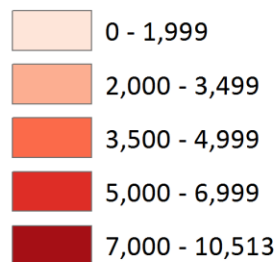


Tract Projections Methodology

- Generate preliminary tract-level projections using cohort change ratios
 - CCR is 2000-2010 change in 10-year cohort
- Spatial adjustment to tract growth rates
 - Growth is averaged between adjacent tracts
- Institute rules on tract growth rates
 - Annual growth rate limit of 3% (annual loss limit of 1%)
 - Maximum population density in 2040 is current developed land* population density in 2010
 - Final tract projections are controlled to county total population

Population Density 2010

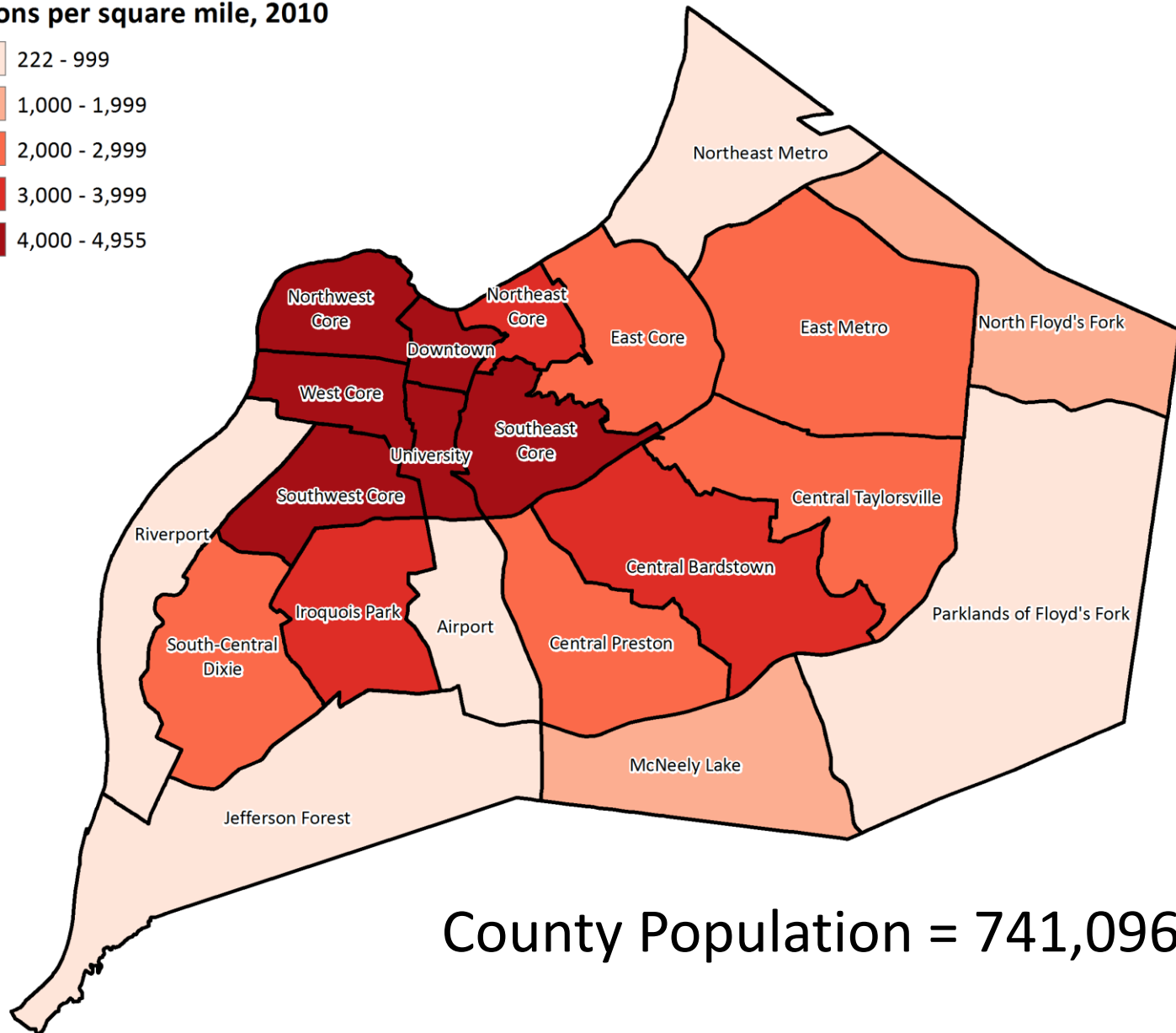
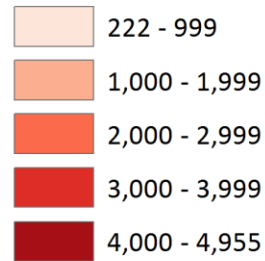
Persons per square mile, 2010



County Population = 741,096

Population Density 2010

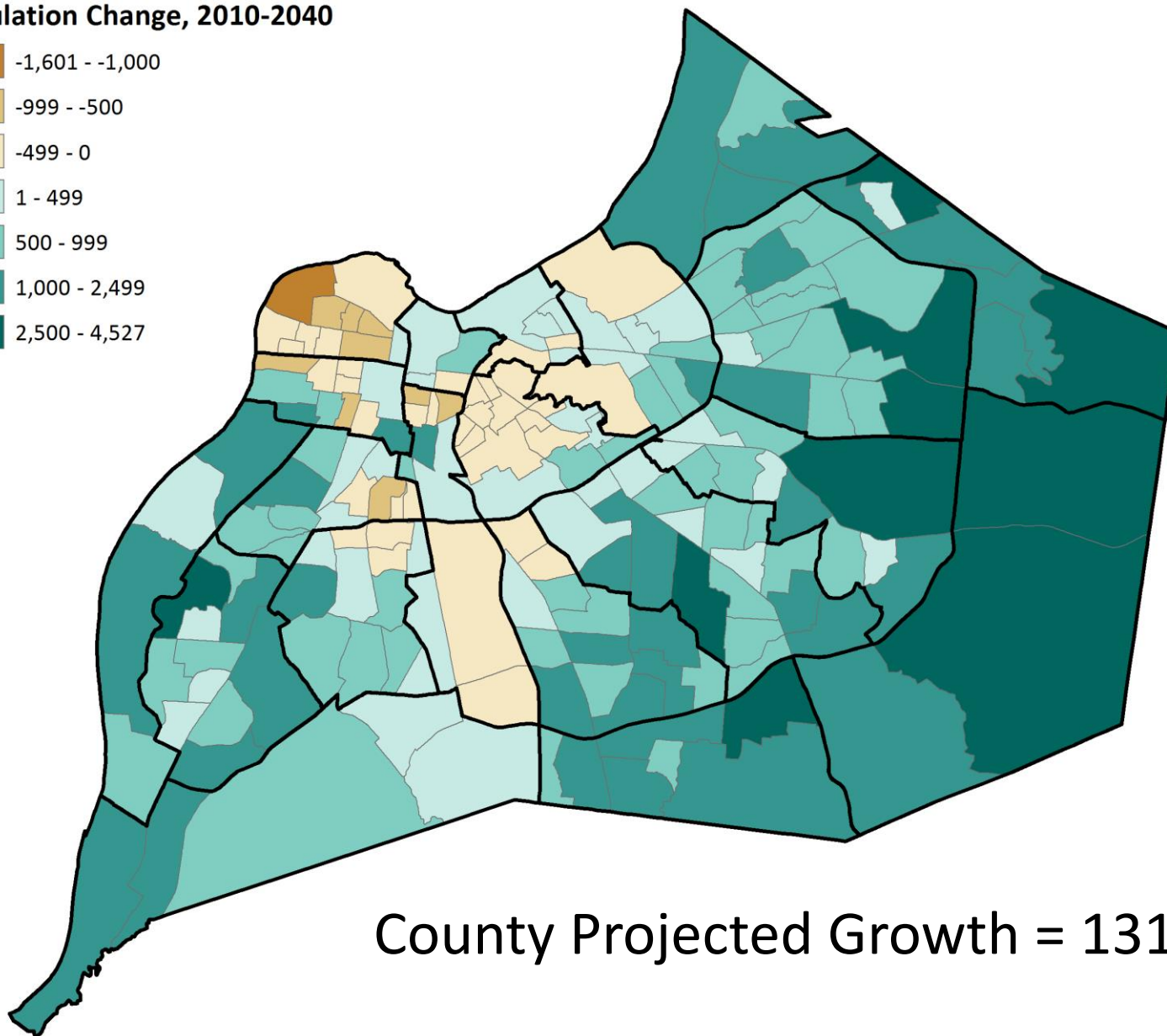
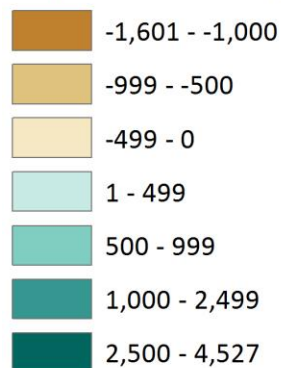
Persons per square mile, 2010



County Population = 741,096

Projected Change 2010-2040

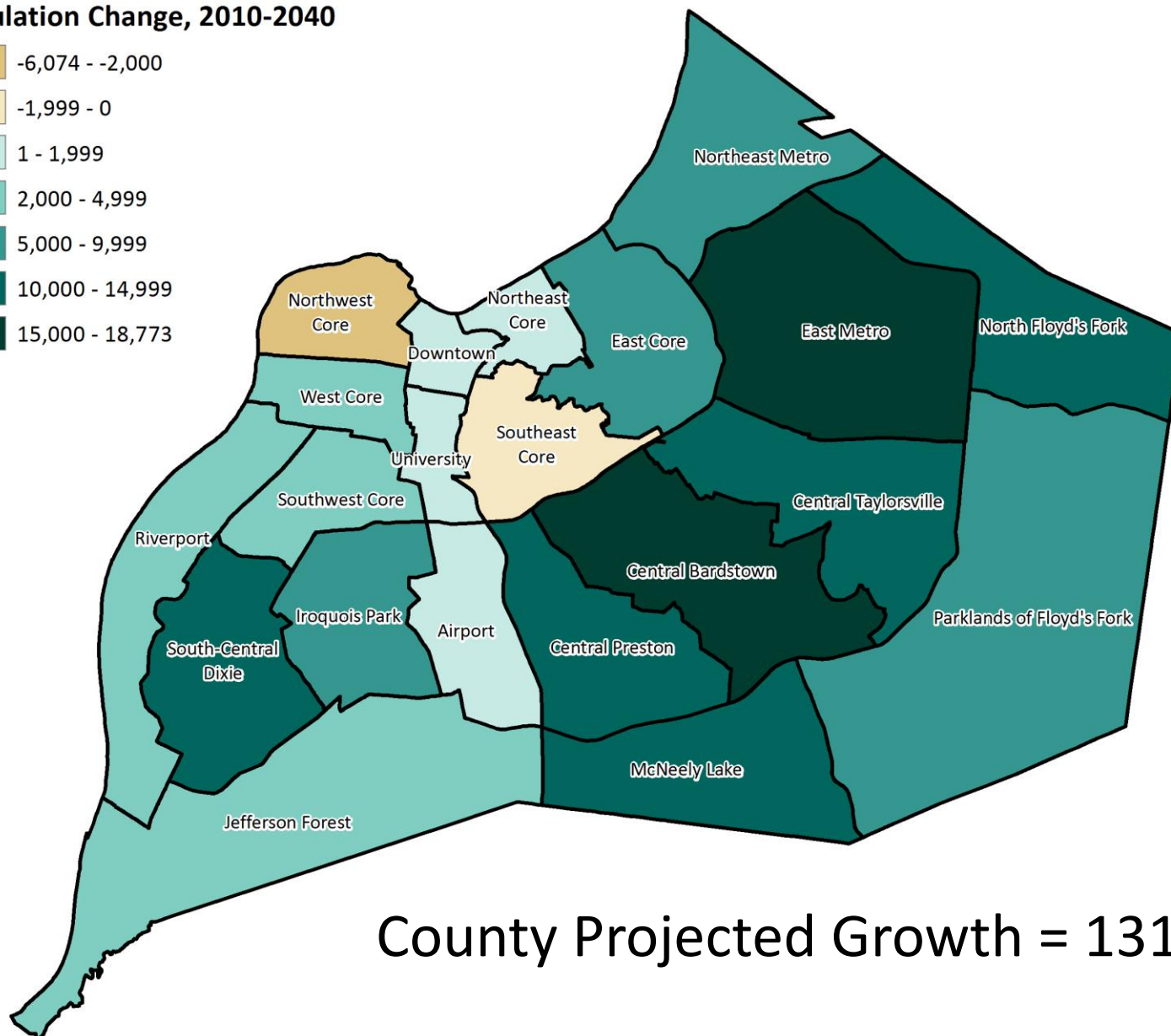
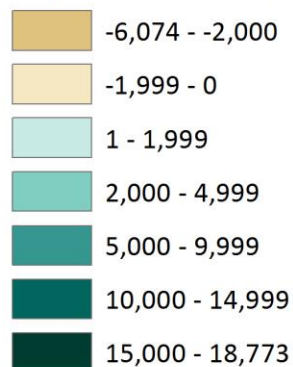
Population Change, 2010-2040



County Projected Growth = 131,135

Projected Change 2010-2040

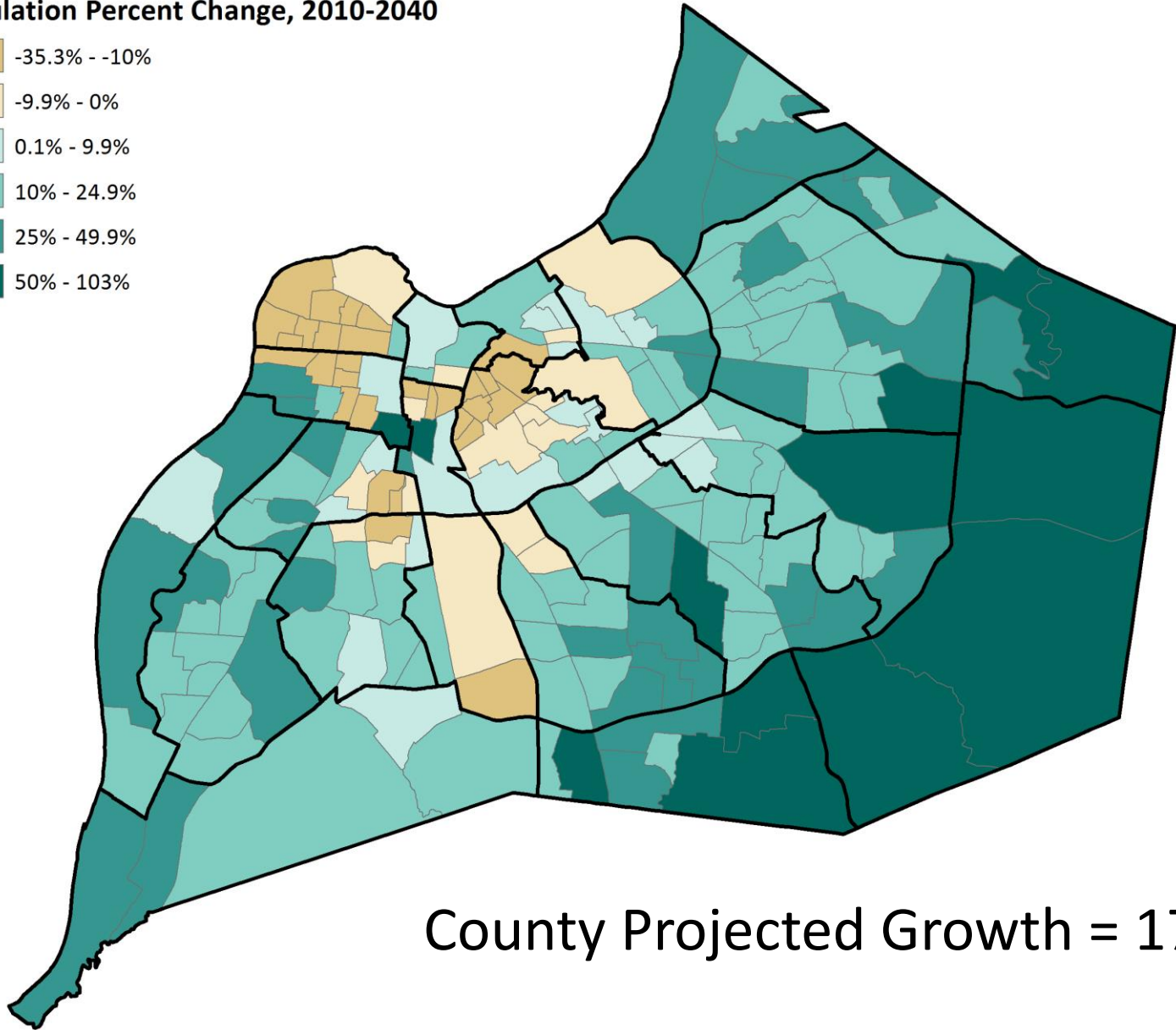
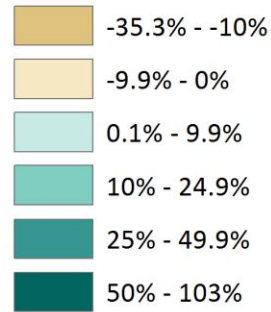
Population Change, 2010-2040



County Projected Growth = 131,135

Projected % Change 2010-2040

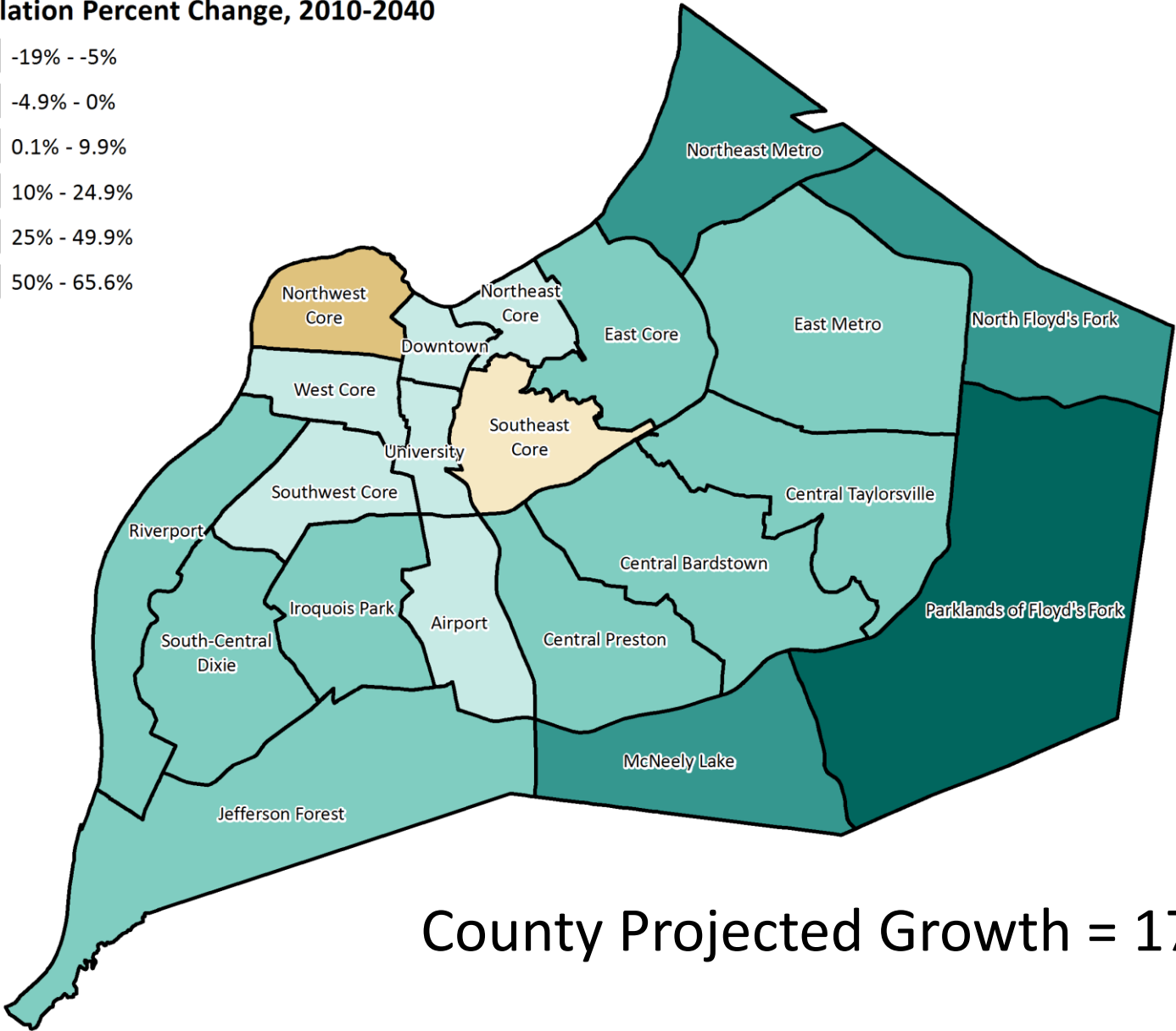
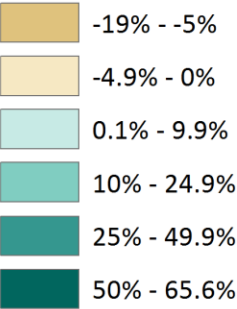
Population Percent Change, 2010-2040



County Projected Growth = 17.7%

Projected % Change 2010-2040

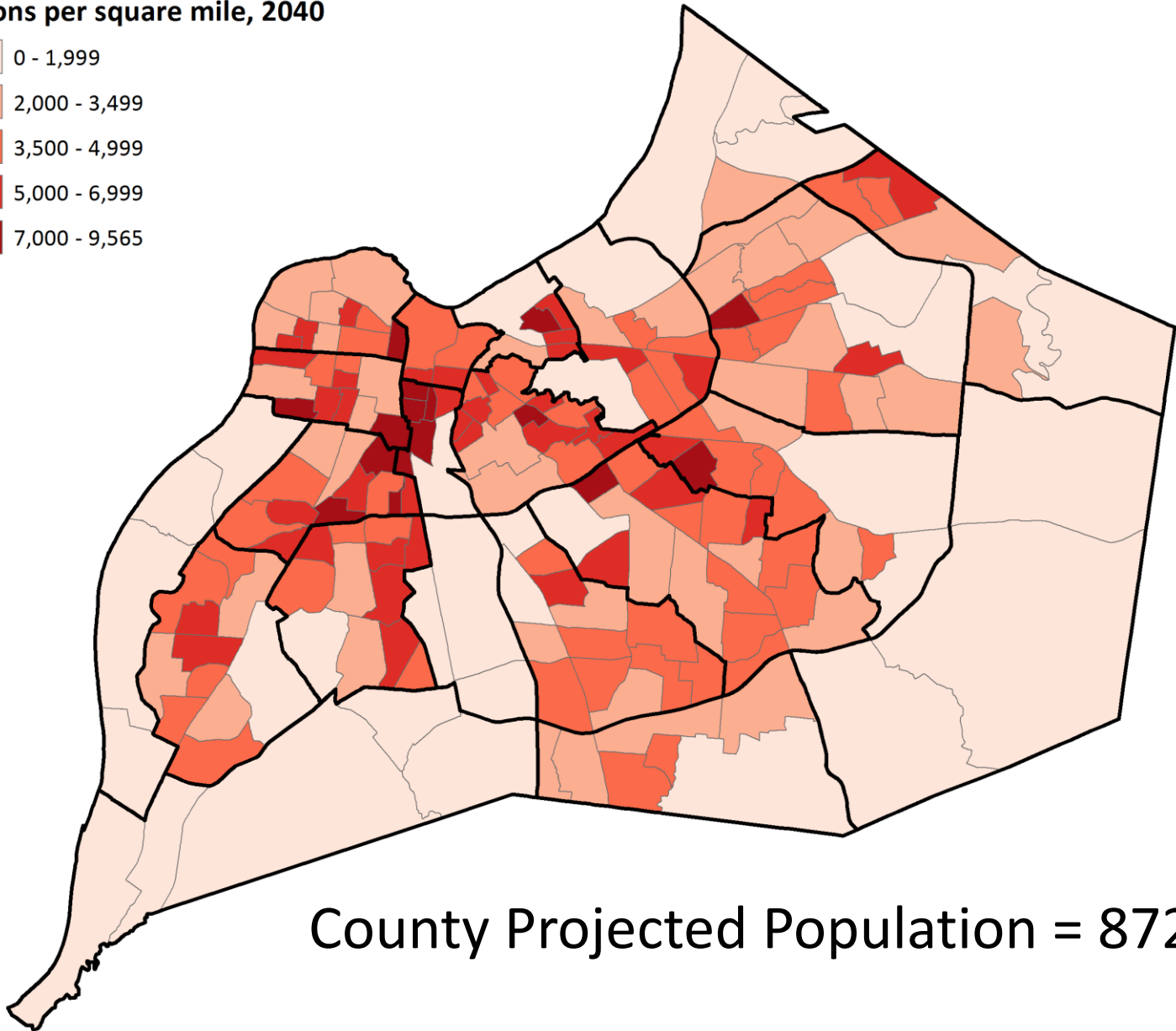
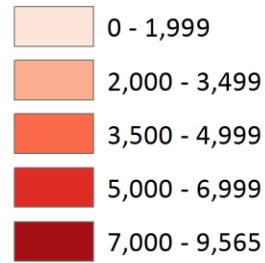
Population Percent Change, 2010-2040



County Projected Growth = 17.7%

Projected Population Density 2040

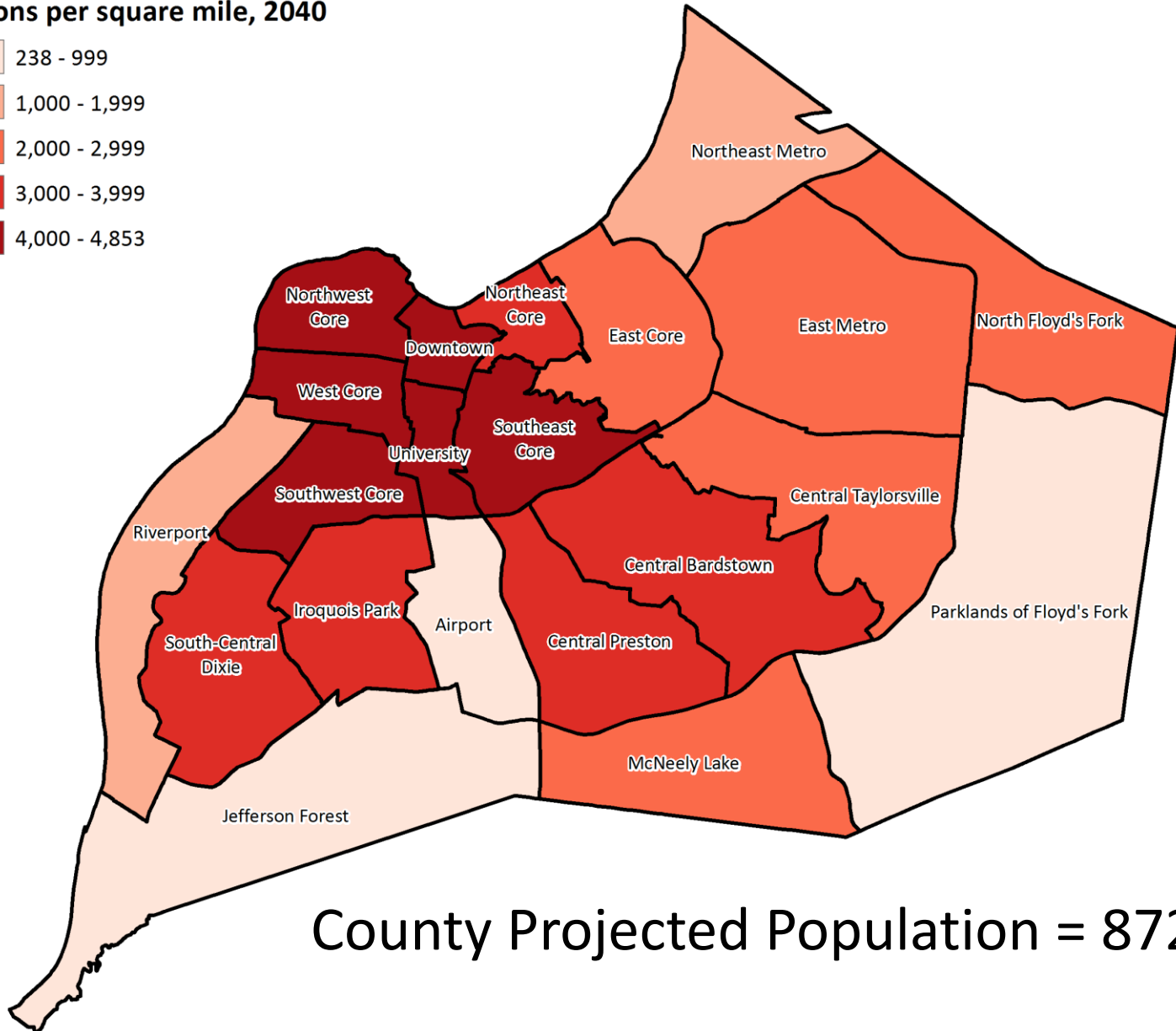
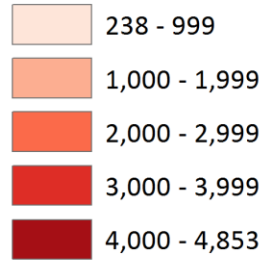
Persons per square mile, 2040



County Projected Population = 872,231

Projected Population Density 2040

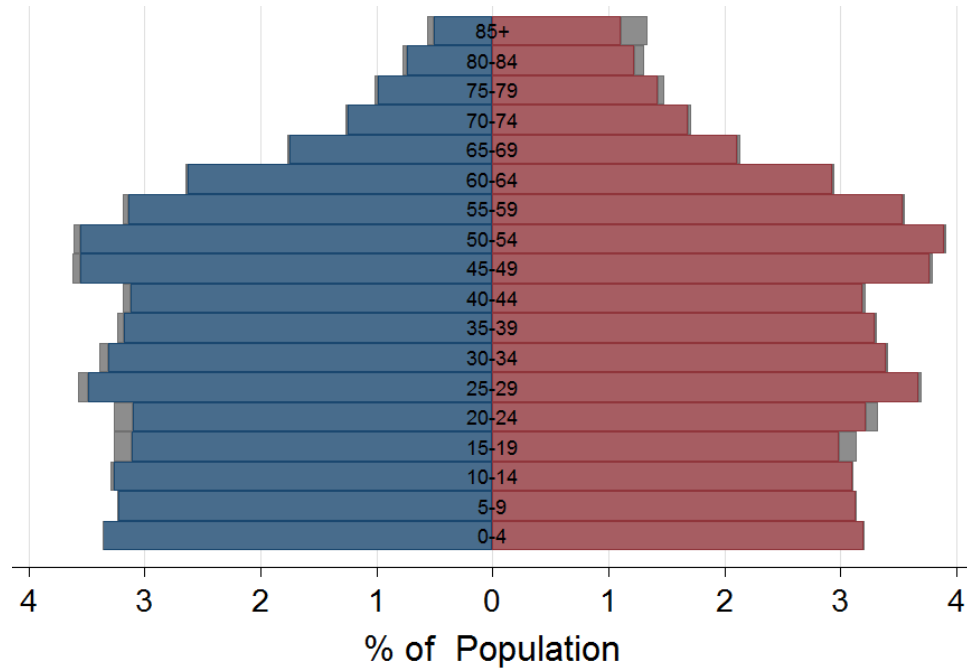
Persons per square mile, 2040



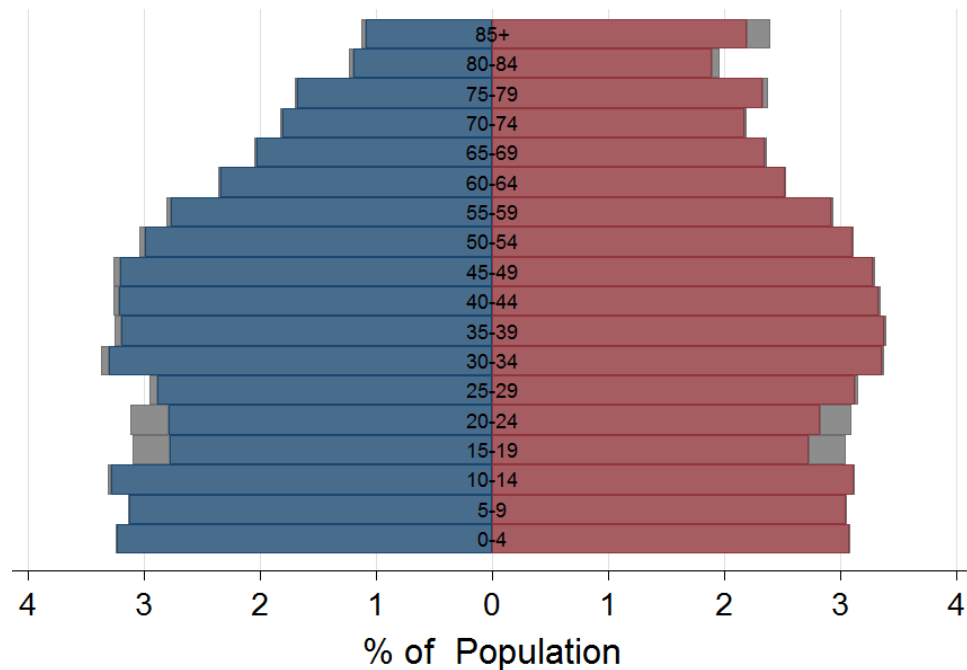
County Projected Population = 872,231

Population Pyramids

2010

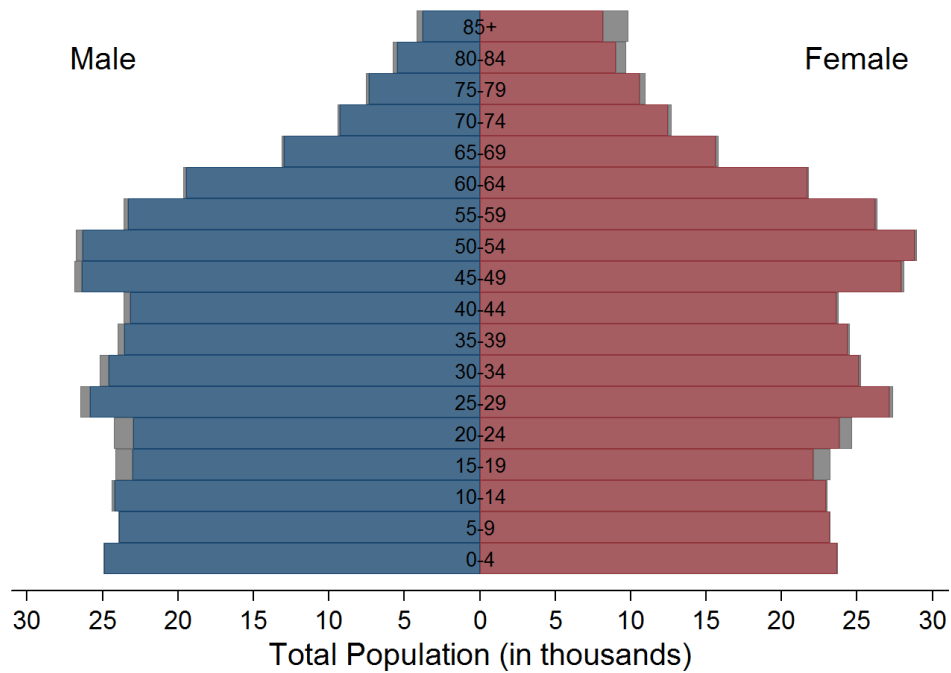


2040

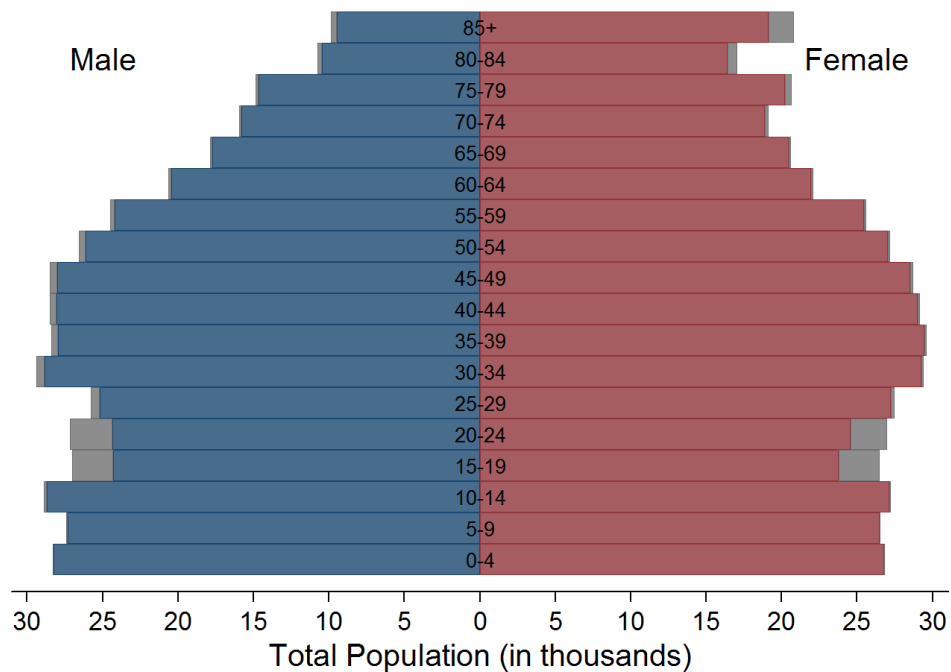


Population Pyramids

2010



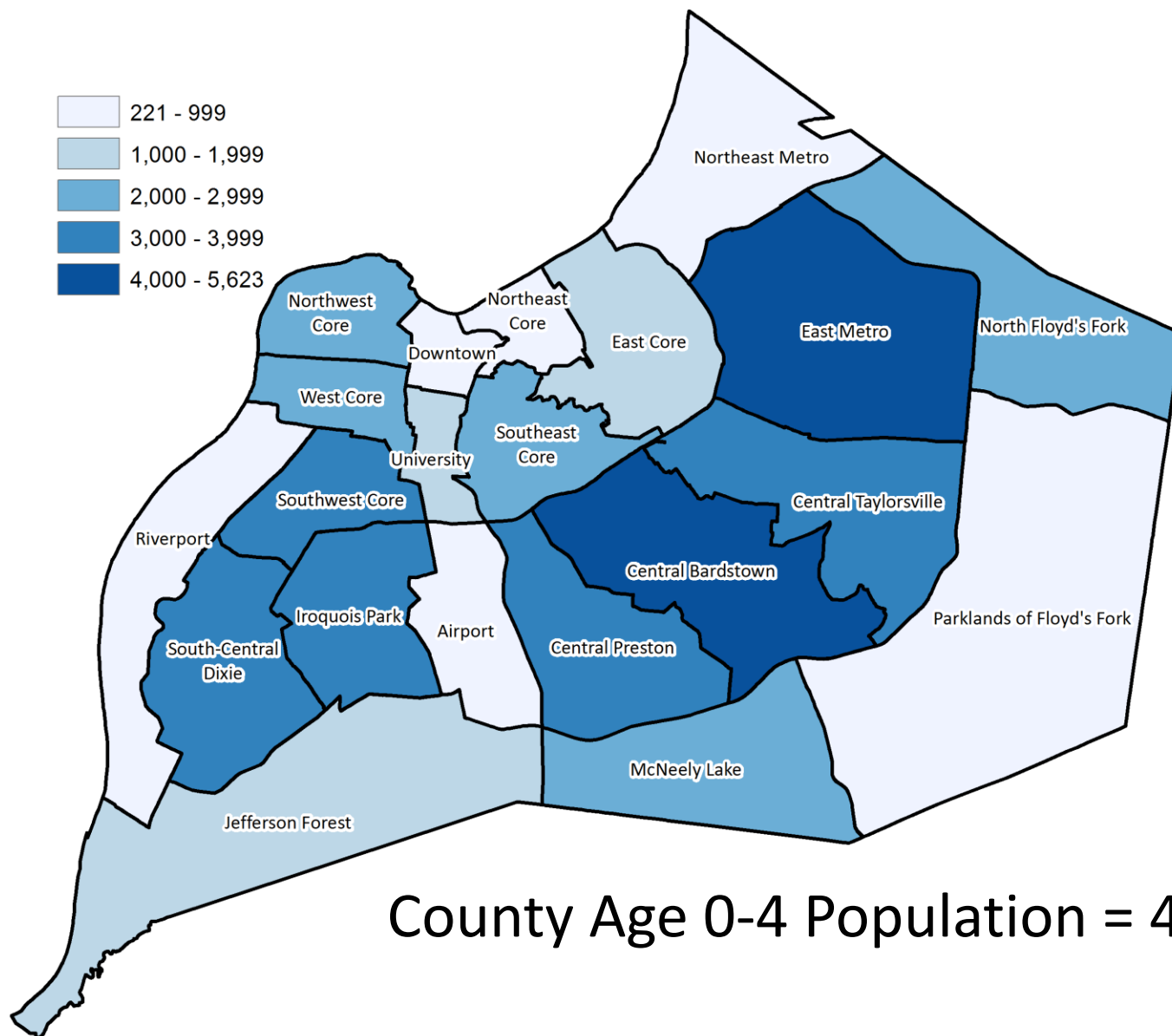
2040



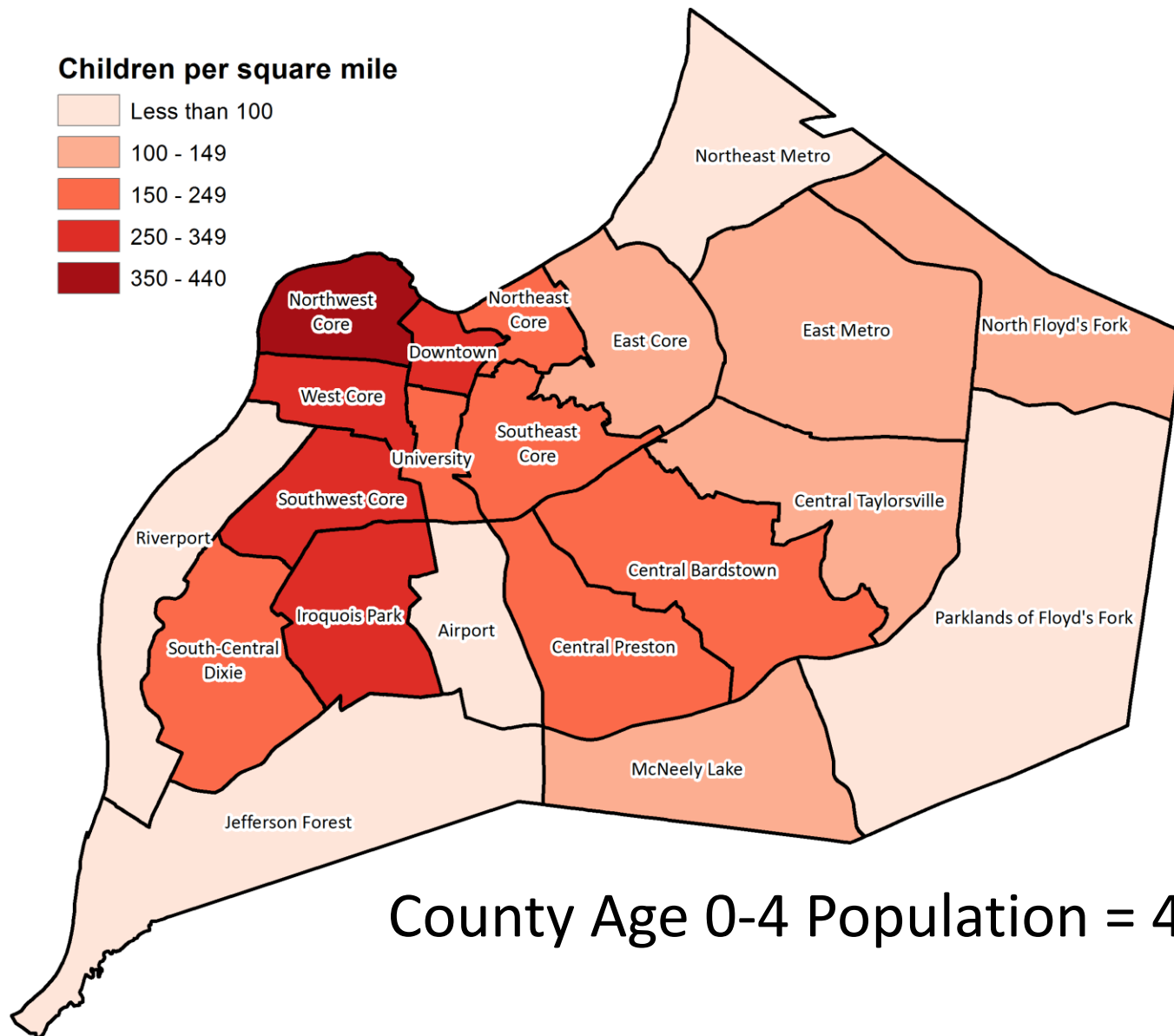
Changing Household Size

Market Area	HH Size 2010	HH Size 2020	HH Size 2030	HH Size 2040
Airport	2.64	2.57	2.55	2.51
Central Bardstown	2.40	2.36	2.36	2.36
Central Preston	2.42	2.39	2.37	2.37
Central Taylorsville	2.36	2.31	2.27	2.27
Downtown	1.72	1.63	1.57	1.52
East Core	2.13	2.08	2.05	2.05
East Metro	2.24	2.16	2.12	2.10
Iroquois Park	2.45	2.42	2.42	2.42
Jefferson Forest	2.64	2.52	2.45	2.41
McNeely Lake	2.65	2.58	2.56	2.54
North Floyd's Fork	2.60	2.50	2.46	2.47
Northeast Core	1.85	1.81	1.80	1.80
Northeast Metro	2.53	2.40	2.36	2.37
Northwest Core	2.53	2.40	2.37	2.37
Parklands of Floyd's Fork	2.61	2.53	2.51	2.56
Riverport	2.57	2.52	2.47	2.48
South-Central Dixie	2.51	2.46	2.45	2.46
Southeast Core	2.04	2.00	1.98	1.99
Southwest Core	2.42	2.40	2.40	2.43
University	1.86	1.79	1.78	1.77
West Core	2.51	2.39	2.34	2.30

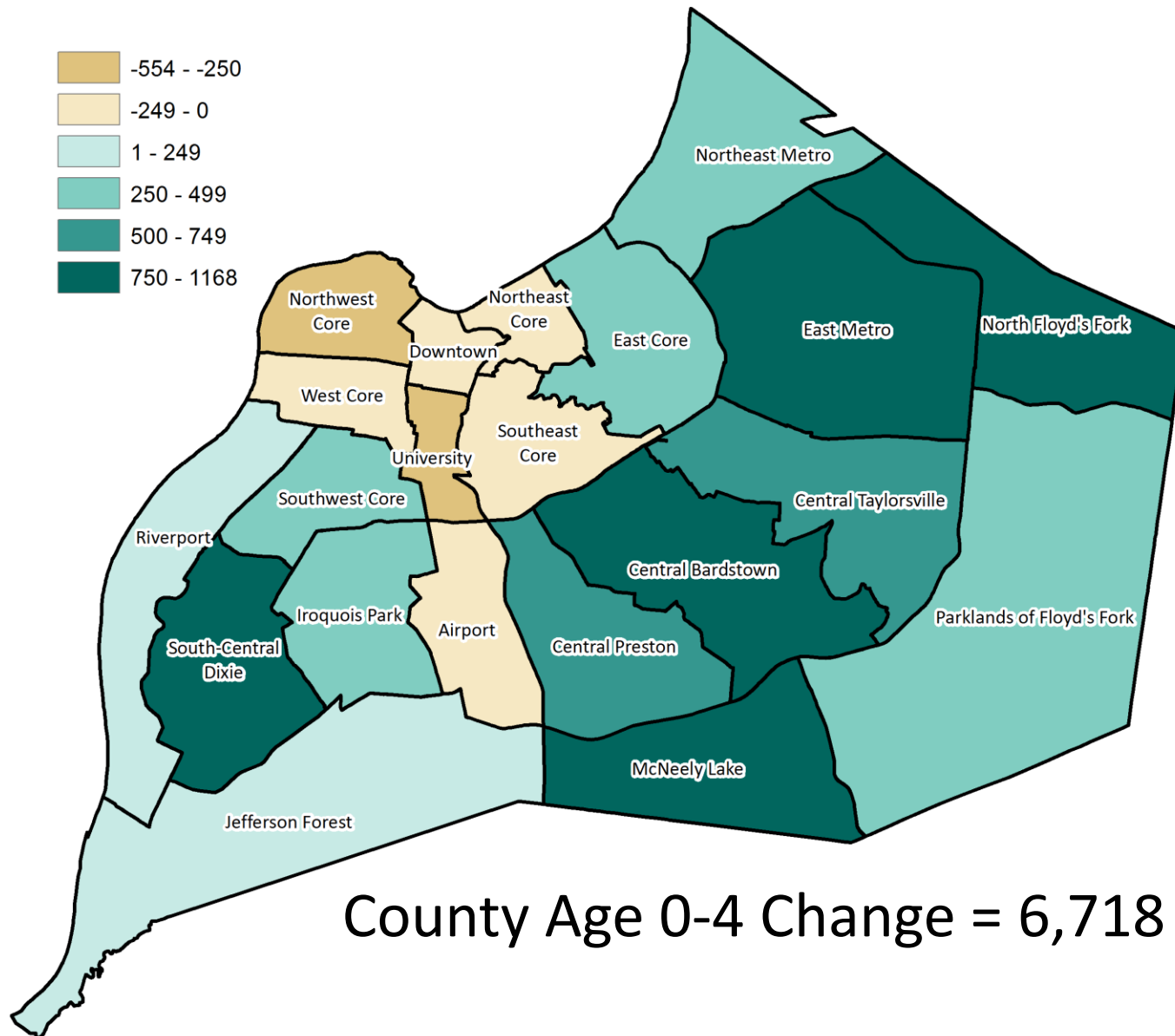
Age 0-4 Population 2010



Age 0-4 Population Density 2010

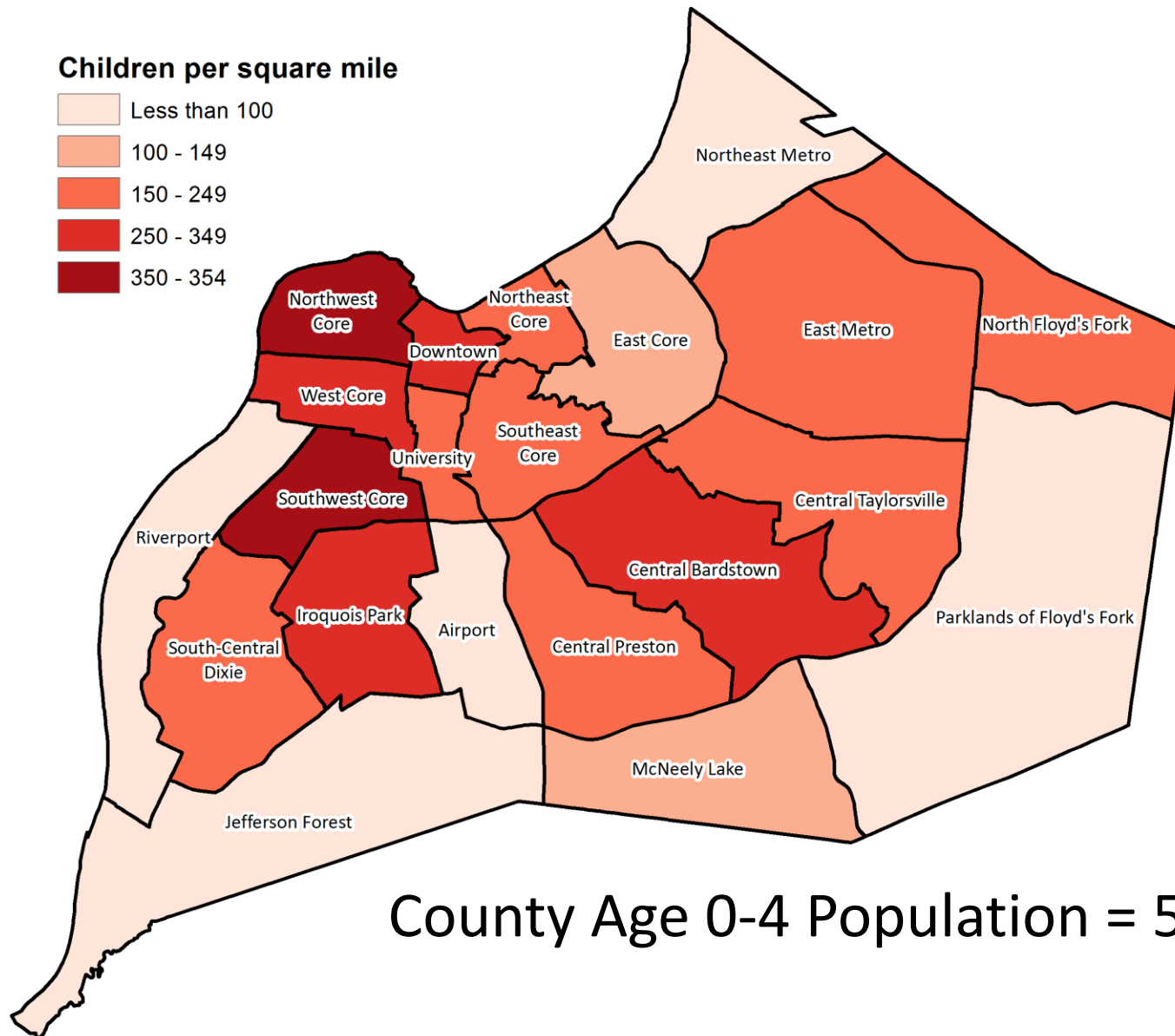


Age 0-4 Change 2010-2040

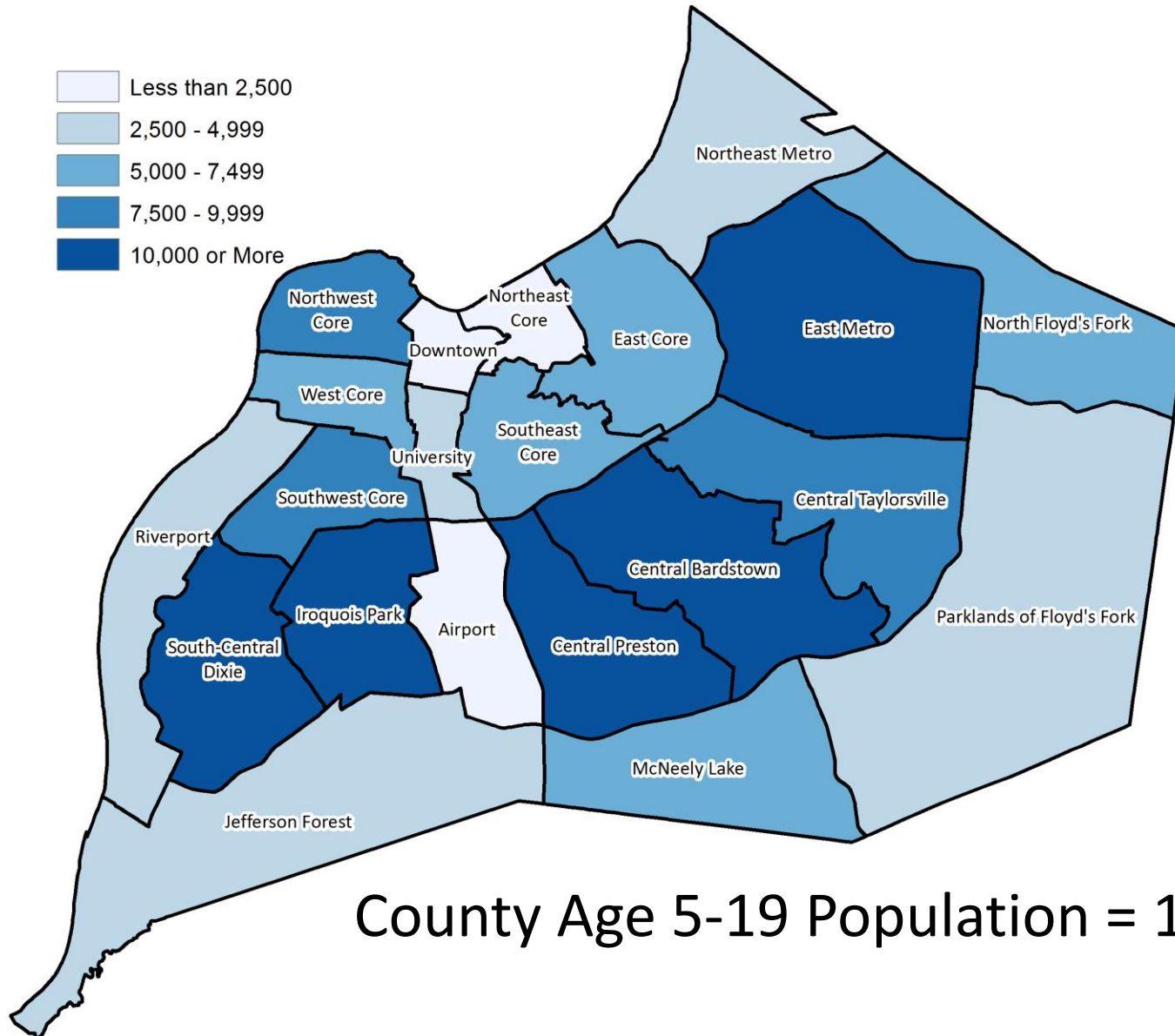


County Age 0-4 Change = 6,718 (13.8%)

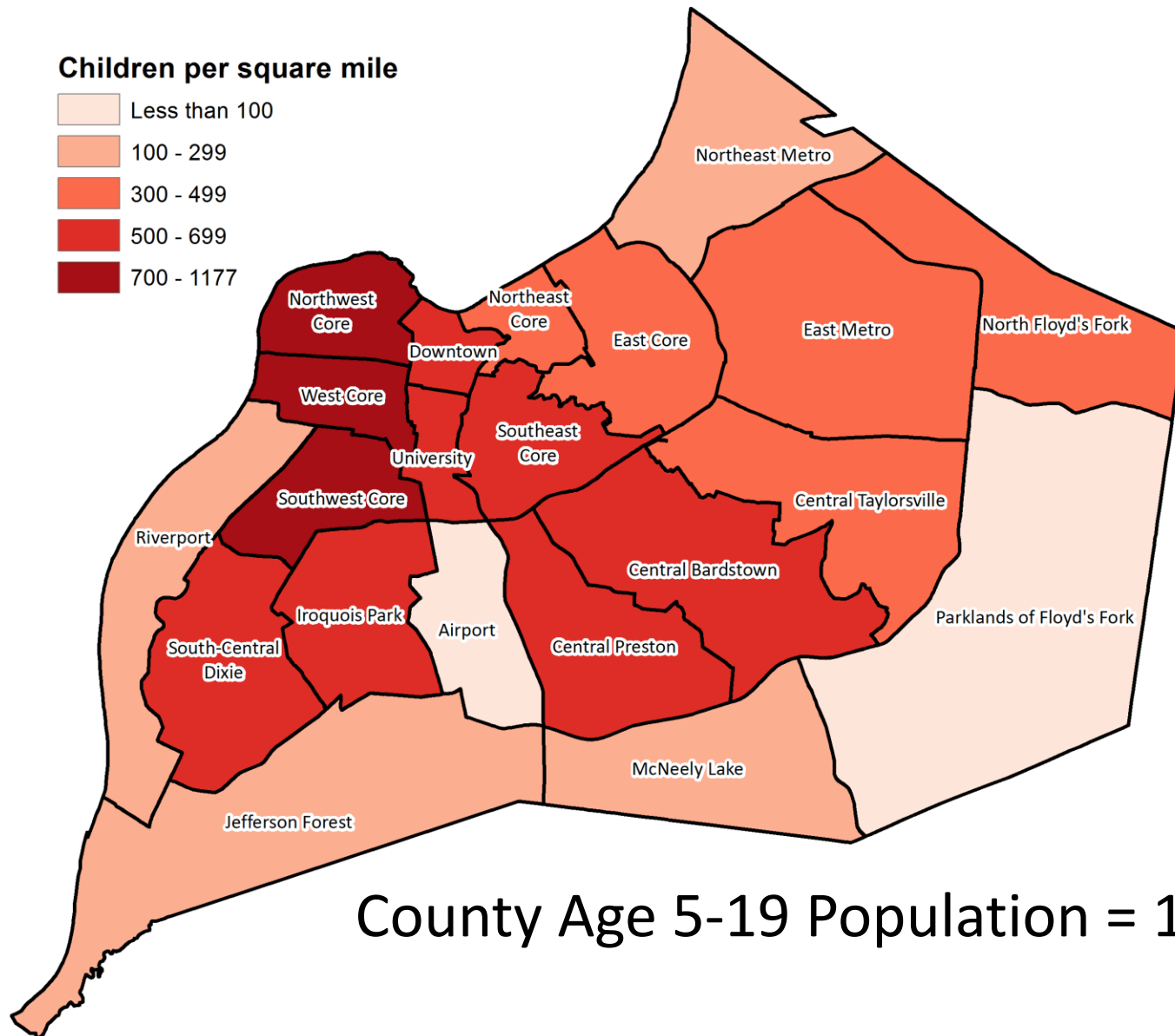
Age 0-4 Population Density 2040



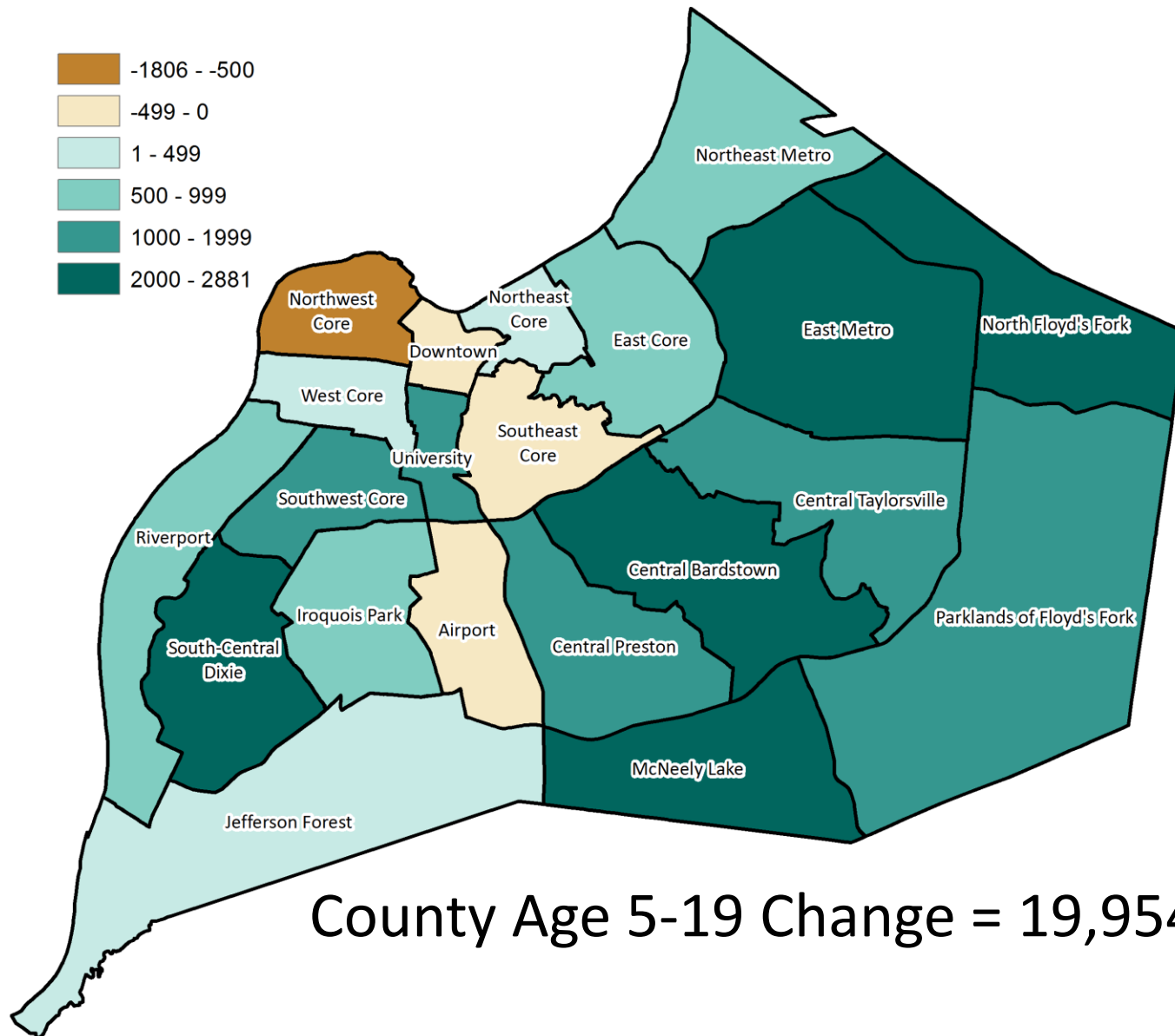
Age 5-19 Population 2010



Age 5-19 Population Density 2010

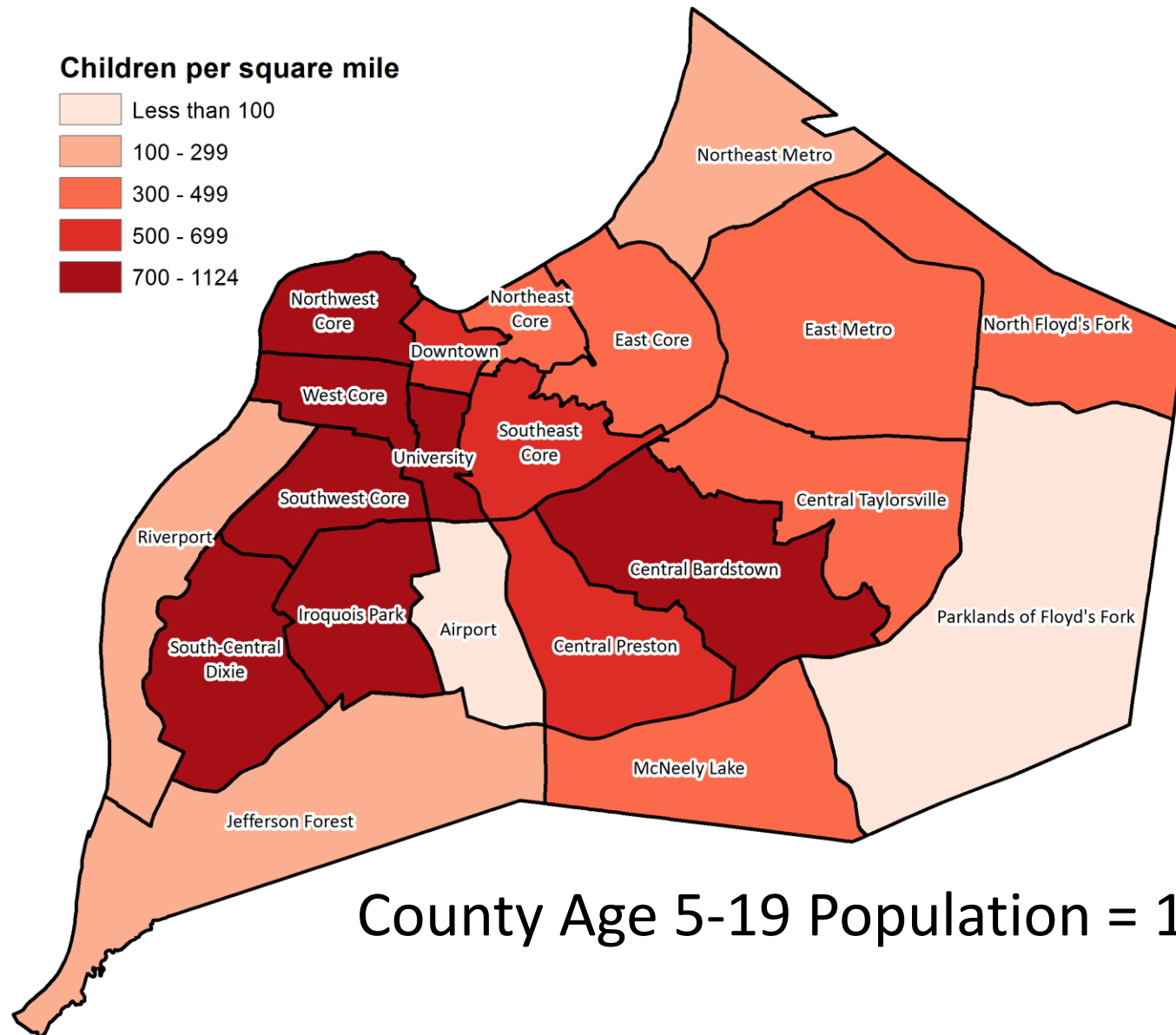


Age 5-19 Change 2010-2040

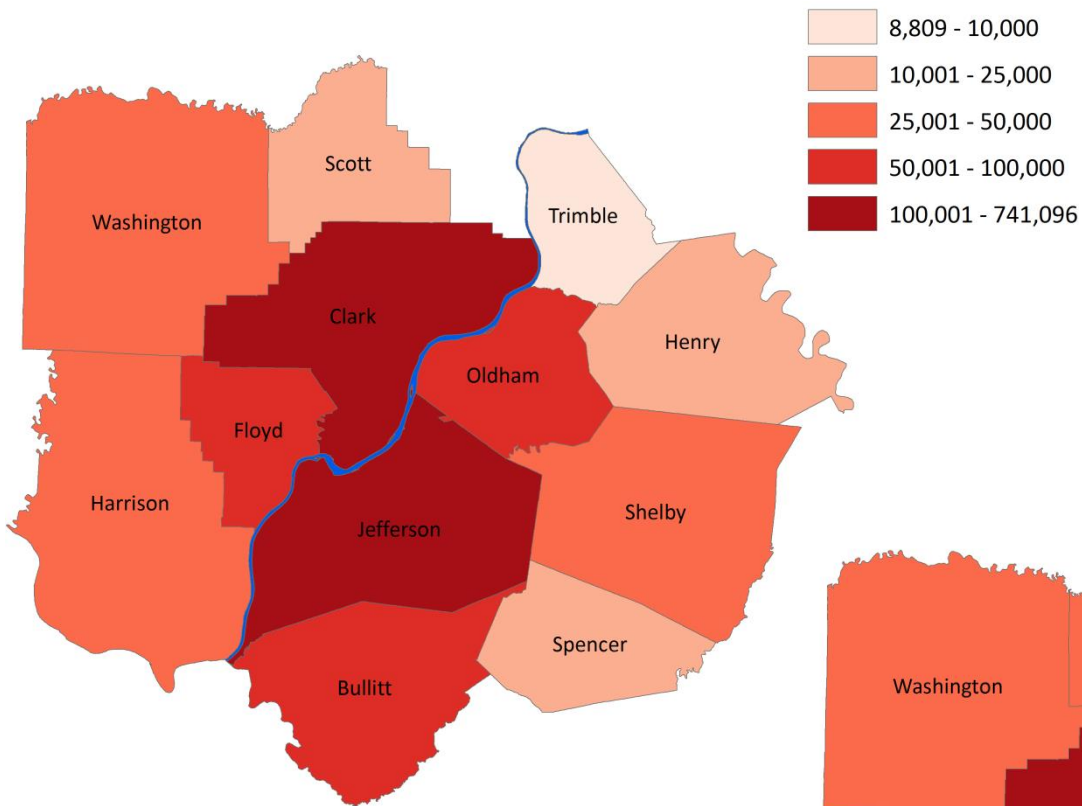


County Age 5-19 Change = 19,954 (14.0%)

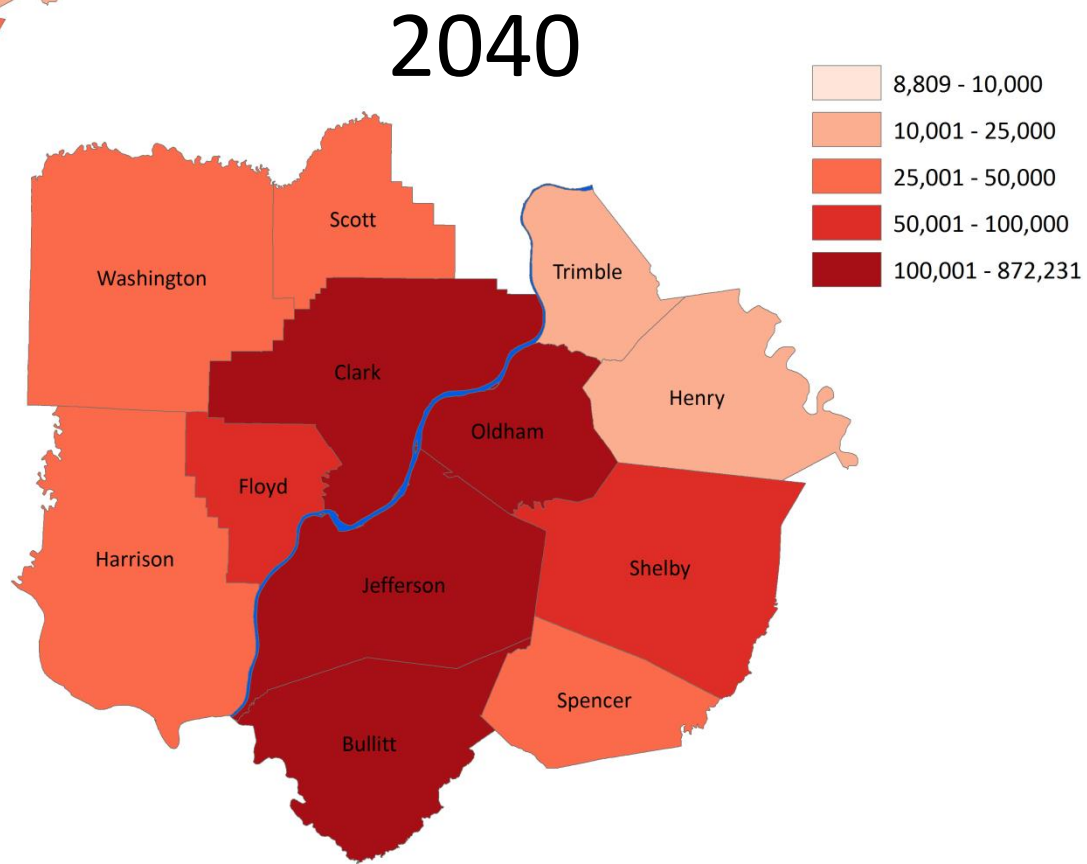
Age 5-19 Population Density 2040



Metro Area Population

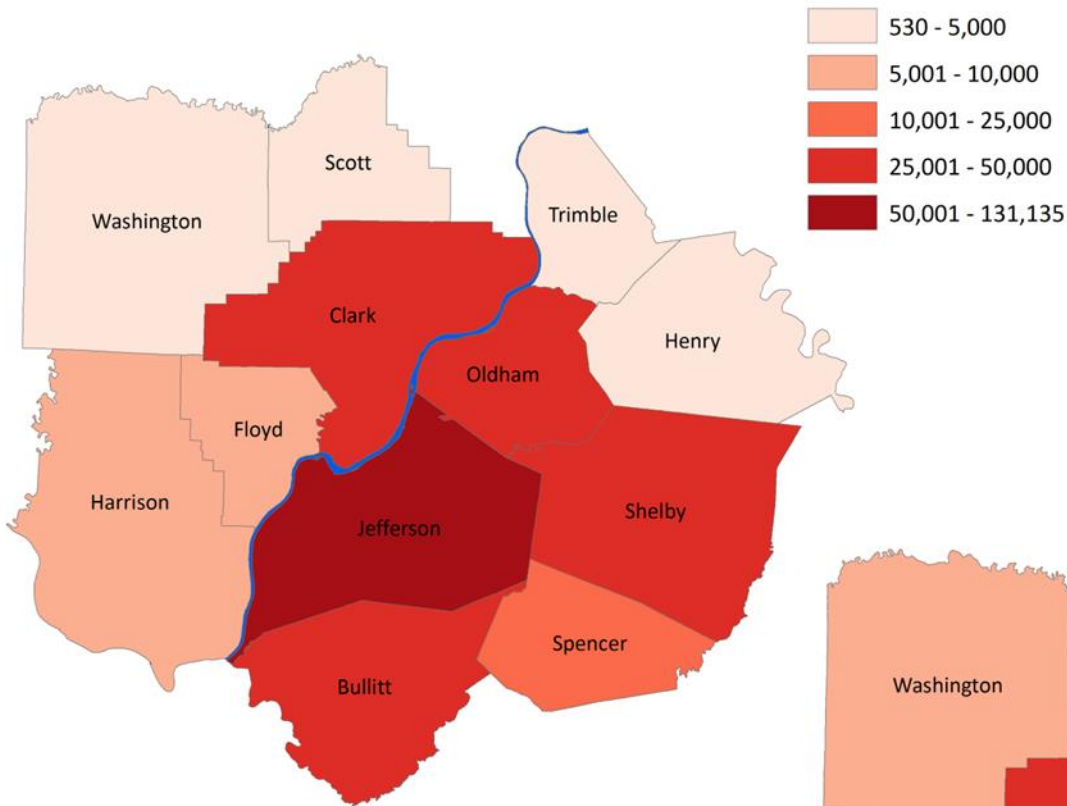


2010

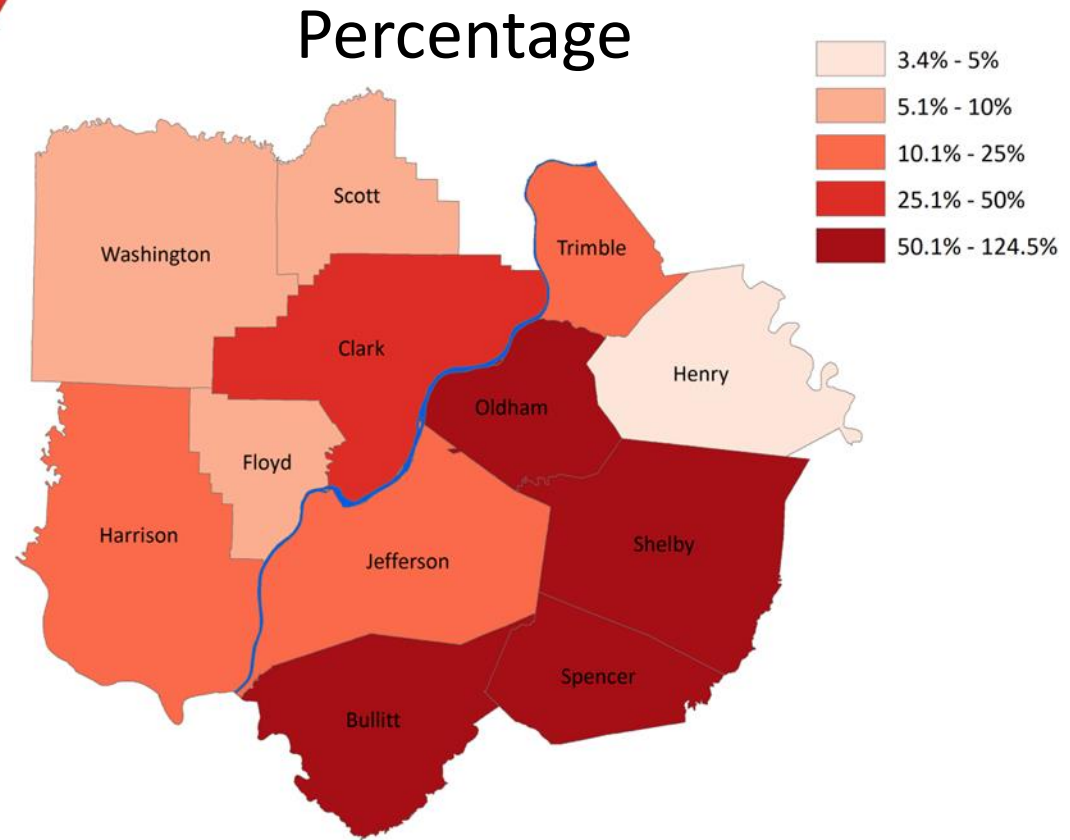


2040

Metro Area Change 2010-2040



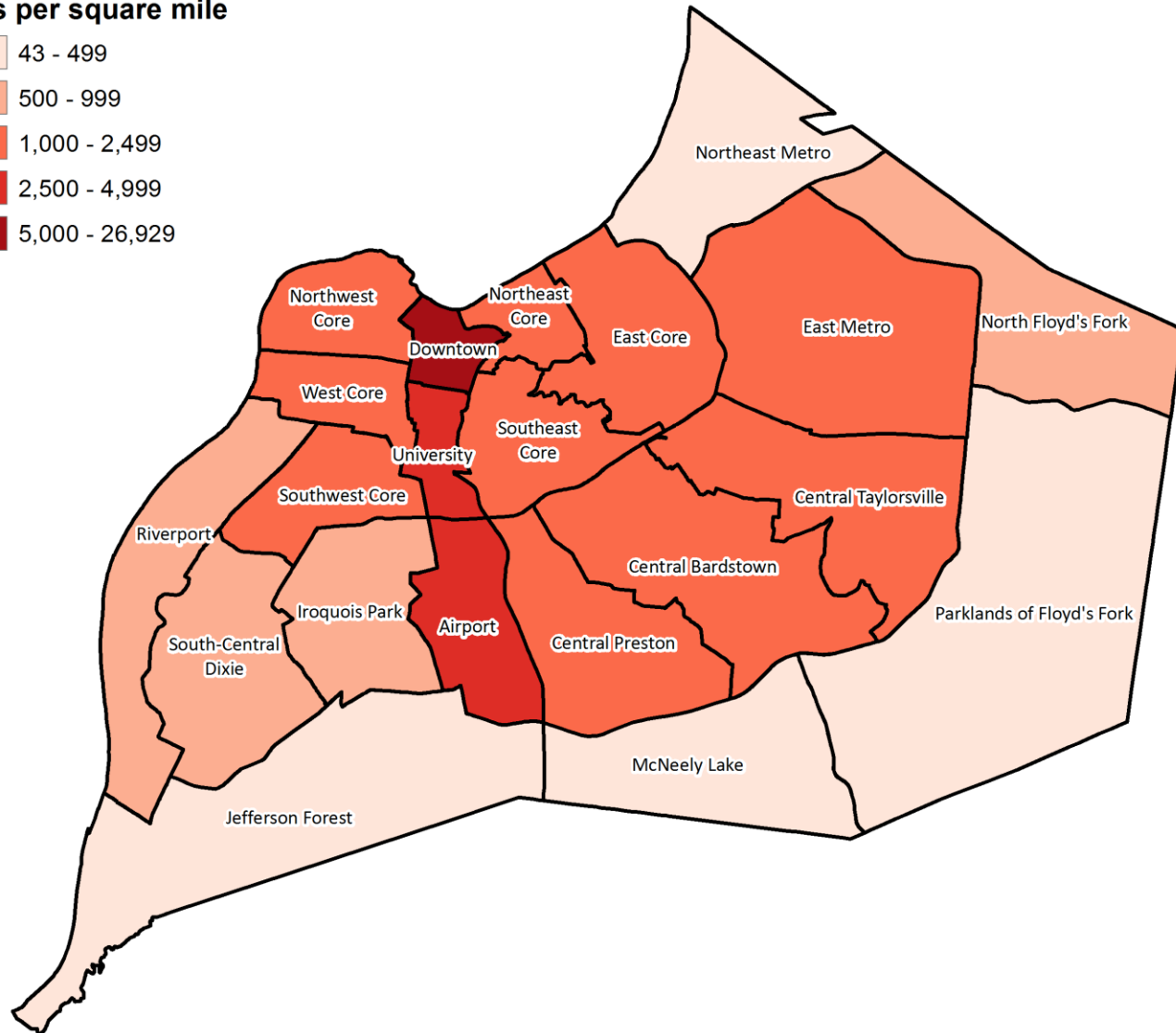
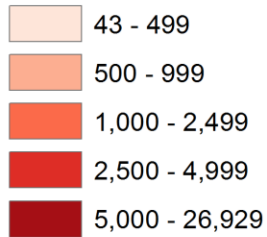
Numeric



Percentage

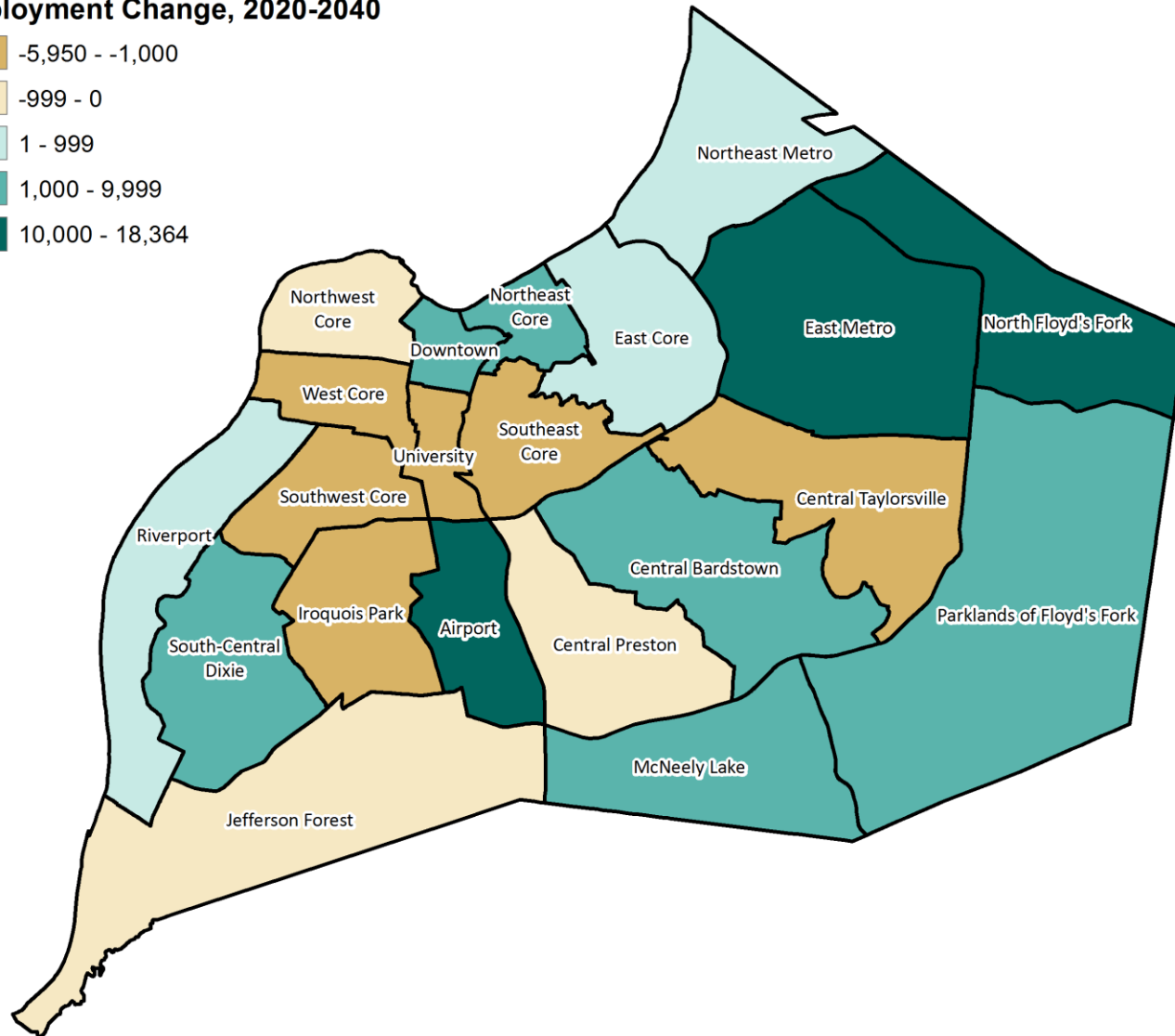
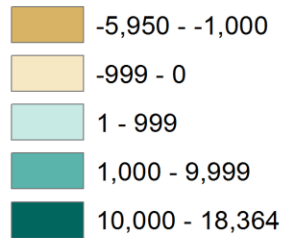
Employment Density 2013

Jobs per square mile



Employment Change 2020-2040

Employment Change, 2020-2040



Louisville Metro Population and Household Projections 2010-2040

Matt Ruther
University of Louisville

matthew.ruther@louisville.edu

April 16, 2016