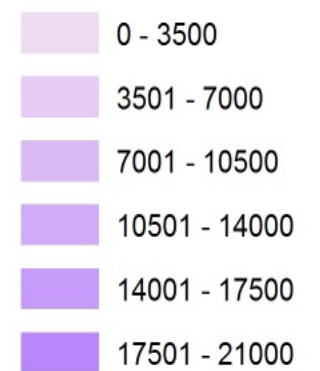
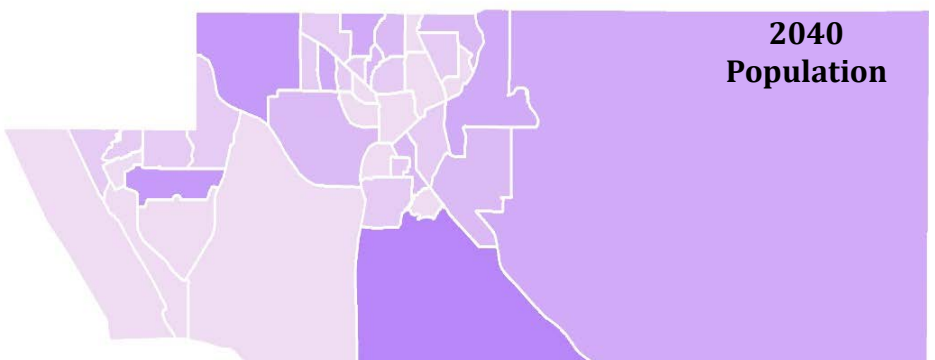
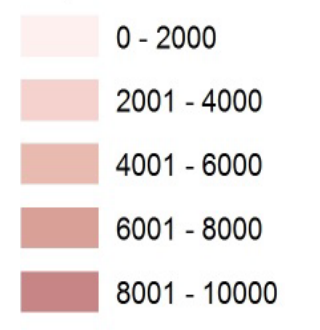
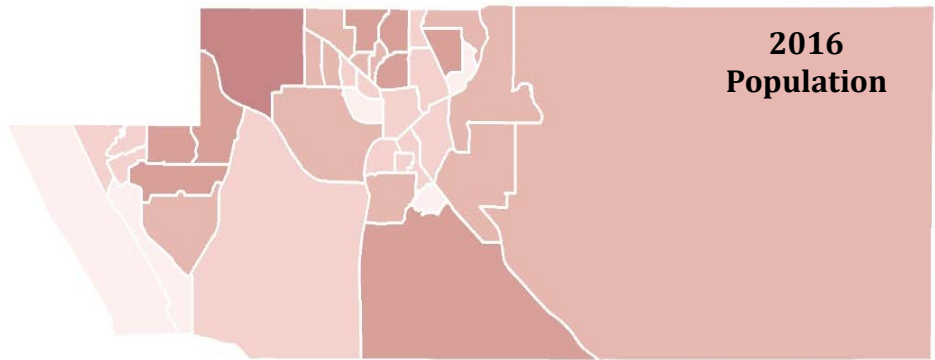


# Charlotte County, Florida

## Population Projections

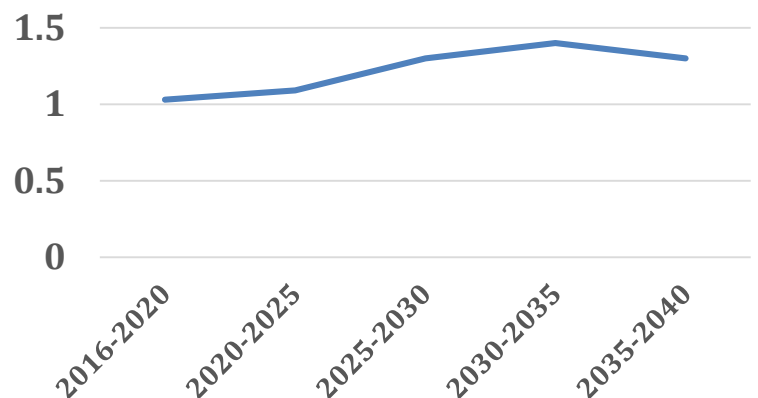


### Population Trends and Projections

The maps above show estimated and projected population by census tract. Trend projections indicate that the county population will approach one quarter of a million in 2040. Population patterns will be similar to present, with highest growth in the eastern half of the county, especially in the next 10 years.

The rate of population growth is projected to increase from 1.03% annually and peak at 1.40% annually between 2030 and 2035.

### Annual Population Growth (%)





# Populaton Projections

## Projection Methods

Population projections are conditional statements about future populations if current conditions remain the same. Charlotte County population projections were calculated using the trend projection method. The method involves fitting an appropriate mathematical curve to a set of data points and extending the curve into the future.

During trend projection several mathematical curves were fit to the data. The challenge is to choose the curve that best fits the available data and will give projections that are reasonable given present conditions. While there are statistical measures to guide the selection of the best curve, it is not possible to remove all the uncertainties with any particular project. All projection methods use population data from the past. The quality of the result depends largely on the number of past data points and the quality of the data. Given that actual census are only decennial, a large part of the past data are estimates based on the decennial census data. This definitely introduces some imperfections into the data and the results.

## County Projections

For the county level projections, the above curves were fitted to thirty-two population data points, from 1970's population to 2016, using the IBM SPSS 23 software. The logarithmic curve was selected as the best curve because it best described the data. The curve explained about 96% of the variation in the data, which was a lot better than the other curves. The general trend shows that the population of Charlotte County will grow over the coming years to near one quarter of a million in 2040.

## Census Tract Projections

For the tract level projections, we could use only seven data points (2010, 2011, 2012, 2013, 2014, 2015, and 2016) because that was all that was available. We could not find data for the tracts in the years before 2010. For all but six of the tracts, we used the cubic curve to make the projections for reasons explained previously. For the remaining six tracts, we used either the S or the quadratic curve.

