

# Problem Set 5

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## 1 Data Collection

- For my project, I am looking to study socioeconomic conditions in Palm Beach County, Florida. Specially, in terms of population and property values. My family has resided in PBC for several years, and the real estate market in these areas has only exponentially increased in price and demand since our move. In order to gain better insight on the population here, I pulled a chart of "Economic Indicators" from Wikipedia. This dataset includes median income, median household income, poverty rate, and varying education levels. I would like to further enhance this dataset by pulling more historical information and assessing the changes over time. This analysis could perhaps answer the question of whether the surrounding population has become more affluent, or if the area itself is just increasingly desirable. In terms of web tutorials, I did utilize ChatGPT to help resolve some errors encountered in this process.

## 2 API Key

- For the second portion of the data pulling, I utilized my FRED API to extract "Housing Inventory: Median Listing Price per Square Feet in Palm Beach County, FL." I love to browse Zillow and Realtor.com listings, but wanted to see what the actual numbers were saying. Additionally, accounting for square feet allows for a more accurate cost analysis. Prices had been steadily increasing for many years, but encountered a massive boom in spring of 2021. Between March 2021 and May 2022, price per square foot increased by over one hundred dollars. I plotted this data in R using ggplot2 to better manipulate the graph shown on the FRED website.