Population Growth Forecasting

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Why Population Growth Forecasting?

There are varying opinions of whether the population of the United States is sustainable from a resources perspective. Population has a unique impact the sustainability of our climate, education system, and economy. We seek to understand the population growth trends within the United States' four largest states: Texas, Florida, New York, and California. We will then use this data to make inferences about population viability.

- US Population Growth Opinion Time for a Pause
- Population Decline Opinion

Source Data

Our primary source of data is United States census data for Texas, Florida, New York, and California. This includes total population statistics and growth percentages.

US Census by State

Main Questions

Is the population in the United States' largest states growing or declining?

Are we at a point where we should seek to accelerate or decline population expansion?

Are certain states more likely to have stronger population growth than others?

What will the population of these states look like in the next 5 years?

Additional Questions

What key factors determine the population growth of state?

Impacts of state-specific population growth (Economical, Political, Area-Specific Limitations)

Predictive factors to determine practical use data: real-estate market, job growth, climate

Positive correlation of population growth: Is there a point in which population growth increases exponentially? A point where growth plateaus?

Technology Utilized

Transforming Data

 Jupyter Notebook, Python, PANDAS, Numpy

Storing Data

SQL Database

Analyzing Trends

MatPlotLib, R Studio

Determining Future Growth

Neural Network Model

Visualizations

Tableau Dashboard, Leaflet JS