

Temperature effects on Detroit, MI population

Context

- Lack of population growth can lead to a city's economy collapse through limited access to new labor and an aging population.
- Temperature changes can affect population growth through affecting people's desire to have children and discouraging immigration.

Criteria for success

- Show that there is a relationship between population growth and temperature.
- Show that improvement of standard of living will offset temperature.

Scope of solution space

- Determine if Temperature and Population growth are correlated
- Determine if standard of living mitigates this correlation

Constraints within solution space

- Temperature may not be a dominating effect on population growth.
- Using a random forest regressor model, I will estimate the effects of an increase in standard of living on an increase of population growth.

Stakeholders to provide key insight

- Detroit, MI

Key data sources:

- <https://www.numbeo.com/quality-of-life/rankings.jsp>
- <https://data.london.gov.uk/dataset/global-city-population-estimates>
- <https://www.kaggle.com/sudalairajkumar/daily-temperature-of-major-cities>
- <https://www.kaggle.com/rishidamarla/global-adherence-to-religion-19452010>
- <https://www.kaggle.com/theworldbank/education-statistics>
- <https://population.un.org/wpp2019/Download/Standard/CSV/>