Comparison of Urban Growth Boundary Cities vs. Top 100 US Cities

Description:

Certain cities across the United States have implemented Urban Growth Boundary legislation (UGB), to limit the expansion of urban sprawl into the surrounding rural areas. These cities include Portland, Seattle, Virginia Beach, Boulder, San Jose, Lexington, Honolulu, Miami, Minneapolis and St. Paul. We want to visualize the differences in demographic metrics as well as census and living/ day-to-day life between the UGB cities and the top 100 populated cities in the US. (All UGB cities are in the top 100 except for Boulder, also keeping in mind the skew cities like NYC and LA may contribute to the top 100 data set.)

Questions to Ask:

* Multi-unit structures vs. single family homes
  + Hypothesis- there are more multi-unit structures and overall cost of housing for all types is higher in UGB cities than the non-UGB cities/per capita
* Commuting not as popular as public transportation (biking, walking) in UGB cities
  + Hypothesis- due to more tightly drawn city lines, UGB cities will have higher rates of public transportation
* Population growth year by year
  + Hypothesis- population growth year by year will be lower in UGB cities, as housing options become more limited and rents increase.
* Population Density
  + Hypothesis- population density will be higher in UGB cities than in non-UGB cities
* Anticipate more to come as data is cleaned and reviewed

Datasets to be Used:

* Census API– identify demographic metrics, population info etc.
* Zillow API for housing/rental pricing
* National Transit Database (<https://www.transit.dot.gov/ntd/ntd-data>)
* <https://datausa.io/profile/geo/united-states>

Break Down of Tasks:

Presentation:

Introduction:

* What is a UGB, what are the cities, what are their goals, what are our questions.
* What is our data frame of reference and comparison; (100) cities.
* Other considerations in the analysis and project

Core Presentation of Questions

* Question 1
  + Hypothesis, data/code/graphs
  + conclusions
* Question 2
  + Hypothesis, data/code/graphs
  + conclusions
* Question 3
  + Hypothesis, data/code/graphs
  + conclusions
* Question 4
  + Hypothesis, data/code/graphs
  + conclusions

Overall Conclusions

Notes 1/22/2020

Aja: Working on pulling transportation data

Jennifer: census data pulling and formatting

Julia: area formatting,

Tyler: formatting population of top 100 cities csv, and population change csv