Liveable Streets Group D: Early Insights

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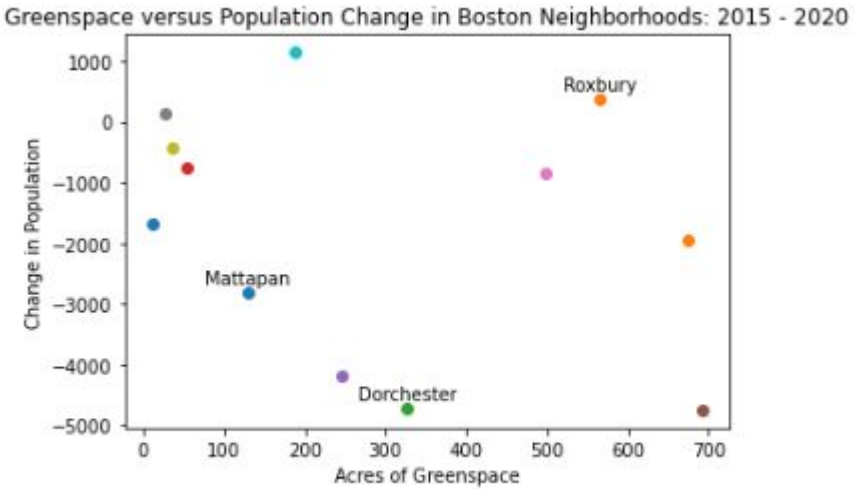
Introduction & Data Collection

- Is there a correlation between the creation of greenways and displacement in Boston?
- We focused the data on Dorchester, Roxbury, and Mattapan
- Population data for Boston neighborhoods (5-year ACS 2015-2019 & US Census 2020)
    - Population change for various neighborhoods
    - Racial demographics
- Open space data for Boston neighborhoods
    - Number of acres for each open space
    - District location
    - Types of open space

Preprocessing

- Population data set
  - Filtered out irrelevant columns (Non-racial focused data)
  - Calculated change in population using US Census 2020 minus 5-year ACS 2015-2019
- Open space data set
  - Filtered out non-greenway open spaces (“Cemeteries & Burying Ground” and “Malls, Squares & Plazas”)
  - Kept greenway open spaces such as (“Parks”, “Playgrounds & Athletic Fields”, “Community Gardens”, etc.)
  - Summed up the acres of each individual greenway with respect to their district

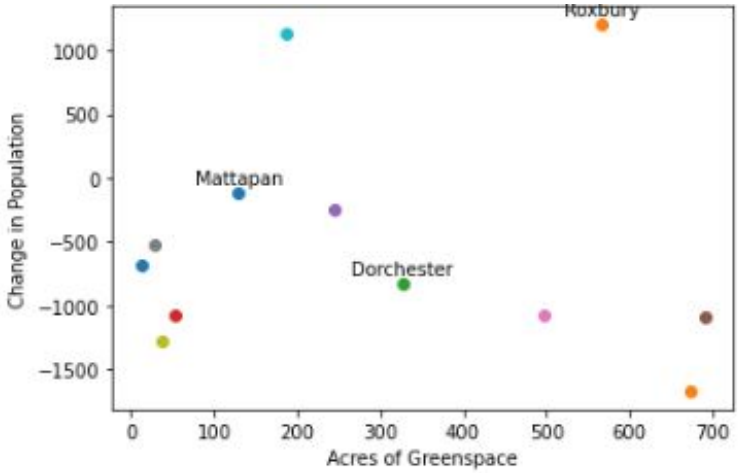
Data Visualization & Analysis



Correlation Coefficient: -0.30004374096415903

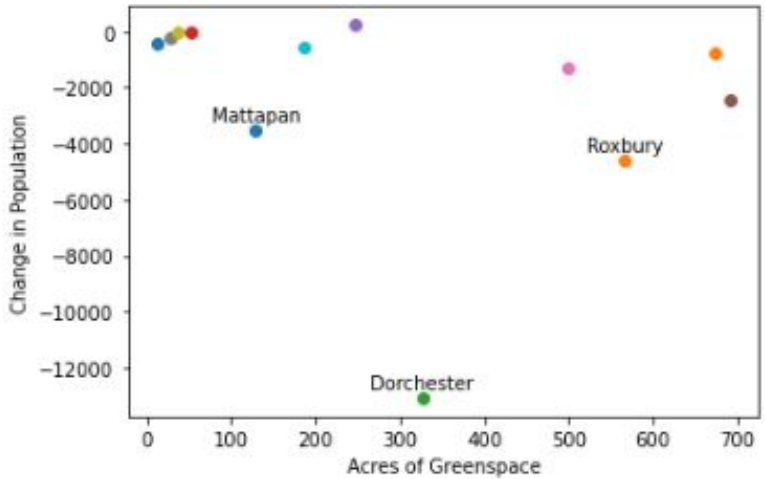
- The correlation coefficient shown below the graph is a weak correlation
- Implies that more green space results in a decrease in population
- Note that Roxbury is an outlier in this graph (increase in population despite its high acres of green space)

White



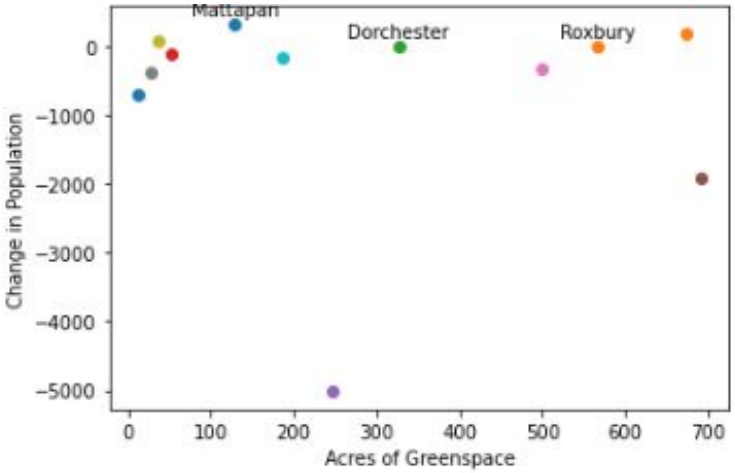
Correlation Coefficient: -0.07755391322386153

African American



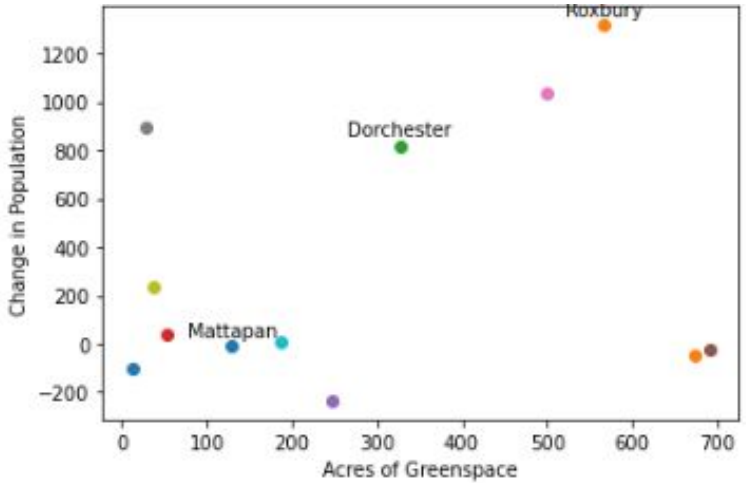
Correlation Coefficient: -0.24139106260161658

Hispanic



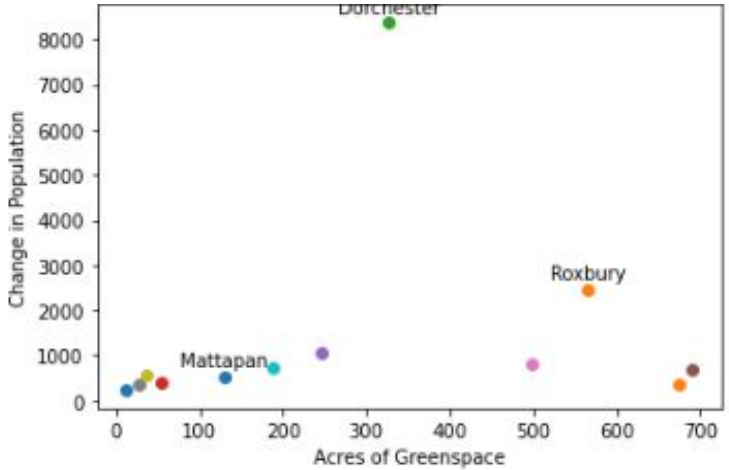
Correlation Coefficient: -0.06984862793003781

Asian



Correlation Coefficient: 0.21481525566943493

Other Races



Correlation Coefficient: 0.15605657810809356

Conclusion

- Based on our current data and analysis, there is no clear correlation between the creation of greenways and displacement in Boston
    - Found weak negative correlation for general population data graph
    - Found inconsistencies when looking at individual race graphs
    - Found outliers for Roxbury (high increase in population despite creation of greenways) and Dorchester (major fluctuations)
- Possible indicator of gentrification and next steps:
    - Searching and analyzing data sets on housing prices, rent, income, etc.
    - Putting higher focus on the outliers, Roxbury and Dorchester