



Public Transit: Is it Equitable?

Austin Gardner

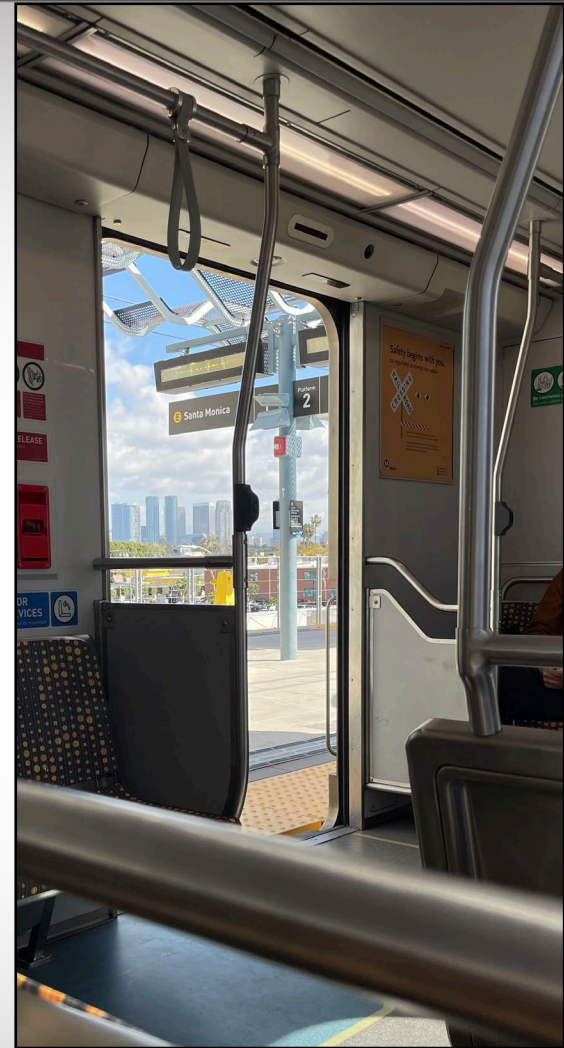
Background

- Autos provide greater access to opportunity
 - Especially in U.S.
- Transit on its own is not inherently equitable

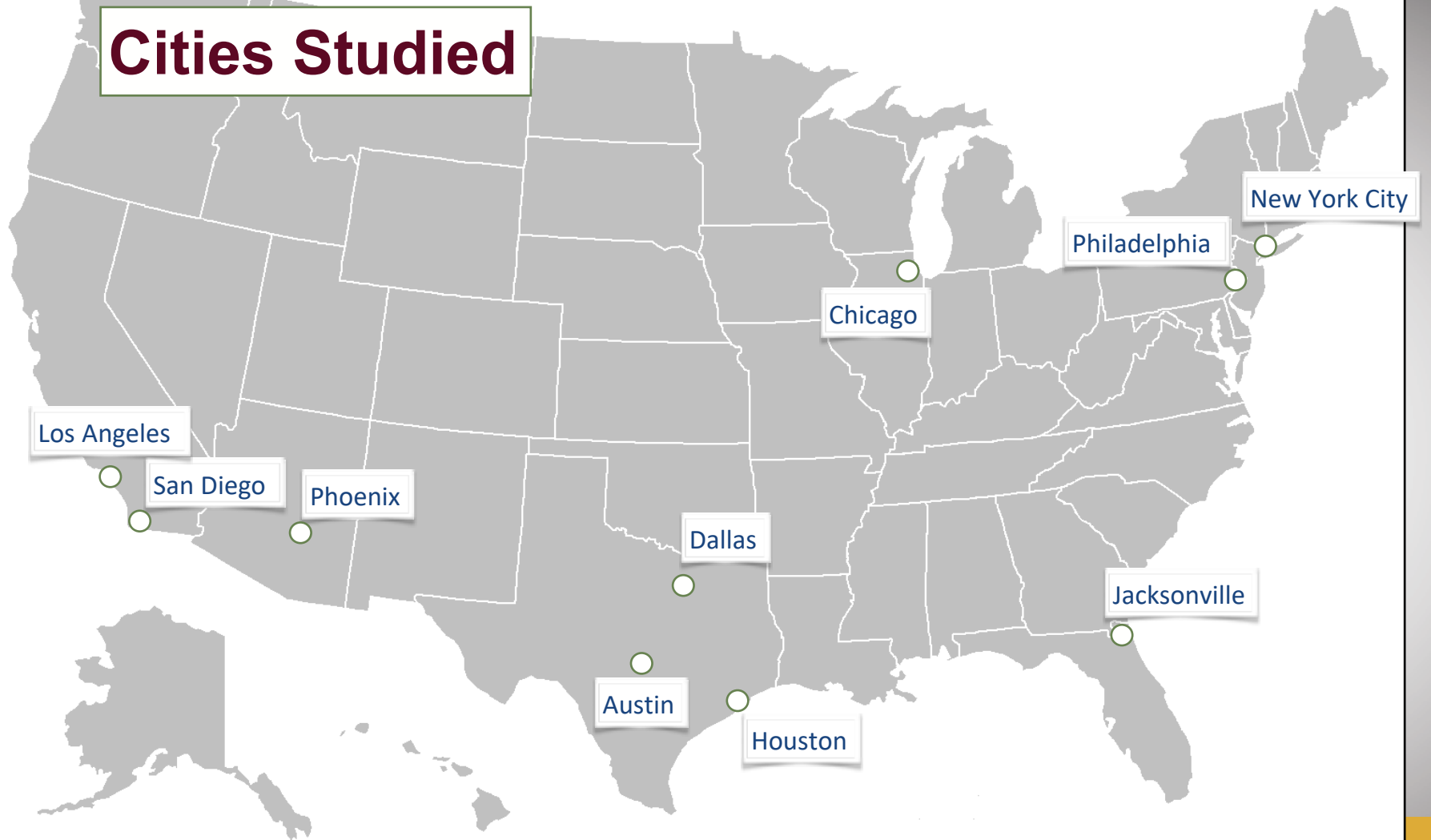


Research Questions

- Investigate whether transit access in the largest US cities is equitable across income levels
- Identify where new transit stops are being provided



Cities Studied



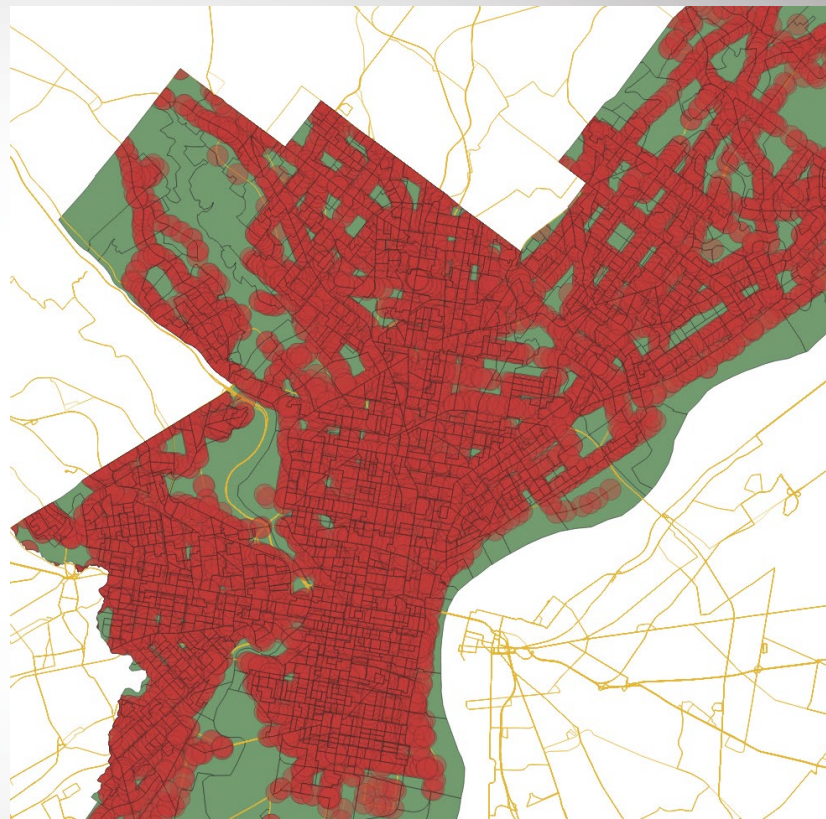
Research Approach

- Investigated Access By Income Level
- Investigating Neighborhoods with Transit Stop Investment



Data Sources

- 2022 Census Data (Simply Analytics)
- 2020 and 2022 USDOT National Transit Map

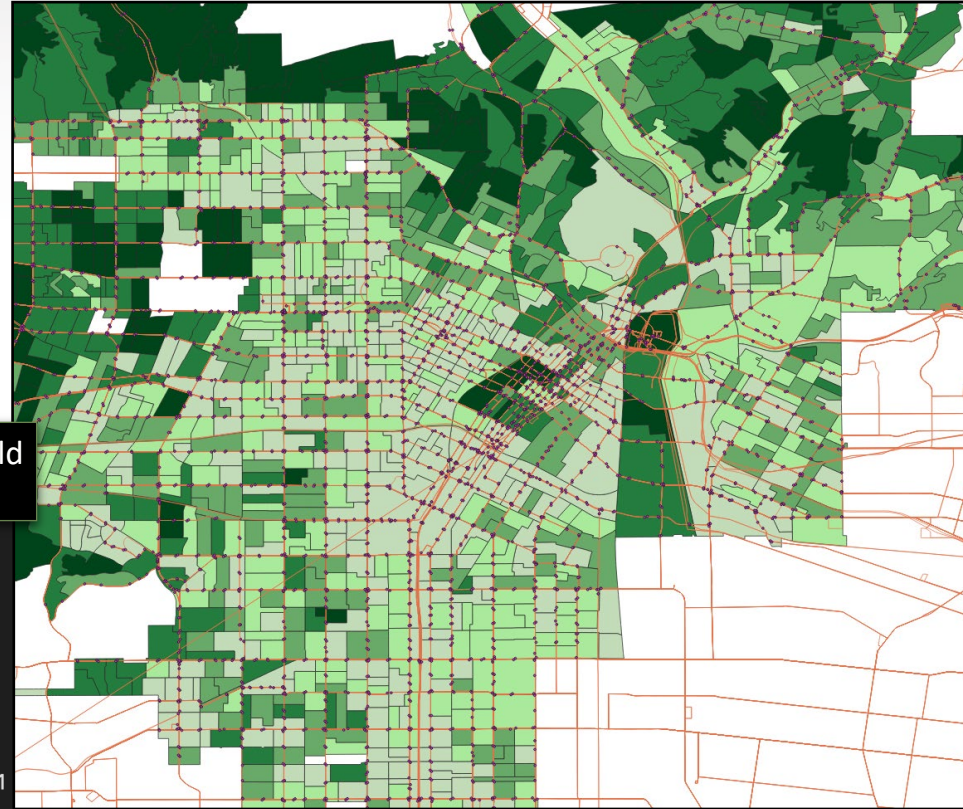
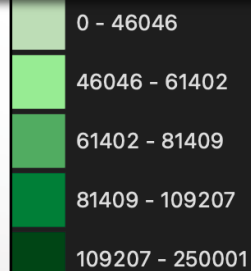


Buffered + Intersected Transit Map for Philadelphia

Methods

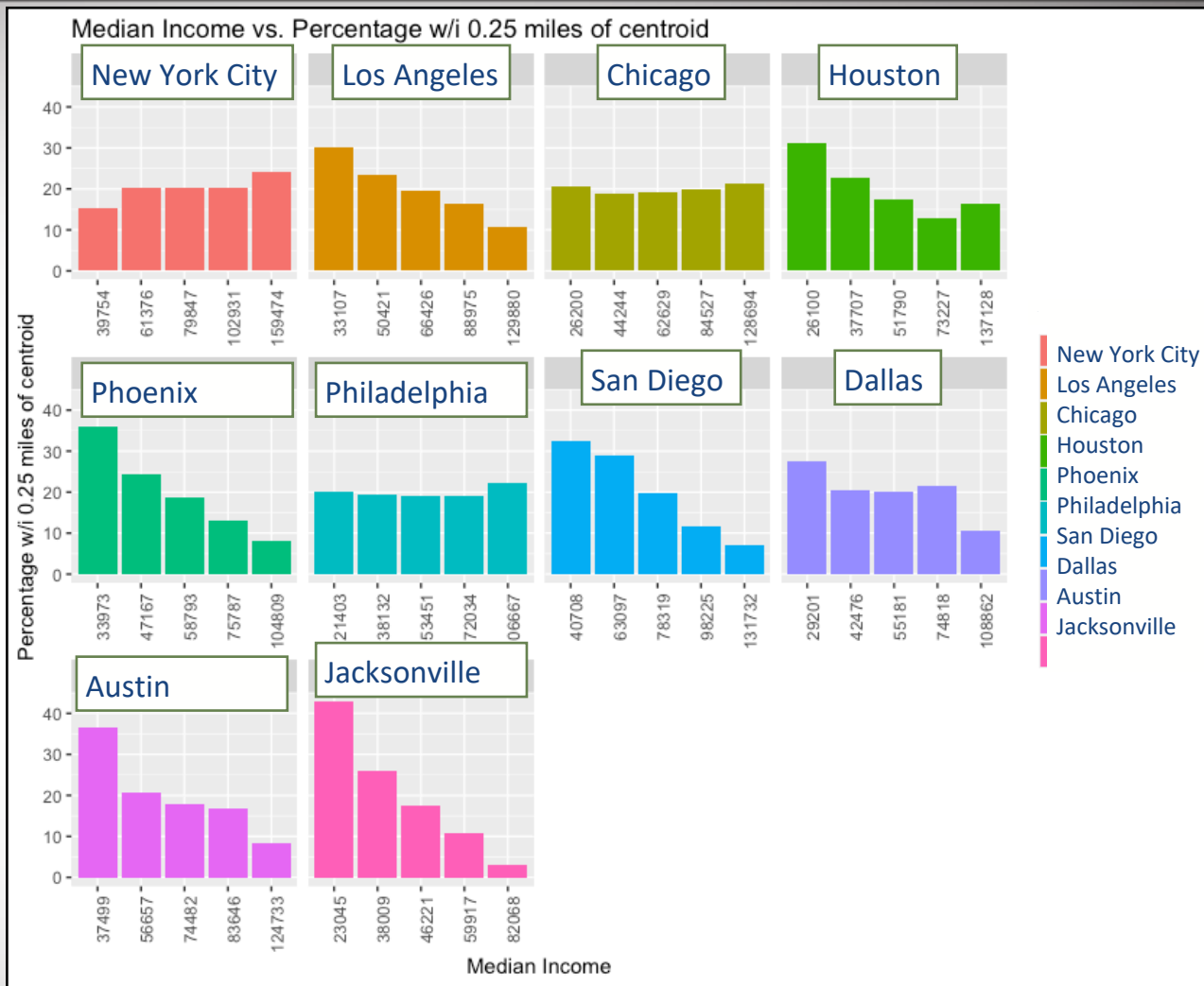
- Access:
 - From Centroid of Block Group
 - Percentage within 0.25 miles of transit
- New Investment:
 - 2020 vs 2022 Transit Stops

Median Household Income for 2022

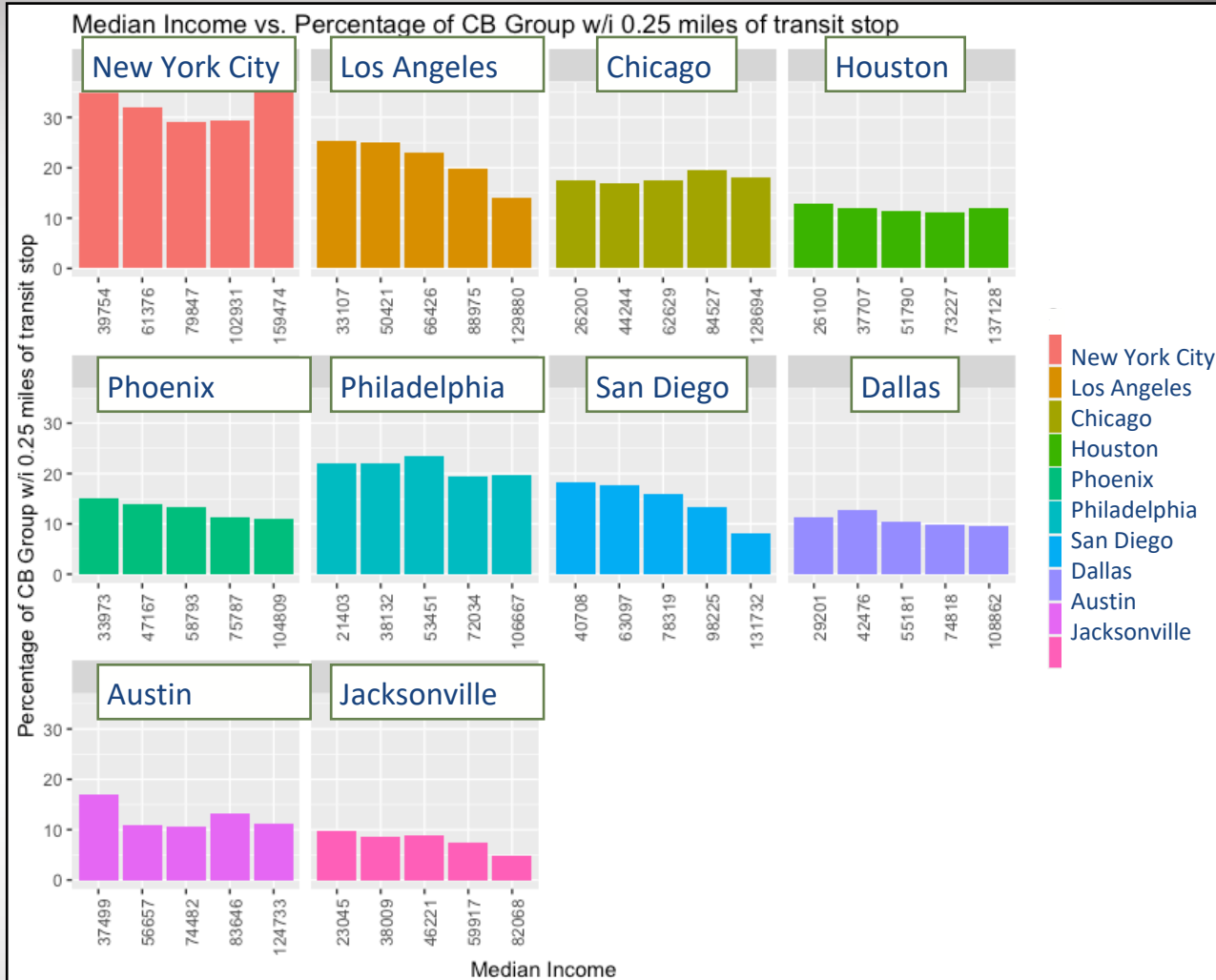


Map of Transit in Downtown Los Angeles

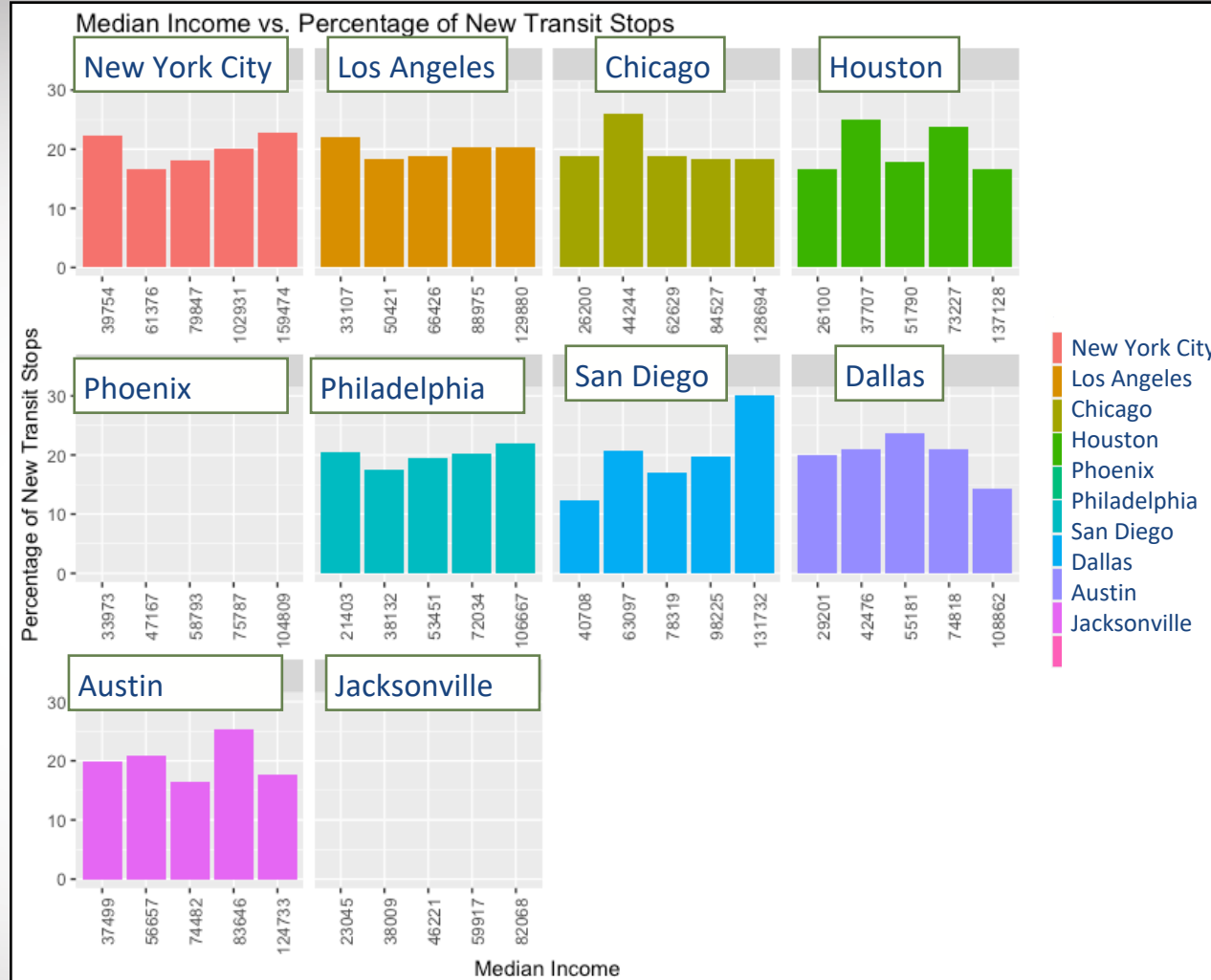
Results: Centroid



Results: Percentage



Results: New Stops



Conclusion & Future Research

- Sunbelt:
 - Negative Correlation
 - Investment appears to be in high-income
- Other Cities:
 - Favor high-income but different attitude
- Future Research:
 - Post-2022 Transit Data
 - Split by Type of Transit
 - Walkability and Equity
 - Focus on metro areas



Questions



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Works Cited Page

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- https://commons.wikimedia.org/wiki/File:BlankMap-USA-states.PNG&psig=AOvVaw1ce5hBuvya2XFHBbxMNLuJ&ust=1721942787090000&source=images&cd=vfe&opi=89978449&ved=0CBQQjhXqFwoTCJjT3_fOwlcDFQAAAAAdAAAAABAJ