

Bicycle Transportation & Gentrification and Displacement

...

Team GRAPE EXPECTATIONS:

Joan Chang, Oscar Garcia, Kathryn Linz, Shayan Ray, Aastha Sharma



Executive Summary

Key Findings

1. **No significant correlation** between bicycle infrastructure to **gentrification** and **displacement** in LA and Orange County (in urban vs suburban vs rural areas) between 1990-2000 and 2000-2015

2. Bike lanes are built in **established neighborhoods**, but their development does not necessarily **attract people**

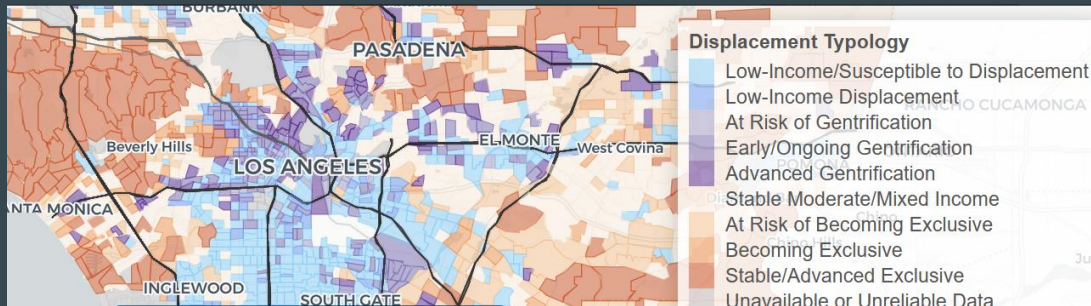


Fig 1. Neighborhood Change in Southern California: Los Angeles and Orange County¹



Key Indicators of Neighborhood Change : Socioeconomic status, race/ethnicity, housing, neighborhood types

Policy Recommendations



Fill gaps in the data

Consider building bike lanes to decrease pollution

Examine positive financial factors from bike lanes in low income areas

Methodology



Gentrification Data² for LA and Orange County*

Socioeconomic status (SES)– Total population, Education, Median Household income

Race or ethnicity – White, African-American, Asian, Hispanic

Housing - Housing Units, Owner vs Rent-occupied (%), Median home value (\$), Median rent (\$),

Neighborhood Types (urban, suburban, rural)

*Residential data only, (1990-2000, 2000-2015)



Merge bike lane data from SCAG

Length of bike lane by each class 0, 1, 2,3,4 in census tracts



Exclude Areas with Significant Transit Improvements

Example: Metrolink (Commuter Rail), Metro (Light Rail) , Metro BRT Orange Line, Amtrak



Exploratory Data Analysis, and Policy Implications

Quantifying Pierson correlation coefficient, Phi coefficient

Discussion



Bike lanes by class (0,1,2,3,4) and sum of all lengths



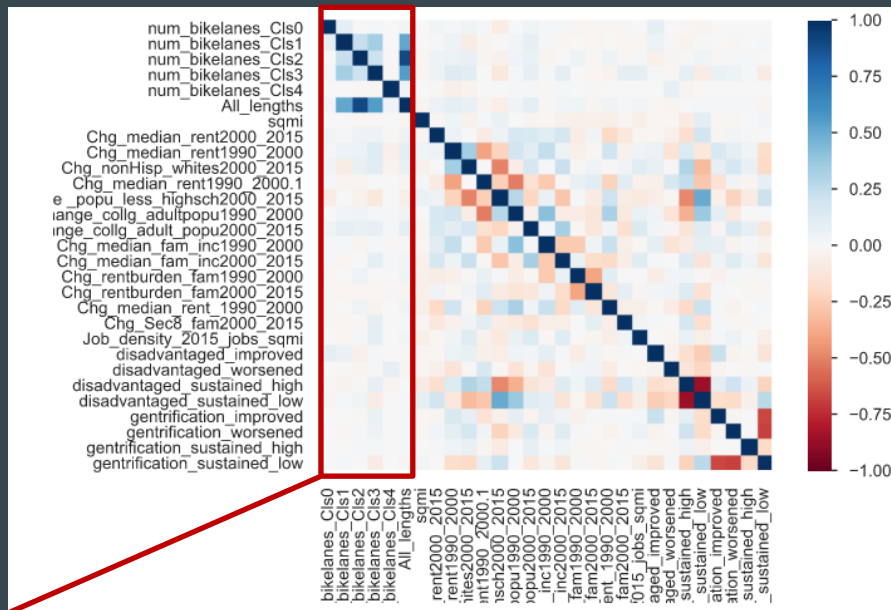
Δ (socioeconomic status, race/ethnicity, housing)

Between 1900 and 2000; 2000 and 2015



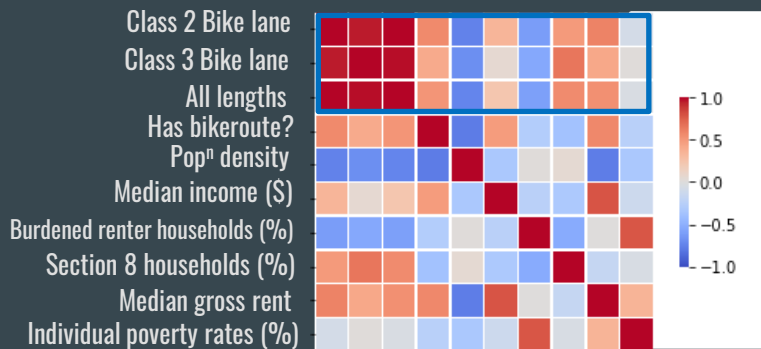
Did gentrification and conditions for disadvantaged communities :

Worsened, Improved, Sustained High/Low?



No significant correlation between bicycle infrastructure to gentrification and displacement*

Conclusion & Recommendations



³Data between 2000 and 2015

There is a **correlation** between installed bike lanes and socioeconomic data in neighborhoods that have been **long gentrified**



Bike lanes are built in **established neighborhoods**, but their development does not necessarily **attract people**

Policy Recommendations



Fill gaps in the data

Wider geographical area, longer time period

Results by wealth, family structure and additional demographic variables (lifestyle)

Localized data on displacement (by census tract, not region/county)
Quantitative data on preferred transportation mode

Examine utilization of bicycles and bike lanes

Consider building bike lanes to decrease pollution

Examine positive financial factors from bike lanes in low income areas