McGuinness Park (2017). Photo by Connie Combs/Kizz Prussia

City of Yakima
Equity Study Analysis

Yakima City Council Meeting
December 12, 2017

Project Team

WSU Metropolitan Center for Applied Research and Extension

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- Connie Combs, MUP
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Scope of Work

1. Assess Equity Study data: process and accuracy audits
2. Analyze existing Equity Study data

Input - Demographics

- Race
- Education level
- Marital status
- Home owner or renter
- Property value
- Property age

Output

- Public safety calls for service
- Street lights
- Code compliance requests
- Parks
- Transit ridership, shelters, benches

- Geographical dividing line - 16th Avenue

Results: Process/Accuracy Audit

- Professional process for collecting, storing and analyzing data
- Staff is knowledgeable in the data infrastructure
- No evidence of explicit bias
- Handled in an appropriate manner for its original intent: to support city's geospatial data and land use planning
- Opportunities to improve data quality and quantity related to an equity analysis

Analysis strategy

City GIS data generally did not contain time attributes (e.g., streetlight installation date)

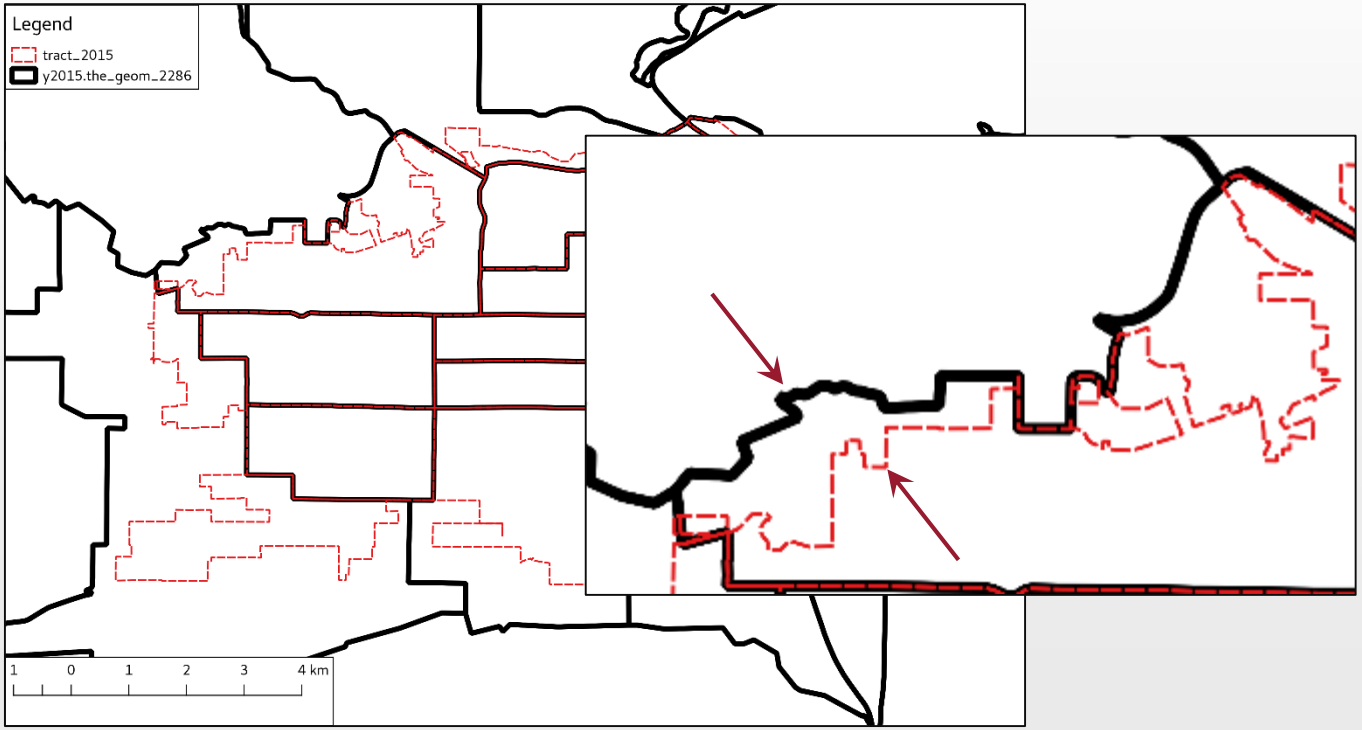
- Did not allow assessment of City infrastructure over time
- The team felt it necessary to provide some analysis of changes to the City over 1980-2015

Extensive GIS analyses were used to characterize census tracts in the City with respect to:

- Demographic changes over time
- Parks (which did contain dates—more on this follows) in relation to demographics over time
- Current infrastructure in relation to current demographics

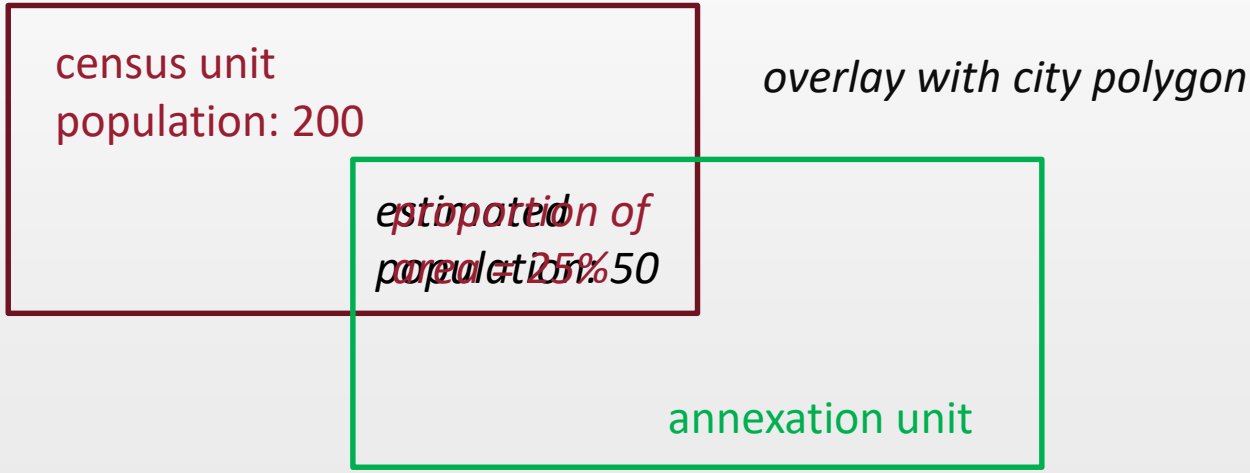
GIS Analysis

Required because city limits do not overlap with tracts precisely



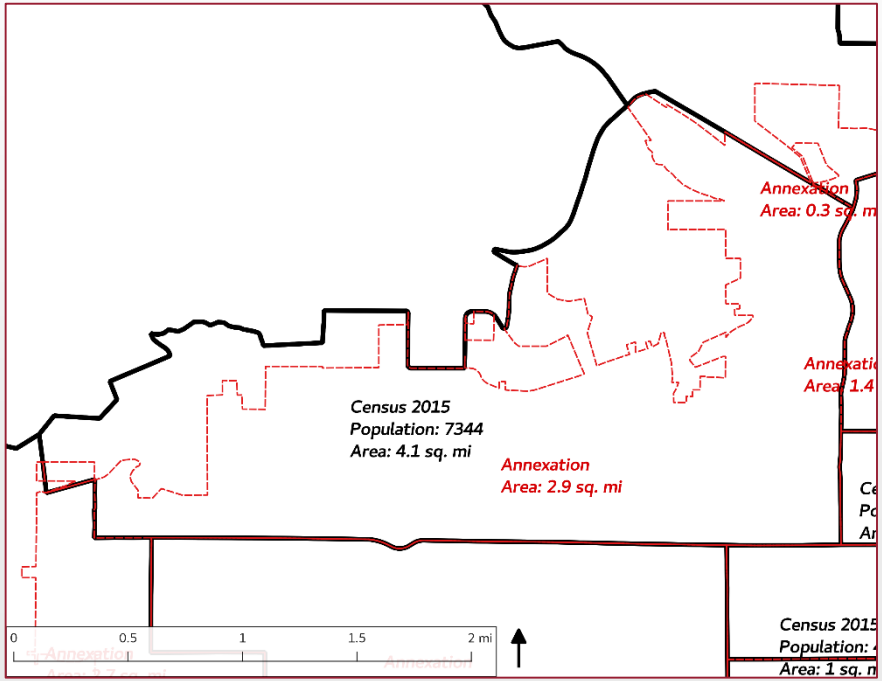
GIS Analysis

Simplified schematic



GIS Analysis

Example with data

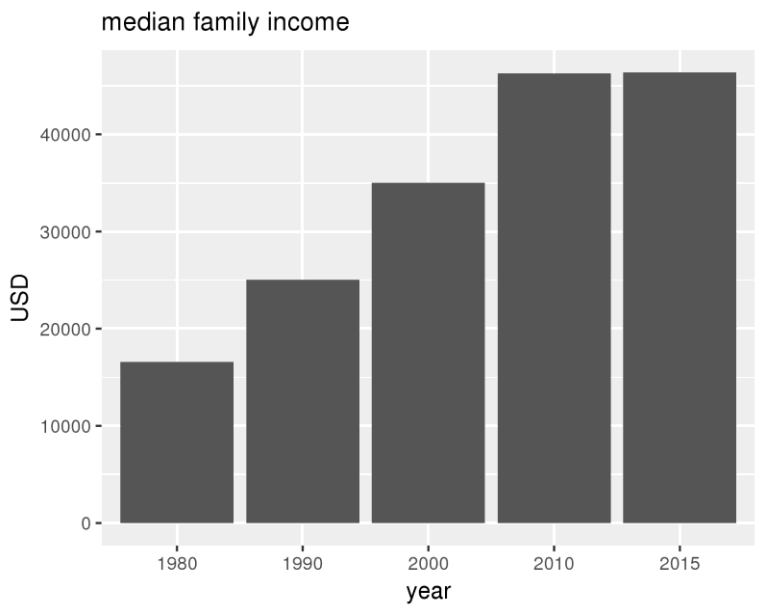


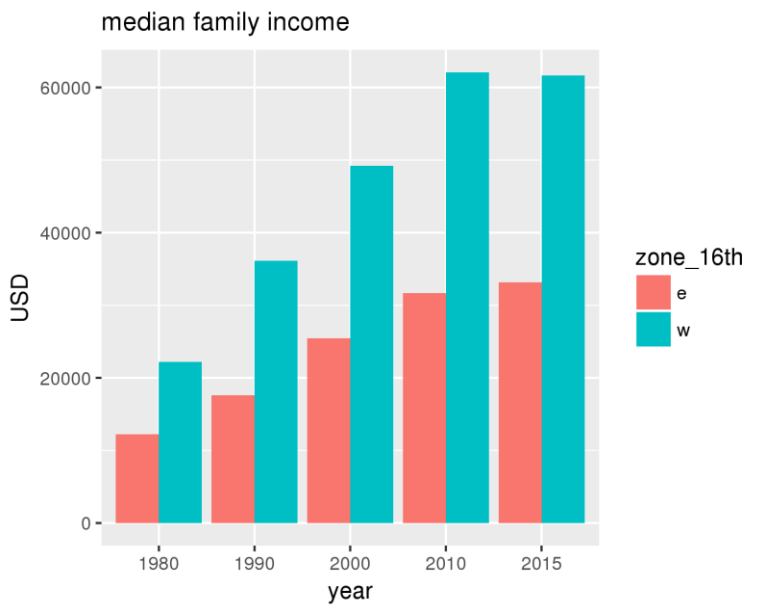
$$7344 * \left(\frac{2.9}{4.1}\right) = 5194.5$$

Area of city limits within census tract has estimate population of 5195 persons

Median family income has increased

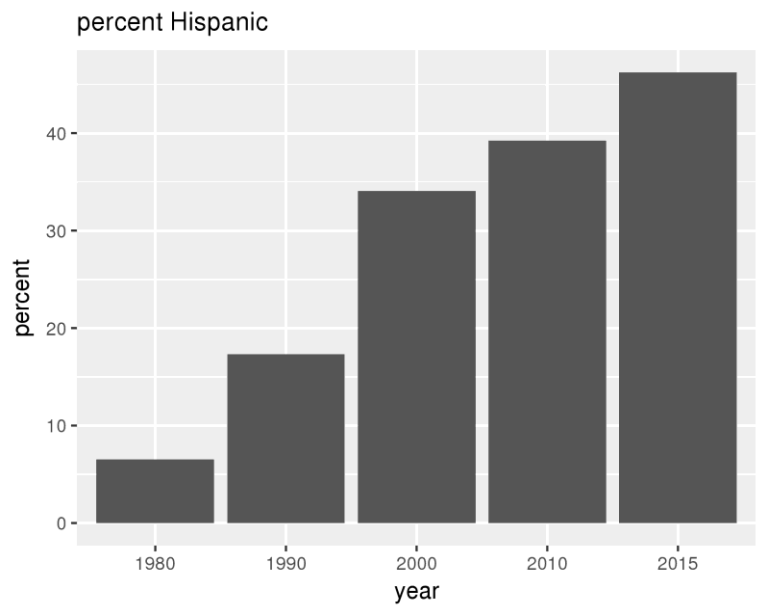
…but more so on the West side of 16th

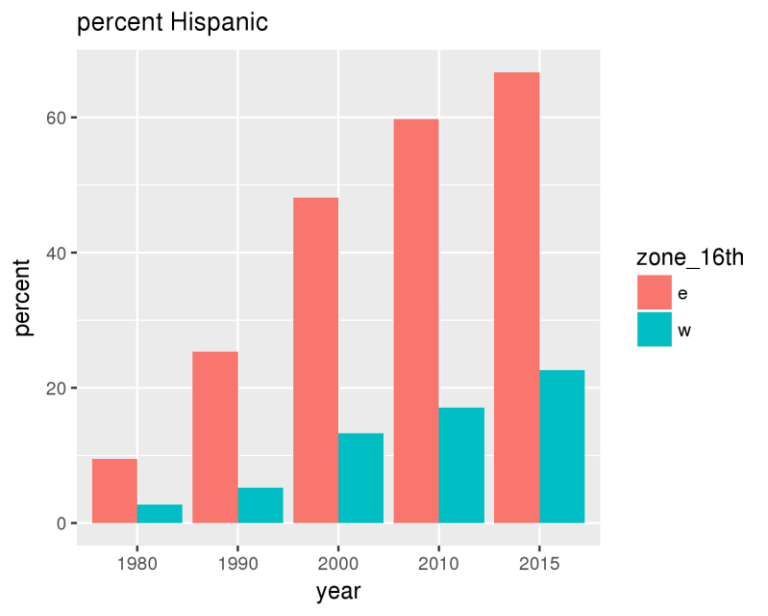




Yakima is now > 40% Hispanic

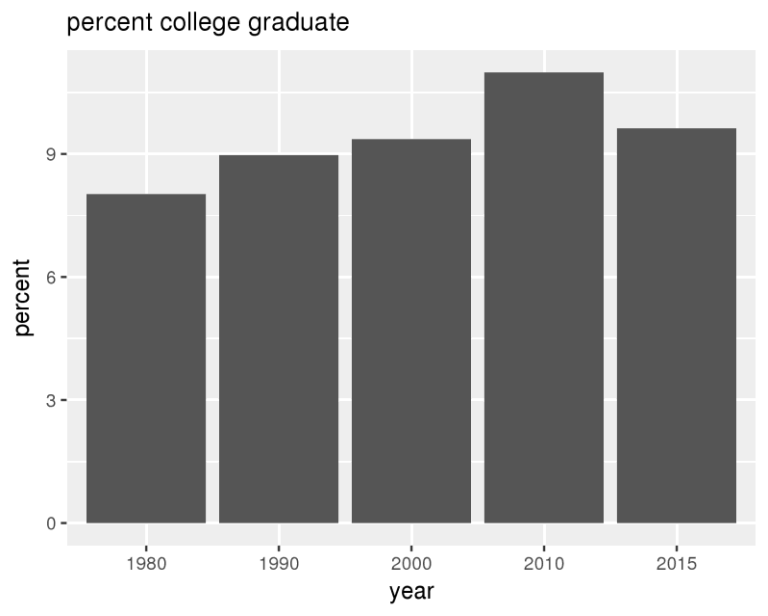
… but with the greatest increases on the East side

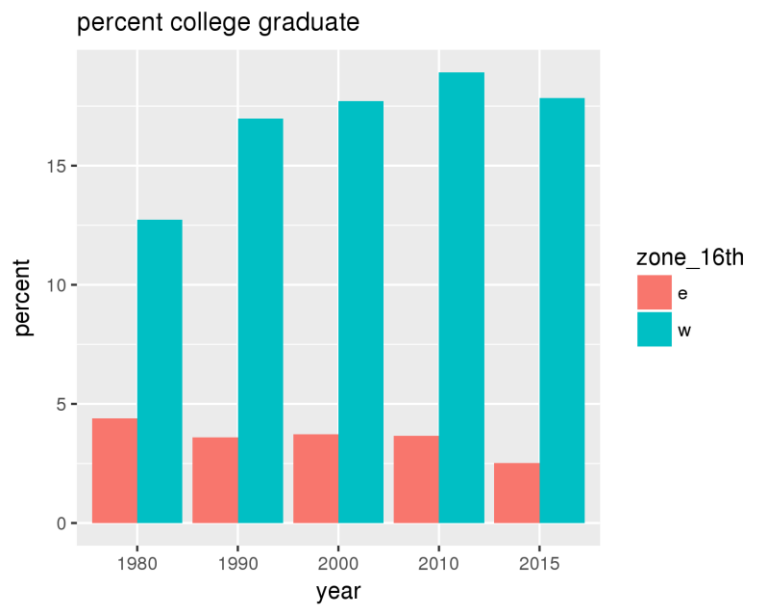




College graduation rates have generally improved

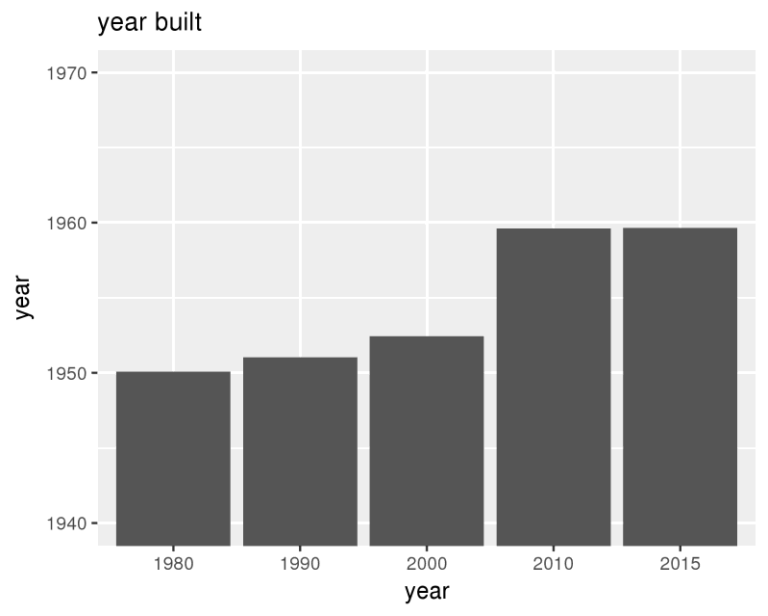
… but continue to decrease on the East side

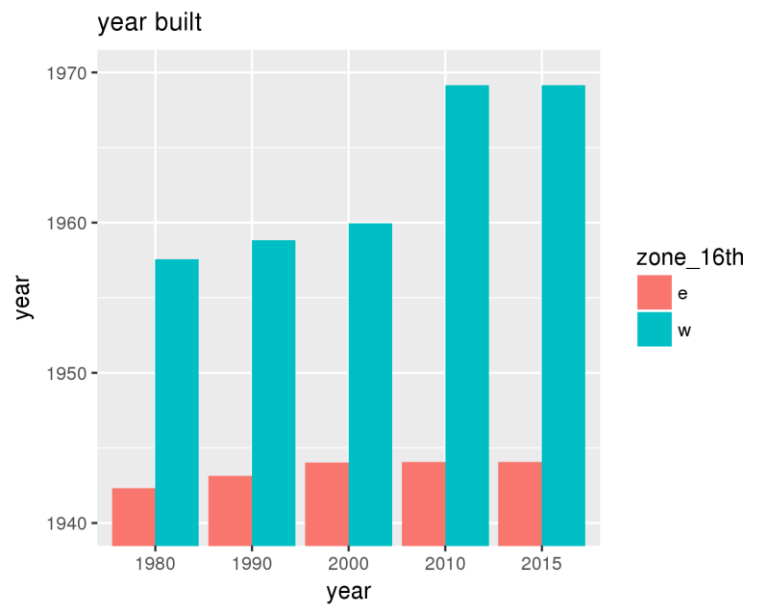




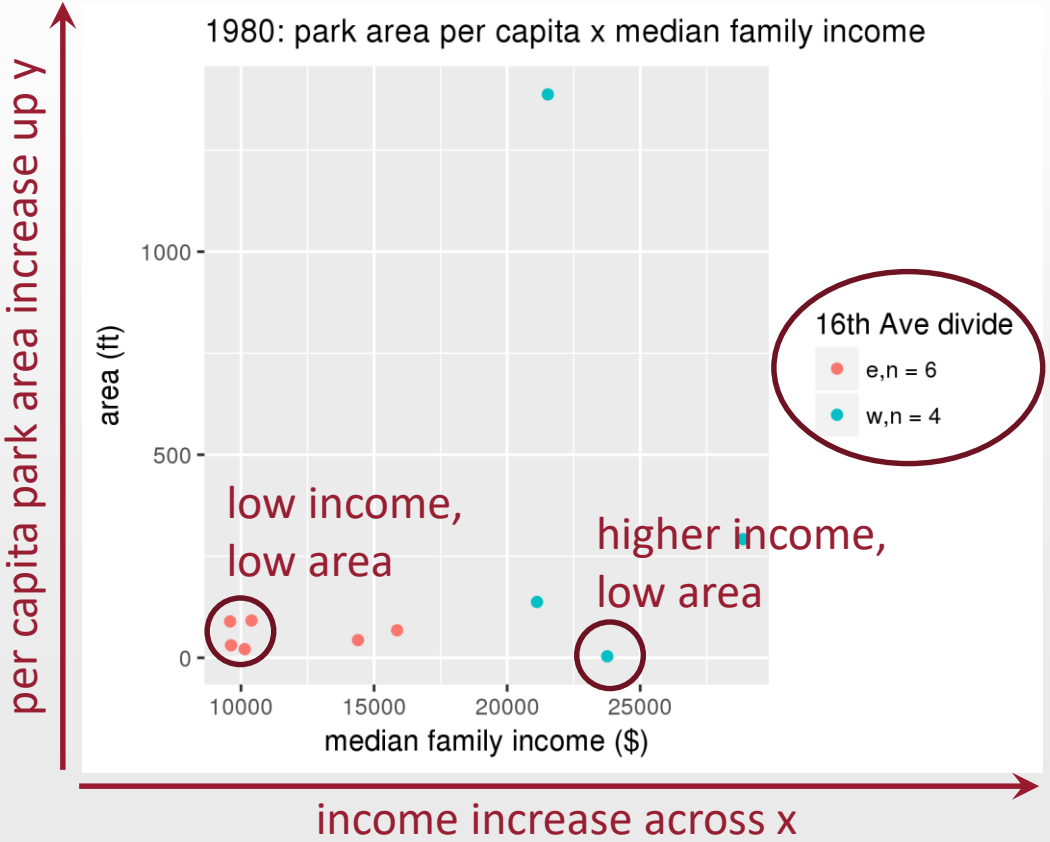
Average year built

… older on the East side, newer on the West side



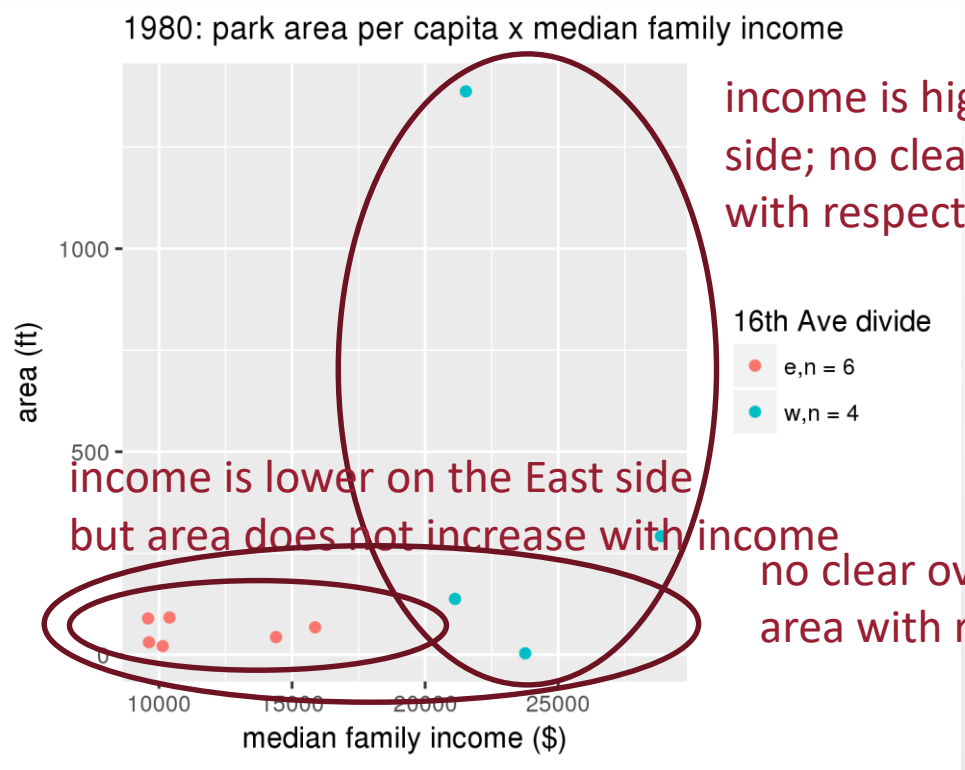


Anatomy of an XY ("scatter") plot



colors represent
East, West

Anatomy of an XY (“scatter”) plot



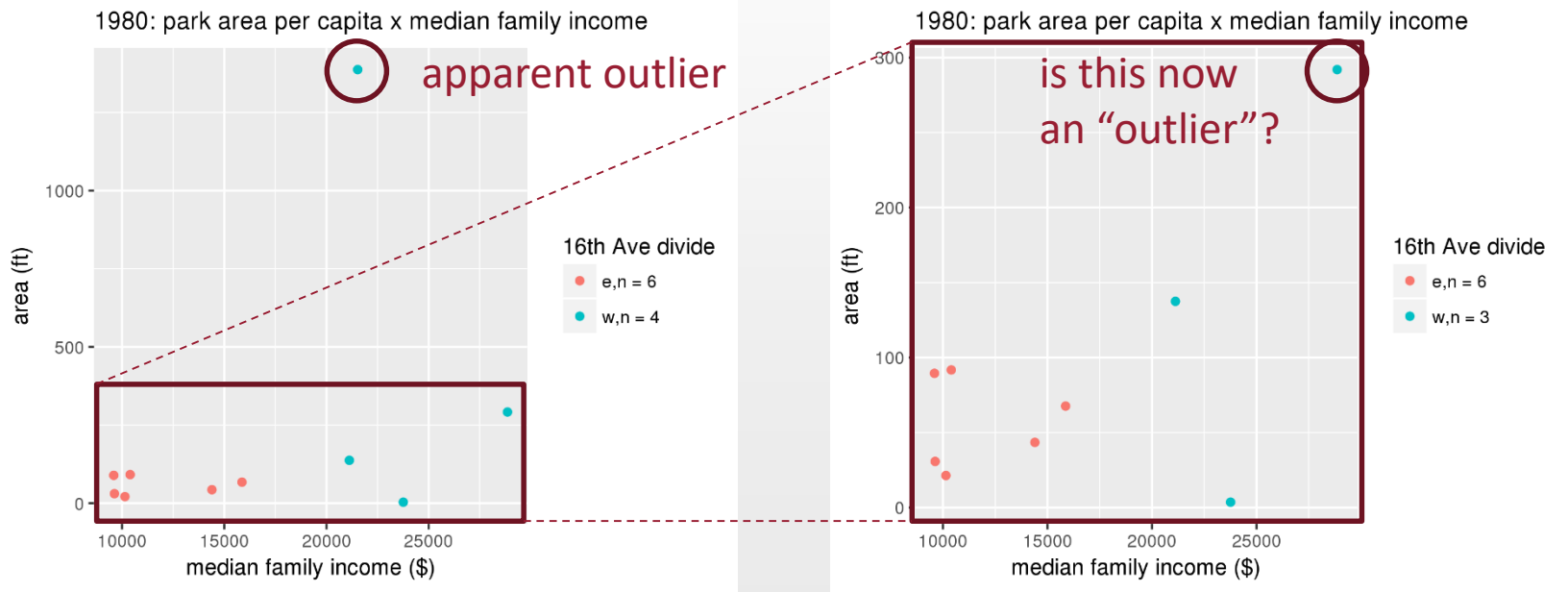
income is higher on the East side; no clear pattern in area with respect to income

income is lower on the East side but area does not increase with income

no clear overall pattern in area with respect to income

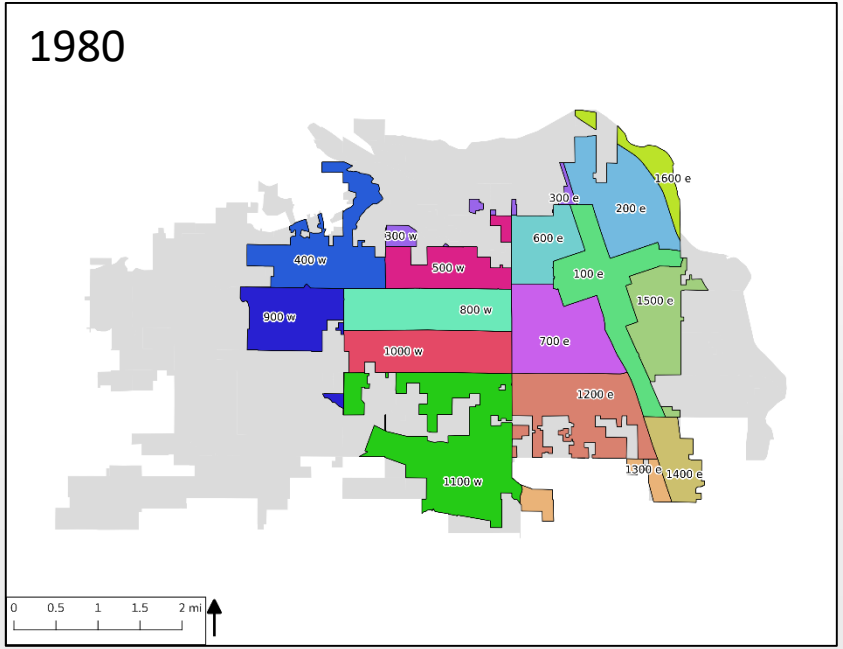
Anatomy of an XY (“scatter”) plot

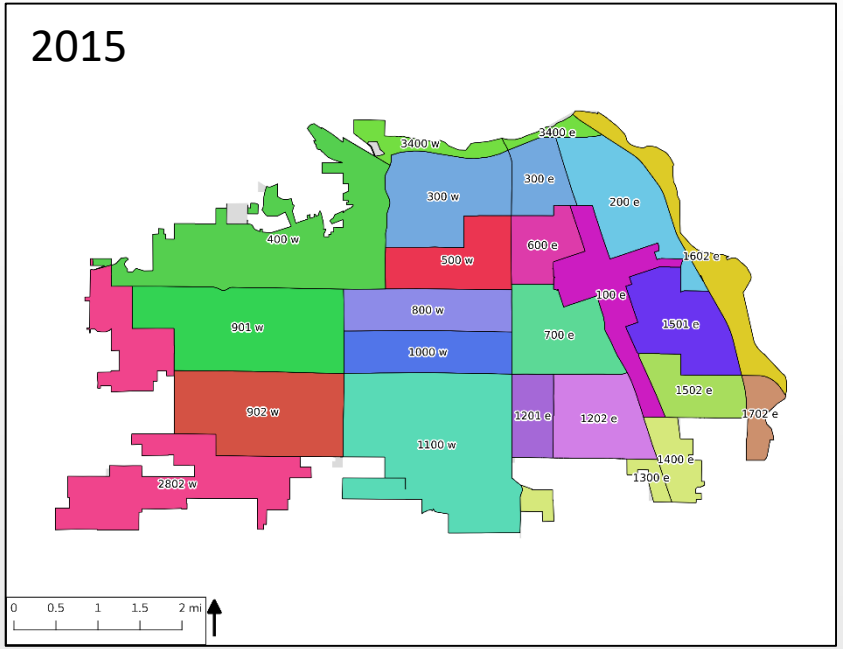
“Outliers” compress axes



“outlier” removed

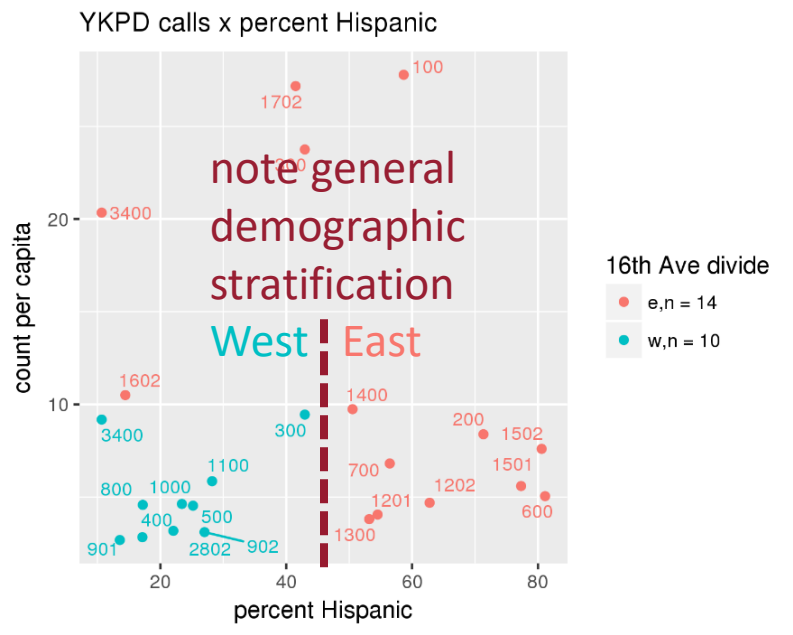
Census Tract Maps

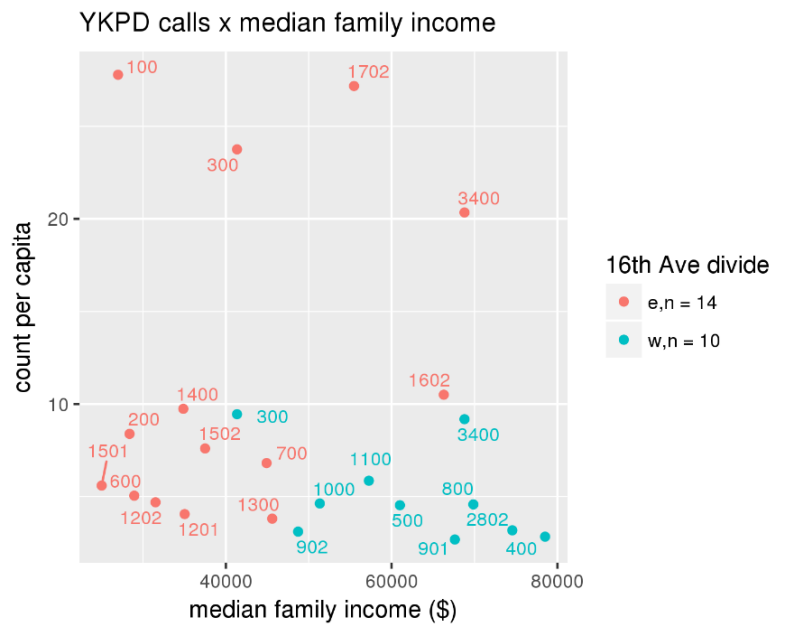




Police Department calls for service

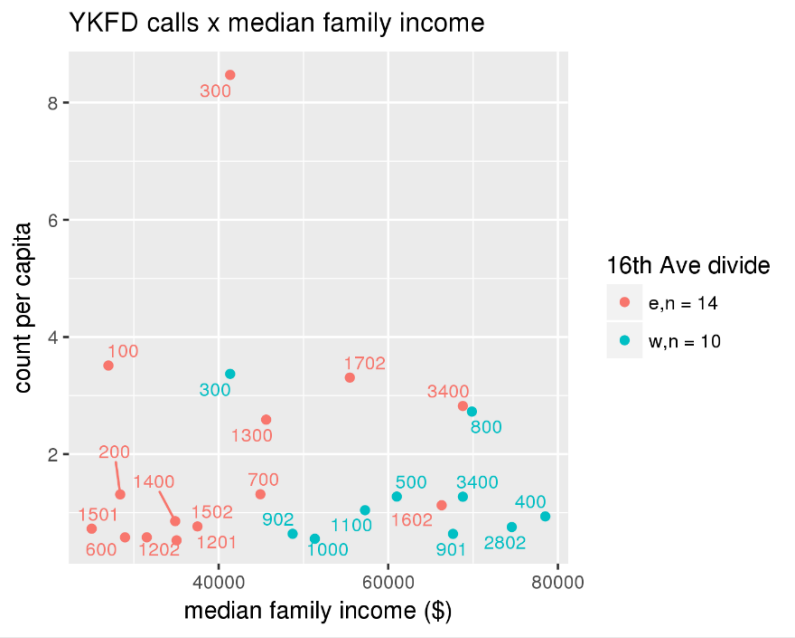
Areas with greatest count per capita are on East side, but across a range of demographics

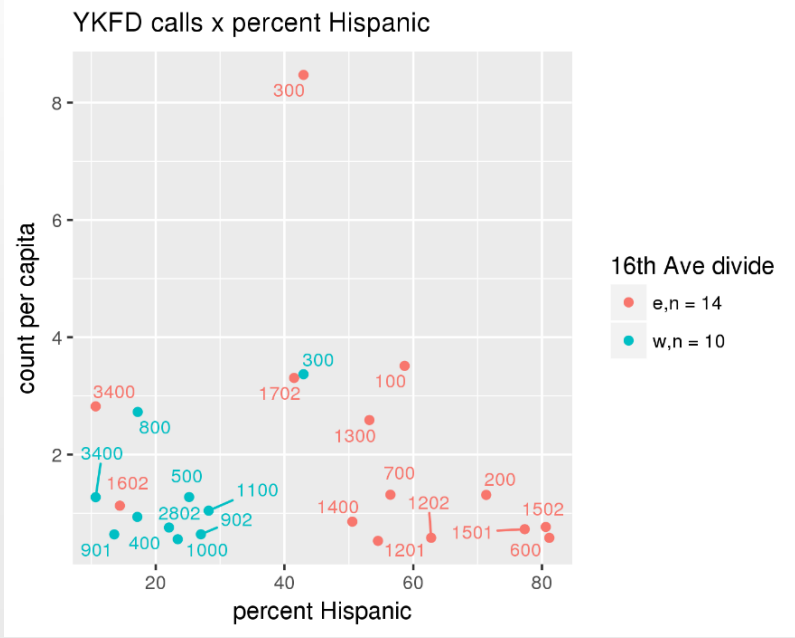




Fire Department calls for service

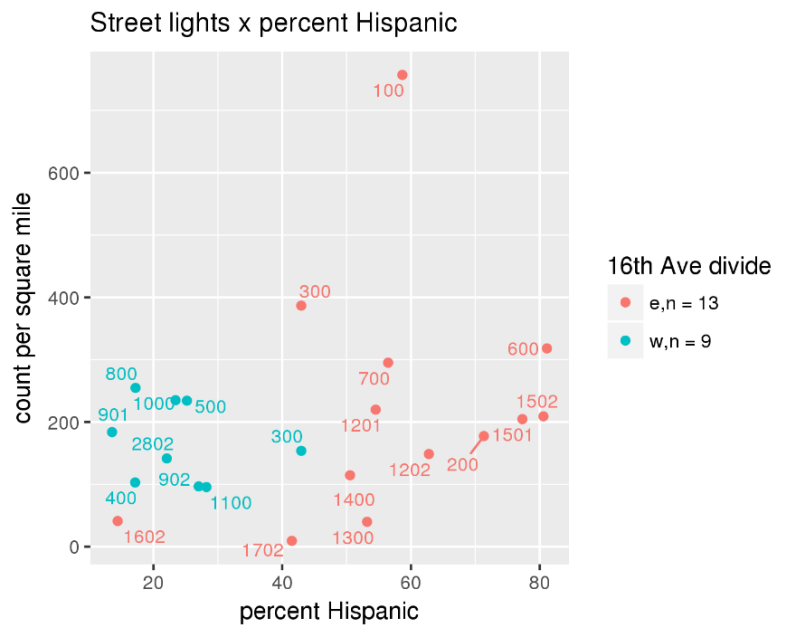
No apparent patterns

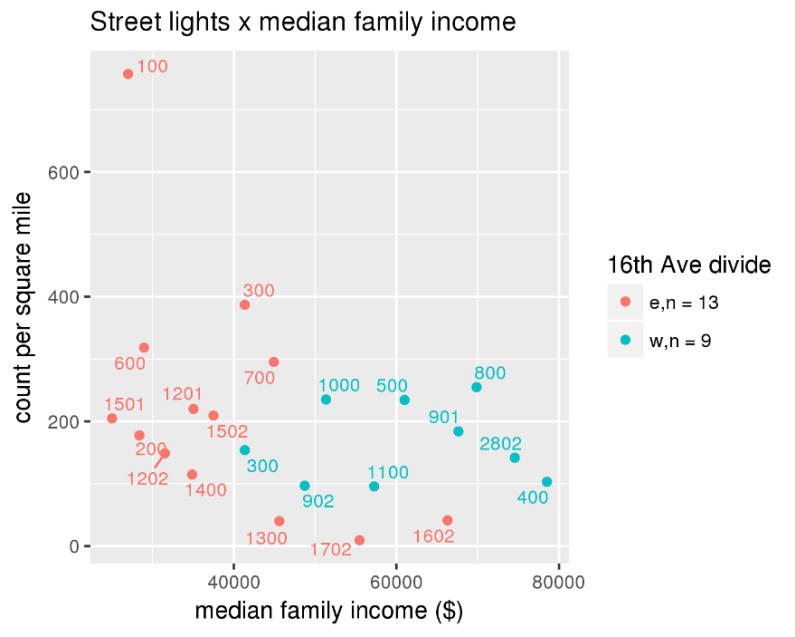




Streetlights

Slightly more streetlights with lower income and higher Hispanic population

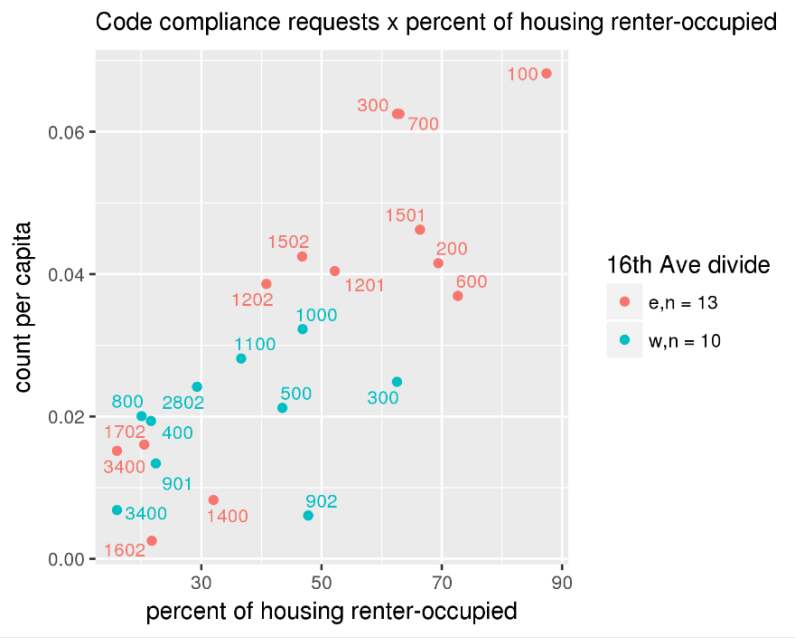


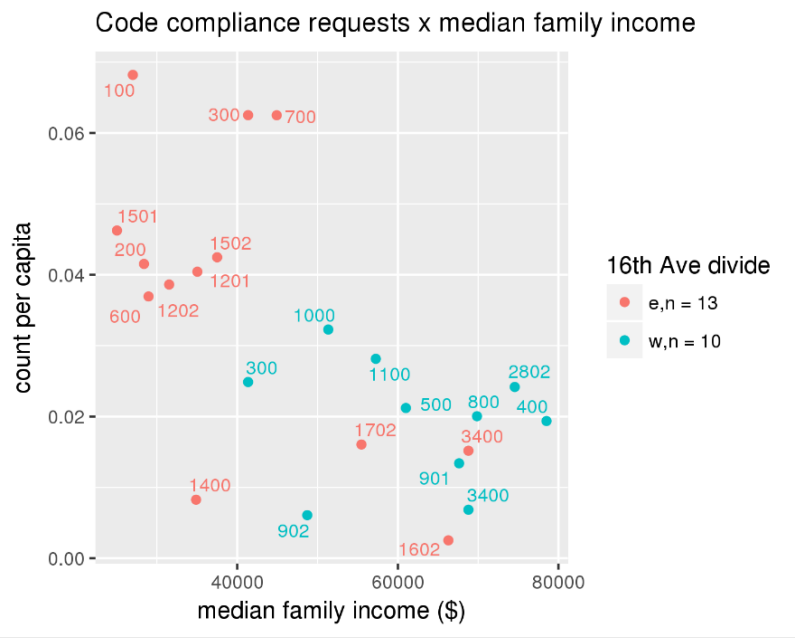


Code Compliance Requests

More requests from tracts with higher renter-occupancy

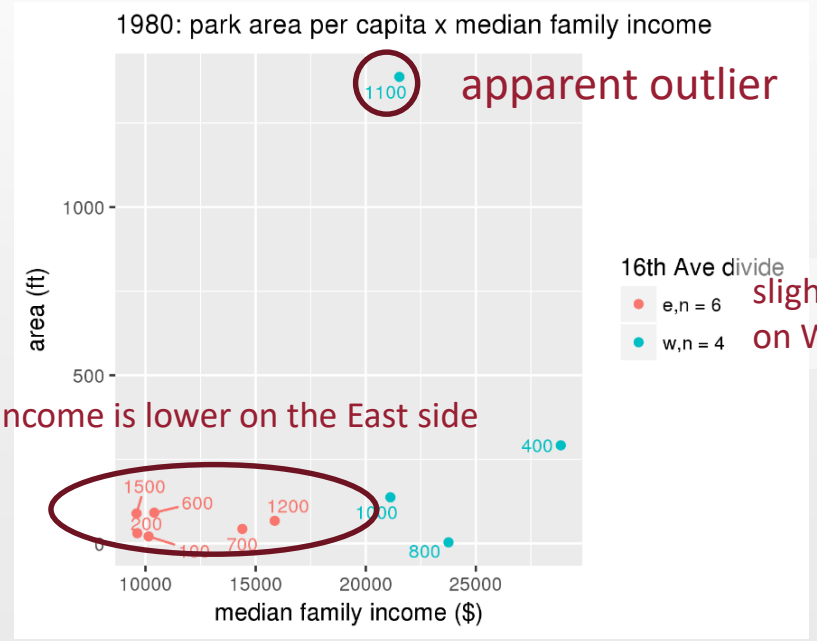
More requests from tracts with lower median family income

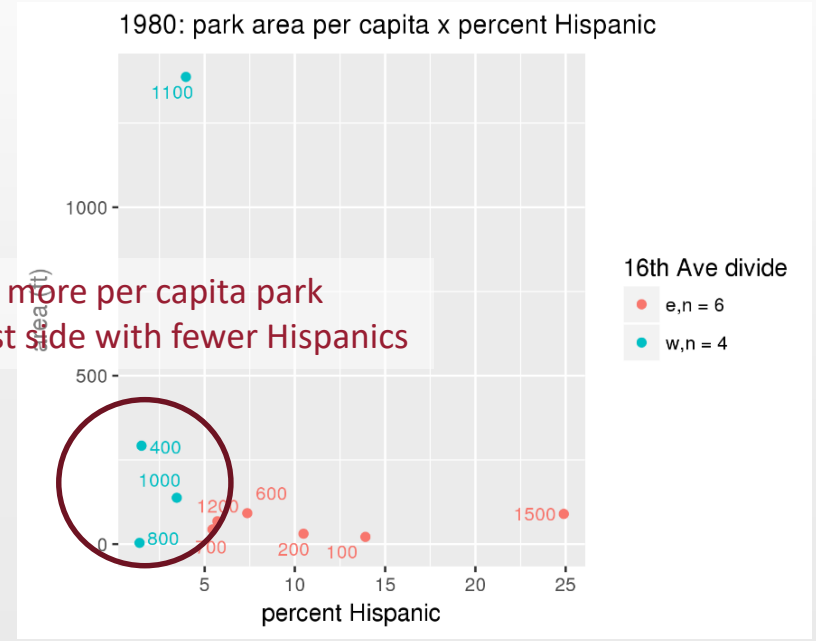




Parks* built up to 1980

Area of park per resident

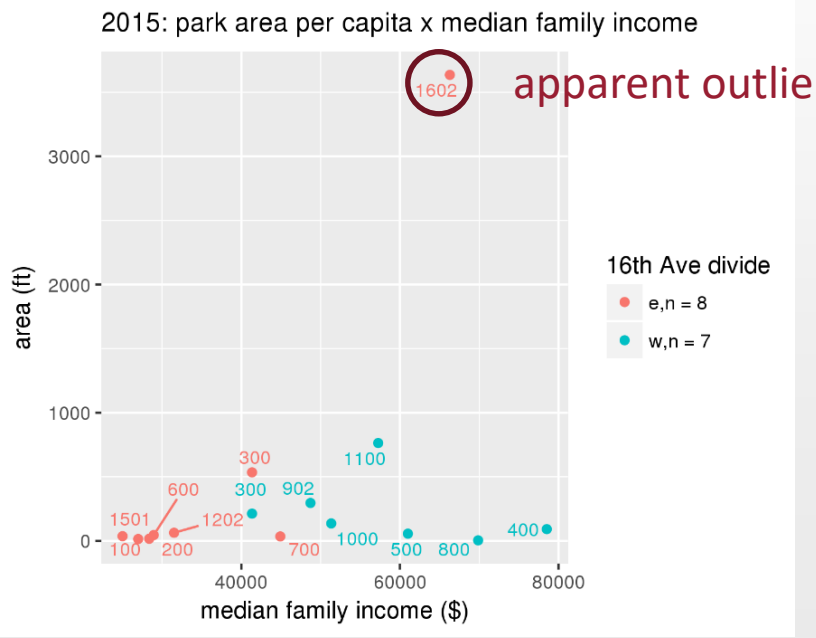


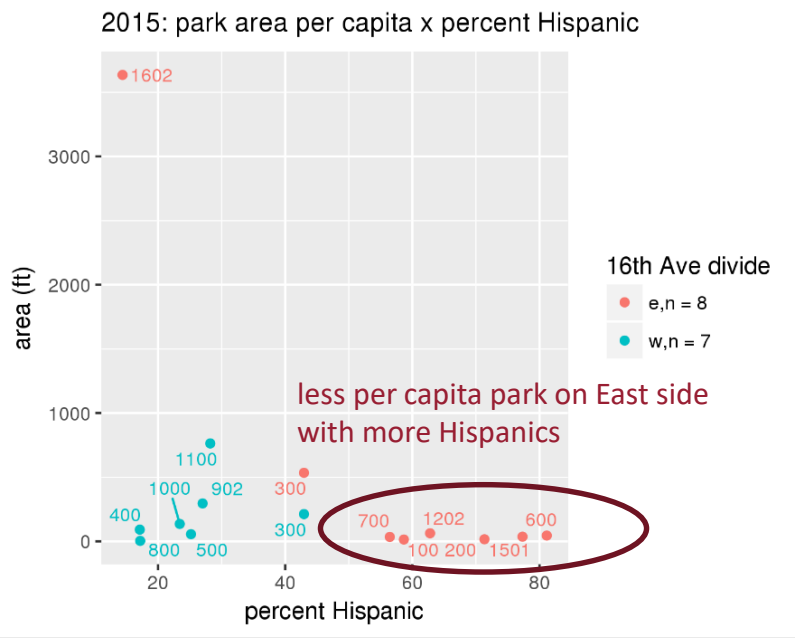


* only parks without any private funding included; only tracts having overlap with parks

Parks* built up to 2015

Area of park per resident

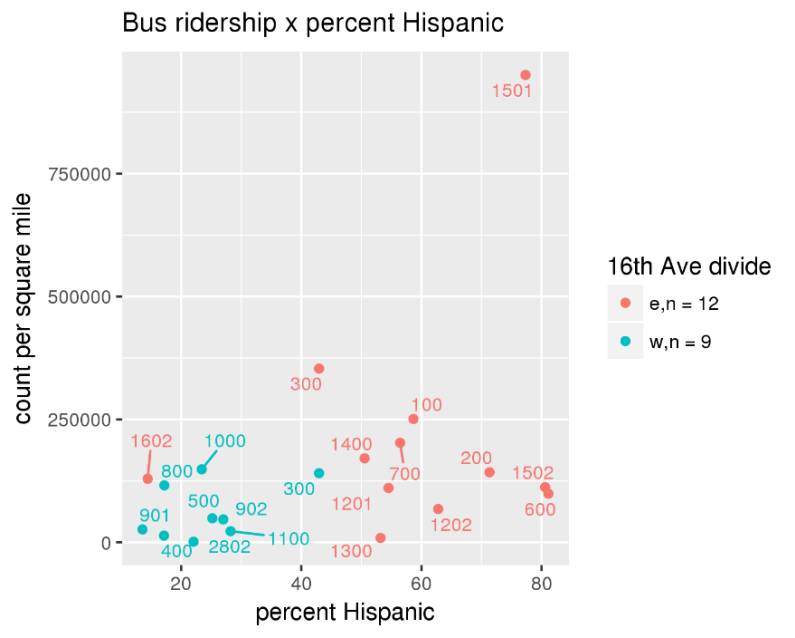


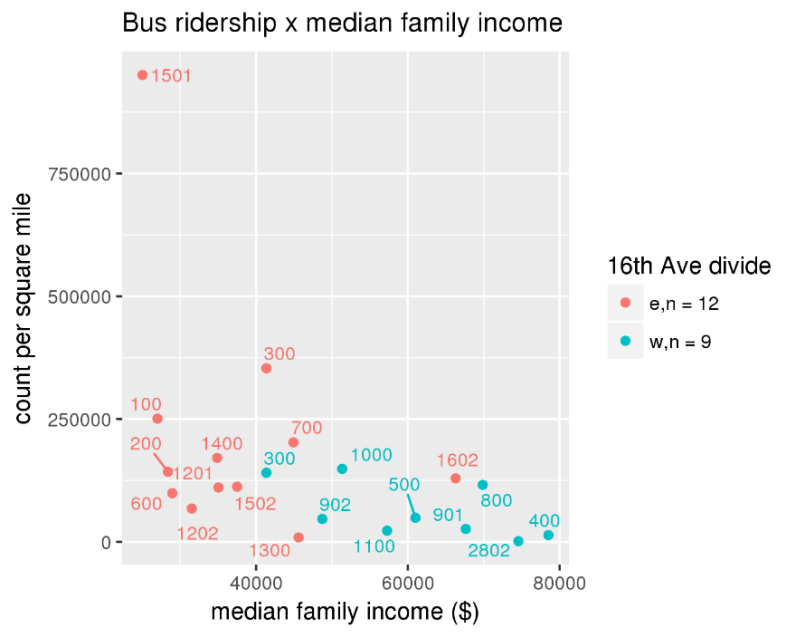


* only parks without any private funding included

Bus Ridership

Higher ridership with greater % Hispanic and lower income

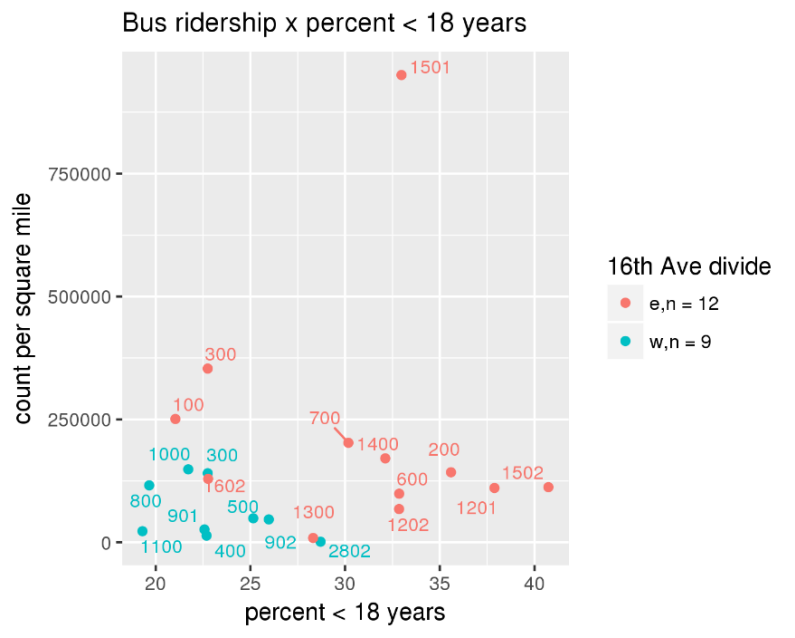


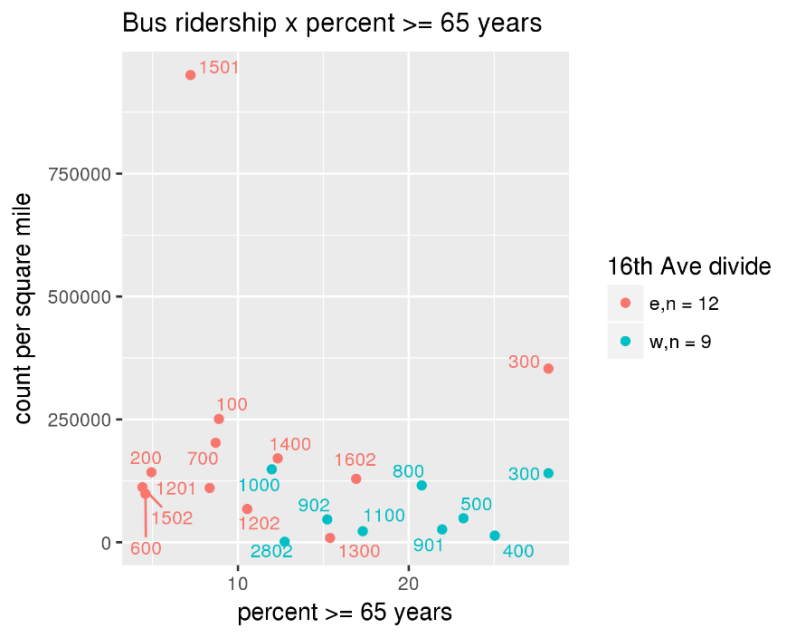


Bus Ridership

Slightly lower on East side in areas with more youth;

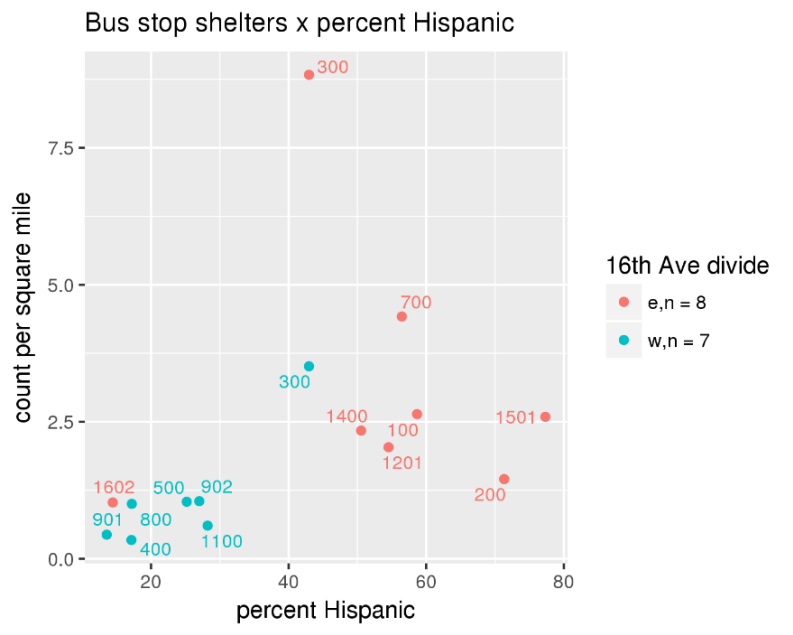
Slightly lower in tracts with more seniors

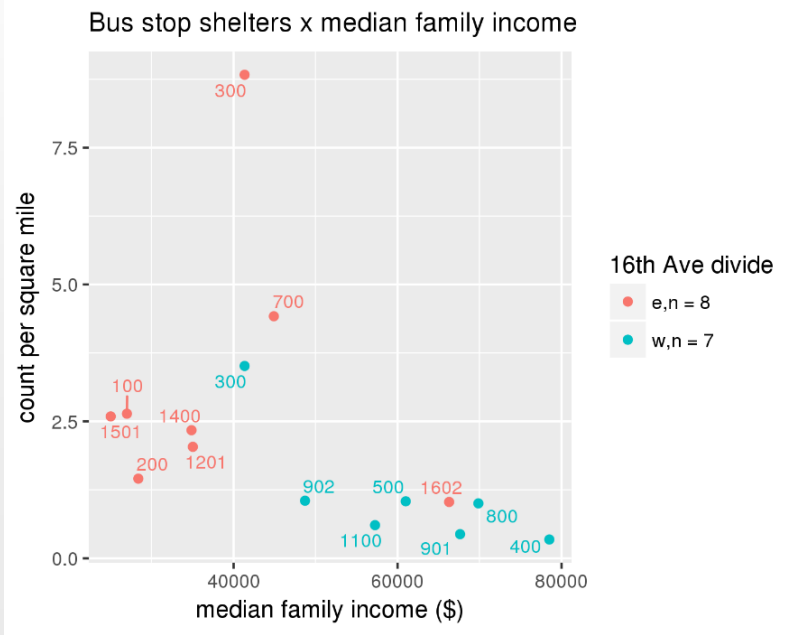




Bus Stop Shelters

More shelters with greater % Hispanic and lower income

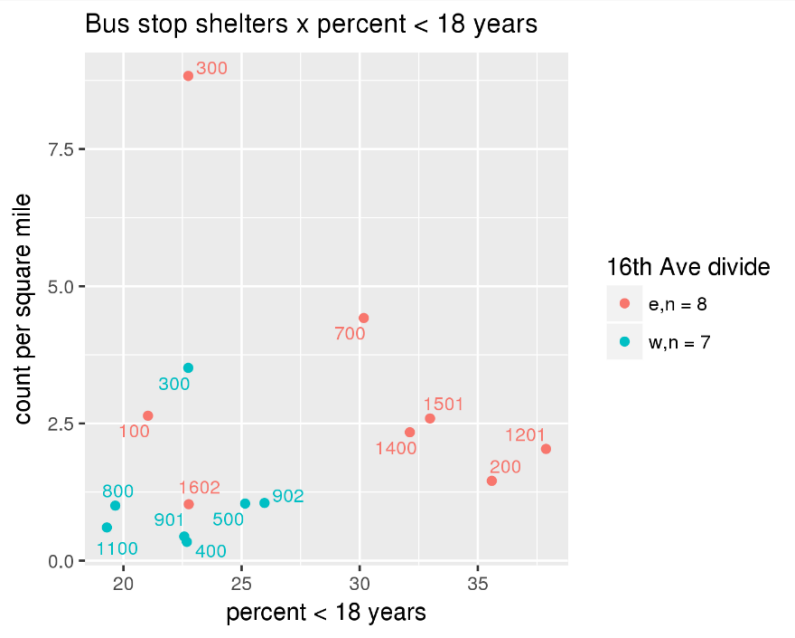


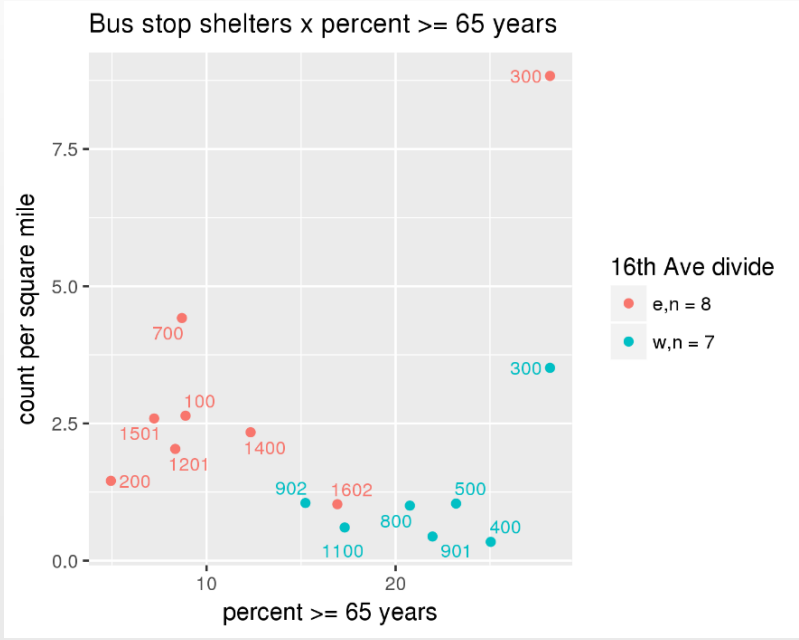


Bus Stop Shelters

Slightly more in tracts with higher youth proportion

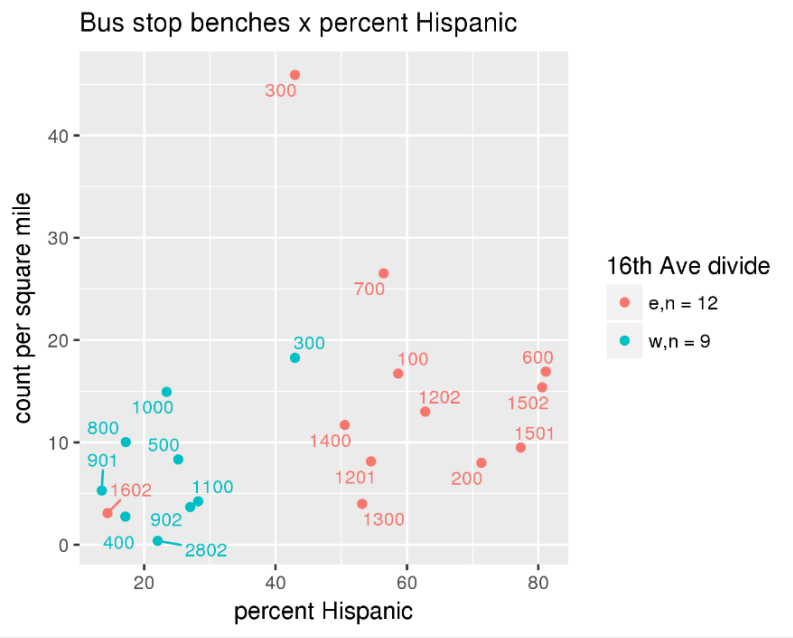
Fewer in tracts with more seniors

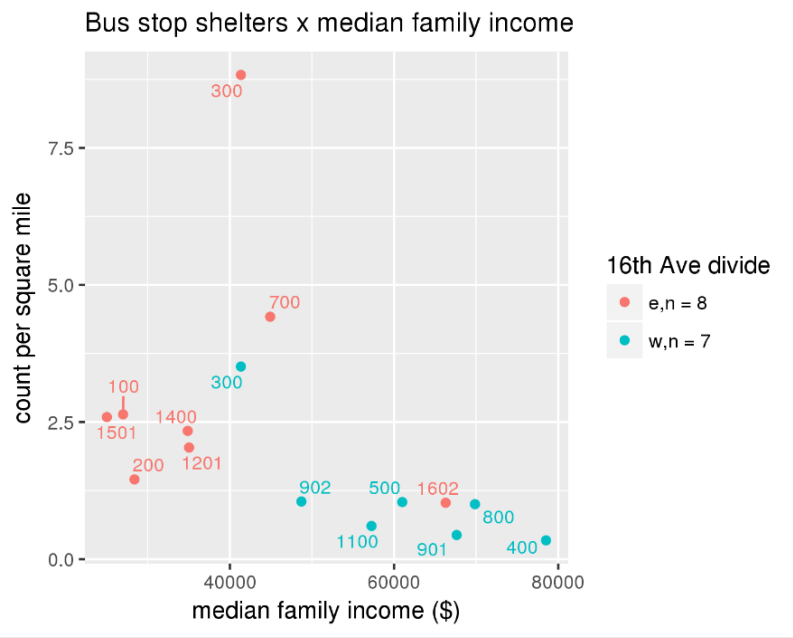




Bus Stop Benches

More benches with greater % Hispanic and lower income

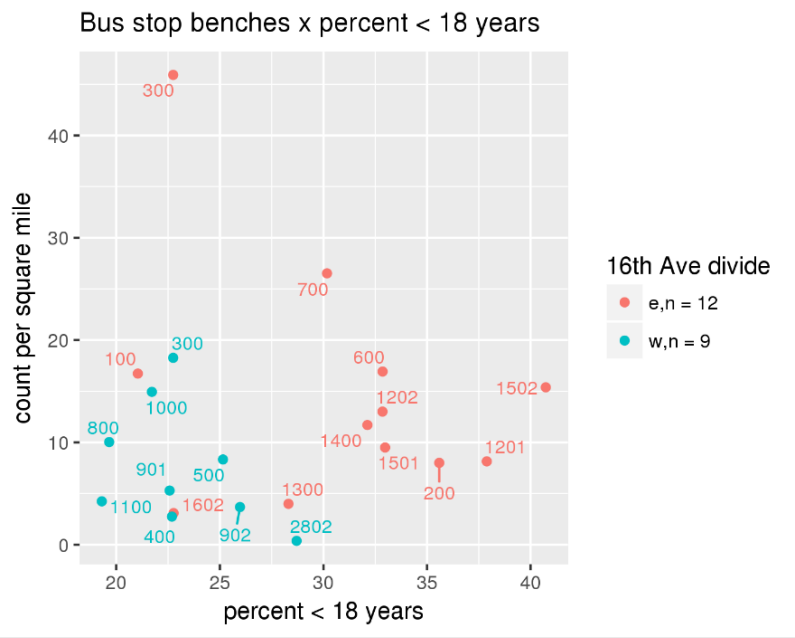


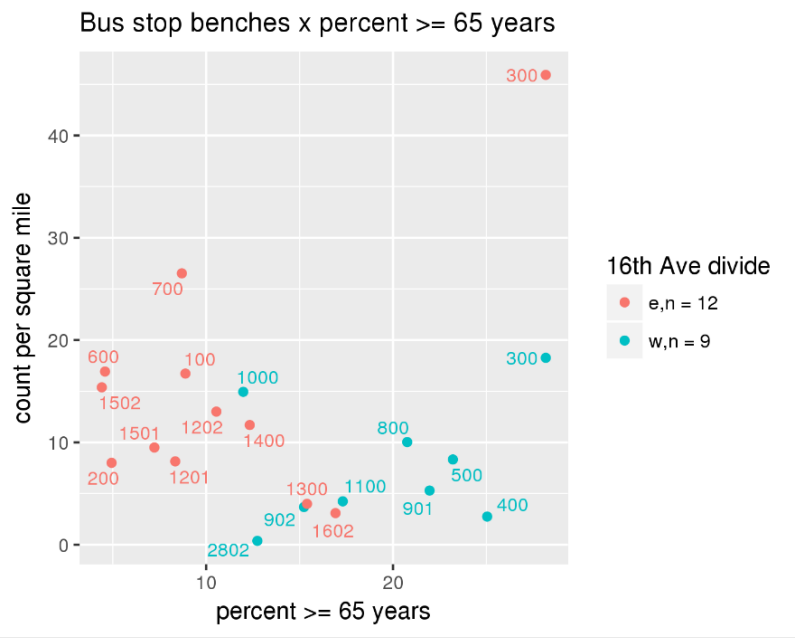


Bus Stop Benches

Slightly more in tracts with higher youth proportion

Fewer in tracts with more seniors





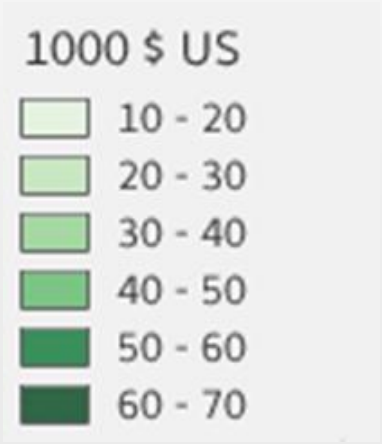
Results

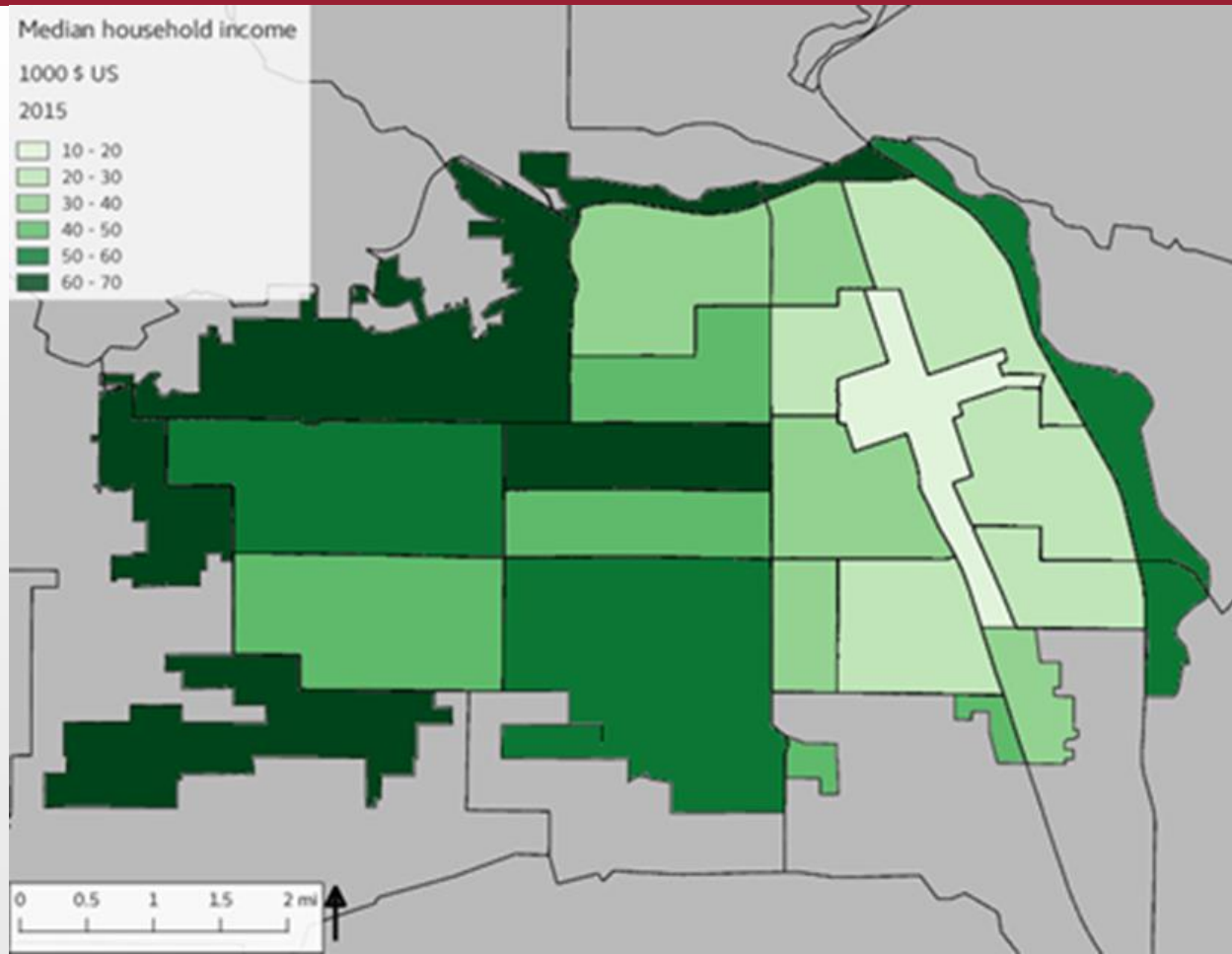
Complete results for each selected GIS data layer, including all graphs, are available at:

http://gist.gis.washington.edu/yakima_equity/

Will be transferred to the city in the near future.

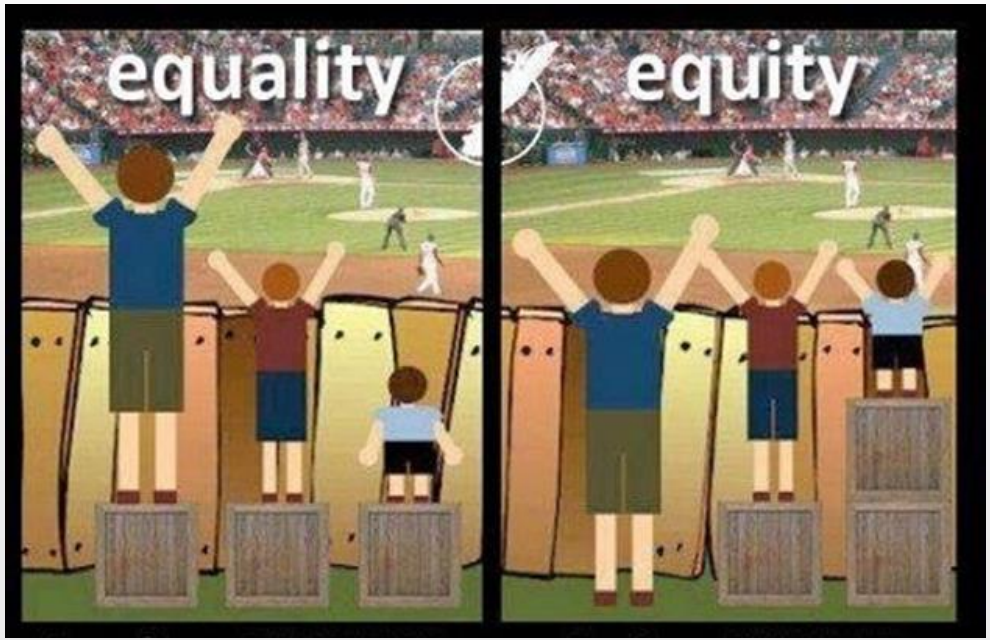
Median Household Income 2015





Potential Next Steps

Equity Lens



A practical tool to help insure that planning, decision making and resource allocation lead to policies and programs that help to achieve equity across the community, racially, socially and economically.

Equity Toolkit

Sample Questions

- What is the policy or decision you are considering?
- Who does this intend to serve and who is it actually serving?
- What data or evidence guides this policy?
- What are the communities that will be most affected by, or concerned with, this policy?
- What are the benefits and burdens these communities will experience with the policy?

Potential Next Steps

- The Kettering Foundation – National Issues Forum. To make choices with others about difficult issues, and work toward creating reasoned public judgment. https://www.nifi.org/

- The Poverty Immersion - an interactive workshop that helps participants develop a better understanding of community needs, ultimately improving policy and program development and decision making. http://metrocenter.wsu.edu/workshops-and-training/poverty-immersion/

McGuinness Park (2017). Photo by Connie Combs/Kizz Prussia

City of Yakima
Equity Study Analysis

Yakima City Council Meeting
December 12, 2017