

ECON 1000

Empirical Exercise #2 Submission Template

Due TUESDAY 9/26/2023, by 10am EDT on Gradescope

Gradescope Course Link: <https://www.gradescope.com/courses/565275>

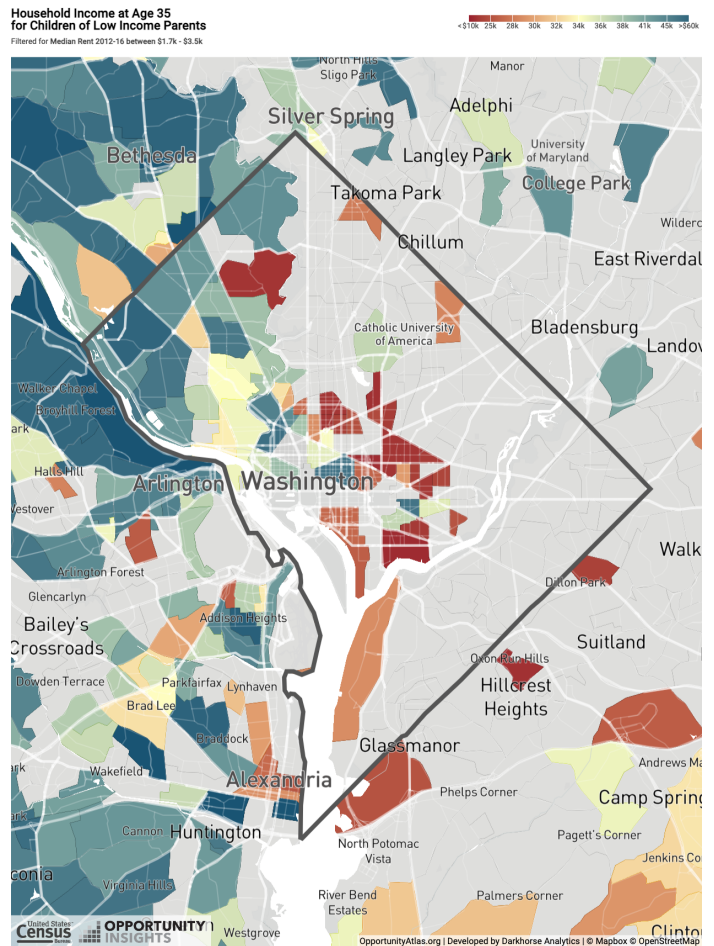
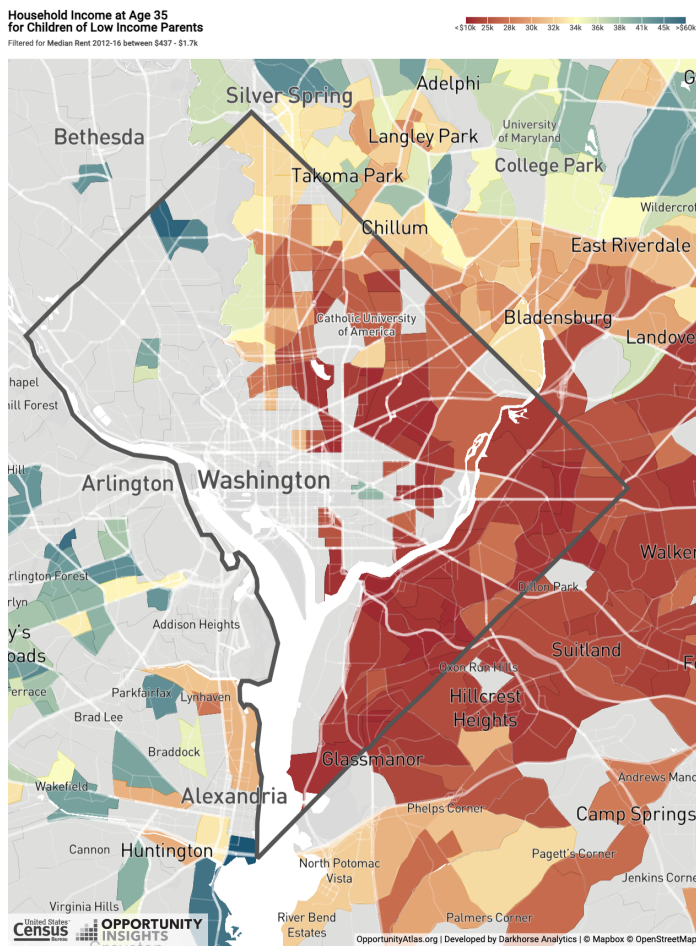
Name: Sonya Rashkovan

Group members with whom you worked¹: N/A

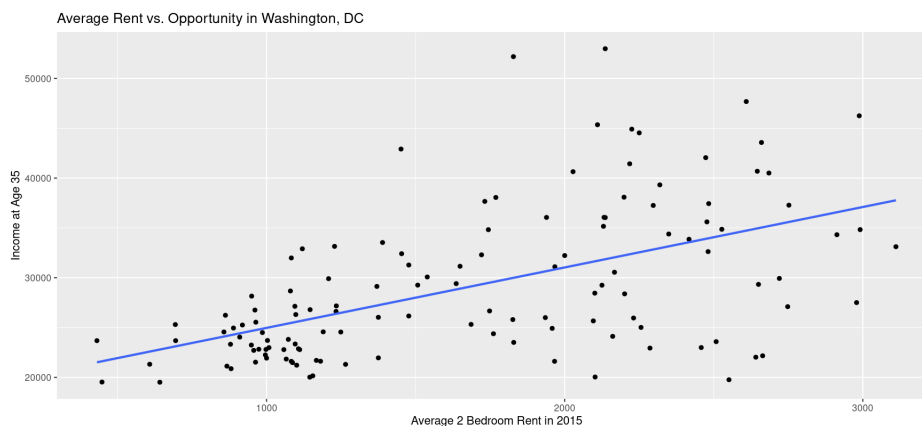
¹In this class we encourage working in groups because you will learn a great deal from your peers. At the end of the day, however, it is important that you write up your own analysis. Concretely, this means you should choose your own city or county for the full exercise. Your narrative will be at the bottom of this document. Please then list all group members with whom you worked. If you have any questions, please ask.

1. Produce a picture of opportunity for low-income (p25) children in tracts that are above vs. below average rent in your chosen city (two maps total).

Average rent of Washington, DC: **\$1675**

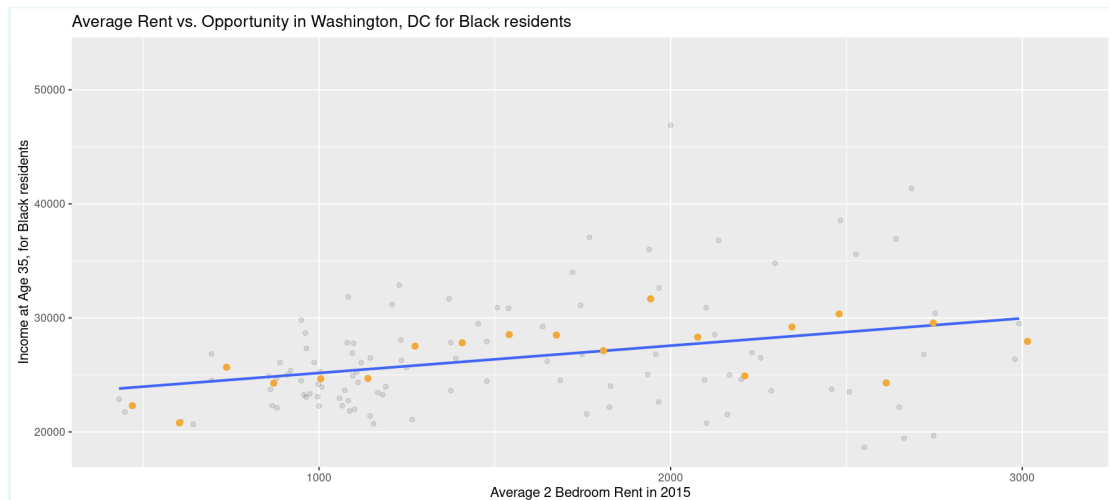


2. Compare rent and opportunity by tract in your chosen city.



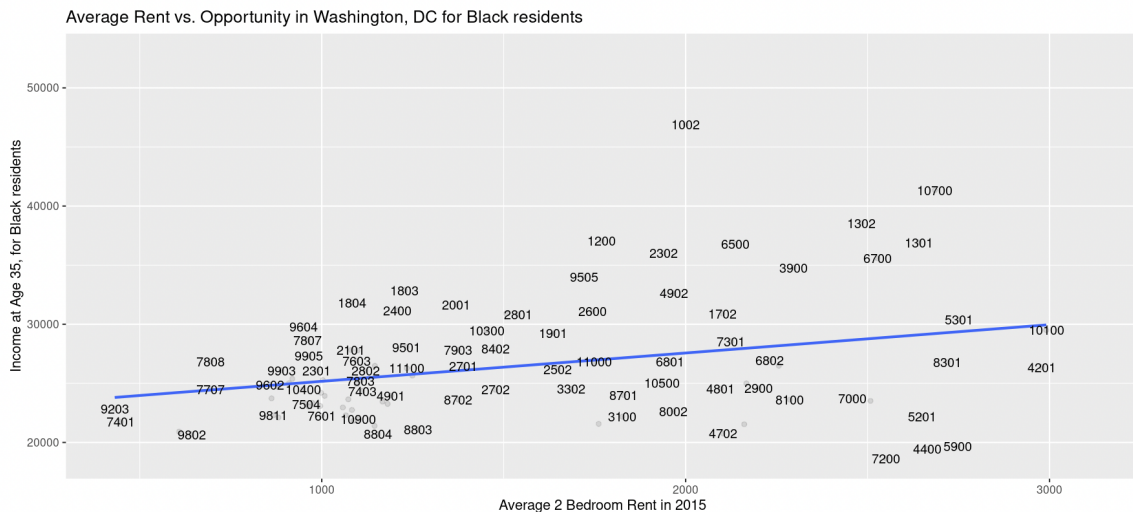
Correlation coefficient: **0.5462292**

3. Make a binscatter of rent vs. opportunity by tract in your chosen city, using different datasets for different racial or ethnic groups.

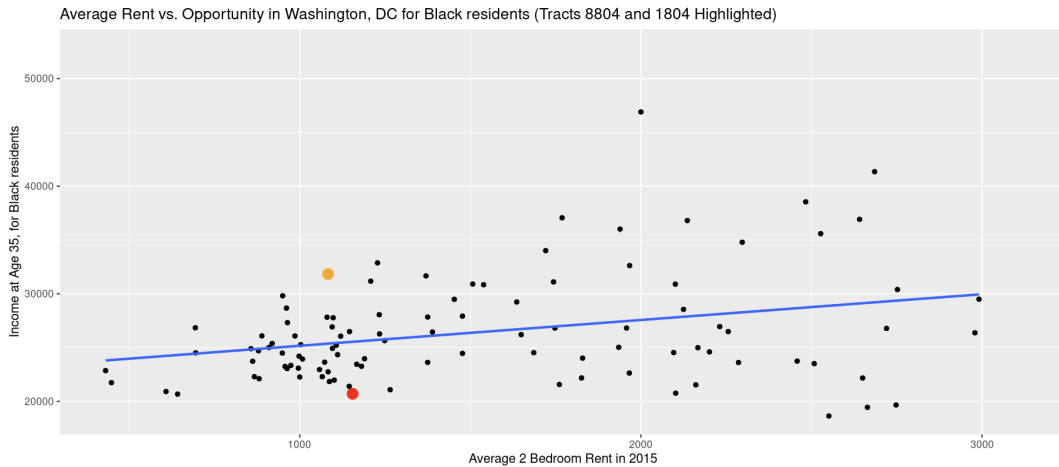


The higher the average rent price is in Washington, DC, the higher the income at age 35 is for Black residents – there appears to be a strong, positive correlation between the two. This suggests that if Black residents lived in a more expensive, rent-wise, neighborhood in 2015 that sets them on a higher economic opportunity path at age 35.

4. Identify an “opportunity bargain” for one racial or ethnic group.



[Include the image of your scatterplot with the highlighted bargain and similar-rent tracts.]



[Record and explain any interesting differences (or lack thereof) between the tracts that may contribute to different opportunities.]

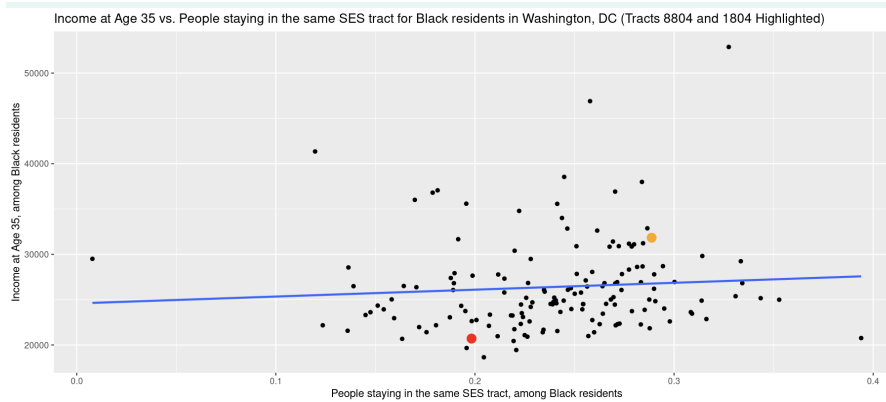
Teen birth among Black girls:

Tract8804: 0.458

Tract1804: 0.255

Interpretation: in tract8804, which has lower economic opportunity, there are almost double as many teen pregnancies among Black girls. Considering that having a child at such a young age is a big barrier to getting higher education and thus having a lower opportunity for economic mobility – this could be one of the characteristics that contribute to tract1804, which has twice as few teenage pregnancies, being a much higher opportunity neighborhood.

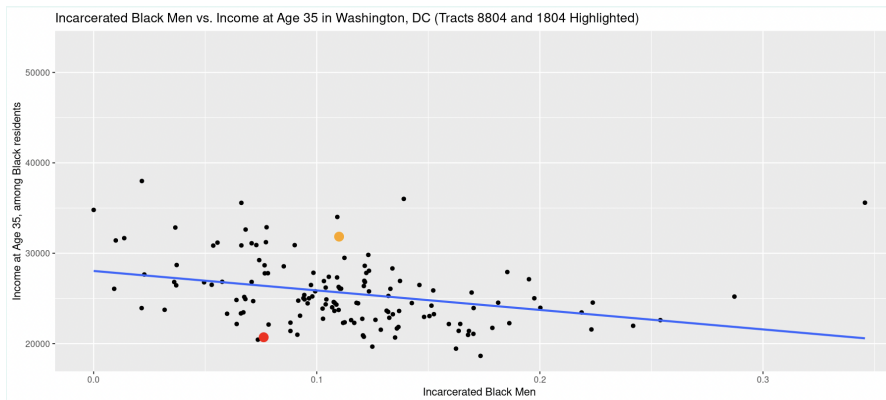
5. Explore the correlates of opportunity in your city.



Tract8804: 0.198

Tract1804: 0.289

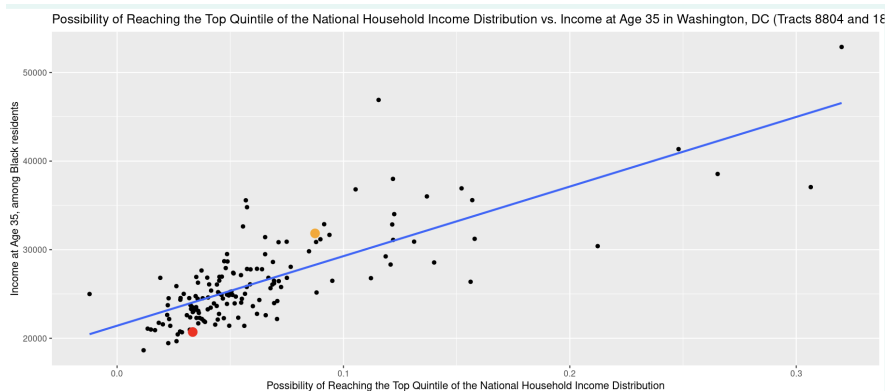
Interpretation: In tract 8804, which has a much lower econ opportunity than tract 1804, there is a lower coefficient of people who stay in the same SES tract among Black residents. However, this is not telling, considering that the correlation coefficient appears to be close to 0.



Tract8804: 0.0762

Tract1804: 0.11

Interpretation: there are more incarcerated Black men in tract 1804 than 8804 which is unusual, considering that the moderate negative correlation coefficient suggests that the more incarcerated Black men there are in a neighborhood, the lower economic opportunity there is – both tracts appear to be an outline for their group.



Tract8804: 0.0334

Tract1804: 0.0875

Interpretation: The possibility of reaching the top quintile of the national household income distribution

[Include a few (at least 3) interesting images and values, with short interpretations of each here.]

Please include your code report here. The simplest way of doing this is to open the html file (generated from the Download Code button at the end of the HW - see below) and copy all of that text here.

Report - Exercise 2: HW

Name: Sonya Rashkovan

Explore the data

Box 1:

```
colnames(OI_atlas_data_full)
```

Question 1

Box 1:

```
Washington_DC <- OI_atlas_data_full %>% filter(state == 11 & county == 001)
```

Box 2:

```
Washington_DC %>% summarise(mean = mean(rent_twobed2015, na.rm = TRUE))
```

Question 2