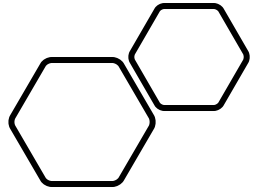# Starbucks Site Selection Analysis  Using MTA Turnstile Data:

# Starbucks is looking to expand to a new location!

## Site Selection Criteria:

- Neighborhoods of $60,000 and over median household income.

- Preferred locations at signalized corners with multiple access points.

- Locations with more people: ~31.5K

- Proximity to other businesses.

- Morning commute (peak time is about 7:15 to7:30am.)

# So where does MTA Turnstile data come in?

- Stations are generally located on corners with multiple access points.
- Stations tend to be in close proximity to other businesses
- Can leverage MTA Turnstile Data to quantify busiest turnstile based on usage
- Turnstile data can be explored to understand commuting trends by time of day, day of week, seasonal trends etc.

## Goal/Approach

- Perform exploratory data analysis on MTA data as well as other sources in order to recommend a store location by a nearby subway station

## Data Used:

- MTA Turnstile data
- US Census Income and Population data

# Methodology:

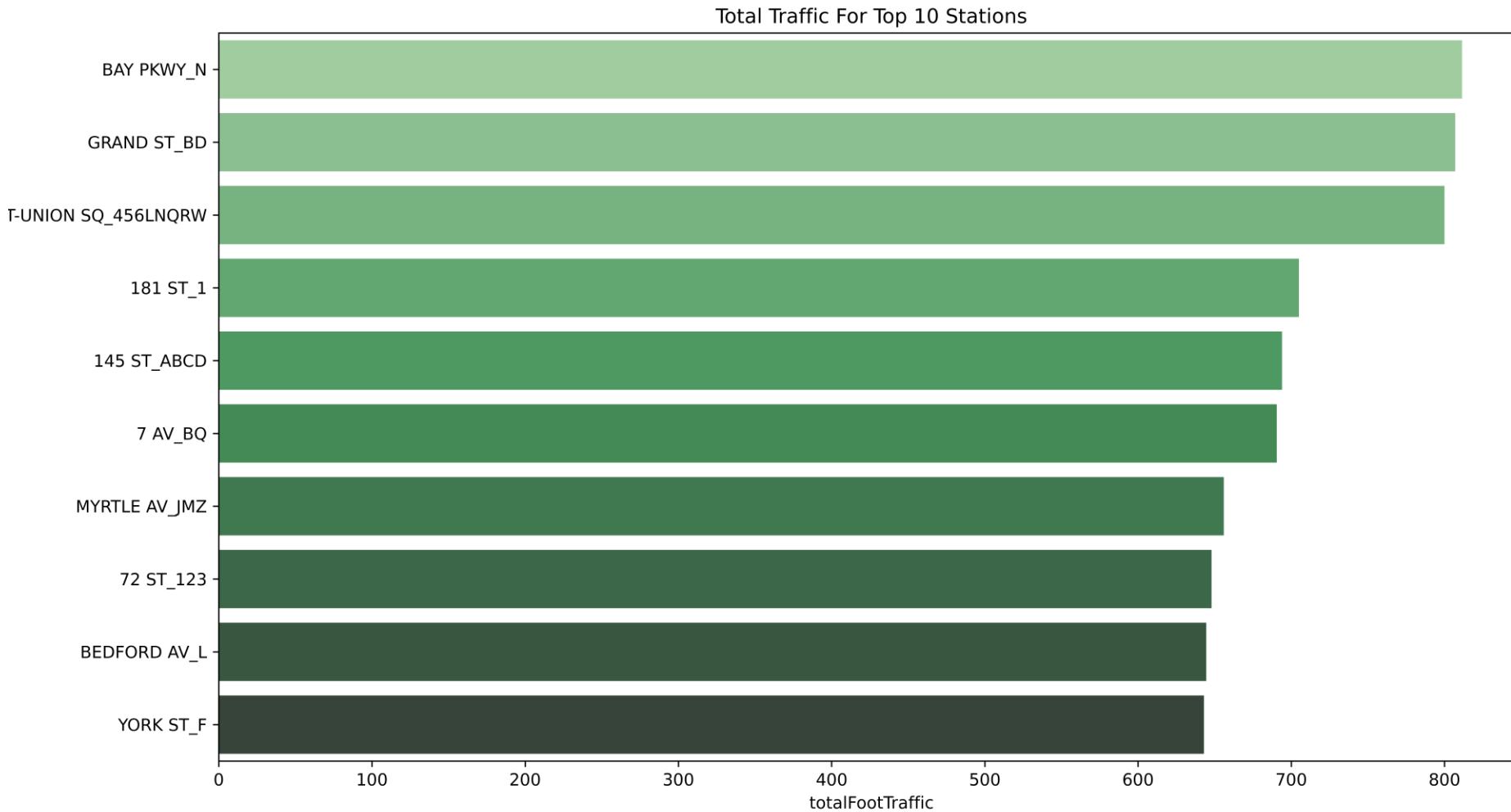Determine busiest stations from turnstile data

Import census data to filter stations by average household income and population

Recommend a location near a station that most closely meets Starbucks' location selection criteria
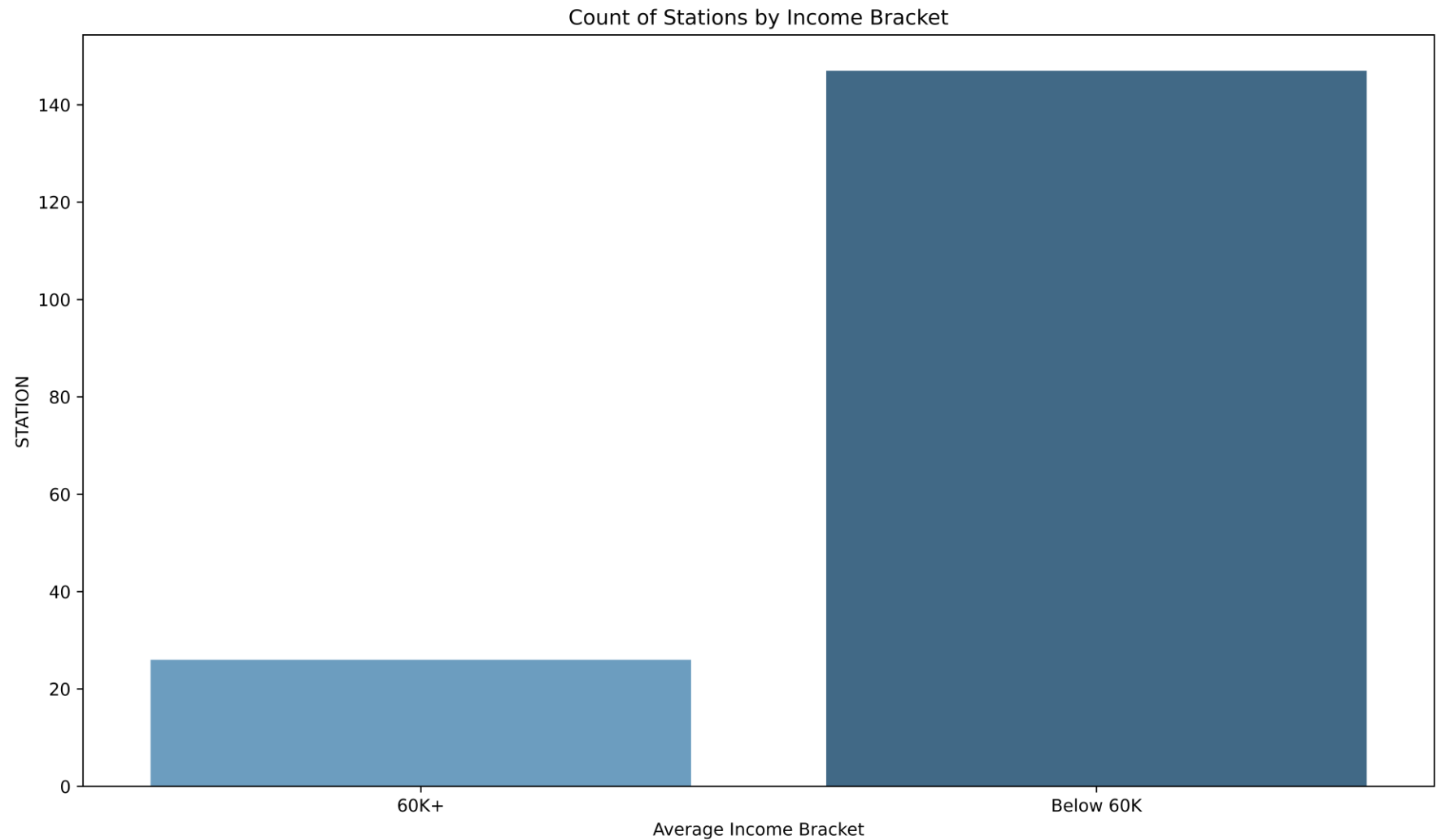
# Results:



Total Traffic For Top 10 Stations
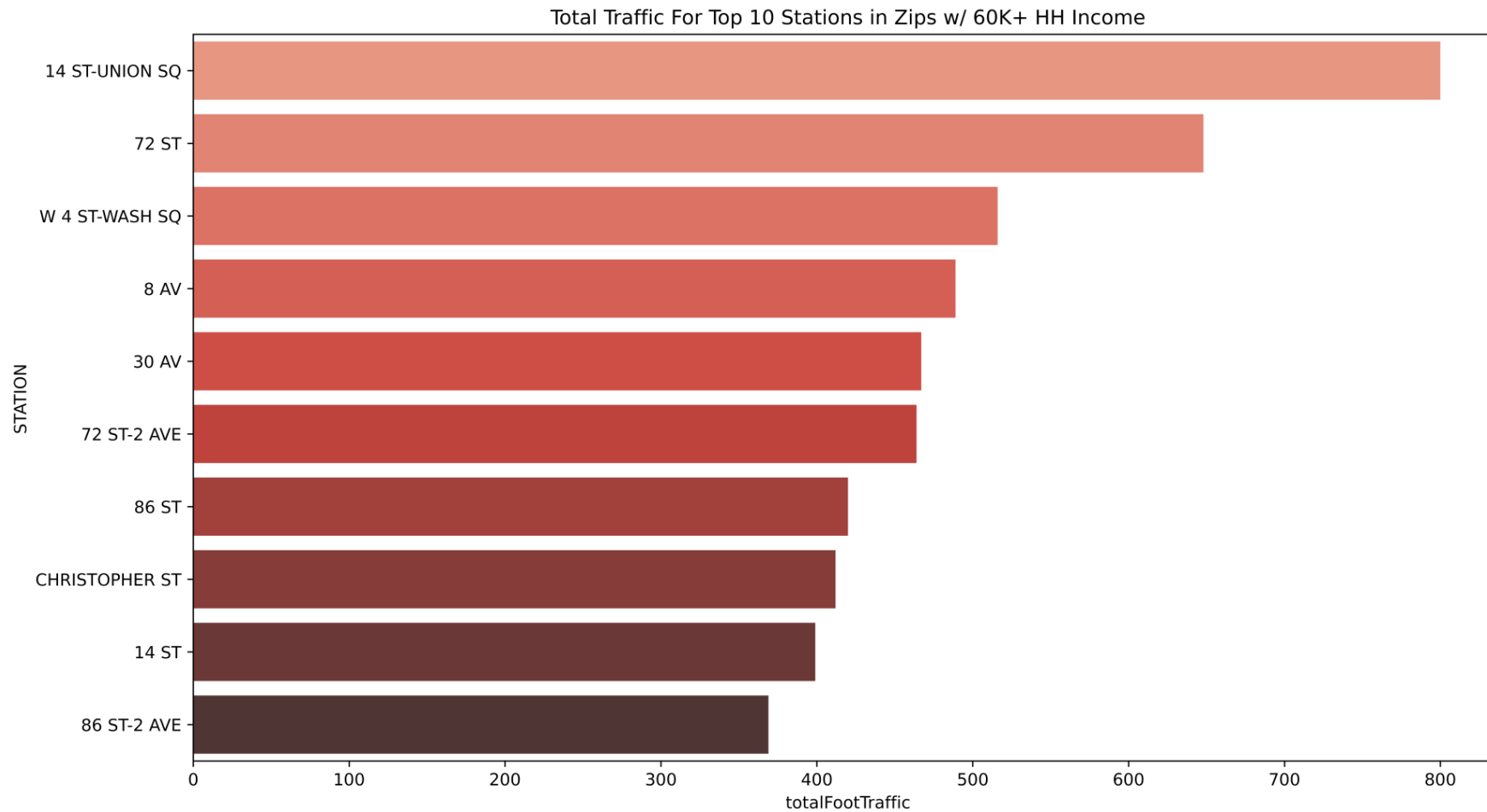
Ranked by foot traffic:

1.  BAY PKWY
2.  GRAND ST
3.  14 ST-UNION SQ
4.  181 ST
5.  145 ST
6.  7 AV
7.  MYRTLE AVE
8.  72 ST
9.  BEDFORD AVE
10. YORK ST

# Results:



Count of Stations by Income Bracket

# Results:



Total Traffic For Top 10 Stations in Zips w/ 60K+ HH Income

Filtered by Avg Household Income over 60K:

1. 14 ST- UNION SQ.
2. 72 ST
3. W. 4- WASH SQ
4. 8 AVE
5. 30 AVE
6. 72 ST- 2AV
7. 86TH ST
8. CHRISTOPHER ST
9. 14TH ST
10. 86TH-2AV

# Results:

## Narrowing down stations: Busy Station vs. Wealthy Population

Ranked by foot traffic:

1. BAY PKWY
2. GRAND ST
3. 14 ST-UNION SQ
4. 181 ST
5. 145 ST
6. 7 AV
7. MYRTLE AVE
8. 72 ST
9. BEDFORD AVE
10. YORK ST

Filtered by Avg Household Income over 60K:

1. 14 ST- UNION SQ.
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4. 8 AVE
5. 30 AVE
6. 72 ST- 2AV
7. 86TH ST
8. CHRISTOPHER ST
9. 14TH ST
10. 86TH-2AV

# Recommendation: 14TH ST!

- While the 14th street station is the third busiest station, it comes in first place for average household income

# Future Work:

- Considering market saturation

- Looking at seasonal changes in foot traffic

- Inspecting patterns in station usage over the course of a day

- Comparing week day traffic to weekend traffic

Thank You

# Appendix:



Total Traffic For Top 10 Stations

Count of Stations by Income Bracket

Total Traffic For Top 10 Stations in Zips w/ 60K+ HH Income