

### Goals



PROVIDE SEATTLE WORKERS WITH A LESS EXPENSIVE HOME OPTION WITHOUT SACRIFICING AMENITIES



GIVE REALTORS SELLING POINTS AND GUIDANCE ON WHERE TO LOOK FOR HOMES FOR SEATTLE WORKERS



SAVE SEATTLE WORKERS TIME AND MONEY IN THEIR HOME PURCHASING BY DIRECTING THEM TO CITY-LIKE NEIGHBORHOODS

## Amenities and Cities Chosen



#### Amenities:

- Medical Facilities
- Police Stations
- Park-and-Rides
- Restaurants

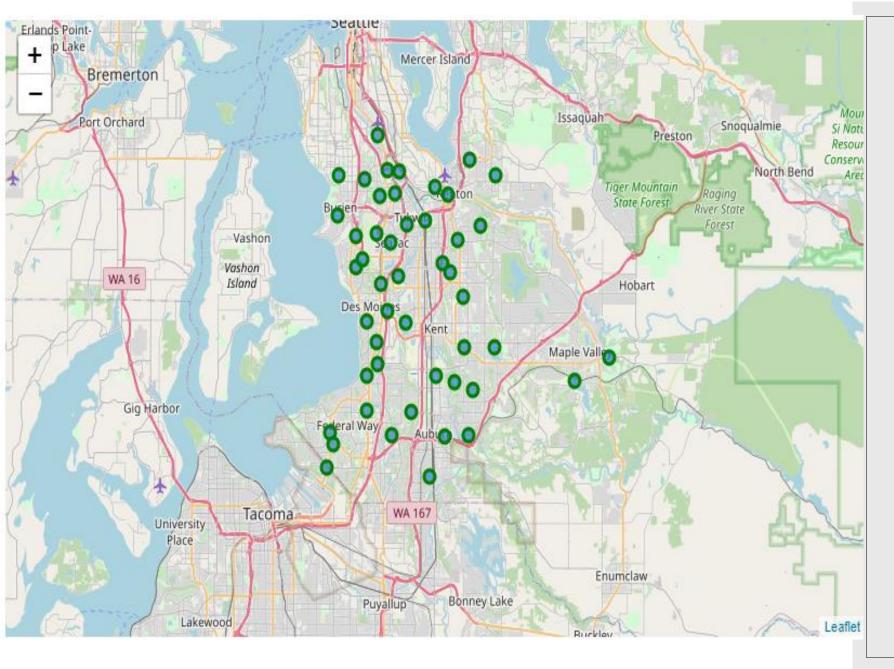
#### Cities:

- Auburn
- Burien
- Des Moines
- Federal Way

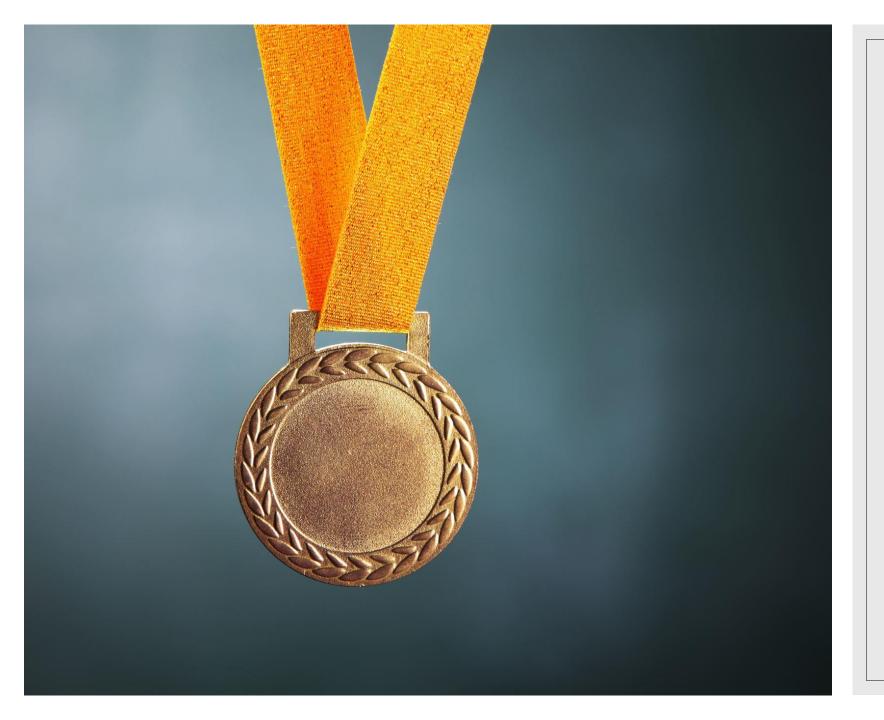
- Kent
- Renton
- SeaTac
- Tukwila

# Data and Preprocessing

- All data except the restaurant data pulled from the King County GIS Open Data website
  - Cities looked up and added from Google Maps where needed
  - City-Zip code field made to be more specific than either city or zip code alone
  - Amenities in each category counted by city-zip
- Restaurant data pulled from Foursquare
  - The latitude and longitude of all addresses in each city-zip code area were averaged to find "center" of city-zip
  - Restaurant information pulled from Foursquare
  - All restaurants within 2 miles (3219 meters) of the center of the city-zip counted
- All counts "scored": the count for the city-zip was divided by the total amenities in the table times 100
- All scores "tiered": Tier 1: Score >25, Tier 2: Score >15, Tier 3: Score >10, Tier 4: Score >5, Tier 5: <= 5



Map with Markers at Each City-Zip



#### Top 5 Winners

• Federal Way-98003

• Score: 54.1

• Kent-98032

• Score: 43.6

• Auburn-98002

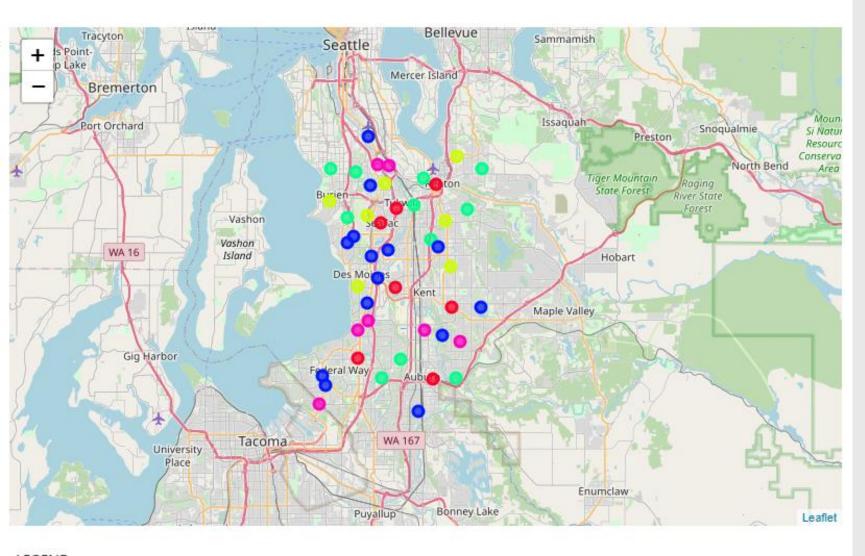
• Score: 32.0

• Tukwila-98188

• Score: 31.7

• Kent-98030

• Score: 28.9



Map Showing
City-Zip Areas
with Colors
Representing
their Tiers

#### **LEGEND**

Tier 1: Red, Score: > 25 | Tier 2: Yellow, Score: 25 - 15 | Tier 3: Green, Score: 15 - 10 | Tier 4: Blue, Score: 10 - 5 | Tier 5: Pink, Score: < 5



# Winners for Each Area

- Highest Score for Medical Facilities: Federal Way-98003
- Highest Score for Police Stations: Kent-98032, Tukwila-98188, Kent-98030
- Highest Score for Park-and-Rides: Federal Way-98003
- Highest Score for Restaurants: 10 different locations reached the 100 limit, spanning from Tier 1 - 3

#### Other Observations

- The city with the highest score is also the city with the lowest score. Within the top tier, Kent-98030 has at least 1 amenity with a score of 0 (park-and-ride)
- Besides those in the top tier, 2 other areas have at least 1 of each amenity: Tukwila-98168 and Burien-98166
- The city of Renton has only 1 area out of 7 in the top tier (the last place of the top tier), but no areas in Tier 5
- Both the areas in the 98188 zip code are in Tier 1 (Tukwila-98188 and SeaTac-98188)
- 2 cities have no Tier 1 areas: Burien and Des Moines they are also the 2 cities with lowest number of city-zip code areas (4 each)

#### Conclusions

- Study was successful in providing insight to homebuyers and realtors
- Better to look not at zip codes or cities only but both
- More research of this nature can be done:
  - Look at distance to amenities instead of count
  - Maybe partial score distance to nearest amenity when it is not available within the bounds of that city-zip
  - Add more amenities tailor-made to audience
- This Analysis is ready to be used as a tool right now!

