

PROBLEM

Chicago is a large city in the midwest, and attracts many new residents each year. Described as a "city of neighborhoods" where each has its own unique feeling and characteristics.

Realtors and apartment agents can be little help, as they make decisions with very little information about the apartment seeker.

SCENARIO

Our scenario: a young student attending University of Illinois at Chicago (UIC), who is looking to live alone, doesn't have a car, and has an active nightlife. They need:

- A cheap 1 bedroom or studio apartment near the train (within 600m)
- Near the Blue Line (the only train line that stops at UIC)
- Many bars also within 600m

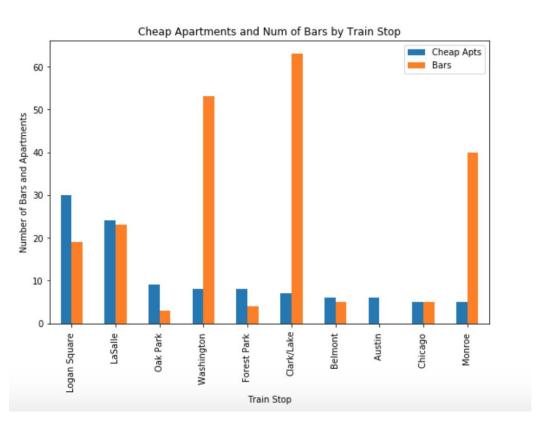
DATA ACQUISITION AND CLEANING

- City of Chicago Data Portal provided location info for each train stop
- 1BR/Studio apartment listings were scraped from Craigslist
- Foursquare provided lists of bars near each train stop.
- Data scraped from Craigslist was cleaned from 8813 listings to 808 (many, many duplicates)

COMPARING TRAIN STOPS

**	Train Stop	Avg Rent	Num Apts	Cheap	Med	Luxury	Bars	Longitude	Latitude
0	Logan Square	1322	31	30	1	0	19	-87.708541	41.929728
1	LaSalle	1882	101	24	74	3	23	-87.631722	41.875568
2	Oak Park	1330	9	9	0	0	3	-87.791602	41.872108
3	Washington	2015	54	8	34	12	53	-87.629440	41.883164
4	Forest Park	1006	8	8	0	0	4	-87.817318	41.874257

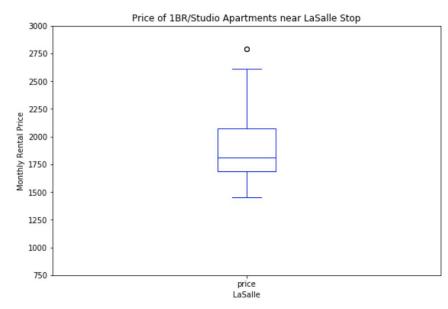
COMPARING TRAIN STOPS



COMPARING TOP TWO BY AVG RENT

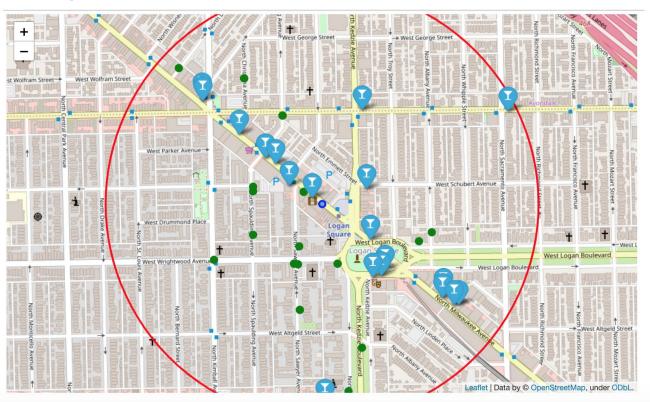
Logan Square and LaSalle train stops had similar numbers of cheap apartments and bars, but different overall rent profiles.





EXPLORING LOGAN SQUARE AREA

Green dots are cheap apartments



EXPLORING LASALLE AREA

Green dots are cheap apartments, yellow are 'medium' red are 'luxury



CONCLUSION

- For a young, price conscious apartment seeker, Logan
 Square is the train stop that they should search for an apartment near.
- There are the highest number of cheap one bedroom and studio apartments and has many bars within walking distance.

LIMITATIONS

- Neighborhoods have different architectural styles, with some containing mostly 2 and 3 bedrooms, and neighborhoods like Logan Square have many 1BR and studios.
- For some neighborhoods, apartments are less often listed on Craigslist and instead use window signs or private rental agencies

FURTHER DIRECTIONS

- The same search techniques could be used to find an apartment with a roommate or partner (2 or 3 bedrooms) and would likely yield different results
- Instead of counting bars in the area, an apartment seeker could use Foursquare to count parks, or libraries, or playgrounds, whatever is important to them.