

Bubble Tea Expansion

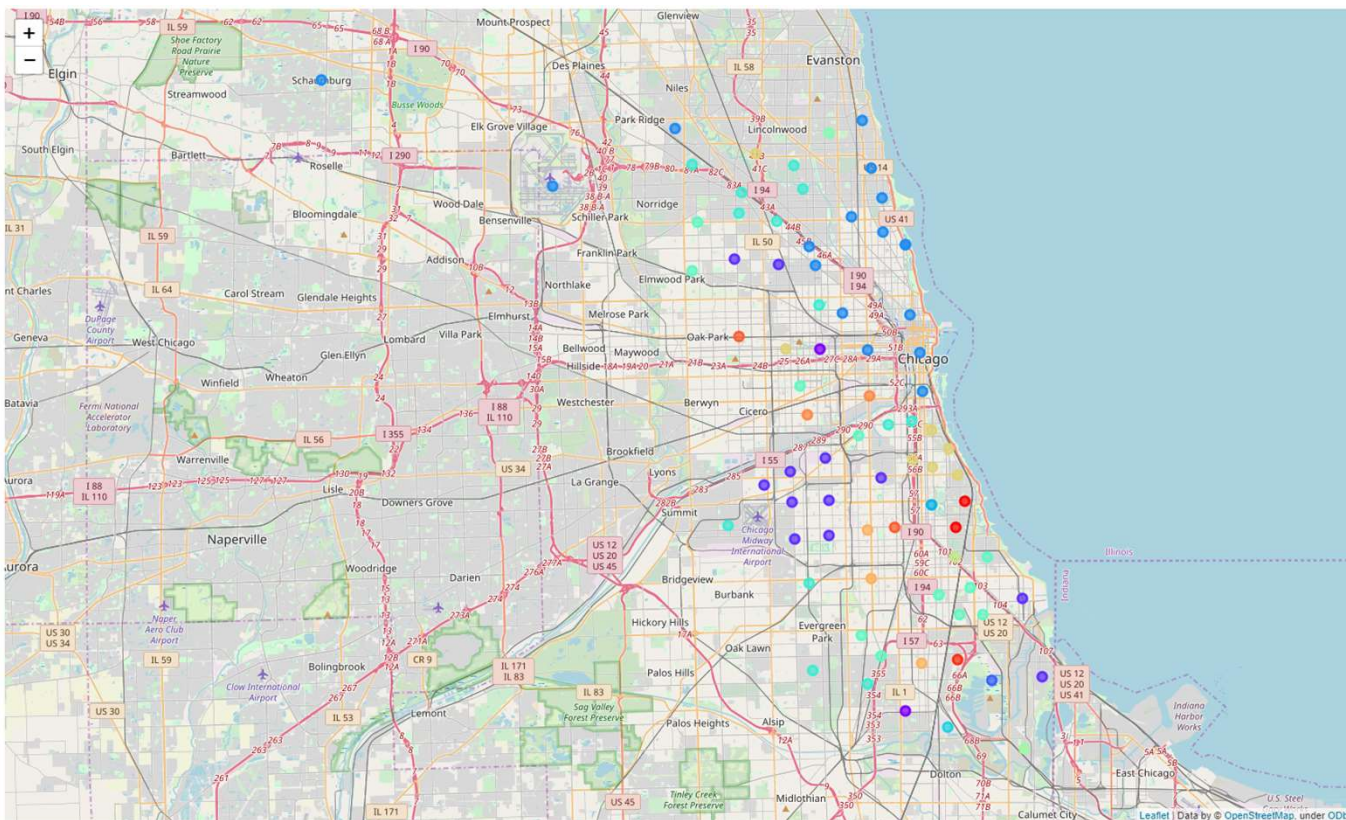
Duplicating success for a new location

- A bubble tea restaurant in Schaumburg, IL has had great success since opening
- The business owner is looking to expand to a new location in Chicago, IL which can replicate the success of the original
- Their success is believed to be attributed to the socioeconomic status and culture of the local area
- Finding similar neighborhoods in Chicago would enable the owner to expand their business

Data acquisition and cleaning

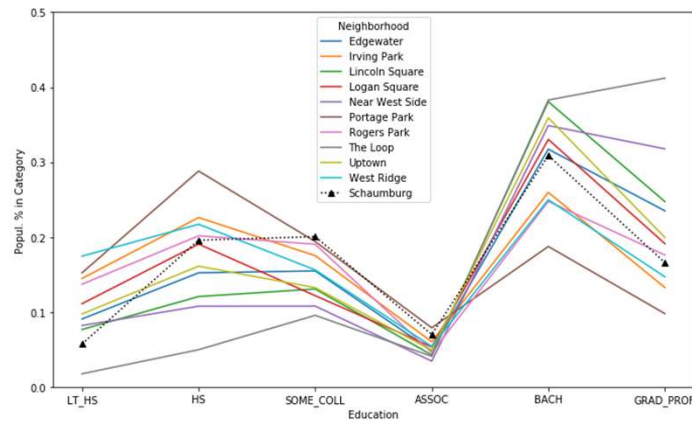
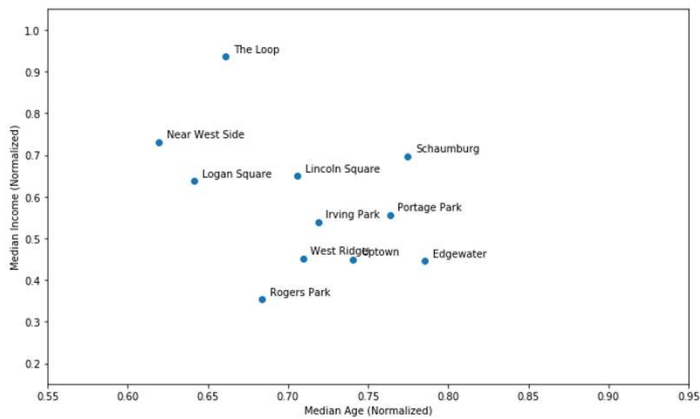
- Age, Education, and Income demographics for all areas from CMAP, 2019 data scraped from cmap.illinois.gov
- Local business information from Foursquare, scraped in Aug. 2019 using Foursquare API
- In total, 77 community areas identified along with Schaumburg, IL, with 22 features for demographics
- Count-based metrics were converted to percentages, median values normalized
- 5693 businesses scraped, forming 362 unique business types
- Businesses were grouped by community, and processed to give relative frequencies of each business type in a given community

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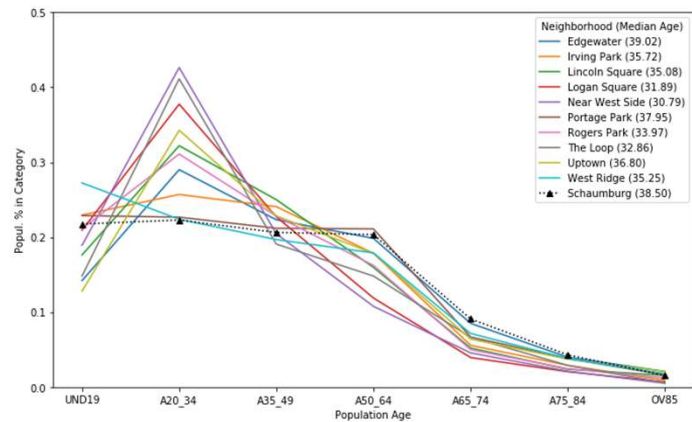
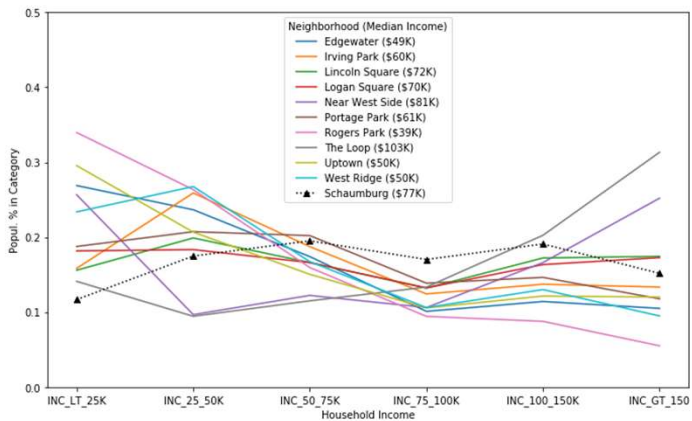


Interested in
communities with
similar businesses to
Schaumburg, IL
(Blue Markers)

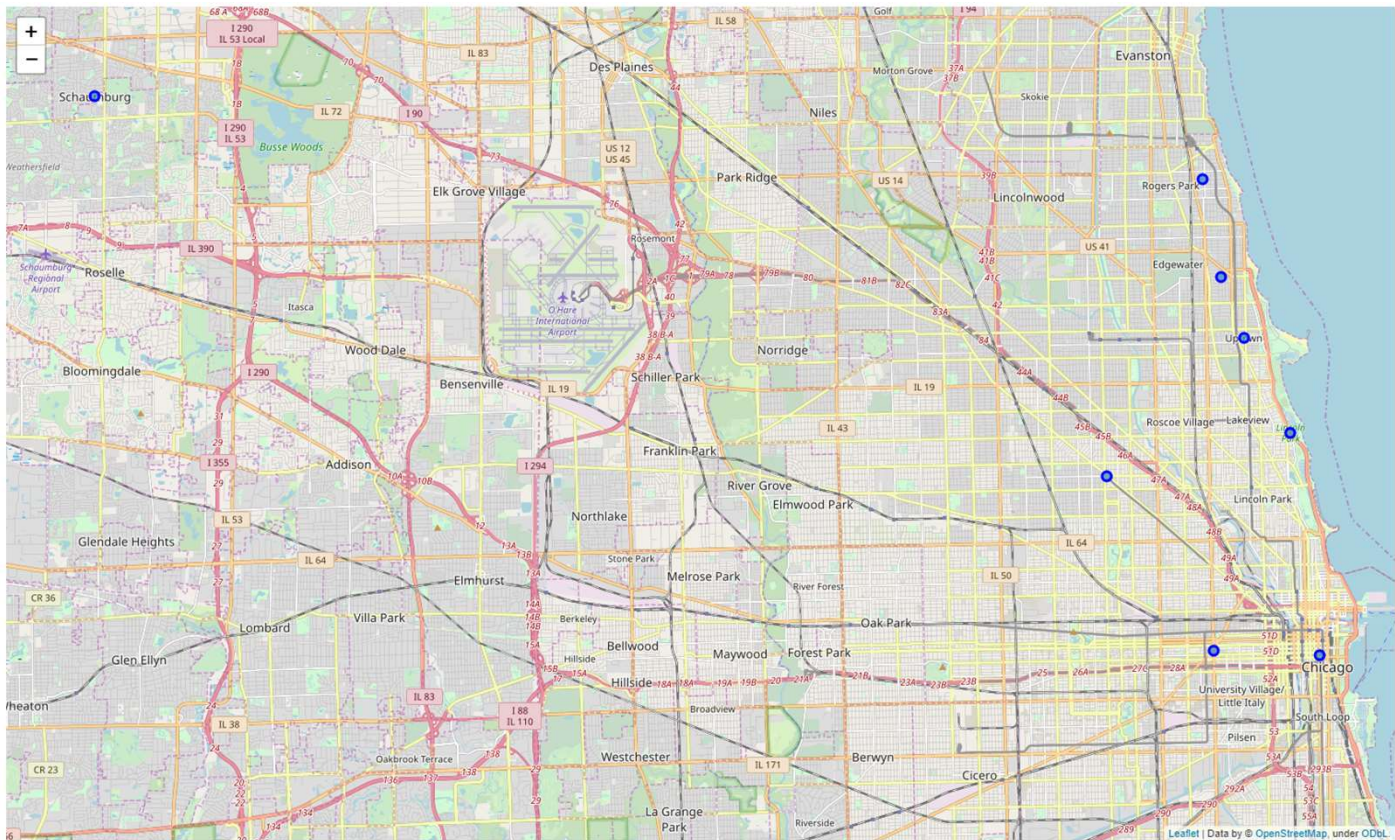
Clustering on demographics



Closest matched communities tend to have more young adults, and a less even income spread

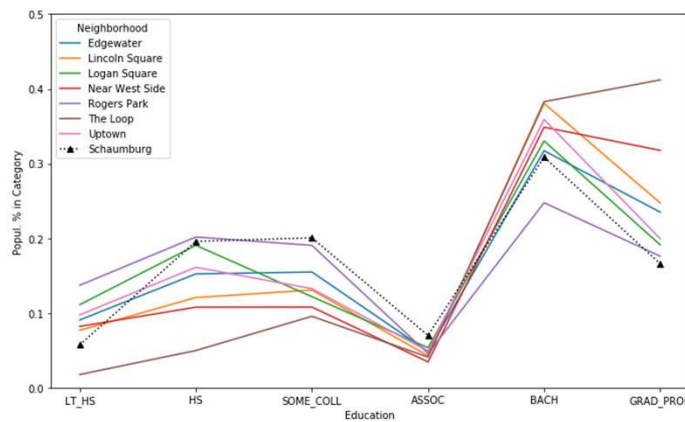
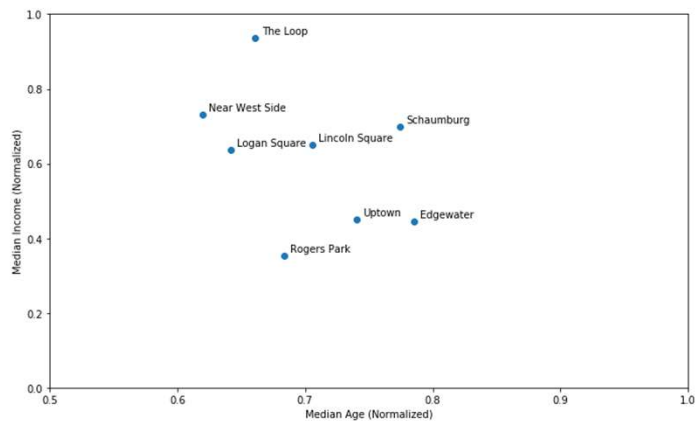


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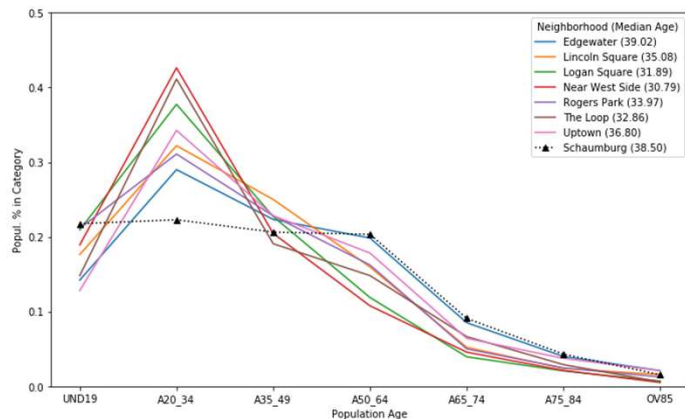
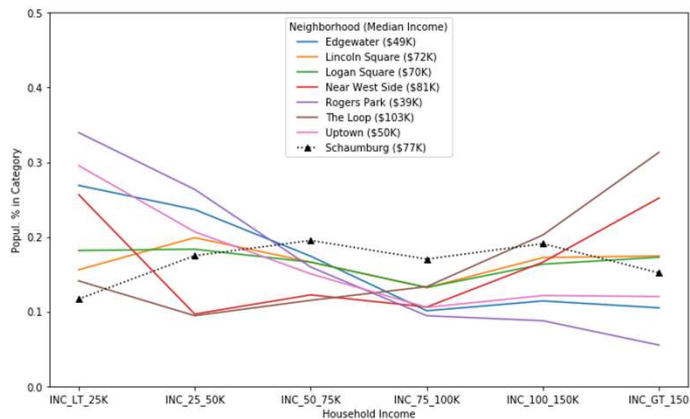


Communities similar
in both business type
and demographics
tend to be North of
Chicago

Communities from both clusterings



Young adults are even more favored by this reduced set



Conclusion and future directions

- Business culture of Schaumburg clusters to young adult communities
- Near West Side & The Loop favored by higher median income
- Choosing a location will require data on rental pricing & business turnover
- Improved results if business implements a reward system for demographic and return customer data
- Implementation as a business tool would require new data source(s) to enable using a wider region (i.e. census data for United States)