Clustering Neighborhoods in Mexico City

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Objective & Data Sources

- Provide a better understanding of neighborhoods surrounding metro stations in Mexico City to aid city planners identify general movement of people

- Data Sources:

  - Foursquare Places API

  - Wikipedia

Most Common Venue Categories

	Category	No. of Venues
0	Mexican Restaurant	466
1	Taco Place	341
2	Bar	106
3	Bakery	98
4	Café	97
5	Coffee Shop	88
6	Convenience Store	84
7	Ice Cream Shop	77
8	Restaurant	74
9	Pizza Place	74

Stations with a Low Number of Venues Surrounding Them

	Station	No. of Venues
0	Impulsora	1
1	Plaza Aragón	1
2	Martín Carrera	2
3	General Anaya	2
4	UAM-I	2
5	La Paz	3
6	Talismán	3
7	Viveros / Derechos Humanos	4
8	Politécnico	4
9	Nezahualcóyotl	4
10	Deportivo 18 de Marzo	4
11	Tacubaya	4

Mexico City's Neighborhoods divided into 3 clusters

- Black circles represent stations not included in the analysis due to the low number of venues surrounding them.

- Blue stations tend to be concentrated in the city center while magenta and red stations seems to be spread throughout the city.
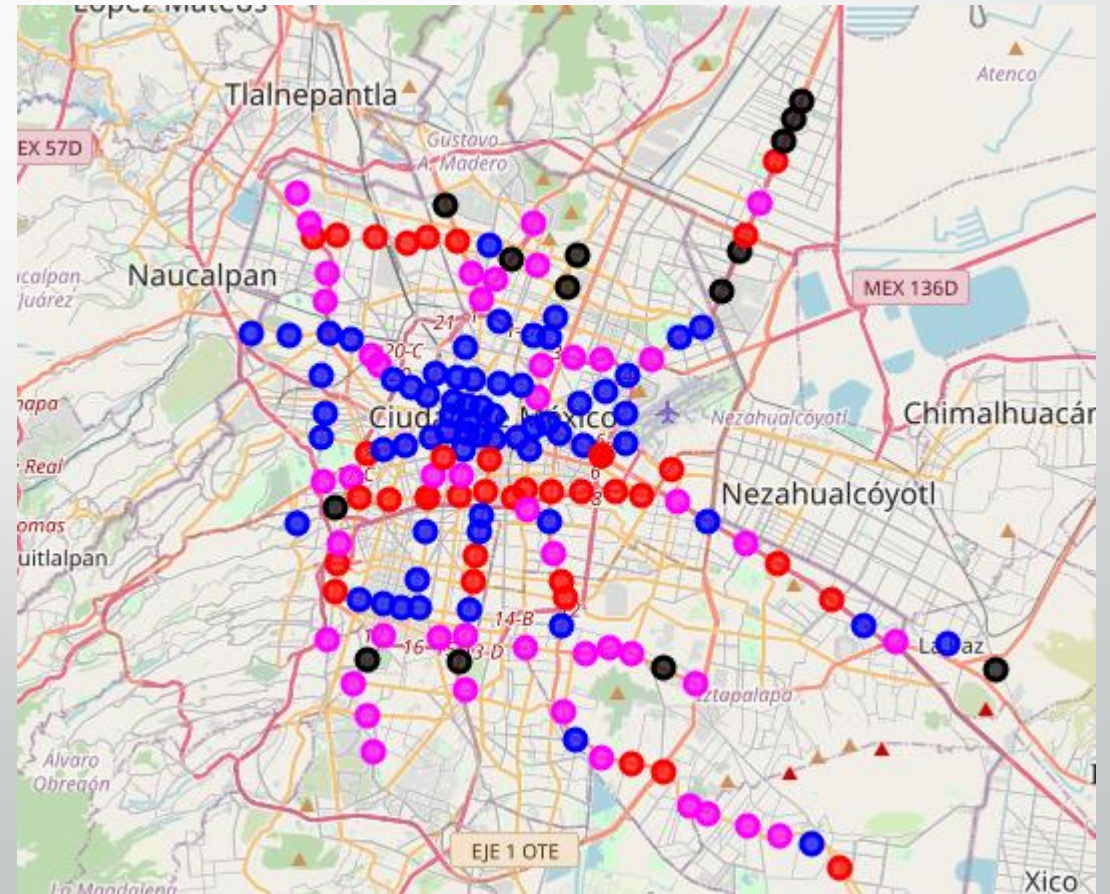
3-Cluster Model

Most Common Venue Categories for Each Cluster

Cluster 0	
Category	No. of Venues
Park	41
Convenience Store	38
Bakery	37
Mexican Restaurant	35
Taco Place	31
Café	25
Coffee Shop	20
Gym	19
Public Art	16
Seafood Restaurant	15

Cluster 1	
Category	No. of Venues
Taco Place	232
Mexican Restaurant	122
Office Supplies Store	54
Brewery	33
Clothing Store	30
Print Shop	29
Bakery	28
Bar	24
Pizza Place	24
Restaurant	23

Cluster 2	
Category	No. of Venues
Mexican Restaurant	308
Taco Place	78
Bar	70
Coffee Shop	58
Café	54
Ice Cream Shop	51
Pizza Place	37
Restaurant	36
Bakery	33
Hotel	32

Mexico City's Neighborhoods divided into 4 clusters

- Black circles represent stations not included in the analysis due to the low number of venues surrounding them.

- 4-Cluster model looks very similar to the 3-cluster model except for the 6 red stations on the north of the city.
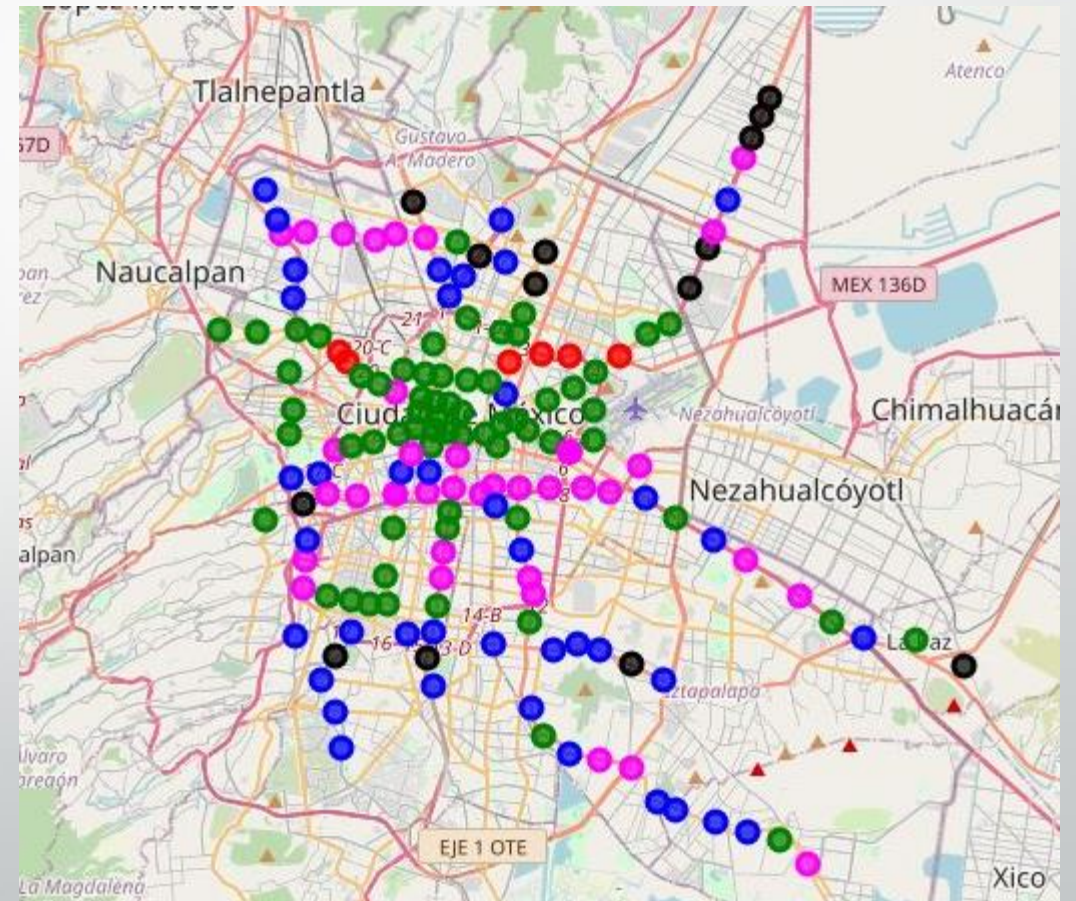
Conclusion

- City center seems to be a more vibrant and tourist-oriented section of the city due to bar and hotel venues.

- Neighborhoods surrounding the city seem to vary between residential areas and neighborhoods with plenty of office space.

- Analysis could be expanded by including Mexico City's bus system to provide a more accurate and more encompassing picture of Mexico City.