

II. DATA

The analysis will rely on data extracted from various sources as reflected in Table 1.

	SOURCE NAME/LINK	DATA RETRIEVED	EXAMPLE
1	Foursquare City Guide	CATEGORY = Grocery Stores per Zip Code in Chicago, IL	See Table 2
2	Zip Atlas	Median household income in Chicago, IL per Zip Code	See Table 3
3	Medical News Today	Definitions and summary of a Food Desert	See Link in SOURCE NAME/LINK column
4	Personal knowledge of Chicago's neighborhoods and geography	Verification of Data Science results	N/A

Table 1: Summary of data sources

a. SOURCE 1: Foursquare City Guide

Application that allows users to search venues/categories by geographic location. In this study we input geographic location as latitude and longitude and search for grocery stores in a 1-mile radius.

	name	categories	lat	lng
0	sweetgreen	Salad Place	41.884964	-87.624728
1	Roti Modern Mediterranean	Mediterranean Restaurant	41.886048	-87.624948
2	Wildberry Pancakes & Cafe	Breakfast Spot	41.884412	-87.623047
3	Chicago Architecture Center	Tour Provider	41.887720	-87.623650
4	Virgin Hotels Chicago	Hotel	41.886065	-87.625853
5	St. Jane Chicago	Hotel	41.886573	-87.624902
6	Giordano's	Pizza Place	41.885130	-87.623761
7	Chicago Cultural Center	Museum	41.883640	-87.624671
8	LondonHouse Chicago, Curio Collection by Hilton	Hotel	41.887832	-87.625426
9	Intelligentsia Coffee	Coffee Shop	41.884517	-87.625783
10	The Chicago Theatre	Theater	41.885539	-87.627151
11	Lakefront Trail	Trail	41.883470	-87.625750
12	Garrett Popcorn Shops - Millennium Park Plaza	Snack Place	41.884854	-87.624499
13	Cloud Gate by Anish Kapoor	Outdoor Sculpture	41.882668	-87.623319
14	Millennium Park	Park	41.882598	-87.624126
15	Jay Pritzker Pavilion	Amphitheater	41.882614	-87.621782
16	Chicago Riverwalk	Waterfront	41.887280	-87.627217
17	Radisson Blu Aqua Hotel, Chicago	Hotel	41.886308	-87.619921
18	Mariano's	Grocery Store	41.885326	-87.618923
19	Maggie Daley Ice Skating Ribbon	Skating Rink	41.884093	-87.619374

Table 2: Foursquare sample data as retrieved and parsed in Python

b. Source 2: Zip Atlas

Zip Atlas is a structured collection of zip code, area code, city and state demographic, social and economic profiles.

Source: [Zipatlas.com](#)

In this study we correlate median household income with selected Chicago, IL Zip Codes. Source data is from calendar year 2020.

#	Zip Code	Location	City	Population	Avg. Income/H/hold	National Rank
1.	60606	41.881988, -87.637329	Chicago, Illinois	1,682	\$100,377.00	#259
2.	60601	41.885805, -87.622911	Chicago, Illinois	5,591	\$77,374.00	#961
3.	60611	41.893024, -87.618998	Chicago, Illinois	26,522	\$69,889.00	#1,558
4.	60614	41.922667, -87.652537	Chicago, Illinois	65,474	\$68,324.00	#1,712
5.	60603	41.880614, -87.629311	Chicago, Illinois	378	\$61,815.00	#2,591

Table 3: Zip Atlas sample data as shown on website