

Galaxy Donuts

An Analysis of the City of Minneapolis

By: Jonathan Sipola

Introduction

- I represent Galaxy Donuts, a national donut shop. Our company is expanding into Minnesota, and I have been tasked with analyzing the city of Minneapolis to determine the optimal location to place our first shop. I will be analyzing all 83 Minneapolis neighborhoods and make the decision based on four main factors in ranked order of importance:
 - 1. Optimal distance from competitor locations
 - 2. Population
 - 3. Lowest per capita crime rate
 - 4. Highest median household income

The Data

- Foursquare API to plot all Minneapolis donut shops
- Neighborhood data:
<http://opendata.minneapolismn.gov/datasets/minneapolis-neighborhoods>
- Crime data:
<http://opendata.minneapolismn.gov/datasets/neighborhood-crime-stats>
- Income data:
<https://www.mncompass.org/profiles/neighborhoods/minneapolis-saint-paul#!community-areas>

Foursquare Data

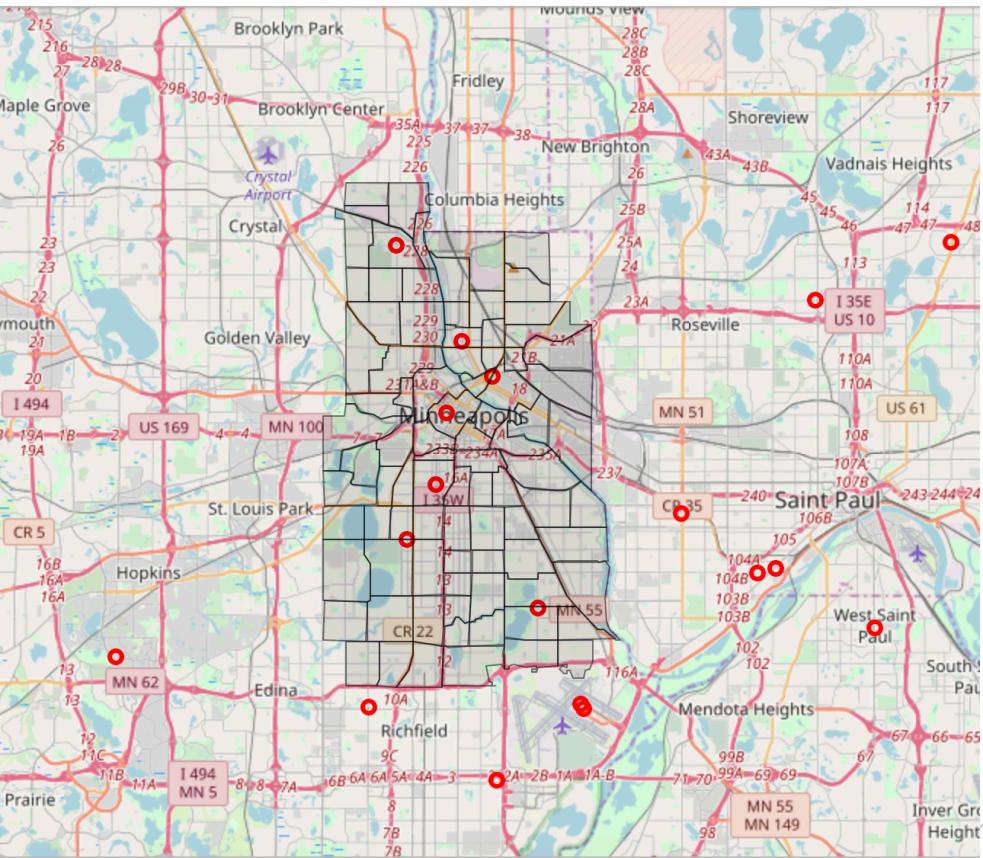
First I call the API to gather the results.

Data Cleaned & Plotted

Using Folium, I mapped all the existing donut shops in the metro area, and I plotted them over a choropleth map of the 83 Minneapolis neighborhoods.

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Dunkin'
Angel Food Bakery & Donut Bar
Dunkin'
Glam Doll Donuts
Donut Connection
Dunkin'
Mel-O-Glaze Bakery
Dunkin'
Dunkin'
Dunkin'
Cardigan Donuts
Glam Doll Donuts
The Thirsty Whale
Sleepy V's
Bogart's Doughnut Co.
Puffy Cream Donuts
YoYo Donuts & Coffee Bar
Dunkin'
Dunkin'
Dunkin'
Bogart's Doughnut Co
Duck Donuts
Dunkin' Donuts
Dunkin'
Dunkin'



Crime Data

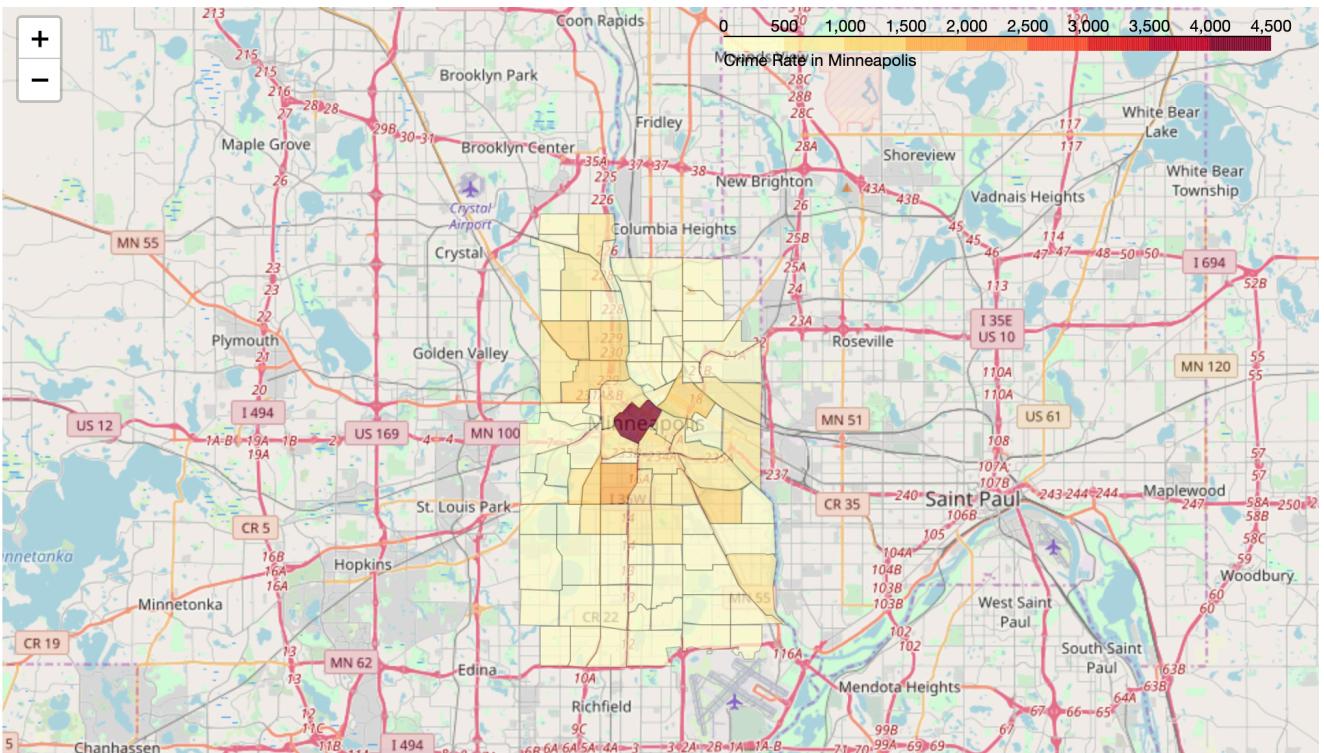
Next I imported, cleaned and analyzed crime statistics by neighborhood in Minneapolis.

neighborhood number

0	Armatage	193
1	Audubon Park	362
2	Bancroft	212
3	Beltrami	121
4	Bottineau	161
...
82	West Calhoun	185
83	Whittier	1894
84	Willard - Hay	848
85	Windom	318
86	Windom Park	310

Choropleth Map

I visually represent the crime data on a choropleth map with a yellow, orange, red gradient



Synthesis

Due to residential zoning, I determined the optimal distance from competitors was 2 neighborhoods, not distance “as the crow flies.” I then calculated crime percentage of 18 neighborhoods that met the requirement.

Number	Neighborhood	Population	Crime %
240	Waite Park	5568	4.310%
277	Fulton	6335	4.373%
66	Kenwood	1468	4.496%
218	Tangletown	4493	4.852%
157	Cedar - Isles - Dean	2950	5.322%
147	Bryn Mawr	2651	5.545%
139	Field	2366	5.875%
212	Bancroft	3587	5.910%
172	Bryant	2833	6.071%
239	Cooper	3692	6.473%
460	Howe	6757	6.808%
362	Audubon Park	5125	7.063%
325	Corcoran	4292	7.572%
848	Willard - Hay	9556	8.874%
793	Prospect Park - East River Road	8482	9.349%
918	Seward	7488	12.260%
760	East Phillips	4269	17.803%
1320	Longfellow	4789	27.563%

Synthesis

I removed all cities above a 6% crime rate, and with < 3k residents. I then gathered median household income of the 3 best options.

Number	Neighborhood	Population	Crime %	Median Income
240	Waite Park	5568	4.310%	\$ 74,993.00
277	Fulton	6335	4.373%	\$ 130,712.00
66	Kenwood	1468	4.496%	
218	Tangletown	4493	4.852%	\$ 95,096.00
157	Cedar - Isles - Dean	2950	5.322%	
147	Bryn Mawr	2651	5.545%	
139	Field	2366	5.875%	
212	Bancroft	3587	5.910%	No commercial center
172	Bryant	2833	6.071%	
239	Cooper	3692	6.473%	
460	Howe	6757	6.808%	
362	Audubon Park	5125	7.063%	
325	Corcoran	4292	7.572%	
848	Willard - Hay	9556	8.874%	
793	Prospect Park - East River Road	8482	9.349%	
918	Seward	7488	12.260%	
760	East Phillips	4269	17.803%	
1320	Longfellow	4789	27.563%	

The Winner!

Fulton Neighborhood in SW
Minneapolis.



Economy

Fulton

— Household income (2017 dollars) (2013-2017)

Total households

Less than \$35,000

\$35,000-\$49,999

\$50,000-\$74,999

\$75,000-\$99,999

\$100,000 or more

Median household income (2017 dollars)

2,580 100.0%

270 10.5%

127 4.9%

282 10.9%

236 9.2%

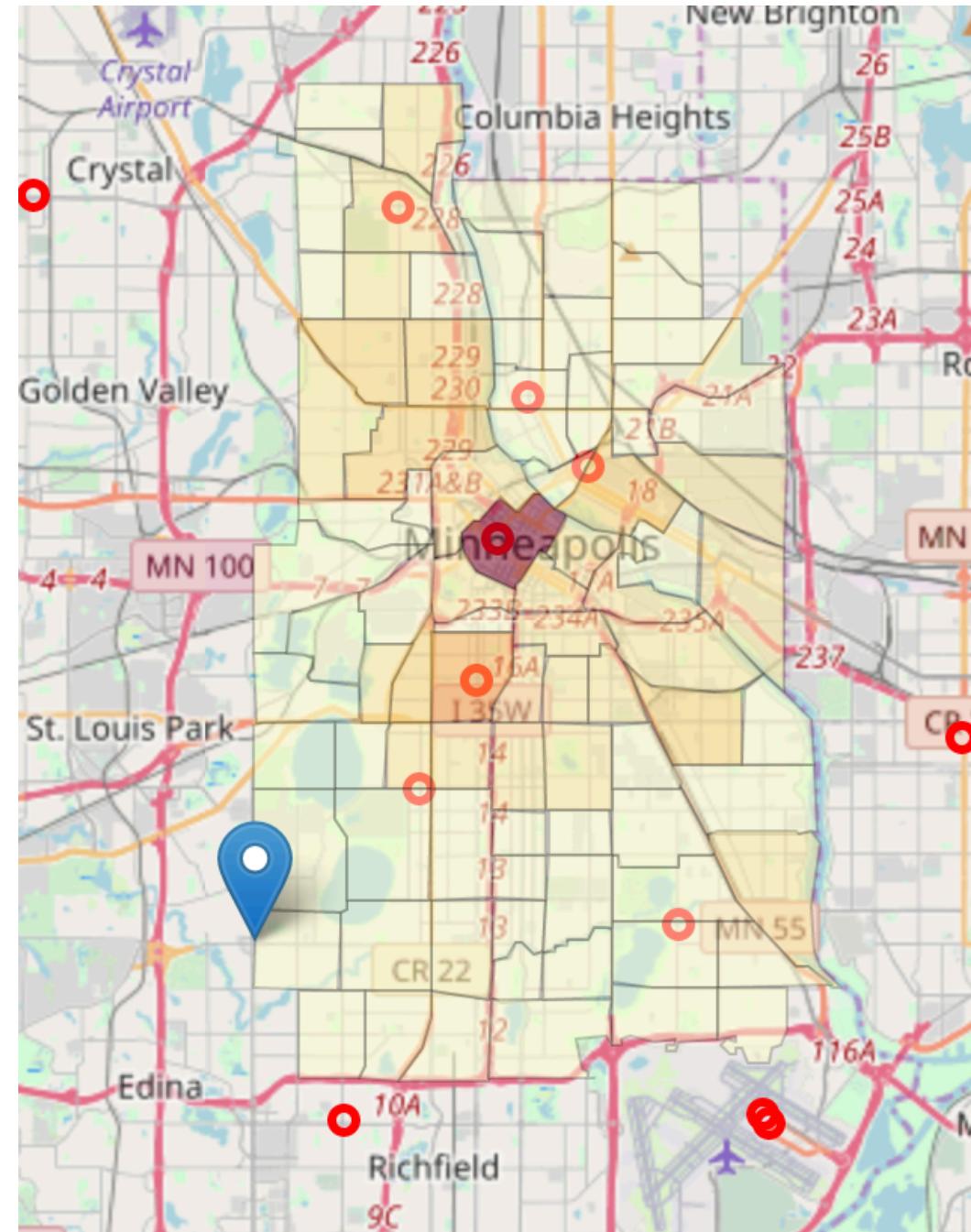
1,665 64.5%

\$130,712



Fulton

We break ground near 50th &
France in the Fulton Neighborhood
of Minneapolis.



Opening Now: Galaxy Donuts Minneapolis!

