

# Yoga Studio Business Opportunity in Philadelphia

Raymond Howanski

May 2020



# Business Opportunity



**Objective: Determine best neighborhood to open a new yoga studio in Philadelphia**



**Yoga industry observed a 9.8% growth in the US from 2013-2018**



**Industry expected to grow in the US over the next 5 years**

Yoga Journal's "Yoga in America" study noted that 6% of American's said they were interested in yoga, but did not practice



**Philadelphia is the fifth largest city in the United States**

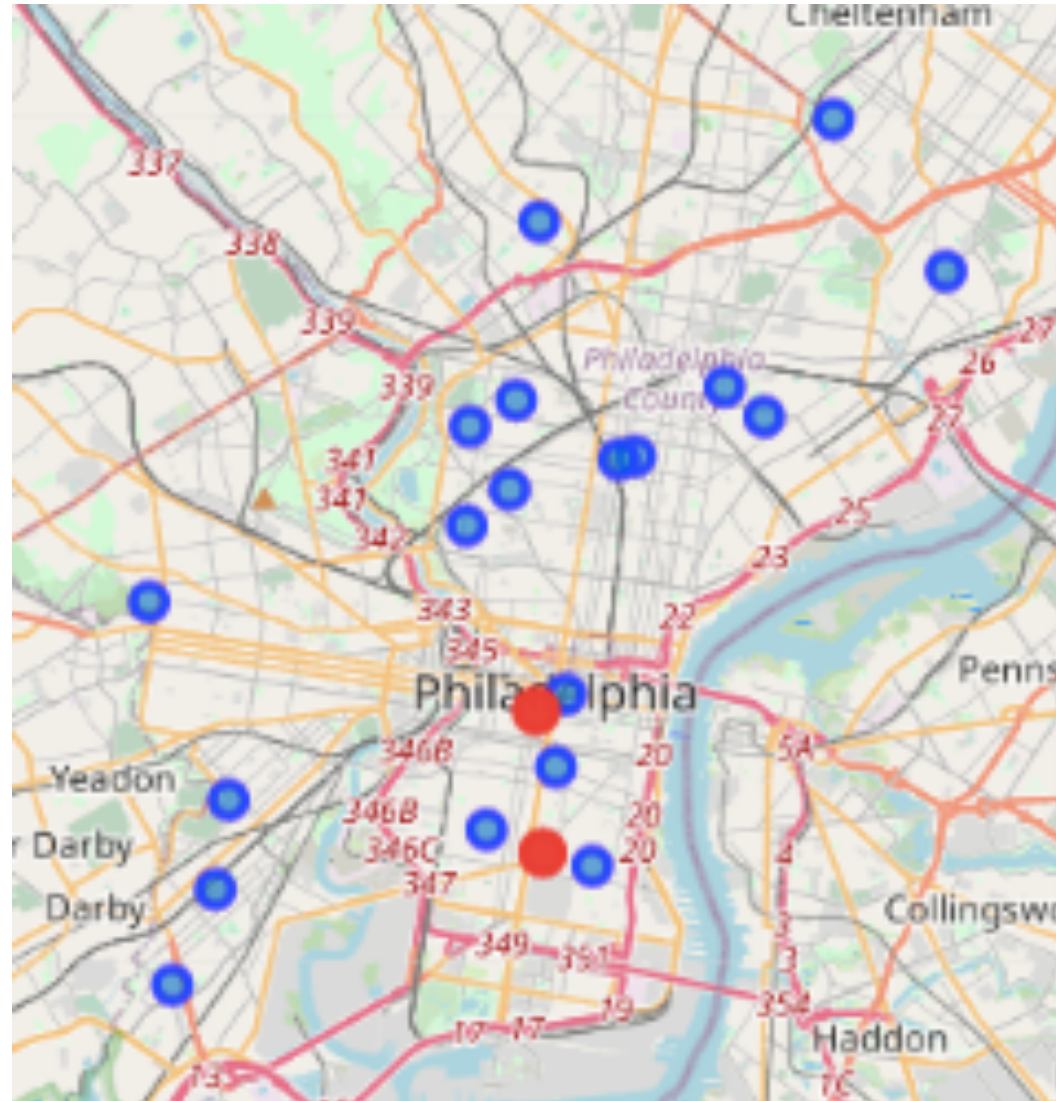
Foursquare database API utilized to characterize venue data of each neighborhood in Philadelphia

Neighborhood candidates for new yoga studio generated algorithmically by using Machine Learning Clustering

Best neighborhood considered similar venue characteristics of neighborhoods that currently have yoga studio

# Philadelphia Neighborhoods

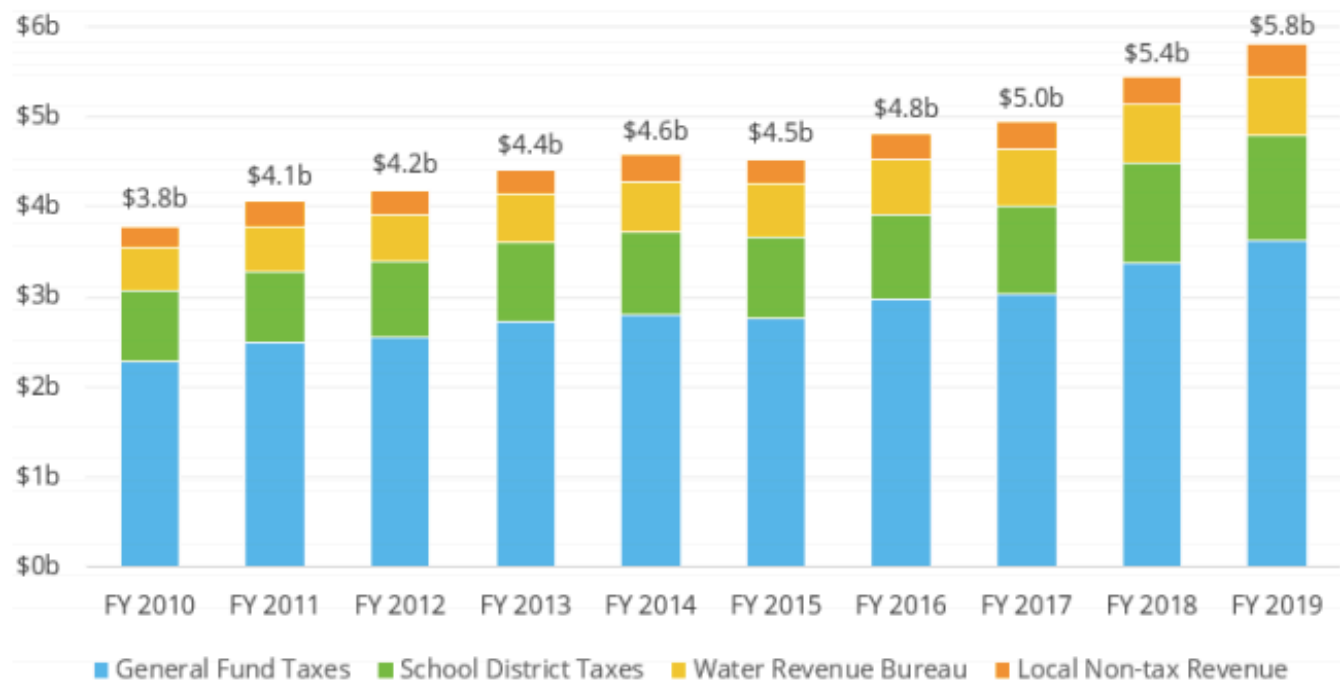
- 19 Philadelphia neighborhoods were incorporate into the analysis (blue dots)
- 2 yoga studios currently available according to Foursquare API (red dots)
- Clustering was utilized to determine which neighborhoods have similar venue distribution to areas that currently have a yoga studio



Neighborhood
Market East
Haddington
Hartranft
Frankford
Strawberry Mansion
North Central
Southeast
Kingsessing
Elmwood
Kensington/Harrowgate
Lawncrest
Swampoodle
Point Breeze
Penrose
St. Hughes
Hawthorne
Germantown
Eastwick
Brewerytown

### Ten-year trend, total collections

All FY19 revenue collections data is preliminary. Data does not include revenue from other governmental units, PICA, or special taxes (ex. Hospitality and Tourism Tax).

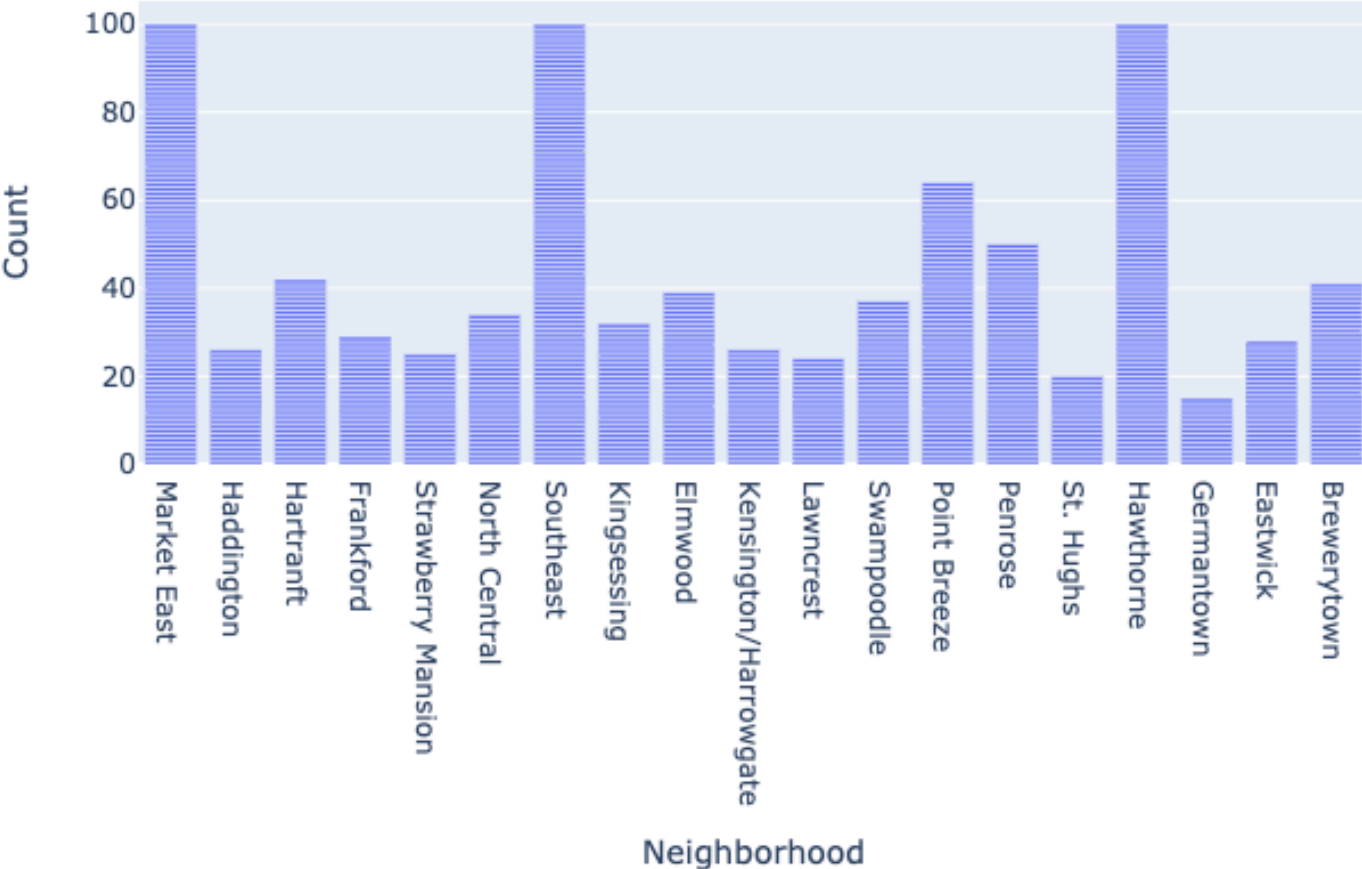


# Philadelphia Neighborhoods

Philadelphia has observed consistent revenue growth during the last ten years

Source: phila.gov

Philadelphia Neighborhood Venue Number (Max of 100)



Venue Number Per Neighborhood

Frequency of Gym and Yoga Studio in Philadelphia Neighborhoods

Neighborhood	Gym	Yoga Studio
Brewerytown	0.000000	0.00
St. Hughs	0.000000	0.00
Point Breeze	0.000000	0.00
North Central	0.000000	0.00
Lawncrest	0.000000	0.00
Kingsessing	0.000000	0.00
Germantown	0.000000	0.00
Elmwood	0.000000	0.00
Eastwick	0.000000	0.00
Haddington	0.000000	0.00
Swampoodle	0.000000	0.00
Hawthorne	0.010000	0.00
Market East	0.010000	0.01
Penrose	0.020000	0.00
Southeast	0.020000	0.01
Hartranft	0.023810	0.00
Kensington/Harrowgate	0.038462	0.00
Strawberry Mansion	0.040000	0.00
Frankford	0.068966	0.00

Two Neighborhoods have Yoga Studios

Where in Philadelphia should a new yoga studio be opened?

K-Means Clustering utilized to group neighborhoods based on frequency of venues in each neighborhood

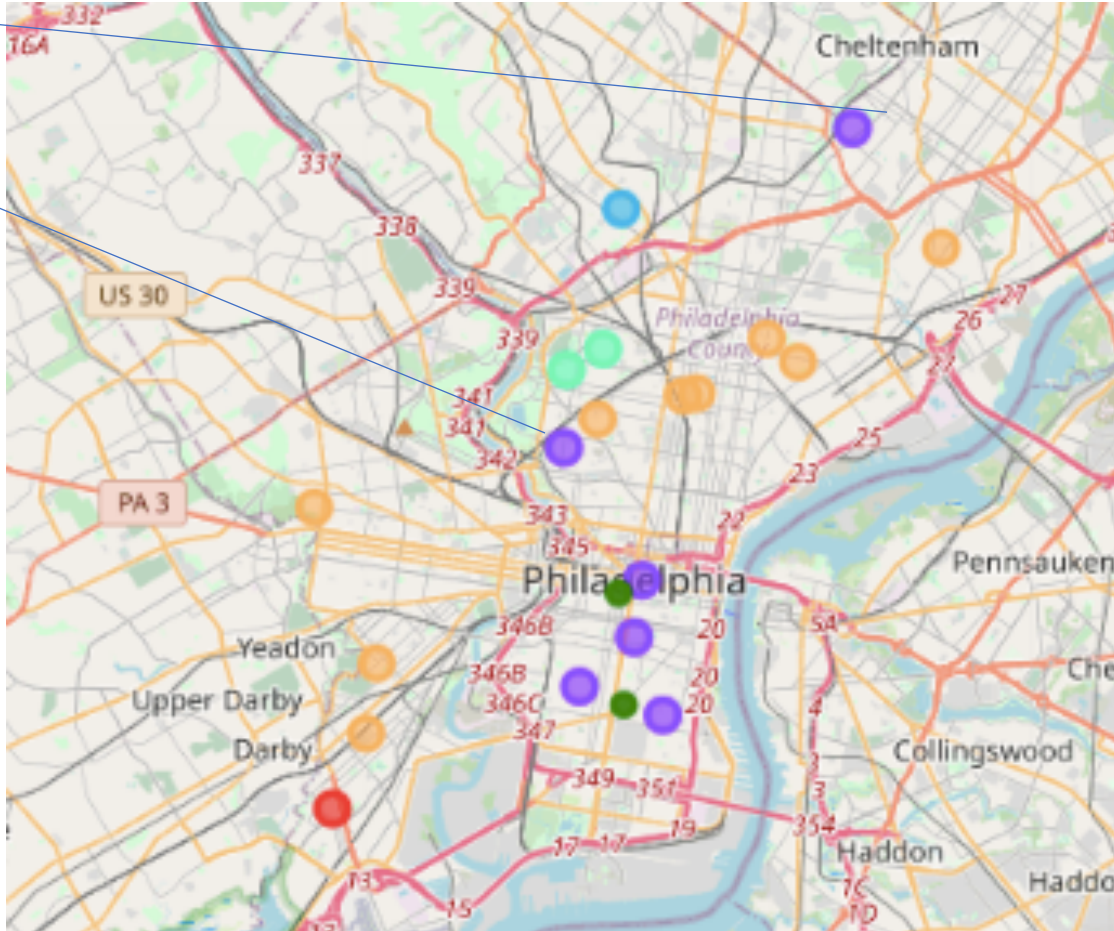
Neighborhood	Cluster Labels	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue
Eastwick	0	Fast Food Restaurant	Pizza Place	Discount Store	Sandwich Place	Bank
Market East	1	Hotel	Sandwich Place	Italian Restaurant	Vegetarian / Vegan Restaurant	Salad Place
Hawthorne	1	Pizza Place	Mexican Restaurant	Coffee Shop	Italian Restaurant	Bar
Point Breeze	1	Pizza Place	Bar	Discount Store	Breakfast Spot	Brewery
Lawncrest	1	Vietnamese Restaurant	Fast Food Restaurant	Supermarket	Pharmacy	Bar
Southeast	1	Bar	Bakery	Pizza Place	Coffee Shop	Mexican Restaurant
Brewerytown	1	Park	Discount Store	Café	Pizza Place	Intersection
Germantown	2	Intersection	Coffee Shop	Discount Store	American Restaurant	Southern / Soul Food Restaurant
Swampoodle	3	Intersection	Breakfast Spot	Grocery Store	Fast Food Restaurant	Pharmacy
Strawberry Mansion	3	Intersection	Grocery Store	Park	Baseball Field	Seafood Restaurant
North Central	4	Deli / Bodega	Intersection	Park	Breakfast Spot	Southern / Soul Food Restaurant
Kingsessing	4	Discount Store	Pizza Place	Grocery Store	Intersection	Moving Target
Elmwood	4	Pizza Place	Donut Shop	Chinese Restaurant	Seafood Restaurant	Breakfast Spot
Frankford	4	Bus Station	Donut Shop	Gym	Convenience Store	Bank
Hartranft	4	Fast Food Restaurant	Discount Store	Metro Station	Intersection	Pizza Place
Penrose	4	Intersection	Train Station	Discount Store	Pizza Place	Metro Station
St. Hughes	4	Spanish Restaurant	Bus Stop	Baseball Field	Pizza Place	Pharmacy
Haddington	4	Light Rail Station	Pharmacy	Snack Place	Skate Park	Sports Bar
Kensington/Harrowgate	4	Pharmacy	Diner	Discount Store	Donut Shop	Pizza Place



# Two Opportunities for a Yoga Studio

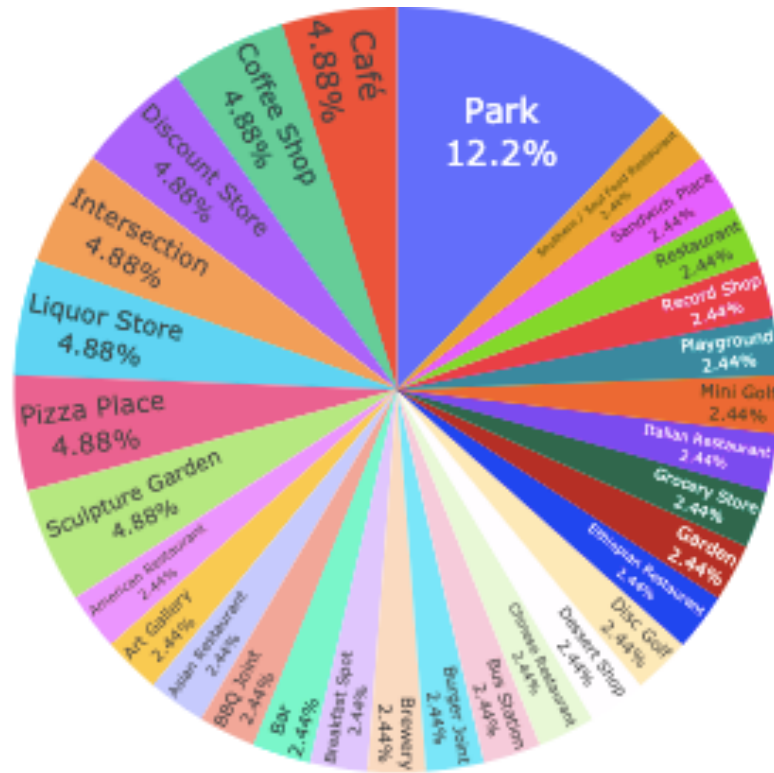
Lawncrest

Brewerytown

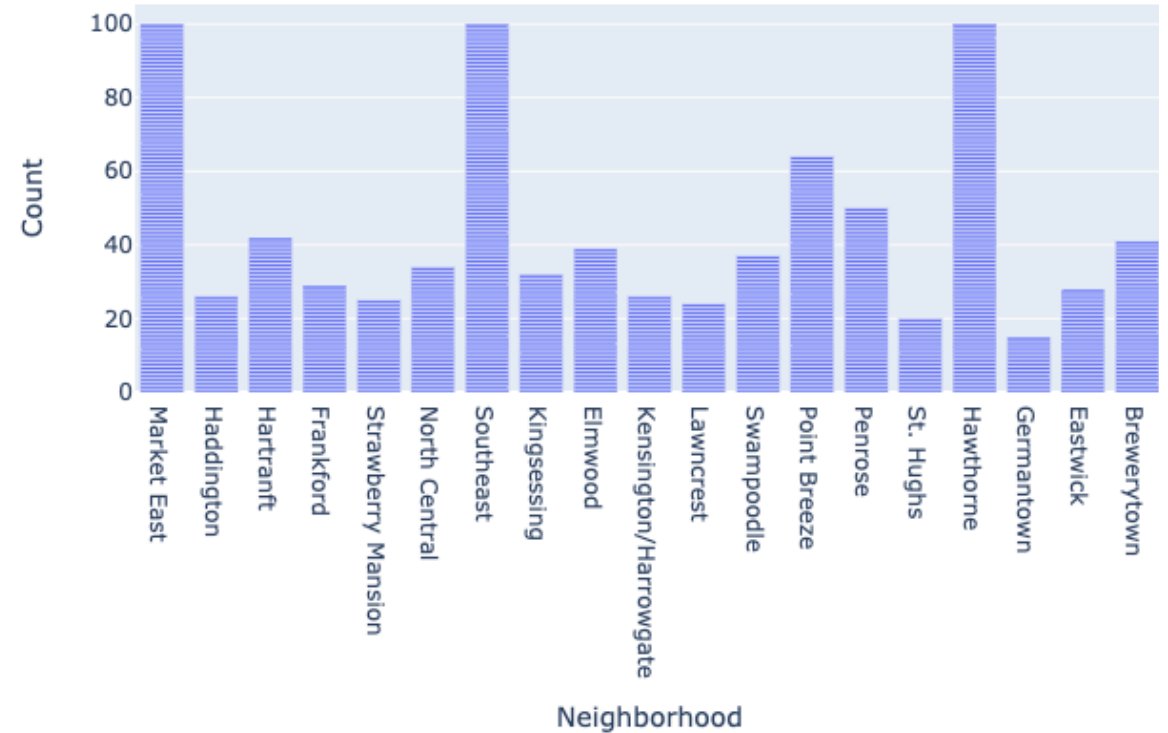


- Purple dots represent a cluster of neighborhoods that have similar based on K-means clustering
- Green dots represent the location of the current yoga studios in Philadelphia
- Brewerytown and Lawncrest identified as two neighborhoods with venue distribution similar to neighborhoods currently within close proximity to a yoga studio

Percentage of Brewerytown Venues



Philadelphia Neighborhood Venue Number (Max of 100)



Brewerytown is Top Selection for New Yoga Studio

- Due to Brewerytown having the larger number of venues compared to Lawncrest, it is considered the better neighborhood to open a new yoga studio