# VEGETARIAN RESTAURANTS

An analysis of neighborhoods in Jacksonville, Florida



#### **OBJECTIVE**

Investigate possibility of opening a vegetarian restaurant in Jacksonville, FL

- List all neighborhoods in metropolitan area
- Find all restaurants
- Find all restaurants categorized as vegetarian / vegan



#### WHY VEGETARIAN?

- In the United States, only 5% of the population identify as vegetarian
- However, plant-based foods are a fast growing segment of the marketplace
- According to Plant Based Food
  Association, retail sales of plant-based
  food are up 29 percent over the last two
  years



### ABOUT JACKSONVILLE, FLORIDA

- Florida is third most populated state in U.S.
- Jacksonville is the largest city in Florida
  - Population as well as land mass
- Jacksonville metro area has over 1.5 million residents
- Approximately 30 neighborhoods
  - Scrape list from Wikipedia

#### WHERE TO FIND RESTAURANT DATA

- Foursquare.com
  - Places API
    - over 60 million commercial points of interest
    - 190+ countries
    - 900+ venue categories
    - 30+ venue details



Courtesy of: https://enterprise.foursquare.com/products/places

#### TYPICAL FOURSQUARE API CALL

- Client credentials
  - Available after creating free account
- Foursquare version number
- Latitude and longitude
- Radius
- Category
- Offset if first search contains more than 50 results

#### FOURSQUARE SEARCH RESULTS

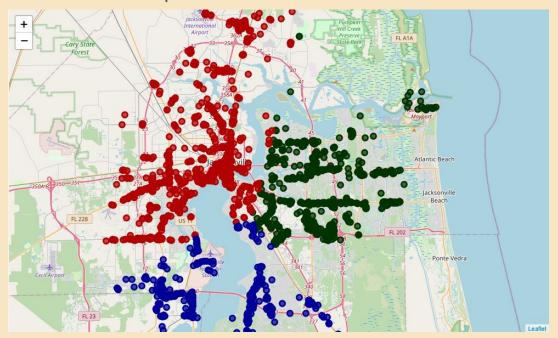
- After searching all neighborhoods for all restaurant categories:
  - Approx 2700 restaurants found

- Searching for only vegetarian restaurants:
  - 19 restaurants found

# SEARCH RESULTS CLUSTERS

• k means analysis identifies 3 as optimal number of clusters

• After mapping:

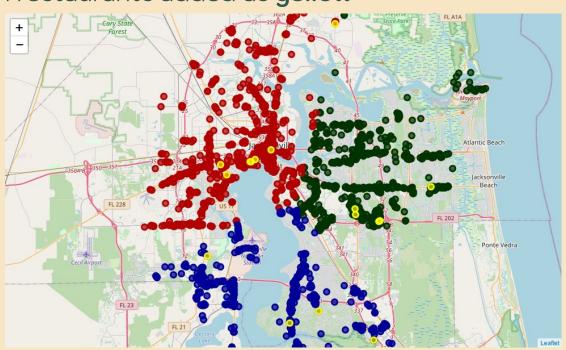


#### CURRENT VEGETARIAN RESTAURANTS

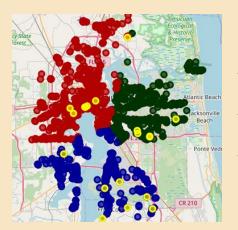
• Existing 19 vegetarian restaurants added as **yellow** 

markers

• After mapping:



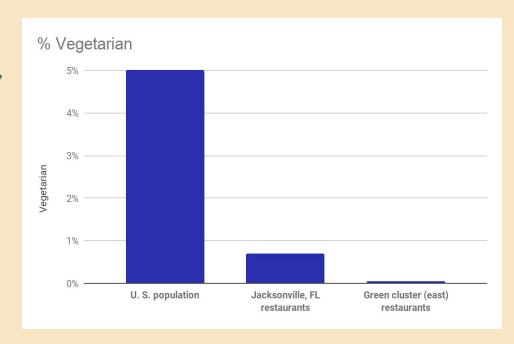
# **CLUSTER SPECIFICS**



	Restaurants	Vegetarian	% Vegetarian
GREEN (east)	931	5	.054%
RED (central)	1,125	7	0.62%
BLUE (south)	679	7	1.03%
TOTALS	2,735	19	0.69%

# CONCLUSION

- According to Foursquare data, vegetarian restaurants appear under-represented in Jacksonville, FL when compared to the overall U.S. population
- In particular, the area contained in green eastern cluster shown previously



# THANK YOU

Any questions or comments please contact:

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