

Battle of the Neighborhoods

IBM Applied Data Science Capstone

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Note: For the purposes of this Coursera capstone project, the author has made a number of assumptions regarding this 'Battle of the Neighborhoods' exercise. The content is not intended to serve as an all-inclusive business plan, nor is it a recommendation for existing businesses. Consume this content with creativity!

A. Introduction

A.1 Description & Discussion of the Business Problem

The U.S. is experiencing the most significant public health crisis in decades, and the federal government's lackluster response to the COVID-19 pandemic has resulted in record level unemployment, an overwhelmed healthcare system, and economic strain disproportionately felt by small business owners.

Restaurants, bars, and breweries have been hit especially hard in 2020. The traditional restaurant business model is unsustainable under pandemic conditions. According to the Q2 2020 Yelp Economic Average report [1], an estimated 60% of restaurant COVID-19 closures are permanent. Those remaining now face many hurdles to simply stay open, including:

- Making unexpected investments to comply with public health requirements, including sanitation, outdoor dining, and protections for staff in the workplace.
- Navigating federal economic relief paperwork.
- Adapting to new restraints on capacity, hours, and services [2].
 - Indoor dining allowed at 25% capacity or 100 people, whichever is lower.
 - Mandated closure for on-site dining between 10 p.m. and 5 a.m.
 - Drive-thru, takeout and delivery service can continue at all hours.
 - Limiting persons sitting at a table to members of the same household
- Implementing new data collection systems to comply with public health mandates [3], such as:
 - Obtaining the name of each guest seated at a table and the telephone number of at least one guest
 - Maintaining the list of names and telephone numbers for three weeks

Similarly, bars and breweries are under operating constraints because alcohol can only be sold in the same transaction as a meal. In San Diego county, brewpubs, breweries, bars, pubs, craft distilleries, and wineries must remain closed and can only resume full operations if they are offering sit-down, dine-in meals.

Like restaurants, breweries also face the challenge of inconsistent demand. If people don't feel safe to dine or drink indoors, then the business faces a hard time meeting their sales quotas resulting in breweries needing new distribution outlets.

Business Plan Adaptation

While many parts of the country will begin to head indoors due to colder weather, residents of Southern California enjoy a comfortable climate year-round. Business owners in this unique market have an opportunity to adapt the traditional restaurant model into an operation that combines many of the things that residents love -- dogs, the outdoors, craft beer, and good food -- while lowering overhead costs. To capitalize on these opportunities, I am proposing a new business model that would bring together a diverse offering of high-quality, food trucks colocated on the same property as a dog park.

A.2 Data Description

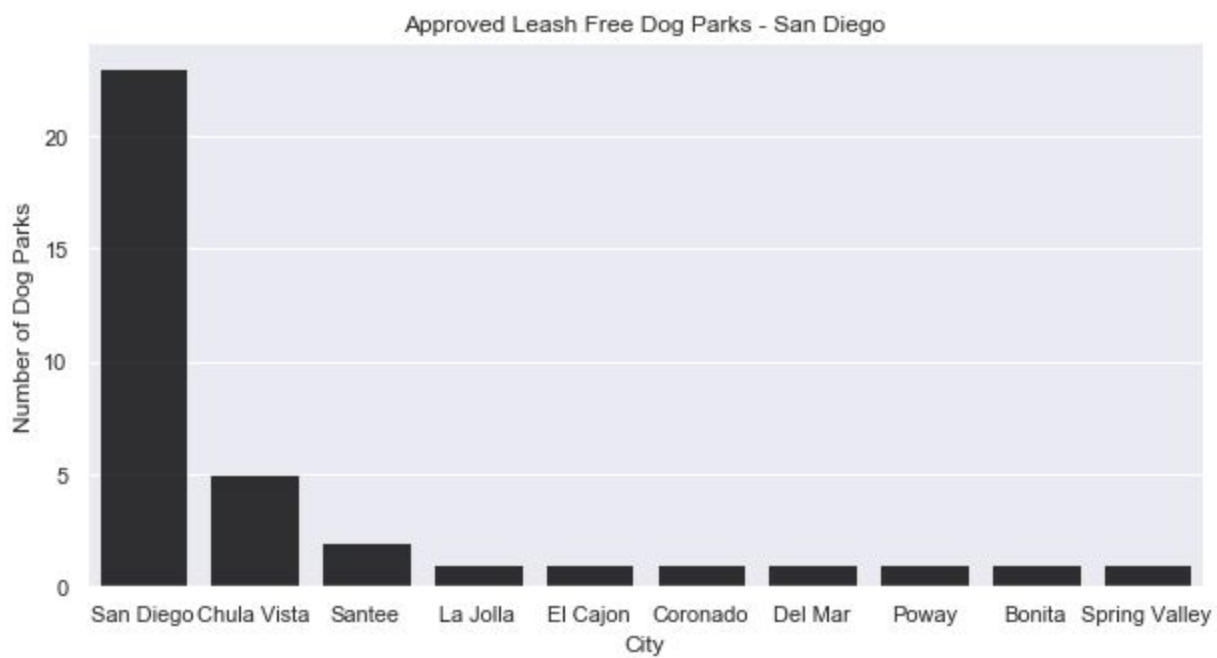
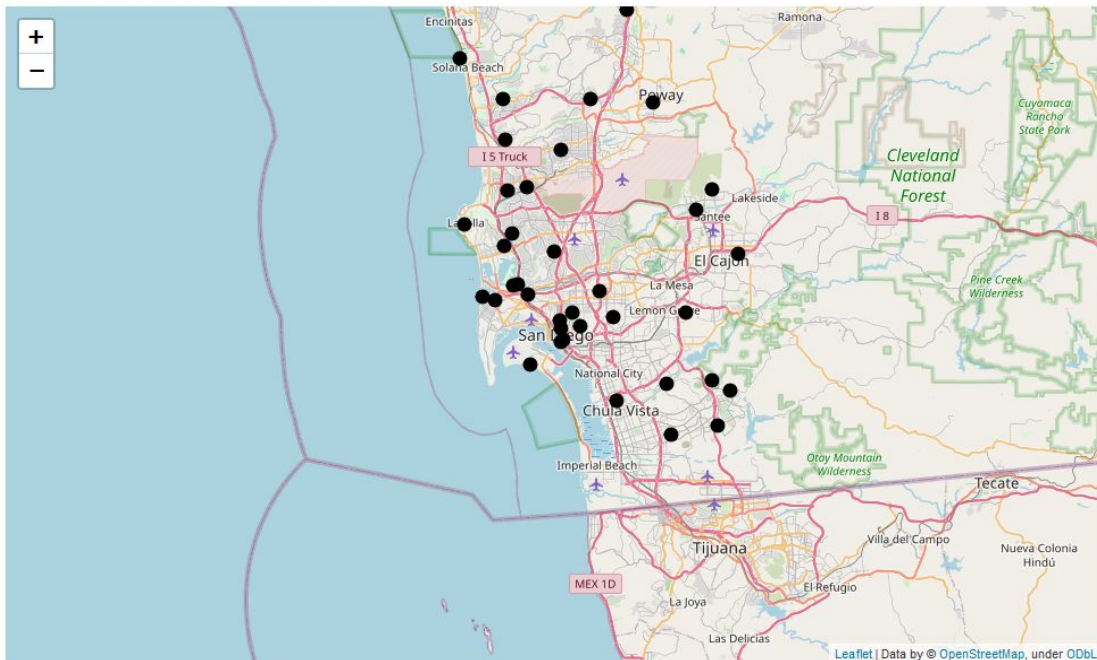
To consider the problem we can utilize the following data:

- Approved Off Leash Dog Parks - San Diego
 - Features:
 - Name
 - Address
 - Latitude
 - Longitude
- Foursquare restaurant data for target communities

B. Methodology

B.1 Summarize San Diego Dog Park Data

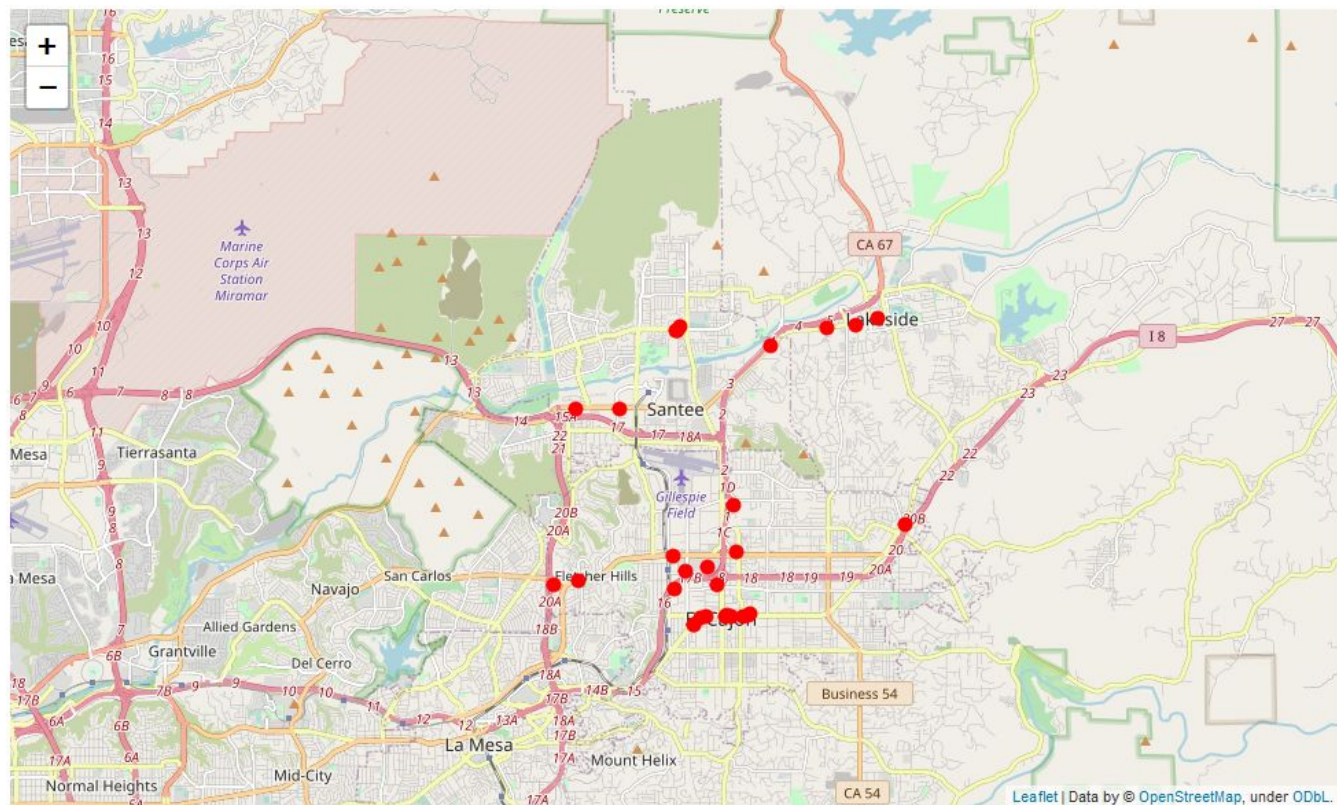
As expected, the data shows that San Diego is overloaded with dog parks. In addition to traditional off-leash dog parks, Southern California is home to numerous off-leash dog beaches like those in Del Mar and Coronado. For this reason, we will focus on La Jolla and expand our search inland.



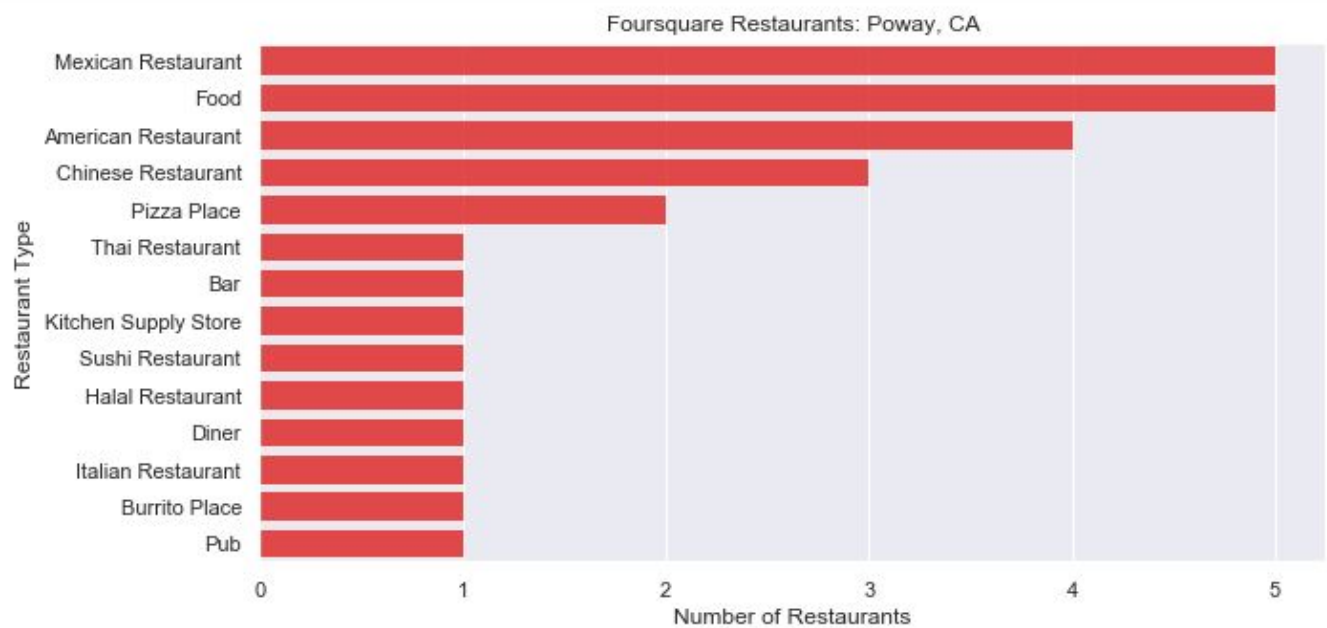
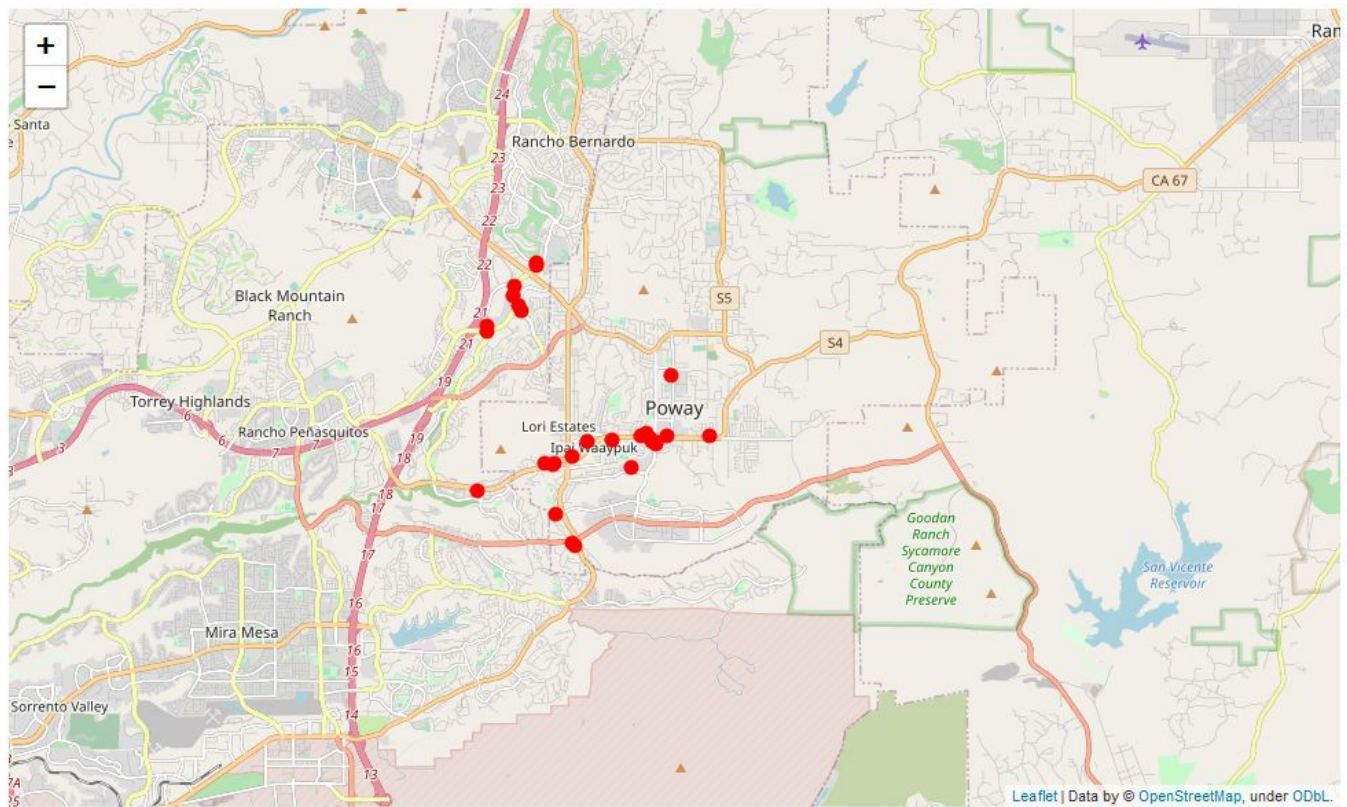
B.2 Explore Restaurant Data for Selected Communities

Exploring locations inland, the data shows that the communities of Santee, Poway, El Cajon, and Chula Vista lack approved leash-free dog parks. Similarly, the coastal community of La Jolla lacks any quality dog parks. We can now explore restaurant data for each of these communities.

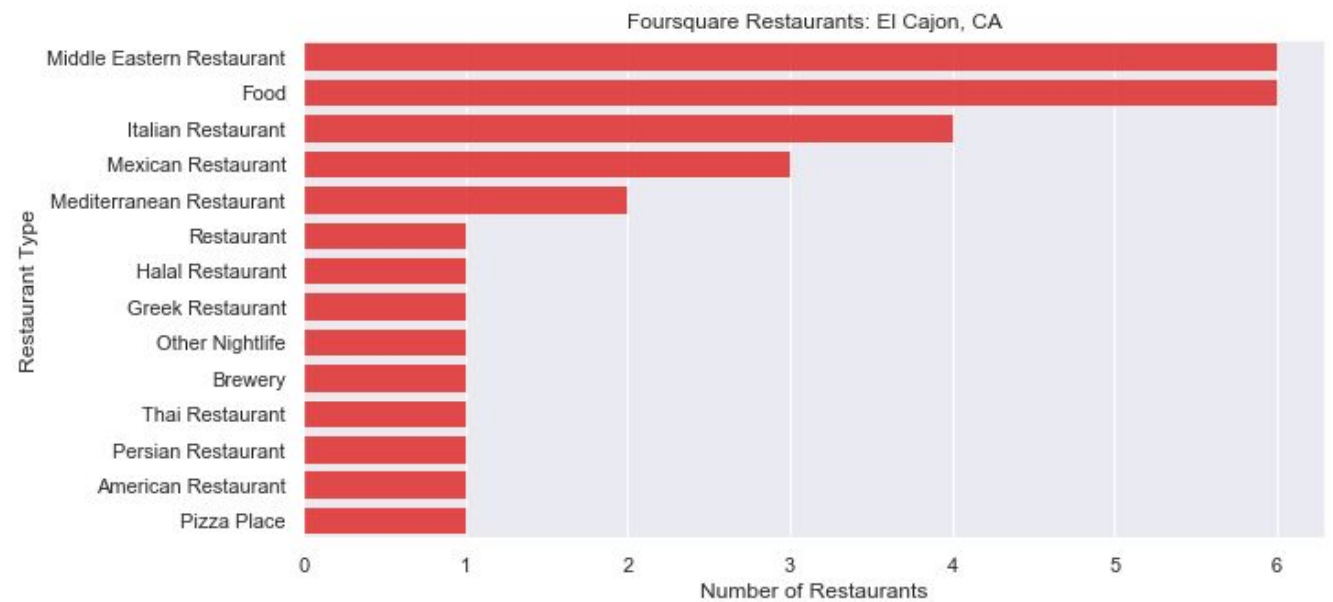
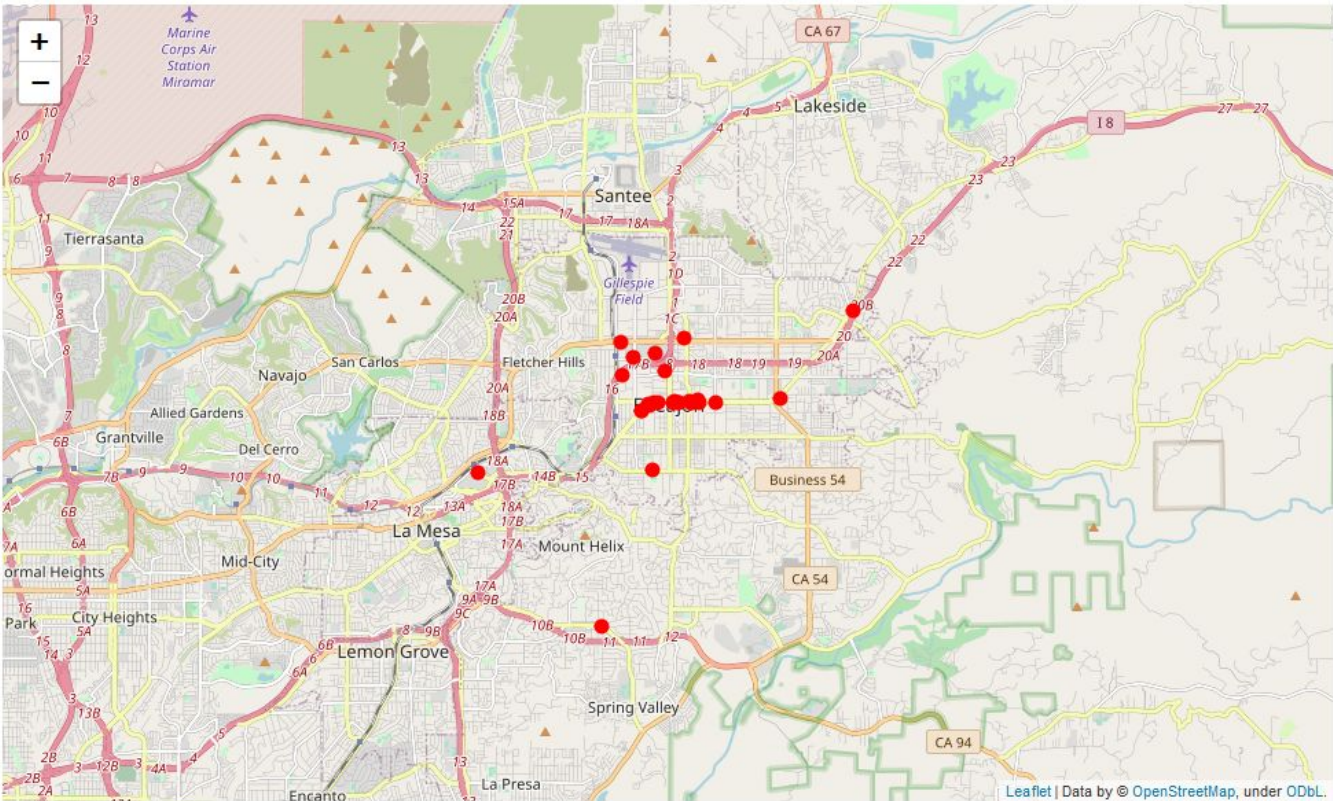
Santee, CA



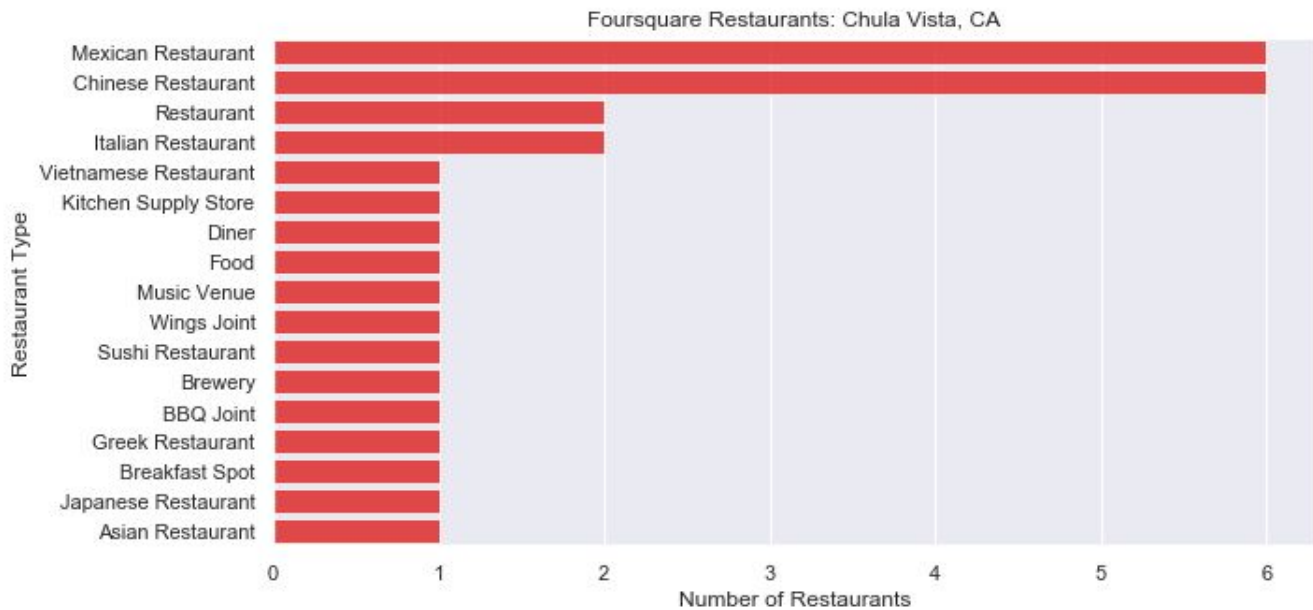
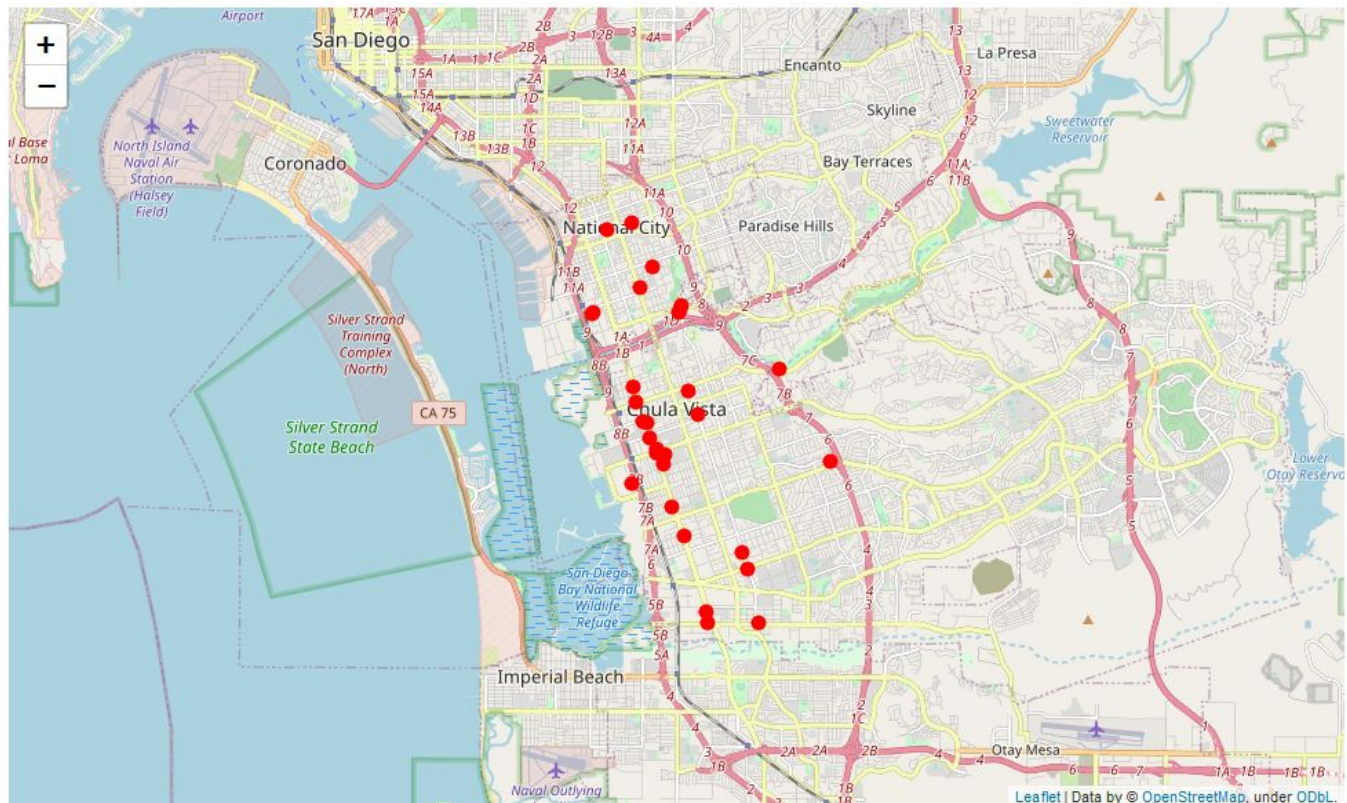
Poway, CA



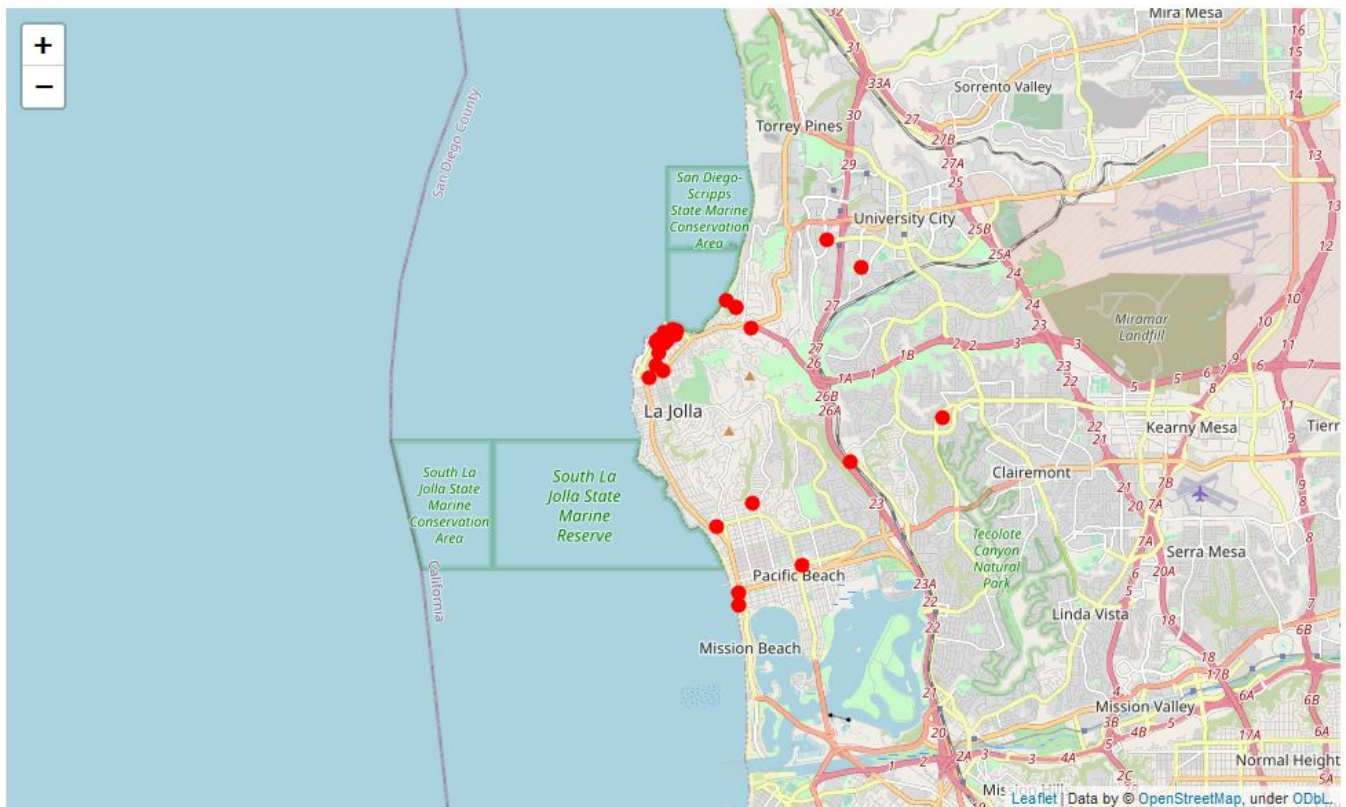
El Cajon, CA



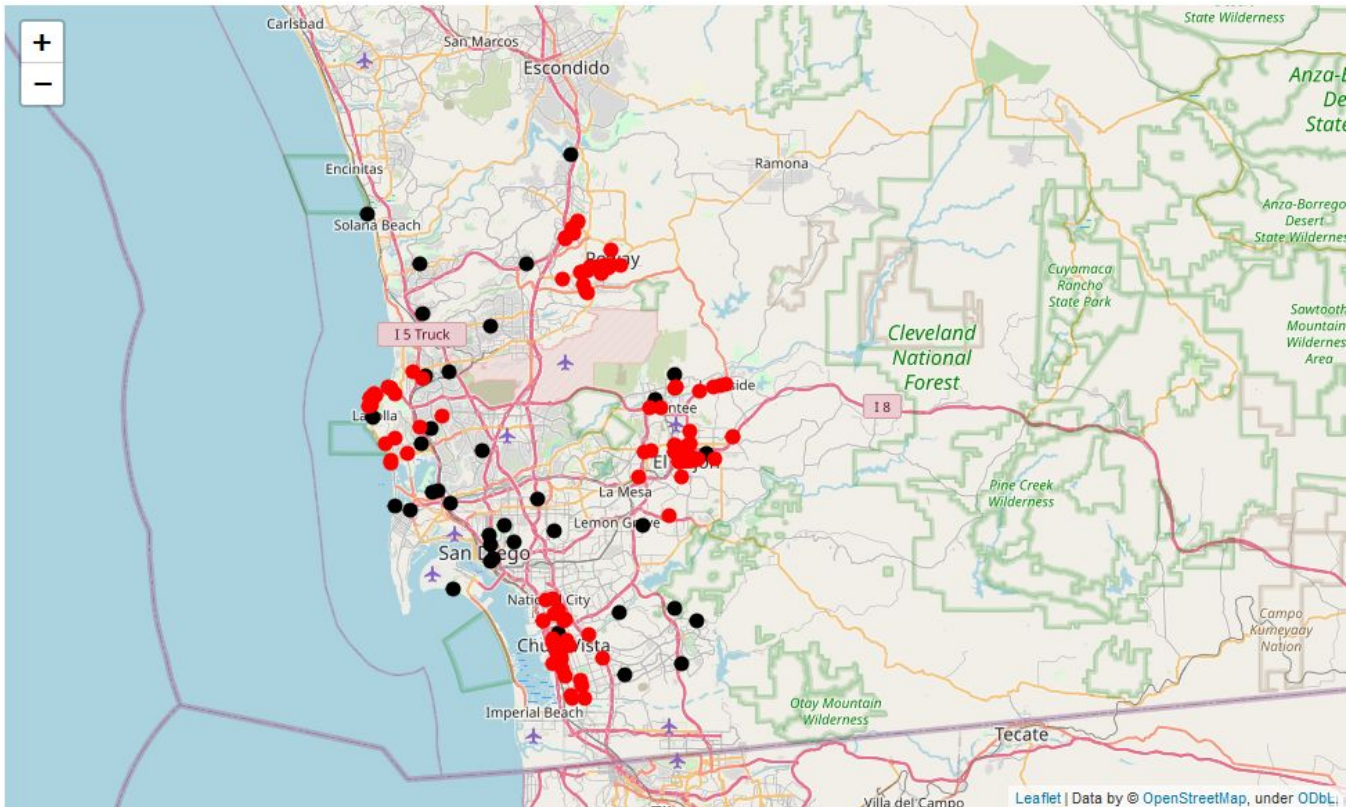
Chula Vista, CA



La Jolla, CA



B.2 Overlay Dog Park Data and Restaurants



C. Results & Conclusion

Any one of these communities are good candidates for a dog park and food truck location. However, La Jolla stands out from the pack. According to the San Diego Union Tribune [4], San Diego County's annual visitors in 2018 was the eighth consecutive year of visitor growth after a sharp dip during the recession. La Jolla stands out as a frontrunner because it is a popular tourist destination, and because families are traveling by car or RV during the COVID-19 pandemic, they are more likely to travel with their dogs. Not many tourists will know to search inland communities for a dog park and food truck location.

D. References

- [1] - [Q2 2020 Yelp Economic Average Report](#)
- [2] - [County of San Diego Order of the Health Officer and Emergency Regulations](#)
- [3] - [State of California Department of Industrial Relations – COVID-19 Industry Guidance: Dine in Restaurants](#)
- [4] - [San Diego saw a record 35.8 million visitors in 2018, and it's spending \\$19M to attract more](#)