

Introduction

I and my coworkers like Thai food. There don't seem to be many Thai restaurants around here. Foursquare will be used for locating current Thai restaurants. It will also show which other types of restaurants (and how many) are in the area.

Data

Initially, I wanted to do this for the whole county. However, the county is a mix of suburbs, a very large rural area, and one very small urban area. The varying sizes of the neighborhoods made comparison difficult (and not very useful). The rural zip code/neighborhood is about 150 square miles, whereas typical suburban neighborhoods are 5 square miles. I would have had to use different radiuses for getting the Foursquare data (and I'm not sure that's possible) or use a very large one to accommodate the rural area that would end up encompassing all neighborhoods in the suburban/urban areas if I used the same size there. This led to better focus of the project.

Fortunately, the City of Port Saint Lucie recently started dividing the city into neighborhoods (<https://www.cityofpsl.com/government/departments/neighborhood-services/nice-program/neighborhoods#:~:text=Neighborhoods%20%20%20Neighborhood%20%20%20community%20wit%20...%20%2026%20more%20rows%20>). So I decided to focus on the city of Port Saint Lucie.

Methodology

The locations of the neighborhoods are shown on the webpage (see "Data" section) and I used Google Earth Pro to find the approximate centers of them (for coordinates). The coordinates were recorded to an Excel spreadsheet. The population of the neighborhoods is also given and I copied that as well. The spreadsheet was exported as a csv. Foursquare was used to get a list of restaurants (and their type) by neighborhood. This data was used to figure out which neighborhoods did not have Thai restaurants. The population data was added to it and it was put into descending order to see the most populous neighborhoods.

Results

There are 29 neighborhoods in Port Saint Lucie. There are only two that have Thai restaurants (Riverview and Saint Lucie West). All of the other ones did not have Thai restaurants.

Discussion

The five most populous neighborhoods without Thai restaurants are Sandhill Crossing (18277), Rosser Reserve (9352), Torino (8891), Northport Village (8762), and Hidden Oaks (8089). These would be ones to consider opening one in.

Conclusion

Based on lack of Thai restaurants and the highest population Sandhill Crossing is the best place to open a new one (or at least seriously consider doing more research into it).