

Orlando Benchmark

May 17, 2019

1 Orlando Business Benchmark

Index

- Introduction
- Crawling Wikipedia with BeautifulSoup
- Geocoder and Folium use of the Location Data
- Segmentation and Clustering using Foursquare API
- Clustering Neighborhoods by Types of Venues
- Segmentation by Venue Category
- Conclusions

2 Introduction

The Orlando area is explored for business opportunities using the Foursquare API. To do that, Wikipedia is scraped for the neighborhood names of the area and Geocoder is used to extract the coordinates of each neighborhood. Then with the coordinates for the neighborhoods the Foursquare API is used to get the most common categories of venues in these neighborhoods and thus bring some conclusions as to whether there are any unmet needs in the area that could be satisfied through an entrepreneurship project.

The Foursquare API is leveraged through its different features in order to explore the area and find new insights and Geocoder is used to find the coordinates of some neighborhoods in Orlando that were scraped from Wikipedia.

3 BeautifulSoup on Wikipedia

Wikipedia contained a list of neighborhoods for Orlando. This list was contained in a table so a loop was used to extract the 'td' elements in the html. Further preparation of the data was done in excel and the clean data was reuploaded through a CSV.

```
In [1]: # import requests
        # import lxml
        # ! pip install BeautifulSoup
        # from bs4 import BeautifulSoup
        #!conda install -c anaconda beautifulsoup4 -y

import numpy as np # library to handle data in a vectorized manner
```

```

import pandas as pd # library for data analysis
import requests
import logging
import time
pd.set_option('display.max_columns', None)
pd.set_option('display.max_rows', None)

import json # library to handle JSON files

!conda install -c conda-forge geopy --yes # uncomment this line if you haven't completed the Foursquare API tutorial
from geopy.geocoders import Nominatim # convert an address into latitude and longitude values

import requests # library to handle requests
from pandas.io.json import json_normalize # tranform JSON file into a pandas dataframe

# Matplotlib and associated plotting modules
import matplotlib.cm as cm
import matplotlib.colors as colors

# import k-means from clustering stage
from sklearn.cluster import KMeans

!conda install -c conda-forge folium=0.5.0 --yes # uncomment this line if you haven't completed the Foursquare API tutorial
import folium # map rendering library

# wikipedia_link='https://en.wikipedia.org/wiki/List_of_neighborhoods_in_Orlando,_Florida'
# raw_wikipedia_page = requests.get(wikipedia_link)
# page= raw_wikipedia_page.text
# soup= BeautifulSoup(page,'lxml')

# orlando_data_saved=""
# for table in soup.find_all('tr'):
#     orlando_data=""
#     for data in soup.find_all('td'):
#         orlando_data=orlando_data+", " + data.text
#     orlando_data_saved=orlando_data_saved + "\n" + orlando_data[1:]
# print(orlando_data_saved)

# import types
# import pandas as pd
# from botocore.client import Config
# import ibm_boto3

# def __iter__(self): return 0
# # @hidden_cell
# # The following code accesses a file in your IBM Cloud Object Storage. It includes your credentials.
# # You might want to remove those credentials before you share your notebook.

```

```
# client_d7ed87afa44d408a9b8e177415c30a0f = ibm_boto3.client(service_name='s3',
#   ibm_api_key_id='2k77yQVNoqPQlLabYpHZXtSX5uF9dCXRHqXkpDwCSI_A',
#   ibm_auth_endpoint="https://iam.bluemix.net/oidc/token",
#   config=Config(signature_version='oauth'),
#   endpoint_url='https://s3.eu-geo.objectstorage.service.networklayer.com')

# body = client_d7ed87afa44d408a9b8e177415c30a0f.get_object(Bucket='machinelearningassignment-don
# # add missing __iter__ method, so pandas accepts body as file-like object
# if not hasattr(body, "__iter__"): body.__iter__ = types.MethodType( __iter__, body )
```

Collecting package metadata: done

Solving environment: /

The environment is inconsistent, please check the package plan carefully

The following packages are causing the inconsistency:

- defaults/linux-64::anaconda==5.3.1=py37_0
- defaults/linux-64::astropy==3.0.4=py37h14c3975_0
- defaults/linux-64::bkcharts==0.2=py37_0
- defaults/linux-64::blaze==0.11.3=py37_0
- defaults/linux-64::bokeh==0.13.0=py37_0
- defaults/linux-64::bottleneck==1.2.1=py37h035aef0_1
- defaults/linux-64::dask==0.19.1=py37_0
- defaults/linux-64::datashape==0.5.4=py37_1
- defaults/linux-64::mkl-service==1.1.2=py37h90e4bf4_5
- defaults/linux-64::numba==0.39.0=py37h04863e7_0
- defaults/linux-64::numexpr==2.6.8=py37hd89afb7_0
- defaults/linux-64::odo==0.5.1=py37_0
- defaults/linux-64::pytables==3.4.4=py37ha205bf6_0
- defaults/linux-64::pytest-arraydiff==0.2=py37h39e3cac_0
- defaults/linux-64::pytest-astropy==0.4.0=py37_0
- defaults/linux-64::pytest-doctestplus==0.1.3=py37_0
- defaults/linux-64::pywavelets==1.0.0=py37hdd07704_0
- defaults/linux-64::scikit-image==0.14.0=py37hf484d3e_1

done

Package Plan

environment location: /home/jupyterlab/conda

added / updated specs:

- geopy

The following packages will be downloaded:

package	build
geographiclib-1.49	py_0 32 KB conda-forge

geopy-1.19.0		py_0	53 KB	conda-forge

Total:			85 KB	

The following NEW packages will be INSTALLED:

geographiclib conda-forge/noarch::geographiclib-1.49-py_0

The following packages will be UPDATED:

geopy conda-forge/linux-64::geopy-1.11.0-py~ --> conda-forge/noarch::geopy-1.19.0-py_0

Downloading and Extracting Packages

```
geopy-1.19.0      | 53 KB    | ##### | 100%
geographiclib-1.49 | 32 KB    | ##### | 100%
```

Preparing transaction: done

Verifying transaction: done

Executing transaction: done

Collecting package metadata: done

Solving environment: /

The environment is inconsistent, please check the package plan carefully

The following packages are causing the inconsistency:

- defaults/linux-64::anaconda==5.3.1=py37_0
- defaults/linux-64::astropy==3.0.4=py37h14c3975_0
- defaults/linux-64::bkcharts==0.2=py37_0
- defaults/linux-64::blaze==0.11.3=py37_0
- defaults/linux-64::bokeh==0.13.0=py37_0
- defaults/linux-64::bottleneck==1.2.1=py37h035aef0_1
- defaults/linux-64::dask==0.19.1=py37_0
- defaults/linux-64::datashape==0.5.4=py37_1
- defaults/linux-64::mkl-service==1.1.2=py37h90e4bf4_5
- defaults/linux-64::numba==0.39.0=py37h04863e7_0
- defaults/linux-64::numexpr==2.6.8=py37hd89afb7_0
- defaults/linux-64::odo==0.5.1=py37_0
- defaults/linux-64::pytables==3.4.4=py37ha205bf6_0
- defaults/linux-64::pytest-arraydiff==0.2=py37h39e3cac_0
- defaults/linux-64::pytest-astropy==0.4.0=py37_0
- defaults/linux-64::pytest-doctestplus==0.1.3=py37_0
- defaults/linux-64::pywavelets==1.0.0=py37hdd07704_0
- defaults/linux-64::scikit-image==0.14.0=py37hf484d3e_1

done

All requested packages already installed.

4 Geocoder and Folium use of the Location Data

```
In [11]: address = 'Orlando, FL'
```

```
geolocator = Nominatim(user_agent="ca_explorer")
location = geolocator.geocode(address)
or_latitude = location.latitude
or_longitude = location.longitude
print('The geograpical coordinate of Orlando are {}, {}'.format(latitude, longitude))
```

The geograpical coordinate of Orlando are 28.756618, -81.3388838221417.

```
In [18]: df_ornelat = pd.read_csv('ornela.csv')
df_ornelat.head()
```

```
Out[18]:
```

	Neighborhood	Latitude	Longitude
0	Beltway Commerce Center	28.476013	-81.232845
1	East Park	28.423651	-81.235694
2	Narcoossee South	28.350192	-81.237217
3	Randal Park	28.439583	-81.237243
4	LaVina	28.427868	-81.249406

With a clean list of the neighborhoods we proceed to start the geocoder and mapping processes of the neighborhoods. We add the string ", Florida" to the neighborhoods in order to improve accuracy of the location.

Then we start using a loop to obtain the coordinates of each neighborhood making sure to use a time.sleep of 0.45 so the geocoder does not kick our calls out.

After having the appropriate latitude and longitude variables we proceed to map the neighborhoods using folium adding a circle marker to each neighborhood point on the map.

```
In [15]: df_ornelat['Neighborhood'] = df_ornelat['Neighborhood'].astype(str) + ', Florida'
list_orne=df_ornelat['Neighborhood'].tolist()
```

```
In [15]: addressess = list_orne
```

```
for address in addressess:
    geolocator = Nominatim(user_agent="FL_explorer")
    location = geolocator.geocode(address)
    latitude = location.latitude
    longitude = location.longitude
    time.sleep(.45)
    #print(address,'{}', {}'.format(latitude, longitude)," ")
```

```
In [12]: map_orlando = folium.Map(location=[or_latitude, or_longitude], zoom_start=10)
```

```
# add markers to map
for lat, lng, neighborhood in zip(df_ornelat['Latitude'], df_ornelat['Longitude'], df_ornelat['Neighborhood']):
    label = '{}'.format(neighborhood)
```

```

label = folium.Popup(label, parse_html=True)
folium.CircleMarker(
    [lat, lng],
    radius=5,
    popup=label,
    color='blue',
    fill=True,
    fill_color='#3186cc',
    fill_opacity=0.7,
    parse_html=False).add_to(map_orlando)

```

map_orlando

Out[12]: <folium.folium.Map at 0x7f1482576278>

5 Segmenting/Clustering using Foursquare

```

In [22]: CLIENT_ID = '4ENNW1RCDJAPTDQBAWYUBHHRENNPKUCTFYAL2WJTWHWGUGKW' # your CLIENT_ID
CLIENT_SECRET = 'QO1KGCPGFCOZPSVFRGXBUX5X3WEZZKTH015JQF3KWDPOEZDL' # your CLIENT_SECRET
VERSION = '20180605' # Foursquare API version

print('Your credentials:')
print('CLIENT_ID: ' + CLIENT_ID)
print('CLIENT_SECRET: ' + CLIENT_SECRET)

```

Your credentials:

```

CLIENT_ID: 4ENNW1RCDJAPTDQBAWYUBHHRENNPKUCTFYAL2WJTWHWGUGKW
CLIENT_SECRET: QO1KGCPGFCOZPSVFRGXBUX5X3WEZZKTH015JQF3KWDPOEZDL

```

We start by using a Foursquare API calls function. In this function we are interested in finding the categories of each venue so we can generalize what types of venues there are in the area and process a lot more information by grouping all the venues according to their category.

The Foursquare API uses the latitude and longitude variables that we geocoded earlier, as well as limit which assigns the maximum amount of requests, and the radius of each call according to coordinates which is in meters.

Then we use a `get_category_type` function to extract the venue categories from the json that was sent by the Foursquare API.

We manipulate the json file further and get each venues name, its category and the its corresponding neighborhood.

```

In [19]: LIMIT = 500
radius = 1000
url = 'https://api.foursquare.com/v2/venues/explore?&client_id={}&client_secret={}&v={}&ll={},{}&
CLIENT_ID,
CLIENT_SECRET,
VERSION,
latitude,

```

```

longitude,
radius,
LIMIT)
results = requests.get(url).json()

def get_category_type(row):
    try:
        categories_list = row['categories']
    except:
        categories_list = row['venue.categories']

    if len(categories_list) == 0:
        return None
    else:
        return categories_list[0]['name']
venues = results['response']['groups'][0]['items']

nearby_venues = json_normalize(venues) # flatten JSON

# filter columns
filtered_columns = ['venue.name', 'venue.categories', 'venue.location.lat', 'venue.location.lng']
nearby_venues = nearby_venues.loc[:, filtered_columns]

# filter the category for each row
nearby_venues['venue.categories'] = nearby_venues.apply(get_category_type, axis=1)

# clean columns
nearby_venues.columns = [col.split(".")[1] for col in nearby_venues.columns]

def getNearbyVenues(names, latitudes, longitudes, radius=1000):

    venues_list=[]
    for name, lat, lng in zip(names, latitudes, longitudes):
        print(name)

        # create the API request URL
        url = 'https://api.foursquare.com/v2/venues/explore?&client_id={}&client_secret={}&v={}&ll={}
            CLIENT_ID,
            CLIENT_SECRET,
            VERSION,
            lat,
            lng,
            radius,
            LIMIT)

        # make the GET request
        results = requests.get(url).json()["response"]["groups"][0]["items"]

```

```

# return only relevant information for each nearby venue
venues_list.append([(
    name,
    lat,
    lng,
    v['venue']['name'],
    v['venue']['location']['lat'],
    v['venue']['location']['lng'],
    v['venue']['categories'][0]['name']) for v in results])

nearby_venues = pd.DataFrame([item for venue_list in venues_list for item in venue_list])
nearby_venues.columns = ['Neighborhood',
    'Neighborhood Latitude',
    'Neighborhood Longitude',
    'Venue',
    'Venue Latitude',
    'Venue Longitude',
    'Venue Category']

return(nearby_venues)
orne_venues = getNearbyVenues(names=df_ornelat['Neighborhood'],
    latitudes=df_ornelat['Latitude'],
    longitudes=df_ornelat['Longitude']
    )

```

Beltway Commerce Center
 East Park
 Narcoossee South
 Randal Park
 LaVina
 Bal Bay
 Bel Air
 Vista East
 Lake Nona Estates
 Lake Nona South
 NorthLake Park at Lake Nona
 City of Orlando/GOAA
 Lake Nona Central
 Ventura
 Airport North
 Engelwood Park
 Azalea Park
 Countryside
 Orlando International Airport
 Lake Fredrica
 South Semoran
 Dixie Belle
 Boggy Creek

Dover Manor
Bryn Mawr
The Dovers
Mariners Village
Dover Estates
Baldwin Park
Dover Shores East
Conway
Orlando Executive Airport
Crescent Park
Wedgewood Groves
Dover Shores West
Lake Underhill
Colonial Town Center
Audubon Park
East Central Park
Coytown
Colonialtown North
Colonialtown South
Rowena Gardens
Lawsona/Fern Creek
Rose Isle
Lake Weldona
Lake Davis/Greenwood
Lancaster Park
Thornton Park
Pineloch
Orwin Manor
Southern Oaks
Lake Formosa
Wadeview Park
Park Lake/Highland
Delaney Park
Lake Cherokee
Lake Copeland
South Orange
Lake Holden
South Division
Lake Dot
Holden Heights
Holden/Parramore
Palomar
Lorna Doone
Rock Lake
Rio Grande Park
Lake Sunset
Lake Shore Village
Lake Fairview

West Colonial
Clear Lake
Park Central
Haralson Estates
Catalina
Lake Mann Estates
Washington Shores
Princeton/Silver Star
Johnson Village
Lake Mann Gardens
Roosevelt Park
Mercy Drive
Rosemont
Millenia
Seaboard Industrial
Camellia Gardens
33rd Street Industrial
Richmond Estates
Malibu Groves
Lake Richmond
New Malibu
The Willows
Signal Hill
Rosemont North
Williamsburg
Florida Center North
Timberleaf
Carver Shores
Kirkman North
Florida Center
Windhover
Kirkman South
MetroWest
Westfield
Windermere
Winter Park
Gotha
Kissimmee
Lake Buena Vista
Hunters Creek
Celebration
Lake Mary

```
In [23]: print(orne_venues.shape)
         orne_count=orne_venues.groupby('Neighborhood').count()
         orne_count.head()

(3203, 7)
```

```
Out[23]:
```

Neighborhood	Latitude	Neighborhood	Longitude	Venue	\
Audubon Park	56		56	56	
Azalea Park	10		10	10	
Bal Bay	8		8	8	
Baldwin Park	25		25	25	
Bel Air	6		6	6	

Neighborhood	Venue Latitude	Venue Longitude	Venue Category
Audubon Park	56	56	56
Azalea Park	10	10	10
Bal Bay	8	8	8
Baldwin Park	25	25	25
Bel Air	6	6	6

By using a radius of 1000 meters to look on the Foursquare API we are able to extract around 3000 venues which gives a more robust dataset, and with that quantity of information the analysis becomes more interesting.

```
In [24]: print('There are {} uniques categories.'.format(len(orne_venues['Venue Category'].unique())))
```

There are 297 uniques categories.

In order to segment or cluster the data we convert the categorical values into numerical values. We achieve this by applying one hot encoding to the Venue Category column, thus creating a dataframe that measures how often there is a specific category of venue in each neighborhood.

However, we need to process the data further in order to see some concrete conclusions.

```
In [25]: # one hot encoding
orne_onehot = pd.get_dummies(orne_venues[['Venue Category']], prefix="", prefix_sep="")

# add neighborhood column back to dataframe
orne_onehot['Neighborhood'] = orne_venues['Neighborhood']
# move neighborhood column to the first column
fixed_columns = [orne_onehot.columns[-1]] + list(orne_onehot.columns[:-1])
orne_onehot = orne_onehot[fixed_columns]
orne_onehot = orne_onehot.set_index('Neighborhood').reset_index()

orne_grouped = orne_onehot.groupby('Neighborhood').mean().reset_index()
orne_grouped.head()
```

```
Out[25]:
```

	Neighborhood	Yoga Studio	Accessories Store	Airport	\
0	Audubon Park	0.017857	0.035714	0.0	
1	Azalea Park	0.000000	0.000000	0.0	
2	Bal Bay	0.125000	0.000000	0.0	

3	Baldwin Park	0.000000	0.000000	0.0
4	Bel Air	0.000000	0.000000	0.0

	American Restaurant	Antique Shop	Arcade	Arepa Restaurant	Art Gallery \
0	0.017857	0.0	0.0	0.0	0.000
1	0.000000	0.0	0.0	0.1	0.000
2	0.125000	0.0	0.0	0.0	0.125
3	0.000000	0.0	0.0	0.0	0.000
4	0.000000	0.0	0.0	0.0	0.000

	Art Museum	Arts & Crafts Store	Arts & Entertainment	Asian Restaurant \
0	0.0	0.017857	0.0	0.00
1	0.0	0.000000	0.0	0.00
2	0.0	0.000000	0.0	0.00
3	0.0	0.000000	0.0	0.04
4	0.0	0.000000	0.0	0.00

	Athletics & Sports	Auto Garage	Auto Workshop	Automotive Shop	BBQ Joint \
0	0.0	0.0	0.0	0.0	0.0
1	0.0	0.0	0.0	0.1	0.0
2	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0

	Baby Store	Bagel Shop	Bakery	Bank	Bar	Baseball Field \
0	0.0	0.0	0.053571	0.0	0.017857	0.017857
1	0.0	0.0	0.000000	0.0	0.000000	0.100000
2	0.0	0.0	0.000000	0.0	0.000000	0.000000
3	0.0	0.0	0.000000	0.0	0.000000	0.000000
4	0.0	0.0	0.000000	0.0	0.000000	0.333333

	Baseball Stadium	Basketball Court	Basketball Stadium	Bed & Breakfast \
0	0.000000	0.0	0.0	0.0
1	0.000000	0.0	0.0	0.0
2	0.000000	0.0	0.0	0.0
3	0.000000	0.0	0.0	0.0
4	0.166667	0.0	0.0	0.0

	Beer Bar	Beer Garden	Beer Store	Big Box Store	Bike Rental / Bike Share \
0	0.017857	0.0	0.0	0.0	0.0
1	0.000000	0.0	0.0	0.0	0.0
2	0.000000	0.0	0.0	0.0	0.0
3	0.000000	0.0	0.0	0.0	0.0
4	0.000000	0.0	0.0	0.0	0.0

	Bike Shop	Bike Trail	Bistro	Board Shop	Boat Rental	Boat or Ferry \
0	0.0	0.017857	0.0	0.0	0.0	0.0
1	0.0	0.000000	0.0	0.0	0.0	0.0

2	0.0	0.000000	0.0	0.0	0.0	0.0
3	0.0	0.000000	0.0	0.0	0.0	0.0
4	0.0	0.000000	0.0	0.0	0.0	0.0

	Bookstore	Botanical Garden	Boutique	Bowling Alley	Brazilian Restaurant	\
0	0.0	0.0	0.0	0.017857	0.0	
1	0.0	0.0	0.0	0.000000	0.0	
2	0.0	0.0	0.0	0.000000	0.0	
3	0.0	0.0	0.0	0.000000	0.0	
4	0.0	0.0	0.0	0.000000	0.0	

	Breakfast Spot	Brewery	Bubble Tea Shop	Buffet	Building	Burger Joint	\
0	0.000000	0.00	0.0	0.0	0.0	0.00	
1	0.000000	0.00	0.0	0.0	0.0	0.00	
2	0.000000	0.00	0.0	0.0	0.0	0.00	
3	0.000000	0.04	0.0	0.0	0.0	0.04	
4	0.166667	0.00	0.0	0.0	0.0	0.00	

	Burrito Place	Bus Station	Bus Stop	Business Service	Butcher	Cafeteria	\
0	0.0	0.0	0.0	0.0	0.0	0.0	
1	0.0	0.0	0.0	0.0	0.0	0.0	
2	0.0	0.0	0.0	0.0	0.0	0.0	
3	0.0	0.0	0.0	0.0	0.0	0.0	
4	0.0	0.0	0.0	0.0	0.0	0.0	

	Café	Cajun / Creole Restaurant	Camera Store	Campground	Candy Store	\
0	0.017857	0.0	0.0	0.0	0.00	
1	0.000000	0.0	0.0	0.0	0.00	
2	0.000000	0.0	0.0	0.0	0.00	
3	0.000000	0.0	0.0	0.0	0.04	
4	0.000000	0.0	0.0	0.0	0.00	

	Caribbean Restaurant	Carpet Store	Cemetery	Check Cashing Service	\
0	0.0	0.0	0.0	0.0	
1	0.0	0.0	0.0	0.0	
2	0.0	0.0	0.0	0.0	
3	0.0	0.0	0.0	0.0	
4	0.0	0.0	0.0	0.0	

	Chinese Restaurant	Chiropractor	Chocolate Shop	Church	Clothing Store	\
0	0.0	0.0	0.0	0.0	0.035714	
1	0.0	0.0	0.0	0.0	0.000000	
2	0.0	0.0	0.0	0.0	0.000000	
3	0.0	0.0	0.0	0.0	0.000000	
4	0.0	0.0	0.0	0.0	0.000000	

	Cocktail Bar	Coffee Shop	College Gym	Comic Shop	Concert Hall	\
0	0.0	0.035714	0.0	0.017857	0.0	

1	0.0	0.000000	0.0	0.000000	0.0
2	0.0	0.000000	0.0	0.000000	0.0
3	0.0	0.000000	0.0	0.000000	0.0
4	0.0	0.000000	0.0	0.000000	0.0

	Construction & Landscaping	Convenience Store	Cosmetics Shop	Creperie	\
0	0.0	0.017857	0.000	0.0	
1	0.1	0.100000	0.000	0.0	
2	0.0	0.000000	0.125	0.0	
3	0.0	0.000000	0.000	0.0	
4	0.0	0.000000	0.000	0.0	

	Cuban Restaurant	Cupcake Shop	Dance Studio	Deli / Bodega	\
0	0.0	0.017857	0.0	0.0	
1	0.2	0.000000	0.0	0.0	
2	0.0	0.000000	0.0	0.0	
3	0.0	0.000000	0.0	0.0	
4	0.0	0.000000	0.0	0.0	

	Department Store	Design Studio	Dessert Shop	Dim Sum Restaurant	\
0	0.035714	0.0	0.0	0.0	
1	0.000000	0.0	0.0	0.0	
2	0.000000	0.0	0.0	0.0	
3	0.000000	0.0	0.0	0.0	
4	0.000000	0.0	0.0	0.0	

	Diner	Discount Store	Dive Bar	Dive Shop	Doctor's Office	Dog Run	\
0	0.017857	0.000000	0.0	0.0	0.0	0.000	
1	0.000000	0.000000	0.0	0.0	0.0	0.000	
2	0.000000	0.000000	0.0	0.0	0.0	0.125	
3	0.000000	0.000000	0.0	0.0	0.0	0.040	
4	0.000000	0.166667	0.0	0.0	0.0	0.000	

	Donut Shop	Drugstore	Dry Cleaner	Electronics Store	\
0	0.0	0.0	0.0	0.0	
1	0.0	0.0	0.0	0.0	
2	0.0	0.0	0.0	0.0	
3	0.0	0.0	0.0	0.0	
4	0.0	0.0	0.0	0.0	

	Ethiopian Restaurant	Event Space	Fabric Shop	Farmers Market	\
0	0.0	0.0	0.0	0.017857	
1	0.0	0.0	0.0	0.000000	
2	0.0	0.0	0.0	0.000000	
3	0.0	0.0	0.0	0.000000	
4	0.0	0.0	0.0	0.000000	

	Fast Food Restaurant	Financial or Legal Service	Fish & Chips Shop	\
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0	0.0	0.0	0.0
1	0.0	0.0	0.0
2	0.0	0.0	0.0
3	0.0	0.0	0.0
4	0.0	0.0	0.0

	Fish Market	Fishing Spot	Flower Shop	Food	Food & Drink Shop \
0	0.0	0.0	0.017857	0.017857	0.017857
1	0.0	0.0	0.000000	0.000000	0.000000
2	0.0	0.0	0.000000	0.000000	0.000000
3	0.0	0.0	0.000000	0.000000	0.000000
4	0.0	0.0	0.000000	0.000000	0.000000

	Food Court	Food Truck	Football Stadium	Fountain	French Restaurant \
0	0.0	0.0	0.0	0.0	0.00
1	0.0	0.0	0.0	0.0	0.00
2	0.0	0.0	0.0	0.0	0.00
3	0.0	0.0	0.0	0.0	0.04
4	0.0	0.0	0.0	0.0	0.00

	Fried Chicken Joint	Frozen Yogurt Shop	Fruit & Vegetable Store \
0	0.0	0.0	0.0
1	0.0	0.0	0.0
2	0.0	0.0	0.0
3	0.0	0.0	0.0
4	0.0	0.0	0.0

	Furniture / Home Store	Garden	Garden Center	Gas Station	Gastropub \
0	0.0	0.0	0.0	0.035714	0.0
1	0.0	0.0	0.0	0.000000	0.0
2	0.0	0.0	0.0	0.000000	0.0
3	0.0	0.0	0.0	0.000000	0.0
4	0.0	0.0	0.0	0.000000	0.0

	Gay Bar	General Entertainment	German Restaurant	Gift Shop	Golf Course \
0	0.0	0.0	0.0	0.0	0.0
1	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0

	Greek Restaurant	Grocery Store	Gym	Gym / Fitness Center	Gymnastics Gym \
0	0.0	0.00	0.0	0.0	0.00
1	0.0	0.00	0.0	0.0	0.00
2	0.0	0.00	0.0	0.0	0.00
3	0.0	0.04	0.0	0.0	0.04
4	0.0	0.00	0.0	0.0	0.00

	Harbor / Marina	Hardware Store	Hawaiian Restaurant \
0	0.0	0.0	0.0
1	0.0	0.0	0.0
2	0.0	0.0	0.0
3	0.0	0.0	0.0
4	0.0	0.0	0.0

	Health & Beauty Service	Herbs & Spices Store	Historic Site \
0	0.0	0.0	0.0
1	0.0	0.0	0.0
2	0.0	0.0	0.0
3	0.0	0.0	0.0
4	0.0	0.0	0.0

	History Museum	Hobby Shop	Home Service	Hookah Bar	Hot Dog Joint	Hotel \
0	0.0	0.017857	0.0	0.0	0.0	0.0
1	0.0	0.000000	0.0	0.0	0.0	0.0
2	0.0	0.000000	0.0	0.0	0.0	0.0
3	0.0	0.000000	0.0	0.0	0.0	0.0
4	0.0	0.000000	0.0	0.0	0.0	0.0

	Hotel Bar	Hotel Pool	Hotpot Restaurant	Housing Development \
0	0.0	0.0	0.0	0.0
1	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0

	Ice Cream Shop	Indian Restaurant	Indie Theater	Insurance Office \
0	0.017857	0.0	0.0	0.0
1	0.000000	0.0	0.0	0.0
2	0.000000	0.0	0.0	0.0
3	0.000000	0.0	0.0	0.0
4	0.000000	0.0	0.0	0.0

	Intersection	Irish Pub	Italian Restaurant	Japanese Restaurant \
0	0.0	0.0	0.00	0.017857
1	0.0	0.0	0.00	0.000000
2	0.0	0.0	0.00	0.000000
3	0.0	0.0	0.04	0.000000
4	0.0	0.0	0.00	0.000000

	Jewelry Store	Juice Bar	Karaoke Bar	Kids Store	Kitchen Supply Store \
0	0.017857	0.017857	0.035714	0.0	0.0
1	0.000000	0.000000	0.000000	0.0	0.0
2	0.000000	0.000000	0.000000	0.0	0.0
3	0.000000	0.000000	0.000000	0.0	0.0
4	0.000000	0.000000	0.000000	0.0	0.0

	Korean Restaurant	Lake	Latin American Restaurant	Lawyer	\
0	0.0	0.0		0.0	0.0
1	0.0	0.0		0.1	0.0
2	0.0	0.0		0.0	0.0
3	0.0	0.0		0.0	0.0
4	0.0	0.0		0.0	0.0

	Leather Goods Store	Light Rail Station	Lighting Store	Lingerie Store	\
0	0.0	0.00	0.0	0.017857	
1	0.0	0.00	0.0	0.000000	
2	0.0	0.00	0.0	0.000000	
3	0.0	0.04	0.0	0.000000	
4	0.0	0.00	0.0	0.000000	

	Liquor Store	Lounge	Luggage Store	Market	Martial Arts Dojo	\
0	0.0	0.0	0.0	0.017857	0.0	
1	0.0	0.0	0.0	0.000000	0.0	
2	0.0	0.0	0.0	0.000000	0.0	
3	0.0	0.0	0.0	0.000000	0.0	
4	0.0	0.0	0.0	0.000000	0.0	

	Massage Studio	Mattress Store	Mediterranean Restaurant	Men's Store	\
0	0.00	0.0		0.0	
1	0.00	0.0		0.0	
2	0.00	0.0		0.0	
3	0.04	0.0		0.0	
4	0.00	0.0		0.0	

	Mexican Restaurant	Middle Eastern Restaurant	Mini Golf	\
0	0.00		0.0	0.0
1	0.00		0.0	0.0
2	0.00		0.0	0.0
3	0.04		0.0	0.0
4	0.00		0.0	0.0

	Miscellaneous Shop	Mobile Phone Shop	Motel	Motorcycle Shop	\
0	0.0	0.017857	0.0	0.0	
1	0.0	0.000000	0.0	0.0	
2	0.0	0.000000	0.0	0.0	
3	0.0	0.000000	0.0	0.0	
4	0.0	0.000000	0.0	0.0	

	Movie Theater	Museum	Music Store	Music Venue	Nail Salon	\
0	0.017857	0.0	0.0	0.0	0.0	
1	0.000000	0.0	0.0	0.0	0.0	
2	0.000000	0.0	0.0	0.0	0.0	
3	0.000000	0.0	0.0	0.0	0.0	

4	0.000000	0.0	0.0	0.0	0.0
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	New American Restaurant	Nightclub	Noodle House	Office	Optical Shop \
0	0.0	0.0	0.0	0.000	0.0
1	0.0	0.0	0.0	0.100	0.0
2	0.0	0.0	0.0	0.125	0.0
3	0.0	0.0	0.0	0.000	0.0
4	0.0	0.0	0.0	0.000	0.0

	Other Repair Shop	Outdoor Supply Store	Outlet Mall	Outlet Store \
0	0.0	0.0	0.0	0.0
1	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0

	Paintball Field	Paper / Office Supplies Store	Park	Pawn Shop \
0	0.0	0.0	0.035714	0.0
1	0.0	0.0	0.000000	0.0
2	0.0	0.0	0.000000	0.0
3	0.0	0.0	0.120000	0.0
4	0.0	0.0	0.166667	0.0

	Performing Arts Venue	Pet Service	Pet Store	Pharmacy \
0	0.0	0.0	0.0	0.00
1	0.0	0.0	0.0	0.00
2	0.0	0.0	0.0	0.00
3	0.0	0.0	0.0	0.04
4	0.0	0.0	0.0	0.00

	Photography Studio	Pizza Place	Platform	Playground	Plaza	Pool \
0	0.0	0.017857	0.0	0.0	0.0	0.000
1	0.0	0.000000	0.0	0.0	0.0	0.000
2	0.0	0.000000	0.0	0.0	0.0	0.125
3	0.0	0.000000	0.0	0.0	0.0	0.040
4	0.0	0.000000	0.0	0.0	0.0	0.000

	Print Shop	Professional & Other Places	Pub	Public Art	Ramen Restaurant \
0	0.0	0.0	0.0	0.017857	
1	0.0	0.0	0.0	0.000000	
2	0.0	0.0	0.0	0.000000	
3	0.0	0.0	0.0	0.000000	
4	0.0	0.0	0.0	0.000000	

	Real Estate Office	Record Shop	Recreation Center	Rental Car Location \
0	0.0	0.017857	0.0	0.0
1	0.0	0.000000	0.0	0.0
2	0.0	0.000000	0.0	0.0

3	0.0	0.000000	0.0	0.0
4	0.0	0.000000	0.0	0.0

	Rental Service	Residential Building (Apartment / Condo)	Resort	\
0	0.0		0.0	0.0
1	0.0		0.0	0.0
2	0.0		0.0	0.0
3	0.0		0.0	0.0
4	0.0		0.0	0.0

	Restaurant	Rock Club	Salad Place	Salon / Barbershop	Sandwich Place	\
0	0.00	0.0	0.0	0.017857	0.017857	
1	0.00	0.0	0.0	0.000000	0.000000	
2	0.00	0.0	0.0	0.000000	0.000000	
3	0.04	0.0	0.0	0.000000	0.040000	
4	0.00	0.0	0.0	0.000000	0.000000	

	Scandinavian Restaurant	Scenic Lookout	Science Museum	Sculpture Garden	\
0	0.0	0.0	0.0	0.0	
1	0.0	0.0	0.0	0.0	
2	0.0	0.0	0.0	0.0	
3	0.0	0.0	0.0	0.0	
4	0.0	0.0	0.0	0.0	

	Seafood Restaurant	Shipping Store	Shoe Store	Shop & Service	\
0	0.0	0.017857	0.017857	0.0	
1	0.0	0.000000	0.000000	0.0	
2	0.0	0.000000	0.000000	0.0	
3	0.0	0.000000	0.000000	0.0	
4	0.0	0.000000	0.000000	0.0	

	Shopping Mall	Shopping Plaza	Skate Park	Ski Area	Smoke Shop	\
0	0.0	0.0	0.0	0.0	0.0	
1	0.0	0.0	0.0	0.0	0.0	
2	0.0	0.0	0.0	0.0	0.0	
3	0.0	0.0	0.0	0.0	0.0	
4	0.0	0.0	0.0	0.0	0.0	

	Smoothie Shop	Snack Place	Soccer Field	Soccer Stadium	\
0	0.00	0.017857	0.0	0.0	
1	0.00	0.000000	0.0	0.0	
2	0.00	0.000000	0.0	0.0	
3	0.04	0.000000	0.0	0.0	
4	0.00	0.000000	0.0	0.0	

	South American Restaurant	Southern / Soul Food Restaurant	Souvenir Shop	\
0	0.0	0.0	0.0	
1	0.1	0.0	0.0	

2	0.0	0.0	0.0
3	0.0	0.0	0.0
4	0.0	0.0	0.0

	Spa	Spanish Restaurant	Speakeasy	Sporting Goods Shop	Sports Bar \
0	0.017857	0.0	0.0	0.0	0.0
1	0.000000	0.0	0.0	0.0	0.0
2	0.000000	0.0	0.0	0.0	0.0
3	0.040000	0.0	0.0	0.0	0.0
4	0.000000	0.0	0.0	0.0	0.0

	Stadium	Stationery Store	Steakhouse	Storage Facility \
0	0.0	0.0	0.017857	0.0
1	0.0	0.0	0.000000	0.0
2	0.0	0.0	0.125000	0.0
3	0.0	0.0	0.040000	0.0
4	0.0	0.0	0.000000	0.0

	Street Food Gathering	Supermarket	Supplement Shop	Sushi Restaurant \
0	0.0	0.0	0.0	0.035714
1	0.0	0.0	0.0	0.000000
2	0.0	0.0	0.0	0.000000
3	0.0	0.0	0.0	0.040000
4	0.0	0.0	0.0	0.000000

	Szechuan Restaurant	Taco Place	Tanning Salon	Tapas Restaurant \
0	0.0	0.0	0.0	0.0
1	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0

	Tattoo Parlor	Tennis Court	Tex-Mex Restaurant	Thai Restaurant	Theater \
0	0.0	0.0	0.0	0.0	0.0
1	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0

	Theme Park Ride / Attraction	Theme Restaurant	Thrift / Vintage Store \
0	0.0	0.0	0.017857
1	0.0	0.0	0.000000
2	0.0	0.0	0.000000
3	0.0	0.0	0.000000
4	0.0	0.0	0.000000

	Tiki Bar	Toll Booth	Toll Plaza	Tourist Information Center \
0	0.0	0.0	0.0	0.0

1	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0

	Toy / Game Store	Track	Trail	Train Station	Vape Store \
0	0.0	0.0	0.0	0.0	0.0
1	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0

	Vegetarian / Vegan Restaurant	Video Game Store	Video Store \
0	0.0	0.0	0.0
1	0.0	0.0	0.0
2	0.0	0.0	0.0
3	0.0	0.0	0.0
4	0.0	0.0	0.0

	Vietnamese Restaurant	Vineyard	Warehouse Store	Water Park	Waterfront \
0	0.0	0.0	0.0	0.0	0.0
1	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0

	Weight Loss Center	Wine Bar	Wine Shop	Wings Joint	Women's Store
0	0.0	0.00	0.0	0.00	0.0
1	0.0	0.00	0.0	0.00	0.0
2	0.0	0.00	0.0	0.00	0.0
3	0.0	0.04	0.0	0.04	0.0
4	0.0	0.00	0.0	0.00	0.0

Through this loop we can visualize the top 5 venue categories in each neighborhood. It gives us a first glance into the data organized in a way that allows for some initial conclusions about the dataset.

If we look at the top 5 venue categories for the neighborhood Lake Buena Vista, we can confirm that it's top venues are clothing stores, resorts, gift shops, restaurants and theme parks. This is aligned with the reality of the neighborhood because it is the neighborhood adjacent to the Disney Theme Parks.

Thus we can assume that there is good credibility to the data we have and we can trust the processes we performed so far.

In [26]: num_top_venues = 5

```
for hoods in orne_grouped['Neighborhood']:
    print("----"+hoods+"----")
    temp = orne_grouped[orne_grouped['Neighborhood'] == hoods].T.reset_index()
```

```

temp.columns = ['venue','freq']
temp = temp.iloc[1:]
temp['freq'] = temp['freq'].astype(float)
temp = temp.round({'freq': 2})
print(temp.sort_values('freq', ascending=False).reset_index(drop=True).head(num_top_venues))
print('\n')

```

---- Audubon Park----

	venue	freq
0	Bakery	0.05
1	Park	0.04
2	Karaoke Bar	0.04
3	Sushi Restaurant	0.04
4	Coffee Shop	0.04

---- Azalea Park----

	venue	freq
0	Cuban Restaurant	0.2
1	Convenience Store	0.1
2	Arepa Restaurant	0.1
3	South American Restaurant	0.1
4	Automotive Shop	0.1

---- Bal Bay----

	venue	freq
0	Yoga Studio	0.12
1	Art Gallery	0.12
2	Pool	0.12
3	Dog Run	0.12
4	Office	0.12

---- Baldwin Park----

	venue	freq
0	Park	0.12
1	Restaurant	0.04
2	Dog Run	0.04
3	Brewery	0.04
4	Burger Joint	0.04

---- Bel Air----

	venue	freq
0	Baseball Field	0.33
1	Discount Store	0.17
2	Baseball Stadium	0.17

3 Breakfast Spot 0.17
 4 Park 0.17

---- Boggy Creek----

venue freq
 0 Convenience Store 0.33
 1 Construction & Landscaping 0.17
 2 Discount Store 0.17
 3 Park 0.17
 4 Pharmacy 0.17

---- Bryn Mawr----

venue freq
 0 Food Truck 0.07
 1 Professional & Other Places 0.07
 2 Gym / Fitness Center 0.07
 3 Gift Shop 0.07
 4 Chinese Restaurant 0.07

---- Camellia Gardens----

venue freq
 0 Convenience Store 0.13
 1 Hotel 0.09
 2 Gym / Fitness Center 0.09
 3 Gym 0.09
 4 Automotive Shop 0.04

---- Carver Shores----

venue freq
 0 Park 0.50
 1 Mobile Phone Shop 0.25
 2 Pizza Place 0.25
 3 Yoga Studio 0.00
 4 Outdoor Supply Store 0.00

---- Catalina----

venue freq
 0 Breakfast Spot 0.09
 1 Lake 0.09
 2 Fast Food Restaurant 0.09
 3 Grocery Store 0.09
 4 Café 0.09

---- Clear Lake----

	venue	freq
0	Park	0.20
1	Convenience Store	0.13
2	Home Service	0.07
3	Restaurant	0.07
4	Shopping Mall	0.07

---- Colonial Town Center----

	venue	freq
0	Park	0.05
1	Italian Restaurant	0.04
2	Mobile Phone Shop	0.04
3	Bakery	0.04
4	Gym	0.04

---- Colonialtown North----

	venue	freq
0	Vietnamese Restaurant	0.06
1	Asian Restaurant	0.06
2	Grocery Store	0.05
3	Taco Place	0.03
4	Convenience Store	0.02

---- Colonialtown South----

	venue	freq
0	Vietnamese Restaurant	0.11
1	Sandwich Place	0.05
2	Asian Restaurant	0.05
3	Café	0.04
4	Grocery Store	0.04

---- Conway----

	venue	freq
0	Convenience Store	0.2
1	Fruit & Vegetable Store	0.2
2	Deli / Bodega	0.2
3	Arts & Crafts Store	0.2
4	Mexican Restaurant	0.2

---- Countryside----

	venue	freq
--	-------	------

0	Fast Food Restaurant	0.20
1	Discount Store	0.13
2	Rental Car Location	0.07
3	Video Store	0.07
4	Gas Station	0.07

---- Coytown----

	venue	freq
0	Deli / Bodega	0.04
1	Asian Restaurant	0.04
2	Bakery	0.04
3	Cosmetics Shop	0.04
4	Gym	0.04

---- Crescent Park----

	venue	freq
0	Park	0.29
1	Lake	0.14
2	Intersection	0.14
3	Restaurant	0.14
4	New American Restaurant	0.14

---- Delaney Park----

	venue	freq
0	Sandwich Place	0.19
1	Intersection	0.12
2	Park	0.12
3	Convenience Store	0.06
4	Smoothie Shop	0.06

---- Dixie Belle----

	venue	freq
0	Gas Station	0.09
1	Latin American Restaurant	0.06
2	Spanish Restaurant	0.06
3	Pawn Shop	0.06
4	Fast Food Restaurant	0.06

---- Dover Estates----

	venue	freq
0	Pizza Place	0.08
1	Cosmetics Shop	0.08
2	Chinese Restaurant	0.06

3	Pharmacy	0.06
4	Sandwich Place	0.06

---- Dover Manor----

	venue	freq
0	Pizza Place	0.14
1	Fishing Spot	0.07
2	Plaza	0.07
3	Gym	0.07
4	Grocery Store	0.07

---- Dover Shores East----

	venue	freq
0	Park	0.25
1	Gas Station	0.08
2	Toll Booth	0.08
3	Pet Store	0.08
4	Pharmacy	0.08

---- Dover Shores West----

	venue	freq
0	Pharmacy	0.07
1	Cosmetics Shop	0.06
2	Pizza Place	0.06
3	Mexican Restaurant	0.06
4	Video Store	0.06

---- East Central Park----

	venue	freq
0	Clothing Store	0.05
1	Vietnamese Restaurant	0.05
2	Park	0.05
3	Sandwich Place	0.03
4	Cosmetics Shop	0.03

---- East Park----

	venue	freq
0	Park	0.33
1	Fast Food Restaurant	0.22
2	Construction & Landscaping	0.11
3	Lake	0.11
4	Convenience Store	0.11

---- Engelwood Park----

	venue	freq
0	Park	0.4
1	Electronics Store	0.2
2	Coffee Shop	0.2
3	Discount Store	0.2
4	Outlet Store	0.0

---- Florida Center----

	venue	freq
0	Clothing Store	0.13
1	Theme Park Ride / Attraction	0.11
2	Coffee Shop	0.05
3	Italian Restaurant	0.04
4	Accessories Store	0.04

---- Florida Center North----

	venue	freq
0	Shoe Store	0.30
1	Women's Store	0.07
2	Hotel	0.07
3	Clothing Store	0.07
4	Noodle House	0.03

---- Haralson Estates----

	venue	freq
0	Grocery Store	0.09
1	Liquor Store	0.09
2	Fast Food Restaurant	0.06
3	Caribbean Restaurant	0.06
4	Toll Booth	0.03

---- Holden Heights----

	venue	freq
0	Train Station	0.07
1	Intersection	0.07
2	Cosmetics Shop	0.07
3	Park	0.07
4	Coffee Shop	0.07

---- Holden/Parramore----

	venue	freq
--	-------	------

0	Basketball Stadium	0.06
1	Fried Chicken Joint	0.06
2	Burger Joint	0.04
3	Bar	0.04
4	Fast Food Restaurant	0.04

---- Johnson Village----

	venue	freq
0	Grocery Store	0.14
1	Convenience Store	0.07
2	Pool	0.07
3	Mobile Phone Shop	0.07
4	Park	0.07

---- Kirkman North----

	venue	freq
0	Pizza Place	0.06
1	Chinese Restaurant	0.06
2	Sandwich Place	0.06
3	Fast Food Restaurant	0.06
4	Ice Cream Shop	0.06

---- Kirkman South----

	venue	freq
0	Sandwich Place	0.07
1	Pharmacy	0.05
2	Indian Restaurant	0.04
3	Chinese Restaurant	0.04
4	Coffee Shop	0.04

---- LaVina----

	venue	freq
0	Pizza Place	0.10
1	Theme Restaurant	0.05
2	Bank	0.05
3	Frozen Yogurt Shop	0.05
4	BBQ Joint	0.05

---- Lake Cherokee----

	venue	freq
0	American Restaurant	0.10
1	Cocktail Bar	0.10
2	Hotel	0.10

3	Park	0.07
4	Sandwich Place	0.07

---- Lake Copeland----

	venue	freq
0	Convenience Store	0.11
1	Park	0.11
2	Brewery	0.06
3	Gym	0.06
4	Pharmacy	0.06

---- Lake Davis/Greenwood----

	venue	freq
0	Park	0.50
1	Intersection	0.17
2	Accessories Store	0.08
3	Cemetery	0.08
4	Sandwich Place	0.08

---- Lake Dot----

	venue	freq
0	Hotel	0.08
1	Convenience Store	0.06
2	Music Venue	0.06
3	Food Truck	0.06
4	Performing Arts Venue	0.04

---- Lake Fairview----

	venue	freq
0	Convenience Store	0.09
1	Mexican Restaurant	0.09
2	Furniture / Home Store	0.06
3	Baseball Stadium	0.03
4	Hobby Shop	0.03

---- Lake Formosa----

	venue	freq
0	Theater	0.07
1	Bar	0.07
2	Park	0.06
3	Cocktail Bar	0.02
4	Furniture / Home Store	0.02

---- Lake Fredrica----

	venue	freq
0	Convenience Store	0.06
1	Sandwich Place	0.06
2	Grocery Store	0.06
3	Gym / Fitness Center	0.06
4	Fast Food Restaurant	0.06

---- Lake Holden----

	venue	freq
0	American Restaurant	0.07
1	Coffee Shop	0.07
2	Fast Food Restaurant	0.05
3	Burger Joint	0.03
4	Spa	0.03

---- Lake Mann Estates----

	venue	freq
0	Restaurant	0.1
1	Coffee Shop	0.1
2	German Restaurant	0.1
3	Gym	0.1
4	Toll Booth	0.1

---- Lake Mann Gardens----

	venue	freq
0	Discount Store	0.33
1	Fried Chicken Joint	0.17
2	Pharmacy	0.17
3	BBQ Joint	0.17
4	German Restaurant	0.17

---- Lake Nona Central----

	venue	freq
0	Construction & Landscaping	0.2
1	Tennis Court	0.2
2	Real Estate Office	0.2
3	Deli / Bodega	0.2
4	Plaza	0.2

---- Lake Nona Estates----

	venue	freq
--	-------	------

0	Golf Course	0.29
1	Gym / Fitness Center	0.14
2	Athletics & Sports	0.14
3	Market	0.14
4	American Restaurant	0.14

---- Lake Nona South----

	venue	freq
0	Construction & Landscaping	0.2
1	Pool	0.2
2	Grocery Store	0.2
3	New American Restaurant	0.2
4	Gym / Fitness Center	0.2

---- Lake Richmond----

	venue	freq
0	Furniture / Home Store	0.06
1	Home Service	0.06
2	Construction & Landscaping	0.06
3	Carpet Store	0.06
4	Skate Park	0.06

---- Lake Shore Village----

	venue	freq
0	Rental Car Location	0.17
1	Convenience Store	0.08
2	Lake	0.08
3	Fast Food Restaurant	0.08
4	Chiropractor	0.08

---- Lake Sunset----

	venue	freq
0	Park	0.12
1	Convenience Store	0.06
2	Lake	0.06
3	Football Stadium	0.06
4	Mobile Phone Shop	0.06

---- Lake Underhill----

	venue	freq
0	Park	0.38
1	Toll Plaza	0.12
2	Food Truck	0.12

3 Dance Studio 0.12
 4 Gas Station 0.12

---- Lake Weldona----

	venue	freq
0	Park	0.36
1	Intersection	0.29
2	Sandwich Place	0.07
3	Café	0.07
4	Cemetery	0.07

---- Lancaster Park----

	venue	freq
0	Park	0.38
1	Intersection	0.31
2	Concert Hall	0.08
3	Performing Arts Venue	0.08
4	Sandwich Place	0.08

---- Lawsona/Fern Creek----

	venue	freq
0	Park	0.11
1	Bar	0.07
2	American Restaurant	0.05
3	Juice Bar	0.05
4	Food Truck	0.05

---- Lorna Doone----

	venue	freq
0	Fried Chicken Joint	0.13
1	Fast Food Restaurant	0.13
2	Convenience Store	0.09
3	Brewery	0.09
4	Park	0.09

---- Malibu Groves----

	venue	freq
0	Park	0.33
1	Construction & Landscaping	0.17
2	Pharmacy	0.17
3	Restaurant	0.17
4	Gas Station	0.17

---- Mariners Village----

	venue	freq
0	Cosmetics Shop	0.08
1	Chinese Restaurant	0.08
2	Italian Restaurant	0.08
3	Grocery Store	0.08
4	Sandwich Place	0.08

---- Mercy Drive----

	venue	freq
0	Convenience Store	0.11
1	Auto Workshop	0.11
2	Kitchen Supply Store	0.11
3	Furniture / Home Store	0.11
4	Print Shop	0.11

---- MetroWest----

	venue	freq
0	Gym / Fitness Center	0.10
1	American Restaurant	0.07
2	Spa	0.07
3	Pizza Place	0.07
4	Pet Store	0.03

---- Millenia----

	venue	freq
0	Clothing Store	0.09
1	Furniture / Home Store	0.08
2	Cosmetics Shop	0.06
3	Women's Store	0.04
4	Burger Joint	0.04

---- Narcoossee South----

	venue	freq
0	Convenience Store	0.22
1	Sandwich Place	0.11
2	Gym / Fitness Center	0.11
3	Fast Food Restaurant	0.11
4	Clothing Store	0.11

---- New Malibu----

	venue	freq
--	-------	------

0	Discount Store	0.29
1	Pharmacy	0.14
2	Pizza Place	0.14
3	BBQ Joint	0.14
4	Mobile Phone Shop	0.14

---- NorthLake Park at Lake Nona----

	venue	freq
0	Golf Course	0.22
1	Market	0.11
2	Gym / Fitness Center	0.11
3	American Restaurant	0.11
4	Housing Development	0.11

---- Orlando Executive Airport----

	venue	freq
0	Mobile Phone Shop	0.08
1	Fast Food Restaurant	0.06
2	Optical Shop	0.06
3	Music Store	0.06
4	Steakhouse	0.03

---- Orlando International Airport----

	venue	freq
0	Rental Car Location	1.0
1	Yoga Studio	0.0
2	Other Repair Shop	0.0
3	Pawn Shop	0.0
4	Park	0.0

---- Orwin Manor----

	venue	freq
0	Café	0.09
1	Garden	0.06
2	Trail	0.06
3	Sandwich Place	0.06
4	Fried Chicken Joint	0.03

---- Palomar----

	venue	freq
0	Intersection	0.08
1	Pet Store	0.08
2	Italian Restaurant	0.08

3	Cosmetics Shop	0.08
4	Pharmacy	0.08

---- Park Central----

	venue	freq
0	Convenience Store	0.15
1	Pizza Place	0.11
2	Pharmacy	0.07
3	Grocery Store	0.07
4	Gym / Fitness Center	0.07

---- Park Lake/Highland----

	venue	freq
0	Vietnamese Restaurant	0.08
1	Bar	0.05
2	Grocery Store	0.04
3	Asian Restaurant	0.04
4	Art Gallery	0.03

---- Pineloch----

	venue	freq
0	American Restaurant	0.06
1	Spa	0.06
2	Pet Store	0.06
3	Convenience Store	0.06
4	Salon / Barbershop	0.03

---- Princeton/Silver Star----

	venue	freq
0	Convenience Store	0.19
1	Sandwich Place	0.12
2	Fast Food Restaurant	0.12
3	Pharmacy	0.06
4	Pizza Place	0.06

---- Randal Park----

	venue	freq
0	Park	0.33
1	Playground	0.33
2	Mexican Restaurant	0.33
3	Yoga Studio	0.00
4	Outdoor Supply Store	0.00

---- Richmond Estates----

	venue	freq
0	Dance Studio	0.10
1	Toy / Game Store	0.05
2	Convenience Store	0.05
3	Construction & Landscaping	0.05
4	Clothing Store	0.05

---- Rio Grande Park----

	venue	freq
0	Intersection	0.11
1	Hotel	0.11
2	Food	0.11
3	Gas Station	0.11
4	Spa	0.11

---- Rock Lake----

	venue	freq
0	Gay Bar	0.15
1	Intersection	0.06
2	Caribbean Restaurant	0.06
3	Bakery	0.06
4	Clothing Store	0.03

---- Roosevelt Park----

	venue	freq
0	Discount Store	0.23
1	Convenience Store	0.08
2	Park	0.08
3	Soccer Field	0.08
4	Grocery Store	0.08

---- Rose Isle----

	venue	freq
0	Theater	0.22
1	Park	0.22
2	Café	0.09
3	Garden	0.09
4	Lake	0.04

---- Rosemont----

	venue	freq
--	-------	------

0	Intersection	0.6
1	Food Truck	0.2
2	Lake	0.2
3	Outlet Mall	0.0
4	Performing Arts Venue	0.0

---- Rosemont North----

	venue	freq
0	Convenience Store	0.12
1	Ice Cream Shop	0.12
2	Grocery Store	0.12
3	Donut Shop	0.12
4	Video Store	0.12

---- Rowena Gardens----

	venue	freq
0	Theater	0.16
1	Park	0.14
2	Garden	0.05
3	Beer Bar	0.03
4	BBQ Joint	0.03

---- Seaboard Industrial----

	venue	freq
0	Fast Food Restaurant	0.17
1	Food	0.17
2	Convenience Store	0.08
3	Auto Workshop	0.08
4	Storage Facility	0.08

---- Signal Hill----

	venue	freq
0	Baseball Field	0.18
1	Park	0.18
2	Pharmacy	0.09
3	Health & Beauty Service	0.09
4	Auto Garage	0.09

---- South Division----

	venue	freq
0	Sandwich Place	0.06
1	Pizza Place	0.06
2	Coffee Shop	0.04

3	Mexican Restaurant	0.04
4	Spa	0.04

---- South Orange----

	venue	freq
0	Spa	0.05
1	American Restaurant	0.05
2	Coffee Shop	0.04
3	Cosmetics Shop	0.04
4	Fast Food Restaurant	0.04

---- South Semoran----

	venue	freq
0	Sandwich Place	0.05
1	Video Store	0.05
2	Pizza Place	0.05
3	Grocery Store	0.05
4	Convenience Store	0.05

---- Southern Oaks----

	venue	freq
0	Butcher	0.08
1	Pet Store	0.08
2	Breakfast Spot	0.08
3	Supplement Shop	0.08
4	Food Truck	0.08

---- The Dovers----

	venue	freq
0	Park	0.33
1	Toll Booth	0.17
2	Gas Station	0.08
3	Pet Store	0.08
4	Fishing Spot	0.08

---- The Willows----

	venue	freq
0	Fast Food Restaurant	0.29
1	Convenience Store	0.21
2	Indian Restaurant	0.07
3	Food	0.07
4	Grocery Store	0.07

---- Thornton Park----

	venue	freq
0	Park	0.13
1	American Restaurant	0.09
2	Pizza Place	0.07
3	Café	0.04
4	Juice Bar	0.04

---- Timberleaf----

	venue	freq
0	Park	0.25
1	Mobile Phone Shop	0.25
2	Pizza Place	0.25
3	Seafood Restaurant	0.25
4	Yoga Studio	0.00

---- Ventura----

	venue	freq
0	Pizza Place	0.23
1	Golf Course	0.15
2	Thrift / Vintage Store	0.08
3	Chinese Restaurant	0.08
4	Breakfast Spot	0.08

---- Vista East----

	venue	freq
0	Pool	0.12
1	Pet Store	0.12
2	Bank	0.12
3	Salon / Barbershop	0.12
4	Photography Studio	0.12

---- Wadeview Park----

	venue	freq
0	Spa	0.06
1	American Restaurant	0.06
2	Pizza Place	0.06
3	Sandwich Place	0.05
4	Intersection	0.04

---- Washington Shores----

	venue	freq
--	-------	------

0	Convenience Store	0.09
1	Lake	0.09
2	Grocery Store	0.09
3	Bakery	0.09
4	Shopping Mall	0.09

---- Wedgewood Groves----

	venue	freq
0	Cosmetics Shop	0.11
1	Pizza Place	0.07
2	Italian Restaurant	0.04
3	Sandwich Place	0.04
4	Optical Shop	0.04

---- West Colonial----

	venue	freq
0	Deli / Bodega	0.07
1	Grocery Store	0.07
2	Fast Food Restaurant	0.07
3	Bakery	0.07
4	Liquor Store	0.07

---- Westfield----

	venue	freq
0	Soccer Field	0.33
1	Baseball Field	0.17
2	College Gym	0.17
3	Park	0.17
4	Garden Center	0.17

---- Williamsburg----

	venue	freq
0	Hotel	0.10
1	Fast Food Restaurant	0.05
2	Japanese Restaurant	0.05
3	Italian Restaurant	0.05
4	Resort	0.05

---- Windhover----

	venue	freq
0	Hotel	0.08
1	Pizza Place	0.06
2	Sports Bar	0.04

3 Pharmacy 0.04
 4 Breakfast Spot 0.04

----33rd Street Industrial----

	venue	freq
0	Dance Studio	0.09
1	Pet Store	0.05
2	Athletics & Sports	0.05
3	Skate Park	0.05
4	Gym / Fitness Center	0.05

----Airport North----

	venue	freq
0	Hotel	0.11
1	Clothing Store	0.06
2	Office	0.06
3	Gym / Fitness Center	0.06
4	Japanese Restaurant	0.03

----Celebration----

	venue	freq
0	Park	0.05
1	Movie Theater	0.03
2	Soccer Field	0.03
3	Bike Rental / Bike Share	0.03
4	Thai Restaurant	0.03

----Gotha----

	venue	freq
0	Gym / Fitness Center	0.29
1	American Restaurant	0.14
2	Park	0.14
3	Martial Arts Dojo	0.14
4	Sandwich Place	0.14

----Hunters Creek----

	venue	freq
0	Convenience Store	0.04
1	Latin American Restaurant	0.04
2	Breakfast Spot	0.04
3	Bank	0.04
4	Fast Food Restaurant	0.04

----Kissimmee----

	venue	freq
0	Pizza Place	0.07
1	Park	0.07
2	Street Food Gathering	0.03
3	Bar	0.03
4	Historic Site	0.03

----Lake Buena Vista----

	venue	freq
0	Clothing Store	0.08
1	Resort	0.07
2	American Restaurant	0.04
3	Theme Park Ride / Attraction	0.04
4	Gift Shop	0.04

----Lake Mary----

	venue	freq
0	Boutique	0.14
1	Dance Studio	0.14
2	Pizza Place	0.10
3	Restaurant	0.10
4	Greek Restaurant	0.05

----Windermere----

	venue	freq
0	Lake	0.4
1	Farmers Market	0.2
2	Southern / Soul Food Restaurant	0.2
3	Dessert Shop	0.2
4	Yoga Studio	0.0

----Winter Park----

	venue	freq
0	Food Truck	0.18
1	Park	0.18
2	Lake	0.18
3	Hotel	0.09
4	New American Restaurant	0.09

```
In [27]: def return_most_common_venues(row, num_top_venues):
    row_categories = row.iloc[1:]
    row_categories_sorted = row_categories.sort_values(ascending=False)

    return row_categories_sorted.index.values[0:num_top_venues]
```

Displaying a table of the 10 most common venues will help when we try to cluster the neighborhoods by similar venues. However, as we will see clustering helps partially. Mostly to get more familiar with the data, however, it will not help us much in drawing conclusions.

```
In [54]: num_top_venues = 10
```

```
indicators = ['st', 'nd', 'rd']

# create columns according to number of top venues
columns = ['Neighborhood']
for ind in np.arange(num_top_venues):
    try:
        columns.append('{{}} Most Common Venue'.format(ind+1, indicators[ind]))
    except:
        columns.append('{{}th Most Common Venue'.format(ind+1))

# create a new dataframe
neighborhoods_venues_sorted = pd.DataFrame(columns=columns)
neighborhoods_venues_sorted['Neighborhood'] = orne_grouped['Neighborhood']

for ind in np.arange(orne_grouped.shape[0]):
    neighborhoods_venues_sorted.iloc[ind, 1:] = return_most_common_venues(orne_grouped.iloc[ind, :],

neighborhoods_venues_sorted.head()
```

```
Out[54]:
```

	Neighborhood	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue	7th Most Common Venue	8th Most Common Venue
0	Audubon Park	Bakery	Clothing Store	Sushi Restaurant	Karaoke Bar	Department Store	Park	Coffee Shop	Gas Station
1	Azalea Park	Cuban Restaurant	Construction & Landscaping	Arepa Restaurant	Latin American Restaurant	Automotive Shop	Office	Baseball Field	South American Restaurant
2	Bal Bay	Yoga Studio	Cosmetics Shop	Dog Run	American Restaurant	Steakhouse			
3	Baldwin Park	Park	Mexican Restaurant	Light Rail Station	Pharmacy	Restaurant			
4	Bel Air	Baseball Field	Park	Baseball Stadium	Breakfast Spot	Discount Store			

2	Art Gallery	Pool	Office
3	Sandwich Place	Candy Store	Dog Run
4	Fast Food Restaurant	Ethiopian Restaurant	Event Space

	9th Most Common Venue	10th Most Common Venue
0	Accessories Store	Record Shop
1	Convenience Store	Fish Market
2	Fast Food Restaurant	Ethiopian Restaurant
3	Burger Joint	Smoothie Shop
4	Fabric Shop	Farmers Market

6 CLUSTERING NEIGHBORHOODS BY TYPES OF VENUE

We run some clustering tests iteratively, in order to find the best number of k clusters. After using the elbow method for inertia, we see that a set of 3 clusters is probably the optimal amount of clusters. However experimenting with different amount of clusters anywhere from 10 or more clusters allows us to see that there are some neighborhoods with similar characteristics, and allows us to see that restaurants are common as well as gyms. Some neighborhoods also have parks, yoga studios, or stores as their main venues.

This suggests that in the Orlando area, customers are interested mostly in food venues, but less intuitively they are also interested in fitness-health venues, which directs us to look at the possibility of exploring a food-health business project.

In addition, there are is very few amount of vegetarian-vegan restaurants locally which would also provide an interesting niche for a restaurant. The neighborhoods where we can find these vegetarian/vegan restaurants are: Dover Manor, East Central Park, Colonialtown North, Colonialtown South, Park Lake/Highland, Lake Fairview, and Millenia.

```
In [80]: orne_vegan = orne_venues.loc[orne_venues['Venue Category'] == 'Vegetarian / Vegan Restaurant', orne_venues['Venue Category'] == 'Vegetarian / Vegan Restaurant']
```

```
Out[80]:
```

	Neighborhood	Neighborhood Latitude	Neighborhood Longitude	\
293	Dover Manor	28.528020	-81.321284	
694	East Central Park	28.544392	-81.347801	
701	East Central Park	28.544392	-81.347801	
871	Colonialtown North	28.560465	-81.358061	
959	Colonialtown South	28.549063	-81.358190	
985	Colonialtown South	28.549063	-81.358190	
1566	Park Lake/Highland	28.558622	-81.369055	
2111	Lake Fairview	28.600709	-81.411018	
2361	Millenia	28.488299	-81.432327	

	Venue	Venue Latitude	Venue Longitude	\
293	Julia's Hippy House	28.527882	-81.329315	
694	Market on South	28.538852	-81.349367	
701	Dixie Dharma	28.538901	-81.349400	
871	The Sanctum Cafe	28.553760	-81.360090	
959	The Sanctum Cafe	28.553760	-81.360090	
985	Veggie Garden	28.553002	-81.363812	

1566	Veggie Garden	28.553002	-81.363812
2111	Dajen Eats Cafe And Creamery	28.602378	-81.418691
2361	Maoz Vegetarian	28.485192	-81.431969

	Venue Category
293	Vegetarian / Vegan Restaurant
694	Vegetarian / Vegan Restaurant
701	Vegetarian / Vegan Restaurant
871	Vegetarian / Vegan Restaurant
959	Vegetarian / Vegan Restaurant
985	Vegetarian / Vegan Restaurant
1566	Vegetarian / Vegan Restaurant
2111	Vegetarian / Vegan Restaurant
2361	Vegetarian / Vegan Restaurant

In [55]: # set number of clusters

```
kclusters = 3
```

```
orne_grouped_clustering = orne_grouped.drop('Neighborhood', 1)
```

```
# run k-means clustering
```

```
kmeans = KMeans(n_clusters=kclusters, random_state=0).fit(orne_grouped_clustering)
```

```
# check cluster labels generated for each row in the dataframe
```

```
kmeans.labels_[0:10]
```

Out[55]: array([1, 1, 1, 1, 0, 0, 1, 1, 0, 1], dtype=int32)

In [32]: Sum_of_squared_distances = []

```
K = range(1,20)
```

```
for k in K:
```

```
    kmeans = KMeans(n_clusters=k)
```

```
    kmeans = kmeans.fit(orne_grouped_clustering)
```

```
    Sum_of_squared_distances.append(kmeans.inertia_)
```

In [35]: import matplotlib.pyplot as plt

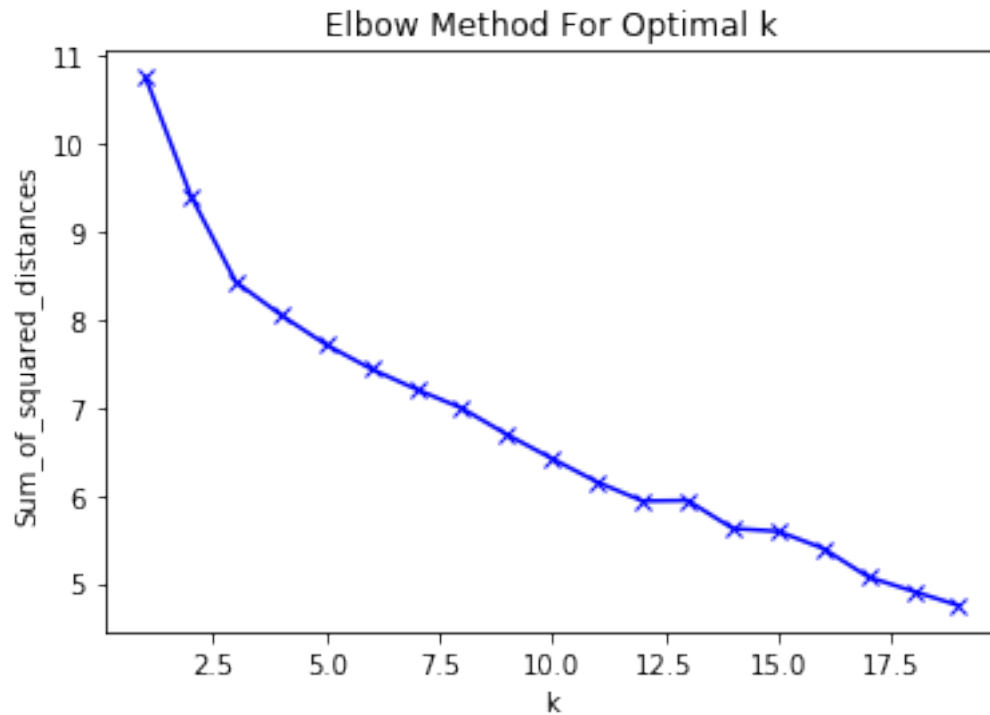
```
plt.plot(K, Sum_of_squared_distances, 'bx-')
```

```
plt.xlabel('k')
```

```
plt.ylabel('Sum_of_squared_distances')
```

```
plt.title('Elbow Method For Optimal k')
```

```
plt.show()
```



The Elbow Method does not show a strong elbow, however it seems to happen at $k=3$.

```
In [56]: # add clustering labels
neighborhoods_venues_sorted.insert(0, 'Cluster Labels', kmeans.labels_)

orne_merged = df_ornelat

# merge toronto_grouped with toronto_data to add latitude/longitude for each neighborhood
orne_merged = orne_merged.join(neighborhoods_venues_sorted.set_index('Neighborhood'), on='Neighborhood')
orne_merged = orne_merged.dropna(axis=0)
orne_merged['Cluster Labels'] = orne_merged['Cluster Labels'].astype(int)
```

```
In [65]: orne_merged.head()
```

```
Out[65]:
```

	Neighborhood	Latitude	Longitude	Cluster Labels
1	East Park	28.423651	-81.235694	0
2	Narcoossee South	28.350192	-81.237217	1
3	Randal Park	28.439583	-81.237243	0
4	LaVina	28.427868	-81.249406	1
5	Bal Bay	28.443361	-81.252563	1

	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue
1	Park	Fast Food Restaurant	Lake
2	Convenience Store	Sandwich Place	Gym / Fitness Center
3	Park	Mexican Restaurant	Playground

4	Pizza Place	Theme Restaurant	Smoothie Shop
5	Yoga Studio	Cosmetics Shop	Dog Run
	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue \
1	Trail Construction & Landscaping	Convenience Store	
2	Electronics Store	Building Fast Food Restaurant	
3	Farmers Market	Drugstore	Dry Cleaner
4	Tex-Mex Restaurant	Business Service	Sushi Restaurant
5	American Restaurant	Steakhouse	Art Gallery
	7th Most Common Venue	8th Most Common Venue	9th Most Common Venue \
1	Fishing Spot	Fish Market	Fish & Chips Shop
2	Furniture / Home Store	Clothing Store	Financial or Legal Service
3	Electronics Store	Ethiopian Restaurant	Event Space
4	Frozen Yogurt Shop	Bank	Bakery
5	Pool	Office	Fast Food Restaurant
	10th Most Common Venue		
1	Financial or Legal Service		
2	Fish & Chips Shop		
3	Fabric Shop		
4	Sandwich Place		
5	Ethiopian Restaurant		

```
In [58]: # create map
map_clusters = folium.Map(location=[or_latitude, or_longitude], zoom_start=10)

# set color scheme for the clusters
x = np.arange(kclusters)
ys = [i + x + (i*x)**2 for i in range(kclusters)]
colors_array = cm.rainbow(np.linspace(0, 1, len(ys)))
rainbow = [colors.rgb2hex(i) for i in colors_array]

# add markers to the map
markers_colors = []
for lat, lon, poi, cluster in zip(orne_merged['Latitude'], orne_merged['Longitude'], orne_merged['Neighbor'], orne_merged['Cluster']):
    label = folium.Popup(str(poi) + ' Cluster ' + str(cluster), parse_html=True)
    folium.CircleMarker(
        [lat, lon],
        radius=5,
        popup=label,
        color=rainbow[cluster-1],
        fill=True,
        fill_color=rainbow[cluster-1],
        fill_opacity=0.7).add_to(map_clusters)

map_clusters
```

```
Out[58]: <folium.folium.Map at 0x7f1460cd90f0>
```

At technically 3 clusters we can see that neighborhoods are distributed in mainly two clusters. 22 neighborhoods that have Parks as their main Venue, and 88 that have stores, restaurants and pretty much most types of venues. So this clustering did not help in developing specific solutions to our initial problem.

```
In [105]: cluster_num=1
          cluster=orne_merged.loc[orne_merged['Cluster Labels'] == cluster_num, orne_merged.columns[[0] + lis
          print(cluster.shape)
          cluster.head()

(88, 11)
```

```
Out[105]:      Neighborhood 1st Most Common Venue 2nd Most Common Venue \
2  Narcoossee South    Convenience Store    Sandwich Place
4      LaVina        Pizza Place    Theme Restaurant
5      Bal Bay        Yoga Studio    Cosmetics Shop
7      Vista East    Athletics & Sports        Bank
8  Lake Nona Estates        Golf Course  Gym / Fitness Center

      3rd Most Common Venue 4th Most Common Venue 5th Most Common Venue \
2  Gym / Fitness Center    Electronics Store        Building
4    Smoothie Shop    Tex-Mex Restaurant    Business Service
5        Dog Run    American Restaurant    Steakhouse
7          Gym        Pool    Salon / Barbershop
8  American Restaurant        Market    Home Service

      6th Most Common Venue 7th Most Common Venue 8th Most Common Venue \
2  Fast Food Restaurant  Furniture / Home Store    Clothing Store
4    Sushi Restaurant    Frozen Yogurt Shop        Bank
5      Art Gallery        Pool        Office
7      Pet Store    Photography Studio    Pizza Place
8  Athletics & Sports        Fabric Shop    Drugstore

      9th Most Common Venue 10th Most Common Venue
2  Financial or Legal Service    Fish & Chips Shop
4          Bakery    Sandwich Place
5    Fast Food Restaurant    Ethiopian Restaurant
7      Women's Store    Drugstore
8      Dry Cleaner    Electronics Store
```

"Dover Manor", "East Central Park", "Colonialtown North", "Colonialtown South", "Park Lake/Highland", "Lake Fairview" and "Millenia" are the neighborhoods with Vegetarian / Vegan restaurants from our list of neighborhoods.

7 Segmenting by Venue Category

Due to the limited amount of insight provided by the segmentation and clustering by neighborhood, we proceed to segment the data by venue category thus showing what are the most common

neighborhoods for each kind of venue.

In [99]: # one hot encoding

```
orne_onehot = pd.get_dummies(orne_venues[['Neighborhood']], prefix="", prefix_sep="")

# add neighborhood column back to dataframe
orne_onehot['Venue Category'] = orne_venues['Venue Category']
# move neighborhood column to the first column
fixed_columns = [orne_onehot.columns[-1]] + list(orne_onehot.columns[:-1])
orne_onehot = orne_onehot[fixed_columns]
orne_onehot = orne_onehot.set_index('Venue Category').reset_index()

orne_grouped = orne_onehot.groupby('Venue Category').mean().reset_index()
orne_grouped.head()
```

```
Out[99]:
```

	Venue Category	Audubon Park	Azalea Park	Bal Bay	Baldwin Park \
0	Accessories Store	0.153846	0.0	0.000000	0.0
1	Airport	0.000000	0.0	0.000000	0.0
2	American Restaurant	0.014085	0.0	0.014085	0.0
3	Antique Shop	0.000000	0.0	0.000000	0.0
4	Arcade	0.000000	0.0	0.000000	0.0

	Bel Air	Boggy Creek	Bryn Mawr	Camellia Gardens	Carver Shores \
0	0.0	0.0	0.0	0.0	0.0
1	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0

	Catalina	Clear Lake	Colonial Town Center	Colonialtown North \
0	0.0	0.0	0.000000	0.000000
1	0.0	0.0	0.500000	0.000000
2	0.0	0.0	0.028169	0.028169
3	0.0	0.0	0.000000	0.000000
4	0.0	0.0	0.000000	0.000000

	Colonialtown South	Conway	Countryside	Coytown	Crescent Park \
0	0.000000	0.0	0.0	0.0	0.0
1	0.000000	0.0	0.0	0.0	0.0
2	0.028169	0.0	0.0	0.0	0.0
3	0.000000	0.0	0.0	0.0	0.0
4	0.000000	0.0	0.0	0.0	0.0

	Delaney Park	Dixie Belle	Dover Estates	Dover Manor \
0	0.0	0.000000	0.0	0.0
1	0.0	0.000000	0.0	0.0
2	0.0	0.014085	0.0	0.0
3	0.0	0.000000	0.0	0.0

4	0.0	0.000000	0.0	0.0
---	-----	----------	-----	-----

	Dover Shores East	Dover Shores West	East Central Park	East Park \
0	0.0	0.0	0.0	0.0
1	0.0	0.0	0.5	0.0
2	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0
4	0.0	1.0	0.0	0.0

	Engelwood Park	Florida Center	Florida Center North	Haralson Estates \
0	0.0	0.307692	0.0	0.0
1	0.0	0.000000	0.0	0.0
2	0.0	0.028169	0.0	0.0
3	0.0	0.000000	0.0	0.0
4	0.0	0.000000	0.0	0.0

	Holden Heights	Holden/Parramore	Johnson Village	Kirkman North \
0	0.0	0.000000	0.0	0.000000
1	0.0	0.000000	0.0	0.000000
2	0.0	0.014085	0.0	0.014085
3	0.0	0.000000	0.0	0.000000
4	0.0	0.000000	0.0	0.000000

	Kirkman South	LaVina	Lake Cherokee	Lake Copeland \
0	0.000000	0.000000	0.000000	0.0
1	0.000000	0.000000	0.000000	0.0
2	0.014085	0.014085	0.042254	0.0
3	0.000000	0.000000	0.000000	0.0
4	0.000000	0.000000	0.000000	0.0

	Lake Davis/Greenwood	Lake Dot	Lake Fairview	Lake Formosa \
0	0.076923	0.000000	0.00	0.000000
1	0.000000	0.000000	0.00	0.000000
2	0.000000	0.028169	0.00	0.014085
3	0.000000	0.000000	0.25	0.250000
4	0.000000	0.000000	0.00	0.000000

	Lake Fredrica	Lake Holden	Lake Mann Estates	Lake Mann Gardens \
0	0.000000	0.000000	0.0	0.0
1	0.000000	0.000000	0.0	0.0
2	0.014085	0.056338	0.0	0.0
3	0.000000	0.000000	0.0	0.0
4	0.000000	0.000000	0.0	0.0

	Lake Nona Central	Lake Nona Estates	Lake Nona South	Lake Richmond \
0	0.0	0.000000	0.0	0.0
1	0.0	0.000000	0.0	0.0
2	0.0	0.014085	0.0	0.0

3	0.0	0.000000	0.0	0.0
4	0.0	0.000000	0.0	0.0

	Lake Shore Village	Lake Sunset	Lake Underhill	Lake Weldon
0	0.0	0.0	0.0	0.0
1	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0

	Lancaster Park	Lawsona/Fern Creek	Lorna Doone	Malibu Groves
0	0.0	0.000000	0.0	0.0
1	0.0	0.000000	0.0	0.0
2	0.0	0.042254	0.0	0.0
3	0.0	0.000000	0.0	0.0
4	0.0	0.000000	0.0	0.0

	Mariners Village	Mercy Drive	MetroWest	Millenia	Narcoossee South
0	0.0	0.0	0.000000	0.153846	0.0
1	0.0	0.0	0.000000	0.000000	0.0
2	0.0	0.0	0.028169	0.042254	0.0
3	0.0	0.0	0.000000	0.000000	0.0
4	0.0	0.0	0.000000	0.000000	0.0

	New Malibu	NorthLake Park at Lake Nona	Orlando Executive Airport
0	0.0	0.000000	0.076923
1	0.0	0.000000	0.000000
2	0.0	0.014085	0.014085
3	0.0	0.000000	0.000000
4	0.0	0.000000	0.000000

	Orlando International Airport	Orwin Manor	Palomar	Park Central
0		0.0	0.000000	0.0
1		0.0	0.000000	0.0
2		0.0	0.014085	0.0
3		0.0	0.250000	0.0
4		0.0	0.000000	0.0

	Park Lake/Highland	Pineloch	Princeton/Silver Star	Randal Park
0	0.000000	0.000000	0.0	0.0
1	0.000000	0.000000	0.0	0.0
2	0.028169	0.028169	0.0	0.0
3	0.250000	0.000000	0.0	0.0
4	0.000000	0.000000	0.0	0.0

	Richmond Estates	Rio Grande Park	Rock Lake	Roosevelt Park
0	0.0	0.0	0.000000	0.0
1	0.0	0.0	0.000000	0.0

2	0.0	0.0	0.014085	0.0
3	0.0	0.0	0.000000	0.0
4	0.0	0.0	0.000000	0.0

	Rose Isle	Rosemont	Rosemont North	Rowena Gardens \
0	0.0	0.0	0.000000	0.000000
1	0.0	0.0	0.000000	0.000000
2	0.0	0.0	0.014085	0.014085
3	0.0	0.0	0.000000	0.000000
4	0.0	0.0	0.000000	0.000000

	Seaboard Industrial	Signal Hill	South Division	South Orange \
0	0.0	0.0	0.0	0.000000
1	0.0	0.0	0.0	0.000000
2	0.0	0.0	0.0	0.056338
3	0.0	0.0	0.0	0.000000
4	0.0	0.0	0.0	0.000000

	South Semoran	Southern Oaks	The Dovers	The Willows	Thornton Park \
0	0.000000	0.0	0.0	0.0	0.000000
1	0.000000	0.0	0.0	0.0	0.000000
2	0.014085	0.0	0.0	0.0	0.070423
3	0.000000	0.0	0.0	0.0	0.000000
4	0.000000	0.0	0.0	0.0	0.000000

	Timberleaf	Ventura	Vista East	Wadeview Park	Washington Shores \
0	0.0	0.0	0.0	0.000000	0.0
1	0.0	0.0	0.0	0.000000	0.0
2	0.0	0.0	0.0	0.070423	0.0
3	0.0	0.0	0.0	0.000000	0.0
4	0.0	0.0	0.0	0.000000	0.0

	Wedgewood Groves	West Colonial	Westfield	Williamsburg	Windhover \
0	0.0	0.0	0.0	0.000000	0.000000
1	0.0	0.0	0.0	0.000000	0.000000
2	0.0	0.0	0.0	0.014085	0.014085
3	0.0	0.0	0.0	0.000000	0.000000
4	0.0	0.0	0.0	0.000000	0.000000

	33rd Street Industrial	Airport North	Celebration	Gotha \
0	0.0	0.0	0.000000	0.000000
1	0.0	0.0	0.000000	0.000000
2	0.0	0.0	0.014085	0.014085
3	0.0	0.0	0.000000	0.000000
4	0.0	0.0	0.000000	0.000000

	Hunters Creek	Kissimmee	Lake Buena Vista	Lake Mary	Windermere \
0	0.000000	0.000000	0.230769	0.0	0.0

1	0.000000	0.000000	0.000000	0.0	0.0
2	0.014085	0.014085	0.056338	0.0	0.0
3	0.000000	0.000000	0.000000	0.0	0.0
4	0.000000	0.000000	0.000000	0.0	0.0

	Winter Park
0	0.0
1	0.0
2	0.0
3	0.0
4	0.0

This new arrangement of the data allows us to look at the categories we are now interested in e.g. Gyms and restaurants. As a highlight, the Metrowest neighborhood has the highest amount of Gyms / Fitness Center category in the city as do, Wadeview Park, Colonial Town Center and Coytown.

In addition if we explore which neighborhoods have the highest amount of the venue category Yoga Studio, we find East Central Park, Audubon Park, Colonial Town Center, Williamsburg, Park Lake/ Highland and Lake Formosa.

This is relevant because these would be potential neighborhoods where we could introduce our Healthy-Food-Vegan restaurant concept.

```
In [64]: num_top_hoods = 5
```

```
for hoods in orne_grouped['Venue Category']:
    print("----"+hoods+"----")
    temp = orne_grouped[orne_grouped['Venue Category'] == hoods].T.reset_index()
    temp.columns = ['hood','freq']
    temp = temp.iloc[1:]
    temp['freq'] = temp['freq'].astype(float)
    temp = temp.round({'freq': 2})
    print(temp.sort_values('freq', ascending=False).reset_index(drop=True).head(num_top_venues))
    print('\n')
```

```
----Accessories Store----
```

	hood	freq
0	Florida Center	0.31
1	Lake Buena Vista	0.23
2	Audubon Park	0.15
3	Millenia	0.15
4	Orlando Executive Airport	0.08
5	Lake Davis/Greenwood	0.08
6	Princeton/Silver Star	0.00
7	Rowena Gardens	0.00
8	Rosemont North	0.00
9	Rosemont	0.00

----Airport----

	hood	freq
0	East Central Park	0.5
1	Colonial Town Center	0.5
2	Audubon Park	0.0
3	Pineloch	0.0
4	Seaboard Industrial	0.0
5	Rowena Gardens	0.0
6	Rosemont North	0.0
7	Rosemont	0.0
8	Rose Isle	0.0
9	Roosevelt Park	0.0

----American Restaurant----

	hood	freq
0	Wadeview Park	0.07
1	Thornton Park	0.07
2	Lake Buena Vista	0.06
3	Lake Holden	0.06
4	South Orange	0.06
5	Lawsona/Fern Creek	0.04
6	Millenia	0.04
7	Lake Cherokee	0.04
8	Lake Dot	0.03
9	Colonial Town Center	0.03

----Antique Shop----

	hood	freq
0	Lake Formosa	0.25
1	Orwin Manor	0.25
2	Park Lake/Highland	0.25
3	Lake Fairview	0.25
4	Audubon Park	0.00
5	Rowena Gardens	0.00
6	Rosemont North	0.00
7	Rosemont	0.00
8	Rose Isle	0.00
9	Roosevelt Park	0.00

----Arcade----

	hood	freq
0	Dover Shores West	1.0
1	Audubon Park	0.0
2	Signal Hill	0.0
3	Rowena Gardens	0.0

4	Rosemont North	0.0
5	Rosemont	0.0
6	Rose Isle	0.0
7	Roosevelt Park	0.0
8	Rock Lake	0.0
9	Rio Grande Park	0.0

----Arepa Restaurant----

	hood	freq
0	Azalea Park	0.33
1	Florida Center	0.33
2	Windhover	0.33
3	Park Lake/Highland	0.00
4	Rowena Gardens	0.00
5	Rosemont North	0.00
6	Rosemont	0.00
7	Rose Isle	0.00
8	Roosevelt Park	0.00
9	Rock Lake	0.00

----Art Gallery----

	hood	freq
0	Park Lake/Highland	0.23
1	Lake Formosa	0.15
2	Lake Buena Vista	0.15
3	Rose Isle	0.08
4	Colonialtown South	0.08
5	Orwin Manor	0.08
6	East Central Park	0.08
7	Rowena Gardens	0.08
8	Bal Bay	0.08
9	Rosemont	0.00

----Art Museum----

	hood	freq
0	Rowena Gardens	0.33
1	Rose Isle	0.33
2	Lake Formosa	0.33
3	Audubon Park	0.00
4	Lorna Doone	0.00
5	Rosemont North	0.00
6	Rosemont	0.00
7	Roosevelt Park	0.00
8	Rock Lake	0.00
9	Rio Grande Park	0.00

----Arts & Crafts Store----

	hood	freq
0	Coytown	0.14
1	East Central Park	0.14
2	Colonialtown South	0.14
3	Airport North	0.07
4	South Orange	0.07
5	Lake Formosa	0.07
6	Wedgewood Groves	0.07
7	Conway	0.07
8	Colonialtown North	0.07
9	Audubon Park	0.07

----Arts & Entertainment----

	hood	freq
0	Orlando Executive Airport	0.5
1	Colonial Town Center	0.5
2	Audubon Park	0.0
3	Park Lake/Highland	0.0
4	Rowena Gardens	0.0
5	Rosemont North	0.0
6	Rosemont	0.0
7	Rose Isle	0.0
8	Roosevelt Park	0.0
9	Rock Lake	0.0

----Asian Restaurant----

	hood	freq
0	Colonialtown North	0.23
1	Colonialtown South	0.19
2	Park Lake/Highland	0.15
3	Coytown	0.12
4	Williamsburg	0.04
5	Millenia	0.04
6	Baldwin Park	0.04
7	Dixie Belle	0.04
8	Lake Buena Vista	0.04
9	South Semoran	0.04

----Athletics & Sports----

	hood	freq
0	Lake Shore Village	0.17
1	NorthLake Park at Lake Nona	0.17

2	33rd Street Industrial	0.17
3	Lake Nona Estates	0.17
4	Lake Fairview	0.17
5	Vista East	0.17
6	Audubon Park	0.00
7	Pineloch	0.00
8	Rosemont	0.00
9	Rose Isle	0.00

----Auto Garage----

	hood	freq
0	Signal Hill	0.5
1	Holden Heights	0.5
2	Lorna Doone	0.0
3	Rowena Gardens	0.0
4	Rosemont North	0.0
5	Rosemont	0.0
6	Rose Isle	0.0
7	Roosevelt Park	0.0
8	Rock Lake	0.0
9	Rio Grande Park	0.0

----Auto Workshop----

	hood	freq
0	Seaboard Industrial	0.14
1	Mercy Drive	0.14
2	Kirkman North	0.14
3	Kirkman South	0.14
4	33rd Street Industrial	0.14
5	Windhover	0.14
6	Lake Fairview	0.14
7	Princeton/Silver Star	0.00
8	Rosemont North	0.00
9	Rosemont	0.00

----Automotive Shop----

	hood	freq
0	Dover Estates	0.08
1	East Central Park	0.08
2	West Colonial	0.08
3	The Willows	0.08
4	Azalea Park	0.08
5	Dover Shores West	0.08
6	Camellia Gardens	0.08
7	Haralson Estates	0.08

8	Coytown	0.08
9	Dover Manor	0.08

----BBQ Joint----

	hood	freq
0	Lake Buena Vista	0.09
1	Holden/Parramore	0.04
2	Coytown	0.04
3	Park Lake/Highland	0.04
4	Lake Sunset	0.04
5	Roosevelt Park	0.04
6	Lake Mann Gardens	0.04
7	Lake Mann Estates	0.04
8	Lake Holden	0.04
9	Lake Formosa	0.04

----Baby Store----

	hood	freq
0	East Central Park	0.5
1	Rock Lake	0.5
2	Audubon Park	0.0
3	Signal Hill	0.0
4	Rowena Gardens	0.0
5	Rosemont North	0.0
6	Rosemont	0.0
7	Rose Isle	0.0
8	Roosevelt Park	0.0
9	Rio Grande Park	0.0

----Bagel Shop----

	hood	freq
0	South Orange	0.1
1	Orwin Manor	0.1
2	South Division	0.1
3	Kirkman South	0.1
4	Lake Copeland	0.1
5	East Central Park	0.1
6	Wadeview Park	0.1
7	Windhover	0.1
8	Colonial Town Center	0.1
9	Coytown	0.1

----Bakery----

	hood	freq
--	------	------

0	Audubon Park	0.07
1	Coytown	0.07
2	Colonial Town Center	0.07
3	Wadeview Park	0.05
4	East Central Park	0.05
5	Lake Formosa	0.05
6	Rock Lake	0.05
7	Florida Center	0.05
8	West Colonial	0.05
9	Washington Shores	0.02

----Bank----

	hood	freq
0	Wadeview Park	0.09
1	Hunters Creek	0.09
2	Dixie Belle	0.04
3	Windhover	0.04
4	Dover Shores West	0.04
5	Dover Manor	0.04
6	Dover Estates	0.04
7	Coytown	0.04
8	Pineloch	0.04
9	Southern Oaks	0.04

----Bar----

	hood	freq
0	Lake Formosa	0.15
1	Park Lake/Highland	0.12
2	Lawsona/Fern Creek	0.10
3	Lake Buena Vista	0.10
4	East Central Park	0.07
5	Holden/Parramore	0.05
6	Colonialtown North	0.05
7	Colonialtown South	0.05
8	Florida Center	0.05
9	Dover Shores West	0.02

----Baseball Field----

	hood	freq
0	Colonialtown North	0.11
1	Bel Air	0.11
2	Signal Hill	0.11
3	Coytown	0.11
4	Audubon Park	0.05
5	Johnson Village	0.05

6	Lake Cherokee	0.05
7	Rosemont North	0.05
8	Roosevelt Park	0.05
9	Delaney Park	0.05

----Baseball Stadium----

	hood	freq
0	Bel Air	0.5
1	Lake Fairview	0.5
2	Audubon Park	0.0
3	Pineloch	0.0
4	Rowena Gardens	0.0
5	Rosemont North	0.0
6	Rosemont	0.0
7	Rose Isle	0.0
8	Roosevelt Park	0.0
9	Rock Lake	0.0

----Basketball Court----

	hood	freq
0	Holden/Parramore	0.33
1	Celebration	0.33
2	Pineloch	0.33
3	Audubon Park	0.00
4	Park Lake/Highland	0.00
5	Rosemont North	0.00
6	Rosemont	0.00
7	Rose Isle	0.00
8	Roosevelt Park	0.00
9	Rock Lake	0.00

----Basketball Stadium----

	hood	freq
0	Holden/Parramore	1.0
1	Audubon Park	0.0
2	Lorna Doone	0.0
3	Rowena Gardens	0.0
4	Rosemont North	0.0
5	Rosemont	0.0
6	Rose Isle	0.0
7	Roosevelt Park	0.0
8	Rock Lake	0.0
9	Rio Grande Park	0.0

----Bed & Breakfast----

	hood	freq
0	Lawsona/Fern Creek	0.2
1	Thornton Park	0.2
2	Lake Cherokee	0.2
3	Rock Lake	0.2
4	Delaney Park	0.2
5	Princeton/Silver Star	0.0
6	Rowena Gardens	0.0
7	Rosemont North	0.0
8	Rosemont	0.0
9	Rose Isle	0.0

----Beer Bar----

	hood	freq
0	Park Lake/Highland	0.25
1	Lake Formosa	0.25
2	Colonialtown North	0.12
3	Rowena Gardens	0.12
4	Thornton Park	0.12
5	Audubon Park	0.12
6	New Malibu	0.00
7	Randal Park	0.00
8	Mercy Drive	0.00
9	Rosemont North	0.00

----Beer Garden----

	hood	freq
0	Lawsona/Fern Creek	0.33
1	East Central Park	0.33
2	Colonialtown South	0.33
3	Pineloch	0.00
4	Seaboard Industrial	0.00
5	Rowena Gardens	0.00
6	Rosemont North	0.00
7	Rosemont	0.00
8	Rose Isle	0.00
9	Roosevelt Park	0.00

----Beer Store----

	hood	freq
0	Park Lake/Highland	0.5
1	Lake Formosa	0.5
2	Lorna Doone	0.0
3	Rowena Gardens	0.0

4	Rosemont North	0.0
5	Rosemont	0.0
6	Rose Isle	0.0
7	Roosevelt Park	0.0
8	Rock Lake	0.0
9	Rio Grande Park	0.0

----Big Box Store----

	hood	freq
0	Millenia	0.08
1	Colonial Town Center	0.08
2	South Division	0.08
3	Holden Heights	0.08
4	East Central Park	0.08
5	Lake Holden	0.08
6	Dixie Belle	0.08
7	Kirkman North	0.08
8	Princeton/Silver Star	0.08
9	Colonialtown South	0.08

----Bike Rental / Bike Share----

	hood	freq
0	Celebration	1.0
1	Audubon Park	0.0
2	Park Lake/Highland	0.0
3	Rowena Gardens	0.0
4	Rosemont North	0.0
5	Rosemont	0.0
6	Rose Isle	0.0
7	Roosevelt Park	0.0
8	Rock Lake	0.0
9	Rio Grande Park	0.0

----Bike Shop----

	hood	freq
0	MetroWest	1.0
1	Audubon Park	0.0
2	Park Lake/Highland	0.0
3	Rowena Gardens	0.0
4	Rosemont North	0.0
5	Rosemont	0.0
6	Rose Isle	0.0
7	Roosevelt Park	0.0
8	Rock Lake	0.0
9	Rio Grande Park	0.0

----Bike Trail----

	hood	freq
0	Audubon Park	1.0
1	Park Lake/Highland	0.0
2	Rowena Gardens	0.0
3	Rosemont North	0.0
4	Rosemont	0.0
5	Rose Isle	0.0
6	Roosevelt Park	0.0
7	Rock Lake	0.0
8	Rio Grande Park	0.0
9	Richmond Estates	0.0

----Bistro----

	hood	freq
0	Mariners Village	0.25
1	Holden/Parramore	0.25
2	Dover Estates	0.25
3	Lake Dot	0.25
4	Princeton/Silver Star	0.00
5	Rowena Gardens	0.00
6	Rosemont North	0.00
7	Rosemont	0.00
8	Rose Isle	0.00
9	Roosevelt Park	0.00

----Board Shop----

	hood	freq
0	Florida Center North	0.5
1	Florida Center	0.5
2	Mercy Drive	0.0
3	MetroWest	0.0
4	Signal Hill	0.0
5	Seaboard Industrial	0.0
6	Rowena Gardens	0.0
7	Rosemont North	0.0
8	Rosemont	0.0
9	Rose Isle	0.0

----Boat Rental----

	hood	freq
0	Lake Shore Village	1.0
1	Audubon Park	0.0

2	Park Lake/Highland	0.0
3	Rowena Gardens	0.0
4	Rosemont North	0.0
5	Rosemont	0.0
6	Rose Isle	0.0
7	Roosevelt Park	0.0
8	Rock Lake	0.0
9	Rio Grande Park	0.0

----Boat or Ferry----

	hood	freq
0	Kirkman South	0.5
1	Windhover	0.5
2	Audubon Park	0.0
3	Park Lake/Highland	0.0
4	Rosemont North	0.0
5	Rosemont	0.0
6	Rose Isle	0.0
7	Roosevelt Park	0.0
8	Rock Lake	0.0
9	Rio Grande Park	0.0

----Bookstore----

	hood	freq
0	Colonialtown South	0.33
1	Coytown	0.17
2	Park Lake/Highland	0.17
3	Colonialtown North	0.17
4	East Central Park	0.17
5	Rock Lake	0.00
6	Randal Park	0.00
7	Richmond Estates	0.00
8	Rio Grande Park	0.00
9	Audubon Park	0.00

----Botanical Garden----

	hood	freq
0	Camellia Gardens	1.0
1	Audubon Park	0.0
2	Park Lake/Highland	0.0
3	Rowena Gardens	0.0
4	Rosemont North	0.0
5	Rosemont	0.0
6	Rose Isle	0.0
7	Roosevelt Park	0.0

8	Rock Lake	0.0
9	Rio Grande Park	0.0

----Boutique----

	hood	freq
0	Lake Mary	0.3
1	Millenia	0.2
2	Lawsona/Fern Creek	0.1
3	East Central Park	0.1
4	Dover Estates	0.1
5	Colonialtown South	0.1
6	Wedgewood Groves	0.1
7	Rose Isle	0.0
8	Princeton/Silver Star	0.0
9	Rosemont	0.0

----Bowling Alley----

	hood	freq
0	Audubon Park	0.5
1	Lake Buena Vista	0.5
2	Park Lake/Highland	0.0
3	Rowena Gardens	0.0
4	Rosemont North	0.0
5	Rosemont	0.0
6	Rose Isle	0.0
7	Roosevelt Park	0.0
8	Rock Lake	0.0
9	Rio Grande Park	0.0

----Brazilian Restaurant----

	hood	freq
0	Kirkman North	0.50
1	Kirkman South	0.25
2	Windhover	0.25
3	Audubon Park	0.00
4	Pineloch	0.00
5	Rosemont North	0.00
6	Rosemont	0.00
7	Rose Isle	0.00
8	Roosevelt Park	0.00
9	Rock Lake	0.00

----Breakfast Spot----

	hood	freq
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0	Windhover	0.14
1	Park Lake/Highland	0.10
2	Hunters Creek	0.10
3	Lawsona/Fern Creek	0.05
4	Millenia	0.05
5	Lake Formosa	0.05
6	Rowena Gardens	0.05
7	Florida Center	0.05
8	Thornton Park	0.05
9	Ventura	0.05

----Brewery----

	hood	freq
0	Lorna Doone	0.10
1	Park Lake/Highland	0.10
2	Lake Formosa	0.10
3	Holden/Parramore	0.10
4	Lawsona/Fern Creek	0.05
5	Colonialtown South	0.05
6	Orwin Manor	0.05
7	Rowena Gardens	0.05
8	Lake Copeland	0.05
9	South Division	0.05

----Bubble Tea Shop----

	hood	freq
0	Park Lake/Highland	0.33
1	Kirkman South	0.33
2	Colonialtown South	0.33
3	Pineloch	0.00
4	Rowena Gardens	0.00
5	Rosemont North	0.00
6	Rosemont	0.00
7	Rose Isle	0.00
8	Roosevelt Park	0.00
9	Rock Lake	0.00

----Buffet----

	hood	freq
0	Dixie Belle	1.0
1	Audubon Park	0.0
2	Signal Hill	0.0
3	Rowena Gardens	0.0
4	Rosemont North	0.0
5	Rosemont	0.0

6	Rose Isle	0.0
7	Roosevelt Park	0.0
8	Rock Lake	0.0
9	Rio Grande Park	0.0

----Building----

	hood	freq
0	Narcoossee South	1.0
1	Audubon Park	0.0
2	Park Lake/Highland	0.0
3	Rowena Gardens	0.0
4	Rosemont North	0.0
5	Rosemont	0.0
6	Rose Isle	0.0
7	Roosevelt Park	0.0
8	Rock Lake	0.0
9	Rio Grande Park	0.0

----Burger Joint----

	hood	freq
0	Millenia	0.13
1	Florida Center	0.10
2	Colonial Town Center	0.07
3	Lake Holden	0.07
4	Holden/Parramore	0.07
5	Wadeview Park	0.07
6	Windhover	0.07
7	South Orange	0.07
8	Kirkman South	0.03
9	Lake Buena Vista	0.03

----Burrito Place----

	hood	freq
0	Coytown	0.33
1	East Central Park	0.33
2	Colonialtown South	0.33
3	Audubon Park	0.00
4	Seaboard Industrial	0.00
5	Rowena Gardens	0.00
6	Rosemont North	0.00
7	Rosemont	0.00
8	Rose Isle	0.00
9	Roosevelt Park	0.00

----Bus Station----

	hood	freq
0	West Colonial	0.25
1	Haralson Estates	0.25
2	Rock Lake	0.25
3	Lake Dot	0.25
4	Rowena Gardens	0.00
5	Rosemont North	0.00
6	Rosemont	0.00
7	Rose Isle	0.00
8	Roosevelt Park	0.00
9	Rio Grande Park	0.00

----Bus Stop----

	hood	freq
0	Kirkman South	1.0
1	Audubon Park	0.0
2	Lorna Doone	0.0
3	Rowena Gardens	0.0
4	Rosemont North	0.0
5	Rosemont	0.0
6	Rose Isle	0.0
7	Roosevelt Park	0.0
8	Rock Lake	0.0
9	Rio Grande Park	0.0

----Business Service----

	hood	freq
0	Park Lake/Highland	0.25
1	Southern Oaks	0.25
2	LaVina	0.25
3	Lake Holden	0.25
4	Pineloch	0.00
5	Rosemont North	0.00
6	Rosemont	0.00
7	Rose Isle	0.00
8	Roosevelt Park	0.00
9	Rock Lake	0.00

----Butcher----

	hood	freq
0	Pineloch	0.2
1	South Orange	0.2
2	Southern Oaks	0.2
3	Colonialtown North	0.2

4	Wadeview Park	0.2
5	Audubon Park	0.0
6	Rosemont North	0.0
7	Rosemont	0.0
8	Rose Isle	0.0
9	Roosevelt Park	0.0

----Cafeteria----

	hood	freq
0	Seaboard Industrial	0.33
1	Mercy Drive	0.33
2	Orwin Manor	0.33
3	Pineloch	0.00
4	Rowena Gardens	0.00
5	Rosemont North	0.00
6	Rosemont	0.00
7	Rose Isle	0.00
8	Roosevelt Park	0.00
9	Rock Lake	0.00

----Café----

	hood	freq
0	Colonialtown South	0.11
1	Orwin Manor	0.09
2	Lake Buena Vista	0.06
3	Thornton Park	0.06
4	Coytown	0.06
5	Rose Isle	0.06
6	Audubon Park	0.03
7	Holden/Parramore	0.03
8	Lake Copeland	0.03
9	Lake Formosa	0.03

----Cajun / Creole Restaurant----

	hood	freq
0	Park Lake/Highland	0.25
1	Thornton Park	0.25
2	Lake Cherokee	0.25
3	Colonialtown North	0.25
4	Pineloch	0.00
5	Rowena Gardens	0.00
6	Rosemont North	0.00
7	Rosemont	0.00
8	Rose Isle	0.00
9	Roosevelt Park	0.00

----Camera Store----

	hood	freq
0	Park Lake/Highland	0.5
1	Colonialtown South	0.5
2	Audubon Park	0.0
3	Rowena Gardens	0.0
4	Rosemont North	0.0
5	Rosemont	0.0
6	Rose Isle	0.0
7	Roosevelt Park	0.0
8	Rock Lake	0.0
9	Rio Grande Park	0.0

----Campground----

	hood	freq
0	NorthLake Park at Lake Nona	1.0
1	Audubon Park	0.0
2	Park Lake/Highland	0.0
3	Rowena Gardens	0.0
4	Rosemont North	0.0
5	Rosemont	0.0
6	Rose Isle	0.0
7	Roosevelt Park	0.0
8	Rock Lake	0.0
9	Rio Grande Park	0.0

----Candy Store----

	hood	freq
0	Holden/Parramore	0.5
1	Baldwin Park	0.5
2	Audubon Park	0.0
3	Pineloch	0.0
4	Rowena Gardens	0.0
5	Rosemont North	0.0
6	Rosemont	0.0
7	Rose Isle	0.0
8	Roosevelt Park	0.0
9	Rock Lake	0.0

----Caribbean Restaurant----

	hood	freq
0	Haralson Estates	0.25
1	Rock Lake	0.25

2	Florida Center	0.12
3	Lake Buena Vista	0.12
4	Rio Grande Park	0.12
5	West Colonial	0.12
6	Pineloch	0.00
7	Seaboard Industrial	0.00
8	Rowena Gardens	0.00
9	Rosemont North	0.00

----Carpet Store----

	hood	freq
0	Lake Richmond	0.5
1	Richmond Estates	0.5
2	Audubon Park	0.0
3	Park Lake/Highland	0.0
4	Rowena Gardens	0.0
5	Rosemont North	0.0
6	Rosemont	0.0
7	Rose Isle	0.0
8	Roosevelt Park	0.0
9	Rock Lake	0.0

----Cemetery----

	hood	freq
0	Lawsona/Fern Creek	0.33
1	Lake Weldon	0.33
2	Lake Davis/Greenwood	0.33
3	Pineloch	0.00
4	Rowena Gardens	0.00
5	Rosemont North	0.00
6	Rosemont	0.00
7	Rose Isle	0.00
8	Roosevelt Park	0.00
9	Rock Lake	0.00

----Check Cashing Service----

	hood	freq
0	Countryside	1.0
1	Audubon Park	0.0
2	Signal Hill	0.0
3	Rowena Gardens	0.0
4	Rosemont North	0.0
5	Rosemont	0.0
6	Rose Isle	0.0
7	Roosevelt Park	0.0

8 Rock Lake 0.0
 9 Rio Grande Park 0.0

----Chinese Restaurant----

 hood freq
 0 Kirkman North 0.09
 1 Park Lake/Highland 0.06
 2 South Semoran 0.06
 3 Mariners Village 0.06
 4 Dover Estates 0.06
 5 Lake Fredrica 0.06
 6 Kirkman South 0.06
 7 Colonialtown South 0.06
 8 Windhover 0.03
 9 Ventura 0.03

----Chiropractor----

 hood freq
 0 Lake Shore Village 1.0
 1 Audubon Park 0.0
 2 Park Lake/Highland 0.0
 3 Rowena Gardens 0.0
 4 Rosemont North 0.0
 5 Rosemont 0.0
 6 Rose Isle 0.0
 7 Roosevelt Park 0.0
 8 Rock Lake 0.0
 9 Rio Grande Park 0.0

----Chocolate Shop----

 hood freq
 0 Florida Center 0.33
 1 Lake Buena Vista 0.33
 2 Millenia 0.33
 3 Audubon Park 0.00
 4 Pineloch 0.00
 5 Rowena Gardens 0.00
 6 Rosemont North 0.00
 7 Rosemont 0.00
 8 Rose Isle 0.00
 9 Roosevelt Park 0.00

----Church----

 hood freq

0	Lake Dot	1.0
1	Audubon Park	0.0
2	Lorna Doone	0.0
3	Rowena Gardens	0.0
4	Rosemont North	0.0
5	Rosemont	0.0
6	Rose Isle	0.0
7	Roosevelt Park	0.0
8	Rock Lake	0.0
9	Rio Grande Park	0.0

----Clothing Store----

		hood	freq
0	Florida Center	0.22	
1	Millenia	0.15	
2	Lake Buena Vista	0.14	
3	East Central Park	0.07	
4	Wadeview Park	0.03	
5	Florida Center North	0.03	
6	Colonialtown South	0.03	
7	Audubon Park	0.03	
8	Airport North	0.03	
9	South Division	0.02	

----Cocktail Bar----

		hood	freq
0	Lake Cherokee	0.18	
1	Park Lake/Highland	0.12	
2	Thornton Park	0.12	
3	Lake Buena Vista	0.12	
4	Lake Formosa	0.12	
5	Colonialtown North	0.12	
6	Windhover	0.06	
7	Holden/Parramore	0.06	
8	Winter Park	0.06	
9	Rowena Gardens	0.06	

----Coffee Shop----

		hood	freq
0	Florida Center	0.10	
1	Lake Holden	0.08	
2	Windhover	0.06	
3	South Orange	0.06	
4	Millenia	0.06	
5	Audubon Park	0.04	

6	Coytown	0.04
7	South Division	0.04
8	Park Lake/Highland	0.04
9	Lake Formosa	0.04

----College Gym----

	hood	freq
0	Westfield	1.0
1	Audubon Park	0.0
2	Park Lake/Highland	0.0
3	Rowena Gardens	0.0
4	Rosemont North	0.0
5	Rosemont	0.0
6	Rose Isle	0.0
7	Roosevelt Park	0.0
8	Rock Lake	0.0
9	Rio Grande Park	0.0

----Comic Shop----

	hood	freq
0	Audubon Park	0.2
1	Coytown	0.2
2	Millenia	0.2
3	Dover Shores West	0.2
4	Colonial Town Center	0.2
5	Seaboard Industrial	0.0
6	Rowena Gardens	0.0
7	Rosemont North	0.0
8	Rosemont	0.0
9	Rose Isle	0.0

----Concert Hall----

	hood	freq
0	Lancaster Park	0.5
1	Wadeview Park	0.5
2	Audubon Park	0.0
3	Park Lake/Highland	0.0
4	Rosemont North	0.0
5	Rosemont	0.0
6	Rose Isle	0.0
7	Roosevelt Park	0.0
8	Rock Lake	0.0
9	Rio Grande Park	0.0

----Construction & Landscaping----

	hood	freq
0	Holden Heights	0.06
1	Lake Richmond	0.06
2	South Division	0.06
3	South Orange	0.06
4	Lake Dot	0.06
5	East Park	0.06
6	Richmond Estates	0.06
7	Lake Holden	0.06
8	Lake Mann Estates	0.06
9	Lake Nona Central	0.06

----Convenience Store----

	hood	freq
0	Park Central	0.05
1	Lake Fairview	0.04
2	South Orange	0.04
3	Lake Dot	0.04
4	Camellia Gardens	0.04
5	Wadeview Park	0.04
6	The Willows	0.04
7	Princeton/Silver Star	0.04
8	Lake Fredrica	0.02
9	Lake Copeland	0.02

----Cosmetics Shop----

	hood	freq
0	Millenia	0.10
1	Dover Shores West	0.05
2	South Orange	0.05
3	Dover Estates	0.05
4	Coytown	0.05
5	Wedgewood Groves	0.05
6	East Central Park	0.05
7	Lake Buena Vista	0.05
8	South Semoran	0.03
9	Kirkman North	0.03

----Creperie----

	hood	freq
0	LaVina	1.0
1	Audubon Park	0.0
2	Lorna Doone	0.0
3	Rowena Gardens	0.0

4	Rosemont North	0.0
5	Rosemont	0.0
6	Rose Isle	0.0
7	Roosevelt Park	0.0
8	Rock Lake	0.0
9	Rio Grande Park	0.0

----Cuban Restaurant----

	hood	freq
0	Azalea Park	0.15
1	Coytown	0.08
2	Colonialtown North	0.08
3	Wadeview Park	0.08
4	Lake Holden	0.08
5	Dover Shores West	0.08
6	Colonialtown South	0.08
7	Lake Fairview	0.08
8	Kissimmee	0.08
9	South Orange	0.08

----Cupcake Shop----

	hood	freq
0	Audubon Park	0.5
1	Lake Buena Vista	0.5
2	Park Lake/Highland	0.0
3	Rowena Gardens	0.0
4	Rosemont North	0.0
5	Rosemont	0.0
6	Rose Isle	0.0
7	Roosevelt Park	0.0
8	Rock Lake	0.0
9	Rio Grande Park	0.0

----Dance Studio----

	hood	freq
0	Lake Mary	0.21
1	Richmond Estates	0.14
2	33rd Street Industrial	0.14
3	Airport North	0.07
4	Lake Underhill	0.07
5	Lake Richmond	0.07
6	Lake Holden	0.07
7	Park Lake/Highland	0.07
8	Kissimmee	0.07
9	Kirkman South	0.07

----Deli / Bodega----

	hood	freq
0	Coytown	0.15
1	Colonial Town Center	0.10
2	West Colonial	0.10
3	East Central Park	0.10
4	Windhover	0.05
5	Lake Nona Central	0.05
6	Lake Holden	0.05
7	Conway	0.05
8	Colonialtown South	0.05
9	Wadeview Park	0.05

----Department Store----

	hood	freq
0	Millenia	0.23
1	Audubon Park	0.15
2	Colonial Town Center	0.08
3	East Central Park	0.08
4	Lake Formosa	0.08
5	Coytown	0.08
6	Williamsburg	0.08
7	Park Central	0.08
8	Kirkman North	0.08
9	Camellia Gardens	0.08

----Design Studio----

	hood	freq
0	Park Lake/Highland	0.5
1	Colonialtown North	0.5
2	Audubon Park	0.0
3	Rowena Gardens	0.0
4	Rosemont North	0.0
5	Rosemont	0.0
6	Rose Isle	0.0
7	Roosevelt Park	0.0
8	Rock Lake	0.0
9	Rio Grande Park	0.0

----Dessert Shop----

	hood	freq
0	Millenia	0.07
1	Celebration	0.07

2	East Central Park	0.07
3	Coytown	0.07
4	Thornton Park	0.07
5	Lake Formosa	0.07
6	Colonialtown North	0.07
7	Colonial Town Center	0.07
8	Lake Holden	0.07
9	South Orange	0.07

----Dim Sum Restaurant----

	hood	freq
0	Colonialtown North	0.33
1	Colonialtown South	0.33
2	Park Lake/Highland	0.33
3	Audubon Park	0.00
4	Pineloch	0.00
5	Seaboard Industrial	0.00
6	Rowena Gardens	0.00
7	Rosemont North	0.00
8	Rosemont	0.00
9	Rose Isle	0.00

----Diner----

	hood	freq
0	Audubon Park	0.17
1	East Central Park	0.17
2	Dover Shores West	0.17
3	Celebration	0.17
4	Lake Dot	0.17
5	Williamsburg	0.17
6	Pineloch	0.00
7	Rosemont North	0.00
8	Rosemont	0.00
9	Rose Isle	0.00

----Discount Store----

	hood	freq
0	Roosevelt Park	0.07
1	Dover Shores West	0.05
2	Colonialtown South	0.05
3	New Malibu	0.05
4	Coytown	0.05
5	Countryside	0.05
6	Millenia	0.05
7	Lake Mann Gardens	0.05

8	East Central Park	0.02
9	Wedgewood Groves	0.02

----Dive Bar----

	hood	freq
0	Lawsona/Fern Creek	0.29
1	Kirkman South	0.14
2	East Central Park	0.14
3	Thornton Park	0.14
4	Windhover	0.14
5	Colonialtown South	0.14
6	Pineloch	0.00
7	Rosemont North	0.00
8	Rosemont	0.00
9	Rose Isle	0.00

----Dive Shop----

	hood	freq
0	Palomar	1.0
1	Audubon Park	0.0
2	Park Lake/Highland	0.0
3	Rowena Gardens	0.0
4	Rosemont North	0.0
5	Rosemont	0.0
6	Rose Isle	0.0
7	Roosevelt Park	0.0
8	Rock Lake	0.0
9	Rio Grande Park	0.0

----Doctor's Office----

	hood	freq
0	Coytown	1.0
1	Audubon Park	0.0
2	Signal Hill	0.0
3	Rowena Gardens	0.0
4	Rosemont North	0.0
5	Rosemont	0.0
6	Rose Isle	0.0
7	Roosevelt Park	0.0
8	Rock Lake	0.0
9	Rio Grande Park	0.0

----Dog Run----

	hood	freq
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0	Bal Bay	0.2
1	Baldwin Park	0.2
2	Kirkman South	0.2
3	Windhover	0.2
4	NorthLake Park at Lake Nona	0.2
5	Audubon Park	0.0
6	Rock Lake	0.0
7	Randal Park	0.0
8	Richmond Estates	0.0
9	Rio Grande Park	0.0

----Donut Shop----

	hood	freq
0	Millenia	0.05
1	Lake Dot	0.05
2	Lake Copeland	0.05
3	Lake Cherokee	0.05
4	South Division	0.05
5	South Orange	0.05
6	Kirkman North	0.05
7	South Semoran	0.05
8	Lake Fredrica	0.05
9	Rosemont North	0.05

----Drugstore----

	hood	freq
0	Lake Fairview	1.0
1	Audubon Park	0.0
2	Lorna Doone	0.0
3	Rowena Gardens	0.0
4	Rosemont North	0.0
5	Rosemont	0.0
6	Rose Isle	0.0
7	Roosevelt Park	0.0
8	Rock Lake	0.0
9	Rio Grande Park	0.0

----Dry Cleaner----

	hood	freq
0	Dover Shores West	0.5
1	Dover Manor	0.5
2	Audubon Park	0.0
3	Princeton/Silver Star	0.0
4	Seaboard Industrial	0.0
5	Rowena Gardens	0.0

6	Rosemont North	0.0
7	Rosemont	0.0
8	Rose Isle	0.0
9	Roosevelt Park	0.0

----Electronics Store----

	hood	freq
0	Millenia	0.23
1	South Division	0.08
2	Florida Center	0.08
3	Lake Copeland	0.08
4	Colonial Town Center	0.08
5	East Central Park	0.08
6	Wadeview Park	0.08
7	Engelwood Park	0.08
8	South Orange	0.08
9	Narcoossee South	0.08

----Ethiopian Restaurant----

	hood	freq
0	Williamsburg	1.0
1	Audubon Park	0.0
2	Park Lake/Highland	0.0
3	Rowena Gardens	0.0
4	Rosemont North	0.0
5	Rosemont	0.0
6	Rose Isle	0.0
7	Roosevelt Park	0.0
8	Rock Lake	0.0
9	Rio Grande Park	0.0

----Event Space----

	hood	freq
0	Park Lake/Highland	0.5
1	Colonialtown North	0.5
2	Audubon Park	0.0
3	Rowena Gardens	0.0
4	Rosemont North	0.0
5	Rosemont	0.0
6	Rose Isle	0.0
7	Roosevelt Park	0.0
8	Rock Lake	0.0
9	Rio Grande Park	0.0

----Fabric Shop----

	hood	freq
0	Colonial Town Center	1.0
1	Audubon Park	0.0
2	Park Lake/Highland	0.0
3	Rowena Gardens	0.0
4	Rosemont North	0.0
5	Rosemont	0.0
6	Rose Isle	0.0
7	Roosevelt Park	0.0
8	Rock Lake	0.0
9	Rio Grande Park	0.0

----Farmers Market----

	hood	freq
0	Audubon Park	0.12
1	Richmond Estates	0.12
2	Thornton Park	0.12
3	Lake Richmond	0.12
4	33rd Street Industrial	0.12
5	Celebration	0.12
6	Lake Mary	0.12
7	Windermere	0.12
8	Rock Lake	0.00
9	Rio Grande Park	0.00

----Fast Food Restaurant----

	hood	freq
0	The Willows	0.06
1	Kirkman North	0.04
2	Lorna Doone	0.04
3	Windhover	0.04
4	Countryside	0.04
5	Lake Holden	0.04
6	South Orange	0.04
7	Wadeview Park	0.04
8	Princeton/Silver Star	0.03
9	South Semoran	0.03

----Financial or Legal Service----

	hood	freq
0	Hunters Creek	1.0
1	Audubon Park	0.0
2	Park Lake/Highland	0.0
3	Rowena Gardens	0.0

4	Rosemont North	0.0
5	Rosemont	0.0
6	Rose Isle	0.0
7	Roosevelt Park	0.0
8	Rock Lake	0.0
9	Rio Grande Park	0.0

----Fish & Chips Shop----

hood freq

0	Lake Buena Vista	1.0
1	Audubon Park	0.0
2	Park Lake/Highland	0.0
3	Rowena Gardens	0.0
4	Rosemont North	0.0
5	Rosemont	0.0
6	Rose Isle	0.0
7	Roosevelt Park	0.0
8	Rock Lake	0.0
9	Rio Grande Park	0.0

----Fish Market----

hood freq

0	Lake Sunset	1.0
1	Audubon Park	0.0
2	Park Lake/Highland	0.0
3	Rowena Gardens	0.0
4	Rosemont North	0.0
5	Rosemont	0.0
6	Rose Isle	0.0
7	Roosevelt Park	0.0
8	Rock Lake	0.0
9	Rio Grande Park	0.0

----Fishing Spot----

hood freq

0	The Dovers	0.5
1	Dover Manor	0.5
2	Audubon Park	0.0
3	Pineloch	0.0
4	Rowena Gardens	0.0
5	Rosemont North	0.0
6	Rosemont	0.0
7	Rose Isle	0.0
8	Roosevelt Park	0.0
9	Rock Lake	0.0

----Flower Shop----

	hood	freq
0	South Division	0.15
1	Audubon Park	0.08
2	East Central Park	0.08
3	South Orange	0.08
4	Rowena Gardens	0.08
5	Princeton/Silver Star	0.08
6	Orlando Executive Airport	0.08
7	Lake Holden	0.08
8	Holden/Parramore	0.08
9	Holden Heights	0.08

----Food----

	hood	freq
0	Seaboard Industrial	0.29
1	Camellia Gardens	0.14
2	The Willows	0.14
3	Rio Grande Park	0.14
4	Orlando Executive Airport	0.14
5	Audubon Park	0.14
6	Narcoossee South	0.00
7	Randal Park	0.00
8	Rowena Gardens	0.00
9	Rosemont North	0.00

----Food & Drink Shop----

	hood	freq
0	Audubon Park	1.0
1	Park Lake/Highland	0.0
2	Rowena Gardens	0.0
3	Rosemont North	0.0
4	Rosemont	0.0
5	Rose Isle	0.0
6	Roosevelt Park	0.0
7	Rock Lake	0.0
8	Rio Grande Park	0.0
9	Richmond Estates	0.0

----Food Court----

	hood	freq
0	Colonialtown North	0.5
1	Coytown	0.5

2	Audubon Park	0.0
3	Pineloch	0.0
4	Seaboard Industrial	0.0
5	Rowena Gardens	0.0
6	Rosemont North	0.0
7	Rosemont	0.0
8	Rose Isle	0.0
9	Roosevelt Park	0.0

----Food Truck----

	hood	freq
0	Lawsona/Fern Creek	0.09
1	Lake Dot	0.09
2	Dover Shores West	0.06
3	Holden/Parramore	0.06
4	East Central Park	0.06
5	Winter Park	0.06
6	Bryn Mawr	0.03
7	Dover Estates	0.03
8	Celebration	0.03
9	Wedgewood Groves	0.03

----Football Stadium----

	hood	freq
0	Holden/Parramore	0.50
1	Lorna Doone	0.25
2	Lake Sunset	0.25
3	Park Lake/Highland	0.00
4	Rosemont North	0.00
5	Rosemont	0.00
6	Rose Isle	0.00
7	Roosevelt Park	0.00
8	Rock Lake	0.00
9	Rio Grande Park	0.00

----Fountain----

	hood	freq
0	Lake Buena Vista	0.5
1	Celebration	0.5
2	Audubon Park	0.0
3	Park Central	0.0
4	Rosemont North	0.0
5	Rosemont	0.0
6	Rose Isle	0.0
7	Roosevelt Park	0.0

8 Rock Lake 0.0
 9 Rio Grande Park 0.0

----French Restaurant----

 hood freq
 0 Lawsona/Fern Creek 0.25
 1 Baldwin Park 0.25
 2 Thornton Park 0.25
 3 Lake Dot 0.25
 4 Pineloch 0.00
 5 Rowena Gardens 0.00
 6 Rosemont North 0.00
 7 Rosemont 0.00
 8 Rose Isle 0.00
 9 Roosevelt Park 0.00

----Fried Chicken Joint----

 hood freq
 0 Holden/Parramore 0.13
 1 Lorna Doone 0.13
 2 Haralson Estates 0.04
 3 West Colonial 0.04
 4 Roosevelt Park 0.04
 5 Rock Lake 0.04
 6 Rio Grande Park 0.04
 7 South Semoran 0.04
 8 Lake Fairview 0.04
 9 Lake Fredrica 0.04

----Frozen Yogurt Shop----

 hood freq
 0 Florida Center 0.25
 1 LaVina 0.25
 2 Thornton Park 0.25
 3 Airport North 0.25
 4 Audubon Park 0.00
 5 Pineloch 0.00
 6 Rosemont North 0.00
 7 Rosemont 0.00
 8 Rose Isle 0.00
 9 Roosevelt Park 0.00

----Fruit & Vegetable Store----

 hood freq

0	Conway	0.33
1	Dover Shores West	0.33
2	Lake Formosa	0.33
3	Pineloch	0.00
4	Rowena Gardens	0.00
5	Rosemont North	0.00
6	Rosemont	0.00
7	Rose Isle	0.00
8	Roosevelt Park	0.00
9	Rock Lake	0.00

----Furniture / Home Store----

	hood	freq
0	Millenia	0.25
1	Park Lake/Highland	0.06
2	Lake Fairview	0.06
3	Lake Formosa	0.06
4	East Central Park	0.06
5	Narcoossee South	0.03
6	Seaboard Industrial	0.03
7	Lake Dot	0.03
8	Rock Lake	0.03
9	Richmond Estates	0.03

----Garden----

	hood	freq
0	Rowena Gardens	0.22
1	Rose Isle	0.22
2	Orwin Manor	0.22
3	Colonialtown North	0.22
4	Lake Formosa	0.11
5	Audubon Park	0.00
6	Pineloch	0.00
7	Rosemont North	0.00
8	Rosemont	0.00
9	Roosevelt Park	0.00

----Garden Center----

	hood	freq
0	Lorna Doone	0.25
1	Holden/Parramore	0.25
2	Palomar	0.25
3	Westfield	0.25
4	Pineloch	0.00
5	Rowena Gardens	0.00

6	Rosemont North	0.00
7	Rosemont	0.00
8	Rose Isle	0.00
9	Roosevelt Park	0.00

----Gas Station----

	hood	freq
0	Dixie Belle	0.12
1	Audubon Park	0.08
2	Colonialtown North	0.08
3	Coytown	0.04
4	Malibu Groves	0.04
5	Orlando Executive Airport	0.04
6	Orwin Manor	0.04
7	Lake Underhill	0.04
8	Pineloch	0.04
9	Rio Grande Park	0.04

----Gastropub----

	hood	freq
0	Holden/Parramore	0.5
1	Colonialtown North	0.5
2	Audubon Park	0.0
3	Pineloch	0.0
4	Rowena Gardens	0.0
5	Rosemont North	0.0
6	Rosemont	0.0
7	Rose Isle	0.0
8	Roosevelt Park	0.0
9	Rock Lake	0.0

----Gay Bar----

	hood	freq
0	Rock Lake	0.45
1	Lake Formosa	0.18
2	Lawsona/Fern Creek	0.09
3	Holden/Parramore	0.09
4	East Central Park	0.09
5	Lake Fairview	0.09
6	Randal Park	0.00
7	Rowena Gardens	0.00
8	Rosemont North	0.00
9	Rosemont	0.00

----General Entertainment----

	hood	freq
0	Lake Richmond	0.33
1	Richmond Estates	0.33
2	33rd Street Industrial	0.33
3	Audubon Park	0.00
4	Park Central	0.00
5	Rosemont North	0.00
6	Rosemont	0.00
7	Rose Isle	0.00
8	Roosevelt Park	0.00
9	Rock Lake	0.00

----German Restaurant----

	hood	freq
0	Lake Mann Gardens	0.33
1	Lake Mann Estates	0.33
2	Washington Shores	0.33
3	Audubon Park	0.00
4	Park Lake/Highland	0.00
5	Rosemont North	0.00
6	Rosemont	0.00
7	Rose Isle	0.00
8	Roosevelt Park	0.00
9	Rock Lake	0.00

----Gift Shop----

	hood	freq
0	Lake Buena Vista	0.21
1	Florida Center	0.11
2	Colonialtown South	0.11
3	Mariners Village	0.05
4	Colonialtown North	0.05
5	East Central Park	0.05
6	Wadeview Park	0.05
7	Dover Estates	0.05
8	Wedgewood Groves	0.05
9	Pineloch	0.05

----Golf Course----

	hood	freq
0	Ventura	0.2
1	NorthLake Park at Lake Nona	0.2
2	Lake Nona Estates	0.2
3	Lake Buena Vista	0.1

4	MetroWest	0.1
5	Hunters Creek	0.1
6	Celebration	0.1
7	Pineloch	0.0
8	Princeton/Silver Star	0.0
9	Randal Park	0.0

----Greek Restaurant----

	hood	freq
0	Lake Holden	0.12
1	Wadeview Park	0.12
2	Lake Mary	0.12
3	South Orange	0.12
4	Dover Shores West	0.12
5	Thornton Park	0.12
6	Park Lake/Highland	0.12
7	Lake Formosa	0.12
8	Rosemont	0.00
9	Rose Isle	0.00

----Grocery Store----

	hood	freq
0	Colonialtown North	0.08
1	Park Lake/Highland	0.07
2	Colonialtown South	0.07
3	Haralson Estates	0.05
4	Dover Estates	0.03
5	Johnson Village	0.03
6	Lake Fredrica	0.03
7	Wadeview Park	0.03
8	West Colonial	0.03
9	Dover Shores West	0.03

----Gym----

	hood	freq
0	Wadeview Park	0.06
1	Colonial Town Center	0.06
2	Coytown	0.06
3	Williamsburg	0.04
4	Lake Formosa	0.04
5	Lake Holden	0.04
6	Colonialtown South	0.04
7	South Orange	0.04
8	Camellia Gardens	0.04
9	Rowena Gardens	0.02

----Gym / Fitness Center----

	hood	freq
0	MetroWest	0.06
1	Park Central	0.04
2	Airport North	0.04
3	Lake Fredrica	0.04
4	South Orange	0.04
5	Kirkman South	0.04
6	South Semoran	0.04
7	Mariners Village	0.04
8	Windhover	0.04
9	Lake Holden	0.04

----Gymnastics Gym----

	hood	freq
0	Baldwin Park	0.25
1	Lake Richmond	0.25
2	33rd Street Industrial	0.25
3	Richmond Estates	0.25
4	Audubon Park	0.00
5	Park Lake/Highland	0.00
6	Rowena Gardens	0.00
7	Rosemont North	0.00
8	Rosemont	0.00
9	Rose Isle	0.00

----Harbor / Marina----

	hood	freq
0	Lake Holden	0.2
1	South Division	0.2
2	South Orange	0.2
3	Lake Fairview	0.2
4	Holden Heights	0.2
5	Pineloch	0.0
6	Rosemont North	0.0
7	Rosemont	0.0
8	Rose Isle	0.0
9	Roosevelt Park	0.0

----Hardware Store----

	hood	freq
0	Haralson Estates	1.0
1	Lorna Doone	0.0

2	Seaboard Industrial	0.0
3	Rowena Gardens	0.0
4	Rosemont North	0.0
5	Rosemont	0.0
6	Rose Isle	0.0
7	Roosevelt Park	0.0
8	Rock Lake	0.0
9	Rio Grande Park	0.0

----Hawaiian Restaurant----

	hood	freq
0	Hunters Creek	1.0
1	Audubon Park	0.0
2	Park Lake/Highland	0.0
3	Rowena Gardens	0.0
4	Rosemont North	0.0
5	Rosemont	0.0
6	Rose Isle	0.0
7	Roosevelt Park	0.0
8	Rock Lake	0.0
9	Rio Grande Park	0.0

----Health & Beauty Service----

	hood	freq
0	Signal Hill	0.33
1	Lake Buena Vista	0.33
2	Celebration	0.33
3	Park Lake/Highland	0.00
4	Rowena Gardens	0.00
5	Rosemont North	0.00
6	Rosemont	0.00
7	Rose Isle	0.00
8	Roosevelt Park	0.00
9	Rock Lake	0.00

----Herbs & Spices Store----

	hood	freq
0	Lake Holden	1.0
1	Audubon Park	0.0
2	Park Lake/Highland	0.0
3	Rowena Gardens	0.0
4	Rosemont North	0.0
5	Rosemont	0.0
6	Rose Isle	0.0
7	Roosevelt Park	0.0

8	Rock Lake	0.0
9	Rio Grande Park	0.0

----Historic Site----

	hood	freq
0	Kissimmee	1.0
1	Audubon Park	0.0
2	Park Lake/Highland	0.0
3	Rowena Gardens	0.0
4	Rosemont North	0.0
5	Rosemont	0.0
6	Rose Isle	0.0
7	Roosevelt Park	0.0
8	Rock Lake	0.0
9	Rio Grande Park	0.0

----History Museum----

	hood	freq
0	Holden/Parramore	0.25
1	Rowena Gardens	0.25
2	Rose Isle	0.25
3	Colonialtown North	0.25
4	Audubon Park	0.00
5	Pineloch	0.00
6	Rosemont North	0.00
7	Rosemont	0.00
8	Roosevelt Park	0.00
9	Rock Lake	0.00

----Hobby Shop----

	hood	freq
0	Audubon Park	0.17
1	Orlando Executive Airport	0.17
2	Rio Grande Park	0.17
3	Colonial Town Center	0.17
4	Lake Dot	0.17
5	Lake Fairview	0.17
6	Princeton/Silver Star	0.00
7	Rowena Gardens	0.00
8	Rosemont North	0.00
9	Rosemont	0.00

----Home Service----

	hood	freq
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0	Seaboard Industrial	0.14
1	Roosevelt Park	0.14
2	Lake Richmond	0.14
3	Clear Lake	0.14
4	Lake Nona Estates	0.14
5	Richmond Estates	0.14
6	Crescent Park	0.14
7	Pineloch	0.00
8	Rowena Gardens	0.00
9	Rosemont North	0.00

----Hookah Bar----

	hood	freq
0	Kirkman South	0.5
1	Windhover	0.5
2	Audubon Park	0.0
3	Park Lake/Highland	0.0
4	Rosemont North	0.0
5	Rosemont	0.0
6	Rose Isle	0.0
7	Roosevelt Park	0.0
8	Rock Lake	0.0
9	Rio Grande Park	0.0

----Hot Dog Joint----

	hood	freq
0	Kissimmee	1.0
1	Audubon Park	0.0
2	Park Lake/Highland	0.0
3	Rowena Gardens	0.0
4	Rosemont North	0.0
5	Rosemont	0.0
6	Rose Isle	0.0
7	Roosevelt Park	0.0
8	Rock Lake	0.0
9	Rio Grande Park	0.0

----Hotel----

	hood	freq
0	Windhover	0.14
1	Lake Dot	0.10
2	Airport North	0.10
3	Williamsburg	0.10
4	Lake Cherokee	0.07
5	Florida Center	0.07

6	Park Lake/Highland	0.05
7	Florida Center North	0.05
8	Camellia Gardens	0.05
9	Coytown	0.02

----Hotel Bar----

	hood	freq
0	Haralson Estates	0.2
1	Florida Center	0.2
2	Rock Lake	0.2
3	Williamsburg	0.2
4	West Colonial	0.2
5	Pineloch	0.0
6	Seaboard Industrial	0.0
7	Rowena Gardens	0.0
8	Rosemont North	0.0
9	Rosemont	0.0

----Hotel Pool----

	hood	freq
0	Williamsburg	1.0
1	Audubon Park	0.0
2	Park Lake/Highland	0.0
3	Rowena Gardens	0.0
4	Rosemont North	0.0
5	Rosemont	0.0
6	Rose Isle	0.0
7	Roosevelt Park	0.0
8	Rock Lake	0.0
9	Rio Grande Park	0.0

----Hotpot Restaurant----

	hood	freq
0	Windhover	1.0
1	Audubon Park	0.0
2	Park Lake/Highland	0.0
3	Rowena Gardens	0.0
4	Rosemont North	0.0
5	Rosemont	0.0
6	Rose Isle	0.0
7	Roosevelt Park	0.0
8	Rock Lake	0.0
9	Rio Grande Park	0.0

----Housing Development----

	hood	freq
0	NorthLake Park at Lake Nona	1.0
1	Audubon Park	0.0
2	Park Lake/Highland	0.0
3	Rowena Gardens	0.0
4	Rosemont North	0.0
5	Rosemont	0.0
6	Rose Isle	0.0
7	Roosevelt Park	0.0
8	Rock Lake	0.0
9	Rio Grande Park	0.0

----Ice Cream Shop----

	hood	freq
0	Kirkman North	0.10
1	Dover Shores West	0.07
2	Florida Center	0.07
3	Hunters Creek	0.07
4	Audubon Park	0.03
5	Dover Manor	0.03
6	Thornton Park	0.03
7	Holden/Parramore	0.03
8	South Semoran	0.03
9	South Orange	0.03

----Indian Restaurant----

	hood	freq
0	Kirkman South	0.4
1	Florida Center	0.2
2	The Willows	0.2
3	Windhover	0.2
4	Audubon Park	0.0
5	Pineloch	0.0
6	Rosemont North	0.0
7	Rosemont	0.0
8	Rose Isle	0.0
9	Roosevelt Park	0.0

----Indie Theater----

	hood	freq
0	Lake Formosa	1.0
1	Audubon Park	0.0
2	Lorna Doone	0.0
3	Rowena Gardens	0.0

4	Rosemont North	0.0
5	Rosemont	0.0
6	Rose Isle	0.0
7	Roosevelt Park	0.0
8	Rock Lake	0.0
9	Rio Grande Park	0.0

----Insurance Office----

	hood	freq
0	Lake Fredrica	1.0
1	Lorna Doone	0.0
2	Rowena Gardens	0.0
3	Rosemont North	0.0
4	Rosemont	0.0
5	Rose Isle	0.0
6	Roosevelt Park	0.0
7	Rock Lake	0.0
8	Rio Grande Park	0.0
9	Richmond Estates	0.0

----Intersection----

	hood	freq
0	Lancaster Park	0.08
1	Lake Weldon	0.08
2	Wadeview Park	0.06
3	Rosemont	0.06
4	Rock Lake	0.04
5	Lake Davis/Greenwood	0.04
6	Delaney Park	0.04
7	Lorna Doone	0.04
8	Holden Heights	0.04
9	Rio Grande Park	0.02

----Irish Pub----

	hood	freq
0	Lake Buena Vista	1.0
1	Audubon Park	0.0
2	Park Lake/Highland	0.0
3	Rowena Gardens	0.0
4	Rosemont North	0.0
5	Rosemont	0.0
6	Rose Isle	0.0
7	Roosevelt Park	0.0
8	Rock Lake	0.0
9	Rio Grande Park	0.0

----Italian Restaurant----

	hood	freq
0	Florida Center	0.12
1	Colonial Town Center	0.09
2	Millenia	0.06
3	Williamsburg	0.06
4	East Central Park	0.06
5	Mariners Village	0.06
6	Dover Shores West	0.06
7	Coytown	0.06
8	Windhover	0.06
9	Lake Fredrica	0.03

----Japanese Restaurant----

	hood	freq
0	Williamsburg	0.22
1	Audubon Park	0.11
2	Windhover	0.11
3	Lake Formosa	0.11
4	Florida Center	0.11
5	Hunters Creek	0.11
6	Park Lake/Highland	0.11
7	Airport North	0.11
8	Princeton/Silver Star	0.00
9	Randal Park	0.00

----Jewelry Store----

	hood	freq
0	Lake Buena Vista	0.33
1	Audubon Park	0.17
2	Florida Center	0.17
3	Millenia	0.17
4	Dover Estates	0.17
5	Princeton/Silver Star	0.00
6	Rowena Gardens	0.00
7	Rosemont North	0.00
8	Rosemont	0.00
9	Rose Isle	0.00

----Juice Bar----

	hood	freq
0	Lawsona/Fern Creek	0.23
1	Thornton Park	0.15

2	East Central Park	0.08
3	Williamsburg	0.08
4	Wadeview Park	0.08
5	South Orange	0.08
6	South Division	0.08
7	Lake Holden	0.08
8	Lake Dot	0.08
9	Audubon Park	0.08

----Karaoke Bar----

	hood	freq
0	Audubon Park	0.67
1	Florida Center	0.33
2	Mariners Village	0.00
3	Mercy Drive	0.00
4	Seaboard Industrial	0.00
5	Rowena Gardens	0.00
6	Rosemont North	0.00
7	Rosemont	0.00
8	Rose Isle	0.00
9	Roosevelt Park	0.00

----Kids Store----

	hood	freq
0	Florida Center North	0.33
1	Orlando Executive Airport	0.33
2	Florida Center	0.33
3	MetroWest	0.00
4	Randal Park	0.00
5	Signal Hill	0.00
6	Seaboard Industrial	0.00
7	Rowena Gardens	0.00
8	Rosemont North	0.00
9	Rosemont	0.00

----Kitchen Supply Store----

	hood	freq
0	Mercy Drive	0.33
1	Millenia	0.33
2	Princeton/Silver Star	0.33
3	Audubon Park	0.00
4	Pineloch	0.00
5	Rowena Gardens	0.00
6	Rosemont North	0.00
7	Rosemont	0.00

8	Rose Isle	0.00
9	Roosevelt Park	0.00

----Korean Restaurant----

	hood	freq
0	Pineloch	0.14
1	Coytown	0.14
2	Wadeview Park	0.14
3	Colonialtown South	0.14
4	Colonialtown North	0.14
5	Orlando Executive Airport	0.14
6	Colonial Town Center	0.14
7	Rio Grande Park	0.00
8	Richmond Estates	0.00
9	Audubon Park	0.00

----Lake----

	hood	freq
0	Winter Park	0.10
1	Windermere	0.10
2	Lake Formosa	0.10
3	Palomar	0.05
4	Rosemont	0.05
5	Rose Isle	0.05
6	Southern Oaks	0.05
7	Lake Dot	0.05
8	East Park	0.05
9	Washington Shores	0.05

----Latin American Restaurant----

	hood	freq
0	Lake Fredrica	0.12
1	Hunters Creek	0.12
2	Dixie Belle	0.12
3	Haralson Estates	0.06
4	Colonial Town Center	0.06
5	South Orange	0.06
6	South Semoran	0.06
7	Rock Lake	0.06
8	Lake Holden	0.06
9	Wadeview Park	0.06

----Lawyer----

	hood	freq
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0	Haralson Estates	0.14
1	MetroWest	0.14
2	Rowena Gardens	0.14
3	East Central Park	0.14
4	Lake Dot	0.14
5	West Colonial	0.14
6	Lake Formosa	0.14
7	Randal Park	0.00
8	Seaboard Industrial	0.00
9	Rosemont North	0.00

----Leather Goods Store----

hood freq

0	Lake Buena Vista	1.0
1	Audubon Park	0.0
2	Park Lake/Highland	0.0
3	Rowena Gardens	0.0
4	Rosemont North	0.0
5	Rosemont	0.0
6	Rose Isle	0.0
7	Roosevelt Park	0.0
8	Rock Lake	0.0
9	Rio Grande Park	0.0

----Light Rail Station----

hood freq

0	Baldwin Park	0.33
1	Rock Lake	0.33
2	Lake Dot	0.33
3	Audubon Park	0.00
4	Pineloch	0.00
5	Rowena Gardens	0.00
6	Rosemont North	0.00
7	Rosemont	0.00
8	Rose Isle	0.00
9	Roosevelt Park	0.00

----Lighting Store----

hood freq

0	Lake Richmond	0.5
1	Richmond Estates	0.5
2	Audubon Park	0.0
3	Park Lake/Highland	0.0
4	Rowena Gardens	0.0
5	Rosemont North	0.0

6	Rosemont	0.0
7	Rose Isle	0.0
8	Roosevelt Park	0.0
9	Rock Lake	0.0

----Lingerie Store----

	hood	freq
0	Millenia	0.33
1	Audubon Park	0.17
2	Coytown	0.17
3	Florida Center	0.17
4	Colonial Town Center	0.17
5	Seaboard Industrial	0.00
6	Rowena Gardens	0.00
7	Rosemont North	0.00
8	Rosemont	0.00
9	Rose Isle	0.00

----Liquor Store----

	hood	freq
0	Haralson Estates	0.23
1	West Colonial	0.15
2	Williamsburg	0.08
3	South Orange	0.08
4	Holden Heights	0.08
5	East Central Park	0.08
6	Lake Holden	0.08
7	Dixie Belle	0.08
8	Wadeview Park	0.08
9	Coytown	0.08

----Lounge----

	hood	freq
0	MetroWest	0.1
1	Colonialtown North	0.1
2	Lake Cherokee	0.1
3	Lake Dot	0.1
4	Thornton Park	0.1
5	Lake Formosa	0.1
6	Colonialtown South	0.1
7	Coytown	0.1
8	Holden/Parramore	0.1
9	Lake Buena Vista	0.1

----Luggage Store----

	hood	freq
0	Florida Center	1.0
1	Signal Hill	0.0
2	Seaboard Industrial	0.0
3	Rowena Gardens	0.0
4	Rosemont North	0.0
5	Rosemont	0.0
6	Rose Isle	0.0
7	Roosevelt Park	0.0
8	Rock Lake	0.0
9	Rio Grande Park	0.0

----Market----

	hood	freq
0	Audubon Park	0.25
1	NorthLake Park at Lake Nona	0.25
2	Lake Nona Estates	0.25
3	Dixie Belle	0.25
4	Pineloch	0.00
5	Rowena Gardens	0.00
6	Rosemont North	0.00
7	Rosemont	0.00
8	Rose Isle	0.00
9	Roosevelt Park	0.00

----Martial Arts Dojo----

	hood	freq
0	Colonialtown South	0.2
1	Colonialtown North	0.2
2	Park Lake/Highland	0.1
3	Gotha	0.1
4	Wadeview Park	0.1
5	Lake Holden	0.1
6	Coytown	0.1
7	South Orange	0.1
8	Roosevelt Park	0.0
9	Rose Isle	0.0

----Massage Studio----

	hood	freq
0	Lawsona/Fern Creek	0.17
1	Wedgewood Groves	0.17
2	Thornton Park	0.17
3	Dover Estates	0.17

4	Mariners Village	0.17
5	Baldwin Park	0.17
6	Lake Buena Vista	0.00
7	Seaboard Industrial	0.00
8	Rosemont North	0.00
9	Rosemont	0.00

----Mattress Store----

	hood	freq
0	Florida Center North	1.0
1	Lorna Doone	0.0
2	Seaboard Industrial	0.0
3	Rowena Gardens	0.0
4	Rosemont North	0.0
5	Rosemont	0.0
6	Rose Isle	0.0
7	Roosevelt Park	0.0
8	Rock Lake	0.0
9	Rio Grande Park	0.0

----Mediterranean Restaurant----

	hood	freq
0	Pineloch	0.2
1	South Orange	0.2
2	Millenia	0.2
3	Orwin Manor	0.2
4	Wadeview Park	0.2
5	Audubon Park	0.0
6	Rosemont North	0.0
7	Rosemont	0.0
8	Rose Isle	0.0
9	Roosevelt Park	0.0

----Men's Store----

	hood	freq
0	Florida Center	0.25
1	Orlando Executive Airport	0.25
2	Colonial Town Center	0.25
3	Palomar	0.25
4	Audubon Park	0.00
5	Princeton/Silver Star	0.00
6	Seaboard Industrial	0.00
7	Rowena Gardens	0.00
8	Rosemont North	0.00
9	Rosemont	0.00

----Mexican Restaurant----

	hood	freq
0	South Orange	0.07
1	Windhover	0.07
2	Lake Fairview	0.07
3	Dover Shores West	0.07
4	Kirkman South	0.04
5	South Division	0.04
6	Wadeview Park	0.04
7	Dixie Belle	0.04
8	Lake Dot	0.04
9	Lake Holden	0.04

----Middle Eastern Restaurant----

	hood	freq
0	MetroWest	1.0
1	Audubon Park	0.0
2	Park Lake/Highland	0.0
3	Rowena Gardens	0.0
4	Rosemont North	0.0
5	Rosemont	0.0
6	Rose Isle	0.0
7	Roosevelt Park	0.0
8	Rock Lake	0.0
9	Rio Grande Park	0.0

----Mini Golf----

	hood	freq
0	Florida Center	1.0
1	Signal Hill	0.0
2	Seaboard Industrial	0.0
3	Rowena Gardens	0.0
4	Rosemont North	0.0
5	Rosemont	0.0
6	Rose Isle	0.0
7	Roosevelt Park	0.0
8	Rock Lake	0.0
9	Rio Grande Park	0.0

----Miscellaneous Shop----

	hood	freq
0	Millenia	0.4
1	Florida Center	0.2

2	East Central Park	0.2
3	Orlando Executive Airport	0.2
4	Audubon Park	0.0
5	Randal Park	0.0
6	Seaboard Industrial	0.0
7	Rowena Gardens	0.0
8	Rosemont North	0.0
9	Rosemont	0.0

----Mobile Phone Shop----

	hood	freq
0	Millenia	0.09
1	Orlando Executive Airport	0.09
2	Colonial Town Center	0.09
3	Lake Holden	0.06
4	Kirkman North	0.06
5	South Orange	0.06
6	Wadeview Park	0.06
7	Lake Sunset	0.03
8	Pineloch	0.03
9	South Division	0.03

----Motel----

	hood	freq
0	Florida Center North	0.33
1	Florida Center	0.33
2	Lake Formosa	0.33
3	Princeton/Silver Star	0.00
4	Seaboard Industrial	0.00
5	Rowena Gardens	0.00
6	Rosemont North	0.00
7	Rosemont	0.00
8	Rose Isle	0.00
9	Roosevelt Park	0.00

----Motorcycle Shop----

	hood	freq
0	Holden/Parramore	0.25
1	Lake Buena Vista	0.25
2	33rd Street Industrial	0.25
3	Princeton/Silver Star	0.25
4	Audubon Park	0.00
5	Park Lake/Highland	0.00
6	Rosemont North	0.00
7	Rosemont	0.00

8	Rose Isle	0.00
9	Roosevelt Park	0.00

----Movie Theater----

	hood	freq
0	Audubon Park	0.14
1	Florida Center	0.14
2	Lake Buena Vista	0.14
3	Rose Isle	0.14
4	Celebration	0.14
5	Airport North	0.14
6	Lake Formosa	0.14
7	Pineloch	0.00
8	Rosemont North	0.00
9	Rosemont	0.00

----Museum----

	hood	freq
0	Winter Park	0.25
1	Airport North	0.25
2	Lake Formosa	0.25
3	Rowena Gardens	0.25
4	MetroWest	0.00
5	Millenia	0.00
6	Rosemont North	0.00
7	Rosemont	0.00
8	Rose Isle	0.00
9	Roosevelt Park	0.00

----Music Store----

	hood	freq
0	Orlando Executive Airport	0.4
1	Dover Shores West	0.2
2	Catalina	0.2
3	Colonial Town Center	0.2
4	Audubon Park	0.0
5	Princeton/Silver Star	0.0
6	Seaboard Industrial	0.0
7	Rowena Gardens	0.0
8	Rosemont North	0.0
9	Rosemont	0.0

----Music Venue----

	hood	freq
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0	Lake Dot	0.38
1	Rowena Gardens	0.12
2	Florida Center	0.12
3	Lake Buena Vista	0.12
4	Lake Fairview	0.12
5	Lake Formosa	0.12
6	Princeton/Silver Star	0.00
7	Rosemont North	0.00
8	Rosemont	0.00
9	Rose Isle	0.00

----Nail Salon----

	hood	freq
0	Millenia	0.5
1	Kirkman North	0.5
2	Audubon Park	0.0
3	Pineloch	0.0
4	Rowena Gardens	0.0
5	Rosemont North	0.0
6	Rosemont	0.0
7	Rose Isle	0.0
8	Roosevelt Park	0.0
9	Rock Lake	0.0

----Neighborhood----

	hood	freq
0	Park Lake/Highland	0.25
1	Kissimmee	0.25
2	Colonialtown North	0.25
3	Colonialtown South	0.25
4	Audubon Park	0.00
5	Rowena Gardens	0.00
6	Rosemont North	0.00
7	Rosemont	0.00
8	Rose Isle	0.00
9	Roosevelt Park	0.00

----New American Restaurant----

	hood	freq
0	Winter Park	0.09
1	Airport North	0.09
2	Lake Formosa	0.09
3	Park Lake/Highland	0.09
4	Crescent Park	0.09
5	Orwin Manor	0.09

6	Lake Nona South	0.09
7	Colonialtown North	0.09
8	Rowena Gardens	0.09
9	Kissimmee	0.09

----Nightclub----

	hood	freq
0	Colonial Town Center	1.0
1	Audubon Park	0.0
2	Park Lake/Highland	0.0
3	Rowena Gardens	0.0
4	Rosemont North	0.0
5	Rosemont	0.0
6	Rose Isle	0.0
7	Roosevelt Park	0.0
8	Rock Lake	0.0
9	Rio Grande Park	0.0

----Noodle House----

	hood	freq
0	Florida Center North	0.25
1	Florida Center	0.25
2	Colonial Town Center	0.25
3	Windhover	0.25
4	Pineloch	0.00
5	Seaboard Industrial	0.00
6	Rowena Gardens	0.00
7	Rosemont North	0.00
8	Rosemont	0.00
9	Rose Isle	0.00

----Office----

	hood	freq
0	Airport North	0.17
1	Haralson Estates	0.08
2	Clear Lake	0.08
3	Rock Lake	0.08
4	Richmond Estates	0.08
5	Lake Richmond	0.08
6	33rd Street Industrial	0.08
7	West Colonial	0.08
8	Kissimmee	0.08
9	Azalea Park	0.08

----Optical Shop----

	hood	freq
0	Colonial Town Center	0.14
1	Orlando Executive Airport	0.14
2	Mariners Village	0.07
3	Celebration	0.07
4	South Division	0.07
5	Holden Heights	0.07
6	Dover Estates	0.07
7	Wedgewood Groves	0.07
8	Kirkman South	0.07
9	Bryn Mawr	0.07

----Other Repair Shop----

	hood	freq
0	Colonial Town Center	0.4
1	Orlando Executive Airport	0.2
2	Airport North	0.2
3	Lake Fairview	0.2
4	Audubon Park	0.0
5	Pineloch	0.0
6	Rowena Gardens	0.0
7	Rosemont North	0.0
8	Rosemont	0.0
9	Rose Isle	0.0

----Outdoor Supply Store----

	hood	freq
0	Seaboard Industrial	1.0
1	Park Lake/Highland	0.0
2	Rowena Gardens	0.0
3	Rosemont North	0.0
4	Rosemont	0.0
5	Rose Isle	0.0
6	Roosevelt Park	0.0
7	Rock Lake	0.0
8	Rio Grande Park	0.0
9	Richmond Estates	0.0

----Outlet Mall----

	hood	freq
0	Florida Center	1.0
1	Signal Hill	0.0
2	Seaboard Industrial	0.0
3	Rowena Gardens	0.0

4	Rosemont North	0.0
5	Rosemont	0.0
6	Rose Isle	0.0
7	Roosevelt Park	0.0
8	Rock Lake	0.0
9	Rio Grande Park	0.0

----Outlet Store----

	hood freq	
0	Florida Center	1.0
1	Signal Hill	0.0
2	Seaboard Industrial	0.0
3	Rowena Gardens	0.0
4	Rosemont North	0.0
5	Rosemont	0.0
6	Rose Isle	0.0
7	Roosevelt Park	0.0
8	Rock Lake	0.0
9	Rio Grande Park	0.0

----Paintball Field----

	hood freq	
0	MetroWest	1.0
1	Audubon Park	0.0
2	Park Lake/Highland	0.0
3	Rowena Gardens	0.0
4	Rosemont North	0.0
5	Rosemont	0.0
6	Rose Isle	0.0
7	Roosevelt Park	0.0
8	Rock Lake	0.0
9	Rio Grande Park	0.0

----Paper / Office Supplies Store----

	hood freq	
0	Coytown	0.11
1	Dixie Belle	0.11
2	Wadeview Park	0.11
3	Colonialtown South	0.11
4	Colonialtown North	0.11
5	East Central Park	0.11
6	33rd Street Industrial	0.11
7	Pineloch	0.11
8	Hunters Creek	0.11
9	Rock Lake	0.00

----Park----

	hood	freq
0	Lawsona/Fern Creek	0.05
1	Lake Davis/Greenwood	0.05
2	Thornton Park	0.05
3	Lake Formosa	0.04
4	Lake Weldona	0.04
5	Lancaster Park	0.04
6	Rowena Gardens	0.04
7	Rose Isle	0.04
8	Colonial Town Center	0.03
9	East Central Park	0.03

----Pawn Shop----

	hood	freq
0	Dixie Belle	0.4
1	Holden Heights	0.2
2	Rock Lake	0.2
3	Haralson Estates	0.2
4	Princeton/Silver Star	0.0
5	Signal Hill	0.0
6	Seaboard Industrial	0.0
7	Rowena Gardens	0.0
8	Rosemont North	0.0
9	Rosemont	0.0

----Performing Arts Venue----

	hood	freq
0	Lake Dot	0.22
1	Park Lake/Highland	0.22
2	Lancaster Park	0.11
3	Lake Buena Vista	0.11
4	Rose Isle	0.11
5	Lake Formosa	0.11
6	Wadeview Park	0.11
7	Audubon Park	0.00
8	Pineloch	0.00
9	Rosemont	0.00

----Pet Service----

	hood	freq
0	Hunters Creek	1.0
1	Audubon Park	0.0

2	Park Lake/Highland	0.0
3	Rowena Gardens	0.0
4	Rosemont North	0.0
5	Rosemont	0.0
6	Rose Isle	0.0
7	Roosevelt Park	0.0
8	Rock Lake	0.0
9	Rio Grande Park	0.0

----Pet Store----

	hood	freq
0	Coytown	0.07
1	Pineloch	0.07
2	Colonialtown South	0.07
3	Wadeview Park	0.07
4	Millenia	0.04
5	Dover Shores East	0.04
6	Vista East	0.04
7	East Central Park	0.04
8	The Dovers	0.04
9	Southern Oaks	0.04

----Pharmacy----

	hood	freq
0	Dover Shores West	0.08
1	Windhover	0.06
2	Kirkman South	0.06
3	South Division	0.04
4	Park Central	0.04
5	South Orange	0.04
6	Dover Estates	0.04
7	South Semoran	0.04
8	Wadeview Park	0.04
9	Colonialtown South	0.04

----Photography Studio----

	hood	freq
0	Winter Park	0.5
1	Vista East	0.5
2	Signal Hill	0.0
3	Rowena Gardens	0.0
4	Rosemont North	0.0
5	Rosemont	0.0
6	Rose Isle	0.0
7	Roosevelt Park	0.0

8	Rock Lake	0.0
9	Rio Grande Park	0.0

----Pizza Place----

	hood	freq
0	Wadeview Park	0.06
1	Thornton Park	0.04
2	Windhover	0.04
3	South Division	0.03
4	Dover Shores West	0.03
5	Dover Estates	0.03
6	Kirkman North	0.03
7	Ventura	0.03
8	South Orange	0.03
9	Park Central	0.03

----Platform----

	hood	freq
0	Lake Dot	1.0
1	Audubon Park	0.0
2	Lorna Doone	0.0
3	Rowena Gardens	0.0
4	Rosemont North	0.0
5	Rosemont	0.0
6	Rose Isle	0.0
7	Roosevelt Park	0.0
8	Rock Lake	0.0
9	Rio Grande Park	0.0

----Playground----

	hood	freq
0	South Semoran	0.25
1	Gotha	0.25
2	Thornton Park	0.25
3	Randal Park	0.25
4	Audubon Park	0.00
5	Park Lake/Highland	0.00
6	Rosemont North	0.00
7	Rosemont	0.00
8	Rose Isle	0.00
9	Roosevelt Park	0.00

----Plaza----

	hood	freq
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0	Lake Buena Vista	0.25
1	Dover Shores West	0.25
2	Dover Manor	0.25
3	Lake Nona Central	0.25
4	Audubon Park	0.00
5	Pineloch	0.00
6	Rowena Gardens	0.00
7	Rosemont North	0.00
8	Rosemont	0.00
9	Rose Isle	0.00

----Pool----

	hood	freq
0	Lake Buena Vista	0.14
1	Lake Nona South	0.07
2	Park Central	0.07
3	Holden/Parramore	0.07
4	Roosevelt Park	0.07
5	Vista East	0.07
6	Kirkman South	0.07
7	Williamsburg	0.07
8	Johnson Village	0.07
9	Bal Bay	0.07

----Print Shop----

	hood	freq
0	Seaboard Industrial	0.5
1	Mercy Drive	0.5
2	Park Lake/Highland	0.0
3	Rowena Gardens	0.0
4	Rosemont North	0.0
5	Rosemont	0.0
6	Rose Isle	0.0
7	Roosevelt Park	0.0
8	Rock Lake	0.0
9	Rio Grande Park	0.0

----Professional & Other Places----

	hood	freq
0	Mariners Village	0.25
1	Bryn Mawr	0.25
2	Dover Estates	0.25
3	Wedgewood Groves	0.25
4	Pineloch	0.00
5	Rowena Gardens	0.00

6	Rosemont North	0.00
7	Rosemont	0.00
8	Rose Isle	0.00
9	Roosevelt Park	0.00

----Pub----

	hood freq	
0	Lawsona/Fern Creek	0.12
1	Dover Shores West	0.12
2	Dover Estates	0.12
3	Dover Manor	0.12
4	Colonialtown South	0.12
5	Colonialtown North	0.12
6	Park Lake/Highland	0.12
7	East Central Park	0.12
8	Rio Grande Park	0.00
9	Rose Isle	0.00

----Public Art----

	hood freq	
0	South Division	0.33
1	Florida Center	0.33
2	South Orange	0.33
3	Pineloch	0.00
4	Rowena Gardens	0.00
5	Rosemont North	0.00
6	Rosemont	0.00
7	Rose Isle	0.00
8	Roosevelt Park	0.00
9	Rock Lake	0.00

----Ramen Restaurant----

	hood freq	
0	Audubon Park	0.33
1	Thornton Park	0.33
2	Lawsona/Fern Creek	0.33
3	Baldwin Park	0.00
4	Pineloch	0.00
5	Seaboard Industrial	0.00
6	Rowena Gardens	0.00
7	Rosemont North	0.00
8	Rosemont	0.00
9	Rose Isle	0.00

----Real Estate Office----

	hood	freq
0	Celebration	0.5
1	Lake Nona Central	0.5
2	Audubon Park	0.0
3	Park Central	0.0
4	Rosemont North	0.0
5	Rosemont	0.0
6	Rose Isle	0.0
7	Roosevelt Park	0.0
8	Rock Lake	0.0
9	Rio Grande Park	0.0

----Record Shop----

	hood	freq
0	Audubon Park	0.25
1	East Central Park	0.25
2	Lake Formosa	0.25
3	Lawsona/Fern Creek	0.25
4	Bel Air	0.00
5	South Division	0.00
6	Seaboard Industrial	0.00
7	Rowena Gardens	0.00
8	Rosemont North	0.00
9	Rosemont	0.00

----Recreation Center----

	hood	freq
0	Mariners Village	0.25
1	Bryn Mawr	0.25
2	Dover Estates	0.25
3	Wedgewood Groves	0.25
4	Pineloch	0.00
5	Rowena Gardens	0.00
6	Rosemont North	0.00
7	Rosemont	0.00
8	Rose Isle	0.00
9	Roosevelt Park	0.00

----Rental Car Location----

	hood	freq
0	Lake Shore Village	0.2
1	Lake Dot	0.2
2	Haralson Estates	0.1
3	Windhover	0.1

4	33rd Street Industrial	0.1
5	Clear Lake	0.1
6	Orlando International Airport	0.1
7	Countryside	0.1
8	Orlando Executive Airport	0.0
9	Randal Park	0.0

----Rental Service----

	hood	freq
0	Lake Richmond	0.5
1	Richmond Estates	0.5
2	Audubon Park	0.0
3	Park Lake/Highland	0.0
4	Rowena Gardens	0.0
5	Rosemont North	0.0
6	Rosemont	0.0
7	Rose Isle	0.0
8	Roosevelt Park	0.0
9	Rock Lake	0.0

----Residential Building (Apartment / Condo)----

	hood	freq
0	Thornton Park	1.0
1	Audubon Park	0.0
2	Signal Hill	0.0
3	Rowena Gardens	0.0
4	Rosemont North	0.0
5	Rosemont	0.0
6	Rose Isle	0.0
7	Roosevelt Park	0.0
8	Rock Lake	0.0
9	Rio Grande Park	0.0

----Resort----

	hood	freq
0	Lake Buena Vista	0.58
1	Williamsburg	0.17
2	Florida Center	0.08
3	Rock Lake	0.08
4	Dixie Belle	0.08
5	Audubon Park	0.00
6	Pineloch	0.00
7	Rowena Gardens	0.00
8	Rosemont North	0.00
9	Rosemont	0.00

----Restaurant----

	hood	freq
0	Coytown	0.07
1	Lake Mary	0.07
2	East Central Park	0.07
3	Johnson Village	0.03
4	Lake Holden	0.03
5	Lake Mann Estates	0.03
6	Lake Cherokee	0.03
7	LaVina	0.03
8	Holden/Parramore	0.03
9	Haralson Estates	0.03

----Rock Club----

	hood	freq
0	Coytown	0.25
1	East Central Park	0.25
2	Colonialtown North	0.25
3	Colonialtown South	0.25
4	Audubon Park	0.00
5	Seaboard Industrial	0.00
6	Rowena Gardens	0.00
7	Rosemont North	0.00
8	Rosemont	0.00
9	Rose Isle	0.00

----Salad Place----

	hood	freq
0	Millenia	0.25
1	Thornton Park	0.25
2	Orlando Executive Airport	0.25
3	Orwin Manor	0.25
4	Audubon Park	0.00
5	Princeton/Silver Star	0.00
6	Rowena Gardens	0.00
7	Rosemont North	0.00
8	Rosemont	0.00
9	Rose Isle	0.00

----Salon / Barbershop----

	hood	freq
0	Wadeview Park	0.17
1	Hunters Creek	0.17

2	Audubon Park	0.08
3	Celebration	0.08
4	Park Lake/Highland	0.08
5	Vista East	0.08
6	Colonialtown North	0.08
7	Pineloch	0.08
8	MetroWest	0.08
9	Kirkman North	0.08

----Sandwich Place----

	hood	freq
0	Colonialtown South	0.06
1	Kirkman South	0.05
2	Wadeview Park	0.05
3	Delaney Park	0.04
4	East Central Park	0.04
5	Coytown	0.04
6	Kirkman North	0.04
7	Windhover	0.04
8	South Division	0.04
9	South Orange	0.04

----Scandinavian Restaurant----

	hood	freq
0	Millenia	1.0
1	Audubon Park	0.0
2	Park Lake/Highland	0.0
3	Rowena Gardens	0.0
4	Rosemont North	0.0
5	Rosemont	0.0
6	Rose Isle	0.0
7	Roosevelt Park	0.0
8	Rock Lake	0.0
9	Rio Grande Park	0.0

----Scenic Lookout----

	hood	freq
0	Mariners Village	0.2
1	Rowena Gardens	0.2
2	Bryn Mawr	0.2
3	Rose Isle	0.2
4	Colonialtown North	0.2
5	Pineloch	0.0
6	Seaboard Industrial	0.0
7	Rosemont North	0.0

8	Rosemont	0.0
9	Roosevelt Park	0.0

----Science Museum----

	hood	freq
0	Rose Isle	0.5
1	Lake Formosa	0.5
2	Audubon Park	0.0
3	Lorna Doone	0.0
4	Rowena Gardens	0.0
5	Rosemont North	0.0
6	Rosemont	0.0
7	Roosevelt Park	0.0
8	Rock Lake	0.0
9	Rio Grande Park	0.0

----Sculpture Garden----

	hood	freq
0	Park Lake/Highland	0.5
1	MetroWest	0.5
2	Audubon Park	0.0
3	Rowena Gardens	0.0
4	Rosemont North	0.0
5	Rosemont	0.0
6	Rose Isle	0.0
7	Roosevelt Park	0.0
8	Rock Lake	0.0
9	Rio Grande Park	0.0

----Seafood Restaurant----

	hood	freq
0	Colonial Town Center	0.10
1	Holden Heights	0.05
2	Colonialtown South	0.05
3	Timberleaf	0.05
4	Lake Fredrica	0.05
5	Florida Center	0.05
6	Haralson Estates	0.05
7	Lake Cherokee	0.05
8	West Colonial	0.05
9	Lake Shore Village	0.05

----Shipping Store----

	hood	freq
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0	Audubon Park	0.08
1	Colonial Town Center	0.08
2	South Semoran	0.08
3	East Central Park	0.08
4	Thornton Park	0.08
5	Lake Fredrica	0.08
6	Wadeview Park	0.08
7	Kirkman North	0.08
8	Windhover	0.08
9	Kirkman South	0.08

----Shoe Store----

	hood	freq
0	Florida Center North	0.32
1	Millenia	0.11
2	Lake Buena Vista	0.11
3	Florida Center	0.11
4	Colonialtown North	0.04
5	Lake Fredrica	0.04
6	South Semoran	0.04
7	East Central Park	0.04
8	Dixie Belle	0.04
9	Coytown	0.04

----Shop & Service----

	hood	freq
0	Holden Heights	0.25
1	South Division	0.25
2	South Orange	0.25
3	Orlando Executive Airport	0.25
4	Pineloch	0.00
5	Rowena Gardens	0.00
6	Rosemont North	0.00
7	Rosemont	0.00
8	Rose Isle	0.00
9	Roosevelt Park	0.00

----Shopping Mall----

	hood	freq
0	Millenia	0.15
1	Lake Buena Vista	0.15
2	Johnson Village	0.08
3	Lake Sunset	0.08
4	Washington Shores	0.08
5	Kirkman North	0.08

6	East Central Park	0.08
7	Clear Lake	0.08
8	Camellia Gardens	0.08
9	Hunters Creek	0.08

----Shopping Plaza----

	hood	freq
0	East Central Park	0.5
1	Colonialtown South	0.5
2	Audubon Park	0.0
3	Pineloch	0.0
4	Seaboard Industrial	0.0
5	Rowena Gardens	0.0
6	Rosemont North	0.0
7	Rosemont	0.0
8	Rose Isle	0.0
9	Roosevelt Park	0.0

----Skate Park----

	hood	freq
0	Lake Richmond	0.33
1	Richmond Estates	0.33
2	33rd Street Industrial	0.33
3	Audubon Park	0.00
4	Park Central	0.00
5	Rosemont North	0.00
6	Rosemont	0.00
7	Rose Isle	0.00
8	Roosevelt Park	0.00
9	Rock Lake	0.00

----Ski Area----

	hood	freq
0	Colonialtown North	0.5
1	Coytown	0.5
2	Audubon Park	0.0
3	Pineloch	0.0
4	Seaboard Industrial	0.0
5	Rowena Gardens	0.0
6	Rosemont North	0.0
7	Rosemont	0.0
8	Rose Isle	0.0
9	Roosevelt Park	0.0

----Smoke Shop----

	hood	freq
0	Park Lake/Highland	0.2
1	Lake Fairview	0.1
2	Kirkman South	0.1
3	Lake Buena Vista	0.1
4	Lake Formosa	0.1
5	Colonialtown South	0.1
6	Colonialtown North	0.1
7	Windhover	0.1
8	Dover Shores West	0.1
9	Rio Grande Park	0.0

----Smoothie Shop----

	hood	freq
0	Kirkman North	0.15
1	South Orange	0.15
2	Wadeview Park	0.15
3	Lake Holden	0.08
4	LaVina	0.08
5	Lake Copeland	0.08
6	Delaney Park	0.08
7	South Division	0.08
8	Baldwin Park	0.08
9	Hunters Creek	0.08

----Snack Place----

	hood	freq
0	Lake Buena Vista	0.29
1	Audubon Park	0.14
2	Colonial Town Center	0.14
3	Millenia	0.14
4	Coytown	0.14
5	Kirkman North	0.14
6	Rosemont North	0.00
7	Rosemont	0.00
8	Pineloch	0.00
9	Roosevelt Park	0.00

----Soccer Field----

	hood	freq
0	Westfield	0.25
1	Johnson Village	0.12
2	South Semoran	0.12
3	Roosevelt Park	0.12

4	Celebration	0.12
5	Catalina	0.12
6	Lake Fairview	0.12
7	Pineloch	0.00
8	Rosemont North	0.00
9	Rosemont	0.00

----Soccer Stadium----

	hood	freq
0	South Orange	0.5
1	Holden/Parramore	0.5
2	Audubon Park	0.0
3	Seaboard Industrial	0.0
4	Rosemont North	0.0
5	Rosemont	0.0
6	Rose Isle	0.0
7	Roosevelt Park	0.0
8	Rock Lake	0.0
9	Rio Grande Park	0.0

----South American Restaurant----

	hood	freq
0	Azalea Park	0.33
1	Kirkman South	0.33
2	Hunters Creek	0.33
3	Park Lake/Highland	0.00
4	Rosemont North	0.00
5	Rosemont	0.00
6	Rose Isle	0.00
7	Roosevelt Park	0.00
8	Rock Lake	0.00
9	Rio Grande Park	0.00

----Southern / Soul Food Restaurant----

	hood	freq
0	Windermere	0.33
1	Holden/Parramore	0.33
2	Lake Buena Vista	0.33
3	Audubon Park	0.00
4	Park Lake/Highland	0.00
5	Rosemont North	0.00
6	Rosemont	0.00
7	Rose Isle	0.00
8	Roosevelt Park	0.00
9	Rock Lake	0.00

----Souvenir Shop----

	hood	freq
0	Florida Center	0.5
1	Lake Buena Vista	0.5
2	Audubon Park	0.0
3	Park Lake/Highland	0.0
4	Rowena Gardens	0.0
5	Rosemont North	0.0
6	Rosemont	0.0
7	Rose Isle	0.0
8	Roosevelt Park	0.0
9	Rock Lake	0.0

----Spa----

	hood	freq
0	Wadeview Park	0.14
1	South Orange	0.11
2	Pineloch	0.05
3	Lake Holden	0.05
4	South Division	0.05
5	MetroWest	0.05
6	Audubon Park	0.03
7	Orlando Executive Airport	0.03
8	Palomar	0.03
9	Park Lake/Highland	0.03

----Spanish Restaurant----

	hood	freq
0	Dixie Belle	0.33
1	Wedgewood Groves	0.17
2	Lake Buena Vista	0.17
3	Celebration	0.17
4	Dover Shores West	0.17
5	Park Lake/Highland	0.00
6	Rosemont North	0.00
7	Rosemont	0.00
8	Rose Isle	0.00
9	Roosevelt Park	0.00

----Speakeasy----

	hood	freq
0	Park Lake/Highland	0.33
1	Lake Buena Vista	0.33

2	Colonialtown North	0.33
3	Audubon Park	0.00
4	Rowena Gardens	0.00
5	Rosemont North	0.00
6	Rosemont	0.00
7	Rose Isle	0.00
8	Roosevelt Park	0.00
9	Rock Lake	0.00

----Sporting Goods Shop----

	hood	freq
0	Holden/Parramore	0.17
1	Colonialtown North	0.17
2	Florida Center	0.08
3	Rock Lake	0.08
4	Park Lake/Highland	0.08
5	Colonial Town Center	0.08
6	Airport North	0.08
7	Florida Center North	0.08
8	Millenia	0.08
9	Lorna Doone	0.08

----Sports Bar----

	hood	freq
0	Windhover	0.19
1	Florida Center	0.19
2	Lawsona/Fern Creek	0.06
3	South Division	0.06
4	East Central Park	0.06
5	Lake Formosa	0.06
6	Wadeview Park	0.06
7	Park Lake/Highland	0.06
8	Colonialtown South	0.06
9	Kirkman South	0.06

----Stadium----

	hood	freq
0	Lorna Doone	0.33
1	Lake Sunset	0.33
2	Lake Dot	0.33
3	Park Lake/Highland	0.00
4	Rosemont North	0.00
5	Rosemont	0.00
6	Rose Isle	0.00
7	Roosevelt Park	0.00

8	Rock Lake	0.00
9	Rio Grande Park	0.00

----Stationery Store----

	hood	freq
0	Park Lake/Highland	0.5
1	Lake Formosa	0.5
2	Lorna Doone	0.0
3	Rowena Gardens	0.0
4	Rosemont North	0.0
5	Rosemont	0.0
6	Rose Isle	0.0
7	Roosevelt Park	0.0
8	Rock Lake	0.0
9	Rio Grande Park	0.0

----Steakhouse----

	hood	freq
0	Colonial Town Center	0.15
1	Lake Buena Vista	0.15
2	Audubon Park	0.08
3	Orlando Executive Airport	0.08
4	Florida Center	0.08
5	Windhover	0.08
6	Celebration	0.08
7	Coytown	0.08
8	Kirkman South	0.08
9	Baldwin Park	0.08

----Storage Facility----

	hood	freq
0	Seaboard Industrial	0.33
1	Mercy Drive	0.33
2	Dover Shores West	0.33
3	Pineloch	0.00
4	Rowena Gardens	0.00
5	Rosemont North	0.00
6	Rosemont	0.00
7	Rose Isle	0.00
8	Roosevelt Park	0.00
9	Rock Lake	0.00

----Street Food Gathering----

	hood	freq
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0	Lawsona/Fern Creek	0.2
1	Lake Buena Vista	0.2
2	Kissimmee	0.2
3	East Central Park	0.2
4	Colonialtown South	0.2
5	Pineloch	0.0
6	Rowena Gardens	0.0
7	Rosemont North	0.0
8	Rosemont	0.0
9	Rose Isle	0.0

----Supermarket----

	hood	freq
0	Coytown	0.33
1	Dixie Belle	0.33
2	Colonialtown South	0.33
3	Audubon Park	0.00
4	Seaboard Industrial	0.00
5	Rowena Gardens	0.00
6	Rosemont North	0.00
7	Rosemont	0.00
8	Rose Isle	0.00
9	Roosevelt Park	0.00

----Supplement Shop----

	hood	freq
0	Pineloch	0.07
1	Colonial Town Center	0.07
2	Florida Center North	0.07
3	South Orange	0.07
4	South Semoran	0.07
5	Southern Oaks	0.07
6	Lake Fredrica	0.07
7	Lake Holden	0.07
8	Wadeview Park	0.07
9	Williamsburg	0.07

----Sushi Restaurant----

	hood	freq
0	Audubon Park	0.08
1	Coytown	0.08
2	Hunters Creek	0.08
3	Colonialtown North	0.08
4	Kirkman South	0.08
5	Celebration	0.04

6	Windhover	0.04
7	Thornton Park	0.04
8	Park Central	0.04
9	Millenia	0.04

----Szechuan Restaurant----

	hood	freq
0	Rock Lake	1.0
1	Audubon Park	0.0
2	Park Lake/Highland	0.0
3	Rowena Gardens	0.0
4	Rosemont North	0.0
5	Rosemont	0.0
6	Rose Isle	0.0
7	Roosevelt Park	0.0
8	Rio Grande Park	0.0
9	Richmond Estates	0.0

----Taco Place----

	hood	freq
0	Colonialtown North	0.33
1	Park Lake/Highland	0.22
2	South Orange	0.11
3	Lake Formosa	0.11
4	Lake Holden	0.11
5	Rowena Gardens	0.11
6	New Malibu	0.00
7	Princeton/Silver Star	0.00
8	Mercy Drive	0.00
9	Rosemont North	0.00

----Tanning Salon----

	hood	freq
0	Wadeview Park	0.5
1	Pineloch	0.5
2	Audubon Park	0.0
3	Signal Hill	0.0
4	Rowena Gardens	0.0
5	Rosemont North	0.0
6	Rosemont	0.0
7	Rose Isle	0.0
8	Roosevelt Park	0.0
9	Rock Lake	0.0

----Tapas Restaurant----

	hood	freq
0	Park Lake/Highland	0.25
1	Holden/Parramore	0.25
2	Colonialtown North	0.25
3	Lake Formosa	0.25
4	Pineloch	0.00
5	Rowena Gardens	0.00
6	Rosemont North	0.00
7	Rosemont	0.00
8	Rose Isle	0.00
9	Roosevelt Park	0.00

----Tattoo Parlor----

	hood	freq
0	Park Lake/Highland	0.5
1	Colonialtown North	0.5
2	Audubon Park	0.0
3	Rowena Gardens	0.0
4	Rosemont North	0.0
5	Rosemont	0.0
6	Rose Isle	0.0
7	Roosevelt Park	0.0
8	Rock Lake	0.0
9	Rio Grande Park	0.0

----Tennis Court----

	hood	freq
0	Celebration	0.2
1	Lake Dot	0.2
2	Orwin Manor	0.2
3	Lake Nona Central	0.2
4	Countryside	0.2
5	Audubon Park	0.0
6	Pineloch	0.0
7	Rosemont North	0.0
8	Rosemont	0.0
9	Rose Isle	0.0

----Tex-Mex Restaurant----

	hood	freq
0	Kirkman North	0.33
1	Hunters Creek	0.33
2	LaVina	0.33
3	Audubon Park	0.00

4	Pineloch	0.00
5	Rosemont North	0.00
6	Rosemont	0.00
7	Rose Isle	0.00
8	Roosevelt Park	0.00
9	Rock Lake	0.00

----Thai Restaurant----

	hood	freq
0	Colonialtown North	0.10
1	Millenia	0.05
2	Williamsburg	0.05
3	South Orange	0.05
4	Lake Fairview	0.05
5	Lake Formosa	0.05
6	Lake Holden	0.05
7	Thornton Park	0.05
8	Wadeview Park	0.05
9	Dixie Belle	0.05

----Theater----

	hood	freq
0	Rowena Gardens	0.26
1	Lake Formosa	0.26
2	Rose Isle	0.22
3	Holden/Parramore	0.04
4	Lake Cherokee	0.04
5	Rock Lake	0.04
6	Orwin Manor	0.04
7	33rd Street Industrial	0.04
8	Lake Dot	0.04
9	Randal Park	0.00

----Theme Park Ride / Attraction----

	hood	freq
0	Florida Center	0.73
1	Lake Buena Vista	0.27
2	Audubon Park	0.00
3	Park Lake/Highland	0.00
4	Rowena Gardens	0.00
5	Rosemont North	0.00
6	Rosemont	0.00
7	Rose Isle	0.00
8	Roosevelt Park	0.00
9	Rock Lake	0.00

----Theme Restaurant----

	hood	freq
0	Florida Center	0.33
1	Lake Buena Vista	0.33
2	LaVina	0.33
3	Audubon Park	0.00
4	Pineloch	0.00
5	Rowena Gardens	0.00
6	Rosemont North	0.00
7	Rosemont	0.00
8	Rose Isle	0.00
9	Roosevelt Park	0.00

----Thrift / Vintage Store----

	hood	freq
0	Audubon Park	0.2
1	Hunters Creek	0.2
2	Ventura	0.2
3	Lake Formosa	0.2
4	Rowena Gardens	0.2
5	Millenia	0.0
6	MetroWest	0.0
7	Rosemont North	0.0
8	Rosemont	0.0
9	Rose Isle	0.0

----Tiki Bar----

	hood	freq
0	Thornton Park	1.0
1	Audubon Park	0.0
2	Signal Hill	0.0
3	Rowena Gardens	0.0
4	Rosemont North	0.0
5	Rosemont	0.0
6	Rose Isle	0.0
7	Roosevelt Park	0.0
8	Rock Lake	0.0
9	Rio Grande Park	0.0

----Toll Booth----

	hood	freq
0	The Dovers	0.29
1	Haralson Estates	0.14

2	Lake Sunset	0.14
3	Dover Shores East	0.14
4	Lake Davis/Greenwood	0.14
5	Lake Mann Estates	0.14
6	Princeton/Silver Star	0.00
7	Rowena Gardens	0.00
8	Rosemont North	0.00
9	Rosemont	0.00

----Toll Plaza----

	hood	freq
0	Lake Underhill	0.2
1	The Dovers	0.2
2	Celebration	0.2
3	Dover Shores East	0.2
4	Orlando Executive Airport	0.2
5	Audubon Park	0.0
6	Pineloch	0.0
7	Rosemont North	0.0
8	Rosemont	0.0
9	Rose Isle	0.0

----Tourist Information Center----

	hood	freq
0	Lake Buena Vista	1.0
1	Audubon Park	0.0
2	Park Lake/Highland	0.0
3	Rowena Gardens	0.0
4	Rosemont North	0.0
5	Rosemont	0.0
6	Rose Isle	0.0
7	Roosevelt Park	0.0
8	Rock Lake	0.0
9	Rio Grande Park	0.0

----Toy / Game Store----

	hood	freq
0	Florida Center	0.2
1	Hunters Creek	0.2
2	Lake Richmond	0.2
3	33rd Street Industrial	0.2
4	Richmond Estates	0.2
5	Audubon Park	0.0
6	Park Lake/Highland	0.0
7	Rosemont North	0.0

8	Rosemont	0.0
9	Rose Isle	0.0

----Track----

	hood	freq
0	Florida Center North	1.0
1	Lorna Doone	0.0
2	Seaboard Industrial	0.0
3	Rowena Gardens	0.0
4	Rosemont North	0.0
5	Rosemont	0.0
6	Rose Isle	0.0
7	Roosevelt Park	0.0
8	Rock Lake	0.0
9	Rio Grande Park	0.0

----Trail----

	hood	freq
0	Orwin Manor	0.4
1	East Park	0.2
2	Celebration	0.2
3	Windhover	0.2
4	Audubon Park	0.0
5	Park Lake/Highland	0.0
6	Rosemont North	0.0
7	Rosemont	0.0
8	Rose Isle	0.0
9	Roosevelt Park	0.0

----Train Station----

	hood	freq
0	South Division	0.25
1	Holden Heights	0.25
2	Holden/Parramore	0.12
3	South Orange	0.12
4	Kissimmee	0.12
5	Lake Copeland	0.12
6	Princeton/Silver Star	0.00
7	Rowena Gardens	0.00
8	Rosemont North	0.00
9	Rosemont	0.00

----Vape Store----

	hood	freq
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0	South Division	0.25
1	South Orange	0.25
2	Wadeview Park	0.25
3	Lake Holden	0.25
4	Audubon Park	0.00
5	Park Lake/Highland	0.00
6	Rosemont	0.00
7	Rose Isle	0.00
8	Roosevelt Park	0.00
9	Rock Lake	0.00

----Vegetarian / Vegan Restaurant----

hood freq

0	East Central Park	0.22
1	Colonialtown South	0.22
2	Lake Fairview	0.11
3	Millenia	0.11
4	Park Lake/Highland	0.11
5	Colonialtown North	0.11
6	Dover Manor	0.11
7	Roosevelt Park	0.00
8	Rock Lake	0.00
9	Audubon Park	0.00

----Video Game Store----

hood freq

0	Millenia	0.22
1	Lake Fredrica	0.11
2	Pineloch	0.11
3	Kirkman North	0.11
4	South Orange	0.11
5	South Semoran	0.11
6	Lake Holden	0.11
7	Wadeview Park	0.11
8	Rosemont	0.00
9	Rose Isle	0.00

----Video Store----

hood freq

0	Dover Shores West	0.08
1	Dover Estates	0.05
2	Kirkman South	0.05
3	South Semoran	0.05
4	Dover Shores East	0.03
5	East Central Park	0.03

6	Florida Center North	0.03
7	Ventura	0.03
8	Thornton Park	0.03
9	Kirkman North	0.03

----Vietnamese Restaurant----

	hood	freq
0	Colonialtown South	0.29
1	Park Lake/Highland	0.21
2	Colonialtown North	0.16
3	East Central Park	0.11
4	Coytown	0.08
5	Dover Shores West	0.05
6	Lawsona/Fern Creek	0.05
7	Williamsburg	0.03
8	Wedgewood Groves	0.03
9	Orlando Executive Airport	0.00

----Vineyard----

	hood	freq
0	Lake Fredrica	1.0
1	Lorna Doone	0.0
2	Rowena Gardens	0.0
3	Rosemont North	0.0
4	Rosemont	0.0
5	Rose Isle	0.0
6	Roosevelt Park	0.0
7	Rock Lake	0.0
8	Rio Grande Park	0.0
9	Richmond Estates	0.0

----Warehouse Store----

	hood	freq
0	Millenia	0.33
1	East Central Park	0.33
2	Colonialtown South	0.33
3	Audubon Park	0.00
4	Princeton/Silver Star	0.00
5	Seaboard Industrial	0.00
6	Rowena Gardens	0.00
7	Rosemont North	0.00
8	Rosemont	0.00
9	Rose Isle	0.00

----Water Park----

	hood	freq
0	Lake Buena Vista	0.75
1	Florida Center	0.25
2	Audubon Park	0.00
3	Park Lake/Highland	0.00
4	Rowena Gardens	0.00
5	Rosemont North	0.00
6	Rosemont	0.00
7	Rose Isle	0.00
8	Roosevelt Park	0.00
9	Rock Lake	0.00

----Waterfront----

	hood	freq
0	Palomar	1.0
1	Audubon Park	0.0
2	Park Lake/Highland	0.0
3	Rowena Gardens	0.0
4	Rosemont North	0.0
5	Rosemont	0.0
6	Rose Isle	0.0
7	Roosevelt Park	0.0
8	Rock Lake	0.0
9	Rio Grande Park	0.0

----Weight Loss Center----

	hood	freq
0	Hunters Creek	1.0
1	Audubon Park	0.0
2	Park Lake/Highland	0.0
3	Rowena Gardens	0.0
4	Rosemont North	0.0
5	Rosemont	0.0
6	Rose Isle	0.0
7	Roosevelt Park	0.0
8	Rock Lake	0.0
9	Rio Grande Park	0.0

----Wine Bar----

	hood	freq
0	Haralson Estates	0.07
1	Colonialtown North	0.07
2	Lake Formosa	0.07
3	Thornton Park	0.07

4	Lake Mann Estates	0.07
5	Pineloch	0.07
6	Wadeview Park	0.07
7	Park Lake/Highland	0.07
8	Rowena Gardens	0.07
9	West Colonial	0.07

----Wine Shop----

	hood	freq
0	Park Lake/Highland	0.5
1	Lake Formosa	0.5
2	Lorna Doone	0.0
3	Rowena Gardens	0.0
4	Rosemont North	0.0
5	Rosemont	0.0
6	Rose Isle	0.0
7	Roosevelt Park	0.0
8	Rock Lake	0.0
9	Rio Grande Park	0.0

----Wings Joint----

	hood	freq
0	West Colonial	0.07
1	Haralson Estates	0.07
2	Dover Estates	0.07
3	Dixie Belle	0.07
4	Wedgewood Groves	0.07
5	Rock Lake	0.07
6	Williamsburg	0.07
7	Park Central	0.07
8	Lake Fairview	0.07
9	Camellia Gardens	0.07

----Women's Store----

	hood	freq
0	Millenia	0.29
1	Florida Center North	0.14
2	Lake Buena Vista	0.14
3	Haralson Estates	0.07
4	Colonialtown North	0.07
5	Florida Center	0.07
6	East Central Park	0.07
7	Colonialtown South	0.07
8	West Colonial	0.07
9	Orwin Manor	0.00

----Yoga Studio----

```
      hood  freq
0   East Central Park  0.17
1      Audubon Park  0.08
2 Colonial Town Center  0.08
3      Williamsburg  0.08
4   Park Lake/Highland  0.08
5      Lake Formosa  0.08
6      Kirkman South  0.08
7   Dover Shores West  0.08
8      Coytown  0.08
9   Lawsons/Fern Creek  0.08
```

In [90]: num_top_venues = 10

```
indicators = ['st', 'nd', 'rd']

# create columns according to number of top venues
columns = ['Venue Category']
for ind in np.arange(num_top_venues):
    try:
        columns.append('{}{} Most Common Hood'.format(ind+1, indicators[ind]))
    except:
        columns.append('{}th Most Common Hood'.format(ind+1))

# create a new dataframe
neighborhoods_venues_sorted = pd.DataFrame(columns=columns)
neighborhoods_venues_sorted['Venue Category'] = orne_grouped['Venue Category']

for ind in np.arange(orne_grouped.shape[0]):
    neighborhoods_venues_sorted.iloc[ind, 1:] = return_most_common_venues(orne_grouped.iloc[ind, :],

neighborhoods_venues_sorted.head()
```

```
Out[90]:      Venue Category      1st Most Common Hood \
0   Accessories Store   Florida Center, Florida,, Florida,
1      Airport   East Central Park, Florida,, Florida,
2 American Restaurant   Thornton Park, Florida,, Florida,
3   Antique Shop   Lake Fairview, Florida,, Florida,
4      Arcade   Dover Shores West, Florida,, Florida,

      2nd Most Common Hood \
0   Lake Buena Vista, Florida,, Florida,
```

- 1 Colonial Town Center, Florida,, Florida,
- 2 Wadeview Park, Florida,, Florida,
- 3 Lake Formosa, Florida,, Florida,
- 4 Winter Park, Florida,, Florida,

3rd Most Common Hood \

- 0 Millenia, Florida,, Florida,
- 1 Winter Park, Florida,, Florida,
- 2 Lake Holden, Florida,, Florida,
- 3 Orwin Manor, Florida,, Florida,
- 4 Florida Center North, Florida,, Florida,

4th Most Common Hood \

- 0 Audubon Park, Florida,, Florida,
- 1 Lake Fairview, Florida,, Florida,
- 2 Lake Buena Vista, Florida,, Florida,
- 3 Park Lake/Highland, Florida,, Florida,
- 4 Haralson Estates, Florida,, Florida,

5th Most Common Hood \

- 0 Orlando Executive Airport, Florida,, Florida,
- 1 Holden Heights, Florida,, Florida,
- 2 South Orange, Florida,, Florida,
- 3 Lake Dot, Florida,, Florida,
- 4 Holden Heights, Florida,, Florida,

6th Most Common Hood \

- 0 Lake Davis/Greenwood, Florida,, Florida,
- 1 Holden/Parramore, Florida,, Florida,
- 2 Lawsons/Fern Creek, Florida,, Florida,
- 3 Haralson Estates, Florida,, Florida,
- 4 Holden/Parramore, Florida,, Florida,

7th Most Common Hood \

- 0 Lake Shore Village, Florida,, Florida,
- 1 Johnson Village, Florida,, Florida,
- 2 Millenia, Florida,, Florida,
- 3 Holden Heights, Florida,, Florida,
- 4 Johnson Village, Florida,, Florida,

8th Most Common Hood \

- 0 Lake Dot, Florida,, Florida,
- 1 Kirkman North, Florida,, Florida,
- 2 Lake Cherokee, Florida,, Florida,
- 3 Holden/Parramore, Florida,, Florida,
- 4 Kirkman North, Florida,, Florida,

9th Most Common Hood

10th Most Common Hood

```

0  Haralson Estates, Florida,, Florida, Holden Heights, Florida,, Florida,
1  Kirkman South, Florida,, Florida, LaVina, Florida,, Florida,
2  Lake Dot, Florida,, Florida, MetroWest, Florida,, Florida,
3  Johnson Village, Florida,, Florida, Kirkman North, Florida,, Florida,
4  Kirkman South, Florida,, Florida, LaVina, Florida,, Florida,

```

Overall in Orlando the most common venues are:

```

In [102]: df_ortop = pd.read_csv('top venues in all of orlando.csv')
          df_ortop.head(20)

```

```

Out[102]:
   Row Labels  Count of Venue Category
0      Park      132
1  Pizza Place      89
2  Sandwich Place    85
3  Convenience Store  84
4  Fast Food Restaurant  71
5  American Restaurant  71
6  Grocery Store     61
7  Cosmetics Shop    60
8  Clothing Store    59
9  Pharmacy          52
10 Coffee Shop       52
11 Gym              51
12 Intersection     49
13 Gym / Fitness Center  47
14 Mexican Restaurant  45
15 Discount Store    44
16 Hotel            42
17 Bakery           42
18 Bar             41
19 Vietnamese Restaurant  38

```

Initially, a Vegan Restaurant would be competing with Pizza Places, Sandwich Places, and Fast Food Restaurants, and American Restaurants, which are the top 5 venue categories in Orlando.

However, gyms are also ubiquitous, with almost 100 in the entire city.

A restaurant that represents a healthy option to pizzas, sandwiches and fast food, could be an interesting business model. Metrowest and Wadeview Park in particular seem to be interesting areas to further explore.

This additional exploration could include demographic information of the neighborhoods such as median income or population per area, as well as real state or rent prices for the business' location. Also, a regression could be made regarding the correlation between gyms and healthy food venues in order to see if in other cities people in neighborhoods with a high number of gyms demand healthy food places.

8 Conclusions

The value in this model is that it is flexible to explore different locations. Leveraging tools like geocoder and Foursquare API is very useful since there is a big amount of information available.

The problem of finding a business opportunity in Orlando has been narrowed down throughout the project to opening a Vegan-Vegetarian Restaurant in an optimal location.

The data that was generated in the project allowed to both define the problem and to point into a solution.

We could conclude that the project has given an initial solution to the problem:

What is an interesting business venture in the Orlando Area?

However, we only used the Foursquare API for benchmarking by location. The Foursquare API could be further leveraged to do sentiment analysis surrounding venues in Orlando by analysing people's review and thus having direct contact with the customers. However the call limits in Foursquare API don't allow to obtain a large amount of this data. However, this is where the most valuable information is at.

We thus conclude, that according to this benchmarking study, the Vegetarian/Vegan Restaurant has limited competition in its niche. However, in a more global sense it is competing against fast food and american food which is ubiquitous in Orlando. Thus, an option for the business model would be to adopt fast food and american food dishes and transform them into vegan dishes, in order to appeal to a larger market since the Vegetarian / Vegan Restaurant niche is presently small.