

# Where to Start Japanese restaurant in Canada?



# Foursquare API Call to get locations of Japanese restaurants on Five cities of Canada

```
[3]: # type your answer here
LIMIT = 500 # Maximum is 100
cities = ["Toronto", 'Ottawa', 'Montreal', 'Calgary', 'Victoria']
results = {}
for city in cities:
    url = 'https://api.foursquare.com/v2/venues/explore?&client_id={}&client_secret={}&v={}&near={}&limit={}&categoryId={}'.format(
        CLIENT_ID,
        CLIENT_SECRET,
        VERSION,
        city,
        LIMIT,
        "4bf58dd8d48988d111941735") # Japanese restaurant CATEGORY ID
    results[city] = requests.get(url).json()
```

```
[4]: df_venues={}
for city in cities:
    venues = json_normalize(results[city]['response']['groups'][0]['items'])
    df_venues[city] = venues[['venue.name', 'venue.location.address', 'venue.location.lat', 'venue.location.lng']]
    df_venues[city].columns = ['Name', 'Address', 'Lat', 'Lng']
```

```
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(maps[city])
print(f"Total number of Japanese restaurant in {city} = ", results[city]['response']['totalResults'])
print("Showing Top 100")
```

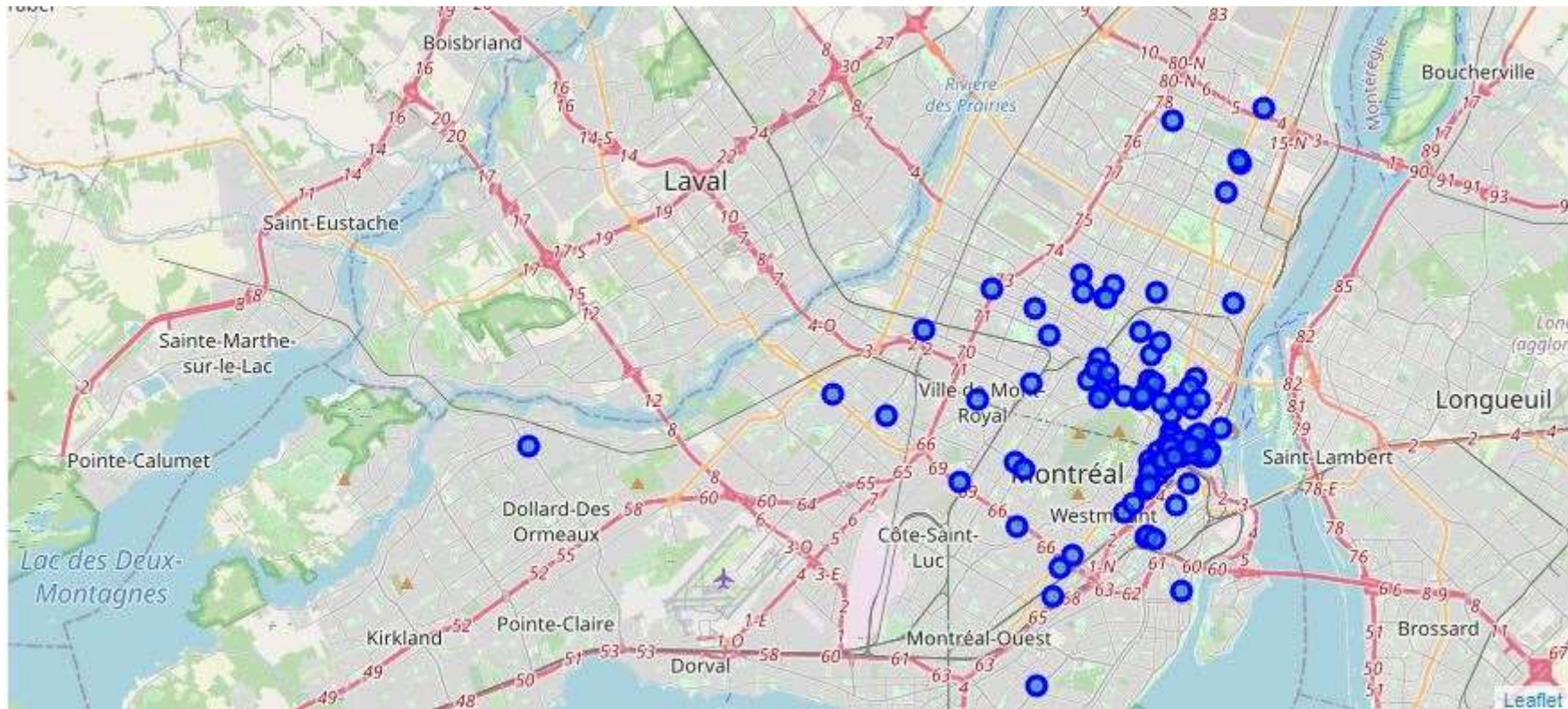
```
Total number of Japanese restaurant in Toronto = 228
Showing Top 100
Total number of Japanese restaurant in Ottawa = 74
Showing Top 100
Total number of Japanese restaurant in Montreal = 160
Showing Top 100
Total number of Japanese restaurant in Calgary = 149
Showing Top 100
Total number of Japanese restaurant in Victoria = 29
Showing Top 100
```

# Toronto Location of Japanese Restaurants



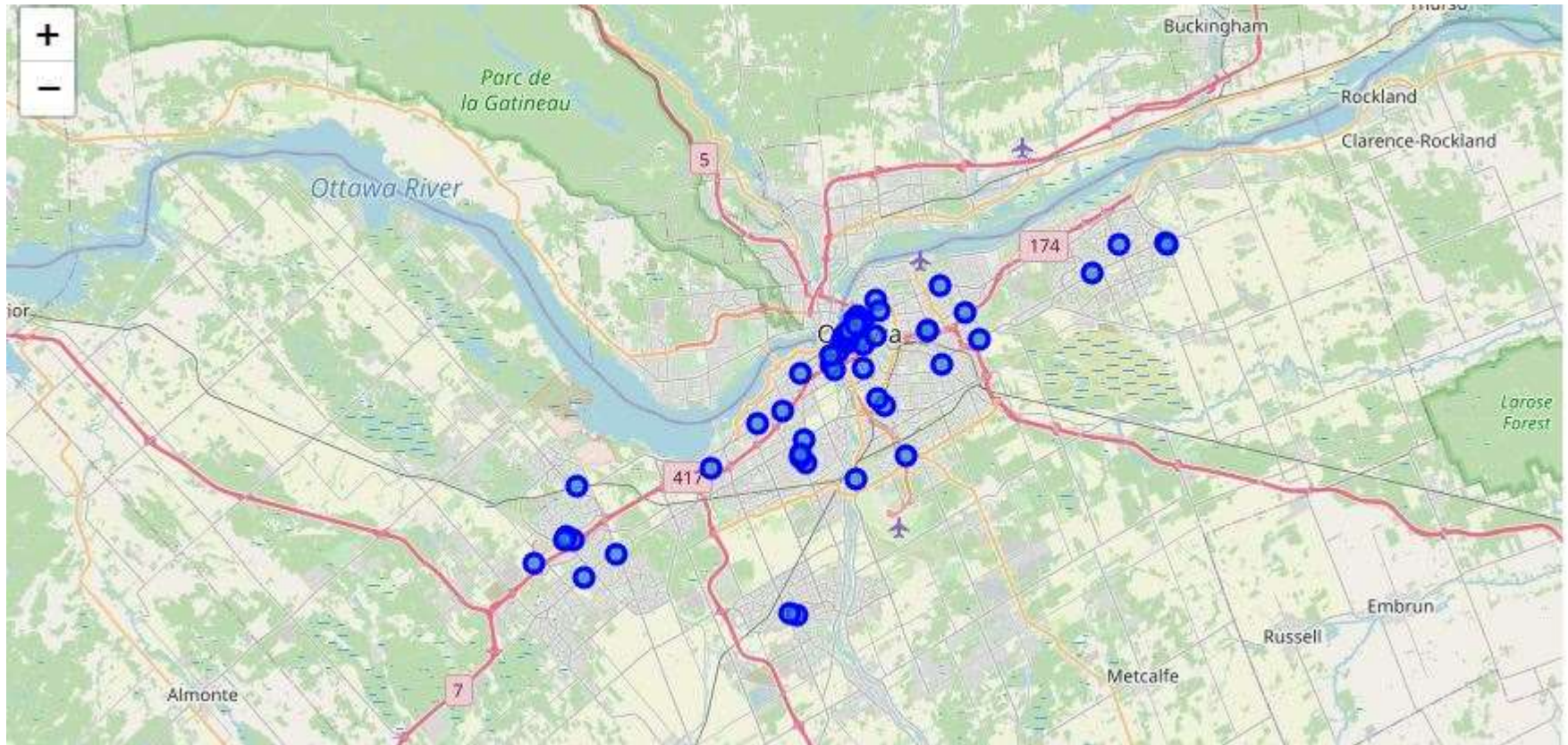


# Montreal Location of Japanese Restaurants





# Ottawa Location of Japanese Restaurants



# Mean Distance from Mean coordinates of Japanese Restaurants in Different Cities

```
popup=10001,  
color='green',  
fill=True,  
fill_color='#3186cc',  
fill_opacity=0.7,  
parse_html=False).add_to(maps[city])  
print(city)  
print("Mean Distance from Mean coordinates")  
print(np.mean(np.apply_along_axis(lambda x: np.linalg.norm(x - venues_mean_coor),1,df_venues[city][['Lat','Lng']].values
```

```
Toronto  
Mean Distance from Mean coordinates  
0.053782952768257085  
Ottawa  
Mean Distance from Mean coordinates  
0.06746202386960644  
Montreal  
Mean Distance from Mean coordinates  
0.03358825349802856  
Calgary  
Mean Distance from Mean coordinates  
0.0623751079019326  
Victoria  
Mean Distance from Mean coordinates  
0.021574210007855248
```

# Toronto Location of Japanese Restaurants Distance from Mean coordinates

```
[12]: maps[cities[0]]
```

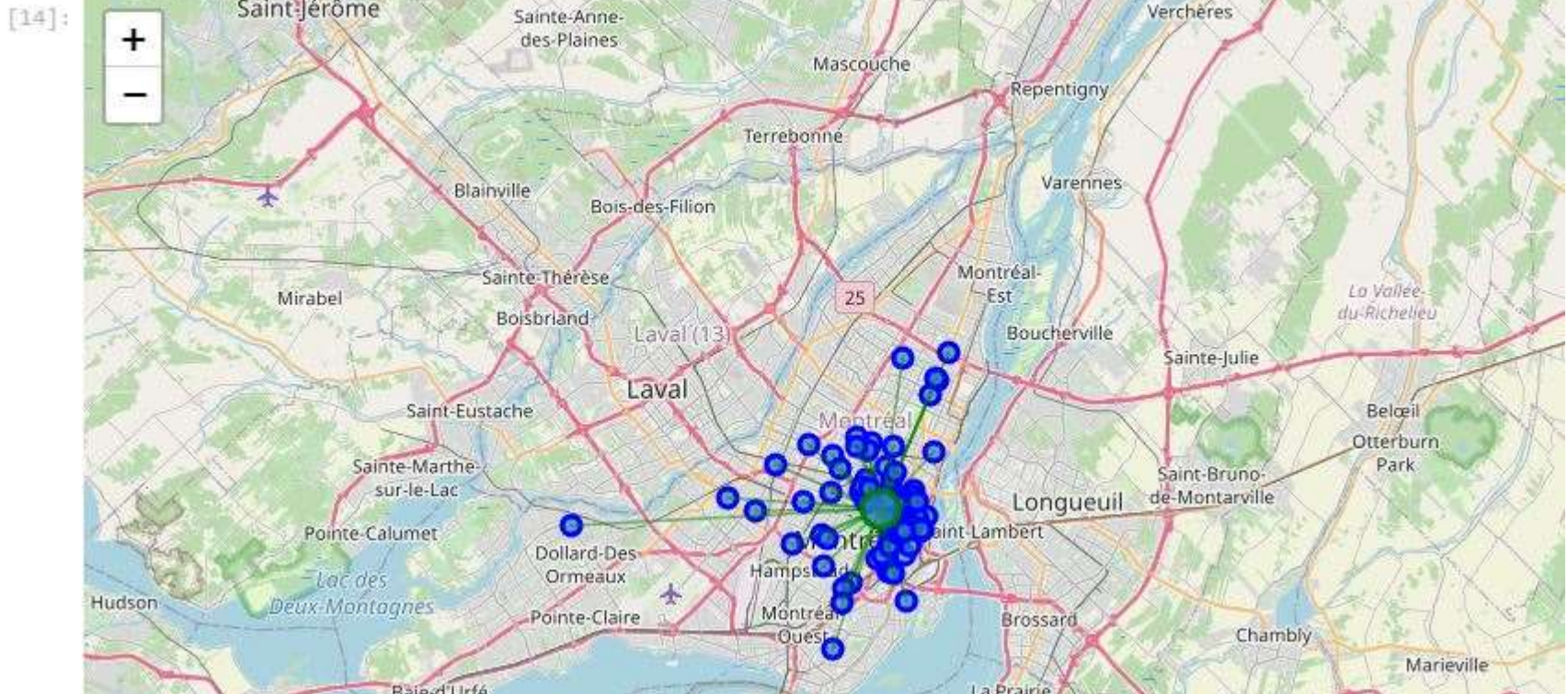
```
[12]:
```





# Montreal - Location of Japanese Restaurants Distance from Mean coordinates

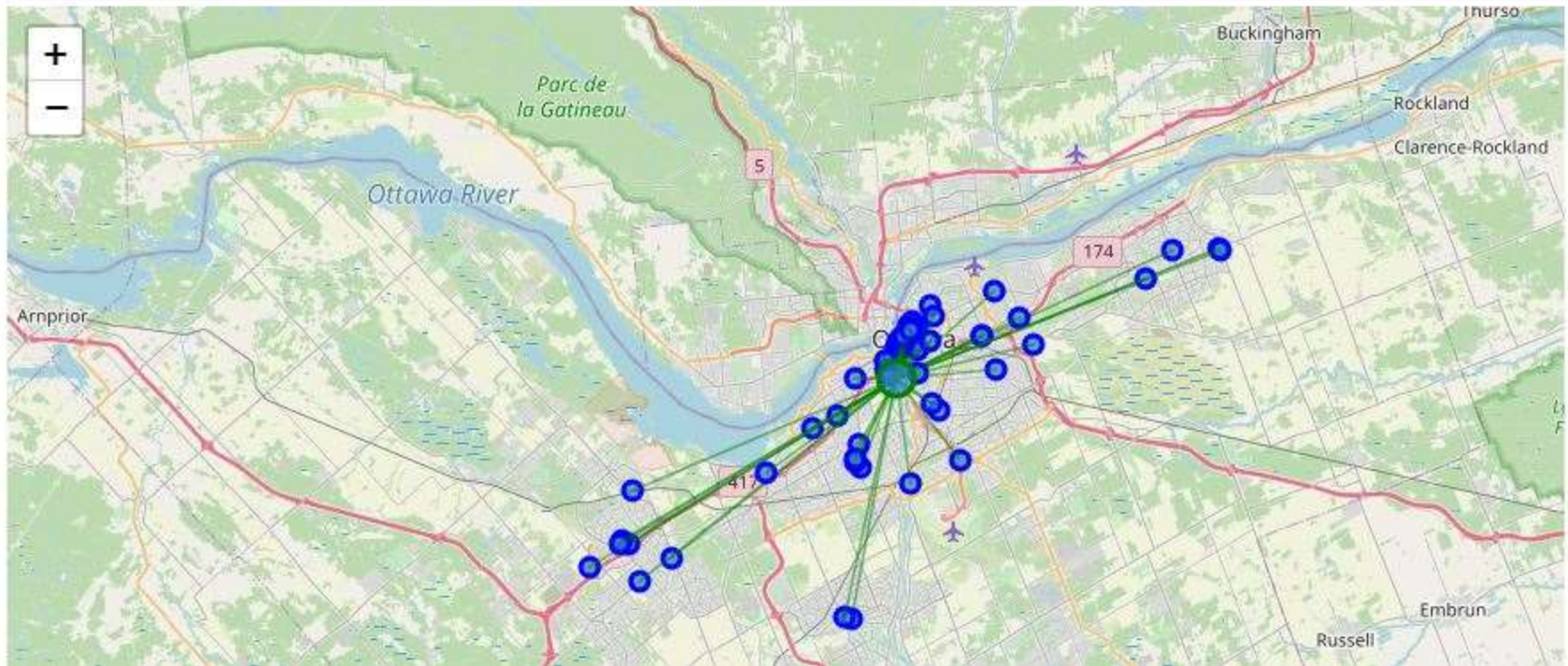
[14]: maps[cities[2]]



# Ottawa - Location of Japanese Restaurants Distance from Mean coordinates

```
[13]: maps[cities[1]]
```

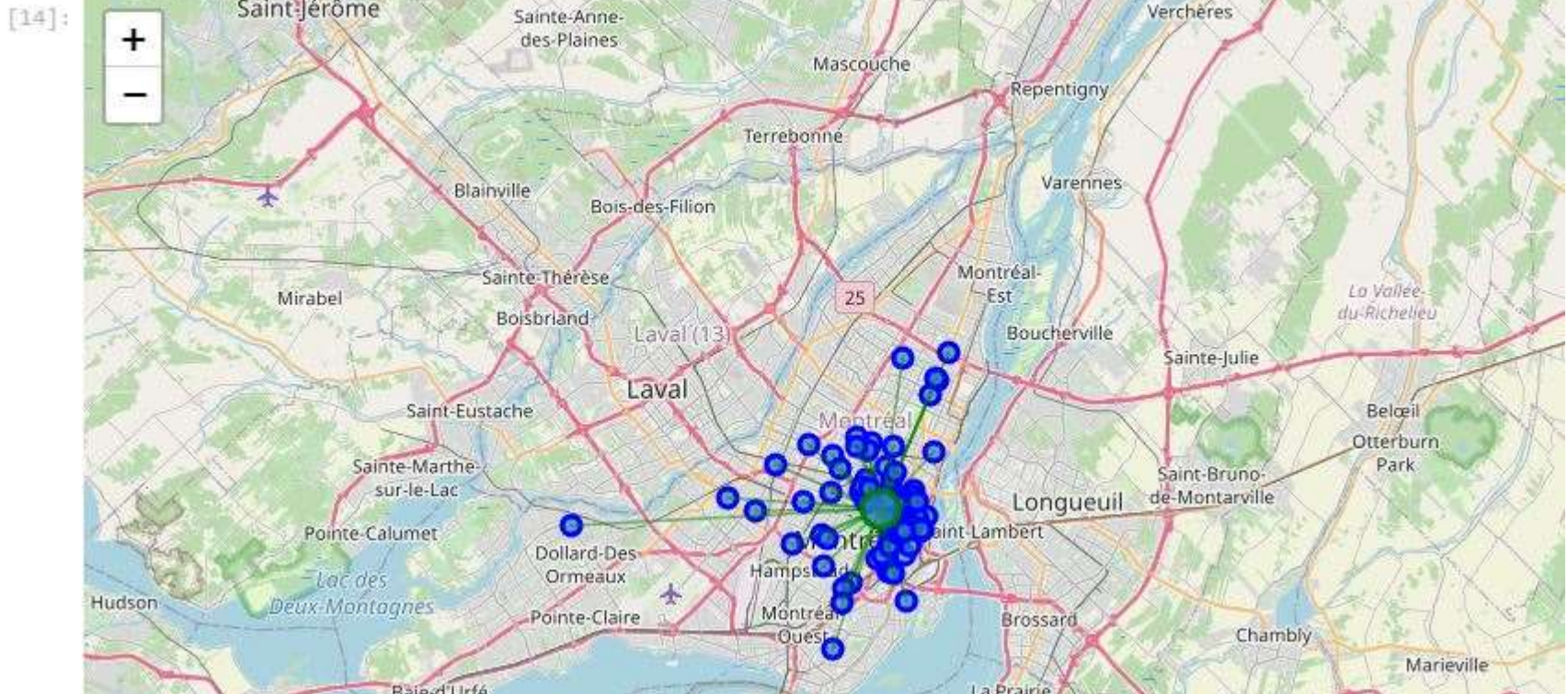
```
[13]:
```





# Montreal - Location of Japanese Restaurants Distance from Mean coordinates

[14]: maps[cities[2]]

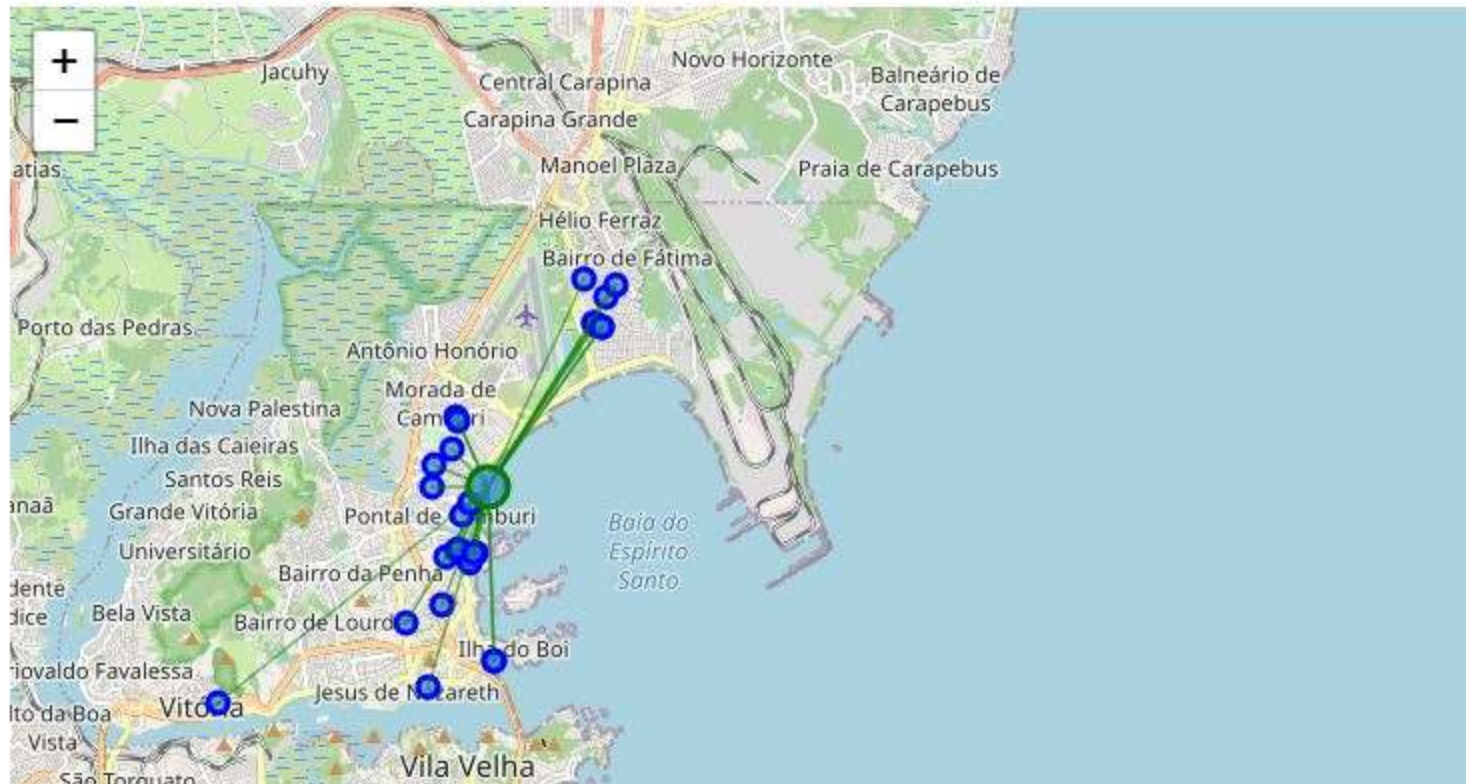




# Victoria - Location of Japanese Restaurants Distance from Mean coordinates

[16]: maps[cities[4]]

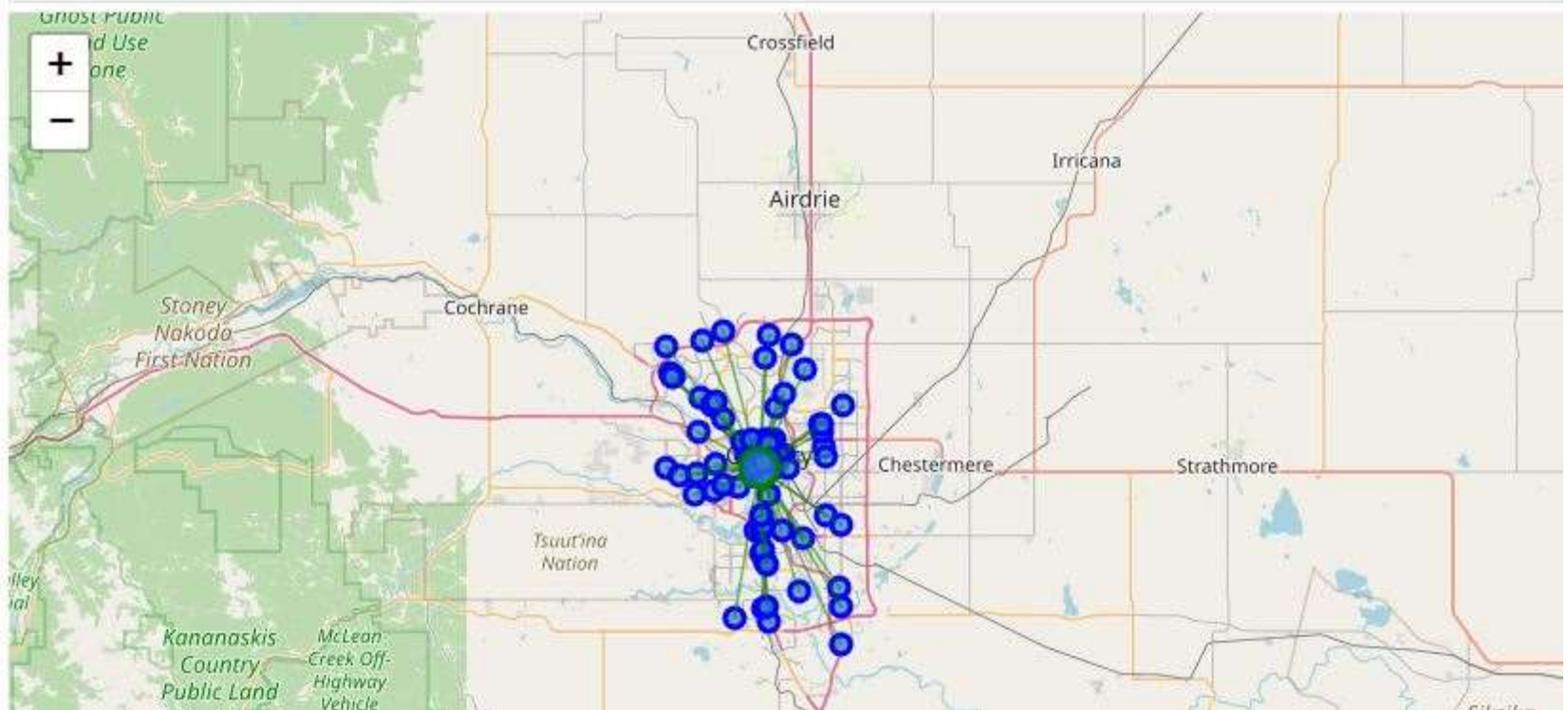
[16]:



# Calgary - Location of Japanese Restaurants Distance from Mean coordinates

```
[15]: maps[cities[3]]
```

```
[15]:
```



# Observations and Conclusion

Here I have presented an analysis for a Japanese restaurant chain expansion prospects in different Canadian cities.

Considering number of restaurants and their mean distance from city center Ottawa seems to be the first option to open the restaurant. Because it has only 74 Japanese restaurants so competition is less moreover the mean distance from the city center is high. Considering this if we select location nearer to mean city location it will be a perfect choice.

Considering competitive environment Victoria is the best option as it has only 29 Japanese restaurants.



# Future Expansion

Here I have only taken in consideration about number of restaurants in a city and there distance from mean city coordinates.

We can analyze the Japanese population in each selected city and comment in terms of demand supply strategy.

We can also add per capita income in selected city and comment in terms of spending capacity of consumers etc.

Thank You