

New Facility Location Selection

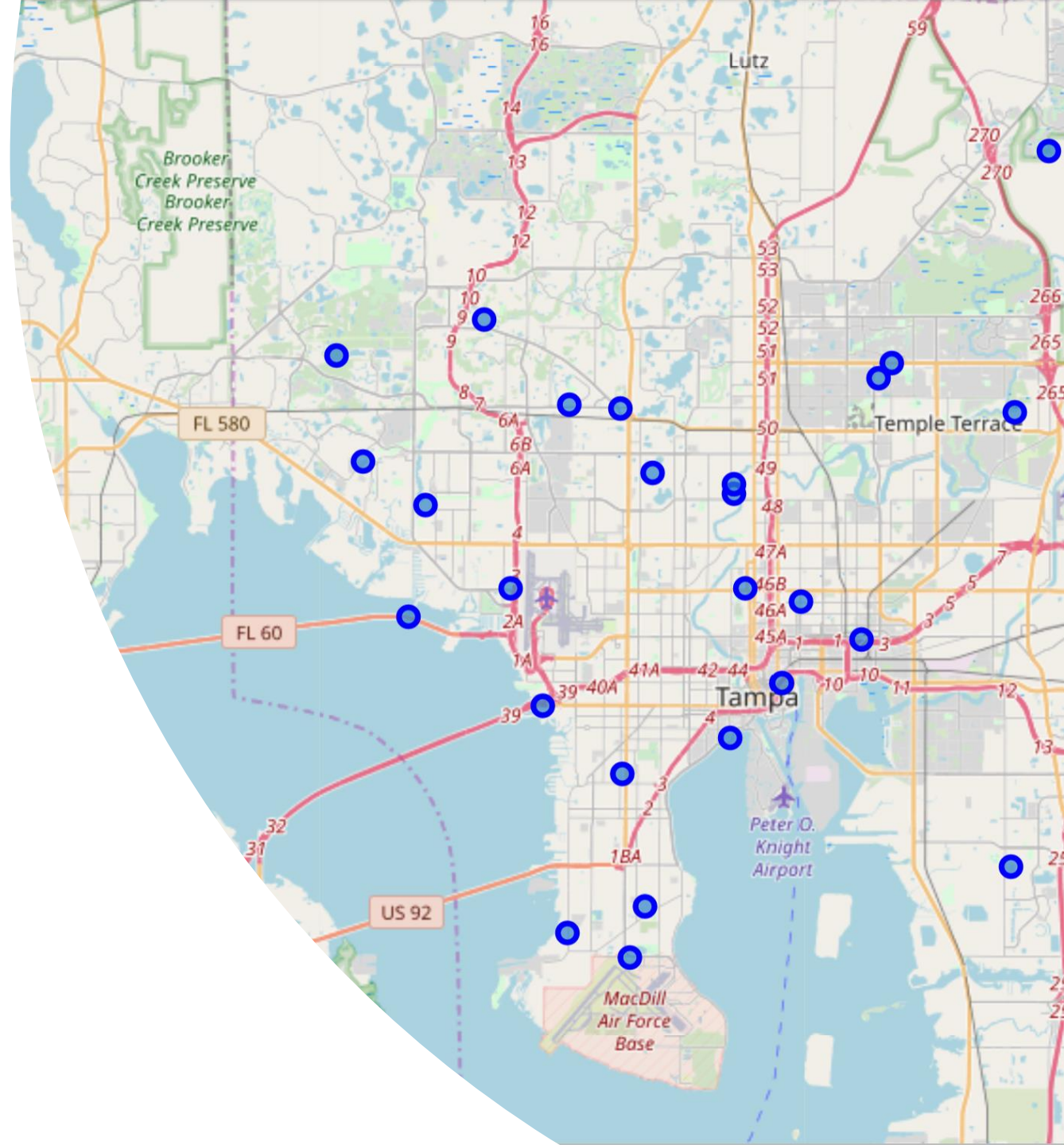
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Business Problem

The owner of several successful gyms wants to open a new facility in Tampa, FL. They want to ensure that the gym's location is in an area not already saturated with gyms and other businesses that might compete with a new gym. This initial analysis will be to determine to a neighborhood level, where to consider placing the new gym facility.

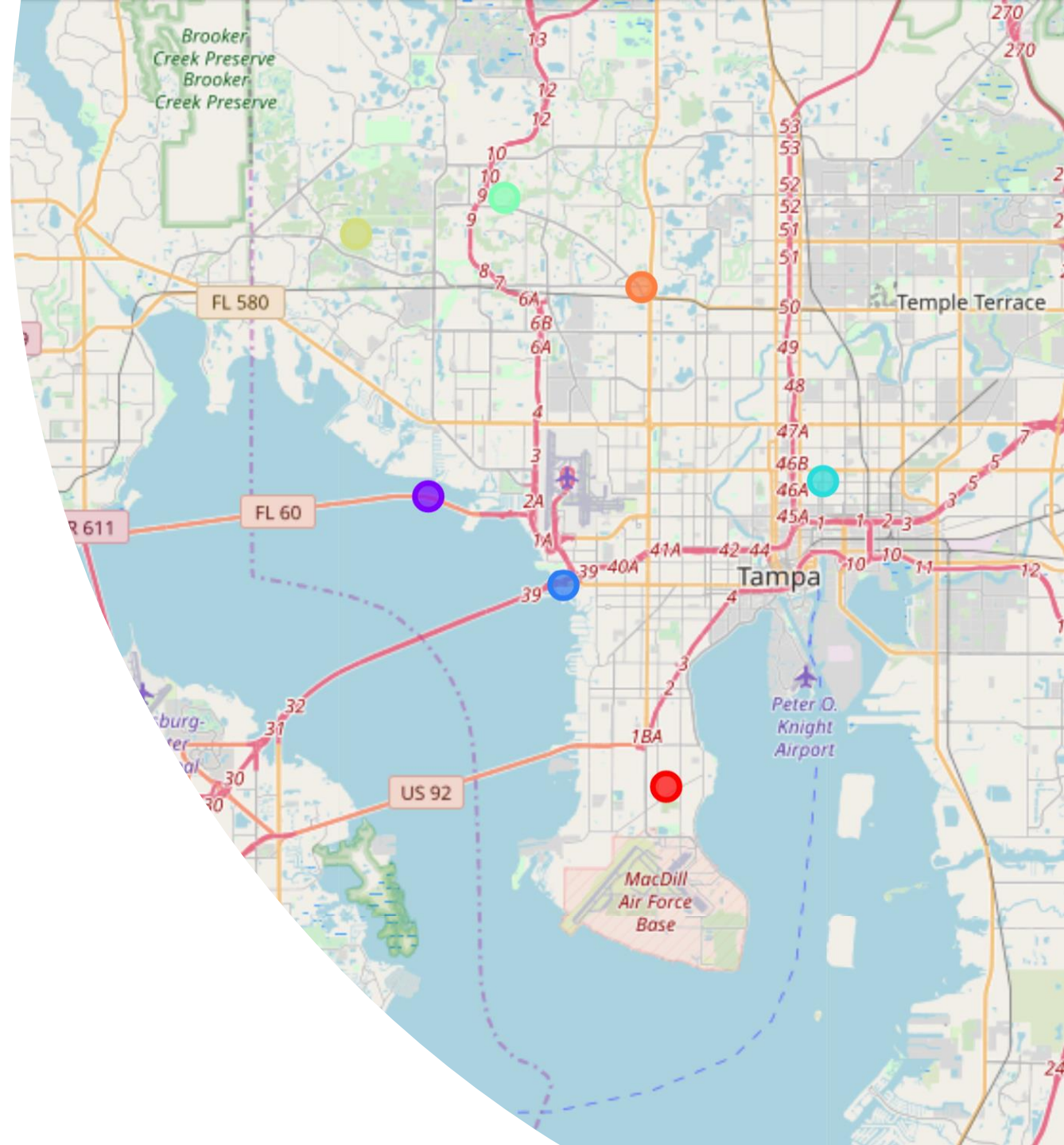
Data: Zip Codes

- Identify the list of Zip Codes that correspond to Tampa, FL.
- <https://www.zip-codes.com/state/fl.asp#zipcodes>
- Create a dataframe consisting of
 - Zip Code,
 - City name,
 - County name, and
 - Zip Code type.
- Geolocate each zip code to obtain
 - Neighborhood name,
 - Latitude, and
 - Longitude.



Market Saturation

- Identify businesses near each neighborhood.
- Combine businesses that are gym-like into one group.
- Determine the relative frequency of gyms for each neighborhood.
- Eliminate neighborhoods where gyms are one of the five most frequent business types.



Conclusion

- There are 7 neighborhoods that meet the criteria for the new facility location.
- The research team can now focus their location search in a few zip codes, saving time and money.

