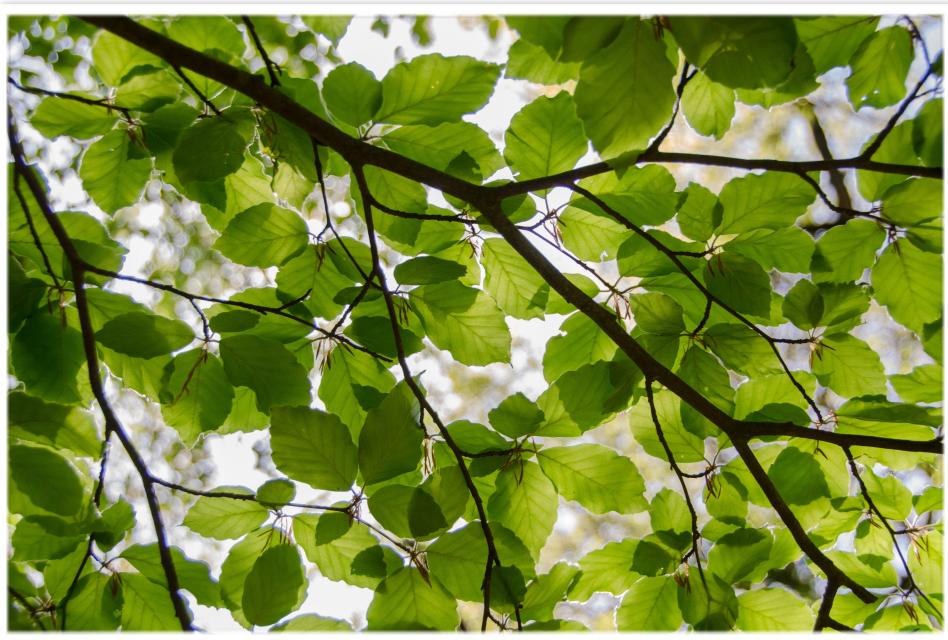


San Francisco leaf-count

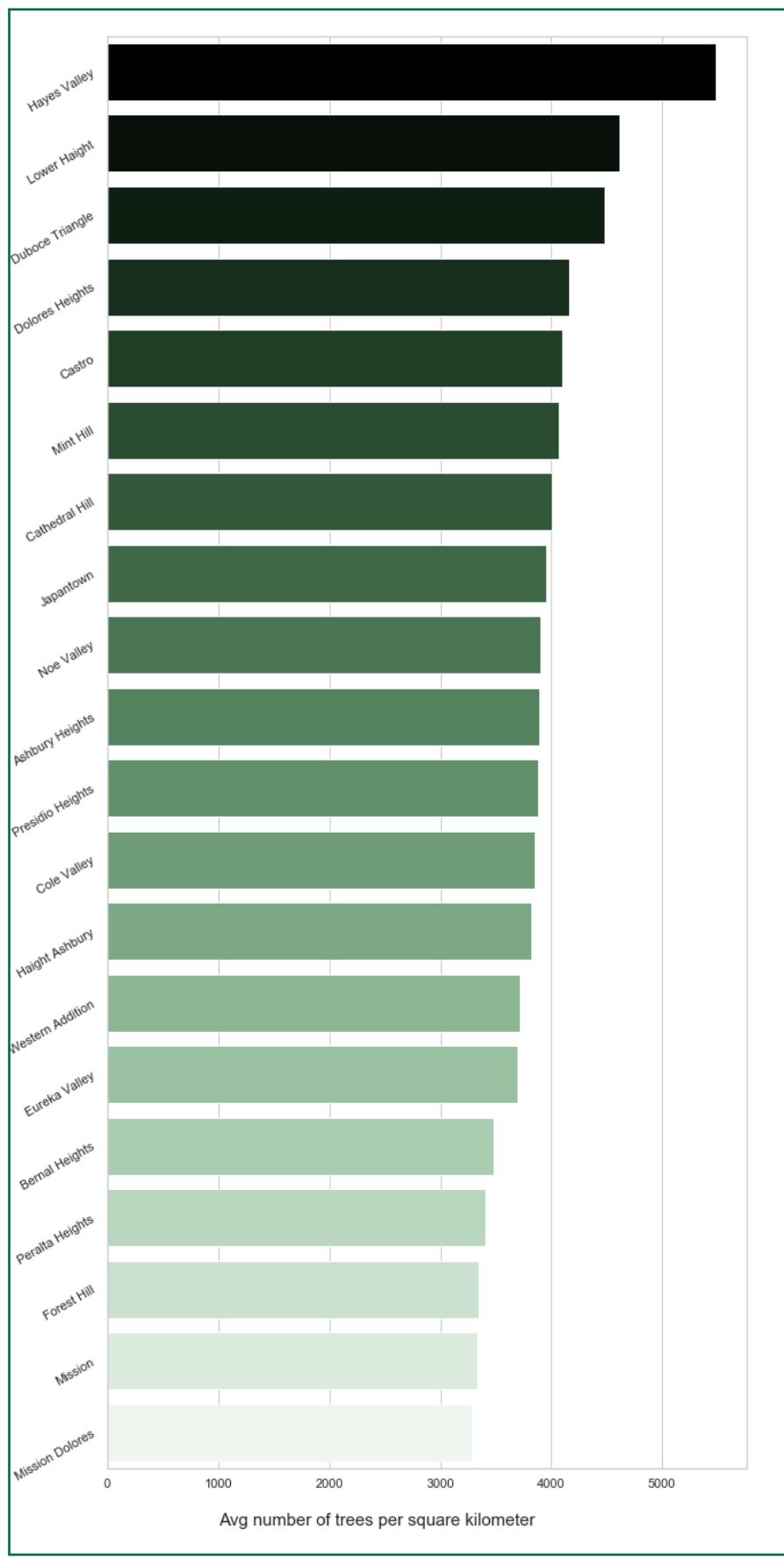


San Francisco leaf-count

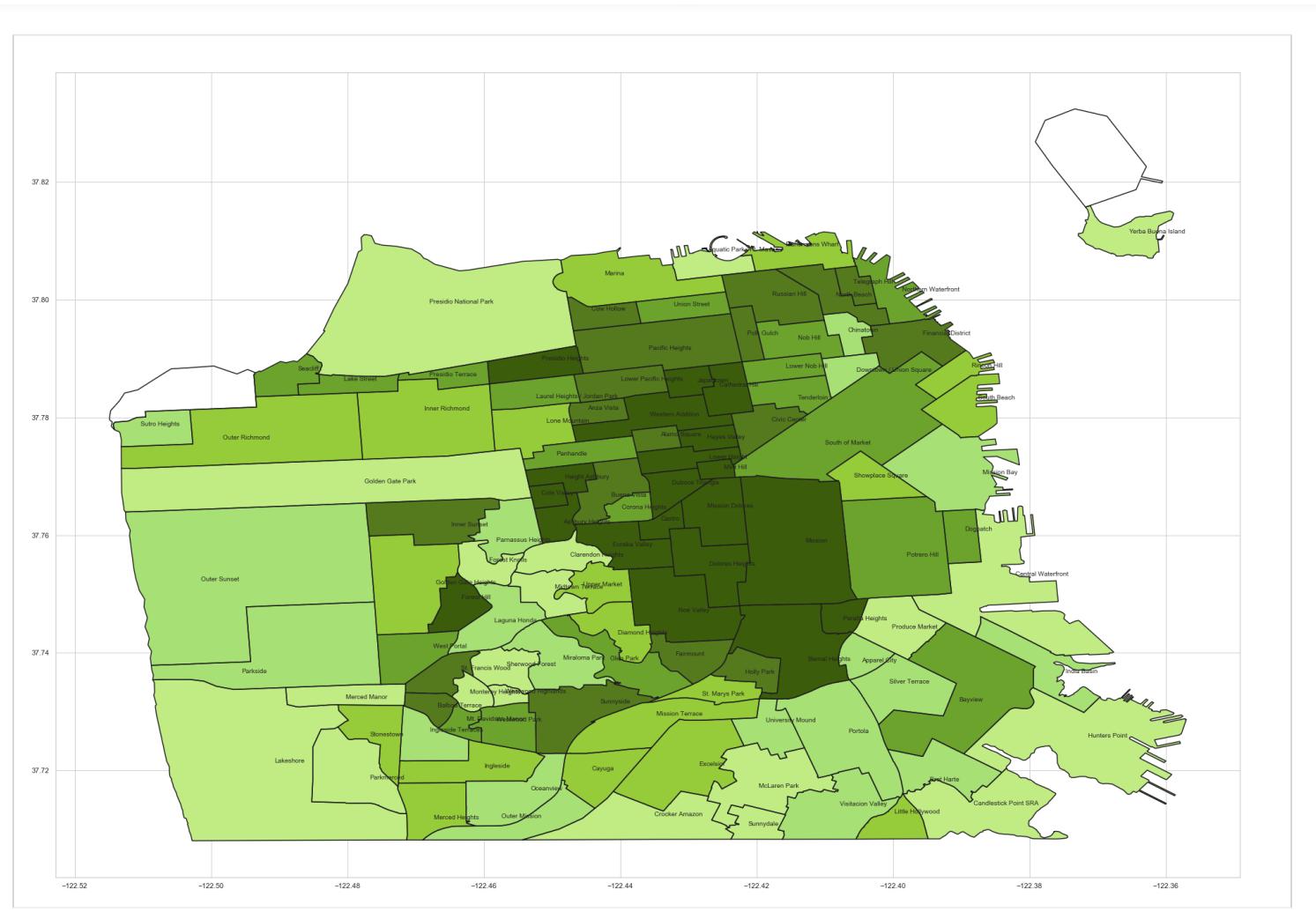
How does each district fare on greenery?

Do you love trees like we do? Have you thought whether it is a need-based endearment because you realize that you literally cannot live without them, or is it more stoic and you like the calmness and tranquility it exuberates? In any case, for sure they make us happy when we are around them, so we went ahead and did what we do best - crunch numbers and found the San Francisco neighborhoods that are most green. Now you know where to go for that evening therapeutic walk or even consider buying a house.

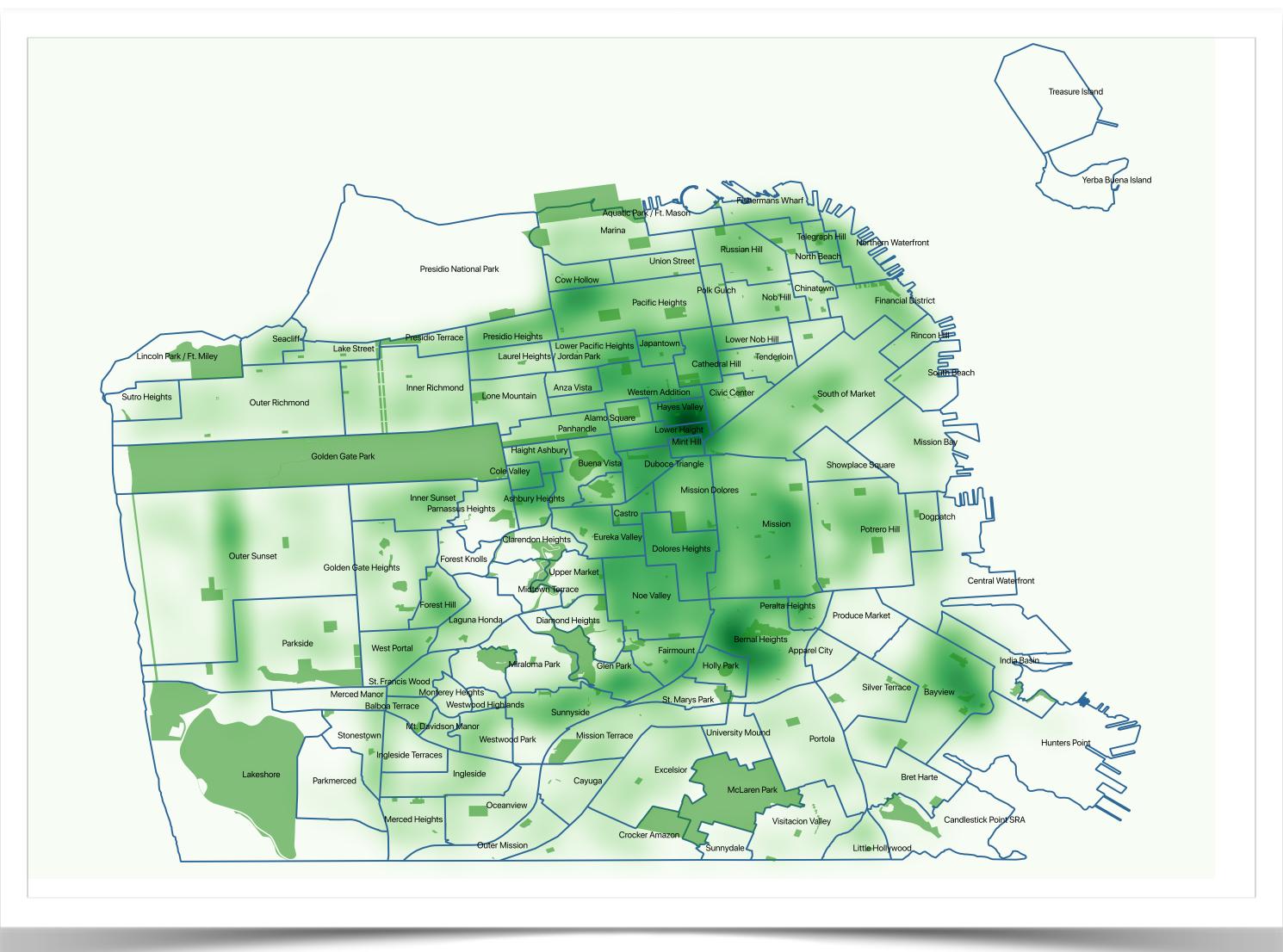
On the next page you will see the list of neighborhoods with most number of trees per square kilometer. Hayes Valley ranks on the top - in case you were wondering why you love strolling down the Hayes street with a person playing a ukulele on a street corner more than walking in SOMA where the tree cover is less than half. By the way, we did not include parks here because we are trying to gauge the general street-greenness of a neighborhood. We will come to parks later.



Despite the Mission Dolores park, the neighborhood appears at the bottom of the list here because we did not account for the parks. It just shows that if you walk around in the streets, there are fewer trees - which is true if you walk down the Valencia street. Here is another picture of the street trees data in all neighborhoods.



To make a judgement on the overall green "accessibility," in a neighborhood, we do want to consider parks. Also, there are green pockets in every neighborhood. We created a map that better informs us about those lush areas. It shows a concentration of street trees as well as parks - the lists of which are publicly available on data.sfgov.org.



Now we have a much better picture of where to go! The above graph shows Presidio National Park as not-green because the park belongs to National Park Service whereas the rest of the parks are the ones maintained by San Francisco Recreation & Parks Department.

That will be all. Hope this is helpful. Happy strolling!

Resources used

In case you are curious about the (legally free!) software and data used for the above analysis, here is a rough list:

- QGIS: A free and open-source cross-platform desktop geographic information system application that supports viewing, editing, and analysis of geospatial data.
- Jupyter Notebook.
- Treepedia project: MIT's open source initiative to assess green cover from Google street view
- Help from so many people writing answers on stackoverflow and making their priceless projects available online.
- Various Shapefiles (<https://en.wikipedia.org/wiki/Shapefile>) from sources like:
 - data.sfgov.org
 - SF Neighborhoods: <https://data.sfgov.org/Geographic-Locations-and-Boundaries/SF-Find-Neighborhoods/pty2-tcw4>
 - Recreation and Parks Properties: <https://data.sfgov.org/Culture-and-Recreation/Recreation-and-Parks-Properties/wkn6-jn8k>
 - County roads: <https://catalog.data.gov/dataset/tiger-line-shapefile-2017-county-san-francisco-county-ca-all-roads-county-based-shapefile>