

4.0 – Distance from Midtown

Starting Point:

Full Data Set after 3.0.xlsx

- Address of the property's Latitude, and Longitude is present in our data set, but we need to make more out of this information by understanding how far it is from a common place. I decided on Midtown Manhattan as it is in the heart of the borough where many NYC residents work at. This is commonly the metric of how far away one lives, "how far away from the city?". Business Question # 7

Process:

4.0 Distance to "Work".ipynb

A. Location.xlsx

B. Distance_To_Midtown.xlsx

- We have the latitude and longitude of the listing.
- Find the latitude and longitude of Midtown, used the Empire State Building.
- Python, import data frame that has just the latitude and longitudes.
- Using the python code of " return geodesic(coords_1, coords_2).miles" a new column with the distance between the first and second location is created.
- Exported information into an Excel file

Results:

Full Data Set after 4.0 .xlsx

- New column Distance_to_Midtown , with distances from the address to the Empire State Building. A relative measure of how far out from common locations NYC residents will have to commute to.
- Incorporated this data into the primary data set with the Distance to Midtown (miles) column, highlighted in yellow
- As everyone's transportation means is different, the distance is the comparable metric. For every single listing we now know how far (in miles) it is from Midtown Manhattan.