

For this assessment I analyzed the housing dataset to glean insights on what neighborhoods the business is having the most success in with selling single family homes (SFH), and where the most resources should go to. The workbook is filtered down to SFHs and neighborhoods where we have at least 50 SFHs, in order to maximize sample sizes while having a large enough dataset. The first worksheet of the workbook starts with a table that presents, via conditional formatting, which neighborhoods the business is having the most success with in selling its inventory of SFHs. The rest of this worksheet includes a card showing the average percentage of houses sold compared to inventory for all home types but while keeping the beforementioned limit on neighborhoods, as well as a geographical map and tree map. The geographical map shows where the neighborhoods are located and compares their percentage of houses sold with each other via bubble points, and the tree map presents another visual comparison on the differences between the neighborhoods in percentage of houses sold, but in finer detail.

The second worksheet aims to dig deeper into these neighborhoods, further filtering them by the top 5 in percentage of SFHs sold of the held inventory. Of these top 5 homes, it first lists them, ordering and ranking (via conditional formatting) them by median sales price to find what neighborhood to focus on for maximizing profit. The logic being that unlike the mean, the median avoids heavy influence by outliers, which are present in the data along with a heavily influenced mean, as shown on the line and clustered bar chart and its Upper East Side category. The cards on the top right show in green, which neighborhood, going by this method, would be considered the most profitable (by median) and thus should have the most resources dedicated to it of the top 5 shown on this worksheet, as well as the least profitable neighborhood of those 5 which is shown in red. The main insight that I present and visualize of the neighborhoods that the business is selling SFHs in is that the ones that it should dedicate the most resources to, to maximize short term profit are:

1. Upper West Side
2. Upper East Side
3. Greenwich Village Central
4. Midtown East
5. Harlem Central

in that order.