LotArea Analysis

Goal: To assess the impact of replacing the lot area with the ESRI shape area, especially for irregular lots miscategorized as regular. Provide summaries of the numbers by borough and land use code.

Result: Comprehensive summaries are available in the linked Jupyter notebook. For lots with miscategorized regularity, replacing the lot area with the shape area reduces the overall numbers.

Regular Lots

There are 722,087 regular lots, of which 63,704 don't have lot areas equal to the front times depth. Of the 63,704 lots, 1,593 have lot areas already equal to the ESRI shape area.

The Jupyter notebook provides a breakdown of the overall lot area, front times depth, and shape area for each borough, as well as each land use code. For the land use code, there is also a bar chart displaying the differences between the three numbers.

Irregular Lots

There are 134,954 irregular lots, of which 709631 have lot areas that aren't equal to the shape area. As with regular lots, I have provided breakouts by borough and land use code, as well as a bar chart illustrating the differences between the areas by land use code. The land use code most affected by this update would be outdoor space and recreation.

Irregular Lots Miscategorized as Regular

This part addresses lots with an IrrLotCode indicator of 'N', where the lot front does not equal the lot depth. The process I wrote identified 1,138 lots. Replacing the lot area with the shape area for these lots would reduce their square footage by approximately 10.5 million.

There is a breakout by borough with Manhattan showing the largest impact. There is also a breakout by land use code, showing that Vacant Land loses the most square footage, and Outdoor Space and Recreation gains the most.

Supporting Documents

Jupyter Notebook

Lots Miscategorized as Regular – Identification Process

Lots Miscategorized as Regular – Excel Spreadsheet

Lots Miscategorized as Regular - Shapefiles

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