Green View Index Calculations

Evaluating the percentage of only Green pixels in RGB format within each Google Street View image of Jersey City and averaging the percentage for a particular area

Green View Scores

Calculated percentile value for each geo-location of Google Street View images within JC and scored them the following way - 0-20% = 1, 20-40% = 2, 40-60% = 3, 60-80% =4, >80% = 5

Impervious Surface Scores

Calculated the percentage of each impervious surface type overlaid on the JC grid using ArcGIS, divided the percentages into scores as follows - 0-20% = 5, 20-40% = 4, 40-60% = 3, 60-80% =2, >80% = 1

Tree Count Estimates

Applied brute force calculations by manually identifying number of trees within Google Street View Images for each geo-location and green view index. 0-3% = 2 Trees, 3-8% = 5 Trees, 8-18% = 15 Trees, 18-24% = 20 Trees, 24-30% = 23 Trees , 30-40% = 27 Trees, 40-45% = 30 Trees and > 45% = 35 Trees

Estimates for Stormwater Mangened, CO2, Dollar Benefits

Stormwater Managed = Tree Count Estimate * 760 gallons

CO2 and Dollar Benefits based on average values derived from JC OpenTreeMaps

Flood Risk

FEMA High Flood Risk Zones = 5, FEMA Mid Risk Zones = 3, FEMA Low Risk Zones = 0

Overall Scores

Round(Impervious Score + Flood Risk + Green Score/3)