

Examining Green Infrastructure Connectivity in the Maspeth Industrial Business Zone: Enhancing Ecological Resilience, Livability, and Mitigating Urban Heat Island Effects.

Edsel Peralta
Newton Creek Alliance
Urban Heat Island Fellowship
Summer 2023

Topic: G.I Connectivity In Maspeth IBZ

- Intersection of urban planning and environmental sustainability by studying green infrastructure in the area
- Locating where in the Maspeth Industrial business zone the Alliance can effectively integrate green infrastructure like rain gardens, parks, and tree pits
- Promote ecological resilience, enhance livability, mitigate the urban heat island effects and most importantly generate connectivity of green infrastructure.

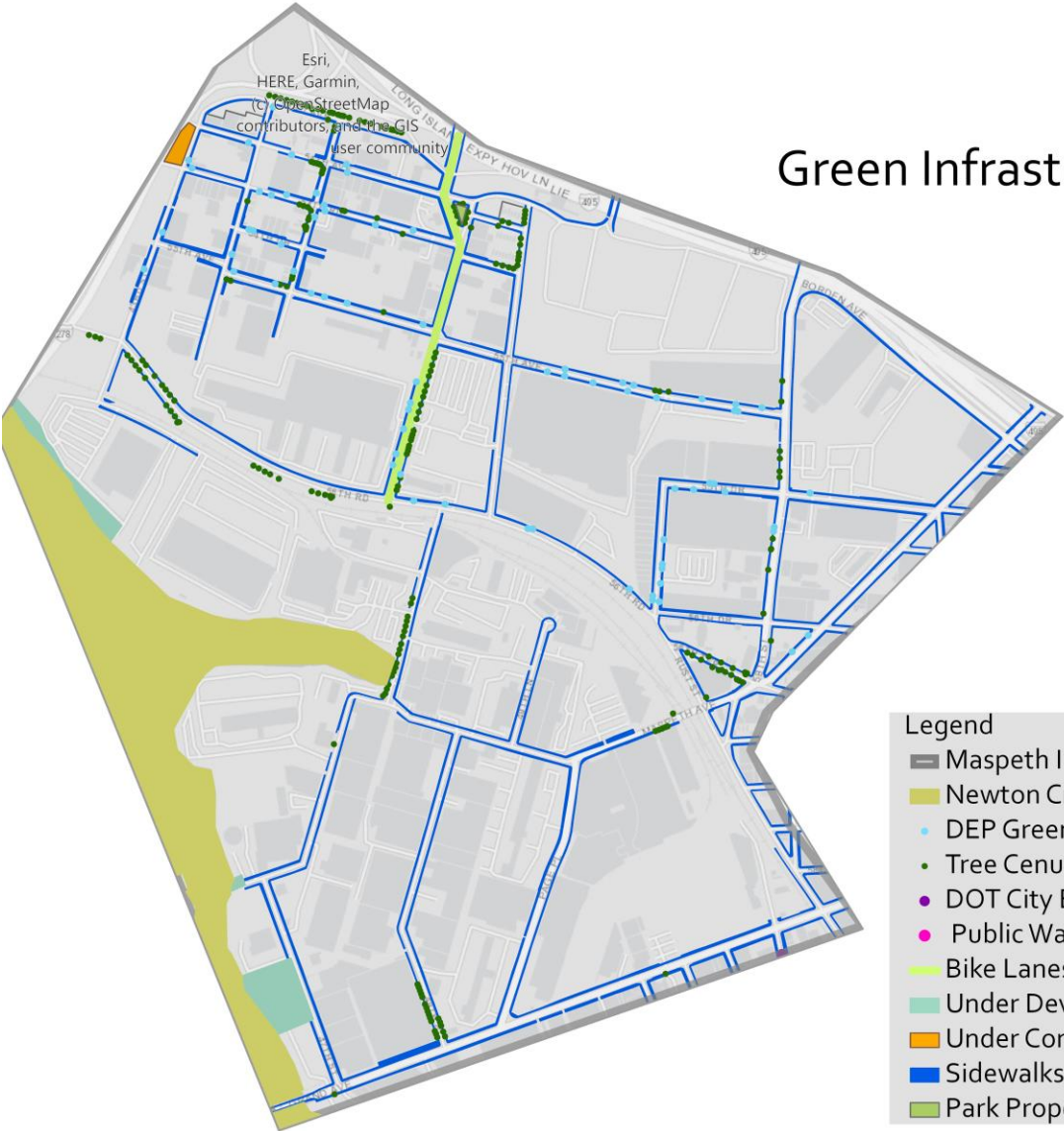
Methodology

- Field Work
- Research of Data found on NYC Open Data

Tools

- ArcGIS Pro
 - Google My Maps
 - NYC Open Data
-

Green Infrastructure Locations



Legend		Quantities
Maspeth IBZ		
Newton Creek		
DEP Green Infrastructure		72
Tree Canus		226
DOT City Bench		0
Public Water Fountains		0
Bike Lanes		1
Under Developed Green Space		3
Under Construction Green Infrasteucture		1
Sidewalks		84
Park Properties		1

0 0.05 0.1 0.2 0.3 0.4 0.5 Miles



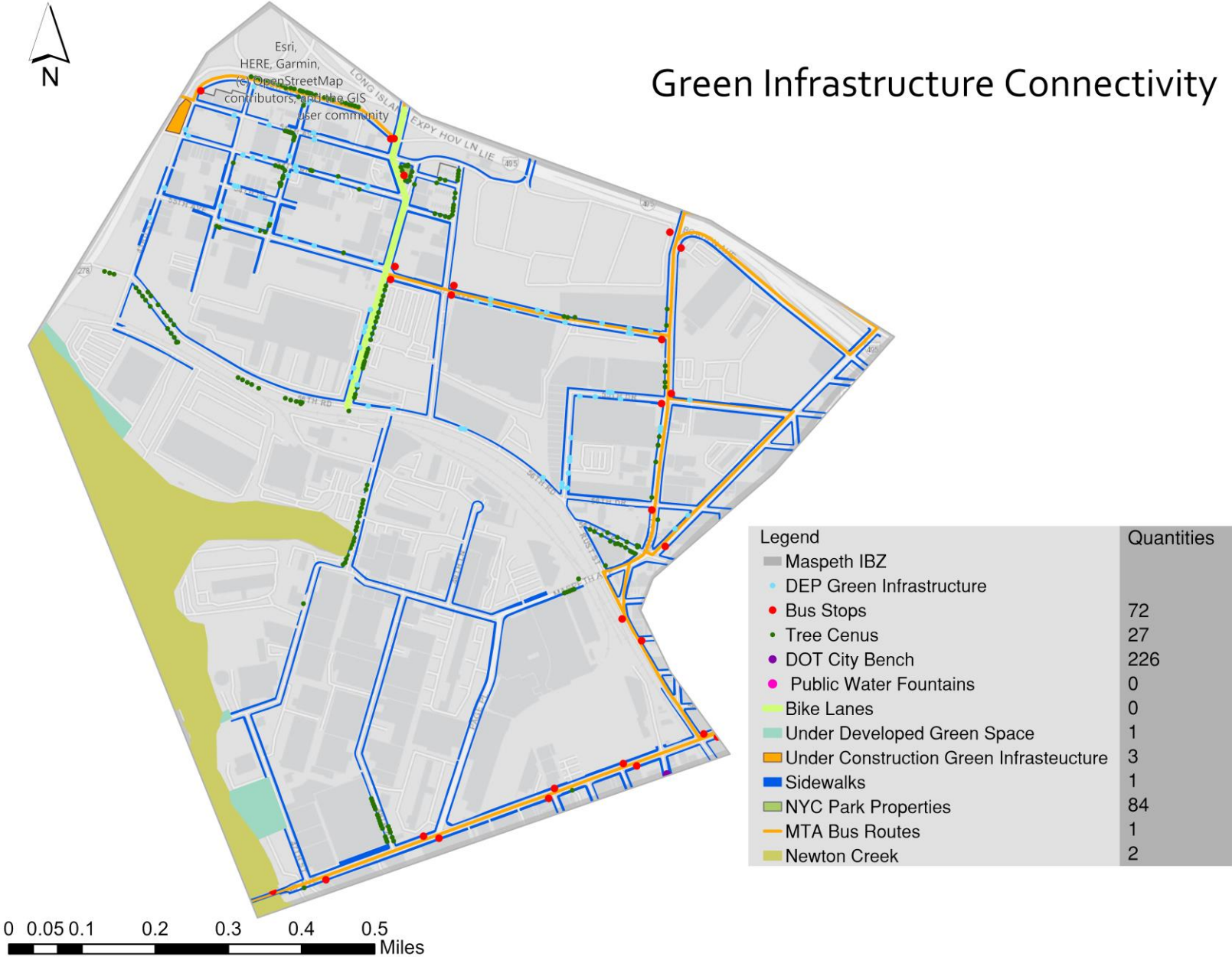
Pedestrian Mobility Comparison: Existing Sidewalks vs. DOT Pedestrian Mobility Plan



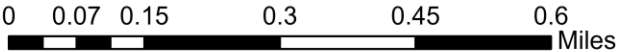
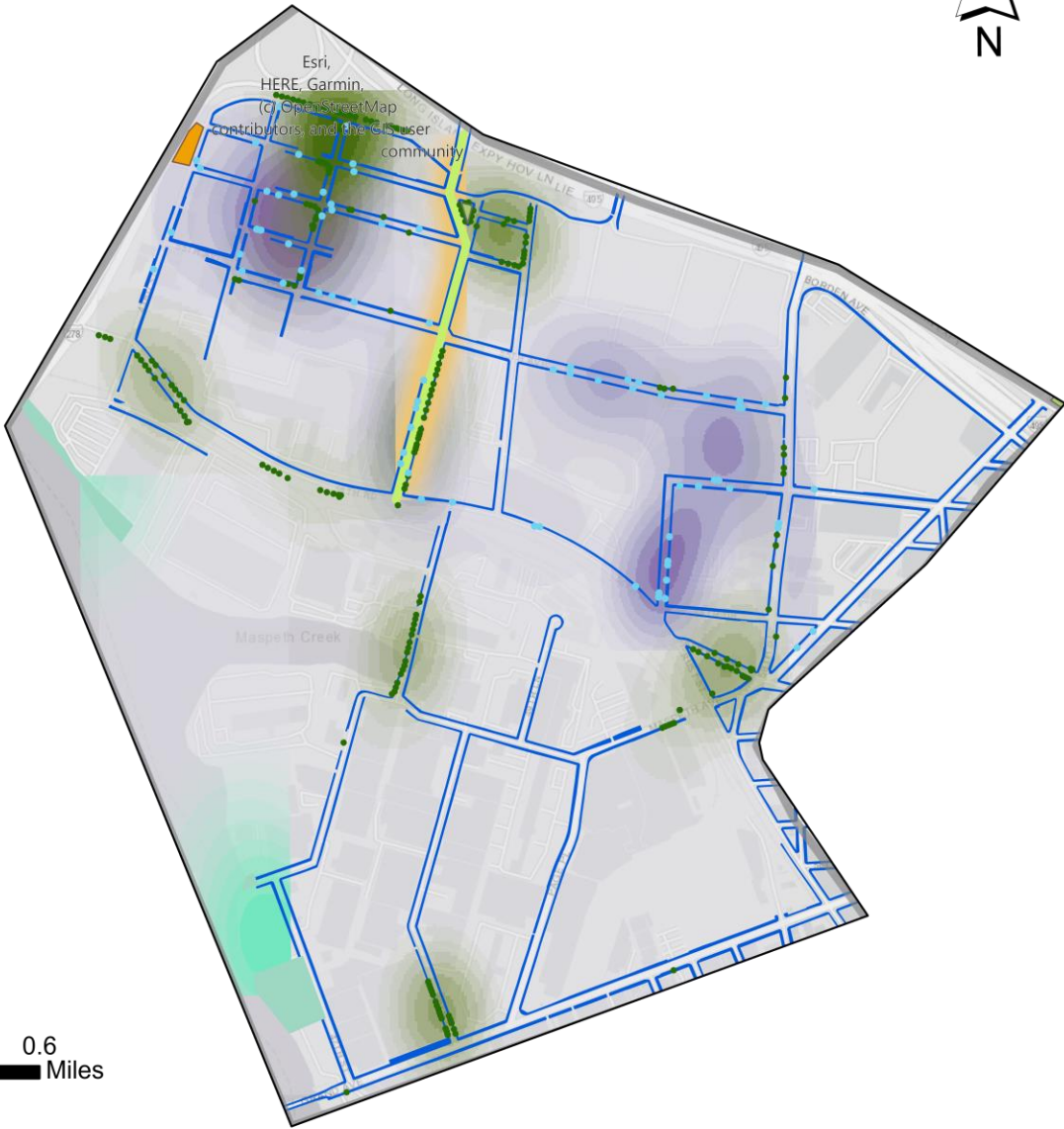
Legend		Quantities
Maspeth IBZ		84
Sidewalks		210 Streets
DOT Pedestrian Mobility Plan		31 Disconnections
Pedestrian Disconnection		



Green Infrastructure Connectivity



Green Infrastructure Network Density



How Do We Fix The Disconnection?

Proposed Suitability For New Green Infrastructure



Legend

- Proposed Rain Gardens
- Proposed Trees
- Proposed New Parks
- Proposed Bike Trail



