Accessibility and Connectivity of Bike Paths in the Bronx, NY
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Introduction

- Cycling provides many health benefits both physically and mentally
- Urban cyclists face the challenge of a lack of a connected bike network
- A study found when access to areas where physical activities are increased (such as parks and recreation centers) as well as educational outreach there is a significant increase in the occurrence of physical activity done by residents*
- This study aimed to determine a low stress biking network for Bronx, NY residents and to access the accessibility of various health and educational promoting facilities (libraries, recreation centers, and parks)

Objective

1. Determine stress imposed on cyclist due to a street link based on street type, speed limit, number of travel lanes, slope, and bicycle accommodation.
2a. What is the access of park entrances to Bronx, NY bicyclists using a low stress bicycle network?
2b. What is the access of libraries to Bronx, NY bicyclists using a low stress bicycle network?
2c. What is the access of recreation centers to Bronx, NY bicyclists using a low stress bicycle network?

Results:

- 77.7% or approximately 110,000 Bronx Residents do not have bike accessibility to park entrances
- 89.25% or approximately 1,270,000 Bronx Residents do not have bike accessibility to recreation centers
- 53.07% or approximately 750,000 Bronx Residents do not have bike accessibility to libraries

Conclusions:

- Lack of Westchester data didn’t include speed limits or number of travel lanes
- Travel Lanes: Generalized to two
- Speed Limit was generalized depending on what municipality:
  - Mount Vernon: 25 mph
  - Bronxville: 30 mph
  - Pelham: 30 mph
  - Scarsdale: 30 mph
  - Pelham Manor: 30 mph
  - New Rochelle: 30 mph

Future Studies:

- Turn Restrictions
- Inherent slow downs at intersections
- Shifting of bike accommodations at intersections
- Integration of daily traffic data

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