I. Problem

Existing pedestrian infrastructure on county-owned roads in Dutchess County, New York does not match current demand. This study compares the results of a Pedestrian Infrastructure Demand Model with an Existing Conditions Evaluation to determine which road segments exhibit the highest need for pedestrian infrastructure improvements.

II. Pedestrian Infrastructure Demand Model

The model performed a GIS-based analysis of each of the 347 unique county road segments, assessing proximity to pedestrian attractions, the demographic characteristics resulting in pedestrian generators, and safety hazards that discourage pedestrian use. 49 road segments earned a Pedestrian Infrastructure Demand (PID) score greater than 50. This suggests that the presence of high quality pedestrian infrastructure, namely sidewalks and crosswalks, is in highest demand in these areas.

III. Existing Conditions Evaluation

Comparison of PID and ECE Results: Of the 49 county road segments that received a PID score greater than 50, 42 received an ECE score less than five: 27 have ECE scores between zero and five, while 15 do not have any existing pedestrian infrastructure. This study considers these 42 road segments as Priority Road Segments for Treatment. This study identifies clusters of priority road segments for treatment and/or those demonstrating the highest disparity between demand and existing conditions as Priority Areas for Treatment.

IV. Findings and Recommendations

Priority Area for Treatment A: Maple Ave in Village of Millerton

- Add lined crosswalks with full signage and signals across all roads at intersection with Main St
- Replace stairs with curb ramps

Priority Area for Treatment B: New Hackensack Road (CR 104) intersection with U.S. Rte 9

- Add crosswalk infrastructure at intersection of CR 8490 and NY 576
- Extend sidewalks to connect to residential neighborhood with commercial hubs

Priority Area for Treatment C: CR 8438 (PID = 55, ECE = 2.9)

- Add crosswalk at intersection of CR 8438 and NY 199

Priority Road Segments for Treatment (ECE ≤ 5.0 and PID > 55)

- CR 8458 (PID = 71, ECE = 3.6)
- CR 8474 (PID = 77, ECE = 4.6)
- CR 8222 (PID = 70, ECE = 4.6)
- CR 8262 (PID = 68, ECE = 4.6)
- CR 8490 (PID = 60, ECE = 4.6)
- CR 8450 (PID = 62, ECE = 4.6)
- CR 8438 (PID = 57, ECE = 4.6)
- CR 8450 (PID = 55, ECE = 3.6)
- CR 8262 (PID = 63, ECE = 4.6)

Recommended Treatment:
- Add sidewalks on each of the four county road segments in treatment area and coordinate with New York State Department of Transportation to add sidewalks along NY 576 to connect residential neighborhoods with businesses and restaurants
- Add crosswalks at intersections of CR 8490 and NY 576

Existing Conditions Evaluation Results: The Existing Conditions Evaluation (ECE) assigned each county road segment a score based on compliance with Americans with Disabilities Act standards. Of the 347 county road segments, 291 earned an ECE score of zero, indicating the absence of any sidewalks and crosswalks along the entire length. The majority of road segments that do have some degree of pedestrian infrastructure are located near or within centers (either existing or emerging). Yet, only eight road segments in the entire county earned an ECE score greater than five. Overall, pedestrian infrastructure is generally absent on county roads. Furthermore, the data suggest that infrastructure that does exist is inadequate in providing pedestrian connectivity.