



Town of Westford, Massachusetts

Pedestrian Network Inventory & Assessment

Preliminary Summary of Findings

Date: August 2025

Introduction

Background

BETA Group, Inc. (BETA) was retained to provide Geographic Information System (GIS) services to develop an inventory of sidewalks and curb ramps along Town-Accepted roadways in Westford, MA (Town) and to assess them for condition and against the Public Right of Way Accessibility Guidelines (PROWAG).

PROWAG, formally adopted in 2024, defines the minimum thresholds for operations, dimensions and grades for pedestrian facilities within the public right of way and is the minimum criteria for accessibility per the Americans with Disabilities Act (ADA). It is the standard recognized by USDOT and the State of Massachusetts Architectural Access Board.

The purpose of this study was to inventory the existing infrastructure and establish a database that may be used to improve the Town's understanding of the existing pedestrian network and to plan for improvements. The resulting database and mapping capability will allow the Town to understand network condition and accessibility, identify and prioritize project areas, inform budgets, and schedule future maintenance and construction efforts.



Data Collection Approach

To develop the inventory, sidewalks and curb ramps were located along specified roadways using GIS based desktop tools. 63 miles of sidewalks were identified and segmented between roadway intersections. Additionally, a total of 701 existing curb ramps were located. A total of 115 locations were observed where curb ramps did not exist but may be required. 107 marked pedestrian crossings were also identified and located.

Field Data Collection Program

Field assessments were conducted in **Spring 2025**. Approximately **63 miles** of sidewalks were inspected by BETA's field team. The data collection effort was undertaken by utilizing GIS-based tools, including web-based tablets and measuring tape to gather point, linear, and attribute data. Observed sidewalk attributes were recorded including location, general condition, surface material, distresses and obstructions. Supplementary attributes were recorded for sidewalk segments including width. Curb ramps were not field inspected.

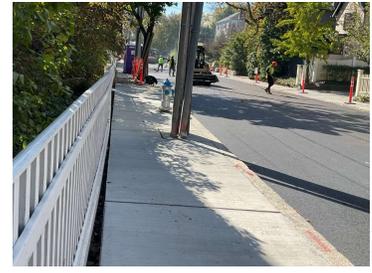


Sidewalk Condition Assessment

Representative Photographs

Good

- No surface distresses identified up to minor blemishes and deterioration observed on sidewalk.
- *Less than 10% of segment may need replacement.*



Fair

- Surface distresses developing, but provide minimal to no impedance
- *10% - 50% of segment may need replacement.*



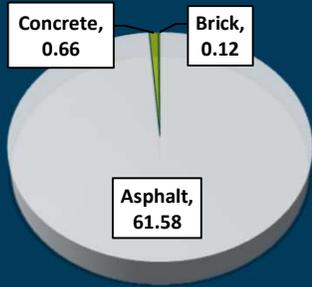
Poor

- Surface distresses and obstructions occur frequently, proving the sidewalk surface to be non-uniform and potentially unstable. (cracks, grass, depressions, bumps, patches, tree roots).
- *50% - 100% of segment may need replacement.*

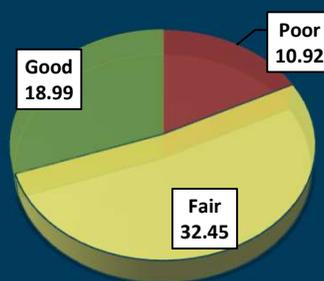


Sidewalk Results

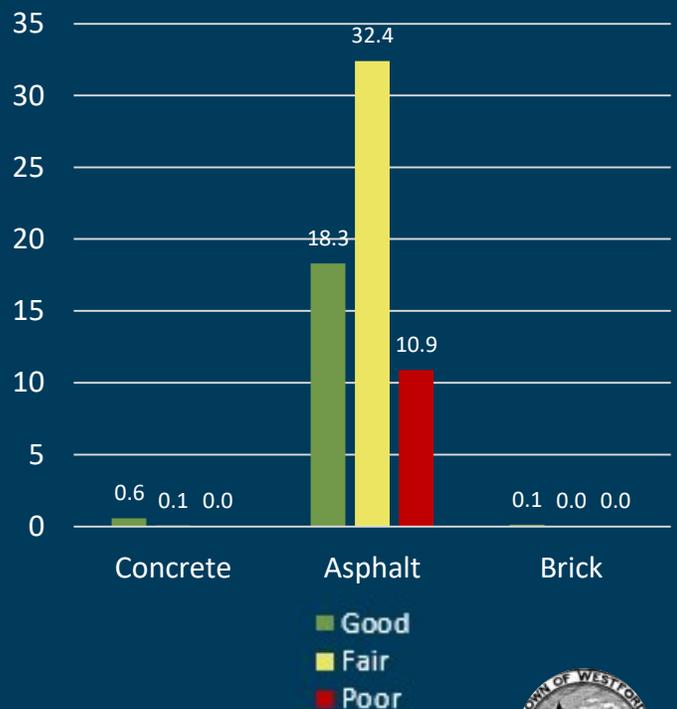
SIDEWALK MILES BY MATERIAL



SIDEWALK MILES BY CONDITION



Sidewalk Mileage by Condition/Material



Along the sidewalks, observation points were documented, including:

- Obstruction = Insufficient width within the access route (48")
- Structural = Distresses which may exceed change in level >1/4"
- Observed Obstruction Issues = 298 point locations
- Observed Structural Issues = 1,693 point locations
- Observed Maintenance Issues = 104 point locations

- | | | |
|--|---|--|
| Obstruction Examples | Structural Examples | Maintenance Examples |
| <ul style="list-style-type: none"> • Hydrants • Mailboxes • Utility Poles | <ul style="list-style-type: none"> • Depression • Panel Lifting • Cracking | <ul style="list-style-type: none"> • Grass/Shrubbery • Overhanging Trees |





Curb Ramp Preliminary ADA Compliance Assessment

Curb ramps were located and assessed for “preliminary compliance” to the PROWAG standard using desktop tools and high-resolution aerial imagery.

Pass

- Concrete surface typically meets the requirements for smooth, stable surface per PROWAG Section 3.2.6
- Detectable Warning Panel (DWP) meets the basic need per PROWAG Section 305

No Pass

- Asphalt, brick or other material are less stable and are prone to shifting and deformity with exposure over time
- Lack of a DWP does not meet minimum standard

Potentially Missing Ramp

- Existing crossing missing one or more receiving ramps

Representative Photographs



Curb Ramp Results



ADA – Preliminary Compliance

ADA compliance of curb ramps is based on PROWAG standards.

“Preliminary” ADA Compliance is determined during the desktop curb ramp inventory using high-resolution aerial imagery. Existing ramp locations that are observed to include concrete surface material and a detectable warning panel are included in the set. Additional field data collection is required to confirm conformance to additional compliance criteria.

Potential Missing Curb Ramps

Locations where a marked pedestrian crossing exists but there is one or more missing curb ramps at the roadway edge (115 Locations)

CURB RAMP TOTALS BY MATERIAL

