

Pedestrian Accessibility Study Public Meeting

Town of Holliston, MA
Monday, August 23, 2021

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Agenda

1. Accessibility Requirements
2. Self-Evaluation
Methodology and Findings
3. Recommendations and
Next Steps
4. Questions and Comments

Accessibility Requirements in the Town



What does this mean for Holliston?

To simply have a transition plan in place to transition from a non-complaint to an accessible sidewalk network

Americans with Disabilities Act

The Americans with Disabilities Act (ADA) was signed into law on July 26, 1990. The ADA is one of America's most complete pieces of civil rights legislation prohibiting discrimination and guarantying people with disabilities the same opportunities as every citizen.

Massachusetts Architectural Access Board (MAAB)

The MAAB is a regulatory agency within the Massachusetts Office of Public Safety. Massachusetts has developed a “specialized code” under CMR 521 to enforce the rules and regulations of the MAAB.

Self-Evaluation Methodology



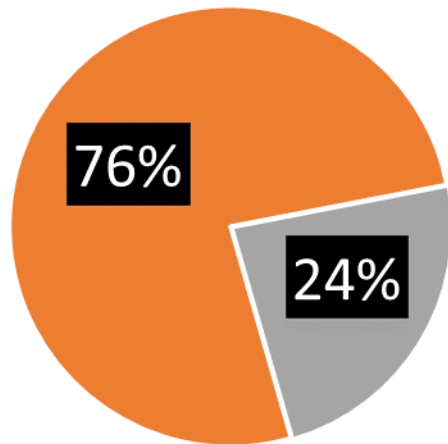
1. Stantec conducted town-wide pedestrian ramp, sidewalk, and crosswalk inventory (located via iPad w/web-based GIS data form)
2. General condition assessment was performed on all ramps, sidewalks, and crosswalks.
 - a) Photograph each asset (Ramp & Sidewalk)
 - b) Ramp and sidewalk material identification
 - c) Surface material condition
 - d) Obvious ramp/sidewalk deficiency categories, based on 2020 ADA/MAAB standards
 - e) Crosswalk existence and condition
 - f) Measured running slope on ramp and landing area (2' Smart Level)
 - g) Measured cross slope on sidewalk (2' Smart Level)
3. Integrated asset assessment into Geographic Information System (GIS) to aid long-term repair strategy
4. Calculated Network Priority Ranking (NPR) for each asset

Existing Ramp Inventory

497 public accepted ramps

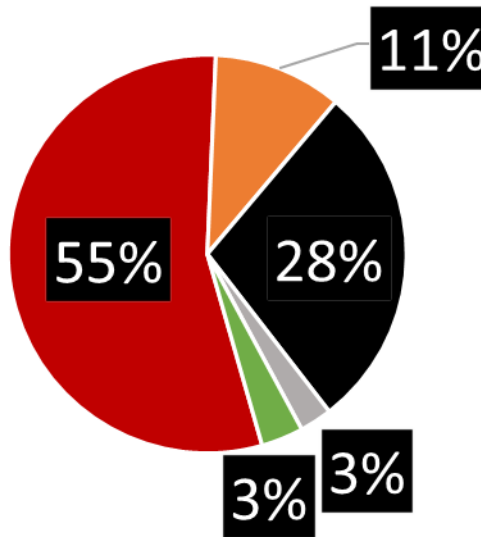
Spring 2021

Ramp Material



■ Bituminous Concrete
■ Portland Cement Concrete

Ramp Accessibility



■ Not Compliant
■ Missing Ramp
■ Compliant
■ Missing Landing
■ Obstructed Ramp

Stantec determined that approximately **97%** of total ramps do not comply with ADA /MAAB regulations.

Note: An additional 10 State-owned were inspected. 7 of those ramps are not compliant.

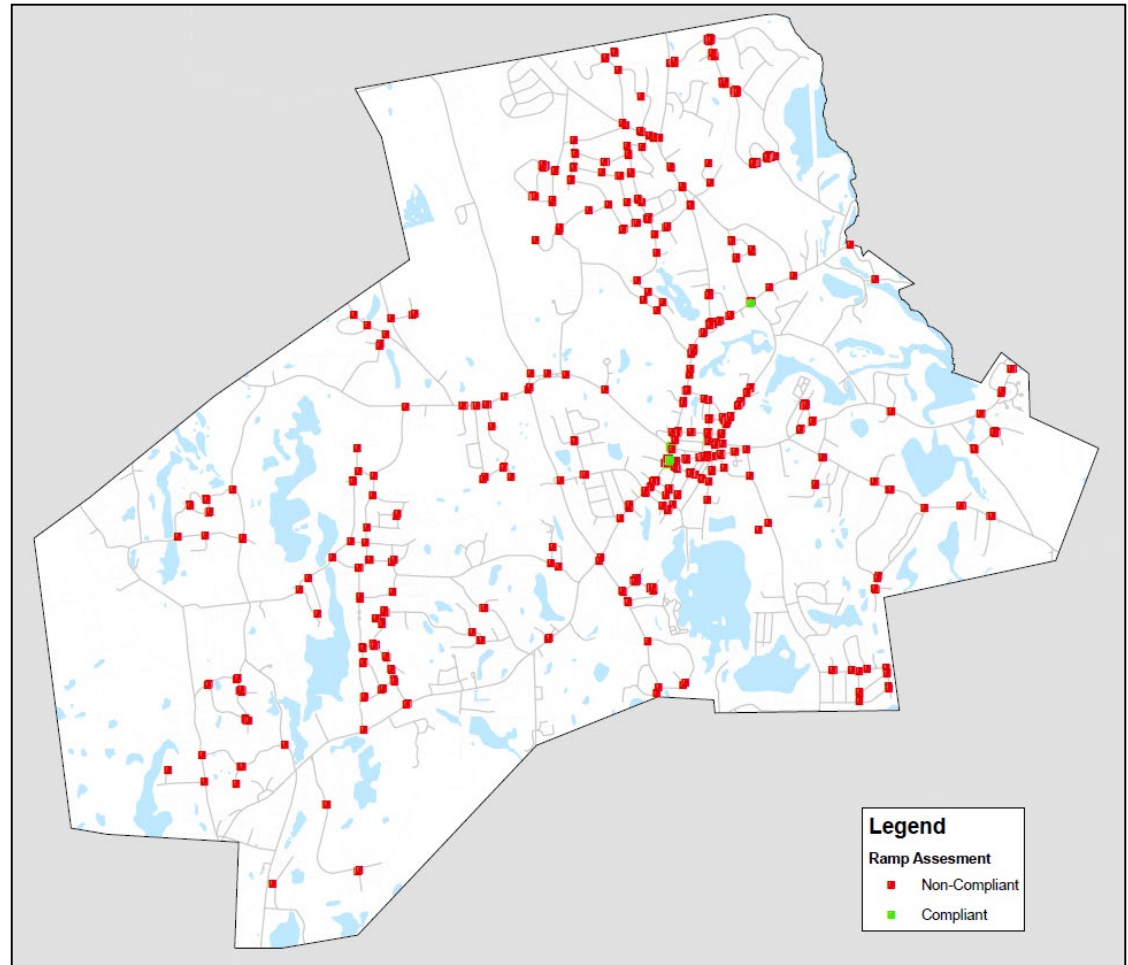
Town-wide Ramp Conditions and Backlog



\$1.84M

Ramp Repair
Backlog

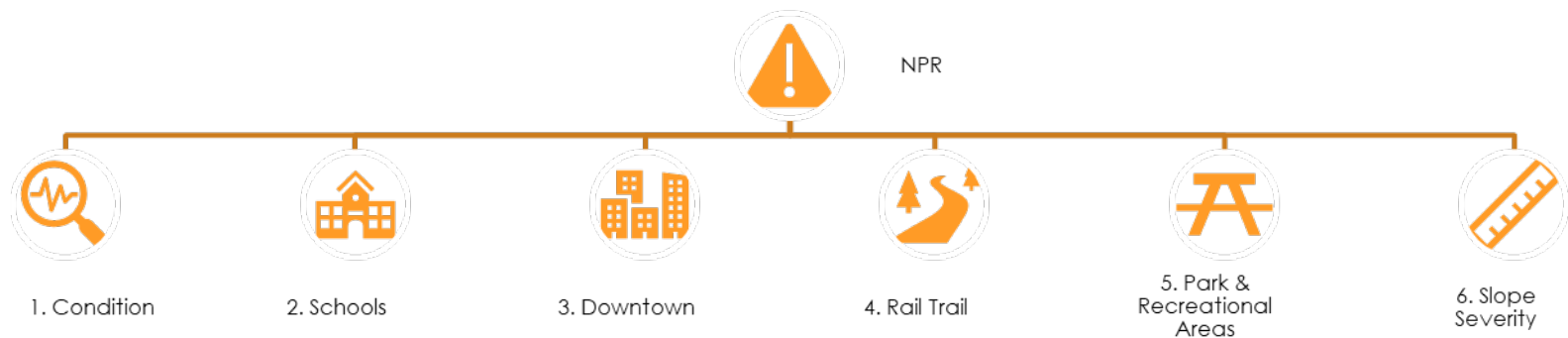
- \$3,000/ramp for BC
- \$5,000/ramp for PCC
- \$2,000/ramp for Safe Zone Repair
- \$1,000/ramp for Detectable Warning Panel Repair



Ramp Methodology Network Priority Ranking



Network Priority Ranking (NPR) Ramps Formula:



Criteria 1: Ramp condition



Compliant Ramp



Missing Landing

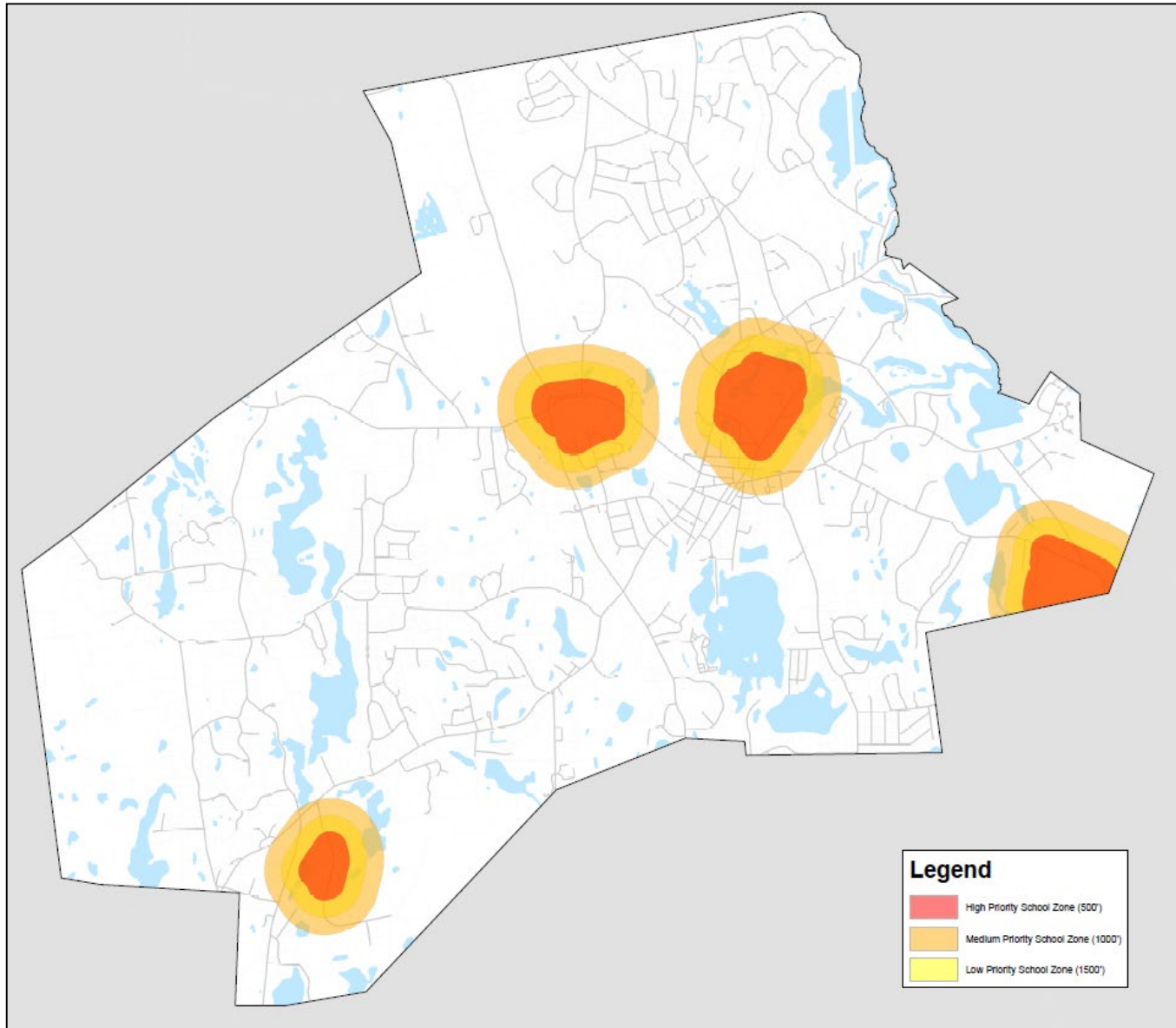


Missing Ramp



Obstructed Ramp

Criteria 2: Proximity to Schools

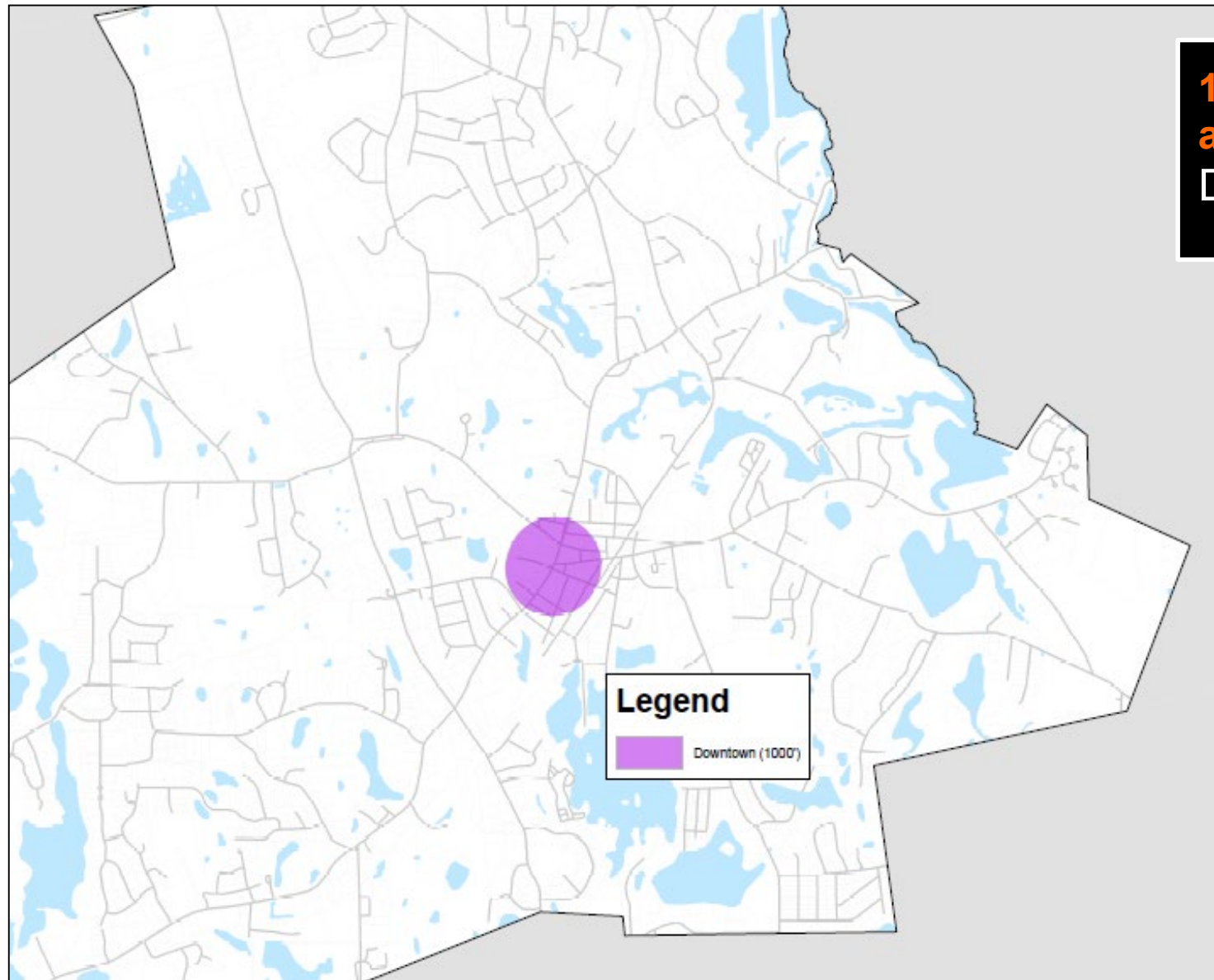


**Within 500'
buffer**
NPR = 1200

**Within 1000'
buffer**
NPR = 800

**Within 1500'
buffer**
NPR = 650

Criteria 3: Proximity to Downtown

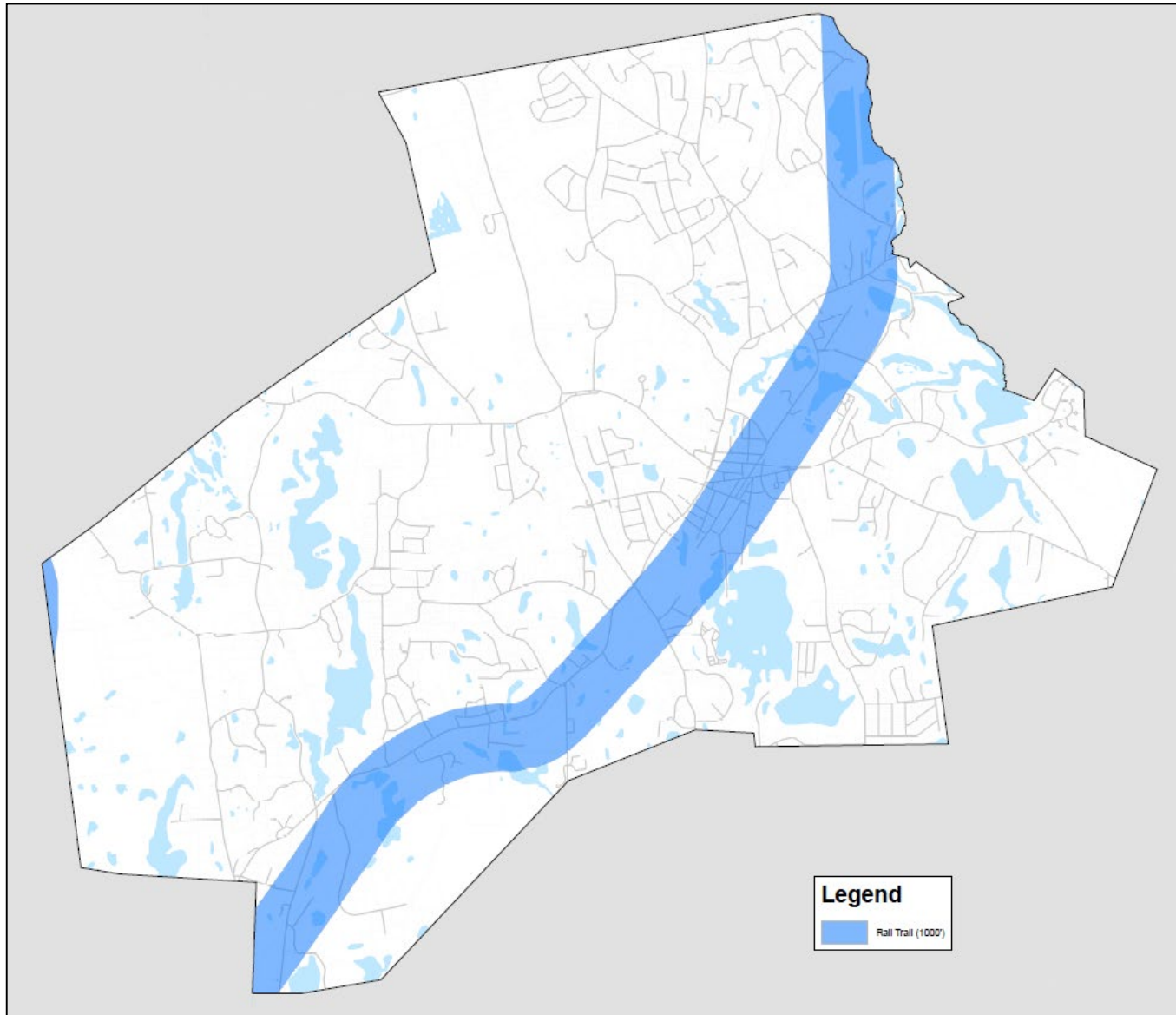


**1000' Buffer
around
Downtown**

Criteria 4: Proximity to Rail Trail



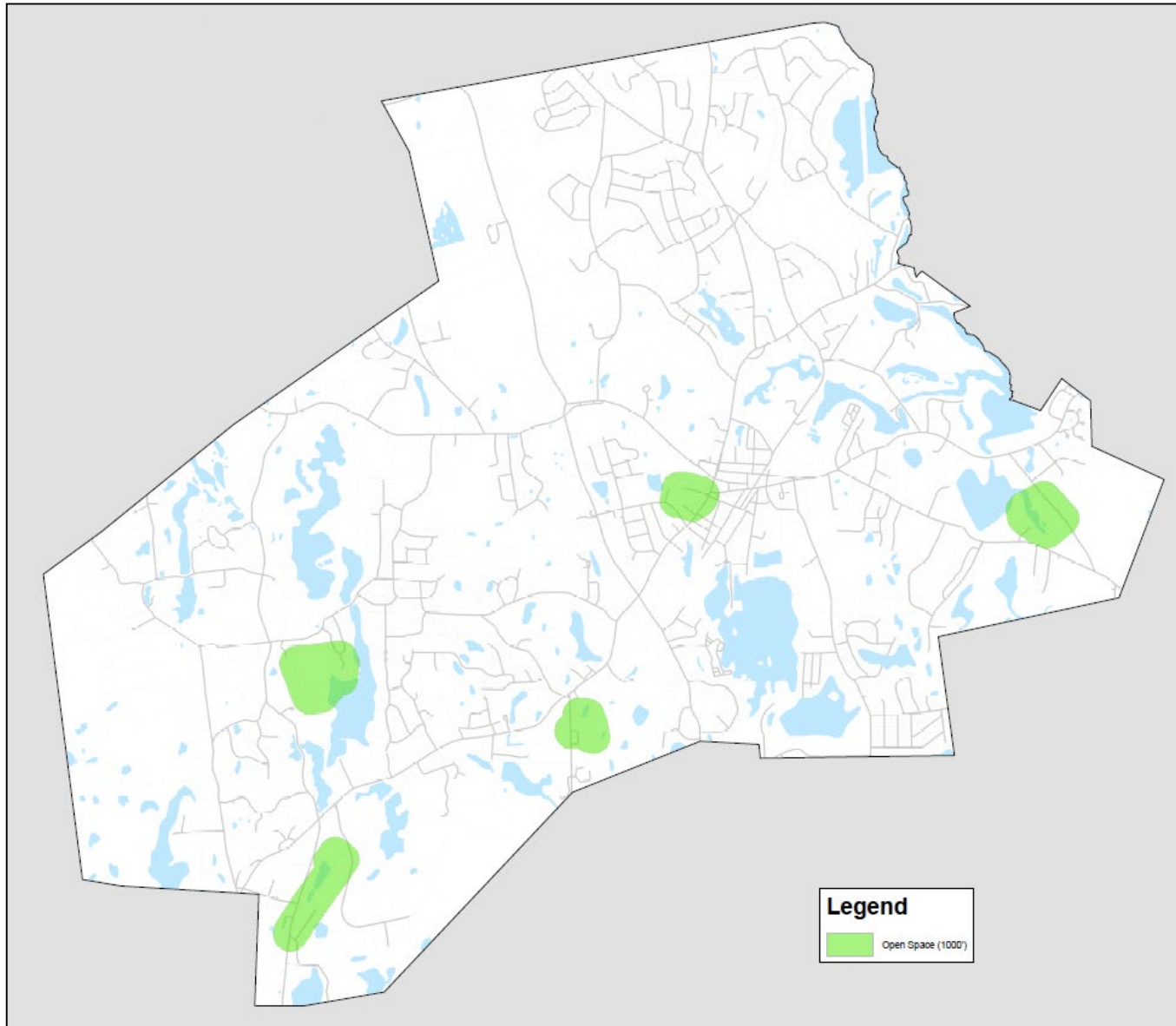
**1000' Buffer
around
Rail Trail**



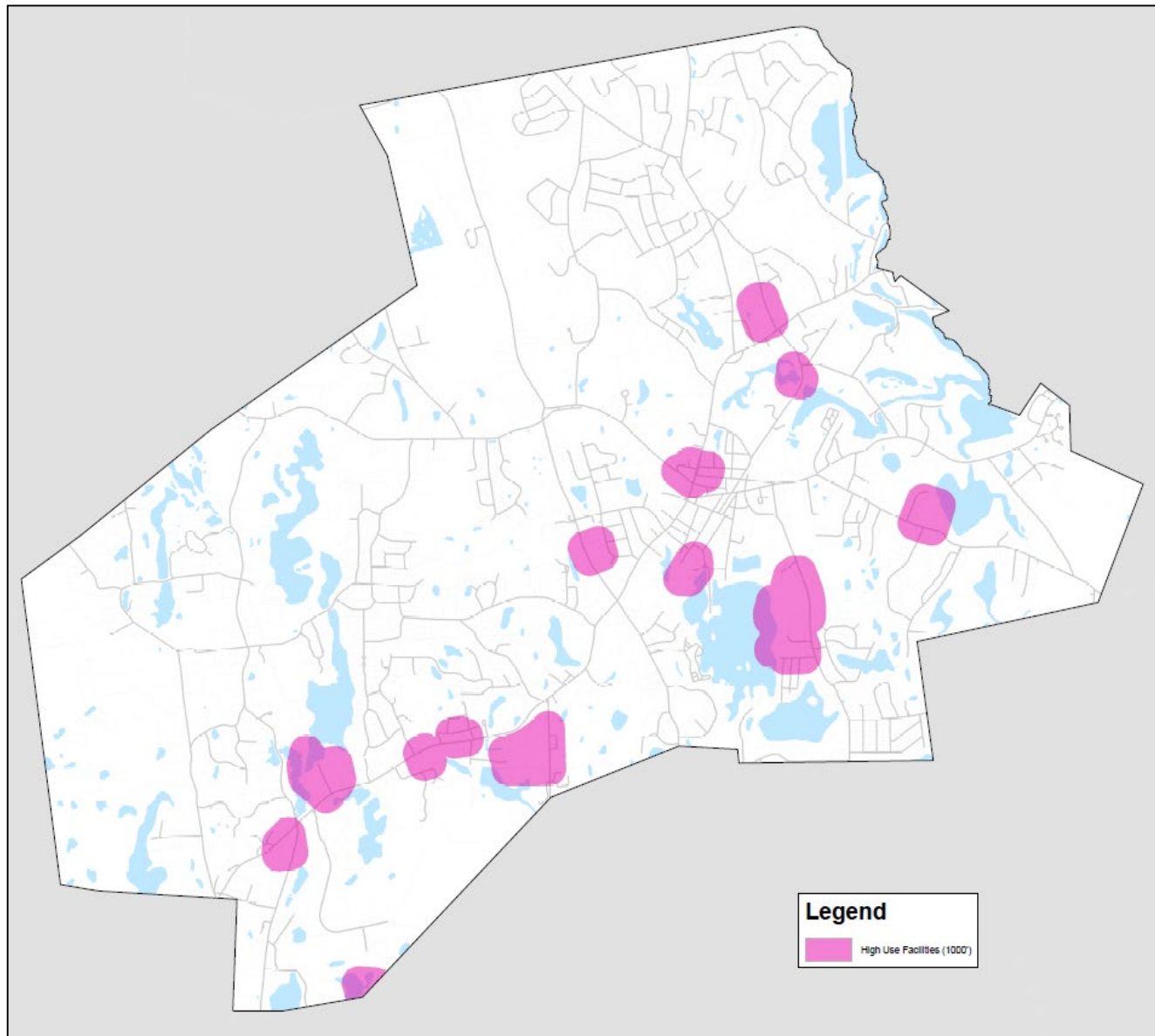
Criteria 5: Proximity to Parks and Recreational Areas



**1000' Buffer
around
Parks and
Recreation**



Criteria 6: Proximity to High Use Facilities



**1000' Buffer
around
High Use
Facilities**



Criteria 7: Slope Severity of Ramp

Slope	AAB LIMIT	Value Range	NPR Score	Value Range	NPR Score
Apron	8.3%	11.9 - 15%	150	> 15%	300
Landing	2.0%	4.5 – 6.5%	100	>6.5%	200

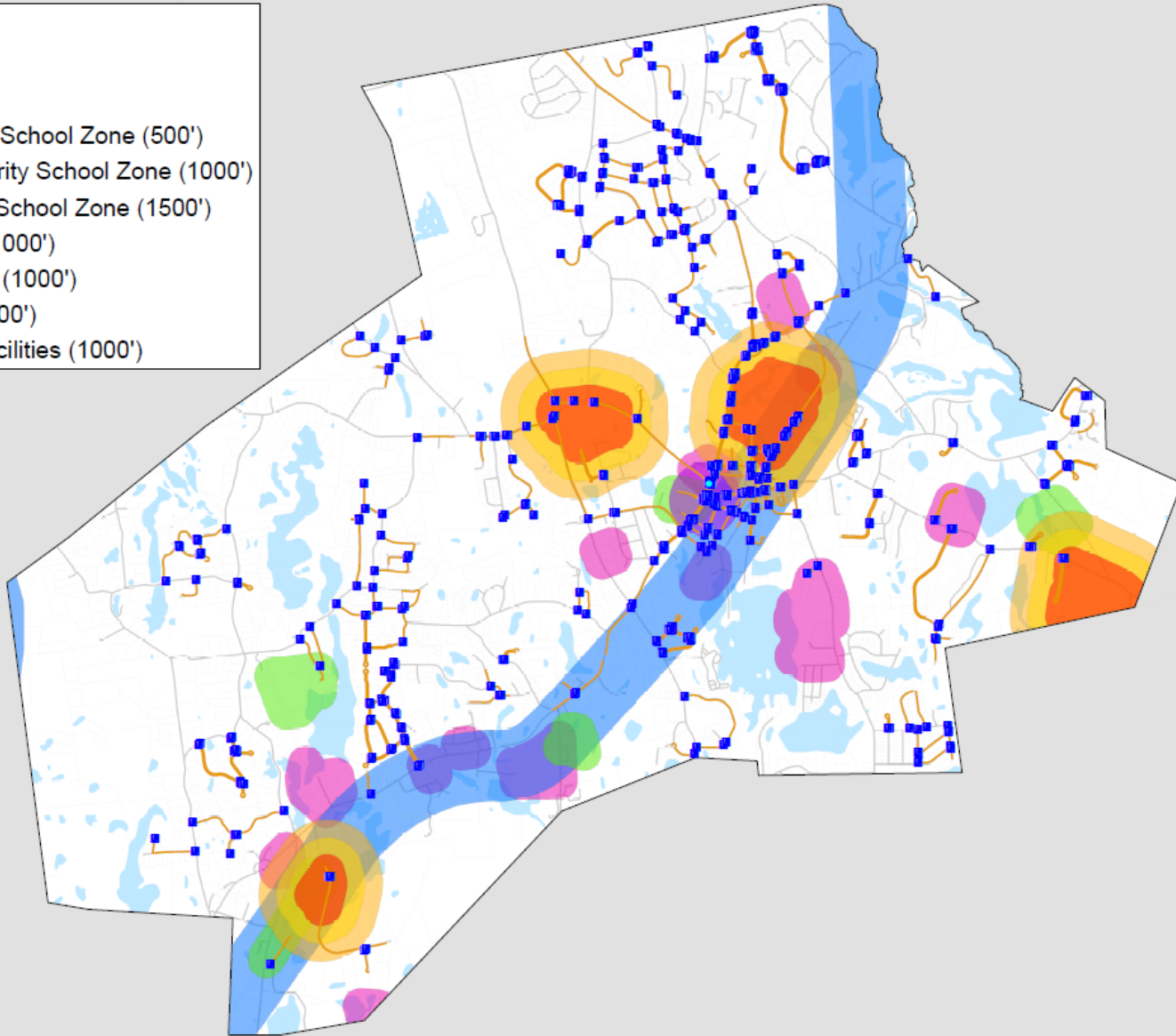
If AAB limits were not exceeded a 0 NPR score was given for each criteria to the ramp.

GIS Spatial Overlay

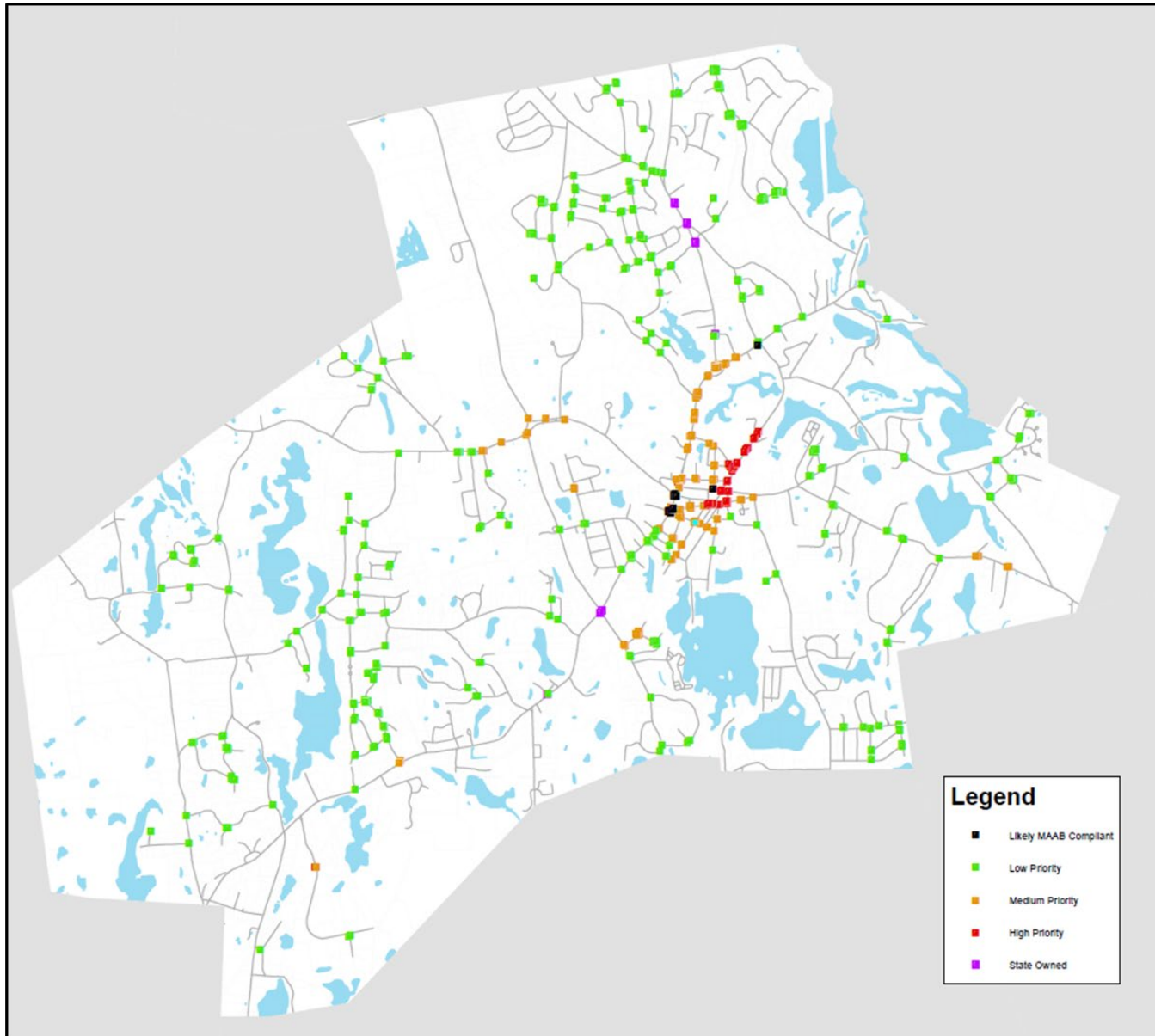


Legend

- Ramps
- Sidewalks
- High Priority School Zone (500')
- Medium Priority School Zone (1000')
- Low Priority School Zone (1500')
- Downtown (1000')
- Open Space (1000')
- Rail Trail (1000')
- High Use Facilities (1000')



Ramp Repair Locations by NPR

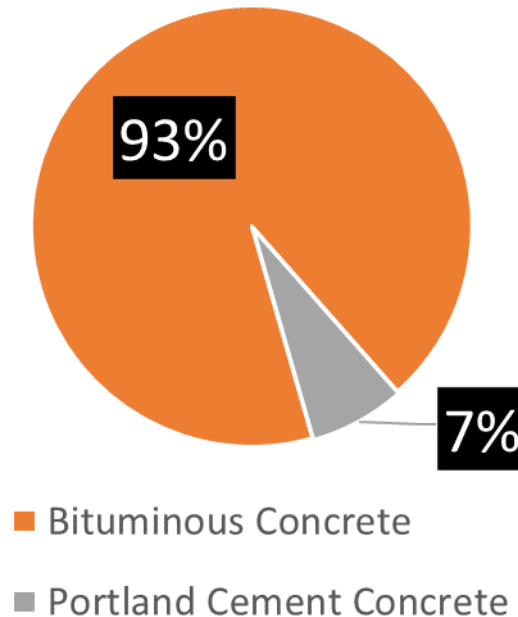


Existing Sidewalk Inventory

50 miles of public sidewalks – Spring 2021



Sidewalk Material





Sidewalk Condition Index (SCI)

A sidewalk condition index or SCI value was established to quickly categorize sidewalk conditions into a repair strategy.

The SCI rating categories are:

100 – 81

Do Nothing

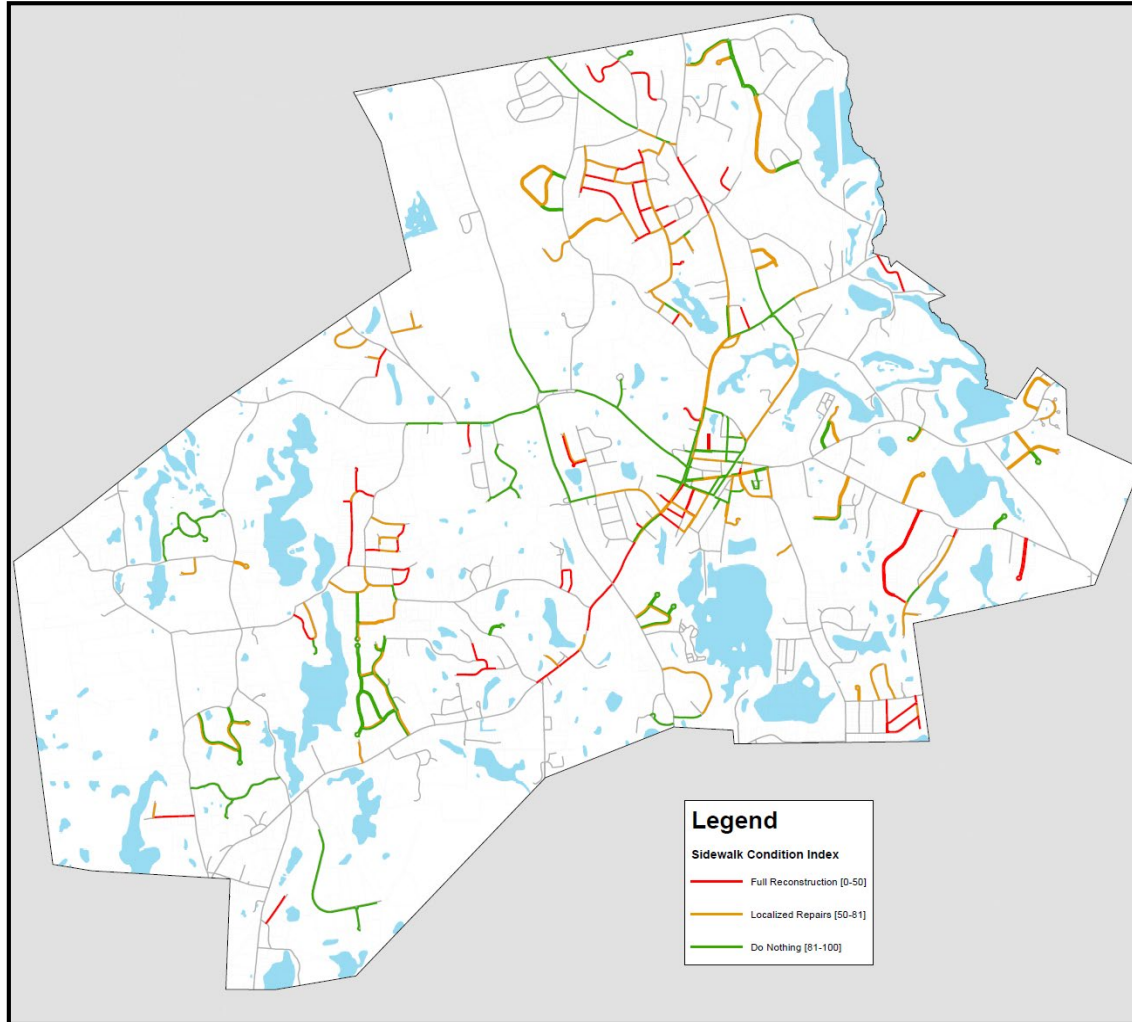
81 – 50

Localized
Repairs/
Panel
Replacement

50 – 0

Full
Replacement/
Reconstruction

Town-wide Sidewalk Conditions and Backlog



\$5,554,327

Sidewalk
Repair Backlog

- \$15/SF for BC
- \$20/SF for PCC
- \$30/SF for Brick
- \$25/SF for PCC w/ Brick Accent

Results of Sidewalk Evaluation



69.3

The average area-based SCI in Holliston was **69.3**, which puts it on the middle of the 'Localized Repair' threshold.

61%

Stantec determined that **61%** of all sidewalks must be repaired or replaced due to existing surface condition.

58%

Stantec determined that approximately **58%** of total sidewalks do not comply with ADA/MAAB regulations.

Sidewalk Methodology

Network Priority Ranking



Network Priority Ranking (NPR) Ramps Formula:



Criteria 1: Sidewalk condition



SCI

100-81

Do nothing



Church Street – Even Side

SCI

81-50

Localized
repair



Andrew Lane – Even

SCI

50 – 0

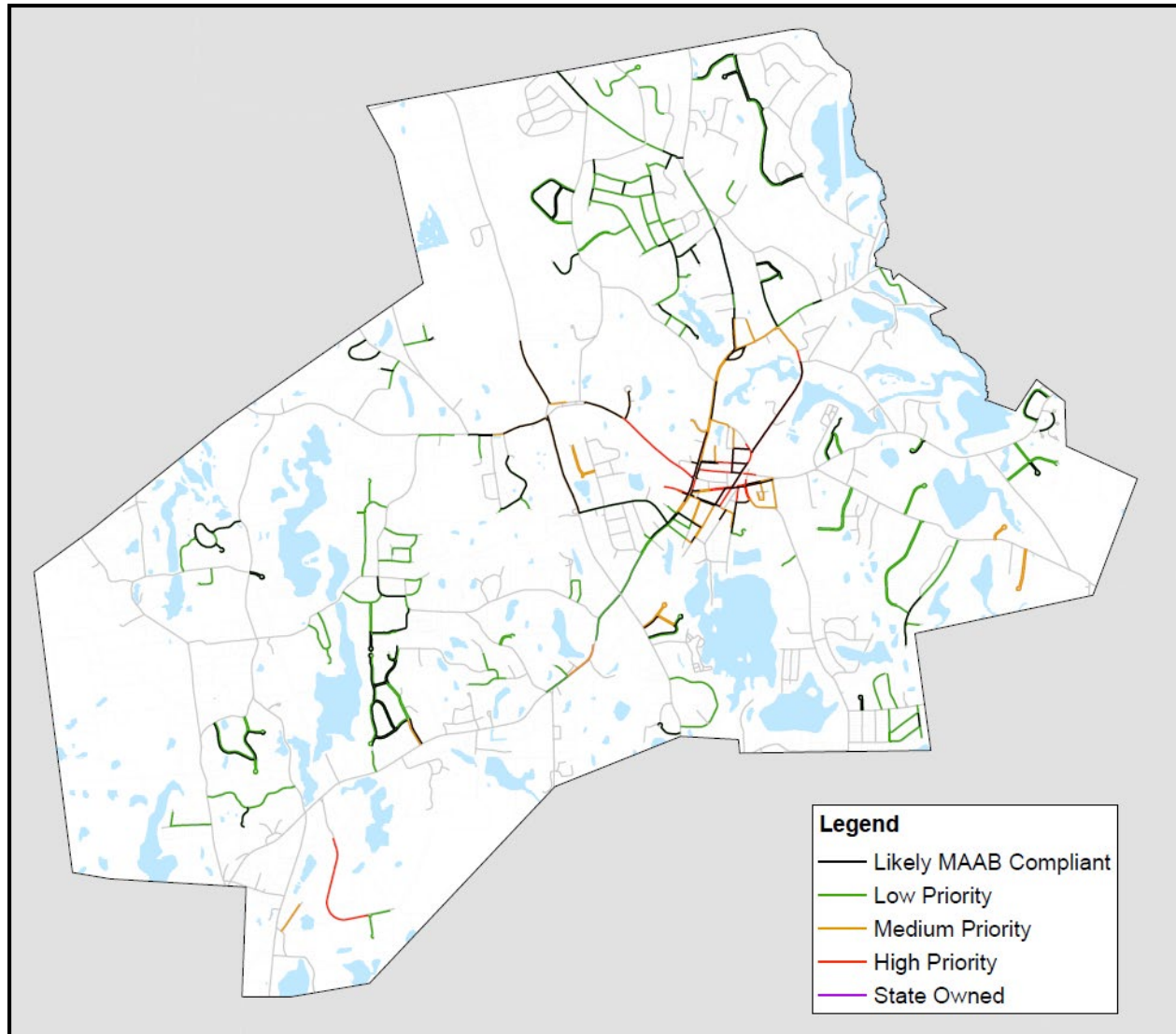
Full
reconstruction



Mechanic Street – Even Side

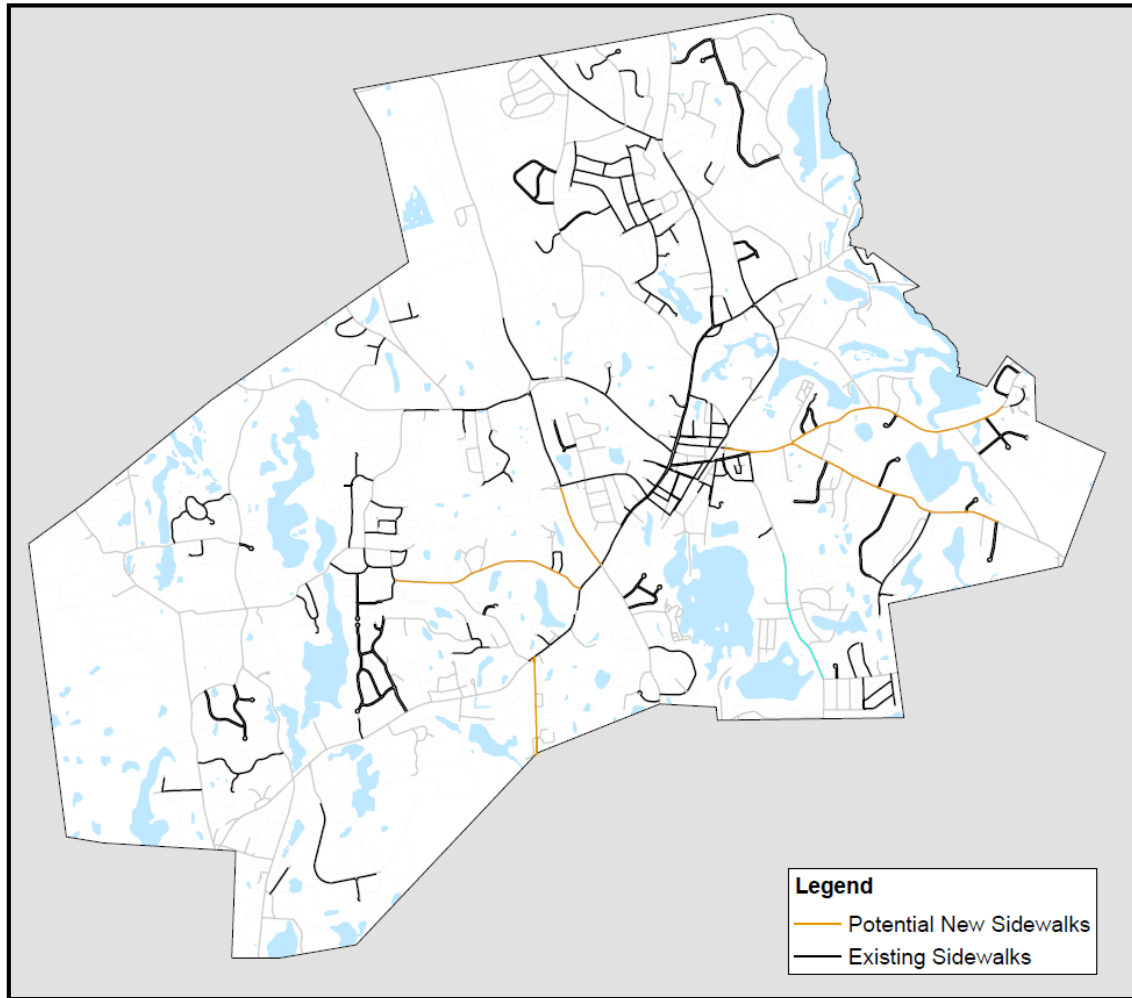
SCI	<50	50-70	70-85	>85
NPR Score	600	300	150	0

Priority Sidewalk Repair Locations



**\$630K per
year to
maintain
today's
SCI**

Gap Analysis



6 Miles
of Potential New
Sidewalks
Identified

- Highland Street
- Underwood Street
- Central Street
- Church Street
- Norfolk Street
- Summer Street
- Fiske Street

\$175/LF

Note: There are many more factors to consider when adding a new sidewalk which can drastically increase the overall cost on a project

Recommendations

- 1) Town should plan to allocate \$630k/year to maintain sustainable sidewalk backlog for current 50 miles of sidewalks in the future. Consider bonding strategy to tackle cost of adding new sidewalks and maintenance of existing.
- 2) Town should assemble an ADA Task Force including members from the physically challenged and disabled communities to seek input on ADA Transition Plan/Schedule going forward.
- 3) Reconstruction and new construction of sidewalks and ramps should adhere to latest design standards as noted in Appendix C.
- 4) As sidewalks and ramps are reconstructed GIS data and plan schedule should be maintained and updated on an annual basis.

QUESTIONS?



COMMENTS?