

TOWN OF INDIAN TRAIL, NC ADA TRANSITION PLAN



PIM

PRECISION
INFRASTRUCTURE
MANAGEMENT

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Introduction

The purpose of an Americans with Disabilities Act (ADA) Transition Plan is to ensure the residents and visitors of the Town of Indian Trail, NC, have meaningful access to the Town of Indian Trail's public Right-of-Way (ROW), public facilities, and other programs, services, and activities. It is designed to accommodate people with disabilities and give fair and equal access to facilities without limiting their quality of life. The Town of Indian Trail is committed to meeting the accessibility needs of individuals with disabilities. This ADA Transition Plan includes those plan components specifically requested by the Town of Indian Trail to fulfill portions of its ADA requirements.

Transition Plan and Purpose

The Americans with Disabilities Act is a civil rights law prohibiting discrimination against individuals on the basis of disability. It was enacted on July 26, 1990, and was amended in 2008 with the ADA Amendments Act. The ADA consists of five titles outlining protections in the following areas:

- I. Employment
- II. State and local government services
- III. Public accommodations
- IV. Telecommunications
- V. Miscellaneous provisions

As required by Title II of the ADA (28 CFR Part 35, Sec. 35.105 and Sec. 35.150), the Town of Indian Trail has conducted a self-evaluation of its public rights-of-way and has developed this Transition Plan detailing the methods to be used to ensure compliance with ADA accessibility requirements.

Agency and Requirements

Under Title II, the Town of Indian Trail must meet these general requirements:

- Must designate at least one responsible employee to coordinate ADA compliance [28 CFR Sec. 35.107(a)]. This person is typically referred to as the ADA Coordinator. The public entity must provide the ADA Coordinator's name, office address, and telephone number to all interested individuals [28 CFR Sec. 35.107(a)].
- Must provide notice of ADA requirements. All public entities, regardless of size, must provide information about the rights and protections of Title II to applicants, participants, beneficiaries, employees, and other interested persons [28 CFR Sec. 35.106]. The notice must include the identification of the employee serving as the ADA Coordinator and must provide this information on an ongoing basis [28 CFR Sec. 104.8(a)].
- Must establish a grievance procedure. Public entities must adopt and conspicuously publish grievance procedures providing for prompt and equitable resolution of complaints [28 CFR Sec. 35.107(b)]. This requirement provides for a timely resolution of all problems or conflicts related to ADA compliance before they escalate to litigation and/or the federal complaint process.

Designation of Responsibility

In accordance with 28 CFR 35.107(a), the Town of Indian Trail has designated the following person to serve as ADA Title II Coordinator, to oversee the Town of Indian Trail's policies and procedures:

- Name: Carey Warner
- Title: HR Director
- Phone: 704-821-5401
- Address: 315 Matthews-Town of Indian Trail Rd, Indian Trail, NC 28079

In accordance with 28 CFR 35.150(d)(3), the Town of Indian Trail has designated the following person to serve as ADA Transition Plan Implementation Coordinator, to monitor the Town of Indian Trail's progress and manage review and updates of this document:

- Name: Adam McLamb
- Title: Assistant Town Manager
- Phone: 704-821-5401
- Address: 315 Matthews-Town of Indian Trail Rd, Indian Trail, NC 28079

Self-Evaluation

Overview

Under Title II of the ADA (28 CFR Sec. 35.105), public entities are required to perform a self-evaluation of their publicly accessible facilities and those within public rights-of-way, in order to identify any obstacles or barriers to accessibility that need to be addressed. The general categories of items to be evaluated include: curb ramp accessibility, obstructions within the ROW, Vertical Height Displacement (VHD) locations, degraded sidewalks, ponding locations within the pedestrian access route, and general compliance with other portions of ADA requirements. Public entities are required to provide an opportunity for interested persons, including individuals with disabilities or organizations representing individuals with disabilities, to participate in the self-evaluation process by submitting comments [28 CFR Sec. 35.105(b)]. Results from the public comment opportunity are presented in the **Community Engagement Survey** section of this report.

Process and Findings

In 2024, a consultant on behalf of the Town of Indian Trail completed a self-evaluation of its facilities within public rights-of-way regarding accessibility. The following types of right-of-way deficiencies were reviewed for specific sidewalk areas within approximately **124.4 miles** of sidewalk (not including the Bonterra area):

- Vertical height displacement locations;
- Absence of curb ramps;
- General curb ramp assessments;
- Missing sidewalks;
- Cross slope issues generally;
- Areas that may require demolition and replacement;
- Pedestrian Access Route (PAR) areas under 4 ft. in width due to structural issues or vegetation;
- Ponding issues within the pedestrian access route.

These deficiencies were cataloged in a geodatabase and provided to the Town of Indian Trail. The methodology used to conduct the condition study followed the ADA Guidelines for ADA Transition Planning, Public Right of Way Accessibility Guidelines (PROWAG), and Self-Assessment Checklists for Public ROW and Facilities. The references to these are provided below:

- ADA.gov - [Laws, Regulations, Standards](#)
- Public Right-of-Way Accessibility Guidelines: [PROWAG](#)
- ADA Accessibility Guidelines: [ADAAG/2010 Standards](#)
- ADA Guide for Small Municipalities: [ADA Guide](#)

An important component of the self-evaluation process is the identification of obstacles or barriers to accessibility and the corresponding modifications that will be needed to remedy these items. The following sections provide a summary of improvements and obstacles that the Town of Indian Trail plans to address as part of this Transition Plan.

The Town of Indian Trail plans to identify barriers to accessibility for all programs, services, and activities, including its website, as part of its ongoing commitment to inclusion and equal access.

Public Involvement

The Town of Indian Trail recognizes that public participation is an important component in the development of this transition plan. Input from the community has been gathered and used to help define priority areas for improvements within the jurisdiction of the Town of Indian Trail. Public involvement for the preparation of this document has consisted of the following activities:

- Announcement of the ADA assessment to the public.
- Publicizing of an ADA Notice and Grievance Procedure.
- A public survey was disseminated through the Town of Indian Trail's website.
- Dissemination of this finalized report to the public.

Public Notice of ADA Requirements and Grievance Procedures

Under the Americans with Disabilities Act, each agency is required to publish its responsibilities with regard to ADA compliance. If users of the Town of Indian Trail's facilities and services believe the Town of Indian Trail has not provided a reasonable accommodation, they have the right to file a grievance. In accordance with 28 CFR Sec. 35.107(b), the Town of Indian Trail has developed a grievance procedure for the purpose of the prompt and equitable resolution of citizens' complaints or concerns. The Town's grievance procedure can be found as an appendix to this plan.

Public Accessibility to Plan

This ADA Transition Plan will be available for review on the Town of Indian Trail's website, and a printed copy is available for review by request at the Town of Indian Trail Town Hall at:

Town of Indian Trail Town Hall
315 Matthews-Indian Trail Rd
Indian Trail, NC 28079

Plan Acceptance

This ADA Transition Plan is hereby adopted by the Town of Indian Trail, effective May 2025. Signed:

Carey Warner, HR Director
Town of Indian Trail, NC

David Cohn, Mayor
Town of Indian Trail, NC

Updates to this Transition Plan

A public entity that employs 50 or more employees must retain its self-evaluation for three years. This plan includes key components of a Title II transition plan, including:

- A list of accessibility barriers.
- Methodology for prioritizing barriers and implementing remedial actions.
- A schedule of remedial work.
- The name of the person responsible for the implementation of this plan.

The Town of Indian Trail will revisit this plan after the fifth year of remedial work, as outlined in this plan, and publish an update that includes progress reports, strategies for prioritizing long-term barriers that are not included in this plan's schedule, and a revised schedule for remaining barrier removal activities.

TOWN OF INDIAN TRAIL, NC RIGHT-OF-WAY SELF-ASSESSMENT



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INTRODUCTION

Overview, Process, & Summary



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Introduction

The Town of Indian Trail, NC, contracted with Precision Infrastructure Management (PIM CS LLC) in **late 2023** to complete an Americans with Disabilities Act Self-Assessment of the Town of Indian Trail's public right-of-way assets. PIM CS LLC completed the Self-Assessment in **July 2024**. This report is a comprehensive review of the assessment and includes an asset management plan to support the Town of Indian Trail's budgeting and work planning processes.

The Study found a total of **13,968 unique ADA barriers across 124.4 miles of Right of Way sidewalk**. A breakdown of the barriers by category is covered in the ADA Barriers Detail section of this report.

Self-Assessment

Overview

Under Title II of the ADA (28 CFR Sec. 35.105), public entities are required to perform a Self-Assessment of their facilities on public property and within public rights-of-way in order to identify any obstacles or barriers to accessibility that need to be addressed. The general categories of items evaluated for the Town's ROW include:

- Sidewalk mileage calculation
- Vertical Height Displacement (VHD) locations
- Absence of curb ramps
- Curb ramps assessments
- Demolition and replacement areas
- Driveway cross slope issues
- Sidewalk with width < 4 ft.
- Cross slope > 4% for more than 50 ft.
- Sidewalk gaps and footpaths
- Obstructions
- Ponding in the Pedestrian Access Route and street

Process & Findings

Precision Infrastructure Management employed ADA field assessment technicians to physically traverse each mile of sidewalk in the Town of Indian Trail. Technicians used 2 ft. smart levels and tape measures to identify ADA barriers within the ROW. All data is stored within ESRI's ArcGIS program with photographs, GPS coordinates, and other associated metadata. The methodology used to conduct the condition study followed the Public Right of Way Access Guidelines (PROWAG). These guidelines were promulgated into final rules for adoption by the United States Access Board in 2023. While they are not yet enforceable standards, it is current ADA best practice to use PROWAG for assessments, as the expectation is that the guidelines will be enforceable in the future. In addition, the guidelines either equal or exceed current enforceable ADA requirements.

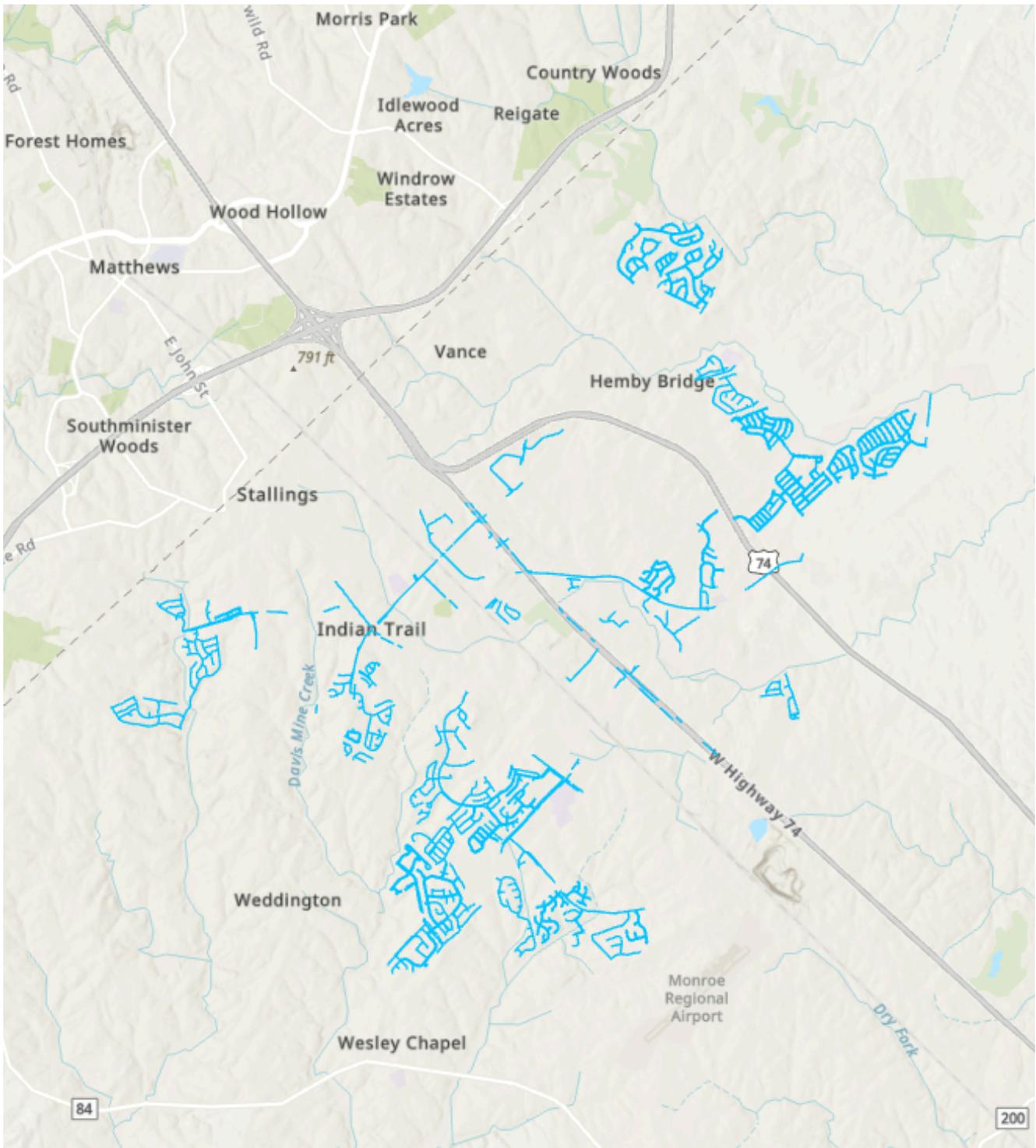


*Not including Bonterra miles: 7.68

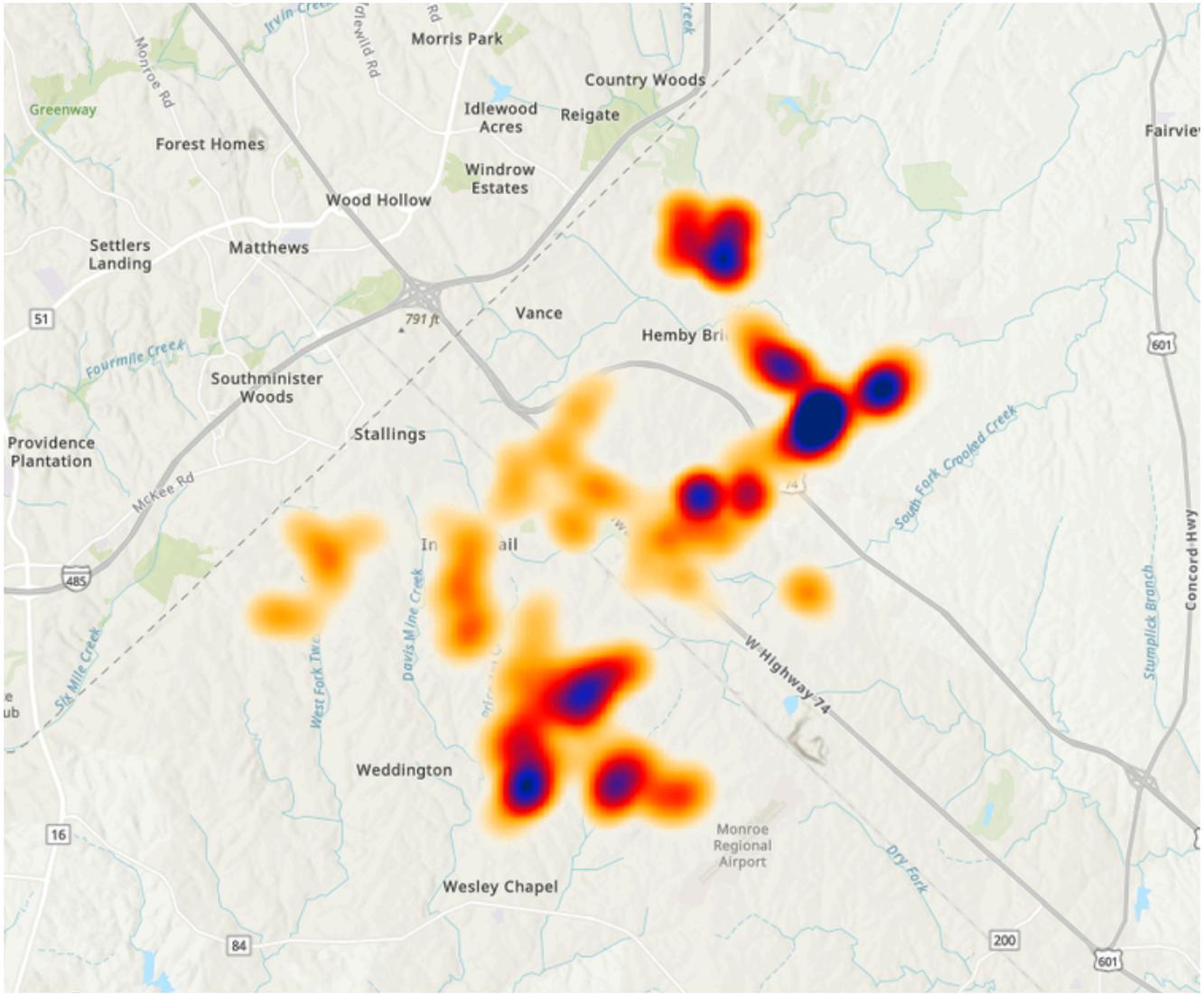
*Not Including Bonterra barriers: 1,199

Assessment Findings Summary

The field assessment of **124.4 miles** of ROW sidewalk included in the Town of Indian Trail sidewalk network identified a total of **13,968** ADA barriers across the assessment categories within the scope of the project. The deficiencies are reviewed in detail in the following sections. The map image below shows sidewalk locations across the Town of Indian Trail.



Caption: Map of the Town of Indian Trail, NC. Sidewalk locations are marked with a blue line.



Caption: Map of the Town of Indian Trail, NC. The heat map indicates ADA barriers identified in PIM’s assessment.

Heatmap Legend

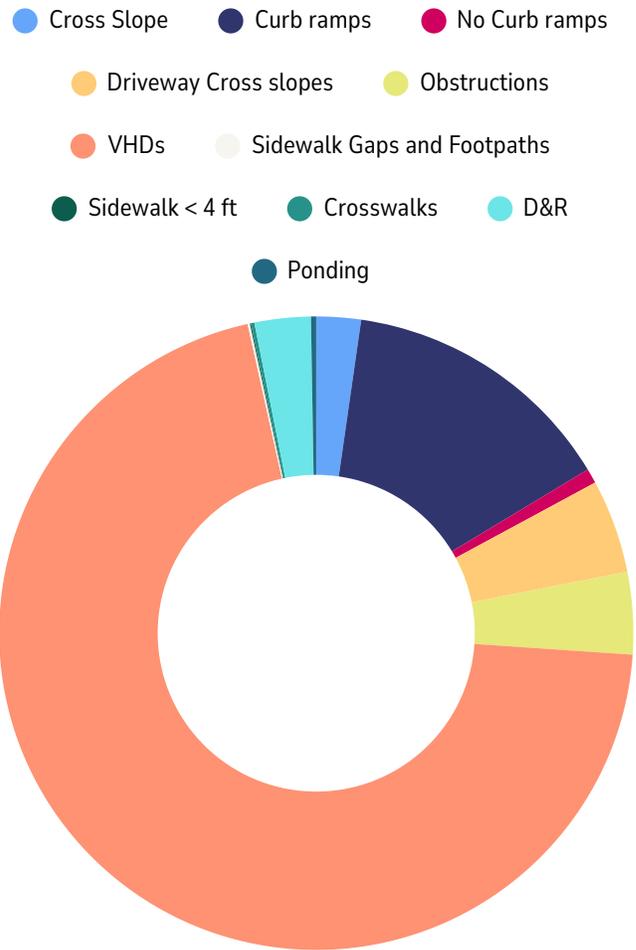
In the heatmaps shown in each barrier section, the legend shown here can be applied. Areas of no color have no barriers within them; Areas shown in red have a moderate number; Areas shown in blue have a higher concentration of barriers. The heatmap above shows the relative density of ADA barriers on different portions of the Town of Indian Trail sidewalk.



Total Findings - ADA Barriers

Cross Slope > 50 ft.	317
Crosswalks	24
Curb Ramps	1,968
Driveway Cross Slopes	667
No Curb Ramp	105
Obstructions	586
Vertical Height Displacements	9,840
Demolition & Replacement	400
Sidewalk Gaps and Footpaths	16
Sidewalk < 4 ft.	8
Ponding	37

• Does not include Bonterra



Vertical Height Displacements make up **70.4%** of the total findings.

Curb Ramps make up **14.1%** of the total findings.

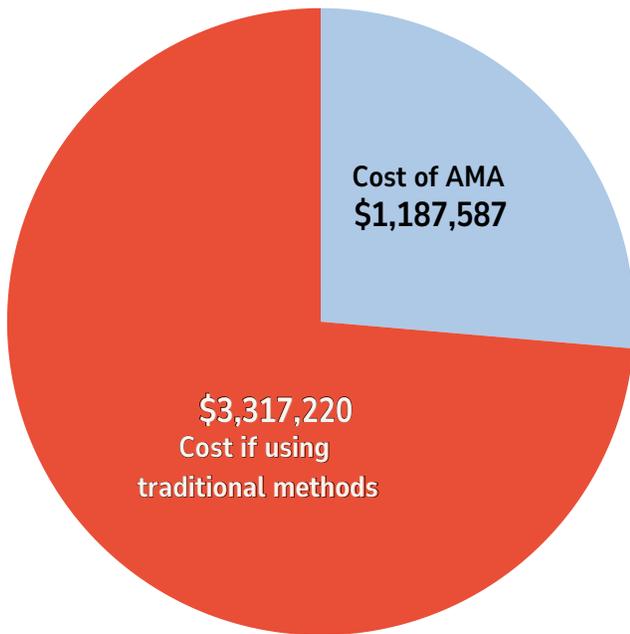
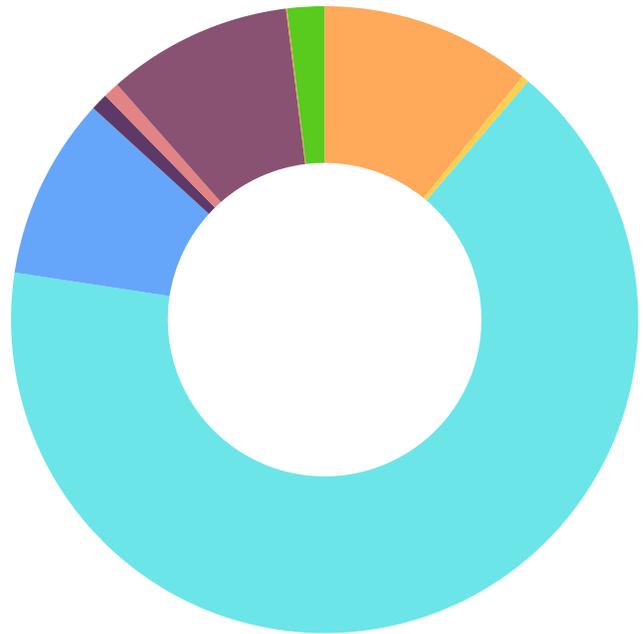
Driveway Cross Slopes make up **4.8%** of the total findings.

The combined other deficiencies consists of **10.7%** of the total findings.

Cost by Barrier Class

■ Cross Slope	\$1,188,750
■ Crosswalks	\$42,000
■ Curb Ramps	\$7,238,000
■ Driveway Cross Slopes	\$1,027,200
■ Obstructions	\$96,350
■ Sidewalk Gaps	\$90,000
■ Vertical Height Displacements	\$1,043,512
■ Sidewalk < 4ft	\$6,375
■ Demo & Replacements	\$208,950

• Does not include Bonterra



Alternative Maintenance Activities vs. Total Cost Replacement

There are multiple methods for remediating certain ADA barriers. While some areas require full demolition and replacement of affected panels, other barriers can be mitigated using Alternative Maintenance Activities (AMA). PIM collected data in such a manner to ensure that alternative maintenance activities could be utilized to remediate certain barriers, such as vertical height displacements or, more rarely, curb ramps. **Utilizing alternative maintenance activities would save the Town of Indian Trail more than \$2.12 million.**

STEPS IN SIDEWALK ASSET MANAGEMENT PLAN

01

Identify & Inventory

02

Inspect & Assess Condition

03

Analyze & Decide

04

Prioritize Work

05

Repair or Demolish & Replace

Prioritization Methodology

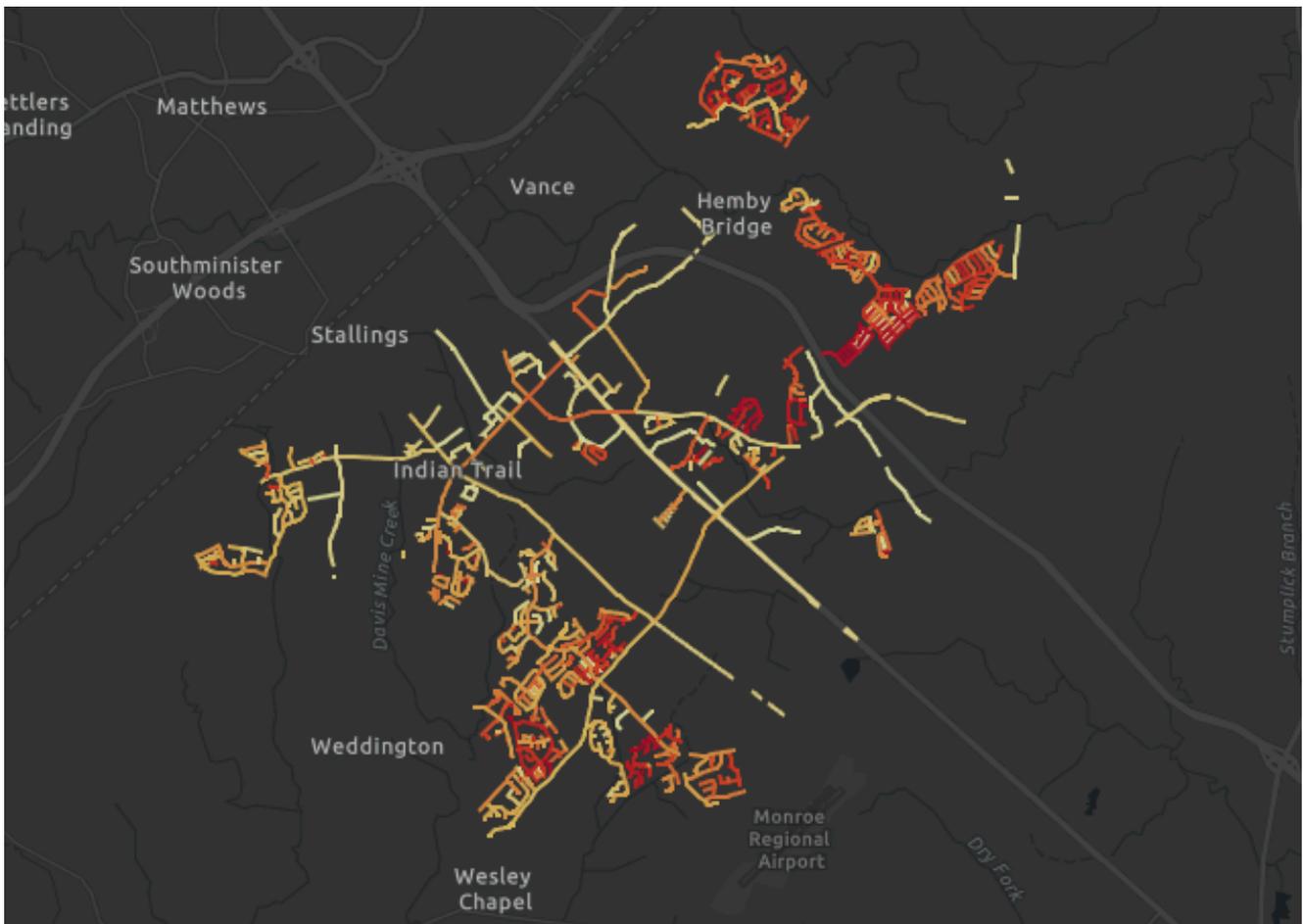
Risk, in the context of the Town of Indian Trail’s Sidewalk Asset Management Plan (SAMP), is defined as exposure to the chance of injury or loss. In asset management, risk is defined in a similar way, where risk = condition of an asset x consequence of failure. The technique that Precision is using allows for the prioritization of sidewalk ROW assets using a risk-based approach comprising barriers referenced per mile of accessible routes (barriers per mile of sidewalk). The higher the barriers per mile of accessible route, the higher the risk. This risk-based approach allows the Town of Indian Trail to measure the risk to pedestrians using accessible routes in the Town.

Barriers and Prioritization

Self-Assessments surface a wealth of information about the condition of a town's sidewalks, often leading to difficulty in deciding when/where/how to remediate barriers found during the assessment. To help prioritize areas that need remediation first, PIM sorted data by risk by street and by Census Block Groups.

These zones are used to collect United States Census and American Community Survey Data and allow towns to prioritize remediation based on selected demographic information.

For purposes of this assessment, risk is defined as the number of barriers per mile of sidewalk.



Caption: Map of the Town of Indian Trail, NC. Barriers identified in PIM's assessment are color-coded by risk.

Above is a map of the Town of Indian Trail's sidewalks, color-coded by risk. Red sidewalks have the highest risk factor, which is computed as ADA barriers per mile of sidewalk. Progressively lighter colors show streets with lower risk factors. A table of the top 10 streets with the highest barriers/mile is presented on the next page. The full list of streets is in an appendix at the end of this report.

<https://arcg.is/1q8yWe1>

Sidewalk Risk - Street Prioritization (With > 50 ADA Barriers)

Rank	Street Name	Barriers	Street Mileage	Barriers/Mile (Risk)
1	Taylor Glenn Ln	52	0.22	236.46
2	Meriwether Lewis Tr	79	0.36	220.14
3	Mendenhall St	54	0.29	189.17
4	Doughton Ln	64	0.37	174.44
5	Paddington Dr	79	0.54	147.49
6	Edgeview Dr	123	0.86	143.43
7	Dunwoody Dr	71	0.51	140.03
8	Salmon River Dr	59	0.43	137.82
9	City Lights Dr	52	0.41	128.32
10	Shumard Cir	56	0.46	121.67

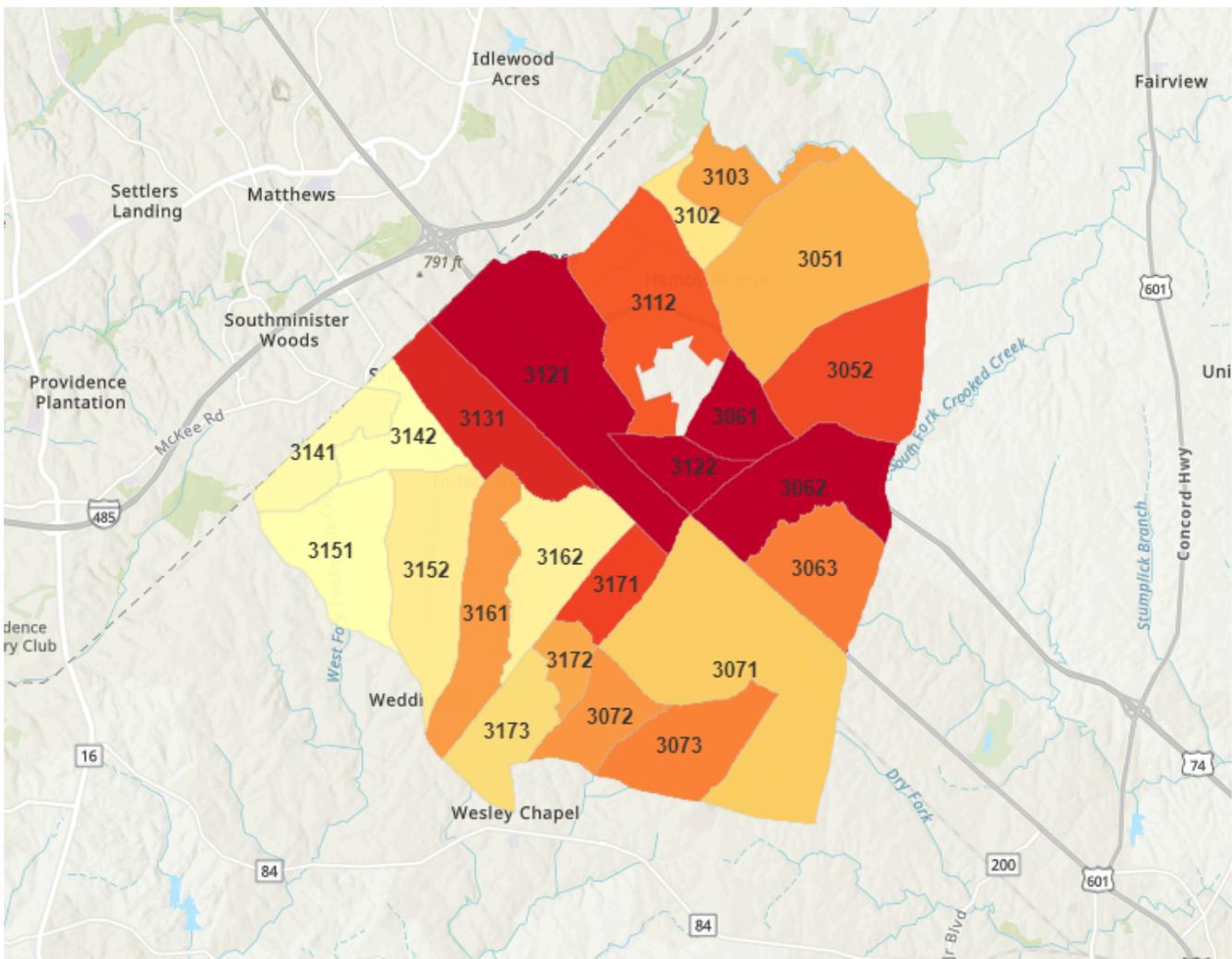
- Does not include Bonterra

Barriers and Prioritization

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Caption: Map of the Town of Indian Trail, NC. Barriers identified in PIM's assessment are color-coded by risk.

Above is a map of the Town of Indian Trail's Block Groups, color-coded by risk. Red Block Groups have the highest risk factor, which is computed as ADA barriers per mile of sidewalk. Progressively lighter colors show streets with lower risk factors. A table of the Block Group data is presented on the next page.

<https://arcg.is/0vv90u>

Block Groups	Barriers	Sidewalk Mileage	Barriers/ Sidewalk Mile (Risk)
3051	567	8.71	65.10
3052	1927	24.50	78.65
3061	632	6.96	90.78
3062	59	0.65	90.90
3063	128	1.76	72.52
3071	196	3.22	60.89
3072	521	7.53	69.17
3073	264	3.67	71.96
3102	41	0.72	56.66
3103	1018	15.08	67.49
3112	43	0.56	77.14
3121	582	4.98	116.88
3122	413	3.56	116.10
3131	140	1.67	83.78
3141	60	1.14	52.64
3142	60	1.79	33.54
3151	311	6.55	47.47
3152	49	0.88	55.49
3161	396	5.78	68.48
3162	301	5.53	54.47
3171	629	7.90	79.60
3172	474	7.12	66.58
3173	702	12.04	58.30

- Includes Bonterra

CURB RAMP

Assessment



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Assessment Specification

- Absence of Ramp (where required)
- No Compliant Detectable Warning Device
- Running Slope too Great
- Cross Slope too Great
- Flare Slope too Great
- Counter Slope too Great
- Width Less Than 4 ft.
- No Flush Transition
- No Compliant Landing
- Ponding at Curb Ramp within Pedestrian Access Route (PAR)
- Vertical Height Displacement on Curb Ramp

Assessment Results

There were 1968 curb ramps evaluated during the assessment. There were 105 locations requiring curb ramps that did not have them.

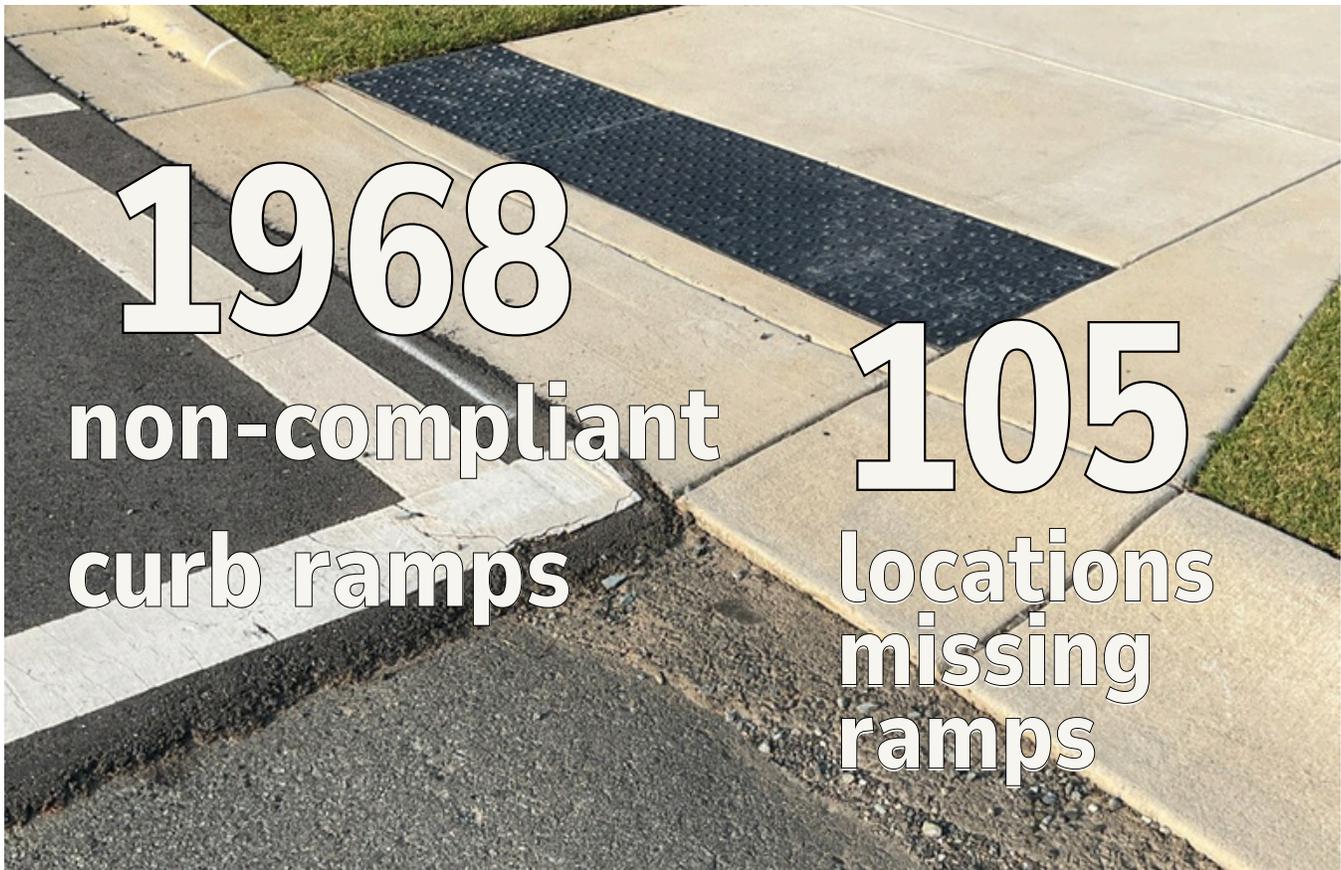
Priority Repairs

Attribute	Qty
No Curb Ramp Locations	105
Compliant Curb Ramps According to Utilized Specifications	0
Total Assessed Curb Ramps	1968

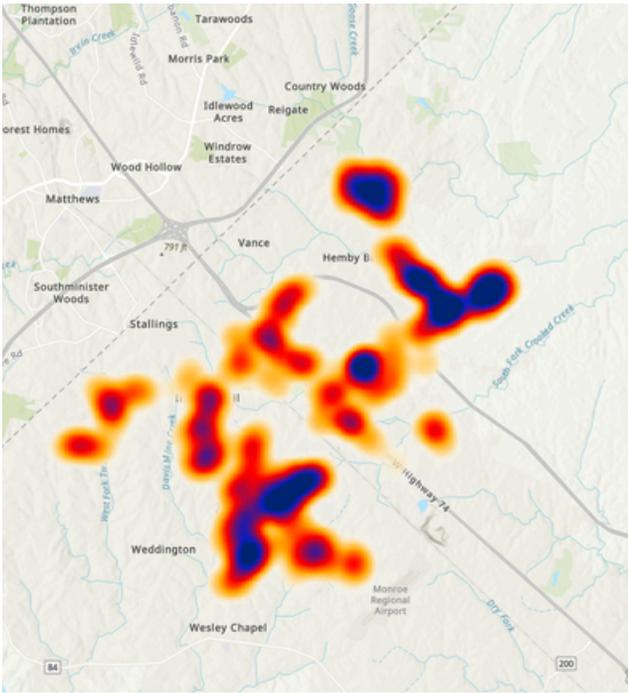
- Does not include Bonterra

Estimated Repair Costs

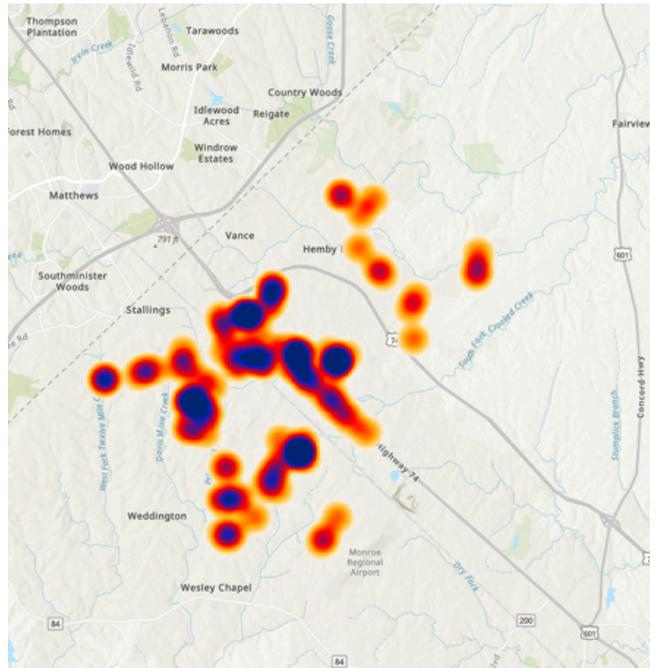
Curb Ramp Installation is projected to average \$3,500 per location. A prioritized summary of repair costs is provided in the report appendices.



Locations & Examples of Curb Ramp Barriers



Locations & Examples with No Curb Ramp



Repair Prioritization Methodology

Curb Ramps were prioritized for repair according to the severity of their deficiencies, as well as, for the most severe cases, proximity to residential disability ramps, public facilities, and parks.

Priority 1

Priority 1 includes curb ramps with any of the following barriers that are also within 1/16th mile of either a residential disability ramp, public facility, or park:

- No curb ramp
- Replacement required
- Inaccessible
- No compliant landing
- Width < 4 ft.
- Running slope > 12%
- Cross slope > 2.8%

Priority 2

Priority 2 includes curb ramps with any of the following barriers:

- No curb ramp
- Replacement required
- Inaccessible
- No compliant landing
- Width < 4 ft.
- Running slope > 12%
- Cross slope > 2.8%

Priority 3

Priority 3 includes curb ramps with any of the following barriers:

- Running slope between 8.3-12%
- Cross Slope between 2.1-2.8%

Priority 4

Priority 4 includes curb ramps with any of the following barriers:

- Non-compliant detectable warning
- No flush transition
- Flare slope > 10%
- Counter slope > 5%
- Trip hazards on curb ramp

The following table shows the breakdown of each priority outlined above.

Priority 1	5
Priority 2	1612
Priority 3	100
Priority 4	358

**Priority rankings include Bonterra*

- Includes Bonterra

The web app button here shows locations of each of these curb ramps.

<https://arcg.is/0mumzW>

Water Ponding in Accessible Routes

Water ponding at the bottom of curb ramps can create significant ADA barriers in the pedestrian access route, especially for those using wheelchairs. This accumulation of water can lead to slippery surfaces, increasing the risk of falls and injuries. For wheelchair users, water ponding presents a barrier that can make it difficult or even impossible to navigate the ramp. The wheels of a wheelchair can get stuck in the water, causing delays or forcing users to find alternative routes in the traffic lane, creating hazardous pedestrian experiences. Additionally, standing water can cause structural damage over time, leading to uneven surfaces that further impede accessibility. Such conditions are ADA barriers and pose safety hazards, reducing the overall usability of pedestrian pathways for everyone.

Ponding at the bottom of a curb ramp is a separate remediation issue from retrofitting a curb ramp, as installing a new ramp does not necessarily eliminate ponding issues.

Assessment Results

37 locations had standing water or had signs of water ponding in the Town of Indian Trail.

Ponding locations also create sediment build-up and degradation of the accessible route.

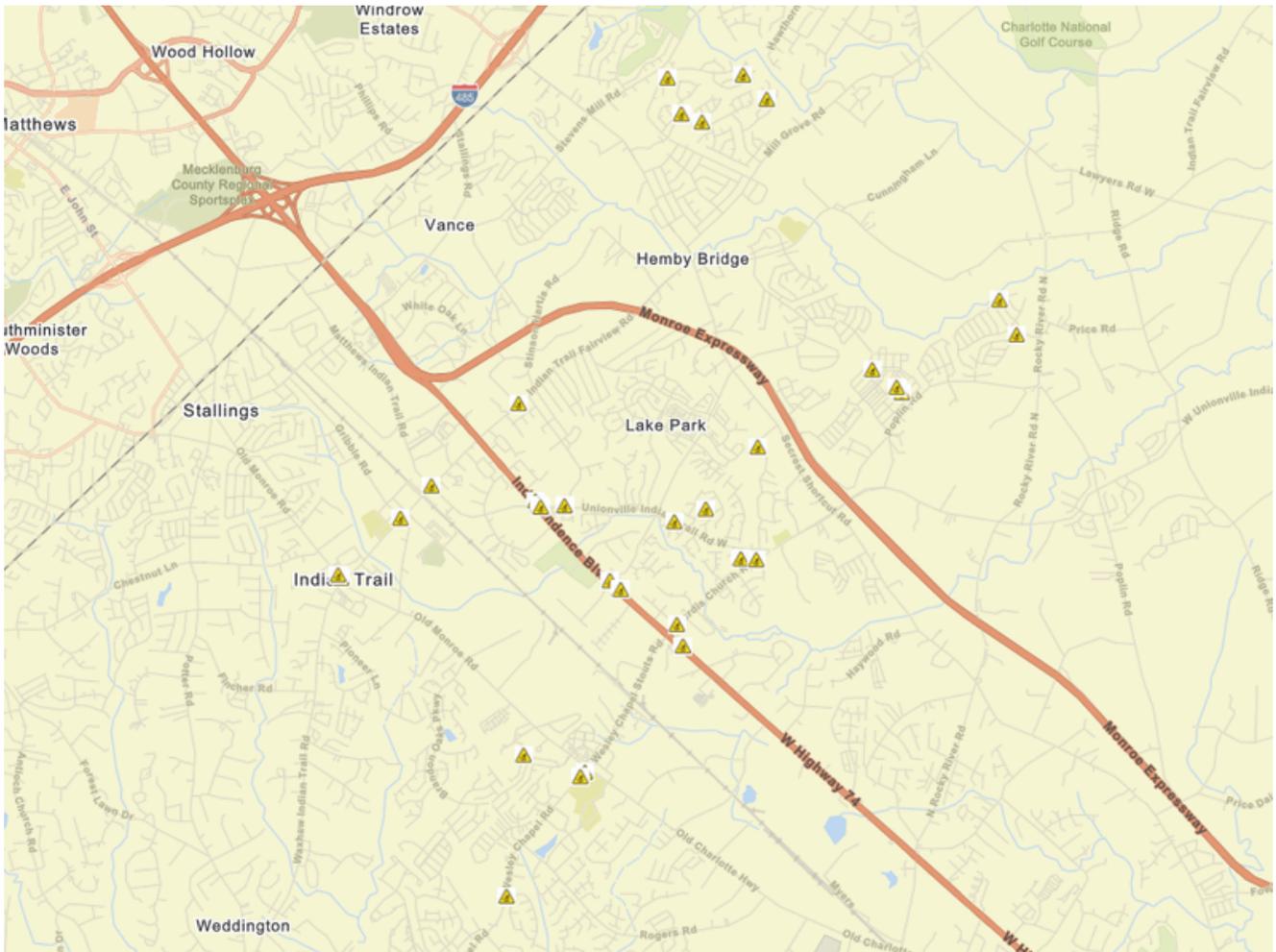
Estimated Repair Costs

Remediation for ponding can cost between \$2,500 and \$15,000, depending on the severity of the ponding issue and whether alternative maintenance activity options are available.



Caption: Curb ramp with ponding.

Locations & Examples of Ponding



SIDEWALK CONDITIONS

Assessment



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Sidewalk Conditions

Assessment Specification

Sidewalk Vertical Height Displacement Severity class:

- Small (.25 in. up to .49 in.)
- Medium (.5 in. up to .99 in.)
- Large (1.0 in. up to 2.5 in.)
- Demolish and Replace (>2.5 in. or > 4 cracks, significant spalling, unstable sections, large voids) [D&R]

Sidewalk Conditions Results

There were 9,840 sidewalk conditions (VHD and D&R locations) recorded during the assessment. Statistical sampling was used to augment the “small” hazard class, as this class of barrier is frequently under-surveyed due to the difficulty in consistently recording VHDs just over .25 inches.

Vertical Height Displacement (VHD) & Demolition and Repairment (D&R) Totals

Small	5,515
Medium	3,367
Large	558
D & R	400

- Does not include Bonterra

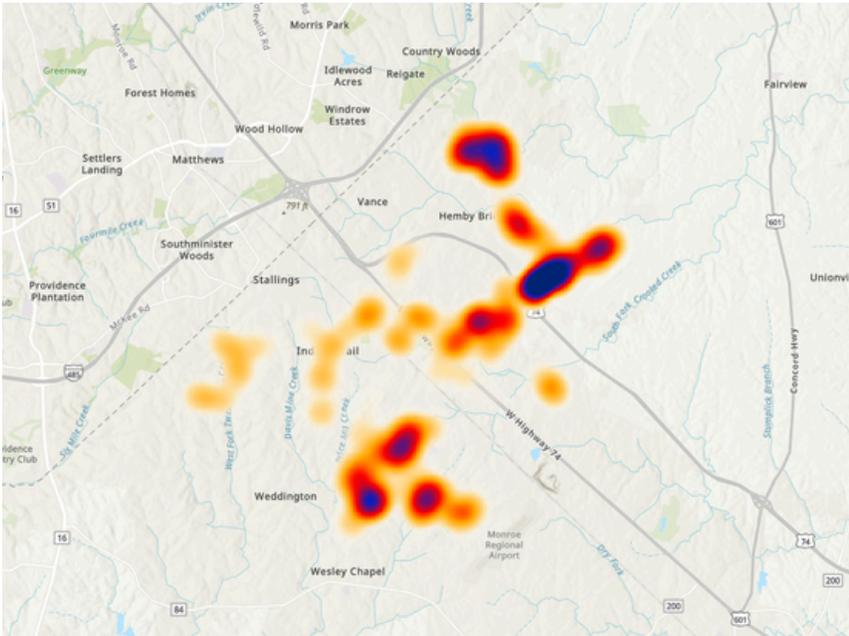
Estimated Repair Costs

VHD repairs are based on an average cost of \$5 per square foot for remediation using an alternative maintenance activity.

D&R cost will be approximately \$15 per square foot of panel replaced.



VHD Locations



SMALL (.25 in. up to .49 in.)



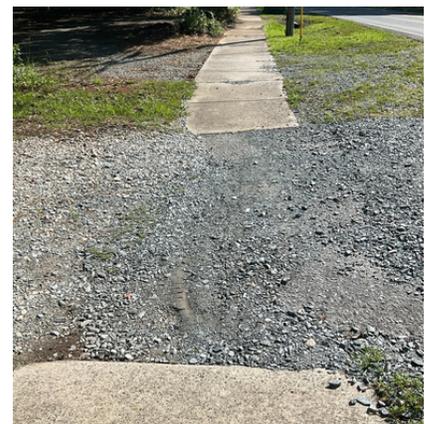
MEDIUM (.5 in. up to .99 in.)



LARGE (1.0 in. up to 2.5 in.)



DEMOLISH AND REPLACE (>2.5 in.)



Obstructions

Assessment Specification

The assessment looked at objects protruding within the ROW, of which a total of 586 were found during the assessment. The 586 obstructions are broken down into 3 fields shown below:

- Vegetative – Significant vegetation blocking the ROW.
- Ground – Physical barriers that obstruct the ROW. Examples include signposts, fire hydrants, and telephone poles.
- Vertical – Physical obstructions less than 80 inches off the ROW that create head clearance issues.

Assessment Results

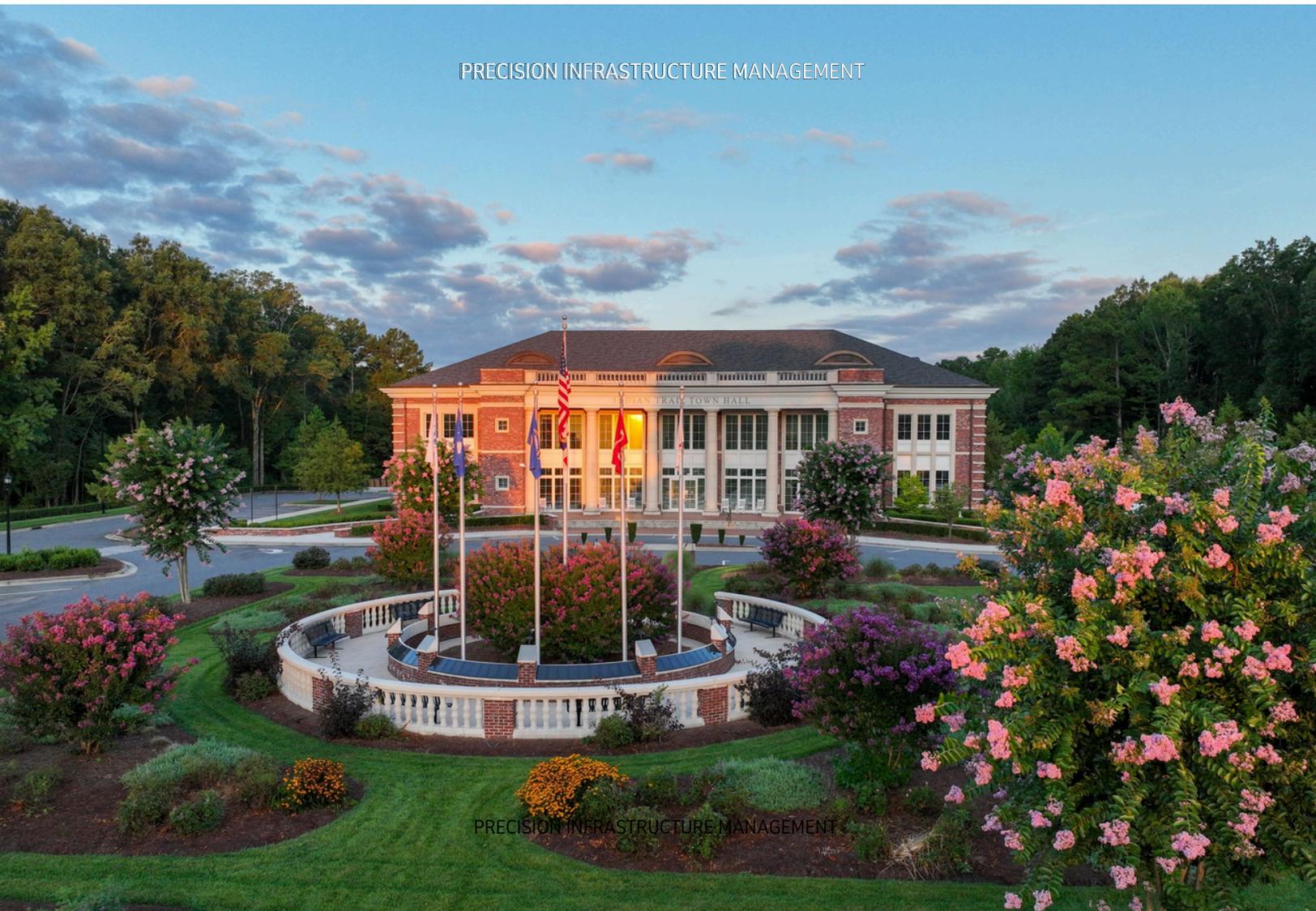
Vegetative	561
Ground	18
Vertical	7

- Does not include Bonterra

Estimated Repair Costs

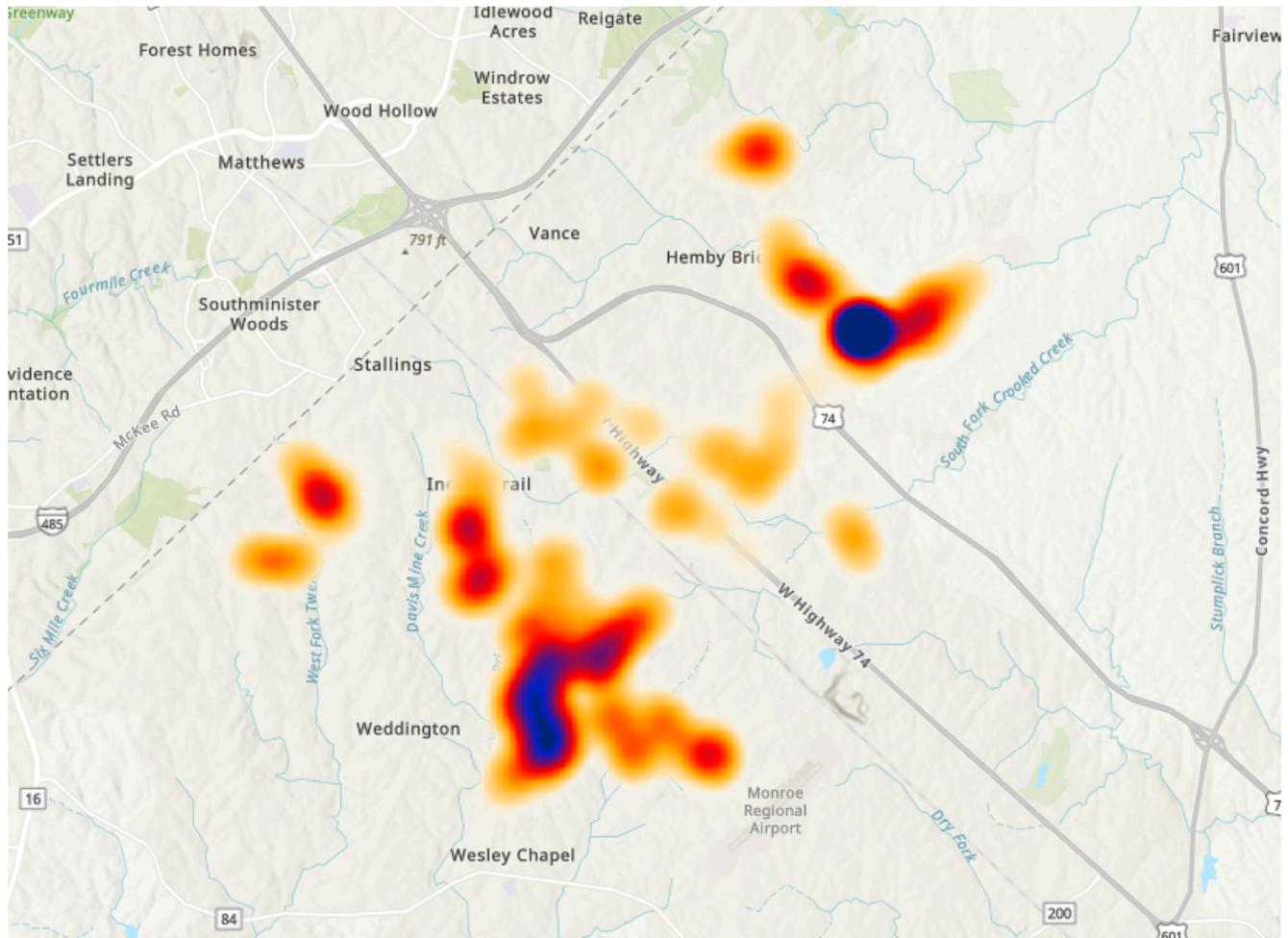
Using data from previous projects, PIM estimates the cost of removing vegetative barriers at \$150 per obstruction and \$500 to mitigate ground/vertical obstructions. Costs for these items, especially ground obstructions, can vary widely depending on the nature of the obstruction.

PRECISION INFRASTRUCTURE MANAGEMENT



PRECISION INFRASTRUCTURE MANAGEMENT

Obstruction Locations and Examples



Vegetative Obstruction Example



Ground Obstruction Example



Vertical Obstruction Example

Less Than 4 ft. Passable Surface

Assessment Specification

PROWAG requires sidewalks to be 4 ft. wide or greater to provide adequate space for walking/wheeling.

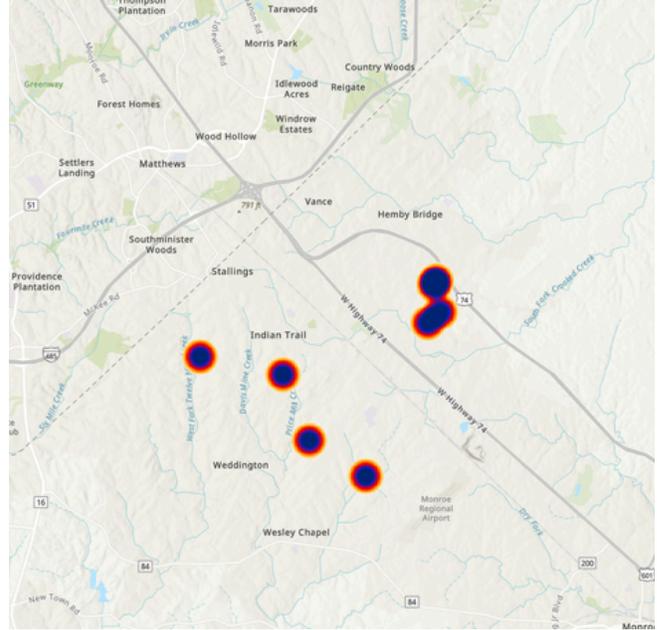
Assessment Results

There were 8 sections of non-4 ft. wide passable sidewalk surfaces identified during the assessment due either to less than 4 ft. wide concrete pours or to erosion of the sidewalk resulting in a less than 4 ft. passable surface.

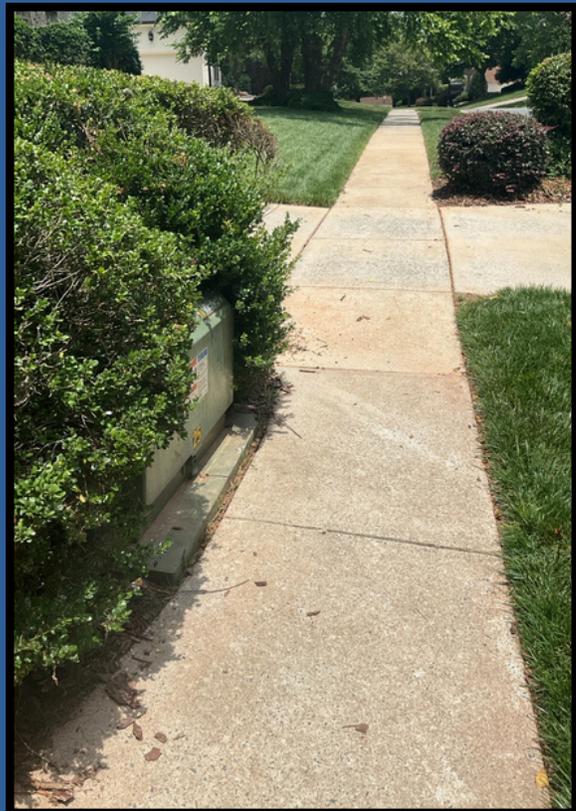
Estimated Repair Costs

The only remedial action for a sidewalk that is less than 4 ft. by design or by degradation is to demolish and replace the existing sidewalk. PIM estimates it would cost \$6,375 to replace the PROWAG non-compliant sections of sidewalk.

Locations and Examples



EXAMPLES



Cross Slopes > 4% for more than 50 ft.

Assessment Specification

PIM collected locations on the Town of Indian Trail sidewalk that had a greater than 4% cross slope for more than 50 ft. This collection item is intended to find the highest priority and most pervasive issues creating ADA barriers.

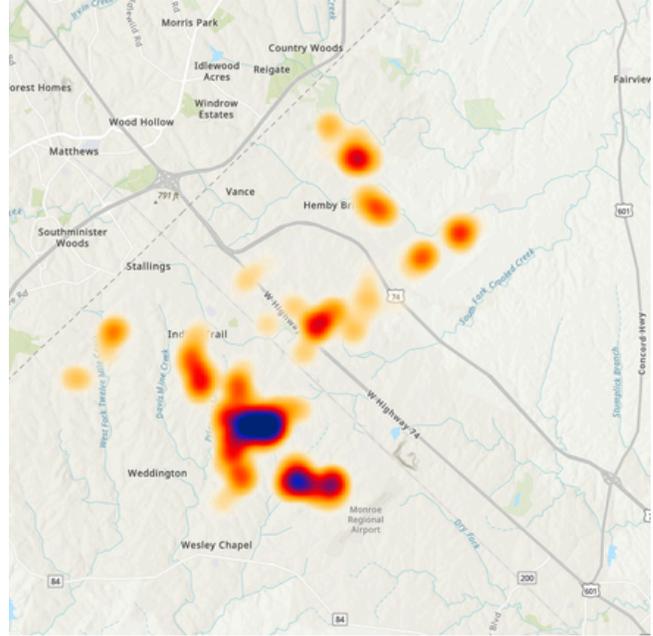
Assessment Results

There were 317 such locations encountered during the assessment.

Estimated Repair Costs

The only remedial action for extreme cross-slope issues is to demolish and replace the existing sidewalk. PIM estimates the total cost of remediation for these cross-slope issues is \$1,222,500.

Locations and Examples



EXAMPLES



Driveway Cross Slopes

Assessment Specification

For many decades, driveways were designed in ways that are now considered non-compliant for the ROW. Typical design allowed homeowners or builders to cut through the existing sidewalk at slopes exceeding current cross-slope requirements. PIM collected these barriers separately to allow the Town of Indian Trail flexibility in remediation strategies.

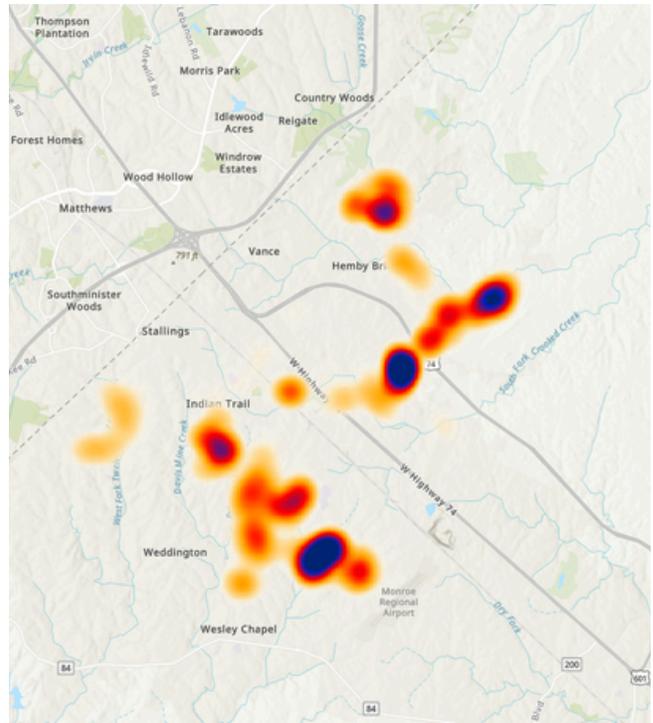
Assessment Results

There were 636 such locations encountered during the assessment.

Estimated Repair Costs

The only remedial action for driveway cross-slope issues is to demolish and replace the existing sidewalk. PIM estimates the total cost of remediation for these cross-slope issues is \$1,076,250.

Locations and Examples



EXAMPLES



CROSSWALKS AND GAPS

Assessment



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INFRASTRUCTURE
MANAGEMENT

Crosswalks

Assessment Specification

PIM assessed both ends of marked crosswalks within the Town of Indian Trail ROW to determine if their slope was compliant with the 5% running slope maximum allowable under PROWAG.

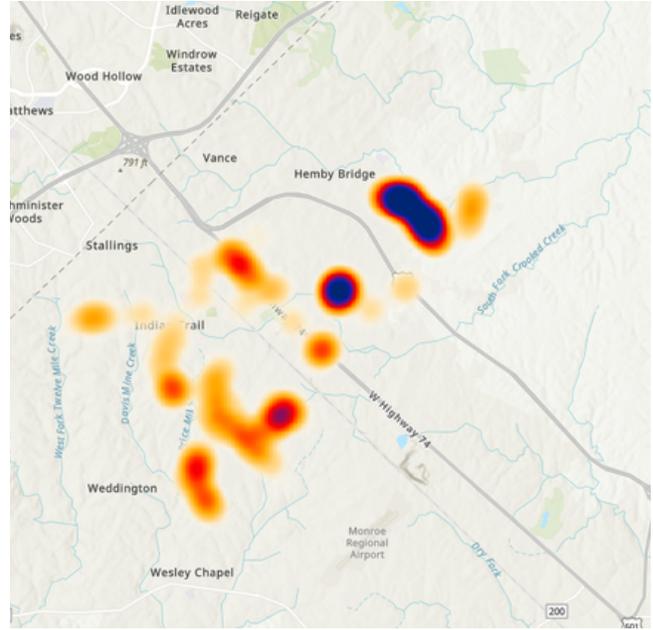
Assessment Results

During the assessment, 24 crosswalks were found to have barriers.

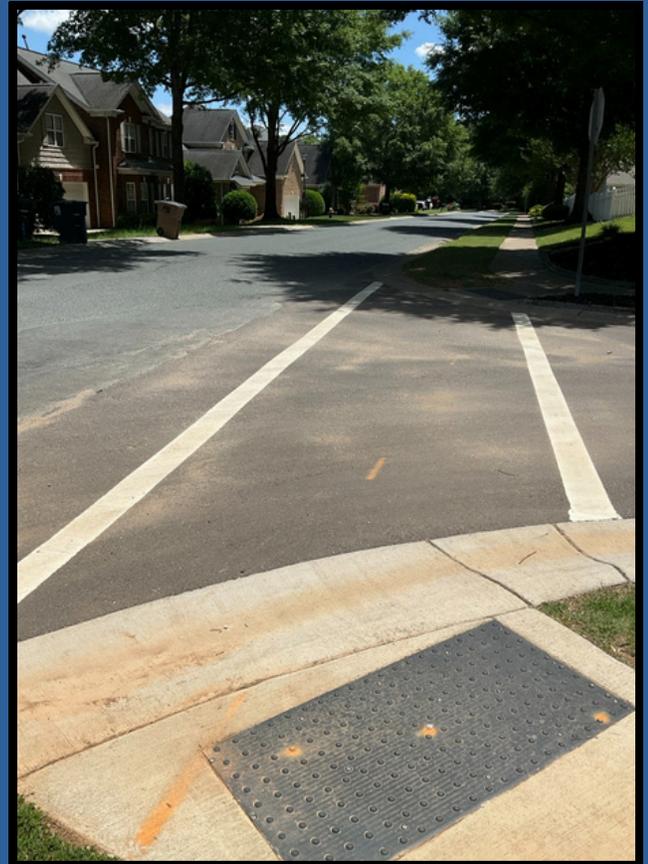
Estimated Repair Costs

The replacement/repair costs for these items vary widely due to the different nature of the work required. PIM used \$1,750 as an estimate for the cost per location. The total cost for repair is estimated to be \$42,000.

Locations and Examples



EXAMPLES



Gaps and Footpaths

Assessment Specification

In addition to ADA compliance items, the Town of Indian Trail requested that PIM flag sidewalk gaps and footpaths. These are areas where additional sidewalks would improve the pedestrian experience in a town and generally increase accessibility for all residents and visitors.

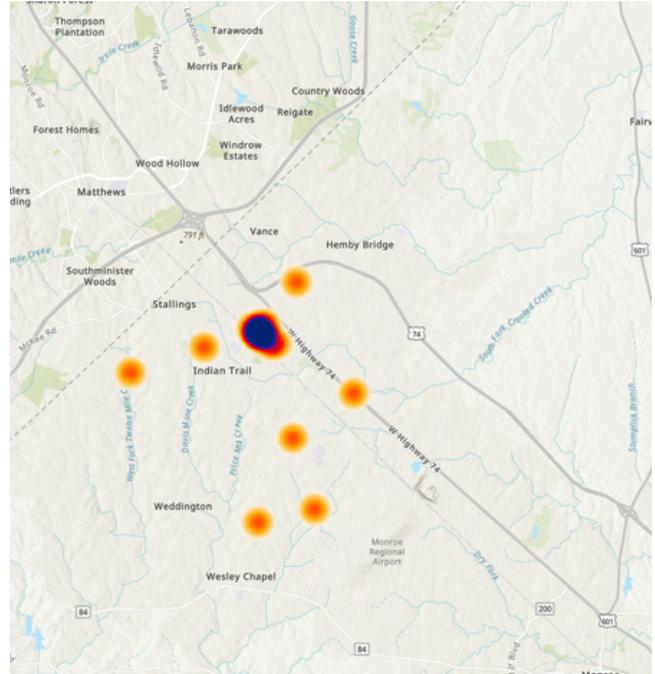
Assessment Results

There were 16 such locations encountered during the assessment.

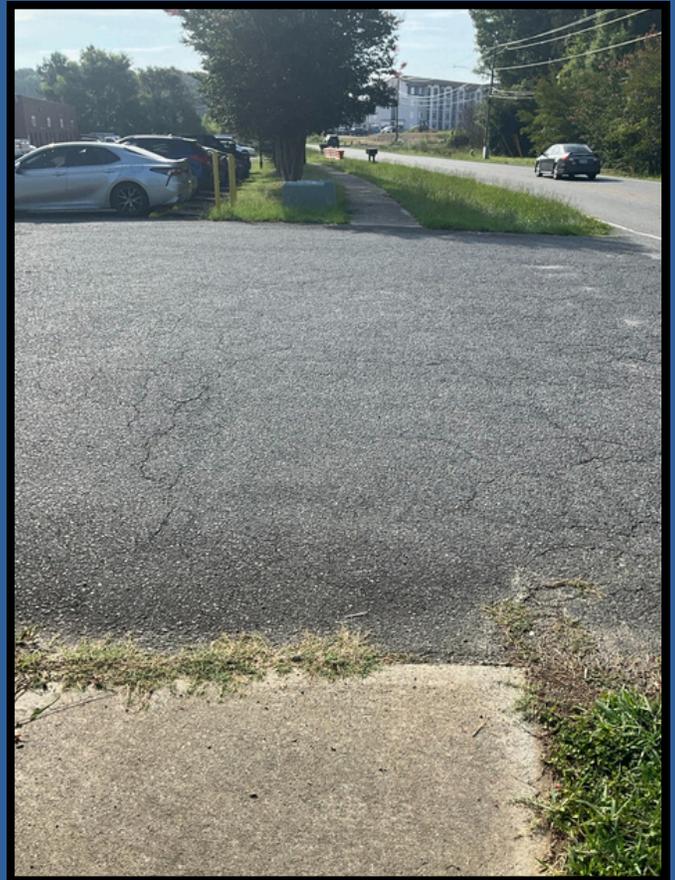
Estimated Repair Costs

PIM estimates it would cost the Town of Indian Trail \$90,000 to add the new sidewalk necessary to connect the sidewalk gaps and footpaths flagged during PIM's assessment.

Locations and Examples



EXAMPLES



NON-DEFICIENT

Findings



RESIDENTIAL RAMPS

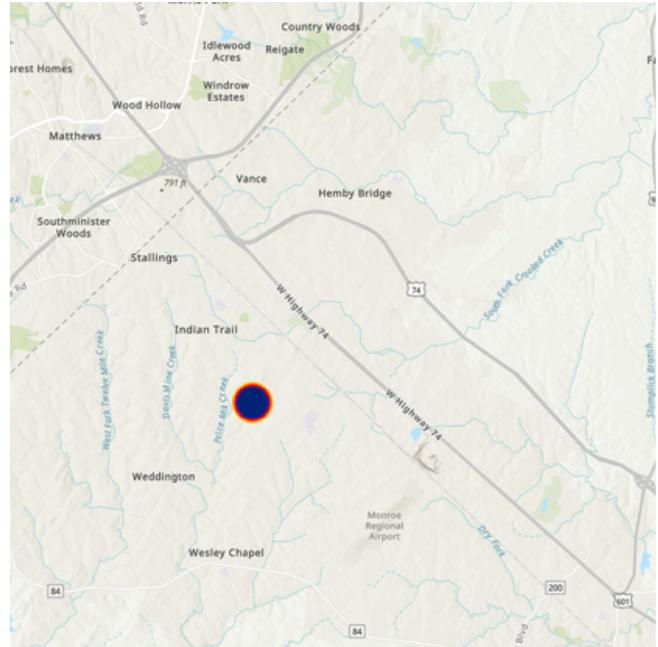
Assessment Specification

PIM collected residential disability ramps connecting residences to driveways or the Town ROW. These ramps are reliable, but imperfect, indicators that someone with a disability lives in the home. This is not a barrier item but is instead used to prioritize repairs.

Assessment Results

There was 1 such location encountered during the assessment.

Locations and Examples



EXAMPLES



ACCESSIBLE PEDESTRIAN SIGNALS

APS Request Process Recommendation



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Accessible Pedestrian Signals (APS)

Accessible Pedestrian Signals (APS) play a crucial role in ensuring the greater accessibility of public rights of way, which include sidewalks, pedestrian crossings, and other pathways used by the public to navigate urban environments. The accessibility of these areas is vital for creating inclusive communities where individuals with disabilities can move about independently and safely.

When APS May Be Required

Notwithstanding PROWAG and its anticipated adoption by the US Department of Justice and the requirements associated with pedestrian traffic control devices, deployment of accessible pedestrian signals may be required when a safety hazard has been identified or upon request by persons with disabilities.

Requesting APS Installation

The following outlines the recommended procedures for requesting Accessible Pedestrian Signals.

1. Requests should be made through the Town of Indian Trail's Public Works Department.
2. All APS installation requests should be reviewed and denied or approved by Public Works.
3. The Public Works Department should conduct a traffic study if the need and applicability are not obvious.
4. Public Works should document the process.
5. The specific type of APS should be determined based on the needs identified in the study and input from relevant organizations.



Non-Indian Trail Sidewalk - Bonterra

Findings



Bonterra Area

The Bonterra area is within the boundary of Indian Trail, but sidewalk and curb ramps are not owned or maintained by Indian Trail. During PIM's assessment, inspectors captured barriers within the full area of Indian Trail's boundaries, including the Bonterra area. This section is the summary of ADA barriers that were identified.

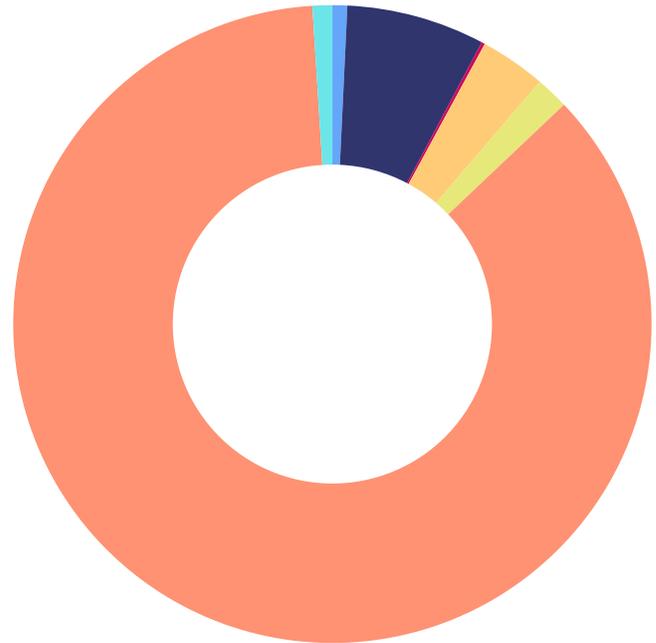
The field assessment of **7.68 miles** of ROW sidewalk included in the Bonterra Area sidewalk network identified a total of **1,199** ADA barriers across the assessment categories within the scope of the project. The deficiencies are reviewed in detail in the following sections. The map image below shows sidewalk locations across the Bonterra Area.



Caption: Sidewalk locations across the Bonterra Area.

Total Findings - ADA Barriers Bonterra

Cross Slope > 50 ft.	9
Crosswalks	0
Curb Ramps	84
Driveway Cross Slopes	40
No Curb Ramp	2
Obstructions	20
Vertical Height Displacements	1,032
Demolition & Replacement	12
Sidewalk Gaps and Footpaths	0
Sidewalk < 4 ft.	0
Ponding	0



Vertical Height Displacements make up **86.1%** of the total findings.

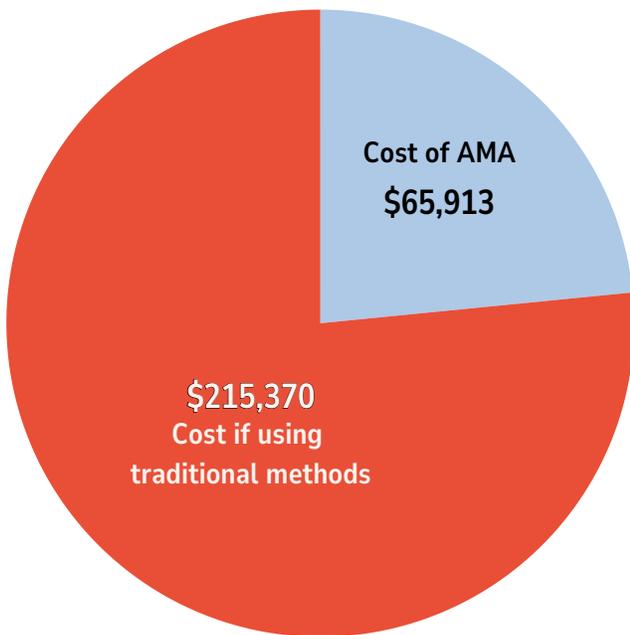
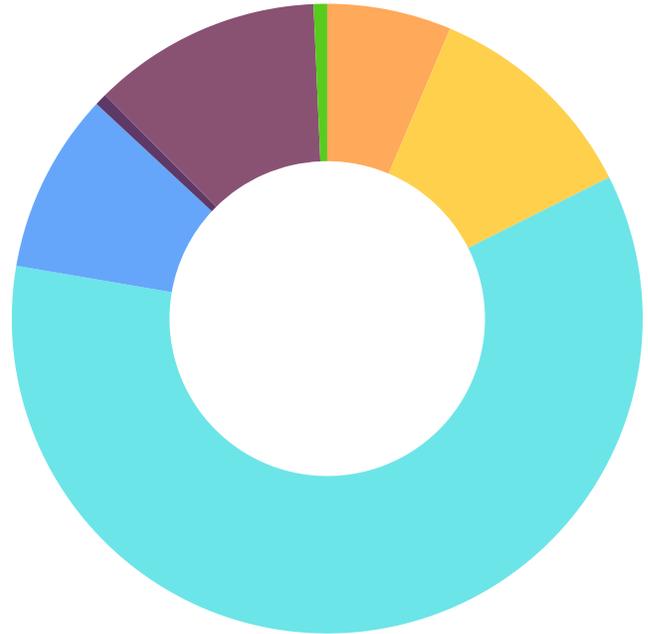
Curb Ramps make up **7%** of the total findings.

Driveway Cross Slopes make up **3.3%** of the total findings.

The combined other deficiencies consists of **3.6%** of the total findings.

Cost by Barrier Class - Bonterra

■ Cross Slope	\$33,750
■ Crosswalks	\$59,500
■ Curb Ramps	\$318,500
■ Driveway Cross Slopes	\$49,050
■ Obstructions	\$3,300
■ Sidewalk Gaps	\$0
■ Vertical Height Displacements	\$62,238
■ Sidewalk < 4ft	\$0
■ Demo & Replacements	\$3,675



Alternative Maintenance Activities vs. Total Cost Replacement

There are multiple methods for remediating certain ADA barriers. While some areas require full demolition and replacement of affected panels, other barriers can be mitigated using alternative maintenance activities. PIM collected data in such a manner to ensure that alternative maintenance activities could be utilized to remediate certain barriers, such as vertical height displacements or, more rarely, curb ramps. **Utilizing alternative maintenance activities would save the Town of Indian Trail more than \$149,000.**

ROW ASSESSMENT - APPENDIX A

Sidewalk Asset Management Plan

- *Includes Bonterra*



PIM | PRECISION
INFRASTRUCTURE
MANAGEMENT

FIRST YEAR COSTS

CURB RAMPS

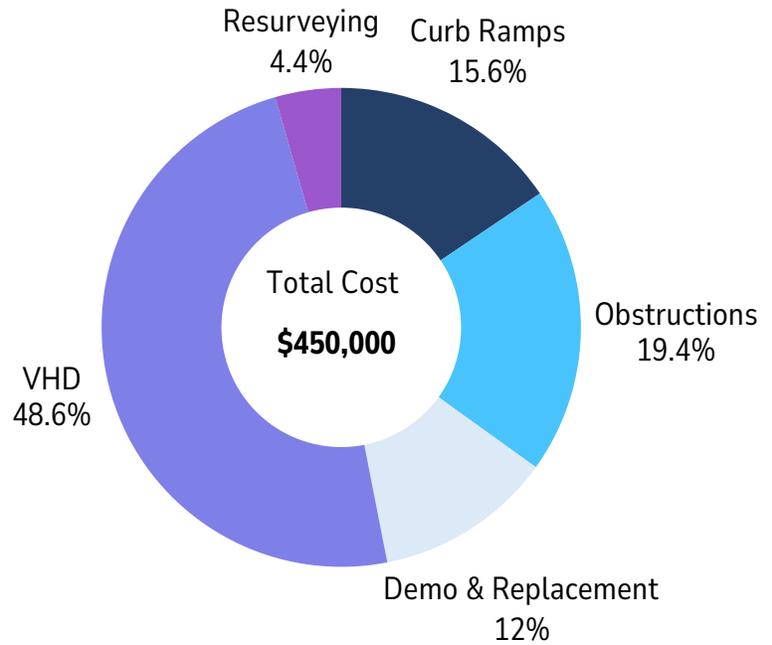
	Cost (\$)	Locations
P1 - Curb Ramp	17,500	5
P2 - Curb Ramp	52,500	15
P3 - Curb Ramp		
P4 - Curb Ramp		

OBSTRUCTIONS

Vertical Obstructions		
Ground Obstructions		
Vegetative Obstructions	87,150	581

DEMO & REPLACEMENT

Sidewalk D&R Panels	54,000	144
Vertical Height Displacement Panels	218,850	1752
Sidewalks < 4 ft		
Sidewalk Gaps		
Cross Slope > 100 Ft		
Driveway Cross Slope		
Crosswalks		
Park/Facility/Sidewalk Resurvey	20,000	20%



First Year Management Plan

Total Cost estimated for the first year over five categories is \$450,000.

100% of P1 Curb Ramp Repair is completed during the 1st year. The total cost for Curb Ramp repair is \$17,500 for 5 locations.

1% of P2 Curb Ramp Repair is completed during the 1st year. The total cost for Curb Ramp repair is \$52,500 for 15 locations.

100% of Vegetative Obstructions are completed during the 1st year. The total cost is \$87,150 for 581 locations.

26% of Demo & Replacement is completed during the 1st year. The total cost is \$54,000 for 144 locations.

20% of VHD Repair is completed during the 1st year. The total cost is \$218,850 for 1752 locations.

20% of Resurveying is completed during the 1st year. The total cost is \$20,000.

13.5%
OF ENTIRE PLAN

13.5% of barrier remediation is scheduled for the first year.

SECOND YEAR COSTS

CURB RAMPS

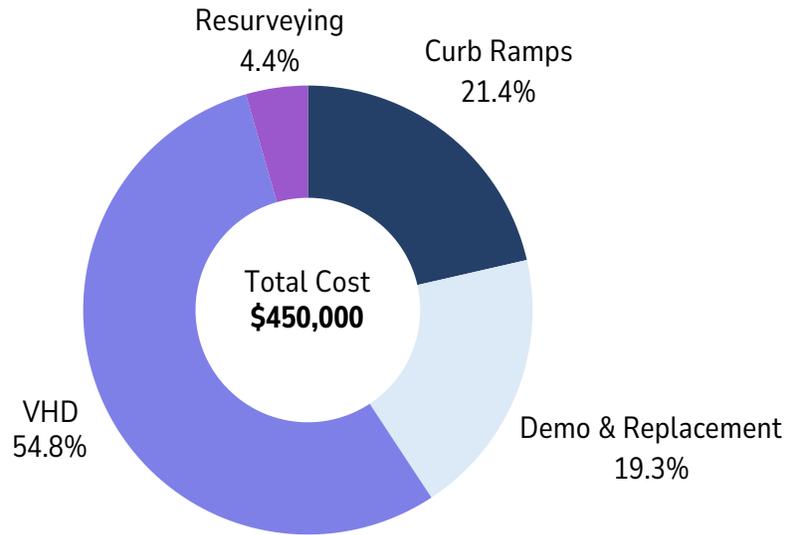
	Cost (\$)	Locations
P1 - Curb Ramp		
P2 - Curb Ramp	96,390	27
P3 - Curb Ramp		
P4 - Curb Ramp		

OBSTRUCTIONS

Vertical Obstructions		
Ground Obstructions		
Vegetative Obstructions		

DEMO & REPLACEMENT

Sidewalk D&R Panels	86,900	227
Vertical Height Displacement Panels	246,710	1935
Sidewalks < 4 ft		
Sidewalk Gaps		
Cross Slope > 100 Ft		
Driveway Cross Slope		
Crosswalks		
Park/Facility/Sidewalk Resurvey	20,000	20%



Second Year Management Plan

Total Cost estimated for the second year over four categories is \$450,000.

2% of P2 Curb Ramp Repair is completed during the 2nd year. The total cost for Curb Ramp repair is \$96,390 for 27 locations.

44% of Demo & Replacement is completed during the 2nd year. The total cost is \$86,900 for 227 locations.

22% of VHD Repair is completed during the 2nd year. The total cost is \$246,710 for 1935 locations.

20% of Resurveying is completed during the 2nd year. The total cost is \$20,000.

11.9% 11.9% of barrier remediation is scheduled for the second year.
OF ENTIRE PLAN

THIRD YEAR COSTS

CURB RAMPS

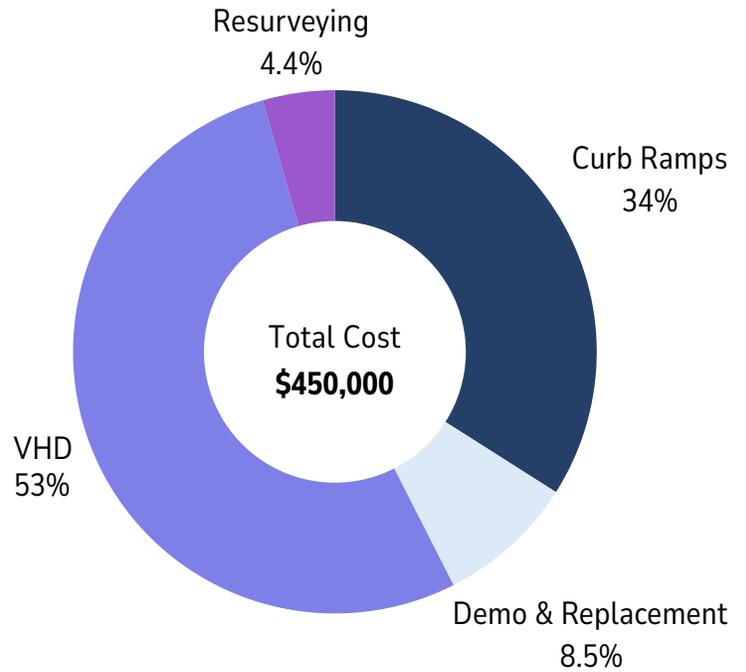
	Cost (\$)	Locations
P1 - Curb Ramp		
P2 - Curb Ramp	153,000	42
P3 - Curb Ramp		
P4 - Curb Ramp		

OBSTRUCTIONS

Vertical Obstructions		
Ground Obstructions		
Vegetative Obstructions		

DEMO & REPLACEMENT

Sidewalk D&R Panels	38,300	98
Vertical Height Displacement Panels	238,650	1835
Sidewalks < 4 ft		
Sidewalk Gaps		
Cross Slope > 100 Ft		
Driveway Cross Slope		
Crosswalks		
Park/Facility/Sidewalk Resurvey	20,000	20%



Third Year Management Plan

Total Cost estimated for the third year over four categories is \$450,000.

3% of P2 Curb Ramp Repair is completed during the 3rd year. The total cost for Curb Ramp repair is \$153,000 for 42 locations.

13% of Demo & Replacement is completed during the 3rd year. The total cost is \$38,300 for 98 locations.

21% of VHD Repair is completed during the 3rd year. The total cost is \$238,650 for 1835 locations.

20% of Resurveying is completed during the 3rd year. The total cost is \$20,000

10.5% OF ENTIRE PLAN

10.5% of barrier remediation is scheduled for the third year.

FOURTH YEAR COSTS

CURB RAMPS

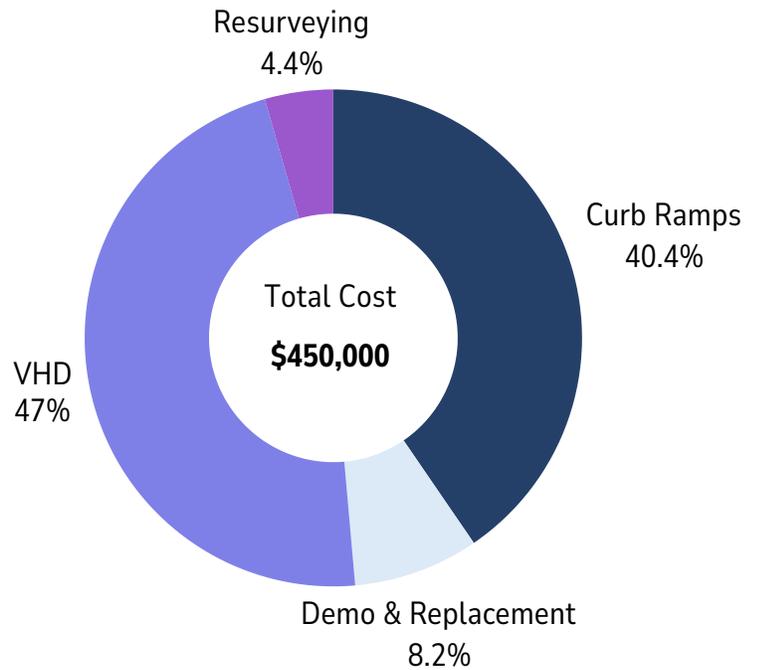
	Cost (\$)	Locations
P1 - Curb Ramp		
P2 - Curb Ramp	182,000	49
P3 - Curb Ramp		
P4 - Curb Ramp		

OBSTRUCTIONS

Vertical Obstructions		
Ground Obstructions		
Vegetative Obstructions		

DEMO & REPLACEMENT

Sidewalk D&R Panels	36,700	92
Vertical Height Displacement Panels	211,300	1593
Sidewalks < 4 ft		
Sidewalk Gaps		
Cross Slope > 100 Ft		
Driveway Cross Slope		
Crosswalks		
Park/Facility/Sidewalk Resurvey	20,000	20%



Fourth Year Management Plan

Total Cost estimated for the fourth year over four categories is \$450,000.

3% of P2 Curb Ramp Repair is completed during the 4th year. The total cost for Curb Ramp repair is \$182,000 for 49 locations.

16% of Demo & Replacement is completed during the 4th year. The total cost is \$36,700 for 92 locations.

18% of VHD Repair is completed during the 4th year. The total cost is \$211,300 for 1593 locations.

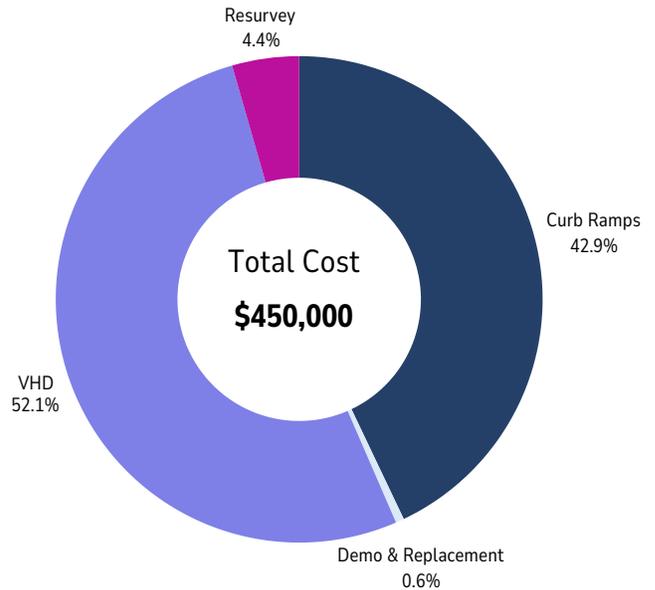
20% of Resurveying is completed during the 4th year. The total cost is \$20,000

9.3% OF ENTIRE PLAN 9.3% of barrier remediation is scheduled for the fourth year.

FIFTH YEAR COSTS

CURB RAMPS

	Cost (\$)	Locations
P1 - Curb Ramp		
P2 - Curb Ramp	193,200	51
P3 - Curb Ramp		
P4 - Curb Ramp		



OBSTRUCTIONS

Vertical Obstructions		
Ground Obstructions		
Vegetative Obstructions		

DEMO & REPLACEMENT

Sidewalk D&R Panels	2,500	6
Vertical Height Displacement Panels	234,300	1731
Sidewalks < 4 ft		
Sidewalk Gaps		
Cross Slope > 100 Ft		
Driveway Cross Slope		
Crosswalks		
Park/Facility/Sidewalk Resurvey	20,000	20%

Fifth Year Management Plan

Total Cost estimated for the fifth year over four categories is \$450,000.

3% of P2 Curb Ramp Repair is completed during the 5th year. The total cost for Curb Ramp repair is \$193,200 for 51 locations.

1% of DNR is completed during the 5th year. The total cost \$2,500 for 6 locations

20% of VHD Repair is completed during the 5th year. The total cost is \$234,300 for 1731 locations.

20% of Resurveying is completed during the 5th year. The total cost is \$20,000

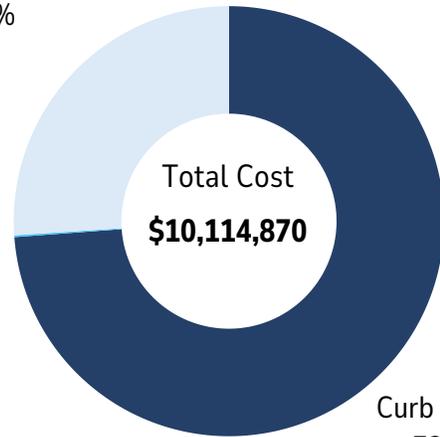
9.6% OF ENTIRE PLAN 9.6% of barrier remediation is scheduled for the fifth year.

LONGTERM COSTS

CURB RAMPS

	Cost (\$)	Locations
P1 - Curb Ramp		
P2 - Curb Ramp	5,629,677	1486
P3 - Curb Ramp	420,525	111
P4 - Curb Ramp	1,413,115	373

Sidewalk Conditions
26%



OBSTRUCTIONS

Vertical Obstructions	9,942	18
Ground Obstructions	3,789	7
Vegetative Obstructions		

SIDEWALK CONDITIONS

Sidewalk D&R Panels		
Vertical Height Displacement Panels		
Sidewalks < 4 ft	5,701	14
Sidewalk Gaps	97,419	240
Cross Slope > 100 Ft	1,323,273	3260
Driveway Cross Slope	1,164,968	2870
Crosswalks	42,000	24

Long Term Costs

Total Cost estimated for the long term over three categories is \$10,114,870.

45% of total locations remain past the first 5 years of remediation.

Due to inflation over the five year management plan, though \$2,250,000 was spent on repairs, there is only a \$1,400,578 decrease in cost, with \$10,007,811 worth of barrier removal work remaining.

With this plan, PIM recommends a full reassessment every 5 years.

45.2%
OF ENTIRE PLAN

45.2% of barriers remain after the first five years of remediation.

	Current Condition		Year 1			Year 2			Year 3			Year 4			Year 5			Longterm		
	Locations/ Panel Number	Total Cost	Locations	Remediation Budget	% Remediated	Locations	Budget	%	Locations	Budget	%	Locations	Budget	%	Locations	Budget	%	Locations	Cost Remaining	% of Locations Remaining
Curb Ramp																				
P1 - Curb Ramp	5	\$ 17,500	5	\$ 17,500	100%	0	\$ -	0%	0	\$ -	0%	0	\$ -	0%	0	\$ -	0%	0	\$ -	0%
P2 - Curb Ramp	1,670	\$ 5,845,000	15	\$ 52,500	1%	27	\$ 96,390	2%	42	\$ 153,000	3%	49	\$ 182,000	3%	51	\$ 193,200	3%	1486	\$ 5,629,677	89%
P3 - Curb Ramp	111	\$ 388,500	0	\$ -	0%	0	\$ -	0%	0	\$ -	0%	0	\$ -	0%	0	\$ -	0%	111	\$ 420,525	100%
P4 - Curb Ramp	373	\$ 1,305,500	0	\$ -	0%	0	\$ -	0%	0	\$ -	0%	0	\$ -	0%	0	\$ -	0%	373	\$ 1,413,115	100%
Obstructions																				
Vegetative	581	\$ 87,150	581	\$ 87,150	100%	0	\$ -	0%	0	\$ -	0%	0	\$ -	0%	0	\$ -	0%	0	\$ -	0%
Ground	18	\$ 9,000	0	\$ -	0%	0	\$ -	0%	0	\$ -	0%	0	\$ -	0%	0	\$ -	0%	18	\$ 9,742	100%
Vertical	7	\$ 3,500	0	\$ -	0%	0	\$ -	0%	0	\$ -	0%	0	\$ -	0%	0	\$ -	0%	7	\$ 3,789	100%
Sidewalk Conditions																				
Sidewalk D&R	567	\$ 212,625	144	\$ 54,000	25%	227	\$ 86,900	40%	98	\$ 38,300	17%	92	\$ 36,700	16%	6	\$ 2,500	1%	0	\$ -	0%
Vertical Height Displacem	8,846	\$ 1,105,750	1752	\$ 218,850	20%	1935	\$ 246,710	22%	1835	\$ 238,700	21%	1593	\$ 211,300	18%	1731	\$ 234,300	20%	0	\$ -	0%
Sidewalks < 4ft	17	\$ 6,375	0	\$ -	0%	0	\$ -	0%	0	\$ -	0%	0	\$ -	0%	0	\$ -	0%	17	\$ 6,901	100%
Sidewalk Gaps	240	\$ 90,000	0	\$ -	0%	0	\$ -	0%	0	\$ -	0%	0	\$ -	0%	0	\$ -	0%	240	\$ 97,419	100%
Cross Slope > 100 ft	3,260	\$ 1,222,500	0	\$ -	0%	0	\$ -	0%	0	\$ -	0%	0	\$ -	0%	0	\$ -	0%	3260	\$ 1,323,273	100%
Driveway Cross Slope	2,870	\$ 1,076,250	0	\$ -	0%	0	\$ -	0%	0	\$ -	0%	0	\$ -	0%	0	\$ -	0%	2870	\$ 1,164,968	100%
Crosswalks	24	\$ 42,000	0	\$ -	0%	0	\$ -	0%	0	\$ -	0%	0	\$ -	0%	0	\$ -	0%	24	\$ 45,462	100%
Resurveying				\$ 20,000	20%		\$ 20,000	20%		\$ 20,000	20%		\$ 20,000	20%		\$ 20,000	20%	0	\$ -	0%
Total	18,589	\$11,411,650	2497	\$ 450,000	13.4%	2189	\$ 450,000	11.8%	1975	\$ 450,000	10.6%	1734	\$ 450,000	9.3%	1788	\$ 450,000	9.6%	8,406	\$ 10,114,870	45%

*Bonterra area barriers are included above.

ROW ASSESSMENT - APPENDIX B

Full Street Rankings



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INFRASTRUCTURE
MANAGEMENT

*Bonterra Area Streets noted in light orange

Rank	Street Name	Barriers	Street Mileage	Risk
1	Equipoise Dr	45	0.15	298.22
2	Affirmed Dr	42	0.15	278.35
3	Bimelech Dr	40	0.15	265.27
4	Belmont Stakes Av	118	0.48	245.09
5	Phar Lap Dr	44	0.18	242.33
6	Glen Hollow Dr	27	0.11	237.23
7	Washburn Ct	13	0.05	237.02
8	Taylor Glenn Ln	52	0.22	236.46
9	Meriwether Lewis Tr	79	0.36	220.14
10	Basin Ct	8	0.04	200.36
11	Downing Ct	27	0.14	194.92
12	Mendenhall St	54	0.29	189.17
13	Parkington Ln	7	0.04	178.79
14	Triple Crown Dr	59	0.33	178.77
15	Guilford Ct	8	0.04	178.25
16	Bitter Root Ct	12	0.07	176.64
17	Scarlet Oak Ct	6	0.03	175.15
18	Ladys Secret Dr	86	0.49	175.06
19	Doughton Ln	64	0.37	174.44
20	Foster Ct	10	0.06	174.34
21	Sebastian Ct	10	0.06	169.83
22	Bowen Ct	6	0.04	168.43
23	Newberry Ct	9	0.05	165.76
24	Creek Trail Rd	34	0.21	165.32
25	Follow The Tr	18	0.11	164.35
26	Sunlight Path Dr	37	0.23	163.86
27	Locust Run Pl	9	0.06	162.32
28	Chapman St	23	0.14	161.81
29	Saratoga Blvd	161	1.00	161.50
30	Early Rise Av	36	0.22	161.15
31	Amberlea Ln	8	0.05	156.55
32	Hatton Rd	23	0.15	156.08
33	Kemp Rd	32	0.21	153.63
34	Seabiscuit Dr	50	0.33	152.51
35	Xilingol Dr	19	0.13	151.56
36	Astoria Dr	32	0.21	150.27
37	Paddington Dr	79	0.54	147.49
38	Cadberry Ct	35	0.24	146.37
39	Hercules Dr	22	0.15	145.92
40	Eversong Ln	16	0.11	144.74
41	Preakness Blvd	26	0.18	143.69
42	Edgeview Dr	123	0.86	143.43
43	Warwagon Dr	20	0.14	140.05
44	Dunwoody Dr	71	0.51	140.03
45	Native Driver Ln	35	0.25	139.40

46	Lighted Way Ln	18	0.13	138.70
47	French Scout Ct	8	0.06	137.92
48	Salmon River Dr	59	0.43	137.82
49	Palace Ct	5	0.04	136.01
50	Mountain Top Ct	4	0.03	134.82
51	Angora Ct	12	0.09	133.96
52	Bonterra Blvd	102	0.76	133.92
53	Tirple Crown Dr	23	0.17	133.71
54	Saphire Ln	25	0.19	132.21
55	Yellow Bee Rd	26	0.20	131.05
56	Mortlock Ct	7	0.05	128.81
57	City Lights Dr	52	0.41	128.32
58	Horton Ridge Ct	8	0.06	127.47
59	Harvest Red Rd	41	0.32	126.97
60	Oswald Ct	6	0.05	126.85
61	Less Traveled Tr	38	0.30	126.63
62	Camp Dubois Ct	5	0.04	126.38
63	Great Falls Dr	34	0.27	124.79
64	Aiken Cross Ln	16	0.13	124.60
65	Candleglow Ct	3	0.02	124.37
66	Layla Manor	9	0.07	123.39
67	La Charette Ln	11	0.09	123.35
68	Carissa Ct	5	0.04	122.45
69	Sparkleberry Dr	34	0.28	121.95
70	Union Grove Ln	39	0.32	121.74
71	Guardian Angel Av	24	0.20	121.68
72	Shumard Cir	56	0.46	121.67
73	Hawfield Road	4	0.03	117.58
74	Whaley View Pl	6	0.05	116.64
75	Joyful Noise Ln	36	0.31	116.36
76	Magna Ln	219	1.90	115.06
77	Woodmore Ln	2	0.02	115.02
78	Fort Manden Dr	18	0.16	114.80
79	Laurel View Cir	23	0.20	114.36
80	Twenty Grand Dr	37	0.33	113.40
81	Good Life Ln	19	0.17	112.48
82	Pinnacle Ct	3	0.03	112.13
83	Perennial Ln	16	0.14	111.78
84	Gwinmar Rd	29	0.26	110.69
85	Chimney Wood Tr	36	0.33	110.55
86	Filly Dr	55	0.50	110.18
87	Kansas City Dr	35	0.32	109.62
88	Gold Nugget Dr	18	0.17	108.99
89	Thessallian Ln	56	0.52	108.17
90	Stevens Mill Rd	9	0.08	107.73
91	Caraway Ln	4	0.04	107.15
92	Nez Perce Ln	11	0.10	104.84

93	William Clark Tr	35	0.33	104.78
94	Bikar Ct	24	0.23	102.17
95	Wayland Ct	9	0.09	102.13
96	Benning Cir	16	0.16	101.80
97	Atherton Dr	26	0.26	101.45
98	Skillbeck Rd	21	0.21	101.12
99	Fairington Dr	15	0.15	99.85
100	Missouri River Ln	14	0.14	99.83
101	Viscount Dr	14	0.14	99.67
102	Highwood Dr	27	0.27	99.47
103	Southwind Trail Dr	35	0.35	99.45
104	Finley Ct	4	0.04	99.02
105	Forest Knoll Ct	10	0.10	98.92
106	Tiger Eye Av	15	0.15	98.85
107	Painted Horse Dr	68	0.69	98.45
108	Dryden Rd	8	0.08	98.00
109	Longwood Ct	7	0.07	97.50
110	Semmes Ln	52	0.54	97.12
111	Fairbanks Ct	4	0.04	96.43
112	Cottage Creek Rd	27	0.28	96.32
113	Northwest Tr	3	0.03	96.05
114	Austin Village Dr	6	0.06	95.68
115	Maple View Ln	21	0.22	94.86
116	Mustang Dr	43	0.45	94.59
117	Miesque Dr	7	0.07	93.40
118	Greenwich Park Dr	19	0.20	93.03
119	Hollingdale Ct	3	0.03	92.79
120	Lavender Ln	8	0.09	92.74
121	Freeport Dr	21	0.23	92.34
122	Currier Pl	29	0.32	91.78
123	Curling Creek Dr	4	0.04	90.60
124	Pine Lake Dr	40	0.44	90.53
125	Singletree Ln	55	0.61	90.11
126	Farm Pond Rd	77	0.86	90.06
127	Greenleaf St	21	0.23	90.03
128	Silent Mist Lane	8	0.09	89.77
129	Holly Park Dr	48	0.54	88.77
130	Dacian Ln	9	0.10	88.70
131	Rhode Island Ct	4	0.05	88.59
132	Top Flight Dr	96	1.09	88.46
133	Council Fire Cir	30	0.34	88.03
134	Thurston Dr	23	0.26	87.91
135	Wood Lake Dr	27	0.31	87.79
136	Josey Ln	5	0.06	87.77
137	Burning Ridge Dr	20	0.23	87.68
138	Paperbark Dr	25	0.29	86.99
139	Ridgefield Cir	43	0.50	86.54

140	Bellshill Dr	14	0.16	86.49
141	Dairy Glen Rd	13	0.15	86.46
142	Julie Av	9	0.10	86.19
143	Fine Robe Dr	39	0.45	85.97
144	Back Stretch Blvd	29	0.34	85.89
145	Calder Dr	32	0.37	85.65
146	Fantasy Ln	4	0.05	85.24
147	Cigar Ln	9	0.11	84.86
148	Envoy Ln	12	0.14	84.70
149	Blue Range Rd	31	0.37	84.54
150	Dania Rd	12	0.14	84.52
151	Canina Ln	14	0.17	84.27
152	Alcona Ct	5	0.06	84.16
153	Lazy Day Ln	9	0.11	83.94
154	Demetrius Ct	3	0.04	83.72
155	Hyde Park Dr	75	0.90	83.42
156	Hunters Trail Dr	46	0.55	83.12
157	Raelea Dr	13	0.16	82.33
158	Treeside Ln	6	0.07	82.27
159	Enderbury Dr	81	0.99	82.12
160	Tremont Dr	56	0.68	81.79
161	Marcell Ln	4	0.05	81.78
162	Savoy Ct	13	0.16	81.57
163	Thicketty Pkwy	44	0.54	81.12
164	Mill Grove Rd	43	0.53	81.01
165	Hamstead Ct	5	0.06	80.77
166	Mckean Rd	3	0.04	80.34
167	Manor Stone Way	60	0.76	79.32
168	Ponytail Dr	45	0.57	79.10
169	Jacobs Ct	13	0.17	78.73
170	Arbor Pointe Dr	22	0.28	78.32
171	Fort Clapsop Ct	6	0.08	77.59
172	Kwanzan Ct	2	0.03	77.44
173	Peacemaker Ln	8	0.10	77.04
174	Magnolia Trce	5	0.07	76.57
175	Blue Stream Ln	86	1.13	75.93
176	Cloud View Ln	14	0.19	75.52
177	Oakbriar Cir	6	0.08	75.28
178	Revelwood Dr	15	0.20	75.03
179	Forestway Ct	7	0.09	74.44
180	Rural Farm Rd	17	0.23	74.44
181	Little Rock Ct	15	0.20	74.38
182	Faith Church Road Ext	63	0.85	74.34
183	Cranston Crossing Pl	25	0.34	74.12
184	Houndscroft Rd	42	0.57	73.73
185	Van Buren Av	62	0.84	73.66
186	Eagle Ridge Ln	18	0.25	73.36

187	Parkland Dr	12	0.16	72.74
188	Moonstone Ln	11	0.15	72.23
189	Wood Side Pl	5	0.07	72.16
190	Proverbs Ct	27	0.38	71.92
191	Andrea Pl	2	0.03	71.68
192	Danbrooke Dr	11	0.15	71.68
193	Dunbarton Rd	10	0.14	71.65
194	Monarch Ln	10	0.14	71.60
195	Matilda Ln	22	0.31	71.41
196	Braxton Dr	7	0.10	71.35
197	Broad Plum Ln	16	0.22	71.28
198	Afterglow Ln	9	0.13	71.18
199	Mondo Ln	10	0.14	71.05
200	N Indian Trail Rd	51	0.72	70.70
201	Brick Landing Dr	22	0.31	70.50
202	Blessing Dr	17	0.24	70.05
203	Preserve Way	2	0.03	70.04
204	Fountainbrook Dr	50	0.71	70.04
205	Fripp Ln	11	0.16	69.73
206	Oakstone Dr	21	0.30	69.53
207	Apogee Dr	25	0.36	69.48
208	Exodus Ct	9	0.13	69.05
209	Unionville Indian Trail Rd	103	1.49	69.03
210	Odessa Pl	22	0.32	69.03
211	Cooper Ln	15	0.22	68.46
212	Tatnall Ln	4	0.06	68.40
213	Loudoun Rd	13	0.19	68.33
214	Centerview Dr	24	0.35	68.20
215	Sedgewick Rd	45	0.66	68.19
216	Hannah Pl	3	0.04	67.95
217	Elk Way	18	0.27	67.21
218	Laparc Ln	8	0.12	66.89
219	Slew O Gold Ln	12	0.18	66.16
220	Thistlewood Cir	7	0.11	65.87
221	Armell Dr	3	0.05	65.75
222	Sunflower Ln	8	0.12	65.69
223	Break Maker Ln	11	0.17	65.38
224	Makin Dr	31	0.47	65.29
225	Arbor Hills Dr	14	0.22	64.36
226	Hampshire Ct	2	0.03	63.97
227	Onotoa Dr	11	0.17	63.88
228	Omaha Dr	16	0.25	63.83
229	Barefoot Ln	4	0.06	63.80
230	Trego Ln	2	0.03	63.70
231	Wadsworth Ln	12	0.19	63.31
232	Burlap Sack Ct	2	0.03	63.08
233	Laggan Ln	43	0.68	62.88

234	Kinder Oak Dr	44	0.70	62.65
235	Green Terra Rd	12	0.19	62.61
236	Bianca Dr	15	0.24	62.54
237	Sugar Mill Rd	6	0.10	62.42
238	Corrona Ln	26	0.42	62.40
239	Capricorn Av	20	0.32	62.34
240	Potomac Rd	24	0.39	62.20
241	Tollcross Rd	12	0.20	60.72
242	Gray Farm Rd	33	0.55	59.97
243	Theodore Ln	7	0.12	59.57
244	Alysheba Dr	6	0.10	59.12
245	Falling Stone Cir	35	0.59	58.89
246	Counselors Dr	30	0.51	58.45
247	Cornflower Ln	31	0.53	58.18
248	Breeze Ln	14	0.24	57.70
249	Mossy Cup Ln	16	0.28	57.40
250	S Indian Trail Rd	63	1.10	57.19
251	Emerson Ln	17	0.30	57.18
252	Defoor Ct	4	0.07	57.15
253	Ivy Way	7	0.12	57.13
254	Little Chapel Ln	5	0.09	57.13
255	Shadow Pines Cir	10	0.18	56.69
256	Trillium Pl	6	0.11	56.61
257	Summerston Ln	12	0.21	56.20
258	Terrapin St	21	0.38	55.64
259	Cattail Cv	3	0.05	55.61
260	Ainslie Place Rd	33	0.59	55.61
261	Helleri Dr	6	0.11	55.04
262	Oak Ally	13	0.24	54.73
263	Red Carpet Ct	2	0.04	54.62
264	Talbot Ct	2	0.04	54.32
265	Fairbrae Ln	15	0.28	53.50
266	Capstone Dr	31	0.58	53.18
267	Thorndale Rd	37	0.70	52.72
268	Crosswinds Ct	4	0.08	52.40
269	Banaba Ct	4	0.08	52.29
270	Matthews Indian Trail Rd	32	0.62	51.91
271	Nutgrove Ln	10	0.19	51.35
272	Ladybank Ct	7	0.14	51.11
273	Twilight Ln	20	0.39	50.95
274	Haven Ln	2	0.04	50.89
275	Trigger Dr	20	0.39	50.78
276	Christobal Ct	7	0.14	50.72
277	Edenshire Ct	15	0.30	50.46
278	Rogers Rd	116	2.30	50.35
279	Monaco Ct	8	0.16	49.76
280	Frances Knight Pl	3	0.06	49.37

281	Fawnbrooke Dr	25	0.51	49.02
282	Waxhaw Indian Trail Rd	60	1.24	48.32
283	Sweet Gum Ct	4	0.08	48.24
284	Galena Chase Dr	19	0.39	48.20
285	Stanbury Dr	36	0.75	47.95
286	Brandon Oaks Pkwy	89	1.88	47.35
287	Lytton Ln	14	0.30	47.13
288	Emerald Ln	3	0.06	47.12
289	Blazing Star Ln	8	0.17	46.78
290	Dataw Ln	11	0.24	46.76
291	Audubon Dr	14	0.30	46.43
292	Coral Bell Ct	10	0.22	46.12
293	Eaton Av	25	0.54	46.10
294	Paddle Wheel Ln	11	0.24	46.06
295	Whispering Way	22	0.48	45.68
296	Murandy Ln	12	0.26	45.49
297	Brookhollow Ct	11	0.24	45.48
298	Dawn Light Rd	7	0.15	45.39
299	Cabra Ct	4	0.09	45.02
300	United Entrance	9	0.20	44.89
301	Forbshire Dr	14	0.31	44.80
302	Archidamius Ln	3	0.07	44.74
303	Garden Oak Dr	26	0.58	44.68
304	Canongate Dr	6	0.13	44.66
305	Bridleside Dr	16	0.36	44.44
306	Ledare Ln	6	0.14	43.90
307	Master Gunner Dr	12	0.27	43.80
308	Jeweled Crown Ct	2	0.05	43.79
309	Landen Chase Dr	12	0.27	43.64
310	Cameo Rose Ln	3	0.07	43.61
311	Fenwick Dr	32	0.73	43.54
312	Desborough Dr	4	0.09	43.13
313	Warren Red Way	6	0.14	42.70
314	Whippoorwill Ln	11	0.26	42.30
315	Secret Garden Ct	14	0.33	42.25
316	Earlston Rd	7	0.17	42.10
317	Lachona Ln	4	0.10	41.85
318	Damascus Dr	12	0.29	41.83
319	Symphony Ln	16	0.38	41.81
320	Prestwick Ln	2	0.05	41.81
321	Buckthorne Ct	2	0.05	41.60
322	Traffic Cir	6	0.14	41.43
323	Holly Villa Cir	31	0.75	41.14
324	Old Evergreen Pkwy	51	1.25	40.90
325	Ainsdale Dr	27	0.66	40.74
326	Spanish Moss Rd	15	0.37	40.55
327	Lugano Ct	2	0.05	40.42

328	Deer Spring Ct	3	0.07	40.01
329	Courtfield Dr	15	0.38	39.76
330	Coulwood Ln	5	0.13	39.58
331	Sandbox Cir	16	0.41	39.47
332	Mcmillan Dr	9	0.23	39.36
333	Westport Ln	2	0.05	39.22
334	Genesis Dr	24	0.61	39.15
335	Garden Web Rd	7	0.18	38.95
336	Streamlet Way	27	0.69	38.94
337	Windjammer Dr	8	0.21	38.89
338	Wesley Chapel Stouts Rd	59	1.54	38.39
339	Stonehill Ln	11	0.29	38.37
340	Aringill Ln	23	0.61	37.86
341	Stevens Pride Ct	5	0.13	37.76
342	Beaverbrook Dr	2	0.05	37.71
343	Wickerby Ct	3	0.08	37.08
344	Canopy Dr	24	0.65	36.72
345	Sentinel Dr	28	0.76	36.70
346	Castleford Blvd	11	0.30	36.68
347	E Park Rd	25	0.69	36.35
348	Brook Valley Run	36	0.99	36.25
349	Clover Hill Rd	37	1.03	35.98
350	Rosewater Ln	28	0.79	35.54
351	Turtle Ridge Dr	10	0.28	35.37
352	Trophy Dr	3	0.08	35.35
353	Heathrow Ct	2	0.06	35.28
354	Wellscroft Rd	7	0.20	35.08
355	Tolka Rd	2	0.06	34.61
356	Beaver Creek Ct	4	0.12	34.53
357	Swan Sea Ct	2	0.06	34.44
358	Younts Rd	42	1.22	34.39
359	Blue Heron Cir	2	0.06	34.34
360	Hemby Commons Pkwy	19	0.55	34.29
361	Arundale Ln	5	0.15	33.31
362	Minden Dr	8	0.24	33.18
363	Sipes Pl	17	0.51	33.11
364	Camrose Crsg	36	1.10	32.85
365	Caboose Ct	1	0.03	32.84
366	Snake River Ct	1	0.03	32.73
367	Delamere Dr	42	1.29	32.59
368	Hollyhedge Ln	19	0.59	32.46
369	Simmon Tree Ct	5	0.15	32.40
370	Elsmore Dr	9	0.28	32.37
371	Summer Creste Dr	5	0.15	32.36
372	Craven St	5	0.15	32.35
373	Sidney Ct	8	0.25	32.29
374	Orby Av	7	0.22	31.71

375	Shalford Ln	10	0.32	31.71
376	Heritage Pointe	3	0.10	30.45
377	Alyssum Ln	6	0.20	30.37
378	Sultana Ln	5	0.16	30.36
379	Kona Ln	4	0.13	30.11
380	Inlet Way	2	0.07	30.09
381	Sardis Church Rd	35	1.17	29.95
382	Colton Ridge Dr	22	0.73	29.93
383	Carlisle Dr	7	0.23	29.79
384	Stepping Stone Ln	5	0.17	29.25
385	Wesley Chapel Rd	101	3.47	29.07
386	Raywood Ct	3	0.10	29.02
387	Pine Cone Ln	7	0.24	28.69
388	Crismark Dr	47	1.66	28.34
389	Laney Pond Rd	9	0.32	28.08
390	Sunshower Ct	2	0.07	27.96
391	Toquima Tr	2	0.07	27.60
392	Jacquelyne Dr	14	0.51	27.50
393	Northland Ct	1	0.04	27.34
394	Altara Ln	4	0.15	27.16
395	Russet Glen Ln	4	0.15	26.90
396	Overwoods Ln	2	0.07	26.83
397	Dumont Ct	1	0.04	26.83
398	Bridgeway Dr	4	0.15	26.20
399	Coral Ridge Ln	3	0.12	25.94
400	Onyx Ln	3	0.12	25.82
401	Allen Way	14	0.54	25.73
402	Old Monroe Rd	96	3.79	25.34
403	Davona Dale Ln	3	0.12	25.27
404	Woodend Dr	6	0.24	24.80
405	Doverstone Ct	2	0.08	24.73
406	Waters Reach Ln	10	0.41	24.57
407	Harrogate Ln	4	0.16	24.47
408	Pioneer Ln	36	1.47	24.46
409	Chestnut Ln	52	2.14	24.33
410	Ivy Pond Ln	4	0.17	23.95
411	Sagebrush Bend	7	0.30	23.62
412	Quinn Rd	4	0.17	23.52
413	Sudbury Ln	5	0.21	23.42
414	Lavenham Pl	2	0.09	23.00
415	Formosa Dr	2	0.09	22.60
416	Farmingham Ln	9	0.40	22.55
417	Stoney Ford Ln	4	0.18	22.47
418	Lenox Ln	2	0.09	22.37
419	Carolina Manor Ct	2	0.09	22.30
420	Buckhead Ln	4	0.18	21.83
421	Manchester Ln	2	0.09	21.40

422	Marlebone Ct	1	0.05	21.22
423	Delacourt Ln	5	0.24	21.08
424	Westbury Dr	8	0.38	20.93
425	Kipling Ct	1	0.05	20.84
426	Blythe Dr	3	0.15	20.61
427	Keystone Ct	1	0.05	20.60
428	Avaclaire Way	3	0.15	20.55
429	W Park Rd	4	0.19	20.53
430	Martina Dr	2	0.10	20.22
431	Woodkirk Ln	4	0.20	20.08
432	Ashe Croft Dr	6	0.30	19.70
433	Chestnut Square Ln	9	0.46	19.55
434	Thompson Ct	5	0.27	18.81
435	Wineberry Way	2	0.11	18.76
436	Faith Church Rd	7	0.38	18.47
437	W Unionville Indian Trail Rd	81	4.39	18.44
438	Chestnut Pkwy	5	0.29	17.53
439	E Independence Blvd	59	3.42	17.23
440	Laurel Creek Ln	4	0.23	17.20
441	Bryson Rd	6	0.35	17.10
442	Old Charlotte Hwy	25	1.54	16.28
443	Harpers Run Ln	4	0.25	16.02
444	Brookforest Ln	2	0.14	14.75
445	Linstead Dr	5	0.34	14.68
446	W Hwy 74	83	5.68	14.61
447	Corporate Blvd	7	0.49	14.43
448	Sandpiper Ln	1	0.07	14.42
449	Dunard Ct	2	0.14	14.05
450	Whispering Wind Ln	2	0.15	13.56
451	Dewdrop Ct	1	0.07	13.54
452	Potter Rd	20	1.51	13.27
453	Stinson Hartis Rd	22	1.67	13.16
454	Novivian Ln	2	0.18	11.37
455	Briarmore Dr	4	0.36	10.97
456	Thistledown Ct	1	0.09	10.68
457	Indian Trail Fairview Rd	35	3.32	10.54
458	Ashburne Pl	1	0.10	10.28
459	Keowee Cir	5	0.49	10.21
460	Autumn Trace Ln	1	0.10	9.80
461	Long Nook Ln	3	0.31	9.67
462	Tree Ridge Rd	2	0.21	9.61
463	N Rocky River Rd	8	0.84	9.52
464	Alexis Dr	2	0.24	8.49
465	Dresden Ct	1	0.13	7.49
466	Flaggstone Ln	2	0.29	7.01
467	Edna Love Ln	2	0.29	6.96
468	White Cliffs Dr	1	0.15	6.84

469	Gribble Rd	9	1.33	6.77
470	Scott Long Rd	4	0.64	6.20
471	Postage Way	2	0.34	5.95
472	Glenn Valley Ln	3	0.51	5.84
473	Education St	2	0.35	5.67
474	Meadow Glen Rd	1	0.18	5.46
475	Chandler Forest Ct	1	0.19	5.19
476	Middleton Av	2	0.40	4.94
477	Alley	25	5.13	4.87
478	Sardis Dr	2	0.43	4.66
479	Plyler Rd	4	0.88	4.52
480	Shady Bluff	1	0.23	4.37
481	Navajo Tr	3	0.70	4.29
482	Marron Way	1	0.24	4.22
483	Spring Fancy Ln	1	0.26	3.79
484	Coventry Dr	1	0.28	3.64
485	Clover Bend Dr	1	0.34	2.96
486	Williams Rescue Rd	1	0.38	2.66
487	Technology Dr	1	0.65	1.53
488	Helmsville Rd	1	0.67	1.48
489	Secrest Short Cut Rd	3	2.36	1.27

TOWN OF INDIAN TRAIL, NC FACILITY ASSESSMENT



PIM

PRECISION
INFRASTRUCTURE
MANAGEMENT

INTRODUCTION

Overview, Process, & Summary



PIM | PRECISION
INFRASTRUCTURE
MANAGEMENT

Introduction

The Town of Indian Trail, NC, contracted with Precision Infrastructure Management (PIM CS LLC) to complete an Americans with Disabilities Act Self-Assessment of the Town's parks and facilities. PIM CS LLC completed the Self-Assessment **in August 2024**. This report is a comprehensive review of the facilities assessment.

The Study found a total of **71 unique ADA barriers across 2 facilities**. A breakdown of the barriers by category is covered in the ADA Barrier Detail section of this report.

Self-Assessment

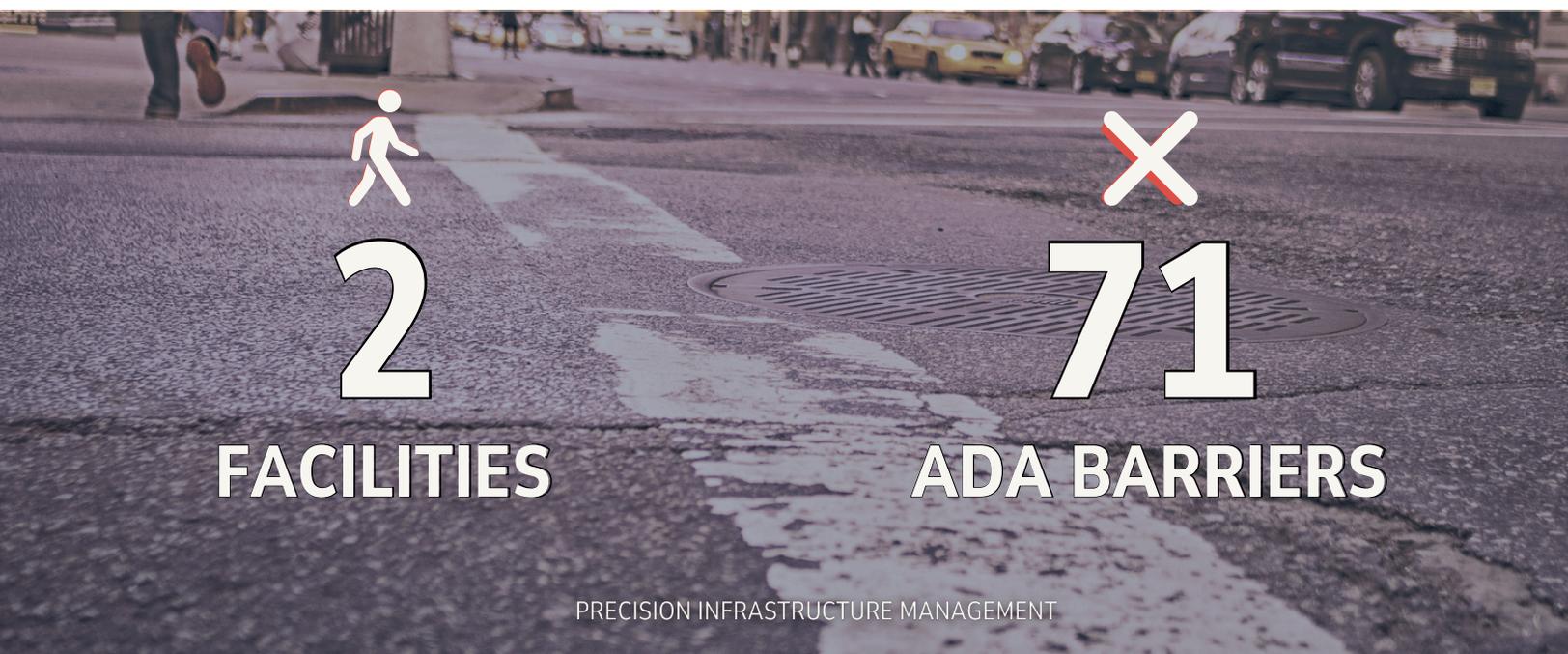
Overview

Under Title II of the ADA (28 CFR Sec. 35.105), public entities are required to perform a Self-Assessment of their facilities on public property and within public rights-of-way in order to identify any obstacles or barriers to accessibility that need to be addressed. This includes park facilities owned and operated by Title II entities. The general categories of items evaluated for the Town's facilities include:

- Accessible Routes
- on and off-street Parking
- Absence of curb ramps
- Curb ramps assessments
- Doors and Gates
- Signs and Alarms
- Play Areas
- Assembly Areas
- Hazards & Protruding Objects
- Kitchens, Kitchenettes, and Wet bars
- Counters, Surfaces, & Fountains
- Knee Clearance
- Toilets, Bathing Rooms, and Saunas

Process & Findings

Precision Infrastructure Management employed ADA field assessment technicians to physically assess each facility. Technicians used a number of tools to identify ADA barriers within the facilities. All data is stored within BlueDAG, an industry-leading ADA assessment software. Data includes photographs, GPS coordinates, and other associated metadata. The methodology used to conduct the condition study followed the 2010 ADA Standards for Accessible Design. After surveying, PIM estimates prices and assigns priorities to each barrier. Certain barriers require additional levels of assessment to provide accurate costing information. These barriers have been labeled as requiring "Capital Investment."



2
FACILITIES

71
ADA BARRIERS

General Barrier Removal Information

The ADA does not have a specific prioritization schema for remediating accessibility barriers. However, the Department of Justice's Title III Technical Assistance Manual says the following with respect to the priority for removing barriers where readily achievable:

III-4.4500 Priorities for barrier removal. The Department's regulation recommends priorities for removing barriers in existing facilities. Because the resources available for barrier removal may not be adequate to remove all existing barriers at any given time, the regulation suggests a way to determine which barriers should be mitigated or eliminated first. The purpose of these priorities is to facilitate long-term business planning and to maximize the degree of effective access that will result from any given level of expenditure. these priorities are not mandatory. Public accommodations are free to exercise discretion in determining the most effective "mix" of barrier removal measures to undertake in their facilities.

Prioritization Process

This regulation suggests that a public accommodation's **first priority should be to enable individual with disabilities to physically enter its facility.** This priority on "getting through the door" recognizes that providing physical access to a facility from public sidewalks, public transportation, or parking is generally preferable to any alternative arrangements in terms of both business efficiency and the dignity of individuals with disabilities.

The next priority is for measures **that provide access to those areas of a place of public accommodation where goods and services are made available to the public.**

The third priority should be **providing access to restrooms, if restrooms are provided for use by customers or clients.**

The fourth priority is to remove **any remaining barriers to using the public accommodation's facility by, for example, lowering telephones.**

The priority order for addressing barriers on a path of travel to a primary function area can provide some guidance. Those issues are to be addressed in this order:

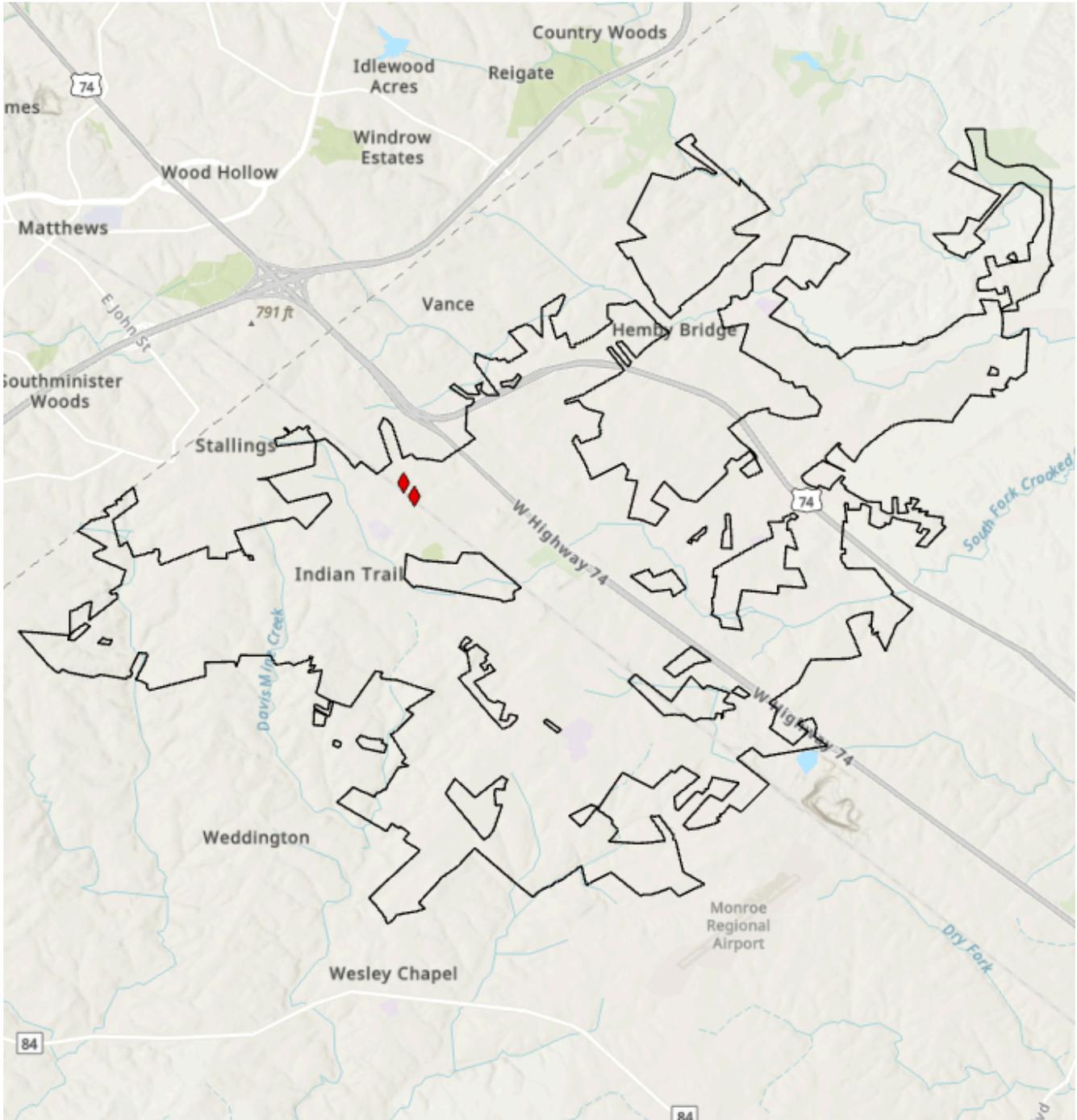
1. An accessible entrance
2. An accessible route to the primary function area
3. Restroom access
4. An accessible telephone, an accessible drinking fountain, access to other elements such as parking and storage

Also, if there is someone with a disability who has had difficulty accessing the goods, services, or programs of a facility, priority could be given to removing the barriers that are causing that barrier.

List and Map of Facilities Assessed

Public Works
130 Blythe Dr
Indian Trail, NC 28079

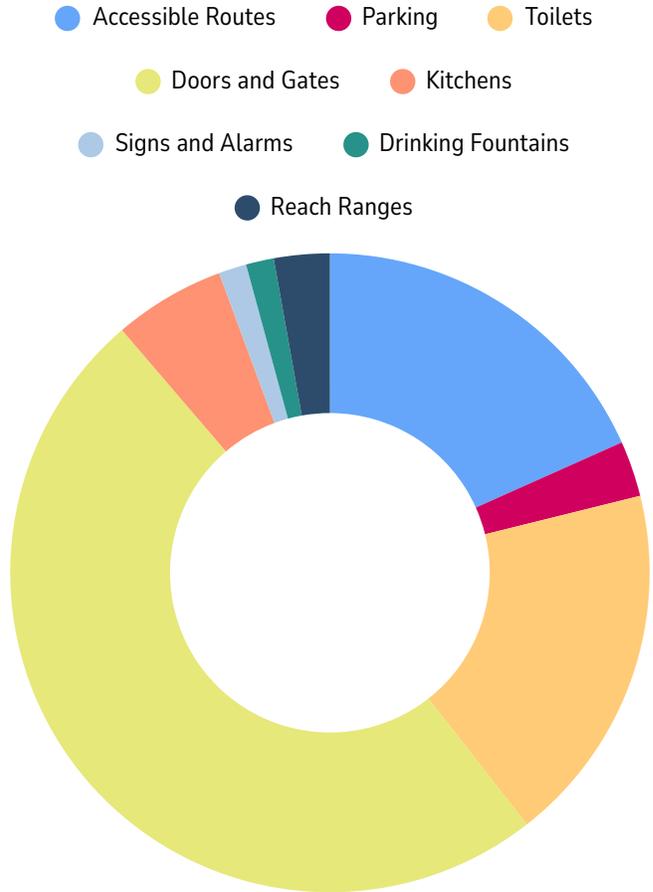
Town Hall
315 Matthews-Indian Trail Rd,
Indian Trail, NC 28079



Caption: Map of facilities assessed.

Total Findings: Facility Groups

Accessible Routes	13
Parking	2
Toilets, Bathing Rooms, And Saunas	13
Doors and Gates	35
Kitchens, Kitchenettes, and Wet Bars	4
Reach Ranges	2
Signs and Alarms	1
Counters/Surfaces/Fountains	1



Toilet and Bathing Rooms barrier comprise **18.3%** of the total findings.

Doors and Gate barriers comprise **49.3%** of the total findings.

Accessible Route barriers comprise **18.3%** of the total findings.

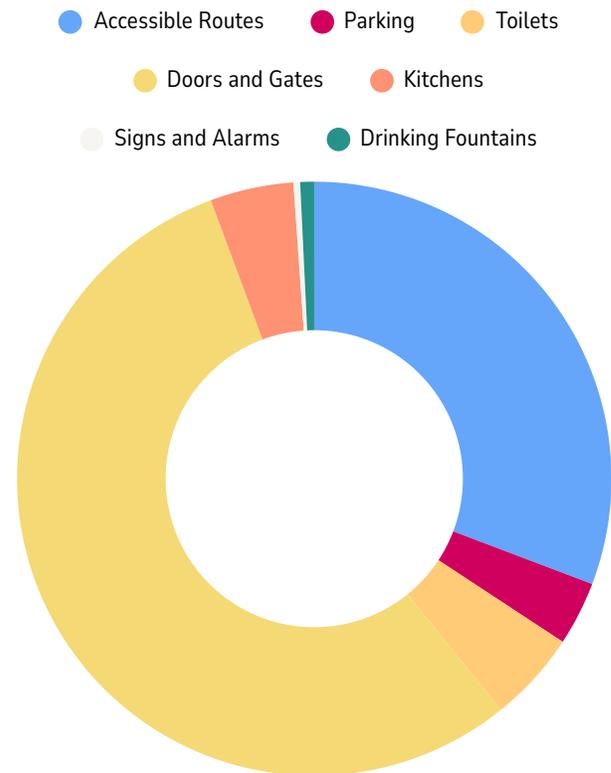
The remaining barriers comprise **14.1%** of the total findings.

Budget and Capital Investments

The numbers below are the combined high estimates of the cost to repair these barriers in each group. However, this number does not reflect the total cost to repair all barriers. There are a number of barriers that fall under the term “Capital Investment.” Capital Investment is used in place of an estimated cost when a barrier is too complex to estimate the remediation cost due to the size and scope of the barrier noted. Material cost is included in the estimate, but labor is not. Typically, labor is expected to be 100% of the cost of material, though this percentage varies dramatically per project.

Cost by Group Budget High

Accessible Routes	\$20,340
Parking	\$2,300
Toilets, Bathing Rooms, And Saunas	\$3,270
Doors and Gates	\$36,450
Kitchens, Kitchenettes & Wet Bars	\$3,000
Signs and Alarms	\$240
Counters/Surfaces/Fountains	\$500



Overviews

Assessment Results

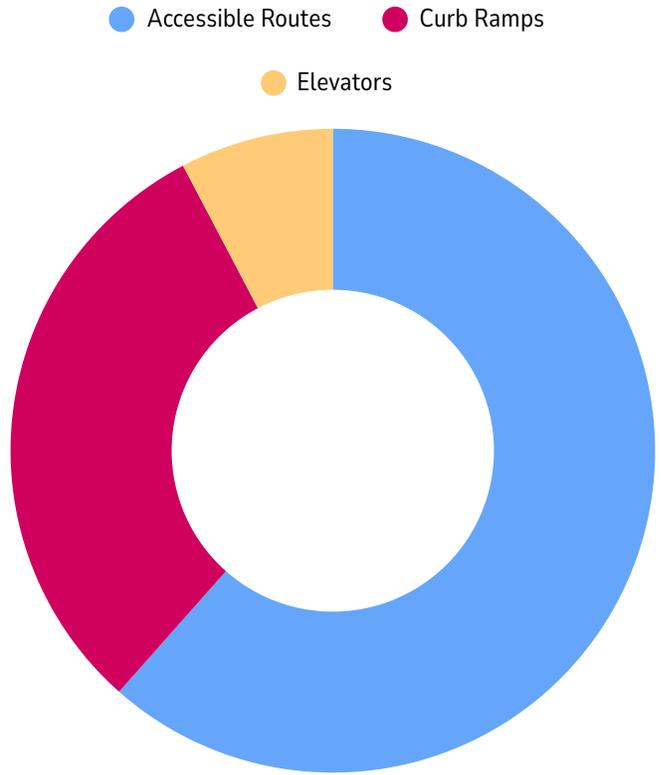


Assessment Results

There were 13 total findings related to Accessible Route barriers.

Accessible Route Type Breakdown

Accessible Routes	8
Curb Ramps	4
Elevator & Lifts	1



Type	Barriers	Low End Cost	High End Cost
Accessible Routes	8	\$30.00	\$2,100.00
Curb Ramps	4	\$6,300.00	\$18,000.00
Elevator & Lifts	1	-	\$240.00
Totals	13	\$6,330.00	\$20,340.00

Examples of Accessible Route Barriers



ACCESSIBLE ROUTE

The accessible path of travel between the building entrance and the accessible parking has cross slopes greater than 2%.

Surface cross slopes shall not exceed 1 unit vertical in 48 units horizontal (2-percent slope).

Citation: 2010 ADAS 403.3

Recommendation: Re-pour to compliant walkway. capital investment



ACCESSIBLE ROUTE

The carpet, rug, or mat is not secured in place.

If carpet or carpet tile is used on a ground or floor surface, then it shall be securely attached; have a firm cushion, pad or backing or no cushion or pad; and have a level loop, textured loop, level-cut pile or level-cut/uncut pile texture. The maximum pile height shall be 1/2 inch.

Citation: 2010 ADAS 302.2

Recommendation: Install nonslip backing or replace



CURB RAMP

The landing of the ramp has a slope greater than 2 percent.

Landings shall have a slope of less than 1:48 (2 percent) in any direction.

Citation: 2010 ADAS 406.4 + 406.4 Exception

Recommendation: Rebuild curb ramp with compliant landing

Water Ponding in Accessible Routes

Water ponding at the bottom of curb ramps can create significant ADA barriers in the pedestrian access route, especially for those using wheelchairs. This accumulation of water can lead to slippery surfaces, increasing the risk of falls and injuries. For wheelchair users, water ponding presents a barrier that can make it difficult or even impossible to navigate the ramp. The wheels of a wheelchair can get stuck in the water, causing delays or forcing users to find alternative routes in the traffic lane, creating hazardous pedestrian experiences. Additionally, standing water can cause structural damage over time, leading to uneven surfaces that further impede accessibility. Such conditions are ADA barriers and pose safety hazards, reducing the overall usability of pedestrian pathways for everyone.

Ponding at the bottom of a curb ramp is a separate remediation issue from retrofitting a curb ramp, as installing a new ramp does not necessarily eliminate ponding issues.

Estimated Repair Costs

Remediation for ponding can cost between \$2,500 and \$15,000 depending on the severity of the ponding issue and whether alternative maintenance activity options are available.



Caption: Example of ponding in the accessible route.

Sidewalk Conditions

Assessment Specification

Vertical height displacements are a frequent barrier found along accessible routes. These barriers, which are present wherever an elevation change of 1/4 inch or greater is present can be mitigated using cost effective alternative maintenance activities.

Estimated Repair Costs

VHD repairs are based on an average cost of \$5 per square foot for remediation using an alternative maintenance activity such as horizontal saw cutting. Demolition & Replacement cost will be approximately \$15 per square foot of panel replaced, if used instead of the alternative maintenance activity.

Sidewalk Conditions Results

Noting individual vertical height displacement locations was not within the scope of this assessment. However, based on historical data, VHDs are the No.1 barrier class on accessible routes



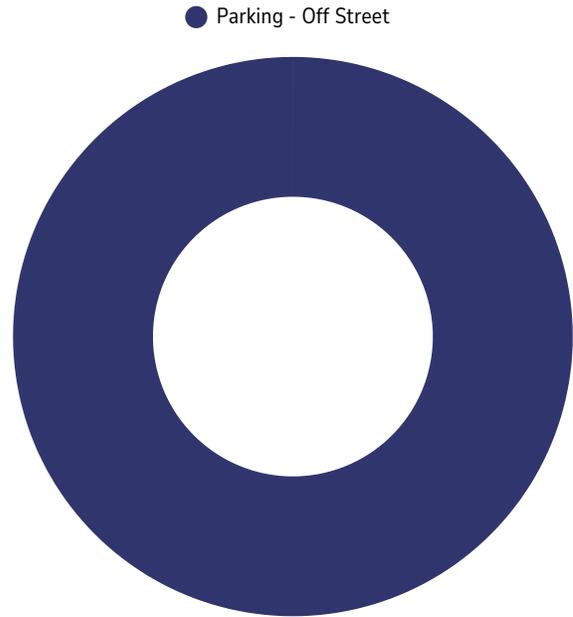
Caption: Example of Vertical Height Displacement.

Parking

There were 2 total findings related to Parking barriers.

Parking Breakdown

Parking - On Street	0
Parking - Off Street	2



Type	Barriers	Low End Cost	High End Cost
On Street	0	-	-
Off Street	2	\$575.00	\$2,300.00
Totals	2	\$575.00	\$2,300.00

Example



PARKING LOT

The running slope (long dimension) of the accessible parking stall exceeds 2%.

The running slope in an accessible parking stall and the access aisle must not exceed 2%.

Citation: 2010 ADAS 502.4

Recommendation: Level, repave and repaint

Toilet and Bathing Rooms Breakdown

There were 13 total findings related to Toilet & Bathing barriers.

Type	Barriers	Low End Cost	High End Cost
Toilet & Bathing Rooms	13	-	\$3,270.00

Examples



TOILET

The clear floor space around the toilet is obstructed by the (cleaning supplies).

No fixtures are allowed in the clear floor space required for the toilet.

Citations: 2010 ADAS 604.3.2

Recommendation: Remove cleaning supplies



ACCESSORIES

The paper towel dispenser's operation mechanism is too high off the floor.

Dispensers must have all operable parts a maximum of 48 inches above the floor.

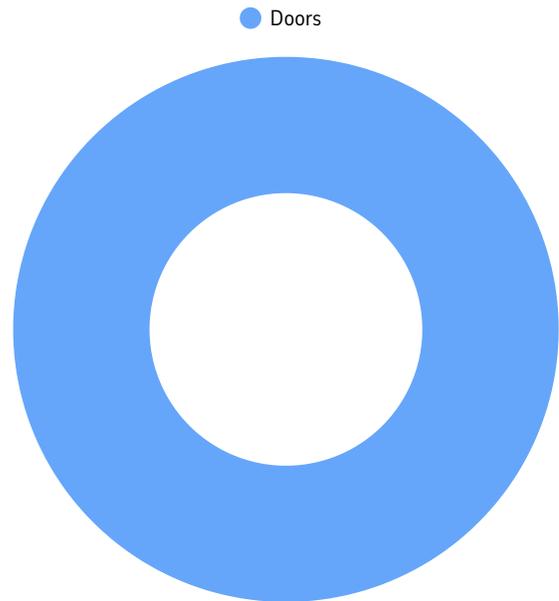
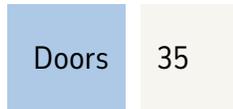
Citations: 2010 ADAS 308.2.1

Recommendation: Replace/relocate to compliant height

Doors and Gates

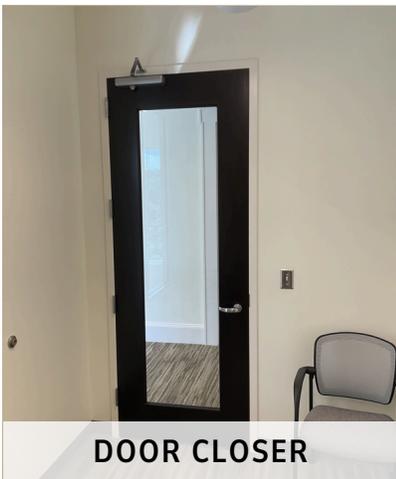
There were 35 total findings related to Door and Gate barriers.

Doors and Gates Breakdown



Type	Barriers	Low End Cost	High End Cost
Doors	35	\$500.00	\$36,450.00

Examples



DOOR CLOSER

The door is equipped with a door closer and returns to a closed position too quickly.

Door closers and gate closers shall be adjusted so that from an open position of 90 degrees, the time required to move the door to a position of 12 degrees from the latch is 5 seconds minimum.

Citation: ADAS 2010 404.2.8.1

Recommendation: Adjust or replace door closer.

Kitchens, Kitchenettes, and Wet Bars

There were 4 total findings related to kitchen and bar barriers.

Type	Barriers	Low End Cost	High End Cost
Kitchens, Kitchenettes, And Wet Bars	4	\$80.00	\$3,000.00

Examples



SINKS

Knee and toe clearance has not been provided at the sink.

The knee clearance shall be 11 inches deep minimum at 9 inches above the finish floor or ground, and 8 inches deep minimum at 27 inches above the finish floor or ground.

Citation: ADAS 2010 606.2

Recommendation: Provide sink with compliant knee and toe clearance. capital investment



COUNTER TOP

The kitchen counter top is too high.

The kitchen work surface shall be 34 inches maximum above the finish floor or ground.

Citation: ADAS 2010 804.3.2

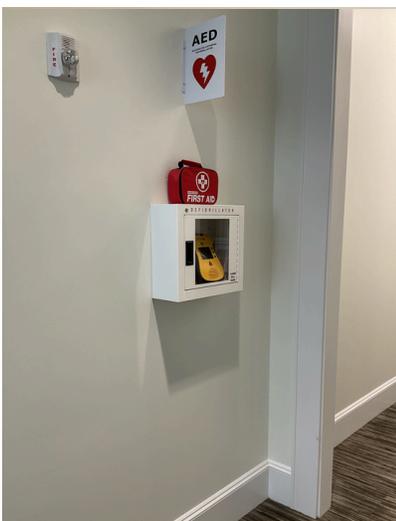
Recommendation: Provide compliant height working surface/counter. capital investment

Reach Ranges

There were 2 Total Findings related to Reach Range barriers.

Type	Barriers	Low End Cost	High End Cost
Reach Ranges	2	-	-

Examples



REACH RANGE

The (AED cabinet) is positioned too high for either a side or front approach.

Where a clear floor or ground space allows a parallel approach to an element and the side reach is unobstructed, the high side reach shall be 48 inches maximum and the low side reach shall be 15 inches minimum above the finish floor or ground.

Citation: ADAS 2010 308.1

Recommendation: Relocate to compliant height



REACH RANGE

The (AED cabinet) is positioned too high for either a side or front approach.

Where a clear floor or ground space allows a parallel approach to an element and the side reach is unobstructed, the high side reach shall be 48 inches maximum and the low side reach shall be 15 inches minimum above the finish floor or ground.

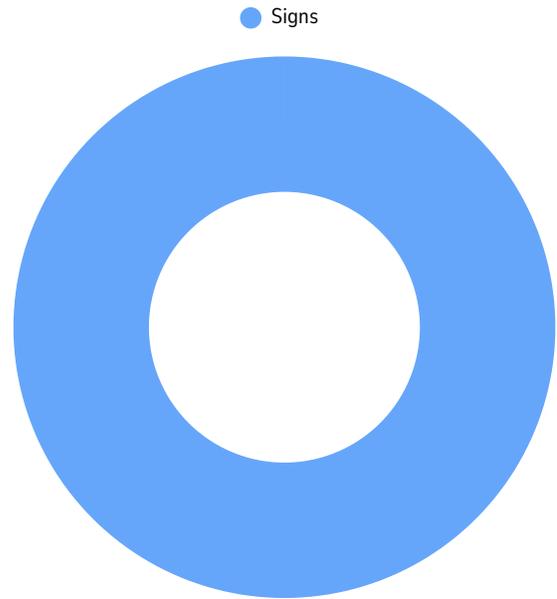
Citation: ADAS 2010 308.1

Recommendation: Relocate to compliant height

Signs

There were 1 total findings related to Sign/Fire Alarm/Operable Part barriers.

Accessible Route Type Breakdown



Type	Barriers	Low End Cost	High End Cost
Signs	1	-	\$240.00

Examples



The wall sign is mounted too low.

Tactile Characters on signs shall be located 48 inches minimum above the finish floor or ground surface, measured from the baseline of the lowest tactile character and 60 inches maximum above the finish floor or ground surface, measured from the baseline of the highest tactile character.

Citation: ADAS 2010 703.4.1

Recommendation: Replace or relocate to compliant height

Counters, Surfaces, and Fountains

There was 1 total finding related to Counter, Surface, and Fountain barriers.

Sales and Service Counters/Tables	0
Drinking Fountains	1
Dining, Bar, and Work Surfaces	0



Type	Barriers	Low End Cost	High End Cost
Fountains	1	-	\$500.00

Examples



DRINKING FOUNTAIN

The drinking fountain projects from the wall into the pedestrian way with its leading edge above 27 inches from the floor.

Objects may protrude no more than 4 inches into circulation route when located between 27 and 80 inches above the floor. All drinking fountains shall be positioned so as not to encroach into pedestrian ways.

Citation: 2010 ADAS 307.2

Recommendation: Reconfigure fountain height or provide cane detection

PER FACILITY COST

Evaluation Title	Address	City	Budget Low	Budget High
Public Works	130 Blythe Dr	Indian Trail	\$ 3,370.00	\$ 33,370.00
Town Hall	315 Matthews-Indian Trail Rd	Indian Trail	\$ 7,115.00	\$ 51,730.00

TOWN OF INDIAN TRAIL, NC PARKS ASSESSMENT



PIM

PRECISION
INFRASTRUCTURE
MANAGEMENT



INTRODUCTION

Overview, Process, & Summary



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INFRASTRUCTURE
MANAGEMENT

Introduction

The Town of Indian Trail, NC, contracted with Precision Infrastructure Management to complete an Americans with Disabilities Act Self-Assessment of the City's parks and facilities. PIM CS LLC completed the Self-Assessment in **August 2024**. This report is a comprehensive review of the park's facilities assessment.

The Study found a total of **101 unique ADA barriers across 3 facilities**. A breakdown of the barriers by category is covered in the ADA Barrier Details section of this report.

Self-Assessment

Overview

Under Title II of the ADA (28 CFR Sec. 35.105), public entities are required to perform a Self-Assessment of their facilities on public property and within public rights-of-way in order to identify any obstacles or barriers to accessibility that need to be addressed. This includes park facilities owned and operated by Title II entities. The general categories of items evaluated for the Town of Indian Trail include:

- Accessible Routes
- on and off-street Parking
- Absence of curb ramps
- Curb ramps assessments
- Doors and Gates
- Signs and Alarms
- Play Areas
- Assembly Areas
- Hazards & Protruding Objects
- Kitchens, Kitchenettes, and Wet bars
- Counters, Surfaces, & Fountains
- Knee Clearance
- Toilets, Bathing Rooms, and Saunas

Process & Findings

Precision Infrastructure Management employed ADA field assessment technicians to physically traverse each park in the Town of Indian Trail. Technicians used a number of tools to identify ADA barriers within the facilities. All data is stored within BlueDAG, an industry-leading ADA assessment software. Data includes photographs, GPS coordinates, and other associated metadata. The methodology used to conduct the condition study followed the 2010 ADA Standards for Accessible Design. After surveying, PIM estimates prices and assigns priorities to each barrier. Certain barriers require additional levels of assessment to provide accurate costing information. These barriers have been labeled as requiring "Capital Investment."



3

PARKS



101

ADA BARRIERS

General Barrier Removal Information

The ADA does not have a specific prioritization schema for remediating accessibility barriers. However, the Department of Justice's Title III Technical Assistance Manual says the following with respect to the priority for removing barriers where readily achievable:

III-4.4500 Priorities for barrier removal. The Department's regulation recommends priorities for removing barriers in existing facilities. Because the resources available for barrier removal may not be adequate to remove all existing barriers at any given time, the regulation suggests a way to determine which barriers should be mitigated or eliminated first. The purpose of these priorities is to facilitate long-term business planning and to maximize the degree of effective access that will result from any given level of expenditure. These priorities are not mandatory. Public accommodations are free to exercise discretion in determining the most effective "mix" of barrier removal measures to undertake in their facilities.

Prioritization Process

This regulation suggests that a public accommodation's **first priority should be to enable individuals with disabilities to physically enter its facility.** This priority on "getting through the door" recognizes that providing physical access to a facility from public sidewalks, public transportation, or parking is generally preferable to any alternative arrangements in terms of both business efficiency and the dignity of individuals with disabilities.

The next priority is for measures **that provide access to those areas of a place of public accommodation where goods and services are made available to the public.**

The third priority should be **providing access to restrooms, if restrooms are provided for use by customers or clients.**

The fourth priority is to remove **any remaining barriers to using the public accommodation's facility by, for example, lowering telephones.**

The priority order for addressing barriers on a path of travel to a primary function area can provide some guidance. Those issues are to be addressed in this order:

1. An accessible entrance
2. An accessible route to the primary function area
3. Restroom access
4. An accessible telephone, an accessible drinking fountain, and access to other elements such as parking and storage

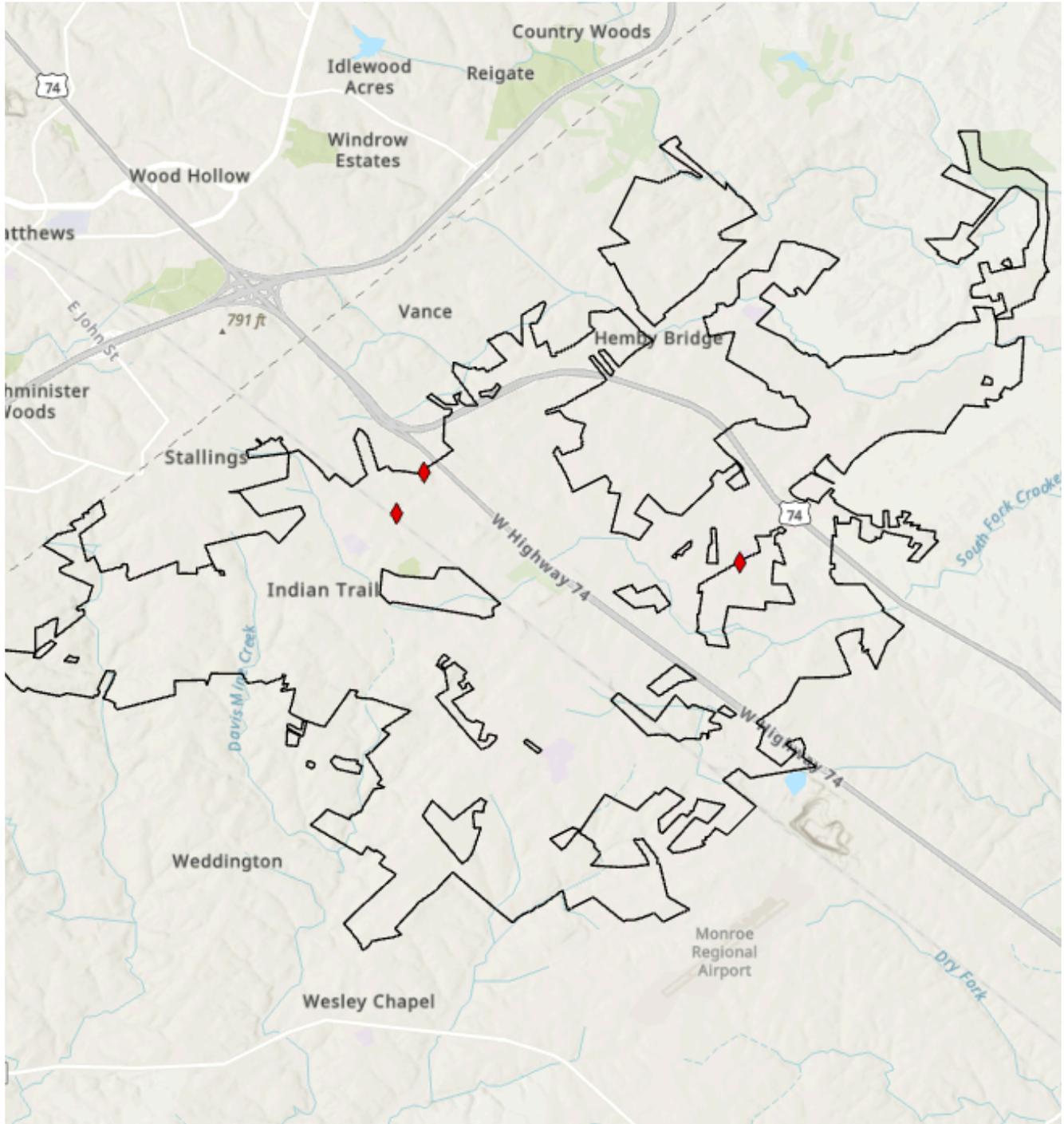
Also, if there is someone with a disability who has had difficulty accessing the goods, services, or programs of a facility, priority could be given to removing the barriers that are causing that barrier.

List and Map of Parks Assessed

Crooked Creek Park
5900 Oakwood Ln,
Indian Trail, NC 28079

Crossing Paths Park
120 Blythe Dr,
Indian Trail, NC 28079

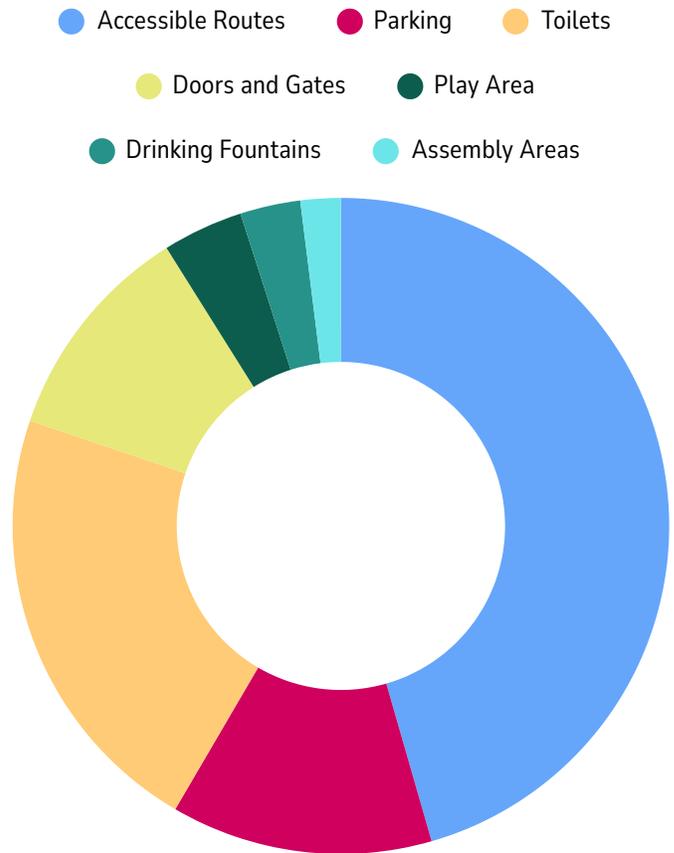
Chestnut Square Park
320 Chestnut Pkwy,
Indian Trail, NC 28079



Caption: Map of park facilities assessed.

Total Findings: Facility Groups

Accessible Routes	46
Parking	13
Toilets, Bathing Rooms, And Saunas	22
Doors and Gates	11
Play Area	4
Counters/Surfaces/Fountains	3
Assembly Areas	2



Toilet and Bathing Room barriers comprise **21.8%** of the total findings.

Parking barriers comprise **12.9%** of the total findings.

Accessible Route barriers comprise **45.5%** of the total findings.

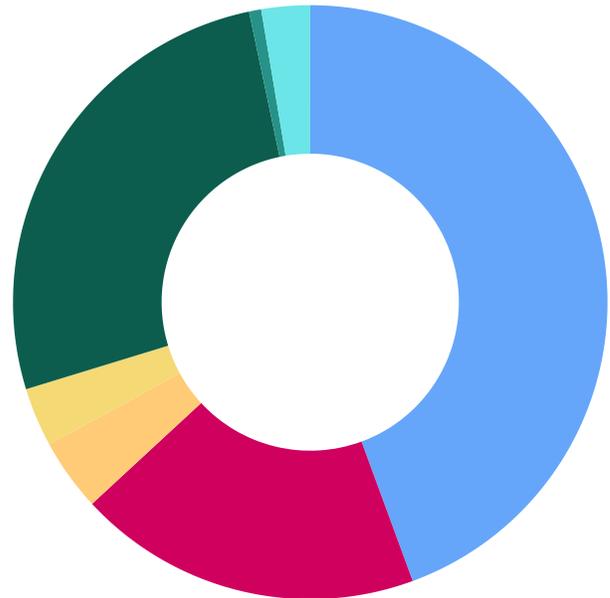
The remaining barriers comprise **19.8%** of the total findings.

Budget and Capital Investments

The numbers below are the combined high estimates of the cost to repair these barriers in each group. However, this number does not reflect the total cost to repair all barriers. There are a number of barriers that fall under the term “Capital Investment.” Capital Investment is used in place of an estimated cost when a barrier is too complex to estimate the remediation cost due to the size and scope of the barrier noted. Material cost is included in the estimate, but labor is not. Typically, labor is expected to be 100% of the cost of material, though this percentage varies dramatically per project.

Cost by Group Budget High

Accessible Routes	\$100,800
Parking	\$42,500
Toilets, Bathing Rooms, And Saunas	\$8,925
Doors and Gates	\$7,300
Play Areas	\$60,000
Counters/Surfaces/Fountains	\$1,500
Assembly Areas	\$6,000



Overviews

Assessment Results

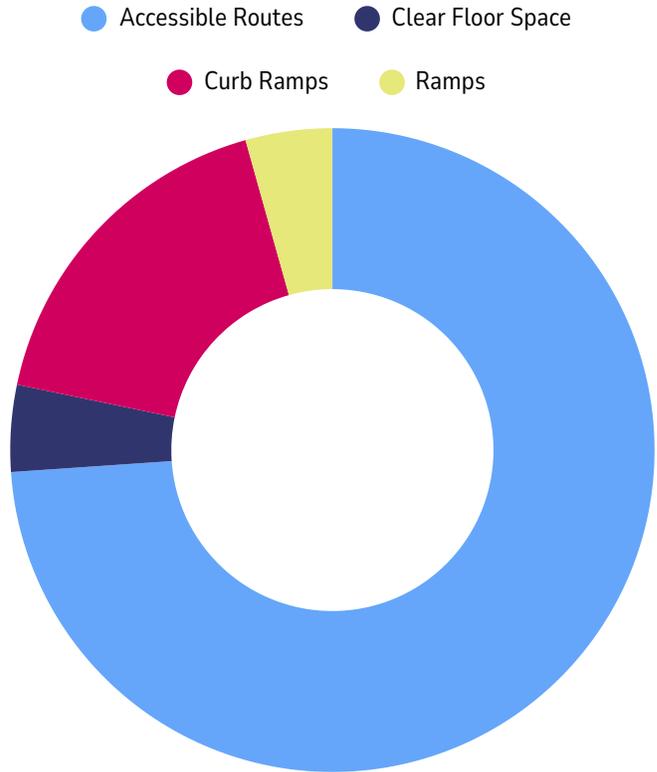


Assessment Results

There were 46 total findings related to Accessible Route barriers.

Accessible Route Type Breakdown

Accessible Routes	34
Clear Floor Space	2
Curb Ramps	8
Ramps	2



Type	Barriers	Low End Cost	High End Cost
Accessible Routes	34	\$10,700.00	\$63,600.00
Clear Floor Space	2	\$2,000.00	\$4,000.00
Curb Ramps	8	\$9,000.00	\$33,200.00
Ramps	2	-	-
Totals	46	\$21,700.00	\$100,800.00

Examples of Accessible Route Barriers



ACCESSIBLE ROUTE

The accessible route of travel on the walk or sidewalk has cross slopes greater than 2%.

Cross slopes shall not exceed one unit vertical in 48 units horizontal (2-percent slope).

Citation: 2010 ADAS 403.3

Recommendation: Level and replace affected panels (>100 ft). Capital investment



ACCESSIBLE ROUTE

There is no accessible route to the accessible element.

At least one accessible route shall connect accessible buildings, accessible facilities, accessible elements, and accessible spaces that are on the same site.

Citation: 2010 ADAS 206.2.2

Recommendation: Install compliant transition ramp



CURB RAMP

The change in level where the gutter meets the curb ramp is greater than 1/4 inch.

1/4 inch is the maximum vertical rise. Changes in level between 1/4 inch and 1/2 inch must be beveled at 1:2 or less. Changes in level greater than 1/2 inch must be by way of a ramp.

Citation: 2010 ADAS 303.3

Recommendation: Cut or remove VHD

Water Ponding in Accessible Routes

Water ponding at the bottom of curb ramps can create significant ADA barriers in the pedestrian access route, especially for those using wheelchairs. This accumulation of water can lead to slippery surfaces, increasing the risk of falls and injuries. For wheelchair users, water ponding presents a barrier that can make it difficult or even impossible to navigate the ramp. The wheels of a wheelchair can get stuck in the water, causing delays or forcing users to find alternative routes in the traffic lane, creating hazardous pedestrian experiences. Additionally, standing water can cause structural damage over time, leading to uneven surfaces that further impede accessibility. Such conditions are ADA barriers and pose safety hazards, reducing the overall usability of pedestrian pathways for everyone.

Ponding at the bottom of a curb ramp is a separate remediation issue from retrofitting a curb ramp, as installing a new ramp does not necessarily eliminate ponding issues.

Estimated Repair Costs

Remediation for ponding can cost between \$2,500 and \$15,000 depending on the severity of the ponding issue and whether alternative maintenance activity options are available.



Caption: Example of ponding in the accessible route.

Sidewalk Conditions

Assessment Specification

Vertical height displacements are a frequent barrier found along accessible routes. These barriers, which are present wherever an elevation change of 1/4 inch or greater is present can be mitigated using cost effective alternative maintenance activities.

Sidewalk Conditions Results

Noting individual vertical height displacement locations was not within the scope of this assessment. However, based on historical data, VHDs are the No.1 barrier class on accessible routes

Estimated Repair Costs

VHD repairs are based on an average cost of \$5 per square foot for remediation using an alternative maintenance activity such as horizontal saw cutting.

Demolition & Replacement cost will be approximately \$15 per square foot of panel replaced, if used instead of the alternative maintenance activity.



Caption: Example of VHDs in the accessible route.

Parking

There were 13 total findings related to Parking barriers.

Parking Breakdown

Parking - On Street	0
Parking - Off Street	13



Type	Barriers	Low End Cost	High End Cost
On Street	0	-	-
Off Street	13	\$9,475.00	\$42,500.00
Totals	13	\$9,475.00	\$42,500.00

Example



ACCESS AISLE

The running slope (long dimension) of the accessible parking stall exceeds 2%.

The running slope in an accessible parking stall and the access aisle must not exceed 2%.

Citation: 2010 ADAS 502.4

Recommendation: Level, repave and repaint 9 spaces

Toilet & Bathing Rooms Breakdown

There were 22 total findings related to Toilet & Bathing barriers.

Barriers	Low End Cost	High End Cost
22	\$325.00	\$8,925.00

Examples



The toilet paper dispenser is mounted too close to the top of the grab bar, minimizing the gripping surface.

Adjacent elements shall be positioned to provide unobstructed use of grab bars. The space between the grab bar and projecting objects above shall be 12 inches minimum.

Citations: 2010 ADAS 609.3

Recommendation: Relocate upper dispensers clear of grab bar



The dispenser's operable part is not within reach range above the floor.

Dispensers must have all operable parts a maximum of 48 inches above the floor.

Citations: 2010 ADAS 308.2.1

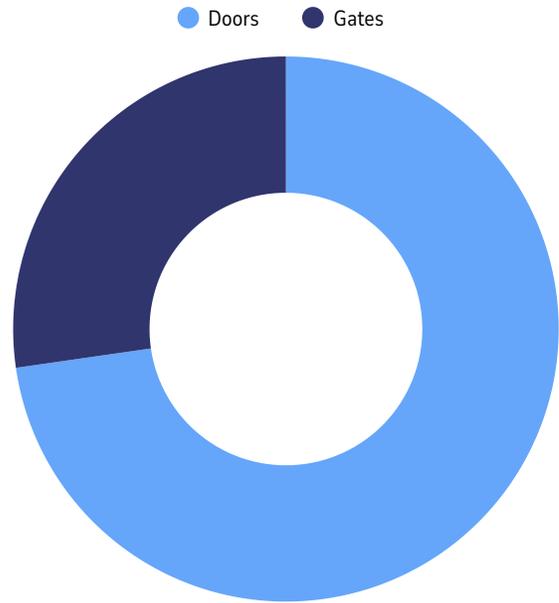
Recommendation: Replace/relocate to compliant height

Doors and Gates

There were 11 total findings related to Door and Gate barriers.

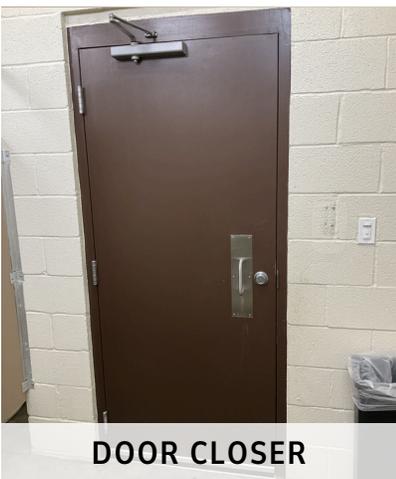
Doors and Gates Breakdown

Doors	8
Gates	3



Type	Barriers	Low End Cost	High End Cost
Doors	8	\$1,000.00	\$6,300.00
Gates	3	\$250.00	\$1,000.00
Totals	11	\$1,250.00	\$7,300.00

Examples



The door is equipped with spring hinges and returns to a closed position too quickly.

Doors and gates with spring hinges shall be adjusted so that from an open position of 70 degrees, the door shall move to the closed position in 1.5 seconds minimum.

Citation: ADAS 2010 404.2.8.2

Recommendation: Adjust or replace closer/ hinges

Play Areas

There were 4 total findings related to Play Area barriers.

Type	Barriers	Low End Cost	High End Cost
Play Areas	4	-	\$60,000.00

Examples



TRANSFER PLATFORM

An accessible route is not provided within the play area or it does not connect accessible ground level components, elevated components, or the entry and exit points of the play components.

Citation: ADAS 2010 206.2.17.1

Recommendation: Create accessible route to and between components



SURFACE

Compliance with ASTM F1951 for accessibility for ground surfaces on accessible routes, clear floor or ground spaces, and turning spaces has not been determined.

Ground surfaces shall comply with ASTM F 1951. Ground surfaces shall be inspected and maintained regularly and frequently to ensure continued compliance with ASTM F 1951.

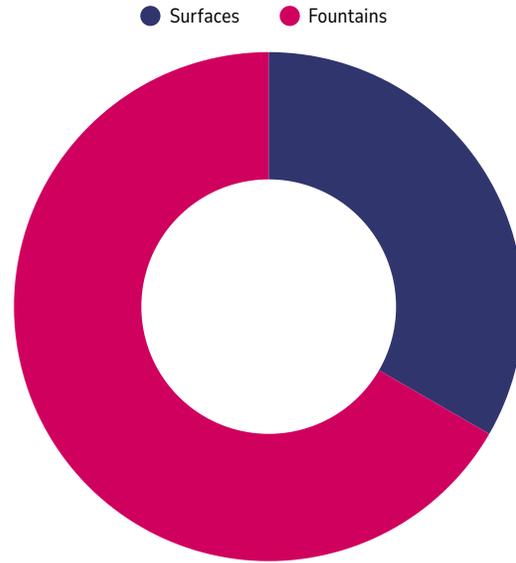
Citation: ADAS 2010 1008.2.6.1

Recommendation: Maintain wood chips or install compliant sensor surface material. Capital investment

Counters, Surfaces, and Fountains

There were 3 total findings related to Counter, Surface, and Fountain barriers.

Dining, Bar and Work Surface	1
Drinking Fountains	2



Type	Barriers	Low End Cost	High End Cost
Work Surface	1	-	-
Fountains	2	-	\$1,500.00
Totals	3	-	\$1,500.00

Examples



DRINKING FOUNTAINS

The drinking fountain projects from the wall into the pedestrian way with its leading edge above 27 inches from the floor.

Objects may protrude no more than 4 inches into circulation route when located between 27 and 80 inches above the floor. All drinking fountains shall be positioned so as not to encroach into pedestrian ways.

Citation: 2010 ADAS 307.2

Recommendation: Move to a compliant location or provide cane detection

Assembly Areas

There were 2 total findings related to Assembly Area barriers.

Type	Barriers	Low End Cost	High End Cost
Assembly Areas	2	\$4,000.00	\$6,000.00

Examples



SEATING

Based on the number of seats provided in this area (~22), there should be a minimum of (1) wheelchair seating space at each bleacher.

Wheelchair spaces shall be provided in assembly areas with fixed seating.

Citation: 2010 ADAS 221.2 + 221.2.1.1

Recommendation - Provide ADA compliant bleachers



SEATING

An accessible wheelchair space is not provided in the team/player seating area.

At least one wheelchair space shall be provided in team or player seating areas serving areas of sports activity.

Citation: 2010 ADAS 221.2.1.4

Recommendation - Provide accessible wheelchair spaces in each dugout

PER FACILITY COST

Evaluation Title	Address	Budget Low	Budget High
Chestnut Square Park	320 Chestnut Pkwy	\$ 9,750.00	\$ 48,300.00
Crooked Creek Park	5900 Oakwood Ln	\$ 27,100.00	\$ 125,225.00
Crossing Paths Park	120 Blythe Dr	\$ 2,900.00	\$ 72,500.00

TOWN OF INDIAN TRAIL, NC COMMUNITY ENGAGEMENT SURVEY



PIM | PRECISION
INFRASTRUCTURE
MANAGEMENT

Introduction

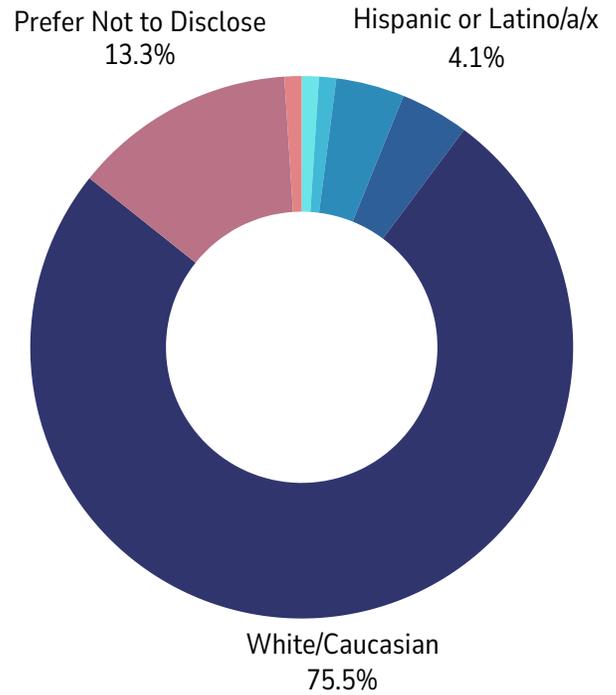
In 2024, the Town of Indian Trail initiated an update to its Americans with Disabilities Act (ADA) Transition Plan to improve accessibility across Town facilities, programs, and services. A key part of this effort was the ADA Transition Plan Community Engagement Survey, which aimed to gather feedback from residents on barriers faced by individuals with disabilities. The survey covered public rights-of-way, Town facilities, parks, programs, and digital accessibility to ensure a comprehensive assessment of accessibility needs.

To further involve the community, the Town of Indian Trail held public engagement sessions, allowing residents to voice concerns and provide suggestions for accessibility improvements. The insights gained from the survey and these discussions will help identify barriers, guide self-evaluation efforts, and shape a detailed transition plan. This plan will outline specific actions and timelines to address accessibility challenges, reinforcing the Town of Indian Trail's commitment to fostering an inclusive and accessible environment for all residents.

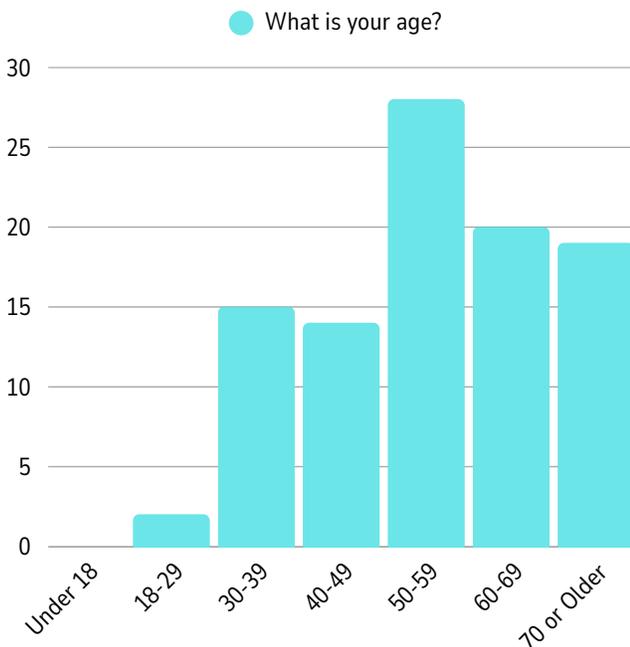


Demographic Information

The majority of respondents (75.51%) identify as White/Caucasian, with the next largest group being those who preferred not to disclose their race/ethnicity (13.27%). Other racial/ethnic groups each make up a small percentage of the total responses, with Black or African American and Hispanic or Latino/a/x each representing 4.08% of the participants.



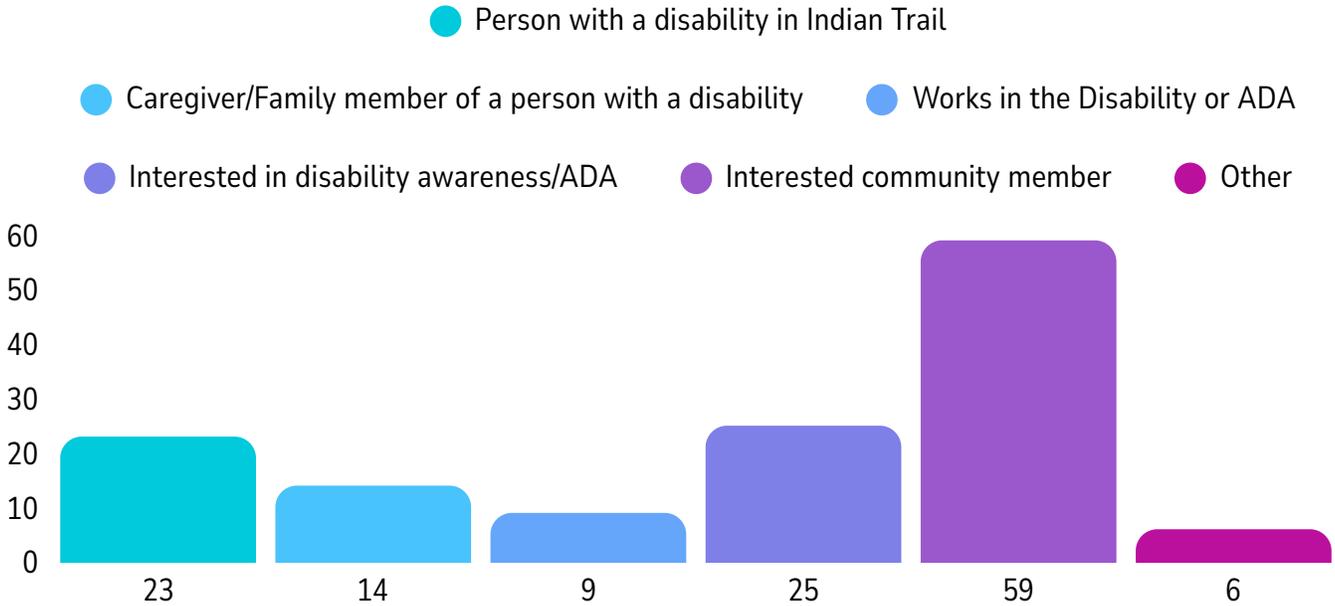
The survey results show that the majority of respondents identified as White/Caucasian (74), with smaller representations from Black or African American (4), Hispanic or Latino/a/x (4), and other ethnic groups, while 13 participants preferred not to disclose their ethnicity.



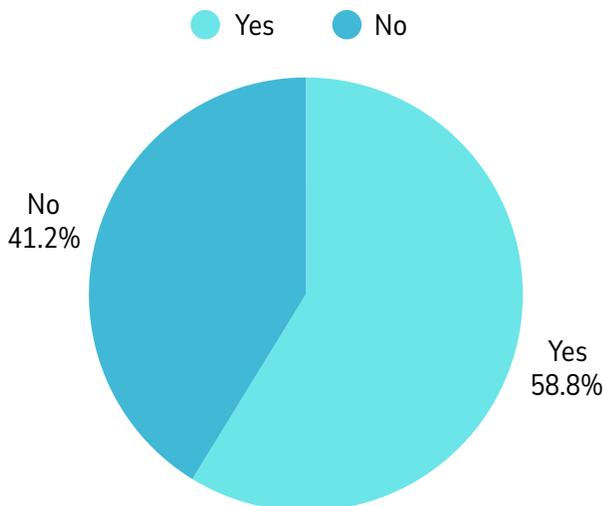
This chart presents the age distribution of 98 respondents, with the majority (28.57%) falling in the 50–59 age group. The lowest representation comes from those under 18 (0%) and the 18–29 category (2.04%), indicating an older demographic among participants.

Interest and Participation

The majority of respondents (60.82%) identified themselves as interested community members, demonstrating strong public engagement with the Town of Indian Trail's ADA Self-Evaluation and Transition Plan. Additionally, 6.19% of respondents selected "Other," with responses including individuals who work in the Town of Indian Trail, family members of someone with a disability, Town planners, and Town employees, highlighting a diverse range of stakeholders invested in accessibility and ADA-related initiatives.



Do you participate in a program or service offered by the Town of Indian Trail?

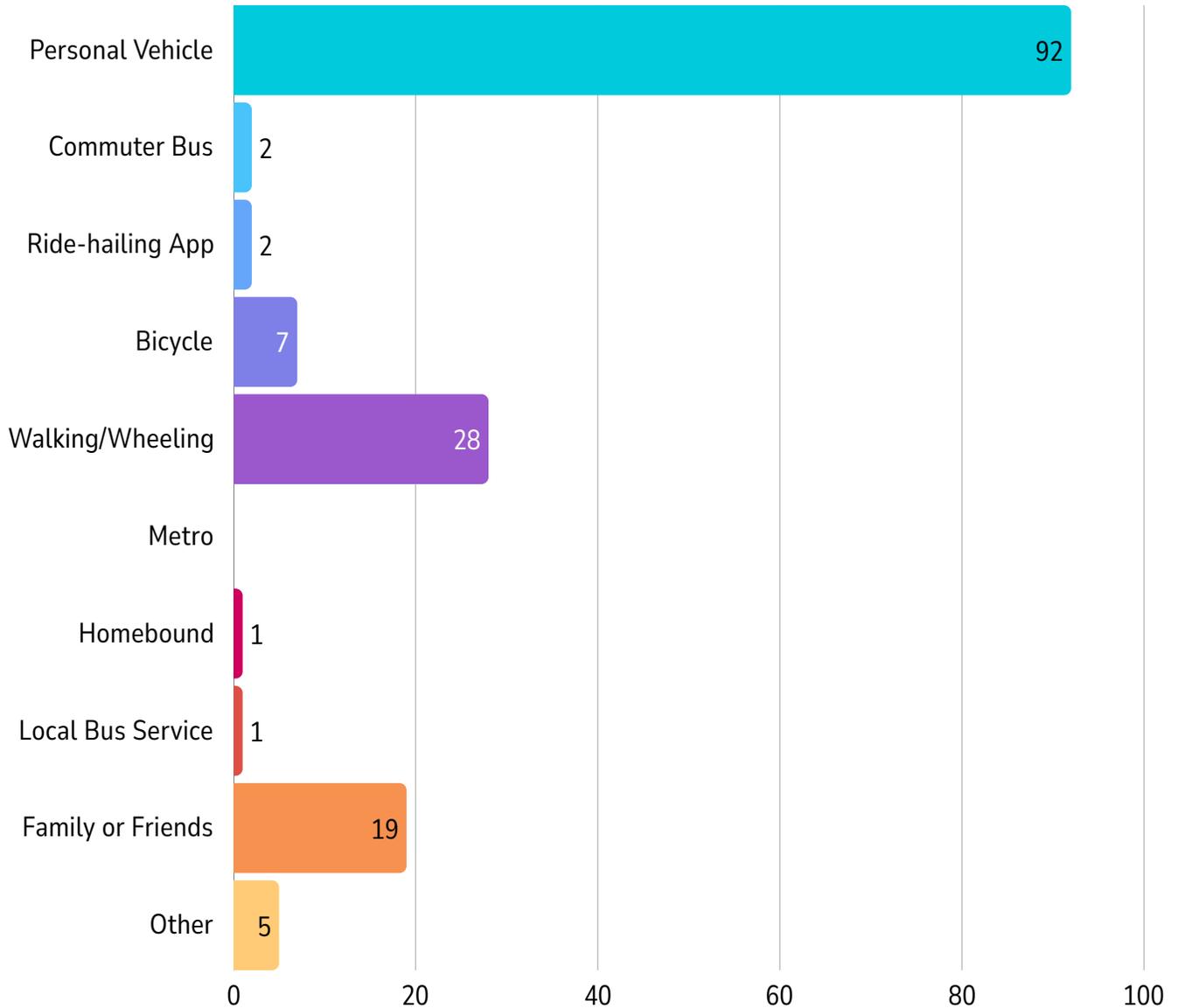


Reported Programs, Services, and Activities

- Libraries & Parks: Regular use for leisure, programs, and events.
- Recreation & Events: Participation in park activities, Town events, and community programs.
- Community Involvement: Volunteering, wellness initiatives, and local advocacy.

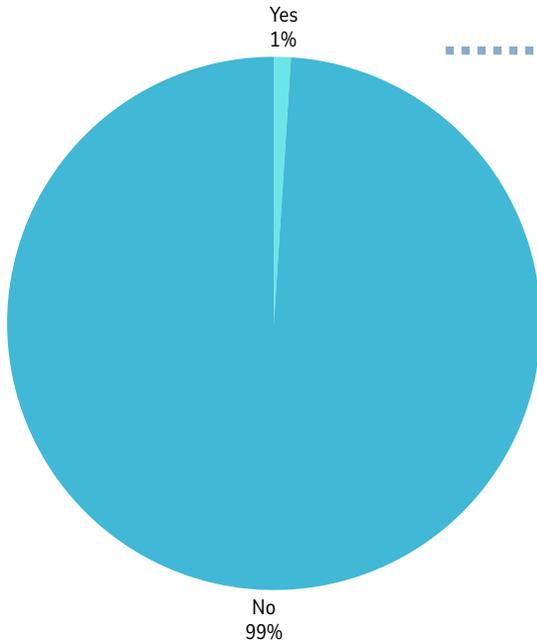
Transportation

The majority of respondents (93.88%) rely on personal vehicles as their primary mode of transportation, while 28.57% also engage in walking or wheeling. A smaller portion (19.39%) depends on family or friends for transportation, and only a few use bicycles (7.14%), commuter buses (2.04%), or ride-hailing services like Uber or Lyft (2.04%). Public transit options, such as metro and local bus services, with 1.02% of respondents being homebound or without transportation.



Reasonable Modification

Have you ever requested a reasonable accommodation for a disability from the Town of Indian Trail?



Pedestrian & Mobility Improvements:

Installation of a flashing crosswalk sign to warn traffic.

Are there any Town policies, practices, procedures, or programs that you have encountered that are inaccessible or where accessibility could be improved? Please list them and share details.

Transportation Issues

- No bus service after 2 p.m., limiting access to medical appointments and errands
- Difficulties attending parades and events due to distant parking
- Need for a local shuttle service for seniors and residents with disabilities

Sidewalk & Crosswalk Problems

- Broken, missing, or disconnected sidewalks force pedestrians into the road
- Few crosswalks and pedestrian connections
- Sidewalk hazards near schools

Public Facilities & Parks Accessibility

- Parks lack wheelchair-accessible paths and benches
- Playgrounds have uneven sidewalks and slopes
- Town Hall, libraries, and meeting spaces need better access

Parking & Infrastructure

- Limited and poorly placed handicap parking
- Storm drains in handicap spaces create hazards

Community & Communication Barriers

- Permit applications lack accessibility for visually or hearing-impaired residents
- Sign language translation at Town meetings

Town Policies

Are there any Town policies, practices, procedures, or programs that you have encountered that are inaccessible or where accessibility could be improved? Please list them and share details.

PUBLIC TRANSPORTATION

- Bus service to and from doctor appointments

SIDEWALKS & CROSSWALKS

- More sidewalks and connections improving accessibility
- More park access and parking locations noted as accessible
- Ramps and door buzzers make building entry easier

CONCERNS & MISSING FEATURES

- Crosswalk lights lack audio cues
- Sidewalks abruptly end in some areas
- Drivers do not yield at crosswalks; better signage is needed

OTHER MENTIONS

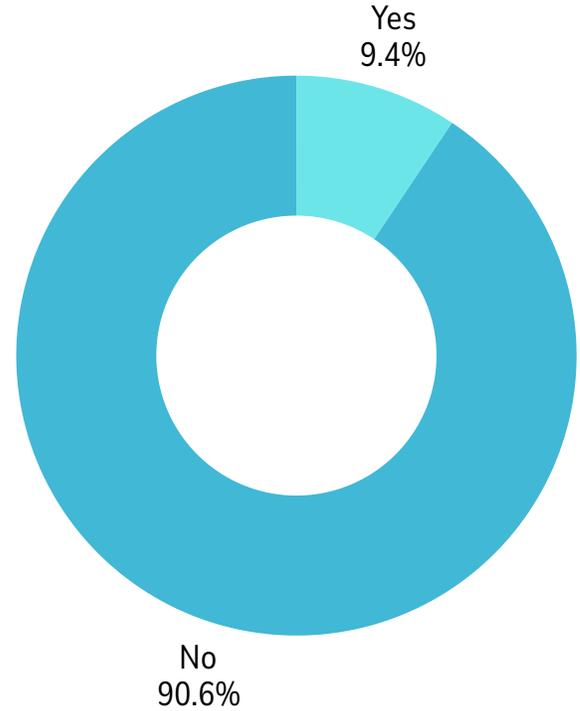
- Access between the Sheriff's Dept and the Town Hall
- Playgrounds and "Touch a Truck" event recognized for accessibility

Town of Indian Trail Staff

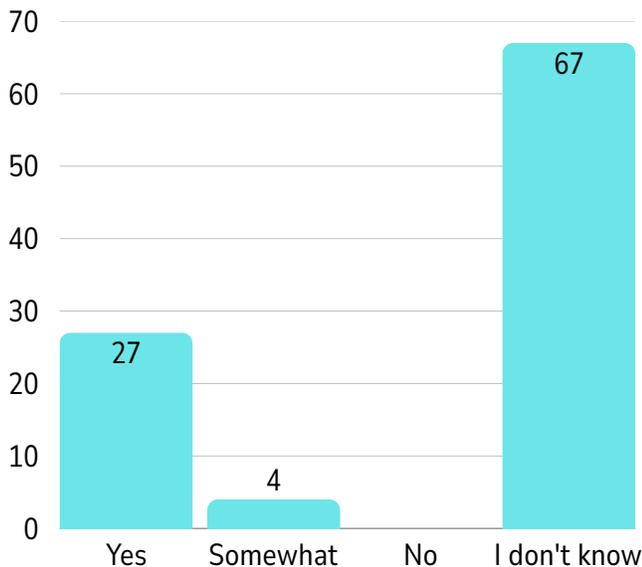
Do you know the person in the Town of Indian Trail you should contact if you need assistance, have a concern or complaint, or need a reasonable modification to access a facility, service, or event?

Common Answers:

- Town Leadership: Mike McLaurin (Town Manager), Mayor
- Public Works & Infrastructure: Adam McLamb (Public Works Director), Todd Huntsinger (Engineering Director)
- Parks & Events: Hayden Kramer (Parks & Recreation Director)
- Human Resources: Carey Warner (HR Director)
- General Contact: Call Town Hall



Are Town staff generally helpful, supportive, and positive in solving accessibility issues for persons with disabilities?

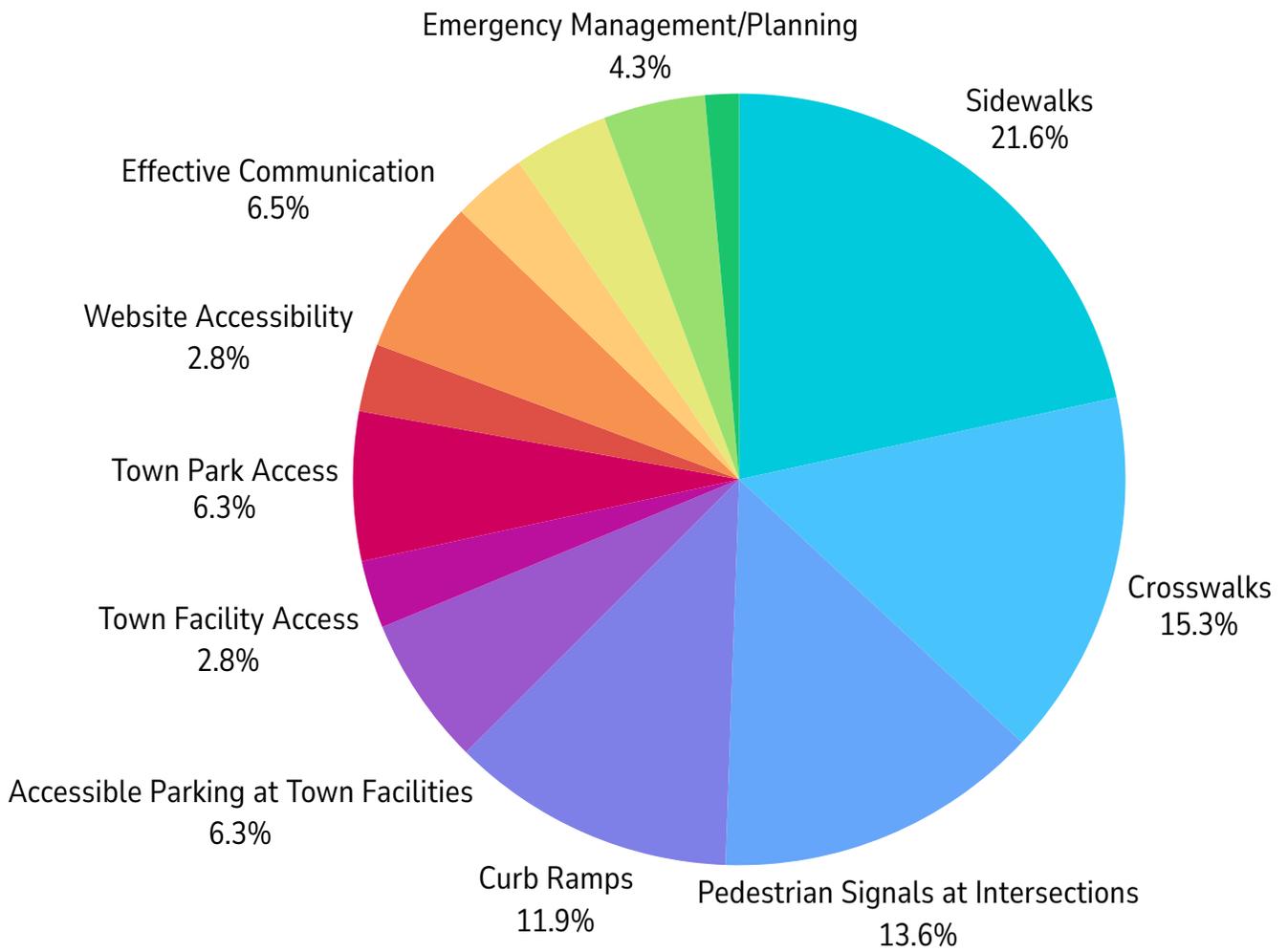


27 (27.55%) stated that Town staff are helpful in addressing accessibility issues, while 4 (4.08%) found them somewhat helpful. No respondents (0%) reported negative experiences, and 67 (68.37%) selected "Do not know."

Highest Priorities to Improve Accessibility

What do you think should be the highest priority for the Town of Indian Trail Government to improve accessibility for persons with disabilities?

Sidewalk improvements (78.35%), crosswalk enhancements (55.67%), and pedestrian signals at intersections (49.48%) were the top concerns. Respondents also highlighted the need for more curb ramps (43.30%), better accessible parking at Town facilities (22.68%), and improved park access (22.68%).



General Concerns

Do you have any additional feedback regarding accessibility in any Town of Indian Trail parks or public facilities?

Recreational Facilities & Amenities

- Requests for a pump track like those in Gastonia (Poston Park) or Waxhaw
- Interest in public and free Pickleball courts (indoor and outdoor)

Sidewalk & Greenway Connectivity

- More sidewalks and crosswalks are needed for safe pedestrian travel
- Greenways should connect neighborhoods to Matthews and Monroe
- Many areas lack safe walking or biking routes to stores and facilities

Park & Public Space Accessibility

- Wheelchair-accessible parks should be a priority
- Crooked Creek playground is frequently misused, limiting accessibility
- Dog park conditions need improvement (mud and poor usability)
- Park trails need better water drainage to prevent flooding and muddy walkways

Facility & Parking Accessibility

- Heavy doors and cramped maneuvering spaces create accessibility challenges
- More handicapped parking is needed, and better enforcement of misuse
- Some regular parking spots are more accessible than designated handicapped spaces
- Gravel surfaces in parking lots, like at the library, create slipping hazards

General Accessibility Concerns

- ADA-compliant ramps should be reviewed for proper slope and handrails
- Elevator access at Town Hall should be evaluated for safety and ease of use
- Electric carts could help residents access large facilities and activities

General Concerns

Are you aware of any sidewalks in the Town of Indian Trail that you find particularly unusable/dangerous? If so, please provide the general address, cross streets, or other location information, and explain your concern.

Lack of Sidewalk Connectivity

- Missing sidewalks throughout town, making pedestrian travel unsafe
- Gaps between existing sidewalks force people to walk in the streets
- Major roads without proper sidewalks: Potter Road, Rogers Road, Chestnut Lane, and Brandon Oaks Parkway

Dangerous Intersections & Roads

- Old Charlotte Highway & Indian Trail Road
- Unionville-Indian Trail Road (multiple sections)
- Old Monroe & Waxhaw Indian Trail Road (lacking crosswalks and pedestrian signals)
- I-74 – No safe way to cross without a car

Sidewalk Conditions & Safety Hazards

- Persistent wet/slippery sidewalk near Mustang Drive (Sun Valley area)
- Uneven, cracked, or pothole-filled sidewalks on Potter Road and Brandon Oaks Parkway
- Sidewalks too close to fast-moving traffic (Unionville-Indian Trail Rd, Sardis Church Rd)

Other Notable Issues

- Poor maintenance – Overgrown shrubs blocking visibility at intersections
- Crosswalks are missing or poorly marked in key areas
- Sidewalks in industrial areas are missing, forcing workers to walk in the streets

TOWN OF INDIAN TRAIL, NC GRIEVANCE PROCEDURE





This Grievance Procedure is established to meet the requirements of the Americans with Disabilities Act of 1990 ("ADA"). It may be used by anyone who wishes to file a complaint alleging discrimination on the basis of disability in the provision of services, activities, programs, or benefits by the **Town of Indian Trail**. The **Town of Indian Trail** Personnel Policy governs employment-related complaints of disability discrimination.

The complaint should be in writing and contain information about the alleged discrimination such as name, address, phone number of complainant and location, date, and description of the problem. Alternative means of filing complaints, such as personal interviews or a tape recording of the complaint, will be made available for persons with disabilities upon request.

The complaint should be submitted by the grievant and/or his/her designee as soon as possible but no later than 60 calendar days after the alleged violation to:

Carey Warner
ADA Coordinator
PO Box 2430
Indian Trail, NC 28079

Within 15 calendar days after receipt of the complaint, *Carey Warner* or *her* designee will meet with the complainant to discuss the complaint and the possible resolutions. Within 15 calendar days of the meeting, *Carey Warner* or *her* designee will respond in writing, and where appropriate, in a format accessible to the complainant, such as large print, Braille, or audio tape. The response will explain the position of the *Town of Indian Trail* and offer options for substantive resolution of the complaint.

If the response by *Carey Warner* or *her* designee does not satisfactorily resolve the issue, the complainant and/or her designee may appeal the decision within 15 calendar days after receipt of the response to the **Mayor** or *his* designee.

Within 15 calendar days after receipt of the appeal, the **Mayor** or *his* designee will meet with the complainant to discuss the complaint and possible resolutions. Within 15 calendar days after the meeting, the **Mayor** or *his* designee will respond in writing, and, where appropriate, in a format accessible to the complainant, with a final resolution of the complaint.

All written complaints received by Cary Warner or *her* designee, appeals to the **Mayor** or *his* designee, and responses from these two offices will be retained by the **Town of Indian Trail** for at least three years.



GRIEVANCE FORM

Grievant Name: _____

Home Address: _____

City, State, and Zip Code: _____

Home Telephone: _____ Business/Cell Phone: _____

Email Address: _____

.....
This section to be completed only if the aggrieved person is not the individual completing this form.

Reporting Individual: _____

Person(s) Affected by the Situation (if other than reporting individual): _____

Address: _____

City, State, and Zip Code: _____

Preferred Telephone or Email: _____

.....
Program/Activity/Facility Alleged to Be Inaccessible: _____

When did the situation occur? (date and time): _____



Describe the situation or way in which the program is not accessible, providing the name(s) where possible of the individuals who were involved in the situation (please attach additional pages as needed).

Have efforts been made to resolve this complaint through the Request for Accommodation with the ADA Coordinator? YES _____ NO _____

If yes, what were the results? _____

Signature: _____ Date: _____

Send or deliver to:

Carey Warner, ADA Coordinator
Phone: 704-821-5401 ext. 397
Email: cww@indiantrail.org
Mailing Address: Attn: ADA Coordinator, PO Box 2430
Indian Trail, NC 28079

Upon request, reasonable accommodation will be provided in completing this form or copies of the form. Please contact the ADA Compliance Coordinator.