TOWN OF GRANITE FALLS

ADATRANSITION PLAN

DRAFT - APRIL 2021





TOWN OF GRANITE FALLS

ADA TRANSITION PLAN

ADOPTED BY

GRANITE FALLS TOWN COUNCIL

DATE

MONTH - DATE, 2021

PREPARED BY



Creative Regional Solutions Since 1968

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EXECUTIVE SUMMARY

Cities with many pedestrian barriers can inhibit community mobility, access to services, and social participation for people with disabilities. Creating an inventory and plan of action for removing pedestrian barriers within municipalities is a crucial step to creating a more accessible environment for all. The primary purpose of this study is to prepare a plan, titled ADA Transition Plan, for the Town of Granite Falls in accordance with two civil rights legislations:

- 1. Americans with Disabilities Act of 1990 (ADA), Title II Regulations, Nondiscrimination on the Basis of Disability in State and Local Government Services, 28 CFR Part 351, and
- 2. Section 504 of the Rehabilitation Act of 1973, as amended, Nondiscrimination on the Basis of Disability in Programs or Activities Receiving Federal Financial Assistance, 49 CFR Part 27.

The intent of the ADA Title II regulations is to ensure nondiscrimination and access for individuals with disabilities in State and local government services. The intent of the Section 504 regulations is to prohibit discrimination on the basis of disability in programs or activities receiving Federal financial assistance.

This report will identify barriers within municipally owned buildings as well as barriers within the pedestrian right of way. The pedestrian right of way includes any infrastructure meant for pedestrian utilization. Mobility hazards are identified during walking audits and documented in a Pedestrian Right of Way Collector Application. The application collects a broad range of data and has criteria for sidewalks, curb ramps, driveway cuts, intersections, railroad crossings, bus stops, crosswalks, and pedestrian islands.

The Town of Granite Falls is required to conduct a self-assessment and to establish a transition plan (28 CFR 35.105-35.107). All ADA efforts have been based on the appropriate guidelines for the project at hand. The pedestrian right of way inventory collection process (mentioned above) utilizes the United States Access Board's Proposed Right-of-Way Accessibility Guidelines (PROWAG). The facility inventory produced by an external contractor utilized a checklist which was based on the 2010 ADA Standards for Accessible Design.

We look forward to our continued progress in achieving the objectives of Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act of 1990, and the ADA Amendments Act of 2008.

TITLE LL OF THE AMERICANS WITH DISABILITIES ACT OF 1990 (ADA)

Title II applies to State and local government entities, and protects qualified individuals with disabilities from discrimination on the basis of disability in services, programs, and activities provided by State and local government entities. Title II extends the prohibition on discrimination established by section 504 of the Rehabilitation Act of 1973, as amended, 29 U.S.C. 794, to all activities of State and local governments regardless of whether these entities receive Federal financial assistance.

State and local governments are required to follow specific architectural standards in the new construction and alteration of their buildings. They also must relocate programs or otherwise provide access in inaccessible older buildings, and communicate effectively with people who have hearing, vision, or speech disabilities. Public entities are not required to take actions that would result in undue financial and administrative burdens. They are required to make reasonable modifications to policies, practices, and procedures where necessary to avoid discrimination, unless they can demonstrate that doing so would fundamentally alter the nature of the service, program, or activity being provided.

Section 504 of the Rehabilitation Act of 1973

Section 504 of the 1973 Rehabilitation Act was the first disability civil rights law to be enacted in the United States. It prohibits discrimination against people with disabilities in programs that receive federal financial assistance, and set the stage for enactment of the Americans with Disabilities Act. Section 504 works together with the ADA and IDEA to protect children and adults with disabilities from exclusion, and unequal treatment in schools, jobs and the community.

TOWN OF GRANITE FALLS ADA PROGRAM

The Town of Granite Falls contracted with Western Piedmont Council of Governments (WPCOG) to identify mobility barriers and create a plan of action for city owned and sponsored services, events, buildings, and pedestrian infrastructure. The following was included in the scope of services:

- Inventory Collection: Create database for municipally owned facilities, parking lots, sidewalks, curb ramps, driveway cuts, intersections, railroad crossings, bus stops, crosswalks, and pedestrian islands
- Reporting to City/DOJ (when necessary)/ADA Specialists in accordance to the US Access Board
- Cost Analysis/Estimate to Correct Non-Compliant Areas this is an estimation of materials and excludes labor costs
- Transition Plan: Coordination of the City's Capital Improvements Plan and the site evaluation survey to establish High / Medium /Low Impact Areas to be corrected
- Maintenance of all Changes/Improvements to Documents: Inventory List, Reports, Transition Plan, support for changes to website, and any filed grievances

GRANITE FALLS GRIEVANCE PROCEDURE

The following grievance procedure was adopted by Town of Granite Falls Council in July 2019. Please see Appendix A for the full form and questionnaire.

In accordance with the requirements of title II of the Americans with Disabilities Act of 1990 ("ADA"), the Town of Granite Falls will not discriminate against qualified individuals with disabilities in its services, programs, or activities.

Employment: The Town of Granite Falls does not discriminate based on disability in its hiring or employment practices and complies with all regulations promulgated by the U.S. Equal Employment Opportunity Commission under title I of the ADA.

Effective Communication: The Town of Granite Falls, upon request, will provide appropriate aids and services for effective communication for qualified persons with disabilities. Effective communication is essential in the equal participation of Town of Granite Falls programs, services, and activities. Available aids and services include qualified sign language interpreters, documents in Braille, and other ways of making information and communications accessible to people who have speech, hearing, or vision impairments.

Modifications to Policies and Procedures: The Town of Granite Falls will make all reasonable modifications to policies and programs to ensure that qualified individuals with disabilities have an equal opportunity to participate in all of its programs, services, and activities. This applies to service animals and other services as requested.

Anyone who requires an auxiliary aid should contact the office of the ADA Coordinator, Averi Ritchie, at or (828) 514-5200, as soon as possible, but no later than 72 hours before the scheduled event. Auxiliary aid includes services for effective communication, or a modification of policies or procedures to participate in a program, service, or activity of the Town of Granite Falls. Individuals with registered service animals only need to provide notice if event accommodations are necessary.

The ADA does not require the Town of Granite Falls to take any action that would fundamentally alter the nature of its programs or services, or impose an undue financial or administrative burden.

Grievances involving accessibility restrictions for persons with disabilities, that will be utilizing the Town of Granite Falls programs, services, or activities; are handled by the ADA Coordinator, Averi Ritchie, at (828) 514-5200.

The Town of Granite Falls will not place a surcharge on persons with disabilities to cover the cost of providing auxiliary aids/ services or reasonable modifications of policy. This includes retrieving items from locations that are open to the public but are not accessible to persons who use wheelchairs.

WESTERN PIEDMONT COUNCIL OF GOVERNMENTS ADA WEBSITE FOR GRANITE FALLS

While WPCOG does not maintain the ADA portion of Town of Granite Falls' website, it does serve to provide support and guidance in posting necessary documents. WPCOG's ADA webpage includes a subset for Town of Granite Falls documents as well as ADA guidance and legislative updates. All adopted grievance documents and Transition Plans are posted to this subset.

POPULATION WITH A DISABILITY OR FUNCTION DIFFICULTY ANALYSIS

In planning for accessibility, analyzing data for populations with disabilities or function difficulty will better allow Granite Falls to assess and plan for eliminating mobility barriers. The United States Census "attempts to capture six aspects of disability: (hearing, vision, cognitive, ambulatory, self-care, and independent living); which can be used together to create an overall disability measure, or independently to identify populations with specific disability types." Source: United States Census.

In 2008, the Census introduced new questions regarding "aspects of disability" to their American Community Survey questionnaires. The questions cover the six disability types to gauge disability status throughout each census tract. Each disability type, as defined by the Census, can be found below:

- Hearing difficulty--deaf or having serious difficulty hearing.
- Vision difficulty--blind or having serious difficulty seeing, even when wearing glasses.
- Cognitive difficulty--Because of a physical, mental, or emotional problem, having difficulty remembering, concentrating, or making decisions.

- Ambulatory difficulty--Having serious difficulty walking or climbing stairs.
- Self-care difficulty--Having difficulty bathing or dressing.
- Independent living difficulty--Because of a physical, mental, or emotional problem, having difficulty doing errands alone such as visiting a doctor's office or shopping.

Source: US Census

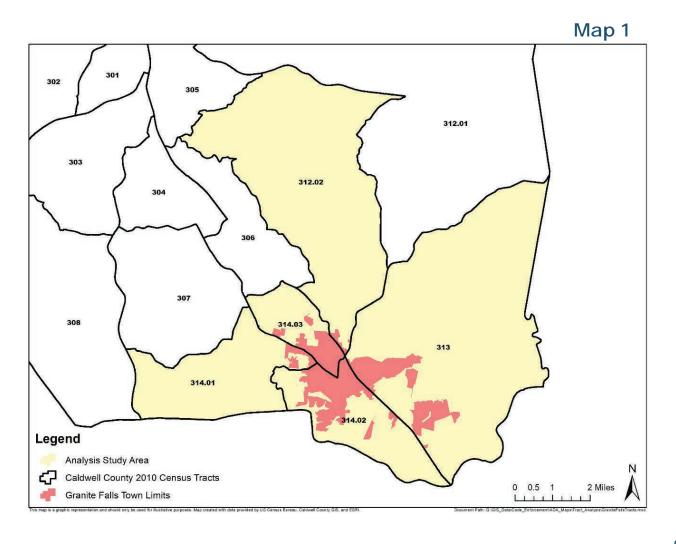
An analysis was performed using Census social characteristics data to examine disability and function difficulty conditions within the town limits of Granite Falls. This analysis aims to note concentrated areas of Granite Falls' population reported as having a disability. These areas must be identified to give special consideration to existing pedestrian and town managed facility placement within these areas. The analysis methodology and results are discussed in this section.

ANALYSIS STUDY AREA

This analysis utilized 2010 Census Tracts. Census Tracts are small, relatively permanent statistical subdivisions of a county. The analysis study area is made up of the Caldwell County Census Tracts that intersect the Granite Falls town limits. This includes the combined areas of Tracts 312.02, 313, 314.01, 314.02, and 314.03 as illustrated in Map 1. The location of these Tracts are in the southeastern corner of Caldwell County, which total approximately 64 square miles in size. Granite Falls town limits is mostly contained within Tracts 313, 314.03, and 314.02. Small sectors of Granite Falls intersect Tracts 312.02 and 314.01, which, as stated above, were also included in the analysis.

ANALYSIS METHODOLOGY

The following methodology explains how Census Tract percentages were determined:



- 1. United States Census and 2014- 2018 American Community Survey (ACS) 5-Year data were used to calculate Caldwell County hearing difficulty, vision difficulty, cognitive difficulty, ambulatory difficulty, self-care difficulty, and independent living difficulty percentages. Percentages were calculated by dividing the total civilian non-institutionalized population with a disability by the total civilian non-institutionalized population. The Census defines the civilian non-institutionalized population as "all U.S. civilians not residing in institutional group quarters facilities such as correctional institutions, juvenile facilities, skilled nursing facilities, and other long-term care living arrangements."
- 2. The same Census and ACS data were used to calculate Census Tract level population percentages. The method used in step 1 was repeated in step 2 on a more area-specific scale. Percentages were derived by dividing the Tract's total civilian noninstitutionalized population with a disability by the total civilian noninstitutionalized population.
- 3. Granite Falls disability status averages were then compared with overall Caldwell County disability status averages to determine concentration levels throughout each Tract. Census Tract level total civilian non-institutionalized population with a disability percentage exceeding the County's average disability status population percentages were scored and placed into a 4-level concentration scale based on the six difficulty types (hearing, vision, cognitive, ambulatory, self-care, and independent living).
 - No Concentration Census Tract with zero types exceeding County disability status averages.
 - Low Concentration Census Tract with one to two types exceeding County disability status averages.
 - Moderate Concentration Census Tract with three to four types exceeding County disability status averages.
 - High Concentration Census Tract with more than four types exceeding County disability status averages.
- 4. The Granite Falls managed facility locations and sidewalk networks were then mapped and overlaid onto the study area. Percentages were calculated to show how many facilities and how much sidewalk exists within the high and low disability population areas.

ANALYSIS STUDY RESULTS

Table 1 shows the total civilian non-institutionalized population for Caldwell County Tracts and their total civilian non-institutionalized population with disability percentages. The Caldwell County percentages create the baseline for the concentration scores. Table 2 shows where the Tracts land on the concentration scale and which of their disability averages exceeded the County averages.

For Caldwell, approximately 10 percent of the population with a disability status have an ambulatory difficulty. Ambulatory difficulties are the most prevalent disability type in the County, followed by cognitive (7.2%) and independent living difficulties (6.28%). Approximately 2,000 Caldwell non-institutionalized residents (3.34%) have a vision difficulty. Vision difficulty represents the County's smallest percentage of disability types. Almost 2,800 persons living in Caldwell have a self-care difficulty.

Table 1 Percentages of Civilian Non-institutionalized Population with a Disability of Function Difficulty

Geography	Total Civilian Noninstitutionalized Population	% Hearing Difficulty	% Vision Difficulty	% Cognitive Difficulty	% Ambulatory Difficulty	% Self-Care Difficulty	% Independent Living Difficulty
Caldwell County	80,953	4.87%	3.34%	7.20%	10.13%	3.40%	6.28%
Census Tract 312.02	4,222	6.47%	3.22%	7.79%	10.68%	3.20%	5.14%
Census Tract 313	8,706	3.86%	3.04%	4.86%	6.62%	1.25%	3.81%
Census Tract 314.01	3,381	3.79%	4.20%	4.73%	11.98%	6.74%	6.09%
Census Tract 314.02	3,239	4.17%	3.09%	6.14%	7.63%	4.26%	5.50%

Source: United States Census, 2014-2018 American Community Survey (ACS) 5-Year

Table 2 Concentration Scale Results - Tracks Averages Higher / Lower Than County Averages

Geography	Concentration Level	% Hearing Difficulty	% Vision Difficulty	% Cognitive Difficulty	% Ambulatory Difficulty	% Self-Care Difficulty	% Independent Living Difficulty
Census Tract 312.02	Moderate	Higher	Lower	Higher	Higher	Lower	Lower
Census Tract 313	No	Lower	Lower	Lower	Lower	Lower	Lower
Census Tract 314.01	Moderate	Lower	Higher	Lower	Higher	Higher	Lower
Census Tract 314.02	Low	Lower	Lower	Lower	Lower	Higher	Lower
Census Tract 314.03	No	Lower	Lower	Lower	Lower	Lower	Lower

Source: United States Census, 2014-2018 American Community Survey (ACS) 5-Year

None of the five Census Tracts had a high concentration of disabled civilian noninstitutionalized population. Although Census Tract 313 makes up the largest tract in terms of total civilian noninstitutionalized population and Tract 314.03 is the smallest, both landed on the no concentration level because all disability status averages are lower than County averages. None of the tracts displayed a higher independent living difficulty percentage than the County.

Tracts 312.02 and 314.01 are moderately concentrated Tracts. Both Tracts have three averages higher than the County disability status averages. Approximately 450 people (10.68%) in Tract 312.02 have an ambulatory difficulty, 7.79% are reported as having a cognitive difficulty (.5% more than the County's baseline), and approximately 270 people have a hearing difficulty (1.6% more than the County's baseline). Tract 314.01 had the highest percentage (12%) of ambulatory difficulty among the five tracts. This Tract is almost two-percent higher than the County's average. There are 228 (6.74%) of the Tract's 3,381 civilian noninstitutionalized population who have reported a self-care difficulty. Approximately four-percent have a vision difficulty (almost one percent higher than the County's baseline).

Census Tract 314.02 is a low concentration level Tract. Only one of its difficulty type averages is higher than the County disability status averages. Approximately 4.25% of 314.02's civilian noninstitutionalized population has a self-care difficulty (almost 0.9% higher than the County's baseline).

Map 2 shows where each Census Tract falls on the 4-Level concentration scale.

The fourteen Granite Falls town facility locations are shown in Map 2. These buildings, parking lots, parks, and cemeteries primarily exist within Tracts 314.02 and 314.03, with Baird House in Tract 313. Table 3 shows facility location in accordance with Census Tract concentration level. Fifty-percent of these facilities have an address in low concentrated Tract 314.02. This Tract includes more popular facilities such as Town Hall, the Police Department, and Lakeside Park. The remaining seven facilities are contained within a non-concentrated Tract.

Like the facilities, the 6.9-miles of sidewalk drawn in Map 2 are dispersed between Tracts 313, 314.02, and 314.03. Table 4 shows how many paths parallel roads in these Tracts. Around 4-miles (60.9%) of the sidewalk network was constructed is within low concentrated Tract, 314.02. The remaining 2.7-miles of sidewalk used by pedestrians are inside the no concentrated Tracts, 313 and 314.03.

As stated above, Tracts 312.02 and 314.01 are moderately concentrated Tracts. Both Tracts have three averages higher than the County disability status averages. These Tracts have the highest ambulatory difficulty percentages. Although 314.02 is a low concentration Tract, it exceeds the County average for self-care difficulty. Proper pedestrian facilities should be considered first in areas with higher reported disabled populations. Eliminating mobility barriers and improving connectivity within Town limits will protect the Town as well as its citizens.

Map 2

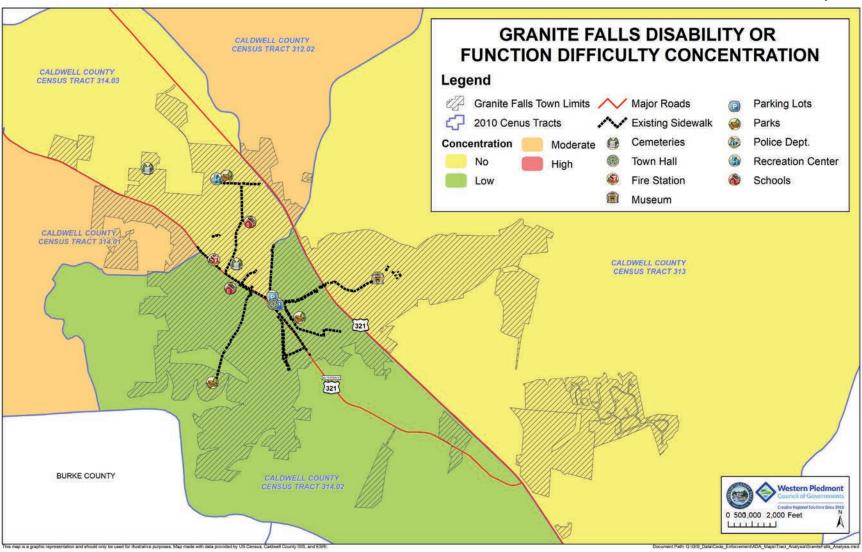


Table 3 Granite Falls Facilities

Facility Name	Facility Type	Census Tract Concentration Level
Dudley Alley Public Parking	Parking Lot	Low
Granite Falls Elementary School (gymnasium and bathrooms)	Building	No
Granite Falls Fire Department	Building	No
Granite Falls History Museum (Baird House)	Building	No
Granite Falls Middle School (gymnasium and bathrooms)	Building	Low
Granite Falls Police Department	Building	Low
Granite Falls Town Office	Building	Low
Lakeside Park & Overlook	Park	Low
Neighborhood Park	Park	Low
Outside play elements of William B. Shuford Center	Park	No
Pinecrest Cemetery	Cemetery	No
Police Department and Town Hall Parking Lot	Parking Lot	Low
Sunset Hill Cemetery	Cemetery	No
William B Shuford Center (Granite Fall Rec Center)	Building	No

Source: Town of Granite Falls

Table 4 Granite Falls Sidewalks

Geography	Concentration Level	Existing Sidewalk (in Miles)
Census Tract 312.02	Moderate	N/A
Census Tract 313	No	0.7
Census Tract 314.01	Moderate	N/A
Census Tract 314.02	Low	4.2
Census Tract 314.03	No	2.0
Study Area	(x)	6.9

Source: Town of Granite Falls, Greater Hickory MPO

FACILITY ASSESSMENT INTRODUCTION

As mentioned above, Title II of the ADA only impacts municipally owned facilities. This title does not address employment or issues concerning other sections of the ADA.

Although many situations allow issues of accessibility to be resolved by changes to program accommodation, there are situations where access to programs, services and activities can only be achieved by removal of physical barriers. This report identifies such physical barriers within each building and from the nearest public way and/or accessible parking space(s) to each building.

Relative to Program Access as stipulated in Title II, state and local governments/agencies, "Are not required to take any action that would result in the fundamental alteration in the nature of the service, program, or activity or in undue financial and administrative burdens. However, public entities must take any other action, if available, that would not result in a fundamental alteration or undue burdens but would ensure that individuals with disabilities receive the benefits or services."

Many think that only new construction and alterations need to be accessible and that older facilities are "grandfathered". However, because the ADA is a civil rights law and not a building code, older facilities are often required to be accessible to ensure that people with disabilities have an equal opportunity to participate.

The Town of Granite Falls contracted with Western Piedmont Council of Governments (WPCOG) to address remaining ADA needs within Granite Falls. Granite Falls, in conjunction with WPCOG, has identified 15 facilities that either are municipally-owned or have heavy use regarding town sponsored programs and services open to the public.

This report was prepared for the Town of Granite Falls as part of an effort to:

- 1. Comprehensively document elements of the built environment which negatively impact individuals with disabilities.
- 2. Plan for most important facility improvements in conjunction with the 2010 ADA Standards for Accessible Design. Included in Appendix B.

FACILITY ASSESSMENT PRIORITIES

This report's ADA compliance information is organized to follow the three priorities for barrier removal as recommended by the Department of Justice in the ADA Title II regulations. The three priorities are included and color coded as follows:

RED - Priority 1 (High)	Accessible Approach and Entrance
ORANGE - Priority 2 (Moderate)	Access to goods and services and access to public toilet rooms
GOLD - Priority 3 (Low)	Access to other items such as water fountains and public telephones

GREEN - Technically Infeasible or Not Applicable

Certain standards do not apply to facilities built prior to March 12, 2012. These items have been noted and do not need to be corrected unless the facility is altered. Measurements within a reasonable tolerance range that would involve undue burden to correct and structural or financial infeasibility are covered under technically infeasible.

Priority 1 (High) items are more time sensitive mobility barriers that should be corrected first. According to regulations, these items are most unsafe or present more immediate liabilities for municipalities. Priority 3 (Low) items are less time sensitive. The following methodology is a modified version of the ADA National Network Guidelines (found in Appendix B). This report is meant to be a living document. Town of Granite Falls' Public Works Department and/or Engineer review is warranted to document any corrected or technically infeasible items.

FACILITY ASSESSMENT METHODOLOGY

The survey team relied on guidelines approved by the ADA National Network while inventorying facilities and certain items within the pedestrian right of way. The resulting methodology correlates with the methodology found in the facility survey guidelines. A facility survey can be found in Appendix B.

High/Critical Priority – relating to immediate safety hazards or access to a facility. Without proper facility access, the categories below become null. Overall interior and exterior door pressures and closure times are high priorities. Exterior doors relate directly to access to a facility as well as most interior doors. Some interior doors relate more to access to goods and services, however, for consistency, doors are scored using the same criteria. There are no set standards for exterior door pressures, but no more than 10 pounds is recommended. Interior doors have a required pressure of 5 pounds or less. Both interior and exterior doors door closure times cannot take less than 5 seconds to close from a 90 degree open position to 12 degrees from the door latch.

Moderate Priority – relating to less severe safety hazards or access to goods and services and public restrooms (certain issues within service areas or public restrooms may still fall into high or low categories depending on the severity of the issue)

Low Priority – relating to non-compliant issues that do not pose an immediate safety hazard or access to an accessory (items such as water fountains and public telephones). Most items received a "low" score if only 5" or less out of compliance in facilities

Not applicable/technically infeasible – This could be due to changing standards, measurements within a reasonable tolerance range, structural or financial infeasibility, etc.

**Note: High, moderate, and low recommendations are included in the plan for consideration. Recommendations are not based on standards and, therefore, are not required.



Granite Falls Recreation Center

General Observations & Recommendations

Notes: The restrooms in the pool area were not inventoried since they were under construction at the time of inventory. Assistance can be provided regarding restroom and accessible entry regulations if needed.

High Priority

» Update all wall-mounted signage pertaining to exits to include:

- » Braille cannot be mounted more than 40" above floor. Signs that are permanent: baseline of lowest character should be at least 48" high and baseline of lowest character no more than 60" high.
- » Watch for drainage issues when fixing accessible entry into pool area. This deals directly with access to a facility.

Moderate Priority

- » Update all directional and service-related signage to include:
 - » Braille directional signage cannot be mounted more than 40" above floor. Current directional signage is mounted 51-52" high. Note: Signs designating permanent rooms and spaces not likely to change over time (room names, numbers, etc) should be mounted on the wall on the latch side of the door. Signs that are permanent: baseline of lowest character should be at least 48" high and baseline of lowest character no more than 60" high.

Low Priority

» Transition into the Women's Fitness Center (due to thickness of mat) is greater than ¼" high. Recommend adding mat (similar to the mat in the Men's Fitness and Exercise Room) to assist transition.





Drainage issues at pool accessible entry.



Transition into fitness center greater than 1/4" high.



Update directional signage to include braille at appropriate height.

Technically Infeasible or Not Applicable

(due to changing standards or measurements within tolerance range)



Service Counter & Main Lobby

- * Opening force for interior doors must be 5 pounds of pressure or less (push and pull). Closure time must be 5 seconds or greater.
- ** Opening force for exterior doors is not specified in the ADA Standards, but exterior doors that need to be accessible should have the minimum force possible. Typical maximum opening force for exterior doors ranges from 8.5 to 10 lbs. Closure time must be 5 seconds or greater.

High Priority

- » Recreation Center Back Exterior Entry Door Pressures:
 - » Push Pressure: 12 pounds
 - » Closure Time: 2.88 seconds
- » Recreation Center Main Entry (Exterior Double Doors as approaching from exterior):
 - » Right Door Push: 19 pounds
 - » Right Door Pull: 19 pounds
 - » Right Door Closure Time: 2.02 seconds
 - » Left Door Closure Time: 3.10 seconds

No Moderate Priority

Low Priority

» The current service counter height is 40.5". ADA standards state that a portion of counter space cannot be more than 36" high and 36" long. The accessible counter needs to be the same width as the regular counter top.

Additional Standards Regarding Accessible Portion of Service Counter:

- » There should be clear floor space 30"x48" for forward and parallel approach.
- » Parallel approach for counters need 48" of adjacent floor space to adequately access counters.
- » Forward approach to counters need 17-25" floor space under accessible counter.
- » Counter bottom must be 27" high

Technically Infeasible or Not Applicable

(due to changing standards or measurements within tolerance range)



Men's Restroom (Rear Entrance - First on Right)

No High Priority

Moderate Priority

» Install signage stating that accessible restrooms can be found further down on right. Currently this restroom does not meet ADA Standards.

No Low Priority

Technically Infeasible or Not Applicable

(due to changing standards or measurements within tolerance range)

Currently, there are no High, Moderate or Low Recommendations



Woman's Restroom (Rear Entrance - Second on Right)

No High Priority

Moderate Priority

» Install signage stating that accessible restrooms can be found further down on right. Currently this restroom does not meet ADA Standards.

No Low Priority

Currently, there are no High or Moderate Recommendations

Technically Infeasible or Not Applicable

Low Recommendation

» Repair damaged stall door locks.



Recommend replacing damaged lock.



Family Restroom (Rear Entrance, single compartment - Third Restroom on Right)

High Priority

» Coat hooks are not required, however, if present, must be installed 15-48" above floor. Coat hook is currently 63" above floor. This could present a safety hazard.

No Moderate Priority

Low Priority

» ADA Standards recommend restroom doors self-close.

Technically Infeasible or Not Applicable (due to changing standards or measurements within tolerance range)

» ADA Standards state that toilet paper dispensers should be located 7-9" from the front of the toilet to the centerline of the dispenser. Currently, the dispenser is 19" from the front of the toilet to the centerline of the dispenser. This only needs to be corrected if the facility was built or altered after 2012.

Currently, there are no High, Moderate or Low Recommendations



Accessible Restroom (Rear Entrance, single compartment - Fourth Restroom on Right)

High Priority

» Coat hooks are not required, however, if present, must be installed 15-48" above floor. Coat hook is currently 63" above floor. This could present a safety hazard,

No Moderate Priority

Low Priority

» ADA Standards recommend restroom doors self-close.

Technically Infeasible or Not Applicable (due to changing standards or measurements within tolerance range)

ADA Standards state that toilet paper dispensers should be located 7-9" from the front of the toilet to the centerline of the dispenser. Currently, the dispenser is 19" from the front of the toilet to the centerline of the dispenser. This only needs to be corrected if the facility was built or altered after 2012.



Drinking Fountain

Low Priority - Drinking fountains and Public Telephones are low priorities according to ADA Standards.

The drinking fountain outside of the gym is currently not compliant. The following are ADA Standards for drinking fountains:

- » Fountain must have a clear floor 30"x48" wide on forward approach
- » There must be 17-25" of floor space under fountain
- » Operable parts can be no higher than 48" for fountains no deeper than 20"
- » Operable parts can be no higher than 44" for fountains no deeper than 20-25"
- » Must be easily operated force required to operate can be no more than 5 pounds
- » Spout can be no higher than 36"
- » Spout can be no less than 15" from rear of fountain
- » Spout can be no more than 5" from front of fountain
- » Must be at least 1 fountain for standing spout must be 38-43" high
- » If the bottom of the fountain is greater than 27" high, the front of the fountain can protrude no more than 4" into accessible pathway



Drinking fountain outside of gym.



Granite Falls Town Hall

General Recommendations

High Priority

Update all wall-mounted signage pertaining to exits to include Braille – cannot be mounted more than 40" above floor. Signs that are permanent: baseline of lowest character should be at least 48" high and baseline of lowest character no more than 60" high.

Moderate Priority

- » Ramp leading into Council Chamber and ramp inside Council Chamber are steep – ADA Standards allow a running slope no greater than 1:12. Handrails on both sides should help with compliance considering space limitations.
- » In reference to seats in Town Hall Council Chamber, 1 wheelchair space is necessary for every 25 seats. Empty space needs to be 36"x48" deep for forward approach. Space must be 36"x60" for parallel approach. Accessible path to wheelchair spaces needs to be 36" wide.
- » Update all directional and service-related signage to include Braille directional signage cannot be mounted more than 40" above floor. Current directional signage is mounted 51-52" high. Note: Signs designating permanent rooms and spaces not likely to change over time (room names, numbers, etc) should be mounted on the wall on the latch side of the door. Signs that are permanent: baseline of lowest character should be at least 48" high and baseline of lowest character no more than 60" high.

No Low Priority



Update signage to include braille.

Technically Infeasible or Not Applicable (due to changing standards or measurements within tolerance range)



Women's Restroom (In Front of Break Room)

No High Priority No Moderate Priority

Low Priority

- » ADA Standards recommend restroom doors self-close.
- » ADA Standards recommend front of sink/counter heights to be less than 34" above floor. The front of the counter is currently 36" high and should be adjusted if the facility is altered.

Currently, there are no High, Moderate or Low Recommendations



There are 3 inches between the water fountain and the doorway.

Technically Infeasible or Not Applicable (due to changing standards or measurements within tolerance range)

- » ADA Standards recommend 18"x18" centered floor space when bathroom door is open 45 degrees. The water fountain is located below sign if constructed before 3/15/2012 and a person may approach within 3 inches of the sign without encountering protruding objects or standing within the door swing, relocation not required. There are 3 inches between the water fountain and the doorway.
- » No coat hook coat hooks are not required, however, if coat hook is installed, it must be between 15-48" high.
- » ADA Standards recommend toilet paper dispenser located 7-9" from front of toilet to centerline of dispenser currently 6" from front of toilet to centerline. This does not apply if the facility was built prior to 3/15/2012.



Men's Restroom (In Front of Break Room)

between 15-48" high.

No High Priority No Moderate Priority

Low Priority

» ADA Standards recommend restroom doors self-close.

Technically Infeasible or Not Applicable (due to changing standards or measurements within tolerance range)

» No coat hook – coat hooks are not required, however, if coat hook is installed, it must be

» ADA Standards recommend 12" between rear grab bar and protruding objects above bar. Recommend moving soap dispenser up from 43" to 47" (can be as high as 48"). This is not applicable if constructed prior to 3/15/2012 – no space requirements in 1991 standards.



Other Doors and Entryways

- * Opening force for interior doors must be 5 pounds of pressure or less (push and pull). Closure time must be 5 seconds or greater.
- ** Opening force for exterior doors is not specified in the ADA Standards, but exterior doors that need to be accessible should have the minimum force possible. Typical maximum opening force for exterior doors ranges from 8.5 to 10 lbs. Closure time must be 5 seconds or greater.

High Priority

- » Town Hall Exterior Entrance (Main Entrance):
 - » Pull Pressure: 11 pounds» Push Pressure: 12 pounds
 - » Closure Time: 2.33 seconds
- » Town Hall Interior Entrance (Main Entrance):
 - » Pull Pressure: 10 pounds
 - » Push Pressure: 11 pounds
 - » Closure Time: 3.03 seconds
- » Interior Doorway to Water Fountain:
 - » Pull Pressure: 14 pounds
 - » Push Pressure: 14 pounds
 - » Closure Time: 2 seconds
- » Interior Doorway to Elevator:
 - » Pull Pressure: 13 pounds» Push Pressure: 14 pounds
 - » Closure Time: 3.23 seconds
 - » Closure Time: 3.23 seconds
- » Doorway from Elevator to Service Area:
 - » Pull Pressure: 17 pounds
 - » Push Pressure: 16 pounds» Closure Time: 1.53 seconds

- » Authorized Personnel Interior Door (Can be used as part of accessible route):
 - » Pull Pressure: 14 pounds
 - » Push Pressure: 15 pounds
 - » Closure Time: 3.37 seconds
- » Council Chamber Exterior Door:
 - » Push Pressure: 12 pounds
- » Council Chamber Interior Door (at top of ramp – part of accessible entry):
 - » Pull Pressure: 17 pounds
 - » Push Pressure: 17 pounds
 - » Closure Time: 2.89 seconds
- » Conference Room Interior Door (door closest to Council Chambers):
 - » Pull Pressure: 12 pounds
 - » Push Pressure: 13 pounds
 - » Closure Time: 3.80 seconds

No Moderate Priority

No Low Priority

Technically Infeasible or Not Applicable

(due to changing standards or measurements within tolerance range)

- » Conference Room Interior Door (door without closer):
 - **Since door has no closer and takes more than 5 seconds to close, door is compliant.



Conference Room (2nd Floor)

High Priority

» The phone cord is a trip hazard.

Moderate Priority

 Directional signage is needed to Conference Room (once off the elevator/stairs).
 Directional signage must be in braille

Low Priority

» If the phone in the conference room is open to anyone utilizing the meeting space, there must be a 36" wide path to access it. Currently, the path is not 36"s wide.

Technically Infeasible or Not Applicable (due to changing standards or measurements within tolerance range)

» ADA Standards require signs designating rooms be mounted on the wall, on the latch side of the door. Due to the building layout, the sign cannot be mounted on the latch side of the door.



Trip hazard





Room signs should be mounted on the wall, on the latch side of the door.



Men's Restroom (2nd Floor)

No High Priority

No Moderate Priority

Low Priority

- » ADA Standards require that hand dryers are mounted no higher than 48"s if not over sink. Currently, the hand dryer is 52.5"s high.
- » Move the cleaning supplies currently blocking the rear grab bar.
- » Door needs to be self-closing.

Technically Infeasible or Not Applicable

(due to changing standards or measurements within tolerance range)

- » The operable part of the soap dispenser is 45"s high. The soap dispenser can be mounted as high as 48"s, as long as it is not over the sink. 2010 ADA Standards require a 12" clearance between the grab bar and protruding objects above. There are 10"s between the side bar and the soap dispenser above the side bar. If the facility was built prior to 2012, there are no space requirements above or below bars.
- » ADA Standards require toilet paper dispensers be located 7-9"s from the front of toilet to the centerline of the dispenser. The dispenser is currently 16"s from the centerline to the toilet. This is not applicable if built prior to 3/15/2012.



The hand dryer is currently mounted 4.5 inches too high.



Women's Restroom (2nd Floor)

No High Priority

No Moderate Priority

Low Priority

- » Move the cleaning supplies currently blocking the rear grab bar.
- » ADA Standards require the bottom of toilet paper dispensers measure 15-48"s high. The bottom of the dispenser is 13"s high.
- » Door needs to be self-closing.

Technically Infeasible or Not Applicable

(due to changing standards or measurements within tolerance range)

» The operable parts of the soap dispenser are 45"s high. The soap dispenser can be mounted as high as 48"s, as long as it is not over the sink. 2010 ADA Standards requires a 12" clearance between the grab bar and protruding objects above. There are 10"s between the side bar and the soap dispenser above the side bar. If the facility was built prior to 2012, there are no space requirements above or below bars.



Keep grab bars clear. The toilet paper dispenser is 2 inches below the minimum height.



Granite Falls Fire Department

General Recommendations

High Priority

» There are no signs in Braille marking exits.

Moderate Priority

- There is no directional signage or signage marking specific rooms.
 Directional signage should also include Braille.
- » The help counter at the lobby is 49"s high. There should be a portion of counter space 36"s tall by 36"s long.

Low Priority

 » Drinking Fountain

 not compliant
 for public use
 (see standards in Additional Access:
 Drinking Fountains section of 2010 ADA Standards).

 Note: Fire alarm systems need flashing lights and audible signals.

Technically Infeasible or Not Applicable Standard Standard

(due to changing standards or measurements within tolerance range)

High Recommendation

» Recommend signage stating "no public use" or "Employees Only". The kitchen is not compliant.



Add braille exit signs.



Drinking fountain is not compliant.



Kitchen is not compliant. Need signage stating "Not for Public Use" or "Employees Only".



Van Accessible Parking Space

High Priority

- » Replace accessible parking and van accessible parking sign (both can be the same space) and mount 60" high.
- » Trash bins cannot block access to the building from the accessible space.

No Moderate Priority

No Low Priority

Technically Infeasible or Not Applicable

(due to changing standards or measurements within tolerance range)

Notes: The van accessible space should:

- » Be at least 11 feet wide with an access aisle of at least 5 feet OR at least 8 feet wide with an access aisle at least 8 feet wide, for a total of 16 feet.
- » Have a marked access aisle leading to the sidewalk or accessible route (where trashcans are currently placed).
- » Slope must be 2% or less in all directions (cross slope and running slope). I generally measure each at the top, middle, and bottom of each space and access aisle.
- » Be located on the closest accessible route to the accessible entrance (side doors of the fire department).
- » Have a compliant curb ramp connection to sidewalk (curb ramp is fine fix gaps exceeding .5" for smooth transition).



Replace van accessible parking sign to that shown below.

Trash bins cannot block accessible access to the building.





Currently, there are no High, Moderate, or Low Recommendations

Fix curb ramp gaps that exceed 0.5 inch.



Door Pressures

High Priority

» Front Exterior Entrance (to help desk):

» Push Pressure: 12 pounds» Pull Pressure: 13 pounds

» Closure Time: 3.41 seconds

» Side Exterior Entrance (double doors)

» Right Door (from outside front approach):

» Push Pressure: 14 pounds» Pull Pressure: 15 pounds

» Closure Time: 2.84 seconds

» Left Door (from outside front approach):

» Push Pressure: 12 pounds» Pull Pressure: 11 pounds

» Closure Time: 2.24 seconds

No Moderate Priority No Low Priority

Technically Infeasible or Not Applicable

(due to changing standards or measurements within tolerance range)

- » Side Interior Door (to trucks):
 - » Push Pressure: 5 pounds (compliant)
 - » Pull Pressure: 5 pounds (compliant)
 - » Closure time: 5 seconds (compliant)

- Opening force for exterior doors is not specified in the ADA Standards, but exterior doors that need to be accessible should have the minimum force possible. Typical maximum opening force for exterior doors range from 8.5 to 10 lbs. Closure time must be 5 seconds or greater.
- » Opening force for interior doors must be 5 pounds of pressure of less (push and pull). Closure time must be 5 seconds or greater.

Currently, there are no High, Moderate, or Low Recommendations



Lounge Area - if this area is open to the public, the following needs to be considered:

No High Priority

Moderate Priority

- » There should be a 36" wide aisle between furniture to allow for accessibility.
- » A wheelchair space 36"x48" needs to be planned for in the area.

No Low Priority Technically
Infeasible or
Not Applicable
(due to changing
standards or
measurements within
tolerance range)





Restroom

The restroom is currently not accessible. In its current condition, we recommend signage stating "No Public Restroom". If hosting events, a temporary rented accessible restroom is necessary.

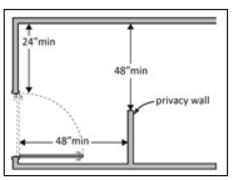
To become compliant, the restroom must:

- 1. Have a 32" wide doorway (minimum) from the side of the door (when opened 90 degrees) to the door latch Currently, the doorway is 26.5"s from the side of door to the latch.
- 2. Add accessible signage in Braille. Must have restroom for men and for women.
 - » Men and women can share a singular accessible community bathroom.
 - » Sign must be on the wall next to the latch side of the door with 18"x18" centered floor space when door is open 45 degrees Base of the lowest word must be >48"s high and the base of the highest word must be <60"s high.
- 3. If there is a front approach to the pull side of the door, there is supposed to be at least 18"s of maneuvering clearance beyond the latch side of the door plus 60"s clear depth. Due to the building layout, there is 60"s clear depth but not 18"s next to the latch side of the entrance. (Door swings inward so should not apply)
- 4. The lock on the main entry door is 59"s high. Locks and handles should be 34"-48"s high.
- 5. Main Entry Door Push/Pull Pressures:
 - » Push pressure: 11 pounds (maximum is 5 pounds)
 - » Pull pressure: 10 pounds (maximum is 5 pounds)
 - » Closure time from 90 degrees to 12 degrees: 5.68 seconds (compliant must be 5 seconds or greater).
- 6. If there is a privacy wall and the door swings inward, ADA requires at least 24"s of maneuvering clearance beyond the door latch side and at least 48"s to the privacy wall if there is no door closer or at least 54"s if there is a door closer. Currently there is 22.5"x48"s of maneuverable space if the trash can is moved.



1. Doorway is 6.5 inches narrower than the minimum.



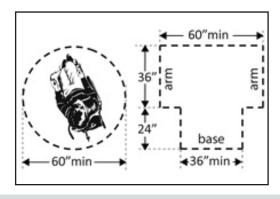


6. See diagram for appropriate maneuverable space with a privacy wall.



Restroom (Cont.)

The restroom is currently not accessible. In its current condition, we recommend signage stating "No Public Restroom". If hosting events, a temporary rented accessible restroom is necessary.



7. See diagram for appropriate maneuverable space within a 60 inch square, i.e. the area needed for a person in a wheelchair to turn around.



13. The hand towel dispenser is 5 inches higher than the maximum.

To become compliant, the restroom must:

- 7. There needs to be clear floor space available for a person in a wheelchair to turn around, i.e. a circle at least 60"s in diameter or a T-shaped space within a 60" square. This is not currently feasible without going into the urinal area.
- 8. The bottom edge of mirrors are supposed to be 40"s high. The bottom edge of the current mirror is 53.25"s high
- 9. Coat hooks are not required. If present, coat hooks must be 15"-48"s high. The current coat hook is 62"s high.
- 10. The sink needs to have a clear floor space for a forward approach of 30"x48"s. There is currently only 31"s between the sink and the urinal divider.
- 11. The sink needs to be 27"s high with insulated pipes below the sink. The sink is 25.5"s tall and the pipes are not insulated.
- 12. If soap dispensers are located above sinks that are 20"-25"s deep, the operable part of the dispenser must be <44"s high. The operable part is currently 47"s high.
- 13. Hand towel dispenser can be up to 48"s high when not over sink. The current dispenser is 53"s high.
- 14. Required toilet heights are 17"-19"s to the top of the seat. The current toilet is 15"s high.
- 15. Side and rear grab bars are required (see standards for toilets in single-user toilet rooms and compartments/stalls). There are currently no grab bars.
- 16. Stall dimensions: 33" x71"s. Must be 60"s wide by 59"s deep.
- 17. Flush handle must be on open side of the toilet. There currently is not an open side of the toilet.
- 18. ADA Standards require toilet paper dispensers to be located 7"-9"s from the front of toilet to the centerline of the dispenser. The dispenser is currently 16"s from the centerline to the toilet and located on the back of the stall door.
- 19. Stall door opening must be 32"s when open 90 degrees. The stall doorway is currently 20.5"s from the side of the door to the latch and 21"s from the side of the door to the other side (not including lock latch).
- 20. Stall door is not self-closing.
- 21. There are no door pulls on either side of the stall door.
- 22. Light switch needs to be 48"s or less to operable part.



Granite Falls Police Department

General Recommendations

High Priority

- » An accessible bathroom should be a high priority for members of the public as well as any employees. There are several issues that would have to be addressed to make the restroom accessible and compliant.
- » The bathroom would require a ramp leading up in place of stairs.
- » Front bathroom wall should be brought outward to comply with standards.
- » Priority 3 Toilet Rooms of the ADA Guide for Existing Facilities must be followed.
- » Currently no fire alarms. A fire suppression system with battery powered fire alarms and audible/ flashing light capabilities will be priced.

No Moderate Priority

No Low Priority Technically
Infeasible
or Not
Applicable
(due to changing
standards or
measurements
within tolerance
range)

High Recommendation

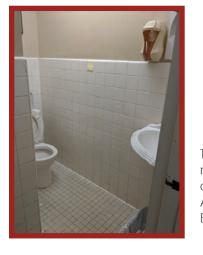
- » Small ramp recommended for back exit. This is a recommendation for after a ramp is installed leading to the restroom area.
- » Recommend restroom sign stating "No Public Restroom". Members of the public can use Town Hall if necessary until bathroom is compliant.



Ramp required







The bathroom will need to be brought outward and follow ADA Guide for Existing Bathrooms.



Entry and Lobby Area

High Priority

- » Door Pressures for Exterior Entry Door:
 - » Closure Time: 1.71 Seconds (must be 5 or more seconds).

Moderate Priority

- » Move table at doorway leading from lobby to interview room so doorway will be 32" wide.
- » Allow for wheelchair space in lobby 36"x48".

Low Priority

» Help desk/window is 41" high. There needs to be an area that is 36" high.

Technically Infeasible or Not Applicable

(due to changing standards or measurements within tolerance range)

» Free finger-printing can still be hosted since the fingerprinting station is portable and can be moved into the lobby if/when necessary.



Move table out of doorway.



Modify help desk / window so that there is an area 36 inches high.



Granite Falls Elementary School

(only elements utilized by the Town of Granite Falls)

General Recommendations

The Town only utilizes the gymnasium for events. The only inventoried parts of the school include the men and women's restrooms closest to the gymnasium (close to the library), the parts of the library used as an access aisle to the gymnasium, the parking area behind the gymnasium, the access pathway to the gymnasium, and the gymnasium.

High Priority

» Update all wall-mounted signage pertaining to exits to include Braille – cannot be mounted more than 40" above floor. Signs that are permanent: baseline of lowest character should be at least 48" high and baseline of lowest character no more than 60" high.

Moderate Priority

» Update all directional and service-related signage to include Braille – directional signage cannot be mounted more than 40" above floor. Current directional signage is mounted 51-52" high. Note: Signs designating permanent rooms and spaces not likely to change over time (room names, numbers, etc) should be mounted on the wall on the latch side of the door. Signs that are permanent: baseline of lowest character should be at least 48" high and baseline of lowest character no more than 60" high.

No Low Priority

Technically Infeasible or Not Applicable

(due to changing standards or measurements within tolerance range)

fire pulls were very close to this range. All future fire pulls need to follow ADA Standards.

installed 34-48"s high. Most

» Make sure all fire pulls are



Women's Restroom (close to the Library)

High Priority

- » Main Entry Door Push Pressure: 12 pounds
- » Main Entry Door Pull Pressure: 12 pounds
- » Main Entry Door Closure Time: 2.88 seconds
- » The rear grab bar is mounted 42" high to the top of the gripping surface. ADA Standards require that rear grab bars be mounted 20-25" high to the top of the gripping surface for children ages 5-8. The back of the toilet currently makes a lower bar installation infeasible. An updated toilet is recommended.

Moderate Priority

- » The bottom of the mirror is 53"s above the floor. When mounted over a sink, the mirror can be mounted no more than 40"s high. This is a moderate issue because the mirrors are more than 5" out of compliance and associated with public restrooms (ADA considers most restroom standards moderate issues).
- » The pipes below the sinks are not insulated. ADA Standards require insulation.

Low Priority

» The side grab bar is mounted 29"s to the top of the gripping surface. ADA Standards require that side grab bars be mounted 20-25"s high to the top of the gripping surface for children ages 5-8.

Technically Infeasible or Not Applicable

(due to changing standards or measurements within tolerance range)

- » The toilet paper dispenser is mounted next to the toilet. ADA Standards require that the toilet paper dispenser must be located 7-9"s from the front of the toilet to the centerline of the dispenser and 14-17"s above the floor for children ages 5-8. If constructed before 3/15/2012, the dispenser does not need to be relocated if within reach of the toilet.
- » Currently, there are only door pulls on one side of the accessible stall door. If constructed before 3/15/2012. door pulls do not need to be added.

Currently, there are no High, Moderate or Low Recommendations



Insulate pipes under sinks and lower mirrors.



Rear grab bar is too high due to back of toilet.



Men's Restroom (close to the Library)

High Priority

- » There is currently no main entry door leading into the men's restroom. There should be a main entry door with 5 pounds (or less) of push and pull pressure and a 5 second (or more) closure time. If there is a door on the women's there should also be one on the men's restroom.
- » There are currently side grab bars on both sides of the toilet and no rear grab bar. In addition to a side bar, ADA Standards require a rear grab bar at least 36"s along the rear wall. The bar needs to extend 12"s to the centerline of the toilet and 24"s to the open side of the toilet. It must be mounted 20-25"s to the top of the gripping surface above the floor for children ages 5-8. There must be 12"s clearance above the bar and 1.5"s clearance below the bar. This could be a safety hazard.
- » The current dimensions of the stall are as follows:
 - » 32.75"s between side bars
 - » 64"s depth
 - » ADA Standards require 60"s width and 59"s depth when toilets are floor mounted. The stall needs to be wider or directional signage for a different accessible restroom needs to be placed.

Moderate Priority

- » The pipes below the sink are not insulated. ADA Standards require that all pipes under sinks must be insulated.
- » The bottom of the mirror is 53"s above the floor. When mounted over a sink, the mirror can be mounted no more than 40"s high.
- » The force required to activate the faucet is currently 10 pounds of pressure. ADA Standards require no more than 5 pounds of force.

No Low Priority

Technically Infeasible or Not Applicable

(due to changing standards or measurements within tolerance range)

» The toilet paper dispenser is 3"s to the centerline of the dispenser to the front of the toilet. ADA Standards require that the toilet paper dispenser must be located 7-9"s from the front of the toilet to the centerline of the dispenser and 14-17"s above the floor for children ages 5-8. If constructed before 3/15/2012, the dispenser does not need to be relocated if within reach of the toilet.

Low Recommendation

» All vertical thresholds should be no more than ¼" high or no more than ½" high with the top ¼" beveled. A better transition piece is recommended.

Currently, there are no High or Moderate Recommendations



A better transitional piece is recommended.



Insulate pipes under sinks and lower mirrors.



Stall does not currently meet ADA standards.



Gymnasium, Library Access Path, & Door Pressures

- » Opening force for exterior doors is not specified in the ADA Standards, but exterior doors that need to be accessible should have the minimum force possible. Typical maximum opening force for exterior doors range from 8.5 to 10 lbs. Closure time must be 5 seconds or greater.
- » Opening force for interior doors must be 5 pounds of pressure of less (push and pull). Closure time must be 5 seconds or greater.

High Priority

Moderate Priority

- » Interior Double Doors to the Library
 - » Left Door (from hallway coming into Library)
 - » Push Pressure: 10 pounds
 - » Pull Pressure: 9 pounds
 - » 2.18 seconds closure time
 - » Right Door (from hallway coming into Library)
 - » Push Pressure: 10 pounds
 - » Pull Pressure: 11 Pounds
- » Exterior Door from Gymnasium
 - » Push Pressure: 19 pounds
 - » Closure Time: 3.41 seconds
- » Front Entry Doors of Gymnasium (coming from Library):
 - » Left Door (from outside)
 - » Push Pressure: 20 pounds
 - » Pull Pressure: 16 pounds
 - » Closure Time: 2.56 seconds
 - » Right Door (from outside)
 - » Push Pressure: 14 pounds
 - » Pull Pressure: 11 pounds
 - » Closure Time: 2 seconds
- » Back Entry Doors of Gymnasium:
 - » Left Door (from outside)
 - » Push Pressure: 18 pounds
 - » Pull Pressure: 16 pounds
 - » Closure Time: 3.12 seconds
 - » Right Door (from outside)
 - » Push Pressure: 15 pounds
 - » Pull Pressure: 11 pounds

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» Wheelchair spaces need to be accounted for in the gymnasium bleacher area. The wheelchair spaces need to be 36"s wide and 48"s deep. If the space can only be entered from the side, then the space needs to be 60"s deep. The spaces cannot overlap circulation paths. Circulation paths must be at least 36"s wide. Generally, there needs to be 1 space per every 25 seats. These seats need to be located a safe distance away from events.

Technically Infeasible or Not Applicable

(due to changing standards or measurements within tolerance range)

» The pathway through the library narrows to 31"s around the tables at the station in the center.
Accessible pathways must be at least 36"s wide. This is not a safety hazard and a wheelchair still has room around transition pieces. Pathways can narrow to 32" for short distances.

Currently, there are no High, Moderate or Low Recommendations

No Low Priority





Parking area and access route behind Gymnasium

High Priority

- » The running slope of an access route (not following a roadway) cannot exceed 5%. The access route from the parking area is steep in select locations. Ramps can exceed 5% but only if handrails are installed. Ramps (with handrails) cannot exceed 8.33% running slope. Access routes cannot exceed 2% cross slope.
- » Accessible routes must be free of obstruction and at least 36"s wide.
- » There are currently no accessible parking spaces in the gymnasium parking area. Since there are 29 spots total, there must be 2 accessible spaces. Spaces must be located as close to the accessible pathway as possible. One accessible space must be van accessible. Please see Priority 1 Approach and Entrance Parking Standards 1.1-1.12.

Low Priority

 Surfaces must be smooth and any cracks exceeding ½" must be sealed.
 Though this pertains to access to a facility, it is a low priority in terms of safety.

Technically Infeasible or Not Applicable (due to changing standards or measurements within tolerance range)

Currently, there are no High, Moderate or Low Recommendations

No

Moderate

Priority





Access routes cannot exceed 2% cross slope.



Routes must be free of obstructions.



Cracks exceeding 1/2" must be sealed.



Granite Falls Middle School

(only elements utilized by the Town of Granite Falls)

Gymnasium Recommendations

- » The Town only utilizes the gymnasium for events. The school was not inventoried. Inventoried sections include: the men and women's restrooms in the gymnasium (on the bottom floor of the gymnasium), the accessible pathway to the gymnasium, and the gymnasium. There is currently no accessible pathway due to construction. There is currently no accessible parking or close parking lot due to construction. The accessible path must lead from the accessible parking to the gymnasium.
- » A renovated gymnasium is planned for Spring of 2021. An elevator is included in the renovation plans.

High Priority

- » Update all wall-mounted signage pertaining to exits to include Braille - cannot be mounted more than 40" above floor. Signs that are permanent: baseline of lowest character should be at least 48" high and baseline of lowest character no more than 60" high.
- » Include directional signage showing accessible pathways during construction.
- » The fire alarm needs to be rehung the bulbs were being replaced at the time of inventory.
- » Include accessible parking spaces as close to the gymnasium as possible for sporting events. Please follow Priority 1 - Approach and Entrance.

Moderate Priority

- » Update all directional and service-related signage to include Braille directional signage cannot be mounted more than 40" above floor. Current directional signage is mounted 51-52" high. Note: Signs designating permanent rooms and spaces not likely to change over time (room names, numbers, etc) should be mounted on the wall on the latch side of the door. Signs that are permanent: baseline of lowest character should be at least 48" high and baseline of lowest character no more than 60" high.
- » Wheelchair spaces need to be accounted for in bleacher areas. The wheelchair spaces need to be 36"s wide and 48"s deep. If the space can only be entered from the side, then the space needs to be 60"s deep. The spaces cannot overlap circulation paths. Circulation paths must be at least 36"s wide. Generally, there should be 1 space per every 25 seats. These seats need to be located a safe distance away from events.
- » Concession stand service area is 44"s high. Install an accessible service counter space 36"s long and 36"s high.

No Low **Priority**

Technically Infeasible or Not Applicable

(due to changing standards or measurements within tolerance range)

» Make sure all fire pulls are installed 34-48"s high. Most fire pulls were very close to this range. All future fire pulls need to follow ADA Standards.

Moderate Recommendation

» All vertical thresholds should be no more than ¼" high or no more than ½" high with the top ¼" beveled. A better transition piece is recommended.

Currently, there are no High or Low Recommendations







Door Pressures for Doors at Rear of Gymnasium

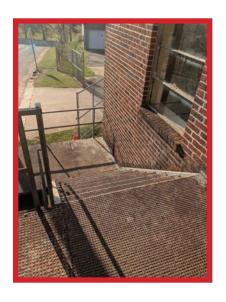
- » Opening force for exterior doors is not specified in the ADA Standards, but exterior doors that need to be accessible should have the minimum force possible. Typical maximum opening force for exterior doors range from 8.5 to 10 lbs. Closure time must be 5 seconds or greater.
- » Opening force for interior doors must be 5 pounds of pressure or less (push and pull). Closure time must be 5 seconds or greater.

High Priority

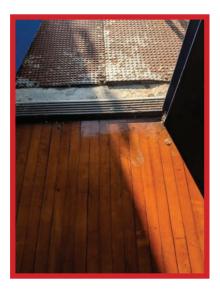
- » The back exits lead to stairwells and are not accessible to someone in a wheelchair. ADA Standards require that 60% of entrances be accessible. There should be tape on each step for visual contrast. The vertical thresholds need have better transition pieces for less of a trip hazard.
- » Far Left Exit (left from inside gym)
 - » Left door (from inside gym):
 - » Push Pressure: 17 pounds
 - » Pull Pressure: 14 pounds
 - » Closure Time: 1.93 seconds
 - » Doorway 27.75"s wide minimum door width is 32"s
 - » Right door (from inside gym)
 - » Push Pressure: 18 pounds
 - » Pull Pressure: 17 pounds
 - » Closure Time: 1.21 seconds
 - » Doorway 27.75"s wide minimum door width is 32"s
- » Far Right Exit (right from inside gym)
 - » Left door (from inside gym)
 - » Push Pressure: 19 pounds
 - » Pull Pressure: 17 pounds
 - » Closure Time: 2.48 seconds
 - » Doorway 26.75"s wide minimum door width is 32"s
 - » Right door (from inside gym)
 - » Push Pressure: 19 pounds
 - » Pull Pressure: 16 pounds
 - » Closure Time: 2.41 seconds
 - » Doorway 27"s wide Minimum door width is 32"s

- » Door pressures Men's Interior Double Doors:
 - » Left door (from inside gym)
 - » Push Pressure: 16 pounds
 - » Pull Pressure: 14 pounds
 - » Closure Time: 1.83 seconds
 - » Right door (from inside gym)
 - » Push Pressure: 18 pounds
 - » Pull Pressure: 14 pounds
 - » Closure Time: 1.83 seconds
- » Door Pressures Women's Interior Double Doors:
 - » Left door (from inside gym)
 - » Push Pressure: 19 pounds
 - » Pull Pressure: 18 pounds
 - » Closure Time: 1.66 seconds
 - » Right door (from inside gym)
 - » Push Pressure: 18 pounds
 - » Pull Pressure: 18 pounds
 - » Closure Time: 2.52 seconds
- » Women's lower level Exterior Doors (at Women's restroom):
 - » Left door (from inside gym)
 - » Push Pressure: 18 pounds
 - » Pull Pressure: 17 pounds
 - » Closure Time: 2.94 seconds
 - » Right door (from inside gym)
 - » Push Pressure: 17 pounds» Pull Pressure: 17 pounds
 - » Closure Time: 3.06 seconds

- » The transition into the doorway at the Women's Restroom exterior doors require a step up/ down. There should be a ramp all the way across exterior doors on lower level.
- » The double doors at the Women's Restroom exterior doors only have one handle for access.
- » Men's lower level Exterior Doors (at Men's restroom)
 - » Left door (from inside gym)
 - » Push Pressure: 17 pounds
 - » Pull Pressure: 15 pounds
 - » Closure Time: 3.16 seconds
 - » Right door (from inside gym)
 - » Push Pressure: 17 pounds» Pull Pressure: 15 pounds
 - » Closure Time: 3.11 seconds
- » The transition into the doorway at the Men's Restroom exterior doors require a step up/down. There should be a ramp all the way across exterior doors on lower level.
- » The double doors at the Men's Restroom exterior doors only have one handle for access.



Exits lead to unaccessible stairwell.



Threshold needs smoother transition piece,



Ramp needed.



Door Pressures

High Priority

- » Door Pressures Exterior Doors at main entry of gymnasium
 - » Far left Double Doors (from outside going into gym)
 - » Left Door
 - » Push Pressure: 14 pounds» Pull Pressure: 14 pounds» Closure Time: 3.63 seconds
 - » Right Door
 - » Push Pressure: 14 pounds» Pull Pressure: 16 pounds» Closure Time: 4.17 seconds
- » Middle Double Doors at Main Entry (from outside going into gym)
 - » Left Door
 - » Push Pressure: 11 pounds» Closure Time: 3.54 seconds
 - » Right Door
 - » All pressures were compliant
 - » All pressures for the far right double doors were also compliant

No Moderate Priority

No Low Priority Technically
Infeasible or
Not Applicable
(due to changing
standards or
measurements within
tolerance range)

Currently, there are no High, Moderate or Low Recommendations



Restrooms and Water Fountain

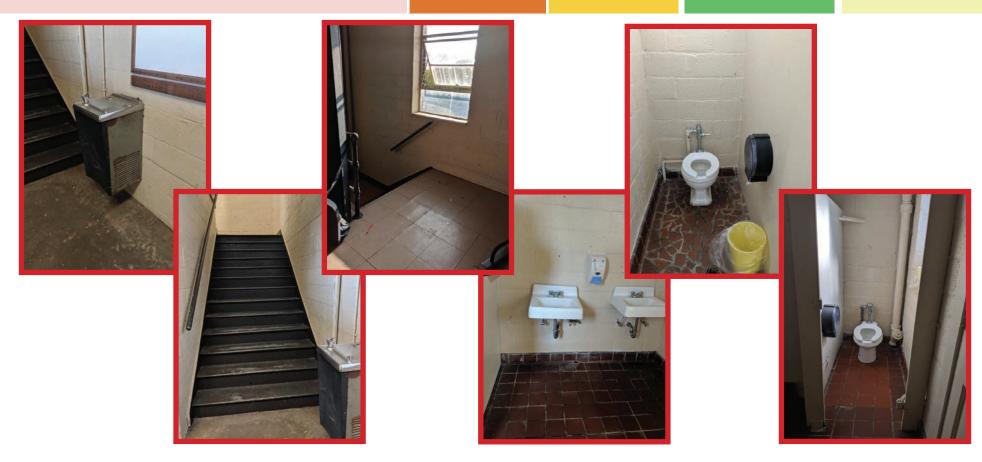
High Priority

- » The restrooms and water fountain are not accessible. Currently, the restrooms can only be accessed by stairs. There are plans to renovate the gymnasium and install an elevator.
- » The restrooms will also be renovated. Consider Priority 3 Toilet Rooms standards 3.1-3.50 in all restroom renovations as well as Advisory 604.9 Water Closets and Toilet Compartments for Children's Use (ages 9-12). Also look at standards for Elevators Full Size & LULA in Priority 2.

No Moderate Priority

No Low Priority Technically
Infeasible or
Not Applicable
(due to changing
standards or
measurements within
tolerance range)

Currently, there are no High, Moderate or Low Recommendations





Baird House

General Recommendations

If this becomes a registered historic property, standards that could degrade historic aspects are considered technically infeasible unless a safety risk is too immediate or an alternative solution can be determined.

High Priority

- » No egress plan.
- » Install smoother threshold/transition pieces at doorways. All vertical thresholds should be no more than ¼" high or no more than ½" high with the top ¾" beveled. The current vertical thresholds are ¾" rubber pieces could be placed on each side of the threshold.
- » There's an upstairs area with lots of exhibits but no lift/elevator for accessing the 2nd floor. If a lift is not feasible at this location, create a visual/audio tour of the upstairs if possible. People could watch or listen to the tour downstairs.

Moderate Priority

- Any counters/service counters open to the public must have a section 36"s high and 36"s long. The current service counter is 46"s high.
- » All circulation paths/access paths should be 36"s wide. The table in the Train Room must be shifted for a 36" circulation path.

Low Priority

» The porch railing is 30.75" high. Rails should generally be installed 34-38"s high – unless the porch is considered historic.





Technically Infeasible or Not Applicable (due to changing standards or measurements within tolerance range)

- » Make sure all fire pulls are installed 34-48"s high. Most were within this range.
- » Though currently not accessible because it's upstairs, the doorway to the Military Room upstairs is 29"s wide. ADA Standards require 32" wide doorways. This is not applicable unless the upstairs is made accessible.
- » The Sports Room (also upstairs) is 26"s wide. ADA Standards require 32" wide doorways. This is not applicable unless the upstairs is made accessible.
- » The doorway to the hallway (upstairs) is 28"s wide. This is not applicable unless the upstairs is made accessible.
- » Restroom upstairs is not accessible without a lift. If a lift is installed, the doorway would need to be widened to 32"s.

Smoother threshold / transition pieces at doorways.

Currently, there are no High, Moderate or Low Recommendations



Women's Restroom (Downstairs)

High Priority

- » Door Pressures
 - » Push Pressure: 10 pounds
 - » Pull Pressure: 11 pounds
 - » Closure Time: 3.34 seconds
- » Coat hooks are not required. If present, coat hooks must be mounted 15-48"s above the floor. The coat hook is currently 61.75"s high.

No Moderate Priority

No Low Priority

Technically Infeasible or Not Applicable

(due to changing standards or measurements within tolerance range)

Currently, there are no High or Moderate
Recommendations

Low Recommendations

» Light switch is hard to operate - recommend replacing.



Men's Restroom (Downstairs)

No High Priority

Moderate Priority

» Door hardware must be 34-48"s high. The current lock is 56"s high.

No Low Priority

Technically Infeasible or Not Applicable

(due to changing standards or measurements within tolerance range)

Currently, there are no High, Moderate, or Low Recommendations



Parking

Notes: **The running slope and cross slope of each accessible space and accessible aisle is measured at the top (area closest to the concrete parking block), middle and bottom. According to ADA Standards, the slope of accessible parking spaces and access aisles should be no greater than 2% in all directions.

High Priority Moderate Priority No Low Priority » The striping is fading - recommend » The cross slope at the top of the accessible space measures 4.3% » The running slope where the concrete and the running slope measures 3.6%. The cross slope in the middle restriping. at the main entrance meets the asphalt of the space measures 4.4% and 3.8% running slope. The cross is 6.8%. ADA Standards require slope at the bottom of the space measures 3.5% and the running running slopes of sidewalk that do not » If possible, there should be a flatter slope measures 4.4%. follow roadways measure 5% or less. accessible space with an access aisle that connects to an accessible pathway and entry. » The cross slope at the top of the accessible aisle measures 4.1% and the running slope measures 4.2%. The cross slope at the middle of the accessible aisle measures 4.3% and the running slope measures 5.6%. The cross slope at the bottom of the aisle measures 3.3% and the running slope measures 5.8%.

Currently, there are no High, Moderate, or Low Recommendations

Technically Infeasible or Not Applicable (due to changing standards or measurements within tolerance range)

» Parking lot renovations may be technically infeasible due to grade of land. It is necessary to make the most level space the accessible space in this lot.







Town Hall & Police Department Parking Lot

General Recommendations

See Pages 96-97 for parking lot design suggestions

High Priority

- » Recommend moving accessible spaces to where staff spaces are currently located at the side of the building. These spaces are more level and closer to the downtown area.
- » Accessible space not signed for van parking but is the proper dimensions for an accessible van space (with a wide 8' access aisle). The accessible aisle is not the correct width for an accessible van space. A van accessible space must be at least 11 feet wide with an access aisle at least 5 feet wide OR at least 8 feet wide with an access aisle at least 8 feet wide. There must be at least one accessible van space (can be the same space as the regular accessible space). Van sign mounted 60" above the ground is required.
- » Though the space needs to be moved, there is no signage on the space closest to Granite Drug. Accessible signs must be mounted 60" above the ground.
- » The access aisles for accessible spaces are incorrect. (The marking method and color may be addressed by state/local requirements.) ADA Standards require that accessible spaces measure at least 8 feet wide with an access aisle at least 5 feet wide. Two spaces may share an access aisle. Access aisles should connect to an accessible route or sidewalk. Please see the following two issues:
 - » The accessible space closest to Town Hall is 8 feet wide, however, the access aisle is split into sections on either side of the space. Each side is 2 feet wide.
 - » The accessible space closest to Granite Drug is 8 feet wide, however, the access aisle is 2.5 feet on either side of the space.
- » Space closest to Town Hall
 - » Top of space: cross slope 8.8%
 - » Top of access aisle to the right of space: 5.8% cross slope; top of aisle to left of space: 9.5% cross slope
 - » Middle of space: 9.5% cross slope
 - » Middle of access aisle to right of space: 8.9% cross slope; middle of aisle to left of space: 9.1% cross slope
 - » Bottom of space: 8.2% cross slope
 - » Bottom of access aisle to right of space: 7.3% cross slope; bottom of aisle to left of space: 9%
- » Space closest to Granite Drug
 - » Top of space: 6.9% cross slope; 3.6% running slope
 - $\ \ \, \text{Top of aisle to the right of space: } 6\% \, \text{cross slope}, 5.8\% \, \text{running slope; top of aisle to the left of space: } 3.3\% \, \text{cross slope}$
 - » Middle of space: 6.3% cross slope
 - » Middle of aisle to the right of space: 7.5% cross slope, 3.5% running slope; middle of aisle to the left of space: 3.9% cross slope
 - » Bottom of space: 6.7% cross slope, 4.6% running slope
 - » Bottom of aisle to right of space: 7.7% cross slope, 4% running slope; bottom of aisle to the left of space: 7.2% cross slope, 2.6% running slope
- » The top of the left access aisle closest to Town Hall is unlevel and presents a trip hazard. A smoother transition is needed.



General Recommendations (Cont.)

Notes: *The running slope and cross slope of each accessible space and accessible aisle is measured at the top (area closest to the concrete parking block), middle and bottom. According to ADA Standards, the slope of accessible parking spaces and access aisles should be no greater than 2% in all directions.

**At the time of inventory, there was 109"s of vertical clearance to the tree limbs. Make sure trees stay trimmed enough to provide at least 98"s of vertical clearance at the van accessible space.

High Recommendation

- » The current staff reserved spaces do not have a slope less than 2% in all directions. They are, however, less steep and closer to the buildings downtown. Recommend moving accessible spaces to staff spaces. Though this still does not meet requirements, it is closer to compliance and closer to destinations. There is also a better barrier separating the spaces from the roadway. Please see the measurements below:
 - » Reserved staff space closest to sidewalk:
 - » Top of space: 5.4% cross slope, 3.3% running slope
 - » Middle of space: 6.3% cross slope, 5.9% running slope
 - » Bottom of space: 6.6% cross slope, 4.3% running slope
- » The staff space to the left of the above space has cross slopes that range from 4-5% and running slopes that range from 4-6%.

Currently, there are no Moderate or Low Recommendations



Recommend moving accessible spaces to the staff spaces.



Add signage.



Access aisle needs to be 5 ft.



Access aisle is unlevel.



Dudley Alley Parking

General Recommendations

Notes: The running slope and cross slope of each accessible space and accessible aisle is measured at the top (area closest to the concrete parking block), middle and bottom. According to ADA Standards, the slope of accessible parking spaces and access aisles should be no greater than 2% in all directions.

High Priority

- » There is currently not an accessible space that meets the proper dimensions of an accessible van space. A van accessible space must be at least 11 feet wide with an access aisle at least 5 feet wide OR at least 8 feet wide with an access aisle at least 8 feet wide. There must be at least one accessible van space (can be the same space as the regular accessible space).
- » An accessible sign (in this case a van accessible sign) mounted 60" above the ground is required. Currently there is no mounted sign.
- » The current space is 9' wide with 2' access aisles on either side of the space. Access aisles must be a continuous 5' or 8' depending on the size of the accessible space. The aisles need to be one aisle and marked accordingly.
- » The access aisle to the right has a curb leading into the accessible space. The curb as well as the rough travel surface throughout the space and aisles are hazardous to mobility.
- » All access aisles need to connect to an accessible route. Accessible aisles must have a <2% slope in all directions until adjoining the sidewalk. The parking lot is very steep. It would be easiest to place the accessible aisle on the far left as close to the sidewalk as possible. This would involve shifting the accessible space to the left next to the new accessible aisle. A curb ramp needs to be installed at the end of the walkway marking the transition between the sidewalk and the accessible aisle. The accessible aisle may need to come down and around the built up area to connect to the sidewalk.
- » Accessible space markings are fading and need to be repainted.
- » Left Access Aisle needs to be redone to meet requirements:
 - » 2' wide ADA Standards require either 5' or 8' width depending on the width of the accessible space
 - » Top of aisle: 7% running slope
 - » Middle of aisle: 4.8% cross slope, 5.2% running slope
 - » Bottom of aisle: 5.5% cross slope, 5% running slope
- » Right Access Aisle needs to be redone to meet requirements:
 - » 2' wide ADA Standards require either 5' or 8' width depending on the width of the accessible space
 - » Top of aisle: 6% cross slope, 3.4% running slope
 - » Middle of aisle: 3.8% cross slope, 6.4% running slope
 - » Bottom of aisle: 6.3% cross slope, 7.2% running slope

Moderate Priority

- » Top of space: 3.3% Cross Slope, 5.8% running slope There are slopes much higher in most other spaces in the lot. Recommend moving one space to the left .
- » Middle of space: 4.8% cross slope, 5.3% running slope.
- » Bottom of space: 4.4% cross slope, 5.7% running slope.

No Low Priority

Technically Infeasible or Not Applicable

(due to changing standards or measurements within tolerance range)

Currently, there are no High, Moderate, or Low Recommendations



Park Square & Main Street Parking

Accessible Space in front of Linda's Family Hair Salon

Notes: The running slope and cross slope of each accessible space and accessible aisle is measured at the top (area closest to the concrete parking block), middle and bottom. According to ADA Standards, the slope of accessible parking spaces and access aisles should be no greater than 2% in all directions.

High Priority

- » If the spaces next to the median (at US 321-A) are included in Park Square, then there must be 1 additional accessible space. There must be 1 per every 25 spaces.
- » Accessible space not signed for van parking but is the proper dimensions for an accessible van space. There must be at least one accessible van space (can be the same space as the regular accessible space). Van sign mounted 60" above ground is required.
- » There needs to be an accessible parallel space in front of Town Hall. This would allow for safe access to Town Hall.
- » If the accessible parallel space is provided, a curb ramp must be installed that follows Priority 1: Approach and Entrance.

Low Priority

No Moderate Priority » Repair any cracks exceeding ½" in the accessible space and access aisle.

Technically Infeasible or Not Applicable

(due to changing standards or measurements within tolerance range)

- » The running slope of the top of the accessible space measured 2.9%. This measurement does not present a safety hazard and is one of two measurements within tolerance range.
- » The running slope of the top of the access aisle measured 2.9%. This measurement does not present a safety hazard and is one of two measurements within tolerance range.

Currently, there are no High, Moderate or Low Recommendations



Accessible Space in front of Mackie Furniture

Notes: The running slope and cross slope of each accessible space and accessible aisle is measured at the top (area closest to the concrete parking block), middle and bottom. According to ADA Standards, the slope of accessible parking spaces and access aisles should be no greater than 2% in all directions.

High Priority

- » The current sign is very faded. There needs to be a new sign installed signed for van accessibility. One accessible space must be van accessible per lot. Please see Priority 1 Approach and Entrance Parking Standards 1.1-1.12.
- » The access aisles currently aren't marked correctly. ADA Standards require that accessible spaces measure at least 8 feet wide with an access aisle at least 5 feet wide. If the space is marked van accessible, the space must be at least 11 feet wide with an access aisle at least 5 feet wide or 8 feet wide with an access aisle at least 5 feet wide.
- » The crack at the center of the space and aisles present a trip hazard. The asphalt is becoming steep around the problem area.

No Moderate Priority

No Low Priority

Technically Infeasible or Not Applicable

(due to changing standards or measurements within tolerance range)

- » The running slope at the top of the accessible space measured 2.7%. The running slope of the top of the left access aisle measured 2.7% and the running slope at the top of the right access aisle measured 2.8%. This does not present a safety hazard, except for around the crack addressed in "High Priorities".
- » The running slope of the middle of the accessible space measured 2.6%. This does not present a safety hazard, except for around the crack addressed in "High Priorities".

Currently, there are no High, Moderate, or Low Recommendations



ADA COMPLIANCE IN PLAY AREAS AND CEMETERIES

The ADA National Network guidelines for play areas can be found in Appendix C. This checklist was used by the project team while inventorying play areas. While a checklist is provided to ensure compliance, items are not prioritized in the same manner as the previous facilities. Priorities and scoring systems are not provided by the standards found in Appendix C. In discussions with ADA Specialists, items within parks and play areas should be addressed with the following points as guidance:

Safety and accessibility are the most important items to consider in play areas.

Focus less on the ratio of elevated components to ground components and focus more on accessible yet safe surface material and accessible pathways to play components.

Some materials, though accessible, can be unsafe and can cause liability concerns (for example, concrete surfaces at elevated play components could be a safety hazard). This is known as "Impact Attenuation of Surfacing Materials Within the Use Zone of Playground Equipment".

Accessibility is just as important for a disabled parent/grandparent/caregiver of a child visiting the playground as it is for a child with a disability. Therefore, accessible pathways are very important to play areas regardless of the type of play element.

Making play areas compliant can be very expensive. ADA Specialists recommend prioritizing one entire playground at a time as opposed to making small improvements to several playgrounds.

Sources to approved accessible sources can be found in Appendix D.

Items to note within the play area checklist:

An elevated play component is defined as a component approached above or below grade that is part of a structure of two or more play components providing more than one play activity. Play components that are attached to a composite play structure and that can be approached from a platform or deck area are considered elevated play components.

Ground level play components are components that can be approached and exited at ground level. For example, a child approaches a spring rider at ground level via the accessible route. The child may ride then exit directly back onto the accessible route. The activity is considered ground level because the child approaches and exits it from the ground-level route.

Number of Elevated Play	Minimum Number of Ground Level Play Components	Minimum Number of Different Types of Ground Level
Components Provided	Required to be on an Accessible Route	Play Components Required to be on an Accessible Route
1	n/a	n/a
2 to 4	1	1
5 to 7	2	2
8 to 10	3	3
11 to 13	4	3
14 to 16	5	3
17 to 19	6	3
20 to 22	7	4
23 to 25	8	4
26 and over	8, plus 1 for each additional 3, or fraction thereof, over 25	5

Play components can be stand alone or part of a composite play structure. Different types of play components are based on the general experience provided by the play component. Different types include, but are not limited to, experiences such as rocking, swinging, climbing, spinning, and sliding. The number of steps/ladders does not come into play when inventorying the number of play elements. What is looked at is the number of different types of play experiences on the composite play structure.

It is best practice to have at least one of each ground level play component on an accessible route.

An accessible route is at least 36" wide and is stable, firm, and slip-resistant. The compliant surface must extend to the play element for safe access for all users.

If there are elevated play components:

To make things equal for persons unable to access elevated play components, ADA Standards use the following chart to determine the number of additional ground play components required to be on an accessible route. The chart uses a ratio of elevated play components to ground components. If more than one ground play element is deemed necessary by the chart, the ground play elements must offer different play experiences and must be dispersed throughout the play area on an accessible route.

To simplify, there are two requirements addressing how many ground-level play components must be on an accessible route. One of each type of ground level play components must be accessible and the ground-level requirements based on the number of elevated play components according to the chart. For example, if a play area has swings and rockers ground level and one elevated play component, there must be one rocker and one swing on an accessible route as they offer different play experiences. The chart will then determine if any additional ground play components must be accessible.

‡ Park items are not prioritized in the same manner as the previous facilities. Prioritize one entire play area at a time as opposed to making small improvements to several play areas.



Lakeside Park

Restrooms - Far Right

**At the time of inventory, one restroom was locked due to maintenance. All restrooms were locked when I returned to collect measurements.

Noncompliant Issues

- If entering the restroom from the accessible parking space, the slope is too steep to safely access the restroom.
 Recommend moving accessible space (please see section on Lakeside Park Parking below).
- » At the time of inventory, there was no working light.
- » Door Pressures:

» Pull Pressure: 21 pounds
» Push Pressure: 16 pounds
» Closure Time: 2.49 seconds

» The lock is mounted 54"s high. Operable parts of door hardware must be mounted 34-48"s above the floor.

- » No restroom signage restroom signage must include Braille, raised text characters and the International Symbol of Accessibility. The sign must be mounted on the latch side of the door with 18x18 inches of centered floor space below. The baseline of the lowest character must be at least 48"s above the floor and the baseline of the highest character must be no more than 60"s above the floor.
- » The hot water does not work. The force to activate the faucet for cold water exceeds 5 pounds (currently a push pressure of 15 pounds).
- » There is currently no soap dispenser. When installed, please follow guidelines in Priority 3 Toilet Rooms, section 3.28.

Technically Infeasible or Not Applicable (due to changing standards or measurements within tolerance range)

- » There is currently no mirror. If a mirror is installed above the sink, ADA Standards require the bottom edge of the reflecting surface be installed no higher than 40"s above the floor. If not installed over the sink, the bottom edge of the reflecting surface must be installed no higher than 35"s above the floor.
- » The hand dryer does not work, but is installed at the correct height.

Currently, there are no High, Moderate or Low Recommendations



No working light.



Slope is too steep to safely access the restroom from accessible space.



Restroom signage must include braille.



If mirror is installed, the bottom shall not be higher than 40 inches.



Accessible Parking - At Park

**The running slope and cross slope of each accessible space and accessible aisle is measured at the top (area closest to the concrete parking block), middle and bottom. According to ADA Standards, the slope of accessible parking spaces and access aisles should be no greater than 2% in all directions.

Noncompliant Issues

- » Accessible sign is mounted 49"s high to the bottom of the sign. The bottom of the sign must be at least 60" above the ground.
- » Accessible space not signed for van parking but is the proper dimensions for an accessible van space. There must be at least one accessible van space (can be the same space as the regular accessible space). Van sign mounted 60" above the ground is required.
- » The sign needs to be visible (cut vegetation around sign).
- » The cross slope at the top of the accessible space measured 7.6% and the running slope measured 7.3%. The cross slope at the middle of the space measured 7.6% and the running slope measured 4.7%. The cross slope at the bottom of the space measured 7.7% and the running slope measured 5%.
- » The cross slope at the top of the accessible aisle measured 9.2% and the running slope measured 4.9%. The cross slope at the middle of the aisle measured 7.4% and the running slope measured 5.4%. The cross slope at the bottom of the aisle measured 6.8% and the running slope measured 7%.

Technically Infeasible or Not Applicable

(due to changing standards or measurements within tolerance range)

Currently, there are no Moderate or Low Recommendations

High Recommendation

» If feasible, recommend moving the accessible space next to the restrooms. It is much flatter in that location.



The accessible sign needs to be visible.



Trail System

**Most trails were steep and would not follow guidelines for Accessible Trails – this is permitted if a conditional departure is met. Recommend placing signage stating "trail not accessible" beyond picnic shelter. Please see the following guidelines:

- » High signage due to safety concerns
- » Conditional Departures The general exceptions are based on these parameters:
 - 1. The combination of running slope and cross slope exceeds 40 percent for over 20 feet; or,
 - 2. A trail obstacle 30 inches or more in height across the full tread width of the trail; or,
 - 3. The surface is neither firm nor stable for a distance of 45 feet or more; or,
 - 4. A clear trail width is less than 12 inches for a distance of 20 feet or more.



Trail System (Cont.)

What if building a trail to an accessible standard just isn't logical, desirable, or even possible?

- The following four areas highlight potential conditional departures from the ADA guidelines that are permitted for any portion of the trail where compliance would:
 - 1. Cause substantial harm to cultural, historic, religious, or significant natural features or characteristics;
 - 2. Substantially alter the nature of the setting or the purpose;
 - 3. Require construction methods or materials that are prohibited by Federal, State, or local regulations or statutes;
 - 4. Not be feasible due to terrain (excessive slope or cross slope) or the prevailing construction practices.



Picnic Shelter

Noncompliant Issues

- » Move the trash cans to an accessible area.
- » The running slope on the ramp into the shelter ranges from 8-11% on the steepest portions, but is very wide. All ramps exceeding a 6" rise are required to have handrails. The maximum slope allowed is generally 8.33%. The ramp does not exceed 8.33% for a majority of the ramp. Please see the chart to the right for more information.
- » There should be picnic tables that allow wheelchair access (table top with knee space beneath).





405.2 Slope. Ramp runs shall have a running slope not steeper than 1:12.

EXCEPTION: In existing sites, buildings, and facilities, ramps shall be permitted to have running slopes steeper than 1:12 complying with Table 405.2 where such slopes are necessary due to space limitations.

Table 405.2 Maximum Ramp Slope and Rise for Existing Sites, Buildings, and Facilities

Slope ^{<u>f</u>}	Maximum Rise
Steeper than 1:10 but not steeper than 1:8	3 inches (75 mm)
Steeper than 1:12 but not steeper than 1:10	6 inches (150 mm)

¹ A slope steeper than 1:8 is prohibited.

Technically Infeasible or Not Applicable

(due to changing standards or measurements within tolerance range)

Currently, there are no High, Moderate or Low Recommendations



River Parking - Right Parking Space and Access Aisle

**The running slope and cross slope of each accessible space and accessible aisle is measured at the top (area closest to the concrete parking block), middle and bottom. According to ADA Standards, the slope of accessible parking spaces and access aisles should be no greater than 2% in all directions.

Noncompliant Issues

- » Accessible space not signed for van parking but is the proper dimensions for an accessible van space. There must be at least one accessible van space (can be the same space as the regular accessible space). Van sign mounted 60" above ground is required.
- » The running slope at the bottom of the accessible space measured 4.9%. All other measurements for the right accessible space met ADA Regulations.
- » The cross slope at the middle of the aisle measured 3.1%. The cross slope at the bottom of the aisle measured 2.8% and the running slope measured 4%. All other measurements for the right accessible aisle met ADA Regulations.

Technically Infeasible or Not Applicable

(due to changing standards or measurements within tolerance range)

Currently, there are no High, Moderate or Low Recommendations

Accessible space signed for van parking but not proper dimensions. Signage needs to be mounted at least 60 inches high.





River Parking - Left Parking Space and Access Aisle

**The running slope and cross slope of each accessible space and accessible aisle is measured at the top (area closest to the concrete parking block), middle and bottom. According to ADA Standards, the slope of accessible parking spaces and access aisles should be no greater than 2% in all directions.

Noncompliant Issues

- » Accessible sign on the left accessible space is mounted 45" above the ground. The sign must be mounted at least 60" (to the bottom of the sign) above the ground.
- » The running slope of the left accessible space measured 5.1% at the top of the space. The cross slope measured 2.6% and the running slope measured 5.3% in the center of the space. The running slope measured 5.7% at the bottom of the space. All other measurements for the left accessible space met ADA Regulations. Most measurements are compliant and do not pose a safety threat, especially given the steep terrain in other locations.
- » The running slope at the top of the top of the left space's aisle measured 2.9%. The running slope of the center of the left aisle measured 4.9%. The cross slope at the bottom of the aisle measured 3.1% and the running slope measured 5.1%. All other measurements met ADA Regulations. Most measurements are compliant and do not pose a safety threat, especially given the steep terrain in other locations.

Technically Infeasible or Not Applicable

(due to changing standards or measurements within tolerance range)

Currently, there are no High, Moderate or Low Recommendations



Neighborhood Park

Noncompliant Issues

- » There is currently no accessible pathway. Accessible pathways ideally connect one of each park item to the entrance of the park and entrance/exit of the park area. This includes a trash bin, the bench swing at the entrance of the park, one bench, the shelter, the water fountain (if brought to standards), the bouncer, one of the climbing structures, one swing (preferably replaced by a jennswing or ADA approved swing), basketball court, tennis court, and slide (unless an additional ground play element is purchased then it is more important for that element to be on the accessible route as opposed to an elevated play element). This is a safety hazard for someone in a wheelchair (child or guardian).
- » Since not following a roadway, accessible pathways can have a maximum running slope of 5% and a maximum cross slope of 2%. It is best practice to make pathways 5' wide
- » The swing on the accessible path must meet the following guidelines:
- » Seat should be 11-24"s above the clear ground space.
- » There should be an open circle 60"s in diameter or a T-shaped space within a 60" square immediately adjacent to the accessible swing.
- » There are elevated play structures with adequate transfer platforms and steps that meet ADA requirements and offer all users an equal or comparable play experience. The current slide needs to be replaced with an ADA approved structure. The current structure is unsafe and has very steep steps that do not meet the measurement requirements. Transfer steps need to be 14"s deep, 24"s wide, and no higher than 8"s. The current steps are only 7"s deep and are very narrow.
- » There should be a means for someone wheelchair bound to safely access the play area from Stirling Street. The ramp leading into the park from the road is too steep and not flush with the roadway. ADA Standards require a maximum of 8.33% running slope and 2% or less cross slope. The current ramp has an 7-18% running slope and 3% cross slope. When corrected, if the rise is greater than 6"s, handrails are required. The section of the ramp leading into the road has a running slope of 9.9% and a 2.2% cross slope.
- » The tennis courts can only be accessed by stairs. The stairs need to be replaced with a ramp that fit the requirements in Priority 1 Approach and Entrance. If a ramp is not feasible, there must be a separate entrance from within the park (close to the shelter) that is on an accessible pathway.
- » The picnic shelter needs to be accessible with an ADA approved surface.
- » All play elements on accessible routes need ADA approved surface materials beneath each play element. This does not necessarily mean a concrete or asphalt surface that could be hazardous to safety. Please see Appendix XXXXX for a list of other approved ADA surfaces.
- » The water fountain is not compliant. If brought to standard, please follow Priority 4: Additional Access Drinking Fountains, Public Telephones & Fire Alarms.
- » The picnic table needs to be accessible with proper knee space at the end of the table.



Technically Infeasible or Not Applicable

(due to changing standards or measurements within tolerance range)

- » Since this is a neighborhood park with no parking for anyone, accessible parking is not required. If parking is added, accessible street spaces will need to be added.
- » The middle of the park area has a running slope along the hill that is 11-13%. The flattest area appears to be along the edge of the fence. This area would still exceed a running slope of 5%. Even if graded, the accessible path will likely exceed standards due to topography.

High Recommendations

- » Recommend adding sidewalks along streets leading up to the park. There is currently no easy/safe way to access the neighborhood park.
- » Recommend removing older playground climbing equipment.
- » Recommend an ADA approved surface material for the entire play area. This would eliminate the need for accessible pathways and materials beneath each play element. Please see Appendix XXXX for a list of approved surfaces.

No Moderate Recommendations

Low Recommendations

» Recommend making hoop height adjustable on basketball court.



General Recommendations (Cont.)





General Recommendations (Cont.)





There should be a means for someone wheelchair bound to safely access the play area from Stirling Street. The ramp leading into the park from the road is too steep and not flush with the roadway.



The tennis courts can only be accessed by stairs. The stairs need to be replaced with a ramp that fit the requirements in Priority 1 - Approach and Entrance.







Recommend removing older playground climbing equipment.



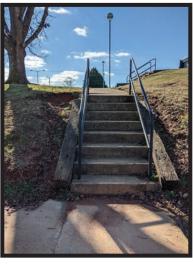
Granite Falls Recreation Center (Outside)

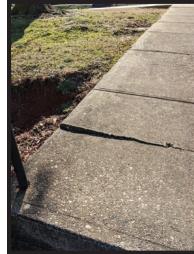
Noncompliant Issues



Site arrival – curb ramp above leading from the sidewalk along Pinewood Road to the park entry is too steep.

- Cross slope:8.1%
- Running slope:10.7%





The staircase above is damaged and could pose a trip hazard. There should be signage at the staircase showing those in wheelchairs the accessible route to the play area below.



Ramps with railing must have a barrier installed 4 inches from the ramp surface. This allows for cane detection and safer wheelchair stops.





Picnic areas should offer a portion of its tables with longer tops to accommodate knee space for those in wheelchairs. There should also be sufficient space for navigation between tables.



- » Mulched surface is too difficult for mobility in the play area next to the recreation center. Mulch should be replaced with an accessible surface along accessible pathways and next to accessible play elements. Please note that while surfaces such as cement are accessible, they can also pose a safety hazard in play areas if located too close to elevated and some ground level components.
 - » The asphalt play area currently meets ADA Standards for surface materials.
- An accessible route should connect one of each play element to the play area entrance if possible. An accessible route is at least 36 inches wide and is stable, firm, and slip-resistant. The compliant surface must extend to the play element for safe access for all users. Since the following play elements offer different play experiences, one of each must be included on the accessible route. Please refer to the pictures below:
- » Installing more equipment that meets universal design standards is recommended but not required.



















Connect accessible pathways to park elements such as benches and garbage cans. Each bench and garbage can does not need to be on the route, as long as accessible benches and cans are dispersed throughout the park.



Bleachers should have a ground area as close to the bleachers as possible designated for wheelchair spaces.

Smaller bleachers only require 1 space.

The space must be 36 inches wide and 48 inches deep.



The pathway above is too narrow for an accessible route at the entrance to the bleachers.



While this ramp offers a temporary fix, it should eventually be replaced with a curb ramp or striping should be rerouted to the existing curb ramp at the restrooms.



The batting cage (pictured above) is not accessible. Extend the sidewalk to the batting cage entrance/exit.

The sidewalk at the batting cage exceeds the 5% running slope allowed when not following a roadway. The sidewalk is cracked with drainage issues creating a hazardous travel path.







Recommend replacing or reinforcing the leaning retaining wall at the tennis courts. There are no standards enforcing this and is only a recommendation.



The rest area pictured above has vertical discontinuities that exceed the permitted 1/3"



The cross slope is hazardous along certain sidewalk segments next to the storage facility. The cross slope is 11.3 percent in the picture above with drainage issues that could cause a hazardous surface for some users.



The sidewalk located between the water tower and picnic shelter exceeds the permitted 5% running slope that sidewalk can reach if not following a roadway. The bottom of the hill has an uneven surface with a storm water drain. Safety improvements are recommended at the bottom of the hill, as well as level resting areas on large hills with a running slope exceeding 5%.

The corn hole boards and volley ball area are not accessible to all users.









The accessible spaces pictured above are missing access aisles. These spaces must be restriped in accordance with Priority 1 – Approach and Entrance in Appendix B.



If the concessions building (pictured above) is still in operation, it is not accessible to all users. An accessible route must lead up to where concessions are sold.



Not all bleacher areas are accessible. The bleacher entrance should be flush with the adjoining asphalt.



Detectable warnings are only necessary where pedestrians are crossing a roadway. The detectable warnings next to the gate are unnecessary.



Signage is necessary at stairways showing guests alternative accessible routes and where they lead.



The surface (pictured above) could be hazardous for some users.





Can visitors access this side of the field from an accessible parking area? If not, one of the spaces pictured above should be designated an accessible space.



Sunset Hills Cemetery

General Recommendations

If the cemetery is operated by a religious entity there are no ADA requirements. Religious organizations are exempt from the ADA. Below are accessibility suggestions based on Site Planning Standards and overall recommendations based on ADA criteria at other sites.

No High Priority No Moderate Priority No Low Priority

Currently, there are no Moderate Recommendations

Technically Infeasible or Not Applicable

(due to changing standards or measurements within tolerance range)

High Recommendation

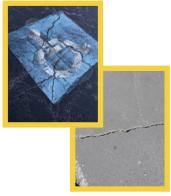
- » Recommend sidewalk for cemetery visitors to access the cemetery on the other side of Sherrill Drive from the accessible spaces at the church. Recommend adding a walkway from the parking lot in front of the church between the gravesites closest to the church to make other side of cemetery accessible from the parking area. OR add sidewalk leading from the accessible spaces to the other side of the cemetery down Clover Church Road.
- » Any future sidewalks should not exceed a cross slope of 2% and a running slope of 5% (unless following a roadway). Sidewalks should be at least 4 feet wide. Curb ramps and roadway crossings should follow the standards in Priority 1: Approach and Entry.



Recommended sidewalk access from church accessible spaces to the cemetery.



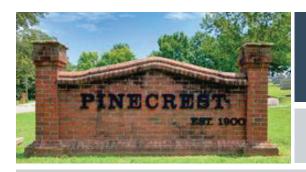
Future plots are recommended to be a minimum of 10 ft from the road and 20 ft from boundaries and fences



Seal cracks exceeding 1/2 inch.

Low Recommendation

- » Some cracks in the current parking lot exceed 1/2". These cracks need to be resealed.
- » Some plots are as close as 4-5 feet from Sherrill Drive leading through the cemetery. For future plots, Site Planning Standards recommend gravesites located a minimum of 10 feet from the edge of roads and a minimum of 20 feet from the boundaries or fence lines. There are no ADA Standards regarding this, however, this would allow adequate room for sidewalks if necessary.
- » The gravesites closest to Clover Church Road are 15 feet behind the boundary line. Site development standards recommend gravesites placed 20 feet behind boundary lines. Clover Church Road is not a major road any future gravesites along Pinewood Road would need a 20 foot buffer. There are no ADA Standards regarding this, however, this would allow adequate room for sidewalks if necessary.
- » Any future benches should have a paved and level (<2% slope in all directions) resting area next to the bench (connecting to the pavement) large enough for a wheelchair (2.5'x4').
- » Since walkways are not always feasible throughout the entire cemetery, main roadways throughout the cemetery should be as level as possible. Cross slopes should generally not exceed 2% and running slopes should not exceed 5% if possible. This is a very level cemetery and should not be an issue for any future roads.
- » For future gravesites, determine steep slopes that are unsuitable for interment areas. These areas should be kept in their natural state and more level/accessible areas should be utilized for future plots. This is a very level cemetery and should not be an issue for any future roads.



Pinecrest Cemetery

General Recommendations

If the cemetery is operated by a religious entity there are no ADA requirements. Religious organizations are exempt from the ADA. Below are accessibility suggestions based on Site Planning Standards and overall recommendations based on ADA criteria at other sites.

High Recommendation

- » An accessible pathway from the parking area at the church to the main road leading through the cemetery is only a recommendation from an ADA viewpoint. The roads leading through the cemetery need to be as smooth as possible since there are currently no sidewalks.
- » Some cracks in the current roads through the cemetery exceed ½" due to vegetation overgrowth. The vegetation needs to be removed and cracks need to be resealed for a smoother path of travel.
- » Since walkways are not always feasible through cemeteries, all roadways should be paved. Currently there is a gravel road leading to a portion of gravesites.
- » Cemetery visitors need an accessible route to utilize accessible parking. The parking needs to be as close to the cemetery as possible. Visitors currently used the church lot adjacent to the cemetery.
- » Any future sidewalks should not exceed a cross slope of 2% and a running slope of 5% (unless following a roadway). Sidewalks should be at least 4 feet wide. Curb ramps and roadway crossings should follow the standards in Priority 1: Approach and Entry.
- » Since walkways are not always feasible throughout the entire cemetery, main roadways throughout the cemetery should be as level as possible. Cross slopes should generally not exceed 2% and running slopes should not exceed 5% if possible. Due to the lay of the land, this is not technically feasible on all roads. Roads should be marked in areas unsafe for wheelchair use OR offer level resting areas (less than 2% slope in all directions). The number of resting areas depends of the severity of the slope.
- » For future gravesites, determine steep slopes that are unsuitable for interment areas. These areas should be kept in their natural state and more level/accessible areas should be utilized for future plots.
- » Any abrupt level changes leading into gravesites should be handled with an accessible solution for all users (ramps, etc.).

No High Priority No Moderate Priority

No Low Priority

Technically Infeasible or Not Applicable

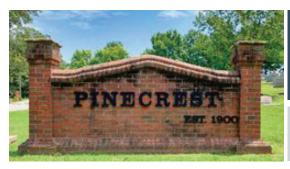
(due to changing standards or measurements within tolerance range)

Moderate Recommendation

» There are drainage issues that are undermining gravesites and head stones. This could be a safety hazard.

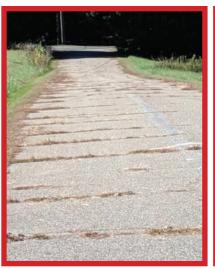
Low Recommendation

- » Some plots are as close as 6 feet or less to roadways throughout the cemetery. For future plots, Site Planning Standards recommend gravesites located a minimum of 10 feet from the edge of roads and a minimum of 20 feet from the boundaries or fence lines. This is recommended for potential sidewalks.
- » Any benches not associated with personal memorial areas should have a paved and level (<2% slope in all directions) resting area next to the bench (connecting to the pavement) large enough for a wheelchair (2.5'x4'). There are several benches that are not accessible.



Pinecrest Cemetery

General Recommendations (Cont.)





Remove vegetation and reseal pavement.



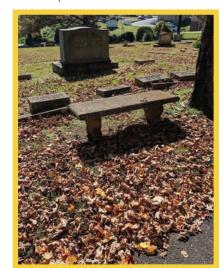


Drainage issue could cause trip hazard.



Main roadways should be paved.







Public benches should have a paved and level resting area.

Pedestrian Right of Way Collector Application

To document mobility hazards within the Town of Granite Falls' pedestrian right of way, the study team published a pedestrian right-of-way collector application for documenting mobility hazards within municipalities. Because ADA covers a broad range of criteria, the application covers criteria for sidewalks, curb ramps, driveway cuts, intersections, railroad crossings, bus stops, crosswalks, and pedestrian islands.

This application uses the most updated set of proposed PROWAG technical ADA standards from the US Access Board and is meant to serve as an overall inventory for the Town of Granite Falls Public Works Department. Using GPS and GIS software, the application is a living document that provides locations and descriptions of mobility hazards or items not complying with standards. All items that are corrected or infeasible can be documented in the application. Items from the application are used in this report.

Note: Age of streets and sidewalks were not noted in the pedestrian application. As this application is utilized, it is important to note the following:

Requirements vary depending on the age of a highway, road, street, or sidewalk and whether it was paved, repaved, resurfaced beyond maintenance, or otherwise altered.

Street, sidewalks, roads, and highways that were built before January 26, 1992, and have not since been altered are considered "pre-ADA". There were no standards in place when these were built and do not have to become compliant unless altered.

"Alterations" to roadways and new construction must comply with current ADA Standards. A street or sidewalk is included in this category if it was constructed prior to January 26, 1992 and has since been altered. Alterations made after January 26, 1992 must also comply with the latest ADA Standards. An alteration is a change that affects usability. Resurfacing a roadway beyond general maintenance is an alteration, however, filling potholes would not be considered an alteration since it does not affect usability.

Pedestrian Right of Way Methodology

Since the application is for Department of Public Works use, the following explains the methodology and ranking system used within the application. Most pedestrian infrastructure images used in this document are considered Priority 1 issues.

Priority 1 (Red) High: This category includes anything considered an immediate safety hazard according to standards. Many high priority items in the application can be corrected or improved by adding detectable warnings. Curb ramps or crosswalks leading pedestrians into roadways without detectable warnings (or truncated dome mats) automatically rank high priority. Detectable warnings are visually contrasting, colored mats with raised domes. This serves to warn pedestrians that are about to enter roadways. Detectable warnings are not necessary at driveway cuts, however, if not present at roadways and crosswalks, could present a dangerous mobility hazard for the visually impaired. Location, lighting, speed limits, and traffic

volumes are also factors in determining which items should be ranked high priority. In addition to lack of detectable warnings, dangerous mobility examples include but are not limited to impassable sections of sidewalk due to obstruction or damage, narrow driveway cuts with improper flares, inaccessible pedestrian signals, cross slopes exceeding 10%, dangerous pedestrian crossings, etc.

Priority 2 (Orange) Moderate: This category includes less severe, but still hazardous safety issues according to standards. Location, lighting, speed limits, and traffic volumes are also factors in determining moderate priority issues. Mobility hazards in this category include but are not limited to vertical discontinuities resulting in potentially dangerous transitions, smaller obstructions that do not completely block accessible paths, cross slopes ranging from 5-10%, unsafe pedestrian crossings, etc.

Priority 3 (Green) Low: This category includes non-compliant issues that do not pose an immediate safety hazard according to standards. Location, lighting, speed limits, and traffic volumes are also factors in determining low priority issues. Mobility hazards in this category include but are not limited to small vertical discontinuities exceeding .5", small cracks in sidewalks that could exceed .5" wide, most cross slopes ranging from 2-5%, etc.

Introduction to Collector Application Categories and Technical Standards

The following images represent examples from each category covered within the pedestrian right of way collector application. This does not represent all items within the application. Images in green boxes represent pedestrian elements within the Town of Granite Falls that comply with ADA Standards. These images show how each pedestrian element should look within the Town of Granite Falls. Images in red boxes represent pedestrian elements within Town of Granite Falls that do not comply with ADA Standards. Technical standards from the US Access Board are listed beside pictures as guidance for how items should be built or corrected in alterations and new construction.

The pedestrian right of way collector application covers each issue not complying with standards. The entire pedestrian network is mapped and addressed in the application. Town of Granite Falls' Public Works Department has access to this application and will correct issues in accordance with safety concerns, the Capital Improvement Program (CIP), and feasibility. Any corrected issue can be easily updated within the application to track improvements or technically infeasible items.

Curb Ramps





- » No detectable warning detectable warnings, or truncated dome mats, are what warns visually impaired individuals that they are about to enter a roadway with vehicular traffic. These mats must visually contrast with the surrounding pavement and be placed at the back of the curb, right before the gutter. There are exceptions where back of curb is not always feasible, however, detectable warnings must be present when entering roadways. Detectable warnings must cover the entire depressed segment of curb and must be 24 inches wide. There should be a smooth surface around detectable warnings so that mats are more easily noticed. Detectable warnings are not necessary at residential driveway cuts. They are recommended at busy commercial driveway cuts.
- » The depressed curb must be at least 48 inches wide to allow for wheelchair accessibility.
- » If one curb ramp serves two adjoining crosswalks at two adjoining streets, there must be a space 48 inches wide and 48 inches deep that is outside of vehicle travel lanes and within the crosswalks. This space must be as level as possible. This is known as a diagonal curb ramp. While diagonal curb ramps are allowed, they are not recommended. New construction is advised against using diagonal curb ramps.
- » The cross slope of each curb ramp is measured parallel to the back of each detectable warning. The cross slope must not exceed 2%.
- The running slope, or running grade, is measured perpendicular to the back of the detectable warning, where the ramp slopes downward towards the gutter. The running slope of curb ramps cannot exceed 8.33%.
- » The cross slope at the gutter, or foot, of the curb ramp cannot exceed 5%. The cross slope in this location is measured parallel to the front of each detectable warning.
- » If the curb ramp has flares that encroach on the pedestrian path of travel, the slope of each flare must measure 10% or less. This is measured parallel to the curb.
- » Curb ramps must have a level turning space that is 48 inches wide and 48 inches deep. Most turning spaces are at the top of the curb ramp. Turning spaces cannot exceed a 2% slope in all directions. If the turning space is constrained, the level turning space must be 48 inches wide by 60 inches deep. Turning spaces are considered constrained if taller curbs or other items block the area needed for proper foot space while turning in a wheelchair.
- » The transition between the ramp and walkway or street must be smooth and flush with the adjacent pavement or asphalt. There cannot be abrupt level changes or obstructions.
- » Curb ramps should have proper alignment. Curb ramps should align on either side of the intersection and/ or roadway and lead pedestrians in the proper direction. In some cases, due to drainage or other issues, this is not always feasible. These instances should be noted in the pedestrian right of way application.

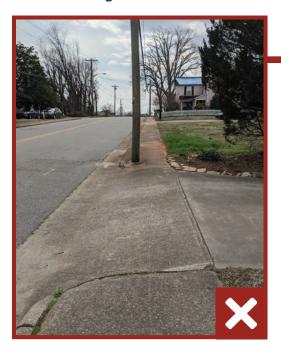
Note: There are many different types of curb ramps. Standards can differ slightly depending on curb ramp type. The following are general requirements for curb ramps using US Access Board technical standards.

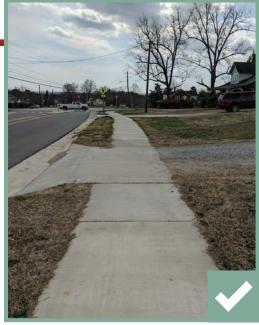
Crosswalks





Driveway Cuts

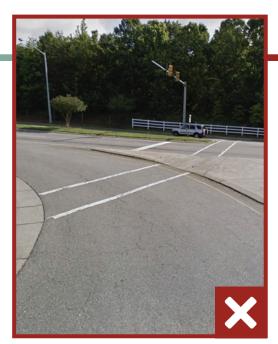




- » Crosswalks must be 6-10 feet wide.
- » There must be a running grade of less than 5%. This is measured perpendicular to the curb.
- The cross slope must be less than 2% if the crosswalk requires a stop or yield. This is measured parallel to the curb.
- The cross slope must be less than 5% if the crosswalk is signalized or uncontrolled on approach. As stated above, the cross slope of crosswalks in measured parallel to the curb.
- » Mid-block crossings require equal street grade.
- » Markings are not required, however, recommended in areas with high traffic volumes. NCDOT requests that marking are present at intersections with pedestrian signals. As stated above, markings must be 6-10 feet wide if present. Crosswalks are present at stop signs and intersections regardless of markings.
- » Textured surfaces are not recommended. Smooth surfaces such as asphalt or concrete without patterns are recommended.
- » High visibility crosswalks are recommended at midblock crosswalks. This includes proper signage, rectangular rapid flashing beacon if applicable, high visibility markings, and overhead lighting.
- » Driveway cuts must maintain a 4 foot wide, level pedestrian path of travel surface for the entire driveway cut.
- » Driveway cuts cannot exceed a 2% cross slope. The cross slope is measured perpendicular to the pedestrian path of travel.
- » Driveway cuts cannot have a rapid grade change at the flare. Flares at the beginning and end of each driveway cut should be out of the 4 foot wide pedestrian path of travel.

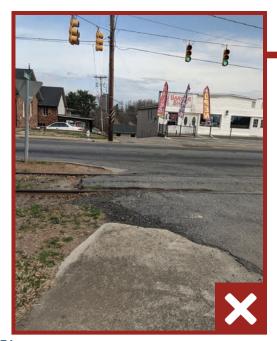
Pedestrian Islands

- » There must be at least 2 feet between detectable warnings.
- » Detectable warnings must be 24 inches in length at both openings. Detectable warning are only required if the pedestrian island exceeds 6 feet in width.
- » The clear width of pedestrian access routes within medians and pedestrian refuge islands should be 5 foot minimum.
- A slip lane is a traffic lane provided at an intersection to allow vehicles to turn at the intersection before merging and interfering with through traffic. The island must be raised at slip lanes except for at accessible openings.
- » Crosswalks must be one car length back at slip lanes as shown in the illustration.





Railroad Crossings





- The pedestrian path must be at least 4 feet wide for the entire crossing. The surface between and on either side of the rails must be aligned with the top of the rails.
- » The flangeway gap can be a maximum of 2.5 inches. Flangeway gaps can be 3 inches wide on freight rail tracks.
- » A detectable warning (or truncated dome) must be located 6-15 feet from the centerline of the nearest rail. The detectable warning must extend the full width of the pedestrian crossing.

Pedestrian Signals

- » When facing the intersection, the push button for the crosswalk on your left should also be located to your left on the outside edge of the crosswalk, and the push button for the crosswalk on your right should be located to your right on the outside edge of the crosswalk. The push button face should also be aligned parallel with the direction of travel.
- » Some of the below standards only apply to new pedestrian signal installations. All signals, however, should be easily accessed by all users.
- » The push button should have a 4' X 4' landing with less than a 2% cross slope in all directions. The landing must be unobstructed and an all-weather surface. The landing can be 30" by 48" for a parallel approach.
- » The push button should be offset up to 5 feet maximum from the lateral projection of the outside edge of the cross walk.
- The push button should be 1.5 feet to 10 feet from the back of curb. It is ideal to space it approximately 6 feet from the back of curb.



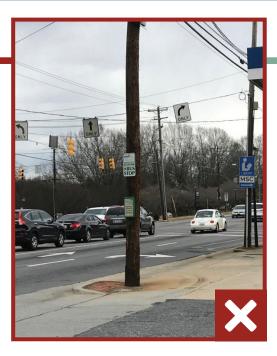


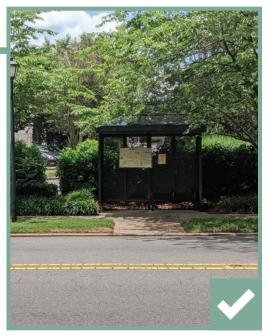
- » The push buttons should have at least 10 feet of separation between them. If located on a pork chop/island, the minimum separation between the push buttons should be at least 6 feet.
- » The face of the push button should be parallel to the crosswalk to be used.
- » The push button(s) shall be at a height of 15-48". The ideal height is 42".
- » The push button can have a 10 inch maximum horizontal reach. For example, a push button can be located up to 10" away from an accessible path/resting area.
- » There must be speakers at the pushbutton
- » There must be a tactile arrow showing pedestrians which direction the pedestrian signal serves. The MUTCD recommends that the tactile arrow vibrate.
- » A pushbutton locator tone is a repeating sound that informs approaching pedestrians that a pushbutton to actuate pedestrian timing or receive additional information exists, and that enables pedestrians with visual disabilities to locate the pushbutton. Standards indicate that alerts should be set to one tone per second.
- » The visual signal head should be mounted 7-10 feet high.

Transit Stops

** Currently transit service is not offered in Granite Falls. The following standards should be considered for any future bus stops.

- If a shelter is present, there must be a clear space measuring2.5 feet by 4 feet, 1.5 feet from the seats within the shelter.
- » The slope must be less than 2% perpendicular to the shelter.
- » A firm stable surface including concrete, asphalt, brick, stone, tile and wood. Loose material such as gravel or stone dust do not meet the requirements unless properly treated with binders, consolidates, compaction or grid forms. Grass is not considered a firm stable surface.
- » ADA landing pad an area that is clear of obstructions and measures eight feet (perpendicular to the curb) by five feet (parallel to the curb). The landing pad can include part of the sidewalk. This allows for full extension of the ramp on the bus.
- » Accessible connections to a street, sidewalk, path etc.
- » Note: Design of Bus Stops recommends for rural areas that a shelter be placed in locations where there are 10 or more boardings per day. Other criteria used to evaluate the potential for a shelter include the number of routes that serve the stop, high percentage of elderly or disabled individuals in the area, proximity to major activity centers and the availability of space to install a shelter.





Sidewalks

- » Sidewalks must be at least 4 feet wide for the pedestrian path of travel. 5 feet of width is recommended.
- » There cannot be vertical discontinuities exceeding ½ inches. Vertical discontinuities include cracks, height differences in concrete slabs, etc.
- » Walkway joints, grate openings, and cracks cannot exceed ½ inches wide. If grate openings exceed ½ inches wide, they should be turned perpendicular to the pedestrian path of travel.
- » Objects measuring 2.25-6.7 feet high cannot protrude more than 4 inches into the pedestrian path of travel. Certain signage and other fixtures are marked within the collector application.
- » Guardrails or barriers must be 2.25 feet maximum above the surface.
- » The pedestrian path of travel cannot exceed a 2% cross slope. The cross slope is measured perpendicular to the pedestrian path of travel.
- » If the sidewalk is NOT following a roadway, the running slope cannot exceed 5%. The running slope is measured parallel to the pedestrian path of travel. Sidewalks following roadways can have the same running grade as the roadway.
- » There must be a smooth travel surface with solid, compliant surface material such as concrete.
- » Sidewalks cannot be buckled or cracked. As stated above, cracks that do not exceed ½ inches in width are permissible but still noted in the collector application.
- » Sidewalks should not have uneven or depressed segments. Depressed segments do not meet proper slope requirements and can cause drainage issues.
- » Sidewalks should not have overgrown vegetation. Any vegetation encroaching on the pedestrian path of travel should be removed. This includes trees or foliage protruding more than 4 inches into the pedestrian path of travel.
- » Sidewalks should not have noticeable drainage issues. Pooled water can create mobility barriers.
- » Trees incorporated into the sidewalk design should be covered by grates. As noted above, grate openings cannot exceed ½ inches in width. If wider than ½ inches, grate openings must be perpendicular to the pedestrian path of travel.
- » Sidewalks should have a designated furniture zone in areas with benches, trash bins, light poles, etc. The furniture zone should be placed on the same side of the sidewalk throughout the municipality for consistency.



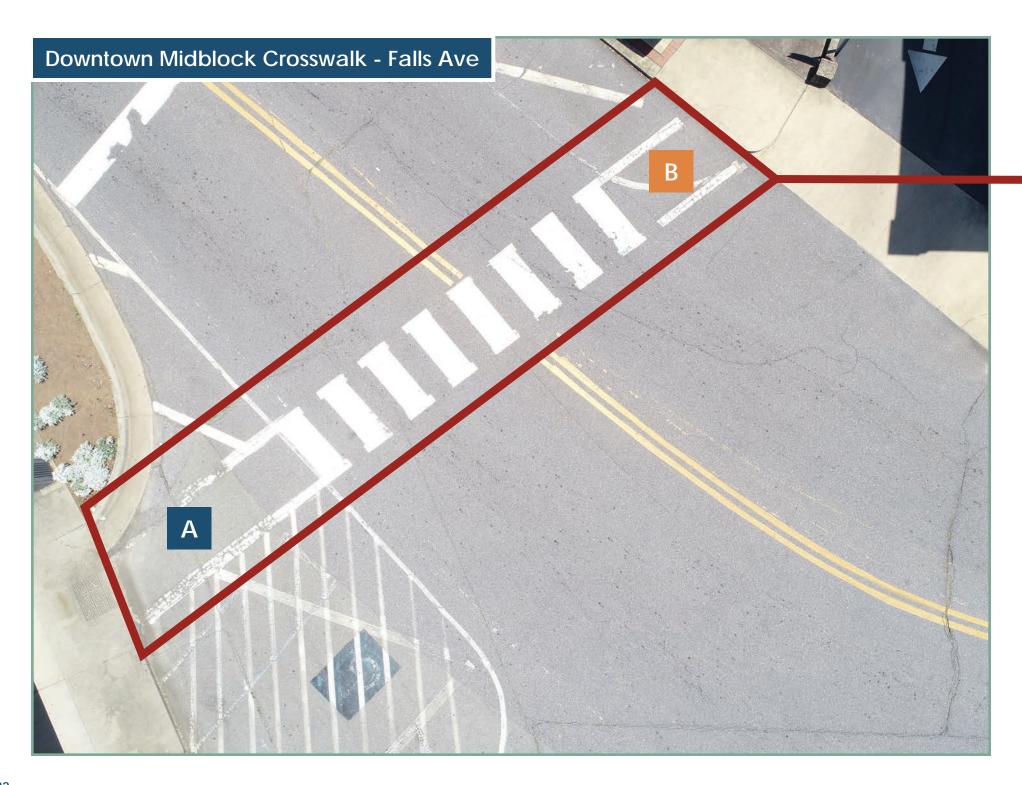


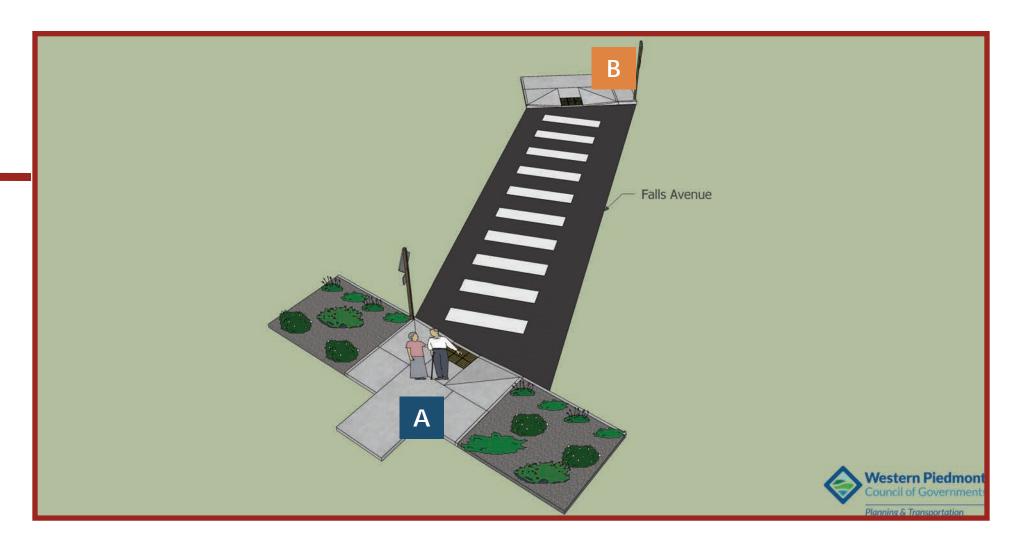


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Problematic Areas within the Pedestrian Right of Way

The following images should be addressed first within the pedestrian right of way collector application. This does not represent all items within the application. These images pose the biggest safety concerns and/or liability threats to the Town of Granite Falls. All image recommendations were reached in coordination with NCDOT. While the recommendations comply with the latest proposed PROWAG standards from the US Access Board, this document is meant for guidance. Engineer approval is still warranted for best safety and feasibility practices.



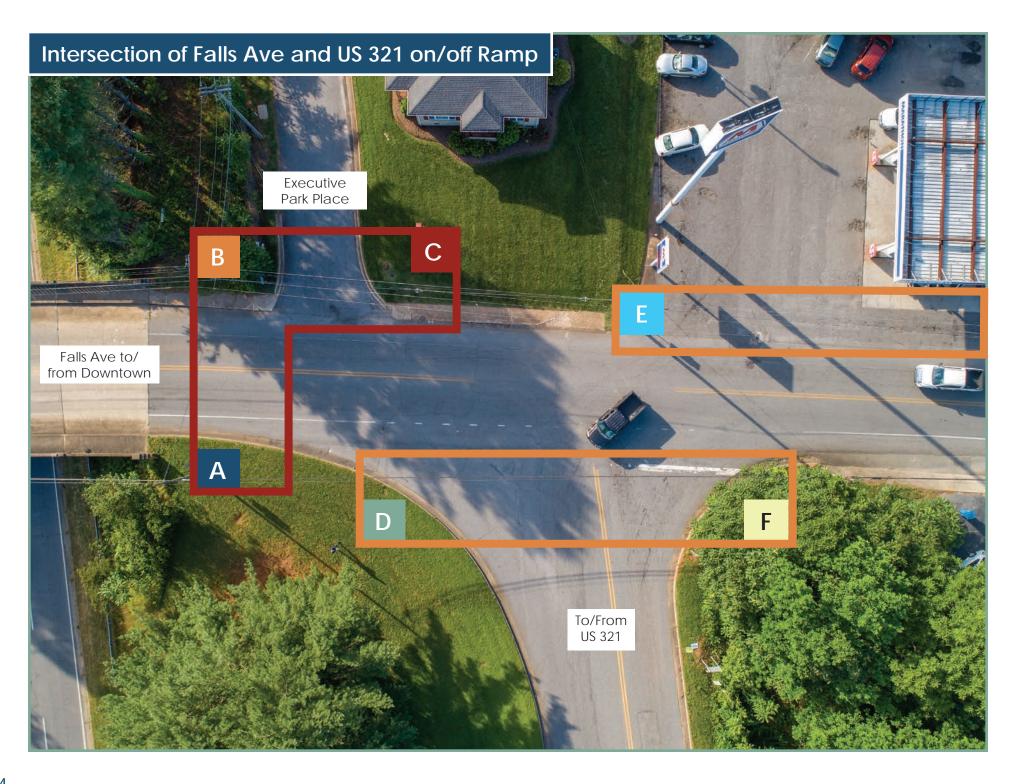


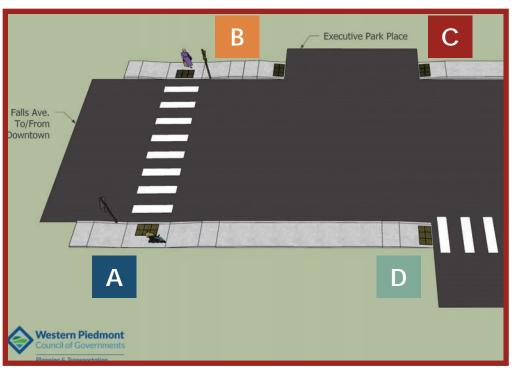


- » Bulb-out with compliant curb ramp and contrasting detectable warning.
- » Pedestrian signage.
- » High visual crosswalk.



- » Bulb-out with compliant curb ramp and contrasting detectable warning. Curb ramp needs to be separate from the adjoining driveway cut.
- » Pedestrian signage recommend placing pedestrian signage before the curve on Falls Ave to give motorists advanced warning of pedestrian crossing.
- » Optional: rapid flashing beacon.







- Sidewalk extension and compliant curb ramp with visually contrasting detectable warning.
- » High visual crosswalk.
- » Pedestrian signage.
- » Note: vegetation on opposite end of bridge needs to be removed for pedestrian visibility.



- » Compliant curb ramp with visually contrasting detectable warning for crosswalk.
- » Compliant curb ramp with visually contrasting detectable warning for crossing at Executive Park Place.



» Compliant curb ramp with visually contrasting detectable warning for crosswalk at Executive Park Place.



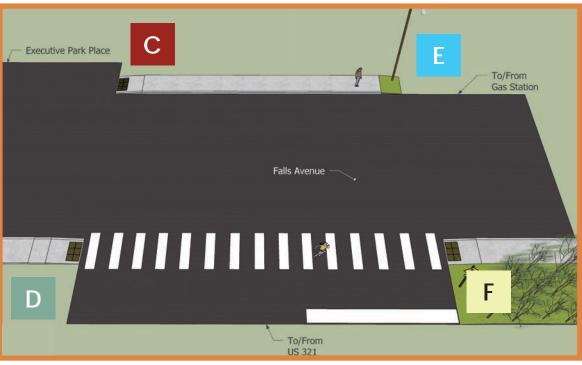
- » Squared intersection to shorten pedestrian crossing.
- » Sidewalk extended to meet intersection.
- » Compliant curb ramp with visually contrasting detectable warning for crossing at US 321 on/off ramp.
- High visual pedestrian crossing across US321 on/off ramp.

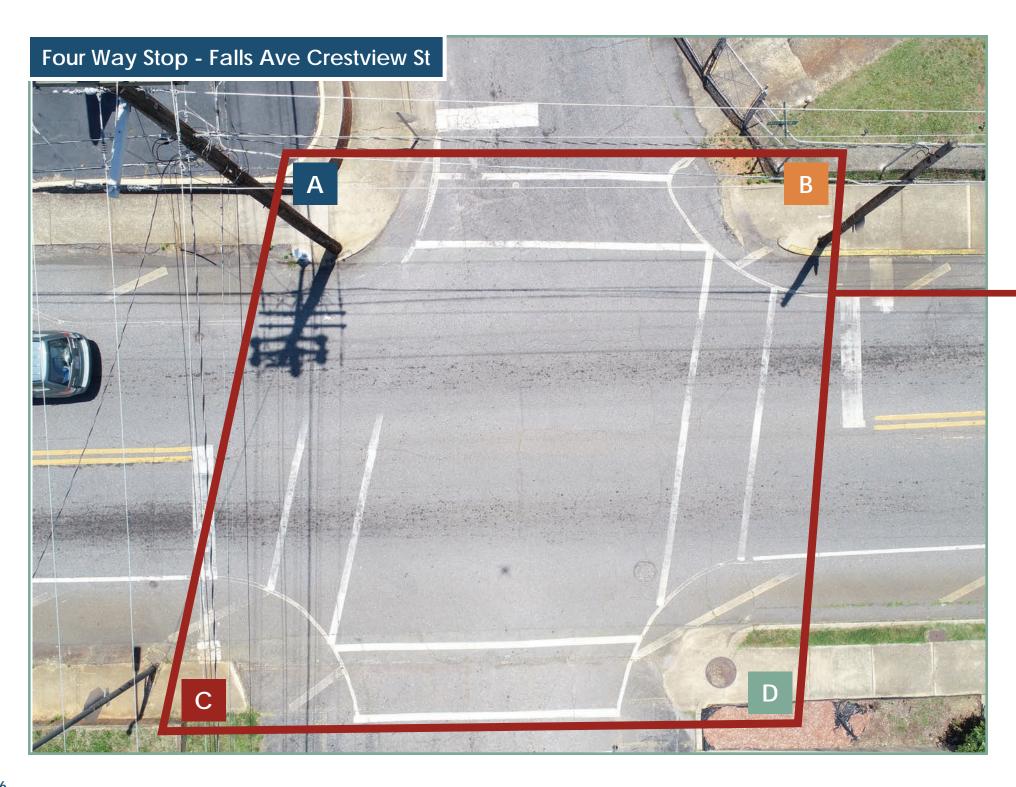


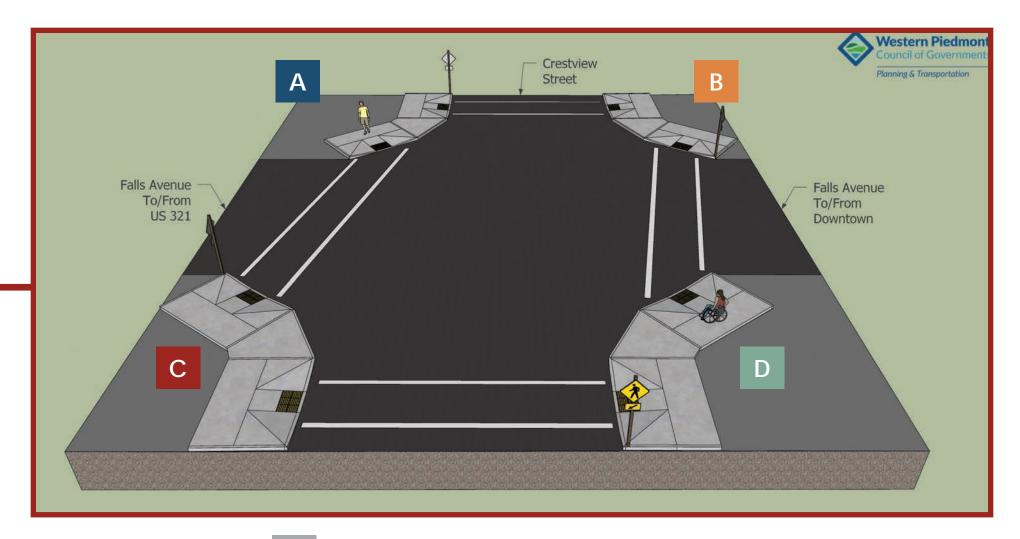
Extend sidewalk down Falls Ave and consolidate driveway cut at Marathon Gas Station.



- » Squared intersection to shorten pedestrian crossing.
- » Compliant curb ramp with visually contrasting detectable warning for crossing at US 321 on/off ramp
- » Pedestrian signage for crosswalk.







Α

» Bulb-out with two compliant curb ramps on each corner for pedestrians crossing in either direction.

В

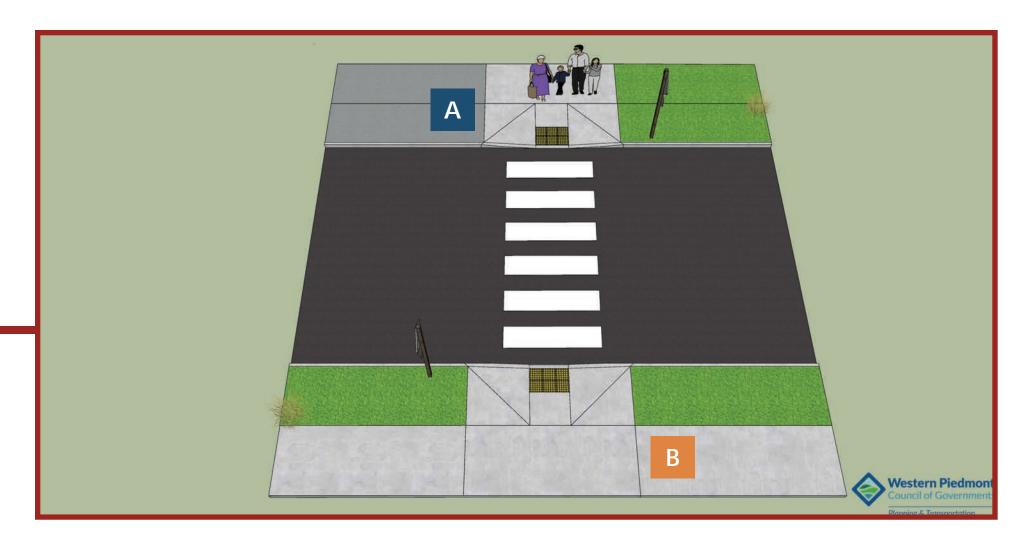
» Curb ramps must have visually contrasting detectable warnings.

С

» Pedestrian signage at crosswalks.

» Restripe crosswalks.



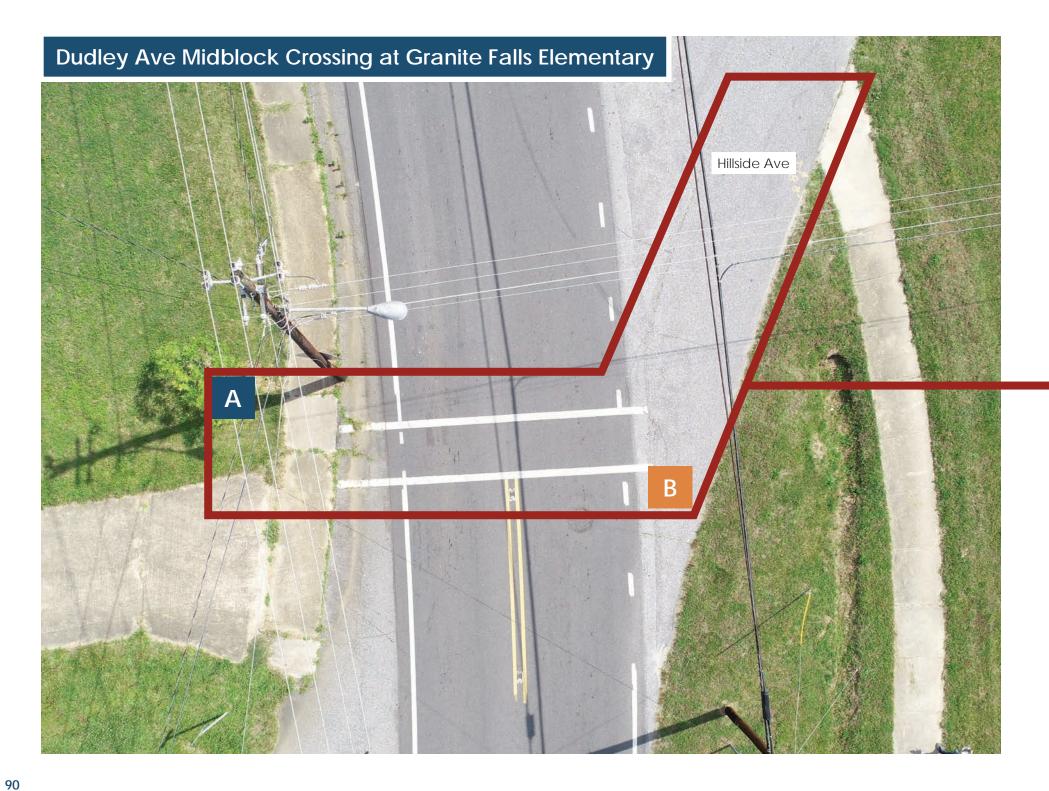


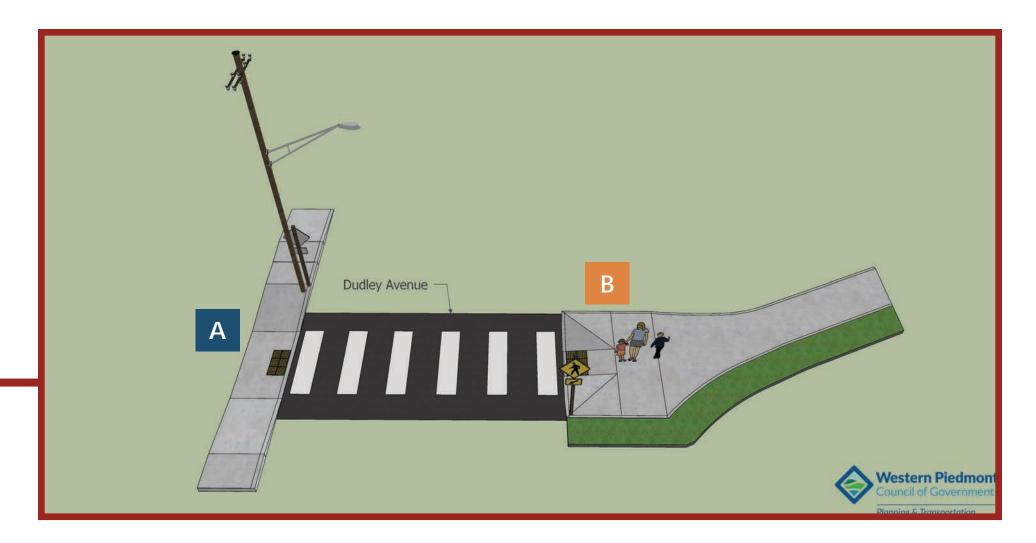


- Install a compliant curb ramp with visually contrasting detectable warning for crosswalk. A level resting pad must be included as part of the curb ramp.
- » Install updated pedestrian crossing signage.
- » Recommendation: Install sidewalk to the right of curb ramp extending to Midway Street.



- Install a compliant curb ramp with visually contrasting detectable warning for crosswalk.
- » Install updated pedestrian crossing signage.







- » Compliant curb ramp with visually contrasting detectable warning at crosswalk.
- » Update pedestrian signage at the crosswalk. Signage should not intersect the pedestrian path of travel.
- » Update crosswalk markings to high visual markings.



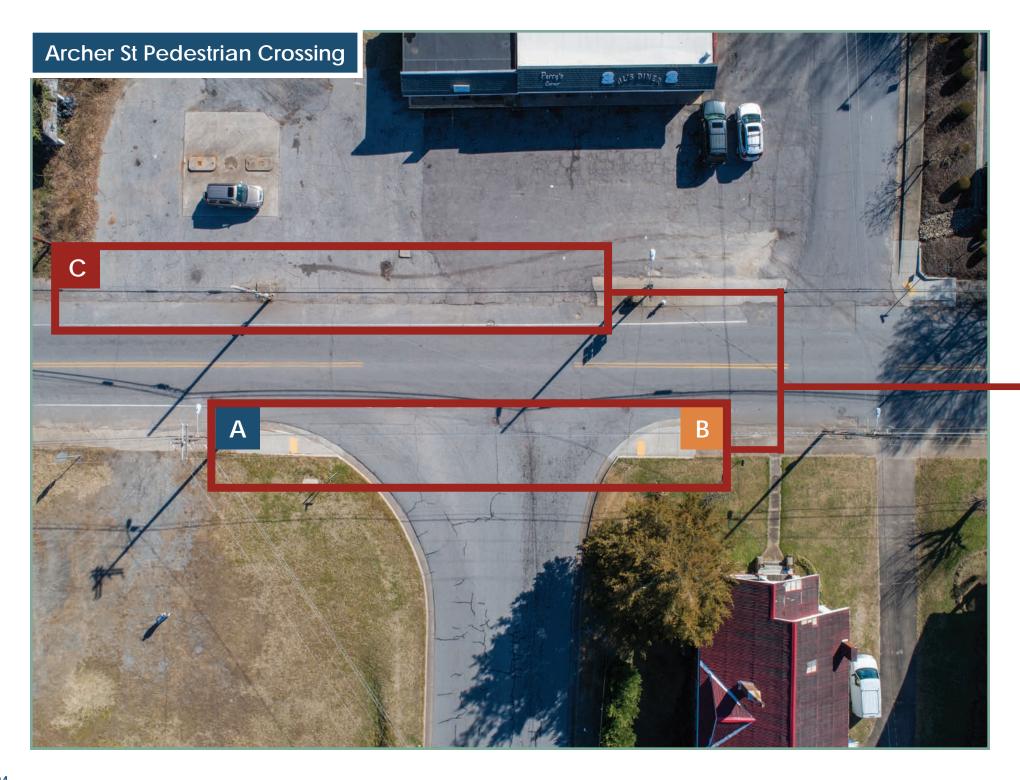
- Install compliant curb ramp with visually contrasting detectable warning at crosswalk.
- » Update pedestrian signage at the crosswalk.
- Extend sidewalk along Hillside Ave to connect to proposed curb ramp.

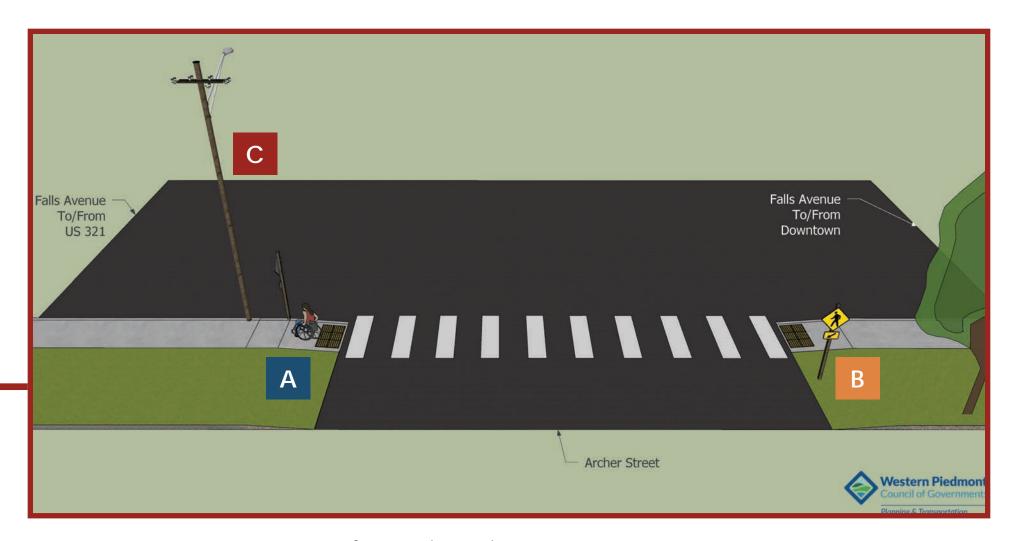






- » Driveway cuts must maintain a 4 foot wide, level pedestrian path of travel surface for the entire driveway cut.
- » Driveway cuts cannot exceed a 2% cross slope. The cross slope is measured perpendicular to the pedestrian path of travel.
- » Driveway cuts cannot have a rapid grade change at the flare. Flares at the beginning and end of each driveway cut should be out of the 4 foot wide pedestrian path of travel.





- » Square-up intersection.
 - » Compliant curb ramp with visually contrasting detectable warning at crosswalk.
 - » Pedestrian signage at crosswalk.
 - » Highly visual crosswalk.
 - » Stop bar for motorists should be 4 ft. behind crosswalk.
- » Recommendation: Consolidate driveway cut.





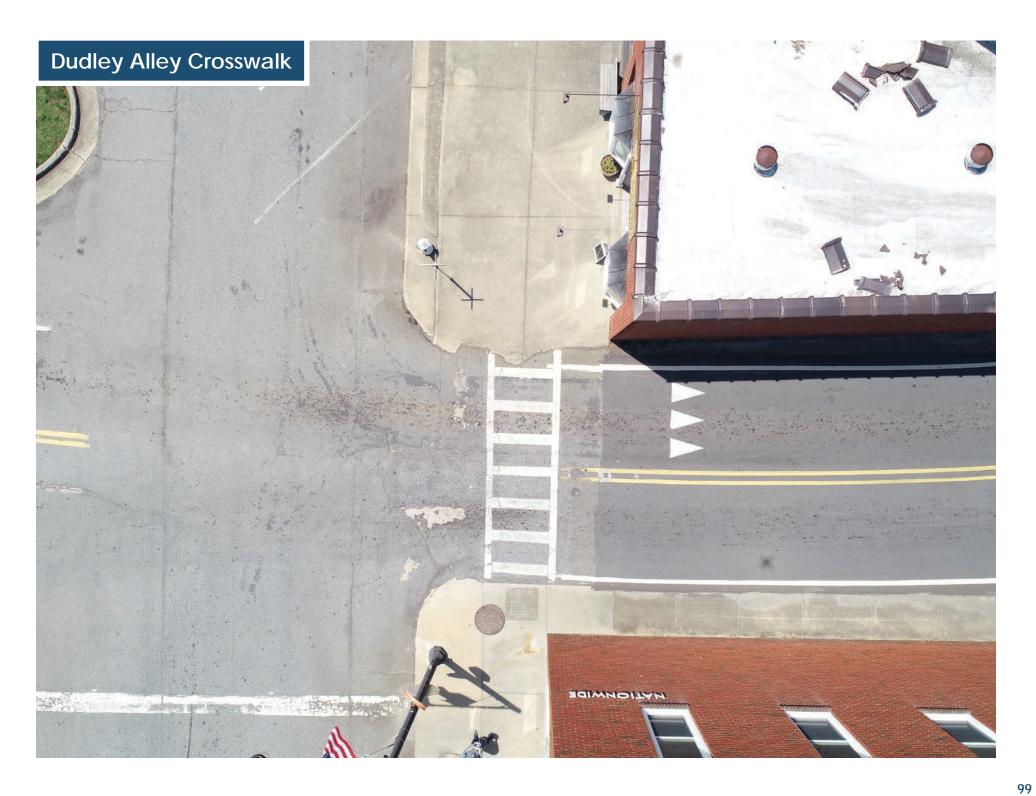
- Α
- » Move accessible spaces (Points "C" and "B") next to the building at Point "A".
- » One space must be van accessible.
 - » Stripe the shared access aisle to connect to the accessible path of travel.
 - » See ADA Parking Standards in Appendix XXX under Approach and Entry.

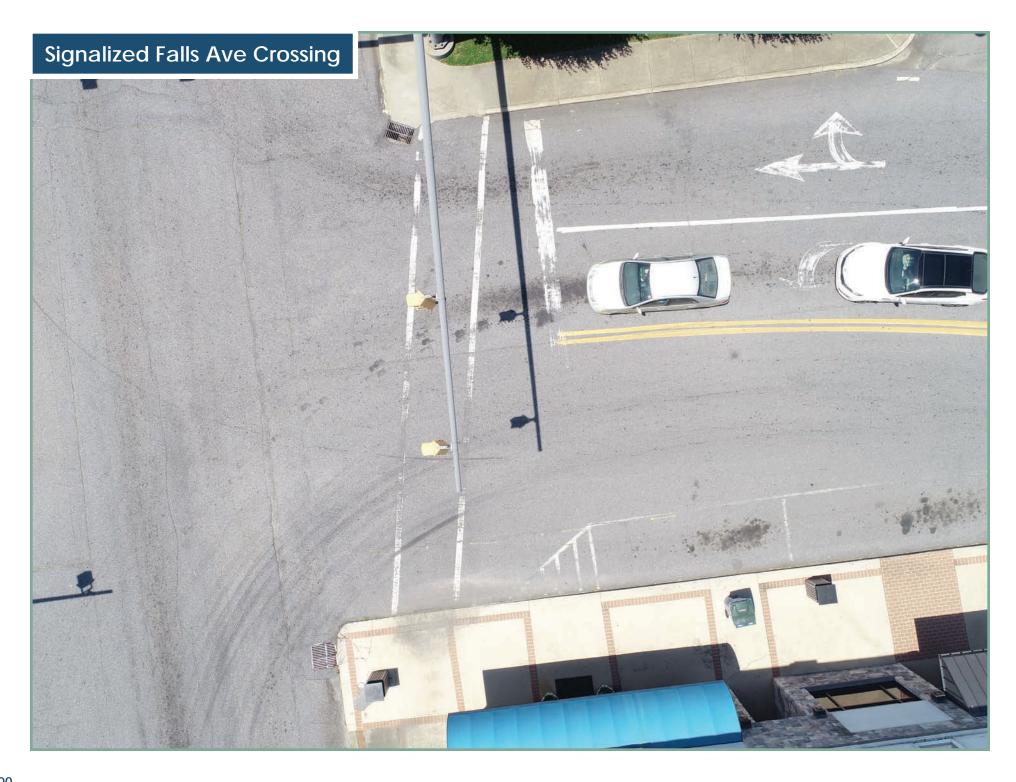
See pages 48-49 for complete markup of parking lot suggestions.

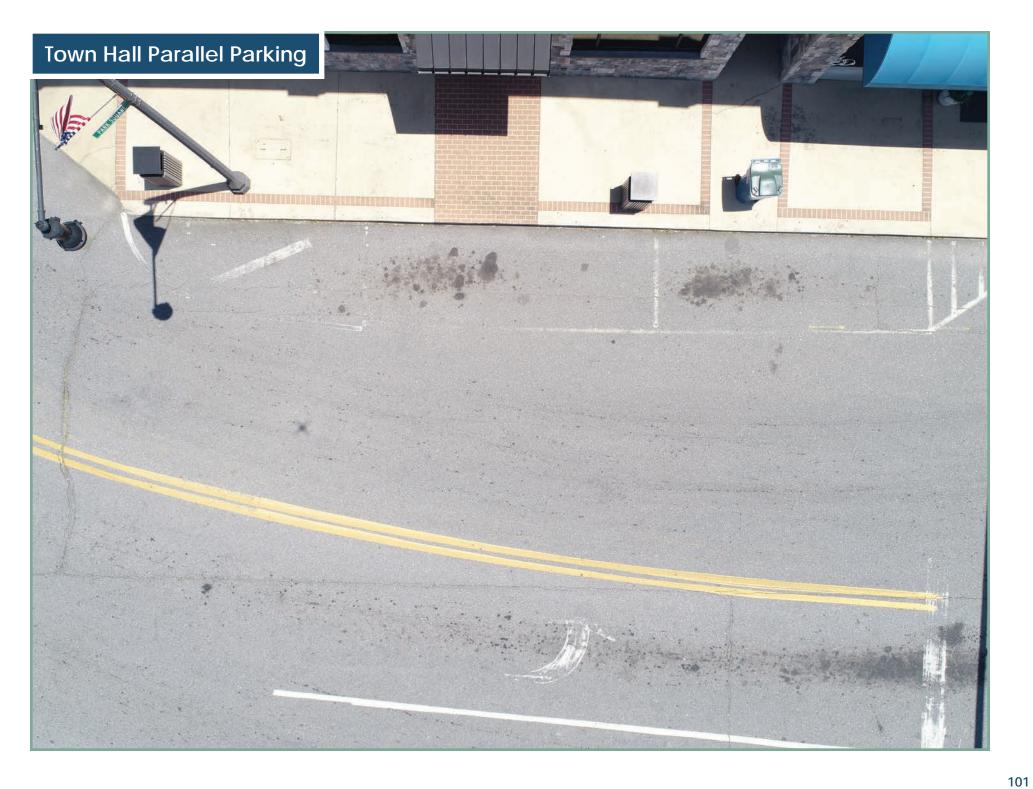
Problematic Areas Addressed with NCDOT Project U-6034

The following drone pictures display problem areas that will be addressed through NCDOT project U-6034. Suggestions and renderings are not included since accessibility improvements are included in the project scope.

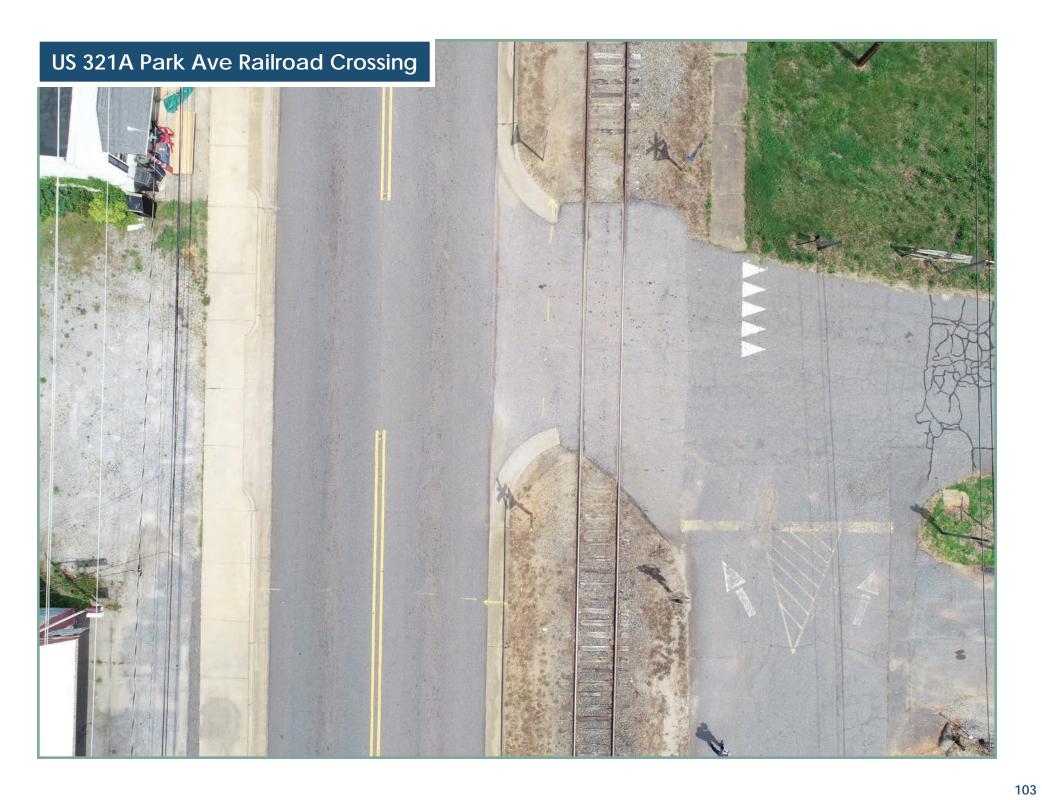
- Dudley Alley Crosswalk
- Signalized Falls Ave Crossing
- Town Hall Parallel Parking
- US 321A North Main Parallel St Highland Ave Railroad Crossing
- US 321A Park Ave Railroad Crossing
- US 321 Lakeside Ave Railroad Crossing
- Highland Ave N Main Parallel St Closeup

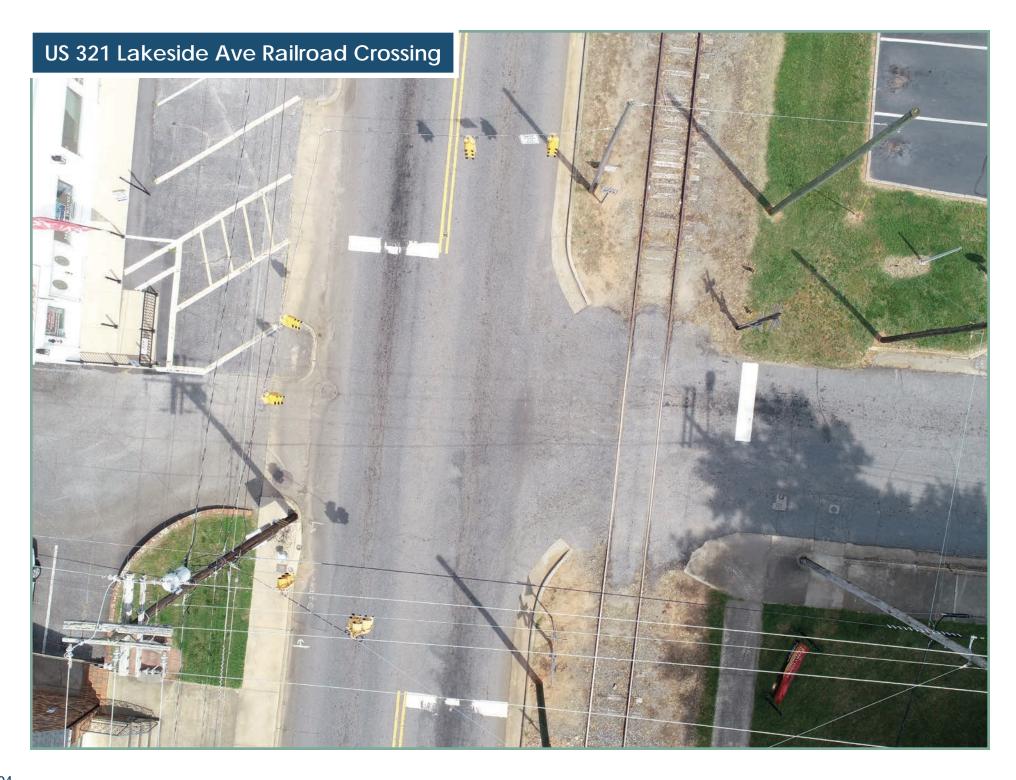


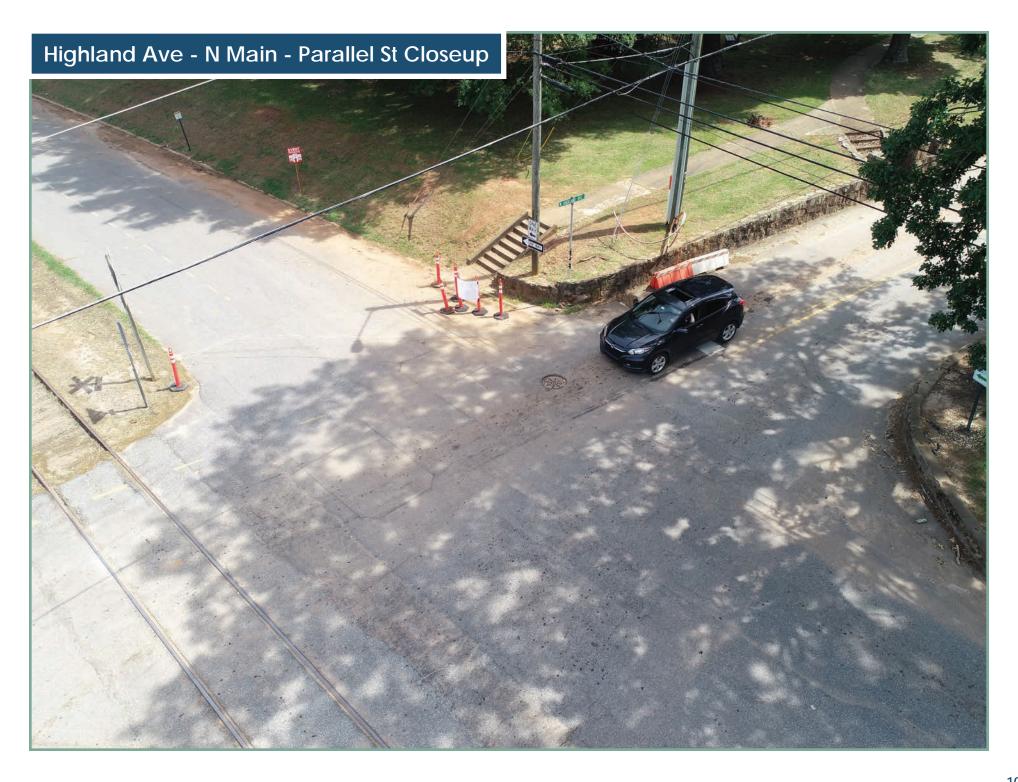












COST ESTIMATES

High and medium priority identified issues have been assigned cost estimates, if applicable. Labor has not been included in these estimates because the Town's maintenance staff plan to supply personnel to complete the labor. Dirt work (grading), acquisition, and engineering costs have not been included in the cost estimates. A majority of the projects that need this level of improvement are located within an NCDOT Right of Way and are/could be scheduled for improvement in the future. It is possible that right of way work will be contracted out through NCDOT's bidding process. Due to inflation, material cost and availability of personnel will fluctuate. These cost estimates should be reassessed at the time of implementation by an engineer and city staff.

General changes that are needed, either at no cost or minimal:

- Rearrange furniture to accommodate ADA requirements
- Remove obstacles that are impeding adequate movement.
- Adjust door pressures so the timing to close is compliant with ADA standards.
- Relocate or remove items as identified, such as hooks, dispensers, and fixtures that are protruding into the travel pathway

FACILITIES

(More ornamental signage can cost up to \$80 per sign) Standard signage has been evaluated.



WHEELCHAIR SYMBOL LIFT SIGN FOR SPAS, SWIMMING POOLS, HOT TUBS, ETC.

 $(SIZE - 6" \times 8")$

\$59.99



ADA COMPLIANT WHEELCHAIR ACCESSIBLE EXIT SIGN

\$49.95



ADA WHEELCHAIR ACCESSIBLE EXIT SIGN WITH DIRECTION ARROW AND BRAILLE

\$69.95



NOT AN EXIT SIGN WITH NON-WHEELCHAIR ACCESSIBLE SYMBOL

\$64.95



PUSH TO EXIT SIGN WITH TACTILE TEXT AND BRAILLE - ADA COMPLIANT

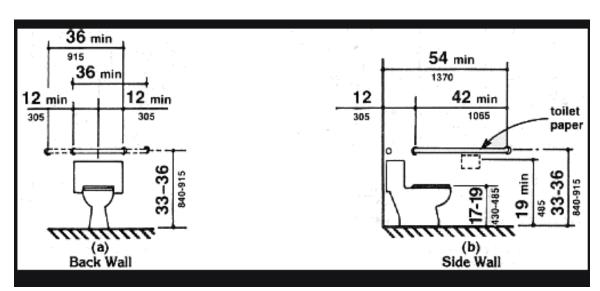
\$44.95



WE ARE PLEASED TO PROVIDE ASSISTANCE FOR CUSTOMERS SIGN

(SIZE - 10" X 10")

\$44.95



BRADLEY GRAB BARS - CONCEALED FLANGES (1 1/4")

(36" Long)

\$31.80





EMPLOYEES ONLY ROOM SIGN - ADA COMPLIANT TACTILE BRAILLE SIGNS

\$44.95





ADA COMPLIANT WHEELCHAIR ACCESSIBLE RESTROOM SIGNS

\$44.95 /per sign



AMERICAN SANITARY TOILET PARTITION SLIDE BOLT LATCH \$7.48



KEENEY ADA COMPLIANT UNDER SINK SAFETY COVER KIT WITH OFFSET

\$37.76

(Insulation or piping replacement for sink ADA requirements – insulation noodle \$1.00 for 6 feet)

PARKING LOTS



R7-8B CALIFORNIA COMPLIANT VAN ACCESSIBLE HANDICAP PARKING SIGNS

\$29.95

(This sign can be added to the existing signs that are not posted correctly.)



U-CHANNEL POST \$20.00



HANDICAP VAN ACCESSIBLE PARKING SIGNS

(SIZE - 12" x 18")

\$34.95

(This sign can be used where none exist and one is needed.)

PARKS

POURED PLAYGROUND RUBBER SURFACE - ADA

Depending on fall height requirements, color choices, the condition of the existing surface, location and other factors, the cost of poured rubber surface for playgrounds 1000 sq. ft. or larger can range from \$8 to \$14 per sq. ft. installed. For smaller playgrounds, the cost per square foot can be more expensive due to the minimum amount of raw material required. It is more cost effective to use rubber playground safety tiles in smaller play areas.

Generally, for wet poured rubber flooring, the surface area should be at least 1000 sq. ft. or more.

Rubber Safety Tiles for Playgrounds less than 1,000 sq. ft.

- 24" x 24" rubber tiles
- Available in both 2-1/2" and 4-1/4" thickness
- ADA compliant edges and accessories

PLAYGROUND SURFACING MATERIAL COMPARISON

As a general rule, unitary surfaces (with the exception of rubber tiles), tend to outperform loose fill materials on every criteria aside from the time and cost to install.



Material Type	Material	Safety Certified	Cleanliness	Maintenance	& Accessibility	Aesthetic	Install Cost	Lifetime Cost
Unitary	Synthetic Grass Systems							
Unitary	Poured in Place							
Unitary	Bonded Rubber							
Unitary	Rubber Nuggets							
Unitary	Rubber Tiles							
Loose-Fill	Engineered Wood Fiber							
Loose-Fill	Landscape Wood Mulch							
Loose-Fill	Sand							
Loose-Fill	Pea Gravel							

ASPHALT TRAIL FOR ADA ACCESSIBILITY (PARKS)

Asphalt paving costs \$7 to \$13 per square foot.

Reference for examples: www.americantrails.org/images/documents/TN-trail-ada.pdf

Crush Cinder Trails - Crusher fine trails usually cost in excess of \$10.00 per linear foot.

"Crushed stone trails provide a user-friendly, all-season surface for all types and ages of visitors, including strollers, wheelchairs, and road bikes."

Cost Range: \$1600 to \$4K (topography, utilities and amount of replacement required due to needed ADA slope are all factors)





ADA HALF RAMP \$437.95



ELEVATED SAND TABLE

\$1,246.00

Age Group - 2 to 5 years

Description:

- Rounded shape gives more children space to play
- Lipped edge keeps the sand in
- Raised to the perfect height to accommodate all children
- Sturdy legs placed at four points

Table 4-1. Unit Cost of Surfacing Materials

Surfacing	
loose fill materials	\$0.30 - \$1.30 per square foot, installed
engineered wood fiber	\$0.90 - \$3.20 per square foot, installed
rubber mats/tiles	\$6.35 - \$16.00 per square foot, installed,

including underlayment

poured-in-place rubber \$8.50 - \$21.00 per square foot, installed,

including underlayment

transitions between loose fill and \$5.30 - \$11.00 per linear foot, installed

rubber materials

border materials \$5.30 - \$16.00 per linear foot, installed

Table 4-2. Unit Cost of Equipment Features

Accessible Equipment Features

12 inch rise of 1:12 ramp \$1,484 - \$2,756

ramp landing \$2,120 - \$5,512, including

barriers

ramp and landing combined, per 12 inch \$3,604 - \$8,218

rise

transfer platform \$424 - \$742 transfer platform with approach step \$742 - \$1,590

transfer steps \$106 - \$530 per foot of rise

earth berm to 24 inches \$3,710 - \$5,830

Table 4-3. Unit Cost of Other Items

Other Cost Elements

stairs \$106 - \$265 per foot of rise ladders and climbers \$32 - \$159 per foot of rise equipment installation 20% - 40% of equipment cost



EQUILATERAL TRIANGLE FABRIC SAIL SHADE STRUCTURE WITH 12FT. ENTRY HEIGHT POWDER COATED STEEL COLUMNS -BASE MODEL

(CANOPY SIZE - 15FT.)

\$5,099.95



BENCH ATTACHMENT ARCH FABRIC SHADE

\$1,152.00

Range from 1100 to 6,000 depending on size, type of material and type of installation (footers, inspection, and engineering)

RIGHT OF WAY

New Sidewalk – 65.00 per linear foot (350,000 per mile) Existing sidewalk repair - 20.00 per linear foot (100,000 per mile)

LEVELING -

The cost of leveling a slab usually ranges from \$500 to \$1,500. This is dependent on the size of the area to level, the materials used, and the labor involved. Foam leveling will likely cost around \$2,000-2,500 for a 100 square foot slab.

DETECTABLE WARNING SURFACE

Detectable warning surface is listed at \$424 per square yard. It was assumed that each curb ramp would be designed with the minimum necessary detectable warning surface necessary – 2' deep and as wide as the depressed area of curb, or 1.1 square yards for each detectable warning surface suggested.

LOW: \$475.00 each

HIGH: \$570.00 each

Stick-on detectable warning – \$200 to \$350

Set in concrete – \$290 to \$400



TRUNCATED DOMES ADA TILES - FOR CONCRETE SURFACES

 $(SIZE - 2' \times 4')$

\$209.00



TRUNCATED DOMES CAST-IN-PLACE REPLACEABLE TILE

 $(SIZE - 3' \times 4')$

\$289.00



TRUNCATED DOMES CAST-IN-PLACE REMOVABLE TILE

 $(SIZE - 3' \times 5')$

\$429.00

CONSTRUCT ADA-COMPLIANT CURB RAMP

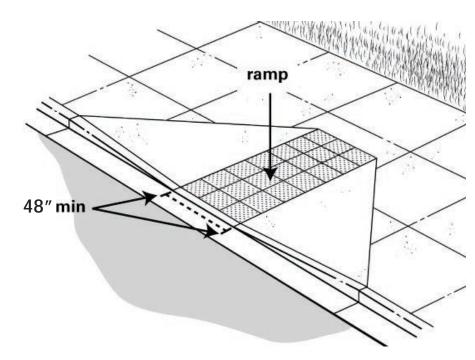
Installing a new curb ramp at a corner is assumed to include the following: constructing a CG-12 with aggregate, a detectable warning surface, a 4' wide strip of concrete along the back of the ramp (about 10 square yards), 8 linear feet of new radial CG-6, sawcutting the existing pavement (about

22 LF), demolishing and then replacing a 1' strip of asphalt pavement along the new curb and curb ramp (about 22 LF), and 5 cubic yards of borrow for any grading that might be necessary behind the new ramp.

LOW: \$2,350.00 each

HIGH: \$2,820.00 each

Cost range due to topography, utilities and amount of replacement required due to needed ADA slope.



REPLACE EXISTING CURB RAMP WITH ADA-COMPLIANT CURB RAMP

Replacing a curb ramp is assumed to involve the following actions: removing the existing concrete curb ramp (assumed to be 12 SY), removing 4 feet of concrete sidewalk along the back of the ramp for grading purposes (about 10 square yards), and installing a new curb ramp.

LOW: \$3,200.00 each

HIGH: \$3,840.00 each

INSTALL CURB AND GUTTER

The installation of curb and gutter includes the costs of sawcutting asphalt pavement, removing a 1' wide strip of existing asphalt pavement, installing a 1' wide strip of full depth asphalt pavement, the cost of the combination concrete curb and gutter itself, and grading behind the curb.

LOW: \$43.00 per linear foot

HIGH: \$51.60 per linear foot

FULL-DEPTH ASPHALT PAVEMENT (TRAIL)

Full depth asphalt pavement is assumed to be 2" of surface course, 4" of intermediate course, 6" of base course, and 8" of aggregate.

LOW: \$101.00 per square yard

HIGH: \$121.20 per square yard

MILL AND OVERLAY (REMOVING, SEALING AND RE-POURING ASPHALT)

Mill and Overlay consists of milling the top layer of flexible pavement and installing a 2" thick overlay on top. The 2" surface course is \$13.03 per SY. Type A Milling (1 ½" depth) is listed at \$30.92 in the Statewide Averages.

LOW: \$49.00 per square yard

HIGH: \$58.80 per square yard

INSTALL BUS STOP PAD

The cost of installing a bus stop pad was based on cost estimates for a group of 11 Fairfax County Bus stops designed by Kimley-Horn. These bus stop pads did not include shelters, and about half included benches. The five most expensive bus stop pads were averaged to produce the "high" cost and six least expensive were averaged to produce the "low" cost. These costs reflect only the construction costs associated with the construction of the bus stop pad and do not include mobilization, maintenance of traffic, utility relocations, professional engineering services, surveys, production of plats, or any contingencies.

LOW: \$5,000.00 each

HIGH: \$9,200.00 each

DEMOLITION OF ASPHALT PAVEMENT

Demolition of flexible pavement is listed at \$10.68 per SY.

LOW: \$11.00 per square yard

HIGH: \$13.20 per square yard

CURBED SIDEWALK

Curbed sidewalk is bid as curb-abutted sidewalk with no buffer space.

LOW: \$63.00 per linear foot

HIGH: \$75.60 per linear foot

DEMOLISH CONCRETE MEDIAN NOSE

This item includes the demolition of 5 linear foot of concrete median nose, replacing that space with full-depth pavement, and relocating the sign that was in the median nose. The cost for demolishing the median nose is assumed to be the same as demolition of curb and gutter, which is listed at \$18.10.

LOW: \$1,600.00 each HIGH: \$1,920.00 each

RELOCATE PEDESTRIAN SIGNAL POLE

Relocating a pedestrian signal pole requires the removal and disposal of the existing pedestal pole and associated push buttons, signs, signal heads, wiring, and junction boxes. The total cost of these items is \$2,650 as derived from previous project experience. The new pole requires a PF-2 Pole and PF-2 Pole Foundation, 500 linear foot of both 14 AWG/7C and 14 AWG/2C conductor cable, a push button with associated sign, and a LED pedestrian signal head. The cost for the PF-2 Pole and foundation is a combined \$1,570. The cost for the conductor cables, push button and sign, and a pedestrian LED Signal Head is a combined \$5,665 as derived from previous project experience.

LOW: \$10,000.00 each HIGH: \$12,000.00 each

NEW PEDESTRIAN SIGNAL POLE

The new pole requires a PF-2 Pole and PF-2 Pole Foundation, 500 linear foot of both 14 AWG/7C and 14 AWG/2C conductor cable, a push button with associated sign, a LED pedestrian signal head, and a new junction box. The cost for the PF-2 Pole and foundation is a combined \$1,570. The cost for the conductor cables, push button and sign, a pedestrian LED Signal Head, and new junction box is a combined \$6,125 as derived from previous project experience.

LOW: \$7,800.00 each HIGH: \$9,360.00 each

UPDATE SIGNAL DISPLAY

Updating a signal display requires a new 3-Section Signal Head, 500' of 14AWG/7C conductor cable, and removing and disposing of the existing signal heads. From past projects, we've estimated this cost at \$2,300 per updated signal head.

LOW: \$2,300.00 per updated signal head HIGH: \$2,760.00 per updated signal head

IMPLEMENT SPLIT PHASE OPERATIONS

Implementing split phase operations is assumed to include the installation of a new 4-Section Signal Head, 500 linear foot of 14AWG/7C, a new elongated double arrow, and the removal of existing signal head for each approach. Implementing split phase operations assumes doing this to both sides of an approach, so costs are doubled.

LOW: \$7,300.00 per pair of approaches HIGH: \$8,760.00 per pair of approaches

FLASHING SIGNAL BEACON

It is assumed that flashing signal beacons will be hard-wired to the signal cabinet. Each pair of flashing signal beacons includes signs, beacons, poles, foundations, conduit, conductor cable, and junction boxes. Based on prior project experience, the combined cost of these items will be \$15,000.

LOW: \$15,000.00 per pair HIGH: \$18,000.00 per pair

STRIPING

 $4^{\prime\prime}$ pavement markings are listed at \$0.61 per linear foot

LOW: \$0.61 per linear foot HIGH: \$0.73 per linear foot

RE-STRIPING

Re-striping a road requires both eradicating pavement markings and laying down new pavement markings. Eradicating pavement markings is listed at \$0.53 per linear foot averages, and 4" pavement markings are listed at \$0.61 per linear foot.

LOW: \$1.14 per linear foot HIGH: \$1.37 per linear foot

STRIPING FOR TURN LANE

Striping for a turn lane is assumed to include three elongated single turn arrows, and two "ONLY" pavement markings.

LOW: \$950.00 per turn lane HIGH: \$1,140.00 per turn lane

ELONGATED ARROW

Elongated single arrows are listed at \$107.73 each

LOW: \$110.00 each HIGH: \$132.00 each

ELONGATED DOUBLE ARROW

Elongated double arrows are listed at \$152.20 each

LOW: \$160.00 each HIGH: \$192.00 each

STOP BAR

24" Type B Class IV Pavement Markings at \$16.05 per linear foot.

LOW: \$16.00 per linear foot HIGH: \$19.20 per linear foot



30" PUSH BUTTON LED FLASHING CROSSWALK SYSTEM

\$4,399.99



RAPID FLASHING
BEACON SYSTEM BACK
TO BACK WITH PUSH
BUTTON ACTIVATION

SOLAR HORIZONTAL

\$3,499.99

LED lighting solutions

SENSE OF SAFETY AND SECURITY ALONG PEDESTRIAN ROUTES ANALYSIS

SAFE ROUTES NETWORK TO GRANITE FALLS FACILITIES

In addition to ADA standards, other factors need to be analyzed to determine route improvements and designs for pedestrians around Granite Falls owned facilities. To address safety issues accurately, root safety hazards must be identified. This analysis covers more common roadway issues influencing pedestrian sense of safety. Pedestrian facilities must offer security elements before citizens and tourists will feel comfortable utilizing them. This section examines the road and pedestrian infrastructure around Granite Falls' fourteen facilities (listed in Table X.1) to develop a proposed Safe Routes Network (SRN) for walkers to use. This analysis utilized WPCOG's Geographic Information System (GIS) to build the walking system. GIS products used included ArcMap 10.7.1, a mapping software from Environment Systems Research Institutes (ESRI), ESRI's ArcGIS Network Analyst, and GIS data provided by the North Carolina Department of Transportation and Greater Hickory Metropolitan Planning Organization. The GIS data inputs included Annual Average Daily Traffic (AADT) counts, existing sidewalk locations, posted speed limits, and road functional classes to define the SRN. Pedestrian crashes were also addressed to further identify problem areas within and outside of the SRN.

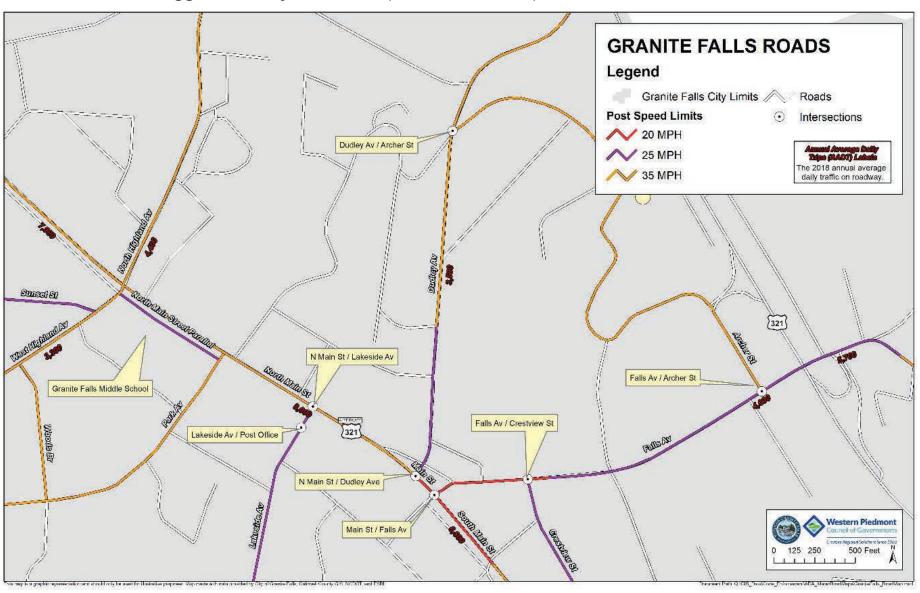
AADT AND POSTED SPEED LIMITS

The map on page XX displays available AADT counts as well as posted speed limits. The points call out specific problematic areas noted previously in the Pedestrian Right of Way section. The highest traffic volumes and highest speeds are along US 321A with volumes ranging from 7,900 to 8,600 vehicles per day. Upgrades to US 321A and its pedestrian facilities are planned as part of NCDOT project U-6034. Currently, pedestrians face many mobility barriers as a result of the railroad. Falls Ave speeds range from 20-25 miles per hour with traffic counts ranging from 4,600 to 5,700 vehicles per day. The four way stop at Falls Ave and Crestview St is unsafe in regard to ADA standards and lacks in overall pedestrian sense of safety. This intersection is noted as a high priority, with suggested improvements found in the previous, Pedestrian Right of Way, section. The intersection of Archer St and Falls Ave lacks a sense of pedestrian safety and was also identified in the previous section. This intersection is very congested and consistently has high speed traffic as

Table 5 Granite Falls Facilities

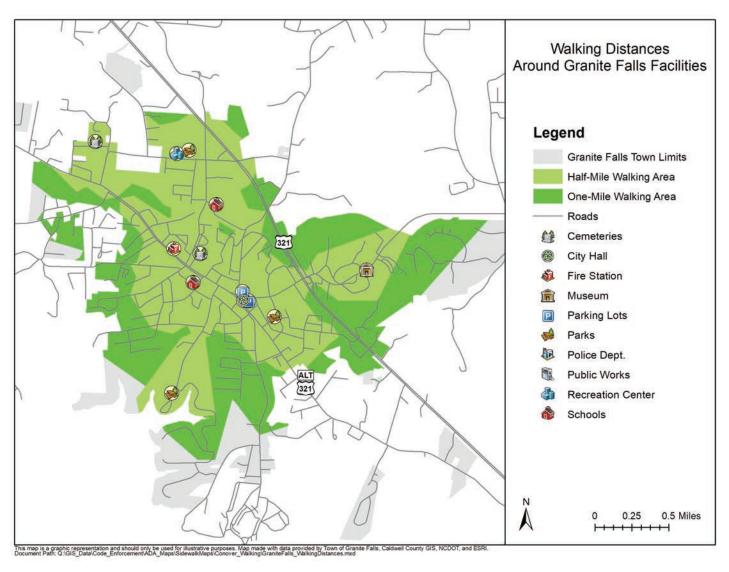
Facility Name	Facility Type					
Dudley Alley Public Parking	Parking Lot					
Granite Falls Elementary School (gymnasium and bathrooms)	School Building					
Granite Falls Fire Department	Fire Station Building					
Granite Falls History Museum (Baird House)	Museum Building					
Granite Falls Middle School (gymnasium and bathrooms)	School Building					
Granite Falls Police Department	Police Department Building					
Granite Falls Town Office	Town Hall Building					
Lakeside Park & Overlook	Park					
Neighborhood Park	Park					
Outside play elements of William B. Shuford Center	Park					
Pinecrest Cemetery	Cemetery					
Police Department and Town Hall Parking Lot	Parking Lot					
Sunset Hill Cemetery	Cemetery					
William B Shuford Center (Granite Fall Rec Center)	Recreation Building					

a result of US 321. Pedestrians must look in many directions to cross Archer St and there is no safe crossing across Falls Ave where the sidewalk currently ends. Please refer to the previous section for a suggested list of improvements. Dudley Ave has speed limits ranging from 25-35 miles per hour and a traffic volume of 3,500 vehicles per day. Dudley Ave currently has two very unsafe pedestrian crossings. The first crossing, Dudley Ave and N Main St, has planned improvements that will address the unsafe crosswalk as part of NCDOT project U-6034. The second crossing, Dudley Ave and Archer St, is very unsafe in regard to ADA standards as well as pedestrian sense of safety. This crossing lacks sidewalk connectivity and does not meet ADA standards. Please see suggested safety and ADA improvements in the previous section.



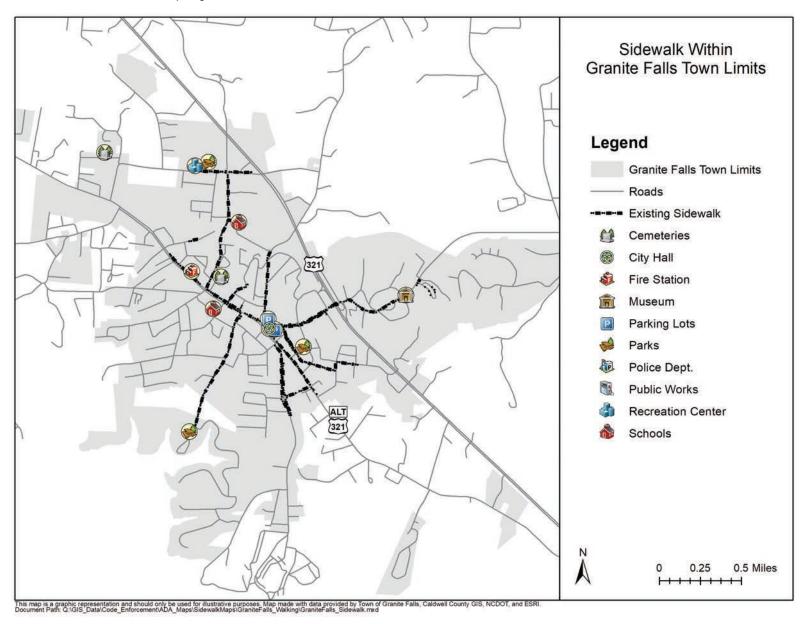
WALKING AREAS

The map below shows half-mile and one-mile buffers around Granite Falls owned facilities. These buffers represent most probable walking areas pedestrians would have to take to access Granite Falls facilities. Buffers are limited to inside Granite Falls town limits and generated by the Network Analyst. There are 27-miles of road within the half-mile area and 40-miles of the road in the one-mile area. The half-mile distance is considered the standard length from which the facilities can be reached in ten minutes. The one-mile space captures the remaining 13-miles of street more than half a mile from a Granite Falls facility. The assessment for the safe route system evaluated all the roads within the one-mile area to address whether a pedestrian can reasonably access routes to Granite Falls facilities.



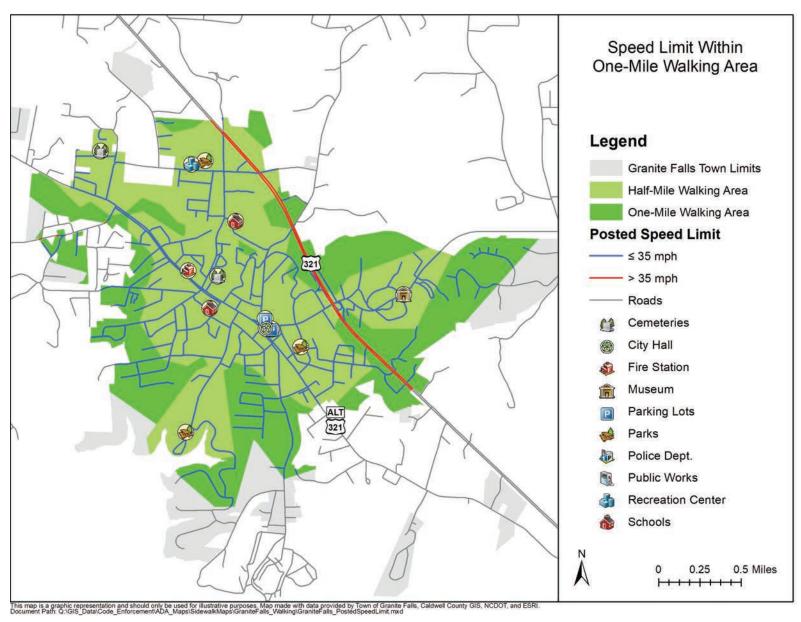
SIDEWALK

The seven-miles of Granite Falls sidewalk are drawn on the map below. The safe route system included all street sections with a sidewalk. This did not analyze sidewalk condition or compliance. Sidewalk can be found around most Granite Falls facilities. Future sidewalk should connect the remaining facilities to the pedestrian network as well as offer neighborhoods, schools, grocery stores, medical, and employment connections.



POSTED SPEED LIMIT

The following map offers a more in-depth view of posted speed limits of roads surrounding Granite Falls facilities. All the roads within the one-mile walking area have a posted speed limit of 20, 25, 35, or 55 mph. The map below shows routes that are less than or equal to 35 mph and routes that are greater than 35 mph. Routes with a 35 mph or lower speed limit are considered less hazardous on SRNs.



FUNCTIONAL CLASSIFICATION SYSTEM

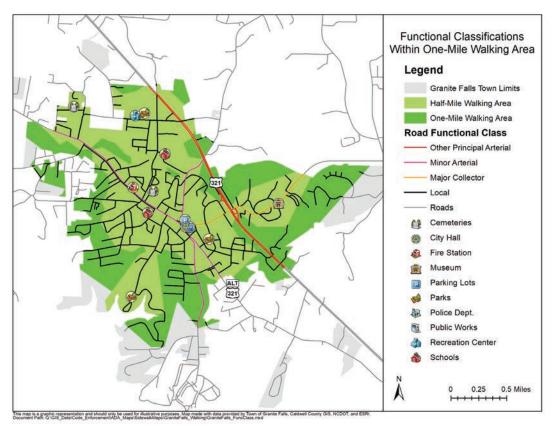
The United States Department of Transportation Federal Highway Administration defines functional classification of routes as "the process by which streets and highways are grouped into classes, or systems, according to the character of service they are intended to provide" (Source: USDOT FHA). The map below classifies the road network as other principal arterials, minor arterials, major collectors, or local streets within the one-mile area. Definitions for these functional classifications are listed below.

Principal Arterial – The principal arterial system should serve the major centers of activity of a metropolitan area, the highest traffic volume corridors, and the longest trip desires; and should carry a high proportion of the total urban area travel on a minimum of mileage. Principal Arterials should be further divided into three subcategories: Interstates; Other Freeways and Expressways; and Other.

Minor Arterial – The minor arterial street system should interconnect with and augment the urban principal arterial system. This street system should also provide service to trips of moderate length at a somewhat lower level of travel mobility than principal arterials.

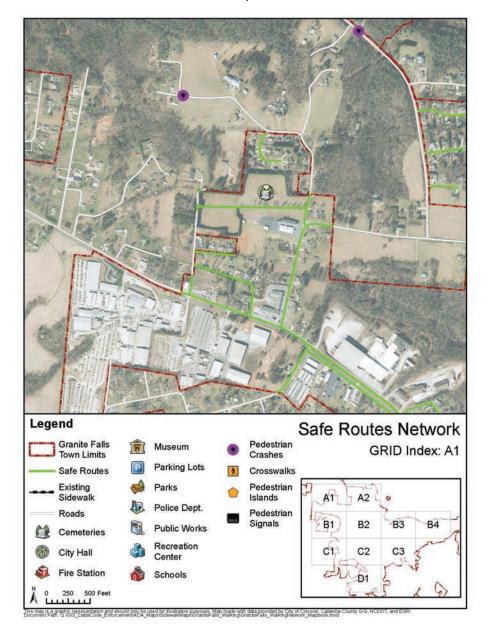
Collector – The collector street system provides land access service and traffic circulation within residential neighborhoods, commercial and industrial areas. This street system differs from the arterial system described above. Facilities on the collector system may intersect residential neighborhoods, thus distributing trips from arterials throughout the area to destinations. In rural areas, the collectors are further divided into major and minor collectors.

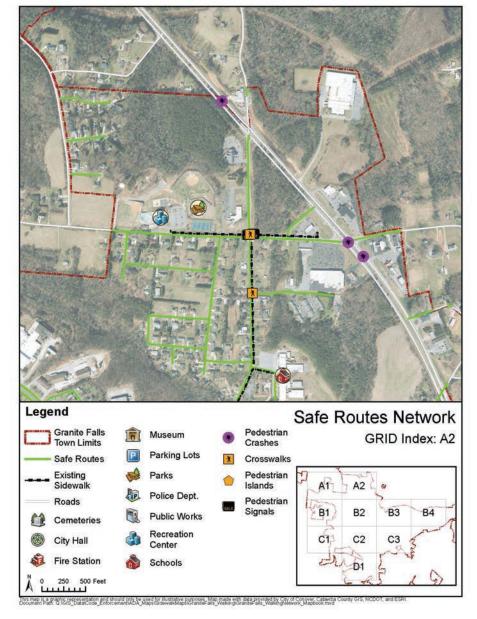
Local - The local street system consists of all roads not defined as arterials or collectors (Source: NCDOT). Each classification serves a different purpose for moving traffic along roadways. Travel characteristics for arterials are high speed limits and highest usage in terms of vehicle average daily trips. Collectors are built for moderate speed limits and moderate usage. Local streets have the lowest posted limits and daily vehicle trips (Source: USDOT FHA). All local classified roads are included in the safe route network since they generally have lower speed limits and lower AADTs.

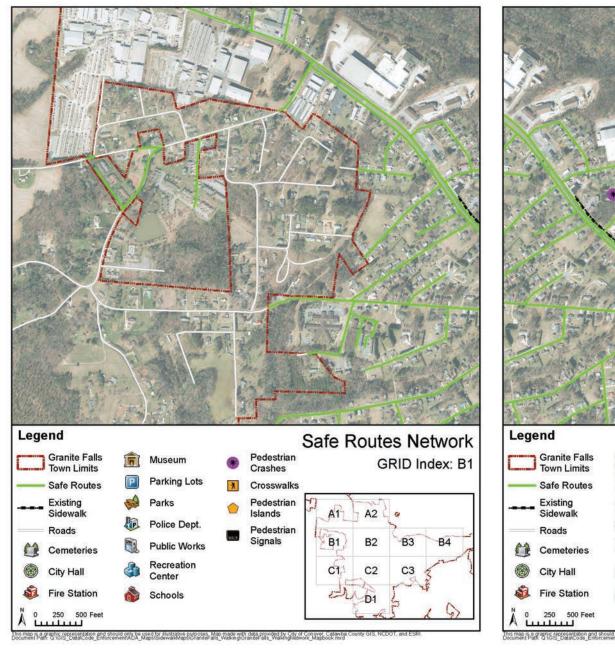


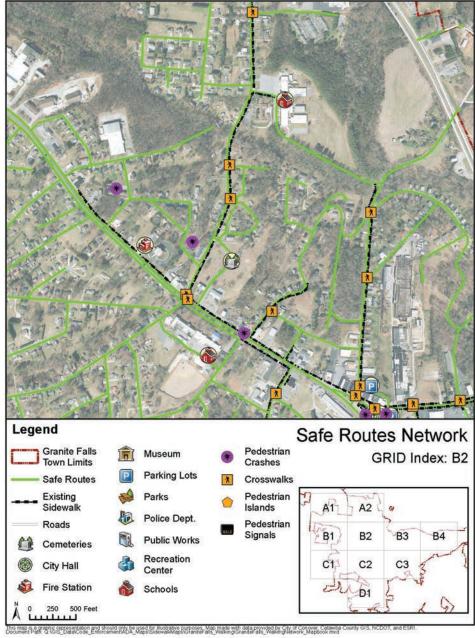
SRN GRID AND DOCUMENTED PEDESTRIAN CRASHES

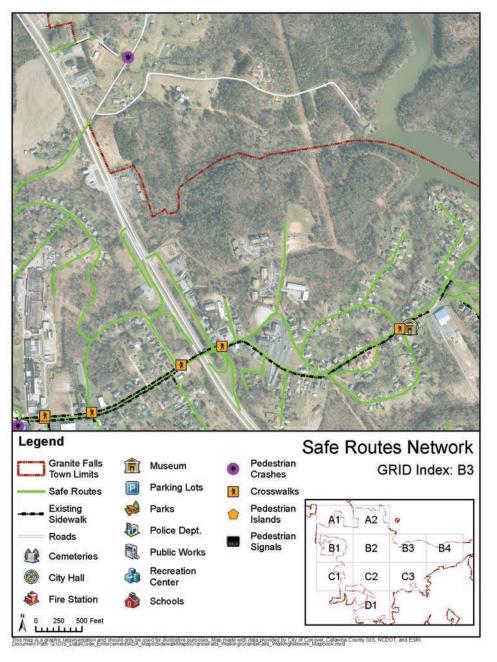
The following maps display a magnified grid version of Granite Falls' proposed SRN, Granite Falls facilities, and pedestrian crashes. While many pedestrian crashes fell outside of the proposed SRN, several occurred within the SRN at identified problematic areas noted in the pedestrian right of way section. Each factor within the SRN should be analyzed in coordination with ADA standards to reduce pedestrian crashes.

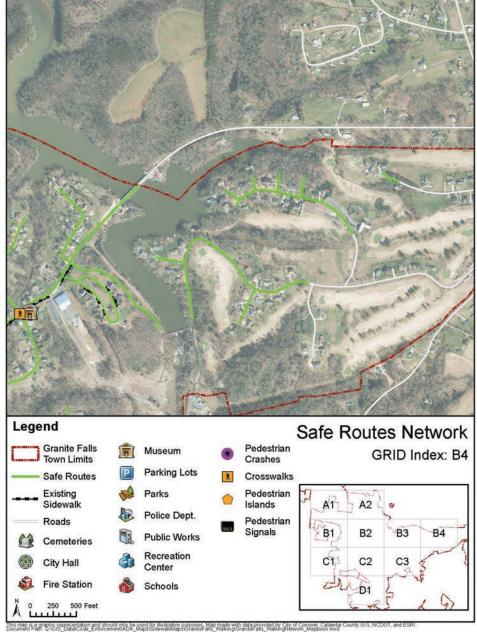


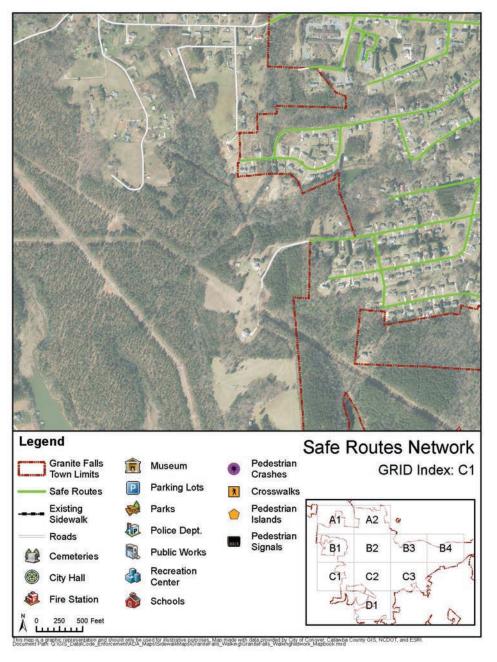


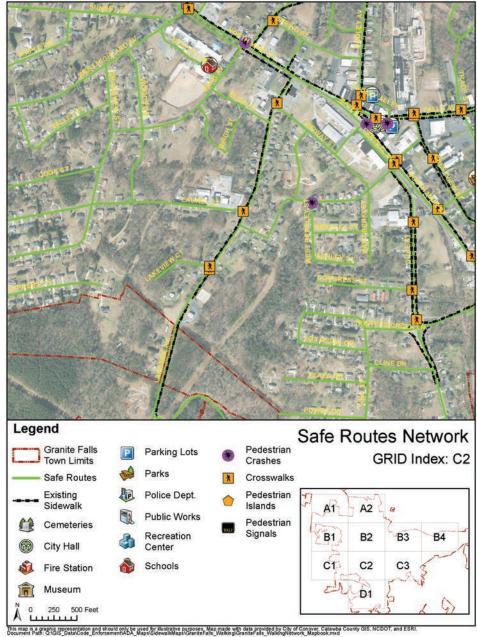


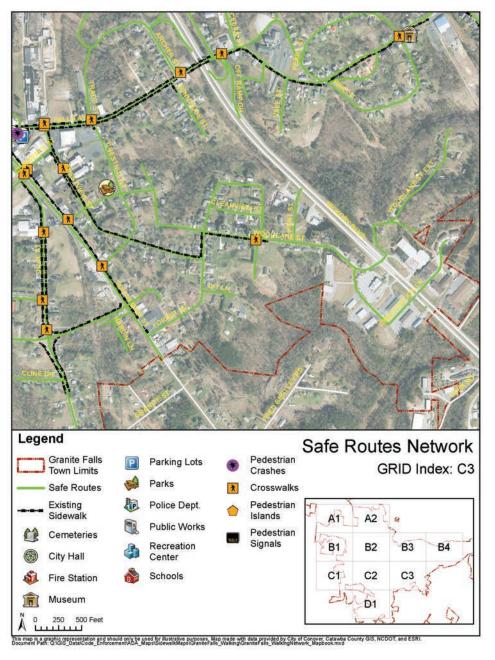


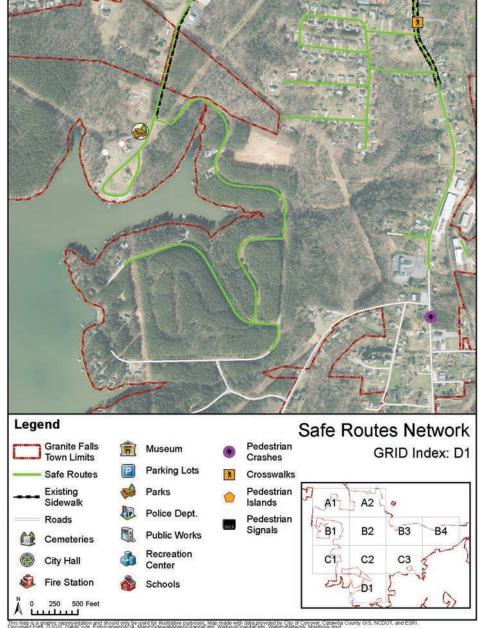












SRN CONCLUSION

As stated above, many pedestrian crashes occurred outside of the proposed SRN. Several, however, occurred within the SRN at identified problematic areas noted in the pedestrian right of way section. Each factor within the SRN should be analyzed in coordination with ADA standards to reduce pedestrian crashes. While the SRN is not wholly dependent on the presence of pedestrian infrastructure, ADA requires that all existing pedestrian infrastructure meet specific standards to meet the needs of all users. Route improvements should be made first to routes posing the biggest safety hazards. Hazardous areas not included in the SRN without compliant pedestrian infrastructure should be considered in the more immediate future for pedestrian improvements. This is necessary for hazardous routes connecting neighborhoods, schools, Granite Falls facilities, shopping, medical, etc. As Granite Falls develops and updates its pedestrian network, the SRN and ADA should be reassessed to document pedestrian usage and improvements.

REFERENCES

Source: United States Census. Disability Status. Retrieved June 25, 2020, from www.census.gov/quickfacts/fact/note/US/DIS010218#:~:text=Definition,vision%2C%20cognition%2C%20and%20ambulation.

Source: United States Census. How Disability Data are Collected from The American Community Survey. Retrieved July 17, 2020, from www.census.gov/topics/health/disability/guidance/data-collection-acs.html

Source: US Department of Transportation, Federal Highway Division. FHWA Functional Classification Guidelines. Retrieved October 21, 2020, from **gpsinformation.info/roundabout/Guides/UrbanRuralDefinition.htm**.

Source: North Carolina Department of Transporation. Collecting Functional Classification Data. Retrieved October 21, 2020, from **connect.ncdot.gov/projects/planning/TransPlanManuals/Collect%20Functional%20Class%20Data.pdf**.

Source: US Department of Transportation, Federal Highway Division. Highway Functional Classification Concepts, Criteria, and Procedure. Retrieved October 22, 2020, from https://dot.sd.gov/media/documents/HwyFunctionalClassification.pdf.

Source: Sullivan County Transportation Short Range Transit Operations Plan - Bus Stop ADA Guidelines, Retrieved October 22, 2020, from www.uvlsrpc.org/files/4215/4775/9655/SCT_ADA_Bus_Stop_Guidelines.pdf.

Source: Americans With Disabilities Act Accessibility Standards Accessed Date: July 23, 2020, from www.access-board.gov/ada/

Source: State and Local Governments (Title II) Accessed Date: July 23, 2020, from www.ada.gov/ada_title_II.htm#:~:text=Title%20II%20applies%20to%20State,State%20and%20local%20government%20entities.

Source: ADA Checklist for Existing Facilities Accessed Date: July 23, 2020, from www.adachecklist.org/checklist.html

APPENDIX

Appendix A: Americans with Disabilities Act Discrimination Grievance Policy - WPCOG - https://41caa07a-56ba-4c1e-bb60-4d43c53aa7ab.filesusr.com/ugd/960958_81aa35a913bc4c55993a9e89d8ede1f8.pdf

Appendix B: ADA Checklist for Existing Facilities - www.adachecklist.org/doc/fullchecklist/ada-checklist.pdf

Appendix C: ADA Checklist for Existing Facilities - Play Areas - www.adachecklist.org/doc/rec/play/play.pdf

Appendix D: Compliant Surfaces from September Report -

- www.access-board.gov/research/completed-research/improved-engineered- wood-fiber-ewf-surfaces
- www.access-board.gov/guidelines-and-standards/recreation- facilities/guides/surfacing-the-accessible-playground
- www.ncaonline.org/resources/articles/playground-surfacestudy- finalreport.shtml