

# Pedestrian and Bicycle Facilities Analysis for the City of Jasper



The contents of this publication reflect the views of the author, who is responsible for the facts and accuracy of data presented herein. The opinions, findings, and conclusions in this publication are those of the author and do not necessarily reflect the official views or policies of those of the Department of Transportation, State of Georgia or Federal Highway Administration. This publication does not constitute a standard, specification, or regulation.

Prepared by:  
North Georgia Regional  
Development Center

March 2008

# **1 Table of Contents**

1	Table of Contents .....	2
2	Introduction .....	3
3	Existing Pedestrian Facilities and Conditions .....	4
3.1	Inventory of Existing Sidewalks .....	4
3.2	Inventory and Assessment of Existing Crosswalks .....	8
4	Recommendations .....	12
4.1	Crosswalk Improvements .....	12
4.2	Improving Existing Sidewalk Deficiencies .....	15
4.3	Additional Sidewalks .....	15
4.4	Signs and Signals .....	17
4.5	Summary of Recommended Design Standards for Pedestrian Facilities .....	18
5	Bicycle Facilities Analysis and Recommendations .....	19
5.1	Existing Facilities .....	19
5.2	Proposed Facilities .....	19
5.3	Types of Bicyclists .....	20
5.4	Types of Bicycle Facilities .....	21
5.5	Bicycle Parking Facilities .....	24
6	Funding and Other Assistance .....	26
7	Appendices .....	27
	Map 1: Existing Sidewalks in Downtown Jasper .....	5
	Map 2: Other Sidewalk Locations in Jasper .....	6
	Map 3: Deficient Crosswalk Locations .....	11
	Map 4: Proposed Sidewalks for Jasper .....	16
	Map 5: Proposed Bicycle Routes .....	20
	Table 1: Crosswalks Conditions .....	9

The contents of this publication reflect the views of the author, who is responsible for the facts and accuracy of data presented herein. The opinions, findings, and conclusions in this publication are those of the author and do not necessarily reflect the official views or policies of those of the Department of Transportation, State of Georgia or Federal Highway Administration. This publication does not constitute a standard, specification, or regulation.

## 2 Introduction

**Figure 1: Pickens Co. Location**



Source: [www.pickenschamber.com](http://www.pickenschamber.com)

In June 2005, the North Georgia RDC submitted to the Georgia Department of Transportation a Regional Bicycle and Pedestrian Plan as a component of the transportation-planning contract between the two agencies. This plan describes an inventory of existing bicycle and pedestrian facilities, and recommends a variety of improvements including new bicycle routes throughout the region and new sidewalk locations in several communities. The sidewalk recommendations are very general however; they indicate only where existing sidewalks are presently located and where new sidewalks may be desirable to enable walking as an alternative transportation opportunity to get to shopping, schools, parks and other local activity centers.

The purpose of this document is to evaluate more closely the condition of existing pedestrian facilities and bicycle facilities in the City of Jasper, to determine how walkable and bikeable the City is, and to assist local officials in developing an improvement program.

According to the State of Georgia, a pedestrian is “*any person who is afoot (GLC 40-1-1). By State definition roller skaters, in-line skaters, skateboarders, and wheelchair users are also considered pedestrians.*”<sup>1</sup> All trips begin and end on foot in the form of a pedestrian trip; and 39% of all trips less than one mile are pedestrian trips. For this reason, pedestrian facilities are an essential component of an integrated transportation system. Safety, security, efficient mobility, attractive environments, and accessibility are primary concerns for providing pedestrian facilities.

To that end, the following sections describe existing pedestrian facilities; provide an analysis for improvements to those facilities; and, finally offer construction standards for those improvements.

**Figure 2: Pickens County**



Source: [www.pickenscounty.georgia.gov](http://www.pickenscounty.georgia.gov)

<sup>1</sup> Georgia Department of Transportation, (2006). Glossary of Acronyms and Terms. In *Context Sensitive Design Online Manual* (Glossary). Retrieved January 14, 2008 from <http://wwwb.dot.ga.gov/csd/resources/glossary/glossaryPR.html>.

### 3 Existing Pedestrian Facilities and Conditions

#### 3.1 Inventory of Existing Sidewalks

According to the Georgia Department of Transportation (GDOT), a sidewalk is “a firm, stable surface constructed of non-penetrable material for use by pedestrians that runs continuous [sic] from one property to another; usually located parallel to a vehicular thoroughfare between the curb line or lateral line of a roadway and the adjacent property line.”<sup>2</sup> Sidewalks are not limited to use by walkers. They are also devoted to other non-motorized transportation users such as joggers, bicyclists, skaters, and individuals traveling in wheelchairs.

Jasper is a small town in central Pickens County with a rural setting, so the sidewalk to roadway ratio is relatively small when compared to available sidewalks in an urban setting. Sidewalks are primarily limited to high traffic areas in residential neighborhoods, near schools, along commercial corridors, and within the downtown business district. The number, condition, and material makeup of sidewalks are the subject for the inventory that follows.

#### Sidewalk Inventory in Jasper

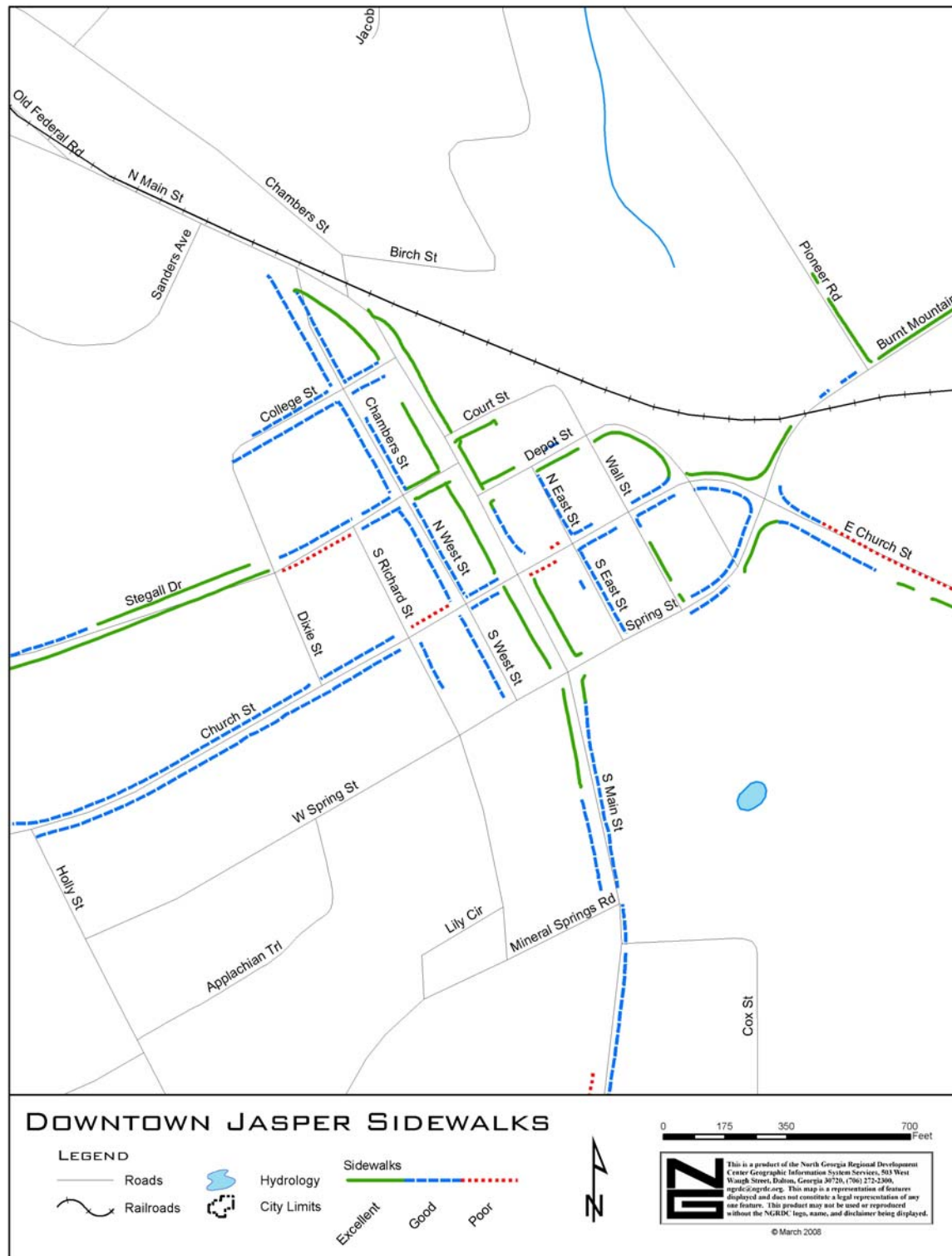
- ✓ 30,659 linear feet of sidewalks
- ✓ All new sidewalks meet ADA requirements
- ✓ All new sidewalks are five feet in width
- ✓ Most sidewalks are detached from the roadway, however, many are still attached
- ✓ Older sidewalks are too narrow
- ✓ Sidewalk facilities are provided primarily in the downtown and adjacent neighborhoods

In 2004, as a component of a contract with GDOT, NGRDC staff collected GIS centerline data for all existing sidewalks in Jasper. This database was updated in 2008 as part of this study; in all, over 30,659 linear feet of sidewalks currently exist within the Jasper city limits. Nearly all of the sidewalks (97.7%) are made of concrete at a width of five (5) feet.

**Map 1: Existing Sidewalks in Downtown Jasper** shows that there is a good network of sidewalks on one or both sides of streets surrounding the downtown area. Breaks in the lines indicate street crossings and curb cuts at intersections and driveways. These facilities are new, safety compliant, and attractive as shown on the title page photograph taken looking south on Main Street in downtown Jasper.

<sup>2</sup> The Georgia Department of Transportation, (2000). *GPS Data Collection Guidelines and Standards: A Manual for Georgia Service Delivery Regions and Regional Development Centers* (Atlanta, Georgia: GDOT, 2000).

## Map 1: Existing Sidewalks in Downtown Jasper

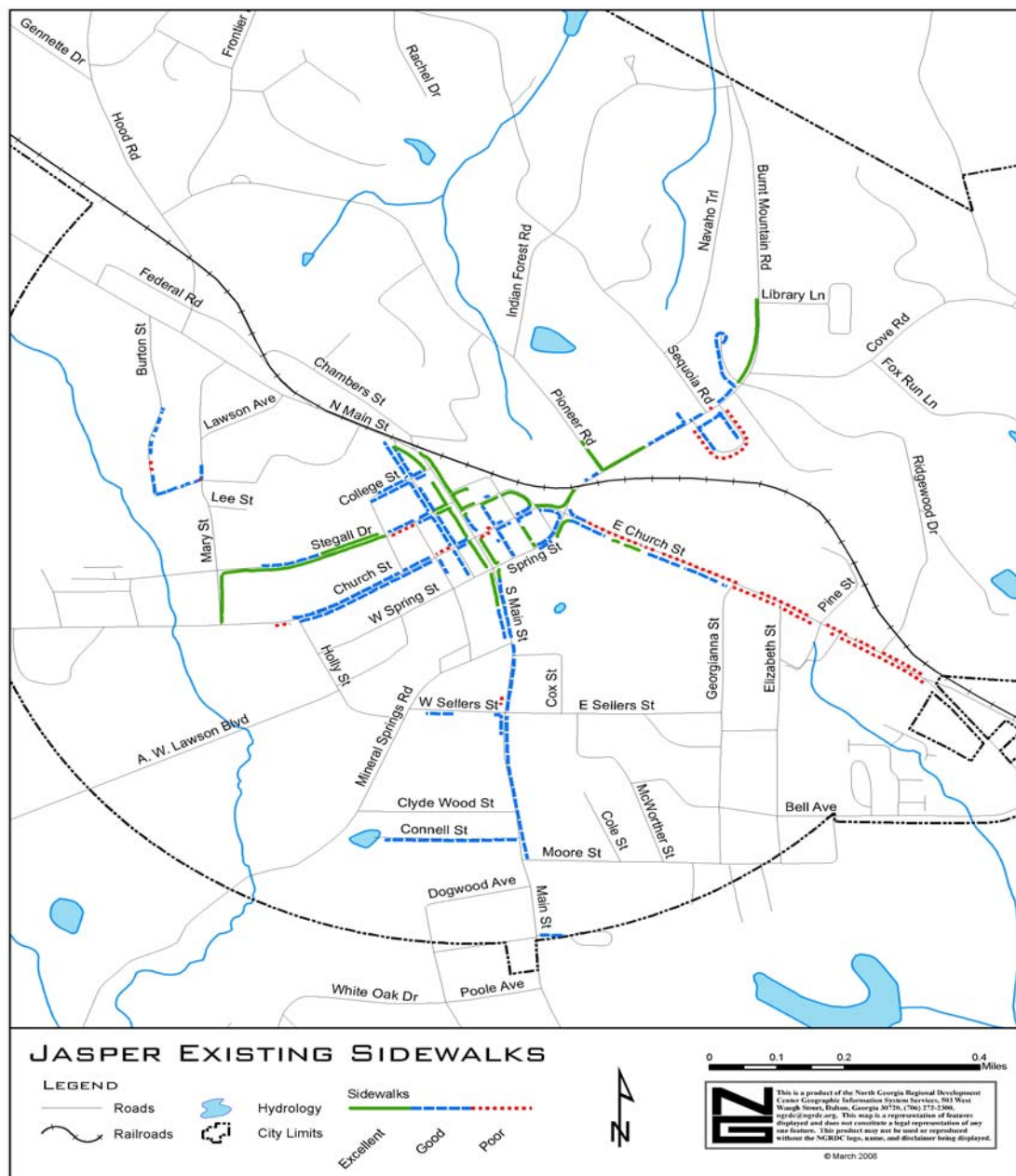


Source: NGRDC GIS Department



**Map 2: Other Sidewalk Locations in Jasper** also shows existing sidewalk facilities beyond the downtown area in Jasper. Additional sidewalk facilities lie along the entire stretch of Highway 5 Alternate Route (E. Church Street) within the City, along S. Main Street, and along Burnt Mountain Road near the college. As seen, the majority of streets in the outlying residential areas of Jasper area do not have sidewalk facilities.

## **Map 2: Other Sidewalk Locations in Jasper**



Source: NGRDC GIS Department

During the data collection process, NGRDC staff utilized GDOT's *GPS Data Collection and Standards Manual* to determine the approximate condition of the sidewalk.<sup>3</sup> Sidewalks were rated as "Excellent," "Good," or "Poor."

NGRDC staff determined that 27.9 percent (8,566 linear feet) of the existing sidewalks within the community were determined to be in an "Excellent" condition. An "Excellent" sidewalk is defined as a sidewalk having outstanding accessibility, attention to detail, intact surfaces, sensitivity to context – in short, referring to the feeling that the walk has "gone above and beyond" required standards. These are located along Stegall Drive and Main Street in the downtown area. This area was the recipient of a recent Transportation Enhancement grant that updated the streetscape, as seen in the photograph on the cover of this document.

About 16,323 linear feet (53.2%) of sidewalks located in Jasper were determined to be in the "Good" category. A "Good" classification is defined as having intact walkways easily passable for pedestrians, cyclists, skaters, walkers with strollers, and pedestrians traveling by wheelchair. These sidewalks are located generally along the secondary downtown streets such as Depot, College, and Church Streets, as well as sections of S. Main Street.

Jasper contains 5,769 linear feet (18.8%) of sidewalks classified in poor condition. A "Poor" condition defined as containing the presence of large cracks, poor provision for drainage, the existence of overgrown or excessive vegetation, or bulging due to the presence of a tree's root system. In short, the walk is in such disrepair that reasonable passage by pedestrian traffic is uncomfortable, difficult, or impossible. Poor sidewalks primarily lie along each side of E. Church St. (S.R. 5 Alt Hwy); almost the entire length of this section is classified poor. Other locations of poor sidewalks are scattered throughout the city, on S. Main, Burton, Sequoia, Stegall, W. Church Streets, and Burnt Mountain Road in small sections of about 30 feet or less.

The most noticeable item the RDC staff found was that most of the residential neighborhoods have very little or no sidewalk connectivity with the overall sidewalk system in Jasper. In addition, many sidewalks contain little or no separation between the vehicular traffic on the roadway and the pedestrian traffic on the sidewalks. According to the Federal Highway

### Sidewalk Condition Ratings

#### Excellent:

- ✓ Outstanding accessibility
- ✓ Attention to detail
- ✓ Intact surfaces
- ✓ Sensitivity to context

#### Good:

- ✓ Easily passable walkways for walkers, cyclists, wheelchairs, etc
- ✓ Intact surfaces
- ✓ No obstacles

#### Poor:

- ✓ Presence of large cracks
- ✓ Poor drainage
- ✓ Existence of overgrown or excessive vegetation
- ✓ Bulging surface due to tree root networks
- ✓ Presence of disrepair
- ✓ Uncomfortable
- ✓ Difficult
- ✓ Impassable

27.9 % of sidewalks in Jasper were rated as excellent; 53.2% as good; and 18.8 % as poor

<sup>3</sup> Georgia Department of Transportation, (2000). *GPS Data Collection Guidelines and Standards: A Manual for Georgia Service Delivery Regions and Regional Development Centers* (Atlanta, Georgia: GDOT, 2000).

Administration (FHWA), the American Association of State Highway and Transportation Officials (AASHTO), and the Americans with Disabilities Act Accessibility Guidelines (ADAAG), there should be a minimum buffer zone between vehicular and pedestrian traffic. The buffer zone consists of parking spaces either adjacent to the curb such as in a commercial area or downtown or with a grass and tree-lined planting strip, also called an out lawn.

Separated or detached sidewalks are the most appealing for pedestrian safety and sidewalk design, particularly in residential areas. This detached design allows for a parkway distinction by adding a tree-lined planting strip to separate pedestrians from the dangerous velocity of vehicular traffic on the roadway. Adding a planting strip and/or parallel parking along some streets in Jasper will not only add to the curbside appearance but also create a safer pedestrian atmosphere.

### 3.2 Inventory and Assessment of Existing Crosswalks

For the purpose of this study, the RDC also inventoried crosswalk conditions throughout the community. Crosswalks are located at intersections where sidewalks exist at immediately opposite sides of the roadway. A crosswalk may or may not be marked.

**Table 1: Crosswalk Conditions** summarizes the inventoried locations and condition of crosswalks in the city. The primary focus of the inventory was to determine if pedestrian crosswalks were properly marked, and if they were handicapped accessible. Of the 34 surveyed crosswalk locations, only thirteen have adequate crosswalk markings. These are located in the downtown area and have been constructed as part of the recently completed FHWA Transportation Enhancement project. The rest of the crosswalk locations in the city do not have any markings at all. These are highlighted in the table. The table also illustrates the status of curb cuts and handicapped accessibility conditions. Of the 34 intersections, 13 do not have adequate curb cuts or handicapped accessibility. **Map 3: Deficient Crosswalk Locations** shows the locations where crosswalks need improvements.



**Table 1: Crosswalks Conditions**

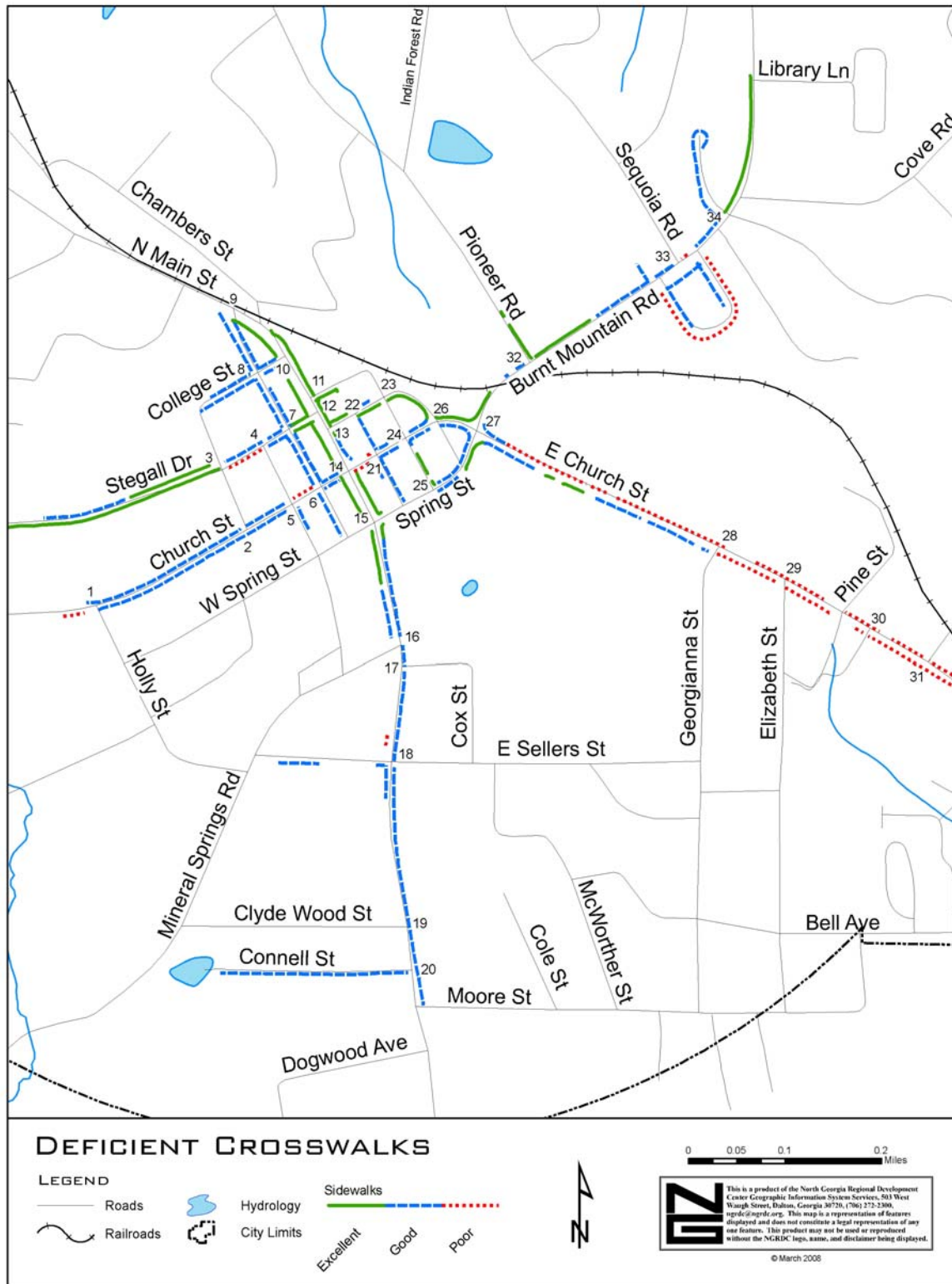
Number	Intersection	Street Markings	Curb Cutouts	Crosswalk Signals *	Traffic Signals *
1	W. Church St. & Holly St.	No	No	No	Stop Sign
2	W. Church St. & Dixie St.	No	At-grade Street-level Access	No	Stop Sign
3	Stegall Dr. & Dixie St.	No	No	No	Stop Sign
4	Stegall Dr. & Richard St.	No	Yes (Good)	No	Stop Sign
5	W. Church St. & Richard St.	No	Yes (Poor)	No	Stop Sign
6	W. Church St. & West St.	No	Yes (Good)	No	Stop Sign
7	Stegall Dr. & West St.	Horizontal	Yes (Excellent)	No	Stop Sign
8	College St. & Chambers St.	Horizontal	Yes (Excellent)	No	Stop Sign
9	N. Main St. & Chambers St.	Horizontal	Yes (Excellent)	No	Stop Sign
10	College St. & N. Main St.	Horizontal	Yes (Excellent)	No	Stop Sign
11	Porch St. & N. Main St.	Horizontal	Yes (Excellent)	No	Stop Sign
12	Stegall Dr. & N. Main St.	Horizontal	Yes (Excellent)	No	Stop Sign
13	Depot St. & N. Main St.	Horizontal	Yes (Excellent)	No	Stop Sign
14	Church St. & N. Main St.	Ladder	Yes (Excellent)	Yes	Lights
15	Spring St. & Main St.	Ladder	Yes (Excellent)	Yes	Lights
16	Mineral Springs Rd. & S. Main St.	No	Yes (Good)	No	Stop Sign
17	Effie St. & S. Main St.	Horizontal	At-grade Street-level Access	No	Stop Sign

18	Sellers St. & S. Main St.	No	Yes (Poor)	No	Stop Sign
19	Clyde Wood St. & S. Main St.	No	No	No	Stop Sign
20	Connell St. & S. Main St.	No	Yes (Poor)	No	Stop Sign
21	E. Church St. & East St.	No	Yes (Poor)	No	Stop Sign
22	Depot St. & East St.	Horizontal	Yes (Good)	No	Stop Sign
23	Depot St. & Wall St.	Horizontal	Yes (Good)	No	Stop Sign
24	E. Church St. & Wall St.	No	Yes (Good)	No	Stop Sign
25	E. Spring St. & Wall St.	No	No	No	Stop Sign
26	Depot St. & E. Church St.	No	Yes (Good)	No	Stop Sign
27	Burnt Mountain Rd. & E. Church St.	Ladder	Yes (Excellent)	Yes	Lights
28	E. Church St. & Georgiana St.	No	Yes (Good)	No	Stop Sign
29	E. Church St. & Elizabeth St.	No	No	No	Stop Sign
30	E. Church St. & Jones St.	No	No	No	Stop Sign
31	E. Church St. & Ridgewood Dr.	No	No	No	Stop Sign
32	Burnt Mountain Rd. & Pioneer Rd.	No	Yes (Excellent)	No	Stop Sign
33	Burnt Mountain Rd. & Sequoia Rd.	No	No	No	Stop Sign
34	Burnt Mountain Rd. & Jasper Heights Rd.	No	Yes (Poor)	No	Stop Sign

Source: NGRDC

\* - Not every intersection and/or crosswalk needs a traffic signal; or “walk/don’t walk” pedestrian signal. However, all major intersections and crosswalks, such as Burnt Mountain Road and East Church Street need both traffic lights and pedestrian signals.

### Map 3: Deficient Crosswalk Locations



Source: NGRDC GIS Department

All crosswalks that contain curb cutouts make the intersections handicapped accessible and easily transitional from one side of the roadway to the other. This is a concern for pedestrian planners because many municipalities across the nation have neglected the federal requirements to replace non-compliant crosswalk curb lines. Municipalities throughout the region contain crosswalks that differ by on-site conditions such as grade, cross-slope, width and vertical clearance, as well as passing space, grates and gaps, and obstacles or protruding objects; however, the issue of handicap accessibility is unavoidable. All crosswalks must be compliant with the Americans with Disabilities Act (ADA) since its passage in 1990.

About 76% of the crosswalks in Jasper are fully compliant with ADA standards. The streets that lack curb lines and gutters contain sidewalks that are already at street-level grade. With these types of facilities, the community may be able to pass the technicality of ADA compliance but these situations have disadvantages in and of themselves.

## **4 Recommendations**

Compliance with regulatory standards, safety considerations, and improving connectivity are the primary focus for determining how best to improve Jasper's pedestrian systems. With this in mind, the RDC recommends improvements in the following areas: 1) correct existing crosswalk and sidewalk deficiencies, and 2) adding new sidewalk facilities in neighborhoods adjacent to the downtown.

### **4.1 Crosswalk Improvements**

The primary concern with existing deficiencies is the lack of marked crosswalks at numerous roadway intersections. Because some of the crosswalks within the City of Jasper lie at street grade level and thus do not impede wheel chair accessibility completely, there is no urgent need to construct curb lines and cutouts with new corner crosswalk facilities. If the City should construct curbs on these streets in the future, proper curb cuts and handicap accessibility requirements should be addressed at that time. In the meantime, proper marking of existing pedestrian crosswalks will address the most important deficiency.

According to the *Manual of Uniform Traffic Control Devices* (MUTCD), a crosswalk should be marked with “solid white lines not less than 6 inches wide marking both edges of the crosswalk and spaced at least 72 inches apart.”<sup>4</sup>

Horizontal crosswalks have a line pattern that are distinguished by lines lying at a right or 90° angle to the flow of traffic patterns, in essence, forming a pedestrian pathway from one side of the street intersection to the other. **Figure 3: Horizontal Crosswalk** is a photograph of a horizontal crosswalk located at an urban intersection.

Another form of crosswalk that makes recognition easy for both pedestrians and motorists is the “ladder” marked crosswalk. It is composed of a series of broad lines placed at a parallel angle in reference to the sidewalk curbsides; another way to think about it is by noticing that the painted lines run with the flow of traffic. This ladder crosswalk can be closed (**Figure 4**) or open (**Figure 5**) within the previously mentioned horizontal walkway lines across the roadway.

A band or stripe can consist of many different types of materials, from a simple painted line on the pavement, to a more aesthetically detailed cobble or brick pattern layout. Some contain reflective materials. Major crosswalks also typically have signage and visual/audio displays to assist pedestrians when and where it is safe to cross the roadway. Although roughly 38% of the crosswalks in Jasper contain markings, it important to note that all major intersections contain visual markings and/or signage indicating the presence of a crosswalk for motorists and pedestrians alike.

Crosswalks are quite easily retrofitted or updated to meet the recommended standards simply by painting the recommended crosswalk lines on the street, and ensuring the ADA standards.

**Figure 3: Horizontal Crosswalk**



Source: [www.sacdot.com](http://www.sacdot.com)

**Figure 4: Closed Ladder Crosswalk**



Source: [www.latimesblogs.latimes.com](http://www.latimesblogs.latimes.com)

**Figure 5: Open Ladder Crosswalk**



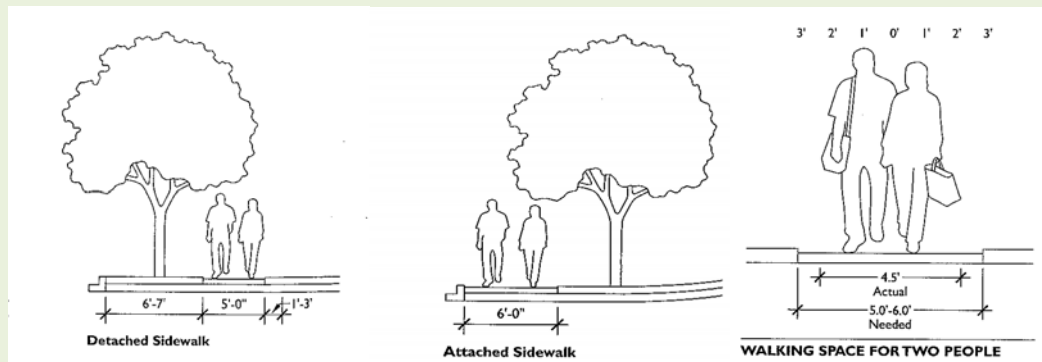
Source: [www.cityofsacramento.org](http://www.cityofsacramento.org)

<sup>4</sup> American Planning Association: Planning and Urban Design Standards (Hoboken, New Jersey: John Wiley & Sons Publishing, 2006), 223.



Sidewalks that lie immediately adjacent to the roadway are another deficiency that the RDC staff has noted. The American Planning Association's *Planning and Urban Design Standards* manual recommends that a minimum six-foot wide sidewalk be installed where it will lie immediately adjacent to the roadway.<sup>5</sup> If sidewalks are to be separated from the street, the sidewalk width can be reduced to five feet; however, there should be at least a six foot out lawn between the street and the sidewalk. This out lawn allows the placement of mailboxes, utility poles, etc. without intruding upon the sidewalk. See the illustration below. The recommended planting strip can be reduced, if necessary, to accommodate right-of-way or topographical conditions.

**Figure 6: Recommended Sidewalk Widths**



Source: American Planning Association

Minimum widths for sidewalks: Detached sidewalks should be at least five feet wide. Attached sidewalks should be at least six feet wide.

Observations of the streetscape in Jasper lead the Regional Development Center to believe that the reasons for installing five-foot wide walkways immediately adjacent to the street may be because of topographical situations and the narrowness of street rights of way within the city. In the future, the RDC recommends that the city consider the above-recommended standards for all future pedestrian facilities planning and construction, if feasible.

<sup>5</sup> American Planning Association: *Planning and Urban Design Standards* (Hoboken, New Jersey: John Wiley & Sons Publishing, 2006), 223.

## 4.2 Improving Existing Sidewalk Deficiencies

There are a number of sidewalks that are considered in poor condition. The longest linear sections lie along East Church Street. According to the Pickens County Transportation Study, these sections are planned to undergo repairs in the near future as part of a road improvement project. The primary concerns lie in the small sections that are scattered throughout the city such as this sidewalk (**Figure 7**) located at the corner of S. Main Street and Sellers Street. The city public works department through a routine maintenance and repair program can easily repair these sections.

**Figure 7: Poor Sidewalk Section**



## 4.3 Additional Sidewalks

The City has replaced a number of old sidewalk facilities in the downtown area as part of the Transportation Enhancement grant, and has constructed new sidewalk facilities in other locations in recent years. This is a step in the right direction towards improving pedestrian facilities in the community. In the future, the city should consider adding new sidewalks particularly in the residential neighborhoods adjacent to the downtown area. Good community planning encourages connectivity among neighborhoods, and between neighborhoods and downtowns and other activity centers such as schools, parks, and commercial centers. Most individuals are willing to walk at least a quarter mile, and many will consider walking up to one-half mile if it is safe.

Source: NGRDC

**Map 4: Proposed Sidewalks for Jasper** shows proposed new sidewalk locations. These new sidewalks were proposed in the Pickens County Transportation Study completed in January 2005, which provides detail about specific improvements. It is assumed that the majority of these new sidewalks will be installed at the same time a roadway is widened. Several of the streets proposed to receive sidewalks are also planned for widening in the future including North Main Street, East Church Street, West Church Street, and along South Main Street. Installing these new sidewalks will substantially improve pedestrian safety, and provide additional connectivity between schools, parks, activity centers, and neighborhoods.

The City should also consider making provisions within its subdivision regulations and zoning codes to assure that new sidewalks are provided wherever new development takes place in the future. At a minimum requirement, the development code should instruct that the developer at his own expense shall provide sidewalks along each street within or adjacent to a subdivision or any other development, if located inside the City of Jasper. The development code should also specify the minimum design and construction standards to be followed in the installation.

## Map 4: Proposed Sidewalks for Jasper



Source: NGRDC GIS Department

## 4.4 Signs and Signals

NGRDC staff also observed the lack of uniformity with street signs on many local streets. There was an absence of traffic markers such as stop or yield signs at some corners, but also there were a few streets that had no street name signs.

The USDOT-FHWA advises that, “*Street name signs should be installed in urban areas at all street intersections regardless of other route signs that may be present and should be installed in rural areas to identify important roads that are not otherwise signed,*” (United States Department of Transportation: Federal Highway Administration, 2003). In addition, the FHWA recommends that, “*In business districts and on principal arterial streets, Street Name signs should be placed at least on diagonally opposite [street] corners. In residential areas, at least one street sign mounted at each intersection. They should be mounted with their faces parallel to the streets they name,*” (United States Department of Transportation: Federal Highway Administration, 2003).

Figure 8: Street Sign Examples



Source: USDOT & FHWA<sup>6</sup>

United States Department of Transportation - Federal Highway Administration Regulations –  
*Manual of Uniform Traffic Control Devices for Streets and Highways (2003 ed. Revision 1 November 2004).*

- ✓ Street signs should be installed at all intersections
- ✓ Lettering must be a minimum of 4 in. on a residential street with a speed limit of 25 mph or less
- ✓ Supplemental lettering such as street type (St., Ave., Rd., etc.) and/or section lettering (E, NW, etc.) must be a minimum of 3 in. in height
- ✓ Street signs must be retro reflective or illuminated to show same shape and color both day & night
- ✓ Street names must be white lettering on a green background
- ✓ At intersection crossroads where the same street has two different street names for each direction of travel, both street names may be labeled on the same street sign with directional arrows alongside appropriate name

<sup>6</sup> United States Department of Transportation: Federal Highway Administration. (2003). *Manual of Uniform Traffic Control Devices for Streets and Highways* (1st Edition, Revision 1: November 2004 ed., Vol. Section 2D). Washington D.C., United States of America: Federal Highway Administration.

## 4.5 Summary of Recommended Design Standards for Pedestrian Facilities

The following summary of recommended design standards should be considered when improving existing facilities or installing new facilities. For more details on design standards, see also the Georgia Department of Transportation's *Georgia Pedestrian and Streetscape Guide* (September 2003). A copy can be found at GDOT's website: [http://www.dot.state.ga.us/travelingingeorgia/bikepedestrian/Documents/ped\\_streetscape\\_guide\\_june05.pdf](http://www.dot.state.ga.us/travelingingeorgia/bikepedestrian/Documents/ped_streetscape_guide_june05.pdf).

### Pedestrian Sidewalks:

- The minimum recommended width for all sidewalks is 5 feet
- Sidewalks that are immediately adjacent to the street should be a minimum six feet wide
- Sidewalks that are detached from the street should have a planting strip between the street and the sidewalk; ideally, this strip should be six feet wide
- Sidewalks should be provided on both sides of streets to provide access to schools, shopping areas and parks; sidewalks on one side of the street may adequately serve residential areas
- Provide adequate signage for pedestrians
- Sidewalks should have a cross-slope of 1.5% to 2.0% to allow for drainage
- Sidewalks should be well designed and laid out in all school zones

### Pedestrian Crosswalks:

- All crosswalks must be ADA compliant and if curbs are present, provide a handicap accessible curb cut
- Proper signs and signals for pedestrians and motorists should be present to indicate a pedestrian right-of-way
- All crosswalks should be properly marked with either horizontal or ladder type designs
- Crosswalk markings should be a minimum of 6 feet wide and have a stop bar painted on the road to indicate where motorists should stop for pedestrians
- School zone signs and signals must be present

### Signs and Signals:

- All intersections should have streets properly labeled
- Residential streets should have at least one corner labeled by a green sign with white lettering that measures 4 inches in height
- Larger intersections should have at least two diagonally opposite corners labeled with green street signs with white lettering that measures 4 inches in height



- All directional, street designation, and section labels may accompany street names on the same sign with a minimum 3-inch height (NW, AVE, BLVD, E, S, etc.)
- All intersections should have accompanying traffic signs or signals, such as STOP, YIELD, etc., and notification of a potential pedestrian and/or bicycle crossing

## **5 Bicycle Facilities Analysis and Recommendations**

### **5.1 Existing Facilities**

Currently there are no dedicated bicycle lanes or bicycle paths in the City of Jasper, nor are there any bicycle routes identified by signage within the City's limits. All cyclists currently have to ride in the road or on sidewalks at their own risk.

### **5.2 Proposed Facilities**

The *Regional Bicycle and Pedestrian Facilities Plan* adopted by the North Georgia Regional Development Center in June, 2005 proposes the development of bicycle routes in several locations in Pickens County, two of which travel through the City of Jasper. These routes were developed and recommended with the input of citizens in Pickens County in course of developing the Pickens County Transportation Study also completed in January 2005. (See *Map Five: Proposed Bicycle Routes*.)

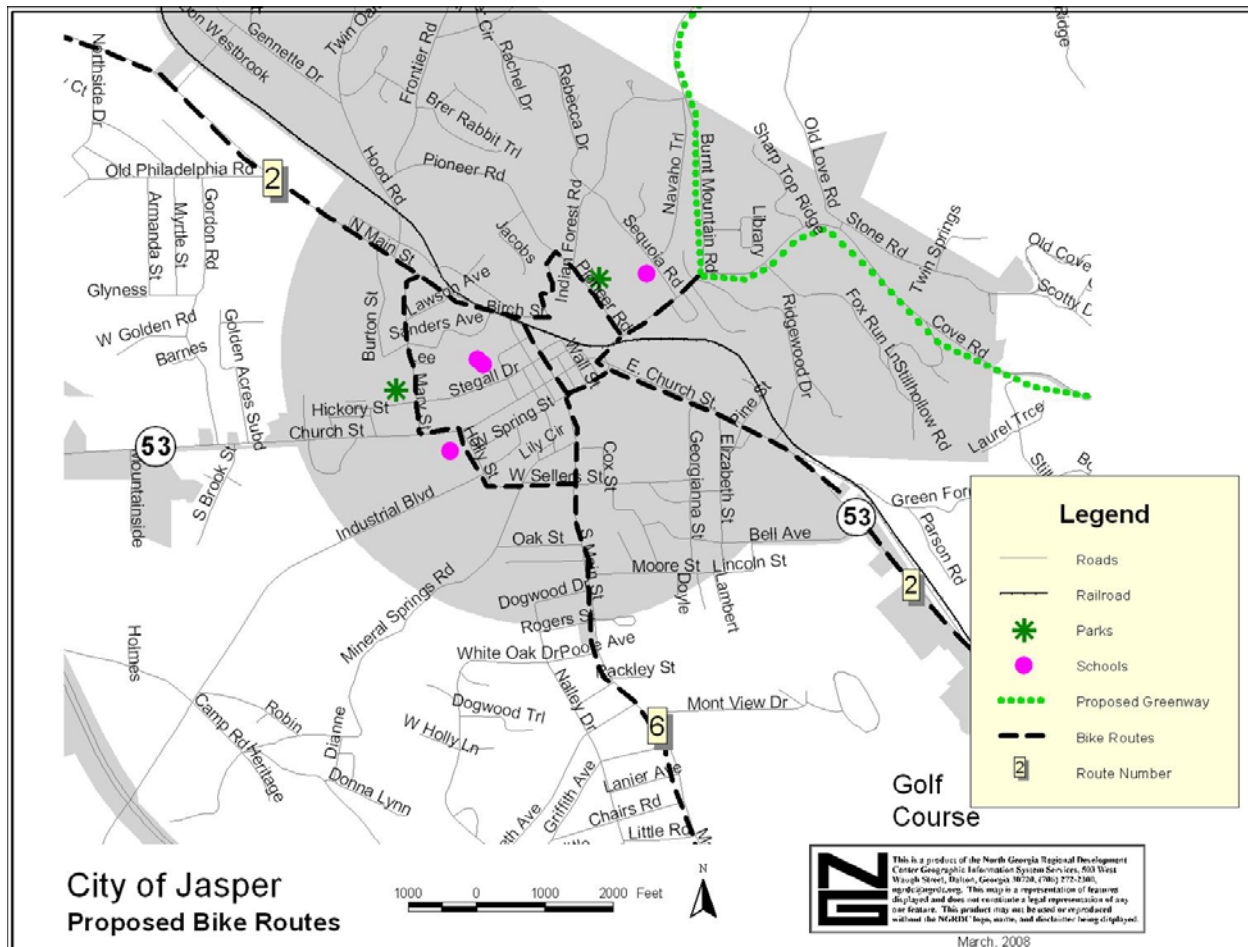
**Route 2** travels the entire length of Pickens County via Old Highway 5 from the Gilmer County line through the City of Nelson into Cherokee County. As it enters the City of Jasper, it follows North Main Street and Spring Street to East Church Street.

**Route 6** begins on Spring Street in downtown Jasper and follows South Main Street all the way to State Highway 108 in south Pickens County. It passes by the county park and two schools near Camp Road.

Other routes are also proposed in the city as alternates to the **Routes 2** and **6** above, to provide improved connectivity between residential areas, schools, parks and the downtown area. One of these routes starts at North Main Street and follows Mary Street, Holly Street, and West Sellers Street to get to South Main Street (**Route 6**). The other route follows Birch Street to Pioneer Street to Burnt Mt. Road. It travels by the City Park and Appalachian Technical College. (See *Map Five: Proposed Bicycle Routes*.)

Finally, two additional routes are proposed as multi-use greenways, which would also travel through the city. These are proposed to be located adjacent to Burnt Mt. Road and Cove Road.

**Map 5: Proposed Bicycle Routes**



Source: North Georgia Regional Bike and Pedestrian Facilities Plan

### 5.3 Types of Bicyclists

Bicyclists can generally be classified into three user types, which is useful to assist in the design of facilities:

**Group A - Advanced Bicyclist.** These are expert or experienced riders who can operate under most traffic conditions. Expert riders often use their bicycles as transportation and desire direct access to destinations with minimal delay. These riders are confident riding their bicycles alongside motor vehicles and are able to negotiate high-speed roadways without special bicycle facilities. In designing facilities for expert riders, adequate space should be provided so that cyclists and motorists can pass comfortably without shifting positions.

**Group B - Casual Bicyclist.** These are casual adult and teenage riders who are less confident of their ability to operate in traffic without provisions for bicycles. The casual bicyclist prefers comfortable access to destinations, preferably by a direct route, using either low-speed, low traffic-volume streets or designated bicycle facilities and well-defined separation of bicycles and motor vehicles on arterial and collector streets or separated bike paths.

**Group C – Inexperienced.** These are riders with very little experience including children whose roadway use is initially monitored by adults. They desire access to key destinations surrounding residential areas, including schools, recreation facilities, and shopping. They prefer access to these sites via residential streets with low motor vehicle speed limits and volumes, or well-defined separation of bicycles and motor vehicles along major streets, or separated bike paths within greenways.

## 5.4 Types of Bicycle Facilities

There are three types of bicycle facilities that can be provided to meet the needs of cyclists:

- Class I: Multi-use Paths
- Class II: Bike Lanes/Shouldered Bikeways
- Class III: Bike Routes

### Class I: Multi-Use Path.

Sometimes more popularly known as greenways, multi-use paths do not allow motor vehicle traffic but they do permit a range of non-motorized travel including bicycling, walking, running, and in-line skating. Although typically built in an independent right-of-way, park, or easement, multi-use paths may also be located within road rights-of-way, separated from motor vehicle traffic by open space or a structural barrier. Multi-use paths are typically 10 to 12 feet wide.

Multi-use paths attract recreational users, but because they typically wind through a community and connect destinations, they also offer an excellent opportunity to function as non-motorized transportation routes. For inexperienced cyclists and children, multi-use paths may be the preferred facility. Multi-use paths are also excellent training ground for building skills to ride on the road.

**Figure 9: Example of multi-use path**



Source: North Georgia Regional Bike & Pedestrian  
Facilities Plan

**Recommendation:** As indicated above, two greenway routes are proposed in the city – adjacent to Burnt Mt. Road from Cove Road to Lumber Camp Road, and adjacent to Cove Road from Burnt Mt. Road to Grandview Road. Both routes pass by scenic areas and would offer additional recreation opportunities (walking, in-line skating, etc.) to local residents as well as provide a safe alternative for access to adjoining neighborhoods for inexperienced bicyclists.

## Class II: Bike Lanes/Shouldered Bikeways.

Bicycle lanes are designated sections of a roadway signed, striped, and marked exclusively for bicycle use. Significant bicycle demand or expectation in urban areas typically contains bicycle lanes on arterial streets and roadways. They are one-way facilities placed on both sides of a street in order to carry bicyclists in the same direction as motor vehicles. The American Association of State Highway and Transportation Officials (AASHTO) standards for bike lanes are 5 feet from the face of the curb to the white edge line if curb and gutter is present, or 4 feet from the face of the curb to the white edge line if there is no gutter pan.

Figure 10: Example of bike lanes



Source: North Georgia Regional Bike & Pedestrian Plan

Shouldered bikeways are paved shoulders separated from travel lanes with a lane stripe, and are typical for rural roadways without curbs and gutters. Pavement markings are not typically used on shouldered bikeways, since they can also be used for other functions, such as vehicle breakdowns. Generally, a 6.5 foot paved shoulder functions well if no curb or gutter is present such as in rural areas. Signage should also be placed on these facilities to indicate the presence of bicyclists.

**Recommendation:** As indicated in the Pickens County Transportation Study, all of the bicycle routes to be developed in the city either are proposed to be constructed as bike lanes or shouldered bikeways. This will be expensive – estimated construction costs are listed at a rate of \$673,000 per mile for five foot paved shoulders on two sides of the road. These improvements can be accommodated at the same time a roadway is scheduled for widening, or other major improvements. A number of routes are in fact proposed for major widening in the future including North Main Street, South Main Street, and East Church Street (SR 53). Per GDOT policy, whenever the State intends to improve a state highway route, which is also designated as a bicycle route in an official plan, the State will install the recommended bicycle facilities as called for in the plan. All of the other proposed routes fall on city streets. An alternate

Figure 11: Example of wide shoulders



Source: North Georgia Regional Bike & Pedestrian Plan

approach that may be more practical for the city to consider would be to develop the remaining routes as **Class III – Bike Routes**.

### Class III: Bike Routes.

On a bike route, bicyclists and motorists share the same travel lanes. Except in the cases where wide outside travel lanes provide safety, motorists will typically have to move into the adjacent lane in order to pass a bicyclist. Bike routes function well on local and minor collector streets, where traffic volumes and speed are typically lower than on major collector and arterial streets. There are three types of shared roadways: Wide Outside Lanes, Shared Signed Roadways, and Local Streets.

On major collector and arterial streets, where severe physical constraints prohibit the construction of bike lanes, Wide Outside Lanes are a desirable alternative. Wide Outside Lanes are wider than the typical 11 or 12 feet, and it is recommended that they be 13 to 14 feet wide. Because they provide less operating room than bicycle lanes, and are not designated for exclusive bicycle use, some cyclists will be uncomfortable using Wide Outside Lanes. However, Wide Outside Lanes allow most motorists to pass without weaving into the adjacent lane and provide a greater degree of comfort to cyclists than a typical 11 or 12-foot lane.

Shared Signed Roadways are arterial or collector streets where bicycle traffic or demand is high, but Bike Lanes or Wide Outside Lanes cannot be provided due to severe physical constraints. Shared Signed Roadways posted with appropriate speed limits rely on signage to encourage both drivers and cyclists to be alert for all roadway users. In addition, use of traffic calming devices on collectors further encourages appropriate travel speeds.

***Recommendation:*** As indicated earlier, development of Bike Lanes or Shouldered Bikeways can be expensive. It is not likely that the variety of city streets that are proposed as bike routes will receive substantial improvements such as a major widening in the near future. Therefore, the roadway widths of these routes are likely to remain as they are, and the route will need to function as either as Wide Outside Lanes or as Shared Signed Roadways. Each route should be evaluated as to whether wide outside lanes could be established. In addition, it is recommended that “Share the Road” signage be installed at reasonable intervals along each route within the city. Posted speed limits on these routes in the City are reasonable; however, if excessive speeds are commonplace, the city should consider greater enforcement.

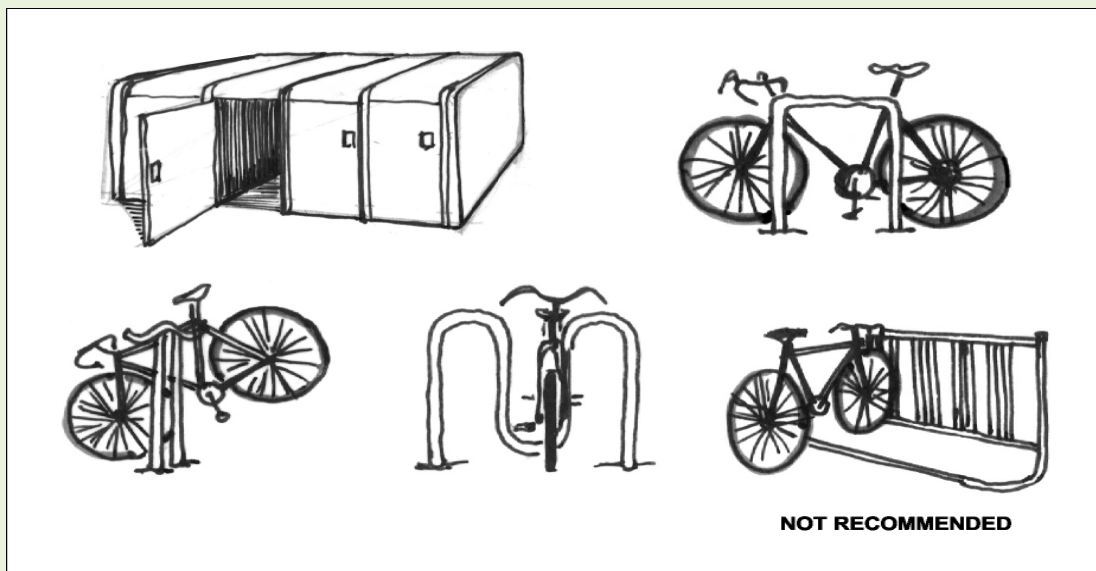
In addition to the specific routes described above, all other local streets should be able to accommodate bicyclists safely without any special treatment. In some cases, signage could be used to identify a through bike route that follows a local street. In cases where local streets carry more traffic at greater speeds than were designed for, implementing traffic calming techniques such as speed humps and curb extensions to help insure that bicycle and motor vehicle traffic operate compatibly.



## 5.5 Bicycle Parking Facilities

Cyclists are often discouraged from using their bicycles as transportation because they have no place to park their bicycles at their destination. Bicycle parking can be addressed by the provision of bike racks or bike lockers. Bike racks come in a range of shapes, sizes, and materials. The intention of bike racks is to provide a short-term parking solution only, and is suitable for the occasional user. However, they do not provide a high degree of protection from theft, vandalism, and weather for long term parking requirements, such as may be required by a biking commuter. Bike lockers can serve this type of parking requirement. Bike lockers are containers designed to store bicycles without dismantling. A rider can also store riding gear in the locker. The bicycle is completely enclosed and secure from impact. (See illustration.)

**Figure 14: Various Bicycle Parking Facilities**



Source: North Georgia Regional Bicycle & Pedestrian Plan

The above illustrations show several types of storage facilities that include bicycle racks and locker designs. The older style rack, in the lower right corner, does not permit a bicycle frame to be secured and is sub-standard.

Generally, bicycle racks should:

- Accommodate high security U-type locks,
- Permit the frame and at least one wheel to be locked,
- Be covered in areas where bikes may be left for longer periods of time, and
- Be securely anchored.

---

Each bicycle parking space should be at least six feet long by two feet wide. Like motorists, bicyclists need space to maneuver their vehicles into parking spaces. Accordingly, when full, a bike rack should have about five feet of clearance on at least three sides.

*Recommendation: Initially, bike racks should be installed at three locations in the city: 1) in the downtown area (there is already one rack located near the courthouse, but other locations should be considered 2) at the City Park on Pioneer Road, and 3) at the schools located on West Church Street.*

## 6 Funding and Other Assistance

A variety of potential funding sources including local, state, and federal funding programs can be used to construct the proposed bicycle and pedestrian improvements. Many of the federal and state programs are competitive, and involve the completion of extensive applications with clear documentation of the project need, costs, and benefits.

Most of the funding for recent bicycle and pedestrian improvements for many communities has come from the U.S Federal Highway Administration Transportation Enhancement (TE) grants, which was used successfully by the city in the downtown area. GDOT solicits applications for TE funding every two years.

Another Federal Highway Administration program, which can also be used to make sidewalk and bicycle facility improvements is the Safe Routes to School Program. Safe Routes to School was initiated under the SAFETEA-LU Act in 2005, Georgia received a \$16.6 million share through the 2009 fiscal year. Approximately 70% of these funds allotted are for construction of infrastructure facilities within two-mile radius of elementary and middle schools (K-8). The remaining 30% funding is reserved for education and information programs. It should be noted that funding provided requires no local match, it is 100% federally funded. More information can be found online with the Georgia's Department of Transportation Safe Routes to Schools program website at <http://www.dot.ga.gov/localgovernment/FundingPrograms/srts/Pages/default.aspx>.

Another program that may be of use is the National Recreation Trails Program administered by the Georgia Department of Natural Resources. This program provides funds primarily for projects that are limited to construction and/or maintenance of trails for typically recreational purposes. They require a 20% local match in funding and currently there is over \$2 million available in Georgia more information available online at the Georgia state parks website located at <http://www.gastateparks.org/net/content/item.aspx?s=18195.0.1.5>.

The Georgia Department of Transportation website is a good source for funding information located online at <http://www.dot.state.ga.us/Page/default.aspx>.

The North Georgia Regional Development Center can provide a variety of technical assistance in helping the City with implementation of the recommendations including providing information about funding programs, and preparing grant applications.

A variety of general and technical information resources can also be of assistance in planning, designing pedestrian, and bicycle facilities. A list of these resources can be found in the appendix. One effective way is to complete a walkability or bikeability checklist for your community. Example checklists are also located in the appendices.

---

## 7 Appendices

**Appendix A** – U.S. Department of Transportation and the Federal Highway Administration in cooperation with the National Center for Safe Routes to School presents the community Walkability Checklist.

**Appendix B** - U.S. Department of Transportation and the Federal Highway Administration in cooperation with the National Highway Traffic Safety Administration presents the community Bikeability Checklist.

# Walkability Checklist

## How walkable is your community?

### Take a walk with a child and decide for yourselves.

Everyone benefits from walking. These benefits include: improved fitness, cleaner air, reduced risks of certain health problems, and a greater sense of community. But walking needs to be safe and easy. Take a walk with your child and use this checklist to decide if your neighborhood is a friendly place to walk. Take heart if you find problems, there are ways you can make things better.

### Getting started:

First, you'll need to pick a place to walk, like the route to school, a friend's house or just somewhere fun to go.

The second step involves the checklist. Read over the checklist before you go, and as you walk, note the locations of things you would like to change. At the end of your walk, give each question a rating. Then add up the numbers to see how you rated your walk overall.

After you've rated your walk and identified any problem areas, the next step is to figure out what you can do to improve your community's score. You'll find both immediate answers and long-term solutions under "Improving Your Community's Score..." on the third page.





Take a walk and use this checklist to rate your neighborhood's walkability.

# How walkable is your community?

Location of walk \_\_\_\_\_

Rating Scale:



## 1. Did you have room to walk?

- ☐ Yes ☐ Some problems:
- ☐ Sidewalks or paths started and stopped
  - ☐ Sidewalks were broken or cracked
  - ☐ Sidewalks were blocked with poles, signs, shrubbery, dumpsters, etc.
  - ☐ No sidewalks, paths, or shoulders
  - ☐ Too much traffic
  - ☐ Something else \_\_\_\_\_
- Locations of problems: \_\_\_\_\_

Rating: (circle one) \_\_\_\_\_  
1 2 3 4 5 6

## 4. Was it easy to follow safety rules?

### Could you and your child...

- ☐ Yes ☐ No Cross at crosswalks or where you could see and be seen by drivers?
- ☐ Yes ☐ No Stop and look left, right and then left again before crossing streets?
- ☐ Yes ☐ No Walk on sidewalks or shoulders facing traffic where there were no sidewalks?
- ☐ Yes ☐ No Cross with the light?
- Locations of problems: \_\_\_\_\_

Rating: (circle one) \_\_\_\_\_  
1 2 3 4 5 6

## 2. Was it easy to cross streets?

- ☐ Yes ☐ Some problems:
- ☐ Road was too wide
  - ☐ Traffic signals made us wait too long or did not give us enough time to cross
  - ☐ Needed striped crosswalks or traffic signals
  - ☐ Parked cars blocked our view of traffic
  - ☐ Trees or plants blocked our view of traffic
  - ☐ Needed curb ramps or ramps needed repair
  - ☐ Something else \_\_\_\_\_
- Locations of problems: \_\_\_\_\_

Rating: (circle one) \_\_\_\_\_  
1 2 3 4 5 6

## 5. Was your walk pleasant?

- ☐ Yes ☐ Some unpleasant things:
- ☐ Needed more grass, flowers, or trees
  - ☐ Scary dogs
  - ☐ Scary people
  - ☐ Not well lighted
  - ☐ Dirty, lots of litter or trash
  - ☐ Dirty air due to automobile exhaust
  - ☐ Something else \_\_\_\_\_
- Locations of problems: \_\_\_\_\_

Rating: (circle one) \_\_\_\_\_  
1 2 3 4 5 6

## 3. Did drivers behave well?

- ☐ Yes ☐ Some problems: Drivers...
- ☐ Backed out of driveways without looking
  - ☐ Did not yield to people crossing the street
  - ☐ Turned into people crossing the street
  - ☐ Drove too fast
  - ☐ Sped up to make it through traffic lights or drove through traffic lights?
  - ☐ Something else \_\_\_\_\_
- Locations of problems: \_\_\_\_\_

Rating: (circle one) \_\_\_\_\_  
1 2 3 4 5 6

## How does your neighborhood stack up? Add up your ratings and decide.

- |          |       |   |
|----------|-------|---|
| 1. _____ | 26-30 | Celebrate! You have a great neighborhood for walking. |
| 2. _____ | 21-25 | Celebrate a little. Your neighborhood is pretty good. |
| 3. _____ | 16-20 | Okay, but it needs work.                              |
| 4. _____ | 11-15 | It needs lots of work. You deserve better than that.  |
| 5. _____ | 5-10  | It's a disaster for walking!                          |

Total \_\_\_\_\_

Now that you've identified the problems,  
go to the next page to find out how to fix them.

Now that you know the problems,  
you can find the answers.

# Improving your community's score...



## 1. Did you have room to walk?

Sidewalks or paths started and stopped  
Sidewalks broken or cracked  
Sidewalks blocked  
No sidewalks, paths or shoulders  
Too much traffic

### What you and your child can do immediately

- pick another route for now
- tell local traffic engineering or public works department about specific problems and provide a copy of the checklist

### What you and your community can do with more time

- speak up at board meetings
- write or petition city for walkways and gather neighborhood signatures
- make media aware of problem
- work with a local transportation engineer to develop a plan for a safe walking route

## 2. Was it easy to cross streets?

Road too wide  
Traffic signals made us wait too long or did not give us enough time to cross  
Crosswalks/traffic signals needed  
View of traffic blocked by parked cars, trees, or plants  
Needed curb ramps or ramps needed repair

- pick another route for now
- share problems and checklist with local traffic engineering or public works department
- trim your trees or bushes that block the street and ask your neighbors to do the same
- leave nice notes on problem cars asking owners not to park there

- push for crosswalks/signals/parking changes/curb ramps at city meetings
- report to traffic engineer where parked cars are safety hazards
- report illegally parked cars to the police
- request that the public works department trim trees or plants
- make media aware of problem

## 3. Did drivers behave well?

Backed without looking  
Did not yield  
Turned into walkers  
Drove too fast  
Sped up to make traffic lights or drove through red lights

- pick another route for now
- set an example: slow down and be considerate of others
- encourage your neighbors to do the same
- report unsafe driving to the police

- petition for more enforcement
- request protected turns
- ask city planners and traffic engineers for traffic calming ideas
- ask schools about getting crossing guards at key locations
- organize a neighborhood speed watch program

## 4. Could you follow safety rules?

Cross at crosswalks or where you could see and be seen  
Stop and look left, right, left before crossing  
Walk on sidewalks or shoulders facing traffic  
Cross with the light

- educate yourself and your child about safe walking
- organize parents in your neighborhood to walk children to school

- encourage schools to teach walking safety
- help schools start safe walking programs
- encourage corporate support for flex schedules so parents can walk children to school

## 5. Was your walk pleasant?

Needs grass, flowers, trees  
Scary dogs  
Scary people  
Not well lit  
Dirty, litter  
Lots of traffic



- point out areas to avoid to your child; agree on safe routes
- ask neighbors to keep dogs leashed or fenced
- report scary dogs to the animal control department
- report scary people to the police
- report lighting needs to the police or appropriate public works department
- take a walk with a trash bag
- plant trees, flowers in your yard
- select alternative route with less traffic

- request increased police enforcement
- start a crime watch program in your neighborhood
- organize a community clean-up day
- sponsor a neighborhood beautification or tree-planting day
- begin an adopt-a-street program
- initiate support to provide routes with less traffic to schools in your community (reduced traffic during am and pm school commute times)

## A Quick Health Check

Could not go as far or as fast as we wanted  
Were tired, short of breath or had sore feet or muscles  
Was the sun really hot?  
Was it hot and hazy?

- start with short walks and work up to 30 minutes of walking most days
- invite a friend or child along
- walk along shaded routes where possible
- use sunscreen of SPF 15 or higher, wear a hat and sunglasses
- try not to walk during the hottest time of day

- get media to do a story about the health benefits of walking
- call parks and recreation department about community walks
- encourage corporate support for employee walking programs
- plant shade trees along routes
- have a sun safety seminar for kids
- have kids learn about unhealthy ozone days and the Air Quality Index (AQI)

Need some guidance?  
These resources might help...

# Great Resources

## WALKING INFORMATION

Pedestrian and Bicycle Information Center (PBIC)  
UNC Highway Safety Research Center  
730 Airport Road, Suite 300  
Campus Box 3430  
Chapel Hill, NC  
27599-3430  
Phone: (919) 962-2202  
[www.pedbikeinfo.org](http://www.pedbikeinfo.org)  
[www.walkinginfo.org](http://www.walkinginfo.org)

National Center for  
Safe Routes to School  
730 Martin Luther  
King, Jr. Blvd., Suite 300  
Campus Box 3430  
Chapel Hill, NC 27599-3430  
Toll-free 1-866-610-SRTS  
[www.saferoutesinfo.org](http://www.saferoutesinfo.org)

National Center for Bicycling and Walking  
Campaign to Make America Walkable  
1506 21st Street, NW  
Suite 200  
Washington, DC 20036  
Phone: (800) 760-NBPC  
[www.bikefed.org](http://www.bikefed.org)

## WALK TO SCHOOL DAY WEB SITES

USA event: [www.walktoschool-usa.org](http://www.walktoschool-usa.org)  
International: [www.iwalktoschool.org](http://www.iwalktoschool.org)

## STREET DESIGN AND TRAFFIC CALMING

Federal Highway Administration  
Pedestrian and Bicycle Safety Research Program  
HSR - 20  
6300 Georgetown Pike  
McLean, VA 22101  
[www.fhwa.dot.gov/environment/bikeped/index.htm](http://www.fhwa.dot.gov/environment/bikeped/index.htm)

Institute of Transportation Engineers  
[www.ite.org](http://www.ite.org)

Surface Transportation Policy Project  
[www.transact.org](http://www.transact.org)

Transportation for Livable Communities  
[www.tlcnetwork.org](http://www.tlcnetwork.org)

## WALKING COALITIONS

America Walks  
P.O. Box 29103  
Portland, Oregon 97210  
Phone: (503) 222-1077  
[www.americawalks.org](http://www.americawalks.org)



## PEDESTRIAN SAFETY

National Highway Traffic Safety Administration  
Traffic Safety Programs  
400 Seventh Street, SW  
Washington, DC 20590  
Phone: (202) 662-0600  
[www.nhtsa.dot.gov/people/injury/pedbimot/ped](http://www.nhtsa.dot.gov/people/injury/pedbimot/ped)

SAFE KIDS Worldwide  
1301 Pennsylvania Ave. NW  
Suite 1000  
Washington, DC 20004  
Phone: (202) 662-0600  
Fax: (202) 393-2072  
[www.safekids.org](http://www.safekids.org)

## WALKING AND HEALTH

US Environmental Protection Agency  
Office of Children's Health Protection (MC 1107A)  
Washington, DC 20460  
Phone: 202-564-2188  
Fax: 202-564-2733  
[www.epa.gov/children/](http://www.epa.gov/children/)  
[www.epa.gov/airnow/](http://www.epa.gov/airnow/)  
[www.epa.gov/air/urbanair/ozone/what.html](http://www.epa.gov/air/urbanair/ozone/what.html)  
[www.epa.gov/sunwise/uvindex.html](http://www.epa.gov/sunwise/uvindex.html)  
[www.epa.gov/otaq/transp/comchoic/ccweb.htm](http://www.epa.gov/otaq/transp/comchoic/ccweb.htm)

President's Task Force on Environmental Health Risks and  
Safety Risks to Children  
[www.childrenshealth.gov](http://www.childrenshealth.gov)

Centers for Disease Control and Prevention  
Division of Nutrition and Physical Activity  
Phone: (888) 232-4674  
[www.cdc.gov/nccdphp/dnpa/readysset](http://www.cdc.gov/nccdphp/dnpa/readysset)  
[www.cdc.gov/nccdphp/dnpa/kidswalk/index.htm](http://www.cdc.gov/nccdphp/dnpa/kidswalk/index.htm)

Prevention Magazine  
33 East Minor Street  
Emmaus, PA 18098  
[www.itsallaboutprevention.com](http://www.itsallaboutprevention.com)

Shape Up America!  
6707 Democracy Boulevard  
Suite 306  
Bethesda, MD 20817  
[www.shapeup.org](http://www.shapeup.org)

## ACCESSIBLE SIDEWALKS

US Access Board  
1331 F Street, NW  
Suite 1000  
Washington, DC 20004-1111  
Phone: (800) 872-2253;  
(800) 993-2822 (TTY)  
[www.access-board.gov](http://www.access-board.gov)



# Bikeability Checklist

## How bikeable is your community?

### Riding a bike is fun!

Bicycling is a great way to get around and to get your daily dose of physical activity. It's good for the environment, and it can save you money. No wonder many communities are encouraging people to ride their bikes more often!

### Can you get to where you want to go by bike?

Some communities are more bikeable than others: how does yours rate? Read over the questions in this checklist and then take a ride in your community, perhaps to the local shops, to visit a friend, or even to work. See if you can get where you want to go by bicycle, even if you are just riding around the neighborhood to get some exercise.

At the end of your ride, answer each question and, based on your opinion, circle an overall rating for each question. You can also note any problems you encountered by checking the appropriate box(es). Be sure to make a careful note of any specific locations that need improvement.

Add up the numbers to see how you rated your ride. Then, turn to the pages that show you how to begin to improve those areas where you gave your community a low score.

Before you ride, make sure your bike is in good working order, put on a helmet, and be sure you can manage the ride or route you've chosen. Enjoy the ride!



National Highway Traffic  
Safety Administration



Pedestrian and Bicycle Information Center



U.S. Department  
of Transportation

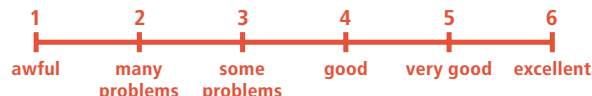
Go for a ride and use this checklist  
to rate your neighborhood's bikeability.



# How bikeable is your community?

Location of bike ride (be specific):  
\_\_\_\_\_

Rating Scale:



## 1. Did you have a place to bicycle safely?

### a) On the road, sharing the road with motor vehicles?

- ☐ Yes ☐ Some problems (please note locations):
- ☐ No space for bicyclists to ride
  - ☐ Bicycle lane or paved shoulder disappeared
  - ☐ Heavy and/or fast-moving traffic
  - ☐ Too many trucks or buses
  - ☐ No space for bicyclists on bridges or in tunnels
  - ☐ Poorly lighted roadways
- Other problems: \_\_\_\_\_

### b) On an off-road path or trail, where motor vehicles were not allowed?

- ☐ Yes ☐ Some problems:
- ☐ Path ended abruptly
  - ☐ Path didn't go where I wanted to go
  - ☐ Path intersected with roads that were difficult to cross
  - ☐ Path was crowded
  - ☐ Path was unsafe because of sharp turns or dangerous downhill
  - ☐ Path was uncomfortable because of too many hills
  - ☐ Path was poorly lighted
- Other problems: \_\_\_\_\_

Overall "Safe Place To Ride" Rating: (circle one)

1 2 3 4 5 6

## 2. How was the surface that you rode on?

- ☐ Good ☐ Some problems, the road or path had:
- ☐ Potholes
  - ☐ Cracked or broken pavement
  - ☐ Debris (e.g. broken glass, sand, gravel, etc.)
  - ☐ Dangerous drain grates, utility covers, or metal plates
  - ☐ Uneven surface or gaps
  - ☐ Slippery surfaces when wet (e.g. bridge decks, construction plates, road markings)
  - ☐ Bumpy or angled railroad tracks
  - ☐ Rumble strips
- Other problems: \_\_\_\_\_

Overall Surface Rating: (circle one)

1 2 3 4 5 6

## 3. How were the intersections you rode through?

- ☐ Good ☐ Some problems:
- ☐ Had to wait too long to cross intersection
  - ☐ Couldn't see crossing traffic
  - ☐ Signal didn't give me enough time to cross the road
  - ☐ Signal didn't change for a bicycle
  - ☐ Unsure where or how to ride through intersection
- Other problems: \_\_\_\_\_

Overall Intersection Rating: (circle one)

1 2 3 4 5 6

Continue the checklist on the next page...



#### 4. Did drivers behave well?

- ☐ Yes    ☐ Some problems, drivers:
- ☐ Drove too fast
  - ☐ Passed me too close
  - ☐ Did not signal
  - ☐ Harassed me
  - ☐ Cut me off
  - ☐ Ran red lights or stop sign
- Other problems: \_\_\_\_\_

Overall Driver Rating: (circle one)

1   2   3   4   5   6

#### 5. Was it easy for you to use your bike?

- ☐ Yes    ☐ Some problems:
- ☐ No maps, signs, or road markings to help me find my way
  - ☐ No safe or secure place to leave my bicycle at my destination
  - ☐ No way to take my bicycle with me on the bus or train
  - ☐ Scary dogs
  - ☐ Hard to find a direct route I liked
  - ☐ Route was too hilly
- Other problems: \_\_\_\_\_

Overall Ease of Use Rating: (circle one)

1   2   3   4   5   6

#### 6. What did you do to make your ride safer?

Your behavior contributes to the bikeability of your community. Check all that apply:

- ☐ Wore a bicycle helmet
- ☐ Obeyed traffic signal and signs
- ☐ Rode in a straight line (didn't weave)
- ☐ Signaled my turns
- ☐ Rode with (not against) traffic
- ☐ Used lights, if riding at night
- ☐ Wore reflective and/or retroreflective materials and bright clothing
- ☐ Was courteous to other travelers (motorist, skaters, pedestrians, etc.)

#### 7. Tell us a little about yourself.

In good weather months, about how many days a month do you ride your bike?

- ☐ Never
- ☐ Occasionally (one or two)
- ☐ Frequently (5-10)
- ☐ Most (more than 15)
- ☐ Every day

Which of these phrases best describes you?

- ☐ An advanced, confident rider who is comfortable riding in most traffic situations
- ☐ An intermediate rider who is not really comfortable riding in most traffic situations
- ☐ A beginner rider who prefers to stick to the bike path or trail

#### How does your community rate? Add up your ratings and decide.

(Questions 6 and 7 do not contribute to your community's score)

1. _____	<b>26-30</b>	Celebrate! You live in a bicycle-friendly community.
2. _____	<b>21-25</b>	Your community is pretty good, but there's always room for improvement.
3. _____	<b>16-20</b>	Conditions for riding are okay, but not ideal. Plenty of opportunity for improvements.
4. _____	<b>11-15</b>	Conditions are poor and you deserve better than this! Call the mayor and the newspaper right away.
5. _____		
<b>Total</b> _____	<b>5-10</b>	Oh dear. Consider wearing body armor and Christmas tree lights before venturing out again.

#### Did you find something that needs to be changed?

On the next page, you'll find suggestions for improving the bikeability of your community based on the problems you identified. Take a look at both the short- and long-term solutions and commit to seeing at least one of each through to the end. If you don't, then who will?

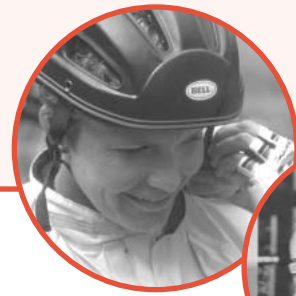
During your bike ride, how did you feel physically? Could you go as far or as fast as you wanted to? Were you short of breath, tired, or were your muscles sore? The next page also has some suggestions to improve the enjoyment of your ride.

Bicycling, whether for transportation or recreation, is a great way to get 30 minutes of physical activity into your day. Riding, just like any other activity, should be something you enjoy doing. The more you enjoy it, the more likely you'll stick with it. Choose routes that match your skill level and physical activities. If a route is too long or hilly, find a new one. Start slowly and work up to your potential.



Now that you know the problems,  
you can find the answers.

# Improving your community's score...



## 1. Did you have a place to bicycle safely?

### a) On the road?

No space for bicyclists to ride (e.g. no bike lane or shoulder; narrow lanes)  
Bicycle lane or paved shoulder disappeared  
Heavy and/or fast-moving traffic  
Too many trucks or buses  
No space for bicyclists on bridges or in tunnels  
Poorly lighted roadways

### What you can do immediately

- pick another route for now
- tell local transportation engineers or public works department about specific problems; provide a copy of your checklist
- find a class to boost your confidence about riding in traffic

### What you and your community can do with more time

- participate in local planning meetings
- encourage your community to adopt a plan to improve conditions, including a network of bike lanes on major roads
- ask your public works department to consider "Share the Road" signs at specific locations
- ask your state department of transportation to include paved shoulders on all their rural highways
- establish or join a local bicycle advocacy group

### b) On an off-road path or trail?

Path ended abruptly  
Path didn't go where I wanted to go  
Path intersected with roads that were difficult to cross  
Path was crowded  
Path was unsafe because of sharp turns or dangerous downhill  
Path was uncomfortable because of too many hills  
Path was poorly lighted

- slow down and take care when using the path
- find an on-street route
- use the path at less crowded times
- tell the trail manager or agency about specific problems

- ask the trail manager or agency to improve directional and warning signs
- petition your local transportation agency to improve path/roadway crossings
- ask for more trails in your community
- establish or join a "Friends of the Trail" advocacy group

## 2. How was the surface you rode on?

Potholes  
Cracked or broken pavement  
Debris (e.g. broken glass, sand, gravel, etc.)  
Dangerous drain grates, utility covers, or metal plates  
Uneven surface or gaps  
Slippery surfaces when wet (e.g. bridge decks, construction plates, road markings)  
Bumpy or angled railroad tracks  
Rumble strips

- report problems immediately to public works department or appropriate agency
- keep your eye on the road/path
- pick another route until the problem is fixed (and check to see that the problems are fixed)
- organize a community effort to clean up the path

- work with your public works and parks department to develop a pothole or hazard report card or online link to warn the agency of potential hazards
- ask your public works department to gradually replace all dangerous drainage grates with more bicycle-friendly designs, and improve railroad crossings so cyclists can cross them at 90 degrees
- petition your state DOT to adopt a bicycle-friendly rumble-strip policy

## 3. How were the intersections you rode through?

Had to wait too long to cross intersection  
Couldn't see crossing traffic  
Signal didn't give me enough time to cross the road  
The signal didn't change for a bicycle  
Unsure where or how to ride through intersection

- pick another route for now
- tell local transportation engineers or public works department about specific problems
- take a class to improve your riding confidence and skills

- ask the public works department to look at the timing of the specific traffic signals
- ask the public works department to install loop-detectors that detect bicyclists
- suggest improvements to sightlines that include cutting back vegetation; building out the path crossing; and moving parked cars that obstruct your view
- organize community-wide, on-bike training on how to safely ride through intersections

# Improving your community's score...

(continued)

## What you can do immediately

## What you and your community can do with more time

### 4. Did drivers behave well?

Drivers:  
Drove too fast  
Passed me too close  
Did not signal  
Harassed me  
Cut me off  
Ran red lights or stop signs

- report unsafe drivers to the police
- set an example by riding responsibly; obey traffic laws; don't antagonize drivers
- always expect the unexpected
- work with your community to raise awareness to share the road

- ask the police department to enforce speed limits and safe driving
- encourage your department of motor vehicles to include "Share the Road" messages in driver tests and correspondence with drivers
- ask city planners and traffic engineers for traffic calming ideas
- encourage your community to use cameras to catch speeders and red light runners

### 5. Was it easy for you to use your bike?

No maps, signs, or road markings to help me find my way  
No safe or secure place to leave my bicycle at my destination  
No way to take my bicycle with me on the bus or train  
Scary dogs  
Hard to find a direct route I liked  
Route was too hilly

- plan your route ahead of time
- find somewhere close by to lock your bike; never leave it unlocked
- report scary dogs to the animal control department
- learn to use all of your gears!

- ask your community to publish a local bike map
- ask your public works department to install bike parking racks at key destinations; work with them to identify locations
- petition your transit agency to install bike racks on all their buses
- plan your local route network to minimize the impact of steep hills
- establish or join a bicycle user group (BUG) at your workplace

### 6. What did you do to make your ride safer?

Wore a bicycle helmet  
Obeyed traffic signals and signs  
Rode in a straight line (didn't weave)  
Signaled my turns  
Rode with (not against) traffic  
Used lights, if riding at night  
Wore reflective materials and bright clothing  
Was courteous to other travelers (motorists, skaters, pedestrians, etc.)

- go to your local bike shop and buy a helmet; get lights and reflectors if you are expecting to ride at night
- always follow the rules of the road and set a good example
- take a class to improve your riding skills and knowledge

- ask the police to enforce bicycle laws
- encourage your school or youth agencies to teach bicycle safety (on-bike)
- start or join a local bicycle club
- become a bicycle safety instructor



Need some guidance?  
These resources might help...

# Great Resources

---

## STREET DESIGN AND BICYCLE FACILITIES

American Association of State Highway and Transportation Officials  
444 North Capitol Street, NW, Suite 249  
Washington, DC 20001  
Tel: (202) 624-5800  
[www.aashto.org](http://www.aashto.org)

Institute of Transportation Engineers  
1099 14th Street, NW, Suite 300 West  
Washington, DC 20005-3438  
Tel: (202) 289-0222  
[www.ite.org](http://www.ite.org)

Association of Pedestrian and Bicycle Professionals (APBP)  
P.O. Box 23576  
Washington, DC 20026  
Tel: (202) 366-4071  
[www.apbp.org](http://www.apbp.org)

Pedestrian and Bicycle Information Center (PBIC)  
UNC Highway Safety Research Center  
730 Airport Road, Suite 300  
Campus Box 3430  
Chapel Hill, NC 27599-3430  
Tel: (919) 962-2202  
[www.pedbikeinfo.org](http://www.pedbikeinfo.org)  
[www.bicyclinginfo.org](http://www.bicyclinginfo.org)

Federal Highway Administration  
400 Seventh Street, SW  
Washington, DC 20590  
[www.fhwa.dot.gov/environment/bikeped/index.htm](http://www.fhwa.dot.gov/environment/bikeped/index.htm)

## EDUCATION AND SAFETY

National Highway Traffic Safety Administration  
400 Seventh Street, SW  
Washington, D.C. 20590  
Tel: (202) 366-1739  
[www.nhtsa.dot.gov/people/injury/pedbimot/bike/](http://www.nhtsa.dot.gov/people/injury/pedbimot/bike/)

League of American Bicyclists  
1612 K Street NW, Suite 401  
Washington, DC 20006  
Tel: (202) 822-1333  
[www.bikeleague.org](http://www.bikeleague.org)

National Bicycle Safety Network  
[www.cdc.gov/ncipc/bike/default.htm](http://www.cdc.gov/ncipc/bike/default.htm)

National Safe Kids Campaign  
1301 Pennsylvania Ave NW, Suite 1000  
Washington, DC 20004  
Tel: (202) 662-0600  
[www.safekids.org](http://www.safekids.org)

## PATHS AND TRAILS

Rails to Trails Conservancy  
1100 17th Street SW, 10th Floor  
Washington, DC 20036  
Tel: (202) 331-9696  
[www.railtrails.org](http://www.railtrails.org)

National Park Service  
Rivers, Trails and Conservation Assistance Program  
1849 C Street, NW, MS-3622  
Washington, DC 20240  
[www.ncrc.nps.gov/rtca/rtca-ofh.htm](http://www.ncrc.nps.gov/rtca/rtca-ofh.htm)

## HEALTH

Centers for Disease Control and Prevention  
Division of Nutrition and Physical Activity  
4770 Buford Highway, NE  
Atlanta, GA 30341-3724  
[www.cdc.gov/nccdphp/dnpa](http://www.cdc.gov/nccdphp/dnpa)  
Tel: (770) 488-5692

National Center for Injury Prevention and Control  
Childhood Injury Prevention  
4770 Buford Highway, NE  
Atlanta, GA 30341  
[www.cdc.gov/ncipc](http://www.cdc.gov/ncipc)

## ADVOCACY AND USER GROUPS

Thunderhead Alliance  
1612 K Street, NW, Suite 401  
Washington, DC 20006  
Tel: (202) 822-1333  
[www.thunderheadalliance.org](http://www.thunderheadalliance.org)

League of American Bicyclists  
1612 K Street, NW, Suite 401  
Washington, DC 20006  
Tel: (202) 822-1333  
[www.bikeleague.org](http://www.bikeleague.org)

National Center for Bicycling and Walking  
1506 21st Street, NW, Suite 200  
Washington, DC 20036  
Tel: (202) 463-6622  
[www.bikewalk.org](http://www.bikewalk.org)

Surface Transportation Policy Project  
1100 17th Street, NW, 10th Floor  
Washington, DC 20036  
Tel: (202) 466-2636  
[www.transact.org](http://www.transact.org)

## OTHER USEFUL RESOURCES

Bikes and transit: [www.bikemap.com](http://www.bikemap.com)

Bicycle information: [www.bicyclinginfo.org](http://www.bicyclinginfo.org)

Bicycle-related research:  
[www.tfhr.gov/safety/pedbike/pedbike.htm](http://www.tfhr.gov/safety/pedbike/pedbike.htm)

Bicycling Magazine: [www.bicycling.com/](http://www.bicycling.com/)

Bicycle touring:  
Adventure Cycling Association  
P.O. Box 8308  
Missoula, MT 59807  
(800) 755-2453  
(406) 721-8754  
[www.adv-cycling.org](http://www.adv-cycling.org)