Walk Williamston

A COMPREHENSIVE PEDESTRIAN PLAN

TOWN OF WILLIAMSTON, NC

Prepared by:
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Division of Bicycle & Pedestrian Transportation

Rivers & Associates, Inc. Since 1918

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Approved by the NCDOT Division of Bicycle & Pedestrian Transportation
May 5, 2012

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Williamston NORTH CAROLINA

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

Division of Bicycle & Pedestrian Transportation

Rivers & Associates, Inc. Since 1918

ACKNOWLEDGEMENTS

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North Carolina Department of Transportation, Division of Bicycle & Pedestrian Transportation & Town of Williamston

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Executive Summary

The Town of Williamston Comprehensive Pedestrian Plan is the first plan of its kind for the Town and was funded in part by a grant from the North Carolina Department of Transportation, Bicycle and Pedestrian Transportation Division. The development of a Comprehensive Pedestrian Plan will support the Town's ongoing efforts to maintain sustainable development, and making it more convenient and safer for pedestrians. The Town of Williamston desires to improve pedestrian facilities throughout the Town in order to safely link residential neighborhoods to parks & recreation facilities, schools, health care facilities and shopping/retail areas.

Overall Goals for Williamston:

Goal: Education & Awareness
To educate the community on the wide-range of benefits of a pedestrian-friendly community, as well as to increase bicyclists', pedestrians', and motorists' awareness of traffic laws and safety measures.

Goal: Connectivity
To develop a continuous sidewalk / trail network that will provide residents and visitors with convenient and pleasant access to popular destinations and points of interest.

Goal: Pedestrian-Friendly Policies
To pursue pedestrian-friendly policies and maintenance procedures to continuously improve walking in Williamston.

Goal: Encourage Opportunities
To encourage and seek opportunities throughout the community to develop and improve pedestrian facilities.

The Town of Williamston submitted a North Carolina Department of Transportation (NCDOT) Application for Bicycle and Pedestrian Planning Grant Funds for the 2010 grant year. The Town was awarded $24,800 of NCDOT Planning Funds to develop a Comprehensive Pedestrian Plan. Accompanied by a local match, the Town of Williamston hired Rivers & Associates, Inc. to assist with the development of a Comprehensive Pedestrian Plan. The Town will use the Pedestrian Plan as a guide for developing a pedestrian-friendly community and will assist when making budget decisions and applying for grant funds from regional, state, federal, and private funding sources.

The local government, the County of Martin, the Williamston Chamber of Commerce and many other organizations throughout the Town and County support improving Williamston's pedestrian transportation to provide a multi-modal transportation system.

The Town of Williamston's 2009-2010 Long-Range Comprehensive Plan update and the Town's Comprehensive Recreation Plan all support the vision of developing a comprehensive pedestrian planning document that will provide direction in achieving safe transportation and connectivity in Williamston.

Williamston's vision is to *develop a pedestrian-friendly environment throughout Town that provides more walking opportunities to promote healthy lifestyles.* Identified goals and objectives to achieve this vision are discussed in Section 1.

The current conditions of the Town of Williamston have been inventoried and evaluated as part of the development of the Comprehensive Pedestrian Plan. Section 2 includes an overview of the Town, current usage/user demographics, an inventory and assessment of existing facilities and compatibility of the local transportation system. The information obtained regarding Williamston's current conditions provides the framework for planning facilities, programs, and policies based on the community's wants and needs.

In addition to analyzing existing conditions, existing plans, programs, and policies at the Local, Regional, and State level were reviewed. Plans and policies determine the type of development that is encouraged and allowed in a community while programs offer methods to promote, encourage, and educate the public. Therefore, these tools (plans, policies, and programs) are a key component to ensure an environment that is supportive of pedestrians. Existing plans, programs, and policies are highlighted in Section 3.

During plan development, several potential projects were identified that would improve the existing pedestrian network. These potential projects have been broken down into four categories: Pedestrian Crossings, New Sidewalk Construction, In-fill / Sidewalk Connections, and Greenway/Mulit-Use Trails. Section 4 describes the Strategic Pedestrian System Plan, which includes many potential project opportunities that were based upon:

- Steering Committee Meetings
- Public survey & Open House #1 comments
- Pedestrian-motor vehicle crash data
- Planned, proposed projects mentioned in existing plans
- Field Inventory and Assessment
- Ability to provide connectivity & improve safety.

Section 5 provides guidance to the Town of Williamston on design standards and guidelines. These standards and guidelines are a critical component of this Plan and for all facility construction and development.

Section 6 outlines recommendations for ancillary facilities, programs, and policies to make the Town of Williamston a pedestrian-friendly community. These recommendations address the Education, Encouragement, and Enforcement categories of a pedestrian -friendly community. The implementation of various programs not only encourages walking, but also provides education, enforcement, and maintenance opportunities to ensure Williamston has a comprehensive pedestrian network where its users feel comfortable to walk throughout the community.

Section 7 contains a listing of Recommended Projects. The initial list of potential project locations was developed based on input from the Steering Committee, Town staff, Public Open House #1 , the public survey, and the results of the sidewalk/crosswalk inventory. Future resurfacing, repaving and improvement projects should be evaluated to determine whether it is possible to recommendations in this Plan as part of those projects. Pedestrian considerations should be included as part of all Local and NCDOT scheduled road maintenance and improvement processes.

A wide range of construction projects were identified and recommended to make the Town more pedestrian-friendly. Fifty-six (56) projects are recommended including twenty-four (24) pedestrian crossing improvements, nineteen (19) new sidewalk construction projects, four (4) infill projects, and nine (9) greenway/multi-use trail projects. A comprehensive description of all construction projects are found in Tables 7.1 – 7.4.

Short-term opportunities are those that may be completed or implemented in a period of zero to five years (0-5 yrs.). Mid-term projects included those projects with low costs and low ratings as well as projects with high costs and high ratings. Mid-term opportunities are those that may be completed or implemented in a period of six to ten years (6-10 yrs). Projects with high costs and low ratings were placed in the long-term project category. Long-term opportunities are those that may be completed or implemented in a timeframe beyond ten (10) years. However, mid and long term projects should be expedited if financing becomes available or a critical need has occurred.

Recommended Programs for Williamston include:

- **Spot Improvement Program**
- **Infrastructure Maintenance Program**
- **Education Programs**
- **Safe Routes to School Program**
- **Enforcement Programs**
- **Encouragement Programs**

Section 8 describes how the recommendations for improving Williamston's pedestrian conditions will be implemented. This section outlines priorities for projects, programs,

and policies as well as potential partners and funding sources. Implementation of this Plan will be a collaborative effort between a variety of Town departments and external agencies. The Town's various departments should be aware of the Plan recommendations and seek to implement them as part of their regular program of work. The NCDOT Division of Bicycle and Pedestrian Transportation may provide technical expertise on issues related to pedestrian movement and financial assistance to ensure that implementation of the Plan moves forward. Progress on improving the Plan should be monitored no less than annually.

Section 1: Introduction

1.1 Pedestrian Plan Initiative

The Town of Williamston Comprehensive Pedestrian Plan was funded in part by a grant from the North Carolina Department of Transportation, Bicycle and Pedestrian Transportation Division. The development of a Comprehensive Pedestrian Plan will support the Town's ongoing efforts to maintain development, while making it more convenient and safer for people who walk. The Town of Williamston desires to improve transportation throughout the Town in order to link residential neighborhoods to parks & recreation facilities, schools, health care facilities and shopping/retail areas.

The Town of Williamston submitted a North Carolina Department of Transportation (NCDOT) Application for Bicycle and Pedestrian Planning Grant Funds for the 2010 grant year. The Town was awarded $24,800 of NCDOT Planning Funds to develop a Comprehensive Pedestrian Plan. Accompanied by a local match, the Town of Williamston hired Rivers & Associates, Inc. to assist with the development of a Comprehensive Pedestrian Plan. The Pedestrian Plan is intended to be utilized as a guide for developing a pedestrian-friendly community and will assist when making budget decisions and applying for grant funds from regional, state, federal, and private funding sources.

The local government, the County of Martin, Martin County Transit and many other organizations throughout the Town and County support improving Williamston's pedestrian transportation to provide a multi-modal transportation system.

The Martin County Land Use Plan and the Williamston Comprehensive Recreation Plan all support the vision of developing a comprehensive pedestrian transportation planning document that will provide direction in achieving safe transportation and connectivity in Williamston.

1.2 Public Involvement

Public input played an important role in the development of Williamston's Comprehensive Pedestrian Plan. The public involvement strategy involved several components including four Steering Committee meetings, two Public Open Houses, and public presentations at the Town's Planning Board and Town Board of Commissioners. Media outreach was utilized with press releases, public notices, and invitations to all meetings and open houses to announce the project.

An eleven (11) Member Steering Committee, comprised of Williamston citizens, Town staff and the consultant team met four times throughout the planning process to discuss goals and

objectives, priorities, existing conditions, identify potential pedestrian corridors and destinations, identify recommendations for projects and programs, and to identify project prioritization. The Steering Committee members are listed on the Acknowledgements page of this Plan. See Appendix A for further information regarding Steering Committee meetings.

In addition to the Steering Committee, pubic input was solicited through a project website www.WalkWilliamston.com, an online-survey available through the Town's website. Additionally, hard copies of the survey were available at Town Hall. Williamston citizens were notified of the survey through local media outlets, "business card" announcements distributed by the Steering Committee Members, the town's website, the project website, and notices placed in utility bills.

Two Public Open Houses were held during development of the Comprehensive Pedestrian Plan. The first Public Open House was held on May 24, 2011 at Martin Memorial Library. During the first Public Open House, participants were provided the opportunity to express needs and concerns and to identify additional potential corridors. The second Public Open House was held on August 9, 2011 at Martin Memorial Library. During the second Public Open House, participants were presented the draft Comprehensive Pedestrian Plan and were provided the opportunity to ask questions and provide any further input. Additional information regarding these Public Open Houses can be found in Appendix A.

1.3 History

The Pedestrian and Bicycle Information Center (PBIC) states "a transportation system that supports bicycling and walking enhances health, reduces traffic congestion, promotes economic vitality, and improves quality of living."[i] Individual citizens can strive towards these goals; although the greatest benefit will be realized when the community as a whole embraces the pedestrian initiative.

Prior to the emergence of the automobile, humans were a pedestrian oriented society. However, the automobile opened opportunities to expand our limits. Walking became more commonly recognized as a recreational endeavor, rather than a functional activity. History has a way of repeating itself and the recent movement towards pedestrian oriented growth has been spurred partially out of need. As gasoline prices continue to rise, people are seeking alternative forms of transportation, such as a safe, continuous pedestrian network.

Williamston leaders have recognized the benefits associated with a multi-modal transportation system and the importance pedestrian infrastructure plays in an effective comprehensive transportation system. The Town intends to expand and improve the pedestrian infrastructure, policies, and programs to provide pedestrians with the ability to safely walk to work, school, and recreation, commercial, and service-oriented destinations. This Comprehensive Pedestrian

Plan will guide future pedestrian facility installation, maintenance of existing facilities, and development of pedestrian programs and policies.

Educating the public on the numerous benefits of walking provides a vital start in developing a walkable community. The following provides a summary of the many benefits of a comprehensive pedestrian system.

- *Health* – Walking improves circulation and respiratory function, combats depression, bolsters the immune system, prevents heart disease, controls weight, and decreases risks of heart disease, diabetes, and osteoporosis.[ii]

- *Environmental / Energy* – Unlike walking, driving an automobile produces a substantial amount of air pollution. According to the Environmental Protection Agency (EPA), transportation is responsible for nearly eighty (80) percent of carbon monoxide and fifty (55) percent of nitrogen oxide emissions in the U.S.[iii] Automobile manufacturers are now producing models that are more environmentally friendly; however traffic continues to increase thus counteracting the possibility of air pollution reduction.

- *Transportation* – Walking can reduce traffic congestion and necessary parking spaces significantly when short distance vehicle trips are replaced with walking.

- *Economics* – The financial responsibility of automobile ownership is getting more expensive with the increasing costs of the purchase price, gasoline, insurance, license, registration, and maintenance. In multiple vehicle households, these costs can be higher than a mortgage or rent payment. However, the cost of walking is the price of a good pair of shoes.

- *Quality of Life* – Walking provides opportunities for social interaction within a community.

As Williamston continues to expand, many areas such as the central business district (Downtown) can become underutilized, uninviting, and unsafe. This problem can be seen in communities across the country, not just in Williamston. Society in general has become less willing to walk due to inconvenience and inaccessibility. As energy costs continue to increase, these societal habits cannot be sustained. Communities must develop new strategies to promote alternative modes of transportation. As Williamston looks towards conserving its small town heritage, the opportunity to promote a walkable community is the first step. A walkable community will offer a wealth of social, health, economic, and environmental benefits.

The Town of Williamston is dedicated to expanding and improving pedestrian facilities. Along with these improvements, the creation of programs and policies will provide pedestrians the opportunity to safely venture to destinations such as school, work, recreation facilities, and

commercial areas. This Comprehensive Pedestrian Plan will guide future pedestrian facility improvements, installation, maintenance of existing facilities and development of pedestrian programs and policies.

1.4 VISION STATEMENT

In an area where the economics have historically been supported by agriculture, Williamston has become a destination on the Roanoke River at the junctions of highways US-64, US-13, and US-17, which serve as major transportation corridors between Raleigh and the Outer Banks. Like other growing communities, Williamston is faced with the challenges of preserving its small town character while promoting economic development, balancing automobile dependency, and providing the quality of life new residents are seeking. These challenges will have to be confronted with new goals and strategies to keep up with changing times.

With the strong support of the public and governing body, Williamston's vision is to invest in the development of a comprehensive pedestrian plan to address opportunities for connectivity, programs, policies, partnerships, and funding to improve and sustain the pedestrian environment of the Town. The implementation of this vision will improve the quality of life for Williamston's citizens through increased health, social interaction, and accessibility.

Formulation of a Pedestrian Vision and Goals/Objectives

As a guide to developing this plan, goals were determined based upon participation by Steering Committee members and the citizens of Williamston. Goals for Williamston are:

- Provide more walking opportunities to promote healthy lifestyles
- Provide safer walking environments
- Build a sense of community
- Improve connectivity and accessibility to allow for viable alternative transportation options
- Improve accessibility and safety for children, the elderly, and the disabled

1.5 SCOPE OF WORK AND PURPOSE OF PLAN

The scope and purpose of this plan is to assess Williamston's pedestrian system. Walking is more than a means of getting from one place to another; walking facilitates healthy living habits, conserves energy while improving air quality, and builds strong communities by increasing social interaction.

Williamston's incorporated and extra territorial jurisdiction (ETJ) serves as the project analysis area. The town's major pedestrian corridors were identified and then development districts, points of interests, and destinations were identified.
Results yielded from this assessment, will help determine a strategy to improve the community's pedestrian connectivity and safety. The strategy identified is targeted towards increasing pedestrian traffic and providing accessibility to the entire community.

Plan Assessment includes:

- *Pedestrian Need*
- *Deficiencies*
- *Potential Improvements*
- *Pedestrian Routes*
- *Design Standards and Guidelines*
- *Pedestrian Projects, Programs, and Policies*
- *Viable Funding Sources*

The purpose of the Comprehensive Pedestrian Plan is to make an accessible, safe, convenient, interconnected and functional pedestrian transportation system, ultimately contributing to a higher quality of living environment.

Planning Process

The process used for plan development involved four phases: 1) Data Collection, Research and Inventory; 2) Preliminary Recommendation Development; 3) Development and Review of Draft Pedestrian Plan; and 4) Final Plan Development and Approval.

PHASE I – DATA COLLECTION, RESEARCH AND INVENTORY

This phase involved data collection, research, and inventory of existing infrastructure and data. Phase 1 contained the following tasks or steps:

- Developed a Public Involvement Strategy;
- Surveyed Williamston citizens by way of an on-line survey available on the Town's website and hardcopies of the survey were also available at Town Hall;
- Analyzed survey results;
- Compiled existing data (relevant plans and ordinances, U.S. Census, and crash data);
- Conducted interviews with stakeholders to discuss issues, plans and goals as they related to stakeholder groups and to identify existing plans for infrastructure improvement;
- Analyzed demographics, social and physical threats in the Town;
- Conducted an on-site assessment of current conditions and constraints;
- Summarized existing ordinances, programs, and initiatives;

- Held two Steering Committee meetings.

PHASE 2 – PRELIMINARY RECOMMENDATION DEVELOPMENT

Based upon Phase 1, preliminary recommendations were developed. Phase 2 contained the following tasks or steps:

- Held the first Pubic Open House to provide public with Plan status and direction as well as to identify additional potential corridors, receive public needs and concerns.
- Developed preliminary recommendations for pedestrian projects, programs, and policies;
- Conducted an inventory for the roadways where pedestrian facilities are recommended;
- Developed preliminary cost options for recommended improvements;
- Met with NCDOT representatives to discuss preliminary recommendations.
- Held a third Steering Committee meeting to present preliminary improvements recommendations and to discuss project prioritization.

PHASE 3 – DEVELOPMENT AND REVIEW OF DRAFT PEDESTRIAN PLAN

Based upon Phase 1 and Phase 2, a draft plan was developed. Phase 3 contained the following tasks or steps:

- Developed a draft Comprehensive Pedestrian Plan based upon the findings of the previous tasks according to the NCDOT's expanded template;
- Held a fourth Steering Committee meeting to present the draft Comprehensive Pedestrian Plan for committee feedback and to discuss implementation;
- Held a second Public Open House to present the draft Comprehensive Pedestrian Plan containing priorities and funding sources;
- Submitted a draft Comprehensive Pedestrian Plan to the Town and NCDOT for review.

PHASE 4 – FINAL PLAN DEVELOPMENT AND APPROVAL

Based upon comments from the NCDOT and Williamston Planning Board review, the Plan was revised and resubmitted to the NCDOT for approval and to the Town Board of Commissioners for review and approval. Phase 4 contained the following tasks or steps:

- Developed a revised draft Comprehensive Pedestrian Plan based upon the feedback from the NCDOT and Williamston Planning Board;
- Resubmitted revised plan to the Town for resubmission to the NCDOT for review and approval;
- Final plan with NCDOT and Planning Board revisions submitted to Town for Planning Board and Town Board of Commissioners's Review;
- Developed a revised final Comprehensive Pedestrian Plan based upon feedback from the Town's Planning Board and the Town Board of Commissioners;
- Submitted final plan to Town for approval and adoption by the Town Board of Commissioners.

[i] Walkinginfo.org. September 2011. (www.walkinginfo.org/develop/activities.cfm)

[ii] The Department of Cambridge Community Development, Harvard Study. September 2011. (www.ci.cambridge.ma.us/cdd/et/ped/ped_hlth.html)

[iii] EPA.gov. September 2007. (www.epa.gov/otaq/consumer/03-co.pdf)

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Section 2: Evaluating Current Conditions

As determined by public involvement efforts and a field analysis, this section identifies the town's existing and future pedestrian-related needs. An analysis of the town's pedestrian crash data was also used to determine pedestrian infrastructure needs. Williamston's existing pedestrian infrastructure was also evaluated to determine areas in need of improvement. Evaluated pedestrian infrastructure included the following:

- Existing Sidewalks
- Street Networks
- Street Intersections
- Parking Lots
- Bridges
- Public Transportation

2.1 Overview of Williamston

Williamston is located on the Roanoke River at the junctions of highways US-65, US-13, and US-17. The Town's population is approximately 5,500 while the county's total population is about 25,000. Williamston's Corporate Limits encompasses 3.773 square miles. The extra territorial jurisdiction (ETJ) extends approximately two (2) miles to the south and one (1) mile to the North for an area of approximately seventeen (17) square miles. It is located in the northeastern coastal plain region of North Carolina. The average rainfall is 49.30 inches per year. Williamston's importance as a town was largely based on its location on the banks of the navigable Roanoke River and its designation as the seat of county government when Martin County was formed in 1774. The Roanoke River enabled ships to navigate upstream to Williamston prior to construction of any roads which automatically made Williamston an important shipping point for river freight. Later, the railroad was constructed and the river was bridged in 1922, which resulted in Williamston becoming the hub of a system of highways and roads upon which the business and commercial life of the county now largely depends. Historical features include the Asa Biggs House (1831) and the Old Martin County Courthouse (1885) which are among those listed in a self-guided walking tour brochure.

According to the 2010 U.S. Census, Williamston's population was 5,511, which is Martin County's largest municipality. The population is approximately 34.6% Caucasian, 62.4% African-American, and 2.1% Hispanic. Family households include 65.4%; the population under the age of 18 is 24.7% and 47.7% of the population is 25 to 64 years old. The median age is 39.1 years.

Williamston is now Martin County's hub for recreational, educational, and economic activities. Martin Community College serves as the community's institute for higher education. The community is also home to the annual Carolina Country Stampede, which has become a popular local street festival event held in downtown Williamston. The seven parks and recreation facilities in the community also provide residents with entertainment opportunities. These recreation centers support many youth activities such as basketball, baseball, Babe Ruth Softball, soccer, volleyball, and football (flag and tackle). These facilities are located throughout the community. A developed well-connected pedestrian network will compliment these existing and future activities.

Schools:

- *Williamston Primary School*
- *EJ Hayes Elementary School*
- *Williamston Middle School*
- *Riverside High School*
- *Martin Community College*

Williamston has four public (not including Martin Community College) schools with approximately 1,851 students in grades K-12. Martin Community College has a student population of approximately 800 students. These educational centers are places where large populations gather. A safe and well-connected pedestrian network should be developed to link these pedestrian generators to the entire community.

With the Town's expanded commercial development comes an increased demand for pedestrian accessibility and connectivity. Williamston is experiencing a rise in service type businesses such as physicians' offices and restaurants. This, along with increased commercial retail developments, is boosting the economy. However, if pedestrian needs are not addressed as soon as possible, a window of opportunity will be lost as retrofitting existing development involves more expensive design and construction.

Williamston's student population is growing, increasing the need for safe and accessible routes to school. This population includes those attending elementary though high schools in the Town, as well as college students attending Martin Community College. In addition, 25.4% of the population is over the age of 60. Many seniors depend on pedestrian connectivity to carry out daily activities, such as going to the post office.

2.2 PEDESTRIAN CRASH ANALYSIS

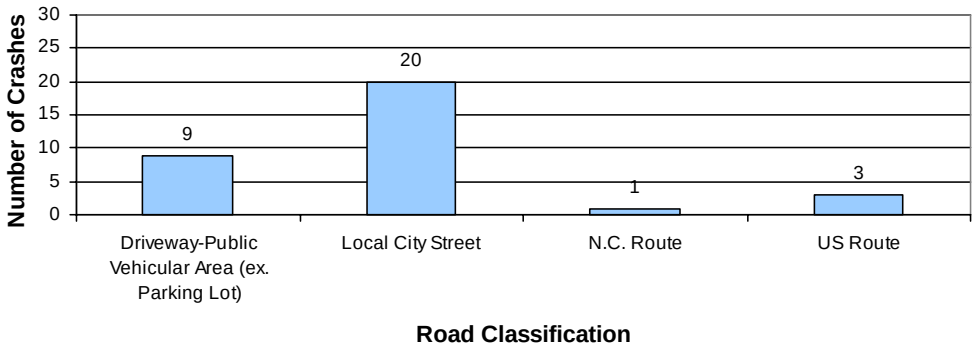
According to the UNC Highway Safety Research Center the pedestrian crash rates for the Town of Williamston is high (33); however, this may be attributed to a lack of safe and accessible facilities.

An analysis of crash data for the Town of Williamston was conducted using the NCDOT's web-based pedestrian crash database (NCDOT, Division of Bicycle & Pedestrian Transportation – Pedestrian Crash Data. March 2011, http://www.pedbikeinfo.org/pbcat/ped_main.htm). The database was created and housed by the Highway Safety Research Center. The data was used to evaluate pedestrian crash trends and identify high-risk areas and populations in Williamston.

According to the North Carolina Pedestrian and Bicycle Crash Data Tool, between the years of 1997-2006, the Town of Williamston experienced thirty-three (33) pedestrian crashes. During this ten-year period, twelve (12) pedestrian-motor vehicle crashes occurred at an "Intersection", thirteen (13) crashes occurred at a "Non-Intersection" and eight (8) crashes occurred at a "Non-Roadway" (not graphed).

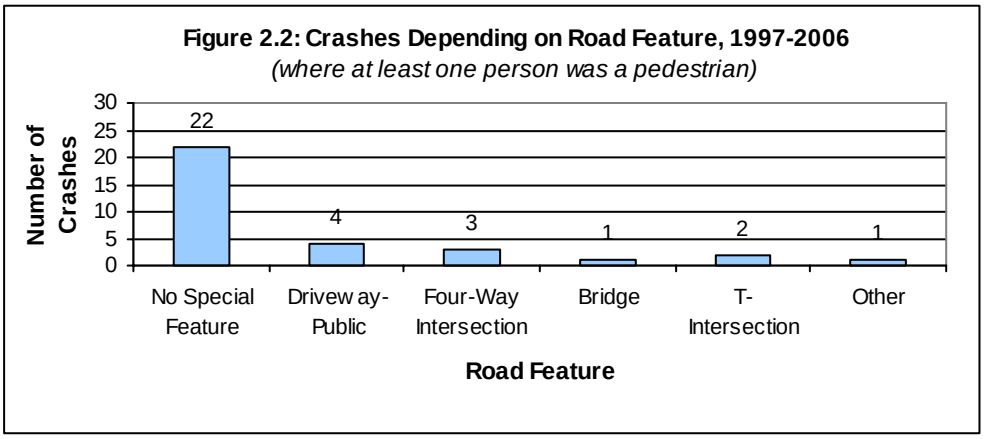
The crash data was further analyzed to determine the location, injuries, and outcomes of the crashes. These attributes are identified in the following graphs.

Figure 2.1: Pedestrian Crashes and Road Classification, 1997-2006
(where at least one person was a pedestrian)



Source: NCDOT Division of Bicycle & Pedestrian Transportation – Pedestrian Crash Data

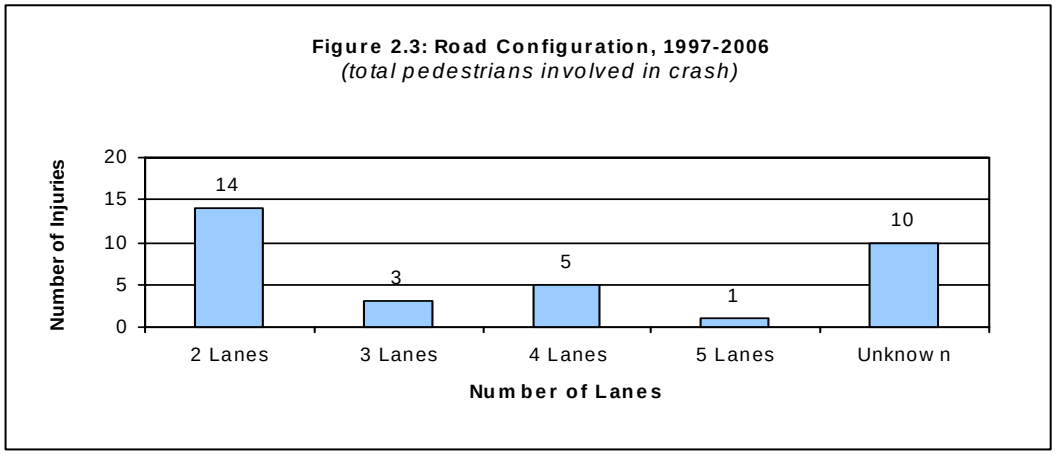
Figure 2.1 categorizes pedestrian crashes according to road classification. Areas classified as driveway-public vehicular areas account for twenty-seven (27%) of all pedestrian crashes. Local city streets, N.C. Routes, and U.S. Routes were also identified as areas where the remaining forty percent (73%) of pedestrian accidents occurred. These statistics indicate the need for increased pedestrian safety measures at designated pedestrian areas within parking facilities, crosswalks and sidewalks. Pedestrian signage improvements are also needed to increase safety.



Source: NCDOT Division of Bicycle & Pedestrian Transportation – Pedestrian Crash Data

Figure 2.2 examines crashes based upon road characteristics. Twenty-two (22) or sixty-six percent (66%) of crashes occurred at locations that had "no special features". Locations having "no special features" are defined by the UNC Highway Safety Research Center as areas along roadways, between intersections or within public vehicle spaces. Public driveways and four-way intersections had seven (7) or twenty-one percent (21%) of pedestrian accidents.

Improving pedestrian facilities such as crosswalks and sidewalks will help reduce pedestrian accidents in these locations. These improvements should be accompanied by traffic calming devices, pedestrian lighting and enhanced pedestrian-friendly design guidelines.

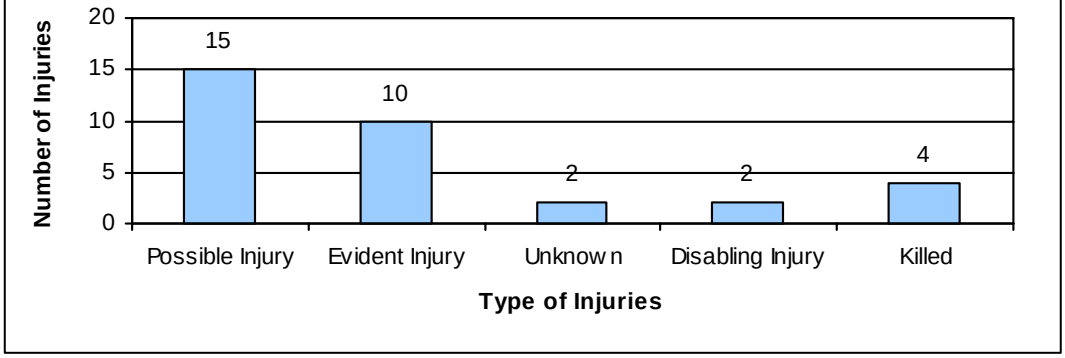


Source: NCDOT Division of Bicycle & Pedestrian Transportation – Pedestrian Crash Data

Figure 2.3 shows the distribution of crashes according to road configurations. Ten (10) or thirty percent (30%) of pedestrian accidents occurred on roadways in which the configuration is unknown. Nineteen (19) or fifty-eight percent (58%) of pedestrian crashes were located on roads configured as two or four lanes. These statistics suggest that crosswalks and sidewalks improvements are needed along two and four lane thoroughfares and pedestrian facilities be installed within parking lots, along public driveways, and other public vehicular areas.

Williamston's crash data was also evaluated according to posted speed limits. Forty percent (40%) of crashes were located on roadways with a speed limit of 20 Mph. Another forty percent (40%) of crashes occurred in areas with speed limits greater than 20 Mph; respectively from 1997-2005 (no graph is provided for this data).

Figure 2.4: Pedestrian Injuries fron Crashes, 1997-2006
(total pedestrians involved in crash)

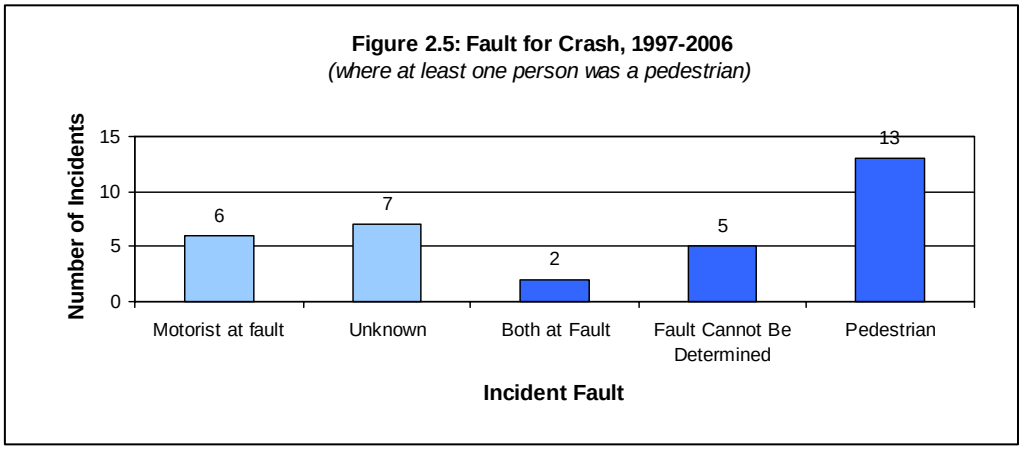


Source: NCDOT Division of Bicycle & Pedestrian Transportation – Pedestrian Crash Data

Figure 2.4 illustrates the severity of injuries sustained to the pedestrians in crash incidents. Thirty percent (30%) of pedestrians involved in crashes sustained evident injury while forty-five percent (45%) received possible injuries. A report sponsored by the National Highway Traffic Safety Administration (NHTSA) entitled *Literature Review on Vehicle Travel Speeds and Pedestrian Injuries* states pedestrians have a five percent (5%) chance of dying when involved in pedestrian-vehicle crashes where the vehicle is traveling 20 MPH or less. In Williamston, 12% of pedestrian crashes resulted in death. Fatality rates increase dramatically as vehicle speeds increase.[1]

Due to this correlation, it is important that vehicle speeds be reduced in areas with high pedestrian activity. Safety education and pedestrian facility improvements are also important considerations to avoid injuries.

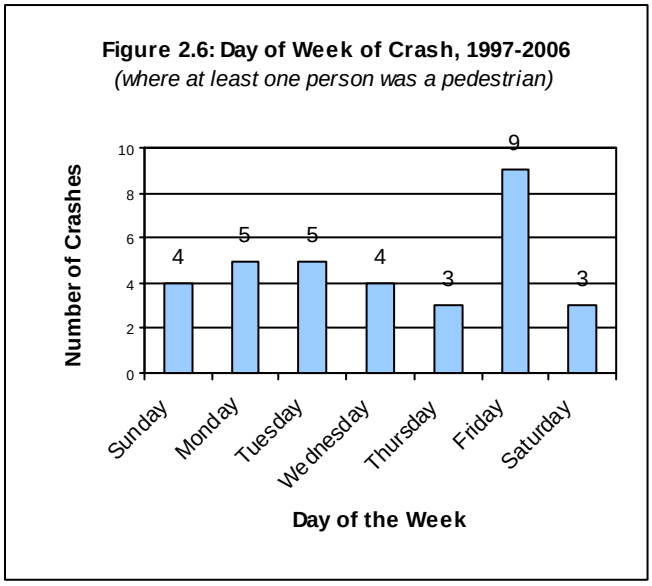
[1] United States Department of Transportation, National Highway Traffic Safety Administration, *Literature Review on Vehicle Travel Speeds and Pedestrian Injuries*, W. A. Leaf and D. F. Preusser, October 1999



Source: NCDOT Division of Bicycle & Pedestrian Transportation – Pedestrian Crash Data

Figure 2.5 illustrates the fault of pedestrian accidents. Motorists were at fault in eighteen percent (18%) of all pedestrian accidents while forty percent (40%) were caused by the pedestrian. These statistics reflect the need for driver and pedestrian safety education. This community education would include vehicle laws, safety, improved crossings, and separation of pedestrian and vehicle facilities with vegetation buffers and/or bollards.

Figure 2.6 explores the possible connections between days of week in relationship to the frequency of crashes. Crashes occurred throughout the week. Accident rates were highest on Fridays, potentially indicating drivers and pedestrians not giving full attention to their task, as they head home from work, school or local activities.

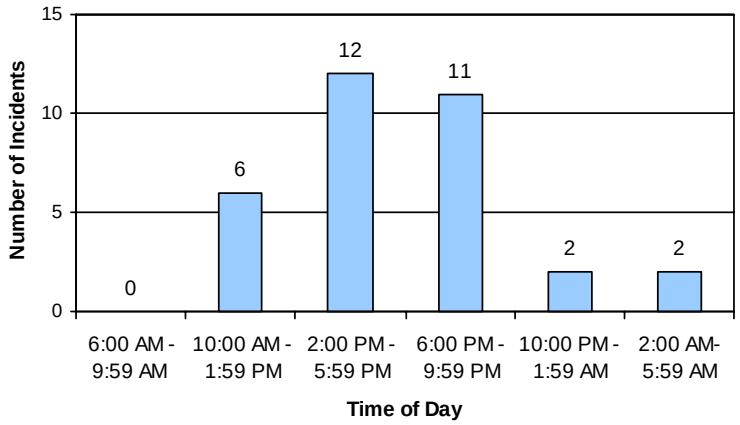


Source: NCDOT Division of Bicycle & Pedestrian Transportation – Pedestrian Crash Data

Figure 2.7 reveals that most accidents, thirty-six percent (36%) took place between 2:00 p.m. and 5:59 p.m. These hours are traditionally when drivers and pedestrians are traveling home from school, work or running errands. Another thirty-three percent (33%) of accidents occurred in early evening hours (6:00 p.m. – 9:59 p.m.) suggesting that these crashes are a result of decreased visibility.

According to the available crash statistical data (not graphed), fifty-five percent (55%) of all pedestrian crashes occurred during daylight hours. Eight (8) crashes occurred on a "Dark-lighted roadway" and five (5) crashes occurred on a "Dark-roadway not lighted." Twenty-four (24) or (73%) of pedestrian crashes transpired during sunny clear weather conditions, while the remaining twenty-seven percent (27%) occurred in cloudy conditions.

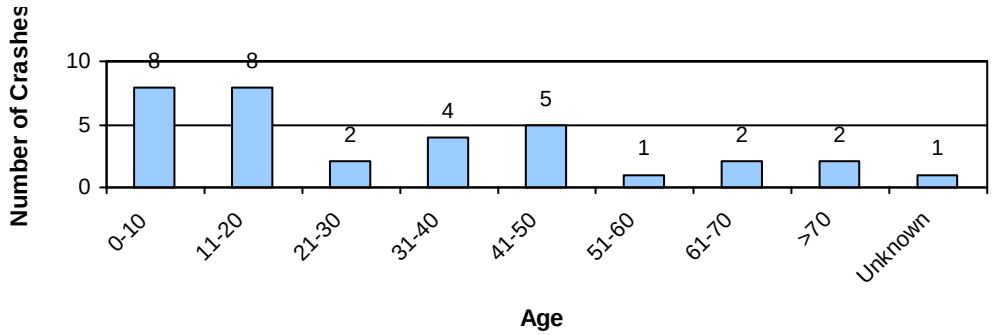
Figure 2.7: Time-of-Day of Crash, 1997-2006
(where at least one person was a pedestrian)



Source: NCDOT Division of Bicycle & Pedestrian Transportation – Pedestrian Crash Data

The 33 pedestrian crashes that have occurred in Williamston were distributed throughout the year (not graphed). The summer month crashes may be attributed to increased recreational activity and students out of school for summer break. Winter month crashes can be attributed to increased holiday shopping and students out for winter break.

Figure 2.8: Age of Pedestrian in Crash, 1997-2006
(total pedestrians in crash)



Source: NCDOT Division of Bicycle & Pedestrian Transportation – Pedestrian Crash Data

As illustrated by Figure 2.8, pedestrian crashes affect nearly every age group. There were many pedestrian crashes for age groups under 20 years of age. Safety education, enforcement, and safe pedestrian routes to schools are tools that can be used to reduce pedestrian accidents.

High Crash Sites

Unfortunately, Williamston has experienced 33 pedestrian-vehicular crashes from January 1997 to December 2006. Four (4) of the crashes were fatal, and ten (10) resulted in type B-injuries (injury evident). These crashes occurred on roadways with no pedestrian facilities except for signage. Three crashes happened along Main Street and Highway 64. Improving these crash sites with sidewalks and proper crossing treatments will provide a safer environment for pedestrians. Map 2.1 illustrates the crash sites.

2.3 COMMUNITY CONCERNS, NEEDS AND PRIORITIES

The Williamston Comprehensive Pedestrian Plan was developed to address the needs and priorities of the community. To determine these needs, the staffs of the Town of Williamston and Rivers and Associates, (Project Team) initiated an extensive public involvement strategy and Rivers conducted a field site analysis. The following outlines specific activities that were undertaken by the Project Team for plan development.

Public Involvement Strategy

The Project Team implemented a project approach using planning techniques that have proven successful for previous planning projects. Encouraging active community participation during plan development was a goal of this public involvement strategy. This strategy was designed to inform, educate, and engage the public in the development of this Comprehensive Pedestrian Plan.

Four Steering Committee meetings, two public open houses, an on-line public survey, and a project website were planning tools used to obtain public input and concerns. Along with these tools, concerned citizens could also communicate directly with Town staff via phone, email or in person. The following is a summary of the public involvement methods utilized during the planning process.

Steering Committee Members:

- ***Brent Kanipe****, Williamston Planning Director*
- ***Phillip Martin****, Williamston Planner*
- ***Kerry Spivey****, Williamston Public Works Director*
- ***Allen Overby****, Williamston Parks & Recreation Director*
- ***Betty Jo Keel,*** *Martin County Transit Director*
- ***Bill Webb,*** *SECU*
- ***Bill Smith,*** *Retired DCA Planner*
- ***Alice Howard,*** *Martin County Schools (retired)*
- ***George "Buck" White***

Public Involvement Summary

The following paragraphs briefly summarize the results of the above public involvement strategy and provided guidance for

recommendations developed for the Town of Williamston. Detailed results of the various public involvement components are contained in Appendix A.

Steering Committee

The Steering Committee members' identified the following concerns, needs, and opportunities/priorities:

- Inadequate pedestrian crossings
- No sidewalks along most major arterials
- Incomplete sidewalk segments / Poor connectivity throughout community
- Non-pedestrian friendly streetscape
- Uneven sidewalk surfaces
- Improve enforcement of rules and regulations
- Improve education about walkable communities and benefits of walking to all persons (parents, students, developers, etc.)
- Improve Town Ordinances to require more sidewalks and land for multi-use trails
- Improve partnerships with neighboring private and public agencies
- Use existing easements for multi-use trails

These comments were incorporated into the Plan's recommendations. A complete list of Steering Committee comments is available in Appendix A.

Public Open Houses

Public Open Houses for this Plan were held on May 24, 2011 and on August 9, 2011. The first open house was held at Martin Memorial Library to inform the public on the project status, importance/benefits of a comprehensive pedestrian plan, and identified deficiencies with current pedestrian network as well as gather public input. The second open house was held at Martin Memorial Library to present draft recommendations and priorities for comments. In general, the following comments were made during these public open houses:

- Improve streetscape with trees, benches, lighting, etc.
- Improve Town Ordinances to require pedestrian facilities for commercial development
- Connectivity from all portions of Town in some manner
- Expand the width of crosswalks to accommodate large groups of pedestrians
- Enforcement of speed limits
- Multi-Use trails are needed
- Sidewalks to key destinations

These comments were incorporated into the Plan's recommendations. A complete list of public comments is available in Appendix A.

Public Survey

A survey was developed and posted on-line using the software application Survey Monkey to obtain pedestrian information on existing pedestrian use, current conditions, concerns and pedestrian needs. This survey was available from March 20, 2011 – June 7, 2011. Hardcopies of this survey were also given to the Town for distribution to non-computer savvy citizens. The project website provided a link to the survey for completion. Eighty-five (85) residents answered the survey. The survey form and all survey results are available in Appendix A.

The survey conducted during plan development showed 32.4% of respondents walk less than 10 minutes a day for pleasure, to a parking lot, or a neighbor's house as a means of transportation. A small percentage of respondents walk to do errands or to go to work. The main issues that keep residents from walking more is 1) lack of time (60%), 2) feel unsafe due to crime (26.2%), 3) not enough destinations (15.4%), and 4) feel unsafe due to traffic (13.8%). An overwhelming number of respondents (69.4%) indicated their neighborhood has no sidewalks and drivers travel at unsafe speeds; therefore, respondents with school-aged children stated they drive their children to school even though there is a public school in their neighborhood. Further, the survey also reveals overwhelming support (85.1%) for the development of guidelines, standards, etc. to ensure pedestrian-friendly development and accommodations.

According to the survey, specific destinations that are difficult to walk to are commercial areas, downtown, parks and schools. Intersection and/or streets identified most often for pedestrian facilities improvements were:

- Main Street
- Prison Camp Road
- East and West Boulevard
- Washington Street

Summary of Concerns, Needs and Priorities

The results of Steering Committee meetings, Public Open Houses, and Public Survey reveal an overwhelming need to improve the pedestrian environment through connectivity, pedestrian facilities (crossings, etc.), enforcement of rules and regulations, Town policies, and the built environment.

For instance, Downtown Williamston contains offices, small shops, residential neighborhoods, and municipal buildings such as the Williamston Library, and Town Hall. Downtown also has a

large number of sidewalks and pedestrian facilities; however, these sidewalks are not easily accessible due to the lack of ADA-compliant curbs, inadequately marked crosswalks, crosswalks that lead to unimproved pedestrian areas, and hazardous situations for pedestrians. Removing these obstacles will increase the accessibility of the downtown by pedestrians.

The residential neighborhoods surrounding downtown have no or sporadically placed sidewalk segments that are incomplete or need repairs, thus preventing pedestrian connectivity to neighborhood schools, parks, the downtown, and surrounding commercial establishments.

Highway 17, a divided and undivided multi-lane highway corridor has experienced an increased amount of commercial and residential development such as Walmart, Dairy Queen, and Country Club Acres Subdivision. With the exception of Walmart, many of the commercial developments feature large expansive parking with little to no pedestrian facilities to ensure a safe connection to store fronts. The areas on the west side of Highway 17 are only accessible by automobiles; therefore, pedestrian facilities are needed to provide pedestrian connectivity to surrounding commercial establishments, recreational opportunities, educational centers, and to the remaining community.

The western portion of Williamston has also experienced expansion of municipal park facilities as well as the community college along Prison Camp Road; however, the connectivity and accessibility to these development areas needs to be address to ensure a walkable community.

2.4 Assessment of Pedestrian Compatibility of Local Transportation System

Williamston has a sporadic network of sidewalks with few well-defined crosswalks, no crossing signals at major street intersections, and few pedestrian design facilities within parking lots. The basic “transverse” style solid white parallel lines mark pedestrian crossings in isolated areas in the community, but crossing treatments are rarely used or noticeable. An overwhelming majority of the Town has no pedestrian facilities and a major barrier, East/West Boulevard, does not accommodate pedestrians at crossings.

Several points of interests and destinations were identified during plan development that need improved or new pedestrian facilities. For instance, Williamston’s Godwin-Coppage Park is also only assessable by walking in the streets or by vehicle. Williamston is fortunate to have several schools within its community; however, these schools are not adequately connected to the surrounding residential areas resulting in busing of students who live only blocks away, an expensive alternative to walking.

Williamston has an opportunity to make significant enhancements to the existing pedestrian network. As a rapidly expanding community, the need for safe and effective pedestrian

facilities is essential to improve the quality of life for its residents. This Plan is the first step towards making Williamston a walkable community that will continue to attract families, young professionals, and retirees for years to come.

Demographics

Williamston is located within Martin County, a Tier 1 designated distressed county in accordance with G.S. 143B-437.01. Williamston's U.S. Census data shows that the community's population demographics are very diverse. The median family household income as determined in the 2010 U.S. Census is $24,922. This is lower than the state average of $45,069 and as a percentage of the National Median Household Income ($49,445 in 2010) is 50%.

In Williamston, there are 1850 persons or 33.7% of residents living below the poverty level, which as a percentage of the state's poverty rate (15% Census data, 2010) is 225%.

Most of Williamston's population has income levels above the poverty level. Ninety-two percent (92%) of Williamston's population own at least one vehicle. As a result, a majority of the population use an automobile as their primary means of transportation. Fourteen (14) or 26% of all those who completed the survey indicated that they walk to work, while eight percent (8%) stated walking was their primary means of transportation. The average commute time for workers is approximately fifteen (15) minutes.

Age and disability demographics also play a critical role in determining pedestrian-related improvements needed in the town. A total of 1,514 or 27.4% of the total population is below the age of 20. Another 2,948 or 53.4% of residents are between the ages of 20 and 64. The number of persons above the age of 65 is 1,049 (19%).

After analyzing the census data, conclusions can be made to assess demographic needs. To encourage pedestrian traffic, connectivity and accessibility should be improved to local businesses, places of employment, schools and other destinations. Although most employment activities are located outside of town, opportunities for new places of work should be encouraged closer to residential areas. These changes will improve the health, wellness and happiness for the community by reducing the amount of vehicular use and commuter time. A developed list of potential pedestrian projects is in Section 7. Although these projects provide connectivity and accessibility, continuous assessment of residents' needs will be required as Williamston continues to grow.

2.5 INVENTORY AND ASSESSMENT OF EXISTING PEDESTRIAN FACILITIES

Field analysis was a major component of this plan. The consultant team carried out reconnaissance surveys for the town. The intent was to focus on understanding general conditions and the character of the pedestrian environment in various parts of the town.

During these field surveys, consultant staff examined elements affecting the pedestrian experience such as:

- Sidewalk design and placement,
- Curb ramp design,
- Driveway access design,
- Intersection design and configuration,
- Pedestrian crossing accommodations,
- Lane widths and number of lanes,
- Speed limits and traffic speed,
- Roadway character, and
- Development character.

Williamston's pedestrian network is fragmented making it hard for people to navigate the community. There are places where there are sufficient sidewalks such as downtown and near Williamston Middle School, Martin Memorial Library and the US Post Office. However, the walking surface is often times in disrepair and unattractive. These conditions do little to provide easy connectivity for pedestrians with disabilities. Unattractive sidewalks and views (dilapidated structures and over-grown yards) can also discourage pedestrian activity.

Outside the immediate downtown area, sidewalks become more sparsely located. There is little to no pedestrian connectivity for surrounding neighborhoods to downtown activities. The sidewalks around the downtown are primarily incomplete segments. Many of the neighborhoods outside of downtown are newer residential and commercial developments; however, the residential developments were designed with cul-de-sac and dead-end streets that prohibit inter-neighborhood connectivity, and commercial developments were not required to install pedestrian facilities. The commercial establishments were designed with only the vehicular access in mind. The characteristics of this design include large front setbacks and little pedestrian facilities within parking lots. Williamston's growth has pushed residential, commercial, and public facilities (parks and schools) further away from the community center resulting in an isolated and automobile dependent environment. To curb the trend of pedestrian inaccessibility, development regulations should require more pedestrian infrastructure and facilities for all types of development.

A description of Williamston's existing pedestrian facilities is summarized below.

Roadways and Thoroughfares

Williamston's arterials traverse the downtown, center and edges of the town. Roadways in Williamston are owned and maintained by one of three entities. The Town of Williamston owns most local and collector roadways, and most of these roads are within residential neighborhoods. Major arterials, designated as North Carolina or United States highways, are

primarily the responsibility of NCDOT. In addition to the publicly-owned roads, there is a minimal amount of roads owned and maintained by private property owners.

According to the Town's 2011 Powell Bill Map, the following is a breakdown of roadway lengths categorized by the entity responsible for maintenance.

- Town of Williamston – 35.26 miles (34.31 paved, 0.54 gravel, 0.41 dirt)
- NCDOT – 6.16 miles
- Private – 500 LF

As illustrated above, the large majority of roads are under the direct purview of the city. On these roads, the city has the direct authority to establish speed limits and pursue traffic calming measures, construct pedestrian amenities, acquire right of way and other actions. On NCDOT roads, Williamston must coordinate with the state on speed limits, roadway improvements, intersection and crossing design, sidewalk installation and other actions that address the pedestrian transportation system. Private roads comprise the smallest percentage of the town's road network. On private roads, the city has limited oversight once a project is developed, provided the roads comply with the town's standards. Careful planning and enforcement of local ordinances will ensure proper placement of new roads in or around Williamston so they appropriately accommodate vehicle and pedestrian traffic. Each type of roadway plays a critical role in the town's transportation network and provides varying levels of accommodation for pedestrians.

Williamston's Thoroughfares
US 17
US 64
US 13
NC 125
SR 1142
SR 1409
SR 1420
Main Street
Railroad Street

Courtesy of ***NCDOT Thoroughfare Plan for Town of Williamston, North Carolina, September 1995***

Pedestrians and motorists are impacted by streetscape design and condition as it relates to a safe walking environment. The streetscape includes building placement and façade design, street plantings and street furniture, parking location and design and the design of the roadway. Streetscapes are an important component of the pedestrian experience because people tend to want to walk in settings that are visually attractive.

Pedestrians in the downtown area have access to some of the best pedestrian facilities in the town. The streets are relatively narrow and low speed limits provide moderate amounts of traffic. Nearly anywhere vehicles have access; there are also sidewalks for pedestrians. Williamston's downtown Main Street has some of the most inviting streetscapes for pedestrians. There are benches and trees that make walking for both leisure and transportation easy and comfortable. There is ample lighting and clear signage to help you reach your destination. Barnes Plaza is an excellent pedestrian facility located at the intersection of W. Main Street and Smithwick. This public space provides seating, pedestrian-level lighting, picnic tables and vegetation.

Arterial streetscape elements are not inviting to pedestrians. Wide roadways and proximity to relatively fast moving traffic increase the perception of exposure, whether or not there is a real increase in danger.

Sidewalks

Sidewalks provide pedestrians with a safe means of travel to and from destinations and are an integral component of a walkable community. If a community does not have sidewalks to destinations, people will drive rather than walk. In addition, if a community has sidewalks that are obstructed or in disrepair, they will not be used. The quality of walking facilities relates to the condition and functionality of sidewalks, curb ramps and crosswalks.

The majority of Williamston's sidewalks are in good condition; however, they are fragmented and overgrown trees and shrubs obstruct clearance along some segments. Map 2.2 shows Williamston existing pedestrian facilities (sidewalks, crossings, and signage). As the map reveals, none of the major thoroughfares have a continuous network of sidewalks. The majority of the sidewalks along residential streets are located within older subdivisions. Newer sidewalks in Williamston meet the required 5 feet in width, but older segments do not meet this minimum width. The width of sidewalks affects walkability. If the sidewalk is only wide enough for one person to walk comfortably then families or wheelchair users may not use them. Therefore, sidewalks with adequate width need to be constructed and existing narrow sidewalks need to be improved. Obstructions from signs, utility poles, and overgrown vegetation need to be resolved to provide adequate clearance for pedestrians.

Sidewalk Accessibility

Accessibility is the suitability of the walking network for people with disabilities. The availability, design and condition of a particular sidewalk or curb ramp is important for any person but it is critical for a person with a disability who may need more time crossing a street or is in a wheelchair. Williamston has installed curb ramps to allow wheelchair users to negotiate curbs more easily, but there are still many non ADA-complaint curb cuts and several marked pedestrian crossings where the sidewalk does not extend to the intersection. Immediate attention is needed to repair and improve pedestrian facilities near schools, parks,

downtown, high accident areas and other major destinations points to ensure ADA-compliance and overall safety.

In addition to curb ramps, surface quality affects ease of travel for pedestrians, especially those using walking –aid (cane, walker, crutches). Grates and cracks wide enough to catch the tip of a cane can be dangerous for walking-aid users. Uneven surfaces can also be hazardous because they further reduce the stability of walking-aid users.

Street Crossings and Intersections

Street crossings present one of the greatest safety hazards for pedestrians. When crossing the street, pedestrians are entering into the domain of motor vehicle traffic and are most exposed to danger. Pedestrians are faced with cross traffic and vehicles turning left or right across their path. Safe crossing of streets and intersections is essential for connectivity and pedestrian safety. Williamston can construct numerous sidewalks and multi-use trails throughout their community, but without proper design and installation of intersections and mid-block crossings, the pedestrian network will fail. Because of inadequate pedestrian intersection treatments, there is a need to improve these crossings. Street crossings should be designed to provide maximum protection to the pedestrian through clear markings, appropriate signage or signalization, and adequate crossing time, pedestrian refuges and other important elements. Signage and markings should provide clear guidance to both pedestrians and motorists as to their respective responsibilities at the crossing. The importance of these improvements are essential to ensuring safety in areas near pedestrian destinations such as schools, downtown, parks, and commercials areas. Major thoroughfares (i.e., Highway 64, Main Street, Boulevard (East and West), Washington Street, Main Street, and Haughton Street) will require additional planning and coordination to provide a safe pedestrian crossing. Intersections near schools, parks, residential and commercial areas, and the downtown have been identified as locations that are in need of pedestrian crossing improvements. These locations were chosen based upon their proximity to destinations such as community facilities and activities, pedestrian-vehicle crashes, and their ability to provide connections to surrounding neighborhoods.

Throughout the public engagement process and field observations, a number of specific concerns were raised related to street crossings in Williamston. Proposed solutions to many of the community's concerns are detailed in Section 7 Recommendations. The concerns expressed by the community include the behaviors of both motorists and pedestrians:

- Many signalized intersections do not have pedestrian signals or marked crosswalks.
- Multi-lane arterials carry substantial vehicle traffic and create wide intersections and long crossings for pedestrians. (Blvd & Washington)
- Pedestrians often fail to use legal crossings, cross against the light, or step into the roadway without checking for oncoming traffic.

- Motorist behaviors increase safety hazards for pedestrians when they fail to stop or yield for pedestrians, stop within the crosswalk or pedestrian crossing area, running red lights and exceeding posted speed limits.
- Long distances between signalized intersections on major arterials either discourages crossing or promotes crossing away from an intersection.

Multi-Use Trails

There is only one multi-use trail in Williamston. Multi-use trails provide an excellent opportunity for functional daily and recreational opportunities. The Skewarkee Rail Trail is a one-mile multi-use path extending from downtown to the Roanoke River by providing connectivity between River Landing park and the business district. The community has expressed concerns of safety along the trail, especially the further away from downtown. Multi-use trails can connect to destinations including outlying educational facilities, municipal parks, as well as residential areas along the outer edges of the community. It is also important to consider their relationship to other facilities such as residential neighborhoods, commercial districts, parks, and schools. Providing links to these facilities from the trail will increase the overall connectivity of the pedestrian network.

Parking Lots

The majority of parking lots in Williamston were designed and constructed with minimal pedestrian accommodations. Storefronts are located far from the road, separated by deep parking lots. Pedestrians have further to walk to access buildings and must often navigate through parking lots using driving aisles to that were not designed to accommodate pedestrian travel. There are few designated pedestrian access routes from parking spaces to the store. In addition, little to no vegetation is planted within parking lots to provide refuge from the sun and to break up the expansive asphalt. To improve pedestrian conditions in parking lots, the Town of Williamston should adopt new development regulations that promote pedestrian-oriented design.

Public Transportation

Although not currently in operation, Martin County Transit once provided public transportation service known as “The Loop” on Monday through Friday (7:00 am-3:45 pm). This was the only public transportation service in Williamston. For a fare of $1.00, there were thirty (30) Bus Stop Locations along “The Loop” including Martin Community College, Martin General Hospital, Town Hall, shopping centers, Gaylord Perry Park and residential communities. Should this service resume once again in Williamston, pedestrians and potential transit users must be able to travel safely to the bus stops from surrounding properties. Therefore, improvements such as sidewalks, signage, crosswalks, and lighting should be done within proximity of this transit stop.

Bridges

Williamston has four bridges in the ETJ (East Boulevard at Roanoke River to Main Street, Prison Camp Road at Highway US 64/13), US 17 at US 64 and Jamesville Road at US 64/US 17, none of which have pedestrian amenities.

Section 3: Existing Plans, Programs & Policies

According to the Town's recently updated Comprehensive Plan, "The issue facing the Town is how to ensure the provision of a safe, efficient transportation system given State and local finances, topography, geography, natural systems, and surrounding land uses and development." Williamston understands the value of pedestrian planning. The Town's commitment to pedestrian planning is demonstrated in the decision to develop this comprehensive pedestrian plan.

Williamston's commitment to pedestrian planning is further demonstrated in the Town's existing plans, programs and policies. The following section provides a general overview of each of these plans, programs and policies, and highlights key pedestrian related components.

3.1 Relevant Plans

Local Plans

The Town's Public Works Department has been developing a street improvements master plan with a sidewalk/pedestrian facility construction/improvement component. Williamston partners with the North Carolina Department of Transportation (NCDOT) with respect to maintaining streets and roads in and through the Town and planning for improvements.

Road maintenance is Town funded using "Powell Bill" funds it receives through the State unless a street or road passing through Town is designated as a "state road" in which case it is the responsibility of NCDOT.

Several recent projects within the Town of Williamston have made significant improvements for pedestrians and can act as models for other similar locations throughout the town.

Skewarkee Trail

In 2003, Williamston completed conversion of an abandoned railroad bed into a bicycle and pedestrian facility called the Skewarkee Trail. The facility creates a safer bicycling and pedestrian environment, linking activity centers such as the Roanoke River, neighborhoods, and the Town's Central Business District. The trail is approximately one (1) mile long.

In 2008, the Town completed construction of a 600-foot elevated boardwalk with floating canoe dock at the NC Wildlife Resources Commission (NCWRC) boat ramp located on the Roanoke River. The River Landing Boardwalk project was funded by NCDOT Enhancement Grant & NC Wildlife Resources Commission funds. The overall project construction included fishing platforms, camping shelter and a restroom/shower facility. This project is Phase I of a multi-phase effort to construct an elevated pedestrian corridor along the Roanoke River to connect the Skewarkee Trail with Moratoc Park and the Roanoke River Paddle Trail.

Fishing Platform at River Landing Boardwalk

In addition to current development activities, Williamston has a number of pending Main Street Sidewalk projects that will provide significant benefits to pedestrians. These have been intentionally designed to improve the public space and subsequently the pedestrian experience.

REGIONAL PLANS

Through joint involvement by the Town of Williamston and Martin County, the Martin County Travel and Tourism Development Authority have developed feasibility studies for improvements to Moratoc Park which include connection to the existing River Landing Boardwalk.

STATE PLANS

Currently there are no pedestrian projects proposed in the NCDOT State Transportation Improvement Program (STIP) located within the study area.

3.2 RELEVANT PROGRAMS & INITIATIVES

LOCAL PROGRAMS & INITIATIVES

The Police Department continually presents educational programs for the community including sponsoring an Annual Bicycle Rodeo. The Bicycle Rodeo is a safety clinic featuring bike safety inspections and a safety lecture about the rules of the road. The primary focus of the bike rodeo is safety for young cyclists. Activities include helmet fitting, prizes and drawings, and in some cases commercial activities such as booths set up by bike shops etc.

Photo Source: Wikipedia

The Town supports local neighborhood watch groups. The purpose of the Community / Neighborhood Watch Programs is to reduce or eliminate criminal opportunity through citizen participation in crime prevention measures. All members of the community are encouraged to be alert and aware, reporting suspicious and criminal activity to the police, initiating actions which reduce criminal opportunity, and participate in periodic meetings on subjects of interest and safety in the community.

Eat Smart Move More program is a statewide movement that encourages healthy eating and physical activity wherever people live, learn, work, play and pray. Its mission is to reverse the rising tide of obesity and chronic disease among North Carolinians by helping them to eat smart, move more and achieve a healthy weight.

The Town is further committed to supporting pedestrian mobility through its work with Audubon International's Sustainable Communities Program. The Town has identified five (5) focus areas related to transportation by which actions can be taken to develop a more supportive and sustainable network. Those transportation focus areas are: public works; public transportation; alternative transportation (pedestrians, bicycles); hybrid/alternative fuel vehicles (AFV); and, parking management. With the Town's involvement in the Audubon Sustainable Communities initiative, Town road projects will be "green" as much as possible.

3.3 RELEVANT POLICIES & INSTITUTIONAL FRAMEWORK

FEDERAL AND STATE POLICIES

There are several State and Federal policies for the development of pedestrian facilities. Through updating their design guidelines, NCDOT has shown they are committed to improving bicycling and pedestrian conditions and recognizes these facilities are "critical elements of the local, state and federal transportation system".[i] These guidelines provide communities with information regarding NCDOT funding for replacement of existing sidewalks as a part of street widening projects.

Complete Streets and the "Safe and Complete Streets Act of 2009"

Complete Streets is a policy requiring that new roads be built to accommodate all users, including bicyclists, pedestrians, and transit riders, of all ages and abilities. The policy is intended to improve safety, reduce congestion and air pollution and create a stronger sense of community. Complete Streets elements in projects include ADA-compliant curb cuts, sidewalk improvements, new bicycle lanes, roadside improvements for public transportation, landscape features, and other elements that improve transportation for all users. The "Safe and Complete Streets Act of 2009" is a bill introduced in the House and Senate ensuring that future transportation investments made by state Departments of Transportation and Metropolitan Planning Organizations create appropriate and safe transportation facilities for all those using the road, including all ages and abilities. The Act builds on existing successful state and local policies to define effective complete streets policies and apply them to federally funded transportation projects. Additionally, the Act authorizes needed research and dissemination of complete streets best practices.[ii]

In July of 2009, the North Carolina Department of Transportation (NC DOT) adopted a Complete Streets Policy. This policy represents an increased commitment to providing bicycle and pedestrian facilities with new NCDOT construction projects, including road repavings, widenings, and bridge replacements. While NCDOT had previously adopted several policies to support the provision of bicycle and pedestrian facilities, the new policy goes further in its recommendations to routinely provide for all users of the roads - bicyclists and pedestrians, public transportation users, and drivers of all abilities and ages. The new Complete Streets Policy:

- Provides that "all transportation facilities within a growth area of a town or city funded by or through NCDOT, and planned, designed, or constructed on state maintained facilities, must adhere to this policy");
- Asserts the Department's role as a partner to local communities in transportation projects;

- Addresses the need for context-sensitivity;
- Sets exceptions (where specific travelers are prohibited and where there is a lack of current or future need) and a clear process for granting them (approval by the Chief Deputy Secretary); and
- Establishes a stakeholders group, including transportation professionals and interest groups, tasked to create comprehensive planning and design guidelines in support of the policy.[iii]

A member of the NCDOT Board of Transportation, Nina Szlosberg, introduced the policy, and Tom Norman, previous Manager of the Bicycle and Pedestrian Division guided the policy through a staff development process. The National Complete Streets Coalition has applauded NCDOT for this important step. The policy is available at: https://apps.dot.state.nc.us/pio/releases/details.aspx?r=2777.

Bicycle and Pedestrian Planning Grant Initiative

NCDOT's Division of Bicycle & Pedestrian Transportation (DBPT) along with the Transportation Planning Branch launched the Bicycle and Pedestrian Planning Grant Initiative in 2004. This matching-grant program, the first of its kind in the nation, enables municipalities across the state to develop comprehensive bicycle and pedestrian transportation plans. Nearly $3.0 million has been awarded through this program to 122 municipalities. These comprehensive plans promote livability/sustainability by helping communities to create bicycle and pedestrian friendly environments that encourage safe walking and bicycling. The Town of Williamston was a 2010 recipient of this grant program facilitating the development of this comprehensive pedestrian plan.

In 2010, the division contacted prior recipients of the planning grants to obtain information on facilities that they had constructed following completion of their plans. A survey was distributed electronically to the 64 communities awarded grant funds from 2004 to 2007 resulting in responses from 41 communities.

Survey results indicate the following: 63 percent allocated local funds for bicycle/pedestrian facilities, 54 percent created a bicycle/pedestrian committee, 51 percent developed an education, encouragement or enforcement program, 54 percent developed bicycle/pedestrian-friendly policies, 46 percent updated design/engineering standards, and 49 percent have programmed or constructed multi-use paths.

Among the pedestrian plans (27 responses of 45 adopted plans), 89 percent have programmed or constructed sidewalk.

Among the bicycle plans (14 responses of 19 adopted plans), the following types of facilities were programmed or constructed: bicycle lane (57 percent), paved shoulder (14 percent), wide outside lane (36 percent), bicycle route (21 percent), and bicycle parking (50 percent).[iv]

Bicycling and Pedestrian Policy

A United States Department of Transportation (US DOT) policy statement regarding the integration of bicycle and walking into transportation infrastructure recommends that, "bicycling and walking facilities will be incorporated into all transportation projects" unless exceptional circumstances exist.[v]

FHWA Memorandum on Mainstreaming Bicycle and Pedestrian Projects

In October 2008, the Federal Highway Administration (FHWA) updated the *Policy for Mainstreaming Nonmotorized Transportation (FHWA Guidance – Bicycling and Pedestrian Provision of Federal Transportation Legislation)* and can be found at: http://www.fhwa.dot.gov/environment/bikeped/bp-guid.htm

NCDOT Bicycle Policy

The NCDOT Bicycle Policy offers guidelines to provide bicycle accommodations on state highways and specifies standards for planning, design, construction, maintenance, and operations relevant to bicycle facilities.[vi]

NCDOT Pedestrian Policy Guidelines

In 2000, the North Carolina Department of Transportation (NCDOT) updated the *1993 Pedestrian Policy Guidelines*. The NCDOT pedestrian policy guidelines can be found at: http://www.ncdot.org/transit/bicycle/laws/laws_pedpolicy.html

NCDOT Administrative Greenway Guidelines

The NCDOT's administrative guidelines were established to consider greenways and greenway crossings during the highway planning process. The Administrative Greenway Guidelines preserves identified corridors for future greenways from highway construction. The NCDOT will incorporate locally adopted plans for greenways into the ongoing planning process within the Statewide Planning and project plans. Localities work in conjunction with the State, place a priority for their greenway construction activities, and justify the transportation nature of each greenway segment.[vii]

NCDOT Traditional Neighborhood Development Street Design Guidelines

The NCDOT's Traditional Neighborhood Development (TND) Street Design Guidelines are available for proposed developments. These guidelines delineate permit locations and encourage developers to design roadways according to TND guidelines rather than conventional subdivision standards. These guidelines promote the use of multi-mode/shared street that allows for pedestrians and bicyclists and encourages mixed use development. The link to this guideline can be found at:
http://www.ncdot.org/doh/preconstruct/alturn/value/manuals/tnd.pdf

NCDOT Resolution for Bicycling and Walking

On September 8, 2000, the N.C. Board of Transportation adopted a *Resolution for Bicycling and Walking* to make bicycling and walking a critical part in the state's long-range transportation system. Additional information can be found at:
http://www.ncdot.org/transit/bicycle/laws/laws_resolution.html

3.4 RELEVANT PEDESTRIAN STATUTES & ORDINANCES

LOCAL ORDINANCES

Existing policies, codes and ordinances regulate infrastructure that both public and private entities construct in Williamston, and ultimately determine the quality of the pedestrian environment. A review of existing policies, codes and ordinances was conducted to ensure that pedestrians are appropriately accommodated in town policies.

Williamston has committed to improving the pedestrian environment through its ordinances requiring:

Town of Williamston's subdivision ordinance states,

"The Planning Board may require pedestrian easements for walkways, bicycle paths, etc., to be provided through the interior of blocks having a length greater than eight hundred (800) feet where such easements are needed to provide adequate pedestrian circulation, or access to schools, shopping centers, churches or transportation facilities. Pedestrian easements shall be at least four (4) feet wide and shall be laid out along property lines. Such pathways shall be part of the street right-of-way when associated with streets."

River Landing Boardwalk

"Sidewalks may be required along officially designated major thoroughfares and may be required along any minor or collector street where considerable pedestrian traffic is expected. Sidewalks shall be constructed in the street right-of-way and installed in accordance with specified town standards by the Town Board of Commissioners."

[i] North Carolina Department of Transportation, *The Department of Transportation Pedestrian Policy Guidelines,* Effective October 1, 2000.

[ii] Complete the Streets, www.completestreets.org

[iii] North Carolina Department of Transportation, Complete Streets Policy, http://www.bytrain.org/fra/general/ncdot_streets_policy.pdf

[iv] North Carolina Department of Transportation, Division of Bicycle and Pedestrian Transportation, Planning Grant Initiative, http://www.ncdot.gov/bikeped/planning/default.html

[v] US Department of Transportation, Federal Highway Administration, http://www.fhwa .dot.gov/environment/bikeped/design.htm

[vi] North Carolina Department of Transportation, *Bicycle Policy*, http://www.ncdot.org/transit/bicycle/laws/laws_bikepolicy2.html

[vii] North Carolina Department of Transportation, *Greenways Administrative Process*, http://www.ncdot.org/transit/bicycle/laws/laws_greenway_admin.html

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Section 4: Strategic Pedestrian System Plan

This section provides an overview of pedestrian system components including types of pedestrian corridors and opportunities within special focus areas. This section should be used in conjunction with the recommendations listed in Section 7.

4.1 System Overview

Williamston's current pedestrian system is limited and needs improvements, although the existing infrastructure does provide a good foundation to build upon. For instance, the Town's subdivision ordinance requires pedestrian easements at least four (4) feet wide along property lines, with those easements being part of the street right-of-way when associated with streets. However, a lack of well-defined crossings and continuous sidewalks restrict connectivity and safety. An overwhelming portion of Williamston is disconnected and auto dependent. This Plan will allow Williamston to develop a more complete network of sidewalks and greenways that will provide the connectivity and accessibility needed to make the Town a walkable community.

Williamston's pedestrian network is fragmented making it hard for people to navigate the community. In places where there are sufficient sidewalks, such as downtown, near the library and Williamston Middle School, the walking surface is often times in disrepair and unattractive. These conditions do little to provide easy connectivity to pedestrians with disabilities. Unattractive sidewalks and views (dilapidated structures and over-grown yards) can discourage pedestrian activity.

Outside of the immediate Downtown area, sidewalks become more sparsely located. There is little to no pedestrian connectivity for surrounding neighborhoods to Downtown activities. The sidewalks around the rest of town are primarily incomplete segments. Many of the neighborhoods outside of Downtown are residential and commercial developments. Some of the neighborhoods have sidewalks but lack adequate connectivity to community facilities and amenities. There is commercial activity located close to residential neighborhoods but these sites feature little to no pedestrian infrastructure to adjacent neighborhoods. These commercial establishments are designed with vehicular access in mind. The characteristics of this design incorporate building setbacks far from the street with frontal parking lots.

Development is also occurring farther away from the central business district near the town's edge. Since its opening in 1998, the Senator Bob Martin Eastern Agricultural Center serves as a destination for those attending horse shows, tractor pulls, national entertainment acts, regional boat shows and other events. The Town recognizes the importance to meet the needs of visitors that frequent the facilities by providing support businesses that will compliment the crowds attending the facility. Additionally, schools, retail centers, and residential subdivisions are developing near the town's edge and should be providing adequate pedestrian connectivity into

the community. This will become increasingly important as the community continues to expand. To curb the trend of walker inaccessibility, new development regulations should require more pedestrian infrastructure and facilities.

Barriers to Pedestrian Travel

In order to improve pedestrian accessibility and connectivity, Williamston has to address the barriers/obstacles that impede the creation of a walkable community. These barriers are both natural and man-made.

Natural and Environmental Barriers

Natural barriers restrict Williamston's walkability, such as the tributaries of the Roanoke River, which restrict pedestrian connectivity between various Williamston residential neighborhoods. Skewarkee Canal meanders through the community in a west-to-east orientation, bisecting several residential areas and Gaylor Perry Park enroute to the Roanoke River, impairing direct walkable access between certain neighborhoods and community amenities. As Williamston continues to grow, access to these facilities will become increasingly important. Placing pedestrian improvements in these areas will ensure future neighborhood connectivity to public facilities.

Moratok Park, a Martin County park, is located within the Town's corporate limits along the west bank of the Roanoke River. This park is located within walking distance of many of the Town's residential neighborhoods. Currently, there are no safe accesses to the park for pedestrians. Due to these current conditions, citizens that would like to use the park's facilities generally travel by automobile to the site. A creation of pedestrian networks will increase availability of this recreational opportunity for Williamston's citizens.

Man-Made Hazards

In the analysis of Williamston's pedestrian system, several man-made barriers were identified. These obstacles restrict pedestrian connectivity throughout the Town of Williamston. Williamston is experiencing commercial growth along the main corridors within its jurisdiction. The largest barriers to restrict connectivity are highways US-64, US-13, and US-17. The highways are major corridors that produce heavy truck and automobile traffic. These thoroughfares are located just south of Downtown Williamston. Positioned along this corridor are a variety of commercial/retail establishments and industrial uses. Although clustered together, it is difficult to travel from an establishment on one side of the road to the other due to inadequate pedestrian crossings. Due to inconveniences and danger, most people choose to travel by automobile to these destinations. Designated crossings and safe alternative transportation along these highways should be established to connect existing and future development.

Main Street serves as one of the Town's east-west corridors. This corridor features a wide street and discontinuous segments of sidewalk outside of the downtown business district. Due to the street's width, it requires additional time for pedestrians to cross the street, thus making it more dangerous for pedestrians. Residential uses also occur on this street where few continuous sidewalks exist and no street crossings.

Martin Luther King Jr. Drive is a major north-south arterial that is also a barrier to pedestrian connectivity. Martin Luther King Jr. Drive features a mixture of commercial and residential uses. The road divides several residential subdivisions from amenities and commercial uses that are on the west side. Even in areas where this road is primarily characterized by residential uses, there are few sidewalks or designated pedestrian crossings. It is important to provide safe crossings for pedestrians to encourage people to walk.

Goals for Future System:

- Provide more walking opportunities to promote healthy lifestyles
- Provide safer walking environments
- Build a sense of community
- Improve connectivity and accessibility to allow for viable alternative transportation options
- Improve accessibility and safety for children, elderly, and the handicapped

Safety & Security Hazards

Collectively, Williamston has a disproportionate share of vehicular oriented spaces in comparison to pedestrian facilities. Areas with pedestrian amenities are sparsely located and unconnected. Gaps in the sidewalks increase danger for walkers by forcing them to walk in the streets. Pedestrians walking in streets are susceptible to crashes with on-coming traffic. This hazard is even greater for elderly and disabled citizens. These sidewalk system users may be less agile or use handicap accessories. Due to the danger, many people will avoid using the sidewalk system.

To encourage pedestrian activity, missing sidewalks segments should be installed. Along with infilling sidewalk gaps, existing damaged sidewalk segments must be repaired or replaced. Overtime, sidewalks may begin to buckle due to underlying tree roots or become layered with debris. This debris could be soil, grass or other obstructions. These obstacles can create tripping hazards for walkers. It can also pose a hazard to people using wheelchairs and other mobility devices.

Lack of personal security can be another barrier that deters people from utilizing pedestrian facilities. People are unlikely to utilize networks that are poorly lit, appear un-patrolled by police, or have unsightly buildings or roaming animals. To address this perception, installation of street level lighting should be considered along sidewalks and multi-use trails with inadequate visibility. Increased police patrols via foot or bicycle will also help to increase personal security.

Inadequate sidewalks and crossing signals also detract from a person's sense of security. The intent of crosswalks is to serve as a designated safe haven for people to cross streets by providing a separation between vehicles and pedestrians, thus the lack of crosswalks force people to attempt crossing streets and roadways in a less secure environmental. Additionally, crossing signals and/or four-way stop signs assist walkers crossing busy streets. These improvements should be implemented in areas of potentially high pedestrian activity, such as near parks/recreation, schools, downtown, major intersections, previous vehicle-pedestrian crash sites (as noted in Section 2), and local destinations.

4.2 CORRIDOR IDENTIFICATION

To ensure easy connectivity, several roads were identified as prime corridors for pedestrian travel. These corridors were determined based on their potential connection to existing sidewalks and proximity to major pedestrian destinations. The following corridors were determined as areas in need of pedestrian accessibility improvements.

- Main Street
- Washington Street
- Haughton Street
- Martin Luther King, Jr. Drive
- East/West Boulevard
- Highway 17

Points of Interest and Destinations

To help identify areas in need of pedestrian amenities, high traffic destinations throughout the community were identified. They consist of typical driving trips to nearby commercial districts, schools, and recreational facilities. Currently, most of these destinations are not accessible by pedestrians due to incomplete sidewalk segments, no sidewalks or hazardous crossings. An illustration of these points of interest and destinations can be seen on Map. 4.1.

4.3 SHORT-TERM AND LONG-TERM OPPORTUNITIES

The Town of Williamston is a dynamic community that has different development patterns throughout the incorporated limits and ETJ. Steering Committee members were asked during a meeting to identify potential opportunities for the various areas of the community. The following paragraphs provide a brief summary of these opportunities. A complete list of their comments is available in Appendix A.

Field Analysis

Pedestrian Crossings / Intersection Improvements Opportunities

- Add crosswalks and walk signals at the intersection of Washington Street (US 17 Business) and West/East Boulevard (US-64 Business) and Haughton, and consider similar treatments for other signalized intersections throughout the community.
- The town should consider four-way stops and high-visibility crosswalks at major [un-signalized] intersections.
- Improvements to the intersection of Main Street and Haughton Street
- See Map 4.1 for suggested locations of crossing improvements throughout Williamston. Many of these locations need further study, but treatment options include walk signals, curb ramps, marked crosswalks and curb extensions.

School Zones Opportunities

- School zones should be marked at all Williamston schools with pavement markings and flashing speed limit signs. The Town may consider active speed monitor speed limit signs in school areas where speeding is a problem.
- Important crossings should be painted with high-visibility, zebra-striped crosswalks and marked with high-visibility "school crossing" signs.
- Schools should be a priority for pedestrian improvements, including intersection improvements and greenway connectors to existing sidewalks. Funding may be available through the NCDOT Safe Routes to School program.

Policies Opportunities

- Consider development of street tree ordinances to add and protect shade trees along major thoroughfares and Downtown streets.
- Consider additional language in ordinances to encourage greenway connections between cul-de-sacs and schools, parks or other cul-de-sacs. Such greenway connections, as illustrated on Map 4.1, could greatly benefit pedestrians throughout Williamston and more safely accommodate children walking to parks, schools and other neighborhood destinations.
- Update sidewalk requirements in existing ordinances to require sidewalk installation on both sides of major arterials and connectors, as well as to require sidewalks along the frontage of property in order to create better sidewalk connections along major roads. Sidewalk requirements should be consistent for subdivided and un-subdivided (commercial) development.
- Create a maintenance program/policy to help keep sidewalks clear of debris and overgrowth.

Other Opportunities

- Install a sidewalk along Park Street from Marshall Street to Williams Street to provide connection to existing commercial establishments.
- Install a sidewalk along Main Street from Roberson to Brownlow to provide connection to Downtown from the surrounding residential areas.
- Install a sidewalk along Church Street from Elm Street to Price Street
- Install a multi-use path from the cul-de-sac at N. Haines Street to Gaylord Perry Park
- Install a multi-use path from E. Park Road to W. Church Street
- Install a multi-use path along the Town's right-of-way from Gaylord Perry Park to Moratock Park
- Install a multi-use path near the High School to encircle Godwin Drive, McCaskey Road, Martin Hospital
- In order to slow traffic and encourage on-street parking, consider parallel parking stalls painted on especially wide two-lane streets such as Church Street, Main Street and Martin Luther King Drive.
- Consider traffic calming tools such as speed humps, neckdowns, curb extensions and/or enforcement techniques to slow traffic on streets with potential vehicular speeding problems, such as Main Street, Church Street or Martin Luther King Drive. These types of traffic calming techniques are summarized in Section 5.

Map 4.1 displays these identified opportunities.

4.4 POTENTIAL PROJECTS / INFRASTRUCTURE IMPROVEMENTS

Based upon a variety of information received and obtained during plan development, several potential projects and infrastructure improvements were identified:

- Provide access to Downtown Williamston from all portions of the community
- Improve a pedestrian environment in Downtown Williamston
- Provide safe access for children and adults to walk to and from school, parks, and commercial areas
- Provide connectivity from residential developments to surrounding areas
- Provide safe, well-defined crossings at specific locations to improve connectivity to destinations
- Provide an alternative to sidewalks to access destinations and provide recreation

Five types of pedestrian projects have been identified for Williamston and are discussed below.

Pedestrian Amenities

The pedestrian environment includes more than sidewalks and crossings; pedestrian-level lights, landscaping, and furniture also play an important role in creating a pleasant walking

experience. The current pedestrian amenities are not adequate, for instance, planting areas along Main Street are in disrepair and underutilized. As new street projects are planned, consideration for pedestrian amenities should be considered to soften the urban environment and make pedestrians feel more welcomed.

Existing Sidewalk Repairs

Existing sidewalks in disrepair need to be refurbished, or demolished and reinstalled with wider sidewalks and curb cuts to satisfy the standards set forth by the American Disability Act of 1991. Sidewalks that need repair are concentrated within the Downtown and adjacent neighborhoods, and range from 85 feet to 385 feet in length.

Map 7.1 in Section 7 illustrates the locations for potential sidewalk spot improvements and existing sidewalk repair projects.

New Sidewalk Construction

New sidewalk construction projects are designed to provide and encourage pedestrian accessibility and connectivity between residential and destinations that are currently isolated. Improvements along the identified corridors will include linking existing sidewalks to form continuous pedestrian routes and improving crossing facilities. All sidewalk projects should possess curb cuts with ramps at all driveways and intersections. All major intersections should have marked crosswalks, signage, and pedestrian crossing signals to ensure safe pedestrian crossing. Sidewalks should be constructed on both sides of the street along all major thoroughfares and residential collectors. Sidewalks should be constructed and gaps should be filled on all existing thoroughfares and residential collector streets. All future and proposed street widening and new roadway construction projects within Williamston's jurisdiction should incorporate pedestrian facilities. See Section 7, Map 7.1, for potential sidewalk construction projects.

Greenway Corridor

Construction of off-road pedestrian facilities along linear drainage corridors, easements, and other tracts of open space are types of greenway corridor projects. These projects will provide an excellent alternative transportation option for pedestrians and bicyclists along a natural setting. The majority of the greenway corridors create linkages to provide access to natural areas and connectivity between schools and parks. Refer to Section 7, Map 7.1, for potential greenway projects.

Pedestrian Crossings

Numerous hazardous or problematic pedestrian crossings have been identified in Williamston. Currently pedestrians in Williamston are faced with significant barriers to travel, created by Highway 64 and high volume intersections. Pedestrian crossings projects range from striping crosswalks to installing pedestrian signals and curb extensions to cross major thoroughfares.

Correcting dangerous crossings will encourage pedestrian travel and safely connect isolated portions of town. Several intersections have been identified as problem spots through field research, public input and Steering Committee meetings. Refer to Section 7, Map 7.1, for potential pedestrian crossing improvement projects.

Section 5: Facility Standards and Guidelines

Design considerations for different pedestrian facilities are examined in this section. All pedestrian facilities must meet the guidelines of Americans with Disabilities Act (ADA). This requirement allows persons with disabilities and persons of all ages to enjoy the facilities. In addition to being ADA-compliant, the construction and installation of pedestrian facilities in North Carolina must meet the following:

- American Association of State Highway and Transportation Officials (AASHTO) *Guide for the Planning, Design and Operation of Pedestrian Facilities*

- Federal Highway Association (FHWA) *Manual on Uniform Traffic Control Devices (MUTCD)*

Minimum Design Standards & Guidelines Provided For:

- Sidewalks and Walkways
- Multi-Use Trails and Greenways
- Intersection Treatments
  - Marked Crosswalks
  - Mid-Block Crossings
  - Curb Ramps
- Traffic Calming Devices
  - Curb Extensions
  - Chicanes
  - Raised Medians
  - Crossing Islands
  - Roadway Narrowing
- Railroad Crossings
- Signs and Signals
- Pedestrian Amenities
  - Street Lighting,
  - Landscaping
  - Pedestrian Furniture
- Commercial Development Guidelines
  - Driveway Design
  - Parking Lots
- Residential Development Guidelines

In addition to AASHTO and MUTCD, the following documents serve as pedestrian facilities guides:

- *FHWA Pedestrian Facilities User Guide* (available at: http://drusilla.hsrc.unc.edu/cms/downloads/PedFacility_UserGuide2002.pdf)

- *Design and Safety of Pedestrian Facilities*, A Recommended Practice of the Institute of Transportation Engineers (ITE) (available at: http://safety.fhwa.dot.gov/ped_bike/docs/designsafety.pdf)

- *Pedsafe: Pedestrian Safety Guide and Countermeasure Selections System* (available at: http://www.walkinginfo.org/pedsafe/)

- *Designing Sidewalks and Trails for Access, Part I and II* (available at: http://www.fhwa.dot.gov/environment/sidewalks/index.htm and http://www.fhwa.dot.gov/environment/sidewalk2/)

5.1 Typical Cross-Sections and Pedestrian Design Considerations & Sample Cost Estimates

Minimum design guidelines and sample cost estimates are provided below, with a compilation of sample cost estimates in Appendix C.

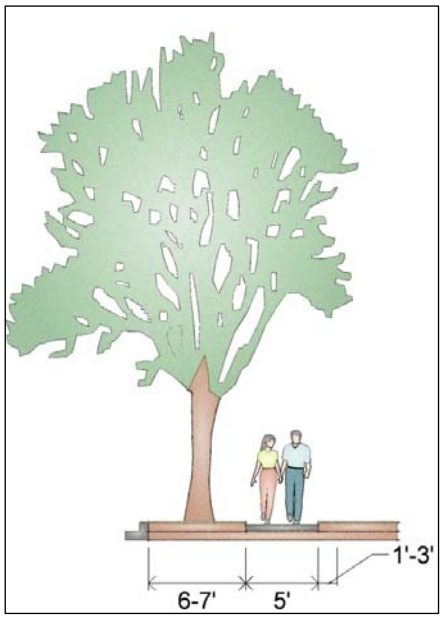


Illustration of standard sidewalk design with landscaped buffer

5.2 Sidewalks & Walkways

Sidewalks and walkways provide a safe refuge for pedestrian from motorists, connect destinations, and increase walking trips; therefore, all new and existing roadways should include sidewalks or walkways for people to safely walk. AASHTO identifies seven attributes of well-designed sidewalks:

- *Accessibility* - Sidewalk networks should be accessible for all users and meet ADA requirements. All street intersections or mid-block crossings should be retrofitted with adequate curb ramps.

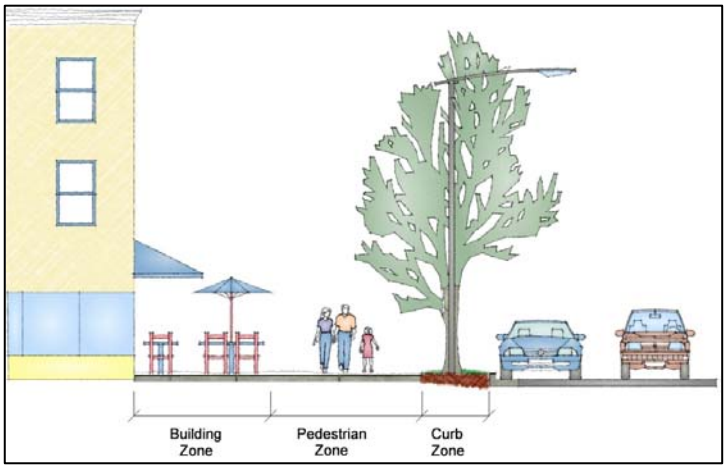


Illustration of pedestrian, building, & curb zone

- *Adequate Width* - Sidewalks should be wide enough to accommodate the volume of people using the facility. Higher volume sidewalks should have larger widths while underused areas can have standard widths. For instance, sidewalks to and around schools, parks, and downtown need to be wider.

- *Safety* - Sidewalks should provide a sense of security and predictability. Pedestrians should not feel at risk due to traffic adjacent to them. Examples include placement of a vegetated buffer between the sidewalk and travel lane and installation of barriers between pedestrian lanes and traffic lanes on bridges.

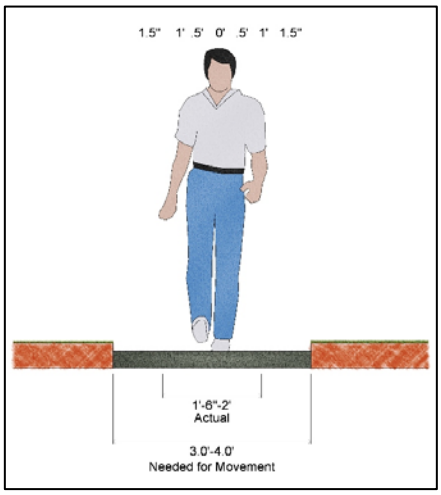


Illustration of standards clearance / width of sidewalks

Concrete curb and sidewalk cost approximately $15/linear foot and $11/square foot for walkways without curb. Asphalt curbs and walkways are less costly but require more maintenance per year.

- *Continuity* – Sidewalks should be contiguous and in good to excellent condition. If a pedestrian must walk around sections of sidewalk that is in disrepair, they are unlikely to use that sidewalk again.

- *Landscaping* - Plantings and street trees along the roadside would contribute to the overall psychological and visual comfort of pedestrians. However, there should be care taken in placement of landscaping to avoid blocking sight distance, reducing vertical and horizontal clearance of sidewalk, and creating potential hiding places for attackers.

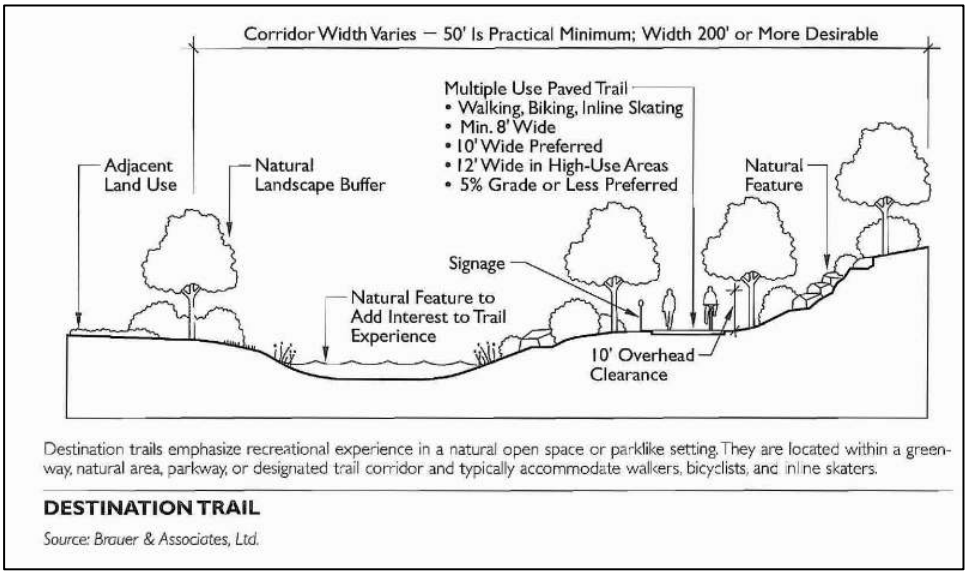


Illustration of a Destination Trail Layout -
A destination trail is used when a trail is located away from vehicular traffic in a more natural environment or park-like setting. This type of trail generally has large landscaped or native buffer between it and adjacent land uses

- *Social Space* - Sidewalks should be places for people to interact. The use of street furniture, street-level lighting, and street cafes are ways to create these social spaces.

- *Quality of Place* - Sidewalks should contribute to the character of neighborhoods and businesses and help strengthen their identity. This can be done with different sidewalk treatments and width.

Sidewalks should be placed on both sides of the road, but it is acceptable to place them on one side when the street has a low volume of traffic or development is sparsely located. Sidewalks can also be placed in easements instead of within the right-of-way. Sidewalks should be constructed of durable, smooth yet slip resistant material, such as asphalt or concrete; however, alternative materials can be used. Alternative materials include brick and stamped concrete that can give the appearance of real bricks.

As recommended by both FHWA and the Institute of Transportation Engineers (ITE), sidewalks should have a minimum width of five (5) feet, excluding any attached curb and have a running grade of 5% or less. This width allows two people to pass comfortably or to walk side-by-side. Where sidewalks are less than five (5) feet in width, there should be passing spaces of at least five (5) feet at reasonable intervals. This gives wheelchair users or people with a stroller room to pass one another or to turn around. Schools, parks, and the Central Business District should also have wider sidewalks to accommodate higher pedestrian traffic. These sidewalks should be six to eight (6-8) feet wide with a planting strip or eight to ten (8-10) feet wide without planting strips. Street lights, utility poles, signs, and other furnishings should not obstruct desirable sidewalk widths.[i]

Buffers along sidewalks can improve pedestrian safety and scenery. The buffer width is the distance between the sidewalk and adjacent roadway. Landscaped buffers can be used to place utility poles, street lights, and serve as a splash guard for passing vehicles. The ideal buffer width on local and collector streets is two to four (2-4) feet. Along major thoroughfares, the buffer width should be five to six (5-6) feet.

5.3 MULTI-USE TRAILS & GREENWAYS

Multi-use trails and greenways are developed to serve bicyclists, runners, walkers, and wheelchairs. Multi-use trails are installed in many locations, such as a connection through residential neighborhoods, along rivers, on abandoned railroad beds, in parks to provide additional recreation, and along utility rights-of-way. Pavement for multi-use trails can range from conventional concrete to pervious concrete, asphalt, or compacted screenings. AASHTO and FHWA recommend multi-use trails meet the following[ii]:

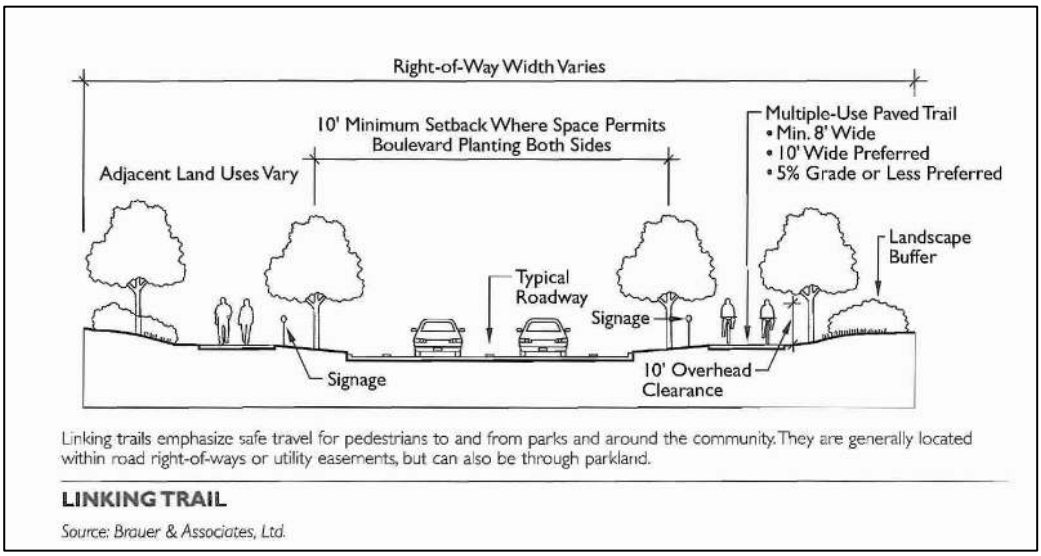


Illustration of a linking trail layout.
A linking trail is used with road right-of-ways to provide a link from residential areas to parks or other community points of interests. A minimum buffer between road and adjacent land uses is used.

- A minimum width of ten (10) feet and twelve (12) feet for bi-directional trails
- A minimum width of six (6) feet for single direction trails
- A two (2) foot graded area adjacent to both sides of the trail with a maximum 1:6 slope
- Cleared of vertical obstructions, such as tree limbs lower than eight (8) feet to allow for safe under-passage
- On sloped landscapes, have grades that do not exceed 5% with a graduated scale up to 11% or more for short distances
- A cross slope of less than 2%
- A minimum of thirty to fifty (30-50) feet on curved trails
- Ninety (90) degree angles should be avoided for safety reasons
- A separation of at least five (5) feet from roadways or a forty-two (42) inch high physical barrier
- Carefully planned path-roadway intersections

- Crossings should be a safe enough distance from neighboring intersections to not interfere (or be interfered) with traffic flow.

- A roadway with flat topography is desirable to increase motorist visibility of the path crossing.

- Motorists and trail users should be warned, such as with signage (including trail stop signs), changes in pavement texture, flashing beacons, raised crossings, striping, etc.
- A refuge is needed where crossing distance is excessive and in conditions exhibiting high volumes/speeds and where the primary user group crossing the roadway requires additional time, such as schoolchildren and the elderly.

- The crossing should occur as close to perpendicular (90 degrees) to the roadway as possible.

- If possible, it may be desirable to bring the path crossing up to a nearby signalized crossing in situations with high speeds/ADT and design and/or physical constraints.

- Signalized crossings may be necessary on trails with significant usage when intersecting with demanding roadways, but MUTCD warrants must be met for the installation of a signalized crossing.

■ Signage and measures at all intersections to avoid crashes between pedestrians, bicyclists, and motor vehicles

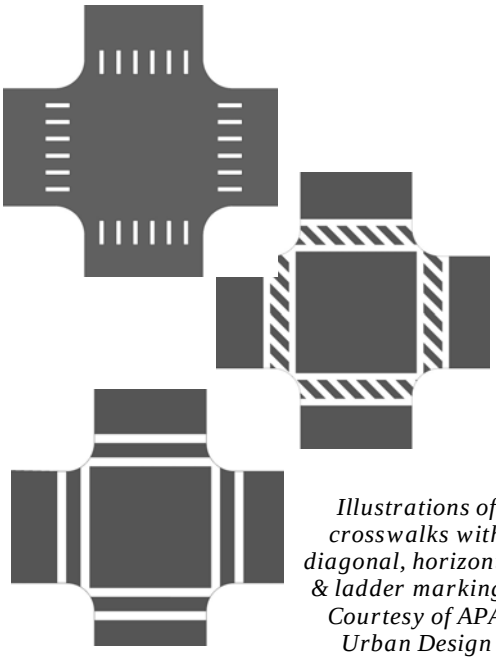
Accessibility should be a top consideration for developing these trails; therefore, as many barriers as possible need to be removed. Informational signs at trail access points indicating steep grades, excessive cross slopes, uneven surfaces, and narrow widths will help users determine if the trail is appropriate for their use. Trails should be built within the land contour and be designed with environmental sensitivity.

When adjacent to canals, ditches or slopes steeper than 1:3, a separation of five (5) feet from the edge of the path pavement to the top of slope is desirable. The vertical clearance should be a minimum of 8 feet; it may be greater (10 feet) if needed to provide for maintenance and access of emergency vehicles.[iii]

The trail design needs to take into consideration user experience, serious bicyclist speeds and environmental conditions; however, the design

Land acquisition costs, structures needed, type of trail surface, width of trail, and facilities for trail users contribute to the cost of developing a trail system. Construction of a soft surface trail alone is approximately $40,000 per mile and construction of a paved trail can be more than $1.0 million per mile in an urban area.

maximum speed should be 20 mph. For further guidance on multi-use trails see North Carolina Division of Bicycle and Pedestrian Transportation website at the following: http://www.ncdot.org/transit/bicycle/projects/project_types/Multi_Use_Pathways2.pdf



Illustrations of crosswalks with diagonal, horizontal, & ladder markings. Courtesy of APA Urban Design Standards

5.4 INTERSECTION IMPROVEMENTS

Intersections should be designed to ensure pedestrian connectivity as well as safety. For a street to be truly pedestrian-friendly, intersections cannot be intimidating for users. With the right design features and layout, intersections can improve walkability and pedestrian usage. An important aspect of redesigning intersections is providing adequate sight distance to reduce both vehicle-vehicle and vehicle-pedestrian crashes. Careful attention to placement of pedestrian design features such as bollards, landscaping, benches, and placement of on-street parking around intersections is essential at initial design stages. The following are design features and techniques that will enhance pedestrian safety at intersections[iv].

Installing a regular striped crosswalk can cost $100, $300 for a ladder crosswalk and $3,000 for a patterned concrete crosswalk. There are no extra costs when the stop line is installed on new paving or as part of repaving projects. The use of words such as "STOP HERE" can assist in or replace the recessed stop line. The cost is low if applied as a retrofit.

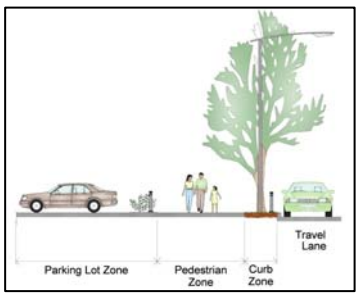


Illustration of bollard placement between pedestrian & vehicle spaces. Courtesy of APA Urban Design Standards

Bollards

Bollards are streetscape elements consisting of concrete or steel that prevents traffic from encroaching in pedestrian areas. Bollards are typically located along the curb edge of a sidewalk, but bollards can be used to protect pedestrians on traffic medians and islands. Plastic or break-away bollards can also be installed in the center of a roadway to warn and direct motorists of special roadway treatments.

Marked Crosswalks

Marked crosswalks are used to indicate appropriate locations for pedestrians to cross streets. These crosswalks are typically placed at signalized intersections and other selected locations. NCDOT typically requires sidewalks on both sides of a roadway when placing marked

crosswalks. It is important to ensure that crosswalks are visible to motorists. According to the FWHA, the best material for crosswalks is inlay tape. Inlay tape can be applied to new or repaved streets and is highly reflective, long lasting, slip resistant, and maintenance free. Although this material is more expensive up front than traditional paint or thermoplastic, it is more cost effective over the long run.

Installing a mid-block crossing can range from $4,000 to $30,000 depending upon material used and if landscaping is provided.

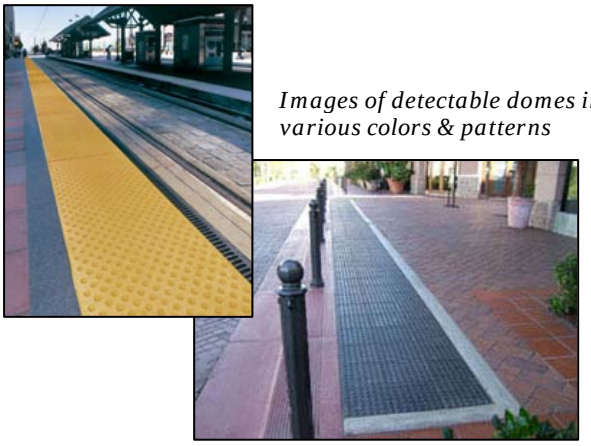
AASHTO recommends that a marked crosswalk not be less than six (6) feet wide. In Central Business Districts the crosswalk widths should be increased to ten (10) feet or in accordance with an engineers study.[v]

Stop lines should be placed further back from pedestrian crosswalks to improve safety and visibility for vehicle and pedestrian. Care should be taken in recessing these stop lines. If placed too far back, motorist will likely ignore the line. AASHTO recommends a 10ft. setback (4ft. minimum) at controlled intersections with greater setbacks recommended at uncontrolled locations[vi].

Mid-Block Crossing

Mid-block crossings provide another location for pedestrians to cross streets safely. These crossings are recommended near schools, pedestrian routes, retail areas, recreation, and residential areas. Ideal streets for the placement of refuge islands are wide streets that:

- Have fast speeds, or large vehicle or pedestrian traffic volumes
- Where children, people with disabilities, or elderly people would cross
- Have complex vehicle movements
- Offer insufficient time to cross because of traffic demands
- Where the crossing exceeds 60 feet (crossings greater than 60 feet should provide a median or crossing island combined with a combination of signage, high-visibility markings, or curb extensions.)



Images of detectable domes in various colors & patterns

This crossing should not be used on roads with speeds greater than 40 mph. These crossings are good to supplement intersection crossings and may even be an alternative for intersections

with heavy traffic volumes. Spacing between mid-block crossings and intersections should not exceed six hundred sixty (660) feet with adequate sight distance for both pedestrians and vehicles. These crossings can not be installed within 300 feet from another signalized crossing point. Mid-block crossings require advanced auto-warning signs and good visibility for both driver and pedestrian. The utilization of MUTCD is useful for crossing signalization. Within the median, any landscaping or signs should not obstruct the view of oncoming traffic.

Curb Ramps

Curb ramps should be designed to ADA requirements for pedestrians with mobility aids such as scooters and wheelchairs. The ideal grade of curb ramps should not exceed 8.33 percent with a cross slope of 2 percent per FHWA. A curb ramp for new construction should be at least four feet (4 ft.) wide not including the flare sides[vii]. In existing sidewalks the minimum width is three (3) feet excluding flares. Ramp landings should be a minimum of 4 ft. square. Detectable truncated domes must be placed at the end of these ramps to indicate the street edge. Perpendicular ramps should be placed at intersections with 90 degrees of curb face. Curb ramps should be located away from storm drains and inlets, which can catch wheelchair casters and canes. For more specific information regarding curb ramp design, curb ramp types (perpendicular, diagonal, and parallel), and curb ramp placement, consult AASHTO's *Guide for the Planning, Design and Operation of Pedestrian Facilities*.

Image of installed detectable truncated domes at the end of a curb ramp

Retrofitting an existing curb or constructing a new curb is approximately $800 to $1,500 per curb ramp.

Although a need exists throughout the community, priority locations are downtown and on streets near schools, parks, transit stops, residences, medical facilities, and shopping areas. For more information regarding curb ramp design see *Designing Sidewalks and Trails for Access, Part I,* by the Federal Highway Administration; as well as *Accessible Rights-of-Way: A Design Guide*, by the U.S. Access Board and the FHWA at http://www.access-board.gov.

All proposed curb ramps must have detectable truncated domes placed at the end the ramps to indicate street edge as required by the Americans with Disabilities Act (ADA). To comply with ADA requirements, detectable warnings should contrast visually with adjoining pavement surfaces. Warning strips are composed of numerous materials and colors.

Four-Way Stop Treatment

A four-way stop treatment is accomplished by permanently placing four stop signs at an intersection or placing the signs on a portable pole with an archer and a wheel to make a temporary 4-way stop (usually done around schools and special event areas during certain

hours only). Traffic from all four directions must stop. The rules for a four-way stop are like those for a two-way: stop and look for ongoing traffic and pedestrians, and proceed when it is safe to do so. Motorists must give the right-of-way to pedestrians in marked crosswalks or within any unmarked crosswalk at or near an intersection. In cases where a motorist arrives at a four-way stop sign at the same time as another driver, the driver to the right has the right of way.

5.5 TRAFFIC CALMING DEVICES

There are a number of different ways to calm traffic. More often than not roads have more travel lanes than what is necessary. These multi-lane roads deter walkability. Reducing the number of lanes improves walkability by making it easier and safer for pedestrians to cross the street. A four-lane road can be converted to one-lane of travel in each direction with planted medians and center turning lanes. Two-lane roads with very wide lanes in each direction can be reduced to nine, ten, or eleven feet (9-11 ft.) wide with excess paving marked for bike lanes or paved shoulders. The street could also be physically altered to incorporate sidewalks, plantings, and on-street parking on the former curb lines.

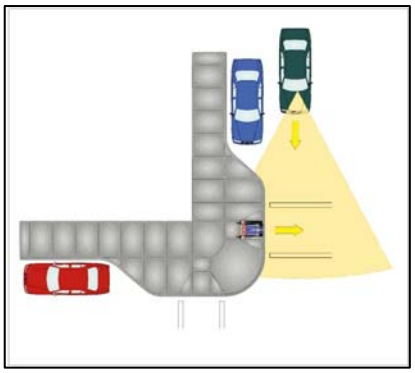


Illustration of curb extension with full sight lines. Courtesy of APA Urban Design Standards

Curb Extensions

Curb extensions also known as bulb-outs extend the sidewalk or curb line out into the parking lane, which reduces the street width. Curb extensions improve visibility and reduce the time needed to cross intersections and mid-block crossings. Curb extensions are only appropriate where there is an on-street parking lane. Curb extensions usually extend 6 ft. from the curb. Special consideration should be taken at intersections where large vehicles such as school buses are frequently used. These larger vehicles require larger turning radii and curb extensions may not be appropriate in these areas. Retrofitting an existing curb with a smaller curb radius instead of a full curb will benefit pedestrians since it slows traffic speeds and shortens pedestrian crossings[viii]. AASHTO recommends any landscape placed in these extensions be low-lying for visibility safety concerns.

Costs vary for curb extensions from $2,000 to $20,000 per corner, depending upon design and site conditions. Costs increase when the curb extension area is large and drainage, special pavement, street furnishings, and vegetation are included in the project.

This Plan proposes a combination of twenty (20) full and partial curb extensions at street intersections to slow vehicle approach and turning speeds, while creating shorter crosswalks and more prominent pedestrian viewing areas. Due to existing building setbacks and utilities, these curb extensions also provides the necessary clearance to meet ADA-compliance.

To maintain existing drainage patterns and stormwater gutters, certain curb extensions should have trench grates installed between the extensions and existing curb to allow stormwater to flow to existing gutters.

To reduce vehicles from "jumping the curb" and striking a pedestrian or damaging landscape, it is recommended bollards be placed along the perimeter or at the corners of curb extensions and mid-block extensions.

Images of installed chicanes

Chicanes

The use of chicanes creates a horizontal diversion of traffic and can be gentler or more restrictive depending on the design. Chicanes can be used to shift or divert the travel lane, resulting in lower traffic speeds. To effectively reduce speed, the desired taper length should reflect the desired speed which is posted prior to the chicane.

Landscape chicanes cost approximately $10,000 (for a set of three) on an asphalt street and $15,000 - $30,000 on a concrete street. Drainage and utility relocation often represents the most significant cost consideration.

Chicanes can also be used to shift vehicle travel by shifting on-street parking from one side to the other. This allows for parking on one side or parallel parking on one side and angle parking on the other. This pattern can be switched back and forth from block to block[ix].

Another method of restricting travel lanes is using a series of curb extensions to narrow the street forcing traffic to slow down. Such treatments are intended for use on residential streets with low traffic counts. If no restriction exists, chicanes can be installed on streets with higher traffic volumes, such as collectors or minor arterials. To ensure safety and mobility of pedestrians, maintaining a good sight distance when planting vegetation is important.

Raised Medians

Raised medians are raised barriers located in the center portion of the street and are most useful on high volume, high speed roads. The median can serve as a landing place for pedestrians crossing a street mid-block or at an intersection. The median can have vegetation for additional visual benefits. Raised medians will eliminate the middle turning lane; therefore, careful design is needed to ensure safe vehicle traveling.

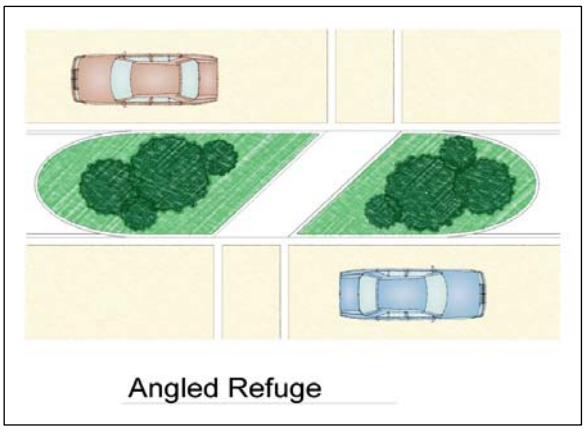
Raised medians are approximately $15,000 - $30,000 per 100 feet, depending upon design, site conditions, and whether the median can be added as part of a utility improvement or other street construction project.

Design considerations are needed to ensure adequate space for wider sidewalks, bicycle lanes, landscaping buffer strips or on-street parking and to ensure the median does not create access problems for emergency vehicles. It is ideal that a median crossing be at least 6 ft. wide to accommodate the pedestrian and of greater width to accommodate high pedestrian traffic areas. In some environments, medians can be constructed in sections creating an intermittent rather than continuous median[x]. A good alternative for larger roads with two or more lanes is the crossing island, which provides a crossing refuge for pedestrians and can aid in decreasing vehicle speeds.

A raised median installed in Boston, MA

Crossing Islands

Crossing islands, also known as center islands, refuge islands, pedestrian islands or median slow points, are raised islands placed in the center of a street at the intersection or mid-block crossing locations to assist in protecting pedestrians from motorists. The island allows pedestrians to deal with only one direction of traffic at a time and enables them to stop part-way across the street and wait for an adequate gap in traffic to cross the remaining vehicle travel lanes.



Crossing islands should be considered at uncontrolled locations where there are no traffic signals or stop signs and on larger streets with multi-traffic lanes as a supplement to the pedestrian crosswalk. If the street is wide

enough, these islands may be used with curb extensions to further enhance pedestrian crossings. AASHTO recommends that median/crossing island be at least 20 ft. in length and 6 ft. in width. They also recommend a 4 ft. square landing within the island to accommodate wheelchair users[xi].

Image of installed speed hump

All crossing islands should accommodate bicycles and persons in wheelchairs by providing a cut-through design. A "cut through" is areas where the road level incline up to the level of the median allowing wheels easier mobility. Consideration should also be given for placement of islands at intersections or near driveways so they do not affect left turn access. Adequate signage is suggested to warn motorists of the island.

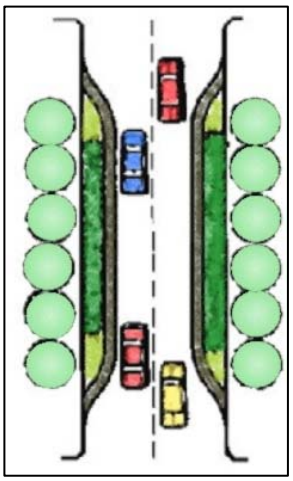
<u>Speed Humps</u>

Speed humps are raised devices, parabolic in shape, placed across a roadway to calm traffic. Speed humps slow traffic more gradually than speed bumps, although less so than speed tables (flat-topped speed humps that are generally long enough for the entire wheelbase of a passenger car to rest on top). Speed humps are usually installed along residential streets with two or less lanes with a posted speed limit of 30 mph or less. A typical speed hump is three to four inches high and 12-22 feet long[xii]. The use of speed humps are not addressed in the MUTCD and careful consideration and justification is needed before a speed hump is installed. However, traffic control devices (regulatory, warning, and guide messages) must be posted in conformance with MUTCD.

A crossing island can run from $6,000-$9,000. Installing a raised concrete pedestrian refuge island with landscaping cost approximately $10,000 - $30,000. The least costly alternative is an asphalt island or one without landscaping.

<u>Neckdowns/Chokers</u>

Neckdowns or chokers are curb extensions on both sides of a street at a specific point to narrow the street from two-lanes to one lane or two narrow lanes. The chokers can be used to narrow wide intersections, mid-block areas on the street, or as a transition between two different land uses (i.e., commercial and residential)[xiii].

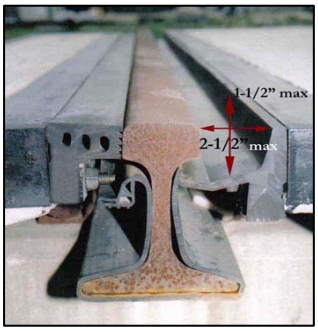


An installed neckdowns or choker can range in price from $5,000 to $20,000, depending on site conditions, landscaping and drainage.

Illustration of a Neckdown/ Choker application

5.6 RAILROAD CROSSINGS

Pedestrian crossings at railroads must be handled safely, since the CSX railroad bisects the Town and separates potential origins and destinations. Perception of the barrier effect is even stronger on the part of long-time residents, furthering the need to provide connectivity to both sides of the tracks. Railroad companies typically hold ownership of their rights-of-way in fee simple arrangements and closely control the frequency and width of crossings of any sort ("encroachments"). Working with the railroad companies has proved to be time consuming; however, many ideas that improve safety stem from published FRA (Federal Railroad Administration) sources and can reduce liability. Implementation of these ideas is likely to receive a favorable reception from the railroad.



ADA Flangeway Filler

Treatments can be thought of in three broad categories:

- Crossings adjacent to an existing or planned roadway;
- Crossings independent of an existing or planned roadway (e.g., greenways); and
- Education and Enforcement techniques discussed in Section 6.

To comply with the American with Disabilities Act (ADA), the flangeway opening between the crossing material and track must be reduced. Numerous manufacturers make material to reduce this flangeway gap (example in first image to the right). Pedestrian crossings should intersect the railroad tracks at a 90-degree angle, to minimize problems with the flange-way gap width. When a perpendicular crossing cannot be achieved, wider crosswalks should be provided to allow pedestrians room to maneuver and position themselves to cross the tracks at a 90-degree angle. The second image to the right shows an example of a pedestrian crossing treatment. Various surface types can be used for the pedestrian crossing; however, the material should not buckle, expand, or contract significantly with the railroad tracks to hinder railroad function and pedestrian use. The pedestrian crossing of railroad tracks should meet or exceed the ADA accessibility guidelines for a minimum clearance for two wheelchairs to pass safely.

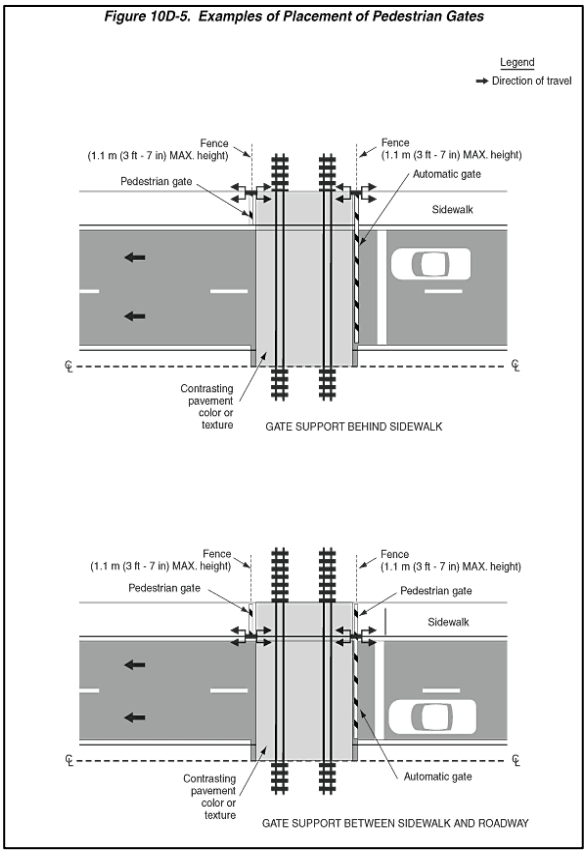

Image of installed textured precast concrete pedestrian crossing

Illustration of a warning sign. Courtesy of FRA: Compilation of Pedestrian Devices in Use at Grade

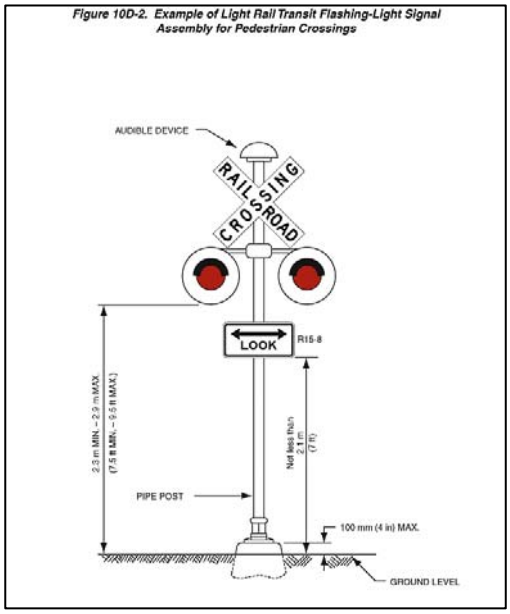
Additionally, railroad crossing safety devices can be thought of as either active and change their appearance and/or position in

the event of an oncoming train (e.g. gates and flashing signals), or passive, such as the familiar "crossbuck" sign, a warning sign, or the "RxR" pavement markings applied to the sidewalk area[xiv].

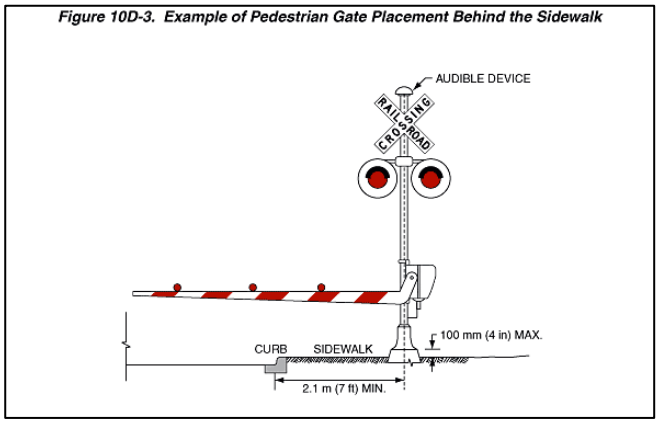
The placement of gates and flashing signals should be set behind the sidewalk, to allow the same level of warning for pedestrian as motor vehicles. The following images illustrate the placement of pedestrian gates, signals, and warning arms.



Courtesy of: FHWA MUTCD, Section 10



Courtesy of: FHWA MUTCD, Section 10



Courtesy of: FHWA MUTCD, Section 10

5.7 Signs & Signals

Regulatory signs range from $50 - $100 per sign.

Important information to improve road safety can be displayed on signs. Signs inform motorists on what they can expect, preparing them to react and behave appropriately when pedestrians are in the area. However, overuse of signs not only provides visual clutter to a motorist, they can foster noncompliance and disregard that could lead to crashes.

Signs

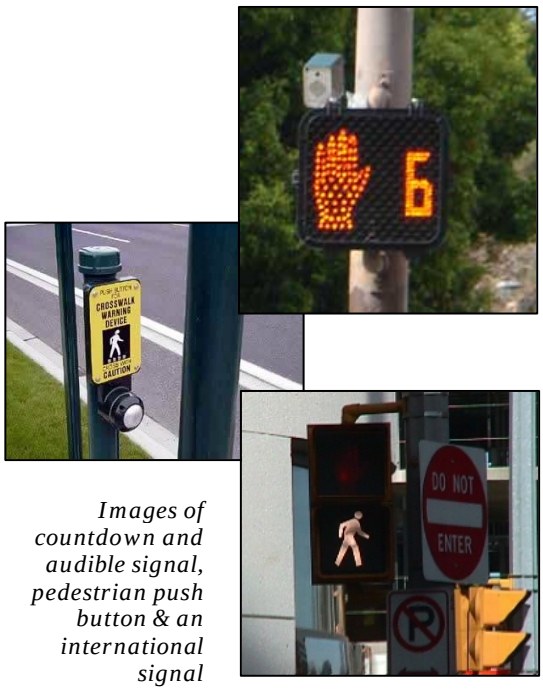
Regulatory and warning signs provide helpful information to motorists and pedestrians unfamiliar with an area, notify motorists of the presence of pedestrians, and give pedestrians the ability to cross an intersection safely. Signs that restrict right turns on red can be used to help pedestrians cross intersections. Motorists often drive onto crosswalks to check traffic before turning without regard to pedestrians. The use of regulatory and warning signs within school zones can be extremely useful for pedestrian safety, in addition to slowing traffic speeds. However, all regulatory signs should only be used sparingly. There are concerns that this signage causes increased turning on green and anxious drivers. There are several different regulatory and warning signs to assist in warning or prohibiting actions by motorists and pedestrians, and they all must comply with MUTCD[xv].

Images of regulatory and warning signs for pedestrians and motorists.
Courtesy of MUTCD

Signals

Traffic and pedestrian signals create gaps within the traffic flow to allow pedestrians to cross a busy intersection. The NCDOT now mandates the use of the countdown signal. NCDOT does not have established guidelines for the placement of pedestrian signals, but they generally use MUTCD and ASSHTO warrants for the installation of traffic signals, which is partly related to pedestrian traffic. Generally, pedestrian signal heads are used at all intersections that have high use, mid-block crossings on higher speed roads, multi-lane roads, and at highly congested intersections. If a new facility is built that will generate a lot of pedestrian activity, such as schools and parks, a signal should be installed in conjunction with the new facility[xvi]. To reduce pedestrian delay, a signal cycle should be a maximum of thirty (30) seconds. There are two types of pedestrian signals, fixed-time and push button/pedestrian activated. The fixed-time signals are tied into the traffic signal and become part of the cycle. These are generally used in high pedestrian and traffic congestion areas. MUTCD recommends traffic signal timing for pedestrians be based on a crossing speed of 4 feet per second; however, if there are significant number of elderly, disabled, or children crossing a particular location, addition time should be given. Where pedestrian activity is infrequent and a fixed-time signal is not appropriate, a push button or pedestrian activated signal can be installed. A pedestrian will push the button to activate a break in the traffic circulation to cross an intersection. The pedestrian push-button should be mounted three and half to four (3 ½ - 4) feet above the sidewalk and placed in a conspicuous and convenient location, preferably next to curb ramps.[xvii]

Pedestrian signals range from $30,000 - $140,000 per signal.



Images of countdown and audible signal, pedestrian push button & an international signal

The MUTCD has a variety of pedestrian signals heads that are allowed to be used, but the international symbol pedestrian signal head is the preferred signal. The pedestrian signal head should be clearly visible to the pedestrian at all times when in the crosswalk or waiting on the far side of the street. Attachments such as an audible signal can be added to the pedestrian signal head to assist impaired pedestrians. An audible signal is attached to an existing pedestrian signal and produces separate and distinctive electronic bird chirping sounds for both north/south and east/west crossings. These devices aid pedestrians who are blind or have low vision in crossing streets safety.

5.8 PEDESTRIAN AMENITIES

Cost of installing furniture is dependent upon the type of furniture, construction material, and amount of planting material used.

The use of street lighting, landscaping, and pedestrian furniture enhances a street environment and provides increased comfort and safety for pedestrians. These elements also turn the street into a pedestrian designation.

Image of bench along sidewalk

Street Lighting

Good placement and quality of lighting can enhance an environment, as well as provide increased pedestrian comfort and safety. Street lighting also improves the motorist ability to see pedestrians at night. Street lights and building lights within commercial areas can enhance the ambiance of the area, in addition to increased visibility of pedestrians by motorists within parking lots. All pedestrian street crossings should be provided with street lighting to ensure safety. For further guidance on street design lighting, refer to the *AASHTO Informational Guide for Roadway Lighting.*

Cost of street lighting varies by type of fixture used and the utility provider.

Pedestrian level lighting in downtown will improve the atmosphere by providing comfort, security, and safety. The use of uniform lighting levels along all pedestrian walkways should be considered in all pedestrian facility improvements.

Landscaping costs vary depending upon the size of planting areas, plants selected, and additional elements (irrigation and maintenance). However, the costs can be shared by multiple entities (neighborhoods, businesses, Town, Non-Profits).

Landscaping

The use of landscaping along a street can provide several benefits, such as providing a separation between motorists and pedestrians, reducing the visual width of the roadway, and providing a more pleasant street environment. Landscaping can include a variety of trees, bushes, and flower beds that can be planted in the buffer area between the sidewalk and roadway or in the street median.

Choosing appropriate plants for the local climate and surrounding area, providing adequate space for growth, and preparing the ground can help ensure they survive with minimal maintenance and do not buckle the sidewalks as they mature. The use of rain gardens and other plant alternatives should also be considered to reduce installation and continuous cost of irrigation. All shrubs should be low-growing and trees should be kept trimmed to at least eight (8) to ten (10) feet to ensure sight distance, vertical clearance, and security[xviii].

Pedestrian Furniture

Well-designed walking environments are enhanced by urban design elements and street or pedestrian furniture including benches, transit shelters, trash receptacles, smokers' depot, and water fountains. The selection of good-quality street furniture will reveal the community's value in its public spaces and is more cost-effective in the long run. Sidewalks and walkways should be kept clear of poles, signposts, newspaper racks, and other obstacles that could block the pedestrian's path, obscure a driver's view or pedestrian visibility or become a tripping hazard. The proper placement of furniture is important to avoid blocking pedestrian walkways, curb ramps, creating sightline problems or restricting impaired pedestrians.

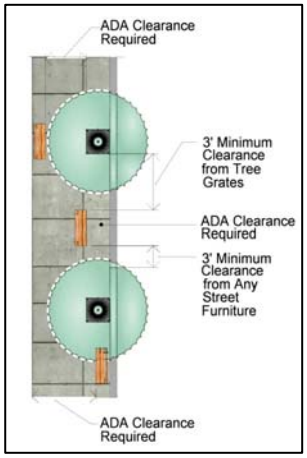


Illustration of bench placement to meet ADA clearance requirement. Courtesy of APA Urban Design Standards

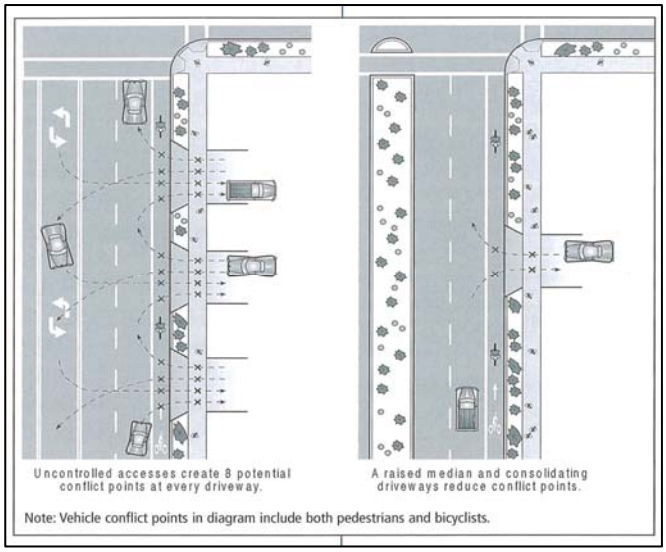


Illustration of uncontrolled and controlled driveway access.

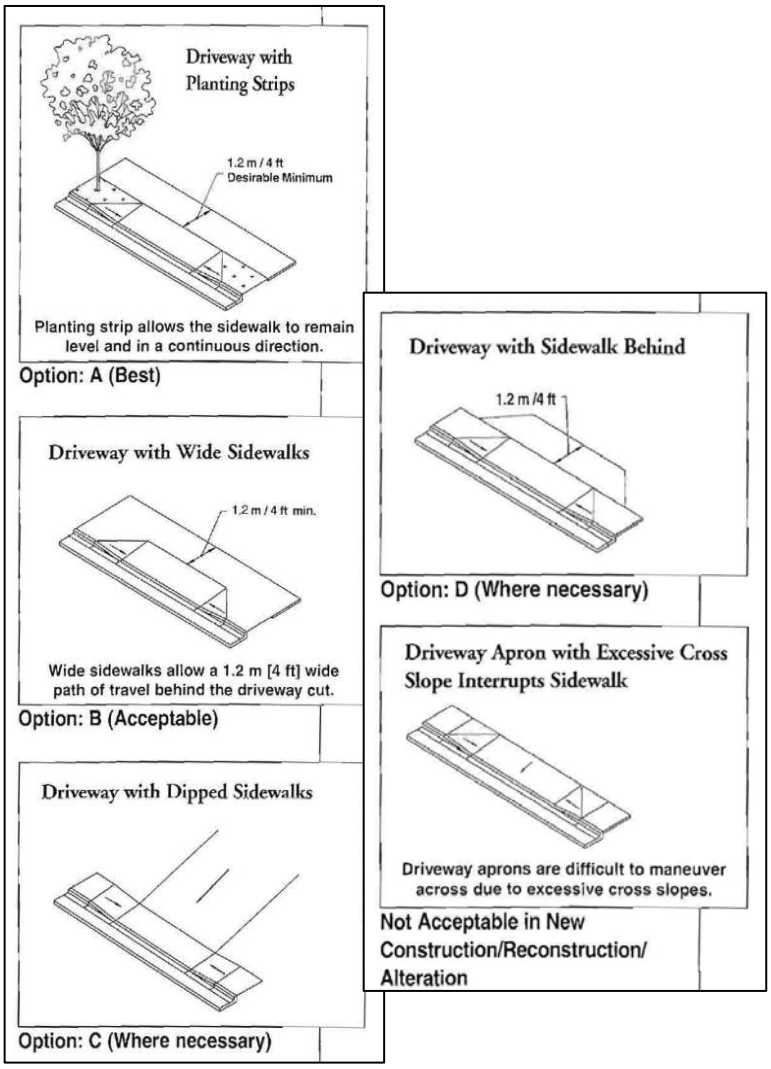
5.9 COMMERCIAL DEVELOPMENT GUIDELINES

Commercial establishments generate a high volume of vehicle traffic, which in turn can generate opportunities for pedestrian and vehicle crashes. Uncontrolled access points from the roadways into the parking area of a commercial building, parking lots, and access from parking lot to the building can all be potential accident areas. The following are some standards on how to improve pedestrian safety within and around commercial development.

Driveway Design

The driveway ramp design for commercial land uses, the number of vehicle access points, and the distance between existing driveways all have a direct effect on the overall pedestrian environment.

Limiting and consolidating vehicle driveways into a commercial site reduces conflict points. The illustration on the left shows how access management can be done. This method can also reduce the number of vehicle-vehicle crashes if the driveways are located near traffic control devices.



Illustrations of sidewalk design opinions at driveway.

The location and slope of the driveway is an important component of ensuring accessibly of the sidewalk on both sides of the driveway. To be ADA-compliant, the driveway must conform in width, cross slope, and grade to the design requirements for sidewalks. Unramped curb returns are prohibited. If the driveway does not adhere to this requirement, the likelihood of pedestrian accidents is increased since the disabled, children, and persons with strollers require a level travel surface. All cross slopes for new construction, reconstruction, and alternations cannot exceed 2% per ADA requirements.

There are four driveway designs that meet accessibility requirements. Each design maintains a level or nearly level travel area for pedestrians.

Option 'A' has a planting buffer to increase the safety of both pedestrian and motorist. These wide planting areas provide more turning area for the motorist. Option 'B' incorporates a sidewalk at the narrowest point of the driveway, but still maintains the minimum clearance for the sidewalk of four (4) feet. Option 'C' should be used in areas where the distance from the edge of the sidewalk to the curb face is insufficient to maintain the maximum two percent (2%) cross slope. The installation of curb ramps to and from the sidewalk on the driveway is how these types of situations should be handled. Option 'D' can be used when it is difficult to maintain the two percent (2%) cross slope. An easement may be purchased or obtained from the property owner to provide a level sidewalk area next to the driveway.

Parking Lots

Parking lots see a high number of pedestrian and vehicle crashes; therefore, the design of parking lots must have pedestrian accommodations to allow safe travel from the vehicle or sidewalk to the commercial building.

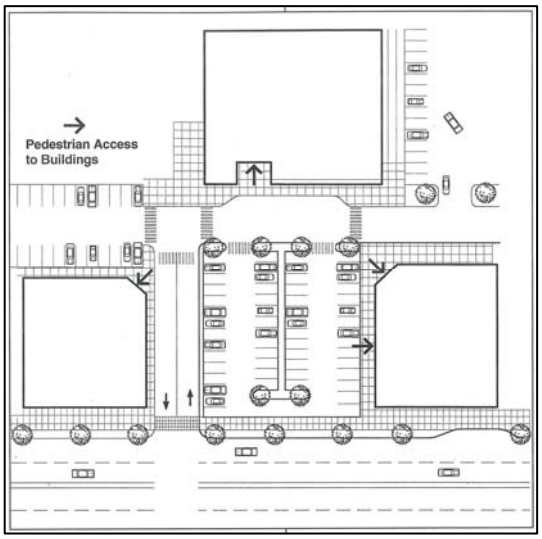


Illustration of a shared parking lot with distinct pedestrian areas and traffic calming devices. Courtesy of AASHTO

Requiring the placement of parking spaces on the side or rear of the buildings and moving the principal land use to the street is an option. Careful design of on-site circulation patterns with separated travel lanes, pedestrian access lanes, signage, and raised crosswalks will clearly define where pedestrians should travel within the commercial site in addition to slowing traffic down.

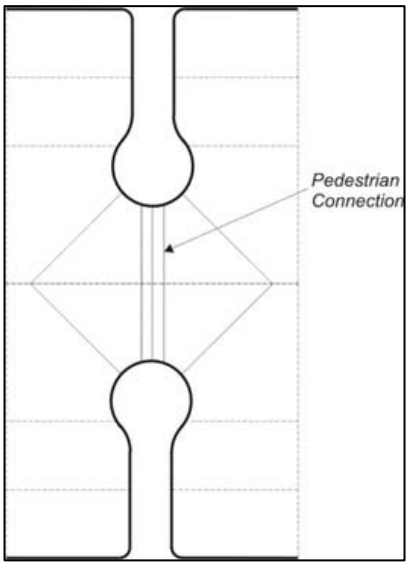


Illustration of pedestrian connection between cul-de-sacs. Courtesy of Citrus Heights, CA (www.ci.citrus-heights.ca.us/docs/106.31.030.pdf)

Adjacent commercial uses should be required to share parking areas to reduce the number of vehicles traveling from use to use. Parking garages should be considered to reduce the amount of impervious coverage in a commercial area. When designed in accordance with pedestrian safety, accessibility and security can be accomplished.

5.10 RESIDENTIAL DEVELOPMENT GUIDELINES

Pedestrian traffic is also generated from residential developments with numerous pedestrian-vehicle conflict points on residential streets; therefore, applying the above mentioned driveway design components would assist in reducing those conflicts. As recommended in previous sections, existing or future cul-de-sacs should be connected to the closest local collector street or to other cul-de-sacs in adjoining subdivisions via sidewalks or multi-use paths. This connection will improve connectivity and accessibility to surrounding land uses.

[i] Federal Highway Administration (FHWA) Pedestrian Safety, *The Walking Environment – Provide Sidewalks or Walkways*, October 2007, http://safety.fhwa.dot.gov/saferjourney/library/countermeasures/01.htm

[ii] Federal Highway Administration (FHWA) Pedestrian Safety, *The Walking Environment – Shared Use Paths*, October 2007, http://safety.fhwa.dot.gov/saferjourney/library/countermeasures/08.htm

[iii] Walkinginfo.org – Pedestrian and Bicycle Information Center, *Trail Costs and Benefits*, October 2007, http://www.walkinginfo.org/engineering/trails-costs.cfm

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[v] Federal Highway Administration (FHWA) Pedestrian Safety, *The Walking Environment – Marked Crosswalks & Enhancements*, October 2007, http://safety.fhwa.dot.gov/saferjourney/library/countermeasures/04.htm

[vi] Federal Highway Administration (FHWA) Pedestrian Safety, *Signs and Signals – Recessed Stop Lines*, October 2007, http://safety.fhwa.dot.gov/saferjourney/library/countermeasures/45.htm

[vii] Federal Highway Administration (FHWA) Pedestrian Safety, *The Walking Environment – Curb Ramps*, October 2007, http://safety.fhwa.dot.gov/saferjourney/library/countermeasures/03.htm

[viii] Federal Highway Administration (FHWA) Pedestrian Safety, *The Walking Environment – Traffic Claming-Curb Extensions*, October 2007, http://safety.fhwa.dot.gov/saferjourney/library/countermeasures/23.htm

[ix] Walkinginfo.org – Pedestrian and Bicycle Information Center, Traffic Calming-Chicanes, October 2007, http://www.walkinginfo.org/engineering/calming-chicanes.cfm

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[xi] Federal Highway Administration (FHWA) Pedestrian Safety, *Traffic Calming – Crossing Islands*, October 2007, http://safety.fhwa.dot.gov/saferjourney/library/countermeasures/25.htm

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[xiv] Federal Railroad Administration (FRA), Compilation of Pedestrian Safety Devices in Use at Grade Crossings, Retrieved January 2009, http://www.fra.dot.gov/downloads/safety/small_Jan08_Ped_Devices_GX2.pdf

[xv] Federal Highway Administration (FHWA) Pedestrian Safety, *Signs and Signals – Add/Modify Signing,* October 2007, http://safety.fhwa.dot.gov/saferjourney/library/countermeasures/46.htm

[xvi] Federal Highway Administration (FHWA) Pedestrian Safety, *Signs and Signals –Pedestrian Signals,* October 2007, http://safety.fhwa.dot.gov/saferjourney/library/countermeasures/43.htm

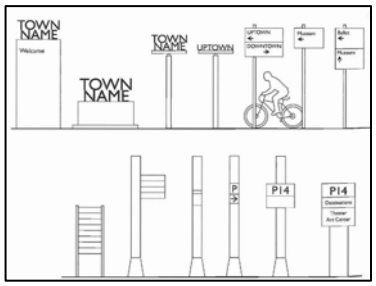
[xvii] Federal Highway Administration (FHWA) Pedestrian Safety, *Signs and Signals – Pedestrian Push,* October 2007, http://safety.fhwa.dot.gov/saferjourney/library/countermeasures/49.htm

[xviii] Walkinginfo.org - Pedestrian and Bicycle Information Center, *Traffic Calming - Landscaping*, October 2007, http://www.walkinginfo.org/engineering/calming-landscaping.cfm

Section 6: Recommendations for Ancillary Facilities, Pedestrian Programs & Policies

Planning for pedestrian facilities also includes maps of pedestrian routes, signage for pedestrian and motorists, programs for spot improvements and maintenance, safety education programs, enforcement programs, and encouragement and pedestrian promotions. The following section will address these additional facilities and programs Williamston should consider employing to create an enhanced walkable community. This section should be used in conjunction with the recommendations listed in Section 7.

6.1 Mapping and Signing Projects



Levels of wayfinding signs Courtesy of Miami Beach, Fl (APA Urban Design Standards)

Wayfinding systems consist of maps, directional signs, destination arrival signs, general information signs, and banners that help guide and orient visitors around a community. This system of maps and signs not only welcome visitors but also gives the Town a unique sense of place. These signs should give direction to destinations, such as historical landmarks and other tourist destinations. Guide maps can be incorporated to include major roads, walking trails, destinations and brief local history.

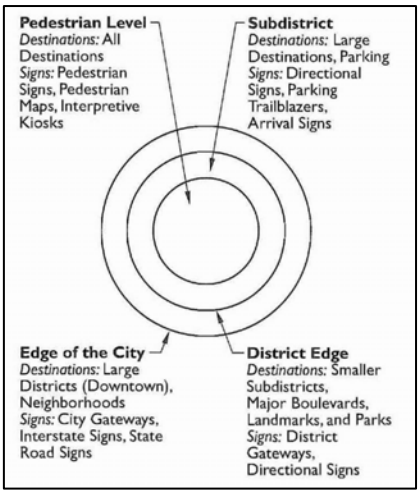


Illustration of the hierarchy of wayfinding signs Courtesy of Soviet of Environmental Graphic Design (APA Urban Design Standards)

Signs should direct pedestrians to state and regional trail and greenway routes. The existing walking routes within Williamston should have signage along the route. Vehicular route signage should follow highway sign design standards and orient motorists to vehicle-based destinations. Pedestrian route signage should direct pedestrians to pedestrian related destinations.

Images of route mapping systems/signs

Neighborhood Route Systems

Neighborhood route system signs should be placed at entrances of neighborhoods and special districts to serve as gateways. The sign could also provide a map of the pedestrian facilities within that neighborhood. These signs are usually

placed in road medians or centered in street rights-of-way. The signs can be enhanced with landscaping.

Comprehensive Route Systems

Comprehensive route maps should be used to show all route systems and destinations in a community. These maps should show major roads, districts, landmarks, destinations, and the pedestrian routes. A list of major destinations with a basic description of each destination, including hours of operation, prices, and historic landmark interpretive information should also be incorporated. When new routes become available, maps should be updated and redistributed to the Library, Post Office, and Town Hall.

6.2 Spot Improvement Program

Certain tasks can be accomplished immediately to improve the condition of the pedestrian facility network. These spot improvements can be done with minimum capital and labor. Removing and replacing severely broken sections of the network are tasks that will require more time and money than other surface improvements. Removing fallen leaves and debris from the sidewalks and edging grass and weeds along the network are simple low cost projects that can enhance the system. Pedestrian signals should be provided in high traffic areas and existing signals should be checked periodically to ensure they are functioning properly. Lighting at intersections and along pedestrian facilities should also be installed where needed, checked and replaced when necessary.

Images of sidewalk maintenance & retrofit Courtesy of Dan Burden (www.pedbikeimages.org)

Crosswalks that need painting or repainting could be done fairly quickly and will provide residents with visual evidence that pedestrian concerns are being addressed. Simultaneously, curb cuts could be checked for ADA compliance and retrofitted or replaced if necessary. Pedestrian-oriented signage should be installed to allow for greater use of the system. Overhanging branches and overgrown shrubs should be trimmed along the network to increase visibility of and for pedestrians. Where culvert crossings or bridges are too narrow to allow pedestrians to cross without entering the traveled way, culverts should be extended, shoulders should be widened, or separate pedestrian bridges should be constructed. Bridges should be equipped with 42-inch guard railings where pedestrian accommodations are provided.

MAINTENANCE PROGRAM

A maintenance program is required to keep any system operating, including a pedestrian network. The Town of Williamston development, adoption, and implementation of a thorough maintenance program to address the continuous needs of a pedestrian network (See Map 2.2 of existing sidewalk conditions). Without a maintenance program, the condition of the existing and future pedestrian facilities will suffer.

6.3 EDUCATIONAL PROGRAMS

Safe Routes to School Program

Establishing a "Safe Routes to School Program"[i] would encourage more children to walk to school. The program brings together educators, municipal and regional transportation professionals, law enforcement, public health professionals, and concerned citizens to address pedestrian safety within two miles of K-8th grade schools. This program concentrates on the five "E's": engineering, education, enforcement, encouragement, and evaluation. Engineering is addressed when existing or new pedestrian facilities are improved or constructed. Education may include teaching parents and children about pedestrian safety or launching safe driving campaigns focused on school zones. This can be done by incorporating pedestrian safety in school driver education programs. Local law enforcement could also be invited into schools to have seminars with students on pedestrian safety. Encouragement may include mileage clubs and contests, walking school buses, and promotional events. Establishing goals for a school and evaluating the participation at the end of the school year would be an evaluation method.

Each K-8th grade school should develop an action plan to identify safety concerns. These plans help to identify where sidewalk and roadway improvements are needed and where crossing guards or police enforcement is needed within a two mile area of each school. Parents and students should be involved in developing the plans. It is recommended that parts of the program focus on teaching children how to cross safely. A successful program will benefit the entire community. [ii]

Adult School Crossing Guards

Adult school crossing guards can insure safe driver and pedestrian behaviors at crosswalks near schools. They help children cross the street safely and remind drivers of the presence of pedestrians. Adult school crossing guards can be parent volunteers, school staff or paid

personnel. Annual classroom and field training for adult school crossing guards, as well as special uniforms and equipment are recommended.[iii]

6.4 ENFORCEMENT PROGRAMS

Enforcement of pedestrian laws is critical to guarantee safety. One enforcement method is to use trained and educated volunteers to assist in enforcing pedestrian and motorists' laws around local schools and other high pedestrian traffic areas. A Police-on-Bikes program could also be developed and used to enforce laws in Downtown and in surrounding neighborhoods. Enforcement of key areas will force people who drive or walk to become more aware of their actions. Local police entities should also be properly educated on an annual or as needed basis to ensure effective enforcement of pedestrian laws. Here are a few basic legal pedestrian related rights mentioned in *A Guide to North Carolina Bicycle and Pedestrian laws*:

- Where traffic control signals are not in place, a vehicle must yield the right-of-way to a pedestrian crossing within a marked or unmarked crosswalk at or near an intersection.

- Drivers of any vehicle within a business or residential district must yield to the right-of-way at marked pedestrian crossings.

- When a flashing yellow light is erected or installed at a place other than an intersection, drivers must yield to the right-of-way to pedestrians.

- Drivers cannot obstruct traffic flow of pedestrians within a crosswalk by driving the vehicle over the crossing unless there is sufficient distance on the other side for the vehicle.

- At pedestrian control signals, ''walk'' gives the pedestrian the right-of-way to cross the street and vehicles must yield to crossing pedestrians.

Outreach programs can also be very beneficial in promoting law abidance. Events like safety fairs should be done at local elementary schools to educate young pedestrians. At middle and high schools, safety brochures and pamphlets can be issued. The students should be shown how to obey these laws and also the consequences of not obeying the laws. Safe Route to School monies can be used to fund safety education programs at elementary and middle schools.

The community can also play an important role in enhancing traffic safety. Representatives of communities can improve driver and pedestrian behaviors in many ways. For more information regarding pedestrian laws, please visit:
http://www.ncdot.org/transit/bicycle/laws/resources/lawsguidebook.html

Neighborhood Speed Watch

This enforcement program allows a radar speed unit to be loaned to residents who are trained by police on how to collect speed data and vehicle descriptions. The local agency follows up and obtains the motorists' addresses from the state motor vehicle department using the recorded license plate numbers. If the vehicle description matches the recorded description of a vehicle observed speeding, the vehicle owner will be sent a letter asking for voluntary compliance. The program can educate neighbors about the issue and help boost support for long-term solutions, such as traffic calming devices.

Slow Down Yard Sign Campaigns and Pace Car Campaigns

Slow down yard sign campaigns allow residents of neighborhoods with speeding problems to participate in reminding drivers to slow down. Neighborhood leaders, safety advocates, and law enforcement work in partnership to identify problem areas, recruit residents to post yard signs, organize distribution of yard signs, garner media attention, and evaluate the effectiveness of the campaign. Slow down yard sign campaigns may be conducted along with other speed enforcement efforts such as pace car campaigns and the use of speed radar trailers.

Neighborhood pace car programs aim to make neighborhoods safer for pedestrians, bicyclists and drivers. Resident pace car drivers agree to drive courteously, at or below the speed limit, and follow other traffic laws. Programs usually require interested residents to register as a pace car driver, sign a pledge to abide by the rules, and display a sticker on their vehicle.

Neighborhood Fight Back Programs

Neighborhood fight back programs are collaborative efforts between local governments and concerned residents to address crime, blight, and other issues negatively affecting their neighborhoods. Though traditionally used to address illegal drug activity, traffic and pedestrian safety may be one area of concern. Through the program, the local government provides multi-agency support over a limited period of time to concentrate enforcement activities in specific neighborhoods.

Radar Speed Trailers and Active Speed Monitors

Fixed motorist feedback signs or movable radar speed trailers can be used as part of a community education program. The more effective units have bright strobe lights that will flash like a photo-enforcement camera or displays red and blue flashing lights when motorists exceed a preset speed. Radar trailers are moved to different locations and are occasionally supplemented with motor officer enforcement. Some radar speed trailers can record speed data and traffic counts by fifteen minute or hourly intervals throughout the day, which will help in targeting future police enforcement.

Dilapidated Structure & Over-Grown Yard Abatement

Having a dilapidated structure and over-grown yard abatement program can assist with removing unsafe and unsightly structures and yards that can pose a safety hazard for pedestrian, especially children. If left alone, these structures and yards can diminish the sense of personal safety and reduce the pleasure of walking.

6.5 ENCOURAGEMENT AND PROMOTION

Walk to School Day

"Walk to School Day" is a designated day once a week or month that encourages students and teachers to walk to school. This event should be well advertised and interactive. This event also gives the opportunity to educate walkers about positive health and environmental impacts of walking. It should also incorporate and promote other initiatives such as the Safe Routes to School Program[iv]. A Walk to School Day may also coincide with the International Walk to School Day and Month.[v]

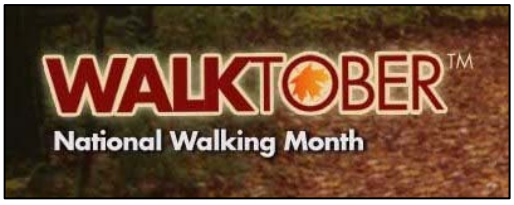
Walking School Bus

A walking school bus is a group of children walking to school supervised by one or more adults. Initiation of this campaign is fairly simple. To start, the program should be initiated in a single neighborhood that has an interest in walking to school. After a route has been determined, it can be fine-tuned and other neighborhoods may be added. This event not only promotes exercise, it also gives opportunity for pedestrian education. The Walking School Bus can be used collectively with Walk to School Day and the Safe Routes to School Program.[vi]

Carfree Day

"Carfree Day" is an international day set aside to give the public the opportunity to envision how our cities would be without the automobile. This event should encourage walking not only on the official day of September 22, but throughout the year. Downtown streets could be closed for entertainment, educational booths, and health and wellness booths. This day would provide a great opportunity for the Town to inaugurate a new and permanent pedestrian event. A "carfree day"[vii] should be a partnership between local businesses, residents, organizations, and the Town.

Walktober



"Walktober"[viii] is a national walking campaign aimed at increasing walking in the community in October. October was chosen for this walking event due to beautiful fall scenery and cooler temperatures. This program could be a good catalyst for walking downtown and along trails. Initiation and promotion of this event should be done by community organizations in conjunction with the Town.

Pedestrian Safety Roadshow

The Pedestrian Safety Roadshow[ix] assists communities in developing their own approach to identifying and solving the problems that affect pedestrian safety and walkability. It is a four hour workshop given to local engineering, planning, enforcement, educators, and health officials, youth groups and senior groups, and local business leaders. Roadshow objectives are to increase the awareness of pedestrian safety and walkability concerns, provide participants with information about the elements that make a community safe and walkable, and channel their concern into a plan of action for addressing pedestrian concerns. This program also provides the Town an opportunity to show the community what they are doing to address pedestrian safety. It also allows the community to identify new walkability barriers and pedestrian enhancement priorities.

Public Perception Marketing

The Town of Williamston should work in conjunction with law enforcement and other local agencies to promote pedestrian safety. This could be done by producing and distributing brochures and pamphlets. The NCDOT[x] website has information on numerous topics, such as the Walk a Child to School Initiative and school guard crossing programs.

To promote walking in the community, the Town will have to construct and infill sidewalks; however, some neighborhoods may associate sidewalks with crime resulting in not wanting sidewalks in front of their home. Although this is a perception, the truth is sidewalks actually improve neighborhoods. Therefore, the Town should take steps to create a positive image for these acquisition projects. Public workshops and meetings should be held to give facts concerning these projects.

6.6 PEDESTRIAN PROGRAM RECOMMENDATIONS

The Steering Committee has identified the following pedestrian programs as priority programs to be implemented within the next five years and continued into the future. Williamston should implement additional programs identified in this Section 6 as needed to ensure Williamston becomes a walkable community for years to come.

Route Systems

As walking routes are established, they should be well marked for easy use by pedestrians. Possible methods for marking these routes include directional signs, general information signs, and lighting.

Safe Routes to School Program

All current K- 8th grade schools within Williamston should develop and implement a Safe Routes to School Program. These schools include Williamston Primary School, E.J. Hayes Elementary School, and Williamston Middle School.

The program promotes walking and biking to and from school through infrastructure improvement projects, educational opportunities, encouragement, and pedestrian safety activities. This program would enable and encourage children to walk and bike to school by making walking and biking trips safer and more appealing.

As components to the Safe Routes to School program, the schools and community should promote and encourage the following programs.

- Walk to School Day Program
- Adult Crossing Guard Program
- Walking School Bus Program

Spot Improvement Program

Develop a spot improvement program to address problems at specific locations such as intersections, short lengths of roadway, small sidewalk gaps (10' or less in length), or single destinations (e.g., an office building or shopping center). Spot improvement could include retrofitting existing curbs to comply with ADA, repainting or striping crosswalks.

Sidewalk Maintenance Program

Develop and implement a sidewalk maintenance program to ensure existing facilities are regularly maintained and do not go into disrepair. The program should also include an updated inventory of existing sidewalks needing repairs to adequately schedule improvements and maintenances of these facilities. A successful program is an essential part of a planned walkable community.

Annual Pedestrian Safety Roadshow

Organize and participate in an annual pedestrian safety roadshow. This program should include going to various schools, community centers, and other locations to educate and provide pedestrian safety informational brochures to children and the public.

Pedestrian and Motorist Education and Enforcement Activities

Continue educational efforts on an annual, or as needed, basis for community volunteers and Town police officers on pedestrian laws; in addition to, how to educate and enforce those laws. Utilize community volunteers to educate and enforce pedestrian laws. Education brochures and pamphlets should also be distributed throughout the community to teach pedestrian safety and promote the health benefits of walking.

Walking Programs & Events

Organize and hold various activities to encourage the public to participate in recreational or educational walking trips. Examples include walking races for health campaigns, Walktober and walking races during annual community festivals.

6.7 PEDESTRIAN POLICY RECOMMENDATIONS

Williamston has an opportunity to further establish new policies for pedestrian-friendly design. Without these policies the vision and goals of the community will not come to fruition; therefore, it is important for the Town to adopt the following policy recommendations. These recommendations foster implementation and continuation of the existing safety and enhancement, encouragement, enforcement and maintenance programs identified in Section 3. Implementation of the following policy recommendations should start immediately and continue over the next five years given the approval and adoption process to amend Town ordinances.

Bridge Enhancements for Pedestrians

Given Williamston's desire is to have an interconnected pedestrian-friendly community and knowing vehicular bridges can pose a threat to this desire, it is recommended that Williamston develop a policy to require all newly constructed bridges be equipped with sidewalks, or an offset area that provides space for future sidewalks or multi-use trails, and railings to accommodate pedestrians.

Reduction of Speed Limits

Create a policy for reducing the speed limits in areas of high pedestrian activity, such around schools, parks, the Downtown, and other major pedestrian destinations. "School zones" should be marked with pavement markings and flashing speed limit signs. Williamston should consider the use of active speed monitor speed limit signs be used near schools with speeding problems.

On-Street Parking Ordinance

The Town should collaborate with NCDOT (where applicable) on creating a policy to paint parallel parking stalls on streets such as Church Street, Main Street, Martin Luther King Drive, and other wide streets to slow traffic and encourage on-street parking.

Street Tree Ordinance

Williamston should develop a street tree ordinance to add and protect shade trees along major thoroughfares and downtown streets. These trees will provide shade for pedestrians and improve the overall streetscape.

Subdivision Ordinance

The following amendments are suggested for Williamston's Subdivision Ordinance.

1. Modifications to Williamston's Subdivision Ordinance should be made to specify that any portion of new subdivisions that lie within a greenway corridor should be dedicated and/or reserved to the public at the option of the Town to protect or preserve the greenway.

2. Where residential developments have cul-de-sacs or dead-end streets, such streets shall be connected to the closest local or collector street or to cul-de-sacs in adjoining subdivisions via a sidewalk or multi-use path, except where deemed impractical by the Planning Director.

3. Subdivision Ordinance should be amended to incorporate the numerous street design recommendations and guidelines, as provided in Section 5.

4. Mixed use and Planned Unit Developments centered on pedestrian-friendly communities should be encouraged instead of separated uses.

5. All new streets within Williamston should be *Complete Streets* with amenities for pedestrians, bicyclists, and motorists. Thus, sidewalks should be placed along both sides of all streets to provide connectivity and improve pedestrian safety.

Zoning Ordinance

The Zoning Ordinance should be amended to specify the following:

1. Any portion of a development that lies within a designated greenway corridor must be set aside to satisfy the open space requirement, and the area within a greenway corridor shall be dedicated and/or reserved to the public at the option of the Town.

2. Commercial development sites should incorporate pedestrian-friendly accommodations such as pedestrian refuge islands, pedestrian channels through parking lots to commercial establishments, landscaping to provide shade and a sense of place within parking lots, traffic calming techniques to reduce vehicular speeds within parking lot, and sidewalks along perimeter of property to provide connection from nearby properties.

3. Parking requirements should be modified to place a maximum amount of parking allowed and not a minimum, thus letting the market dictate the amount of parking that is created for a development and require shared parking spaces amongst adjoining or adjacent uses.

4. Ensure and allow mixed-uses within existing neighborhoods instead of separating uses as a use-by-right. By creating livable neighborhoods, walking will become a more attractive option to transportation.

5. Reduce the number of driveways and driveway design into a development. Reducing the number of uncontrolled access points into a development will in turn reduce potential pedestrian-vehicle accident areas. The location and slope of the driveway will also ensure accessibility and safety for pedestrians.

6. Change street design standards to reflect those identified in Section 5 to ensure all future road development is pedestrian-friendly.

7. Mixed use and pedestrian-friendly developments should be encouraged, if not required, for all future developments.

8. All new streets within Williamston should be *Complete Streets* with amenities for pedestrians, bicyclists, and motorists.

[i] http://safety.fhwa.dot.gov/saferoutes/

[ii] http://ncdot.org/transit/bicycle/saferoutes/SafeRoutes.html

[iii] SRTS Guide, Adult School Crossing Guard Guidelines, October 2007, http://www.saferoutesinfo.org/guide/crossing_guard/index.cfm

[iv] http://www.iwalktoschool.org/

[v] www.walktoschool-usa.org

[vi] http://www.walkingschoolbus.org/

[vii] World Carfree Network, October 2007, http://www.worldcarfree.net/wcfd/documents/cfd_howto.pdf

[viii] Welcome to Walktober, October 2007, http://www.walktober.com/content.aspx?PageID=8

[ix] http://safety.fhwa.dot.gov/ped_bike/ped/roadshow/walk/index.htm

[x] http://ncdot.org/transit/bicycle/walking/walking_intro.html

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Section 7: Preliminary Recommendations

7.1 Potential Projects / Infrastructure Improvements

Preliminary recommendations or potential projects have been identified. These projects were based upon:

- Steering Committee meeting #2 mini-charrette
- Public survey & Open House #1 comments
- Pedestrian-vehicle crash data
- Planned, proposed projects mentioned in existing plans
- Field Analysis
- Ability to provide connectivity & improve safety
- Satisfying American Disability Act of 1991

Pedestrian Crossings (PC)

Pedestrian crossings range from striping crosswalks or installing curb extensions to crossing multi-lane highways. Installing proper pedestrian crossings will encourage pedestrian travel and safely connect isolated portions of Williamston.

Table 7.1 Pedestrian Crossing Improvement Project Recommendations

Project ID (ref. on Map 7.2)	Pedestrian Crossing Location	Description	Preferred Action / Treatment
1	Washington St & Garrett Rd	Walmart Shopping Ctr, High School, Residential subdivision, Commercial uses	Install crosswalks, refuge island, pedestrian-activated signals and signage
2	Washington St & McCaskey Rd	Banks, Ballfields, Schools, Commercial areas	Install crosswalks, refuge island, and signage
3	Godwin Dr & McCaskey	Ballfields, school, hospital, commercial uses	Install crosswalks and signage
4	Washington St & Boulevard St	Major Intersection with surrounding commercial uses, nearby medical, High School, Baseball fields	Install crosswalks, refuge island, pedestrian-activated signals and signage
5	E. Boulevard St & Jamesville Rd	Surrounding commercial (Bojangles, Burger King, shopping) adjacent to residential uses	Install crosswalks, pedestrian-activated signals and signage
6	Washington St & Martin Luther King	Shopping, residential areas	Install crosswalks and signage
7	E. Boulevard St & Park St	Access to commercial/retail incl. Rite Aid, Hess, BizGallery, Roses, Wendys, 45mph	Install crosswalks, pedestrian-activated signals and signage
8	E. Boulevard St & Gatling St	Location of a pedestrian-vehicle crash, posted speed changes from 45 to 55, heavy traffic, residential uses along Gatling St.	Install crosswalks, refuge island, pedestrian-activated signals, and signage

9	E. Boulevard St. & E. Main St/Willow Dr	Location of a pedestrian-vehicle crash, currently has a flashing overhead beacon warning for vehicle crossing, residential along Willow Dr.	Install crosswalks, refuge island and signage
10	E. Main St & N. Biggs St	Currently, a mid-block crossing from Martin County offices to associated parking lot, includes pedestrian crossing sign and bar stripes.	Maintain vegetation to keep pedestrians visible. Traffic calming may be considered.
11	E. Main Street & Watts Street	Downtown	Install crosswalks and signage
12	Main St & Smithwick	Downtown, Barnes Plaza, Post office, Town Hall	Improve existing crossing to increase visibility
13	Smithwick & Academy	Library	Install crosswalks and signage
14	Main St & Harrison St	Downtown	Install crosswalks and signage, Mid Block Crossing
15	Main St & Haughton St	Current crossing paint/striping is eroded, traffic signal at intersection, pavement condition is poor, downtown pedestrian use	Install highly visible crosswalks, pedestrian-activated signals, and signage
16	Main St & Elm St	Downtown	Install highly visible crosswalk
17	N. Haughton Street & Pine Street	Location provides crossing from residential to recreational uses.	Install highly visible crosswalk, signage, refuge island
18	W. Main St & Martin Luther King Jr	Location provides access to residential, commercial and recreational uses.	Install highly visible crosswalks and signage
19	W. Main Street & Roberson Street	Location of current diagonal crossing	Install highly visible crosswalks and signage
20	W. Main St & Edgewood	School	Install highly visible crosswalk
21	W. Main St & McCaskey Rd	Schools, Hospital, Commercial and Residential areas	Install highly visible crosswalk and signage
22	McCaskey Rd & E. Boulevard St.	Schools, Hospital, Commercial and Residential areas	Install highly visible crosswalk, signage, refuge island.
23	W. Boulevard/W. Main & Prison Camp Rd	Parks and Martin CC	Install crosswalk and signage
24	Prison Camp Rd & Kehukee Park Rd	Parks and Martin CC	Install highly visible crosswalk and signage

New Sidewalk Construction (NSC)

New sidewalk construction projects are aimed at providing pedestrian accessibility and connectivity between areas of Williamston that are currently isolated. These projects were identified to connect areas of high pedestrian density (residential areas) to surrounding destinations, such as parks, schools, commercial areas, downtown, and proposed greenways. Sidewalk construction also includes connections to existing sidewalks to form continuous routes. All sidewalk projects should include curb cuts with ramps at all driveways and intersections.

Table 7.2 New Sidewalk Construction Project Recommendations

Project id (Ref. on Map 7.3)	New Sidewalk Construction Location	From	To	Preferred Action / Treatment
25	Washington Street	Garrett Road	Boulevard St	Install sidewalks and curb ramps along the west side of Washington street between the drainage ditch and easement limits.
26	Brentway Avenue	S. McCaskey Rd	Garrett Rd.	Install sidewalks and curb ramps.
27	Godwin Drive	S. McCaskey Road	Garrett Rd	Install sidewalks and curb ramps along west side of Godwin Dr outside of the drainage ditch. Consider multi-use trail/greenway.
28	S. McCaskey Road	Washington Street	W. Boulevard Street	Install sidewaks and curb ramps on south side of McCaskey Rd outside of the drainage ditch. Consider multi-use trail/greenway. May need to acquire ROW from adjacent property owners.
29	W. Boulevard	McCaskey	Washington	Install sidewalks and curb ramps.
30	McCaskey Rd	Boulevard St	Main St	Install sidewalks and curb ramps along east side of McCaskey Rd.
31	W. Main Street	Brownlow St.	Roberson Street	Install sidewalk to connect residential to downtown, recreation per plans approved by NCDOT. Install signage to alert motorists of pedestrians.

32	S. Edgewood Avenue	W. Main Street	West End Tennis Courts	Install sidewalks and curb ramps along east side of road to connect Main St. to tennis courts.
33	Washington St	Boulevard St.	Peele St	Install sidewalks and curb ramps along west side of Washington St to connect to existing sidewalks and provide Safe Route to School
34	Washington Street	Boulevard St	Elm St	Install sidewalks and curb ramps along east side of Washington St.
35	E. Boulevard	Washington St.	Park St.	Install NCDOT approved pedestrian facility along highway. Additional review by NCDOT.
36	Jamesville Road	Washington St	E. Boulevard St	Install sidewalks and curb ramps.
37	E. Boulevard	Park Street	Willow Drive	Install NCDOT approved pedestrian facility along highway. Additional review by NCDOT.
38	E. Main St	Boulevard St	River Rd	Install sidewalks and curb ramps outside of drainage ditch.
39	River Road	Thelma St	River Landing	Install NCDOT approved pedestrian facility to provide continuous connections to/from downtown, neighborhoods, and recreation facilities
40	W. Church Street	Haines St	Roberson St	Install sidewalks and curb ramps along north side of Church St.
41	Haines St	W. Church St	Street-end	Install sidewalks and curb ramps.
42	W. Main St	McCaskey Rd	Kehukee Park Rd	Install NCDOT approved pedestrian facility. Additional review by NCDOT.

43	Prison Camp Road	W. Main St	Kekukee Park Road	Install NCDOT approved pedestrian facility to connect parks, community college, & residential areas. Additional review by NCDOT.

Sidewalk Infill or Connections to Existing Sidewalks

Table 7.3 Sidewalk Infill / Connection Improvement Recommendations				
Project id (Ref. on Map 7.3)	**Sidewalk Construction Location**	**From**	**To**	**Preferred Action / Treatment**
44	E. Main Street	Ormond Dr.	Henderson St.	Install sidewalk and curb ramps on north side of Main St. to connect existing sidewalks. May need to obtain right-of-way for sidewalk.
45	Washington Street	Pearl St	Elm St	Install sidewalk and curb ramps on east side of Washington St. to connect to existing sidewalks. May be impacted by driveways/parking.
46	Warren Street	Jamesville Rd.	S. Haughton St.	Install sidewalk and curb ramps on south side of Warren St. to connect to existing sidewalks.
47	N. Haughton Street	W. Grace St.	W. Franklin St.	Install sidewalk and curb ramps on east side to connect to existing sidewalks.

Greenway Corridor Construction (GCC)
Greenway corridor construction projects include off-road pedestrian facilities, typically along lateral stream and drainage corridors, easements, and other open tracts of land. Adequate grade separated pedestrian crossings should be installed at all greenway corridor intersections.

Table 7.4 Greenway / Multi-Use Trail Project Recommendations

Project id (Ref. on Map 7.3)	Greenway Corridor Construction Location	From	To	Reason	Alignment Details
48	Skewarkee Canal	Gaylord Perry Park	River Landing Park	Connection between parks, nature walk	Suggested alignment along sewer easement
49	N. Haines St & Gaylord Perry	N. Haines Street	Gaylord Perry Park	To provide connection from residential area to Gaylord Perry Park	Suggested alignment between properties at cul-de-sac (Martin Co Parcels 0503868 & 0504523 (310 N. Haines St)
50	Lilley Property	East Park Road (terminus)	W. Church Street (terminus)	Connection to residential areas, Gaylord Perry Park	Suggested alignment across property (currently dirt)
51	Area behind Williamston High School	Garrett Rd	McCaskey Rd	Connection between schools, commercial, medical uses	Install multi-use greenway to provide a connection serving schools, hospital, residential areas
52	Garrett Road / Tyner Road	Washington Street	Prison Camp Road	Connection residential areas with commercial, schools, and parks	Install multi-use greenway along north side of street
53	Kekukee Park Road	W. Main Street	Prison Camp Road	Connection Martin CC, Parks, residential areas	Install multi-use greenway along east side of Kekukee Park Rd
54	Utility easement south of W. Main St.	Outterbridge Rd	Kehukee Park Rd	Connection to parks, Martin CC	Install multi-use greenway along utility easement
55	Utility easement south of W. Main St. and S. McCaskey Rd.	Kehukee Park Rd.	Washington Street	Connection Martin CC, Parks, residential and commercial areas	Install multi-use greenway along utility easement
56	Sewer utility easement east of E. Boulevard St.	Park Street	Willow Drive	Connection of residential and commercial areas	Install multi-use greenway along utility easement

Table 7.5: Potential Improvement Projects Prioritized									
Priority Ranking	**Project ID (ref. on map)**	**Priority Points**	**Type of Project**	**Road Class**	**At / On**	**From**	**To**	**Est. Length**	**Est. Cost**
1	37	26	New Sidewalk	NCDOT	E. Boulevard	Park Street	Willow Drive	3,300	$ 346,500
2	33	25	New Sidewalk	NCDOT	Washington St	Boulevard St.	Peele St	680	$ 71,400
3	31	25	New Sidewalk	NCDOT	W. Main Street	Brownlow St.	Roberson Street	4,600	$ 178,500
4	25	25	New Sidewalk	NCDOT	Washington Street	Garrett Road	Boulevard St	2,700	$ 283,500
5	7	24	Pedestrian Crossing	NCDOT	E. Boulevard St & Park St	N/A	N/A	N/A	$ 31,000
6	4	24	Pedestrian Crossing	NCDOT	Washington St & Boulevard St	N/A	N/A	N/A	$ 51,000
7	14	23	Pedestrian Crossing	NCDOT	Main St & Harrison St	N/A	N/A	N/A	$ 3,000
8	13	23	Pedestrian Crossing	NCDOT	Smithwick & Academy	N/A	N/A	N/A	$ 3,500
9	15	23	Pedestrian Crossing	NCDOT	Main St & Haughton St	N/A	N/A	N/A	$ 34,000
10	27	23	New Sidewalk	NCDOT	Godwin Drive	S. McCaskey Road	Garrett Rd	2,200	$ 231,000
11	29	23	New Sidewalk	NCDOT	W. Boulevard	McCaskey	Washington	3,500	$ 367,500

Table 7.5: Potential Improvement Projects Prioritized (cont.)									
Priority Ranking	**Project ID (ref. on map)**	**Priority Points**	**Type of Project**	**Road Class**	**At / On**	**From**	**To**	**Est. Length**	**Est. Cost**
12	11	22	Pedestrian Crossing	NCDOT	E. Main Street & Watts Street	N/A	N/A	N/A	$ 1,000
13	12	22	Pedestrian Crossing	Town	Main St & Smithwick	N/A	N/A	N/A	$ 3,000
14	6	22	Pedestrian Crossing	NCDOT	Washington St & Martin Luther King	N/A	N/A	N/A	$ 5,000
15	10	22	Pedestrian Crossing	NCDOT	E. Main St & N. Biggs St	N/A	N/A	N/A	$ 5,000
16	46	22	Sidewalk In-Fill	Town	Warren Street	Jamesville Rd.	S. Haughton St.	1,140	$ 119,700
17	28	22	New Sidewalk	NCDOT	S. McCaskey Road	Washington Street	W. Boulevard Street	3,340	$ 350,700
18	34	22	New Sidewalk	NCDOT	Washington Street	Boulevard St	Elm St	3,800	$ 399,000
19	54	22	Greenway / Multi-Use Trail	N/A	Utility easement south of W. Main St.	Outterbridge Rd	Kehukee Park Rd	3,350	$ 445,500
20	35	22	New Sidewalk	NCDOT	E. Boulevard	Washington St.	Park St.	5,200	$ 546,000
21	3	21	Pedestrian Crossing	NCDOT	Godwin Dr & McCaskey	N/A	N/A	N/A	$ 1,000
22	2	21	Pedestrian Crossing	NCDOT	Washington St & McCaskey Rd	N/A	N/A	N/A	$ 21,000

Table 7.5: Potential Improvement Projects Prioritized (cont.)									
Priority Ranking	**Project ID (ref. on map)**	**Priority Points**	**Type of Project**	**Road Class**	**At / On**	**From**	**To**	**Est. Length**	**Est. Cost**
23	44	21	Sidewalk In-Fill	NCDOT	E. Main Street	Ormond Dr.	Henderson St.	220	$ 23,100
24	45	21	Sidewalk In-Fill	NCDOT	Washington Street	Pearl St	Elm St	270	$ 28,350
25	47	21	Sidewalk In-Fill	NCDOT	N. Haughton Street	W. Grace St.	W. Franklin St.	320	$ 33,600
26	5	21	Pedestrian Crossing	NCDOT	E. Boulevard St & Jamesville Rd	N/A	N/A	N/A	$ 51,000
27	8	21	Pedestrian Crossing	NCDOT	E. Boulevard St & Gatling St	N/A	N/A	N/A	$ 51,000
28	36	21	New Sidewalk	NCDOT	Jamesville Road	Washington St	E. Boulevard St	1,520	$ 159,600
29	55	21	Greenway / Multi-Use Trail	N/A	Utility easement south of W. Main St. and S. McCaskey Rd.	Kehukee Park Rd.	Washington Street	10,200	$ 1,356,600
30	18	20	Pedestrian Crossing	NCDOT	W. Main St & Martin Luther King Jr	N/A	N/A	N/A	$ 3,500
31	16	20	Pedestrian Crossing	NCDOT	Main St & Elm St	N/A	N/A	N/A	$ 5,000
32	22	20	Pedestrian Crossing	NCDOT	McCaskey Rd & E. Boulevard St.	N/A	N/A	N/A	$ 21,000

Table 7.5: Potential Improvement Projects Prioritized (cont.)									
Priority Ranking	**Project ID (ref. on map)**	**Priority Points**	**Type of Project**	**Road Class**	**At / On**	**From**	**To**	**Est. Length**	**Est. Cost**
33	1	20	Pedestrian Crossing	NCDOT	Washington St & Garrett Rd	N/A	N/A	N/A	$ 51,000
34	42	20	New Sidewalk	NCDOT	W. Main St	McCaskey Rd	Kehukee Park Rd	6,200	$ 651,000
35	20	19	Pedestrian Crossing	NCDOT	W. Main St & Edgewood	N/A	N/A	N/A	$ 300
36	17	19	Pedestrian Crossing	NCDOT	N. Haughton Street & Pine Street	N/A	N/A	N/A	$ 24,000
37	32	19	New Sidewalk	Town	S. Edgewood Avenue	W. Main Street	West End Tennis Courts	500	$ 52,500
38	30	19	New Sidewalk	NCDOT	McCaskey Rd	Boulevard St	Main St	735	$ 77,175
39	26	19	New Sidewalk	Town	Brentway Avenue	S. McCaskey Rd	Garrett Rd.	2,050	$ 215,250
40	51	19	Greenway / Multi-Use Trail	N/A	Area behind Williamston High School	Garrett Rd	McCaskey Rd	3,600	$ 478,800
41	19	18	Pedestrian Crossing	NCDOT	W. Main Street & Roberson Street	N/A	N/A	N/A	$ 3,500
42	21	17	Pedestrian Crossing	NCDOT	W. Main St & McCaskey Rd	N/A	N/A	N/A	$ 1,000
43	52	17	Greenway / Multi-Use Trail	N/A	Garrett Road	Washington Street	Prison Camp Road	10,400	$ 1,383,200

Table 7.5: Potential Improvement Projects Prioritized (cont.)									
Priority Ranking	**Project ID (ref. on map)**	**Priority Points**	**Type of Project**	**Road Class**	**At / On**	**From**	**To**	**Est. Length**	**Est. Cost**
44	41	16	New Sidewalk	Town	Haines St	W. Church St	Street-end	1,370	$ 143,850
45	38	16	New Sidewalk	NCDOT	E. Main St	Boulevard St	River Rd	1,560	$ 163,800
46	39	16	New Sidewalk	NCDOT	River Road	Thelma St	River Landing	2,100	$ 220,500
47	9	15	Pedestrian Crossing	NCDOT	E. Boulevard St. & E. Main St/Willow Dr	N/A	N/A	N/A	$ 21,000
48	40	15	New Sidewalk	Town	W. Church Street	Haines St	Roberson St	1,160	$ 121,800
49	50	15	Greenway / Multi-Use Trail	N/A	Lilley Property	East Park Road (terminus)	W. Church Street (terminus)	1,280	$ 170,240
50	49	14	Greenway / Multi-Use Trail	N/A	N. Haines St & Gaylord Perry	N. Haines Street	Gaylord Perry Park	220	$ 29,260
51	43	14	New Sidewalk	NCDOT	Prison Camp Road	W. Main St	Kekukee Park Road	4,360	$ 457,800
52	56	14	Greenway / Multi-Use Trail	N/A	Sewer utility easement east of E. Boulevard St.	Park Street	Willaw Drive	3,680	$ 490,000
53	53	14	Greenway / Multi-Use Trail	N/A	Kekukee Park Road	W. Main Street	Prison Camp Road	4,120	$ 547,960
54	48	12	Greenway / Multi-Use Trail	N/A	Skewarkee Canal	Gaylord Perry Park	River Landing Park	10,100	$ 1,343,000

Table 7.5: Potential Improvement Projects Prioritized (cont.)									
Priority Ranking	**Project ID (ref. on map)**	**Priority Points**	**Type of Project**	**Road Class**	**At / On**	**From**	**To**	**Est. Length**	**Est. Cost**
55	23	10	Pedestrian Crossing	NCDOT	W. Boulevard/W. Main & Prison Camp Rd	N/A	N/A	N/A	$ 1,000
56	24	8	Pedestrian Crossing	NCDOT	Prison Camp Rd & Kehukee Park Rd	N/A	N/A	N/A	$ 1,000

Short-Term Project Recommendations

Short-term opportunities are those that may be completed or implemented in a timeframe of zero to five years (0-5 yrs.). The following projects should be considered in the short-term of implementation of the Pedestrian Plan (Table 7.6).

Table 7.6: Short-Term Improvement Projects

Priority Ranking	Project ID (ref. on map)	Type of Project	Road Class	At / On	From	To	Est. Length	Est. Cost
3	6	Pedestrian Crossing	NCDOT	Washington St & Martin Luther King	N/A	N/A	N/A	$ 1,000
4	10	Pedestrian Crossing	NCDOT	E. Main St & N. Biggs St	N/A	N/A	N/A	$ 2,000
5	13	Pedestrian Crossing	NCDOT	Smithwick & Academy	N/A	N/A	N/A	$ 3,500
6	7	Pedestrian Crossing	NCDOT	E. Boulevard St & Park St	N/A	N/A	N/A	$ 31,000
12	14	Pedestrian Crossing	NCDOT	Main St & Harrison St	N/A	N/A	N/A	$ 3,000
13	15	Pedestrian Crossing	NCDOT	Main St & Haughton St	N/A	N/A	N/A	$ 34,000
17	3	Pedestrian Crossing	NCDOT	Godwin Dr & McCaskey	N/A	N/A	N/A	$ 1,000
18	11	Pedestrian Crossing	NCDOT	E. Main Street & Watts Street	N/A	N/A	N/A	$ 1,000

Table 7.6: Short-Term Improvement Projects (cont.)								
Priority Ranking	**Project ID (ref. on map)**	**Type of Project**	**Road Class**	**At / On**	**From**	**To**	**Est. Length**	**Est. Cost**
19	12	Pedestrian Crossing	Town	Main St & Smithwick	N/A	N/A	N/A	$ 3,000
20	16	Pedestrian Crossing	NCDOT	Main St & Elm St	N/A	N/A	N/A	$ 3,000
21	5	Pedestrian Crossing	NCDOT	E. Boulevard St & Jamesville Rd	N/A	N/A	N/A	$ 31,000
27	18	Pedestrian Crossing	NCDOT	W. Main St & Martin Luther King Jr	N/A	N/A	N/A	$ 3,500
28	2	Pedestrian Crossing	NCDOT	Washington St & McCaskey Rd	N/A	N/A	N/A	$ 21,000
29	22	Pedestrian Crossing	NCDOT	McCaskey Rd & E. Boulevard St.	N/A	N/A	N/A	$ 21,000
30	44	Sidewalk In-Fill	NCDOT	E. Main Street	Ormond Dr.	Henderson St.	220	$ 23,100
31	45	Sidewalk In-Fill	NCDOT	Washington Street	Pearl St	Elm St	270	$ 28,350
32	47	Sidewalk In-Fill	NCDOT	N. Haughton Street	W. Grace St.	W. Franklin St.	320	$ 33,600

Table 7.6: Short-Term Improvement Projects (cont.)								
Priority Ranking	**Project ID (ref. on map)**	**Type of Project**	**Road Class**	**At / On**	**From**	**To**	**Est. Length**	**Est. Cost**
38	20	Pedestrian Crossing	NCDOT	W. Main St & Edgewood	N/A	N/A	N/A	$ 300
39	19	Pedestrian Crossing	NCDOT	W. Main Street & Roberson Street	N/A	N/A	N/A	$ 3,500
40	17	Pedestrian Crossing	NCDOT	N. Haughton Street & Pine Street	N/A	N/A	N/A	$ 24,000
42	21	Pedestrian Crossing	NCDOT	W. Main St & McCaskey Rd	N/A	N/A	N/A	$ 1,000
47	9	Pedestrian Crossing	NCDOT	E. Boulevard St. & E. Main St/Willow Dr	N/A	N/A	N/A	$ 21,000
50	49	Greenway / Multi-Use Trail	N/A	N. Haines St & Gaylord Perry	N. Haines Street	Gaylord Perry Park	220	$ 29,260
55	23	Pedestrian Crossing	NCDOT	W. Boulevard/W. Main & Prison Camp Rd	N/A	N/A	N/A	$ 1,000
56	24	Pedestrian Crossing	NCDOT	Prison Camp Rd & Kehukee Park Rd	N/A	N/A	N/A	$ 1,000

Mid-Term Project Recommendations

Mid-term opportunities are those that may be completed or implemented in a timeframe of six to ten years (6-10 yrs.). The following projects should be considered in the mid-term of implementation of the Pedestrian Plan (Table 7.7).

Table 7.7: Mid-Term Improvement Projects

Priority Ranking	Project ID (ref. on map)	Type of Project	Road Class	At / On	From	To	Est. Length	Est. Cost
7	27	New Sidewalk	NCDOT	Godwin Drive	S. McCaskey Road	Garrett Rd	2,200	$ 231,000
8	34	New Sidewalk	NCDOT	Washington Street	Boulevard St	Elm St	2,600	$ 273,000
14	33	New Sidewalk	NCDOT	Washington St	Boulevard St.	Peele St	680	$ 71,400
15	25	New Sidewalk	NCDOT	Washington Street	Garrett Road	Boulevard St	2,700	$ 283,500
22	4	Pedestrian Crossing	NCDOT	Washington St & Boulevard St	N/A	N/A	N/A	$ 51,000
23	8	Pedestrian Crossing	NCDOT	E. Boulevard St & Gatling St	N/A	N/A	N/A	$ 51,000
24	46	Sidewalk In-Fill	Town	Warren Street	Jamesville Rd.	S. Haughton St.	1,140	$ 119,700
25	36	New Sidewalk	NCDOT	Jamesville Road	Washington St	E. Boulevard St	1,520	$ 159,600

Table 7.7: Mid-Term Improvement Projects (cont.)								
Priority Ranking	**Project ID (ref. on map)**	**Type of Project**	**Road Class**	**At / On**	**From**	**To**	**Est. Length**	**Est. Cost**
33	1	Pedestrian Crossing	NCDOT	Washington St & Garrett Rd	N/A	N/A	N/A	$ 51,000
34	32	New Sidewalk	Town	S. Edgewood Avenue	W. Main Street	West End Tennis Courts	500	$ 52,500
35	26	New Sidewalk	Town	Brentway Avenue	S. McCaskey Rd	Garrett Rd.	2,050	$ 215,250
36	31	New Sidewalk	NCDOT	W. Main Street	Brownlow St.	Roberson Street	1,700	$ 178,500
41	30	New Sidewalk	NCDOT	McCaskey Rd	Boulevard St	Main St	735	$ 77,175
44	41	New Sidewalk	Town	Haines St	W. Church St	Street-end	1,370	$ 143,850
45	38	New Sidewalk	NCDOT	E. Main St	Boulevard St	River Rd	1,560	$ 163,800
46	39	New Sidewalk	NCDOT	River Road	Thelma St	River Landing	2,100	$ 220,500
48	40	New Sidewalk	Town	W. Church Street	Haines St	Roberson St	1,160	$ 121,800
49	50	Greenway / Multi-Use Trail	N/A	Lilley Property	East Park Road (terminus)	W. Church Street (terminus)	1,280	$ 170,240

Long-Term Project Recommendations

Long-term opportunities are those that may be completed or implemented in a timeframe beyond ten years. The following projects should be considered in the long-term of implementation of the Pedestrian Plan (Table 7.8).

Table 7.8: Long-Term Improvement Projects

Priority Ranking	Project ID (ref. on map)	Type of Project	Road Class	At / On	From	To	Est. Length	Est. Cost
1	37	New Sidewalk	NCDOT	E. Boulevard	Park Street	Willow Drive	3,300	$ 346,500
2	28	New Sidewalk	NCDOT	S. McCaskey Road	Washington Street	W. Boulevard Street	3,340	$ 350,700
9	29	New Sidewalk	NCDOT	W. Boulevard	McCaskey	Washington	3,450	$ 362,500
10	54	Greenway / Multi-Use Trail	N/A	Utility easement south of W. Main St.	Outterbridge Rd	Kehukee Park Rd	3,350	$ 445,500
11	35	New Sidewalk	NCDOT	E. Boulevard	Washington St.	Park St.	5,000	$ 525,000
16	55	Greenway / Multi-Use Trail	N/A	Utility easement south of W. Main St. and S. McCaskey Rd.	Kehukee Park Rd.	Washington Street	10,200	$ 1,356,600
26	42	New Sidewalk	NCDOT	W. Main St	McCaskey Rd	Kehukee Park Rd	6,200	$ 651,000

Table 7.8: Long-Term Improvement Projects (cont.)								
Priority Ranking	**Project ID (ref. on map)**	**Type of Project**	**Road Class**	**At / On**	**From**	**To**	**Est. Length**	**Est. Cost**
37	51	Greenway / Multi-Use Trail	N/A	Area behind Williamston High School	Garrett Rd	McCaskey Rd	3,600	$ 478,800
43	52	Greenway / Multi-Use Trail	N/A	Garrett Road	Washington Street	Prison Camp Road	10,400	$ 1,383,200
51	43	New Sidewalk	NCDOT	Prison Camp Road	W. Main St	Kekukee Park Road	4,360	$ 457,800
52	56	Greenway / Multi-Use Trail	N/A	Sewer utility easement east of E. Boulevard St.	Park Street	Willaw Drive	3,680	$ 490,000
53	53	Greenway / Multi-Use Trail	N/A	Kekukee Park Road	W. Main Street	Prison Camp Road	4,120	$ 547,960
54	48	Greenway / Multi-Use Trail	N/A	Skewarkee Canal	Gaylord Perry Park	River Landing Park	10,100	$ 1,343,000

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Section 8: Plan Implementation

The Town of Williamston is responsible for monitoring and evaluating the implementation of the Comprehensive Pedestrian Plan. Upon Plan completion, and distribution, a coordinator should be appointed who will be responsible for stimulating, coordinating and managing the implementation of the Plan. Development of a comprehensive pedestrian network is a continuing process and depends on the active involvement of the Town in implementing, monitoring, evaluating and updating the Plan. It is important to realize that this on-going process does not end once the initial Plan has been adopted.

The Town's commitment to implementing this Plan and accomplishing the recommended pedestrian projects, programs and policies will improve Williamston's walkability; therefore, Williamston should create a goal to complete a minimal number of projects each year (i.e. at least three short-term construction projects per year); in addition to coordinating the design and construction of mid-term and long-term projects. In addition, Williamston should adopt development regulations that require the dedication of land for multi-use trails along identified greenway corridors. Williamston should also develop a process to acquire any additional easements and right-of-way necessary along these greenway corridors, so that the multi-use trails can be developed as funds and opportunities become available.

An annual assessment of the pedestrian system should be performed to ensure that it stays up-to-date, based on needs. This should be accomplished in conjunction with planning for the CIP each year. The Pedestrian Plan should be updated at the same time to keep the document fresh by removing (or acknowledging) completed projects.

The recommended policy/ordinance amendments and pedestrian programs listed in Section 6 are low cost measures, which should be implemented as soon as possible or within the next five years and continued into the future; in addition, Williamston should implement additional programs identified in Section 6 as needed. These policies and programs will ensure a comprehensive pedestrian system; therefore, they should be evaluated annually and new policies and programs should be implemented as needed.

COORDINATOR

The implementation of this Plan will be best achieved with oversight by a designated Coordinator, a selected Town staff member, and other local and state of officials whose agencies have been designated as having the responsibility for implementing specific recommendations specified in this Plan. To integrate pedestrian activities into work plans, the Coordinator should contact the local agency responsible for accomplishing the specific work to ensure that the issue is addressed by that agency; this includes ensuring Plan recommendations

and potential projects are placed in the RPO thoroughfare plan updates and on the NCDOT TIP.

The Coordinator is encouraged to develop a pedestrian committee to assist in overseeing the implementation of this Plan. The committee should be made up of stakeholders and neighborhood representatives with the interest, knowledge and ability to ensure the proper steps are taken to find funding, change or create public policy, re-rank projects and identify new projects as necessary, ensure implementation of programs, carry out policy changes including developing pedestrian-friendly development guidelines and encourage the community to embrace foot travel. The committee is strongly encouraged to work with other community organizations and agencies to implement the various programs recommended in this Plan.

FUNDING

Williamston should allocate funds by line item in the fiscal budget to ensure completion of pedestrian infrastructure. Williamston should also utilize its Capital Improvement Plan (CIP) for budgeting pedestrian-related projects, since most projects will usually be funded locally. The CIP will list the specific and general projects that will be funded over a five or ten-year period in the community. The specific projects and their expected costs will be listed for the next year and more general projects and cost estimates will be listed for future years. The CIP contain a prioritized list of what Williamston wants to accomplish in regards to pedestrian facilities and typically provides a good indication of what the Town is planning to build in the future.

Projects involving NCDOT roads should be recommended by the RPO for placement on NCDOT's TIP, especially sidewalk and pedestrian crossing projects incidental to road construction projects. Sidewalk and pedestrian crossing projects should also be integrated within other Town projects (water or sewer line, park improvements, etc.) to save costs and roadway disturbance. In addition, Williamston should look to combine several small projects into one big one to achieve cost-savings since a unit bid price is generally reduced as unit quantities increase.

Other activities may require time that the Coordinator may not have available. The use of student interns from local universities or community colleges should be considered to assist with plan implementation.

Finally, Williamston should take an active role in acquiring State, Federal, and private monies available for pedestrian-related facilities. These funds are very competitive thus continuous planning, budgeting and partnerships with local agencies is required to ensure a successful application. Refer to Appendix E for a complete list of funding sources.

PARTNERSHIPS

Future coordination among all town departments, local government agencies and private agencies seeking funding to build pedestrian facilities is extremely important. Not only does it keep all parties informed, it also reduces duplicate applications for the same project to funding sources. Nothing speaks louder to state and federal funding sources that there is no communication or cooperative planning than duplicate applications from various parties for the same project. Potential partners for implementation of Williamston Pedestrian Plan are listed in the text box to the right.

Potential Partners for Plan Implementation:

- Martin County Schools
- Martin County Transit
- Martin County Department of Aging
- Martin Community College
- Martin Memorial Health Systems
- Martin County Travel & Tourism
- Martin County Chamber of Commerce
- Martin County Economic Development Corporation
- Peanut Belt Rural Planning Organization (RPO)
- Roanoke River Partners
- Active Living by Design
- Williamston Planning Department
- Williamston Police Department
- Williamston Parks & Recreation Department
- Williamston Public Works Department
- Bob Martin Eastern Agricultural Center
- Local Realtors
- Local Developers
- Local Business Owners

MONITORING

Monitoring is an important component of the implementation process. A tracking and reporting system is essential to monitor the progress of the recommendations. To assist with this process, the Coordinator should designate an individual from private and public agency and/or department (NCDOT, CSX Railroad, Planning, Recreation, etc.) to periodically report on the status of each recommendation. This information, as well as the annual progress report should be shared with appropriate individuals to keep them informed and involved in the process. The Coordinator can also monitor progress through phone calls, visits, and meetings.

Those who have implementation responsibilities can provide the Coordinator with meeting agenda, attendance sheets, correspondence, legislation, minutes of public meetings, telephone records, and grant proposals as the basis for their report to a Coordinator.

ANNUAL REVIEW / PROGRESS REPORT / REVISIONS

Williamston's Town Administrator should direct the Coordinator and Pedestrian Committee to take responsibility for conducting an annual review. The annual review should ensure the Town Council receives an annual report and/or presentation on the progress of Plan implementation. The report would include a status report on the implementation of recommended projects, programs and policies and would recommend, as appropriate, any

necessary revisions or amendments to the Plan. For instance, this may include different treatment options for a particular recommended intersection improvement, a change in Federal and State statutes or regulations, identification of additional projects, moving a listed potential project to the recommended project list or a change in pedestrian movement. This process will help ensure that local walkability efforts include the latest and most effective projects.

Appendix A: Public Involvement Strategy

A.1 Strategy Overview

The goal of the citizen participation strategy was to encourage active community participation during the Comprehensive Plan development. The public involvement strategy for the Comprehensive Pedestrian Plan included extensive public participation, including a Steering Committee comprised of local stakeholders, a survey, and two public open houses. The strategy was designed to inform, educate, and engage the public in the development of this Comprehensive Pedestrian Plan.

A.2 STEERING COMMITTEE

An 11-member Steering Committee was created with stakeholders representing a variety of groups in Williamston. Four Steering Committee meetings were held throughout the project development.

The first Steering Committee meeting was held on March 22, 2011 from 4:00 – 5:30 p.m. During this meeting key project personnel met and became familiar with the project. The Project Team explained the need and benefits of a Comprehensive Pedestrian Plan and the components of a walkable community. This meeting also included a brief walking tour to identify components of a pedestrian friendly environment, as well as a SWOT (Strengths, Weaknesses, Opportunities, and Threats) Analysis to determine specific needs and identify foreseeable issues.

The second meeting was held on May 3, 2011 from 4:00 – 5:30 p.m. During this meeting, findings from the previous meeting and existing pedestrian conditions assessments were reported and discussed. The Project Team reviewed existing facilities, programs, and policies currently in place. An informal design charrette to identify sites to be linked and potential corridors was conducted. Plans for Public Open House #1 were also finalized.

A third meeting was held June 28, 2011 from 4:00 – 5:30 p.m. At this meeting, preliminary recommendations were presented, in addition to public comments received and field observations. The Steering Committee members were involved in identifying criteria for prioritizing the list of preliminary recommendations.

The final Steering Committee meeting was held on August 23, 2011 from 4:00 – 5:30 p.m. The Project Team presented the draft Comprehensive Pedestrian Plan and received comments from members that were applied to the development of the Final Plan. This meeting provided the Town staff and Steering Committee members with an opportunity to discuss the steps for implementation following plan adoption by the Town's Board of Commissioners.

MEETING AGENDA

DATE: Tuesday, March 22, 2011 at 4:00 p.m.

LOCATION: Assembly Room
Town Hall (2nd Floor)
102 E. Main Street, Williamston

SUBJECT: Town of Williamston Comprehensive Pedestrian Plan
Steering Committee Meeting #1

At this initial meeting of the Steering Committee, the Project Team will provide an overview of the Williamston Comprehensive Pedestrian Plan process and the purpose(s) of the Pedestrian Plan. This meeting will include a brief walking tour to identify components of a pedestrian friendly environment. Please bring your calendar so we can schedule the next meeting.

This meeting will begin promptly at 4:00 and will conclude by 5:30.

Agenda:

I. **Introductions** – Brent Kanipe & Mark Garner

II. **Project overview** – Kelly Lasky

III. **Purposes of a Pedestrian Plan** – Ben Williams

IV. **Downtown Williamston Walking Tour** – All
(please wear comfortable shoes for walking)

V. **Next Steps** – Kelly Lasky

VI. **Conclusion / Questions** – Kelly Lasky

We thank you for your time and assistance in improving Williamston's walkability.

Additional project information can be found at: www.WalkWilliamston.com

Division of Bicycle & Pedestrian Transportation

Rivers & Associates, Inc. Since 1918

WILLIAMSTON PEDESTRIAN PLAN
Steering Committee Meeting #1
March 22, 2011 4:00 – 5:30 PM
Assembly Room (2nd Floor of Town Hall)
201 Main Street.

	Mr. Mrs. Ms. Dr.	Name	Organization / Company	Mailing Address	Phone	Email
1		George B White	[illegible]	205 Wilson	252-799-7291	[illegible]@yahoo.com
2		[illegible] Keel	Martin Co. Transit	Po Box 668, Williamston	252-217-5519	bkeel@martincountyncgov.com
3		Alice Howard		PO Box 1431 Williamston NC	252-809-0749	No
4		Bill Smith	Retired	100 W. Church St Williamston NC	252-794-5442	wgsmith85@gmail.com
5		Bill Webb	SECU	410 N Smithwick St Williamston NC	252 802 1274	[illegible]@rocketmail.com
6		Kerry Spivey	Williamston	PO Box 506, Williamston, NC 27892	252-752-1024	kerrys@suddenlinkmail.com
7		Allen Overby	Williamston	PO Box 506	252-792-7042	aoverby@suddenlinkmail.com
8		Phillip Martin	Williamston	109 E Main St	252-792-5142	pmartin.planner@yahoo.com.
9		Brent Kanipe	Williamston	P.O. Box 506	792-5142	rbkanipe@yahoo.com
10		Kelly Lasky	Rivers & Associates	PO Box 929 Greenville 27835	252.752.4135	klasky@riversandassociates.com
11		Ben Williams	" "	" "	" "	bwilliams@riversandassociates.com
12		Helen Chaney	NCDOT Div. of Bike/Ped	1552 Mail Service Center Raleigh NC 27605	919.807.0780	hmchaney@ncdot.gov
13						
14						
15						

TOWN OF WILLIAMSTON
NORTH CAROLINA

102 E. Main Street
PO Box 506
Williamston, NC 27892

REVISED
2:25 pm, 3/29/11

Williamston Comprehensive Pedestrian Plan
Steering Committee Meeting #1
March 22, 2011
Minutes

Welcome & Overview

At 4:00 p.m. the Williamston Planning Director, Brent Kanipe, welcomed the members of the Pedestrian Steering Committee to their first meeting and gave a brief overview of the project including the selection process which lead to hiring Rivers & Associates as the consultant for the plan. The project team from Rivers & Associates was introduced, which was comprised of Ms. Kelly Lasky, Mr. Mark Garner and Mr. Ben Williams. Ms. Helen Chaney from NCDOT was introduced and was present to serve as the grant administrator during the Pedestrian project for Williamston. After the brief welcome the committee introduced themselves and why they were interested in becoming a part of the Comprehensive Pedestrian Plan project in Williamston.

Project Overview & Role of Steering Committee

After the introductions, Ms. Lasky provided the group an overview to include the project scope and purpose, project schedule, and role of steering committee member.

Under the project scope, Ms. Chaney explained that the plan would be developed under the guideline developed by an NCDOT template that included the following five steps Engineering, Education, Encouragement, Enforcement & Evaluation.

Second under project overview was the schedule/time table. Ms. Lasky informed the committee that there were four steering committee meetings scheduled and that all of them were to take place from 4:00 – 5:00 P.M. in the Town Hall Assembly Room and that the next meeting was to take place on April 26th. Ms. Lasky then provided information on the open houses that are to take place in May and August 2010 and that specific times were not presently available.

The final component was the role of the Steering Committee Member. Ms. Lasky emphasized that each member was to represent the entire community of Williamston and not just one group or idea. Other focus areas included providing information, priorities, feedback and opinions on the plans and ideas brought forth in discussion and design phases of the Pedestrian plan.

Benefits of a Comprehensive Pedestrian Plan

Mr. Williams discussed how the development of a Comprehensive Pedestrian Plan will support the Town's ongoing efforts to maintain development, while making it more convenient and safer for people who walk. The Town of Williamston desires to improve transportation throughout the Town in order to link residential neighborhoods to parks & recreation facilities, schools, health care facilities and shopping/retail areas. The Town will use the Pedestrian Plan as a guide for developing a pedestrian-friendly community and will assist when making budget decisions and applying for grant funds from regional, state, federal, and private funding sources.

Mr. Williams provided a discussion on the benefits of walking, which included lower risk of heart disease, stroke, diabetes and general overall exercise.

Downtown Walking Tour

The Steering Committee was divided into two groups before Ms. Lasky and Mr. Williams led the Committee on a brief walking tour. Each group took a different route within a few blocks of Town Hall. The consultants pointed out pedestrian facilities and strengths, weaknesses, opportunities and threats to look out for.

Following the walking tour, the Steering Committee regrouped at Town Hall to discuss its observations:

- Good separation of on-street parking, streetscape and sidewalks
- Presence of good sidewalk network
- Good visual separation
- Charming downtown
- Lack of crosswalks
- Crosswalks not marked
- Lack of curb ramps
- Need more signage (pedestrian yield)
- Unlevel sections of sidewalks
- Existing flower boxes on Main Street are well done
- Need clearly marked crosswalks (reflectors, bright yellow, striped)
- Uneven surfaces for handicap/stroller access
- Lack of pedestrian level lighting
- Obstacles/Impediments (utilities, trash cans)
- Handicap ramps do not align
- Vegetation overgrowth reduces sidewalk width
- Motorist behavior

S.W.O.T. Analysis

Members were asked to participate in another exercise of identifying strengths, weaknesses, threats and opportunities facing cyclists in Williamston. The committee supplied various opinions of these four categories with some pertaining to more than one category. This discussion provided a good overview on which areas the plan can build upon and which will have obstacles that will need to be overcome in order for the plan to be successful. Results on these exercise is as follows:

Strengths:	*Weaknesses:*	*Threats:*	*Opportunities:*
• Flat terrain • Low speed limits areas • Low traffic areas • Favorable climate • Attractive Land-Uses • Community support for bicycling and walking • Multi-Use Downtown Area • Recreation Walking • Transportation Walking • Good existing sidewalk network	• Lack of curb ramps • Lack of Facilities • Traffic Patterns • Lack of Educational Opportunities • Separation of destinations to neighborhoods	• Uneducated motorists and pedestrians • Unsafe Feeling • Big Trucks • Uneven Surfaces • Lack of Connectivity • Loss of "area" for facilities • Tree roots uplifting sidwaks	• Provide facilities, programs, policies • Pedestrian donations • Funding alternatives • Local events • Education • Safe Routes to Schools • Rails-to-Trails (conversion of abandoned RR) • Multi-use trails • New Development • Lighting improvements

Steering Committee's Next Steps

As to what the steering committee could be doing to stay active until the April meeting, Ms. Lasky asked them to take a walk around Williamston and start thinking with a "pedestrian state of mind." Ms. Lasky and Mr. Williams also asked that each member take an online survey located on the town's website www.WalkWilliamston.com and encourage others to do the same. Ms. Lasky then passed out Pedestrian business cards and asked that each member hand them out to a person or group that they knew that walked in town and would become active in the project.

Looking towards the next meeting, Mr. Williams provided a cursory review of the topics to be discussed in April. Those items included a presentation of existing conditions, constraints, policies and programs that are currently in place in Williamston. Ms. Lasky also reminded the members that there would be an informal design exercise identifying potential Pedestrian corridors, improvements and infrastructure.

Conclusion

At the conclusion of the meeting, Rivers & Associates took questions regarding future funding and plans. Ms. Chaney spoke to the future funding that in order to receive funding from NCDOT for implementation that we first had to have a plan however, that did not preclude private investment or local funding sources.

Ms. Lasky thanked everyone for their attendance and involvement and reminded them about the April 26th meeting at 4:00 PM and that several days prior each steering committee member would be receiving a project schedule and an agenda.

Ms. Lasky and Mr. Williams thanked everyone for their participation.

The Steering Committee then recessed at 5:30 PM.

Minutes prepared by:
Kelly Lasky, Planner, Rivers & Associates, Inc

Reviewed by:
Brent Kanipe, Town Planning Director, Williamston

How Walkable is Williamston? Take a Walk and Decide For Yourself!
Walkability Checklist

Location of walk _____

_____

Rating Scale: 1 awful · 2 many problems · 3 some problems · 4 good · 5 very good · 6 excellent

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

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

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

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

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

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

1. _____
2. _____
3. _____
4. _____
5. _____

Total _____

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

Optional Information:

Name_____

Phone_____

Email_____

This checklist is adapted from www.walkinginfo.org Pedestrian and Bicycle Information Center.

MEETING AGENDA

DATE: Tuesday, May 3, 2011 at 4:00 p.m.

LOCATION: Assembly Room
Town Hall (2nd Floor)
102 E. Main Street, Williamston

SUBJECT: Town of Williamston Comprehensive Pedestrian Plan
Steering Committee Meeting #2

At this meeting, findings from previous meeting and existing pedestrian facilities will be reported and an informal design charrette will be conducted to identify goals, mission of plan, and potential corridors for connectivity.

This meeting will begin promptly at 4:00 and will conclude by 5:30.

AGENDA

I. **Introductions & Recap**

II. **Review of Existing Facilities, Programs, Policies**

III. **Informal Design Charrette**

IV. **Next Steps**

V. **Conclusion / Questions**

We thank you for your time and assistance in improving Williamston's walkability.

Additional project information can be found at: www.WalkWilliamston.com

Williamston NORTH CAROLINA

Division of Bicycle & Pedestrian Transportation

Rivers & Associates, Inc.

TOWN OF WILLIAMSTON
NORTH CAROLINA

102 E. Main Street
PO Box 506
Williamston, NC 27892

Williamston Comprehensive Pedestrian Plan
Steering Committee Meeting #2
May 13, 2011
Minutes

Welcome & Overview

At 4:00 p.m. the Williamston Planning Director, Brent Kanipe, welcomed the members of the Pedestrian Steering Committee to their second meeting. After the brief welcome, Ms. Lasky welcomed the members and began the meeting.

Recap of Steering Committee Meeting #1

After the welcome, Ms. Lasky provided the group a recap from the March meeting, which included a review of Pedestrian Basics, an exercise, including a walking tour, to identify pedestrian destinations, attractions and generators in Williamston, and a SWOT Analysis (Strengths, Weaknesses, Opportunities, Threats) listing items that pedestrians may encounter while walking in Williamston.

Existing Pedestrian Inventory

After the reap, Ms. Lasky gave a presentation and an overview of the Existing Pedestrian Inventory in Williamston. The following items were presented as part of the inventory:

1. Existing Rail-Trail Route
2. Sidewalks and Crosswalks
3. Destination Points

In conclusion of the existing inventory, Ms. Lasky provided statistical data regarding the number of pedestrian/vehicle reported crashes in Williamston from 2003 to 2010 as per the NCDOT's crash database and the Williamston's police records.

Existing Policies, Plans & Programs

After the review of the inventory, Ms. Lasky gave a brief overview of the existing policies, plans and programs that the Town had in place. She mentioned that the Town may want to consider expanding some of their existing programs and all members were in agreement.

Informal Design Charrette

Following the discussion on existing conditions, policies, and programs, the committee was led in a design activity by Mr. Ben Williams and Ms. Lasky. Two groups were formed and placed at different tables and were asked to review the existing map of Williamston and identify potential corridors, areas that need infrastructure improvement and locations for new crosswalks. Once completed with the exercise, the groups presented their concept of ideas for the community.

Steering Committee's Next Steps and Conclusion

MEETING AGENDA

DATE: Tuesday, June 28, 2011 at 4:00 p.m.

LOCATION: Assembly Room
Town Hall (2nd Floor)
102 E. Main Street, Williamston

SUBJECT: Town of Williamston Comprehensive Pedestrian Plan
Steering Committee Meeting #3

At this meeting, preliminary recommendations will be presented, in addition to public comments received to date and field observations. Steering Committee members will be identifying criteria to assist in prioritizing the list of preliminary recommendations; therefore, your attendance is important.

This meeting will begin promptly at 4:00 and will conclude by 5:30.

AGENDA

I. Introductions & Recap

II. Review of Planning Process

III. Preliminary Recommendations

IV. Priority Criteria Exercise

V. Next Steps

VI. Conclusion / Questions

We thank you for your time and assistance in improving Williamston's walkability.

Additional project information can be found at: www.WalkWilliamston.com

Williamston NORTH CAROLINA

Division of Bicycle & Pedestrian Transportation

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

Rivers & Associates, Inc. Since 1918

TOWN OF WILLIAMSTON
NORTH CAROLINA

102 E. Main Street
PO Box 506
Williamston, NC 27892

Williamston Comprehensive Pedestrian Plan
Steering Committee Meeting #3
June 28, 2011
Minutes

Welcome & Overview

At 4:00 p.m. the Williamston Planning Director, Brent Kanipe, welcomed the members of the Pedestrian Steering Committee to their third meeting. After the brief welcome, Ms. Lasky welcomed the members and began the meeting.

Recap of Steering Committee Meeting #2

After the welcome, Ms. Lasky provided the group a recap from the May meeting, which included a review of the results of public involvement survey and field analysis. Ms. Lasky summarized the planning process to date.

Preliminary Recommendations

After the review of the planning process and inventory analysis, Ms. Lasky gave a brief overview of the preliminary recommendations for programs, policies, and projects. A list of preliminary recommendations for the Pedestrian Plan was reviewed by members. The projects were based on input from Steering Committee members, the public survey, pedestrian crash data, the field inventory and improved connectivity for pedestrians.

Priority Criteria Exercise

The next agenda item had each committee member place dots next to project characteristics to rank them in priority that they thought should be accomplished for the plan.

Steering Committee's Next Steps and Conclusion

Ms. Lasky thanked everyone for their attendance and involvement and reminded them about the August 23 meeting at 4:00 PM and that several days prior each steering committee member would be receiving a project schedule and an agenda.

The Steering Committee then recessed at 5:00 PM.

Minutes prepared by:
Kelly Lasky, Planner, Rivers & Associates, Inc

Reviewed by:
Brent Kanipe, Town Planning Director, Williamston

MEETING AGENDA

DATE: Tuesday, August 23, 2011 at 4:00 p.m.

LOCATION: Assembly Room
Town Hall (2nd Floor)
102 E. Main Street, Williamston

SUBJECT: Town of Williamston Comprehensive Pedestrian Plan
Steering Committee Meeting #4

This meeting will begin promptly at 4:00 and will conclude by 5:30.

AGENDA

I. **Introductions & Recap**

II. **Review of Draft Report**

III. **Review of Recommendations**

IV. **Next Steps**

V. **Conclusion / Questions**

We thank you for your time and assistance in improving Williamston's walkability.

Additional project information can be found at: www.WalkWilliamston.com

Williamston NORTH CAROLINA

Division of Bicycle & Pedestrian Transportation

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

Rivers & Associates, Inc. Since 1918

A.3 PUBLIC SURVEY

An online survey was developed to gather input from the community. The questionnaire was available from March 20, 2011 to June 7, 2011 (nearly three months). Hard copies of the survey were available at Town Hall and public buildings. In addition to a notice in the local newspaper, Steering Committee members and Town staff notified the public of the survey through the distribution of marketing cards. The Consultant received eighty-five (85) surveys for analysis. Results of the survey provided the Town, Steering Committee members, and the Consultant with information regarding pedestrian preferences, constraints, opportunities, and areas for improvement. Highlights of the survey are discussed in Section 2 of the Plan and complete results are illustrated graphically on the following pages.

Walk Williamston

SurveyMonkey

1. How much time do you generally spend walking each day in Williamston? (Check one)

	Response Percent	Response Count
Not at all → Skip to Q7	18.3%	13
Less than 10 minutes	**32.4%**	**23**
11 - 20 minutes	14.1%	10
21 - 60 minutes	29.6%	21
More than one hour daily	5.6%	4
	answered question	**71**
	skipped question	**0**

2. How far do you generally walk each day in Williamston? (Check one)

	Response Percent	Response Count
Less than 1/4 mile	**34.0%**	**18**
1/4 mile to 1/2 mile	20.8%	11
1/2 mile to 1 mile	24.5%	13
More than 1 mile	20.8%	11
	answered question	**53**
	skipped question	**18**

3. How many days per week do you walk at least 10 continuous minutes in Williamston? (Check one)

	Response Percent	Response Count
7 days	7.5%	4
6 days	3.8%	2
5 days	18.9%	10
4 days	9.4%	5
3 days	**26.4%**	**14**
2 days	7.5%	4
1 day	9.4%	5
0 days	17.0%	9
	answered question	**53**
	skipped question	**18**

4. Where do you walk to in Williamston? (Check all that apply)

	Response Percent	Response Count
Work	26.4%	14
Park	15.1%	8
School	7.5%	4
Neighbor's house	18.9%	10
Post Office	24.5%	13
Church	15.1%	8
Library	15.1%	8
Store	18.9%	10
No destination / For pleasure	**54.7%**	**29**
Parking lot/car	28.3%	15
Other (please specify)	3.8%	2
	answered question	**53**
	skipped question	**18**

5. Why do you walk? (Check all that apply)

	Response Percent	Response Count
Exercise/Health	64.2%	34
Enjoy nature	32.1%	17
Walking a pet	17.0%	9
Relaxation	32.1%	17
Accompany family/friend	20.8%	11
Most convenient	24.5%	13
Primary means of transport	7.5%	4
Cheapest way to get around	11.3%	6
answered question		53
skipped question		18

6. Do you generally walk... (Check all that apply)

	Response Percent	Response Count
Alone	67.9%	36
With a pet	22.6%	12
With friends and/or family	39.6%	21
With an organized group	3.8%	2
answered question		53
skipped question		18

7. What keeps you from walking more than you do now? (Check all that apply)

	Response Percent	Response Count
No time/too busy	60.0%	39
Health reasons	7.7%	5
Extreme heat	7.7%	5
Feel unsafe due to traffic	13.8%	9
Feel unsafe due to crime	26.2%	17
Not enough destinations	15.4%	10
Get enough exercise elsewhere	4.6%	3
Don't think about walking	10.8%	7
Other (please specify)	9.2%	6
answered question		65
skipped question		6

8. Is your neighborhood mostly: (Check one)

	Response Percent	Response Count
Single-family homes	67.7%	42
Apartments and/or other multi-family structures	1.6%	1
A mix of single-family homes and multi-family structures	8.1%	5
A mix of residential and commercial	12.9%	8
Don't know/not sure	9.7%	6
answered question		62
skipped question		9

9. Are there public or private schools in your neighborhood? Do not include daycare centers, nursery schools, or home school locations. (Check one)

	Response Percent	Response Count
Yes	56.7%	34
No	43.3%	26
answered question		60
skipped question		11

10. If you have school aged children, how do they get to school on a regular basis? (Check one)

	Response Percent	Response Count
You drive them	37.1%	23
They ride the bus	9.7%	6
A family member or friend drives them	0.0%	0
They walk	1.6%	1
Not applicable (N/A)	51.6%	32
answered question		62
skipped question		9

11. What best describes the sidewalks in your neighborhood? (Check one)

	Response Percent	Response Count
Sidewalks on both sides of all streets	6.5%	4
Sidewalks on both sides of some streets	9.7%	6
Sidewalks on one side of all streets	0.0%	0
Sidewalks on one side of some streets	8.1%	5
Sidewalks exist, but are inconsistent	6.5%	4
No sidewalks	69.4%	43
	answered question	**62**
	skipped question	**9**

12. How would you describe the condition of sidewalks in your neighborhood? (Check one)

	Response Percent	Response Count
Excellent - sidewalks are easy to walk on, no obstructions	0.0%	0
Good - most sidewalks are easy to walk on, few obstructions	6.6%	4
Fair - some sidewalks in good condition, others need work	21.3%	13
Poor - cracked, broken, uneven, many obstructions, gaps	6.6%	4
No sidewalks	65.6%	40
	answered question	**61**
	skipped question	**10**

13. In Your Neighborhood...

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	N/A	Rating Average	Response Count
Drivers drive at safe speeds	5.7% (3)	**30.2% (16)**	17.0% (9)	24.5% (13)	18.9% (10)	3.8% (2)	3.22	53
Drivers usually respect/yield to pedestrians	7.7% (4)	**38.5% (20)**	21.2% (11)	23.1% (12)	5.8% (3)	3.8% (2)	2.80	52
Traffic signals or signs are sufficient and crosswalks are well marked	3.8% (2)	**30.2% (16)**	17.0% (9)	18.9% (10)	11.3% (6)	18.9% (10)	3.05	53
Amount of curb ramps are sufficient	3.8% (2)	**28.3% (15)**	**28.3% (15)**	7.5% (4)	11.3% (6)	20.8% (11)	2.93	53
Traffic signals allow enough time to cross the street	5.9% (3)	33.3% (17)	11.8% (6)	7.8% (4)	3.9% (2)	**37.3% (19)**	2.53	51
Street lighting is sufficient	3.9% (2)	**31.4% (16)**	15.7% (8)	23.5% (12)	13.7% (7)	11.8% (6)	3.13	51
I feel safe walking in my neighborhood	15.4% (8)	**36.5% (19)**	17.3% (9)	15.4% (8)	7.7% (4)	7.7% (4)	2.60	52
Benches and/or places to sit are sufficient	0.0% (0)	5.7% (3)	24.5% (13)	**32.1% (17)**	9.4% (5)	28.3% (15)	3.63	53
Streets have enough trees and/or other attractive features along them	11.3% (6)	**41.5% (22)**	30.2% (16)	5.7% (3)	3.8% (2)	7.5% (4)	2.45	53
Walking trails are adequate	1.9% (1)	18.9% (10)	22.6% (12)	18.9% (10)	9.4% (5)	**28.3% (15)**	3.21	53
My neighborhood is attractive and enjoyable to walk	17.0% (9)	**43.4% (23)**	18.9% (10)	9.4% (5)	5.7% (3)	5.7% (3)	2.40	53
There are commercial areas within walking distance to my home	11.3% (6)	**39.6% (21)**	13.2% (7)	13.2% (7)	1.9% (1)	20.8% (11)	2.43	53
My neighborhood is full of active walkers	5.7% (3)	**41.5% (22)**	17.0% (9)	15.1% (8)	13.2% (7)	7.5% (4)	2.88	53
It is easy to walk in my neighborhood	13.2% (7)	**43.4% (23)**	13.2% (7)	15.1% (8)	9.4% (5)	5.7% (3)	2.62	53
						answered question		53

14. What would be most likely to make you walk more in your neighborhood? (Check all that apply)

	Response Percent	Response Count
Cleaner street	7.4%	4
Better/more sidewalks	**44.4%**	**24**
Better/more lights	38.9%	21
Reduced vehicle speeds	24.1%	13
More street trees	1.9%	1
Better connection between developments	3.7%	2
More parks and trails	22.2%	12
Better/more crosswalks	13.0%	7
Better police enforcement	20.4%	11
More pedestrian amenities (benches, etc.)	31.5%	17
Other (please specify)	13.0%	7
	answered question	**54**
	skipped question	**17**

15. What specific destinations (list names of schools, parks, shopping centers, etc.) are difficult to walk to?

	Response Count
	49
answered question	49
skipped question	22

16. What intersections and/or streets in Williamston need more pedestrian facilities (sidewalks, traffic &/or pedestrian signals, crosswalks, etc.)

	Response Count
	49
answered question	49
skipped question	22

17. Do you know of any existing walking programs in Williamston?

	Response Percent	Response Count
Yes	4.2%	2
No	75.0%	36
Not sure/don't know	20.8%	10
answered question		48
skipped question		23

18. If Williamston provided opportunities for organized walking activities, would you participate?

	Response Percent	Response Count
Yes	27.1%	13
No	22.9%	11
Not sure/don't know	50.0%	24
answered question		48
skipped question		23

19. Which of the following would be your ideal neighborhood? (Check one)

	Response Percent	Response Count
Single-family homes, accessible only by vehicles	18.4%	9
Single-family homes, accessible by multiple modes of transportation (i.e. bus, walk, bike, etc)	**42.9%**	**21**
Mixture of residental uses, accessible by only vehicles	4.1%	2
Mixture of residental uses, accessible by multiple modes of transportation (i.e. bus, walk, bike, etc)	18.4%	9
Mixture of residential and commercial uses, accessible only by vehicles	0.0%	0
Mixture of residential and commercial uses, accessible by multiple modes of transportation	16.3%	8
	answered question	**49**
	skipped question	**22**

20. Should Williamston adopt guidelines, standards, or regulations to ensure proper development / growth focused on pedestrian needs?

	Response Percent	Response Count
Yes	85.1%	40
No	14.9%	7
	answered question	**47**
	skipped question	**24**

21. Do you:

	Yes	No	Rating Average	Response Count
Have children under 5?	10.9% (5)	**89.1% (41)**	1.89	46
Have a physical disability	13.0% (6)	**87.0% (40)**	1.87	46
Have a drivers' license?	**89.4% (42)**	10.6% (5)	1.11	47
Own a car?	**91.5% (43)**	8.5% (4)	1.09	47
			answered question	47
			skipped question	24

22. What is your primary mode of transportation?

		Response Percent	Response Count
Car		91.7%	44
Bus		0.0%	0
Bicycle		0.0%	0
Walking		2.1%	1
Ride in car (passenger)		6.3%	3
Other (please specify)		0.0%	0
		answered question	48
		skipped question	23

23. If you are a student, what school do you attend?

	Response Count
	12
answered question	12
skipped question	59

24. If you are employed, where do you work? (nearest intersection and city)

	Response Count
	33
answered question	33
skipped question	38

25. Are you:

	Response Percent	Response Count
Female	46.8%	22
Male	53.2%	25
answered question		47
skipped question		24

26. What is your age?

	Response Percent	Response Count
12 to 15	4.3%	2
16 to 24	6.5%	3
25 to 34	17.4%	8
35 to 44	26.1%	12
45 to 54	28.3%	13
55 to 64	15.2%	7
65 and over	2.2%	1
answered question		46
skipped question		25

27. Where do you live in Williamston (street name and/or subdivision name)?

	Response Count
	42
answered question	42
skipped question	29

28. Is there anything else you'd like to say about walking in your neighborhood or community-wide?

	Response Count
	21
answered question	21
skipped question	50

A.4 PUBLIC OPEN HOUSES

Two Public Open Houses were held throughout the course of the Plan development. On May 24, 2010 the first Public Open House was held from 7:00 – 8:30 p.m. at the Public Library to introduce the project to the public and receive comments from the public regarding bicycling opportunities, destinations, and improvements. Information was presented to the public through information stations throughout the facility. Each station provided different information to the public and some requested action from the participations.

The Project was well received by the community and concerns about bicycling safety, opportunities, challenges and destinations were expressed. Participants were encouraged to stay involved in the project by attending the second Public Open House, discussing the project with others, or contacting the Project Coordinator.

The second Public Open House was conducted at Public Library from 7:00 – 8:30 on August 23, 2011. Proposed recommendations was available for public scrutiny, discussion and comment. Overall, the participants felt that their needs and concerns had been addressed and were eager for the Town to implement the projects.

Do you enjoy taking your dog for a walk? ■ Would you like a more walkable community? Do your kids walk with you to the park or school? ■ Do you walk to the store or downtown? Would you like to incorporate more walking into your daily life?

If you answered yes to any of these questions, please join us!
We need your input to help create a

WALKABLE WILLIAMSTON!

WHAT

Comprehensive Pedestrian Plan Open House

WHEN

Tuesday, May 24, 2011
7:00—8:30 PM

WHERE

Martin Memorial Library
Williamston Branch
200 N. Smithwick St.

www.WalkWilliamston.com

GOALS FOR THIS OPEN HOUSE ARE:

- PROVIDE YOU WITH PROJECT INFORMATION
- REVIEW EXISTING PEDESTRIAN CONDITIONS THROUGHOUT THE TOWN
- FIND OUT YOUR NEEDS AND GOALS FOR A MORE WALKABLE WILLIAMSTON
- DISCUSS FUTURE PLANS

Williamston NORTH CAROLINA

Division of Bicycle & Pedestrian Transportation

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

Rivers & Associates, Inc. Since 1918

This plan is being developed by professional consultants and is funded by the Town of Williamston & the NCDOT.

WORKING MEETING AGENDA

DATE: Tuesday, May 24, 2011 from 7:00 – 8:30 p.m.

LOCATION: Library
Martin Memorial Library – Williamston Branch
200 N. Smithwick St.

SUBJECT: Town of Williamston Comprehensive Pedestrian Plan
Public Open House #1

This informal open house is to garner the trust and support of the community by highlighting the benefits of a Comprehensive Pedestrian Plan and components of a pedestrian-friendly environment. At Station 1, the public will be asked to visit each station where study area maps will be displayed and attendees will have an opportunity to express needs and concerns to make Williamston walkable.

MATERIALS / EQUIPMENT:

Town to provide:

- Refreshments (if desired)

Rivers to provide:

- Name tags
- Comment sheet envelopes
- Charrette toolbox (i.e. trace paper, post-it notes, pens, markers, etc.)
- Boards with maps & photos
- Easels for boards
- Camera

ROOM LAYOUT:

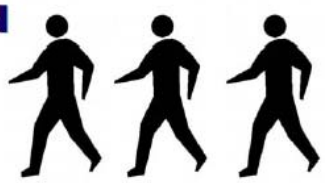
- The room should be set up with 7 stations throughout the room. The station layout will include a table, easels, boards, post-it notes, pens, markers, and comment sheets. There be should a few chairs placed in the middle of stations for sitting. Arrows or pedestrian symbols will be placed on the floor to direct flow through stations.
- **Station 1:** Sign-in, name tags, and project information hand out
- **Station 2:** Overall study area map
- **Station 3:** Existing Conditions Imagery
- **Stations 4-6:** Aerial maps with conditions shown for each quadrant (northeast, south, southwest)
- **Station 7:** Table, chairs to complete online survey

Williamston NORTH CAROLINA

Division of Bicycle & Pedestrian Transportation

Rivers & Associates, Inc. Since 1918

WILLIAMSTON PEDESTRIAN PLAN



Public Open House #1
Tuesday, May 24, 2011 from 7:00 – 8:30 pm
Library – Martin Memorial, Williamston Branch
200 N. Smithwick St

PROJECT SUMMARY & STATUS

Williamston's Planning Department was awarded a grant from the North Carolina Department of Transportation and a local match from the Town to develop a Comprehensive Pedestrian Plan. The Project Consultants from Rivers & Associates, Inc. are working closely with the Town, the Pedestrian Plan Steering Committee, and Citizens to identify future **pedestrian projects, programs, and policies** for Williamston. This open house is part of the second phase of the project and it is your opportunity to express needs and concerns to make Williamston walkable.

OPEN HOUSE STRUCTURE

To best use your time at today's open house and provide the project team with the information needed, please visit the following **7 STATIONS** while you are here:

- ☐ **STATION 1: SIGN-IN:** Sign in, fill out a name tag, and receive project information
- ☐ **STATION 2: OVERALL PROJECT AREA:** Review overall project area map
- ☐ **STATION 3: EXISTING CONDITIONS:** Review photos of existing pedestrian conditions
- ☐ **STATION 4: NORTHEAST QUADRANT:** Review northeast quadrant conditions map and write down comments and suggestions
- ☐ **STATION 5: SOUTH QUADRANT:** Review south quadrant conditions map and write down comments and suggestions
- ☐ **STATION 6: SOUTHWEST QUADRANT:** Review southwest quadrant conditions map and write down comments and suggestions
- ☐ **STATION 7: SURVEY:** Complete the survey

WHAT NEXT?

Following this open house the project team will begin drafting recommendations based on your comments. These draft recommendations will be presented to the Steering Committee in July. You can stay involved in this project by:

- Attending the second public workshop in September
- Checking the website for information and announcements
- Telling your family, friends and co-workers about this project
- Contacting the Project Coordinator with questions or suggestions

Brent Kanipe, Planning Director or Phillip Martin, Town Planner
Williamston Planning Department
(252) 792-5142

www.**WalkWilliamston**.com

Williamston

Division of Bicycle & Pedestrian Transportation

Rivers & Associates, Inc. Since 1918

WANT A MORE

PEDESTRIAN-FRIENDLY WILLIAMSTON?

IF YOU ANSWERED YES, PLEASE JOIN US!
THE TOWN OF WILLIAMSTON NEEDS YOUR INPUT!

WHAT

Comprehensive Pedestrian Plan
Open House #2

WHEN

Tuesday, August 23, 2011
7-8:30 PM

WHERE

Martin Memorial Library
Williamston Branch
200 N. Smithwick St.

www.walkwilliamston.com

GOALS & OBJECTIVES:

- PROVIDE YOU WITH PROJECT INFORMATION
- PRESENT DRAFT RECOMMENDATIONS & PRIORITIES FOR THE COMPREHENSIVE PEDESTRIAN PLAN
- ACCEPT COMMENTS, RECOMMENDATIONS, & QUESTIONS FROM YOU

Williamston NORTH CAROLINA

Division of Bicycle & Pedestrian Transportation

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

Rivers & Associates, Inc. Since 1918

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Appendix B: Potential Projects

B.1 Potential Pedestrian Projects

The following is a list of potential pedestrian projects identified by Steering Committee and citizen participation during the Comprehensive Plan development.

Table B.1 Pedestrian Crossing Improvement Project Recommendations

Project ID (ref. on map)	Pedestrian Crossing Location	Description	Preferred Action / Treatment
1	Washington St & Garrett Rd	Walmart Shopping Ctr, High School, Residential subdivision, Commercial uses	Install crosswalks, refuge island, pedestrian-activated signals and signage
2	Washington St & McCaskey Rd	Banks, Ballfields, Schools, Commercial areas	Install crosswalks, refuge island, and signage
3	Godwin Dr & McCaskey	Ballfields, school, hospital, commercial uses	Install crosswalks and signage
4	Washington St & Boulevard St	Major Intersection with surrounding commercial uses, nearby medical, High School, Baseball fields	Install crosswalks, refuge island, pedestrian-activated signals and signage
5	E. Boulevard St & Jamesville Rd	Surrounding commercial (Bojangles, Burger King, shopping) adjacent to residential uses	Install crosswalks, pedestrian-activated signals and signage
6	Washington St & Martin Luther King	Shopping, residential areas	Install crosswalks and signage
7	E. Boulevard St & Park St	Access to commercial/retail incl. Rite Aid, Hess, BizGallery, Roses, Wendys, 45mph	Install crosswalks, pedestrian-activated signals and signage
8	E. Boulevard St & Gatling St	Location of a pedestrian-vehicle crash, posted speed changes from 45 to 55, heavy traffic, residential uses along Gatling St.	Install crosswalks, refuge island, pedestrian-activated signals, and signage
9	E. Boulevard St. & E. Main St/Willow Dr	Location of a pedestrian-vehicle crash, currently has a flashing overhead beacon warning for vehicle crossing, residential along Willow Dr.	Install crosswalks, refuge island and signage
10	E. Main St & N. Biggs St	Currently, a mid-block crossing from Martin County offices to associated parking lot, includes pedestrian crossing sign and bar stripes.	Maintain vegetation to keep pedestrians visible. Traffic calming may be considered.
11	E. Main Street & Watts Street	Downtown	Install crosswalks and signage

12	Main St & Smithwick	Downtown, Barnes Plaza, Post office, Town Hall	Improve existing crossing to increase visibility
13	Smithwick & Academy	library	Install crosswalks and signage
14	Main St & Harrison St	Downtown	Install crosswalks and signage, Mid Block Crossing
15	Main St & Haughton St	Current crossing paint/striping is eroded, traffic signal at intersection, pavement condition is poor, downtown pedestrian use	Install highly visible crosswalks, pedestrian-activated signals, and signage
16	Main St & Elm St	Downtown	Install highly visible crosswalk
17	N. Haughton Street & Pine Street	Location provides crossing from residential to recreational uses.	Install highly visible crosswalk, signage, refuge island
18	W. Main St & Martin Luther King Jr	Location provides access to residential, commercial and recreational uses.	Install visible crosswalks and signage
19	W. Main Street & Roberson Street	Location of current diagonal crossing	Install visible crosswalks and signage
20	W. Main St & Edgewood	School	Install visible crosswalk
21	W. Main St & McCaskey Rd	Schools, Hospital, Commercial and Residential areas	Install visible crosswalk and signage
22	McCaskey Rd & E. Boulevard St.	Schools, Hospital, Commercial and Residential areas	Install highly visible crosswalk, signage, refuge island.
23	W. Boulevard/W. Main & Prison Camp Rd	Parks and Martin CC	Install crosswalk and signage
24	Prison Camp Rd & Kehukee Park Rd	Parks and Martin CC	Install crosswalk and signage

Table B.2 New Sidewalk Construction Project Recommendations				
Project id (Ref. on map)	**New Sidewalk Construction Location**	**From**	**To**	**Preferred Action / Treatment**
25	Washington Street	Garrett Road	Boulevard St	Install sidewalks and curb ramps along the west side of Washington street between the drainage ditch and easement limits.
26	Brentway Avenue	S. McCaskey Rd	Garrett Rd.	Install sidewalks and curb ramps.
27	Godwin Drive	S. McCaskey Road	Garrett Rd	Install sidewalks and curb ramps along west side of Godwin Dr outside of the drainage ditch. Consider multi-use trail/greenway.
28	S. McCaskey Road	Washington Street	W. Boulevard Street	Install sidewaks and curb ramps on south side of McCaskey Rd outside of the drainage ditch. Consider multi-use trail/greenway. May need to acquire ROW from adjacent property owners.
29	W. Boulevard	McCaskey	Washington	Install sidewalks and curb ramps.
30	McCaskey Rd	Boulevard St	Main St	Install sidewalks and curb ramps along east side of McCaskey Rd.
31	W. Main Street	Brownlow St.	Roberson Street	Install sidewalk to connect residential to downtown, recreation per plans approved by NCDOT. Install signage to alert motorists of pedestrians.
32	S. Edgewood Avenue	W. Main Street	West End Tennis Courts	Install sidewalks and curb ramps along east side of road to connect Main St. to tennis courts.
33	Washington St	Boulevard St.	Peele St	Install sidewalks and curb ramps along west side of Washington St to connect to existing sidewalks and provide Safe Route to School

34	Washington Street	Boulevard St	Elm St	Install sidewalks and curb ramps along east side of Washington St.
35	E. Boulevard	Washington St.	Park St.	Install NCDOT approved pedestrian facility along highway. Additional review by NCDOT.
36	Jamesville Road	Washington St	E. Boulevard St	Install sidewalks and curb ramps.
37	E. Boulevard	Park Street	Willow Drive	Install NCDOT approved pedestrian facility along highway. Additional review by NCDOT.
38	E. Main St	Boulevard St	River Rd	Install sidewalks and curb ramps outside of drainage ditch.
39	River Road	Thelma St	River Landing	Install NCDOT approved pedestrian facility to provide continuous connections to/from downtown, neighborhoods, and recreation facilities
40	W. Church Street	Haines St	Roberson St	Install sidewalks and curb ramps along north side of Church St.
41	Haines St	W. Church St	Street-end	Install sidewalks and curb ramps.
42	W. Main St	McCaskey Rd	Kehukee Park Rd	Install NCDOT approved pedestrian facility. Additional review by NCDOT.
43	Prison Camp Road	W. Main St	Kekukee Park Road	Install NCDOT approved pedestrian facility to connect parks, community college, & residential areas. Additional review by NCDOT.

Table B.3 Sidewalk Infill / Connection Improvement Recommendations				
Project id (Ref. on map)	**Sidewalk Construction Location**	**From**	**To**	**Preferred Action / Treatment**
44	E. Main Street	Ormond Dr.	Henderson St.	Install sidewalk and curb ramps on north side of Main St. to connect existing sidewalks. May need to obtain right-of-way for sidewalk.
45	Washington Street	Pearl St	Elm St	Install sidewalk and curb ramps on east side of Washington St. to connect to existing sidewalks. May be impacted by driveways/parking.
46	Warren Street	Jamesville Rd.	S. Haughton St.	Install sidewalk and curb ramps on south side of Warren St. to connect to existing sidewalks.
47	N. Haughton Street	W. Grace St.	W. Franklin St.	Install sidewalk and curb ramps on east side to connect to existing sidewalks.

Table B.4 Greenway / Multi-Use Trail Project Recommendations					
Project id (Ref. on map)	**Greenway Corridor Construction Location**	**From**	**To**	**Reason**	**Alignment Details**
48	Skewarkee Canal	Gaylord Perry Park	River Landing Park	Connection between parks, nature walk	Suggested alignment along sewer easement
49	N. Haines St & Gaylord Perry	N. Haines Street	Gaylord Perry Park	To provide connection from residential area to Gaylord Perry Park	Suggested alignment between properties at cul-de-sac (Martin Co Parcels 0503868 & 0504523 (310 N. Haines St)
50	Lilley Property	East Park Road (terminus)	W. Church Street (terminus)	Connection to residential areas, Gaylord Perry Park	Suggested alignment across property (currently dirt)
51	Area behind Williamston High School	Garrett Rd	McCaskey Rd	Connection between schools, commercial, medical uses	Install multi-use greenway to provide a connection serving schools, hospital, residential areas
52	Garrett Road	Washington Street	Prison Camp Road	Connection residential areas with commercial, schools, and parks	Install multi-use greenway along north side of street
53	Kekukee Park Road	W. Main Street	Prison Camp Road	Connection Martin CC, Parks, residential areas	Install multi-use greenway along east side of Kekukee Park Rd
54	Utility easement south of W. Main St.	Outterbridge Rd	Kehukee Park Rd	Connection to parks, Martin CC	Install multi-use greenway along utility easement
55	Utility easement south of W. Main St. and S. McCaskey Rd.	Kehukee Park Rd.	Washington Street	Connection Martin CC, Parks, residential and commercial areas	Install multi-use greenway along utility easement
56	Sewer utility easement east of E. Boulevard St.	Park Street	Willow Drive	Connection of residential and commercial areas	Install multi-use greenway along utility easement

Appendix C: Sample Cost Estimates

C.1 Sample Cost Estimates

Preliminary opinion of probable costs for recommended pedestrian projects in this Plan are provided in this appendix. These costs are rough estimates based on the Federal Highway Administration[i] and similar projects recently implemented. The listed cost estimates should be used as a planning guide and do not include extra costs such as land acquisition, utility relocation, roadway size, drainage, final materials used, grading, land clearing and demolition, professional engineering and surveying, inspection and legal and administration. These costs are not and should not be considered to be a substitute for professional engineering and surveying regarding actual costs of project construction.

Pedestrian Crossings

- Regular striped crosswalk is approximately $100 / each
- Ladder crosswalk is approximately $300 / each
- Patterned (stamped or stained) concrete crosswalk is approximately $3,000 / each
- Mid-Block crossing can range between $4,000 - $30,000
- ADA curb ramps is approximately $1,000 / each
- Curb extensions range from $2,000 - $20,000 / corner, depending upon design and site conditions
- Raised crosswalk/speed table cost approximately $15,000 - $100,000 / each
- Raised intersection typically cost between $25,000 - $200,000 / each
- Pedestrian-activated signal range from $20,00 – $40,000 / each
- Fixed-time pedestrian signal cost $40,000 - $200,000 / each
- Attachments to a pedestrian signal head to assist impaired pedestrian range from $30,000 - $140,000 / signal
- NO TURN ON RED Signs range from $30 - $150 / each plus installation at $200 / each
- Regulatory signs cost $50 - $150 / each plus $150 / each in installation costs

Traffic Calming Devices

Speed Bumps

- Standard speed bump is approximately $500 / each

Curb Extensions

- Concrete curb extension vary from $2,000 to $20,000 / corner, depending upon design and site conditions

Chicanes

- Landscaped chicanes cost approximately $10,000 for a set of three on an asphalt street and $15,000 - $30,000 on a concrete street

Raised Median

- Raised median cost approximately $15,000 - $30,000 / 100 feet

Crossing Island/ Pedestrian Refuge Island

- Crossing island cost approximately $6,000 - $9,000 / island
- Raised concrete pedestrian refuge island with landscaping cost approximately $10,000 - $30,000 / each

Road Striping

- Adding striped shoulders or on-street bike lanes cost $1,000 per mile if old paint does not need to be replaced
- Restriping a mile of street to bike lanes or reducing number of traffic lanes to add on-street parking cost approximately $5,000 - $20,000 depending upon the number of old lane lines to be removed

Streetscape Improvements

Lighting

- Varies depending upon type of light, location, and utility provider; however, costs usually starts at $3,000 per fixture.

Landscaping

- Street trees (depending on foliage, type, and size) range from $350 - $500 / street tree
- Shrubs (depending on type) cost approximately $50 - $75 / each installed by a contractor

Street Furniture

- Depending upon type and material used.
- Benches typically range from $1,300 – 2,500
- Trash receptacles range from 2,000 – 3,000

Sidewalks

- Standard concrete curb and 5' sidewalk w/gravel base cost approximately $105/linear foot (cost includes design, bidding, and inspection)
- Asphalt curbs and walkways are less costly but require more maintenance per year
- Concrete driveway replacement and repair approximately $55 / linear foot
- Asphalt driveway replacement and repair approximately $55 / linear foot

[i] Federal Highway Administration (FHWA) Pedestrian Safety, *Safer Journey Library* , October 2007, http://safety.fhwa.dot.gov/saferjourney/library/matrix.htm

Appendix D: Glossary of Terms

D.1 Glossary of Terms

The following definitions are for terminology used throughout this document as defined by the American Association of State Highway and transportation Officials (AASHTO).

Americans with Disabilities Act (ADA) - Federal law prohibiting discrimination against people with disabilities. It requires public entities and public accommodations to provide accessible accommodations for people with disabilities.

Americans with Disabilities Act Accessibility Guidelines (ADAAG) – Provides scoping and technical specifications for new construction and alterations undertaken by entities covered by ADA.

Crosswalk – Area designated for pedestrians to cross an intersection or marked sections of a roadway.

Curb Extension – A section of sidewalk extending into the roadway at an area of a midblock crossing that reduces the crossing width for pedestrians and may help reduce traffic speeds.

Feasible – Capable of being accomplished with a reasonable amount of money and effort.

Flare – Sloped surface that flanks a curb ramp and provides a graded transition between the ramp and the sidewalk. Flares bridge differences between the ramp and sidewalks intended to prevent pedestrians from tripping.

Intermodal – A transportation policy that promotes full development of alternative modes of transportation to benefit travel mobility, efficiency, sustainability, economic, and physical health.

Intersection – Area where two or more roads meet.

Midblock Crossing – Crossing point positioned within a block instead of an intersection.

Parallel Curb Ramp – Curb ramp design where the sidewalk slopes down on either side of a landing. Parallel curb ramps require users to turn before entering the street.

Passing Space – Section of path or sidewalk wide enough to allow two wheelchair users to pass one another to travel abreast.

Path or pathway – Track or route along which pedestrians are intended to travel.

Pedestrian – A person afoot or in wheelchair.

Pedestrian Access Route – A continuous, unobstructed path connecting all accessible elements of a pedestrian system that meets ADAAG.

Pedestrian-Actuated Traffic Control – Pushbutton or other control activated by pedestrians to permits pedestrians to cross a signalized intersection or crossing.

Ramp – Sloped transition between two elevation levels.

Right-of-Way – Real property rights (whether fee-simple ownership, by easement, or other agreement) acquired across land for public purpose including pedestrian use.

Shy Distance – Area closest to buildings, fences, or other obstructions that are generally avoided by pedestrians.

Sidewalk – Paved surface paralleling a roadway intended for pedestrian use.

Sight Distance – The length of roadway visible to a driver or pedestrian; the distance a person can see along an unobstructed line of sight.

Wayfinding – A system of information comprising visual, audible, and tactile elements that help users experience an environment and facilitates getting to point A to point B.

Width, Sidewalk – ***Total width*** of sidewalk including obstructions that begins at the edge of a roadway to the side of the building. ***Clear width*** is the portion of the sidewalk k that excludes obstructions and any attached curb. ***Effective width*** is the portion of clear with that excludes any shy distances.

Appendix E: FUNDING SOURCES

To bring Williamston's vision of a bicycle-friendly community to fruition, a combination of funding sources would need to be utilized to implement the identified projects and programs outlined in this Plan. Williamston should seek all funding opportunities for project implementation, including State, Federal, and Private monies where available. Special funding programs for specific types of projects such as Safe Routes to School should also be pursued. The use of private foundation contributions should be thoroughly researched and private donations accepted to assist in funding. Even with the vast funding sources available, there usually is a local match requirement. The most reliable funding will be local government; therefore, it is important for the Town of Williamston to continue to allocate the necessary funds each year to ensure completion of pedestrian infrastructure. An annual budget line item will ensure that projects identified in this Plan will be completed. This action will also illustrate the Town's commitment to improve the walking environment in the community.

This Appendix has identified funding opportunities for facilities from local, state, and federal level; as well as from public and private initiatives to aid in the implementation of this Plan. As mentioned earlier, some projects will require a combination of funding sources.

E.1 LOCAL SOURCES

Several types of potential local funding sources are available for the Town of Williamston. Local funds should be used for projects not on major state routes and as local match. Local funding sources tend to be flexible and include general revenue expenditures as well as proceeds from bond programs. Some local funding sources are:

ANNUAL IMPROVEMENT PROGRAM

The Town should allocate a specified amount each fiscal year in the Capital Improvement Program (CIP) for street repairs, construction of new facilities, and intersection improvements.

FEE OR PAYMENT "IN-LIEU OF"

If it is determined that adequate provisions cannot be provided on a property under development review, Williamston could utilize the use of a fee in-lieu of as a funding source to implement sidewalk facilities and multi-use trails. Mitigation may be based on impacts on population increase caused by the development, property values, or percentage of development fees.

IMPACT FEES

The use of impact fees to provide funding for greenways and multi-use trails. Impact fees are monetary one-time charges levied by a local government on new development. Unlike required dedications, impact fees can be applied to finance pedestrian facilities located outside the boundary of the development. The NC General Assembly has permitted a 'small but growing number of local governments to impose impact fees." These fees can be levied through the subdivision or building permit process to finance facilities in Williamston.

SPECIAL ASSESSMENT BONDS

Williamston could use special assessment bonds to install facilities within an area in need. Special assessment bonds are secured by a lien on a property that benefits by the improvements funded with the special assessment bond proceeds. Debt service payments on these bonds are funded through annual assessments to the property owners in the assessment area.

REVENUE BONDS

Revenue bonds are bonds that are secured by a pledge of the revenues from a certain local government activity. The entity issuing the bond pledges to generate sufficient revenue annually to cover the program's operating costs, and meet the annual debt service requirements (principal and interest payment). Revenue bonds are not constrained by the debt ceiling of general obligation bonds, but they are generally more expansive than general obligation bonds.

GENERAL OBLIGATION BONDS

A general obligation bond (GOB) is a bond that is legally backed by the full faith and credit of the issuing government. The local government that issues the bond pledges to raise its property taxes, or use any other sources of revenue, to generate sufficient revenues to make the debt service payments on the bond. A GOB pledge is considered more robust than a revenue pledge, and thus is likely to carry a lower interest rate then a revenue bond.

TRANSPORTATION BONDS

Transportation bonds have been instrumental in strategic implementation of local roadways, transit, and non-motorized travel throughout North Carolina. Voters in communities have regularly approved the use of these bonds in order to improve their transportation system. Improvements to the pedestrian system in Williamston would be a type of project that could be funded using a transportation bond program.

EXCISE TAX

Excise taxes are taxes on specific goods and services. These taxes require special legislation and the use of the funds generated through the tax are limited to specific uses. Examples include lodging, food, and beverage taxes that generate funds for promotion of tourism, and the gas tax that generates revenues for transportation related activities.

PROPERTY TAX

Property taxes generally support a significant portion of a municipality's activities. However, the revenues from property taxes can also be used to pay debt service on general obligation bonds issued to finance greenway or multi-use trail acquisitions. Because of limits imposed on tax rates, use of property taxes to fund greenways could limit the municipality's ability to raise funds for other activities. Property taxes can provide a steady stream of financing while broadly distributing the tax burden.

SALES TAX

North Carolina authorizes a sale tax at the state and county levels. Local governments that choose to exercise the local option sales tax, use the tax revenues to provide funding for a wide

variety of projects and activities. Any increase in the sales tax, even if applying to a single county, must gain approval of the state legislature.

E.2 STATE & FEDERAL SOURCES

The Safe, Accountable, Flexible, and Efficient Transportation Equity Act: A Legacy for Users (SAFETEALU) law guarantees funding for highways, highway safety, and public transportation. Provisions of the law address specific safety issues, including pedestrian and bicycle safety. Funds for pedestrian projects come from several different sources that are described below; however, allocation of those funds depends on the type of project or program and other criteria.[i]

The American Recovery and Reinvestment Act of 2009 (ARRA) included $8 billion for transportation infrastructure investments. Of that money, more than $27.5 billion were in funding categories that make funds eligible for projects with complete streets elements, and another $3.8 billion are available for bicycle and pedestrian infrastructure.[ii]

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP)

HSIP allows States to target their most critical safety needs. States are required to develop and implement a safety plan and submit safety reports that describe hazardous locations, progress in implementation of highway safety improvement projects, and the effectiveness of those projects in reducing injuries and fatalities. [iii]

SAFE ROUTES TO SCHOOLS PROGRAM (SRTS)

The SRTS program is new to North Carolina. It intends to enable and encourage elementary and middle school students to walk safely to school. Funding is available to facilitate planning, development, and implementation of activities and projects that reduce traffic, fuel consumption, air pollution, and improve safety within approximately two (2) miles of elementary and middle schools (K-8 only). The North Carolina Safe Routes to School program provides opportunities for schools to apply for grant funding to develop an action plan, non-infrastructure improvements (education, enforcement, and encouragement), and infrastructure improvements to encourage walking and cycling to school. The maximum amount an applicant can receive to develop an action plan is $15,000 for one to two schools and $30,000 for three or five schools. The maximum amount for non-infrastructure grants is $50,000[iv]. The funding range for infrastructure projects is $100,000 to $300,000 per project.

HIGHWAY DIVISION FUNDS

Highway Division Funds are a component of the SRTS program. These funds will be used for timely, relatively low-cost spot safety improvements within the rights-of-way on state maintained roadways. Requests for these funds must be made directly to the Division offices. The maximum amount per request is $50,000. The Town of Williamston is in the NCDOT Division 1 with headquarters in Edenton.

POWELL BILL FUNDS

Powell Bill funds are collected by the state in the form of a gasoline tax. These funds are distributed based on the number of street miles to be maintained and the Town's population.[v]

THE RECREATIONAL TRAILS PROGRAM

This program has thirty percent (30%) of its funds set aside for motorized trail projects, thirty percent (30%) for non-motorized trail uses, and the remainder can be spent on either. These funds can be used to cover the costs of construction, maintenance of equipment, real estate, educational programs, state administration, and assessment of trail conditions. The maximum amount an applicant can receive is $75,000 and there is a twenty percent (20%) local match requirement.[vi]

TRANSPORTATION IMPROVEMENT PROGRAM (TIP)

As a part of the state's Transportation Improvement Program (TIP), incidental (those related to a scheduled highway project) pedestrian TIP projects can receive allocations through an array of funding resources including Federal Aid Construction Funds and State Construction Funds/State Highway Trust Fund. Projects programmed into the TIP as independent (those that are not related to a scheduled highway project) pedestrian projects are managed and selected by NCDOT, Division of Bicycle and Pedestrian Transportation (DBPT). The Division has an annual budget of $6 million. Eighty percent of these funds are from STP-Enhancement funds, while the State Highway Trust provides the remaining 20 percent of the funding.

Each year, the DBPT regularly sets aside a total of $200,000 of TIP funding for the department to fund projects such as training workshops, pedestrian safety and research projects, and other pedestrian needs statewide. Those interested in learning about training workshops, research and other opportunities should contact the DBPT for information.

A total of $5.3 million dollars of TIP funding is available for funding various bicycle and pedestrian independent projects, including the construction of multi-use trails, the striping of bicycle lanes, and the construction of paved shoulders, among other facilities. Prospective applicants are encouraged to contact the DBPT regarding funding assistance for bicycle and pedestrian projects. For a detailed description of the TIP project selection process, visit http://www.ncdot.org/transit/bicycle/funding/funding_TIP.html. Another $500,000 of the division's funding is available for miscellaneous projects.

However, one of the most cost-effective ways of providing pedestrian facilities is to incorporate them as part of larger reconstruction, new construction, and repaving projects as incidental projects. Projects with bicycle and pedestrian accommodations such as bike lanes, widened paved shoulders, sidewalks and bicycle-safe bridge design are frequently included as incidental features of highway projects. In addition, bicycle-safe drainage grates are a standard feature of all highway construction. Most bicycle and pedestrian safety accommodations built by NCDOT are included as part of scheduled highway improvement projects funded with a combination of National Highway System funds and State Highway Trust Funds.

SURFACE TRANSPORTATION PROGRAM (STP)

Funds allocated to the STP can be used to construct bicycle facilities, create maps and brochures, or develop public service announcements (PSAs) promoting safe biking.[vii]

TRANSPORTATION ENHANCEMENT ACTIVITIES (TEAS)

North Carolina earmarks ten percent (10%) of their annual STP funds for Transportation Enhancement Activities (TEAs). Transportation enhancements are transportation-related activities that are designed to strengthen the cultural, aesthetic, and environmental aspects of transportation systems and must benefit the traveling public and help communities increase transportation choices and access, enhance the built or natural environment, and create a sense of place. Eligible projects in this category include providing bicycle and pedestrian facilities for safe accommodation, either through construction of new facilities or modifications to existing facilities. The facility must comply with American Association of State Highway Transportation Officials (AASHTO), Americans with Disabilities Act (ADA) and NCDOT standards." Conversion of abandoned railway corridors to multi-use paths can also be funded with these monies.[viii]

STATEWIDE DISCRETIONARY FUNDS

The Statewide Discretionary Fund consists of funds administered by the Secretary of the Department of Transportation. This fund can be used on any project at any location within the State. Primary, urban, secondary, industrial access, and spot safety projects are eligible for this funding. To request funding, an entity must submit a written request to the NCDOT Highway Division office with a clear description of project and project justification.

HAZARD ELIMINATION AND RAILWAY-HIGHWAY CROSSING PROGRAMS

These funds are an additional subset of the State Transportation Improvement Program (STIP) funding, constituting ten percent (10%) of a state's funds. This program is intended to inventory and correct the safety concerns of all travel modes including pedestrian. A maximum of $100,000 is offered per NCDOT Highway Division for hazard elimination projects.[ix]

LAND AND WATER CONSERVATION FUND (LWCF)

The Land and Water Conservation Fund provide grants for communities to build a variety of park and recreation facilities including trails and greenways. In North Carolina, the federally granted money is allocated through the State Division of Park and Recreation. There is a fifty percent (50%) local match.[x]

NORTH CAROLINA'S CLEAN WATER MANAGEMENT TRUST FUND (CWMTF)

CWMTF provides grants to local governments, state agencies, and conservation nonprofits to help finance projects that specifically address water pollution problems. CWMTF funds may be used to establish a network of riparian buffers and greenways for environmental, educational, and recreational benefits. Grants are designed to fund projects that bring parks and recreation, including multi-use trails closer to people's homes.[xi]

GOVERNOR'S HIGHWAY SAFETY PROGRAM (GHSP)

The Governor's Highway Safety Program is committed to enhancing the safety of the roadways in North Carolina. To achieve this, GHSP funding is provided through an annual program, upon approval of specific project requests to undertake a variety of safety initiatives. Communities may apply for a GHSP grant to be used as seed money to start a program to

enhance highway safety. Funding is provided on a reimbursement basis and evidence of reductions in crashes, injuries, and fatalities is required. Amounts of GHSP monies vary from year to year.[xii]

NORTH CAROLINA PARKS AND RECREATION TRUST FUND (PARTF) GRANT PROGRAM

The PARTF program provides local governments with dollar-for-dollar matching grants to acquire land and renovate or develop of recreational projects for the public, including multi-use trails. The maximum amount an applicant is eligible for is $500,000.[xiii]

NORTH CAROLINA ADOPT-A-TRAIL PROGRAM

North Carolina Adopt-A-Trail Program provides communities with grant monies up to $5,000 for construction, maintenance, facilities, signage, brochures, and maps.[xiv]

CONSERVATION TAX CREDIT

The Conservation Tax Credit program allows landowners who donate property for conservation purposes by easements or sale. These landowners are eligible for the North Carolina Conservation Tax Credit. The goal of the program is to provide incentive to protect water supply watersheds, manage stormwater, retain forests and working farms, and to allow for ecological communities through the formation of trails and wildlife corridors.[xv]

CONGESTION MITIGATION AND AIR QUALITY IMPROVEMENT PROGRAM

This Environmental Protection Agency's (EPA's) program can assist in funding many of the same projects funded by the STP including pedestrian facilities, maps, brochures, and public service announcements.[xvi]

WATERSHED PROTECTION AND FLOOD PREVENTION GRANTS FOR SMALL WATERSHEDS

Watershed Protection and Flood Prevention Grants for Small Watersheds provides funding to state and local agencies or nonprofit organizations to create and maintain watershed improvements of less than 250,000 acres. Financial and technical assistance are available and a fifty percent (50%) local match is required for public recreation projects.[xvii]

E.3 PRIVATE SOURCES

BLUE CROSS BLUE SHIELD FIT TOGETHER GRANTS

The Fit Community Program is a designation and grant program to recognize and reward municipality and county efforts to promote physical activity, healthy eating and tobacco-free programs, policies, environments and lifestyles. A municipality or county is eligible for grant money once it has received a Fit Community designation. This program awards up to nine partnerships with up to $30,000 annually for a two-year period.[xviii]

ACTIVE LIVING BY DESIGN (ALBD)

Active Living by Design is a program sponsored by the Robert Wood Johnson Foundation. The program seeks to bring together the health care and transportation communities to create an environment that encourages residents to pursue active forms of transportation such as walking and bicycling. Grants are awarded each year to a selected number of communities with a local match requirement. These monies can be used to create plans, change land use policies, institute education policies, and develop pilot projects.[xix]

THE TRUST FOR PUBLIC LAND

The Trust for Public Land (TPL) is the only national nonprofit working exclusively to protect land to enhance the health and quality of life in American communities. TPL works with landowners, government agencies, and community groups to create urban parks and greenways as well as to conserve land for watershed protection.[xx]

DEVELOPER CONTRIBUTIONS

Through diligent planning and early project identification, regulations, policies, and procedures could be developed to protect future pedestrian corridors and require contributions from developers when the property is subdivided. To accomplish this goal, it will take a cooperative effort between local planning staff, NCDOT planning staff, and the development community.

DESIGN ARTS PROGRAM, THE NATIONAL ENDOWMENT FOR THE ARTS

The Design Arts Program can provide states, local agencies, individuals, and nonprofit organizations with grants if their project incorporates urban design, planning, historic preservation, architecture, landscape architecture, or other community improvement activities – for example multi-use trail development. Maximum amount per applicant is $50,000 with a required 50% local match.[xxi] These monies can be used for bicycle facilities or multi-use trails/paths in the historical district of Ahoskie.

THE ROBERT WOOD JOHNSON FOUNDATION

The Robert Wood Johnson Foundation is dedicated to enhancing the health and health care of every American. Grants are prioritized into four goal areas, one of which is the promotion of healthy communities and lifestyles. Projects would include multi-use trails and sidewalks.

SMALL GRANTS

Small grants of $250-$2,000 are offered for planning, design, and development of greenways through a partnership between the Conservation Fund's American Greenways Program[xxii], Eastman Kodak Corporation, and the National Geographic Society. These grants can be used for off-road multi-use trails.

WAL-MART FOUNDATION

Local community and environmental activities and educational programs for children that are put on by charitable organizations may be funded through the Wal-Mart Foundation.[xxiii] Organizations must work with the local store manager to discuss application. These funds should be used for bicycle safety education.

LEAGUE OF AMERICAN BICYCLISTS (LAB) BICYCLE-FRIENDLY COMMUNITY PROGRAM

LAB recognizes states, communities and businesses for their efforts to promote bicycling and provide roadmaps to improve. Recognition is awarded based on an application process.[xxiv]

OTHER PRIVATE FUNDING OPPORTUNITIES

Project sponsors can purchase amenities such as benches, trash receptacles, mile markers, entry signage and bollards to assist in funding while enhancing the overall project. Another option is to sell linear feet of a multi-use path at the unit cost for said path. Some sort of recognition should be provided for sponsors possibly through a plaque or certificate.

Volunteers from within the community can aid in the expansion of the pedestrian network by conducting fundraisers or by donating labor to construction, landscaping, and maintenance after the facility is in place. Community volunteers can be drawn from civic groups, scouting groups, and outdoor clubs.

E.4 SPECIAL FUNDING OPPORTUNITIES FOR HIGH PRIORITY PROJECTS

All of the funding opportunities listed above, and others that are not listed that may become available in the future should be applied for when possible. Mid- and long-range projects may be included in later editions of the TIP as enhancement projects. If a roadway improvement project is scheduled for a road that currently has no pedestrian facilities, NCDOT should be approached in an effort to get pedestrian facilities installed incidental to the project. Mapping and signing projects may also be included in the TIP. Safety projects should be funded by the Governor's Highway Safety Program. The Safe Routes to School program funds should be utilized for pedestrian safety and access within two (2) miles of all K-8th grade schools.

Projects scheduled for construction along major and minor thoroughfares throughout the Town may be funded by a bond referendum. Grant programs are the preferred method of payment for large-scale projects, as they do not have to be repaid by the Town or its citizens. A Capital Improvement Program (CIP) should be utilized for planning and funding pedestrian facilities. Private partnerships are another good way to make pedestrian facility improvements since they allow the public to take an extra sense of pride from the facility.

[i] SAFETEALU, http://www.fhwa.dot.gov/safetealu/factsheets/hsip.htm

[ii] US Department of Transportation, Federal Highway Administration, American Recovery & Reinvestment Act of 2009, http://www.fhwa.dot.gov/economicrecovery/index.htm

[iii] **Highway Safety Improvement Program (HSIP), http://safety.fhwa.dot.gov/state_program/hsip/index.htm & http://www.fhwa.dot.gov/safetealu/factsheets/hsip.htm**

[iv] **North Carolina Safe Routes to School Program, http://ncdot.org/transit/bicycle/saferoutes/SafeRoutes.html**

[v] Powell Bill Funds, http://ncdot.org/programs/Powell_Bill/

[vi] Recreational Trails Program, http://www.fhwa.dot.gov/environment/rectrails/index.htm

[vii] Surface Transportation Program, http://www.fhwa.dot.gov/programadmin/113005.cfm

[viii] Transportation Enhancement Activities, http://www.ncdot.org/financial/fiscal/Enhancement/ProgramInformation/Background/

[ix] Hazard Elimination & Railroad-Highway Crossing Programs, http://safety.fhwa.dot.gov/safetealu/siebyside.htm

[x] Land and Water Conservation Fund, http://www.nps.gov/ncrc/programs/lwcf/

[xi] North Carolina's Clean Water Management Trust Fund, http://www.cwmtf.net/

[xii] **Governor's Highway Safety Program, http://www.ncdot.org/programs/GHSP/**

[xiii] North Carolina Parks and Recreation Trust Fund Grant Program, http://www.partf.net/

[xiv] North Carolina Adopt-A-Trail Program, http://ils.unc.edu/parkproject/trails/grant.html#a

[xv] Conservation Tax Credit, http://www.enr.state.nc.us/conservationtaxcredit/

[xvi] Congestion Mitigation and Air Quality Improvement Program, http://www.fhwa.dot.gov/environment/cmaqpgs/

[xvii] Watershed Protection and Flood Prevention Grants for Small Watersheds, http://12.46.245.173/pls/portal30/CATALOG.PROGRAM_TEXT_RPT.SHOW?p_arg_names=prog_nbr&p_arg_values=10.904

[xviii] Blue Cross Blue Shield Fit Together Grants, www.healthwellNC.com

[xix] Active Living by Design, www.activelivingbydesign.org

[xx] **The Trust for Public Land, www.tpl.org.**

[xxi] Design Arts Program, The National Endowment for the Arts, http://www.nea.gov/grants/apply/Design.html

[xxii] Conservation Fund's American Greenways Program, http://www.conservationfund.org/node/245

[xxiii] Wal-Mart Foundation, http://www.walmartfoundation.org/wmstore/goodworks/scripts/index.jsp

[xxiv] League of American Bicyclists, http://bicyclefriendlycommunity.org

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Appendix F: Project Priority Ranking

F.1 Methodology of Priority and Ranking

The Steering Committee met on August 23, 2011, to discuss the potential list of projects and identify priority criteria to determine priority projects. To assist the Steering Committee in determining which projects to construct first, an exercise was performed at this meeting to prioritize projects based on preselected priority criteria. Steering Committee members were given five numbered dots from one to five (1-5) with one (1) being the most important to five (5) being the least important. The list was tabulated with each criterion given a numeric value based on their ranking (1=5 pts, 2=4 pts, 3=3 pts, 4=2 pts, & 5=1 pts).

Prioritization and scheduling were based on the following criteria:

1. Project Characteristics: A project's ability to address these items:
   - Connectivity to schools, parks, Downtown, commercial/retail areas, employment centers, and existing sidewalks
   - Improves a known safety issues (pedestrian-vehicle crash sites)
   - Improves an area of existing use or need (worn path and/or observed use)
   - Identified in existing plans as a pedestrian improvement/project
   - Listed or submitted for submission to NCDOT TIP

2. Number of Public Comments: Repeated comments from the Steering Committee and public at Open Houses and from surveys.

3. The complexity or ease of constructing the project based on various components and engineering design work needed, as well as the cost of construction.

Project prioritization was a layered process, which incorporated the above-mentioned criteria in the following steps:

1. Each potential project was rated on the above criteria. A project received points for the following criteria:

   a) Connectivity: *Shopping Center*. Is a shopping center located within the project limits?
   Yes, between .125-.25 miles = 3 points
   Yes, between .25 - .5 miles = 2 points

Yes, between .5 – 1 mile = 1 point
No (> 1 mile) = 0 points

b) Connectivity: *Schools*. Is a schools located within the project limits?
Yes, between .125-.25 miles = 3 points
Yes, between .25 - .5 miles = 2 points
Yes, between .5 – 1 mile = 1 point
No (> 1 mile) = 0 points

c) Connectivity: *Parks.* Is a park located within the project limits?
Yes, between .125-.25 miles = 3 points
Yes, between .25 - .5 miles = 2 points
Yes, between .5 – 1 mile = 1 point
No (> 1 mile) = 0 points

d) Connectivity: *Commercial/Retail.* Is a commercial/retail area located within the project limits?
Yes, between .125-.25 miles = 3 points
Yes, between .25 - .5 miles = 2 points
Yes, between .5 – 1 mile = 1 point
No (> 1 mile) = 0 points

e) Connectivity: *Downtown*. Is Downtown located within the project limits?
Yes, between .125-.25 miles = 3 points
Yes, between .25 - .5 miles = 2 points
Yes, between .5 – 1 mile = 1 point
No (> 1 mile) = 0 points

f) Connectivity: *Employment Centers.* Is an employment center located within the project limits?
Yes, between .125-.25 miles = 3 points
Yes, between .25 - .5 miles = 2 points
Yes, between .5 – 1 mile = 1 point
No (> 1 mile) = 0 points

g) Connectivity: *Existing Sidewalk or Multi-Use Trail.* Does the project link to or complete a segment of existing sidewalk or multi-use trail?
Yes, Connect to = 1 point No, Doesn't connect to = 0 points

h) Safety: Does the project improve a pedestrian-vehicular crash site?
Yes = 1 point No = 0 points

i) Latent Demand/Existing Use: Does the project improve an area of existing use or need?
Yes, path and/or frequent use = 3 points
Yes, path and/or routine use = 2 points
Yes, infrequent use = 1 point

No, no path or use = 0 points

j) Within Existing Plans: Is the project listed in an existing plan?
Yes = 1 point No = 0 points

k) Listed or Submitted for Inclusion on NCDOT TIP: Is the project listed or has been submitted for inclusion?
Yes = 1 point No = 0 points

l) Number of Public Comments: Is the Project mentioned repeatedly either specifically, or as a part of connectivity to a stated destination?
Yes = 1 point No = 0 points

Project Cost Evaluation

Once projects were rated based on characteristics and public input, projects were given a rough associated cost based on their complexity and ease of construction; such as further study needed to identify potential environmental or constraints, property acquisition, surveying and engineering, permitting, utility relocation, etc.

Minimal Cost
Minimal costs is $10,000 or less for a project based on existing conditions, proposed treatment, any further study that is needed, level of engineering required, and project components (permits, acquisition, coordination, etc.). Examples of projects include installation of signage and pavement markings, and spot and/or hazard improvements.

Low Cost
Low costs for a project range from $10,001 - $99,999 based on existing conditions, proposed treatment, any further study that is needed, level of engineering required, and project components (permits, acquisition, coordination, etc.). Examples of projects include striping, signage, and pavement markings.

Moderate Cost
Moderate cost estimate for projects range from $100,000 - $299,999 based on existing conditions, proposed treatment, any further study that is needed, level of engineering required, and project components (permits, acquisition, coordination, etc.). Examples of projects include small multi-use trails outside of environmentally sensitive areas, restriping/striping for bike lanes where milling is required.

High Cost
High cost estimate for projects range is $300,000 or higher based on existing conditions, proposed treatment, any further study that is needed, level of engineering required, and project components (permits, acquisition, coordination, etc.). Examples of project include long multi-use trail/paths segments through environmentally sensitive areas and paved shoulders or other overlay or new construction treatment projects.

PLACEMENT OF PROJECTS ON PHASING SCHEDULE

Once each project was ranked and given a cost estimate they were placed into a category (short-term, mid-term, or long-term) based upon their preliminary estimated cost and priority ranking. For instance, projects that had an estimated minimal and low costs and high priority ranking were placed on the short-term (0-5 yrs) implementation schedule. Mid-term (6-10 yrs) projects are those projects with a minimal, low and/or moderate costs and low and high priority ranking. Long-term (10+ yrs) projects were those projects that had high cost and low priority ranking. However, mid- and long-term projects should be expedited if financing becomes available.

Town of Williamston
Comprehensive Pedestrian Plan

Map 1.1 Study Area Map

Legend

- Senior Center
- Town Hall
- Library
- Schools
- Boat Ramp
- Skewarkee Rail Trail
- Parks and Rec Facilities
- Recreation Facilities
- Town_Limit_revised081611
- Power Transmission Corridors
- Railroad
- Parcles
- SurfaceWater
- Downtown

N

1,500 750 0 1,500 Feet

Division of Bicycle & Pedestrian Transportation

Rivers & Associates, Inc. Since 1918

Williamston

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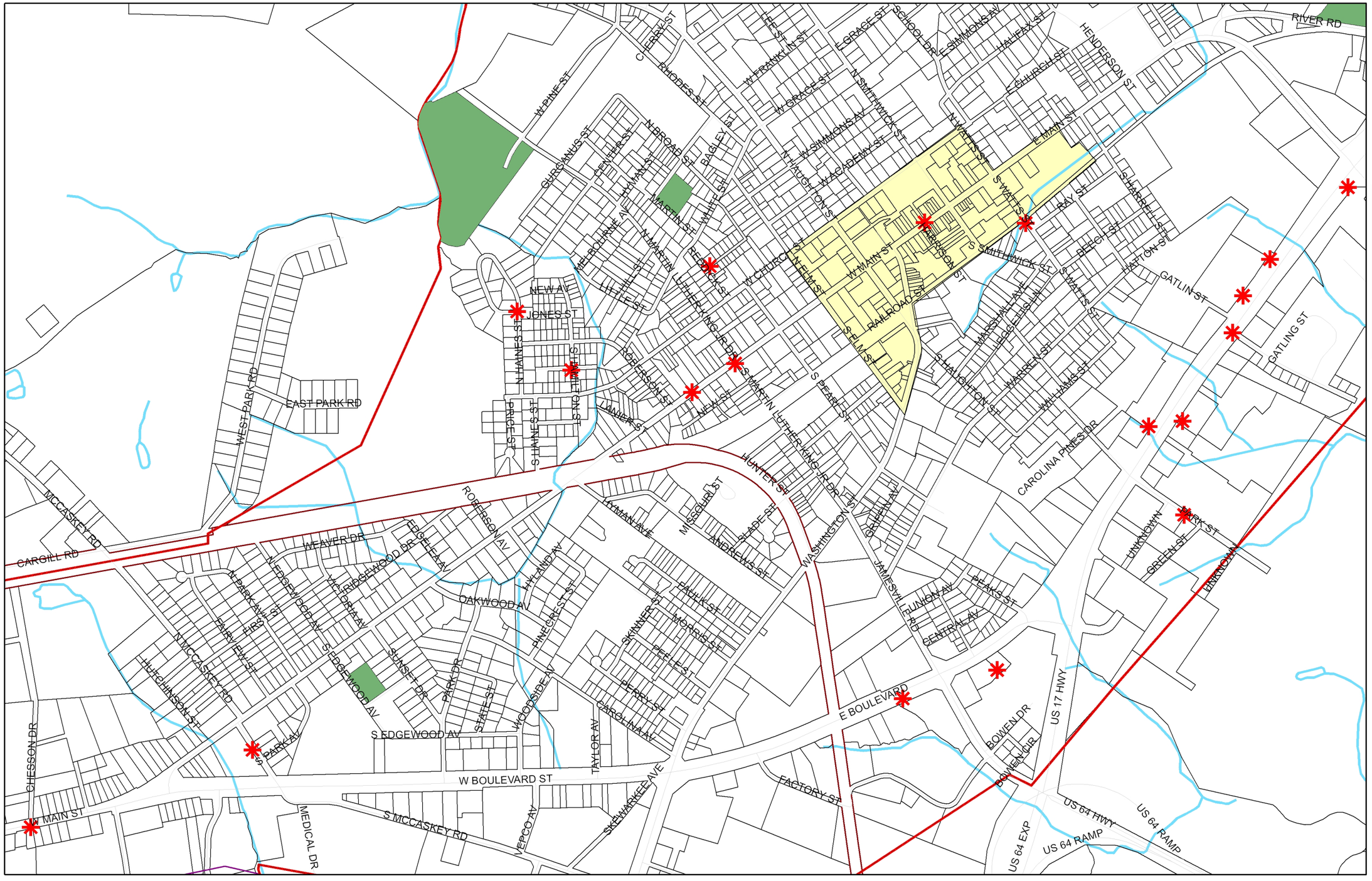
Town of Williamston
Comprehensive Pedestrian Plan
Map 2.1 Pedestrian Crash Sites



Legend

- Crash Sites
- Recreation Facilities
- Town Limit
- Power Transmission Corridors
- Railroad
- Parcles
- SurfaceWater
- Downtown

0 312.5 625 1,250 Feet

Division of Bicycle & Pedestrian Transportation

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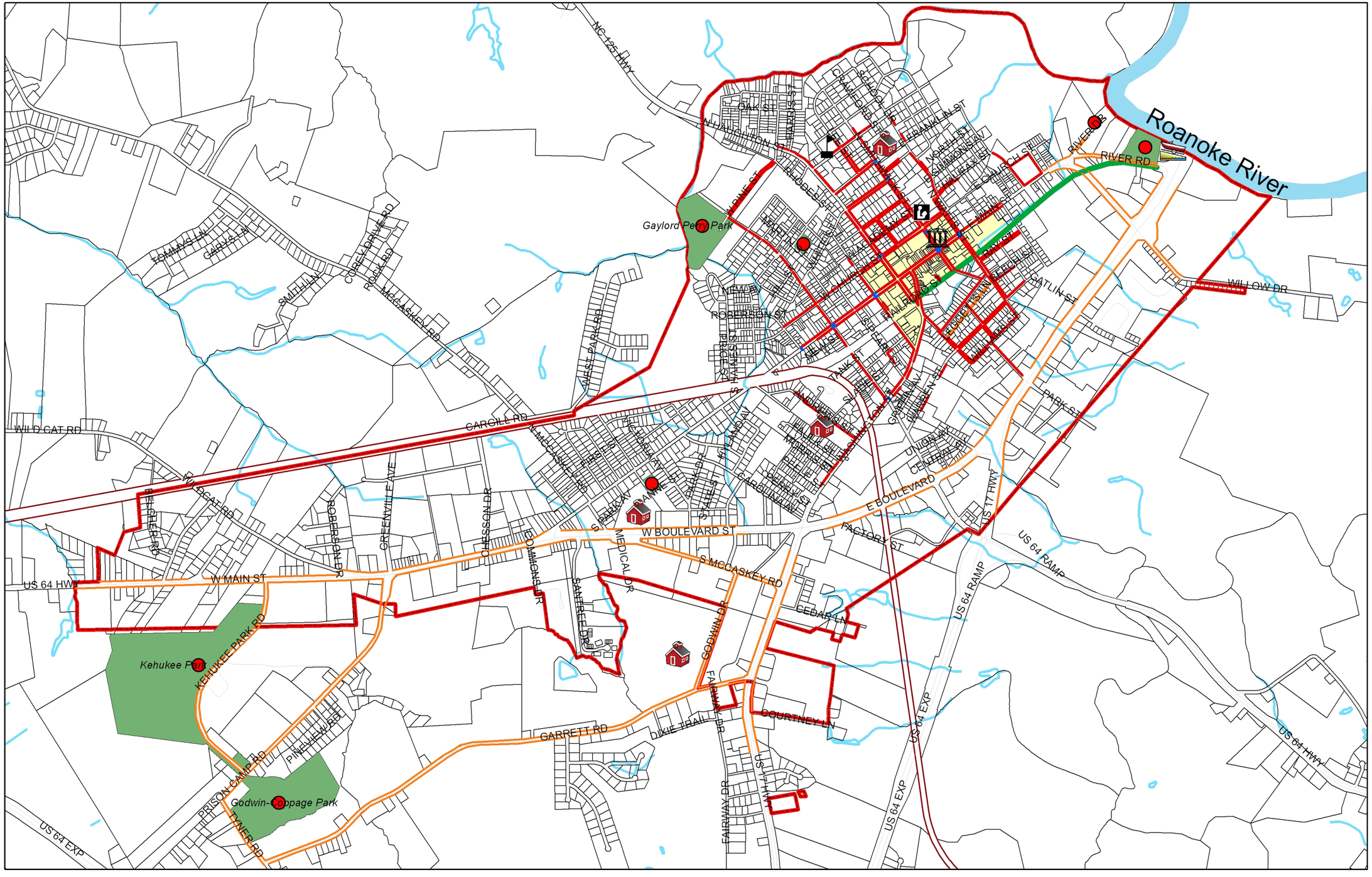
Town of Williamston

Comprehensive Pedestrian Plan

Map 2.2 Existing Pedestrian Facilities



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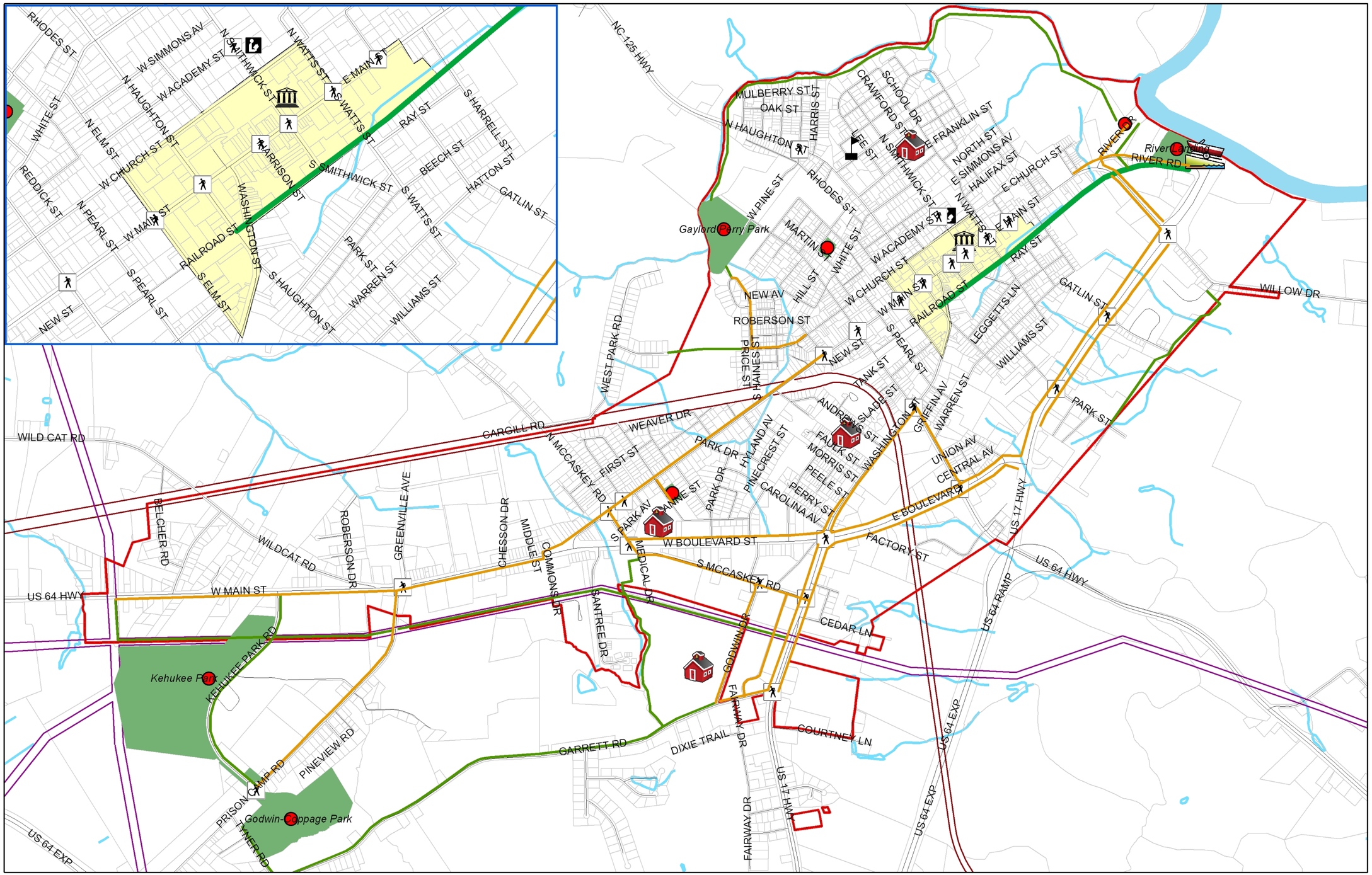
Town of Williamston

Comprehensive Pedestrian Plan

Map 4.1 Potential Opportunities & Corridors



Legend

- Sidewalk Improvements
- Multi-Use Trail Improvements
- Crosswalk Improvements
- Senior Center
- Town Hall
- Library
- Schools
- Boat Ramp
- Skewarkee Rail Trail
- Parks and Rec Facilities
- Recreation Facilities
- Town Limit
- Power Transmission Corridors
- Railroad
- Parcels
- SurfaceWater
- Downtown

980 490 0 980 Feet

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Williamston

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Town of Williamston

Comprehensive Pedestrian Plan

Map 7.1 Final Preliminary Project Recommendations

Legend

- Crosswalk Improvements
- Sidewalk Improvements
- Sidewalk Infill
- Multi-Use Trail Improvements
- Town Limit
- Senior Center
- Town Hall
- Library
- Schools
- Boat Ramp
- River Landing Boardwalk
- Skewarkee Rail Trail
- Existing Crosswalk
- Existing Sidewalk
- Areas w/ no Curb/Gutter
- Parks and Rec Facilities
- Recreation Facilities
- Power Transmission Corridors
- Railroad
- Surface Water
- Downtown

1,200 600 0 1,200 Feet

Division of Bicycle & Pedestrian Transportation

Rivers & Associates, Inc. Since 1918

Williamston

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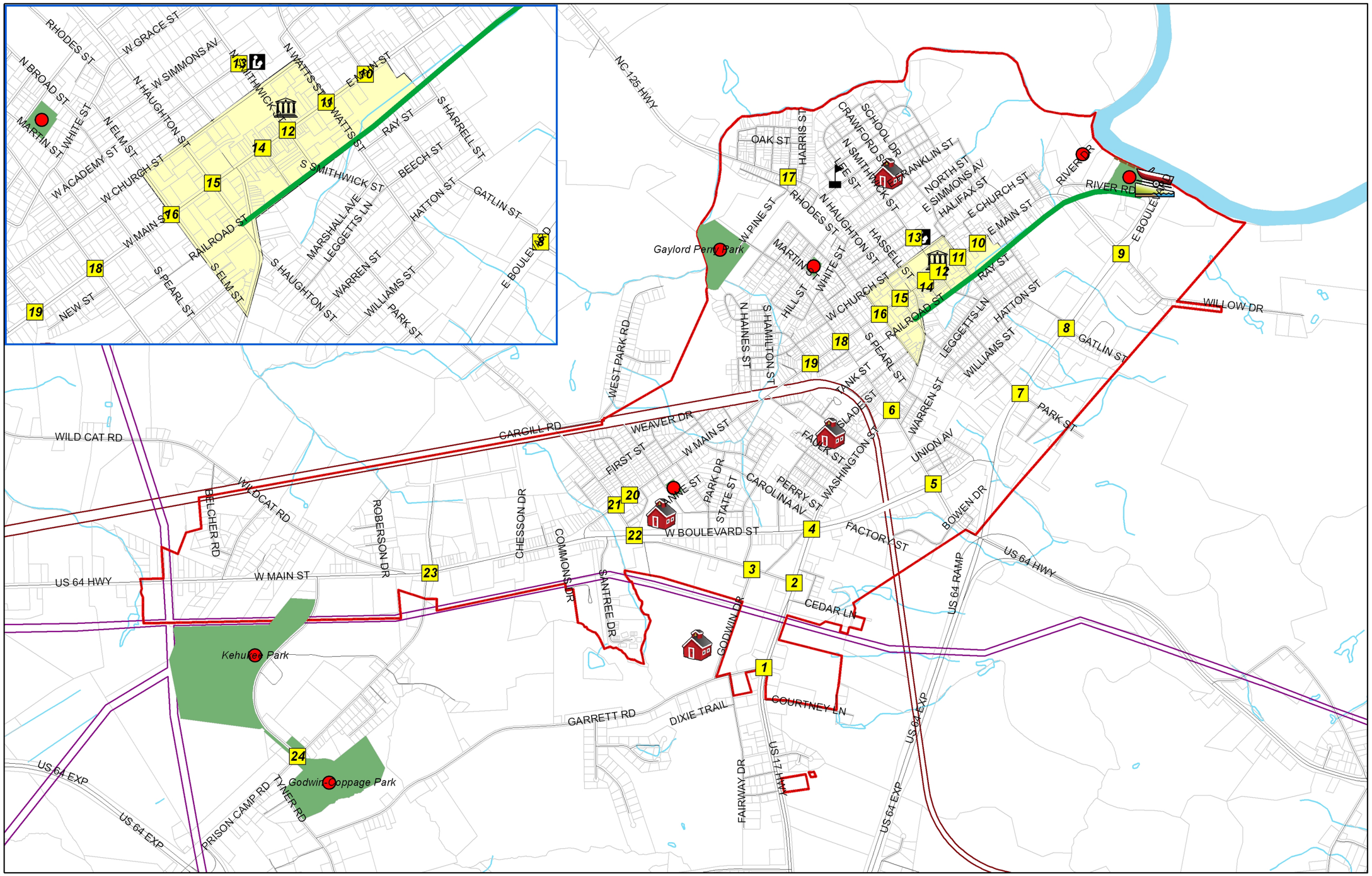
Town of Williamston

Comprehensive Pedestrian Plan

Map 7.2 Recommended Pedestrian Crossing Improvements



Legend

- Crosswalk Improvements
- Senior Center
- Town Hall
- Library
- Schools
- Boat Ramp
- River Landing Boardwalk
- Skewarkee Rail Trail
- Parks and Rec Facilities
- Recreation Facilities
- Town Limit
- Power Transmission Corridors
- Railroad
- Parcels
- SurfaceWater
- Downtown

920 460 0 920 Feet

Division of Bicycle & Pedestrian Transportation

Rivers & Associates, Inc. Since 1918

Williamston

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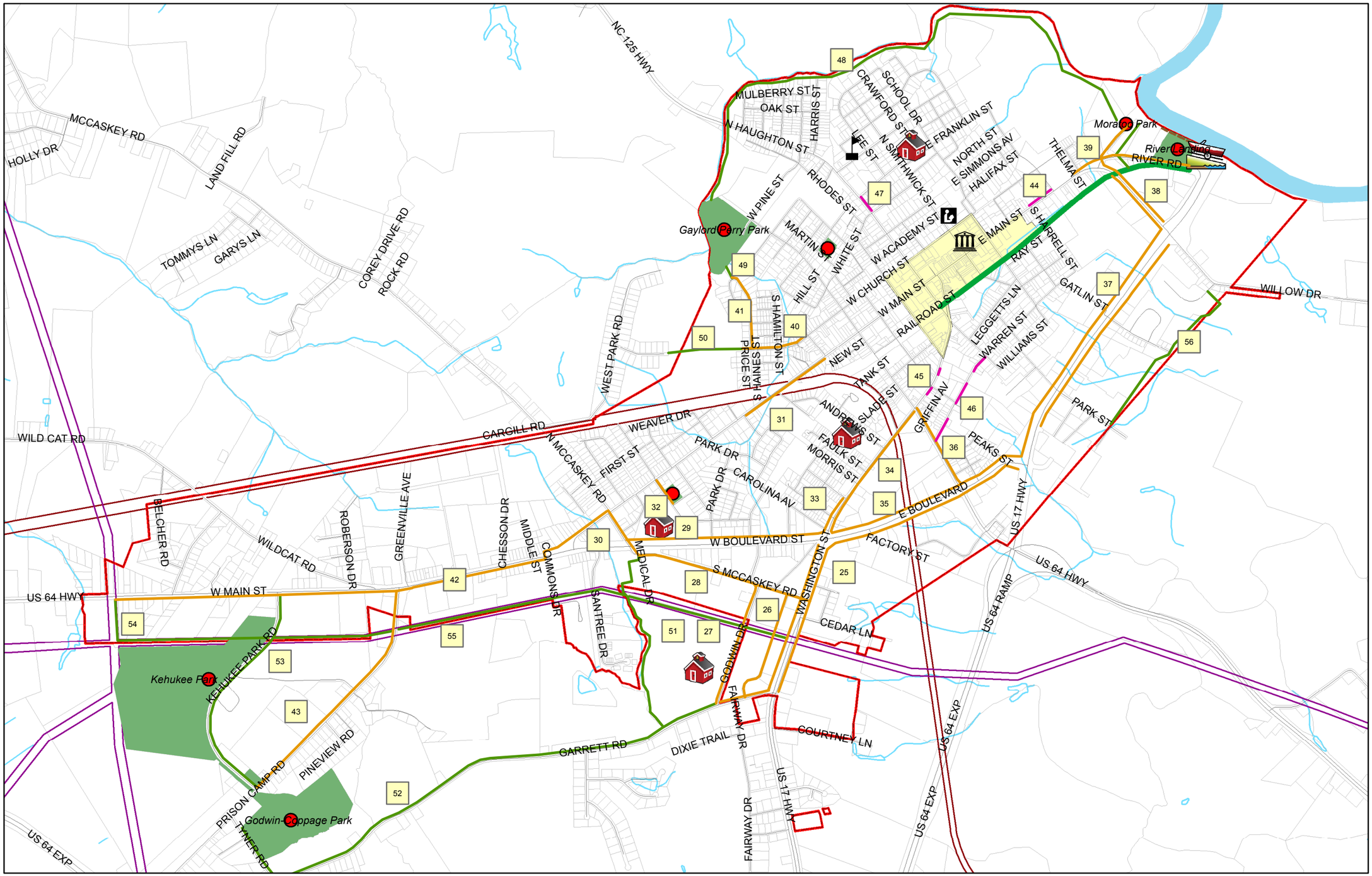
Town of Williamston

Comprehensive Pedestrian Plan

Map 7.3 Recommended Sidewalk & Greenway Improvements



Legend

- Sidewalk Infill
- Sidewalk Improvements
- Multi-Use Trail Improvements
- Senior Center
- Town Hall
- Library
- Schools
- Boat Ramp
- River Landing Boardwalk
- Skewarkee Rail Trail
- Parks and Rec Facilities
- Recreation Facilities
- Town Limit
- Power Transmission Corridors
- Railroad
- Parcels
- SurfaceWater
- Downtown

925 462.5 0 925 Feet

Division of Bicycle & Pedestrian Transportation

Rivers & Associates, Inc. Since 1918

Williamston

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