Town of Farmville

Comprehensive Pedestrian Plan





NCDOT

Town of Farmville

Mid-East Commision

December 2014

ACKNOWLEDGEMENTS

TOWN OF FARMVILLE COMPREHENSIVE PEDESTRIAN PLAN – ADOPTED DECEMBER 2, 2014

KEY PARTNERS

The Town of Farmville The North Carolina Department of Transportation (NCDOT), Division of Bicycle and Pedestrian Transportation

MAYOR

Etsil S. Mason

TOWN COUNCIL

David Shackleford JaminDixon John Baker John O. Moore Richard Hicks

FARMVILLE PLANNING BOARD

FARMVILLE PEDESTRIAN PLAN STEERING COMMITTEE

PROJECT CONSULTANT

Mid-East Commission - Planning Department Justin Oakes - Project Manager Bryant Buck - Planning Director Ben Rogers - Project Planner

CONTENTS

ACKNOWLEGEMENTS	1
CONTENTS	2
EXECUTIVE SUMMARY	3
SECTION 1 – INTRODUCTION	8
SECTION 2 – CURRENT CONDITIONS	15
SECTION 3 – EXISTING PLANS, PROGRAMS, POLICIES	31
SECTION 4 – STRATEGIC PEDESTRIAN PLAN	37
SECTION 5 – PEDESTRIAN FACILITY STANDARDS & GUIDELINES	61
SECTION 6 – RECOMMENDATIONS FOR ANCILLARY FACILITIES, PROGRAM AND POLICIES	NS, 82
SECTION 7 – PROJECT RECOMMENDATIONS	93
SECTION 8 – IMPLEMENTATIONS	100

APENDIX

APPENDIX A – PUBLIC INVOLVEMENT STRATEGY	106
APPENDIX B – COST ESTIMATES	119
APPENDIX C – EXISTING CONDITIONS INVENTORY	124
APPENDIX D – FUNDING SOURCES	127

EXECUTIVE SUMMARY

The Town of Farmville Comprehensive Pedestrian Plan is the first plan of its kind for the Town and was funded by a Bicycle and Pedestrian Planning Grant from the North Carolina Department of Transportation Bicycle and Pedestrian Division. The development of a Comprehensive Pedestrian Plan will support the Towns ongoing efforts to promote sustainable growth and development as well as healthy living habits, and attract individuals, both tourist and potential residents, to the area, all while making it more convenient and safer for people who both enjoy walking or depend on it everyday. The Town of Farmville 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 Farmville submitted an application for the Bicycle and Pedestrian Planning Grant Funds for the 2011 grant year. The Town, putting up a \$5,000 match, was awarded \$20,000 of NCDOT Planning Funds to develop a Comprehensive Pedestrian Plan. Upon receipt of the grant, the Town of Farmville acquired the services of the Mid-East Commission 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 raking budget decisions and applying for grant funds from regional, state, federal, and private funding sources.

The Town of Farmville local government, Pitt County Health Department, Pitt County Board of Commissioners, Elementary, Middle, and High Schools in Farmville, the Friends of Greenville Greenways (FROGGS), and several Farmville Citizens has all expressed their support for improving Farmville's Pedestrian transportation to provide a multi-modal transportation-system.

The existing Pitt County Comprehensive Greenway Plan, Pitt County Comprehensive Transportation Plan, and the Farmville Comprehensive Bicycle Plan all support the vision of developing a comprehensive pedestrian transportation planning document that will provide direction in achieving safe transportation and connectivity in Farmville.

Town of Farmville Comprehensive Pedestrian Plan Vision Statement:

Farmville is recognized as a pedestrian-friendly community where walking is a safe, viable, healthy, and popular transportation and recreation choice for all citizens, students, workers, and visitors. Identified themes that came out of Steering Committee discussion include:

Improved Safety Education Connectivity and Accessibility Pedestrian Amenities Enforcement

These themes led to the development of the plan's goals and objectives to achieve the vision. These are discussed in further in **Section 1**.

The current conditions within the Town of Farmville 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 pedestrian facilities and walking compatibility of the local transportation system. The information obtained regarding Farmville's current conditions provides the framework for planning pedestrian 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 on bicycling. 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 pedestrian and multiuse facilities projects have been broken down into three categories: Sidewalk Additions and Improvements; Multi-Use Facility Additions and Improvements, and Ancillary Facilities. **Section 4** describes the Strategic Pedestrian Plan, which: includes many potential project opportunities that were based upon:

- Steering Committee Meetings
- Public Survey & Open Houses
- Pedestrian Crash Data
- Field Inventory and Assessment
- Connectivity & Improved Safety

Section 5 will provide guidance to the Town on design standards and guidelines for pedestrian facilities. These standards and guidelines are a critical component of this Plan and for all facility construction and development. The design

standards and guidelines mentioned in this section are derived from North Carolina Department of Transportation (NCDOT) *Bicycle Facilities Planning and Design Guidelines*, the American Association of State Highway and Transportation Officials (AASHTO), and the Federal Highway Association (FHWA) *Manual on Uniform Traffic Control Devices* (MUTCD).

Section 6 outlines recommendations for ancillary facilities, programs, and policies aimed at making Farmville a pedestrian-friendly community. Addressing engineering, education, encouragement, enforcement, and evaluation and planning, these recommendations will encourage the transformation of Farmville into a pedestrian-friendly community. The implementation of programs discussed in the plan will not only encourage pedestrian transportation, but provide education, enforcement, and maintenance opportunities, ensuring Farmville has a comprehensive pedestrian network in which users feel comfortable walking in the community.

Section 7 contains the Recommended Projects. This list of potential project locations was developed based upon input from the Steering Committee, Town Staff, and the Public (via Open Houses, Public Survey, and letters of support). Projects were also developed through observations taken during field visits conducted by the consultant. All projects should be evaluated to determine whether it is possible to provide the facility recommended 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.

Top 10 Priorities				
Type of Project	Project/Improvement	At/On	From	То
	Name			
	Main Street Sidewalk			
	Extension, Southern			
Sidewalk Addition	Connection (East Side)	S. Main St.	Vines St.	Marlboro Rd.
	Main Street Sidewalk			
	Extension, Southern			
Sidewalk Addition	Connection (West Side)	S. Main St.	Vines St.	Marlboro Rd.
	Grimmersburg Street	Grimmersburg		
Sidewalk Addition	Sidewalk Extension	St.	Greene St.	Davis Dr.
	Main Street Sidewalk			
	Extension, Northern			
Sidewalk Addition	Connection	N. Main St.	Dale Dr.	Jones St.
	Farmville Municipal Athletic			
Sidewalk Addition	Park Connection	W. Horne Ave.	Walnut St.	May Blvd.

The following table outlines all recommended projects included in the plan.

	Pitt Street Sidewalk			
Sidewalk Addition	Extension - Phase 2	Pitt St.	E. Pine St.	Ellis Ave.
	Pitt Street Sidewalk		Grimmersburg	
Sidewalk Addition	Extension - Phase 1	Pitt St.	St.	E. Pine St.
	Wilson Street Sidewalk			
Sidewalk Addition	Extension - Phase 2	W. Wilson St.	May St.	Fields St.
	Wilson Street Sidewalk			
Sidewalk Addition	Extension - Phase 1	W. Wilson St.	Park St.	Charter Oaks Dr.
			W. Wilson St.	
	Church Street Sidewalk		(Church	
Sidewalk Addition	Extension	W. Church St.	Entrance)	Turnage St.
	1	t Term	_	
Type of Project	Project/Improvement Name	At/On	From	То
	Contentnea to Oliver	NC 121/N.		Contentnea
Sidewalk Addition	Murphy Connection	Main St.	Dale Dr.	Street
	Bennett Street Park	S George		
Sidewalk Addition	Connection	St./Bennett St.	W. Perry St.	S. Main St.
	Farmville Athletic Park			
Crosswalk Addition	Crosswalk	W. Horne St.	NA	NA
	Belcher/Grimmersburg			
Crosswalk Addition	Crosswalk	N Main St.	NA	NA
	Oliver Murphy Park			
Crosswalk Addition	Crosswalk	N. Main St.	NA	NA
		l Term	_	
Type of Project	Project/Improvement	At/On	From	То
	Name			
	Ellis Avenue Sidewalk		C D:++ C+	Creative ad Drive
Sidewalk Addition	Extension Crestwood Sidewalk	Ellis Ave.	S. Pitt St.	Crestwood Drive
Sidewalk Addition	Extension	Crestwood Dr.	Ellis Ave.	E. Perry St.
	Perry Street Sidewalk	Crestwood Dr.	Lills Ave.	Powder Horne
Sidewalk Addition	Extension	Perry St.	Crestwood Dr.	Ln.
	Contentnea Street Sidewalk	N. Contentnea		NC 121/N. Main
Sidewalk Addition	Extension	St.	Lang St.	St.
	Walnut Street Sidewalk	N. Walnut		
Sidewalk Addition	Extension - Phase 1	Street	W. Wilson St	W. Horne Ave.
	Walnut Street Sidewalk	N. Walnut		
Sidewalk Addition	Extension - Phase 2	Street	Jones St.	Dale Dr.
	Belcher Street Sidewalk			
Sidewalk Addition	Extension	Belcher St.	May Blvd.	N. Barrett St.

	Lon	g Term		
Type of Project	Project/Improvement	At/On	From	То
	Name			
	May Boulevard Complete		Planters Way	
Sidewalk Addition	Street Improvement	May Blvd.	Dr.	W. Wilson St.
	Dale Drive Sidewalk		N. Walnut	NC 121/N. Main
Sidewalk Addition	Extension	Dale Dr.	Street	St.
			Farmville	
Greenway	North Farmville Greenway	New Location	Central HS	May Blvd.
		New Location		
		(Utility		
	May Boulevard Shared Use	Easement	Planters Way	
Shared Use Path	Path	along May)	Dr.	Shopping Center
	North Farmville Greenway			
	Crosswalk NC 121/N. Main	NC 121/N.		
Crosswalk Addition	Street	Main St.	NA	NA
	North Farmville Greenway			
Crosswalk Addition	Crosswalk/May Boulevard	May Blvd.	NA	NA
Railroad Crossing	Pitt Railroad Crossing			
Cushion	Improvement	Pitt St.	NA	NA
Railroad Crossing	Main Railroad Crossing			
Cushion	Improvement	S. Main St.	NA	NA

Section 8 describes how the recommendations for improving Farmville'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 Towns various departments should be aware of the Plan recommendations and seek to implement them as part of their regular work. The NCDOT Division of Bicycle and Pedestrian Transportation may provide technical expertise on issues related to pedestrian transportation and financial assistance to ensure that implementation of the Plan moves forward. Progress on improving the Plan should be monitored on no less than an annual basis. Almost every transportation project offers an opportunity to implement a piece of this Plan.

SECTION 1 — INTRODUCTION

The Town of Farmville Comprehensive Pedestrian Plan is the first plan of its kind for the Town and was funded by a Bicycle and Pedestrian Planning Grant from the North Carolina Department of Transportation Bicycle and Pedestrian Division. The development of a Comprehensive Pedestrian Plan will support the Town's ongoing efforts to promote sustainable growth and development as well as healthy living habits, and attract individuals, both tourist and potential residents, to the area, all while making it more convenient and safer for people who walk. The Town of Farmville 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 Farmville, in cooperation with the Mid-East Commission and Mid-East RPO, submitted an application for the Bicycle and Pedestrian Planning Grant Funds for the 2011 grant year. The Town, putting up a \$5,000 match, was awarded \$20,000 of NCDOT Planning Funds to develop a Comprehensive Bicycle Plan. Upon receipt of the grant, the Town of Farmville acquired the services of the Mid-East Commission 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 raking budget decisions and applying for grant funds from regional, state, federal, and private funding sources.

The Town of Farmville local government, Pitt County Health Department, Pitt County Board of Commissioners, Elementary, Middle, and High Schools in Farmville, the Friends of Greenville Greenways (FROGGS), and several Farmville Citizens has all expressed their support for improving Farmville's Pedestrian transportation to provide a multi-modal transportation-system.

The Town, who is also currently in the process of developing an accompanying Comprehensive Bicycle Plan, was also included in the development of the Pitt County Comprehensive Transportation Plan. Both documents support the vision of developing a comprehensive pedestrian transportation planning document that will provide direction in achieving safe transportation and connectivity in Farmville.

PUBLIC INVOLVEMENT

Public input was a driving force behind the development of Farmville's Comprehensive Pedestrian Plan. The public involvement strategy involved several components including Steering Committee meetings, Public Open Houses, and public hearings at the Town's Planning Board and Town Council. Media outreach was utilized with press releases, public notices, and invitations to open houses to announce the project.

A 14 Member Steering Committee, comprised of citizens, City staff, and Mid-East Commission staff met six 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. See Appendix A for further information regarding Steering Committee meetings.

In addition to the Steering Committee, pubic input was solicited through online and hard copy surveys. The survey was available on the Town website and hardcopies of the survey were available at Town Hall, Farmville Public Library, Piggly Wiggly Supermarket, Offices of Drs. Warren and Hardee, and Farmville Internal Medicine, PA. Citizens in Farmville were notified of the survey through local media outlets and the Town's website.

Two Public Open Houses were held during the development of the Comprehensive Pedestrian Plan. The first Public Open House was held on December 10th, 2013. During the first Public Open House, participants were presented the draft Comprehensive Pedestrian Plan, including proposed projects, and were provided the opportunity to ask questions and provide any further input. A second Public Open House was held on May 20th 2014 to present the updated plan recommendations. Additional information regarding these Public Open Houses can be found in Appendix A.

VISION STATEMENT

During the first Steering Committee Meeting, members discussed their vision for the Pedestrian Plan. That discussion, along with additional fine tuning at the next Steering Committee Meeting, formulated the final vision for the plan:

Farmville is recognized as a pedestrian-friendly community where walking is a safe, viable, healthy, and popular transportation and recreation choice for all citizens, students, workers, and visitors.

THEMES, GOALS, & OBJECTIVES

There were several overall themes that the plan needed to address that were identified through discussions by the Steering Committee. The following themes were derived:

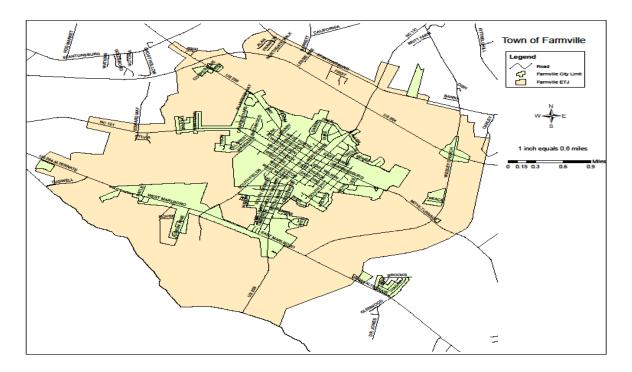
- Improved Safety
- Education
- Connectivity and Accessibility
- Enforcement
- Health Promotion

Based off of these themes, goals and objectives were developed for the Town of Farmville Comprehensive Pedestrian Plan.

PURPOSE OF THE COMPREHENSIVE PEDESTRIAN PLAN

The Comprehensive Pedestrian Plan provides a comprehensive approach to pedestrian planning that maximizes Farmville's existing infrastructure, identifies new opportunities, and creates an opportunity to develop and foster a more pedestrian-friendly community through planning, design, and regulations, while also addressing pedestrian safety and encouragement.

The Comprehensive Pedestrian Plan Study Area includes Farmville's town limits and extra-territorial jurisdiction (ETJ). Map 1 illustrates the project study area:



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 citizens by way of an on-line survey available on the Town website and hardcopies of the survey available at Town Hall, Farmville Public Library, Piggly Wiggly Supermarket, Offices of Drs. Warren and Hardee, and Farmville Internal Medicine, PA
- Analyzed survey results
- Compiled existing data (relevant plans and ordinances,: Census Data, 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 within the Town
- Conducted on-site assessments of current conditions and constraints
- Summarized existing ordinances, programs, and initiatives
- Held two Steering Committee Meetings

PHASE 2 - PRELIMINARY RECOMMENDATION DEVELOPMENT

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

- Developed preliminary recommendations for pedestrian projects, programs; and policies
- Conducted an inventory for the roadways where pedestrian facilities are recommended
- Met with NCDOT representatives to discuss preliminary recommendations
- Held 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
- Presented the draft Comprehensive Pedestrian Plan to the Steering Committee for committee feedback and to discuss implementation
- Held a Public Open House to present the draft Comprehensive Bicycle Plan containing project priorities
- 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 Farmville Planning Board review, the Plan was revised and resubmitted to the NCDOT for approval and to the Town Council 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 Farmville 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 Council's review
- Developed a revised final Comprehensive Pedestrian Plan based upon feedback from the Town's Planning Board and Town Council
- Submitted final plan to Town for approval and adoption by the town council

BENEFITS OF WALKING

Walking provides numerous benefits capable of promoting healthy, livable, and thriving community. These benefits include, but are not limited to, health, transportation, environmental and economic, all of which contribute to a high quality of life.

HEALTH BENEFITS

The benefits of walking are countless. Walking is one of the easiest forms of physical activity one can participate in. It has the lowest dropout rate of all physical activities. It is simple and is an easy way to improve one's health.

Walking at least thirty minutes a day has been shown to reduce the risk of many diseases and health issues. Coronary heart disease is number one killer but can be reduced by walking. Heart disease occurs when the heart doesn't receive enough oxygen or blood flow, but one who walks increases their blood flow and oxygen to the heart and rest of the body. Walking also helps improve blood pressure by increasing one's systolic, which increase blood flow and oxygen through the arteries and to all the muscles of the body. Walking regularly helps maintain body weight and therefore reduce the risk of obesity, which helps reduce the risk of diabetes and cancers. Another benefit one receives from walking is they decrease their risk of arthritis or osteoporosis. This occurs because when one walks regularly he/she strengthens their muscles and bones. Walking is also a great way to reduce one's stress. When one participates in walking, or any physical activity, endorphins are released, which makes one calmer and more relaxed. Reducing stress is an important part of one's health too, because it can be considered a risk factor for many other diseases, such as heart disease, high blood pressure, etc. Overall, walking is a simple activity but along with the many other benefits it can overall increases one well-being and guality of life. It is said that with walking one is obviously healthier, so there is less stress about health issues, but one also feel better about themselves and has a more positive outlook on life. For such a simple activity there are numerous health benefits one could experience and shouldn't miss out on.

In 2011, Pitt County's top three causes of death were heart disease, cancer, and cerebrovascular disease. Of the deaths between the years of 2004 and 2009, 868.1 deaths were due to heart disease, 883.1 deaths were due to cancer, and 259.8 were due to cerebrovascular disease. These three deaths were closely followed in number of deaths by chronic lower respiratory disease and diabetes mellitus. Only 36% of Pitt County adults reported getting the recommended amount of physical activity, which is 30 minutes of moderate activity, at least five times a week, or 20 minutes of vigorous activity at least three times a week. Pitt County has six priority areas they are working toward improving: diabetes, high blood pressure, nutrition, physical activity, tobacco, and unintended pregnancies and infant mortality. Five of those six major priorities are risk factors that impact the County's top three causes of death. Three of the six major priorities can be positively influenced or affected by walking. Walking is moderate physical activity which can help control one's diabetes, weight, decrease the risk of heart disease, and decrease the risk of cerebrovascular disease. Walking is a simple task that can make a huge impact on Farmville and Pitt County's health status.

TRANSPORTATION BENEFITS

Given its prominent location just outside of Greenville, Farmville is an attractive choice for professionals and families looking to get away from the hustle and bustle of the big city. Farmville is not only an attractive community because of its geographical proximity to Greenville, but the community is also highly suitable for pedestrian travel due to the roadway layout, conditions, and the relatively low traffic volumes its residential neighborhoods offer. At the same time however, there are several locations in Farmville that are of importance to its citizens that are located along stretch's that experience higher traffic volume, relatively dangerous roadway conditions, and lack pedestrian-friendly facilities. Of particular concern is the location of prominent destinations in the community (shopping center, restaurants, grocery stores, medical facilities) that currently have no infrastructure connecting residents to them.

The development of a pedestrian-friendly community may alleviate roadway congestion and reduce the number of accidents, both vehicular related and pedestrian/motorist. With a number of Farmville's goods and services located on the edge of town, and no existing pedestrian facilities to connect them to residential areas, it is the goal of the pedestrian plan will assist in providing pedestrian infrastructure to provide linkages to the town's destination points as well as increase walking trips.

ENVIRONMENTAL BENEFITS

Walking is an easy way to reduce energy needs and pollution emissions. With traffic volumes likely to continue to grow, the overall air quality in communities will deteriorate from the additional motor vehicles polluting the air. Providing a safe, alternative method of transportation will increase the number of pedestrians; therefore reducing the number of motor vehicles leading to a decrease in emissions.

ECONOMIC BENEFITS

Walking is an affordable mode of transportation. Implementation of the plan will lead to increased opportunities for further economic development within the Town. Promotion of a more walkable Farmville will attract potential residents to locate in the Town. Providing well connected pedestrian facilities in Farmville may increase visits to local businesses and recreation facilities. Other economic benefits of walking include reduced health care costs and reduced dependency on auto ownership.

SECTION 2 — CURRENT CONDITIONS



TOWN OF FARMVILLE OVERVIEW

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

The area surrounding the current Town of Farmville was first settled in the mid 1760s. These early settlers were few in numbers and were almost exclusively farmers by trade. The first recorded structure inside the current town limits was a log cabin erected about 1840. In the 1850's a church and a school were built, however, growth was quite slow up through the end of the 1860s. In 1872 the populace petitioned the North Carolina legislature to create a town named Farmville. Prior to this time the community had no formal name and was generally referred to as New Town. The Town of Farmville was formally incorporated on February 12, 1872. During the last quarter of the 19th century, the town developed as a small commercial center supporting the agricultural expansion of the region brought about by the boom in Brightleaf Tobacco cultivation.

The first quarter of the 20th century was a period of incredible growth for Farmville. The period 1901 to 1907 saw the arrival of two railroads, providing cost effective transportation outlets and bringing about an expansion of agribusiness support services. The period 1905 to 1929 saw the establishment of a number of large tobacco sales, processing and warehousing operations. Along with this commercial growth came the growth of residential areas, accommodating persons of virtually every economic class.

Tobacco sales, processing and warehousing, as well as, agribusiness support services continued to be of primary importance to Farmville's growth and stability up through the late 1960s. With the decline of the tobacco industry beginning in the early 1970s, Farmville began an aggressive campaign to diversify its commercial and industrial base. Although agribusiness support continues to be an important part of Farmville, industrial, commercial and residential diversification continues to be the course on which this community of approximately 4800 residents is proceeding.

CURRENT USAGE / USER DEMOGRAPHICS

When developing a Pedestrian network, knowing the demographic makeup of a community is essential in determining the preferences and travel behaviors of residents. Information regarding the current usage and user demographics was obtained from the US Census Bureau, the NCDOT Bicycle and Pedestrian Division, and a public pedestrian survey. Analysis of the data received is described in this sub-section.

DEMOGRAPHIC ANALYSIS

A demographic analysis was completed based on data obtained from the US Census Bureau. As of the year 2010, the total population for the Town of Farmville was 4,654, of which 44.8% were males and 55.2% were females with a median age of 42.5 years. In the same census year, the estimated North Carolina population was 9,535,483 and the U.S. population was 308,745,538. The median age was 37.4 years for North Carolina and 37.2 for the United States.

In the year 2010, the town's population was distributed with 77.9% over the age of 15 of which 17.4% were 65 years of age or older. In 2010, the population 65 years of age or older was 12.9% in North Carolina and was 13% in the U.S. In comparison, Farmville's population is older than the state and national averages. Figure 2.0 reflects the age demographics for the Town of Farmville in the year 2010.

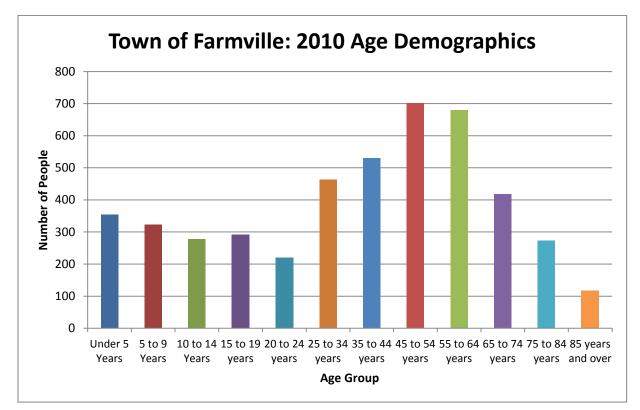


Figure 2.0 : Town of Farmville: Age Demographics

Source: U.S. Census Data

The racial breakdown of the population of the Town of Farmville in 2010 was as follows: 49.7% African American, 48.1% Caucasian, 0.2% American Indian, 0.4% Asian, and 0.8% from other races and 0.8% from two or more races. The racial breakdown of North Carolina's population in 2010 included 21.5% African American and 68.5% Caucasian. The racial breakdown of the U.S. population in 2010 included 12.6% African American and 72.4% Caucasian, which indicates that the Town of Farmville has a greater African-American population than the state and national average. Figure 2.1 reflects the racial breakdown of the Town of the Town of Farmville.

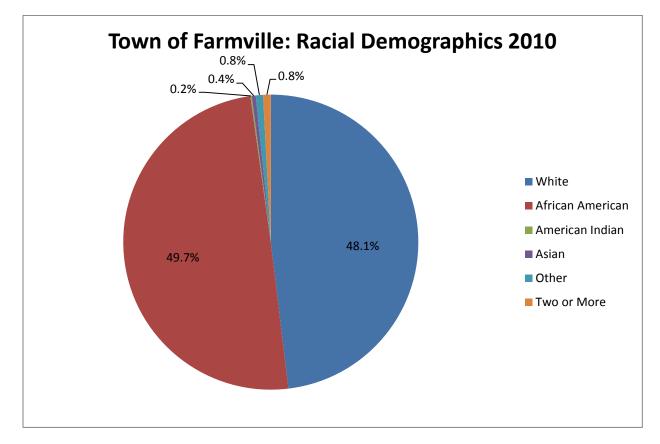


Figure 2.1 : Town of Farmville: Racial Demographics 2010

Source: U.S. Census Data

EDUCATION

American Community Survey 5-year estimates provide data from education levels in the Town of Farmville. In Farmville, the educational attainment forresidents 25 years and over in 2010 was as follows: 5.6% with less than 9th grade; 14.1% with some high school; 37.4% were high school graduates (includes equivalency); 21.5% with some college, no degree; 6.8% with an associate degree; 8.8% with a bachelor's degree; and 5.8% with a graduate or professional degree. Therefore, 80.3% of the population earned an education of high school graduate or higher. Figure 2.2 reflects the educational attainment for Farmville's residents 25-years and over.

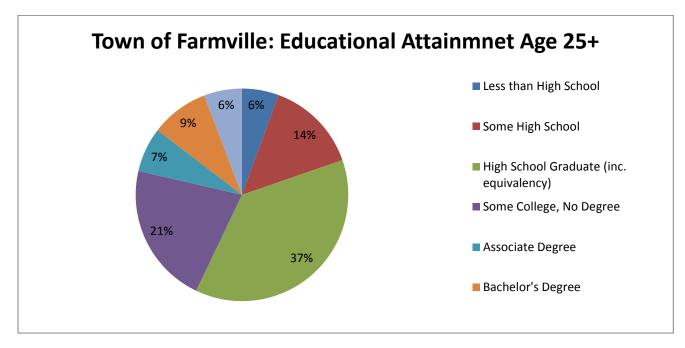


Figure 2.2 : Town of Farmville: Educational Attainment

Source: 2007-2011 American Community Survey 5-year Estimates

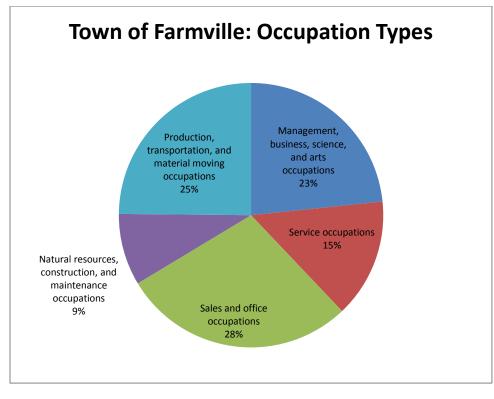
The educational attainment of Farmville's population reflects the state and national levels. 27.7% of North Carolina's population and 28.6% of the U.S. population of 25 years and over are high school graduates (including equivalency) without further education. 84.1% of the state's population and 85.4% of the country's population attained at least high school graduation or higher. Comparatively, Farmville has a higher proportion of high school graduates (including equivalency) without further education, but a slightly lower proportion of people with high school graduation or higher.

EMPLOYMENT

An economic analysis was completed using 2007-2011 American Community Survey 5-year estimates. Farmville's population 16 years and over was estimated to be 3,588 people. 2,157 people are in the civilian labor force (60.1% of possible labor force), of which 1,936 (54.0%) are employed and 221 (6.2%) are unemployed. 15 people are in the armed forces.

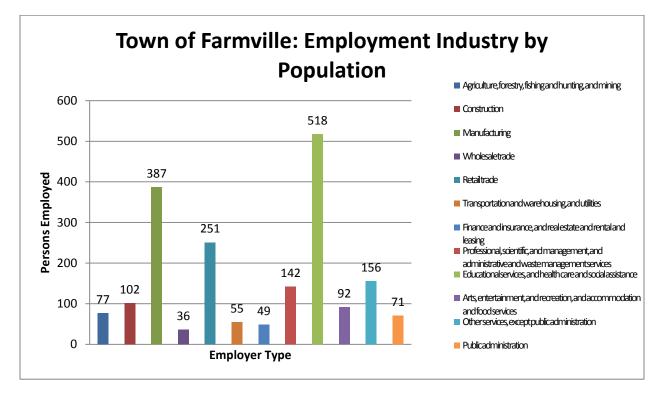
Employment can be broken down into occupations based on the employed civilian population 16 years and over. Figure 2.3 illustrates Farmville's occupation types





Source: 2007-2011 American Community Survey 5-year Estimates

Figure 2.4 illustrates Farmville's employment industries by population. In Farmville, the Education Services, Health Care, and Social Assistance industry had the largest number of employees at 518, followed by Manufacturing at 387 and Retail Trade at 251. In Farmville, 59.7% of the employed population worked in one of these three industries.

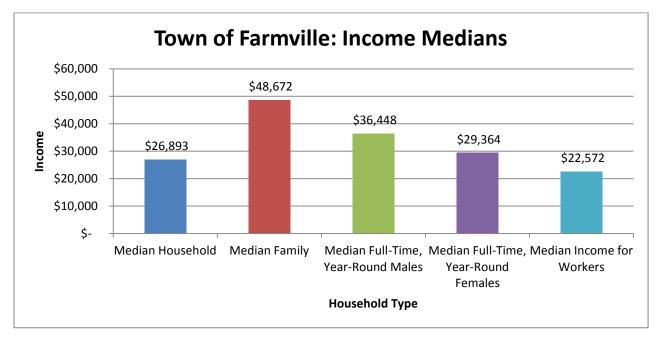


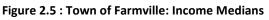


Source: 2007-2011 American Community Survey 5-year Estimates

INCOME

According to the 2007-2011 American Community Survey 5-year estimates, 2,036 households were listed in the Town of Farmville. Farmville's median household income was \$26,893 and the median family income was \$48,672. Farmville's median incomes are significantly less than the state and national averages. The North Carolina median household income was \$46,291 and the median family income was \$57,171. The U.S. median household income was \$52,762 and the median family income was \$64,293. Figure 2.5 illustrates income medians in Farmville.





Source: 2007-2011 American Community Survey 5-year Estimates

Farmville's full-time, year-round workers earned \$36,448 for males and \$29,364 for females. The per capita income for Farmville was \$22,572. Farmville's per capitaincome was less than that of the state and nation with \$25,256 in North Carolina and \$27,915 in the United States. 25.5% of Farmville's families were below the poverty line, including 45.7% of those with related children under 18 years and 55.2% with related children under 5 years. The population below the poverty line of the state and nation is significantly less than that of Farmville with 11.8% in North Carolina and 10.5% in the United States. VEHICLES

Approximately eighty percent (84.6%) of Farmville's households have at least one motor vehicle. Of the occupied housing units (total 2,036), 15.2% have no vehicle, 41.7% have one vehicle, 29.2% have two vehicles, and 14.0% have three or more vehicles. Farmville's population does not use mass public transportation.

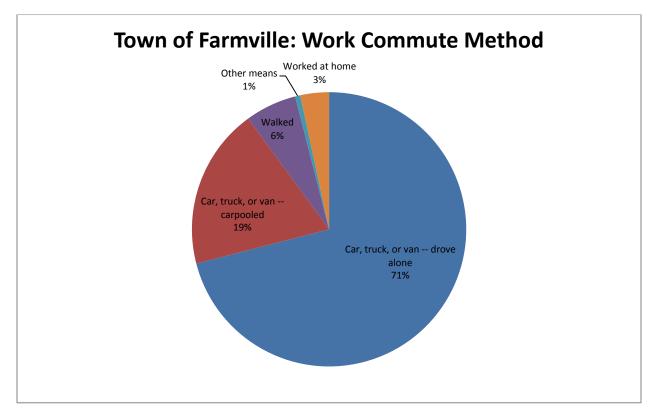


Figure 2.6 : Town of Farmville: Work Commute Method

Source: 2007-2011 American Community Survey 5-year Estimates

Figure 2.6 illustrates the methods of transportation for working residents (16 years and over) of Farmville. A large majority of employed residents (71%) drive alone to work in their own vehicle. 90% drove a car, truck, or van to work. 6% walked to work. The mean travel time to work was 19.4 minutes. Considering the gap between the 9% that walk to work from home and the 15.2% of households without vehicles, employment opportunities may depend on vehicle ownership.

PUBLIC SURVEY SUMMARY

Public input for the Pedestrian plan was solicited through online and hard copy surveys. The survey was made available through the Town's website. Hard copies of the survey were made available at numerous locations throughout Farmville, including Town Hall, Farmville Public Library, Piggly Wiggly, Farmville Internal Medicine, and Offices of Drs. Warren & Hardee. Citizens in Farmville were notified of the survey through the local newspaper, the Town's website, and a display at a local event.

Most respondents felt that current walking conditions in Farmville are fair, with improvements to walkability being seen as important for the community. Most respondents reported walking in Farmville, either for recreation or by necessity, at least a few times a week. Results also showed that if more pedestrian facilities (sidewalks, trails, corridors) were available, citizens would be more likely to walk more often than they currently do.

Respondents said they would support public funds being used for pedestrian improvements. The majority of these respondents preferred to see State and Federal as well as Safe Routes to School funds used to fund improvements. The lack of sidewalks and trails, accompanied with automobile traffic, speeding, and aggressive motorist were all reasons listed by respondents that discouraged them from walking. Most likely in part because of these concerns, Greenways and Side Use Paths, both of which keep pedestrians away from motorist, were the top choices among the facilities that funding should be spent on.

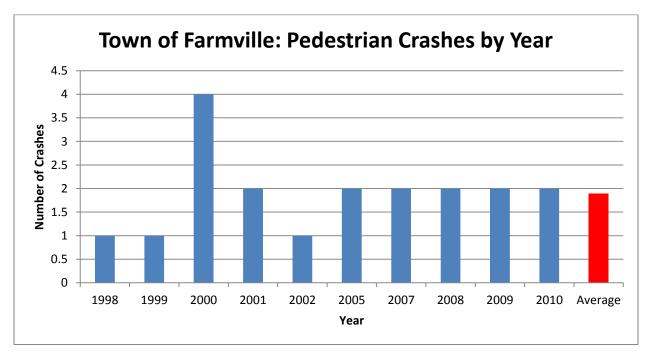
Among the top corridors respondents would like to see pedestrian facilities or improvements were the completion of sidewalk along Church Street toward the Methodist Church; completion of sidewalk along Main Street all the way to Marlboro (US 264 ALT); and Grimmersburg to Wilson Streets. Locations that lead to or surround the Town Common as well as recreation facilities were also reported as areas needing facilities or improvements. The desire to connect to these recreation facilities are likely due in part to the publics top reasons for walking, which were recreation and increased health benefit.

Survey responses were the highest among those aged 20 to 39 and those age 50 and above, with each group making up roughly 45% of the respondents.

LOCAL PEDESTRIAN CRASH DATA

The Town of Farmville pedestrian crash data was analyzed using the NCDOT's web-based Pedestrian crash database. This data was created by the UNC Highway Safety Research Center from all reported pedestrian-motor vehicle crashes within Farmville from 1998-2010. The data was analyzed to determine trends and to identify the high-risk areas of Farmville.

During the thirteen-year period, The Town of Farmville experienced nineteen (19) reported pedestrian-motor vehicle crashes. 1.9 pedestrian-motor vehicle crashes occurred per year on average. Figure 2.7 shows the distribution of crashes by year from 1998 to 2010.





Source: NC DOT Division of Bicycle and Pedestrian Transportation, Pedestrian Crash Data

Characteristics of crash data were reviewed to determine locations and results of the crashes.

84% or sixteen (16) out of nineteen (19) of the reported pedestrian-motor vehicle crashes occurred on a local street. The crash data indicates the need for additional safety measures such as pedestrian visibility, enforcement, additional signage, and driveway improvements on local streets.

The majority of Pedestrian crashes (13 out of 19) occurred on two-lane roads within the Town of Farmville. Three (3) out of nineteen (19) crashes occurred on roads with more than two (2) lanes and three (3) were unknown. The number of crashes on multiple-lane roads indicates a possible need for road narrowing, off-road trails, vehicle speed reduction, sidewalk installation, enforcement /compliance of traffic laws, access management, and lighting. Below is a list of the recoded pedestrian-motor vehicle crash types in the Town of Farmville from 1998-2010. "Backing Vehicles – Roadways" was listed as the most common type of crash with three (3) crashes of this type occurring during this time period.

Assault with Vehicle	Dart-Out	Motorist Failed to Yield
Backing Vehicle - Parking Lot	Dash	Non-Intersection - Other /
Backing Vehicle - Roadway	Driverless Vehicle	Unknown Pedestrian Failed to Yield
Crossing an Expressway	Entering / Exiting Parked Vehicle	Pedestrian Loss of Control

Pedestrian-Motor Vehicle Crash Types in the Town of Farmville 1998-2010:

Working in Roadway

The likelihood of Pedestrian injury increases with higher speed limits. According to a report (BIKESAFE) by the NC Highway Safety Research Center, "...faster speeds increase the likelihood of bicyclists being struck and seriously injured. At higher speeds, motorists are likely to stop in time to avoid a crash." The report indicated a diver traveling at 31 miles per hour needs approximately 200 feet to stop, which usually exceeds the available distance to avoid collision, but a driver traveling at 19 miles per hour is able to stop completely within 100 feet. The Town of Farmville should consider traffic-calming measures and speed reductions on streets with sidewalks or high pedestrian usage.

Figure 2.8 indicates the need for both motorist and pedestrian education regarding safety.

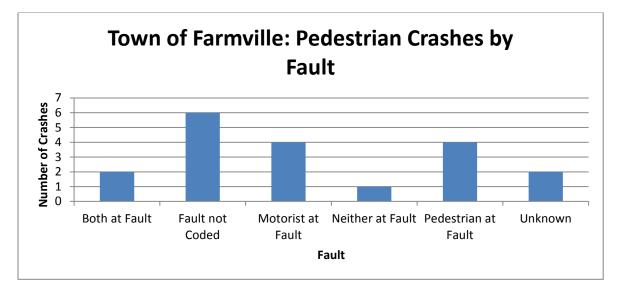


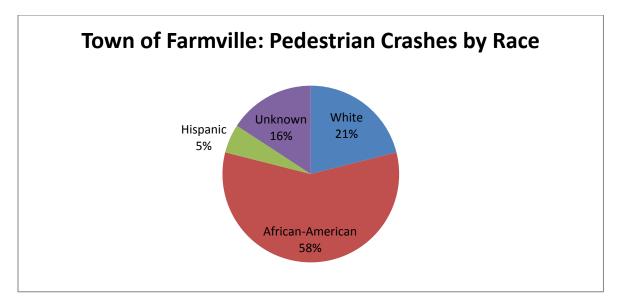
Figure 2.8: Town of Farmville: Pedestrian Crashes by Fault

Source: NC DOT Division of Bicycle and Pedestrian Transportation, Pedestrian Crash Data

According to crash data, of nineteen (19) pedestrian-motor vehicle crashes, eight (8) involved male pedestrians and nine (9) involved female pedestrians. Two (2) were unknown.

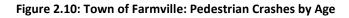
A significant majority of pedestrian-motor vehicle crashes involved an African-American pedestrian. Of nineteen (19) crashes, 58% or eleven (11) involved African-Americans, 21% or four (4) involved whites, 5% or one (1) involved a Hispanic, and 16% or three (3) were unknown. Figure 2.9 shows the distribution of pedestrian-motor vehicle crashes by the race of the pedestrian.

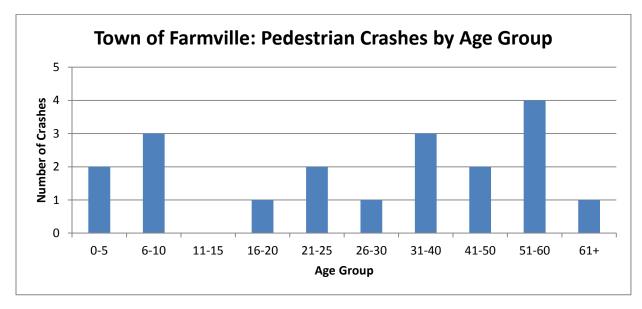




Source: NC DOT Division of Bicycle and Pedestrian Transportation, Pedestrian Crash Data

Figure 2.10 shows that pedestrian-motor vehicle crashes in Farmville involved somewhat equal proportions of school-aged children and adults from all age groups. The number of school-aged children in pedestrian crashes indicates a need for pedestrian education in local schools. Adults also need pedestrian education.





Source: NC DOT Division of Bicycle and Pedestrian Transportation, Pedestrian Crash Data

Analysis of Farmville's crash data indicates a need for pedestrian-friendly development standards, improved pedestrian visibility along roadways and intersections, traffic and pedestrian enforcement, and additional motorist and pedestrian safety education. The Town of Farmville had nineteen (19) pedestrian-motor vehicle crashes from 1998-2010.

SECTION 3 – EXISTING PLANS, PROGRAMS, AND POLICIES

In addition to analyzing existing conditions, reviewing existing plans, programs, and policies at the Local, Regional, and State level is also important. 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 on walking. Therefore, these tools (plans, policies, and programs) are a key component to ensure an environment that is supportive of walking.

The following plans, programs, and policies were reviewed in preparation of the Farmville Comprehensive Pedestrian Plan:

- Town of Farmville Land Use Plan (2006)
- Pitt County Greenway Plan 2025 (2006)
- Town of Farmville Code of' Ordinances
- Walk Bike NC Statewide Pedestrian and Bicycle Plan (2013)
- 2013-2019 State Transportation Improvement Program (TIP)
- State Programs and Initiatives

RELEVANT PLANS

LOCAL PLANS

TOWN OF FARMVILLE LAND USE PLAN (2006)

The Town of Farmville's Land Use Plan serves as a guide to making short-term and long-term land use decisions. Farmville has two types of roadways: primary roads and secondary roads. While there is no interstate highway, Farmville contains two US Highways (258 & 264) and one North Carolina Highway (121).

The plan is a data-rich document, providing numerous details on the Town's population, economy, and land use patterns, and environmental conditions. The Plan also documents key growth related issues that were identified through a robust public planning process.

PITT COUNTY GREENWAY PLAN 2025 (2006)

The Pitt County Greenway Plan is intended to serve as a guide for the establishment of a countywide network of greenways and trails. It will also support County efforts to achieve other goals in maintaining the natural environment, wetland preservation, and floodplain protection in the county. This proposed plan will also help to link people to the County's natural, recreational, cultural and commercial resources by connecting the waterways, open spaces and sensitive areas of the county with the existing recreation and greenway plans of regional and local governments and organizations. The Pitt County Comprehensive Land Use Plan of 2002 included a goal for the establishment of greenways in the County and provided the impetus for the development of this Plan. This Plan also serves to expand the City of Greenville's existing greenway system and proposes extensions from the corridors cited in the 2004 Greenville Greenway Plan.

STATE PLANS

The State of North Carolina has many planning documents that support bicycling. One of the most important is the newly developed Walk Bike NC -Statewide Pedestrian and Bicycle Plan. Currently, there are no planned improvements in Farmville.

WALK BIKE NC - STATEWIDE PEDESTRIAN AND BICYCLE PLAN (2013)

NCDOT launched this project to improve walking and bicycling conditions statewide and develop a vision for the future of bicycling and walking in North Carolina. Planning for walking and bicycling – whether for recreation, exercise, or transportation – helps to create a safer, more efficient network everyone can use. Important tasks included reviewing the current status of bicycling and walking in this state, researching appropriate strategies for improvement, and identifying the most efficient avenues to apply those strategies.

2013-2019 STATEWIDE TRANSPORTATION IMPROVEMENT PROGRAM (TIP)

This program funds transportation projects including new construction, maintenance, and safety of existing infrastructure. Each transportation project is described and its status is listed in this report.

RELEVANT PROGRAMS & INITIATIVES

STATE PROGRAMS AND INITIATIVES

The State of North Carolina has many programs and initiatives that support walking throughout the state. These programs include:

- Bicycle and Pedestrian Grant Initiative
- Safe Routes to School
- Share the Road Initiative

MID-EAST RURAL TRANSPORTATION PLANNING ORGANIZATION

The Mid-East Rural Transportation Planning Organization (RPO) currently does not have any projects identified within the Pedestrian Plan project area. The Mid-East RPO does support Farmville's desire to develop a pedestrian-friendly community.

LOCAL PROGRAMS AND INITIATIVES

LAW ENFORCEMENT

Pedestrian safety education is an important part in the development of Farmville's Comprehensive Pedestrian Plan, a part that the Farmville Police Department can play a big role in. Given the limited number of current programs that help promote safety and awareness of pedestrians in the community, it is recommended that additional safety and promotional programs be created.

One of the biggest concerns that police officers have voiced in Farmville in regards to pedestrians is walkers behavior in the roadway. Currently, citizens can be seen walking against traffic, walking down the middle of the road, and erratically crossing business driveways. Another concern is individuals who walk at night with no reflective lighting. The Police Department desires to increase encouragement of walkers to obey traffic rules set both locally and at the state level.

There are a few streets within Farmville that are identified as higher potential hazard areas, including:

- Marlboro Road/264
- May Boulevard
- Grimmersburg Street
- Wilson Street
- Main Street

PARKS AND RECREATION DEPARTMENT

The Town of Farmville's Parks and Recreation Department manages the Town's public parks and recreation facilities and provides programming for citizens of all ages. The department strives to offer the people of Farmville the opportunity to develop their leisure time and interests through diverse activities and programs, promoting the enrichment of life and creating outlets for developing physical fitness, sportsmanship, leadership and cultural arts. The interaction of people participating in a common interest enables them to grow and prosper in unity of family and community spirit.

It is for these reasons that it is a goal of the Parks and Recreation Department through this Pedestrian Plan to provide safe routes to connect neighborhoods and schools to recreation facilities. Although the department does not offer walking programs, the Town's public facilities are a destination of walkers. Many of the department's program users are youth who often depend on motor vehicle transportation to attend practices, games, and after-school activities. The Recreation Department would like to see routes developed that would provide "across town" connections within Farmville.

RELEVANT POLICIES & INSTITUTIONAL FRAMEWORK

FEDERAL AND STATE POLICIES

There are numerous State and Federal policies for the development of pedestrian facilities. Through their guidelines, NCDOT has shown their commitment to improving bicycling and pedestrian conditions. This commitment is all the more important as these facilities have become a critical element of the overall transportation system.

USDOT POLICY ON BICYCLE AND PEDESTRIAN ACCOMMODATION REGULATIONS AND RECOMMENDATIONS

The DOT policy is to incorporate safe and convenient walking and bicycling facilities into transportation projects. Every transportation agency, including DOT, has the responsibility to improve conditions and opportunities for walking and bicycling and to integrate walking and bicycling into their transportation systems. Because of the numerous individual and community benefits that walking and bicycling provide — including health, safety, environmental, transportation, and quality of life — transportation agencies are encouraged to

go beyond minimum standards to provide safe and convenient facilities for these modes.

COMPLETE STREETS POLICY OF 2009

The North Carolina Board of Transportation adopted a Complete Streets policy in July 2009. The policy directs the North Carolina Department of Transportation (NCDOT) to consider and incorporate all modes of transportation when building new projects or making improvements to existing infrastructure. Under the new policy, NCDOT will collaborate with cities, towns, and communities during the planning and design phases of new streets or improvement projects. Together, they will decide how to provide the transportation options needed to serve the community and complement the context of the area.

The policy adopted by the Board of Transportation directed NCDOT to develop planning and design guidelines. 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.

NCDOT RESOLUTION ON 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.

LOCAL POLICIES

There are very few policies or ordinances regarding pedestrian safety or facilities in Farmville.The Town has acknowledged the need for policies and ordinances to ensure pedestrian or multi-use trail facilities when new development occurs. While these types of recreational facilities can be recommended during the planning and permit approval phases, the Town should consider an ordinance to require such facilities. This would likely increased sidewalk, trail, or route connectivity and it is recommended that installation of facilities during development will provide greater opportunities for more facilities. The Town should consider a fee-in-lieu of dedication as an installation.

RELEVANT BICYCLE STATUTES & ORDINANCES

There are a few existing policies related to pedestrians at the local, state, and federal levels.

STATE STATUTES & LAWS

State of North Carolina laws regulate a range of safety and operational issues, including the following areas pertaining to pedestrians:

- Compliance with signs and signals
- One-way streets
- Yielding right-of-way to pedestrians
- Crashes

LOCAL ORDINANCES

As was previously mentioned, the Town of Farmville has very few ordinances regarding pedestrian safety or facilities. Sections of the Town of Farmville's ordinances related to pedestrians are outlined below.

SECTION 4 – STRATEGIC PEDESTRIAN PLAN

In order to develop a strategic pedestrian plan to make Farmville a pedestrianfriendly community, there are a number of issues that will need to be addressed in the development of the plan.

Developing pedestrian facilities for Farmville will require considerations for:

- Safety
- Barriers
- Direct and convenient alignment to serve origins and destinations
- Sidewalk Continuity avoiding abrupt discontinuity
- Crash Reduction
- Traffic volumes and speed
- Intersection conditions
- Adequate maintenance commitment
- Costs
- Policies

This section identifies the overall transportation system, desired corridors of pedestrian travel, special focus areas, and potential projects.

SYSTEM OVERVIEW

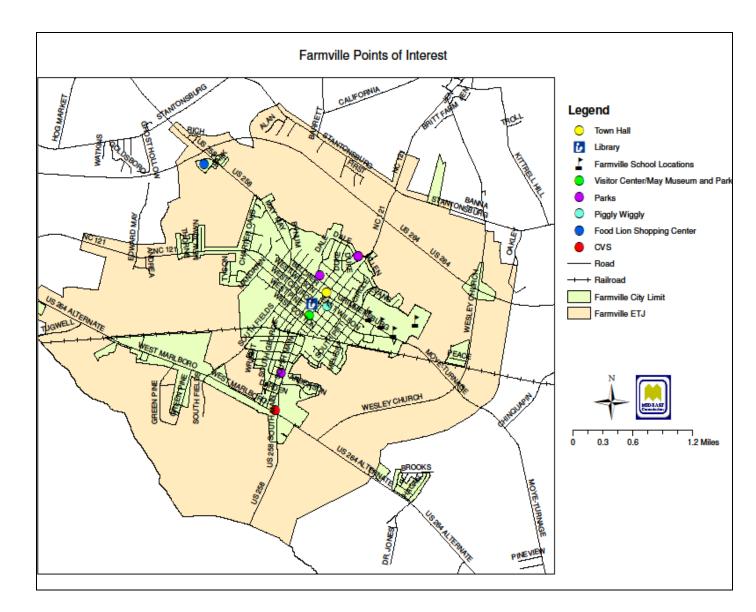
The overall transportation system in Farmville is automobile dependent. As a result, intersections and thoroughfares were designed to accommodate automobile travel only. Farmville's more recent commercial growth has evolved around the US Highway 264 and May Boulevard corridors that include shopping centers with grocery stores, restaurants, and a service station. While "urban sprawl" is limited, the pattern of commercial development along the existing thoroughfares can be intimidating for walkers due to many commercial driveways, intersections that are unsafe to cross, limited access and lack of provisions to accommodate pedestrian travel.

The most bicycle and pedestrian accessible areas of Farmville are its residential areas due to low traffic speeds and short blocks.

CORRIDOR IDENTIFICATION

The identification of corridors, origins, and destination points provides an idea on available access to desired routes and pedestrian facilities. The assessment of the conditions of existing pedestrian corridors and desired routes will assist in developing recommendations for pedestrian facilities and improvements. This subsection will discuss the analysis of the existing conditions for the following in Farmville: destinations, origins, and desired corridors of pedestrian travel.

Map 4.1 illustrates all identified destinations and points of interest throughout the Town of Farmville project area.



OPPORTUNITIES/POTENTIAL PROJECTS

Potential projects to improve the existing pedestrian network (see Map 4.2) in Farmville were developed from public input activities, Steering Committee meetings, and community evaluation. Twenty-nine (29) preliminary recommendations or potential projects have been identified. Refer to Appendix B for a complete description of all preliminary recommendations.

During plan development, several potential projects were identified that would improve the existing pedestrian network. These potential pedestrian facilities projects have been broken down into three categories: Sidewalks, Multi-Use Facilities, and Ancillary Facilities. Some projects may require further review and approval by the NCDOT Division 2 Office located in Greenville, NC.

The potential projects were based upon.

- Steering Committee Meetings
- Public Survey & Open House Comments
- Pedestrian-Motor Vehicle Crash Data
- Field inventory and Assessment
- Ability to provide connectivity & improve safety

During the May 29, 2013 Steering Committee Meeting, members participated in an exercise to identify opportunities related to the development of a Comprehensive Pedestrian Plan. Members identified a list of general opportunities related to connectivity, education and awareness; increasing visibility, and providing additional pedestrian elements and facilities. Refer to Appendix B for a complete list of identified opportunities.

The Town should consider its utility easements as opportunities for pedestrian corridors. Opportunities to provide connector routes to regional greenway routes, parks, residential areas, and other bicycling destinations were recommended during plan development.

Map 4.2 – Town of Farmville Existing Pedestrian Inventory



Farmville Pedestrian Plan Existing Inventory

SIDEWALK ADDITIONS AND IMPROVEMENTS

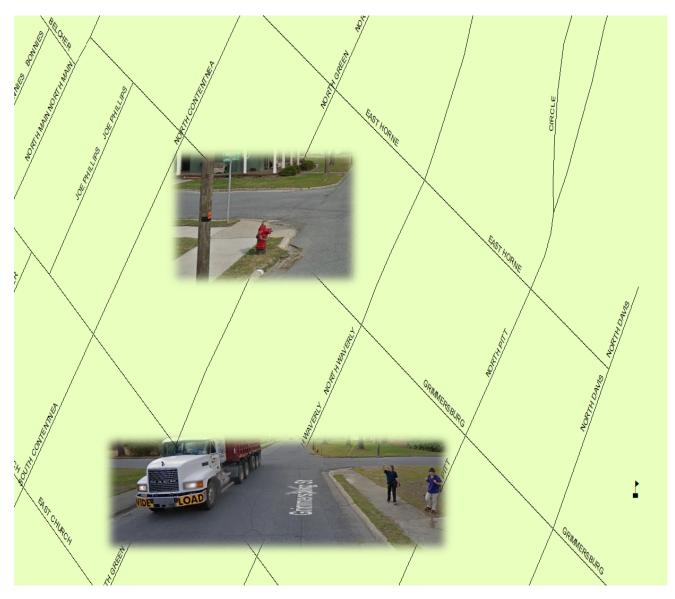
Main Street Sidewalk Extension – Southern Connection

Currently, there is no existing sidewalk on Main Street south of Vines Street. The proposed connection will provide a new sidewalk on Main Street from Vines Street to Marlboro Road. This addition will connect pedestrians in residential areas in southern Farmville, including the Housing Authority, to pharmacy, retail, Bennett Street Park, and downtown.



Grimmersburg Street Sidewalk Extension

Currently, there is continuous existing sidewalk along the southern side of Grimmersburg Street. Along the northern edge however, there is no sidewalk from Davis Drive to Waverly Street and numerous gaps between existing sidewalks between Waverly and Greene Street. The proposed connection will provide new sidewalk segments along the northern edge of Grimmersburg Street, bridging gaps in existing sidewalks between Greene Street and Davis Drive. These additions will complete sidewalks along both sides of East Grimmersburg Street, connecting pedestrians, especially children attending the schools located at the end of Grimmersburg.



Main Street Sidewalk Extension – Northern Connection

Currently, there are numerous gaps between existing sidewalks on North Main Street. The proposed connection will provide new sidewalk segments on Main Street, bridging gaps in existing sidewalks between Horne Street and Dale Drive. These additions will complete sidewalks along North Main Street, connecting pedestrians to retail and medical services, Farmville Community Center, parks including Bennett StreetPark and Oliver Murphy Park, and Town Hall.



Farmville Municipal Athletic Park Connection

The existing sidewalk on Horne Street ends at Walnut Street. The proposed connection will involve the addition of new sidewalks on Horne Avenue from Walnut Street to May Boulevard. This addition will complete sidewalks along Horne Street out to May Boulevard, connecting pedestrians to the Farmville Municipal Athletic Complex.



Pitt Street Sidewalk Extension – Phase 2

The proposed extension will provide a new sidewalk on Pitt Street from Pine Street to Ellis Avenue. This Phase will also include sidewalk additions to segments of Crestwood Drive and East Perry Street. This addition will connect residents in the Southeastern portion of town to numerous areas of interest in Farmville, including parks, the community center, and local schools.



Pitt Street Sidewalk Extension – Phase 1

Currently, there is no existing sidewalk on Pitt Street. The proposed extension will provide a new sidewalk on Pitt Street from Grimmersburg Street to Pine Street. This addition will connect pedestrians in the residential areas in southern Farmville to Grimmersburg Street and to local schools in Farmville.



Wilson Street Sidewalk Extension-Phase 2

The existing sidewalk on Wilson Street has a small two block gap missing between May and Fields Streets. Phase 2 will involve new sidewalks along Wilson Street from May Street to Fields Street. This addition added to the Phase 1 proposal will complete connections for pedestrians along Wilson Street.



Wilson Street Sidewalk Extension-Phase 1

The existing sidewalk on Wilson Street ends at Park Street. Phase 1 will involve the new addition of sidewalks from Park Street to Charter Oaks Drive along Wilson Street. An addition will allow connections for pedestrians traveling from all residential areas along Wilson Street.



Church Street Sidewalk Extension

The existing sidewalks on Church Street end at a railroad crossing west of Turnage Street. The proposed extension involves the addition of new sidewalks from the United Methodist Church entrance along Church Street to Turnage Street. This addition will complete a pedestrian/sidewalk network through residential areas along Church Street.



Contentnea to Oliver Murphy Connection

The proposed connection will provide new sidewalks on NC 121/N. Main Street, connecting other proposed sidewalks, bridging gaps in existing sidewalks between Horne Street to Dale Drive.



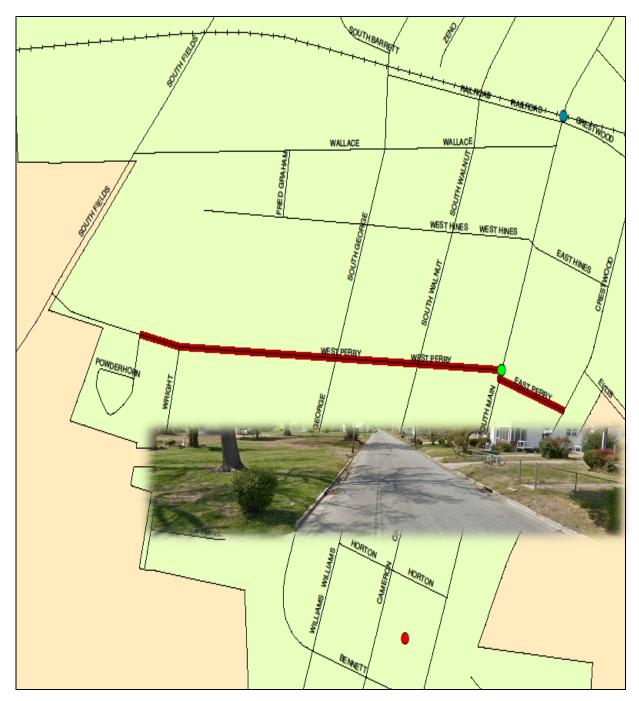
Bennett Street Park Connection

The proposed connection will provide a new sidewalk on South George Street and Bennett Street from West Vines Street to South Main Street. An existing sidewalk on George ends at Vines. This addition will complete a sidewalk along George/Bennett to Main. It will connect pedestrians, especially children, to Bennett Street Park without having to use Main Street.



Perry Street Sidewalk Extension

The proposed extension will provide new sidewalks on Perry Street from Crestwood Drive to Powder Horne Lane. It will accompany a proposed crosswalk at S. Main Street. This addition will connect pedestrians to areas of interest, including local schools, the community center, and parks. It will connect Bennett Street Park via the proposed Bennett Street Park Connection.



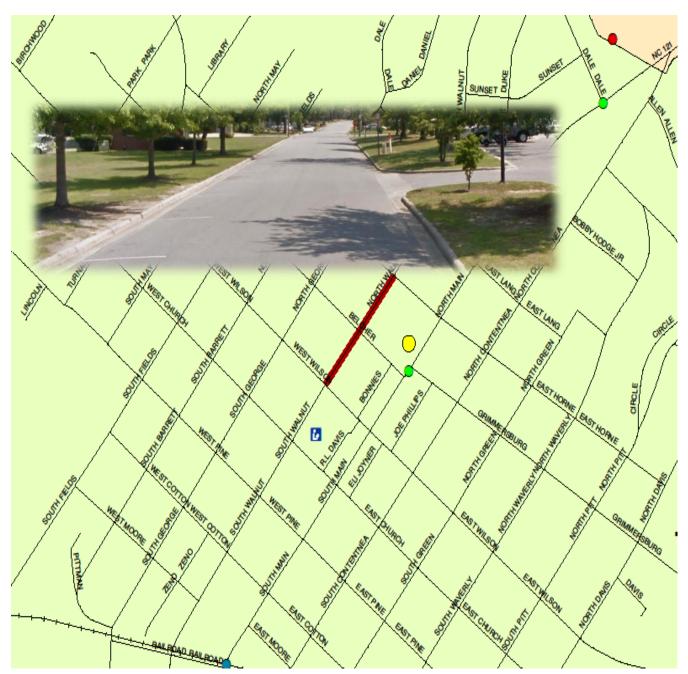
Contentnea Street Sidewalk Extension

The proposed extension will provide new sidewalk segments on Contentnea Street, extending existing sidewalk from Lang Street to NC 121/Main Street. This addition would allow pedestrians to reach the proposed crosswalk on Main Street to reach Oliver Murphy Park.



Walnut Street Sidewalk Extension – Phase 1

The proposed extension will provide new sidewalks on N. Walnut Street, connecting sidewalks on N. Wilson Street to sidewalks on W. Horne Avenue. This addition, in conjunction with proposed Phase 2, will create complete sidewalk segments from Wilson St. to Dale Drive. It will connect pedestrians to Town Hall, Farmville Municipal Athletic Park, and Oliver Murphy Park



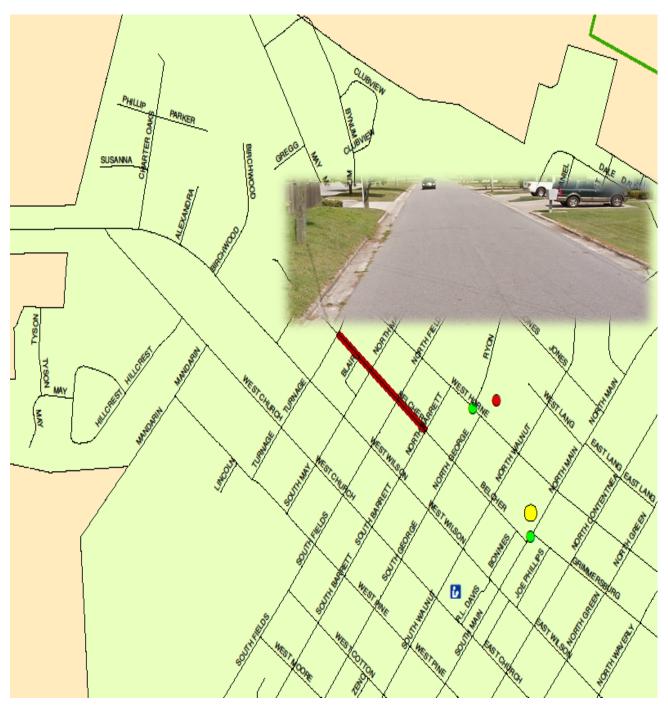
Walnut Street Sidewalk Extension – Phase 2

The proposed extension will provide a new sidewalk on N. Walnut Street from Jones Street to Dale Drive, connecting existing sidewalks on N. Walnut Street from Horne to Jones. This addition, in conjunction with proposed Phase 1, will create complete sidewalk segments from Wilson Street to Dale Drive. It will connect pedestrians to Town Hall, Municipal Park, and Oliver Murphy Park.



Belcher Street Sidewalk Addition

The proposed addition will provide a new sidewalk along Belcher Street from Barrett Street to May Boulevard. An existing sidewalk on Belcher Street ends at the intersection of Belcher Street and Barrett Street. This addition will complete a sidewalk through residential area between Barrett Street and May Boulevard.



Dale Drive Sidewalk Extension

The proposed extension will provide a new sidewalk on Dale Drive, connecting another proposed sidewalk on N. Walnut Street to a proposed sidewalk extension on NC 121/N. Main Street. This addition will connect the area near Oliver Murphy Park to Municipal Park, Town Hall, and other downtown locations via Walnut Street, creating recreational walking opportunities



May Boulevard Complete Street Improvement Project-Sidewalk Addition

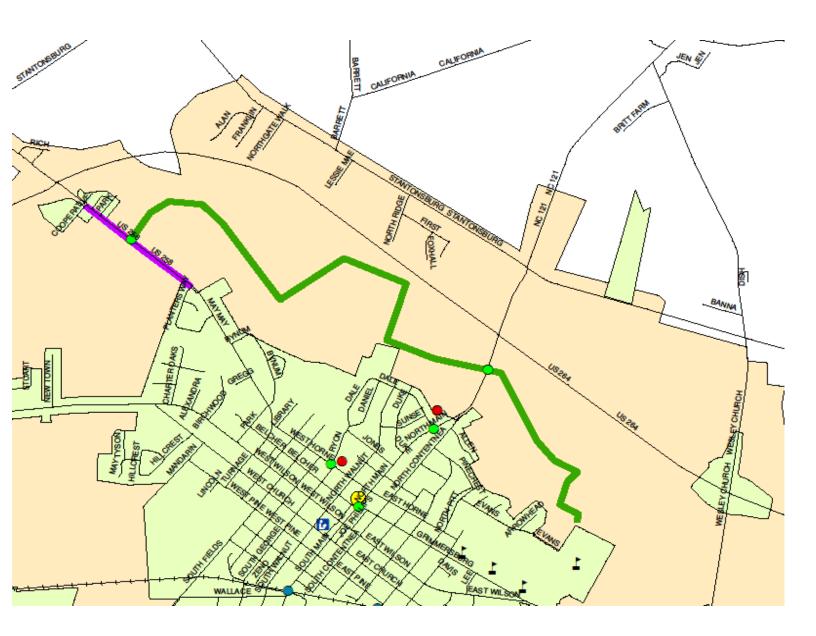
The proposed addition will provide a new sidewalk from Planters Walk Drive to Wilson Street along May Boulevard. This sidewalk addition will be part of Complete Street Improvement on May Boulevard, with travel lane reduction and a bike land addition, providing a buffer for pedestrians. This addition will provide sidewalks for pedestrians trying to reach the Food Lion shopping center on May Blvd.



MULTI-USE FACILITY ADDITIONS AND IMPROVEMENTS

North Farmville Greenway

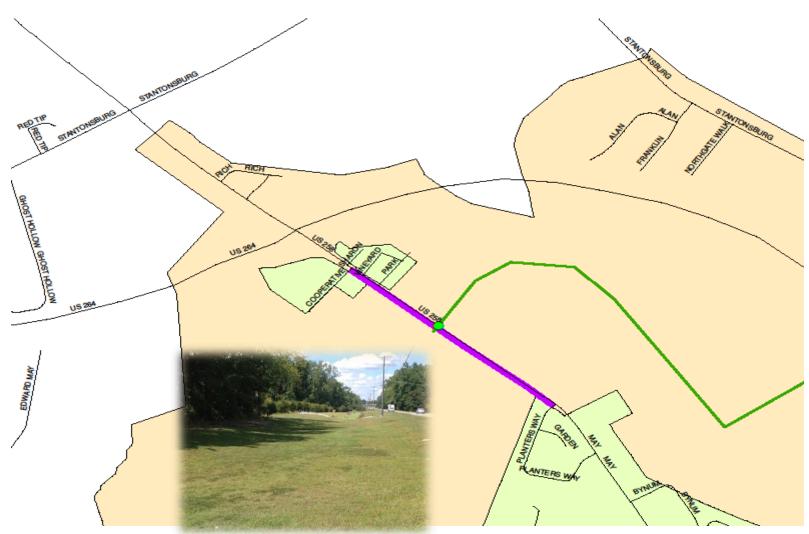
The proposed new Greenway will run behind Farmville Central High School to May Boulevard. The Greenway will provide both pedestrians and bicyclists with an off-road facility, suitable for recreation.



May Boulevard Shared Use Path

The proposed new shared use path will run along May Boulevard. The path will connect pedestrians from where a proposed sidewalk along May Boulevard ends at Planters Walk Drive to a shopping center on May Boulevard. The path would connect to the proposed North Farmville Greenway.





These guidelines originate from and adhere to national design standards as defined by the American Association of State Highway Transportation Officials (AASHTO), the Americans with Disabilities Act (ADA), the Federal Highway Administration (FHWA) Pedestrian Facilities Users Guide, the Manual on Uniform Traffic Control Devices (MUTCD), and the NCDOT. Should the national standards be revised in the future and result in discrepancies with this chapter, the national standards should prevail for all design decisions. Likewise, all cost information provided is relevant only at or around the date of this report (September 2006). A qualified engineer or landscape architect should be consulted for the most up to date and accurate cost estimates.

The sections below serve as an inventory of pedestrian design elements/treatments and provide guidelines for their development. These treatments and design guidelines are important because they represent minimum standards for creating a pedestrian-friendly, safe, accessible community, and have been tailored to meet the specific facility development needs of Holly Springs' pedestrian system. The guidelines are not, however, a substitute for a more thorough evaluation by a landscape architect or engineer upon implementation of facility improvements. Some improvements may also require cooperation with the NCDOT for specific design solutions.

6.1 Pedestrian Facility Elements

Sidewalks and Walkways

Sidewalks and walkways are extremely important public right-of-way components often times adjacent to, but separate from automobile traffic. In many ways, they act as the seam between private residences, stores, businesses, and the street. They are spaces where children play, neighbors meet and talk, shoppers meander casually, parents push strollers, and commuters walk to transit stops or directly to work. Because of the social importance of these spaces, great attention should be paid to retrofit and renovate areas with disconnected, dangerous, or otherwise malfunctioning walkways.

There are a number of options for different settings, both urban and rural. From a European style promenade to, in the case of a more rural environment, a simple asphalt or crushed stone path next to a secondary road, walkway form and topography can vary greatly. In general, sidewalks are constructed of concrete although there are some successful examples where other materials such as



asphalt, crushed stone, or other slip resistant material have been used. The width of the walkways should correspond to the conditions present in any given location (i.e. level of pedestrian traffic, building setbacks, or other important natural or cultural

features). FHWA {Federal Highway Administration) and the Institute of Transportation Engineers both suggest five feet as the minimum width for a sidewalk. This is considered ample room for two people to walk abreast or for two pedestrians to pass each other. Often downtown areas, near schools, transit stops, or other areas of high pedestrian activity call for much wider sidewalks.

Sidewalks are typically built in curb and gutter sections. They need to be kept completely free of obstructions such as utility poles. A four to eight foot buffer zone parallel to the sidewalk or walkway is recommended to separate pedestrian traffic from automobile traffic and to keep the sidewalk free of light pole obstructions. Much like the sidewalk and walkway itself, the form and topography of this buffer will vary greatly. Native street tree plantings have historically proven to work successfully within these buffer zones. They regulate micro-climate, create a desirable sense of enclosure, promote a local ecological identity and connection to place, and can act as a pleasant integration of nature into an urban environment. In the event that vegetation is not possible, a row of parked cars, bike lane, or street furniture can be used to create this buffer.

- Concrete is preferred surface, providing the longest service life and requiring the least maintenance.
- Sidewalks should be built as flat as possible to accommodate all pedestrians; they should have a running grade of five percent or less; with a two percent maximum cross-slope.
- Concrete sidewalks should be built to minimum depth of four inches; six inches at driveways.
- Sidewalks should be a minimum of five feet wide; eight to ten feet wide within Downtown; ten feet can also be considered in other areas of heavy pedestrian traffic. When sidewalk abuts storefronts, an additional two feet of space from walls is recommended.

- Buffer zone of two to four feet in local or collector streets; five to six feet in arterial or major streets and up to eight feet in busy streets and Downtown to provide space for light poles and other street furniture. See the Vegetation section later in this chapter for shade and buffer opportunities of trees and shrubs.
- Motor vehicle access points should be kept to minimum.

Cost:

- Concrete curbing: \$10-\$15/linear foot
- Walkways: \$3/square foot
- Asphalt walkways are much less expensive in terms of construction cost but more difficult to traverse and more expensive to maintain.

Greenway Trail



A greenway is defined as a linear corridor of land that can be either natural, such as rivers and streams, or manmade, such as abandoned railroad beds and utility corridors. Most greenways contain trails. Greenway trails can be paved or unpaved, and can be designed to accommodate a variety of trail users, including bicyclists, walkers, hikers, joggers, skaters, horseback riders, and those confined to wheelchairs.

Single-tread, multi-use trails are the most common trail type in the nation. These trails vary in width and can accommodate a wide variety of users. The minimum width for two-directional trails is 10', however 12'-14' widths are preferred where heavy traffic is expected. Centerline stripes should be considered for paths that generate substantial amounts of pedestrian traffic. Possible conflicts between user groups must be considered during the design phase, as cyclists often travel at a faster speed than other users. Radii minimums should also be considered depending on the different user groups.

While the vegetative clearing needed for these trails varies with the width of the trail. The minimum width for clearing and grubbing a 14' wide trail is 16'. Selective thinning increases sight lines and distances and enhances the safety of the trail user. This practice includes removal of underbrush and limbs to create open'

pockets within a forest canopy, but does not include the removal of the forest canopy itself.

Typical pavement design for a paved, off-road, multi-use trail should be based upon the specific loading and soil conditions for each project. These asphalt or concrete trails should be designed to withstand the loading requirements of occasional maintenance and emergency vehicles.

Concrete

In areas prone to frequent flooding, it is recommended that concrete be used because of its excellent durability. Concrete surfaces are capable of withstanding the most powerful environmental forces. They hold up well against the erosive action of water, root intrusion and subgrade deficiencies such as soft soils. Most often, concrete is used for intensive urban applications. Of all surface types, it is the strongest and has the lowest maintenance requirement, if it is properly installed.

Asphalt

Asphalt is a flexible pavement and can be installed on virtually any slope. One important concern for asphalt trails is the deterioration of trail edges. Installation of a geotextile fabric beneath a layer of aggregate base course (ABC) can help to maintain the edge of a trail. It is important to provide a 2' wide graded shoulder to prevent trail edges from crumbling.

Trail and Roadway Intersections

The images below present detailed specifications for the layout of intersections between trail corridors and roadways. Signage rules for these sorts of intersections are available in the MUTCD as well.

Marked Crosswalks

A marked crosswalk designates a pedestrian right-of-way across a street. It is often installed at controlled intersections or at key locations along the street (a.k.a. mid-block crossings) and in this Plan are prescribed for the Downtown, school areas, and key residential and commercial areas where pedestrian activity is greatest. Although marked crosswalks provide strong visual clues to motorists that pedestrians are present, it is



important to consider the use of these elements in conjunction with other traffic calming devices to fully recognize low traffic speeds and enhance pedestrian safety. In general, "marked crosswalks should not be installed in an uncontrolled environment where speeds exceed 40 mph"3. Every attempt should be made to install crossings in places where pedestrians are most likely to cross. A well-designed traffic calming location is not effective if pedestrians are using other unmodified and potentially dangerous locations to cross the street.

Marked pedestrian crosswalks may be used under the following conditions: 1) At locations with stop signs or traffic signals, 2) At non-signalized street crossing locations in designated school zones, and 3) At non-signalized locations where engineering judgment dictates that the use of specifically designated crosswalks are desirable.

There is a variety of form, pattern, and materials to choose from when creating a marked crosswalk. It is important however to provide crosswalks that are not slippery, are free of tripping hazards, or are otherwise difficult to maneuver by any person including those with physical mobility or vision impairments. Although attractive materials such as inlaid stone or certain types of brick may provide character and aesthetic value, the crosswalk can become slippery. Also, as it degrades from use or if it is improperly installed, it may become a hazard for the mobility or vision impaired.

A variety of color or texture may be used to designate crossings. These materials should be smooth, skid-resistant, and visible'. Reflective paint is inexpensive but is considered more slippery than other devices such as inlay tape or thermoplastic. A variety of patterns may be employed as detailed in Figure 6). In areas with a high volume of pedestrian traffic, particularly at mid-block crossings, a crosswalk can be raised to create both a physical impediment for automobiles and a reinforced visual clue to the motorist.

An engineering study may need to be performed to determine the appropriate width of a crosswalk at a given location, however marked crosswalks should not be less than six feet in width. In downtown areas or other locations of high pedestrian traffic, a width of ten feet or greater should be considered.

- Should not be installed in an uncontrolled environment where speeds exceed 40 mph.
- Crosswalks alone may not be enough and should be used in conjunction with other measures to improve pedestrian crossing

safety, particularly on roads with average daily traffic (ADT) above 10,000.

- Width of marked crosswalk should be at least six feet wide; ideally ten feet or wider in Downtown areas.
- Curb ramps and other sloped areas should be fully contained within the markings.
- Crosswalk markings should extend the full length of the crossings.
- Crosswalk markings should be white per MUTCD.
- Either the 'continental' or 'ladder' patterns are recommended for intersection improvements in Holly Springs for aesthetic and visibility purposes. Lines should be one to two feet wide and spaced one to five feet apart.

Cost:

- Regular striped: \$100
- Continental : \$300
- Ladder crosswalk: \$300
- Pattern concrete: \$3,000

Maintenance cost varies according to region and pattern used

Advance Stop Bars

Moving the vehicle stop bar 15-30 feet back from the pedestrian crosswalk at signalized crossings and mid-block crossings increases vehicle and pedestrian visibility. Advance stop bars are 1-2 feet wide and they extend across all approach lanes at intersections. The time and distance created allows a buffer in which the pedestrian and motorist can interpret each other's intentions. Studies have shown that this distance translates directly into increased safety for both motorist and pedestrian. One study in particular claims that by simply adding a "Stop Here for Pedestrians" sign reduced pedestrian motorist conflict by 67%. When this was used in conjunction with advance stop lines, it increased to 90%.

Cost:

- Signage (if desired): \$50 \$150 plus installation
- No additional cost if new line is installed in new paving or as part of repaving

Curb Ramps

Curb ramps are critical features that provide access between the sidewalk and roadway for wheelchair users, people using walkers, crutches, or handcarts, people pushing bicycles or strollers, and pedestrians with mobility or other physical impairments. In accordance with the 1973 Federal Rehabilitation Act and to comply with the 1990 Federal ADA requirements, curb ramps must be installed at all intersections and mid-



block locations where pedestrian crossings exist'. In addition, these federal regulations require that all new constructed or altered roadways include curb ramps. Although the federally prescribed maximum slope for a curb ramp is 1:12 or 8.33% and the side flares of the curb ramp must not exceed a maximum slope of 1:10 or 10.0%, it is recommended that much less steep slopes be used whenever possible.

It is also recommended that two separate curb ramps be provided at each intersection. With only one large curb ramp serving the entire corner, there is not safe connectivity for the pedestrian. Dangerous conditions exist when the single, large curb ramp inadvertently directs a pedestrian into the center of the intersection, or in front of an unsuspecting, turning vehicle.

For additional information on curb ramps see Accessible Rights-of-Way: A Design Guide, by the U.S. Access Board and the Federal Highway Administration, and Designing Sidewalks and Trails for Access, Parts I and II, by the Federal Highway Administration. Visit: www.access-board.gov for the Access board's right-of-way report'.

Guidelines:

- Two separate curb ramps, one for each crosswalk, should be provided at corner of an intersection.
- Curb ramp should have a slope no greater than 1:12 (8.33%). Side flares should not exceed 1:10 (10%).

Cost:

• Curb ramp: \$800 - \$1,500 per ramp (new or retrofit)

Raised or Lowered Medians

Medians are barriers in the center portion of a street or roadway'. When used in conjunction with mid-block or intersection crossings, they can be used as a crossing island to provide a place of refuge for



pedestrians. They also provide opportunities for landscaping that in turn can help to slow traffic. A center turn lane can be converted into a raised or lowered median thus increasing motorist safety.

A continuous median can present several problems when used inappropriately. If all left-turn opportunities are removed, there runs a possibility for increased traffic speeds and unsafe U-turns at intersections. Additionally, the space occupied may be taking up room that could be used for bike lanes or other treatments discussed in this chapter. An alternative to the continuous median is to create a segmented median with left turn opportunities.

Raised or lowered medians are best suited for high-volume, high-. speed roads, and they should provide ample cues for people with visual impairments to identify the boundary between the crossing island and the roadway.

- Median pedestrian refuge islands should be provided as a place of refuge for pedestrians crossing busy or wide roadways at either mid-block locations or intersections. They should be utilized on high speed and high volume roadways.
- Medians should incorporate trees and plantings to change the character of the street and reduce motor vehicle speed.
- Landscaping should not obstruct the visibility between motorists and pedestrians.
- Median crossings should provide ramps or cut-through for ease of accessibility for all pedestrians
- Median crossings should be at least 6 feet wide in order to accommodate more than one pedestrian, while a width of 8 feet (where feasible) should be provided for bicycles, wheelchairs, and groups of pedestrians Median

crossings should possess a minimum of a 4 foot square level landing to provide a rest point for wheelchair users.

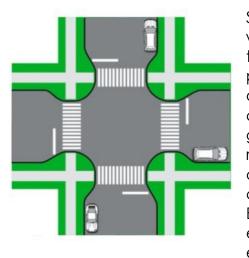
• Pedestrian pushbuttons should be located in the median of all signalized mid-block crossings, where the roadway width is in excess of 60 feet.

Cost:

• Raised or lowered: \$15,000 - \$30,000 per 100 feet

Bulb-outs

A bulb-out, or curb extension, is a place where the sidewalk extends into the parking lane of a street. Because these curb extensions physically narrow the roadway, a pedestrian's crossing distance and consequently the time spent in the street is reduced. They can be placed either at mid-block crossings or at intersections.



Sightlines and pedestrian visibility are reduced when motor vehicle parking encroaches too close to corners creating a dangerous situation for pedestrians. When placed at an intersection, bulbouts preclude vehicle parking too close to a crosswalk. Also, bulb-outs at intersections can greatly reduce turning speed, especially if curb radii are set as tight as possible'. Finally, bulb-outs also reduce travel speeds when used in mid-block crossings because of the reduced street width. Bulb-outs should only be used where there is an existing on-street parking lane and should never encroach into travel lanes, bike lanes, or shoulders.

- Bulb-outs should be used on crosswalks in heavy pedestrian areas where parking may limit the driver's view of the pedestrian.
- Where used, sidewalk bulb-outs should extend into the street for the width of a parking lane (a minimum five feet) in order to provide for a shorter crossing width, increased pedestrian visibility, more space for pedestrian queuing, and a place for sidewalk amenities and planting.
- Curb extensions should be used on mid--block crossing where feasible.

• Curb extensions may be inappropriate for use on corners where frequent right turns are made by trucks or buses.

Cost:

- Bulb-outs/Curb extensions: \$2,000 \$20,000
- Cost can increase depending on the amount of infrastructure that may have to be relocated

Pedestrian Overpasses/Underpasses

Pedestrian overpasses and underpasses efficiently allow for pedestrian movement across busy thoroughfares. These types of facilities are problematic in many regards and should only be considered under suitable circumstances or where no other solution is possible. Perhaps the best argument for using them sparingly is that research proves pedestrians will avoid using such a facility if they perceive the ability to cross at grade as taking about the same amount of time.

The other areas of contention arise with the high cost of construction. There are also ADA requirements for stairs, ramps, and elevators that in many cases once complied with result in an enormous structure that is visually disruptive and difficult to access.

Overpasses work best when existing topography allows for smooth transitions. Underpasses as well work best with favorable topography when they are open and accessible, and exhibit a sense of safety'. Each should only be considered with rail lines, high volume traffic areas such as freeways, and other high volume arteries.

- Over and underpasses should be considered only for crossing arterials with greater than 20,000 vehicle trips per day and speeds 35 40 mph and over.
- Minimum widths for over and underpasses should follow the guidelines for sidewalk width.
- Underpasses should have a daytime luminance minimum of 10 fc achievable through artificial and/or natural light provided through an open gap to sky between the two sets of highway lanes, and a night time level of 4 foot-candle.

- In underpasses, where vertical clearance allows, the pedestrian walkway should be separated from the roadway by more than a standard curb height.
- Consider acoustics measures within underpasses to reduce noise impacts to pedestrians and bicyclists.

Cost:

• Varies greatly from \$500,000 to \$4,000,000

Roundabouts

A roundabout is a circular intersection that maneuvers traffic around in a counterclockwise direction so that cars make a right-hand turn onto a desired street'. Vehicles from approaching streets are generally not required to stop although approaching vehicles are required to yield to motorists in the roundabout. It is believed that this system eliminates certain types of crashes at traditional intersections.

Roundabout design can become quite problematic in dealing with pedestrian and bicycle use. Every effort must be made to prompt motorists to yield to pedestrians crossing the roundabout. A low design speed is required to improve pedestrian safety. Splitter islands and single lane approaches both lend to pedestrian safety as well as other urban design elements discussed in this chapter.

Problems also arise with the vision-impaired because there are not proper audible cues associated with when to cross. Studies are underway to develop and test solutions. Auditory accessible pedestrian signals placed on sidewalks and splitter islands are one solution, but again there is no research to prove their efficacy.

In areas where traffic is low, a roundabout presents little in the way of a barrier for bicyclists. However, in multi-lane roundabouts where speeds are higher, and the traffic is heavy, bicyclists are at a distinct and dangerous disadvantage. Adding a bike lane within such a roundabout has not proven to be effective. A possible solution involves creating a bike lane that completely skirts the roundabout allowing the cyclist to use or share the pedestrian route. Guidelines:

- The recommended maximum entry design speed for roundabouts ranges from 15 mph for 'mini-roundabouts' in neighborhood settings, to 20 mph for single-lane roundabouts in urban settings, to 25 mph for single-lane roundabouts in rural settings.
- Refer to roundabout diagram for typical crosswalk placement.
- Please refer to FHWA's report, Roundabouts, an Information Guide, available online through: www.tfhrc.gov The report provides information on general design principles, geometric elements, and provides detailed specifications for the various types of roundabouts.

Cost:

- Neighborhood intersection, landscaped: \$45,000 \$150,000
- Arterial, landscaped: \$250,000
- Lower maintenance cost than traditional signals

Signalization

Traffic Signals



Traffic signals assign the right of way to motorists and pedestrians and produce openings in traffic flow, allowing pedestrians time to cross the street. When used in conjunction with pedestrian friendly design, proper signalization should allow for an adequate amount of time for an individual to cross the street. The suggested amount of pedestrian travel speed recommended in the Manual on Uniform Traffic Control Devices (MUTCD) is 4ft/sec however this does not address the walking speed of the elderly or children.

Therefore it is suggested that a lower speed of 3.5ft/sec be used whenever there are adequate numbers of elderly and children using an area.

Engineering, as well as urban design judgment, must be used when determining the location of traffic signals and the accompanying timing intervals. Although warrants for pedestrian signal timing have been produced by the MUTCD, each site must be analyzed for factors including new facility and amenity construction (i.e. a popular new park or museum) to allow for potential future pedestrian traffic volume. In addition, creating better access to existing places may in fact generate a higher pedestrian volume'.

Fixed timed sequencing is often used in high traffic volume commercial or downtown areas to allow for a greater efficiency of traffic flow. In such instances, the pedestrian speed must be carefully checked to ensure safety

Pedestrian Signals

There are a host of possible traffic signal enhancement opportunities that can greatly improve the safety and flow of pedestrian traffic. Some include: international symbols for WALK and DON'T WALK, providing large traffic signals, the positioning of traffic signals so that those waiting at a red-light cannot see the opposing traffic signal and anticipate their own green-light, installing countdown signals to provide pedestrians



information on how long they have remaining in the crossing interval, automatic pedestrian sensors, and selecting the proper signal timing intervals.

Symbols should be of adequate size, clearly visible, and, in some circumstances, accompanied by an audible pulse or other messages to make crossing safe for all pedestrians. Consideration should be paid to the noise impact on the surrounding neighborhoods when deciding to use audible signals'. For additional information on accessible pedestrian signals, please visit: www.walldnginfo.org/aps.



Audible cues can also be used to pulse along with a countdown signal. Countdown signals are pedestrian signals that show how many seconds the pedestrian has remaining to cross the street. The countdown can begin at the beginning of the WALK phase, perhaps flashing white or yellow, or at the beginning of the clearance, or DON'T WALK phase, flashing yellow as it counts down. The timing of these or other pedestrian signals needs to be adapted to a given situation. There are three types of signal timing generally used: concurrent, exclusive, and leading pedestrian interval (LPI). The strengths and weaknesses of each will be discussed with an emphasis on when they are best employed.

Concurrent signal timing refers to a situation where motorists running parallel to the crosswalk are allowed to turn into and through the crosswalk, left or right, after yielding to pedestrians. This condition is not considered as safe as some of the latter options, however this type of signal crossings generally allows for more pedestrian crossing opportunities and less wait time. In addition, traffic is allowed to flow a bit more freely. Concurrent signal timing is best used where lower volume turning movements exist.

Where there are high-volume turning situations that conflict with pedestrian movements, the exclusive pedestrian interval is the preferred solution. The exclusive pedestrian intervals stop traffic in all directions. In order to keep traffic flowing regularly, there is often a greater pedestrian wait time associated with this system. Although it has been shown that pedestrian crashes have been reduced by 50% in some commercial or downtown areas by using these intervals, the long wait times can encourage some to attempt a cross when there is a perceived lull in traffic'. These types of crossings are dangerous and may negate the use of the system. A problem is also created for those with visual impairments when the audible cues of the passing parallel traffic is eliminated. Often an audible signal will have to accompany a WALK signal.

A proven enhancement that prevents many of the conflicts addressed under either of the former methods is LPI. An LPI works in conjunction with a concurrent signal timing system and simply gives the pedestrian a few seconds head start on the parallel traffic. An advance walk signal is received prior to a green light for motorists. This creates a situation where the pedestrian can better see traffic, and more importantly, the motorists can see and properly yield to pedestrians. Long-term research has shown that this system has worked well in places like New York City (where it has been used for 20 years) at reducing motorist and pedestrian conflict. As with the exclusive pedestrian interval, an audible cue will need to accompany the WALK signal for the visually impaired.

The use of infrared or microwave pedestrian detectors has increased in many cities worldwide. Theses devices replace the traditional push-button system. Although still experimental, they appear to be improving pedestrian signal compliance as well as reducing the number of pedestrian and vehicle conflicts'. Perhaps the best use of these devices is when they are employed to extend crossing time for slower moving pedestrians. Whether these devices are used or the traditional push-button system is employed, it is best to provide instant feedback to pedestrians regarding the length of their wait. This is thought to increase and improve pedestrian signal compliance.

Guidelines:

- Pedestrian signals should be placed in locations that are clearly visible to all pedestrians.
- Larger pedestrian signals should be utilized on wider roadways, to ensure readability.
- Pedestrian signal pushbuttons should be well-signed and visible.
- Pedestrian signal pushbuttons should clearly indicate which crossing direction they control.
- Pedestrian signal pushbuttons should reachable from a flat surface, at a maximum height of 3.5 feet and be located on a level landing to ensure ease of operation by pedestrians in wheelchairs.
- Walk intervals should be provided during every cycle, especially in high pedestrian traffic areas.

Cost:

- Traffic signals: \$20,000-\$140,000
- Pedestrian signals: \$5,000
- Adjusting signal timing requires a few hours of staff time

Right Turn on Red Restrictions

Introduced in the 1970's as a fuel saving technique, the Right Turn on Red (RTOR) law is thought to have had a detrimental effect on pedestrians'. The issue is not the law itself but rather the relaxed enforcement of certain caveats within the law such as coming to a complete stop and yielding to pedestrians. Often motorists will either nudge into a crosswalk to check for oncoming traffic without looking for pedestrians or slow, but not stop, for the red-light while making the turn.

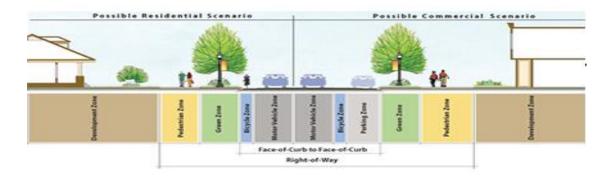
There is legitimate concern that eliminating an RTOR will only increase the number of right-turn-on-green conflicts where all of the drivers who would normally have turned on red, now are anxious to turn on green. As discussed in the prior section, LPI or exclusive pedestrian intervals my help to alleviate this problem. Eliminating RTOR should be considered on a case-by-case basis and only where there are high pedestrian volumes.

Cost:

• Signage, installed: \$230 - \$350

Landscaping

The introduction of vegetation in an urban environment can provide a welcomed intervention of nature into a place that is otherwise hardened from buildings, concrete, and asphalt. It can be used to provide a separation buffer between pedestrians and motorists, reduce the width of a roadway, calm traffic by creating a visual narrowing of the roadway, enhance the street environment, and help to generate a desired aesthetic.



Street trees and other plantings provide comfort, a sense of place, and a more natural and inviting setting for pedestrians. Landscaping and the aforementioned street furniture make people feel welcome There are also some instances where islands of vegetation are created to collect and filter stormwater from nearby streets and buildings. These islands are referred to as constructed wetlands, rain gardens, and/or bioswales. When these devices are employed, the benefits listed above are coupled with economic and ecologic benefits of treating stormwater at its source. There are many examples of this in Oregon and Washington, particularly Seattle's Green Streets Program. Using thoughtful design to treat stormwater as an amenity rather than waste to be disposed of in an environmentally harmful manner is gaining popularity nationwide.

An issue with this or any landscaping treatment is that of ongoing maintenance. The responsibility often falls on local municipalities although there are instances where local community groups have provided funding and volunteers for maintenance. The best way to address the maintenance issue is to design using native plant material that is already adapted to the local soil and climate. Growth pattern and space for maturation, particularly with larger tree plantings, are important to avoid cracking sidewalks and other pedestrian obstructions.

Guidelines:

- Buffer zone plantings should be maintained at no higher than three feet to allow sight distance for motorists and pedestrians.
- Trees with large canopies planted between the sidewalk and street should generally be trimmed to keep branches at least seven feet above the sidewalk.
- Plants and trees should be chosen to match character of area.

Cost:

• Varies greatly. May be supplemented by funds from community organizations or homeowners associations.

Roadway Lighting Improvements

Proper lighting in terms of quality, placement, and sufficiency can greatly enhance a nighttime urban experience as well as create a safe environment for motorists and pedestrians. Two-thirds of all pedestrian fatalities occur during low-light conditions. Attention should be paid to crossings so that there is sufficient ambience for motorists to see pedestrians. To be most effective, lighting should be consistent, adequately spaced, and distinguished, providing adequate light.





In most cases, roadway street lighting can be designed to illuminate the sidewalk area as well. The visibility needs of both pedestrian and motorist should be considered. In commercial or downtown areas and other areas of high pedestrian volumes, the addition of lower level, pedestrian-scale lighting to streetlights with emphasis on crossings and intersections may be employed to generate a desired ambiance. A variety of lighting choices include mercury vapor, incandescent, or less expensive high-pressure sodium lighting for pedestrian level lighting'. Roadway streetlights can range from 20-40 feet in height while pedestrian-scale lighting is typically 10-15 feet.

It is important to note that every effort should be made to address and prevent light pollution. Also known as photo pollution, light pollution is "excess or obtrusive light created by humans"4. Whenever urban improvements are made where lighting is addressed, a qualified lighting expert should be consulted early in the process. This individual should not only create a safe and attractive ambiance, but will do so with the minimum of fixtures, an awareness of the importance of minimizing photo pollution, and with a focus on minimizing future energy use. A thoughtful plan of how and where to light will reap benefits not only in potential reduced infrastructure cost, but future energy costs as well.

Guidelines:

- Ensure pedestrian walkways and crossways are sufficiently lit.
- Consider adding pedestrian-level lighting in areas of higher pedestrian volumes, Downtown, and at key intersections.
- Install lighting on both sides of streets in commercial districts.
- Use uniform lighting levels.

Cost:

• Varies greatly depending on design, fixture selection, and public utility

Street Furniture and Walking Environment

As part of a comprehensive sidewalk and walkway design, all street furniture should be placed in a manner that allows for a safe, pleasurable, and accessible walking environment. Good-quality street furniture will show that the community values its public spaces and is more cost-effective in the long run. Street furniture includes benches, trash bins, signposts, newspaper racks, water fountains, bike racks, restaurant seating, light posts, and other ornaments that are found within an urban street environment. Street furniture should mostly be considered in the Downtown area and other important pedestrian-active areas.

In addition to keeping areas free of obstruction from furniture, a walking environment should be clean and well maintained. Attention should be given to removing debris, trimming vegetation, allowing for proper stormwater drainage, providing proper lighting and sight angles, and repairing or replacing broken or damaged paving material can make an enormous difference in pedestrian perception of safety and aesthetics. Special attention should be paid to the needs of the visually impaired so that tripping hazards and low hanging obstructions are removed.



Guidelines:

- Ensure proper placement of furniture; do not block pedestrian walkway or curb ramps or create sightline problems.
- Wall mounted Objects not to protrude more than 4" from a wall between 27" and 7' from the ground
- Single post mounted Objects not to protrude more than 4" from each side of the post between 27" and 7' from the ground
- Multiple Post Mounted Objects lowest edge should be no higher than 27" and no lower than 7'
- Place street furniture at the end of on-street parking spaces rather than in middle to avoid vehicle-exiting conflict.

Cost:

• Varies depending on design, furniture selection, material, and level of landscaping

Pedestrian Signs and Wayfinding



Signage provides important safety and wayfinding information to motorist and pedestrian residents and tourists. From a safety standpoint, motorists should be given advance warning of upcoming pedestrian crossings or of traffic calming areas. Signage of any type should be used and regulated judiciously. An inordinate amount of signs creates visual clutter. Under such a condition, important safety or wayfinding information may be ignored resulting in confusion and possible pedestrian vehicle conflict. Regulations should also address the orientation, height, size, and sometimes even style of signage to comply with a desired local aesthetic.

Wayfinding signage should orient and communicate in a clear, concise and functional manner. It should enhance pedestrian circulation and direct visitors and residents to important destinations. In doing so, the goal is to increase the comfort of visitors and residents while helping to convey a local identity.

Maintenance of signage is as important as walkway maintenance. Clean, graffiti free, and relevant signage enhances guidance, recognition, and safety for pedestrians.

Cost:

• Signage: \$50 - \$150 plus installation

Bridges

Provisions should always be made to include a walking facility as a part of vehicular bridges, underpasses, or tunnels, especially if the facility is part of the Pedestrian Network. All new or replacement bridges, other than those for controlled access roadways, should accommodate pedestrians with wide sidewalks on both sides of the bridge. Even though bridge replacements do not occur regularly, it is important to consider these in longer-term pedestrian planning.

It is NCDOT bridge policy that within Urban Area boundaries, sidewalks shall be included on new bridges with curb and gutter approach roadways with no controlled access. Sidewalks should not be included on controlled access facilities. A determination on whether to provide sidewalks on one or both sides of new bridges will be made during the planning process according to the NCDOT Pedestrian Policy Guidelines. When a sidewalk is justified, it should be a minimum of five to six feet wide with a minimum handrail height of 42".

It is also NCDOT bridge policy that bridges within the Federal-aid urban boundaries with rural-type roadway sections (shoulder approaches) may warrant special consideration. To allow for future placement of ADA acceptable sidewalks, sufficient bridge deck width should be considered on new bridges in order to accommodate the placement of sidewalks. Guidelines:

- Sidewalks should be included on roadway bridges with no controlled access with curb and gutter approach in Urban Areas.
- Sufficient bridge deck width should be considered on new bridges with rural-type shoulder approaches for future placement of sidewalks.
- Sidewalk should be 5' to 6' wide.
- Minimum handrail height should be 42"

SECTION 6 – RECOMMENDATIONS FOR ANCILLARY FACILITIES, PROGRAMS & POLICIES

This section outlines recommendations for ancillary facilities, programs, and policies to assist in making the Town of Farmville a pedestrian-friendly community. These recommendations satisfy Engineering, Education, Encouragement, Enforcement, and Evaluation and Planning categories of a pedestrian-friendly community.

Ancillary programs and practices are an important part of establishing a pedestrian-friendly community without necessarily being incorporated with any on-the-ground projects. Facility design, maintenance, traffic calming, education programs, law enforcement, promotion, and offering transportation choices are all necessary to create a community that is walkable. Some of these recommendations could be implemented immediately, while others may need the basic land-use and infrastructure to be incorporated into the defined Pedestrian Oriented Development Districts to be effective.

The implementation of various programs not only encourages walking, but also provides education, enforcement, and maintenance opportunities to ensure Farmville has a comprehensive pedestrian network where its users feel comfortable to bike in the community. The recommended programs for Farmville include:

- Spot Improvement and Maintenance Program
- Education Programs
- Encouragement & Promotional Programs
- Enforcement Programs
- Alternative Transportation Options that Compliment Walking
- Anti-Litter Programs
- Mapping And Signage Projects

6.1. SPOT IMPROVEMENT AND MAINTENANCE PROGRAMS

Sidewalks / Walkways

Just as potholes, uneven pavement, and visual obstructions irritate automobile drivers, these do the same to pedestrians. Current sidewalks should be free of cracks, dead-ends, or uneven alignment. All sidewalk/roadway intersections should include curb cuts, ramps, detectable warnings and landing areas that comply with ADA. Funding should be set aside for maintenance of worn sidewalks and consideration should be given as to which material to use to maximize the sidewalks' lives. The Town should apply for any available state or federal funding to correct any gaps in its existing sidewalk network and to retrofit ADA specific accommodations.

Currently, a limited sidewalk inventory exists for the Town of Farmville. It is recommended that the Town conduct a comprehensive inventory, including notes on where these sidewalks need maintenance or ADA upgrades. A means should also be established by which the Town can annually determine where new maintenance issues occur, and continually receive alerts from the public on sidewalk maintenance concerns. These maintenance projects should be compiled and continuously updated as maintenance is competed and additional maintenance needs arise.

Additionally, small gaps in the sidewalk may occur when separate public or private projects do not completely connect. A serious effort must be made to connect these pieces of walkways, and future policy must be created and enforced that ensures that these connections are always created in future projects.

6.2. EDUCATION PROGRAMS

School Safety Patrol Programs

School Safety Patrol Programs across the United States have been responsible for decreased pedestrian/vehicle collisions. The American Automobile Association (AAA), municipalities, and schools have sponsored these important safety programs in the past, and should be continued by Farmville's schools. More information can be found at:

http://www.schoolsafetypatrol.aaa.com/

North Carolina School Crossing Guard Training Program

As traffic continues to increase on North Carolina's streets and highways, concern has grown over the safety of our children as they walk to and from school. At the same time, health agencies, alarmed at the increase in obesity and inactivity among children, are encouraging parents and communities to get their children walking and biking to school. In response, the Division of Bicycle and Pedestrian Transportation decided to establish a consistent training program for law enforcement officers responsible for school crossing guards. According to the office of the North Carolina Attorney General, school crossing guards may be considered traffic control officers when proper training is provided as specified in GS 20-114.1.

Law enforcement agencies interested in participating in the School Crossing Guard Training Program should contact the Division of Bicycle and Pedestrian Transportation by phone at (919) 707-2600 or visit <u>http://www.ncdot.gov/bikeped/about/training/school_crossing_guard/</u> http://www.ncdot.org/transit/bicycle/safety/programs_initiatives/crossing.html

Safety Signs on Pedestrian Routes

Pedestrian walkways should have certain amenities to make them comfortable such as benches, water fountains, shelters, waste and recycle cans, restrooms, landscaping, interpretation signs, lockers, boardwalks, bridges, etc. Use these structures to your advantage. Safety messages could be placed on any of the aforementioned amenities in a location where users could clearly read it, and quite possibly abide by its message. Using riddles, rhymes, or stories to make the point increases the public's interest. A local business or family could sponsor each structure and its corresponding safety sign.

Public Perception Marketing

Although an increase in pedestrian facilities is far more popular than many transportation projects, it is highly recommended that a positive marketing campaign start as soon as possible. Shared-use paths, sidewalks, bikeways, and intersection improvements cost tax dollars, require right-of-way, and sometimes create friction between the impatient driver and the pedestrian. In addition, recent political events concerning the acquisition of right-of-way have created some public uneasiness with sidewalk and other projects that might require land easements.

In reality, shared-use paths such as greenways have shown through studies to occasionally increase property re-sale values, have no increase or actually might decrease neighborhood crime, and result in more positive ecological effects than negative. Once greenways are successfully on the ground in communities, the residents know first hand of their benefits and welcome more. However, communities are sometimes wary as to how these trails might negatively affect them, and false information and negative perceptions may allow for a public relations issue before the walkways are in place.

Plus, designing a community where transportation choices exist has been shown to place communities at an economic advantage over communities that rely solely on the automobile. Tax dollars spent to improve or create pedestrian facilities are tax dollars that place a return on the investment for the community. The Town should first act to create a positive image for future greenways, sidewalks, zoning changes, intersection improvements, traffic calming and other pedestrian expenditures before any opposition occurs. Circulate the facts concerning these facilities and show the positive benefits.

Driver Education

Targeting the young generation with this plan is very important. Children aged 5-15 are not yet old enough to drive, are young enough to have the energy and ability to learn new skills and habits, and sometimes have no choice but to walk. Once these children turn sixteen, it should be expected that the majority of these youth are drawn to the automobile. The car is a status symbol, a mode of independence, and a sign that they are becoming an adult.

At the same time young drivers are very impressionable and this provides excellent opportunities to educate the driving population. Pedestrian safety, as well as how to safely maneuver an automobile while in the presence of pedestrians and bicycles can be an instrumental part of any driver's education program in Farmville. This training will allow this new generation to be more aware of the simple fact that motorized vehicles do not have sole right to the transportation network, and it is everyone's responsibility to be careful when in the roadways

Pedestrian Education

Many pedestrian crashes occur because the pedestrian disobeyed traffic laws. Crossing signalized intersections on the red phase, walking on the roadway in the same direction as traffic, and darting across traffic lanes are not only dangerous, they are illegal.

Indeed, much of the reasoning why a pedestrian breaks the law is because of conditions unknown to the motorist such as the scarcity of proper crossing locations or the absence of walkways out of the roadway. But unfortunately, many pedestrians do take unnecessary risks often. Much of the time, they may not know that any traffic laws apply to them, but it would be fair to say that many pedestrians choose not to follow the law. In addition to creating safe walking areas for pedestrians, walkers must be taught to respect the laws for their own safety. Pedestrian Education courses should be offered at schools, libraries, or on informational web sites.

Resources

• The North Carolina Department of Transportation Division of Bicycle and Pedestrian Transportation has a wealth of information on their web site:

http://www.ncdot.gov/bikeped/travelingfoot/wheretowalk/#safety

This web site includes information on bicycle and pedestrian programs. The web site is also a good source of resources and materials.

• http://www.walkinginfo.org also has a great amount if information and program ideas, including design and engineering guidelines, programs, facts, news, outreach and solutions to problems.

• http://safety.fhwa.dot.gov/ offers ideas for a variety of pedestrian-safety focused curricula.

6.3. ENCOURAGEMENT AND PROMOTIONAL PROGRAMS

Bicycle and Pedestrian Advisory Committee

As a short-term priority, the Town should consider establishing a standing Bicycle and Pedestrian Advisory Committee to advocate for bicycle and pedestrianfriendly Town policies and actions. Citizens currently serving on the Bicycle and Pedestrian Plan Steering Committees, as well as any additional interested citizens, would serve as committee members and Town staff would facilitate committee meetings. A Bicycle and Pedestrian Advisory Committee would meet regularly to discuss issues; provide recommendations and/or advise Town staff regarding bicycle and pedestrian related concerns and actions. Additionally, the committee may consider coordinating an annual event, generating brochures or marketing materials, and/or reviewing development plans for bicycle and pedestrian friendliness.

Zoning Ordinance & Subdivision Regulations

Currently, the Town can recommend that pedestrian facilities be incorporated into new development projects, but there is no Town policy to require such facilities. Farmville acknowledges the need for regulations requiring pedestrian facilities as development occurs. Farmville should consider revising its Zoning Ordinance and Subdivision regulations to set a standard for the Town and require pedestrian facilities with certain development requests. Farmville should consider an ordinance requiring pedestrian facilities on all arterial and connector roads as development occurs as well as providing connections to neighboring roads and pedestrian facilities.

Complete Streets Ordinance

As a short-term priority recommendation, Farmville should develop and implement a Complete Streets Ordinance to ensure all new and reconstruction

of roadways have "complete street" elements (components for all types of transportation) incorporated into the design and construction as appropriate. These elements include:

- ADA-complaint curb cuts
- ADA-compliant sidewalk improvements
- New bicycle lanes
- Pedestrian medians
- Roadside improvements for public transportation; including bus shelters and bus priority traffic signals (as appropriate)
- Traffic calming measures, such as chicanes, curb extensions, and speed humps/tables
- Improved landscaping and streetscape features, such as benches, trees, and street/pedestrian lighting
- Intersection and crosswalk improvements for all non-motorized users
- Other improvements to ensure safety, accessibility, and quality of the roadway

Town Funding

The Town should consider allocating resources on an annual basis to establish and maintain a pedestrian network, maintain existing facilities, and fund programs and on-going activities directed towards encouragement, enforcement, and education. The allocation of Town funding for pedestrian facilities will be an ongoing need.

Safe Routes to Schools

The Safe Routes to School Program was established in August 2005 as part of the most recent federal transportation reauthorization legislation, SAFETEA-LU. This law provided multi-year funding for the surface transportation programs that guide spending of federal gas tax revenue.

The **Moving Ahead for Progress in the 21st Century Act** (MAP-21) authorized the Transportation Alternatives Program (TAP), which replaced the funding from pre-MAP-21 programs including the Transportation Enhancement Activities, Recreational Trails Program, and Safe Routes to School Program (SRTS). MAP-21 did not provide specific funding for SRTS, but SRTS projects are eligible for TAP funds and for Surface Transportation Program (STP) funds. TAP provisions and requirements apply to projects using TAP funds

MAP-21 Section 1122 codified the TAP under title 23 United States Code (U.S.C.) sections 213(b) and 101(a)(29). Section 213 of title 23 provides for the reservation of funds apportioned to a State under section 104(b) of title 23 to carry out the

TAP. The national total reserved for the TAP is equal to 2 percent of the total amount authorized from the Highway Account of the Highway Trust Fund for Federal-aid highways each fiscal year.

Walk to Work, Shop, School and Play Days

Designate a day, or preferably even a week or month where people walk to their destinations. This can coincide with International Walk to School Week, or with Bike to Work Week, or with another common "Hike, Bike, and Bus" week that some municipalities sponsor. Advertise these events, have some fun events along common pedestrian routes, and offer prizes and recognition for shining participants. International Walk to School Week typically falls on the first week of October, and their web site with good information can be found at http://www.walktoschool.org/

Walk to School events can be as simple as a few kids and parents meeting to walk to school or can be very elaborate celebrations. Event logistics range from a central walking location to people walking from their homes. Successful events have the support and participation of the principal, police and parents, and programs such as this give public agencies and representatives the opportunity to publicly support health, environment and safety initiatives.

Walking School Bus

A walking school bus is a group of children walking to school with one or more adults. It can be as informal as two families taking turns walking their children to school to as structured as a route with meeting points, a timetable and a regularly rotated schedule of trained volunteers. More information can be found at http://www.walkingschoolbus.org/.

Walk a Child to School in North Carolina

Thanks to the national initiative and support from the NC Governor's Highway Safety Program, Walk a Child to School Programs have gained a foothold in North Carolina and are growing each year. To date more than 5,000 students in 12 communities in the state have participated.

Walking Challenge

Have a web page set up where residents can enroll to receive a pedometer (at no cost or at a cost determined by the Town) and a map of Farmville's pedestrian routes. Participants record on the web site how much they walk each month, and have the opportunity to win recognition or awards. It is amazing how recording the results from a pedometer can addict users to walking. Once many of the recommended projects are constructed, it would create a perfect opportunity for regular special events. A festival could be set up downtown, at a park, or on a greenway, closing roadways off to vehicular traffic for seasonal festivals, or even on currently low traffic days like Saturdays, spurring a new and desired shopping experience that may draw more business than a typical Saturday.

An international trend is to turn major city roads into "Sunday Parkways." This concept takes long strips of roadways (linear or in a looping pattern) and converts one or both directions of traffic to pedestrian malls during a portion of every Sunday and holiday. This encourages people to get out and walk, increases the amount of public space, and motivates people to walk more often throughout the rest of the week.

6.4. ENFORCEMENT PROGRAMS

Enforce the Laws

Continued police enforcement of traffic laws is always necessary to protect pedestrians. Farmville's Police Department should be particularly encouraged to ticket violators in residential, high density commercial, and other popular pedestrian areas. Pedestrians must also be encouraged to follow the law for their own safety, with pedestrian violators also being educated as to the correct behaviors.

Sting Operations

This tactic, along with others, is a method from www.walkinginfo.org for making an impact upon motorists who fail to stop for pedestrians in crosswalks.

- 1. Identify high risk locations for pedestrians.
- 2. Observe to see the types of violations that are occurring and choose a location for the sting.
- 3. Calculate a reasonable amount of time for a driver to see and react to the pedestrian, mark that distance back from the crossing with a cone or sign.
- 4. A police officer in high visibility civilian clothes acts as a pedestrian, stepping into the street before the car has passed the "cone".

5. Other officers observe the crossing attempts from concealment and pursue and apprehend violators. The media is invited to view and report on this sting operation.

Twenty's Plenty

There is always a need to reduce automobile speeds to accommodate for increased pedestrian traffic. Creating an awareness program that encourages drivers to drive no more than 20 MPH in certain areas of town will make it more comfortable for the pedestrian to venture out on foot. The severity of pedestrian / automobile incidents drastically decreases with lower automobile speeds. The name, "Twenty's Plenty" has been used with success in other communities.

Foot Patrol

The Farmville Police Department should assign pedestrian officers to be visible and personal presence, particularly in downtown and other Pedestrian Districts. These officers will therefore get to know business owners, residents, and frequent visitors well, as they would be more reachable to the people of these communities.

6.5. ALTERNATIVE TRANSPORTATION OPTIONS THAT COMPLIMENT WALKING

Bicycle Accommodations and Loaner Programs

Providing bicycle parking throughout Farmville will give pedestrians an option of using a bicycle for slightly further or quicker trips. In addition, bicycle loaner programs may be an option in areas where pedestrian and bicycle trips might be more common. Although this program is more typical of larger municipalities, Farmville may be able to customize a version of this program to suit it needs and realities. Some operational difficulties with this program could be mitigated by issuing any interested person a "Bicycle Loan Card" from the public library for a small fee or no fee. This recommendation will also be included in the Farmville Bicycle Plan.

6.6. ANTI-LITTER PROGRAMS

Adopt a Road / Adopt a Sidewalk Programs

Adopt a Road programs are common, enabling members of the community to sponsor and help to clean a road of litter. The Town of Farmville can begin a similar program for its sidewalks and (future) greenways. This program could also be used as a means for the community to alert the Town when there is a maintenance issue with a sidewalk, or as a means for a sidewalk to get special attention, funding, and improvements because of the dedication of its community sponsor. In the end, if the number of pedestrians in the Town increases, the awareness and sense of pride and ownership should eventually create a cleaner streetscape.

6.7. MAPPING AND SIGNING PROJECTS

Neighborhood and Comprehensive Route Systems

An ideal city transportation system might have neighborhood roads that take residents from their homes to densely developed satellite shopping, employment, and interior schools. Newer residential roads commonly end in culde-sacs and some housing developments have only a few exits out of the development. Commercial strip development away from residential areas is far more common than nearby dense commercial development. Realistically, changing the future development patterns is a far more effective planning strategy than most infrastructure additions, but sometimes simple and affordable solutions need to be implemented to enhance existing conditions. Pedestrian mapping or signing projects are one such tool.

Several pedestrian routes have been identified in this plan, and missing gaps in the connections should be built immediately to ensure that the proposed routes are functional. Once a route is physically connected with pedestrian walkways, it should be named, mapped, and marked. Maps should be printed and distributed, with occasional updates added. The pedestrian structures, waste cans, or sidewalks themselves should have the route name posted on it without the need for additional signage. These marked routes would eventually serve to make the walker less unsure of connection problems. Once a policy-driven street connection system is developed, there will be no need for additional mapped local routes.

Table 6.0: Implementation Table						
Program Name	Implementation Phase					
School Safety Patrol Programs	Short-Term (Continuation of Existing)					
North Carolina School Crossing Guard Training Program	Short-Term (Continuation of Existing)					
Safety Signs on Pedestrian Routes	Mid-Term					
Public Perception Marketing	Short-Term					
Driver Education	Short-Term					
Pedestrian Education	Short-Term					
Walk to Work, Shop, School and Play Days	Short-Term (Conjunction with existing Walk					
	to School Week/Events)					
Walking School Bus	Short-Term (Continuation of Existing)					
Walk a Child to School in North Carolina	Short-Term					
Walking Challenge	Mid-Term					
Greenway Events and Street Closings	Mid-Term					
Twenty's Plenty	Short-Term					
Foot Patrol	Short-Term (Continuation of Existing)					
Bicycle Accommodations and Loaner Programs	Mid-Term					
Adopt a Road/Adopt a Sidewalk Program	Short-Term					
Neighborhood and Comprehensive Route System	Mid-Term					
Policy Name	Implementation Phase					
Bicycle and Pedestrian Advisory Committee	Short Term					
Zoning Ordinance & Subdivision Regulations	Short-term					
Complete Streets Ordinance	Mid-Term					
Town Funding	Mid to Long-Term					
Enforcement of Laws	Short-Term					

SECTION 7 – PROJECT RECOMMENDATIONS

CONSTRUCTION PROJECTS

The initial list of potential project locations was developed based on input from the Steering Committee meetings, Town staff, the public survey, and the results of the sidewalk inventory. Pedestrian considerations should be included as part of all new road/street construction and maintenance improvement processes.

A wide range of projects have been identified to make Farmville more pedestrian-friendly. Physical improvements including adding sidewalks, greenways, and side paths are recommended. Twenty-nine (29) construction projects are recommended including nineteen (19) sidewalk additions, one (1) greenway, one (1) shared use path, six (6) crosswalk improvements, and two (2) railroad crossing improvements. A description of all construction projects are found in Table 7.O.

Table 7.0 is the recommended listing of pedestrian improvement construction projects. Refer to Map 7.1 for locations of the projects. The following definitions apply to the terms as utilized in Table 7.0:

- Type of Project Identifies project type (sidewalk, greenway, shared use path, crosswalks improvements, railroad cushions)
- Project / Improvement Name Identified project name
- At/On Identifies location of project (street, intersection, etc)
- From Identifies starting point of construction project
- To Identifies ending point of construction project
- Approximate Length (ft) Identifies approximate length of project in feet
- Details/Purpose Identifies the need for the project
- Preferred Treatment Identifies recommended project improvement(s)
- Preliminary Opinion of Probable Costs These costs are rough estimates and should not be considered final. Surveying, engineering design, environmental considerations, rights-of-way considerations and coordination among interested parties need to be completed to determine costs to be utilized for specific project budgeting.

- Estimated Cost Range Magnitude of estimated cost calculated using various sources.
 - *Minimal:* Cost estimate for project is \$10,000 or less based on existing conditions, proposed treatment, any further study that is needed, and level of engineering, and project components (permits, acquisition, coordination, etc.).
 - Low: Cost estimate for project range from \$10,001- \$99,999 based on existing conditions; proposed treatment, any further study that is needed, and level of engineering, and project components (permits, acquisition, coordination, etc.).
 - Moderate: Cost estimate for project range from \$100,000 \$299,999 based on existing conditions, proposed treatment, any further study that is needed, and level of engineering, arid project components (permits, acquisition, coordination, etc.).
 - High: Cost estimate for project range is \$300,000 or higher based on existing conditions, proposed treatment, any further study that is needed, and level of engineering, and project components (permits, acquisition, coordination, etc.).
- Implementation Phase Phasing schedule category based upon their preliminary estimated cost, priority ranking, and constructability.

Town of Farmville - Pedestrian Plan Project Recommendations											
Type of Project	Name	At/On Fro	om To	l le	ng	Tret Co	Cost st Range	State /Local	ROV	v	Phase
Tioject	Hame			op 10 Priori	- -		in nong				i nabe
Sidewalk Addition	Main Street Sidewalk Extension, Southern Connection (East Side) Main Street	S. Main St.	Vines St.	Marlbo ro Rd.	2 6 5 0	Sidewalk Addition	\$ 43,700	Low	State	50' - 60'	1
Sidewalk Addition	Sidewalk Extension, Southern Connection (West Side)	S. Main St.	Vines St.	Marlbo ro Rd.	2 6 5 0	Sidewalk Addition	\$ 43,700	Low	State	50' - 60'	1A
Sidewalk Addition	Grimmersburg Street Sidewalk Extension	Grimmersburg St.	Greene St.	Davis Dr.	1 3 0 0	Sidewalk Addition	\$ 21,500	Low	Local	50'	2
Sidewalk Addition	Main Street Sidewalk Extension, Northern Connection	N. Main St.	Dale Dr.	Jones St.	1 1 7 5	Sidewalk Addition	\$ 19,400	Low	State	50' - 60' - 10 0'	3
Sidewalk Addition	Farmville Municipal Athletic Park Connection	W. Horne Ave.	Walnut St.	May Blvd.	2 1 0 0	Sidewalk Addition	\$ 34,700	Low	Local	50'	4
Sidewalk Addition	Pitt Street Sidewalk Extension - Phase 2	Pitt St.	E. Pine St.	Ellis Ave.	1 6 2 5	Sidewalk Addition	\$ 26,800	Low	Local	60'	5
Sidewalk Addition	Pitt Street Sidewalk Extension - Phase 1	Pitt St.	Grimmersburg St.	E. Pine St.	1 6 2 5	Sidewalk Addition	\$ 26,800	Low	Local	50'	6
Sidewalk Addition	Wilson Street Sidewalk Extension - Phase 2	W. Wilson St.	May St.	Fields St.	1 5 0	Sidewalk Addition	\$ 2,500	Minimal	State	50'	7
Sidewalk Addition	Wilson Street Sidewalk Extension - Phase 1	W. Wilson St.	Park St.	Charter Oaks Dr.	1 6 5 0	Sidewalk Addition	27,200	Low	State	50' - 60'	8
Sidewalk Addition	Church Street Sidewalk Extension	W. Church St.	W. Wilson St. (Church Entrance)	Turnag e St.	1 2 7 5	Sidewalk Addition	21,000	Low	State	60'	9

Project	Name	At/On Fro	om To	le le	ng	Tret Co	Cost st Rang	State e /Local	RO	N	Phase
Tiojeet	Hame			rm Priority			in nung		ner		Thuse
			Short re	in Phoney	(U-5 y	ears					
	Contentnea to			Conten	5					50'	
Sidewalk	Oliver Murphy	NC 121/N.		tnea	2	Sidewalk	\$			-	Short-
Addition	Connection	Main St.	Dale Dr.	Street	5	Addition	8,700	Minimal	State	60'	Term
	Bennett Street	S George			1 8						
Sidewalk	Park	St./Bennett		S. Main	2	Sidewalk	\$				Short-
Addition	Connection	St.	W. Perry St.	St.	5	Addition	30,100	Low	Local	50'	Term
Cross	Farmville	W. Horne St.	NA	NA	N	Cross	5,000				Short-
Walk	Athletic Park				A	Signage					Term
Addition	Crosswalk					and Marking		Minimal	Local	50′	
Cross	Belcher/Grim	N Main St.	NA	NA	N	Cross	5,000	wiiiiiiiai	LUCAI	50	Short-
Walk	mersburg				А	Signage	-,				Term
Addition	Crosswalk					and				50′	
						Marking				-	
								Minimal	State	60′	
Cross	Oliver	N. Main St.	NA	NA	Ν	Cross	5,000				Short-
Walk	Murphrey				Α	Signage					Term
Addition	Park					and				50′	
	Crosswalk					Marking		Minimal	State	- 60'	
				I	1]]	wiinina	State	00	
Type of							Cost	State			-
Project	Name	At/On Fro	om To		ng	Tret Co	st Rang	e /Local	RO	N	Phase
			Mid-Terr	n Priority (!	5-10 \	'ears)					
					1						
	Ellis Avenue			Crestw	1 1						
Sidewalk	Ellis Avenue Sidewalk			Crestw ood	1 2	Sidewalk					Mid-
Sidewalk Addition		Ellis Ave.	S. Pitt St.		1	Sidewalk Addition	18,600	Low	Local	50'	Mid- Term
	Sidewalk	Ellis Ave.	S. Pitt St.	ood	1 2		18,600	Low	Local	50'	-
Addition Sidewalk	Sidewalk Extension Crestwood Sidewalk			ood Drive E. Perry	1 2 5 1 7	Addition Sidewalk					Term Mid-
Addition	Sidewalk Extension Crestwood	Ellis Ave. Crestwood Dr.	S. Pitt St. Ellis Ave.	ood Drive	1 2 5	Addition	18,600 2,900	Low Minimal	Local	40'	Term
Addition Sidewalk	Sidewalk Extension Crestwood Sidewalk			ood Drive E. Perry	1 2 5 1 7	Addition Sidewalk				40' 20'	Term Mid-
Addition Sidewalk	Sidewalk Extension Crestwood Sidewalk			ood Drive E. Perry	1 2 5 1 7	Addition Sidewalk				40'	Term Mid-
Addition Sidewalk	Sidewalk Extension Crestwood Sidewalk			ood Drive E. Perry	1 2 5 1 7 5	Addition Sidewalk				40' 20' (E Per ry)	Term Mid-
Addition Sidewalk	Sidewalk Extension Crestwood Sidewalk Extension			ood Drive E. Perry St.	1 2 5 1 7 5	Addition Sidewalk				40' 20' (E Per ry) 30'	Term Mid-
Addition Sidewalk Addition	Sidewalk Extension Crestwood Sidewalk Extension Perry Street			ood Drive E. Perry St. Powder	1 2 5 1 7 5 2 3	Addition Sidewalk Addition				40' 20' (E Per ry) 30' (W	Term Mid- Term
Addition Sidewalk	Sidewalk Extension Crestwood Sidewalk Extension			ood Drive E. Perry St.	1 2 5 1 7 5	Addition Sidewalk				40' 20' (E Per ry) 30'	Term Mid-
Addition Sidewalk Addition Sidewalk	Sidewalk Extension Crestwood Sidewalk Extension Perry Street Sidewak	Crestwood Dr.	Ellis Ave.	ood Drive E. Perry St. Powder Horne	1 2 5 1 7 5 2 3 2	Addition Sidewalk Addition Sidewalk	2,900	Minimal	Local	40' 20' (E Per ry) 30' (W Per	Term Mid- Term Mid-
Addition Sidewalk Addition Sidewalk	Sidewalk Extension Crestwood Sidewalk Extension Perry Street Sidewak Extension Contentnea	Crestwood Dr.	Ellis Ave.	ood Drive E. Perry St. Powder Horne Ln. NC	1 2 5 1 7 5 2 3 2 5 1	Addition Sidewalk Addition Sidewalk	2,900	Minimal	Local	40' 20' (E Per ry) 30' (W Per	Term Mid- Term Mid-
Addition Sidewalk Addition Sidewalk Addition	Sidewalk Extension Crestwood Sidewalk Extension Perry Street Sidewak Extension Contentnea Street	Crestwood Dr. Perry St.	Ellis Ave.	ood Drive E. Perry St. Powder Horne Ln. NC 121/N.	1 2 5 1 7 5 2 3 2 5 5 1 7	Addition Sidewalk Addition Sidewalk Addition	2,900	Minimal	Local	40' 20' (E Per ry) 30' (W Per	Term Mid- Term Mid- Term
Addition Sidewalk Addition Sidewalk Sidewalk	Sidewalk Extension Crestwood Sidewalk Extension Perry Street Sidewak Extension Contentnea Street Sidewalk	Crestwood Dr. Perry St. N. Contentnea	Ellis Ave. Crestwood Dr.	ood Drive E. Perry St. Powder Horne Ln. NC 121/N. Main	1 2 5 1 7 5 2 3 2 5 5 1 7 7	Addition Sidewalk Addition Sidewalk Addition	2,900	Minimal	Local	40' 20' (E Per ry) 30' (W Per ry)	Term Mid- Term Mid- Term Mid-
Addition Sidewalk Addition Sidewalk Addition	Sidewalk Extension Crestwood Sidewalk Extension Perry Street Sidewak Extension Contentnea Street Sidewalk Extension	Crestwood Dr. Perry St.	Ellis Ave.	ood Drive E. Perry St. Powder Horne Ln. NC 121/N.	1 2 5 1 7 5 2 3 2 5 5 1 7	Addition Sidewalk Addition Sidewalk Addition	2,900	Minimal	Local	40' 20' (E Per ry) 30' (W Per	Term Mid- Term Mid- Term
Addition Sidewalk Addition Sidewalk Sidewalk	Sidewalk Extension Crestwood Sidewalk Extension Perry Street Sidewak Extension Contentnea Street Sidewalk Extension Walnut Street	Crestwood Dr. Perry St. N. Contentnea	Ellis Ave. Crestwood Dr.	ood Drive E. Perry St. Powder Horne Ln. NC 121/N. Main St.	1 2 5 1 7 5 2 3 2 5 1 7 7 5	Addition Sidewalk Addition Sidewalk Addition	2,900	Minimal	Local	40' 20' (E Per ry) 30' (W Per ry)	Term Mid- Term Mid- Term Mid-
Addition Sidewalk Addition Sidewalk Sidewalk	Sidewalk Extension Crestwood Sidewalk Extension Perry Street Sidewak Extension Contentnea Street Sidewalk Extension	Crestwood Dr. Perry St. N. Contentnea	Ellis Ave. Crestwood Dr.	ood Drive E. Perry St. Powder Horne Ln. NC 121/N. Main	1 2 5 1 7 5 2 3 2 5 5 1 7 7	Addition Sidewalk Addition Sidewalk Addition	2,900	Minimal	Local	40' 20' (E Per ry) 30' (W Per ry)	Term Mid- Term Mid- Term Mid-
Addition Sidewalk Addition Sidewalk Addition	Sidewalk Extension Crestwood Sidewalk Extension Perry Street Sidewak Extension Contentnea Street Sidewalk Extension Walnut Street Sidewalk	Crestwood Dr. Perry St. N. Contentnea St.	Ellis Ave. Crestwood Dr.	ood Drive E. Perry St. Powder Horne Ln. NC 121/N. Main St. W.	1 2 5 1 7 5 2 3 2 5 1 7 7 5 8 8 7 5	Addition Sidewalk Addition Sidewalk Addition Sidewalk Addition	2,900	Minimal	Local	40' 20' (E Per ry) 30' (W Per ry)	Term Mid- Term Mid- Term Mid- Term
Addition Sidewalk Addition Sidewalk Addition Sidewalk Sidewalk	Sidewalk Extension Crestwood Sidewalk Extension Perry Street Sidewak Extension Contentnea Street Sidewalk Extension Walnut Street Sidewalk Extension - Phase 1 Walnut Street	Crestwood Dr. Perry St. N. Contentnea St. N. Walnut	Ellis Ave. Crestwood Dr. Lang St.	ood Drive E. Perry St. Powder Horne Ln. NC 121/N. Main St. W. Horne	1 2 5 1 7 5 2 3 2 5 5 1 7 7 5 8 8 7 5 1	Addition Sidewalk Addition Sidewalk Addition Sidewalk Sidewalk	2,900 38,400 29,300	Minimal Low	Local	40' 20' (E Per ry) 30' (W Per ry) 50'	Term Mid- Term Mid- Term Mid- Term
Addition Sidewalk Addition Sidewalk Addition Sidewalk Sidewalk	Sidewalk Extension Crestwood Sidewalk Extension Perry Street Sidewak Extension Contentnea Street Sidewalk Extension Walnut Street Sidewalk Extension - Phase 1	Crestwood Dr. Perry St. N. Contentnea St. N. Walnut	Ellis Ave. Crestwood Dr. Lang St.	ood Drive E. Perry St. Powder Horne Ln. NC 121/N. Main St. W. Horne	1 2 5 1 7 5 2 3 2 5 1 7 7 5 8 8 7 5	Addition Sidewalk Addition Sidewalk Addition Sidewalk Sidewalk	2,900 38,400 29,300	Minimal Low	Local	40' 20' (E Per ry) 30' (W Per ry) 50'	Term Mid- Term Mid- Term Mid- Term

Type of Project	Name	At/On Fi	rom To	Le	eng	Tret Co	Cost st Rang	State e /Local	ROV	V P	hase
Mid-Term Priority (5-10 Years)											
Sidewalk Addition	Belcher Street Sidewalk Extension	Belcher St.	May Blvd.	N. Barrett St.	1 1 2 5	Sidewalk Addition	18,600	Low	Local	40'	Mid- Term
Cross Walk Addition	Perry Street Crosswalk	S. Main St.	NA	NA	N A	Cross Signage and Marking	5,000 Cost	Minimal State	State	60'	Mid- term
Project	Name	At/On Fi	rom To		eng	Tret Co	st Rang	e /Local	ROV	V P	hase
Sidewalk Addition (Road Diet Project)	May Boulevard Complete Street Improvement Dale Drive	May Blvd.	Planters Way Dr. N. Walnut	n Priority (1 W. Wilson St. NC	4 3 7 5 1	Sidewalk Addition Sidewalk	72,200 21,500	Low	Local Local	60' 50'	Long Term Long
Sidewalk Addition	Sidewalk Extension	Dale Dr.	Street	121/N. Main St.	3 0 0	Addition					Term
Greenway	North Farmville Greenway	New Location	Farmville Central High School	May Blvd.	1 6 0 0 0	Off-Road Facility	2,212,000	High	Local	NA	Long Term
Share Use Path	May Boulevard Shared Use Path	New Location	Planters Way Drive	Shop Center	2 9 0 0	Off-Road facility	338,000	High	State	100'	Long Term
Cross Walk Addition	North Farmville Greenway Crosswalk NC 121/N. Main Street	NC 121/N. Main St.	NA	NA	N A	Cross Signage and Marking	5,000	Minimal	State	100	Long Term
Cross Walk Addition	North Farmville Greenway Crosswalk/ May Boulevard	May Blvd.	NA	NA	N A	Cross Signage and Marking	5,000	Minimal	Local	60'	Long Term
Rail Road Crossing	Pitt Railroad Crossing Improvement	Pitt ST	NA	NA	N A	Railroad Crossing Cushion	5,000	Minimal	Nolf- South	NA	Long Term
Rail Road Crossing	Main Railroad Crossing Improvement	S Main St.	NA	NA	N A	Railroad Crossing Cushion	5,000	Minimal	Nolf- South	NA	Long Term

PRIORITIZED PROJECTS

Project development and prioritization was a multi-step process which included the identification of locations for potential projects, determining the appropriate treatments for projects, and prioritizing those projects. Following project development, projects were then prioritized based on the following factors:

- Public Input: information from Steering Committee, comments from participants in Public Open Houses and public survey.
- Project Characteristics: During the forth Steering Committee Meeting, members were asked to select priority criteria based on factors that include safety, connectivity to major destinations, immediate need, and other factors. These results were used to identify top priorities.
- Constructability and Cost: Including site preparation, engineering services, easement purchases, preliminary design, and ease of construction.

A project cost analysis was compared to the list of projects organized by project rating. Projects which were estimated to be low cost and also received high ratings were placed in the short term project category. Projects with high costs and low ratings were placed in the long term project category. Mid term projects included those projects with low costs and low ratings as well as projects with high costs and high ratings.

All construction projects are listed by priority ranking in Table 7.1.

SHORT-TERM PROJECTS

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 7.1).

MID-TERM PROJECTS

Mid-term opportunities are those that may be completed or implemented in a timeframe of six to ten years (6-10 years). The following opportunities should be considered in the mid-term of implementation of the Pedestrian Plan (Table 7.1).

LONG-TERM PROJECTS

Long-term opportunities are those that may be completed or implemented in a timeframe beyond ten years. The following opportunities should be considered in the long-term of implementation of the Pedestrian Plan (Table 7.1).

SECTION 8 – IMPLEMENTATION PLAN



IMPLEMENTATION STRATEGY

This chapter describes how the recommendations for improving Farmville's pedestrian conditions will be implemented. Priorities are outlined for projects, plans, and policies as well as potential partners and funding sources. Implementation of this plan will require a collaborative effort between a variety of Town departments and agencies. The Town's staff should be aware of the plan recommendations and seek to implement them as part of other regular work efforts. The NCDOT Division of Bicycle and Pedestrian Transportation may provide technical expertise on issues related to pedestrians and ensure that implementation of the plan moves forward. Progress on improving the plan should be monitored on at least an annual basis. Almost every project involving street or transportation improvements offers an opportunity to implement a component of this plan. Implementation priorities of recommended programs and policies are listed in Table 6.0 Implementation Table.

INITIATING ACTIONS

The following initiating actions will ensure implementation of the Comprehensive Pedestrian Plan and help the Town to meet the goals and objectives of it.

Action: Establish a Standing Pedestrian and Pedestrian Advisory Committee

- Establish an on-going committee to monitor progress of the plans implementation. Section 7 of this document includes a comprehensive list of all recommended projects. Projects are listed according to priority rank by project type.
- Review development plans to identify opportunities for pedestrian facilities.

Action: Providing Pedestrian Facilities as parts of all existing/proposed roadways

- Accommodate pedestrians as part of all new roadway projects. Seek opportunities to provide sidewalks, crosswalks, and signage as part of road projects in an effort to provide the Town additional pedestrian facilities.
- Incorporate requirements for pedestrian facilities into the Town's policies and ordinances.

Action: <u>All Town departments should consult the Comprehensive Pedestrian Plan</u> when implementing projects and conducting plan reviews.

- Farmville's development review process should be modified to include requirements for on and off- site pedestrian connections, sidewalks, crosswalks, and other amenities.
- Establish a Pedestrian Committee to review development plans.

Action: Develop a Pedestrian Education Program and Enforce Traffic Laws.

See Section 6 for recommended programs, such as Safe Routes to School and other encouragement programs.

• Develop a pedestrian education program as part of the Town's overall communication and education programs.

- Use the Town's website, newsletter, and local newspaper as information and educational tools
- Use Local Public Access Channel to advertise Pedestrian Safety Education Public Service Announcements as well as any events

Action: Plan and Construct Pedestrian Amenities.

• Develop and provide maps of sidewalks, walking routes, and popular destinations. See Section 6 for discussion related to route designation, mapping, route signage, and other facilities.

Action: <u>Reduce Speed Limits and Use Pedestrian-Friendly Devices.</u>

The Town should consider traffic calming measures and/or speed reductions on roads with sidewalks or high pedestrian activity.

Action: Update the Comprehensive Pedestrian Plan every 5 - 10 years.

Updates to the plan are essential in aiming to address the changing needs and priorities in Farmville. The plan should be reviewed on no less than an annual basis, with public input serving as an essential piece for future plan updates and reviews.

Action: Evaluate new pedestrian facility treatments.

New pedestrian treatments should be evaluated to determine their effectiveness. The results of the evaluations will be used to refine, adjust, and guide future use of these treatments. Pedestrian usage, motorist response, safety, and maintenance needs should be addressed during evaluation of new pedestrian facilities. This includes the evaluation of the following facilities:

- Sidewalks improvements/treatments
- Roadway crossing improvements/treatments
- Signage

Action: Establish partnerships based on their potential interest or involvement in a project.

The Town should look to local agencies, businesses, organizations and governmental departments to provide partnership opportunities to assist them in meeting the goals of the Pedestrian Plan. These partnerships may be utilized to develop pedestrian education, enforcement, and encouragement programs.

Farmville should consider establishing or strengthening partnerships with the following to achieve the completion of the Plan's projects and recommendations:

- North Carolina Department of Transportation
- Mid-East RPO
- Mid-East Commission Local Government Services Department
- Pitt County Health Department
- Pitt County Schools
- Farmville Chamber of Commerce
- Local Businesses
- Local Developers
- Local Pedestrian Clubs
- Neighborhood Associations
- Elected Officials

PERFORMANCE MEASURES

The Town of Farmville should continue to monitor performance measures following the adoption of the plan. In doing so, the Town can determine the amount of progress being made toward the eventual goal of achieving the plans vision. These measures should be reviewed and updated every few years to ensure that goals which require the Town's resources are being met when the resources are available.

EVALUATION/MONITORING PROCESS

The Town, in partnership with the Mid-East Rural Planning Organization, should provide an ongoing evaluation of pedestrian facilities in Farmville to determine that the goals and objectives of the Pedestrian Plan are being met. These organizations must also continue to monitor if. The goals and objectives should continually be modified to reflect changing circumstances or attitudes in Farmville. It is recommended that the evaluation be conducted biannually with concern towards the goals of the plan. Performance monitoring should be led by the Town's Planning Department with support of a Pedestrian/Pedestrian Advisory Committee and the Mid-East RPO staff.

Performance measures are used to monitor progress towards the vision of the plan. Based on the recommendations made in the plan, Farmville can measure success a number of ways, including

- Miles of on-street sidewalks and other pedestrian routes created
- Changes in the number of people using pedestrian programs
- Creation/Adoption of multi-modal policies that improve the quality of pedestrian experience
- Connections to surrounding communities/multi-modal facilities
- New linear feet of multi-modal accommodation

APPENDIX A – PUBLIC INVOLVEMENT STRATEGY

During the development of the Pedestrian Plan, public input from a range of community members was sought through a variety of means. During the planning process, a public input survey, Steering Committee meetings, and public open houses provided the public insight into the planning process, as well as give them an opportunity to provide input.

A Public Input Survey was conducted at the start of the planning process to learn more about pedestrian habits, users, points of interest, areas of concerns, and other relevant information that would assist in the development of the plan. An overview of survey results can be found in Section 2 of this document.

A Steering Committee comprised of members from a variety of backgrounds and areas in Farmville met on five occasions to assist in guiding the development of the plan. This group was responsible for deciding the projects that have been included, as well as deciding the priority of each project included in this document.



In addition to Steering Committee meetings, two Public Open Houses were held at the Farmville Community Center in December 2013 and May 2014 to provide insight into the plan, as well as allow citizens to provide their ideas and thoughts, as well as give input on areas they would like to have access to and areas they avoid due to safety concerns.

Town of Farmville Pedestrian Plan Steering Committee Wednesday April 17, 2013

Sign In

Name	Address	Phone Number(s)	E-Mail
Jeff Poles	KI	v	
Mary Mor	Don. Divan		
Ben Roye	15		
Dovid Ho	dakma		
Bod Mo	sher		
Altron S	wat		
Stevent	tordy Draz		
	obert Erms		
	r		
	briggen		
hispych			
Joden	0.		
Angela		pre	

Town of Farmville - Comprehensive Pedestrian Plan PLAN STEERING COMMITTEE

April 17, 2013 - 2:30 p.m.

MEETING AGENDA

- I. Purpose of the Plan
- II. Scope of Work
- III. Vision Statement
- IV. Goals of the Plan
- V. Pedestrian Safety Taskforce Project Update
- VI. Discuss Areas of Concern and Potential Projects
- VII. Staff Contact

Town of Farmville Pedestrian Plan Steering Committee Wednesday May 29, 2013

Sign In

Name	Address	Phone Number(s)	E-Mail
Dould Hodeks	65		
Paul Ellis			
	•		
Mary Magican 1			
Carson Books			
Ellen Walston			
and the second se			
Chef Gran	/		
Bab Mosher			
Frank Brad	ran		
Allion Sep			

Town of Farmville - Comprehensive Pedestrian Plan PLAN STEERING COMMITTEE

May 29, 2013 - 4:00 p.m.

MEETING AGENDA

L	Welcome/Introductions
---	-----------------------

- II. April Meeting Review/Comments
- III. Pedestrian Safety Task Force Presentation
- IV. Overview of Identified Pedestrian Facilities Needs
- V. Mapping Activity
- VI. Public Input Survey Discussion
- VII. Propose Next Meeting Date

Town of Farmville Pedestrian Plan Steering Committee Wednesday September 25, 2013

Sign In

Name	Ad	<u>dress</u>	Phone Number(s	<u>E-Mall</u>
Ben	Rogers	MEC	252-974-1822	bizesamideestrom. og
	rrison Dixa	1		
Peans	typhins			Determentelier
Rebert	Elan		252-753-6721	Det pus QNCrutches con
J.L.	lage		341-2209	plask@formy.lenc.or
Elles	1 m yo	Instal	847-8532	e walstool wident
ALLISA	I SWABT		902-2278 Pitrice	INTYRIC GOV health icon
. Otever	Harry B	5)2	753 6114	
2				
-				
<u>.</u>		the second s		
1				
A <u></u>				
			10 A	

Town of Farmville - Comprehensive Pedestrian Plan

PLAN STEERING COMMITTEE

September 25, 2013 - 4:00 p.m.

MEETING AGENDA

- I. Welcome/Introductions
- II. Proposed Project Presentation
- III. Discuss Prioritization Spreadsheet Assignment
- IV. Discuss Draft Plan Distribution
- V. Next Meeting Date
 - Wednesday October 30th , 4:00 PM
 - Proposed Open House Date, Tuesday November 12th

Town of Farmville Pedestrian Plan Steering Committee Wednesday October 30, 2013

Sign In

Name	Address	Phone Number(s)	E-Mail	
Mary-M.	orrison Dixon			
Bubh	DSHER			
Angela	Harne - media			
Steven	Hardy- Bree			
	SWART	-		
Ben T	Egers			
DAVID +				
ETSIL	S MASON	253-951.3	ets, Imosageman	1. Con
	TSRADHAM.	531-8473-	tbrad han @	Com
ACOd	60mm \$03326	864.0833	sakampropetti s@ Vels	2 capement
Larrichter an an	na dia 112 dia - 112 Marta da Marta I.			
-				
······································				
ter francisco de comenciação de comenciação de comenciação de comenciação de comenciação de comenciação de come		· · · · · · · · · · · · · · · · · · ·		

Town of Farmville - Comprehensive Pedestrian Plan PLAN STEERING COMMITTEE

October 30, 2013 - 4:00 p.m.

MEETING AGENDA

- I. Welcome/Introductions
- II. Project Prioritization Discussion
 - Inclusion of Additional Projects from Pitt County Greenway Plan
 - Prioritization Discussion
- III. Draft Plan Presentations and Distribution
 - Current Conditions
 - Ancillary Facilities, Programs, and Policy Recommendations
 - Implementation Strategies
 - Hand Out Draft Plan (Please review and return comments at December meeting)
- IV. Next Meeting Date
 - Next Meeting Date, Wednesday December 4th 4:00 PM
 - Proposed Open House Date, Tuesday December 10th

Town of Farmville Pedestrian Plan Steering Committee Tuesday March 18, 2014

Sign In

Name	Address	Phone Number(s)	E-Mail
ETSIC MAS	m TOF,	753-4573	emason formalle - 11e
Robert Elo	no- 4058 Pinecrent	753-4424	Unnich farmith mores
Steven Hav	-2y-Brez 3340 N		had phace consider an
RANK BRA	=DHAM: 5946 MAY	y BUD 531-8473	Cherchambertina
	Iston VMC	-	Habstool Quidant
Danie	BREENS TOF.PD	753-4111 dgee	wo plasmille health, com
DAND HODD	UNS TOP	-153-6700 dha	hoveinse farmville-ne .com
Mary Morris	on. Divon		
Angels H	urne - Furnantle E	nepre	
			· · · · · · · · · · · · · · · · · · ·
		·	
	-		
-			
	0 		
	4		

Town of Farmville - Comprehensive Pedestrian Plan PLAN STEERING COMMITTEE

March 18, 2014 - 3:00 p.m.

MEETING AGENDA

I. Welcome/Updates

- II. Project Prioritization Discussion
 - Prioritization Discussion/Ranking
- III. Program/Policy Prioritization
 - Prioritization Discussion/Ranking
- IV. Next Meeting Date
 - Proposed Open House Date, Tuesday April 22nd
 - Proposed Next Meeting Date: first week of May 2014



Connecting Farmville one block at a time

Pedestrian grant could open doors to more funding

> By ANGELA HARNE Group Educa

lown is still waiting to receive an official award letter from the N.C. Department of Transportation for a S25,000 pedestrian grant Farmville received several months ago.

The grant - state funded \$20,000 with a required match of \$5,000 - will allow the town of Farmville. to produce a tool to use to apply for grant fourling, said

See BLOCK, page 2

continued from date 1

Block

a priority list of areas the town would like to install a videwalk or upgrade an existing one factoring in FARMVILLE The Ock, a planner of Mid-Bast safely dismonts, said Justin

> Last October, the town sent out a bioycle and pedestrian community survey in its power hills. Only 138 of the 1,977 distributed

aidows his and traits. Twoaty-two citizens

lanes on roadways as a teppriority, while 54 respontients mark d this action so least destruble. Twentydurar citizens requested the creation of a greenway or mult-use trail, of which 70 tagged this as a least desirable action.

Several citizens noted on their serveys the hazards has a support difference of the table - ^a the angle of the sidewalk (should) be recuced along Physicians East on Main Street. (It) is very dangerous to boadiespped," one wrote.

Another survey participaul wrote. "also cut downs st comers for wheelchair(s) throughout town."

Survey respondents also equested a sidewalk from West Wilson Street to Charto Oaks and that the sidewalks on Contentnea and Church Screets be repaired. The podestrian plan will also identify secondary improvements, Oaks said. This could include connec-

marked an addition of b ke tions of additional sidewark. off of existing ones and a natural trail.

"Connecting all adddivisions is a vision (the town should have to connect) Westwood aubdivision and Charter Oaks subdivision." said Mayor Bebby Evans.

The town has discussed, children. in the past constructing a natural or greenway trail beaund Farmville Central healthy land use and s High School to U.S. 254, Oaks solded.

"Oute a plan is in place. you can use it to apply for funding for multi-use trails, sidewalks and gotting," he said, adding Mid-East Commission could produce the plan for the town. "This will open the town up for state funding."

At last menth's Farm ville Board of Commissioners meeting. Commissioner John Moore questioned waether or not the town had preduceo a similar plan in the past.

We have no plan to use in graot applications." Evans said.

Jean Wilkerson of Pitt County Health Dop ment said, "This is the . leg of the process,"

The health departm is interested in Farmyill plan to cusore safe ror to actual are included.

'Our goal is to have healthy community w welking areas," Wilkers said, adding funding in this grant cannot haved construction.

Oaks said. "You use : plan to prioritize proje when you're looking funding to develop."

Wilkerson said. "You: required to have a plan place to receive funding.

Oaks agreed. The cor missioners have not tak any action to hire a firm Mid-East Commission develop the plan.

"There can be no actin because we do not have grant sgreement from th DOT," Nuble said.

interim Town Manager Sam-Noble. A plan identifying the elements conditions of sidewalles and crosswalks, along with town ondes and ordinance will be formulated. The plan will identify

Commission.

ware returned

The top three community requests were a paved walking call that is wheelchain and similar accessible, additional cross walk signals and improved lighting around



BY ANGELS HARRE Genes Editor

d

nears

FARMVHLLE-The lown of Farmville hosted the second required open house May 21 to reveal its proposed pedestrian plan that, if funded, would improve the town's connectivity through a sidowalk and Spectaway system

The purpose of the comprehensive pedestrian plan, which is being hurled through a N.C. Department of Transportation grant, is to identify pedescian needs and identify strategies to meet the needs of the residents, including those with limited access to vehicles, healthoriented citizens, citizens with accessibility lumitations and citizens with destinations within walking distances of home, school and work.

Having a plau in place is required among most funding agencies, explained Justin Oakes of the Mid-East Commission, which is assisting Farmville with its comprehensive plan.

Once the plan is finalized and approved the depariment of transportation and Farmville Board of

See PLAN, page 8

Plan

continued from page 1

Commissioners, the town can then begin applying for grant funds to build sidewalks and greenways, Oakes said.

 Sidewalk connectivity, promoting yedestrian sotivity in town and making Farmville a friendly, walkable community are key elements in the proposed plan, Ockes explained.

Several years ago, Farmwills was featured as a pedestrian-friendly town in a PBS documentary, "Walk America."

"Farmville is a walkable lown. I enjoy walking to the library, grocery store or to cat-out, instead of getting in my car all the time," said Farmville resident Nancy Wilson.

The proposed pedestrian plan recommends sidewalk extensions on Wilson, Bolcher, Church, Pitt, Conioninea, Walnut and Perry streets, Dale Drive and the southern most and northera-most partious of Main Street. The plan recommends a new sidewalk on

Home Avenue from Walnut at the Farmville Athlet Street to May Boulovard, which would connect pedestriants to the Municipal Athletic Complex Sidewalks are also proposed to connect Beamett and Oliver Murphy parks.

"From Dr. Warren's office, if sidewalk is poured, people can walk the whole way (to downtowo) and be healthier," said Jeff Polaski, Farmville's recreation director and a member of the pedestrian steering committee.

"Now Farmville has some sidowalks and then none. We want to make walking more accessible, se people can walk from downtown to CVS."

The installation of sidewalks from Main Street to Marlboro Road is proposed. in the plan to occur in less than five years.

"I walk almost everyday and ride my bike and I'm concerned with the sidewolks in town, which are not consistent," Wilson said as she reviewed the proposed plan. "This is a great idea, especially if the priority is connectivity. That is critical."

and Oliver Murphy park the North Farmville Green way. Perry Street and at th intersections of Belcher ar Grimmersburg streets an N.C. 122 and North Mai Street.

"The idea is to conner all of packs to downtown Polaski said.

The proposed greenwa will provide both pedes trians and cyclists with a off-road facility, suitable fa recreation. This green way called the North Farmvill Greenway, will connect us ers to the shopping center on May Boulevard and U.S. 258. The greenway will start behind the Farmville schools' campus and Fal into the proposed shared use path near the Food Lion shopping center.

That would be great," Wilson said.

The shared-use path, if approved, will decrease May Boulevard from fon: lanes to two and hievele lanes will be added, Frank Bracham, a member of the pedestrian steering committce, explained to Farmville resident A'alshah Salaam.

Implementation of this Crosswalks are proposed part of a plan would be

Pape 1

APPENDIX B – COST ESTIMATES

SAMPLE COST ESTIMATES

Below are approximate unit costs for the types of projects proposed in this Plan, based on some example project costs that have been recently implemented, along with costs of other projects. Project cost estimations included in this Plan are based on these figures, and do not necessarily include extra costs involved in the project such as advanced grading issues, land acquisition, land clearing, etc.

Shared-Use Paths

- Floodplain paths, such as creek or sewer paths may require more site preparation. Floodplain costs usually involve drainage issues (i.e., need for culverts and bridges, or geotextiles), permitting issues, and boardwalk.
 Greenways are typically constructed on creek corridors or sewer easements, and whose greenways therefore provide good cost examples for Washington's rail-trail project.
- Rail Trails and sidepaths that have the advantage of being on a relatively cleared alignment with some existing grading and base work already complete can be constructed more economically.

Typical Costs Associated with Floodplain Shared - Use Paths on Waterways or Sewer Lines

- \$120 per linear asphalt foot (installation including grading, clearing, construction, and a sub-base with 18" on either side of asphalt for shoulder stabilization) 633,600 per mile +10% administration and design = approximately \$700,000 per mile = \$132 per linear foot
- 10' Concrete walkway: \$300,000 \$500,000 per mile (with design and administration add 10%)
- 10' wide prefabricated "Steadfast" type Pedestrian Bridge: \$1,200 per linear foot with design, engineering, installation and administration costs. An 8' wide clearance can reduce this cost.

- 10' paved asphalt path (with two-foot margins and associated improvements): \$100 -\$125 per foot (\$528,000 \$660,000 per mile.) Add 10% for design and administration.
- Boardwalk: Historically \$200 / linear foot (\$1,056,000 / mile), lately has increased to \$225 \$250 per linear foot. Unit prices on bids can see boardwalks come in anywhere from \$150 350/LF. Boardwalk is 8' clear.
- Converted Culverts and Underpasses: \$60,000 \$100,000. Varies according to width, lighting needs, if stream restoration is involved, and other circumstances.
- Typical estimate of \$120 per linear foot for construction of path (clearing, grading, subbase -- 14' wide, asphalt trail 10' wide).
- Estimates of \$1,000,000/mile for the design and construction of greenway paths (10' wide asphalt trail). This cost takes into account various factors including need for culverts, drainage and flood studies.

Costs Typical with Upland Multi-Use Paths on Rail Beds, Road Corridors, Gas, or Electric Lines.

- Construction is less expensive in upland areas, especially where grading is already complete or where a subbase is not needed.
- Rail Trail construction can be estimated at \$510,000 per mile, based on other North Carolina Rail Trail projects plus an additional 10% for design and administration. This plan uses \$106 per linear foot to calculate all costs estimations for paths built on roadway and other upland corridors.
- 10' Crushed Rock walkway: \$80,000 \$120,000 per mile (with design and administration add 10%). These greenways have high maintenance costs.
- Parking lot: \$18 per square yard. (Parking lots for greenways can typically be shared with shopping areas, parks, or other public destinations and more typically are not needed at all because they are neighborhood access points.)

Intersections

- Crosswalk/Countdown signal: \$5,000 per intersection (this includes installation and an additional installed post). This cost can be up to \$15,000 per intersection if a retrofit is done with APS devices.
- Curb extensions: \$5,000 \$25,000
- Simple neighborhood crosswalks with signs and markings: \$500 \$1,500
- Enhanced crosswalk with special stencils, raised platforms, or special signage: \$5,000
- Raised crosswalks: \$2,000 \$15,000
- Refuge island: \$10,000 \$40,000
- In pavement illumination: \$25,000 \$40,000 per crossing
- Hawk signal: \$40,000
- Mid Block Flashing Crosswalk: \$20,000 for equipment and \$20,000 to install

Lane Marking

- Bicycle or vehicle lane striping (thermoplastic): \$15,000/mile with design and administration for both sides of the road.
- \$1.20 per linear foot of thermoplastic for line striping
- \$350.00 for each set of performed thermoplastic bike symbols with arrows

Lighting, Landscaping, and Signage

- Lighting: Varies widely depending on type of light and location. Lighting an underpass could be \$2,000 \$5,000 for 3 to 4 lights.
- Landscaping: Contractor installed foliage costs around \$400 \$500 per tree and \$25 \$50 per shrub.

- Marking a route with signs: \$2,000 per mile with design and administration
- Signs: \$250 \$350 each

Pedestrian	Pedestrian Plan Preliminary Project Recommendations								
Type of Project	Project/Improvement Name	At/On	From	То	Cost				
Sidewalk Addition	Wilson Street Sidewalk Extension - Phase 2	W. Wilson St.	May St.	Fields St.	2,500				
Sidewalk Addition	Farmville Municipal Athletic Park Connection	W. Horne Ave.	Walnut St.	May Blvd.	34,700				
Sidewalk Addition	Pitt Street Sidewalk Extension - Phase 1	Pitt St.	Grimmersburg St.	E. Pine St.	26,800				
Sidewalk Addition	Pitt Street Sidewalk Extension - Phase 2	Pitt St.	E. Pine St.	Ellis Ave.	26,800				
Sidewalk Addition	Main Street Sidewalk Extension, Southern Connection	S. Main St.	Vines St.	Marlboro Rd.	43,700				
Sidewalk Addition	Main Street Sidewalk Extension, Northern Connection	N. Main St.	Dale Dr.	Jones St.	19,400				
Sidewalk Addition	Contentnea to Oliver Murphy Connection	NC 121/N. Main St.	Dale Dr.	Contentnea Street	8,700				
Sidewalk Addition	Grimmersburg Street Sidewalk Extension	Grimmersburg St.	Greene St.	Davis Dr.	21,500				
Sidewalk Addition	Bennett Street Park Connection	S George St./Bennett St.	W. Perry St.	S. Main St.	30,100				
Sidewalk Addition	Wilson Street Sidewalk Extension - Phase 1	W. Wilson St.	Park St.	Charter Oaks Dr.	27,200				
Sidewalk Addition	Church Street Sidewalk Extension	W. Church St.	W. Wilson St. (Church Entrance)	Turnage St.	21,000				
Sidewalk Addition	Ellis Avenue Sidewalk Extension	Ellis Ave.	S. Pitt St.	Crestwood Drive	18,600				
Sidewalk Addition	Crestwood Sidewalk Extension	Crestwood Dr.	Ellis Ave.	E. Perry St.	2,900				
Sidewalk Addition	Perry Street Sidewalk Extension	Perry St.	Crestwood Dr.	Powder Horne Ln.	38,400				

		т	_ 		
Sidewalk Addition	Contentnea Street Sidewalk Extension	N. Contentnea St.	Lang St.	NC 121/N. Main St.	29,300
Sidewalk Addition	Walnut Street Sidewalk Extension - Phase 1	N. Walnut Street	W. Wilson St	W. Horne Ave.	14,400
Sidewalk Addition	Walnut Street Sidewalk Extension - Phase 2	N. Walnut Street	Jones St.	Dale Dr.	24,800
Sidewalk Addition	Belcher Street Sidewalk Extension	Belcher St.	May Blvd.	N. Barrett St.	18,600
Sidewalk Addition (Road Diet Project)	May Boulevard Complete Street Improvement	May Blvd.	Planters Way Dr.	W. Wilson St.	72,200
Sidewalk Addition	Dale Drive Sidewalk Extension	Dale Dr.	N. Walnut Street	NC 121/N. Main St.	21,500
Crosswalk Addition	Farmville Athletic Park Crosswalk	W. Horne St.	N/A	N/A	5,000
Crosswalk Addition	Belcher/Grimmersburg Crosswalk	N Main St.	N/A	N/A	5,000
Crosswalk Addition	Oliver Murphrey Park Crosswalk	N. Main St.	N/A	N/A	5,000
Crosswalk Addition	Perry Street Crosswalk	S. Main St.	N/A	N/A	5,000
Crosswalk Addition	North Farmville Greenway Crosswalk NC 121/N. Main Street	NC 121/N. Main St.	N/A	N/A	5,000
Crosswalk Addition	North Farmville Greenway Crosswalk/May Boulevard	May Blvd.	N/A	N/A	5,000
Rail Crossing	Pitt Railroad Crossing Improvement	Pitt St.	N/A	N/A	5,000
Rail Crossing	Main Railroad Crossing Improvement	S. Main St.	N/A	N/A	5,000
Greenway	North Farmville Greenway	New Location	Farmville Central HS	May Blvd.	2,112,000
Share Use Path	May Boulevard Shared Use Path	New Location (Utility Easement along May)	Planters Way Dr.	Shopping Center	338,000

APPENDIX C – EXISTING CONDITIONS INVENTORY

Before considering the possible pedestrian improvements in Farmville, it was essential to know the current conditions which existed at each project location. These conditions, inventoried in the table below, allowed Consultants, Town Staff, and Steering Committee members to make decisions regarding treatments that were most suitable for the given location. While automobile dependent, it was found upon field visits that Farmville, thanks in part to its grid block pattern, is suitable for pedestrian development.

Project/Improve ment Name	At/On	App. Length (ft.)	Preferred Treatment	Probable Cost Estimate	Road Width	Curb and Gutter	ROW	Speed Limit
Wilson Street Sidewalk Extension - Phase 2	W. Wilson St.	150	Sidewalk Addition	\$ 2,500	50	Yes	50'	35
Farmville Municipal Athletic Park Connection	W. Horne Ave.	2100	Sidewalk Addition	\$ 34,700	50	Yes	50'	35
Pitt Street Sidewalk Extension - Phase 1	Pitt St.	1625	Sidewalk Addition	\$ 26,800	50	Yes	50'	35
Pitt Street Sidewalk Extension - Phase 2	Pitt St.	1625	Sidewalk Addition	\$ 26,800	50	Yes	60'	35
Main Street Sidewalk Extension, Southern Connection	S. Main St.	2650	Sidewalk Addition	\$ 43,700	60	Yes	50'-60'	35
Main Street Sidewalk Extension, Northern Connection	N. Main St.	1175	Sidewalk Addition	\$ 19,400	60	Yes	50'-60'- 100'	35
Contentnea to Oliver Murphy Connection	NC 121/N. Main St.	525	Sidewalk Addition	\$ 8,700	120	No	50'-60'	50
Grimmersburg Street Sidewalk Extension	Grimmersburg St.	1300	Sidewalk Addition	\$ 21,500	50	Yes	50'	25-35- 25

Bennett Street Park Connection	S George St./Bennett St.	1825	Sidewalk Addition	\$ 30,100	26 Bennett to Williams 50	Yes	50'	35
					George to Williams			
Wilson Street Sidewalk Extension - Phase 1	W. Wilson St.	1650	Sidewalk Addition	\$ 27,200	50	Yes	50'-60'	35
Church Street Sidewalk Extension	W. Church St.	1275	Sidewalk Addition	\$ 21,000	50	Yes	60'	35
Ellis Avenue Sidewalk Extension	Ellis Ave.	1125	Sidewalk Addition	\$ 18,600	50	Yes	50'	35
Crestwood Sidewalk Extension	Crestwood Dr.	175	Sidewalk Addition	\$ 2,900	38	Yes	40'	35
Perry Street Sidewak Extension	Perry St.	2325	Sidewalk Addition	\$ 38,400	20	Yes	20' E Perry 30' W Perry	25
Contentnea Street Sidewalk Extension	N. Contentnea St.	1775	Sidewalk Addition	\$ 29,300	60	Yes	50'	35
Walnut Street Sidewalk Extension - Phase 1	N. Walnut Street	875	Sidewalk Addition	\$ 14,400	26 Wilson to Belcher 50 Belcher to Horne	No Wilson to Belcher Yes Belcher to Horne	50'	35
Walnut Street Sidewalk Extension - Phase 2	N. Walnut Street	1500	Sidewalk Addition	\$ 24,800	26	Yes	50'	35
Belcher Street Sidewalk Extension	Belcher St.	1125	Sidewalk Addition	\$ 18,600	50	Yes	40'	35
May Boulevard Complete Street Improvement	May Blvd.	4375	Sidewalk Addition	\$ 72,200	60	Yes	60'	45

Dale Drive Sidewalk Extension	Dale Dr.	1300	Sidewalk Addition	\$ 21,500	50	Yes	50'	35
Farmville Athletic Park Crosswalk	W. Horne St.	NA	Crosswalk Addition	\$ 5,000	50	Yes	50'	35
Belcher/Grimm ersburg Crosswalk	N Main St.	NA	Crosswalk Addition	\$ 5,000	60	Yes	50'-60'	35
Oliver Murphrey Park Crosswalk	N. Main St.	NA	Crosswalk Addition	\$ 5,000	60	Yes	50'-60'	35
Perry Street Crosswalk	S. Main St.	NA	Crosswalk Addition	\$ 5,000	60	Yes	60'	35
North Farmville Greenway Crosswalk NC 121/N. Main Street	NC 121/N. Main St.	NA	Crosswalk Addition	\$ 5,000	120	Yes	100'	50
North Farmville Greenway Crosswalk/May Boulevard	May Blvd.	NA	Crosswalk Addition	\$ 5,000	60	Yes	60'	45
Pitt Railroad Crossing Improvement	Pitt St.	NA	Railroad Crossing Cushion	\$ 5,000	50	Yes	50'-60'	35
Main Railroad Crossing Improvement	S. Main St.	NA	Railroad Crossing Cushion	\$ 5,000	60	Yes	60'	35
North Farmville Greenway	New Location	16000	Farmville Central HS	\$ 2,112,000	NA	NA	NA	NA
May Boulevard Shared Use Path	New Location (Utility Easement along May)	2900	Planters Way Dr.	\$ 338,000	NA	NA	100'	45

APPENDIX D – FUNDING SOURCES

When considering possible funding sources for the Town of Farmville's pedestrian projects, it is important to consider that it is highly unlikely that all construction activities will be accomplished from a single funding source since these projects are expected to be in the millions of dollars. It will be necessary to consider several sources of funding, that when combined, would support full project construction. This paper outlines the most likely sources of funding for the projects at the federal, state, local government level and from the private sector.

STATE AND FEDERAL

Federal funding is typically directed through State agencies to local governments either in the form of grants or direct appropriations. State budget shortfalls may make it extremely difficult to accurately forecast available funding for future project development. The following is a list of possible Federal and State funding sources that could be used to support construction of the many pedestrian projects. Since these funding categories are difficult to forecast, it is recommended that the Town continue to work with the Mid-East RPO on getting pedestrian projects listed in the TIP (Transportation Improvement Program), as discussed below.

DEPARTMENT OF ENERGY (DOE)

The Department of Energy's Energy Efficiency and Conservation Block Grants (EECBG) grants may be used to reduce energy use and fossil fuel emissions and for improvements in energy efficiency. Section 7 of the funding announcement states that these grants provide opportunities for the development and implementation of transportation programs to conserve energy used in transportation including development of infrastructure such as bike lanes and pathways and pedestrian walkways.

NC DEPARTMENT OF TRANSPORTATION AND SAFETEA-LU

The most likely source of funding for the pedestrian projects would come from the North Carolina Department of Transportation and the federal funding program MAP-21. Some of the sub-programs within MAP-21 and within NCDOT are listed below:

- State Transportation Improvement Program (STIP): The STIP contains funding for various transportation divisions of NCDOT including: highways, aviation, enhancements, public transportation, rail, bicycle and pedestrians, and the Governor's Highway Safety Program. STIP is the largest single source of funding within SAFETEA-LU and NCDOT.
- NCDOT Discretionary Funds: The Statewide Discretionary Fund consists of \$10 million and is 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. The Town would have to make a direct appeal to the Secretary of NCDOT to access these funds.
- NCDOT Contingency Fund: The Statewide Contingency Fund is a \$10 million fund administered by the Secretary of Transportation. Again, the Town would have to appeal directly to the Secretary.
- NCDOT Enhancement Funding: Federal Transportation Enhancement funding is administered by NCDOT and serves to strengthen the cultural, aesthetic, and environmental aspects of the State's intermodal transportation system. Transportation Enhancement (TE) funding is awarded through NCDOT. The State typically will make a Call for Projects, and each project 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.
- NCDOT Bicycle and Pedestrian Project: Funds for bicycle and pedestrian projects come from several different sources. Allocation of funds depends on the type of project/program and other criteria. Projects can include independent and incidental projects.

NC DEPARTMENT OF ENVIRONMENT – RECREATIONAL TRAILS; AND ADOPT-A-TRAIL GRANTS

The State Trails Program is a section of the N.C. Division of Parks and Recreation. The program originated in 1973 with the North Carolina Trails System Act and is dedicated to helping citizens, organizations and agencies plan, develop and manage all types of trails ranging from greenways and trails for hiking, biking and horseback riding to river trails and off-highway vehicle trails. The Recreation Trails Program awards grants up to \$75,000 per project. The Adopt-A-Trail Program awards grants up to \$5,000 per project.

POWELL BILL FUNDS

Annually, State street-aid (Powell Bill) allocations are made to incorporated municipalities which establish their eligibility and qualify as provided by G.S. 136-41.1 through 136-41.4. Powell Bill funds shall be expended only for the purposes of maintaining, repairing, constructing, reconstructing or widening of local streets that are the responsibility of the municipalities or for planning, construction, and maintenance of bikeways or sidewalks along public streets and highways.

COMMUNITY DEVELOPMENT BLOCK GRANT FUNDS

Community Development Block Grant (CDBG) funds are available to local municipal or county governments for projects that enhance the viability of communities by providing decent housing and suitable living environments and by expanding economic opportunities, principally for persons of low-and moderate-income. State CDBG funds are provided by the U.S. Department of Housing and Urban Development (HUD) to the state of North Carolina. Some urban counties and cities in North Carolina receive CDBG funding directly from HUD. Each year, CDBG provides funding to local governments for hundreds of critically-needed community improvement projects throughout the state. These community improvement projects are administered by the Division of Community Assistance and the Commerce Finance Center under eight grant categories. Two categories might be of support to the Town of Farmville Bicycle Projects: infrastructure and community revitalization.

LAND AND WATER CONSERVATION TRUST FUND

The Land and Water Conservation Fund (LWCF) has historically been a primary funding source of the US Department of the Interior for outdoor recreation development and [and acquisition by local governments and state agencies. In North Carolina, the program is administered by the Department of Environment and Natural Resources.

N.C. PARKS AND RECREATION TRUST FUND (PARTF)

The Parks and Recreation Trust Fund (PARTF) provide dollar-for-dollar matching grants to local governments for parks and recreational projects to serve the general public. Counties, incorporated municipalities and public authorities, as defined by G.S. 159-7, are eligible applicants.

A local government can request a maximum of \$500,000 with each application. An applicant must match the grant dollar-for-dollar, 50% of the total cost of the project, and may contribute more than 50%. The appraised value of land to be donated to the applicant can be used as part of the match. The value of in-kind services, such as volunteer work, cannot be used as part of the match.

SAFE ROUTES TO SCHOOL PROGRAM

(MANAGED BY NCDOT, DBPT)

The NCDOT Safe Routes to School Program is a federally funded program that was initiated by the passing of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) in 2005, which establishes a national SRTS program to distribute funding and institutional support to implement SRTS programs in states and communities across the country. SRTS programs facilitate the planning, development, and implementation of projects and activities that will improve safety and reduce traffic, fuel consumption, and air pollution in the vicinity of schools. The Division of Bicycle and Pedestrian Transportation at NCDOT is charged with disseminating SRTS funding.

The state of North Carolina was allocated \$15 million in Safe Routes to School funding for fiscal years 2005 through 2009 for infrastructure or noninfrastructure projects. In 2009, more than \$3.6 million went to 22 municipalities and local agencies for infrastructure and non-infrastructure projects. All proposed projects must relate to increasing walking or biking to and from an elementary or middle school. An example of a non-infrastructure project is an education or encouragement program to improve rates of walking and biking to school. An example of an infrastructure project is construction of sidewalks around a school. Infrastructure improvements under this program must be made within 2 miles of an elementary or middle school. The state requires the completion of a competitive application to apply for funding.

LOCAL GOVERNMENT

Local funding sources that would support sidewalk and pedestrian project construction will most likely be limited but should be explored.

LOCAL RURAL PLANNING ORGANIZATION

The Mid-East Rural Planning Organization (RPO) manages the transportation planning process required by Federal law. The RPO plans for the area's surface transportation needs, including highways, transit, bicycle, and pedestrian facilities. There are two subcommittees of the RPO: the Technical Advisory Committee and the Technical Coordinating Committee. An important part of the transportation planning process is to identify transportation needs and to explore feasible alternatives to meet those needs. Plans and programs are often conducted in partnership with the NC Department of Transportation to identify needs and projects to enhance Farmville's transportation infrastructure.

It is suggested that the Town work closely with the RPO on getting these projects listed on the TIP since this may be the primary source of funding for the project. Typically, projects on this list require a 20% local match.

TOWN OF FARMVILLE CAPITAL IMPROVEMENT PROGRAMMING

The Town of Farmville may have funding available to support some elements of construction or repair. It will be important to meet with Town Commissioners and the Town Manager to judge the availability of this funding.

OTHER LOCAL FUNDING OPTIONS

- Bonds/Loans
- Taxes
- Impact fees
- Exactions
- Tax increment financing
- Partnerships

PRIVATE SECTOR

Many communities have solicited greenway funding assistance from private foundations and other conservation-minded benefactors. Below are several examples of private funding opportunities available.

LAND FOR TOMORROW CAMPAIGN

Land for Tomorrow is a diverse partnership of businesses, conservationists, farmers, environmental groups, health professionals and community groups committed to securing support from the public and General Assembly for protecting land, water and historic places. The campaign is asking the North Carolina General Assembly to support issuance of a bond for \$200 million a year for five years to preserve and protect its special land and water resources. Land for Tomorrow will enable North Carolina to reach a goal of ensuring that working farms and forests; sanctuaries for wildlife; land bordering streams, parks and greenways; land that helps strengthen communities and promotes job growth; historic downtowns and neighborhoods; and more, will be there to enhance the quality of life for generations to come. Website: http://www.landfortomorrow.org/

THE ROBERT WOOD JOHNSON FOUNDATION

The Robert Wood Johnson Foundation was established as a national philanthropy in 1972 and today it is the largest U.S. foundation devoted to improving the health and health care of all Americans. Grant making is concentrated in four areas:

- To assure that all Americans have access to basic health care at a reasonable cost
- To improve care and support for people with chronic health conditions
- To promote healthy communities and lifestyles
- To reduce the personal, social and economic harm caused by substance abuse: tobacco, alcohol, and illicit drugs

For more specific information about what types of projects are funded and how to apply, visit <u>http://www.rwjf.org/applications/</u>.

NORTH CAROLINA COMMUNITY FOUNDATION

The North Carolina Community Foundation, established in 1988, is a statewide foundation seeking gifts from individuals, corporations, and other foundations to build endowments and ensure financial security for nonprofit organizations and institutions throughout the state. Based in Raleigh, North Carolina, the foundation also manages a number of community affiliates throughout North Carolina, that make grants in the areas of human services, education, health, arts, religion, civic affairs, and the conservation and

preservation of historical, cultural, and environmental resources. The foundation also manages various scholarship programs statewide. Web site: <u>http://nccommunityfoundation.org/</u>

AMERICAN GREEN WAYS EASTMAN KODAK AWARDS

The Conservation Fund's American Greenways Program has teamed with the Eastman Kodak Corporation and the National Geographic Society to award small grants (\$250 to \$2,000) to stimulate the planning, design and development of greenways. These grants Can be used for activities such as mapping, conducting ecological assessments, surveying land, holding conferences, developing brochures, producing interpretive displays, incorporating land trusts, and building trails. Grants cannot be used for activities. For more information visit The Conservation Fund's website at: www.conservationfund.org.

NATIONAL TRAILS FUND

American Hiking Society created the National Trails Fund in 1998, the only privately supported national grants program providing funding to grassroots organizations working toward establishing, protecting and maintaining foot trails in America. 73 million people enjoy foot trails annually, yet many of our favorite trails need major repairs due to a \$200 million backlog of badly needed maintenance. National Trails Fund grants help give local organizations the resources they need to secure access, volunteers, tools and materials to protect America's cherished public trails. To date, American Hiking has granted more than \$240,000 to 56 different trail projects across the U.S. for land acquisition, constituency building campaigns, and traditional trail work projects. Awards range from \$500 to \$10,000 per project.

- Projects the American Hiking Society will consider include:
- Securing trail lands, including acquisition of trails and trail corridors, and the costs associated with acquiring conservation easements.
- Building and maintaining trails which will result in visible and substantial ease of access, improved hiker safety, and/or avoidance of environmental damage.
- Constituency building surrounding specific trail projects ¬including volunteer recruitment and support.

Web site: www.americanhiking.org/alliance/fund.html.

BLUECROSS BLUESHIELD OF NORTH CAROLINA FOUNDATION (BCBS)

Blue Cross Blue Shield (BCBS) focuses on programs that use an outcome approach to improve the health and well-being of residents. The Health of Vulnerable Populations grants program focuses on improving health outcomes for at-risk populations. The Healthy Active Communities grant concentrates on increased physical activity and healthy eating habits. Eligible grant applicants must be located in North Carolina, be able to provide recent tax forms and, depending on the size of the nonprofit, provide an audit.

http://www.bcbsncfoundation.org/

LOCAL TRAIL SPONSORS

A sponsorship program for trail amenities allows smaller donations to be received from both individuals and businesses. Cash donations could be placed into a trust fund to be accessed for certain construction or acquisition projects associated with the greenways and open space system. Some recognition of the donors is appropriate and can be accomplished through the placement of a plaque, the naming of a trail segment, and/or special recognition at an opening ceremony. Types of gifts other than cash could include donations of services, equipment, labor, or reduced costs for supplies.

VOLUNTEER WORK

It is expected that many citizens will be excited about the development of a greenway corridor. Individual volunteers from the community can be brought together with groups of volunteers form church groups, civic groups, scout troops and environmental groups to work on greenway development on special community workdays. Volunteers can also be used for fund-raising, maintenance, and programming needs.