



COMPREHENSIVE PEDESTRIAN PLAN CITY OF KINSTON, NC



February 2008

Prepared for:

The City of Kinston,
North Carolina



Prepared by:

 **Rivers**
& Associates, Inc.
Since 1918

Funding From:



Division of
Bicycle &
Pedestrian
Transportation



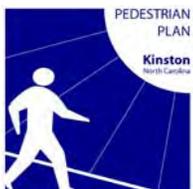
Kinston-Lenoir County
Convention & Visitors Bureau

Defining the Past • Embracing the Present • Shaping the Future



TABLE OF CONTENTS

ACKNOWLEDGEMENTS	VII
EXECUTIVE SUMMARY	I
SECTION 1 – INTRODUCTION	
Vision Statement	1-1
Benefits of Pedestrian Opportunities	1-2
Past Efforts & Recent Initiatives	1-3
Goals and Objectives	1-4
Scope and Purpose of Plan	
SECTION 2 – EVALUATING CURRENT CONDITIONS	
Overview	2-2
Determine Community Concerns, Needs and Priorities	2-3
<i>Public Involvement Strategies</i>	2-4
<i>Crime Analysis</i>	2-11
<i>Pedestrian Crash Analysis</i>	2-13
Assess Pedestrian Friendliness of Local Transportation Systems	2-23
Current Usage / User Demographics	2-24
Inventory and Existing Facilities Assessment	2-25
<i>Sidewalks</i>	2-25
<i>Multi-Use Trails / Paths</i>	2-25
<i>Streets</i>	2-27
<i>Bridges</i>	2-28
<i>Intersections</i>	2-29
<i>Transit</i>	2-30
<i>Parking Lots</i>	2-30
<i>Identification of Barriers</i>	2-30
Pedestrian Statutes and Ordinances	2-32



SECTION 3 – EXISTING PLANS, PROGRAM AND POLICIES

Existing Plans	3-2
Existing or Planned Programs and Initiatives	3-6
Existing Policies	3-10

SECTION 4- PEDESTRIAN SYSTEM PLAN

System Overview	4-1
<i>Sidewalks</i>	4-1
<i>Multi-Use Trails and Greenways</i>	4-1
<i>Roads</i>	4-2
<i>Intersections</i>	4-2
<i>Transit</i>	4-2
Pedestrian Activity Areas	4-3
<i>Corridor Identification</i>	4-3
<i>Points of Interest and Destinations</i>	4-5
<i>Study Regions</i>	4-7
<i>Development Districts</i>	4-10
Identified Opportunities	4-10

SECTION 5 – FACILITY STANDARDS AND GUIDELINES

General Pedestrian Planning and Design Guidelines	5-1
Typical Cross-Sections and Pedestrian Design Considerations & Sample Cost Estimates	5-1
<i>Sidewalks and Walkways</i>	5-2
<i>Pedestrian Bridges</i>	5-5
<i>Multiple- Use Paths / Trails</i>	5-5
<i>Shared Streets</i>	5-8
<i>Intersection Treatments</i>	5-9
<i>Traffic Calming Devices</i>	5-12
<i>Transit Stop Treatments</i>	5-19
<i>Signs</i>	5-20



<i>Signals</i>	5-21
<i>Street Lighting, Landscaping, & Pedestrian Furniture</i>	5-22
<i>Commercial Development Guidelines</i>	5-24
<i>Residential Development Guidelines</i>	5-27
SECTION 6- ANCILLARY FACILITIES AND PROGRAMS	
Mapping and Signing Projects	6-1
<i>Links to State and Regional Route Systems</i>	6-2
<i>Neighborhood Route Systems</i>	6-2
<i>Comprehensive Route Systems</i>	6-2
<i>On-Street Pedestrian Systems</i>	6-2
Spot Improvement Programs	6-3
Maintenance Programs	6-3
Educational Programs	6-3
<i>Safe Routes to School Program</i>	6-3
<i>Adult School Crossing Guards</i>	6-4
Enforcement Programs	6-4
<i>Neighborhood Speed Watch</i>	6-5
<i>Slow Down Yard Sign Campaigns and Pace Car Campaigns</i>	6-6
<i>Neighborhood Fight Back Programs</i>	6-6
<i>Radar Speed Trailers and Active Speed Monitors</i>	6-6
Encouragement and Promotion	6-7
<i>Walk to School Day</i>	6-7
<i>Carefree Day</i>	6-7
<i>Walktober</i>	6-8
<i>Pedestrian Safety Roadshow</i>	6-8
<i>Brochures and Pamphlets</i>	6-8
SECTION 7 – PROJECT DEVELOPMENT	
Potential Projects and Preferred Treatments	7-1
<i>Potential Southeast Region Projects</i>	7-1
<i>Potential North Region Projects</i>	7-5
<i>Potential West Region Projects</i>	7-9
<i>Potential City-Wide Projects</i>	7-11



<i>Summary of Potential Projects</i>	7-12
Review Funding Opportunities	7-18
<i>Local Funding Sources</i>	7-18
<i>State & Federal Funding Sources</i>	7-19
<i>Private Funding Sources</i>	7-24
Identify Special Funding Opportunities for High Priority Projects	7-26
Identify Supporting Policies / Guidelines	7-26
Develop Evaluation / Monitoring Process	7-27
SECTION 8 – MAPS	
All Potential Pedestrian Projects	8-1
All Recommended Priority Pedestrian Projects	8-2
Comprehensive Transportation Plan	8-3
SECTION 9 - RECOMMENDATIONS	
Recommendations for Pedestrian Projects	9-1
<i>Methodology of Priority & Ranking</i>	9-1
<i>Recommended Pedestrian Projects – Action Plan</i>	9-2
<i>Preferred Treatments for Recommended Projects</i>	9-6
Pedestrian Program Recommendations	9-12
<i>Safe Routes to Schools Program</i>	9-12
<i>Spot Improvement Program</i>	9-12
<i>Sidewalk Maintenance Program</i>	9-13
<i>Greenway Master Plan</i>	9-13
<i>Annual Pedestrian Safety Roadshow</i>	9-13
<i>Pedestrian & Motorist Education and Enforcement Activities</i>	9-13
<i>Walking Programs and Events</i>	9-14
Pedestrian Policy Recommendations	9-14
<i>Unified Development Ordinance</i>	9-16
Funding Recommendations	9-17
Staffing / Committee Recommendations	9-18

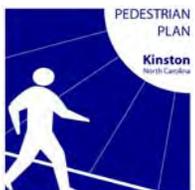


SECTION 10 – IMPLEMENTING THE PLAN

Plan Approval / Adoption Process	10-1
Project Planning / Implementation Process	10-1
<i>Implementation & Responsibilities</i>	10-1
<i>Coordinator</i>	10-2
<i>Funding</i>	10-2
<i>Use of Media</i>	10-2
<i>Monitoring</i>	10-3

APPENDICES

Appendix A Task Force Meetings
Appendix B Public Workshops
Appendix C Survey Results
Appendix D Road Diet Report
Appendix E Media Coverage
Appendix F Glossary of Terms
Appendix G Sample Cost Estimates



LIST OF FIGURES & MAPS

SECTION 1

Map 1.1: Entire Study Area	1-7
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SECTION 2

Map 2.1: 2003 Crime Data	2-12
Figure 2.1: Total Number of Pedestrians Involved in Crashes by Year	2-13
Figure 2.2: Crashes Depending on Road Feature- 1997-2005	2-14
Figure 2.3: Pedestrian Crashes and Road Classifications- 1997-2005	2-15
Figure 2.4: Road Configuration (Pedestrian Crashes 1997-2005)	2-16
Figure 2.5: Pedestrian Injuries from Crashes- 1997-2005	2-17
Figure 2.6: Fault for Crashes- 1997-2005	2-18
Figure 2.7: Time-of-Day of Crash- 1997-2005	2-19
Figure 2.8: Day of Week of crash- 1997-2005	2-19
Figure 2.9: Age of Pedestrian in Crash- 1997- 2005	2-20
Map 2.2: Pedestrian – Vehicle / DOT Crash Data	2-22
Map 2.3: Existing Sidewalks	2-26

SECTION 3

Map 3.1: Department of Transportation – Transportation Improvement Program (TIP)	3-9
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SECTION 4

Map 4.1: Major Corridors Identified	4-4
Map 4.2: Generators / Attractors / Development Districts	4-6
Map 4.3: Identified Opportunities	4-14

SECTION 8

Map 8.1: All Potential Pedestrian Projects	8-1
Map 8.2: All Recommended Priority Pedestrian Projects	8-2
Map 8.3: Comprehensive Pedestrian Plan	8-3



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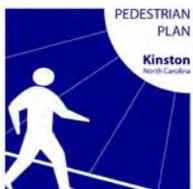
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*EXECUTIVE
SUMMARY*



EXECUTIVE SUMMARY

PURPOSE OF PLAN

The City of Kinston recognizes the many benefits associated with a multi-modal transportation system and the importance the pedestrian infrastructure plays in an effective comprehensive transportation system. The City intends to expand and improve the pedestrian infrastructure, policies, and programs to provide pedestrians with the ability to safely walk to work, school, recreation, commercial, tourism and service-oriented destinations. This Comprehensive Pedestrian Plan will guide future pedestrian facility installation, maintenance of existing facilities, and development of pedestrian programs and policies.

STRUCTURE OF PLAN

The Comprehensive Pedestrian Plan is organized such that the first sections describe the current conditions and needs of the City with the remaining sections building upon these needs to recommend projects, programs, and policies to make Kinston more pedestrian-friendly.

Section 1 - Introduction

Section 1 identifies Kinston's vision, benefits of a walkable community, past and recent planning initiatives with pedestrian elements, goals and objectives, and project study area.

Kinston's long-term goal is to provide a safe, efficient, and continuous multimodal transportation network so residents and visitors can enjoy the magnitude of historical, natural, and cultural resources in Kinston and improve pedestrian accessibility throughout the Central Business District. This goal includes creation and enhancement of connections that support pedestrian movement and the creation or enhancement of places that support pedestrian travel or activity.

Achieving the ultimate long-term pedestrian goal requires a long-term commitment by Kinston. This Comprehensive Pedestrian Plan is the first effort to plan pedestrian routes and places on a City-wide basis and in most cases it is the first time local agencies have been encouraged to consider this subject comprehensively. The Plan identi-

A "Goal" is a long-term end towards which projects, programs, or policies are ultimately directed. It broadly addresses a desired outcome that supports the purpose of the Plan.

An "Objective" is a specific, measurable, intermediate end that is achievable and allows measurement of progress towards a goal.



ties many concepts and projects that together will make great strides toward implementing the ultimate multimodal system.

Kinston's short-term goals and objectives are:

Goal 1: Pedestrian Health & Safety. To provide pedestrian facilities throughout Kinston that promotes healthier lifestyles, and provides safe walking routes between destinations.

Objective 1.1: Create safe and comfortable access to major points of interest or destinations.

Objective 1.2: Create a safer, pedestrian-friendly downtown.

Objective 1.3: Provide safe access to schools and parks.

Goal 2: Connectivity and Accessibility. To develop a well-designed continuous ADA-compliant pedestrian network that will provide residents and visitors with convenient and pleasant access to major points of interest and destinations within a reasonable walking distance.

Objective 2.1: Create access to major points of interest and destinations within reasonable walking distance through sidewalk and multi-use trail construction

Objective 2.2: Ensure pedestrian friendliness in all types of development

Objective 2.3: Make necessary repairs to existing facilities

Goal 3: Pedestrian Education & Programs. To educate the community on the wide-range of benefits of a walkable community, as well as promoting and encouraging pedestrian programs.

Objective 3.1: Provide brochures, pamphlets, and educational devices to the public and private organizations

Objective 3.2: Promote national walking events and programs to encourage walking

Benefits of a Walkable Community:

- *Improved Health*
- *Improved Environmental*
- *Reduced Energy Consumption*
- *Reduction in Traffic Congestion*
- *Improved Economy*
- *Improved Quality of Life*

SHORT-TERM GOALS:

- ✓ Pedestrian Health & Safety
- ✓ Connectivity & Accessibility
- ✓ Pedestrian Education & Programs
- ✓ Pedestrian-Friendly Development



Goal 4: Pedestrian-Friendly Development. To develop and implement pedestrian-friendly development elements throughout the community.

Objective 4.1: Update City ordinances to require pedestrian-friendly design elements for new development

Objective 4.2: Expand the existing parks to incorporate walking opportunities

Objective 4.3: Implement traffic calming devices

Section 2 – Evaluating Current Conditions

Evaluating Current Conditions addresses Kinston’s existing and future pedestrian-related needs based on public involvement efforts and evaluating pedestrian infrastructure such as existing sidewalks, multi-use paths/trails, street network, bridges, street intersections, public transportation, and parking lots.

Following a walking tour of Queen Street, Task Force members identified pedestrian safety, pedestrian amenities and aesthetics, and ADA compliance as pedestrian concerns. Task Force members also answered the question “How would you like the Comprehensive Plan to Direct Walkability?” Their responses were:

- ❖ Existing pedestrian crossing situations are dangerous at some of the major intersections:
 - Queen Street and Vernon Avenue
 - Herritage Street and Vernon Avenue
 - McLewean Street and Vernon Avenue
 - Highway 70 and the Wal-Mart area
- ❖ Need for ‘walk/no walk’ lights to help guide pedestrians
- ❖ Walking trails for recreational purposes
- ❖ Increased accessibility to shops and restaurants
- ❖ Pedestrian bridge over the Neuse River to the Neuseway Park/Nature Center
- ❖ Walkways along the riverbanks (“riverwalk loop”)
- ❖ A large loop around Kinston for connectivity that can use by public as well as for private organizations (i.e., Relay for Life, etc.)
- ❖ Recreational trails should be multi-modal

Pedestrian Concerns Identified During Walking Tour:

- Pedestrian Safety
- Amenities for Pedestrians
- ADA Compliance



- ❖ Bring life to the downtown through possible walking tours

Pedestrian deficiencies and opportunities were discussed for the three regions of the community (Maps in Section 4). The Southeast region consists of high density residential, tourist sites, lodging facilities, and the Central Business District. The North region consists of commercial development, medical facilities, and low density residential. The West region is a mixture of commercial and residential. Identified deficiencies and opportunities include the following.

- ❖ Southeast Kinston:
 - Connect Rochelle School and Holloway Park
 - Improve overall connectivity to Rochelle School
 - Use existing utility (sewer) right-of-way for trail to connect neighborhood on the north
 - Develop an improved corridor along MLK Boulevard that incorporates a mixed-use business/residential environment
 - Build two pedestrian bridges across the Neuse River to Neuseway Park and to the power plant to create a loop
 - Build a riverwalk / greenway that includes an interpretative trail
 - Sidewalks should be installed along Vernon Street where none exist
 - Traffic calming and pedestrian amenities should be incorporated downtown (Queen Street and Heritage Street)
 - Connectivity / accessibility along Highway 70 to connect businesses
 - Main thoroughfares need pedestrian facilities such as Vernon Avenue, Washington Street (east of MLK), JP Harrison Boulevard, and Highway 70
 - Improve Route 258 and Highway 70 intersection
- ❖ North Kinston:
 - Develop a riverwalk loop with several access points
 - Construct multi-modal walkways
 - Develop a trail from the High School to the medical facility
 - Install sidewalks along Hardee Road to improve connectivity
 - Teachers Memorial Elementary School should be better connected
 - Establish a “Highway to Heaven” church walk
 - Need a “serious” walkers trail to the airport
 - Install sidewalks along Carey Road where needed

Task Force identified the need for:

- *Traffic calming devices*
- *Multimodal trails*
- *Improved intersections*
- *Walking programs and incentives*
- *Pedestrian bridges*
- *Sidewalks*
- *Improved connectivity and assessability to destinations*
- *Mixed use development*



❖ West Kinston:

- Install traffic calming devices
- Provide encouragement programs
- Develop pedestrian connection between Caswell Center and Caswell Park
- Construct a pedestrian bridge to connect riverwalk and Caswell Park
- Organize a “Highway to Heaven” church walk
- Construct sidewalks along Hillcrest Road to connect Kinstonian Heights and Country Acres neighborhoods with Sand Clay Road, Banks School, Bethel Christian Academy, and Barnet Park/Bill Faye Park
- Develop an internal walking trail around commercial sites on outer edge of community

Through online and printed surveys, citizens identified the following factors that make walking in Kinston difficult or unpleasant:

1. Sidewalks and Streetscapes
 - No sidewalks or gaps in the existing sidewalk
 - Poor surface quality
 - Unattractive streetscapes
 - Sidewalks too narrow
 - Poor access for disabled
2. Distances
 - Destinations too far to walk
3. Personal Safety
 - High crime
 - Poor lighting
4. Driver and Pedestrian Interface
 - Drivers do not stop for pedestrians at crosswalks
 - Fast vehicle speeds
 - Vehicles running red lights
 - Right turns on red
 - Heavy traffic

To Make Kinston a Walkable Community...

Items that Need Substantial Improvements:

- Major Street Corridors
- Schools
- Service Providers (hospitals, medical clinics)
- Along Neuse River
- Tourist Destinations

Areas Where Some Improvements are Needed:

- Neighborhood Streets
- Retail / Shopping Centers
- Downtown
- Bridges



The crash analysis revealed the need for safety education, enforcement, design standards for places where pedestrians and motorists interface, reduction of vehicle speeds in certain areas, traffic calming devices, street lighting, and improved sight distance visibility. Improving pedestrian areas with adequate crosswalks, designated pedestrian areas within parking lots, pedestrian and street level lighting, traffic calming devices, and adopting pedestrian-friendly design guidelines will assist in reducing crashes within these areas.

Based on Kinston's Census data, an improved pedestrian system which provides connectivity and assessability to local businesses, places of work, schools, and other destinations is extremely important to ensure public health, wellness, and happiness, especially for the fifty-nine percent (59%) of households with one or fewer vehicles.

Section 3 – Existing Plans, Programs, and Policies

Section 3 summarizes existing plans, programs, and policies related to pedestrian planning. Task Force members reviewed and discussed *The Kinston Waterfront – NOW! Conceptual Vision Plan, Themed Development Plan for the Revitalization of Downtown Kinston & Surrounding Historic Areas, and Linking Natural and Historic Assets: Green Infrastructure as Economic Development in Lenoir County*. Pedestrian projects identified were:

- ❖ Make Queen Street more pedestrian-friendly by widening sidewalks, reducing traffic, and creating vivid crosswalks
- ❖ Creation of a walking tour of historic downtown Kinston encompassing many historic sites in and around downtown
- ❖ Develop an extensive greenway system that connects Kinston's historical and natural points of interest and recreational facilities

Programs and initiatives currently underway or planned include: (1) The Pride of Kinston proactively pursuing the projects identified in *The Kinston Waterfront – Now! Plan*; (2) Kinston-Lenoir County Chamber of Commerce's strong interest in ensuring a continuous network of pedestrian facilities and improved pedestrian safety; (3) Kinston Sentinel program that provides the opportunity for volunteers to become part of the solution, as well as provide positive social interaction with citizens of Kinston; and (4) NCDOT's Transportation Improvement Program (TIP) that can provide incidental pedestrian projects. Current TIP projects are as follows:

Vehicle – Pedestrian Crash Data (sample):

Between 1997 and 2005, there were 119 total reported pedestrian crashes involving 143 pedestrians

41% of pedestrian crashes were on two-lane roads

Local city streets had 61% of all pedestrian crashes followed by public vehicular areas with 30%



1. B-4565 - Bridge Replacement - Replacement of Queen Street Bridges (north and southbound) over Neuse River. The replacement bridges will be equipped with sidewalks. These bridges should also include a constructed barrier between the sidewalks and travel lanes. (Construction in FY 2011)
2. B-4925 - on SR 1732 (Wallace Family Road) replace bridge over Briary Run. Project is located within the ETJ (Unfunded Project).
3. R-2235 - widen US 258 to multi-lanes from NC 24 west of Richlands to US 70 in Kinston. These improvements will take place partially within the ETJ and Municipal limits. (Unfunded Project).
4. R-2553 - Kinston Bypass is a long-term project that will divert traffic off US 70/ New Bern Road and around Kinston. This would make crossing US 70/New Bern Road easier and would complement recommended improvements at the US 70 / US 258 intersection. (Right-of-way in FY 2015)
5. R-2719 - new multi-lane route – Crescent Road from US 70 to NC 58. US 258 to NC 58 is complete. US 70 to US 258 right-of-way in process, with construction in FY 2009 through FY 2012.
6. R-3308 - widen US 258 to multi-lanes from Crescent Road in Kinston to US 64 in Tarboro (Unfunded Project).
7. U-3618 - Carey Road Extension - Multi-lane Carey Road Extension at SR. 1572 (Rouse Road) to US 258. This road extension should incorporate sidewalks along one side. (Unfunded Project)
8. U-4018 - Plaza Boulevard Extension - Multi-lane Plaza Blvd. extension from NC 58 (North Queen Street) to NC 11 North (Greenville Hwy.). This road extension should incorporate sidewalks. (Unfunded Project)

Section 4 – Pedestrian System Plan

The *Pedestrian System Plan* provides an overview of pedestrian system components including types of pedestrian corridors and opportunities within special focus areas. The overall pedestrian system in Kinston is limited and needs improvements, although the existing infrastructure provides a good foundation to build upon.



Based upon the length of continuous road, connectivity to destinations and points of interest, and extent of existing facilities desired corridors of pedestrian travel were identified. Through improved pedestrian connectivity and accessibility along these corridors, more residents will step outside to walk instead of driving to their destination.

Section 5 – Facility Standards and Guidelines

In *Facility Standards and Guidelines* different pedestrian facilities are discussed. In addition to being ADA-compliant, the construction and installation of pedestrian facilities must meet the following state and federal guidelines:

- ❖ American Association of State Highway and Transportation Officials (AASHTO) *Guide for the Planning, Design and Operation of Pedestrian Facilities*
- ❖ Federal Highway Association (FHWA) *Manual on Uniform Traffic Control Devices (MUTCD)*
- ❖ *Design and Safety of Pedestrian Facilities*, A Recommended Practice of the Institute of Transportation Engineers (ITE)
- ❖ *Pedsafe: Pedestrian Safety Guide and Countermeasure Selections System*
- ❖ *Designing Sidewalks and Trails for Access, Part I and II*

Typical cross-sections, minimum pedestrian design guidelines, and estimated costs are provided for sidewalks and walkways, pedestrian bridges, multiple-use paths or trails, shared streets, intersection treatments, traffic calming devices, transit stop treatments, signs and signals, street lighting, landscaping and pedestrian furniture, and commercial development and residential guidelines.

Section 6 – Ancillary Facilities and Programs

Section 6 provides a summary of ancillary facilities and programs for pedestrian facilities. These facilities and programs include maps of pedestrian routes, signage for pedestrian and motorists, spot improvements, sidewalk maintenance, safe routes to schools, safety education, enforcement, and encouragement and pedestrian promotions. The implementation of these facilities and programs will contribute to Kinston's overall pedestrian network.



Section 7 – Project Development

Project Development provides a summary of potential pedestrian projects. Recommended priority projects were pulled from this list and future priority projects should also come from this list. Local, State, Federal, and Private funding sources are also discussed. Map 8.1 shows all potential pedestrian projects.

The following table lists the identified pedestrian projects for Kinston. The table is separated by regions and is laid out to show the following information:

- 1) **Project ID**– Represents the project's identification number that is used throughout the Plan and associated maps for that specific project.
- 2) **Potential Pedestrian Projects** - The potential pedestrian projects for the City of Kinston are listed in this column.
- 3) **“TIP”** stands for ‘Transportation Improvement Program’, all projects that could be a ‘TIP’ project are indicated with a “Y” for ‘yes’ or “N” for ‘no’.
- 4) **Public Support** - This column indicates if the project was identified by the public as a need or wasn't a discussion item, but was determined a potential project to improve connectivity, assessability, and safety of pedestrians (n/a).
- 5) **Type** - The last column indicates the project type.



CITY OF KINSTON - SUMMARY OF POTENTIAL PEDESTRIAN PROJECTS				
PROJECT ID	POTENTIAL PEDESTRIAN PROJECTS	TIP	PUBLIC SUPPORT	TYPE OF FACILITY
POTENTIAL SOUTH REGION PROJECTS:				
P-1	Conduct Queen Street Road Design Improvements	Y	Yes	Traffic Calming
P-2	Conduct Downtown Streetscape Improvements	N	Yes	Aesthetics & Crossings
P-3	Construct a Pedestrian Bridge across the Neuse River	Y	Yes	Pedestrian Bridge
P-4	Improve MLK Blvd. and Caswell Street Intersection	Y	Yes	Crossing
P-5	Improve MLK Blvd. and Washington Street Intersection	Y	Yes	Crossing
P-6	Install Sidewalk Infill along East Washington Street	N	Yes	Sidewalk Infill
P-7	Install Sidewalk Infill along MLK Boulevard	N	Yes	Sidewalk Infill
P-8	Install Sidewalks along Secrest Street	Y	Yes	Sidewalk
P-9	Replace Holloway Pedestrian Bridge over Adkin Branch	N	Yes	Pedestrian Bridge
P-10	Construct Replacement of Washington Street Pedestrian Bridge	Y	Yes	Multimodal Bridge
P-11	Improve Secrest Street / Washington Street / J.P. Harrison Street Intersection	Y	Yes	Crossing
P-12	Construct a Multi-Use Trail along Highway 70	Y	Yes	Multi-Use Trail
P-13	Improve South Queen Street and Shine Street Intersection	Y	N/A	Crossing



CITY OF KINSTON - SUMMARY OF POTENTIAL PEDESTRIAN PROJECTS				
PROJECT ID	POTENTIAL PEDESTRIAN PROJECTS	TIP	PUBLIC SUPPORT	TYPE OF FACILITY
P-14	Improve South Queen Street and South Street Intersection	Y	N/A	Crossing
P-15	Install Sidewalk Infill along South Queen Street to Intersection of Highway 70	N	Yes	Sidewalk Infill
P-16	Ensure Queen and King Street Bridges are Multimodal	Y	Yes	Multimodal Bridges
P-17	Ensure King Street Bridge is Multimodal	Y	Yes	Multimodal Bridge
P-18	Improve Meadowbrook Drive and Highway 70 Intersection	Y	Yes	Crossing
P-19	Improve Highway 58 and Highway 70 Intersection	Y	Yes	Crossing
P-20	Improve Highway 258 and Highway 70 Intersection	Y	Yes	Crossing
P-21	Improve South Queen Street Bridge near Spring Hill Street	Y	N/A	Multimodal Bridge
POTENTIAL NORTH REGION PROJECTS:				
P-22	Improve North Queen Street Bridge over Adkin Branch	Y	N/A	Multimodal Bridge
P-23	Install Sidewalks along Highland Avenue	Y	Yes	Sidewalk
P-24	Improve Highland Avenue and North Queen Street Intersection	Y	N/A	Crossing
P-25	Construct a Multi-Use Trail along Highland Avenue	Y	Yes	Multi-Use Trail
P-26	Construct a Multi-Use Path along J.P. Harrison	Y	Yes	Multi-Use Trail
P-27	Construct a Multi-Use Path between Kinston High School and Lenoir Memorial Hospital	Y	Yes	Multi-Use Trail



CITY OF KINSTON - SUMMARY OF POTENTIAL PEDESTRIAN PROJECTS				
PROJECT ID	POTENTIAL PEDESTRIAN PROJECTS	TIP	PUBLIC SUPPORT	TYPE OF FACILITY
P-28	Improve Herritage Street and Airport Road Intersection	Y	N/A	Crossing
P-29	Improve Herritage Street and Highway 58 Intersection	Y	Yes	Crossing
P-30	Install Sidewalk Infill along Herritage Street	N	Yes	Sidewalk Infill
P-31	Install Sidewalk Infill along North Queen Street	N	Yes	Sidewalk Infill
P-32	Improve North Queen Street and Airport Road Intersection	Y	N/A	Crossing
P-33	Improve Plaza Boulevard and Herritage Street Intersection	Y	N/A	Crossing
P-34	Improve Plaza Boulevard and North Queen Street Intersection	Y	N/A	Crossing
P-35	Install Sidewalk Infill along Plaza Boulevard	N	Yes	Sidewalk Infill
P-36	Improve Herritage Street and Vernon Avenue Intersection	Y	Yes	Crossing
P-37	Improve Queen Street and Vernon Avenue Intersection	Y	Yes	Crossing
P-38	Improve Herritage Street and Highland Avenue Intersection	Y	N/A	Crossing
P-39	Construct Sidewalks along Doctors Street	N	N/A	Sidewalk
P-40	Install a Mid-Block Crossing from Doctors Street to Lenoir Memorial Hospital	Y	N/A	Crossing
P-41	Improve MLK Boulevard and Vernon Avenue Intersection	Y	N/A	Crossing
P-42	Improve Vernon Avenue and McLewean Street Intersection	Y	Yes	Crossing



CITY OF KINSTON - SUMMARY OF POTENTIAL PEDESTRIAN PROJECTS				
PROJECT ID	POTENTIAL PEDESTRIAN PROJECTS	TIP	PUBLIC SUPPORT	TYPE OF FACILITY
P-43	Improve Stadiem Street and Old Snow Hill Road Intersection	N	N/A	Crossing
P-44	Improve Stadiem Street and Hyman Street Intersection	N	N/A	Crossing
P-45	Improve Stadiem Street and Charlotte Street Intersection	N	N/A	Crossing
P-46	Improve William Street and Charlotte Street Intersection	N	N/A	Crossing
POTENTIAL WEST REGION PROJECTS:				
P-47	Install Sidewalk Infill along Carey Road	N	Yes	Sidewalk Infill
P-48	Install Sidewalk and/or Multi-Use Lane along Carey Road	Y	Yes	Sidewalk or Multi-Use Trail
P-49	Improve Vernon Avenue and Greenbriar Road Intersection	Y	N/A	Crossing
P-50	Improve Vernon Avenue and Carey Road Intersection	Y	N/A	Crossing
P-51	Improve Plaza Boulevard and Carey Road Intersection	Y	N/A	Crossing
P-52	Install a Sidewalk or Walkway around Kinston Country Club and Golf Course	N	Yes	Sidewalk/Walkway/ or Shared Street
P-53	Install Sidewalks along Washington Street	N	N/A	Sidewalks
P-54	Construct a Multi-Use Trail along Vernon Avenue	Y	Yes	Multi-Use Trail
P-55	Improve Vernon Avenue and Pecan Drive Intersection	Y	N/A	Crossing
P-56	Improve Vernon Avenue and Hardee Road Intersection	Y	N/A	Crossing



CITY OF KINSTON - SUMMARY OF POTENTIAL PEDESTRIAN PROJECTS				
PROJECT ID	POTENTIAL PEDESTRIAN PROJECTS	TIP	PUBLIC SUPPORT	TYPE OF FACILITY
P-57	Install Sidewalk Infill along Hardee Road	N	Yes	Sidewalk Infill
P-58	Improve Highway 70 and Highway 258 near Wal-Mart	Y	Yes	Crossing
P-59	Install Sidewalk Infill along Vernon Avenue	Y	Yes	Sidewalk Infill
P-60	Install Sidewalks along Hillcrest Road	Y	Yes	Sidewalk
P-61	Construct a Westgate Multi-Use Trail	N	Yes	Multi-Use Trail
POTENTIAL CITY-WIDE PROJECTS:				
P-62	Develop an East Coast Greenway Connection	N	Yes	Multi-Use Trail
P-63	Develop a Greenway and Riverwalk	N	Yes	Multi-Use Trail
P-64	Develop a Mountain-to-Sea Trail Connection	N	N/A	Multi-Use Trail
P-65	Revitalization of MLK Boulevard	N	Yes	Special Improvements
P-66	Improve Transit Stops	N	N/A	Site Specific Pedestrian Improvements



Section 8 - Maps

Maps for all potential pedestrian projects (Section 7), recommended priority projects (Section 9), and the comprehensive transportation plan is contained in this section. The projects are identified by their project identification number (i.e., P-1, P-2, etc) and mapped by type of project – intersection, sidewalk, multi-use trail, etc.

Section 9 - Recommendations

Recommendations for priority pedestrian projects, programs, and policies for the City of Kinston are provided in this section. These recommendations are based upon the input received from the public participation activities, existing plans, Task Force priorities, and identified needs. These recommendations were presented and discussed at task force meetings for feedback and comments. The comments and concerns received were addressed and the following represents the summary of the projects, programs, and policies that will make the City of Kinston a walkable community.

Recommended Pedestrian Projects

The recommended priority projects were determined by Task Force members. They were asked to review of all potential projects in Section 7 and rank their top ten projects they felt were a priority in the next 5-10 years. Projects were ranked from one to ten (1-10) with one (1) being the most important to ten (10) being least important. The lists were tabulated with each project given a numeric value based on their ranking (1=10 points, 2=9 points, 3=8 points...). Once tabulated, incidental projects to those priority projects were identified by the Consultant and listed as well. For instance, intersection improvement projects were added to the list to ensure adequate pedestrian crossings and safer pedestrian and vehicle interface. Potential projects not recommended at this time should be considered for future pedestrian projects when this Plan is reviewed annually.

An Action plan was developed to itemize each recommendation and was placed in order by their priority given by the Task Force. The Action Plan lists the following information (if applicable):

- **Study Area** – Corresponds to the study area as mentioned throughout the plan (Southeast, North, West, City-Wide)



- **Project ID** - Corresponds to the project identification number used in this Plan. This project identification number provides a link to the text and associated maps in Section 8.
- **Task Force Priority** – Indicates Task Force’s priority of project
- **Type** - Identifies the action type
- **Project**– Recommended action
- **Funding Sources** - Identifies potential funding sources which can assist financial responsibility for each project. (Funding sources are ones that were available at time of plan development and are subject to change.)
- **Responsible Party** - Identifies probable entity and/or agency responsible for making sure the corresponding project is completed
- **Estimated Cost** – Cost estimates calculated using Federal Highway Administration published costs and rough scaling. These costs are rough estimates and should not be considered final. Further surveying and engineering should be completed to determine final costs.



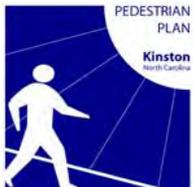
RECOMMENDED PRIORITY PEDESTRIAN PROJECTS – ACTION PLAN							
STUDY AREA	PROJECT ID	TASK FORCE PRIORITY	TYPE	PROJECT	FUNDING SOURCE(S)	RESPONSIBLE PARTY(IES)	Estimated Cost
SE	P-3	1	Bridge	Construct a pedestrian bridge over Neuse River	Local, Private, NCDOT(TIP)	Joint – City & Private	\$1.5 million
SE	P-1	2	Traffic Calming	Conduct Queen Street Road Design Improvements	Local, NCDOT (TIP)	Joint – City & NCDOT	\$1-2.5 million
SE	P-16	3	Bridges	Ensure new Queen Street bridges are multimodal	NCDOT(TIP)	Joint – City & NCDOT	\$500,000
SE	P-2	4	Special	Conduct downtown streetscape improvements	Local, NCDOT, Private	Joint – City & NCDOT	\$200,000-250,000
CW	P-64	6	Multi-Use Trail	Construct a Mountain-to-Sea Trail Connection	Local, NCDOT, CWTF, PARTF	Joint - Public Works, Parks & Recreation	\$236,786
N	P-27, P-29, & P-28	8	Multi-Use Trail/Path & Incidental Crossings	Construct a multi-use trail/path between Herritage Street and Kinston High School with two intersection improvements (Highway 58/Herritage Street and Airport Road/Herritage Street)	Local, NCDOT(TIP)	Public Works	\$482,686
N	P-56	8	Intersection	Improve Herritage Street and Vernon Avenue intersection	Local, NCDOT, Private	Joint – Public Works & NCDOT	\$181,600
N	P-35, P-34, P-33, & P-51	9	Sidewalk & Incidental Crossings	Install sidewalk infill sidewalks along Plaza Boulevard with three incidental intersection improvements (N. Queen Street/Plaza Blvd., Plaza Blvd./Herritage Street, and Plaza Blvd. and Carey)	Local, NCDOT(TIP)	Joint - Public Works & NCDOT	\$585,645
N	P-47 & P-50	9	Sidewalk & Incidental Crossings	Install sidewalk Infill along Carey Road with one incidental intersection improvement (Carey Rd/Vernon Ave.)	Local, NCDOT (TIP)	Joint – City and NCDOT	\$223,195



RECOMMENDED PRIORITY PEDESTRIAN PROJECTS – ACTION PLAN							
STUDY AREA	PROJECT ID	TASK FORCE PRIORITY	TYPE	PROJECT	FUNDING SOURCE(S)	RESPONSIBLE PARTY(IES)	Estimated Cost
N	P-48	9	Sidewalk	Install sidewalk or Multi-Use Lane along Carey Road	Local, NCDOT(TIP)	Joint – City and NCDOT	\$389,935
N	P-37	9	Intersection	Improve Queen Street and Vernon Avenue intersection	Local, NCDOT, Private	Joint – Public Works & NCDOT	\$181,600
CW	P-63	10	Multi-Use Trail	Construct Greenway and Riverwalk	Local, Private, CWTF, PARTF, NCDOT	Joint – Public Works, Planning & Pride	\$25 Million +
CW	P-66	11	Special	Improve transit stops	Local, NCDOT	Joint – Local, Transit Authority	\$160,000
W	P-59, P-56, P-41	12	Sidewalk & Incidental Crossings	Install sidewalk infill along Vernon Avenue with two intersection improvements (Hardee/Vernon Ave., and Vernon Ave. and MLK Blvd.)	Local, NCDOT(TIP)	Public Works	\$727,095
N	P-49	13	Intersection	Improve Vernon Avenue and Greenbriar Road intersection	Local, NCDOT	Joint - Public Works & NCDOT	\$181,600
SE	P-6 & P-11	14	Sidewalk & Incidental Crossing	Install sidewalk infill along E. Washington Street with one intersection improvement (Secrest/JP Harrison/Washington)	Local, NCDOT(TIP)	Public Works	\$562,620
N	P-23, P-24, & P-38	14	Sidewalk & Incidental Crossings	Install sidewalk infill along Highland Avenue with two incidental intersection improvements (Highland Ave./Queen Street and Highland Ave./Heritage St.)	Local, NCDOT(TIP)	Public Works	\$343,175
W	P-57	14	Sidewalk	Construct sidewalks along Hardee Street	Local	Public Works	\$132,120



RECOMMENDED PRIORITY PEDESTRIAN PROJECTS – ACTION PLAN							
STUDY AREA	PROJECT ID	TASK FORCE PRIORITY	TYPE	PROJECT	FUNDING SOURCE(S)	RESPONSIBLE PARTY(IES)	Estimated Cost
W	P-54 & P-55	14	Multi-Use Trail/Path & Incidental Crossing	Construct a multi-use trail along Vernon Avenue with one incidental intersection improvement (Vernon Ave/Pecan Drive)	Local, NCDOT(TIP)	Joint – Public Works & NCDOT	\$360,421
N	P-12, P-18, P-19, & P-20	15	Multi-Use Trail & Incidental Crossings	Construct a multi-use trail along Highway 70 with three incidental intersection improvements (Hwy 58/Hwy 70, Hwy 70/Meadowbrook, and Hwy 258/Hwy 70)	NCDOT(TIP)	Joint – City and NCDOT	\$774,621
SE	P-7, P-4, & P-5	16	Sidewalk Infill & Crossings	Install sidewalk infill along MLK Boulevard with two incidental intersection improvements (Washington/MLK and MLK and Caswell)	Local, NCDOT(TIP)	Public Works	\$368,210



Pedestrian Program Recommendations

The Task Force also identified the following pedestrian programs as priority programs to be implemented within the next five years. However, additional programs have been recommended to ensure Kinston becomes a walkable community for years to come. A complete description of these recommended programs can be found in Section 6.

- **Safe Routes to School Program** – Southeast Elementary School, Bynum Intermediate School, Teachers Memorial School, Northwest Elementary School, Rochelle Middle School, and the new replacement school (will replace Bynum I.S. and Teachers M.S.)
- **Walk to School Day Program**
- **Adult Crossing Guard Program**
- **Walking School Bus Program**
- **Spot Improvement Program**
- **Sidewalk Maintenance Program**
- **Greenway Master Plan**
- **Annual Pedestrian Safety Roadshow**
- **Pedestrian and Motorist Education and Enforcement Activities** – Sentinels, Police-on-Bikes, Education brochures and pamphlets
- **Walking Programs and Events** – Historic Walking Tour, Walktober, walking races for health campaigns, and walking races during annual community festivals.

Pedestrian Policy Recommendations

All policy recommendations encourage implementation and continuation of the existing safety and to establish new policies for pedestrian-friendly design. Without these types of policies the vision and goals of the community will not come to fruition; therefore it is important for the City to adopt policies for education and civic facilities, commercial sites and parking lots, curb cuts and sidewalks, interconnectivity between uses, residential interconnectivity, and circulation. All policy recommendations provide below also encourage implementation and continuation of the existing safety and enhancement, encouragement, enforcement, and maintenance programs identified in Section 3. A number of listed policy recommendations will also involve significant updates to the code of ordinances and the UDO.



The following are recommended policies for implementation.

1. New educational and civic facilities shall be located near existing pedestrian facilities or pedestrian facilities should be provided to the new location. Placement of pedestrian entrances along North Carolina state roads shall be avoided, instead these facilities shall be along non-collector streets to reduce safety issues.
2. Commercial development sites shall incorporate pedestrian-friendly accommodations such as pedestrian refuge islands, pedestrian channels through parking lots to commercial establishments, landscaping to provide shaded and a sense of place within parking lots, and traffic calming techniques to reduce vehicular speeds.
3. The Unified Development Ordinance shall be modified to place a maximum amount of parking allowed and not a minimum, thus letting the market dictate the amount of parking that is created for a development and require shared parking spaces amongst adjoining or adjacent uses.
4. Ensure and allow mixed-uses within existing neighborhoods instead of separating uses. By creating livable neighborhoods walking will become a more attractive option to transportation.
5. All existing and new development shall be connected and accessible for pedestrians; therefore, local streets in addition to major collectors shall be equipped with pedestrian facilities. All new developments shall be required to contract sidewalks.
6. Within residential and/or non-residential developments, pedestrian ways, crosswalks, or multi-purpose trails no less than 5 feet in width, shall be constructed near the center and entirely through any block which is 900 feet or more in length where necessary to provide adequate pedestrian circulation or access to schools, churches, retail stores, personal service establishments, recreational areas, or transportation facilities.
7. Where residential developments have cul-de-sacs or dead-end streets, such streets shall be connected to the closest local or collector street or to cul-de-sacs in adjoining subdivisions via a sidewalk or multi-use path, except where deemed impractical by the Planning Director.



8. Modify Code of Ordinance to reduce the number of driveways and driveway design into a development. Reducing the number uncontrolled access points into a development will in turn reduce potential pedestrian-vehicle accident areas. The location and slope of the driveway will also ensure accessibility and safety for pedestrians.
9. Modify Code of Ordinance to reduce the vehicle speed allowed in all residential areas. Further, the placement of traffic calming devices along those streets will assist in creating a pedestrian-friendly environment instead of a vehicle environment.
10. New development shall be required to set aside a percent of the land for greenways. These greenways will provide an alternative route for pedestrians to travel throughout the community.
11. Modify Code of Ordinance to include smaller curb radii into design and construction guidelines for certain intersections to assist in slowing vehicles and shortening travel distance for pedestrians.

Section 10 – Implementing the Plan

Section 10 outlines the implementation process. This process involves a Coordinator and the formation of a Pedestrian Committee to ensure that the proper steps are taken to find funding, change or create public policy, re-rank projects and identify new projects as necessary, ensure implementation of programs, carrying out policy changes including developing pedestrian-friendly development guidelines, and encourage the community to embrace foot travel. Continued use of local media outlets is strongly encouraged to keep pedestrian projects, programs, and policies in front of the public to gain support and serve as an effective tool for implementation.

To accomplish the recommended pedestrian projects, program, and policies outlined in Section 9, Kinston should strive to complete at least one segment of a multi-use path, one segment of a major sidewalk improvement, two-thousand (2000) linear feet of minor sidewalk improvements, and at least one (1) intersection improvement per year. Sidewalk improvements include construction of new sidewalks and the repair of existing facilities. An annual assessment should be done on the pedestrian system to ensure that it stays up-to-date, based on needs. This should be done in conjunction with planning for the CIP each year, and the Pedestrian Plan should be updated at the same time to keep the document fresh by removing completed projects.

The recommended policy/ordinance amendments and pedestrian programs listed in Section 9 are low cost measures which should be implemented as soon as possible. These policies and programs will ensure a comprehen-



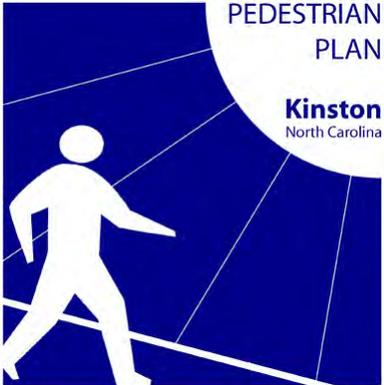
sive pedestrian system; therefore, they should be evaluated annually and new policies and programs should be implemented as needed.

Monitoring, tracking, and annual review of this Plan is an important component of the implementation process; therefore, the Coordinator should designate an individual from each agency to periodically report on the status of each recommendation. This information, as well as the annual progress report should be shared with appropriate individuals to keep them informed and involved in the process. The Coordinator can also monitor progress through phone calls, visits, and meetings.

The City Manager shall direct the Coordinator and Pedestrian Committee to take responsibility for conducting an annual review. The annual review shall ensure the City Council receives an annual report and/or presentation on the progress of Plan implementation. The report will include a status report on the implementation of recommended projects, programs, and policies and will recommend, as appropriate, any necessary revisions or amendments to the Plan. For instance different treatment options for a particular recommended intersection improvement, a change in Federal and State statutes or regulations, identification of additional projects, moving a potential project listed in Section 7 to the recommended project list in Section 9, or a change in pedestrian movement. This process will help ensure that local walkability efforts include the latest and most effective projects.



SECTION 1 -
INTRODUCTION



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SECTION 1 INTRODUCTION



VISION STATEMENT

The City of Kinston is presently at a crossroads to determine goals and strategies to meet the diverse needs of current citizens, encourage growth, preserve resources, and develop tourism opportunities. Kinston history is filled with tales of the habitation of the Neusiok Indians, revered Civil War grounds, the tobacco and cotton trade, a vibrant mid-20th century downtown once dubbed the “Magic Mile”, and the devastation of 1999’s Hurricane Floyd. Geographically, Kinston lies in the center of rural eastern North Carolina along a heavily traveled route between the capital City of Raleigh and the North Carolina coast. Parted by the powerful waters

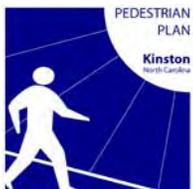
of the Neuse River and its tributaries, Kinston is also rich in natural land and wildlife. The demographic is as diverse as the City’s history with predominant Caucasian and African-American populations. Age and gender demographics are spread fairly evenly, although a disproportionate percentage of the population falls below the national poverty line.

Like comparable cities across the country, Kinston faces the challenges of a sprawling, automobile dependant society. The downtown is less vibrant, streets and parking lots are congested, public health is compromised, and daily social interaction is limited. Although with a mild climate, diverse history and culture, rich natural resources, and a wealth of civic pride, Kinston is a community seeking an opportunity for renewal. These resources present an opportunity for Kinston to create a community of character that embraces the social, economic, and environmental benefits of a walkable community.

The City of Kinston recognizes the many benefits associated with a multi-modal transportation system and the importance the pedestrian infrastructure plays in an effective comprehensive transportation system. The City intends to expand and improve the pedestrian infrastructure, policies, and programs to provide pedestrians with the ability to safely walk to work, school, recreation, commercial, tourism and service-oriented destinations. This Comprehensive Pedestrian Plan will guide future pedestrian facility installation, maintenance of existing facilities, and development of pedestrian programs and policies.

VISION –

Develop a multi-modal transportation system including expansion and improvements to pedestrian infrastructure, policies, and programs to provide citizens and visitors with opportunities to safely walk to work, school, recreation, commercial, tourism, and service-oriented destinations.



BENEFITS OF PEDESTRIAN OPPORTUNITIES

The Pedestrian and Bicycle Information Center (PBIC) states “a transportation system that supports bicycling and walking enhances health, reduces traffic congestion, promotes economic vitality, and improves quality of living.”¹ Individual citizens can strive towards these goals; although the greatest benefit will be realized when the community as a whole embraces the pedestrian initiative.

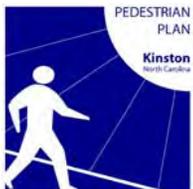
Prior to the emergence of the automobile, humans were a pedestrian oriented society. However, the automobile opened opportunities to expand our limits. Walking became more commonly recognized as a recreational endeavor, rather than a functional activity. However, history has a way of repeating itself and the recent movement towards pedestrian oriented growth has been spurred partially out of need. As gasoline prices increase people are prone to use alternative forms of transportation, such as a safe, continuous pedestrian network. As our daily commutes become longer and more congested, people once again desire to be closer to where they live, work, and play. Finally, as water and air quality decreases, regulations are implemented to control automobile emission levels.

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

- ❖ **Health** – Walking improves circulation and respiratory function, combats depression, bolsters the immune system, prevents heart disease, controls weight, and decreases risks of heart disease, diabetes, and osteoporosis.²
- ❖ **Environmental / Energy** – Unlike walking, driving an automobile produces a substantial amount of air pollution. According to the Environmental Protection Agency (EPA), transportation is responsible for nearly eighty (80) percent of carbon monoxide and fifty (55) percent of nitrogen oxide emissions in the U.S.³ Automobile manufacturers are now producing models that are more environmentally friendly; however traffic continues to increase thus counteracting the possibility of air pollution reduction.
- ❖ **Transportation** – Walking can reduce traffic congestion and necessary parking spaces significantly when short distance vehicle trips are replaced with walking.

Benefits of a Walkable Community:

- *Improved Health*
- *Improved Environmental*
- *Reduced Energy Consumption*
- *Reduction in Traffic Congestion*
- *Improved Economy*
- *Improved Quality of Life*



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

PAST EFFORTS & RECENT INITIATIVES

In the recent past the City has adopted plans and ordinances to accommodate pedestrian facilities. The following plans address pedestrian related elements:

- ❖ The Kinston Waterfront – Now! Conceptual Vision Plan (August 2006)
- ❖ Kinston Urban Forestry Plan (February 2005)
- ❖ Linking Natural & Historic Assets, Green Infrastructure as Economic Development Plan (May 2002)
- ❖ Kinston/Lenoir County Green Infrastructure Plan for the Neuse River Flood Plain (May 2001)
- ❖ Themed Development Plan for the Revitalization of Downtown Kinston & Surrounding Historic Areas (July 2001)
- ❖ Sidewalk Management System (November 1990)
- ❖ RetroGreen Park Development (On-going)

Current Trends

The City of Kinston has taken steps to expand the sidewalk network beyond current limits and infill where they are needed. Additionally, recent City funded park projects such as the Neuseway Nature Center and a proposed dog



park at Highway 70 and Highway 11 include networks of walking trails. However, there is a strong interest for a comprehensive pedestrian plan that assesses the City as a whole.

The City of Kinston has taken the first step to improving the pedestrian network within the community by applying for and receiving a 2006 Pedestrian Planning Grant from the North Carolina Department of Transportation (NCDOT) Division of Bicycle and Pedestrian Transportation for \$31,500 plus a local match of \$13,500 for a total of \$45,000 to conduct a comprehensive pedestrian plan. This NCDOT program encourages the development of a comprehensive municipal pedestrian plan, which may be developed by consultants or by a combination of both municipal and consultants and a full-time, permanent employee for the municipality who is assigned as project manager to oversee the development of the plan. Rivers & Associates, Inc. was selected to develop the plan in conjunction Kinston's Planning and Inspection Director, Tommy Lee, acting as Project Manager for the City. The program requirements include a task force comprised of relevant local staff, regional planning staff, advocates and representatives of stakeholder groups to oversee plan development (listed in Section 2). John Vine-Hodge was the NCDOT Pedestrian and Bike Division representative for this project. Mr. Vine-Hodge was actively involved with the planning process.

GOALS AND OBJECTIVES

An important component of this Plan is establishing goals and objectives to identify the aim of the project and to guide the decisions made throughout the planning process. Goals are general ideas which the plan's efforts are directed and objectives are measurable outcomes created to achieve a goal. These goals and objectives identify the most important pedestrian concerns to local residents and leaders based on input received by the Task Force, City staff, and the public. The goals listed below were also used as a basis for the proposed pedestrian system plan (Section 4), ancillary facilities and programs (Section 6), potential projects (Section 7), and the plan recommendations (Section 9).

Kinston's long-term goal is to provide a safe, efficient, and continuous multimodal transportation network so residents and visitors can enjoy the magnitude of historical, natural, and cultural resources in Kinston and improve pedestrian accessibility throughout the Central Business District. Achieving this goal will improve residents' health and quality of life, and reduce traffic congestion throughout the community.

The following short-term goals have been identified to meet the community's needs. These goals guided the prioritization of the identified pedestrian projects, programs, and policies.

LONG-TERM GOAL:

To provide a safe, efficient, and continuous multimodal transportation network so residents and visitors can enjoy the magnitude of historical, natural, and cultural resources in Kinston and providing pedestrian accessibility to the Central Business District.



The short-term goals for the City of Kinston are:

Goal 1: Pedestrian Health & Safety. To provide pedestrian facilities throughout Kinston that promote healthier lifestyles and provide safe walking routes between destinations.

Objective 1.1: Create safe and comfortable access to major points of interest or destinations.

Objective 1.2: Create a safer, pedestrian-friendly downtown.

Objective 1.3: Provide safe access to schools and parks.

Goal 2: Connectivity and Accessibility. To develop a well-designed continuous ADA-compliant pedestrian network that will provide residents and visitors with convenient and pleasant access to major points of interest and destinations within a reasonable walking distance.

Objective 2.1: Create access to major points of interest and destinations within reasonable walking distance through sidewalk and multi-use trail construction.

Objective 2.2: Ensure pedestrian friendliness in all types of development.

Objective 2.3: Make necessary repairs to existing facilities.

Goal 3: Pedestrian Education & Programs. To educate the community on the wide-range of benefits of a walkable community, as well as promoting and encouraging pedestrian programs.

Objective 3.1: Provide brochures, pamphlets, and educational devices to the public and private organizations.

Objective 3.2: Promote national walking events and programs to encourage walking.

SHORT-TERM GOALS:

- ✓ Pedestrian Health & Safety
- ✓ Connectivity & Accessibility
- ✓ Pedestrian Education & Programs
- ✓ Pedestrian-Friendly Development



Goal 4: Pedestrian-Friendly Development. To develop and implement pedestrian-friendly development elements throughout the community.

Objective 4.1: Update City ordinances to require pedestrian-friendly design elements for new development.

Objective 4.2: Expand the existing parks to incorporate walking opportunities.

Objective 4.3: Implement traffic calming devices.

SCOPE AND PURPOSE OF PLAN

This purpose and scope of this Comprehensive Pedestrian Plan is to conduct an assessment on Kinston's pedestrian system. The results of the assessment will assist in developing a sound strategy to improve pedestrian circulation throughout the City. The strategy will increase pedestrian trips and accessibility to identified development districts, points of interest, and destinations.

The City and the extraterritorial boundary of Kinston serve as the project area. To ensure adequate analysis major pedestrian corridors were identified first then the project area was divided into three regions (southeast, north, and west). Development districts, points of interests, and destinations were identified within each region.

Map 1.1 illustrates the project area.

¹ Walkinginfo.org. September 2007. (www.walkinginfo.org/develop/activities.cfm)

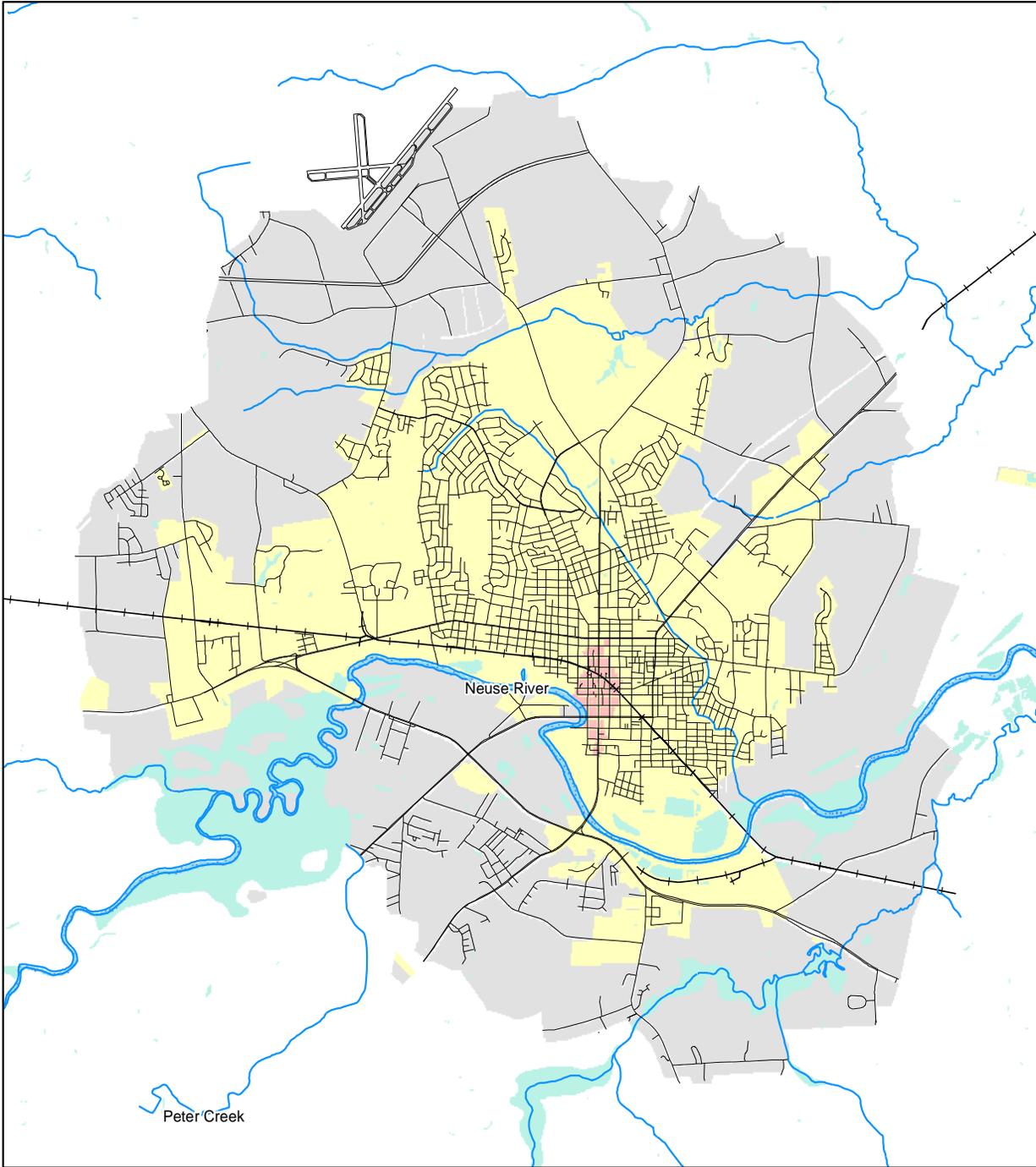
² The Department of Cambridge Community Development, Harvard Study. September 2007. (www.ci.cambridge.ma.us/cdd/et/ped/ped_hlth.html)

³ EPA.gov. September 2007. (www.epa.gov/otaq/consumer/03-co.pdf)

The Assessment will identify:

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





Legend

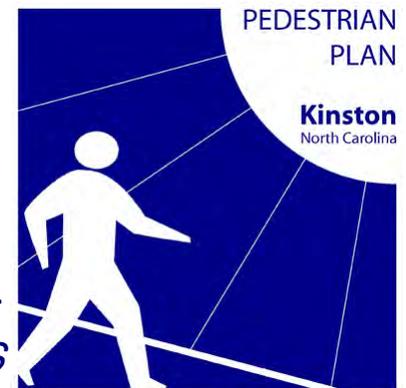
- Roads
- +— Rail Road
- Downtown
- Kinston City Limits
- ETJ
- Streams
- Neuse River
- Water Bodies

The City of Kinston Comprehensive Pedestrian Plan

Map 1.1 - Entire Study Area



SECTION 2 -
EVALUATING CURRENT CONDITIONS



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SECTION 2 EVALUATING CURRENT CONDITIONS

This Section identifies the City's existing and future pedestrian-related needs based on public involvement efforts conducted for this Plan. The pedestrian infrastructure in the City of Kinston was also evaluated, including:

- ❖ Existing sidewalks
- ❖ Street network
- ❖ Bridges
- ❖ Street intersections
- ❖ Public Transportation
- ❖ Parking Lots

The Section also discusses crime and pedestrian-vehicle crash statistics.

OVERVIEW

Located along the banks of the Neuse River, the City of Kinston dates back to 1759 when the General Assembly of North Carolina passed an act to establish inspection warehouses for tobacco. Known as Kingston, named after King George III of England, the community requested to remove the "g" following the Revolutionary War. The City of Kinston was incorporated in 1826. Kinston's 1990 population was 25,295 people and by 2000 it decreased by 8.6% to 23,688. To combat this population decrease, Kinston can capitalize on the opportunity to become a walkable community as a marketing tool to attract newcomers and retain existing citizens. Across the country, walkable communities are known to be attractive places to locate.

Kinston is home to the NC Global TransPark, Kinston Indians baseball team, the Caswell Center, Lenoir Memorial Hospital, and Lenoir Community College. The City hosts the North Carolina Symphony yearly, as well as monthly shows of the Eastern North Carolina Bluegrass Association. The Parks and Recreation Department of Kinston manages eleven parks providing various organized children's programs such as arts and crafts, drama, golf and tennis classes, summer day camp, baseball, basketball, football, soccer and swimming. The department also provides year round adult activities such as golf, tennis, basketball, softball, bridge, aerobics, line dancing and crafts. An active Senior Olympics program is also available. A well-developed pedestrian network will compliment these commercial, cultural, recreational, and civic activities and destinations.



*Historic photo of Queen Street.
Courtesy of City Hall*



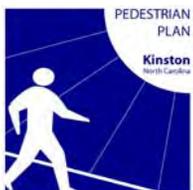
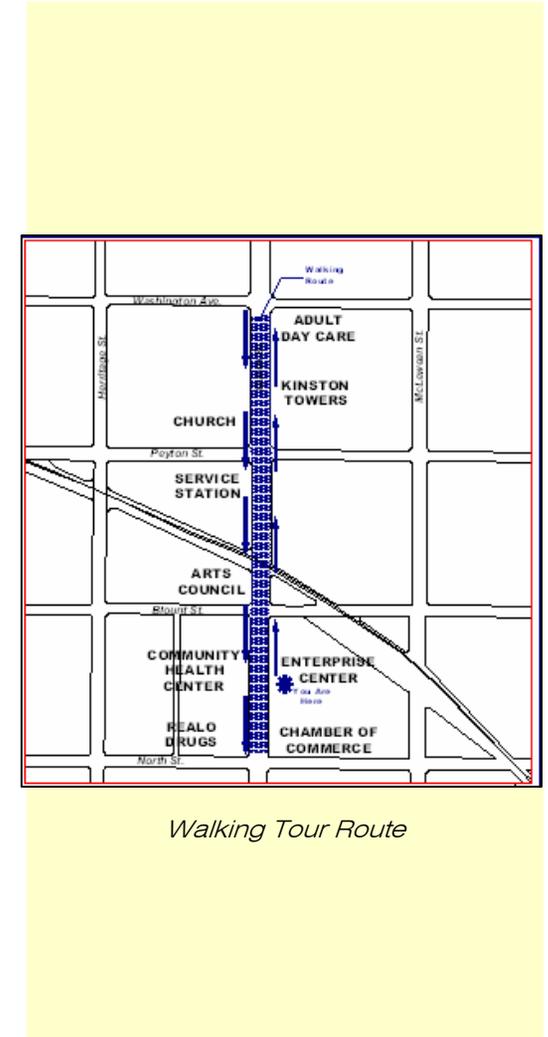
There are currently seven county run schools in the city limits: Bynum Elementary, Northwest Elementary, Southeast Elementary, Teachers Memorial Elementary, Sampson, Rochelle Middle, and Kinston High. Lenoir Community College is also located in Kinston. Since schools are regular destinations for a large population, a safe, connected, and well-developed pedestrian network should be a priority.

Kinston has an operational downtown with nationally registered historic sites, restaurants, the Neuse Regional Library, museums, offices, and nearby residences. Kinston is also one of fifty-seven (57) Main Street communities in North Carolina. The North Carolina Main Street Program helps small towns to recognize and preserve their historic fabric, and, using local resources, build on their unique characteristics to create vibrant central business districts that meet the needs of today's communities¹. Downtown Kinston is the most pedestrian accessible area in Kinston with the greatest expanse of sidewalks and pedestrian conveniences.

Areas outside downtown lack adequate pedestrian facilities and amenities. These areas were developed with less stringent regulations that encouraged sprawl and an automobile dominate environment. Newer residential areas were developed with cul-de-sac or looped streets with no sidewalks. Commercial development was commonly designed with massive parking lots, large front setbacks, little to no pedestrian facilities, and no interconnectivity of surrounding uses. The larger commercial developments such as Lowe's, Wal-Mart, and Staples built along Highway 70 isolated from the majority of Kinston where the only assessability to these establishments is by automobile.

DETERMINE COMMUNITY CONCERNS, NEEDS AND PRIORITIES

To address the pedestrian concerns of the community various methods of public involvement were applied. The public was given many opportunities to provide input, concerns, and ideas through public workshops, an online survey, and a project website, as well as continuous opportunities to communicate directly with the consultant's project coordinator via phone, email, or in person. The following is a summary of the public involvement methods utilized during the planning process.



Public Involvement Strategies

Task Force

Mr. Tommy Lee, Kinston Planning Director, assembled a Task Force to help facilitate plan development. The committee of nineteen (19) city and county affiliates met five times throughout the planning process. The Task Force's role was to provide information and recommendations, act as a public liaison, and assist with plan implementation. The Task Force members were:

Name	Affiliation / Title	Organization
Leigh Abell	Education Director	Lenoir County Council on Aging
Jack Anglin	Walking Enthusiast	Interested Citizen
Mike Barton	General Manager	Hampton Inn
Clarice Bryant	Civil Engineer II	City of Kinston, Public Works
Duncan Charlton	Park Superintendent	Kinston/Lenoir Recreation
Terry Cline	Superintendent	Lenoir County Public Schools
Angelina Craft	Certified Fitness Instructor	Minges Wellness Center (LMH)
Michael Dunn	Architect	Dunn & Dalton Architects
Bill Ellis	Director	Kinston/Lenoir Recreation
Preston Ellis	KPD Police Officer	City of Kinston Public Safety
Constance Hengel	Director of Community Programming and Development	Lenoir Memorial Hospital (LMH)
Pat Humphreys	Representative	Heritage Tourism Council
Adrian King	Executive Director	PRIDE of Kinston
Tim Knobeloch	Recreation Superintendent	Kinston/Lenoir Recreation
Lucy Marston	Lenoir County Tourism Director	Kinston/Lenoir Recreation
Chip Medlin	Program Supervisor II	Kinston/Lenoir Recreation
Scott Stevens	City Manager	City of Kinston
Laura Lee Sylvester	President	Kinston/Lenoir Co. Chamber of Commerce
Angeleique Williams-Thomas	Health Educator	Lenoir County Health Department

Pedestrian Concerns Identified During Walking Tour:

- Pedestrian Safety
- Amenities for Pedestrians
- ADA Compliance



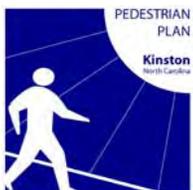
During the first meeting, the Task Force took a walking tour of Queen Street to observe pedestrian functionality. Upon completion of the tour the members discussed the issues they observed. The following is a consolidated list of the key pedestrian concerns from that discussion.

- ❖ Pedestrian Safety
 - Increase crosswalks and signage
 - Improve cross markings
 - Improve street lighting
 - Apply traffic calming devices
- ❖ Amenities / Aesthetics for Pedestrians
 - Relocate existing benches
 - Bury overhead utilities
 - Improve street lighting
 - Improve signage
 - Add trees and planting beds
- ❖ ADA Compliance
 - Existing crosswalks are not ADA-compliant
 - Several curb ramps enter into intersections

At the second Task Force meeting members were asked the following question, “How would you like the comprehensive plan to direct walkability?” Their responses were:

- ❖ Existing pedestrian crossing situations are dangerous at some of the major intersections:
 - Queen Street and Vernon Avenue
 - Herritage Street and Vernon Avenue
 - McLewean Street and Vernon Avenue
 - Highway 70 and the Wal-Mart area

*“How Would You Like the
Comprehensive Plan to
Direct Walkability?”*



- ❖ Need for 'walk/no walk' lights to help guide pedestrians
- ❖ Walking trails for recreational purposes
- ❖ Increased accessibility to shops and restaurants
- ❖ Pedestrian bridge over the Neuse River to the Neuseway Park/Nature Center
- ❖ Walkways along the riverbanks ("riverwalk loop")
- ❖ A large loop around Kinston for connectivity that can use by public as well as for private organizations (i.e., Relay for Life, etc.)
- ❖ Recreational trails should be multi-modal
- ❖ Bring life to the downtown through possible walking tours

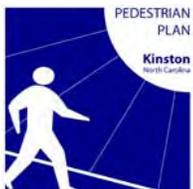
The Task Force was then broken into three study area groups to assess the existing pedestrian conditions and discuss opportunities for the southeast, north, and west regions of Kinston.

The Southeast region consists of high density residential, tourist sites, lodging facilities, and the Central Business District. The North region consists of commercial development, medical facilities, and low density residential. The West region is a mixture of commercial and residential. Section 4 maps show a visual depiction of these areas.

The group recommendations were:

- ❖ Southeast Kinston:
 - Connect Rochelle School and Holloway Park
 - Improve overall connectivity to Rochelle School
 - Use existing utility (sewer) right-of-way for trail to connect neighborhood on the north
 - Develop an improved corridor along MLK Boulevard that incorporates a mixed-use business/residential environment

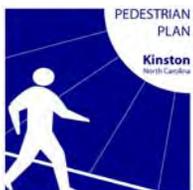
Task Force Meetings



- Build two pedestrian bridges across the Neuse to Neuseway Park and to the power plant to create a loop
- Build a riverwalk / greenway that includes an interpretative trail
- Sidewalks should be installed along Vernon Street where none exist
- Traffic calming and pedestrian amenities should be incorporated downtown (Queen Street and Heritage Street)
- Connectivity / accessibility along Highway 70 to connect businesses
- Main thoroughfares need pedestrian facilities such as Vernon, Washington (east of MLK), JP Harrison Blvd., and Highway 70
- Improve Route 258 and Highway 70 intersection
- ❖ North Kinston:
 - Develop a riverwalk loop with several access points
 - Construct multi-modal walkways
 - Develop a trail from the High School to the medical facility
 - Install sidewalks along Hardee Road to improve connectivity
 - Teachers Memorial Elementary School should be better connected
 - Establish a “Highway to Heaven” church walk
 - Need a “serious” walkers trail to the airport
 - Install sidewalks along Carey Road where needed
- ❖ West Kinston:
 - Install traffic calming devices
 - Provide encouragement programs
 - Develop pedestrian connection between Caswell Center and Caswell Park

Task Force identified the need for:

- *Traffic calming devices*
- *Multimodal trails*
- *Improved intersections*
- *Walking programs and incentives*
- *Pedestrian bridges*
- *Sidewalks*
- *Improved connectivity and assessability to destinations*
- *Mixed use development*

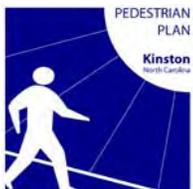
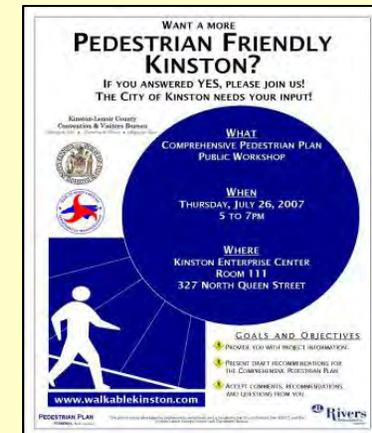
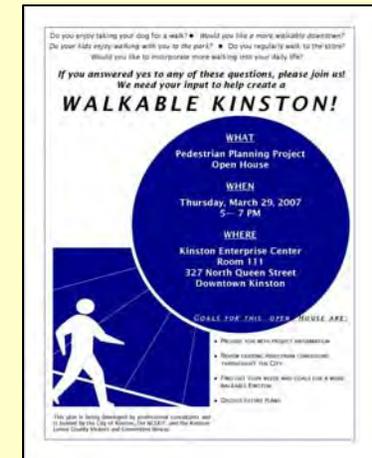


- Construct a pedestrian bridge to connect riverwalk and Caswell Park
- Organize a “Highway to Heaven” church walk
- Construct sidewalks along Hillcrest Road to connect Kinstonian Heights and Country Acres neighborhoods with Sand Clay Road, Banks School, Bethel Christian Academy, and Barnet Park/Bill Faye Park
- Develop an internal walking trail around commercial sites on outer edge of community

During the third Task Force meeting the members were asked to comment on the existing Kinston plans as they relate to pedestrian planning by answering the following questions: “Are there plans to implement this plan/project? What are the priorities for each plan/project?”

Through this exercise, the Task Force identified the top priorities for pedestrian improvements. This list included:

- Pedestrian bridges to connect downtown and future mixed use developments to the Neuseway Nature Center
- Riverwalk along Neuse River
- A Kinston Loop that provides multimodal opportunities
- A Highway 70 Trail located along the street with an improved pedestrian crossing
- Main thoroughfare connections
- Trail connection from the Mall to Barnett Park
- A Kinston High School to Lenoir Memorial Hospital trail
- A Walk to School Program(s) for South East, Rochelle, Northwest and Bynum schools
- Reuse of the old Peachtree Wastewater site to an agricultural education site that is connected to the Neuse greenway system (special interest priority)
- Neuseway Nature Center Expansion (special interest priority)



Public Workshops

Two public workshops were conducted and designed to identify public needs. Flyers to advertise the workshops were posted at participating businesses, gyms, community centers and emailed to all City of Kinston employees, Lenoir Memorial Hospital employees, and Lenoir Community College employees. In addition, several announcements and articles were written in the Kinston Free Press Newspaper.

The first public workshop was held at the Kinston Enterprise Center on March 29, 2007. The workshop was conducted as an open house format. The open house provided the public with project information and a review of the existing pedestrian conditions throughout the city. The public also expressed their needs and goals for a more walkable city. There were twenty-five (25) citizens in attendance.

The second public workshop was held at the Kinston Enterprise Center on July 26, 2007. The consultant team presented draft recommendations in Power Point format. The public discussions supported recommendations for a greenway, riverwalk, a pedestrian-friendly downtown, additional sidewalks, and improved connectivity to destinations. Twelve people besides the consultant attended this meeting. Appendix B contains detailed public workshop input.

Public Survey

Public surveys were conducted during plan development. Computer stations were set up at the first public workshop with access to the online survey and the survey remained active for two months. Hard copy surveys were also distributed and collected. Twenty-nine citizens answered the survey.

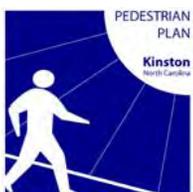
The survey questions were designed to capture information about pedestrian activity, inadequacies, and adequacies of the pedestrian environment in Kinston. The survey consisted of both open and closed-ended questions.

According to the survey, the top three critical issue citizens face while walking are: missing or poorly maintained sidewalks, personal safety, and unsafe street crossings. Citizens identified the following factors that make walking difficult or unpleasant:

1. *Sidewalks and Streetscapes*
 - No sidewalks or gaps in the existing sidewalk
 - Poor surface quality
 - Unattractive streetscapes
 - Sidewalks too narrow



Public Open House



- Poor access for disabled
- 2. *Distances*
 - Destinations too far to walk
- 3. *Personal Safety*
 - High crime
 - Poor lighting
- 4. *Driver and Pedestrian Interface*
 - Drivers do not stop for pedestrians at crosswalks
 - Fast vehicle speeds
 - Vehicles running red lights
 - Right turns on red
 - Heavy traffic

Media Contacts / Outlets

A website, www.walkablekinston.com, was developed and was operational throughout the entire planning process. The website provided project status, project information, and project coordinator contact information. The website also had an action alert section that emphasized important dates. During the planning process the website had five hundred fifty (550) hits.

The Kinston Free Press newspaper reporters attended the public workshops and Task Force meetings. Throughout the planning process these reporters wrote informative articles on the plan development. Appendix E contains all media coverage.

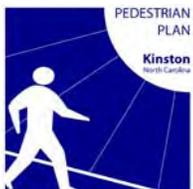
*To Make Kinston a
Walkable Community...*

*Items that Need Substantial
Improvements:*

- Major Street Corridors
- Schools
- Service Providers
(hospitals, medical clinics)
- Along Neuse River
- Tourist Destinations

*Areas Where Some
Improvements are Needed:*

- Neighborhood Streets
- Retail / Shopping Centers
- Downtown
- Bridges



Public & Private Agencies

During the planning process, the project team asked key partners what their main concerns were about pedestrian planning and creating a walkable community. The Planning Department's main concern is to develop a sound strategy to improve pedestrian circulation throughout the City, with a focus on downtown.

The Parks and Recreation Department's main concern is to create better pedestrian access to all parks.

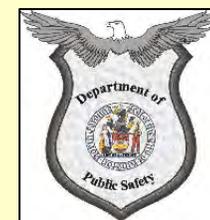
The Pride of Kinston has the following goals and priorities for pedestrian planning and recreation:

- ❖ The construction of a pedestrian bridge at the Neuseway Park/Nature Center. The bridge would be of high-quality architecture.
- ❖ The development of walkways along the riverbanks ("Riverwalk Loop") connecting downtown to the power plant and the Caswell Historic Site.
- ❖ Assist the Parks/Recreation Department on expanding the Neuseway Center for educational purposes.

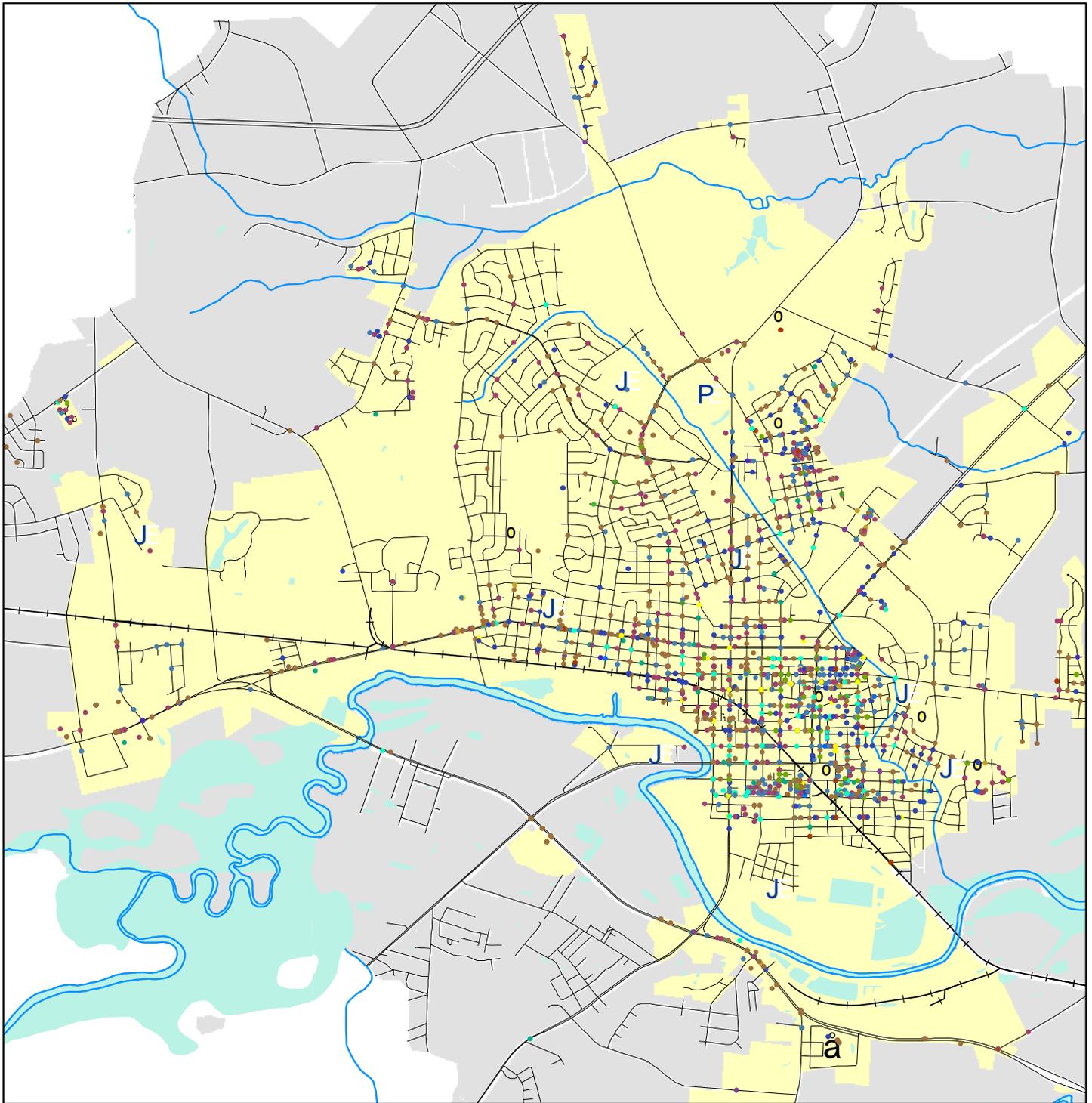
The Heritage Street Merchants Association sees walkability as a key component to attracting patrons to their businesses.

Crime Analysis

The City of Kinston is no stranger to crime and safety concerns; however, with improved street lighting, neighborhood watch programs, and additional patrols these concerns can be reduced. The Kinston Police Department provided crime data for 2003. The data was broken down into the type of crime committed. Map 2.1 illustrates Kinston's crime distribution. As the map shows, the entire community has experienced some type of crime activity; however, there were a greater number of crimes committed within the southeast portion of the community.



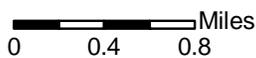
¹ <http://www.nccommerce.com/en/CommunityServices/CommunityPlanningAssistance/NCMainStreetCenter/>



The City of Kinston Comprehensive Pedestrian Plan
 Map 2.1 - 2003 Crime Data

Crimes

- | | | |
|----------------------|---------------------------|----------------------|
| ● AGGRAVATED ASSAULT | ● HOMICIDE | ● ROBBERY |
| ● ARSON | ● LARCENY | ● SEX OFFENSES |
| ● BURGLARY | ● MOTOR VEHICLE THEFT | ● SIMPLE ASSAULT |
| ● DISORDERLY CONDUCT | ● OFFENSES AGAINST FAMILY | ● STOLEN PROPERTY |
| ● DRUG VIOLATIONS | ● PROSTITUTION | ● VANDALISM |
| ● DWI | ● RAPE | ● WEAPONS VIOLATIONS |



2



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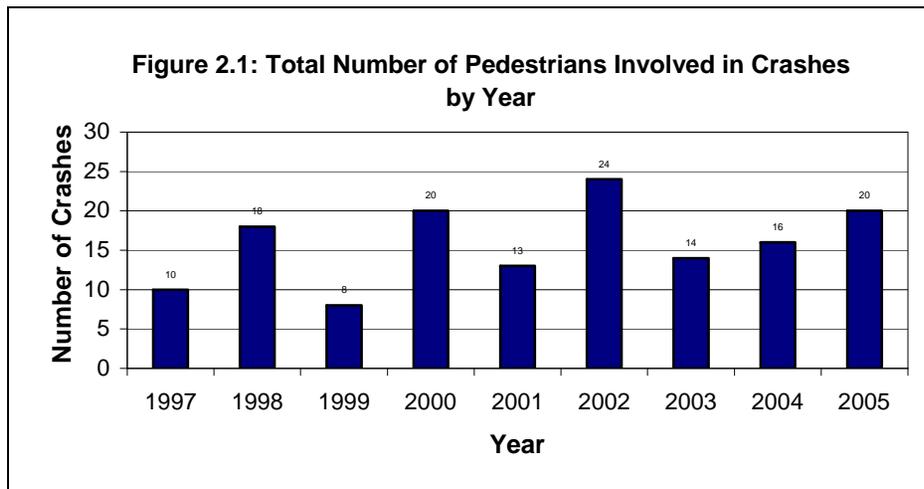


Division of
 Bicycle &
 Pedestrian
 Transportation

Pedestrian Crash Analysis

Kinston's pedestrian crash data was analyzed using the NCDOT's web-based pedestrian crash database (*NC DOT, Division of Bicycle & Pedestrian Transportation - Pedestrian Crash Data. September 2007, http://www.pedbikeinfo.org/pbcat/ped_main.htm*). This database was created and is housed by the Highway Safety Research Center. The data was analyzed to determine the trends and to identify the high risk areas and populations in Kinston.

The City of Kinston experienced one hundred nineteen (119) reported pedestrian crashes involving one hundred forty-three (143) pedestrians from 1997 to 2005. Figure 2.1 shows the distribution of the crashes over this time period. As the graph reveals, the number of crashes has fluctuated over the years. The lowest year for crashes was 1999 with eight. Three years (2000, 2002 and 2005) saw the number of pedestrian crashes reach and surpass twenty. During 2002, twenty-four (24) crashes occurred.



119 total reported pedestrian crashes involving 143 pedestrians occurred from 1997 to 2005

The crash data were also reviewed to determine the location, injuries, and outcomes of the crashes. These characteristics are shown in the following charts.

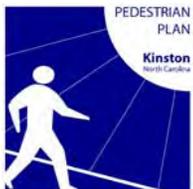
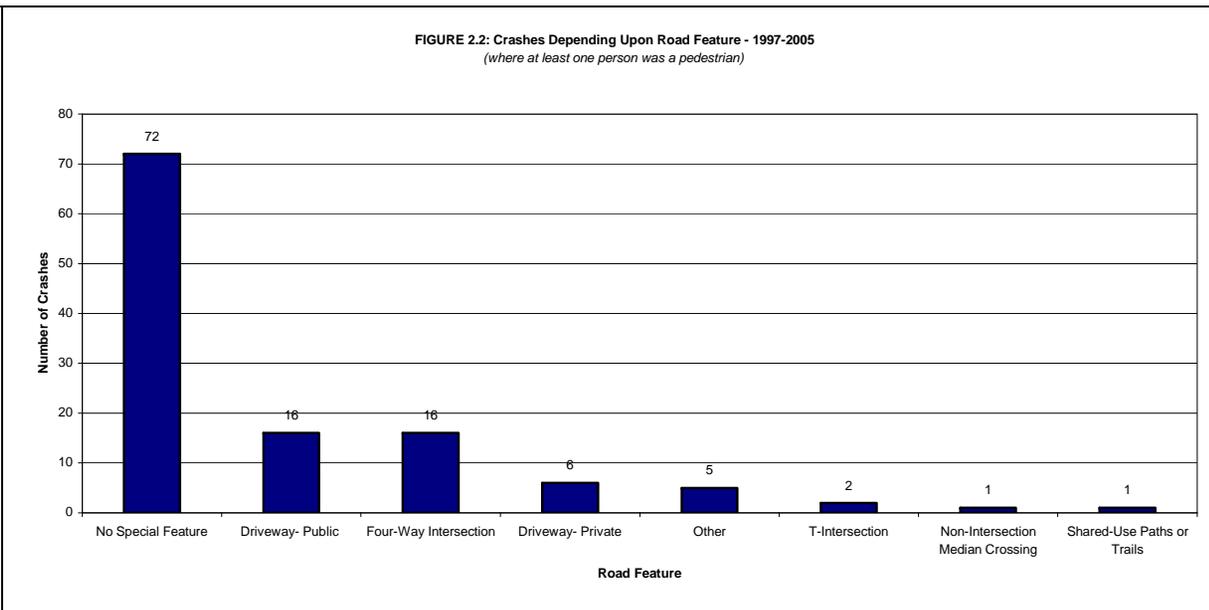


Figure 2.2 illustrates road characteristics of each crash. Seventy-two (72) or sixty percent (60%) of the pedestrian crashes occurred at locations that had “no special features”. According to the UNC Highway Safety Research Center, “no special features” include along roadways, between intersections or within public vehicle areas. The second highest percentage of crashes occurred in pedestrian/ vehicular shared areas such as public driveways and four-lane intersections. These crashes accounted for nearly twenty-seven percent (27%) of all pedestrian crashes. Possible reasons for such a high number of crashes at areas with “no special features” is likely caused by pedestrians darting or dashing out into traffic due to inadequate or non-designated crosswalks, no sidewalks, inadequate signage and lighting, and/or higher than necessary traffic speeds.

Improving pedestrian areas with adequate crosswalks, designated pedestrian areas within parking lots, pedestrian and street level lighting, traffic calming devices, and adopting pedestrian-friendly design guidelines will assist in reducing crashes within these areas.



60% of pedestrian crashes occurred at locations that have “no special features”

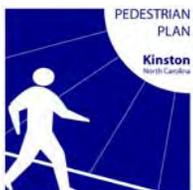
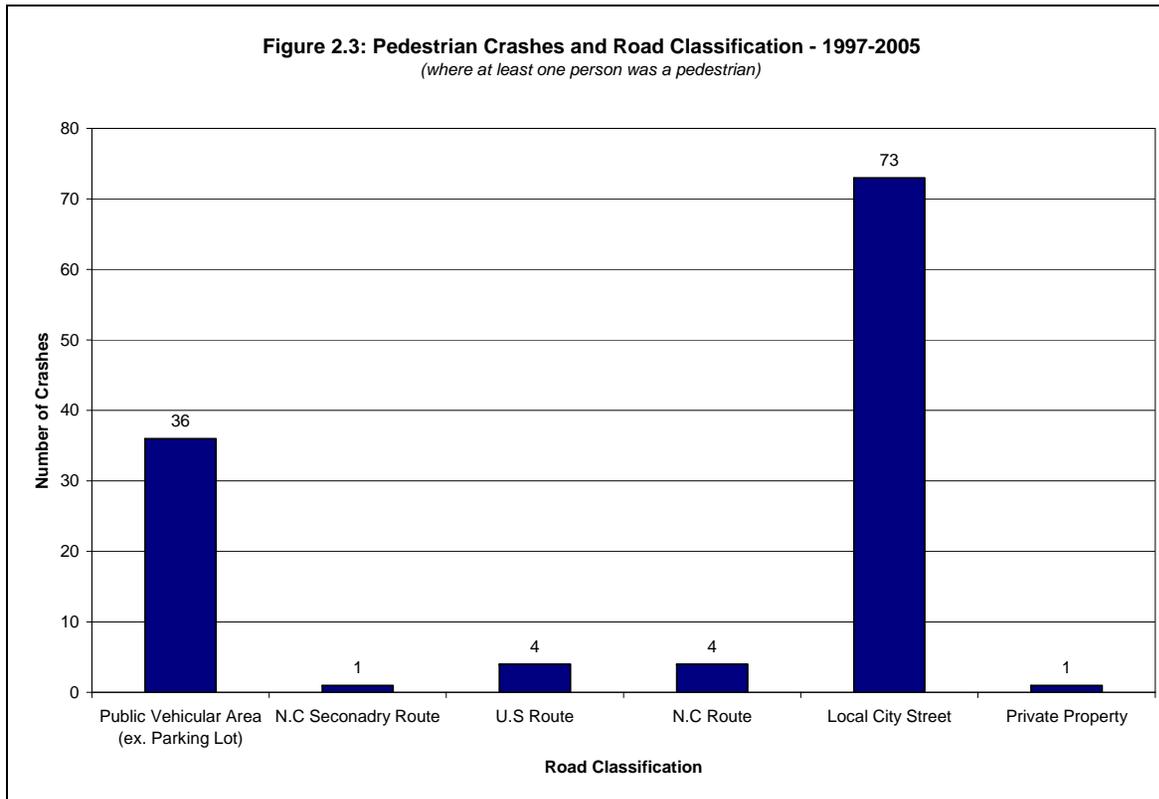


Figure 2.3 confirms that the majority of the pedestrian crashes occurred on local city streets. These crashes accounted for sixty-one percent (61%) of all crashes while another thirty (30%) occurred in public vehicular areas. These numbers suggest the need for additional safety measures at intersections and crossings, sidewalks, designated pedestrian areas within parking areas, and improved signage.



Local city streets had 61% of all pedestrian crashes followed by public vehicular areas with 30%

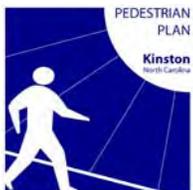
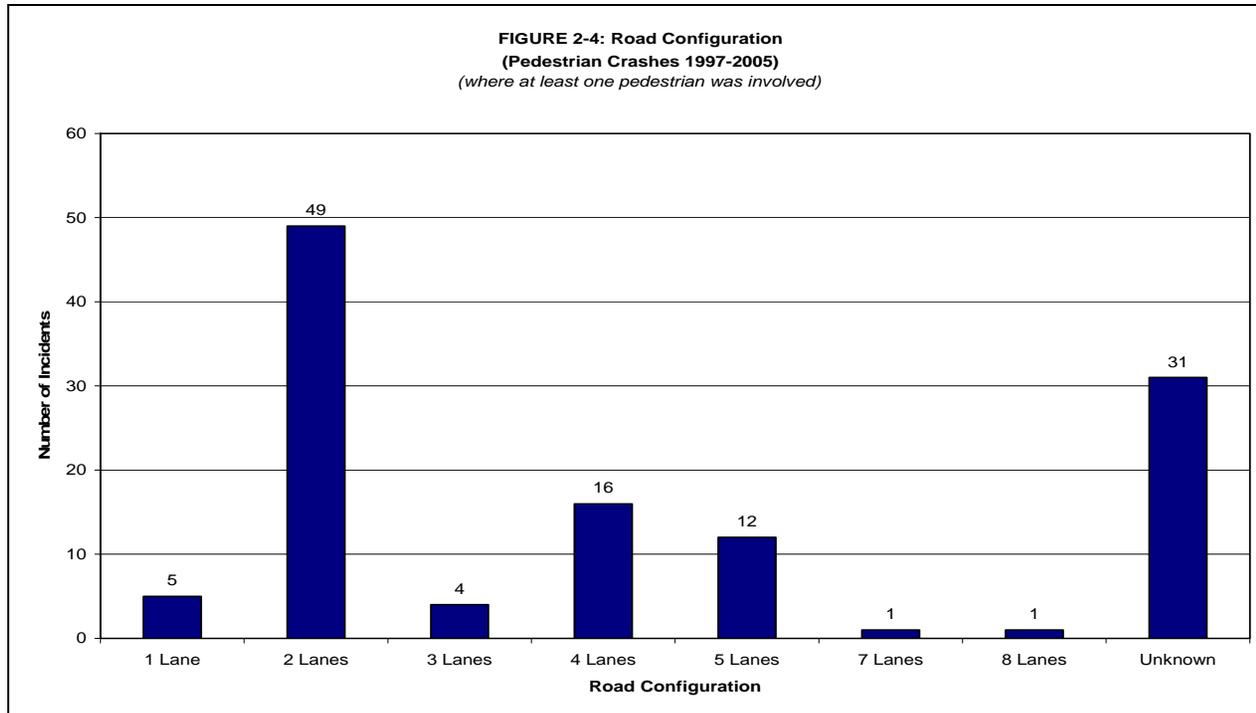


Figure 2.4 shows the distribution of crashes according to road configurations. The majority of crashes (49) occurred on two-lane roads. Kinston’s four and five-lane roads also experienced crashes indicating the need for improved crossings and additional sidewalks along those roads.



Pedestrian crashes were high on two-lane roads – 41%

According to Kinston’s crash data, fifty-four percent (54%) or forty-seven (47) crashes occurred where the posted speed limit was 35 Mph. Roadways and public vehicular areas with posted speed limits of 25 and 20 Mph saw twenty-one percent (21%) and sixteen percent (16%) of pedestrian crashes, respectively between 1997 and 2005 (no graph is provided for this data).

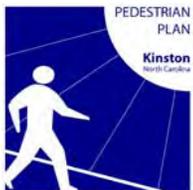


Figure 2.5 illustrates the degree of injuries inflicted in pedestrian crash incidents. Likely only five persons were killed and eleven disabled due to pedestrian-vehicle crashes. The majority of the crashes resulted in fifty-five (55) possible injuries or fifty-four (54) minor injuries. According to a report sponsored by the National Highway Traffic Safety Administration (NHTSA) entitled *Literature Review on Vehicle Travel Speeds and Pedestrian Injuries*, pedestrians have a five percent (5%) chance of dying when involved in pedestrian-vehicle crashes where the vehicle is traveling at 20 Mph or less, this fatality rate increases substantially and incrementally as vehicle speeds increase. For instance, a vehicle traveling at 30, 40, or 50 Mph will result in a forty (40), eighty (80), or one hundred (100) percent chance of pedestrian causality, respectively².

Therefore, future pedestrian injuries can be avoided with improved pedestrian facilities, safety education, reduction of vehicle speeds especially within high pedestrian areas, and signage.

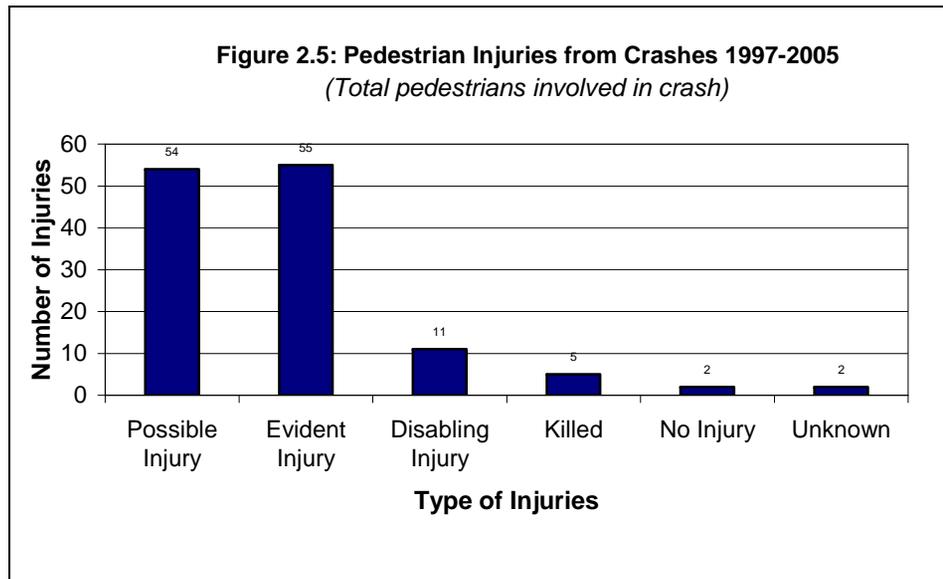
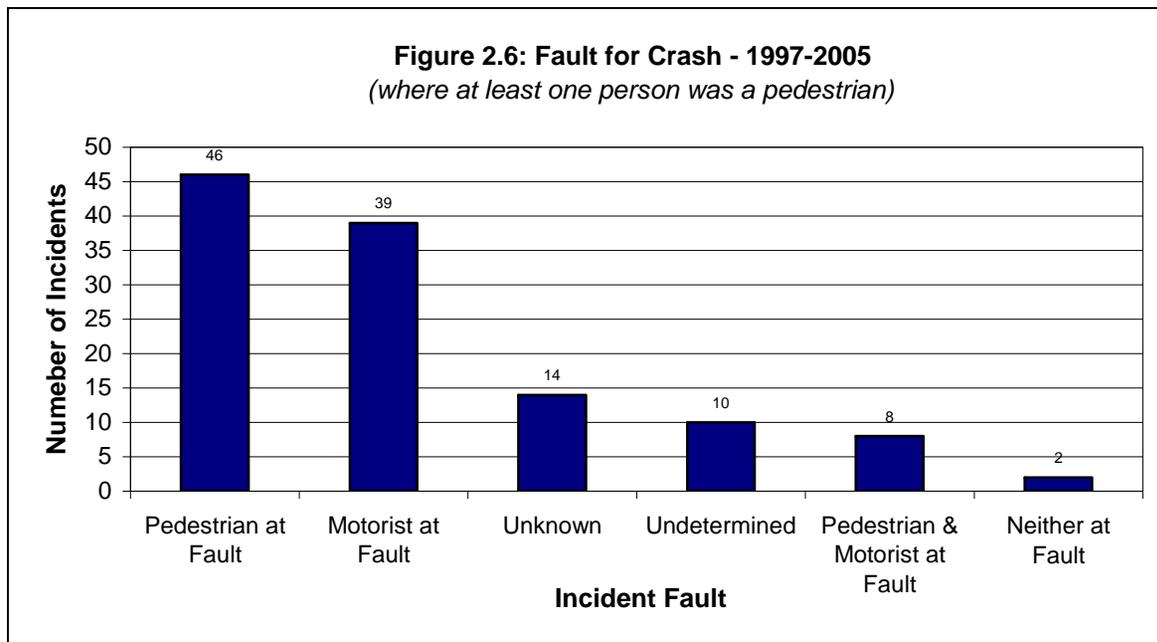


Figure 2.6 reveals there is a great need in Kinston for more pedestrian and driver safety education. According to the graph, pedestrians were at fault for forty-six (46) accidents where they failed to yield to oncoming vehicles or dashed or darted-out in front of moving vehicles. Another thirty-nine (39) crashes were caused by motorists failing to yield, not being aware of surroundings, backing up or turning or merging. Motorists and pedestrians were at fault for seventy-two percent (72%) of all incidents. These high percentages reflect a need for education in the community concerning pedestrian and vehicle laws, safety, improved crossings, and the separation of pedestrian and vehicles.

Pedestrians were at fault for 46 accidents

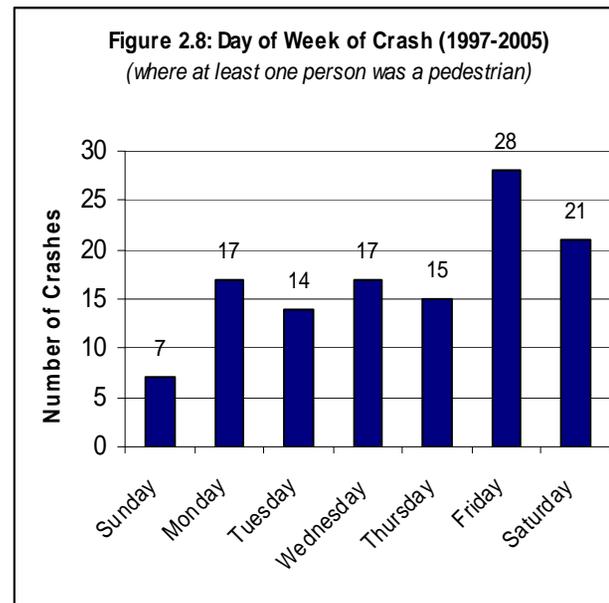
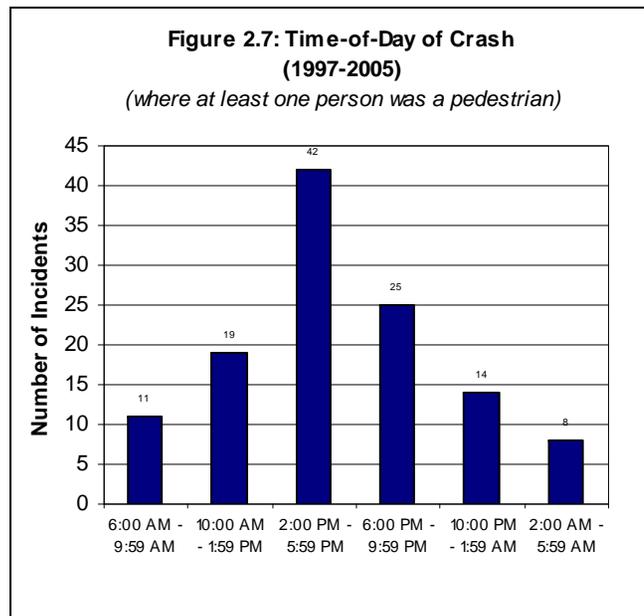


72 % of all accidents were caused by motorists and pedestrians as opposed to unknown or undetermined elements



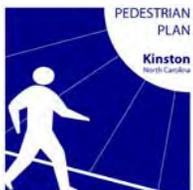
Figure 2.7 illustrates the time of day when the pedestrian crashes took place. Although crashes occur throughout the day, the numbers peak during the mid-day hours (42 crashes). This number may be assisted with school letting out, warming weather to be outside, or persons going to or heading home from work. The second highest number of crashes happened between six and ten or late evening when pedestrian visibility is decreased. The early morning and late night crashes are relatively low in comparison to evening crash counts. Figure 2.8 shows which days of the week experienced majority of crashes.

According to Figure 2.8, forty-nine (49) crashes occurred on Friday and Saturday with Sunday having the fewest. Friday's number could suggest lower awareness of pedestrians by vehicle drivers as they head home for the weekend, whereas Saturday's crashes could be a result of more children and adults enjoying the outdoors and/or walking to conduct their errands or local activities.



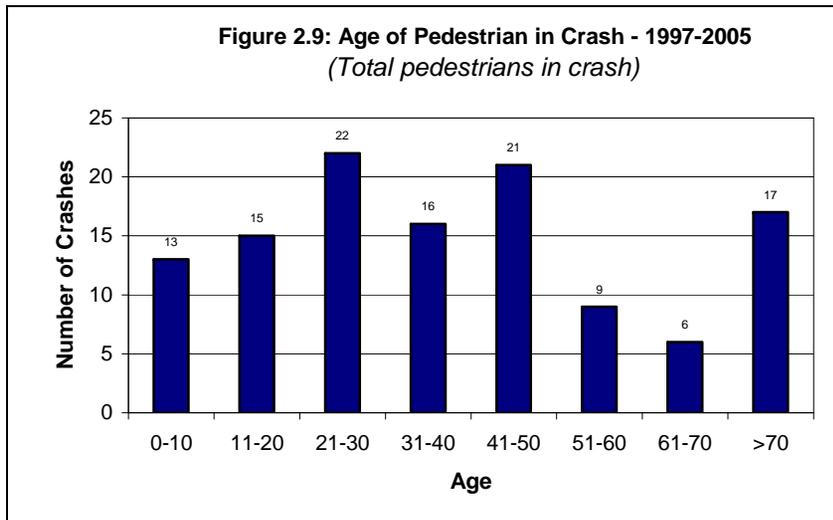
80% of crashes occurred on clear sunny days
15% of crashes occurred on cloudy days
5 % of crashes occurred when it is raining

63% of crashes occurred during daylight
27% of crashes occurred at dark on lighted roadways
5% of crashes occurred at dark on unlighted roadways



The months of March, April, June, and July saw a total of sixty (60) pedestrian crashes, the highest number (19) of those crashes occurred in June. These numbers indicates higher level of pedestrian activity during the spring and summer months when the weather is nice and schools are out for the summer (No graph/ figure provided).

Figure 2.9 shows that pedestrian crashes affect all age groups, however there are peaks in the 21-31, 41-50, and over 70 age groups. School-aged persons were also involved in a high number (28) of crashes. Providing pedestrian safety education, enforcement, and safe pedestrian routes to schools could assist in reducing the number of crashes for all age groups.



Map 2.2 reveals more site specific locations of pedestrian and vehicle crashes for January 1, 2004 through December 31, 2006, using NCDOT crash data. As the map reveals, the concentration of crashes are within a half mile radius of downtown. The map also reveals two distinctive clusters located on or near Stadium Drive (residential area) and South Queen Street (commercial and residential area). These two locations should be looked at to determine the necessary pedestrian improvements to assist in reducing future pedestrian-vehicle crashes;

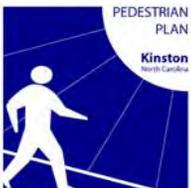
The two age groups that were involved in the lowest number of crashes were the 51-60 and 61-70 age group

55% of pedestrian involved in crashes were male

80% of pedestrians were African American

Kinston Needs:

- ✓ Pedestrian Safety Education
- ✓ Traffic and Pedestrian Enforcement
- ✓ Pedestrian-Friendly Development Standards
- ✓ Improved Pedestrian and motorist visibility

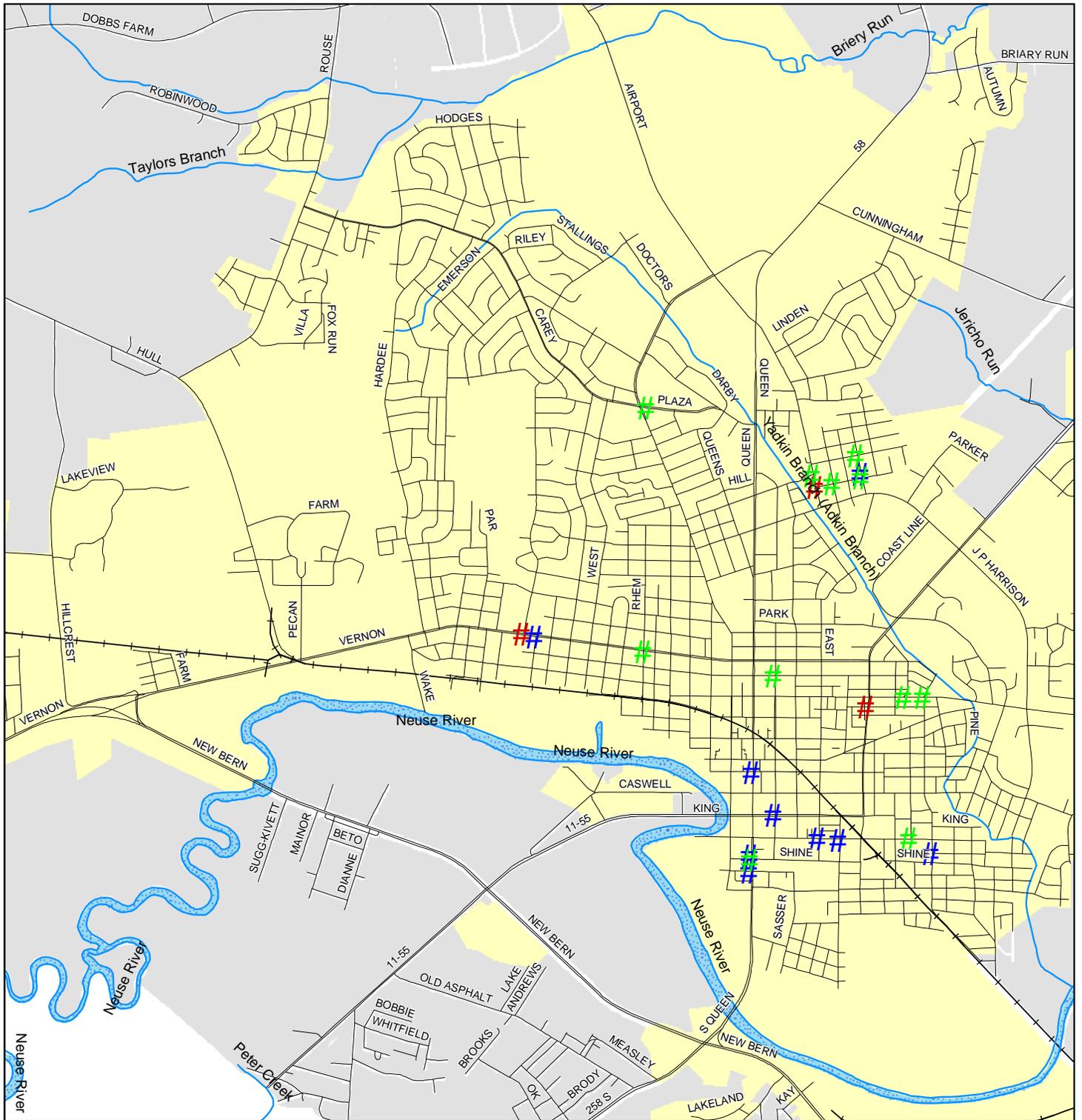


whether that is reducing vehicle speeds in residential areas, designated pedestrian crossings, curb extensions, or other traffic calming devices.

This crash analysis has revealed the need for safety education, enforcement, design standards for places where pedestrians and motorists interface, reduction of vehicle speeds in certain areas, traffic calming devices, street lighting, and improved sight distance visibility.

² United States Department of Transportation, National Highway Traffic Safety Administration, *Literature Review on Vehicle Travel Speeds and Pedestrian Injuries*, W. A. Leaf and D. F. Preusser, October 1999, <http://www.nhtsa.dot.gov/people/injury/research/pub/HS809012.html>





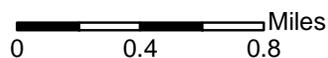
The City of Kinston Comprehensive Pedestrian Plan

Map 2.2 - Pedestrian-Vehicle / DOT Crash Data

January 1, 2004 to December 31, 2006

- Legend**
- # Possible Injury
 - # Evident Injury
 - # Disabling Injury
 - Roads
 - Streams
 - RailRoad
 - Neuse River
 - Kinston City Limits
 - ETJ

2



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Transportation**

ASSESS PEDESTRIAN FRIENDLINESS OF LOCAL TRANSPORTATION SYSTEMS

Planning for all modes of transportation, especially pedestrian facilities, is becoming more common. The City of Kinston has identified there is a substantial need to improve pedestrian facilities within older, more established areas and provide new pedestrian facilities in the newly developed areas. The City has slowly integrated more pedestrian friendliness, but there is a great deal more that needs to be done.

Kinston has a fairly well-developed network of sidewalks within the downtown and older residential neighborhoods surrounding the downtown, as well as pockets throughout the City. However, pedestrian elements such as well-defined crosswalks, crossing signals at street intersections, and pedestrian design elements within parking lots are limited. The basic “transverse” style solid white parallel lines mark pedestrian crossing areas are throughout the downtown, but intersection treatments elsewhere are rarely used or noticeable. There are many sections of the City with no pedestrian facilities. The existing vehicle bridges have raised areas for pedestrian use; however, there is no barrier between these areas and the vehicle lanes.

There were neighborhoods mentioned during the planning process, such as the area around the Kinston Country Club & Golf Course that have a high number of recreational walkers; however the street is used since there are no sidewalks. Opportunities for long distance walking for recreation and transportation from the neighborhoods to downtown, parks, or to commercial areas are limited. There are a few major thoroughfares with sidewalks outside the downtown. The result is pedestrians walking in busy streets or in potentially unsafe areas (e.g. ditches, overgrown areas, parking lots). These inadequate conditions encourage driving.

There are several points of interests and destinations identified during plan development that need improved or new pedestrian treatments. A large number of parks and recreational facilities in Kinston are not connected with pedestrian facilities. To access these areas a person must travel by vehicle or walk in the street. Therefore, Kinston should develop safe pedestrian routes to schools and parks.

Kinston is also a part of the Lenoir County Transit service that provides transportation to human services agencies, as well as to other destinations within Lenoir County. Unfortunately, Kinston has limited or no pedestrian facilities connecting to the bus stops. This situation makes using the service an unsafe endeavor.



Kinston has an opportunity to make significant enhancements to pedestrian activities. As a community trying to retain and attract residents and visitors, the need for safe and effective pedestrian facilities is critical. The first step towards improving the quality of life for pedestrians starts with a comprehensive pedestrian plan.

CURRENT USAGE / USER DEMOGRAPHICS

According to the 2000 U.S. Census, 18.9% of Kinston's population is 65 years or older. Another eighteen percent (18%) are between 6-17 years old. Twenty-five percent (25%) of the population are disabled, who live throughout the community as apposed to being institutionalized. Kinston's median household income is \$26,630 (in 1999 dollars). There are 5,270 persons or twenty-three percent (23%) living below the poverty level. As a result of these income levels, twenty-two percent (22%) of households have no cars or other vehicle and thirty-seven percent (37%) have only one car or other vehicle. The majority (76.7%) of Kinston's working population travels to work by car, 16.4% carpools, 1.5% uses public transportation, 2.7% walk to work, and 2.7% work for home or travels to work by other means.

Based on Kinston's Census data, an improved pedestrian system which provides connectivity and assessability to local businesses, places of work, schools, and other destinations is extremely important to ensure public health, wellness, and happiness, especially for the fifty-nine percent (59%) of households with one or fewer vehicles. The list of potential pedestrian projects in Section 7 should provide this connectivity and assessability; however, Kinston should continuously evaluate the needs of these households to identify future projects.

The survey conducted during the planning process showed the current residents frequently walked 10 minutes or more for exercise, leisure, walking a dog, or to/from the car. However, residents rarely or never walked 10 minutes or more for errands, shopping, entertainment, to the bus stop, to work, or to school. Of the respondents, the critical issue people face while walking in Kinston is the missing or poor maintenance of sidewalks. The low number at pedestrian facilities is also due to a perceived sense of lack of personal safety, whether due to history of crime, poor lighting, or interaction with traffic.

Existing sidewalk conditions downtown and in a neighboring area



INVENTORY AND EXISTING FACILITIES ASSESSMENT

Sidewalks

A sidewalk inventory of existing sidewalks was developed as part of the planning process for arterial, collector, and sub-collector streets. Map 2.3 shows the current sidewalks in Kinston. The sidewalks shown on the map do not take into consideration the possibility of very small gaps (10' or less) within the segment. These small gaps can be fixed with minimum effort to complete the sidewalk segment. The street may have larger pockets where sidewalks were constructed. As the map reveals, none of the major corridors have a continuous network of sidewalks.

The majority of the sidewalks along residential streets are located within the older sections of the community. These sections were developed on the traditional grid pattern that provided for sidewalks. Within the newly developed areas of the community, the installation of sidewalks and other pedestrian facilities are limited primarily because Kinston's ordinances do not require the installation of sidewalks.

Most of Kinston's existing sidewalks are in fair condition. There are some sidewalks covered by overgrown grass or weeds or have broken asphalt or concrete. Kinston also has numerous non ADA-compliant curb cuts and several pedestrian crossings where the sidewalk does not extend to the intersection. Immediate attention is needed to repairing and improving pedestrian facilities near schools, recreational facilities, downtown, high accident areas, and medical facilities. A few specific areas would be Queen Street, Herritage Street, King Street (portion of), Washington Street, Plaza Boulevard, Highland Avenue, Vernon Avenue, Carey Road, and Hardee Road.

Multi-Use Trails / Paths

Kinston has no multi-use paths or trails to provide pedestrians an alternative method of travel; therefore, opportunities for multi-use paths or trails should be identified.



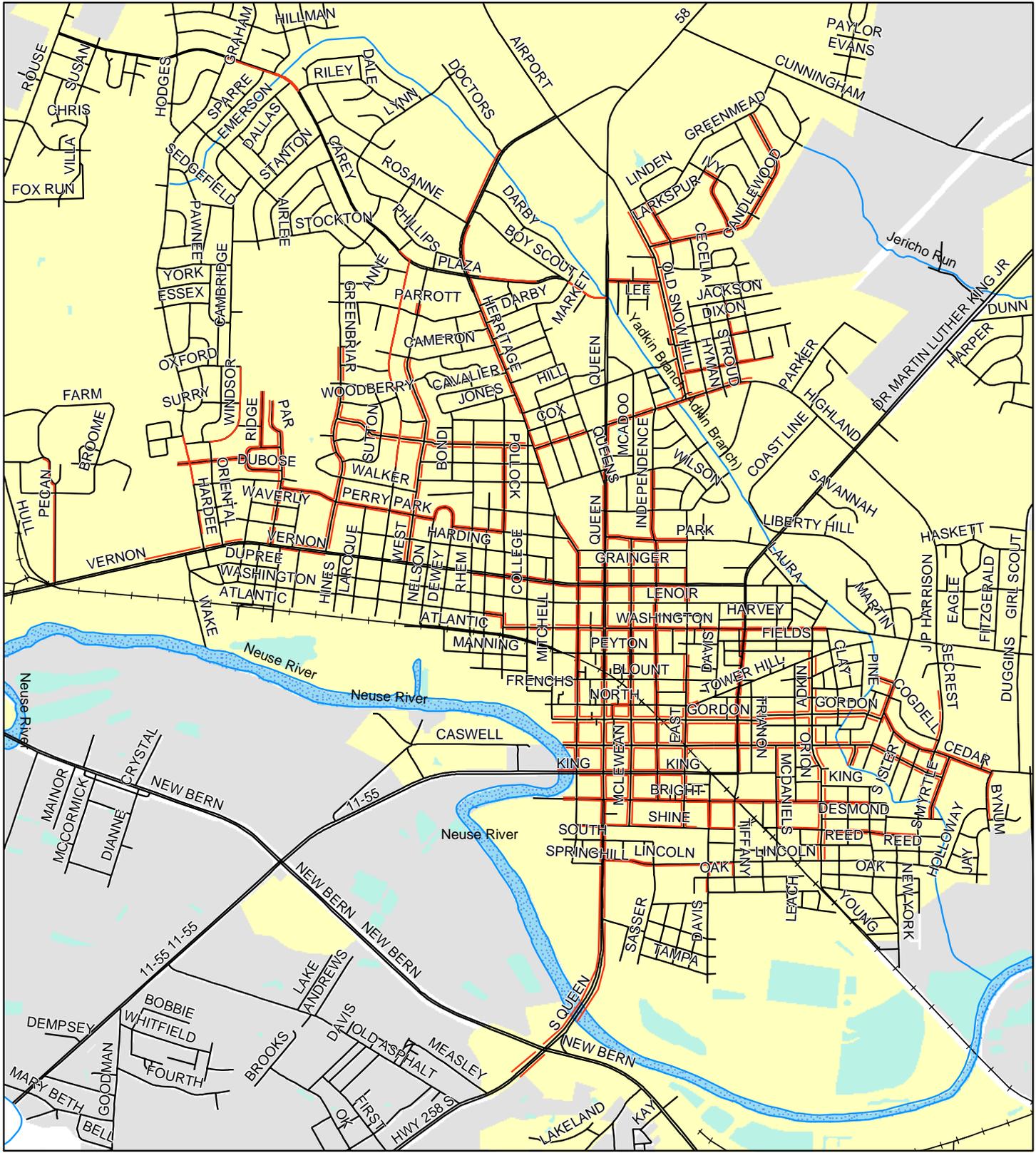
Existing sidewalk conditions along Par Street



A gap along Vernon Avenue



This photo illustrates a portion of King Street where citizens created a dirt path to walk since no sidewalk exist.

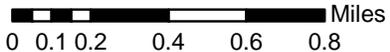


- Legend**
- Sidewalks
 - Roads
 - Rail Road
 - Water Bodies
 - Neuse River
 - Streams
 - Kinston City Limits
 - ETJ

2

The City of Kinston Comprehensive Pedestrian Plan

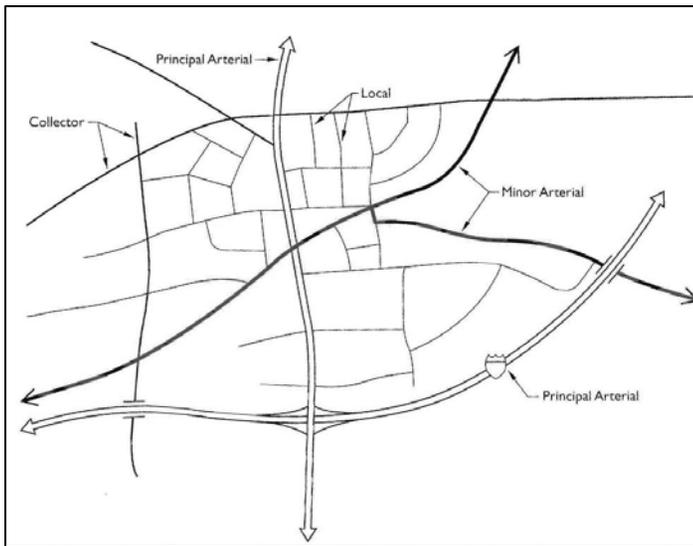
Map 2.3 - Existing Sidewalks



Streets

The majority of Kinston's collector and local streets are two-lanes with on-street parking on one or both sides. The arterial corridors have multiple lanes for vehicles and some have on-street parking. These multi-lane roadways leave little room for pedestrian treatments or adequate pedestrian crossings. They are designed and used for vehicle trips not walking trips.

The hierarchy of streets is shown in the illustration below.



Vernon Avenue



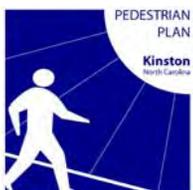
South Heritage Street



North Heritage Street



North Queen Street



Bridges

While Kinston has numerous bridges within its limits, extra-territorial jurisdiction (ETJ), and outlying areas outside of the ETJ this section only discusses those bridges within City limits and ETJ that are existing or perceived pedestrian active areas. Bridges not identified herein should be reviewed upon Plan review for pedestrian activity and included in the Plan update if determined to be located in a pedestrian active area. Specific pedestrian accommodations should be determined when a new bridge has been identified as a pedestrian facility.

King Street Bridge

The King Street Bridge was designed primarily for vehicle trips since there are pedestrian treatments are minimal. At this time no additional pedestrian treatments are necessary.

Queen Street Bridges

The Queen Street (south of Broadway Street) has two bridges to accommodate northbound and southbound traffic. These bridges have two raised sidewalks along the sides, but there is no protection device between the sidewalk and travel lanes resulting in a safety hazard for children, handicapped persons, and elderly. A safety barrier will not only provide a structural separation between the traveling vehicles, but will also improve safety and security of pedestrians. Fortunately, the Queen Street Bridges are on NCDOT's Transportation Improvement Program (TIP) list for replacement. The replacement bridges will accommodate the pedestrian and provide a safety barrier.

A single bridge over South Queen Street near Spring Hill Street has sidewalks but no safety barrier between travel lanes and sidewalks. Absence of this barrier creates a safe environment for pedestrian activity; therefore, a structural barrier between the travel lanes and pedestrian space should be installed to improve pedestrian safety at some time.

The Queen Street Bridge over the Adkin Branch near Plaza Boulevard currently has no pedestrian facilities. This absence of a sidewalk interferes with pedestrian connectivity and safety because currently pedestrian have to walk amongst vehicle traffic to cross the bridge. This activity is unsafe and can lead to pedestrian-vehicle crashes.

Greenville Highway (MLK Blvd) Bridge

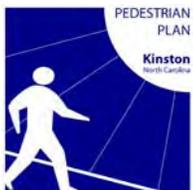
Greenville Highway (MLK Blvd) bridge at Park Avenue has no existing pedestrian facilities; however, at this time this bridge does not serve an active pedestrian area, but should be evaluated when the Greenway Master Plan is



Existing approach to King Street Bridge



Existing Queen Street Bridge



developed to determine if the herein proposed multi-use trail under this bridge should be connected to the highway.

Pedestrian Bridges

Kinston currently has three pedestrian bridges located between Lincoln Street and Washington Street crossing the Adkin Branch stream. The Adkin Branch is undergoing a stream restoration project being performed by the State of North Carolina and the City of Kinston. And as a part of the project, the existing stream channel will be widened to reduce erosion and flooding. As a result these pedestrian bridges will be removed during construction.

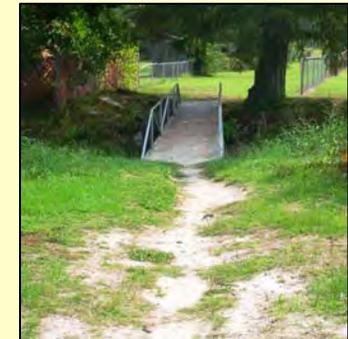
The City of Kinston and the State of North Carolina gathered public input on which bridges should be replaced. The conclusion is that one of the bridges near Holloway Park will be rebuilt and a second will be combined with a vehicle bridge on Washington Street. Currently the bridges are accessed by grass or dirt paths. Therefore, construction should include adequate walking paths constructed to and from the bridges.

Intersections

The majority of Kinston's intersections need additional improvements, especially near destinations such as schools, parks, downtown, shopping centers, and medical facilities. Special attention is also needed for safe crossing of multi-lane intersections.

The following intersections need improvements due to their proximity to community facilities and activities, source of pedestrian-vehicle crashes, and their ability to provide connection to surrounding neighborhoods.

- Vernon Avenue and Queen Street
- Vernon Avenue and Herritage Street
- Vernon Avenue and Greenbriar Road
- Vernon Avenue and Hardee Road
- Vernon Avenue and McLewean Street
- Vernon Avenue and MLK Boulevard
- Vernon Avenue and Pecan Drive
- Vernon Avenue and Carey Road
- MLK Boulevard and Caswell Street
- MLK Boulevard and Washington Street
- Secret Street/J.P. Harrison Street and Washington Street
- South Queen Street and Shine Street
- South Queen Street and South Street
- Meadowbrook Drive and Highway 70
- Highway 58 and Highway 70
- Highway 258 and Highway 70
- Highland Avenue and Herritage Street
- Highland Avenue and North Queen Street
- Herritage Street and Airport Road



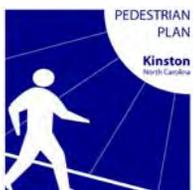
An existing pedestrian bridge and pedestrian pathway



Intersection of Hwy 258 & Hwy 70



Intersection of Greenbriar Road & Vernon Avenue



- Herritage Street and Highway 58
- North Queen Street and Airport Road
- Plaza Boulevard and Herritage Street
- Plaza Boulevard and North Queen Street
- Plaza Boulevard and Carey Road
- Stadiem Street and Old Snow Hill Road
- Stadiem Street and Hyman Street
- Stadiem Street and Charlotte Street
- William Street and Charlotte Street

Transit

Lenoir County Transit service is dependent upon pedestrians. If pedestrians are unable to travel safely to transit stops the service will not be utilized. Improvements such as sidewalks, signage, street markings, shelters, and lighting should be done along the transit route.

Parking Lots

The majority of parking lots in Kinston were designed and constructed with minimal pedestrian accommodations. There are few designated pedestrian access routes from parking spaces to the store. Also, little to no vegetation is planted within parking lots to provide refuge from the sun and to break up the expansive asphalt. Kinston should adopt pedestrian-oriented site development regulations to improve the pedestrian experience to and from commercial facilities.

Identification of Barriers

Like all communities, the City of Kinston has to address barriers to implement the tools for a walkable community. These barriers are categorized as follows:

- Natural environment / barriers
- Man-made hazards
- Safety hazards
- Security hazards
- Gaps in the system



Vehicle parked in a bus stop loading /unloading area



Existing commercial parking lot

Natural Environment / Barriers

There are three natural barriers Kinston has to address and design around when planning pedestrian facilities. The Neuse River is the major barrier that runs along the south and southwest portions of the City. It divides the City creating a challenging situation for the planning of pedestrian connectivity between the north and south sides of the river.

The second barrier is the Adkin Branch stream, which runs northwest from the Neuse River. As mentioned previously, the stream channel will be widened creating a greater expanse between the banks, which increases the crossing distance.

The final natural barrier is the floodplain property, specifically in the southern portion. With Hazard Mitigation Grant Program (HMGP) monies, the City has acquired property and relocated the citizens in the southern section. This area will be developed into a RetroGreen Park with a network of walking trails. These and other pedestrian facilities built within the floodplain will require specialized design and construction to meet ADA-compliance and handle future flooding.

Man-Made Hazards

There are several man-made hazards or barriers that impact the walkability of Kinston. The most significant is Highway 70. Highway 70 runs along the southwestern portion of the community and like any major thoroughfare, the commercial establishments have been designated with little regard for pedestrians. This makes pedestrian crossings unsafe and nearly impossible.

Vernon Avenue, King Street and MLK Boulevard are also three main thoroughfares for heavy truck and vehicle traffic. Vernon Avenue and MLK Boulevard beyond the downtown area are typical commercial strip thoroughfares with four lanes plus a middle turning lane, numerous curb cuts, diverse commercial activity, and little to no pedestrian facilities. King Street is used primarily by semi-trucks hauling livestock. Safe pedestrian travel along these streets is rare with the amount of traffic and limited pedestrian crossings or markings.

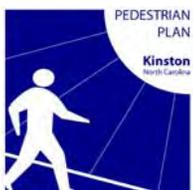
Queen Street, the only north-south route through the community, has four lanes of traffic with on-street parking. The street width, lack of adequate pedestrian crossings, and no traffic calming devices make this street a safety hazard for pedestrians.



View of Neuse River



View of Queen Street



Kinston has seen significant commercial development designed and installed with the vehicle in mind, not the pedestrian. The buildings are setback off the street with aisles of parking spaces creating a barrier between the sidewalk and the front of the store. Newer residential streets have cul-de-sacs or are looped, which limits connectivity to the surrounding area. Future site planning should include provisions to make the infrastructure and building access more pedestrian friendly.

Safety Hazards

Although Kinston has many key sidewalk connections in place, the lack of a continuous network is a significant hazard as it forces pedestrians to walk in vehicle dominated environments. The condition of the existing sidewalk is also a safety hazard for the elderly, the young, and the disabled because the surfaces are not cleared or smooth. Also the lack of pedestrian-friendly intersection crossings and signage make an unsafe environment for walking, as the previous crash data revealed. The need for improved continuous connections, safer crossings, signage, and education is necessary to assist in making Kinston a walkable community.

In order for people to walk, they need to feel their personal safety is not compromised. More street-level security lighting, the ability to easily contact police, and more police patrols (e.g. foot and/or bicycle patrol) are all methods to insure the personal safety of pedestrians. Regardless of the level of pedestrian facilities a community may have, if a person feels their personal safety is not met they will not walk.

The gaps in Kinston's pedestrian system present a safety hazard as well as discourage walking. In order to increase walking trips, sidewalks with gaps must be in filled. A component of this Plan is to identify the critical gaps in the existing system and begin the process of infill.

Specific locations for safety improvements include areas around schools, parks/recreational facilities, downtown, major pedestrian intersections, bridges with pedestrian activity, pedestrian-vehicle crash sites, and pedestrian avenues.

PEDESTRIAN STATUTES AND ORDINANCES

Kinston's Code of Ordinance has several articles that address sidewalks, although they do not require installation of new sidewalks. The existing ordinance includes the words "may require"³ and the City discourages connectivity by stating "cul-de-sacs and loop streets are encouraged



View of Highway 70



Existing unsafe sidewalks



so that through-traffic on residential streets is minimized.”⁴ The existing ordinances also do not require accommodations for pedestrian facilities within commercial development. Kinston does require a raised curb or a stop bar between parking areas and sidewalks to prohibit vehicles from blocking the sidewalks.⁵

The current ordinances have provisions if the permit-issuing authority “finds that means of pedestrian access is necessary from the subdivision to schools, parks, open space, playgrounds, or other roads or facilities and that such access is not conveniently provided by sidewalks adjacent to the streets, the developer may be required to reserve an unobstructed easement for at least 10 feet in width to provide such access.”⁶

Though Section 20-3 of Article 1, of Chapter 20 of the Code of Ordinance states “...every occupant or owner of a lot where a hard-surface sidewalk has been laid shall keep the area between the sidewalk and the vehicular portion of the street clear of weeds and other vegetation,” there are several areas in the community where this is not being enforced. Vegetation can provide aesthetics and make a walking trip more pleasurable, but it can also hinder a trip entirely if the vegetation is not maintained. Recommended amendments to Kinston’s Code of Ordinance are described in Section 9. These amendments should provide the necessary elements to increase walking trips by requiring pedestrian-friendly design and construction.

¹ <http://www.nccommerce.com/en/CommunityServices/CommunityPlanningAssistance/NCMainStreetCenter/>

² United States Department of Transportation, National Highway Traffic Safety Administration, *Literature Review on Vehicle Travel Speeds and Pedestrian Injuries*, W. A. Leaf and D. F. Preusser, October 1999, <http://www.nhtsa.dot.gov/people/injury/research/pub/HS809012.html>

³ City of Kinston Code of Ordinance, Article XIV, Section 216: Street width, Sidewalk, & Drainage Requirements for Subdivisions.

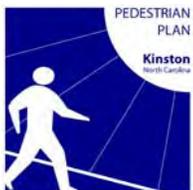
⁴ City of Kinston Code of Ordinance, Article XIV, Section 217: General Layout of Streets.

⁵ City of Kinston Code of Ordinance, Article IV, Section 20-86: Use and Protection of Public Property.

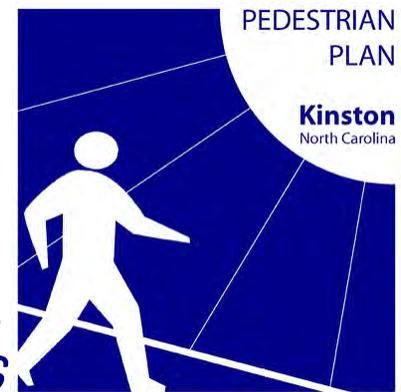
⁶ City of Kinston Code of Ordinance, Article XIV, Section 216(e): Street width, Sidewalk, & Drainage Requirements for Subdivisions; and Section 221(d): Road and Sidewalk Requirements in Unsubdivided Developments.



Gaps in network



SECTION 3 -
EXISTING PLANS, PROGRAMS, & POLICIES



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SECTION 3 EXISTING PLANS, PROGRAMS AND POLICIES

This section provides a summary of the existing plans, programs, and policies related to pedestrian planning. These plans, programs, and policies assisted in the development of this Plan.

EXISTING PLANS

The Kinston Waterfront – NOW! Conceptual Vision Plan 2006; By NCSU Landscape Architecture Graduate Students (LA500); For Pride of Kinston

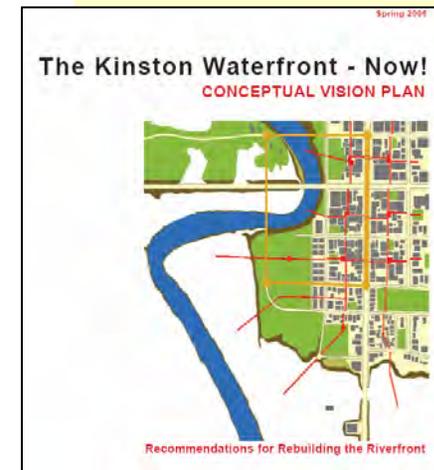
The Kinston Waterfront-NOW! Conceptual Vision Plan was developed to explore the revitalization of the Neuse River waterfront in downtown Kinston. The concepts presented offer a vision for the waterfront that includes pedestrian connections to and around the Neuse River. The strategic goals include:

- ❖ Provide a continuous riverwalk
- ❖ Balance modes of transportation (all modes of transportation should have some riverfront access)
- ❖ Encourage mixed use along the river's edge
- ❖ Plan for pedestrian-oriented retail and entertainment opportunities along the river

The following list of projects recommended in the plan is separated into two categories, “pedestrian projects” and “special interest projects.” The purpose of the “pedestrian projects” is to develop pedestrian oriented facilities. The “special interest projects” are site specific such as redevelopment of a power plant; however, each project should incorporate pedestrian-oriented design.

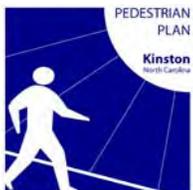
Pedestrian Projects

1. Two Pedestrian Bridges – Construct two pedestrian bridges to connect downtown and future mixed-use developments to the Neuseway Nature Center.
2. Neuseway Nature Center Expansion - Incorporate new pedestrian trails and amenities that will connect with the greenway system.



Special Interest Projects

1. Sugar Hill Neighborhood Renovations - Incorporate pedestrian-friendly streets and mixed-use developments. These new developments should connect to the greenway and Neuseway Nature Center trails.
2. Landfill Redevelopment - Reuse the former landfill site to incorporate a 4-H training facility, farmers market, community gardens and recreational facilities. This area would have paths connecting to Queen Street and Lincoln Street.
3. Peachtree Wastewater Site - Reuse the Peachtree Wastewater site as an agricultural education center that is connected to the greenway.
4. Herritage Street Plaza - Create a plaza at the corner of Herritage and Caswell Street.
5. Power Plant Redevelopment - Reuse the non-operational power plant for civic and public use incorporating community gardens and access to the greenway.
6. Amphitheater - Use the slopes of the Neuse River to build a community amphitheater for festivals and gatherings. This theater would be located on the edge of the riverwalk connecting to the Mitchelltown neighborhood.
7. New RV Campground - Creation of a new recreation center and RV campground near the Neuseway Nature Center and Neuse Greenway.



***Themed Development Plan for the Revitalization of Downtown Kinston & Surrounding Historic Areas
July 2001; By Cynthia Rice, ASLA; For Pride of Kinston***

The focus of the *Themed Development Plan* is to create neighborhood themes that capitalize on the existing and authentic character of downtown neighborhoods. This plan recognizes the need for the downtown to be safe, accessible, convenient, and pedestrian-oriented. The plan addressed many key pedestrian elements such as improved streetscape, recreation and signage.

The plan included the following strategic goals:

- ❖ Expand sidewalks at intersections
- ❖ Reduce crosswalk length
- ❖ Install medians and roundabouts

The following is a compilation of the plan's pedestrian and special interest projects.

Pedestrian Project

1. Queen Street Improvements - Make Queen Street more pedestrian-friendly by widening sidewalks, reducing traffic, and creating vivid crosswalks.

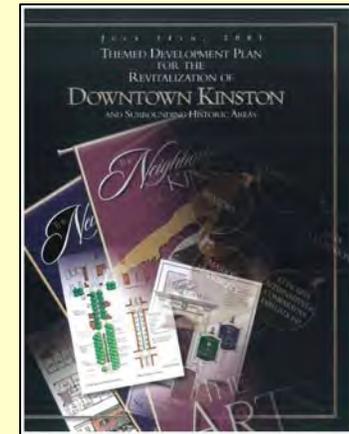
Special Interest Project

1. Railroad Depot Improvements - Renovate the Railroad Depot and create a downtown plaza that is located on the Walking Tour of Historic Downtown Kinston.

***Linking Natural and Historic Assets: Green Infrastructure as Economic Development in Lenoir County
May 2002; By UNC at Chapel Hill, City and Regional Planning Graduate Students; For City of Kinston and Lenoir County***

The *Linking Natural and Historic Assets Plan* provides recommendations to improve the green infrastructure around Lenoir County. The pedestrian elements of this plan include passive and active recreation improvements by using the area's natural and historical resources.

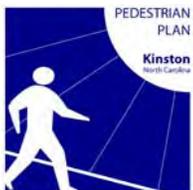
Pedestrian-oriented recommendations included walking tours of historic places and development of an extensive greenway system. The following is a compilation of the plan's pedestrian and special interest projects.



Pedestrian Projects

1. Walking Tour of Historic Downtown Kinston - A Walking Tour of Historic Downtown Kinston encompassing many historic sites in and around the downtown area. These sites include:
 - Baptist Parsonage
 - Blalock House
 - People's Bank Building
 - Neuseway Park
 - Mitchelltown Historic District
 - Grainger- Hill Historic District
 - Grainger Stadium
 - Hotel Kinston
 - Canady House
 - Community Council for the Arts
 - Queen Gordon Historic District
 - Atlantic & NC RR Depot
 - White Rock Presbyterian Church
 - Trianon Historic District
 - Kinston's Museum Row:
 - The Neuseway Nature Center
 - CSS Neuse II
 - Civil War Museum
 - Caswell No.1 Fire Station Museum
 - Harmony Hall
 - Cultural Herritage Museum
 - Cedar Grove, Hebrew and Maplewood Cemeteries

2. Greenway - Development of an extensive greenway system that connects Kinston's historical and natural points of interest and recreational facilities. These connections will increase accessibility and tourism throughout the City.



3. Driving Tour of Historic Lenoir County – Creation of a driving tour of historic Lenoir County that would link many dispersed landmarks to Kinston. This route would incorporate potential and existing tourist attractions such as:
 - Battle of Kinston Site
 - Kelly’s Millpond
 - Proposed Sugar Hill Redevelopment
 - Downtown

EXISTING OR PLANNED PROGRAMS AND INITIATIVES

The Pride of Kinston, Inc.

The Pride of Kinston is a private non-profit agency established to lead the revitalization of downtown using the Main Street approach. This approach is to promote economic development within the context of historic preservation. The agency is proactively pursuing projects identified in *The Kinston Waterfront – Now Plan*.

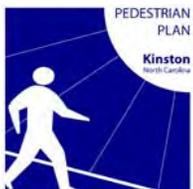
Kinston-Lenoir County Chamber of Commerce

The Chamber of Commerce for Kinston and Lenoir County has also taken an interest in pedestrian facility planning, as they assisted the City with the required local match for this Plan. The Chamber recognizes the tremendous community benefits associated with a continuous network of pedestrian facilities and improved pedestrian safety.

Kinston Sentinels

As a volunteer organization serving the Kinston Department of Public Safety, the men and woman in the Sentinel program assist the department with a variety of duties and valuable services, such as:

- ❖ Report Writing
- ❖ Directing Traffic
- ❖ Vehicle Safety
- ❖ Business and Residential Safety Checks
- ❖ Vacation House Checks
- ❖ Crime Prevention



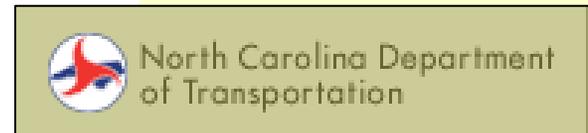
- ❖ Neighborhood Watch
- ❖ Responding to Non-Threatening Calls for Service

This program provides the opportunity for volunteers to become part of the solution, as well as provide positive social interaction with citizens of Kinston.

As a valuable service to the community and the Department of Public Safety, the possibility of the Sentinels program to extend into providing additional pedestrian safety measures is encouraged.

NC DOT Transportation Improvement Projects (TIP)

There are eight construction projects currently listed on the NCDOT TIP¹ for the City of Kinston. Some of these projects could incorporate pedestrian facilities. Map 3.1 illustrates the location of those projects with mapped routes (excludes R-3308 and R-2235).

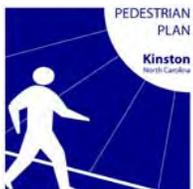
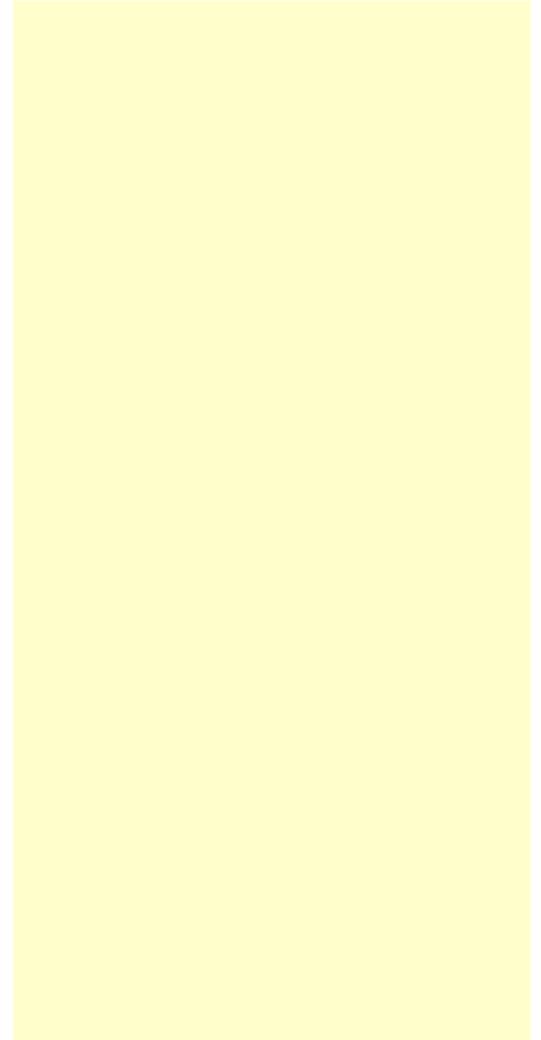


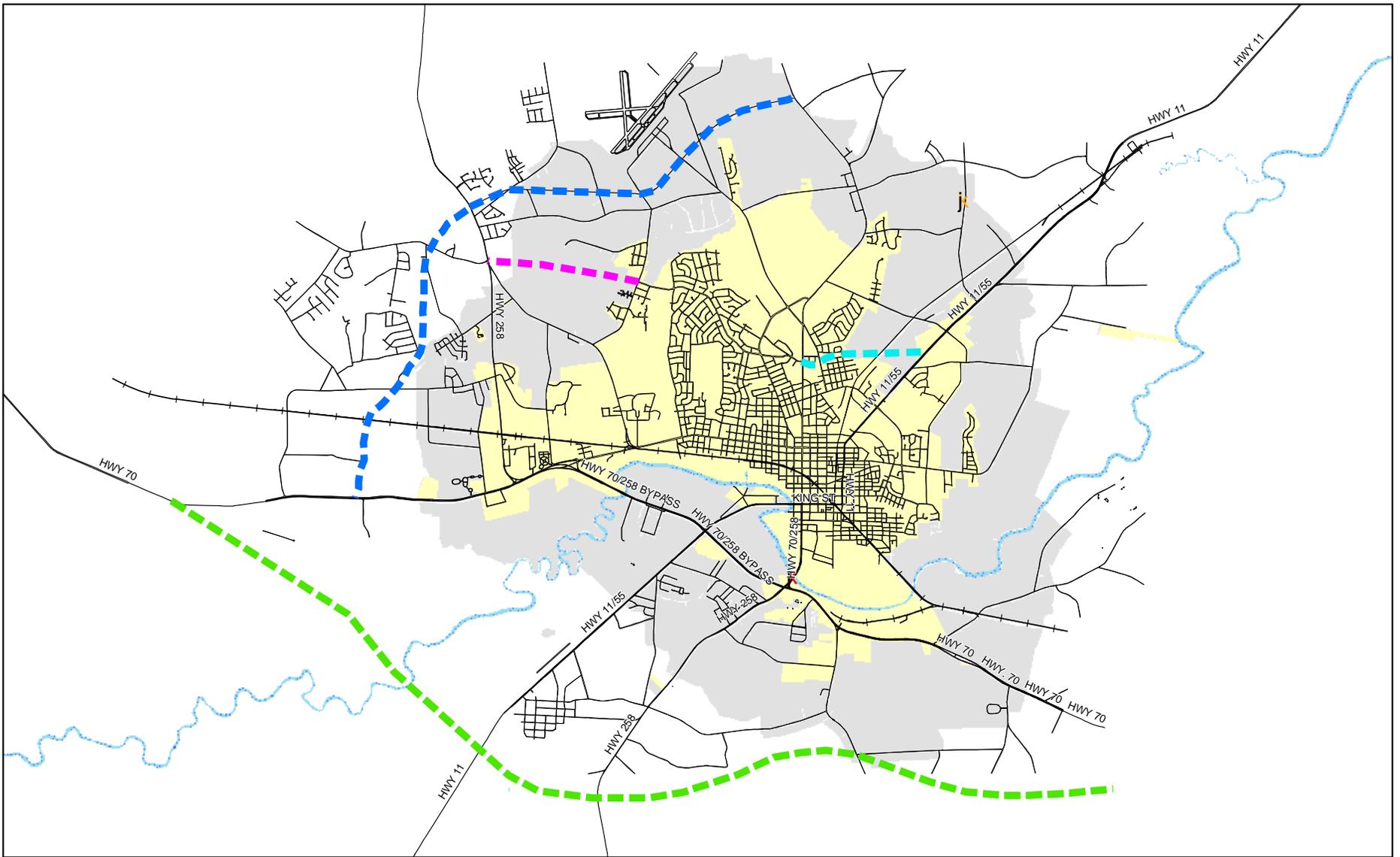
TIP Projects

1. Carey Road Extension (U-3618) - Multi-lane Carey Road Extension at SR. 1572 (Rouse Road) to US 258. This road extension should incorporate sidewalks along one side. (unfunded project)
2. Plaza Boulevard Extension (U-4018) - Multi-lane Plaza Blvd. extension from NC 58 (North Queen Street) to NC 11 North (Greenville Hwy.). This road extension should incorporate sidewalks. (unfunded project)
3. Kinston Bypass (R-2553) – Long-term project that will divert traffic off US 70/ New Bern Road and around Kinston. This project would make crossing US 70/New Bern Road easier and would complement recommended improvements at the US 70 / US 258 intersection. (right-of-way in FY 2015)
4. Bridge Replacement (B-4565) - Replacement of Queen Street bridges (northbound and southbound) over Neuse River. The replacement bridges should be equipped with sidewalks and a constructed barrier between sidewalks and travel lanes. (construction in FY 2011)
5. C.F. Harvey Parkway / Crescent Road (R-2719) – New multi-lane route that will divert traffic from Highway 70 to Highway 58. US Highway 258 to NC Highway 58 is complete. US Highway 70 to US Highway 258 right-of-way in process, with construction in FY 2009 through FY 2012. Pedestrian facilities would not be suitable for this multi-lane highway; however, upon completion it would create possible opportunities for pedestrian facilities along the western portion of Highway 70 due to reduced traffic.



6. US Highway 258 (R-3308) – Widen US Highway 258 to multi-lanes from Crescent Road in Kinston to US Highway 64 in Tarboro (unfunded project). Pedestrian facilities would not be suitable for this multi-lane highway, due to the high vehicular speed associated with this type of highway.
7. US Highway 258 (R-2235) – Widen US Highway 258 to multi-lanes from NC Highway 24 west of Richlands to US Highway 70 in Kinston (unfunded project). This project is partially within the ETJ and municipal limits. Pedestrian facilities would not be suitable for this multi-lane highway, due to the high vehicular speed associated with this type of highway.
8. SR 1732 / Wallace Family Road (B-4925) – Bridge replacement over Briery Run (unfunded project). This project is located in the ETJ. This bridge replacement would not need a pedestrian facility at this time.



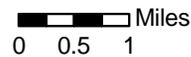


Legend

- | | | | |
|--|--|--|--------------------------|
| | B-4565 / Queen Street Bridge Replacement | | Roads |
| | B-4925 / Briary Run Bridge Replacement | | Kinston Regional Jetport |
| | U-4018 / Plaza Blvd Extension | | Rail Road |
| | U-3618 / Carey Road Extension | | Neuse River |
| | R-2719 / Crescent Road | | Kinston City Limits |
| | R-2553 / US 70 Bypass | | ETJ |
| | Truck Routes | | |

The City of Kinston Comprehensive Pedestrian Plan

*Map 3.1 - Department of Transportation
Transportation Improvement Projects (TIP)*



2



EXISTING POLICIES

There are a few existing pedestrian related policies at the local as well as at the state and federal level. The following are these policies.

Local Ordinances

The Kinston Code of Ordinances has several provisions which take into account pedestrians and pedestrian facilities. The City has a special assessment provision within Article V of Chapter 1 of the Code that grants authority to the City to order street improvements and sidewalk improvements, as well as assessing the abutting properties for those improvements (per Chapter 160A, Article 10 of General Statutes). Kinston has adopted provisions and regulations for the construction of sidewalks, driveways, driveway approaches, landscaping, and parking. Kinston has also adopted a design and construction manual for streets, sidewalks, drainage, and water and wastewater extension. All of these provisions and regulations assist in making the community of Kinston a walkable community; however, the minimum sidewalk width needs to be increased to five feet (5') instead of four feet (4') for all new sidewalks to be ADA-compliant. Existing sidewalks should be brought up to five feet or if space is limited, five foot sections should be placed along sidewalk to allow passing of handicapped persons.

Also adopting smaller curb radii into local design and construction guidelines will assist in slowing vehicles as they turn corners, as well as providing a shorter travel distance for pedestrians.

State and Federal Policy

In 2000, the North Carolina Department of Transportation (NCDOT) updated the *1993 Pedestrian Policy Guidelines*. The NCDOT pedestrian policy guidelines can be found at:

http://www.ncdot.org/transit/bicycle/laws/laws_pedpolicy.html

NCDOT's greenway policy can be found at the following link:

http://www.ncdot.org/transit/bicycle/laws/laws_greenway_admin.html.

Through updating these guidelines, NCDOT has shown they are committed to improving bicycling and pedestrian conditions and recognizes these facilities are "critical elements of the local, state and federal transportation sys-

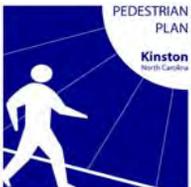


tem”.² These guidelines provide communities with information regarding NCDOT funding for replacement of existing sidewalks as a part of street widening projects.

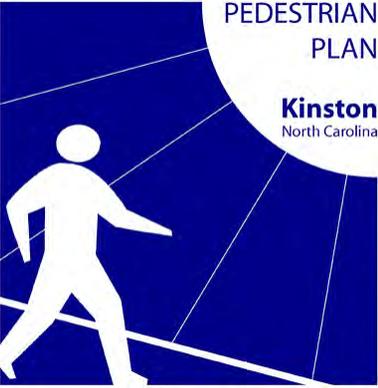
The NCDOT’s Traditional Neighborhood Development (TND) Street Design Guidelines are available for proposed developments. These guidelines delineate permit locations and encourage developers to design roadways according to TND guidelines rather than conventional subdivision standards. These guidelines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

¹ North Carolina Department of Transportation, July 2007. (<https://apps.dot.state.nc.us/projects/tipsearch/Default.aspx>)

² North Carolina Department of Transportation, *The Department of Transportation Pedestrian Policy Guidelines*, Effective October 1, 2000.



SECTION 4 –
PEDESTRIAN SYSTEM PLAN



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SECTION 4 PEDESTRIAN SYSTEM PLAN

This section provides an overview of pedestrian system components including types of pedestrian corridors and opportunities within special focus areas. This section should be used in conjunction with the recommendations listed in Section 9.

SYSTEM OVERVIEW

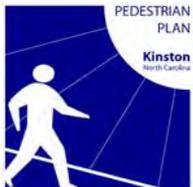
Currently, the pedestrian system in Kinston is limited and needs improvements, although the existing infrastructure provides a good foundation to build upon. For example, downtown has wide tree lined streets and wide sidewalks. However, hazardous intersection conditions restrict connectivity. Kinston's northwest neighborhoods boast beautiful tree lined streets and connected sidewalks, while the east and southeast lacks these pedestrian scale aesthetics. Kinston's western edge is sprawling, fragmented and auto dependant. This is contrary to the downtown and adjacent neighborhoods that are densely populated laid out on grid street patterns. This Plan will allow Kinston to develop a full system of sidewalks and greenways that will extend into surrounding areas providing opportunity for inter-municipal, county-wide and regional connections.

Sidewalks

Sidewalks provide pedestrians with a safe area to travel to and from destinations and are an integral component of a walkable community. If a community does not have sidewalks to destinations people will tend to access the destination by vehicle rather than walking. The width of sidewalks also affects walkability. If the sidewalk is only wide enough for one person to walk comfortably then families may not use them. Therefore, sidewalks with adequate width need to be constructed and existing arrow sidewalks need to be improved.

Multi-Use Trails and Greenways

Greenways and multi-use trails provide an excellent opportunity for functional daily and recreational pedestrian connectivity. Greenways can connect to destinations and points of interests including Kinston's historical sites, downtown and Vernon Park Mall, as well as low-density areas along the outer edges of the community. It is also important to consider their relationship to other facilities such as residential neighborhoods, commercial districts,



parcs, and schools. Providing links to these facilities from the greenway or trail will increase the overall connectivity of the pedestrian network.

Roads

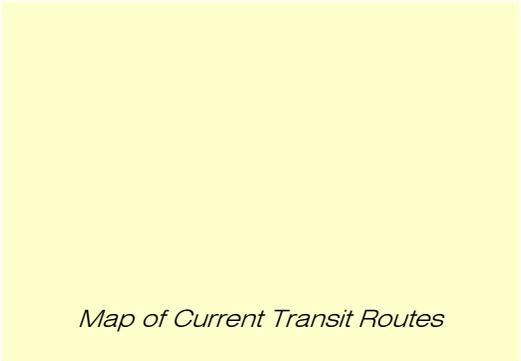
The alignment and cross-section of roads affect the overall pedestrian network. A multiple lane road with no pedestrian amenities or a narrow sidewalk along one side will see little to no pedestrian usage because the road environment is not pedestrian-friendly. Careful planning and enforcement of local ordinances will ensure proper placement of new roads in or around Kinston so they appropriately accommodate vehicle and pedestrian traffic.

Intersections

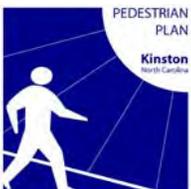
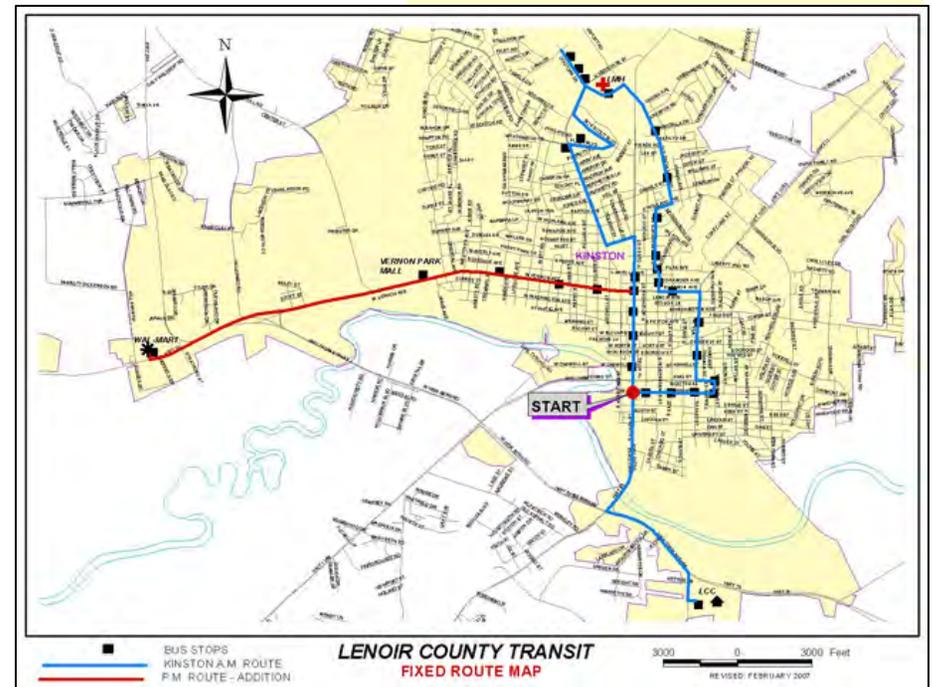
A community can construct sidewalks, greenways, or trails throughout their community, but without proper design and installation of intersections, the pedestrian network will fail. Safe crossing of intersections is essential for connectivity and pedestrian safety.

Transit

A successful transit system relies on pedestrian usage. When the system is difficult to access by walking, the service will not be used. For the Lenoir County Transit and Kinston's pedestrian systems to be successful there needs to be adequate pedestrian facilities and access to the existing transit stops. A continuous sidewalk, safe street crossings, benches, trees, and shelters make using the transit system more enjoyable.



Map of Current Transit Routes



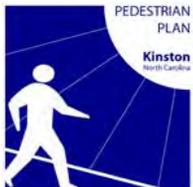
PEDESTRIAN ACTIVITY AREAS

This section identifies specific areas with existing pedestrian activities and areas where desired pedestrian facilities should be installed due to schools, parks and recreation, cultural/historic and tourism opportunities, and commercial and residential uses.

Corridor Identification

During the planning process, desired corridors of pedestrian travel along existing roads were determined based upon the length of continuous road, connectivity to destinations, and extent of existing sidewalk. Potential pedestrian projects were identified for these corridors. Map 4.1 shows the location of the following identified corridors:

- ❖ Queen Street
- ❖ Vernon Avenue (from Governor Caswell Memorial to MLK Blvd.)
- ❖ King Street (from South Queen Street to MLK Blvd)
- ❖ Herritage Street
- ❖ Hardee Road
- ❖ MLK Boulevard (from Vernon Ave. to King Street)
- ❖ Plaza Boulevard
- ❖ Carey Road (from Vernon Avenue to Rouse Road)
- ❖ Highland Avenue
- ❖ Washington Street
- ❖ Highway 70 (from Highway 258 to Highway 58)
- ❖ J.P. Harrison Boulevard
- ❖ Secrest Street
- ❖ Doctors Street
- ❖ Hillcrest Road (from Hwy 70 to Sandy Clay Road)



Points of Interest and Destinations

Points of origin and destinations within Kinston were identified and include typical driving trips from residential areas to destinations such as Lenoir Memorial Hospital, other medical agencies, schools, parks and recreation areas, downtown, and commercial areas.

Map 4.2 illustrates the trip generators and attractors within Kinston.



Grainger Stadium



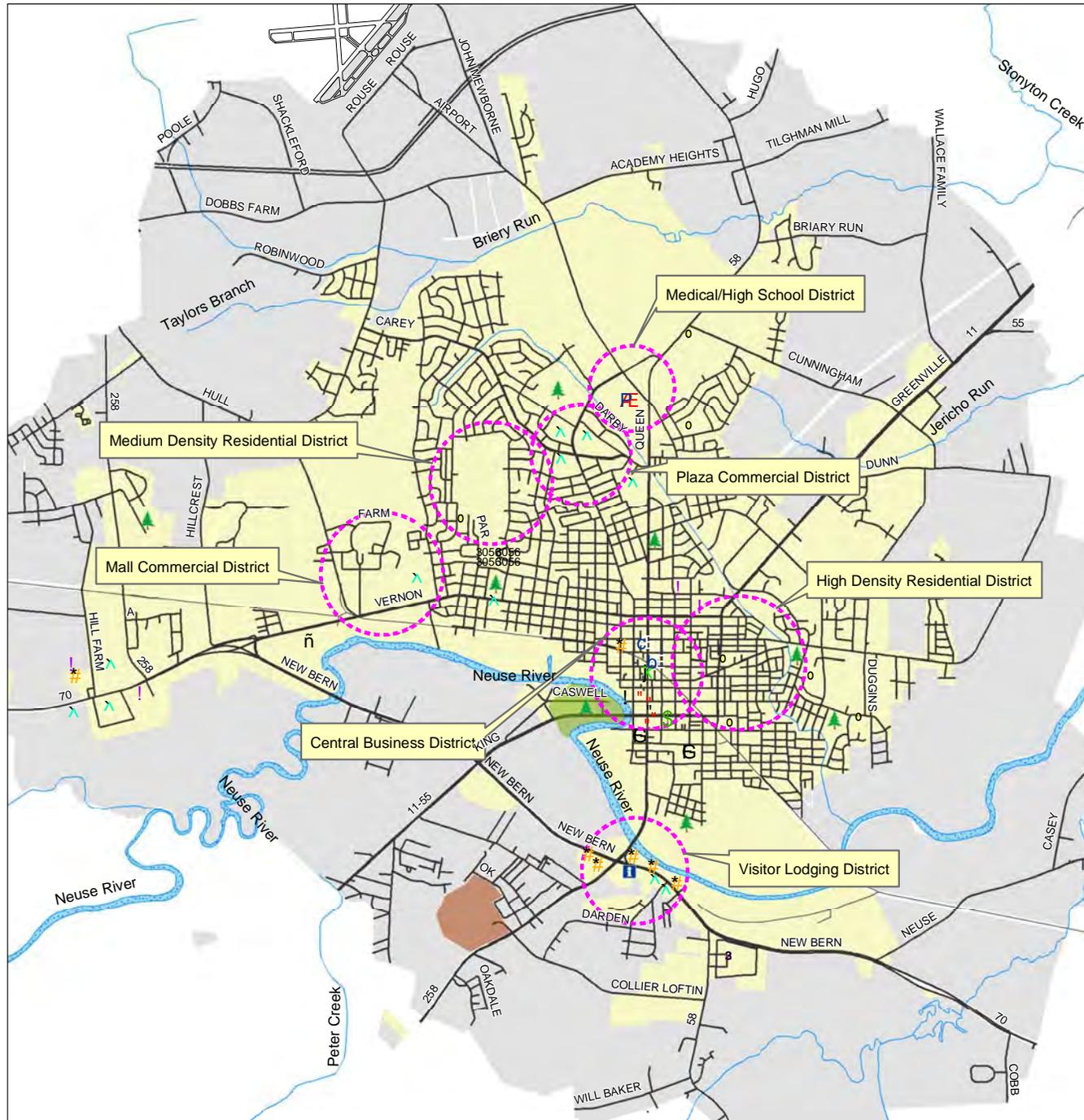
Neuseway Nature Park Facilities



*Civil War
Reenactment Site*

The City of Kinston Comprehensive Pedestrian Plan

Map 4.2 - Generators / Attractors / Development Districts



Legend

- Museums
- ! Entertainment
- " Lenoir County Courthouse
- 3 Lenoir Community College
- λ Shopping
- # Hotels
- K Kinston Enterprise Center
- 0 Public Schools
- \$ Police, Fire Station & Town Hall
- H Lenoir Memorial Hospital
- C Neuse Regional Library
- Development Districts
- Kinston Regional Jetport
- b The Depot on Queen Street
- ! Neuseway Park (CSS Neuse Museum)
- B Colonial Cemetary
- ñ Gov. Caswell Memorial
- Battle of Kinston Site
- Visitors Center
- ⌘ Parks
- Neuseway Nature Center
- Roads
- Streams
- Railroad
- Neuse River
- Kinston City Limits
- ETJ

2



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Study Regions

Due to Kinston's size and shape, the City was broken into three study regions (Southeast, North, and West) to further study and identify pedestrian needs and potential facilities.

Southeast Study Region

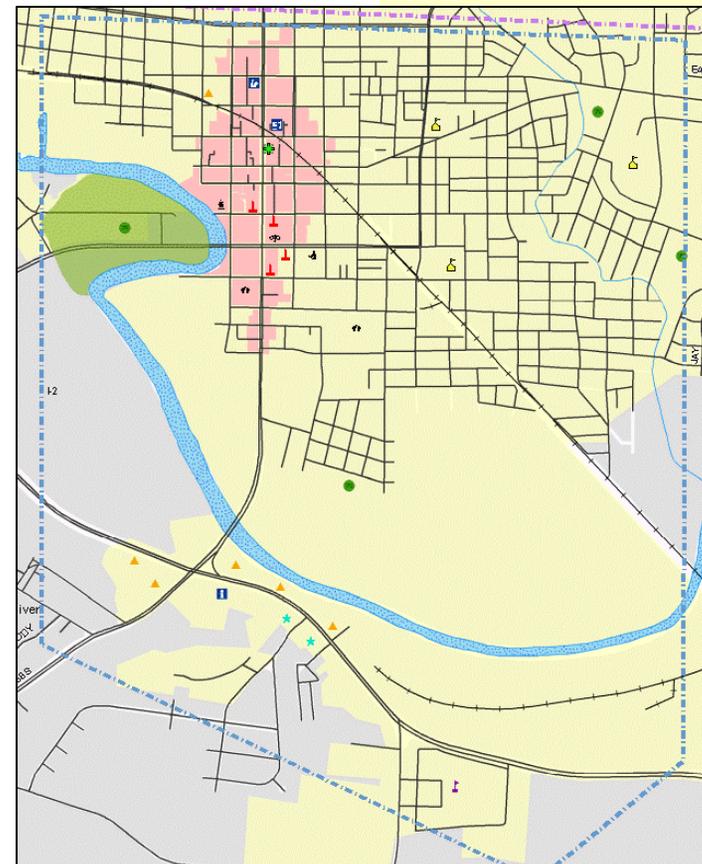
The southeast study region includes Kinston's downtown. The downtown is defined by the blocks along Queen Street, McLewean Street and Heritage Street starting south of Vernon Avenue to north of Springhill Street. The downtown is historically the hub of Kinston and is densely developed with retail shops, restaurants, professional businesses, public library, county courthouse, museums, an arts center, and a senior living facility.

The high density residential district is in this region and is defined by the blocks south of Vernon Avenue, east of downtown, and south to the Neuse River. This district includes the Sugar Hill, Trianon, and Mitchelltown neighborhoods. It is also home to several schools and parks. The southern portion of the district is the future site of the RetroGreen Park. Since the majority of this district was built on the grid street pattern there are sidewalks along the streets; however, there are pockets of missing sidewalks and sections in need of repair.

The visitor lodging district is located south of the Neuse River along Highway 70. The district consists of hotels and motels, commercial establishments, Lenoir Community College, and a pocket of residential. This district and the points of interest within it are isolated by Highway 70 and the Neuse River. There are no pedestrian facilities within this district.

With the majority of the points of interest located within this study area, this area holds the most opportunity for pedestrian connectivity as it serves a large population of residents and visitors. Improved connectivity, accessibility, and safety are needed between the points of interest and the various districts, as well as connections to the remaining community.

Southeast Study Region



Special Focus Pedestrian Areas

Kinston is the educational, industrial, and commercial center for Lenoir County. Kinston also has many natural amenities such as the Neuse River and associated natural landscapes. These amenities have drawn retirees, visitors, families and senior citizens to Kinston. In order to continue this trend, it is important that all areas of the City have proper connectivity to downtown, residential, and retail areas.

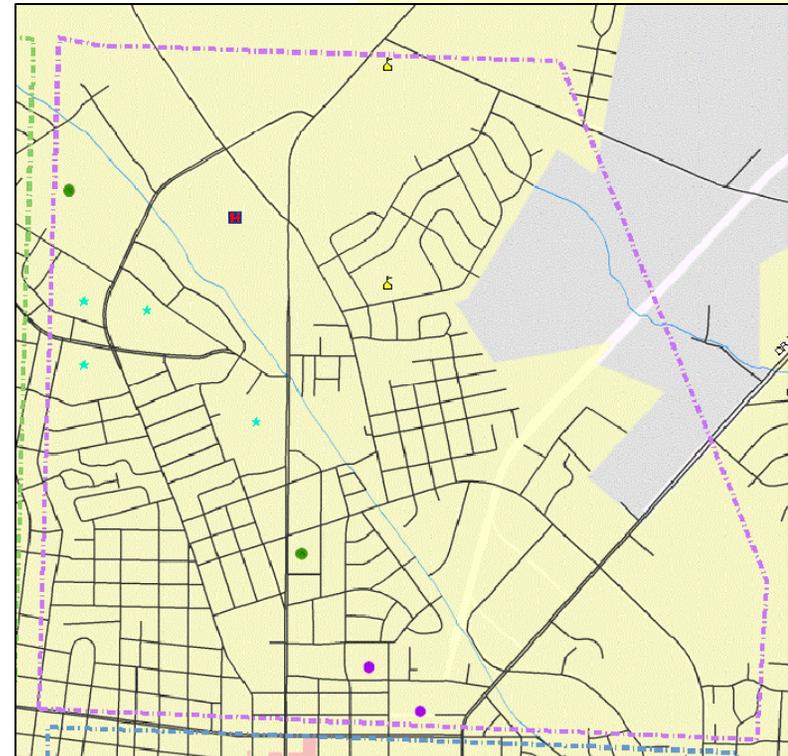
These unique opportunities discussed, were determined to be special projects that would involve pedestrian facilities components; however, the projects will take additional planning and recourses to accomplish, outside of this plan.

Kinston should focus on pedestrian improvements to existing areas of the city such as downtown. Kinston's downtown was once known as the 'Magic Mile' that was thriving with pedestrian activity. Now, it has become difficult for people to cross the wide streets and busy intersections. To restore downtown's once pedestrian-friendly environment, internal as well as external linkage to adjacent neighborhoods need improvement. Some special projects for the downtown would be:

1. A 'road diet' application for Queen Street.
2. The development and implementation of the streetscape plan that would include buried power lines, improved facade treatments, improved sidewalks, curb extensions, and plantings.
3. The construction of a Herritage Street plaza where pedestrians could socialize.
4. Improved transit stops to accommodate pedestrians.

Attention should also focus on the redevelopment of existing neighborhoods to ensure proper pedestrian connectivity and safety. A comprehensive redevelopment plan for these areas should be completed to ensure that the residents and leaders needs, concerns, and ideas for these areas are met. A component of the redevelopment plan should be the connectivity, accessibility, and safety of pedestrians. Converting the Peachtree Wastewater site into an agricultural education site that is connected to the Neuse Greenway system is also possibility.

North Study Region i



North Study Region

The north study region includes a portion of the major commercial district along Vernon Avenue, the Plaza Boulevard Shopping district, the medical and high school district, and a portion of the medium density residential neighborhoods. The major streets within this region include a portion of Vernon Avenue (north side), North Queen Street, Highland Avenue, a portion of Harrison Boulevard, MLK Boulevard, North Heritage Street, Plaza Boulevard, Greenbriar Road, and Carey Road.

This area has a variety of residential, commercial, medical, schools, and recreational uses. Several of the major corridors have sidewalks; however, there are pockets where sidewalks are missing.

Grainger Stadium is near the southern boundary of this region. This destination is only accessible by vehicle. Improved connectivity and accessibility to this facility as well as to the magnitude of commercial businesses, medical facilities, schools, and parks is greatly needed.

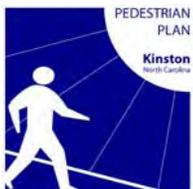
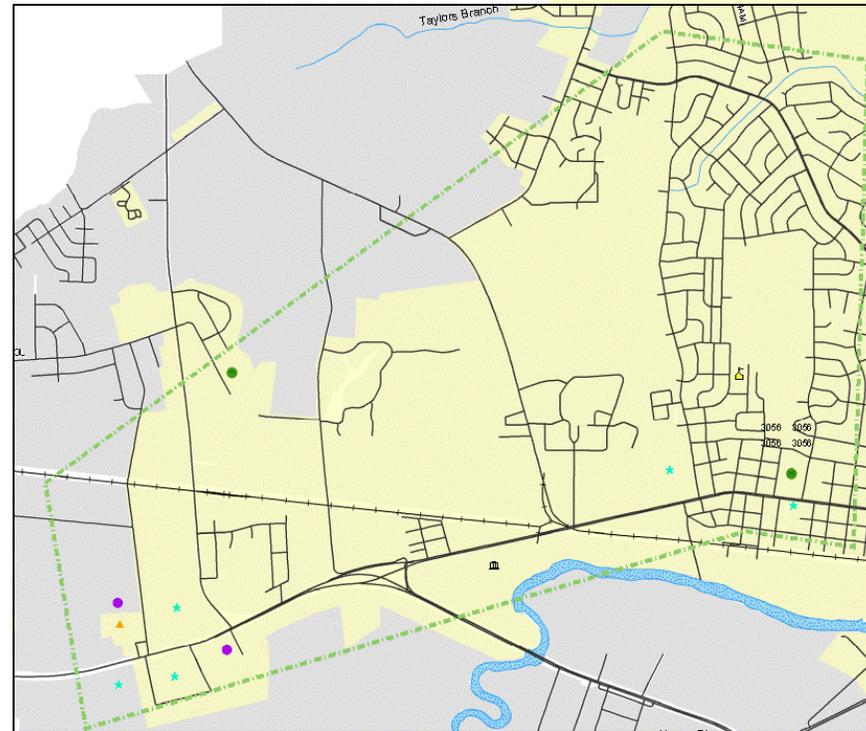
West Study Region

The west study region is comprised of the remaining major commercial district (Vernon Park Mall) and the medium density residential district. The Governor Caswell Memorial is the only point of interest in this region. The major streets include the western portion of Vernon Avenue, Hardee Road, Hull Road, Hillcrest Road, and Highway 70/258 Bypass.

The 'big box' stores are located on the outer-western edge of this region. Smaller commercial uses are also found in this area.

Besides limited pockets of sidewalks along Hardee Road and near Northwest Elementary School, this area is virtually only accessible by vehicle.

West Study Region



Development Districts

The development districts below have shown great increase in commercial and/or residential development in recent years and are identified based upon their primary usage.

The development districts are shown on Map 4.2 and include:

- ❖ Central Business District / Downtown
- ❖ Medical / High School District
- ❖ Medium Density Residential District (Kinston Country Club & Golf Course area)
- ❖ Major Commercial District – Plaza Blvd
- ❖ High Density Residential District
- ❖ Visitor Lodging District (Hwy 70 and Hwy 258 area)
- ❖ Major Commercial District – Vernon Park Mall

IDENTIFIED OPPORTUNITIES

During plan development there were many identified opportunities to improve the existing pedestrian network in addition to installing new facilities throughout the community to increase walking trips.

These following pedestrian opportunities can be implemented now or in the future. Map 4.3 displays these identified opportunities; however, not all opportunities (Highway to Heaven) are mapped due to their exact location hasn't been determined.

1. Vernon Park Mall Trail

- A pedestrian connection between Vernon Park Mall and Fairfield Park.



2. Kinston Loop

- A large loop around Kinston for connectivity. These trails could be used by organizations such as Relay for Life for their programs. A marketing campaign could also be introduced that awards t-shirts with slogans such as “I Walked the Kinston...Trail”.
- A “Serious” walkers trail to the airport that follows that partially follows the Lenoir County Driving Tour. The start of the “airport trail” can start at Rt. 70 and Hull Road north of Rouse Road.

3. MLK Redevelopment

- The MLK Blvd. corridor should be improved to incorporate mixed-use development.
- Redevelopment of this thoroughfare should create a more pedestrian-friendly environment for this area.
- MLK and Vernon Avenue should be designed as gateways into the City.
- The shirt factory site on MLK Blvd. and King St. should be rehabilitated.

4. Rochelle & Holloway Connection

- Provide pedestrian linkage from Rochelle Middle School to Holloway Park.

5. Power Plant and Neuseway Nature Center Loop

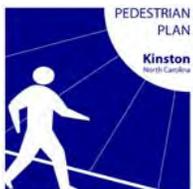
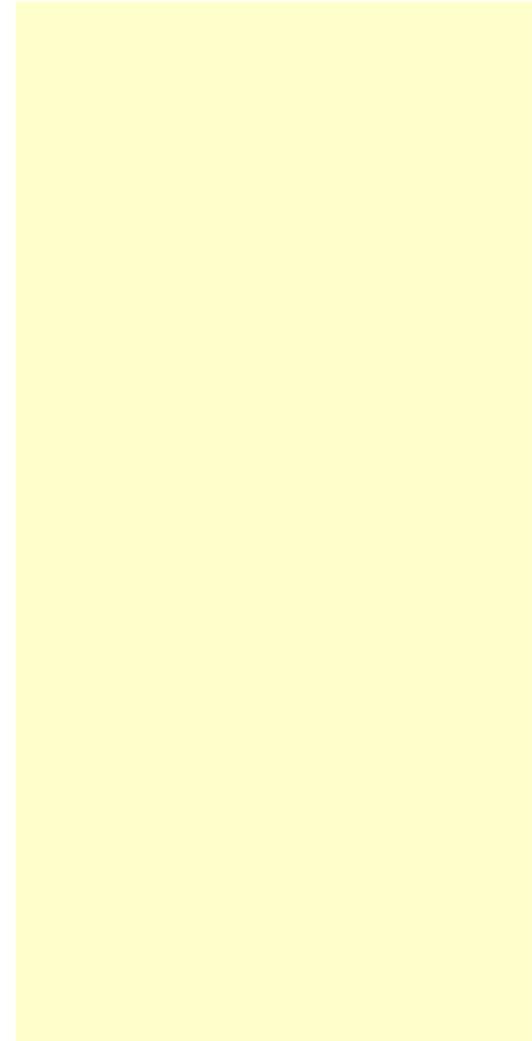
- Build two pedestrian bridges across the Neuse to Neuseway Nature Park and power plant creating a pedestrian loop.

6. NC 11 to Abandoned Landfill Trail

- Connect abandoned landfill to Bynum Park to Grove Park to NC 11.

7. Route 70 and 258 Pedestrian Crossing

- Improve intersection of Route 258 and 70 making it more pedestrian friendly.



8. Hwy 70 Trail

- Connect Comfort Inn and Hampton Inn to Kings Restaurant, Neuse Sports Shop, and Lenoir Community College (LCC) along HWY 70. Also connect LCC and McDonalds. A sidewalk isn't recommended but a trail behind stores would be acceptable.

9. Adkins Branch Pedestrian Bridge Replacement

- Replacement of the three pedestrian bridges along the Adkins Branch. At a community forum held in to address the new placement of these bridges. At the community forum held in October 2007 to address the new placement of these bridges, it has been agreed to keep the bridge directly behind Holloway center near Myrtle Drive.

10. Main Thoroughfare Connections

- Main thoroughfares need sidewalks such as Vernon, Washington (east of MLK), JP Harrison Blvd. and US 70.
- Add sidewalks along Carey Rd. where there are gaps. However, many citizens south of Highland Ave. are opposed to this idea because it would require tree removal and "loss" of property.
- Sections of Hardee Road without sidewalks should be connected.
- Sidewalks along Hillcrest Road can connect Kinstonian Heights and Country Acres neighborhoods with Sandy Clay Road, Banks School, Bethel Christian Academy, and Barnett Park/ Bill Faye Park.

11. Kinston High School and Lenoir Memorial Hospital Trail

- Develop trail from Kinston High School to Lenoir Memorial Hospital.

12. Country Club Loop

- The rectangle around the Country Club consisting of Stockton, Greenbriar, and Cambridge Streets is heavily used by pedestrians. The northern part of the route does not have sidewalks, but the roads are walkable.



13. Walk to School Trails

- Better connectivity with community schools to neighborhood amenities, especially connecting Rochelle Middle School with Holloway Park.
 - Teachers Memorial School – will be closed in the future
 - Rochelle Middle School
 - Southeast Elementary School
 - Northwest Elementary School
 - Sampson School
 - Bynum Elementary School – will be closed in the future
 - Kinston High School

14. Westgate Trail

- The Lowe's commercial site could serve as an internal walking opportunity at this complex. Traffic calming initiatives and encouragement programs may be worthwhile. Crossing at Hwy 70 would be difficult.

15. Caswell Memorial Connection

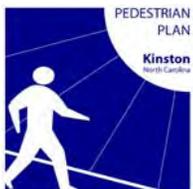
- Pedestrian connection between Caswell Center, Vernon Park Mall, and Caswell Park to serve employees and residents.

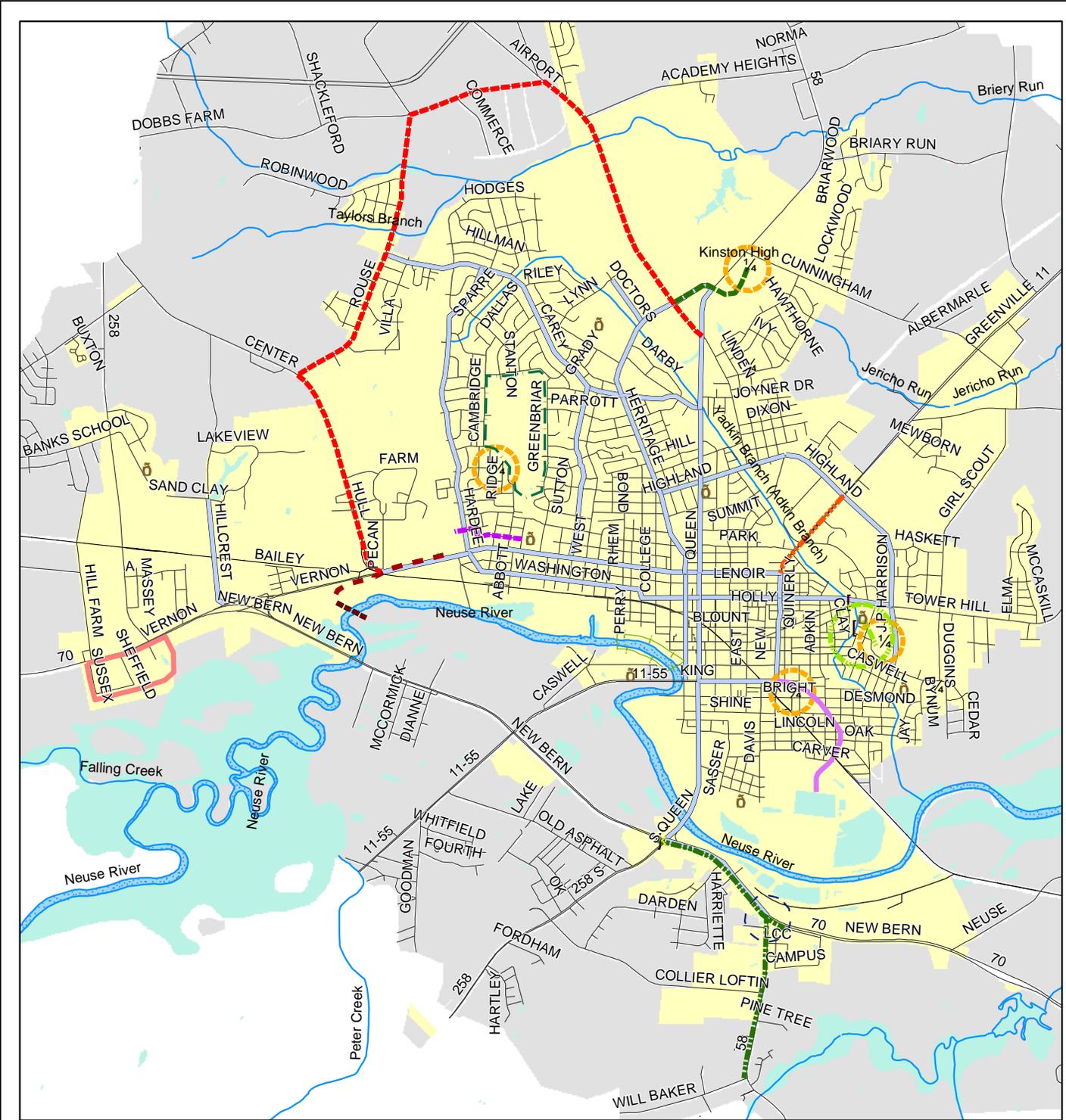
16. Caswell Memorial Pedestrian Bridge

- Pedestrian bridge connection to riverwalk loop at Caswell Park site.

17. Highway to Heaven

- A tour of area historic churches that also enables people to walk to church. (not mapped)





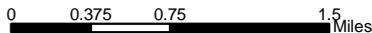
Legend

- Parks
- Public Schools
- Route 258 and 70 Pedestrian Crossing
- Adkins Branch Pedestrian Bridge Replacement
- Vernon Park Mall Trail
- Kinston Loop
- MLK Redevelopment
- Rochelle and Holloway Connection
- Power Plant and Neuseway Nature Center Loop
- NC 11 to Abandoned Landfill Trail
- Highway 70 Trail
- LCC Commercial Connection
- KHS to LMH Trail
- Country Club Loop
- Walk to School Trails
- Westgate Trail
- Caswell Connection
- Caswell Memorial Pedestrian Bridge
- Main Thoroughfare Connections
- Roads
- Streams
- Rail/Road
- Neuse River
- Water Bodies
- Kinston City Limits
- ETJ

The City of Kinston Comprehensive Pedestrian Plan

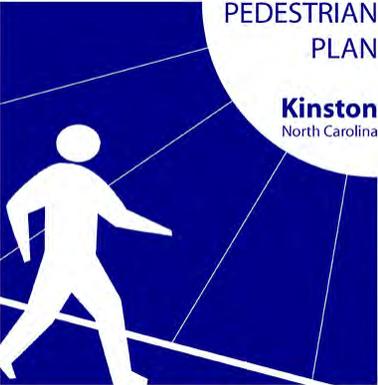
Map 4.3 - Identified Opportunities

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SECTION 5 –
FACILITY STANDARDS & GUIDELINES



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SECTION 5 FACILITY STANDARDS AND GUIDELINES

GENERAL PEDESTRIAN PLANNING AND DESIGN GUIDELINES

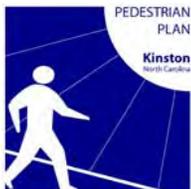
Design considerations for different pedestrian facilities are highlighted in this section. All pedestrian facilities must meet the guidelines of Americans with Disabilities Act (ADA). This requirement allows persons with disabilities and persons of all ages to enjoy the facilities. In addition to being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

- ❖ American Association of State Highway and Transportation Officials (AASHTO) *Guide for the Planning, Design and Operation of Pedestrian Facilities*
- ❖ Federal Highway Association (FHWA) *Manual on Uniform Traffic Control Devices (MUTCD)*
- ❖ *Design and Safety of Pedestrian Facilities*, A Recommended Practice of the Institute of Transportation Engineers (ITE)
- ❖ *Pedsafe: Pedestrian Safety Guide and Countermeasure Selections System*
- ❖ *Designing Sidewalks and Trails for Access, Part I and II*

TYPICAL CROSS-SECTIONS AND PEDESTRIAN DESIGN CONSIDERATIONS & SAMPLE COST ESTIMATES

Minimum design standards and guidelines are provided for:

- ❖ Sidewalks and Walkways
- ❖ Pedestrian Bridges
- ❖ Multiple- Use Paths or Trails
- ❖ Shared Streets
- ❖ Intersection Treatments
 - Marked Crosswalks
 - Mid-Block Crossings
 - Curb Ramps
- ❖ Traffic Calming Devices



- Curb Extensions
- Raised Intersections and Raised Crosswalks
- Chicanes
- Mini-Traffic Circles
- Roundabouts
- Raised Medians
- Crossing Islands
- Roadway Narrowing
- ❖ Transit Stop Treatments
- ❖ Signs and Signals
- ❖ Street Lighting, Landscaping, and Pedestrian Furniture
- ❖ Commercial Development Guidelines
 - Driveway Design
 - Parking Lots
- ❖ Residential Development Guidelines

Sample cost estimates are provided after each facility guideline and a compilation of cost estimates is provided in Appendix G.

Sidewalks and Walkways

All new and existing roadways should include sidewalk or walkway for people to safely walk. AASHTO identifies seven attributes of well-designed sidewalks:

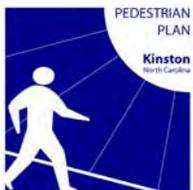
- ❖ **Accessibility** - Sidewalk networks should be accessible for all users and meet ADA requirements. All street intersections or mid-block crossings should be retrofitted with adequate curb ramps.
- ❖ **Adequate Width** - Sidewalks should be wide enough to accommodate the volume of people using the facility. Higher volume sidewalks should have larger widths while underused areas can have standard widths. For instance, sidewalks to and around schools, parks, and downtown need to be wider.
- ❖ **Safety** - Sidewalks should provide a sense of security and predictability. Pedestrians should not feel at risk due to traffic adjacent to them. Examples include placement of a vegetated buffer between the

Purpose of Sidewalks & Walkways:

- ❖ Provides a safe refuge for pedestrians from motorists
- ❖ Connects destinations
- ❖ Increases walking trips



*Sidewalk along Highway 70
-Morehead City, NC*



sidewalk and travel lane and installation of barrier between pedestrian lane and traffic lanes on bridges.

- ❖ *Continuity* – Sidewalks should be continuous and in good to excellent condition. If a pedestrian must walk around sections of sidewalk that is in disrepair, they are unlikely to use that sidewalk again.
- ❖ *Landscaping* - Plantings and street trees along the roadside would contribute to the overall psychological and visual comfort of pedestrians. However, there should be care taken in placement of landscaping to avoid blocking sight distance, reducing vertical and horizontal clearance of sidewalk, and creating potential hiding places for attackers.
- ❖ *Social Space* - Sidewalks should be places for people to interact. The use of street furniture, street-level lighting, and street cafes are ways to create these social spaces.
- ❖ *Quality of Place* - Sidewalks should contribute to the character of neighborhoods and businesses and help strengthen their identity. This can be done with different sidewalk treatments and width.

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

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

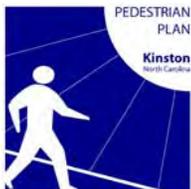
Buffers along sidewalks can improve pedestrian safety and scenery. The buffer width is the distance between the sidewalk and adjacent roadway. Landscaped buffers can be used to place utility poles, street lights, and serve as



*Brick sidewalk treatment
- New Bern, NC*



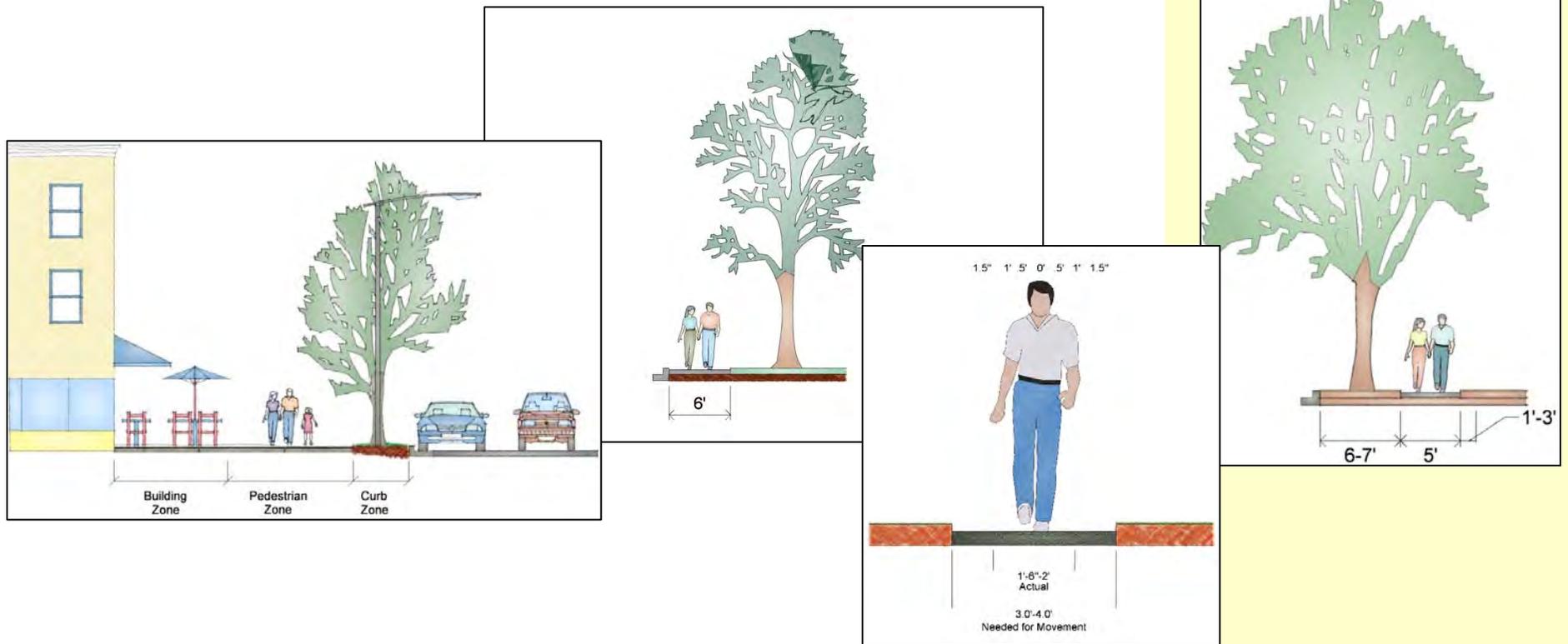
*Stamped sidewalk treatment
- New Bern, NC*



a splash guard for passing vehicles. The ideal buffer width on local and collector streets is two to four (2-4) feet. Along major thoroughfares, the buffer width should be increased to five to six (5-6) feet.

Concrete curb and sidewalk cost approximately \$15/linear foot and \$11/square foot for walkways without curb. Asphalt curbs and walkways are less costly but require more maintenance per year.¹

Cross Sections of Various Sidewalks



Pedestrian Bridges

Pedestrian bridges are used to cross obstacles which interfere with pedestrian movement such as water, roadways and steep terrain. These structures are not only functional; they can also be designed to enhance the scenic value of a landscape. To be successful, pedestrian bridges must be designed to accommodate a variety of users such as people with disabilities, bicyclists, walkers and runners. Pedestrian bridges must comply with to standards set by the Americans with Disabilities Act Accessibility Guidelines (ADAAG).

In areas with bridge spans of less than 30 ft. a typical footbridge may be built. These bridges may be prefabricated or custom designed by engineers. It is best that bridges spanning more than 30 ft. be designed by professional engineers. Bridge length affects the size, number and loading of its foundation. There are many types of pedestrian bridge types; these can range from simple slabs to suspension. Once a bridge is chosen and built, it must be maintained. All bridges deteriorate over time due to use and decay. To protect the bridge, it should be periodically inspected and repaired.



Purpose of Pedestrian Bridges:

- Provides pedestrian connection across environmental and man-made obstacles
- Provides safe options for pedestrians to reach recreational areas

*Pedestrian bridge
-Hendersonville, TN (top photo)*

*Pedestrian bridge
-Humber River Bridge at Lake Ontario
(bottom photo)*

Multiple-Use Paths / Trails

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

- ❖ A minimum width of ten (10) feet and twelve (12) feet for two directional paths
- ❖ A minimum width of six (6) feet for one direction paths

Purpose of Multi-Use Paths:

- Multiple Users
- Can utilize old railroad beds



- ❖ A two (2) foot graded area adjacent to both sides of the trail with a maximum 1:6 slope
- ❖ Be clear of vertical obstructions, such as tree limbs lower than eight (8) feet to allow for safe under passage
- ❖ On sloped landscapes, have grades that do not exceed 5% with a graduated scale up to 11% or more for short distances
- ❖ A cross slope of less than 2%
- ❖ A minimum of thirty to fifty (30-50) feet on curved paths
- ❖ Ninety (90) degree angles should be avoided for safety reasons
- ❖ A separation of at least five (5) feet from roadways or a forty-two (42) inch high physical barrier
- ❖ Carefully planned path-roadway intersections
- ❖ Signage and measures at all intersections to avoid crashes between pedestrians, bicyclists, and motor vehicles

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

When adjacent to canals, ditches or slopes steeper than 1:3, a wider separation of five (5) feet from the edge of the path pavement to the top of slope is desirable. The vertical clearance should be a minimum of 8 feet; it may be greater (10 feet) if needed to provide for maintenance and access of emergency vehicles.²

The trail design needs to take into consideration user experience, serious bicyclist speeds and environmental conditions; however, the minimum design speed should be 20 mph.

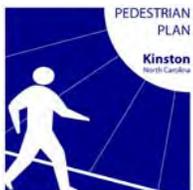
Land acquisition costs, structure needed, type of trail surface, width of trail, and facilities for trail users contribute to the cost of developing a trail system. Construction of a soft surface trail alone is approximately \$40,000 per mile and construction of a paved trail can be more than \$1,000,000 per mile in an urban area.³



*A multiuse trail entrance off road
- Williamston, NC*

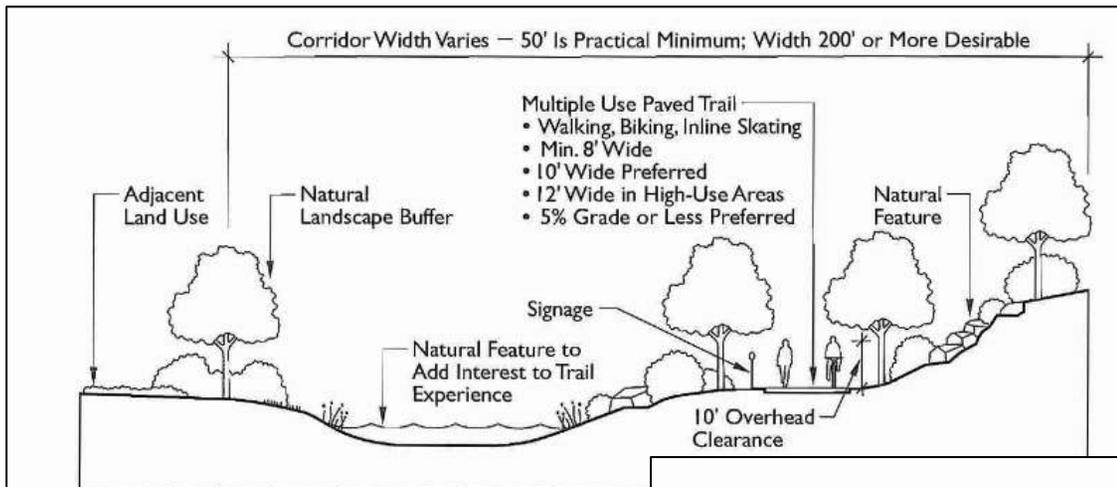


*An asphalt multi-use trail
- Greenville, NC*



The following images illustrate the different types of trails. A destination trail is used when a trail is located away from vehicular traffic in a more natural environment or park-like setting. This type of trail generally has large landscaped or native buffer between it and adjacent land uses. A linking trail is used with road right-of-ways to provide a link from residential areas to parks or other community points of interests. A minimum buffer between road and adjacent land uses is used.

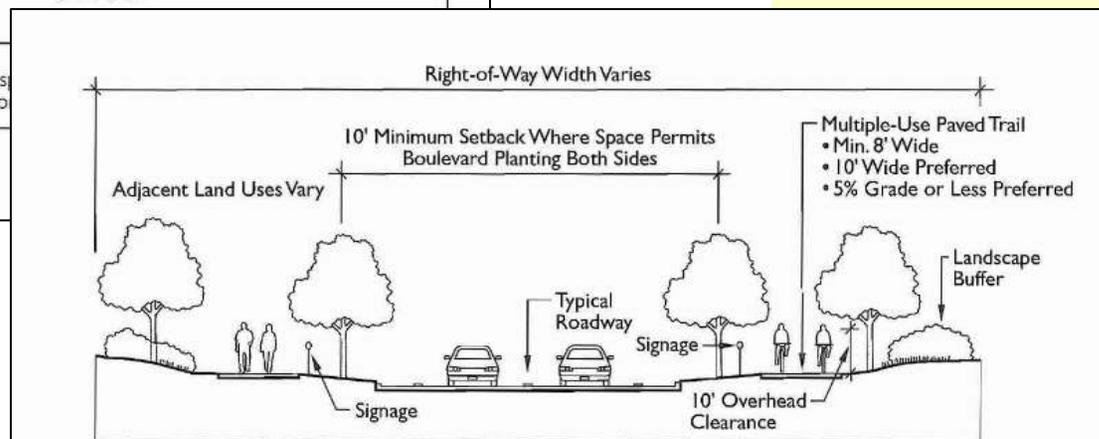
For further guidance on multi-use trails see North Carolina Division of Bicycle and Pedestrian Transportation website at the following: http://www.ncdot.org/transit/bicycle/projects/project_types/Multi_Use_Pathways2.pdf



Destination trails emphasize recreational experience in a natural open space, way, natural area, parkway, or designated trail corridor and typically accommodate...

DESTINATION TRAIL

Source: Brauer & Associates, Ltd.

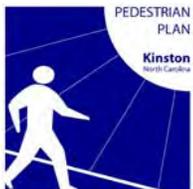


Linking trails emphasize safe travel for pedestrians to and from parks and around the community. They are generally located within road right-of-ways or utility easements, but can also be through parkland.

LINKING TRAIL

Source: Brauer & Associates, Ltd.

Cross Sections of a Destination Trail and a Linking Trail (APA Planning & Urban Design Standards)

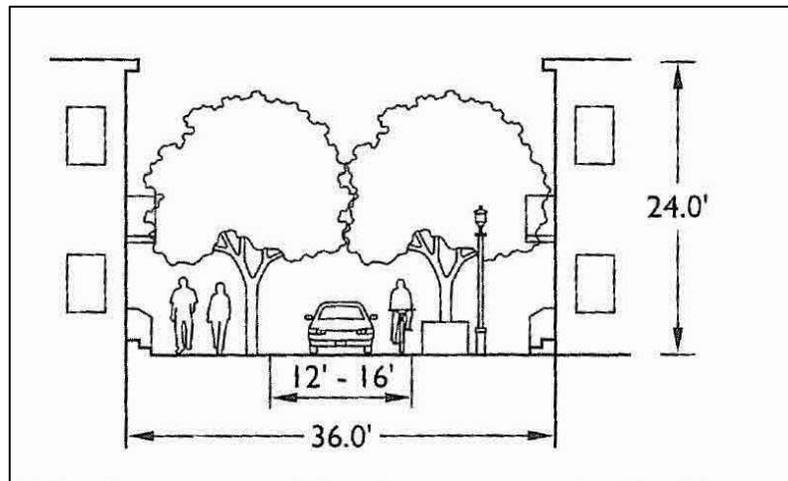


Shared Streets

A shared street, also known as “green streets” or “woonerf” which is a Dutch term meaning “Street for living,” is a common space created for pedestrians, bicyclists, and low-speed motor vehicles. These are typically narrow streets without curbs and sidewalks. Vehicles are slowed to very low speeds (usually below 10 mph) by placing trees, planters, parking areas, and other obstacles in the street, resulting in the motorist becoming the intruder. This treatment results in the street becoming available for public use by local residents or businesses. A shared street can be a residential street or it can be a street in a commercial area. In commercial areas, shared streets are often populated by restaurants, cafes, merchant displays, street vendors, and other outdoor commercial uses.

Careful consideration must be given to provide access by emergency vehicles, school buses, and other service vehicles. A shared street is generally not appropriate where there is a need to provide nonresident motorists with access to services or through travel. The safety of children must also be addressed with designing the street. A possible opportunity for a shared street in Kinston is the neighborhood around the Country Club Golf Course, where no pedestrian facilities exist.

Retrofitting an existing street into a shared street can be expensive; however there is generally no extra cost if designed into the original construction.⁴



Purpose of Shared Street:

- Creates very low automobile volume, primarily on local access streets
- Create a public space for social interactions, commercial activities, or children's play



*A shared street application
- Arlington, VA*

*A shared street
- Courtesy of Dan Burden
(www.pedbikeimages.org)*

*Illustration of a "woonerf"
- Courtesy of Peter Swift
P.E. (APA Planning & Urban Design Standards)*

Intersection Treatments

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

Bollards

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



Purpose of Marked Crosswalks:

- Warning device for motorists to expect pedestrian crossing.
- Indicate desired crossing locations for pedestrians.
- Improves visibility of pedestrians to motorists.

Crosswalk with a longitudinal treatment - Arlington, VA

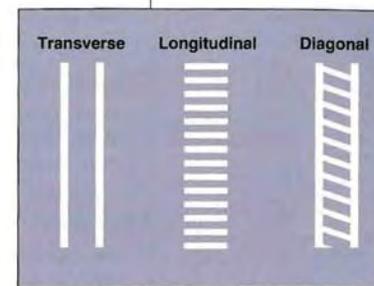
Marked Crosswalks

Marked crosswalks are used to indicate appropriate locations for pedestrians to cross streets. These crosswalks are typically placed at signalized intersections and other selected locations. It is important to ensure that crosswalks are visible to motorists. According to the FHWA, the best material for crosswalks is inlay tape. Inlay tape can be applied to new or repaved streets and is highly reflective, long lasting, slip resistant, and maintenance free. Although this material is more expensive up front than traditional paint or thermoplastic, it is more cost effective over the long run.

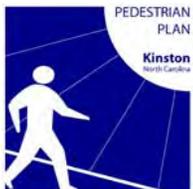


Alternative crosswalk markings - Arlington, VA

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



*Crosswalk marking patterns
Courtesy of FHWA*



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

Installing a regular striped crosswalk can cost \$100, \$300 for a ladder crosswalk and \$3,000 for a patterned concrete crosswalk.⁵ There are no extra costs when the stop line is installed on new paving or as part of repaving projects. The use of words such as “STOP HERE” can assist in or replace the recessed stop line. The cost is low if applied as a retrofit.⁶

Mid-Block Crossing

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

- ❖ Have fast speeds, or large vehicle or pedestrian traffic volumes
- ❖ Where children, people with disabilities, or elderly people would cross
- ❖ Have complex vehicle movements
- ❖ Offers insufficient time to cross because of traffic demands
- ❖ Where the crossing exceeds 60 feet

This crossing should not be used on roads with speeds greater than 40 mph. These crossings are good to supplement intersection crossings and may even be an alternative for intersections with heavy traffic volumes. Spacing between mid-block crossings and intersections should not exceed six hundred sixty (660) feet with adequate sight distance for both pedestrians and vehicles. These crossings can not be installed within 300 feet from another signalized crossing point. Mid-block crossings require advanced auto-warning signs and

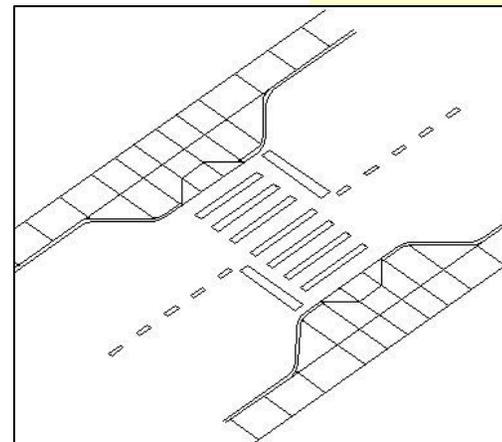


*A mid-block crossing.
- Courtesy of Dan Burden
(pedbikeimages.org)*



Purpose of Mid-Block Crossing:

- Creates an alternative pedestrian crossing, especially at non-signalized locations
- Enhances a popular pedestrian crossing



*Illustrations of a
mid-block crossing
with curb extensions
- Courtesy of FHWA*

good visibility for both driver and pedestrian. The utilization of MUTCD is useful in regards to warrants for crossing signalization. Within the median, any landscaping or signs should not obstruct the view of oncoming traffic.

Installing a mid-block crossing can range from \$4,000 to \$30,000 depending upon material used and if landscaping is provided.⁷

Curb Ramps

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

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

Retrofitting an existing curb or constructing a new curb is approximately \$800 to \$1,500 per curb ramp.⁸

Purpose of Curb Ramps:

- Creates accessible sidewalks and walkways
- Conforms to the Disabilities Act (ADA) guidelines



*Installed detectable truncated domes on a ramp
- Arlington, VA*

Traffic Calming Devices

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

Curb Extensions

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

Curb extensions vary in costs from \$2,000 to \$20,000 per corner, depending upon design and site conditions. Costs increase when the curb extension area is large and drainage, special pavement, street furnishings, and vegetation are included in the project.⁹



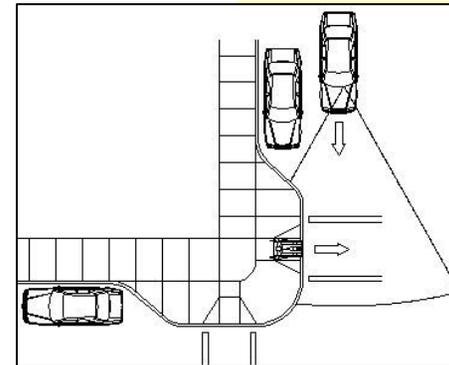
*Curb radii reduction
Courtesy of Dan Burden
(pedbikeimages.org)*



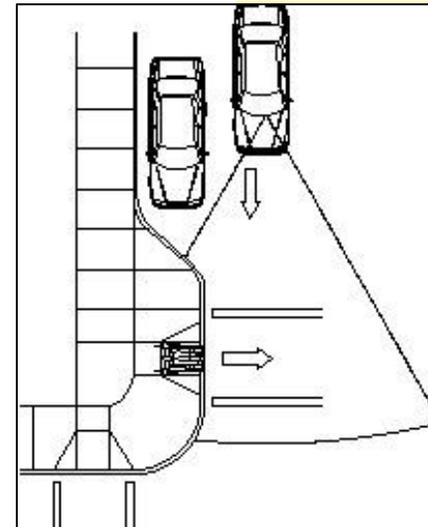
*Installed curb extensions
- Arlington, VA*

Purpose of Curb Extensions:

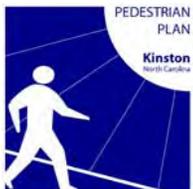
- Improves pedestrian safety
- Encourages pedestrians to cross at designated locations
- Prevents motorists from parking on corners.



*Illustration of
full curb extension
Courtesy of FHWA
(APA Planning
& Urban
Design Standards)*



*Illustration of a
partial curb
extension
Courtesy of FHWA
(APA Planning &
Urban Design
Standards)*



Raised Intersections & Raised Crosswalks

A raised intersection creates a speed table for an entire intersection. Raised crosswalks are typically installed on two lane streets with posted speeds of less than 35 mph. To construct these intersections, ramps should be provided at each intersection approach and leveled to the sidewalk level. This design enables people to cross the road at the same level as the sidewalk. This design is helpful for impaired pedestrians that cannot detect curb edges. An alternative to the raised intersection is a raised crosswalk. These crosswalks are usually ten to fifteen (10-15) feet wide. Both methods require motorists to slow down and yield to pedestrians. The placement of tactile warning strips at the edges enables site impaired persons to detect the crossing. These treatments should not be used if the line of sight is restrictive or on steeply sloped streets. Several raised crossings on emergency routes should not be used to ensure that these services are not disrupted. When special paving materials are used, the speed tables, raised crosswalks, and intersections can be an urban design element.

Installing a raised crosswalks/speed table cost approximately \$15,000 to \$100,000 depending upon drainage conditions and materials used. A raised intersection is highly dependent on the size of the roads but typically runs between \$25,000 to \$200,000 (depending upon drainage conditions and materials used).¹⁰

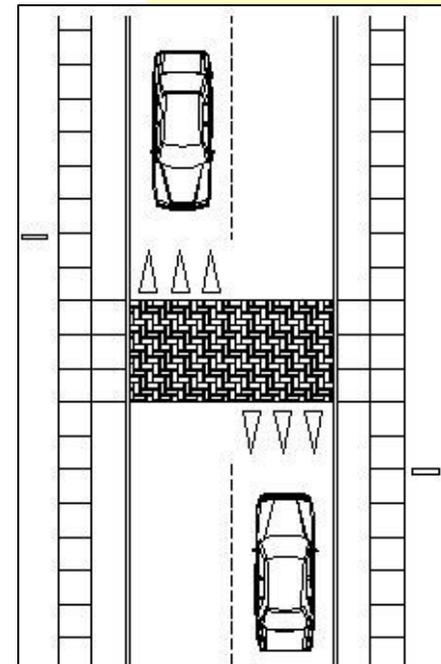
Purpose of Raised Intersections & Raised Crosswalks:

- Reduces vehicle speeds
- Enhances pedestrian environment and pedestrian crossings

*Illustration of a raised crosswalk
Courtesy of FHWA
(APA Planning & Urban Design
Standards)*



*Raised crosswalk and a raised intersection
Courtesy of ITE Pedestrian Bicycle Council
(www.pedbikeimages.org)*



Chicanes

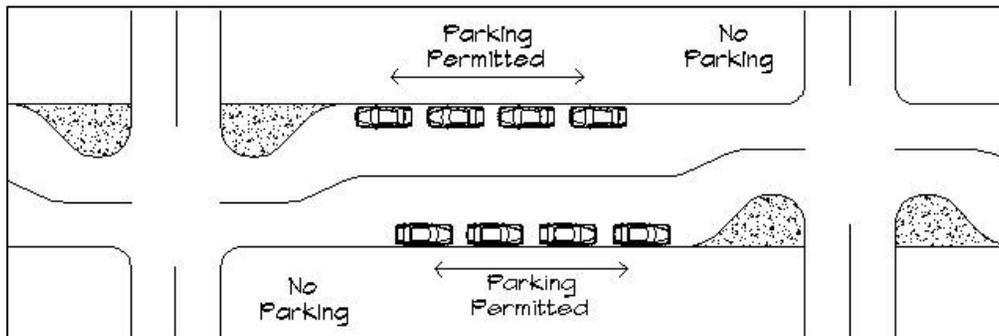
The use of chicanes creates a horizontal diversion of traffic and can be gentler or more restrictive depending on the design. Chicanes can be used to shift or divert the travel lane, resulting in lower traffic speeds. To effectively reduce speed, the desired taper length should reflect the desired speed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

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

Another method of restricting travel lanes is using a series of curb extensions to narrow the street forcing traffic to slow down. Such treatments are intended for use on residential streets with low traffic counts. If no restriction exists, chicanes can be installed on streets with higher traffic volumes, such as collectors or minor arterials.

To ensure safety and mobility of pedestrians, maintaining a good sight distance when planting vegetation is important.

The cost of landscaped chicanes is approximately \$10,000 (for a set of three chicanes) on an asphalt street and \$15,000 to \$30,000 on a concrete street. Drainage and utility relocation often represents the most significant cost consideration.¹¹



*Illustration of Chicanes
– Courtesy of APA Land Planning & Urban Design Standards*

Purpose of Chicanes:

- Reduce vehicle speeds
- Reduce on-street parking
- Add more green landscaping to a street – improving pedestrian friendliness



*Installed chicanes
– Arlington, VA*

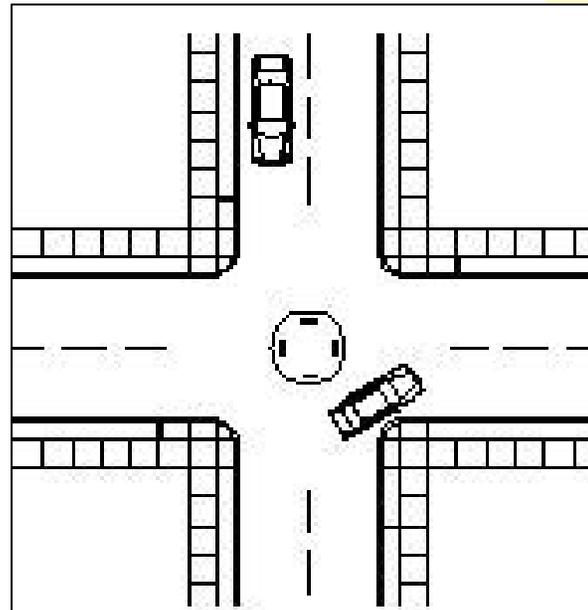
Mini-Traffic Circles

When traffic calming along a residential or minor street is needed, the installation of a mini-circle or a neighborhood traffic circle is an option. These circles are raised circular islands constructed in the center of street intersections. The circles assist in reducing vehicle speeds by forcing motorists to maneuver around them. Adequate signs are needed to direct motorists to proceed around the right side of the circle before passing through or making a left turn. The raised center of the circle is usually landscaped with low lying vegetation.

A landscaped traffic mini-circle on an asphalt street cost approximately \$6,000 and is \$8,000 to \$12,000 for a landscaped mini-circle on a concrete street.¹²



*An installed mini-circle in Michigan
Courtesy of Dan Burden
(www.pedbikeimages.org)*



*Illustration of a mini-traffic circle
Courtesy of
(APA Planning & Urban
Design Standards)*

Purpose of Mini-Traffic Circles:

- Manages traffic at intersections where volumes do not warrant a stop sign or signal
- Reduces crashes at local street intersections
- Reduces vehicle speed through intersection

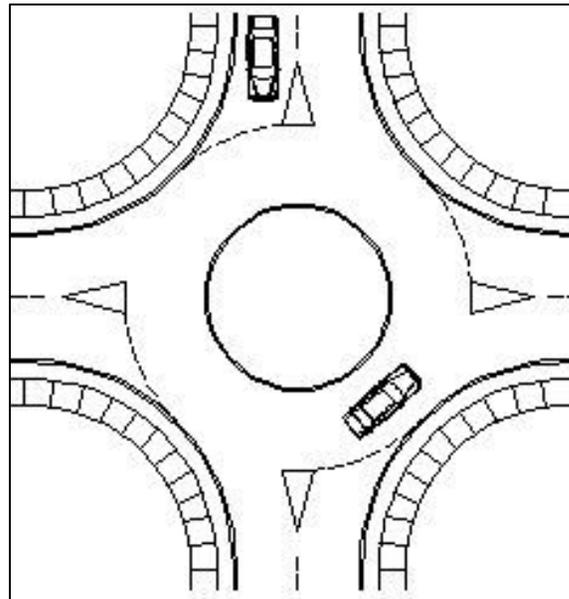
Roundabouts

A roundabout is a circular intersection that makes traffic maneuver around the circle in a counterclockwise direction before turning right onto the desired street. Roundabouts are not signalized, requiring all vehicles to slow down and traffic yields to on-coming traffic.

Several considerations and safety elements must be addressed before installation:

- ❖ Sufficient amount of right-of-way
- ❖ Not ideal for an intersection of two multi-lane roads
- ❖ Accommodations for emergency and service vehicles
- ❖ Installation of splitter islands to slow vehicles and allow pedestrians to cross one direction of travel at a time
- ❖ Reduction of barriers for pedestrians with vision impairments is needed – wayfinding and gap selection cues

A landscaped roundabout for neighborhood intersections varies widely and can range from \$45,000 to \$150,000 and up to \$250,000 for arterial street intersections, not including additional right-of-way acquisition. However, roundabouts have a lower ongoing maintenance costs than traffic signals.



*Illustration of a Roundabout
- Courtesy of FHWA
(APA Planning & Urban Design Standards)*

Purpose of Roundabout:

- Improve safety at intersection, particularly those experiencing large number of angle collisions
- Convert signalized intersection to improve traffic flow
- Reduce speeds at an intersection
- Create a gateway into an area



*A roundabout application
- Courtesy of Dan Burden
(pedbikeimages.org)*

Raised Medians

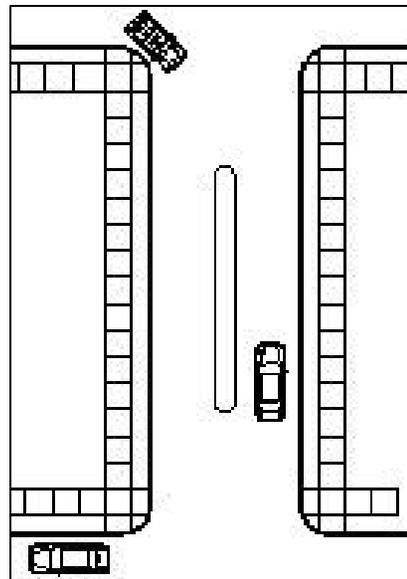
Raised medians are raised barriers located in the center portion of the street and are most useful on high volume, high speed roads. The median can serve as a landing place for pedestrians crossing a street mid-block or at an intersection. The median can have vegetation for additional visual benefits.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

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

Adding a raised median is approximately \$15,000 to \$30,000 per hundred (100) feet, depending on the design, site conditions, and whether the median can be added as part of a utility improvement or other street construction project.¹³

Purpose of Raised Medians:

- Manages traffic
- Provides comfortable left-hand turning pockets with fewer or narrower lanes
- Provides pedestrian refuge for crossing
- Provides space for street landscaping and trees



*Illustration of a
Raised median
Courtesy of FHWA
(APA Planning & Urban Design
Standards)*



*A raised median installed
- Boston, MA*

Crossing Islands

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

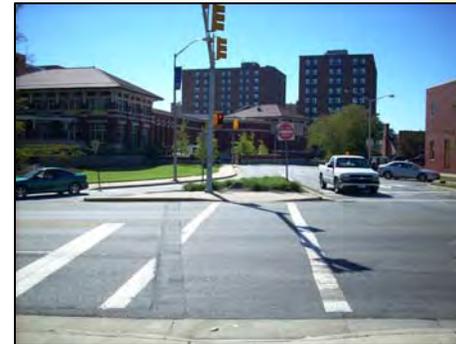
Crossing islands should be considered at uncontrolled locations where there are no traffic signals or stop signs and on larger streets with multi-traffic lanes as a supplement to the pedestrian crosswalk. If the street is wide enough, these islands may be used with curb extensions to further enhance pedestrian crossings. AASHTO recommends that median/crossing island be at least 20 ft. in length and 6 ft. in width. They also recommend a 4 ft. square landing within the island to accommodate wheelchair users.

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

A crossing island can run from \$6,000 to \$9,000. The cost for installing a raised concrete pedestrian refuge island with landscaping is approximately \$10,000 to \$30,000. The least costly alternative is an asphalt island or one without landscaping.¹⁴

Roadway Diet

A road diet is an effective method of improving pedestrian friendliness, safety, and traffic calming along streets. The street is physically narrowed or the street is given the perception of being narrowed. There are several different methods of physically narrowing the roadway:



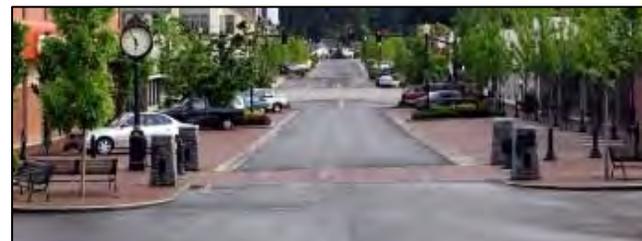
Purpose of Crossing Islands:

- Enhances pedestrian crossings, especially at unsignalized crossing points
- Reduces vehicle speed
- Highlights pedestrian crossing

A crossing island in Greenville, NC

Purpose of Roadway Narrowing:

- Reduces vehicle speeds
- Increases pedestrian safety
- Redistributes space to other users
- Reduces street maintenance costs



*A roadway narrowing installation
– Arlington, VA*



- ❖ Lane widths can be reduced and excess asphalt striped with a bicycle lane or paved shoulders
- ❖ Travel lanes are removed
- ❖ Sidewalks and landscaped areas are extended or on-street parking is added within the former curb lines

The physical reduction of street widths is usually done along residential streets; however, if a traffic analysis is conducted and lane reduction is determined to be appropriate then the use can be applied on any street.



A nonphysical method of street narrowing is planting trees along the street, resulting in a sense of spatial enclosure what will promote reduced vehicle speeds. The use of curb extensions, on-street parking, separated walkways with planting strips, and bike lanes also make the street appear narrower.

Adding striped shoulders or on-street bike lanes are \$1,000 per mile if the old paint does not need to be replaced. The cost of restriping a mile of street to bike lanes or reducing the number of traffic lanes to add on-street parking is \$5,000 to \$20,000 depending upon the number of old lane lines to be removed.¹⁵

Transit Stop Treatments

Since transit users are also pedestrians, it is critical that transit stops and the surrounding environment be safe and accessible for every transit user.

AASHTO provides guidelines for transit connections. The minimum length of a typical loading/unloading zone is normally eighty (80) feet depending upon the bus size. These zones should be located at or near intersections to discourage unsafe mid-block crossings. All newly constructed transit stops must be accessible to all users; therefore an eight (8) foot by five (5) foot landing pad is required by the American Disabilities Action Accessibility Guidelines. A continuous sidewalk the length of the transit stop is also suggested. All obstacles, such as utility poles, signs, and fire hydrants should not interfere with access to the stop.

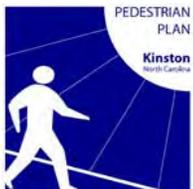
The FHWA is currently developing a guideline manual, *Pedestrian Safety Guide for Transit Agencies*, covering actions to improve pedestrian safety and access, strategies for developing partnerships, tools for identifying



Transit amenities - Greenville, NC

Purpose of Signs & Signals:

- Provides regulations or information for road users as to what to expect and how to behave.
- Indicates appropriate time for pedestrians to cross an intersection.



pedestrian safety and access issues, and strategies to increase the safety of pedestrians accessing transit services. This document should be available in 2008.¹⁶

Some treatment methods include additional signage, curb-ramps, improved crosswalks, extension of sidewalks/walkways, on-street markings to clearly designate the transit stop location, a landing/waiting pad, and a shelter with a minimum clear floor area of 2.5 feet by 4 feet. These improvements vary in costs from \$1,000 to \$10,000 depending upon the type of improvement.¹⁷

Signs



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



Regulatory signs provide helpful information to motorists and pedestrians unfamiliar with an area and give pedestrians the ability to cross an intersection safely. Signs that restrict right turns on red can be used to help pedestrians cross intersections. Motorist often drive onto crosswalks to check traffic before turning without regard to pedestrians. These regulatory signs should only be used sparingly. There are concerns that this signage causes increased turning

on green and anxious drivers. There are several different regulatory signs to assist in warning or prohibiting actions by motorists and pedestrians and they all must be in compliance with MUTCD. Regulatory signs can range from \$50 to \$150 per sign.¹⁸



Signals

Traffic and pedestrian signals create gaps within the traffic flow to allow pedestrian to cross a busy intersection. The countdown signal is a popular and preferred signal type. Pedestrian signal heads should be used at all intersections that have high use, mid-block crossings on higher speed roads, multi-lane roads, and at highly congested intersections. If a new facility is being built that will generate a lot of pedestrian activity, such as schools and parks a signal should be installed in conjunction with the new facility. To reduce pedestrian delay, a signal cycle should be a maximum of thirty (30) seconds. There are two types of pedestrian signals, fixed-time and push button/pedestrian activated. The fixed-time signals are tied into the traffic signal and become part of the cycle. These are generally used in high pedestrian and traffic congestion areas. Where pedestrian activity is infrequent and a fixed-time signal is not appropriate, a push button or pedestrian activated signal can be installed. A pedestrian will push the button to activate a break in the traffic circulation to cross an intersection. The pedestrian push-button should be mounted three and half to four (3 ½ - 4) feet above the sidewalk and placed in a conspicuous and convenient location, preferably next to curb ramps.¹⁹

The MUTCD has a variety of pedestrian signals heads that are allowed to be used, but the international symbol pedestrian signal head is the preferred signal. The pedestrian signal head should be clearly visible to the pedestrian at all times when in the crosswalk or waiting on the far side of the street. Attachments can be added to the pedestrian signal head to assist impaired pedestrians such as an audible signal. An audible signal is attached to an existing pedestrian signal and produces separate and distinctive electronic bird chirping sounds for both north/south and east/west crossings. These devices aid pedestrians who are blind or have low vision in crossing streets safely. These pedestrian signals can range from \$30,000 to \$140,000 per signal.²⁰



A pedestrian push button



International Signal



Countdown Signal



*Audible signal
- Courtesy of Abledata*

Street Lighting, Landscaping, & Pedestrian Furniture

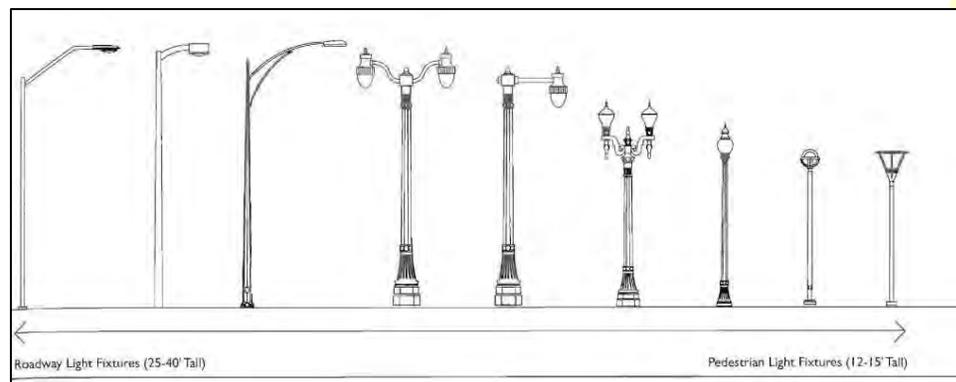
The use of street lighting, landscaping, and pedestrian furniture enhances a street environment and provides increased comfort and safety for pedestrians. These elements also turn the street into a pedestrian designation.

Street Lighting

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

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

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



Purpose of Street Lighting:

- Ensures pedestrian safety
- Enhances the street environment



Street lighting in Boston, MA

*Levels of Street Light Features
Courtesy of David Schellinger,
SMWM (APA Planning & Urban
Design Standards)*

Landscaping

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

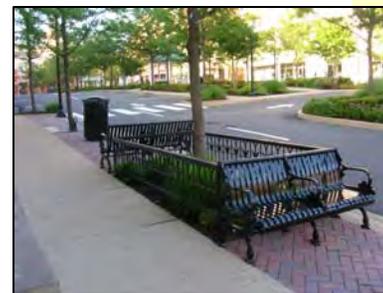
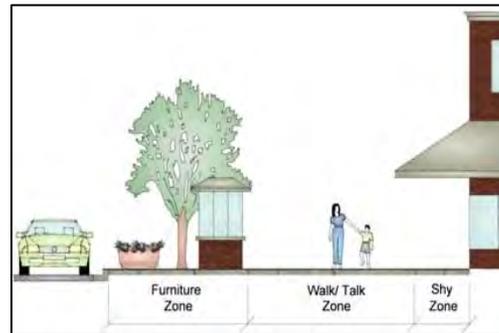
Choosing appropriate plants for the local climate and surrounding area, providing adequate space for growth, and preparing the ground can help ensure they survive with minimal maintenance and do not buckle the sidewalks as they mature. The use of rain gardens and other plant alternatives should also be considered to reduce installation and continuous cost of irrigation. All shrubs should be low-growing and trees should be kept trimmed to at least eight (8) to ten (10) feet to ensure sight distance, vertical clearance, and security.²¹

Landscaping costs vary depending upon the size of planting areas, plants selected, and additional elements (irrigation and maintenance). However, funding of landscaping can be shared by multiple parties, such as neighborhoods, business groups, and the City.

Pedestrian Furniture

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

The cost of installing furniture is dependent on the type of furniture, the material out of which it is constructed, and the amount of planting material used.



Purpose of Landscaping:

- Enhances street environment.
- Calms traffic by creating a visual narrowing of the roadway.



*Example of landscaping
- Arlington, VA.*

Purpose of Pedestrian Furniture:

- Enhances pedestrian environment.
- Enliven commercial districts by fostering community life.

*Installed pedestrian furniture
- Arlington, VA*



Commercial Development Guidelines

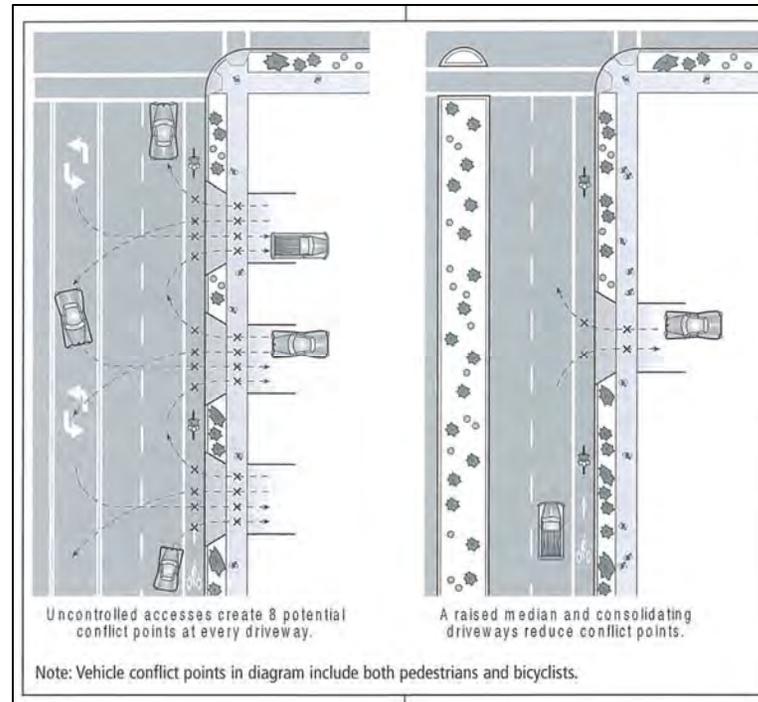
Commercial establishments generate a high volume of vehicle traffic, which in turn can generate opportunities for pedestrian and vehicle crashes. Uncontrolled access points from the roadways into the parking area of a commercial building, parking lots, and access from parking lot to the building can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

Driveway Design

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

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

The location and slope of the driveway is an important component of ensuring accessibility of the sidewalk on both sides of the driveway. To be ADA-compliant, the driveway must conform in width, cross slope, and grade to the design requirements for sidewalks. Unramped curb returns are prohibited. If the driveway does not adhere to this requirement the likelihood of pedestrian accidents is increased since the disabled, children, and persons with strollers require a level travel surface. All cross slopes for new construction, reconstruction, and alternations cannot exceed 2% per ADA requirements.¹



Purpose of Commercial Development Guidelines:

- Reduce pedestrian and vehicle conflict points
- Ensures installed infrastructure is ADA-Compliant

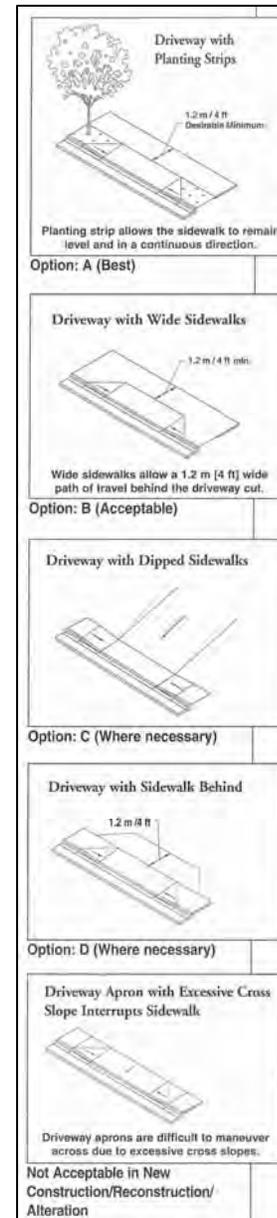


*A sidewalk modification to maintain slope
- Courtesy of Dan Burden (pedbikeimages.org)*

*Illustration of uncontrolled access vs. controlled access
- Courtesy of FHWA*

There are four driveway designs that meet accessibility requirements. These designs are illustrated on the left, as well as a design that is not acceptable for new construction or alterations. Each design maintains a level or nearly level travel area for pedestrians.

Option 'A' has a planting buffer to increase the safety of both pedestrian and motorist. These wide planting areas provide more turning area for the motorist. Option 'B' incorporates a sidewalk at the narrowest point of the driveway, but still maintains the minimum clearance for the sidewalk of four (4) feet. Option 'C' should be used in areas where the distance from the edge of the sidewalk to the curb face is insufficient to maintain the maximum two percent (2%) cross slope. The installation of curb ramps to and from the sidewalk on the driveway is how these types of situations should be handled. Option 'D' can be used when it is difficult to maintain the two percent (2%) cross slope. An easement may be purchased or obtained from the property owner to provide a level sidewalk area next to the driveway.¹



Existing driveway cut and sidewalk slope in Kinston

Illustration of four acceptable sidewalk design options for driveway crossing, Courtesy of FHWA.



Parking Lots

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

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

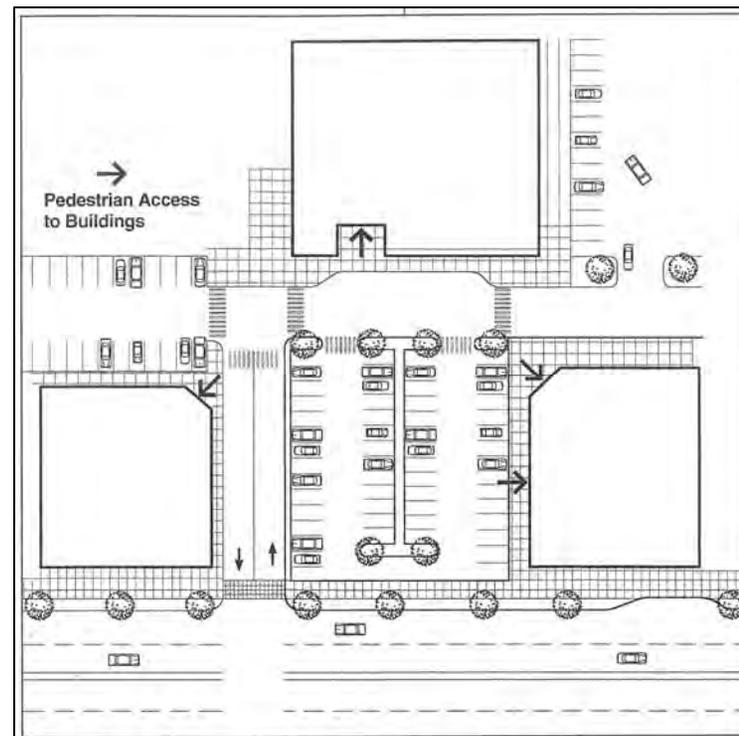
Commercial uses beside each other should be required to share parking areas to reduce the number of vehicles traveling from use to use. Parking garages should be looked at as a means to reduce the amount of impervious coverage in a commercial area and the when designed accordingly pedestrian safety, accessibility and security can be accomplished.



Installed landscaping and islands within a commercial parking lot - Greenville, NC

Illustration of a shared parking lot with distinct pedestrian areas and traffic calming devices to improve safety

- Courtesy of AASHTO



*Imagine of pedestrian sidewalk within commercial parking lot
Source: "Parking: A lot to Look At" by Melissa Ezarik
(<http://www.universitybusiness.com/viewarticle.aspx?articleid=626&p=1#0>)*

Residential Development Guidelines

In addition to commercial development, residential developments also generate pedestrian traffic. Pedestrian-vehicle conflict points on residential streets are numerous; therefore, applying the above mentioned driveway design components would assist in reducing those conflicts. Also existing or future cul-de-sacs should be connected to the closest local collector street or to other cul-de-sacs in adjoining subdivisions via sidewalks or multi-use paths. This connection will improve connectivity and assessability to surrounding land uses.

¹ Federal Highway Administration (FHWA) Pedestrian Safety, *The Walking Environment – Provide Sidewalks or Walkways*, October 2007, <http://safety.fhwa.dot.gov/saferjourney/library/countermeasures/01.htm>

² Federal Highway Administration (FHWA) Pedestrian Safety, *The Walking Environment – Shared Use Paths*, October 2007, <http://safety.fhwa.dot.gov/saferjourney/library/countermeasures/08.htm>

³ Walkinginfo.org – Pedestrian and Bicycle Information Center, *Trail Costs and Benefits*, October 2007, <http://www.walkinginfo.org/engineering/trails-costs.cfm>

⁴ Walkinginfo.org – Pedestrian and Bicycle Information Center, *Shared Streets*, October 2007, <http://www.walkinginfo.org/engineering/calming-street.cfm>

⁵ Federal Highway Administration (FHWA) Pedestrian Safety, *The Walking Environment – Marked Crosswalks & Enhancements*, October 2007, <http://safety.fhwa.dot.gov/saferjourney/library/countermeasures/04.htm>

⁶ Federal Highway Administration (FHWA) Pedestrian Safety, *Signs and Signals – Recessed Stop Lines*, October 2007, <http://safety.fhwa.dot.gov/saferjourney/library/countermeasures/45.htm>

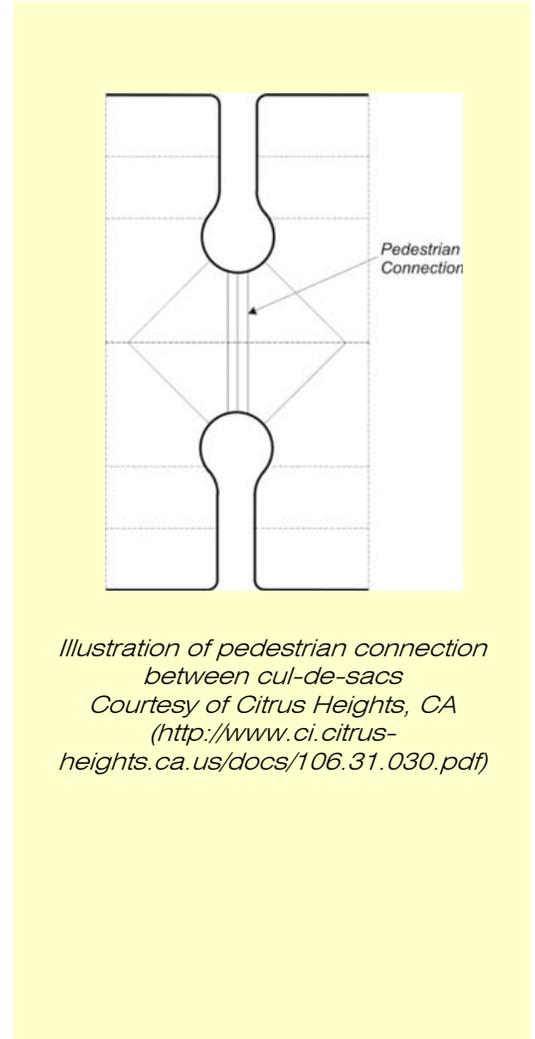
⁷ Walkinginfo.org – Pedestrian and Bicycle Information Center, *Crossing Enhancements*, October 2007, <http://www.walkinginfo.org/engineering/crossings-enhancements.cfm>

⁸ Federal Highway Administration (FHWA) Pedestrian Safety, *The Walking Environment – Curb Ramps*, October 2007, <http://safety.fhwa.dot.gov/saferjourney/library/countermeasures/03.htm>

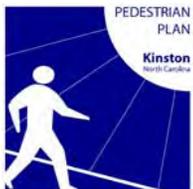
⁹ Federal Highway Administration (FHWA) Pedestrian Safety, *The Walking Environment – Traffic Calming-Curb Extensions*, October 2007, <http://safety.fhwa.dot.gov/saferjourney/library/countermeasures/23.htm>

¹⁰ Federal Highway Administration (FHWA) Pedestrian Safety, *Traffic Calming – Raised Intersection and Raised Pedestrian Crossing*, October 2007, <http://safety.fhwa.dot.gov/saferjourney/library/countermeasures/29-30.htm>

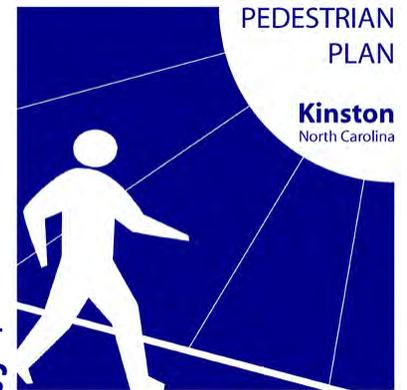
¹¹ Walkinginfo.org – Pedestrian and Bicycle Information Center, *Traffic Calming-Chicanes*, October 2007, <http://www.walkinginfo.org/engineering/calming-chicanes.cfm>



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- ¹² Walkinginfo.org – Pedestrian and Bicycle Information Center , Traffic Claming – Mini-Circles, October 2007, <http://www.walkinginfo.org/engineering/calming-circles.cfm>
- ¹³ Federal Highway Administration (FHWA) Pedestrian Safety, *Road Design- Raised Medians*, October 2007, <http://safety.fhwa.dot.gov/saferjourney/library/countermeasures/16.htm>
- ¹⁴ Federal Highway Administration (FHWA) Pedestrian Safety, *Traffic Calming – Crossing Islands*, October 2007, <http://safety.fhwa.dot.gov/saferjourney/library/countermeasures/25.htm>
- ¹⁵ Federal Highway Administration (FHWA) Pedestrian Safety, *Road Design- Roadway Narrowing*, October 2007, <http://safety.fhwa.dot.gov/saferjourney/library/countermeasures/11.htm>
- ¹⁶ Walkinginfo.org - Pedestrian and Bicycle Information Center, *Improving Transit Stop/Station Access*, October 2007, <http://www.walkinginfo.org/transit/access.cfm>
- ¹⁷ Federal Highway Administration (FHWA) Pedestrian Safety, *The Walking Environment – Transit Stop Treatments*, October 2007, <http://safety.fhwa.dot.gov/saferjourney/library/countermeasures/05.htm>
- ¹⁸ Federal Highway Administration (FHWA) Pedestrian Safety, *Signs and Signals – Add/Modify Signing*, October 2007, <http://safety.fhwa.dot.gov/saferjourney/library/countermeasures/46.htm>
- ¹⁹ Federal Highway Administration (FHWA) Pedestrian Safety, *Signs and Signals – Pedestrian Push*, October 2007, <http://safety.fhwa.dot.gov/saferjourney/library/countermeasures/49.htm>
- ²⁰ Federal Highway Administration (FHWA) Pedestrian Safety, *Signs and Signals –Pedestrian Signals*, October 2007, <http://safety.fhwa.dot.gov/saferjourney/library/countermeasures/43.htm>
- ²¹ Walkinginfo.org - Pedestrian and Bicycle Information Center, *Traffic Calming - Landscaping*, October 2007, <http://www.walkinginfo.org/engineering/calming-landscaping.cfm>



SECTION 6 –
ANCILLARY FACILITIES & PROGRAMS



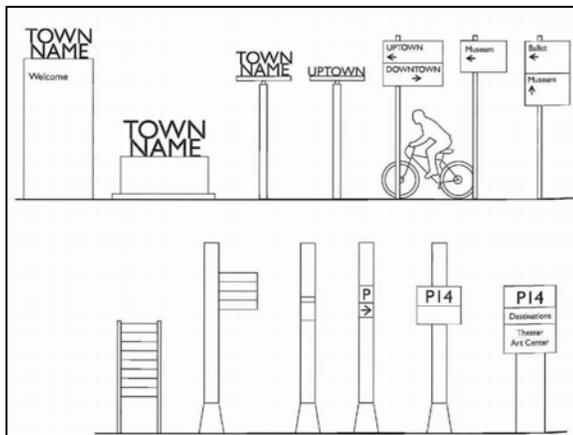
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SECTION 6 ANCILLARY FACILITIES AND PROGRAMS

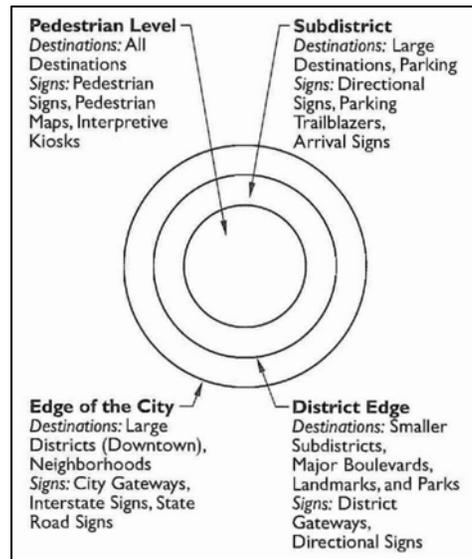
Planning for pedestrian facilities also includes maps of pedestrian routes, signage for pedestrian and motorists, programs for spot improvements and maintenance, safety education programs, enforcement programs, and encouragement and pedestrian promotions. The following section will address these additional facilities and programs Kinston should employ to create a walkable community.

MAPPING AND SIGNING PROJECTS

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

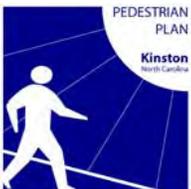


Typical Family of Wayfinding Signs
Courtesy of Miami Beach, Florida
(APA Planning & Urban Design Standards)



Examples of various wayfinding signage

Hierarchy of Wayfinding Signs
Courtesy of Society of Environmental Graphic Design (APA Planning & Urban Design Standards)



Links to State and Regional Route Systems

Signs should direct pedestrians to state and regional trail and greenway routes. Routes near Kinston include the East Coast Greenway and Mountain-to-Sea Trail. Vehicular route signage should follow highway sign design standards and orient motorists to vehicle-based destinations. Pedestrian route signage should direct pedestrians to pedestrian related destinations.

Neighborhood Route Systems

Neighborhood route system signs are placed at entrances of neighborhoods and special districts to serve as gateways. The sign could also provide a map of the pedestrian facilities within that neighborhood. These signs are usually placed in road medians or centered in street rights-of-way. The signs can be enhanced with landscaping.

Comprehensive Route Systems



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

On-Street Pedestrian Systems

Some residential streets without sidewalks may be suitable for pedestrian traffic with little modification. To make these streets pedestrian-friendly, a strip of the road along the edges can be designated for pedestrian traffic. These areas should be clearly marked and designated with appropriate signage. City streets that are wide with little traffic and speed limits less than 20 miles per hour would be perfect candidates for this treatment. This treatment will need to be evaluated after implementation to ensure the space is not mistaken for a bike facility.



Examples of route mapping systems



Example of neighborhood signage

SPOT IMPROVEMENT PROGRAM

Certain tasks can be taken care of immediately to improve the condition of the pedestrian facility network. These spot improvements can be done without involving a lot of capital or labor. Removing and replacing severely broken sections of the network are tasks that will require more time and money than other surface improvements. Removing fallen leaves and debris from the sidewalks and edging grass and weeds along the network are simple low cost projects that can enhance the system. Pedestrian signals should be provided in high traffic areas and existing signals should be checked periodically to insure they are functioning properly. Lighting at intersections and along pedestrian facilities should also be installed where needed and checked and replaced when necessary.

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

MAINTENANCE PROGRAM

A maintenance program is required to keep any system operating, including a pedestrian network. The City of Kinston needs to develop, adopt, and implement a thorough maintenance program to address the continuous needs of a pedestrian network. Without a maintenance program the condition of the existing and future pedestrian facilities will suffer.

EDUCATIONAL PROGRAMS

Safe Routes to School Program

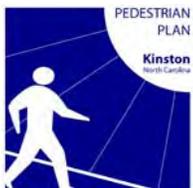
Establishing a “Safe Routes to School Program”¹ would encourage more children to walk to school. The program brings together educators, municipal and regional transportation professionals, law enforcement, public health professionals, and concerned citizens to address pedestrian safety within two miles of K-8th grade schools. This



*Sidewalk maintenance and retrofit
Courtesy of Dan Burden
(www.pedbikeimages.org)*



Kinston Public Works



program concentrates on the five “E’s”: engineering, education, enforcement, encouragement, and evaluation. Engineering is addressed when existing or new pedestrian facilities are improved or constructed. Education may include teaching parents and children about pedestrian safety or launching safe driving campaigns focused on school zones. This can be done by incorporating pedestrian safety in school driver education programs. Local law enforcement could also be invited into schools to have seminars with students on pedestrian safety. Encouragement may include mileage clubs and contests, walking school buses, and promotional events. Establishing goals for a school and evaluating the participation at the end of the school year would be an evaluation method.

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

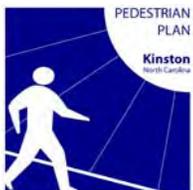
Adult School Crossing Guards

Adult school crossing guards can insure safe driver and pedestrian behaviors at crosswalks near schools. They help children cross the street safely and remind drivers of the presence of pedestrians. Adult school crossing guards can be parent volunteers, school staff or paid personnel. Annual classroom and field training for adult school crossing guards, as well as special uniforms and equipment are recommended.²

ENFORCEMENT PROGRAMS

Enforcement of pedestrian laws is critical to guarantee safety. The Sentinels and Police-on-Bikes can help enforce these safety laws (The Sentinels are discussed further in Section 3). The Sentinels could be used in high pedestrian traffic areas such as downtown, residential areas, and schools to enforce pedestrian and motorist laws. A Police-on-Bikes program could be developed and used to enforce laws in downtown. Enforcement of key areas will force people who drive or walk become more aware of their actions. Before pedestrian laws can be effectively enforced, local police entities should also be properly educated. Here are a few basic legal pedestrian related rights mentioned in *A Guide to North Carolina Bicycle and Pedestrian laws*:

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



- ❖ Drivers of any vehicle within a business or residential district must yield to the right-of-way at marked pedestrian crossings.
- ❖ When a flashing yellow light is erected or installed at a place other than an intersection, drivers must yield to the right-of-way to pedestrians.
- ❖ Drivers cannot obstruct traffic flow of pedestrians within a crosswalk by driving the vehicle over the crossing unless there is sufficient distance on the other side for the vehicle.
- ❖ At pedestrian control signals, “walk” gives the pedestrian the right-of-way to cross the street and vehicles must yield to crossing pedestrians.

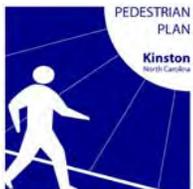
Outreach programs can also be very beneficial in promoting law abidance. Events like safety fairs should be done at local elementary schools to educate young pedestrians. At middle and high schools, safety brochures and pamphlets can be issued. The students should be shown how to obey these laws and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

The community can also play an important role in enhancing traffic safety. Representatives of communities can improve driver and pedestrian behaviors in many ways.

For more information regarding pedestrian laws please visit:
<http://www.ncdot.org/transit/bicycle/laws/resources/lawsguidebook.html>

Neighborhood Speed Watch

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



Slow Down Yard Sign Campaigns and Pace Car Campaigns

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

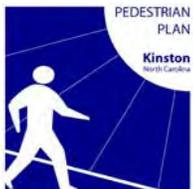
Neighborhood pace car programs aim to make neighborhoods safer for pedestrians, bicyclists and drivers. Resident pace car drivers agree to drive courteously, at or below the speed limit, and follow other traffic laws. Programs usually require interested residents to register as a pace car driver, sign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

Neighborhood Fight Back Programs

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

Radar Speed Trailers and Active Speed Monitors

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



ENCOURAGEMENT AND PROMOTION

Walk to School Day

“Walk to School Day” is a designated day once a week or month that encourages students and teachers to walk to school. This event should be well advertised and interactive. This event also gives the opportunity to educate walkers about positive health and environmental impacts of walking. It should also incorporate and promote other initiatives such as the Safe Routes to School Program³. A Walk to School Day may also coincide with the International Walk to School Day and Month.⁴

Walking School Bus

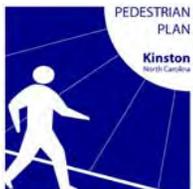
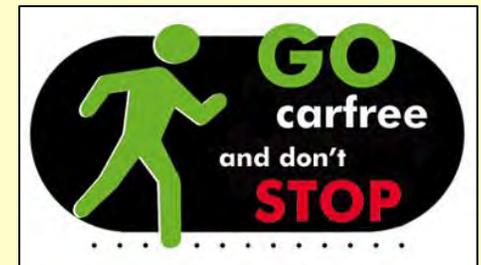
A walking school bus is a group of children walking to school supervised by one or more adults. Initiation of this campaign is fairly simple. To start, the program should be initiated in a single neighborhood that has an interest in walking to school. After a route has been determined, it can be fine tuned and other neighborhoods may be added. This event not only promotes exercise, it also gives opportunity for pedestrian education. The Walking School Bus can be used collectively with Walk to School Day and the Safe Routes to School Program.⁵

Historic Walking Tour of Downtown Kinston

To showcase the rich heritage and history of downtown Kinston, a historic walking tour should be commissioned. A walking tour would increase pedestrian activity and potentially encourage tourists to shop downtown. Potential destinations may include historic buildings, museums and landmarks. Tour guides may be used to direct participants or for a more informal tour, maps can be placed at strategic locations for self-guided tours.

Carfree Day

“Carfree Day” is an international day set aside to give the public the opportunity to envision how our cities would be without the automobile. This event should encourage walking not only on the official day of September 22, but throughout the year. Downtown streets could be closed for entertainment, educational booths, and health and wellness booths. This day would provide a great opportunity for the City to inaugurate a new and permanent pe-



pedestrian event. A “carfree day”⁶ should be a partnership between local businesses, residents, organizations, and the City.

Walktober

“Walktober”⁷ is a national walking campaign aimed at increasing walking in the community in October. October was chosen for this walking event due to beautiful fall scenery and cooler temperatures. This program could be a good catalyst for walking downtown and along trails. Initiation and promotion of this event should be done by community organizations in conjunction with the City.

Pedestrian Safety Roadshow

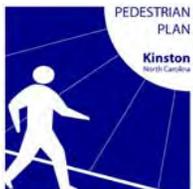
The Pedestrian Safety Roadshow⁸ assists communities in developing their own approach to identifying and solving the problems that affect pedestrian safety and walkability. It is a four hour workshop given to local engineering, planning, enforcement, educators, and health officials, youth groups and senior groups, and local business leaders. Roadshow objectives are to increase the awareness of pedestrian safety and walkability concerns, provide participants with information about the elements that make a community safe and walkable, and channel their concern into a plan of action for addressing pedestrian concerns. This program also provides the City an opportunity to show the community what they are doing to address pedestrian safety. It also allows the community to identify new walkability barriers and pedestrian enhancement priorities.

Brochures and Pamphlets

The City of Kinston should work in conjunction with law enforcement and other local agencies to promote pedestrian safety. This could be done by producing and distributing brochures and pamphlets. The NCDOT⁹ website has information on numerous topics, such as the Share the Road Initiative, Walk a Child to School Initiative, and school guard crossing programs.

Public Perception Marketing

To promote walking in the community, the City will have to construct and infill sidewalks; however, some neighborhoods may associate sidewalks with crime resulting in not wanting sidewalks in front of their home. Although this is a perception, the truth is sidewalks actually improve neighborhoods. Therefore, the City should



take steps to create a positive image for these acquisition projects. Public workshops and meetings should be held to give facts concerning these projects.

¹ <http://safety.fhwa.dot.gov/saferoutes/>

² SRTS Guide, Adult School Crossing Guard Guidelines, October 2007, http://www.saferoutesinfo.org/guide/crossing_guard/index.cfm

³ <http://www.iwalktoschool.org/>

⁴ www.walktoschool-usa.org

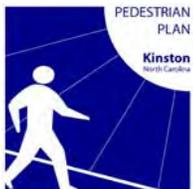
⁵ <http://www.walkingschoolbus.org/>

⁶ World Carfree Network, October 2007, http://www.worldcarfree.net/wcfd/documents/cfd_howto.pdf

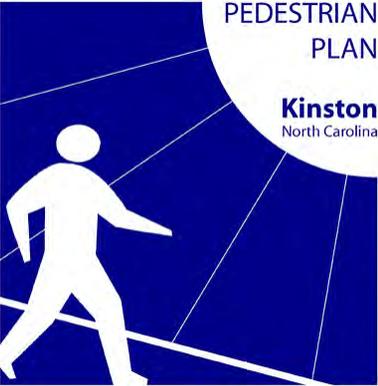
⁷ Welcome to Walktober, October 2007, <http://www.walktober.com/content.aspx?PageID=8>

⁸ http://safety.fhwa.dot.gov/ped_bike/ped/roadshow/walk/index.htm

⁹ http://ncdot.org/transit/bicycle/walking/walking_intro.html



SECTION 7 –
PROJECT DEVELOPMENT



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SECTION 7 PROJECT DEVELOPMENT

This section identifies potential projects, preferred treatments, and lists potential funding sources to accomplish the specified projects. The projects were developed from public input activities, task force meetings, and community evaluation. All potential pedestrian projects are mapped in Section 8 on Map 8.1.

POTENTIAL PROJECTS AND PREFERRED TREATMENTS

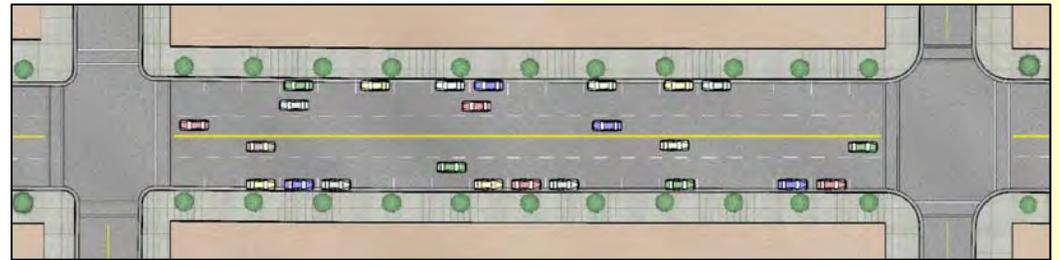
There are several potential projects that would improve the existing pedestrian network, as well as constructing additional facilities as discussed in Section 4. The potential pedestrian facilities projects have been broken down into the three regions, in addition to projects that would serve or benefit the entire community. The list of projects within each study area is in no particular order of priority. Each project has its own project identification number that is used throughout this Plan and on all maps in Section 8. Projects on NCDOT maintained roads may require further review and approval by the NCDOT Division 2 Office in Greenville.

Potential Southeast Region Projects

P-1 Conduct Queen Street Road Design Improvements

A 'road diet' application could be applied to Queen Street between King Street and Vernon Avenue. Queen Street is currently a four-lane, undivided roadway, with on-street parking along both sides that discourages mobility and access for non-motorized users. This proposed project would improve the mobility and access for non-motorized users, while maintaining vehicular capacity. A feasibility study conducted by Ramey Kemp & Associates, Inc., (Appendix D) identified two types of traffic calming methods for Queen Street.

The first method is conversion of the existing four lanes to two traffic lanes with one through lane in each direction and a center turn lane. The center turn lane may also be utilized for landscaping. On-street parking can be handled by parallel parking or diagonal parking with curb bump-outs at key intersections. A combination of textured or raised crosswalks can provide traffic calming to increase pedestrian accessibility and safety.



Current road layout of Queen Street



The second method is installing a single-lane roundabout at a specified intersection. Both methods would require significant coordination and cooperation between the City of Kinston, the NCDOT, and property owners.

This project could be completed at any time since the majority of the heavy truck traffic uses King Street to MLK Boulevard. The installation of a traffic calming device would assist in reducing traffic speeds to improve pedestrian access and safety.

P-2 Conduct Downtown Streetscape Improvements

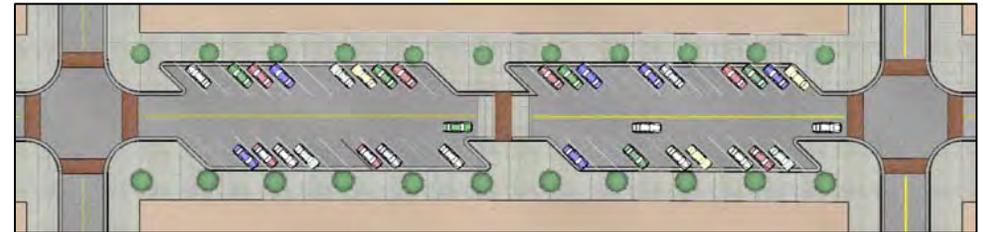
Improvements to the downtown streetscape include updated pedestrian scale design elements, such as wayfinding signage, textured crosswalks, trash receptacles, decorative pavements, decorative street lights, planting beds, and benches.

P-3 Construct a Pedestrian Bridge across the Neuse River

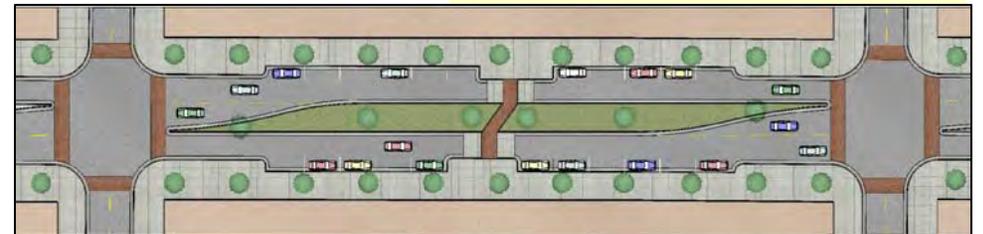
An attractive, well-designed pedestrian bridge should be constructed across Neuse River to connect downtown to Neuseway Nature Park. This project would serve the entire community once the greenway and riverwalk is developed.

P-4 Improve MLK Boulevard & Caswell Street Intersection

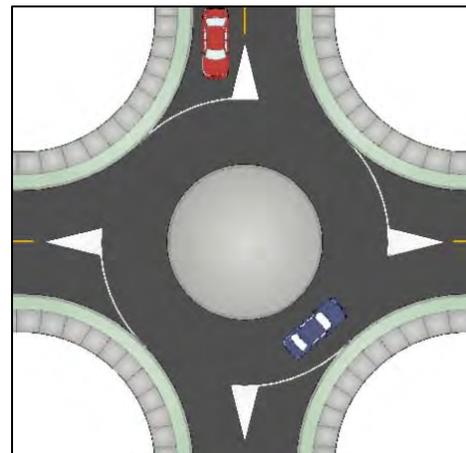
Provide adequate pedestrian crossing at this intersection through pedestrian activated devices or fixed-time signals, crosswalk markings, and signage.



Queen Street with Diagonal Parking & Curb Extensions



Queen Street with Planted Median with Curb Extensions



Queen Street with a Single-Lane Roundabout



P-5 Improve MLK Boulevard & Washington Street Intersection

Provide adequate pedestrian crossing at this intersection through pedestrian activated devices or fixed-time signals, crosswalk markings, and signage.

P-6 Install Sidewalk Infill along East Washington Street

Construct sidewalk infill and construction along both sides of East Washington Street to the intersection of Washington Street and Secret Street.

P-7 Install Sidewalk Infill along MLK Boulevard

Continuous sidewalks should be installed along both sides of MLK Boulevard between King Street and Vernon Avenue.

P-8 Install Sidewalks along Secret Street

Continuous sidewalks should be installed along Secret Street ending at Holloway Park. This continuous connection would provide pedestrian accessibility to various points of interests (the new replacement school, residential uses, parks, and commercial) and increase the number of walking trips along this area.

P-9 Replace Holloway Pedestrian Bridge over the Adkin Branch

Ensure the replacement of the Holloway Pedestrian Bridge is in a location that would adequately serve the immediate residents and accommodate the entire community. An improved pathway should be constructed from the new bridge to existing sidewalks. This facility would provide accessibility to the schools, parks, and residential neighborhoods on the east side of Adkin Branch, especially the identified Rochelle and Holloway connection opportunity.

P-10 Construct Replacement of Washington Street Pedestrian Bridge

Ensure the Washington Street pedestrian bridge will adequately serve pedestrians along both sides of Washington and sidewalks are constructed to and from the bridge.

P-11 Improve Secret Street / Washington Street / J.P. Harrison Street Intersection

Provide adequate pedestrian crossing at Secret/ Washington/ J.P. Harrison with pedestrian activated devices, crosswalk markings, and signage; to improve pedestrian safety in this area. This project would increase pedestrian connectivity and safety.



View of existing pedestrian bridge along Washington Street



Current view of East Washington Street

P-12 Construct a Multi-Use Trail along Highway 70

Construct a multi-use trail along the right-of-way of Highway 70 from Highway 258 and Highway 70 intersection passed Lenoir Community College. This path would provide the necessary connection between the existing hotels, commercial establishments, college, and historic sites located along Highway 70 which are currently only assessable by motor vehicles.

P-13 Improve South Queen Street and Shine Street Intersection

The pedestrian crossing of South Queen Street and Shine Street has experienced a high number of pedestrian-vehicle crashes over the years; therefore, it needs to be improved to provide a safer pedestrian assessability from residential to commercial establishments. The use of pedestrian activated devices, refuge islands, marked crosswalks, lighting, and signage are potential treatments for this intersection.

P-14 Improve South Queen Street and South Street Intersection

The pedestrian crossing of South Queen Street and South Street has experienced a high number of pedestrian-vehicle crashes over the years; therefore, it needs to be improved to provide a safer pedestrian assessability from residential to commercial establishments. The use of pedestrian activated devices, refuge islands, marked crosswalks, lighting, and signage are potential treatments for this intersection.

P-15 Install Sidewalk Infill along South Queen Street to Intersection of Highway 70

Install sidewalk infill along South Queen Street to the intersection of Highway 70. This would provide a continuous connection from the visitor lodging district to downtown.

P-16 Ensure Queen Street Bridges are Multimodal

Kinston needs to take an active role to ensure future replacement bridges for Queen Street (north and southbound) are multimodal. The bridges should have sidewalks and a physical barrier between the vehicle lanes and sidewalk. Multimodal bridges will provide a connection to downtown from the visitor lodging district.

P-17 Ensure King Street Bridge is Multimodal

Kinston needs to take an active role to ensure future replacement bridge for King Street is multimodal. The bridge should have sidewalks and a physical barrier between the vehicle lanes and sidewalk. A multimodal bridge will provide another connection to Neuseway Nature Center.



View of South Queen Street from Bright Street



Lack of sidewalk on eastside of Queen Street Bridge



P-18 Improve Meadowbrook Drive and Highway 70 Intersection

Improve pedestrian crossing of Highway 70 near Meadowbrook Drive with pedestrian activated device, crosswalk markings, a pedestrian refuge island, and signage.

P-19 Improve Highway 58 and Highway 70 Intersection

Improve pedestrian crossing of Highway 70 near Highway 58 and Lenoir Community College. The use of a pedestrian activated device, crosswalk markings, a possible pedestrian refuge island, and signage would improve pedestrian access to the commercial establishments across the highway.

P-20 Improve Highway 258 and Highway 70 Intersection

Improve pedestrian crossing of Highway 258 and Highway 70 to provide safe pedestrian connectivity to commercial establishments, Visitor Center, and Civil War memorial from surrounding hotels and downtown. The use of pedestrian activated devices, refuge islands, marked crosswalks, and signage are potential treatments for this intersection.

P-21 Improve South Queen Street Bridge near Spring Hill Street

Improve South Queen Street Bridge near Spring Hill Street with installing a pedestrian barrier between vehicle lanes and pedestrian travel area.

Potential North Region Projects

P-22 Improve North Queen Street Bridge over Adkin Branch

Improve North Queen Street Bridge over Adkin Branch with sidewalks and a structural safety barrier.

P-23 Install Sidewalks along Highland Avenue

Sidewalks should be constructed along one side of Highland Avenue to Stroud Street. This connection would allow pedestrian access to the western portion of the community, as well as to Queen Street that connects into downtown.

P-24 Improve Highland Avenue and North Queen Street Intersection

Improve pedestrian crossing of Highland Avenue and North Queen Street with improved crosswalk markings, signage, pedestrian activated devices, and street lighting.



Current views of Highway 70



North Queen Street and Highland Ave. Intersection



P-25 Construct a Multi-Use Trail along Highland Avenue

Construct a multi-use trail along Highland Avenue from Stroud Street to MLK Boulevard. This trail would connect the surrounding residential and commercial areas to the proposed new school site along Highland Avenue, as well as provide a possible connection to Greenway/Riverwalk trail.

P-26 Construct a Multi-Use Path along J.P. Harrison

Construct a multi-use path along J.P. Harrison from MLK Boulevard to Washington Street. This path would provide a segment of a pedestrian loop in the eastern section of Kinston, which could be tied to the overall greenway system.

P-27 Construct a Multi-Use Path between Kinston High School and Lenoir Memorial Hospital

Construct a multi-use path between Lenoir Memorial Hospital and Kinston High School. This path would provide a connection between these two points of interest, in addition to the commercial establishments located along the path.

P-28 Improve Herritage Street and Airport Road Intersection

Improve Herritage Street and Airport Road with fixed-time pedestrian signal or pedestrian activated device, crosswalk markings, a pedestrian refuge island, and signage

P-29 Improve Herritage Street and Highway 58 Intersection

Improve intersection at Highway 58 and Herritage Street with pedestrian activated devices, signage, a possible crossing island, and crosswalk markings to ensure safe pedestrian crossing.

P-30 Sidewalk Infill along Herritage Street

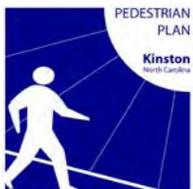
Install sidewalk infill and new construction along at least one side of Herritage Street to provide a continuous connection and accessibility amongst the different land uses and to the adjacent residential areas.

P-31 Sidewalk Infill along North Queen Street

Install sidewalk infill and new construction along at least one side of North Queen Street to provide a continuous connection and accessibility amongst the different land uses and to the adjacent residential areas.



*North Queen St. and Airport Rd.
Intersection*



P-32 Improve North Queen Street and Airport Road Intersection

Improve intersection of North Queen Street and Airport Road to improve pedestrian safety with a pedestrian activated device, crosswalk markings, a possible pedestrian refuge island, and signage.

P-33 Improve Plaza Boulevard and Herritage Street Intersection

Improve intersection of Plaza Boulevard and Herritage Street with a pedestrian activated device, crosswalk markings, and signage.

P-34 Improve Plaza Boulevard and North Queen Street Intersection

Improve intersection of Plaza Boulevard and North Queen Street with a pedestrian activated device, crosswalk markings, and signage.

P-35 Install Sidewalk Infill along Plaza Boulevard

Sidewalk infill should be done along, at least one side, of Plaza Blvd. from North Queen Street to Carey Road. This would provide a connection from surrounding neighborhood areas to the Kinston Plaza Shopping Center and other business establishments.

P-36 Improve Herritage Street and Vernon Avenue Intersection

Improve intersection of Herritage Street and Vernon Avenue with fixed-time pedestrian signal or pedestrian activated device, crosswalk markings, a pedestrian refuge island, and signage.

P-37 Improve Queen Street and Vernon Avenue Intersection

Improve intersection of Queen Street and Vernon Avenue with fixed-time pedestrian signal or pedestrian activated device, crosswalk markings, a pedestrian refuge island, and signage.

P-38 Improve Herritage Street and Highland Avenue Intersection

Improve intersection of Herritage Street and Highland Avenue with crosswalk markings and signage.

P-39 Construct Sidewalks along Doctors Street

Construct sidewalks along Doctors Street to accommodate transit users and between medical buildings along Doctors Street. The sidewalks should have landing pads at the three transit stops and possible shelters.



*Herritage Street and Plaza Blvd.
Intersection*



P-40 Install a Mid-Block Crossing from Doctors Street to Lenoir Memorial Hospital

Install a mid-block crossing from Doctors Street to Lenoir Memorial Hospital to provide a safe pedestrian connection between these medical facilities.

P-41 Improve MLK Boulevard and Vernon Avenue Intersection

The intersection and pedestrian crossing at Vernon Avenue and MLK Boulevard should be improved with a fixed-time pedestrian signal or a pedestrian activated device, crosswalk markings, and signage.

P-42 Improve Vernon Avenue and McLewean Street Intersection

Improve intersection of Vernon and McLewean with pedestrian fixed-time pedestrian signal or pedestrian activated device, improved crosswalk markings, signage, and street lighting.

P-43 Improve Stadiem Street and Old Snow Hill Road Intersection

Due to past pedestrian-vehicle crashes at this intersection, this intersection should be improved with marked crosswalks, street lighting, and signage.

P-44 Improve Stadiem Street and Hyman Street Intersection

Due to past pedestrian-vehicle crashes at this intersection, this intersection should be improved with marked crosswalks, street lighting, and signage.

P-45 Improve Stadiem Street and Charlotte Street Intersection

Due to past pedestrian-vehicle crashes at this intersection, this intersection should be improved with marked crosswalks, street lighting, and signage.

P-46 Improve William Street and Charlotte Street Intersection

Due to past pedestrian-vehicle crashes at this intersection, this intersection should be improved with marked crosswalks, street lighting, and signage.



Vernon Avenue and McLewean Street Intersection



Stadiem Street and Old Snow Hill Road Intersection



Potential West Region Projects

P-47 Install Sidewalk Infill along Carey Road

Construct sidewalk infill along Carey Road between Highland Avenue and Vernon Avenue to eliminate sidewalk gaps and provide a continuous connection between the residential areas to the commercial land uses along Vernon Avenue.

P-48 Install Sidewalk and/or Multi-Use Lane along Carey Road

Construct a sidewalk and/or a multi-use lane within the street along all portions of Carey Road from Plaza Boulevard to Rouse Road, to provide connections between existing facilities and land uses.

P-49 Improve Vernon Avenue and Greenbriar Road Intersection

The intersection and pedestrian crossing at Vernon Avenue and Greenbriar Road should be improved with a fixed-time pedestrian signal or a pedestrian activated device, crosswalk markings, a possible crossing island, and signage.

P-50 Improve Vernon Avenue and Carey Road Intersection

The intersection and pedestrian crossing at Vernon Avenue and Carey Street should be improved with a fixed-time pedestrian signal or a pedestrian activated device, a crossing island, crosswalk markings, and signage.

P-51 Improve Plaza Boulevard and Carey Road Intersection

Improve intersection of Plaza Boulevard and Carey Road with a pedestrian activated device, crosswalk markings, and signage.

P-52 Install a Sidewalk or Walkway around Kinston Country Club and Golf Course

Construct a sidewalk or walkway along the perimeter of Kinston County Club, south onto Greenbriar and north on Stockton to Carey Road, or apply a shared street treatment to these residential streets.

P-53 Install Sidewalks along Washington Street

Construct sidewalks along at least one side of Washington Street from the intersection of Vernon Avenue and Hardee Road to Herritage Street. This sidewalk would provide a vital connection between the western portions of the community to downtown.



*Plaza Blvd. and Carey Rd.
Intersection*



*Existing street surrounding Country
Club and Golf Course*



P-54 Construct a Multi-Use Trail along Vernon Avenue

A multi-use trail from Vernon Park Mall passing the Caswell Center to the Caswell Memorial Site Park should be constructed to provide a continuous connection to these points of interests.

P-55 Improve Vernon Avenue and Pecan Drive Intersection

The intersection and pedestrian crossing at Vernon Avenue and Pecan Drive should be improved to provide a fixed-time pedestrian signal or a pedestrian activated device, in addition to crosswalk markings and signage, and possible pedestrian refuge island.

P-56 Improve Vernon Avenue and Hardee Road Intersection

The intersection and pedestrian crossing at Vernon Avenue and Hardee Street should be improved to provide a fixed-time pedestrian signal or a pedestrian activated device, in addition to crosswalk markings and signage, and possible pedestrian refuge island. This would improve pedestrian safety when crossing Vernon Avenue.

P-57 Install Sidewalk Infill along Hardee Road

Construct a continuous sidewalk along at least one side of Hardee Road from Carey Road to Vernon Avenue. This improvement would provide a north and south pedestrian link to Vernon Park Mall and surrounding neighborhoods.

P-58 Improve Highway 70 and Highway 258 (near Wal-Mart) Intersection

Improve the intersection of Highway 70 and Highway 258 near Wal-Mart with pedestrian activated devices, marked crosswalks, signage, and a refuge island.

P-59 Install Sidewalk Infill along Vernon Avenue

Infill sidewalks along both sides of Vernon Avenue from MLK Boulevard to Hardee Road. This facility will provide a connection to various commercial and recreational opportunities, especially the identified Vernon Park Mall and Fairfield Park opportunity.



P-60 Install Sidewalks along Hillcrest Road

Install sidewalks along one side of Hillcrest Road to provide a pedestrian connection between Kinstonian Heights and Country Acres neighborhoods with Sandy Clay Road, Banks School, Bethel Christian Academy, and Barentt Park/Bill Faye Park.



Existing north/east bank of Neuse River edge & existing right of way along Adkin Branch

P-61 Construct a Westgate Multi-Use Trail

Construct a Westgate multi-use trail and traffic calming techniques to serve the Lowe's development site. This facility would provide a safe pedestrian connection between the various commercial establishments.



Potential City-Wide Projects

P-62 Develop an East Coast Greenway Connection

Coordinate, plan, and construct a multi-use trail(s) to provide a connection to the East Coast Greenway. This trail in the long-term would bring recreational pedestrians and outdoor enthusiasts to Kinston. More information can be found at <http://www.greenway.org/>.



East Coast Greenway Route

P-63 Develop a Greenway and Riverwalk

Construct a multi-use greenway and riverwalk along one side (north/east side) of Neuse River with connections to Neuseway Nature Center, Caswell Memorial Park, and the RetroGreen Park. This trail would be the beginning of the community-wide pedestrian loop providing necessary connections to various destinations and points of interest using the existing utility right of way along the Adkin Branch.

P-64 Develop a Mountain-to-Sea Trail Connection

Coordinate, plan, and construct a multi-use trail to provide a connection to the Mountain-to-Sea Trail. Currently, this trail is planned to pass Kinston on the South, along Bicycle Route 7. Becoming involved with the development of the trail and providing a trail connection



Mountain-to-Sea Trail Route



from the main route to downtown would enhance Kinston's marketability.

P-65 Revitalization of MLK Boulevard

A specific and detailed revitalization plan should be conducted along MLK Boulevard to identify and assess transportation and community planning issues, as well as pedestrian improvements. This plan would determine the future growth along the corridor, identify additional physical issues, and improvements for streetscape, pedestrian, vehicle flow, accessibility, and redevelopment of existing structures.

P-66 Improve Transit Stops

Improve all transit stops with on-site pedestrian accommodations. These accommodations could be as simple as improved signage, a designated curb space, a pullout area, a shoulder for the transit vehicle to stop, adequate sidewalks to and at the transit stop, and a landing pad. Transit stops may also include other facilities, such as shelters, benches, and other furnishings.

Summary of Potential Projects

The following table lists the previous identified pedestrian projects for Kinston. The table is separated by regions. The table is laid out to show the following information:

1. **Project ID**– Represents the project's identification number that is used throughout the Plan and associated maps for that specific project.
2. **Potential Pedestrian Projects** - The potential pedestrian projects for the City of Kinston are listed in this column.
3. **"TIP"** stands for 'Transportation Improvement Program', all projects that could be a 'TIP' project are indicated with a "Y" for 'yes' or "N" for 'no'.
4. **Public Support** - This column indicates if the project was identified by the public as a need or wasn't a discussion item, but was determined a potential project to improve connectivity, assessability, and safety of pedestrians (n/a).
5. **Type** - The last column indicates the project type.



CITY OF KINSTON - SUMMARY OF POTENTIAL PEDESTRIAN PROJECTS				
PROJECT ID	POTENTIAL PEDESTRIAN PROJECTS	TIP	PUBLIC SUPPORT	TYPE OF FACILITY
POTENTIAL SOUTH REGION PROJECTS:				
P-1	Conduct Queen Street Road Design Improvements	Y	Yes	Traffic Calming
P-2	Conduct Downtown Streetscape Improvements	N	Yes	Aesthetics & Crossings
P-3	Construct a Pedestrian Bridge across the Neuse River	Y	Yes	Pedestrian Bridge
P-4	Improve MLK Blvd. and Caswell Street Intersection	Y	Yes	Crossing / Intersection
P-5	Improve MLK Blvd. and Washington Street Intersection	Y	Yes	Crossing / Intersection
P-6	Install Sidewalk Infill along East Washington Street	N	Yes	Sidewalk
P-7	Install Sidewalk Infill along MLK Boulevard	N	Yes	Sidewalk
P-8	Install Sidewalks along Secrest Street	Y	Yes	Sidewalk
P-9	Replace Holloway Pedestrian Bridge over Adkin Branch	N	Yes	Pedestrian Bridge
P-10	Construct Replacement of Washington Street Pedestrian Bridge	Y	Yes	Multimodal Bridge
P-11	Improve Secrest Street / Washington Street / J.P. Harrison Street Intersection	Y	Yes	Crossing / Intersection
P-12	Construct a Multi-Use Trail along Highway 70	Y	Yes	Multi-Use Trail
P-13	Improve South Queen Street and Shine Street Intersection	Y	N/A	Crossing / Intersection



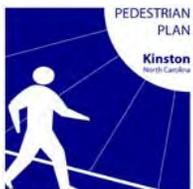
CITY OF KINSTON - SUMMARY OF POTENTIAL PEDESTRIAN PROJECTS				
PROJECT ID	POTENTIAL PEDESTRIAN PROJECTS	TIP	PUBLIC SUPPORT	TYPE OF FACILITY
P-14	Improve South Queen Street and South Street Intersection	Y	N/A	Crossing / Intersection
P-15	Install Sidewalk Infill along South Queen Street to Intersection of Highway 70	N	Yes	Sidewalk
P-16	Ensure Queen and King Street Bridges are Multimodal	Y	Yes	Multimodal Bridges
P-17	Ensure King Street Bridge is Multimodal	Y	Yes	Multimodal Bridge
P-18	Improve Meadowbrook Drive and Highway 70 Intersection	Y	Yes	Crossing / Intersection
P-19	Improve Highway 58 and Highway 70 Intersection	Y	Yes	Crossing / Intersection
P-20	Improve Highway 258 and Highway 70 Intersection	Y	Yes	Crossing / Intersection
P-21	Improve South Queen Street Bridge near Spring Hill Street	Y	N/A	Multimodal Bridge
POTENTIAL NORTH REGION PROJECTS:				
P-22	Improve North Queen Street Bridge over Adkin Branch	Y	N/A	Multimodal Bridge
P-23	Install Sidewalks along Highland Avenue	Y	Yes	Sidewalk
P-24	Improve Highland Avenue and North Queen Street Intersection	Y	N/A	Crossing / Intersection
P-25	Construct a Multi-Use Trail along Highland Avenue	Y	Yes	Multi-Use Trail
P-26	Construct a Multi-Use Path along J.P. Harrison	Y	Yes	Multi-Use Trail
P-27	Construct a Multi-Use Path between Kinston High School and Lenoir Memorial Hospital	Y	Yes	Multi-Use Trail



CITY OF KINSTON - SUMMARY OF POTENTIAL PEDESTRIAN PROJECTS				
PROJECT ID	POTENTIAL PEDESTRIAN PROJECTS	TIP	PUBLIC SUPPORT	TYPE OF FACILITY
P-28	Improve Herritage Street and Airport Road Intersection	Y	N/A	Crossing / Intersection
P-29	Improve Herritage Street and Highway 58 Intersection	Y	Yes	Crossing / Intersection
P-30	Install Sidewalk Infill along Herritage Street	N	Yes	Sidewalk
P-31	Install Sidewalk Infill along North Queen Street	N	Yes	Sidewalk
P-32	Improve North Queen Street and Airport Road Intersection	Y	N/A	Crossing / Intersection
P-33	Improve Plaza Boulevard and Herritage Street Intersection	Y	N/A	Crossing / Intersection
P-34	Improve Plaza Boulevard and North Queen Street Intersection	Y	N/A	Crossing / Intersection
P-35	Install Sidewalk Infill along Plaza Boulevard	N	Yes	Sidewalk
P-36	Improve Herritage Street and Vernon Avenue Intersection	Y	Yes	Crossing / Intersection
P-37	Improve Queen Street and Vernon Avenue Intersection	Y	Yes	Crossing / Intersection
P-38	Improve Herritage Street and Highland Avenue Intersection	Y	N/A	Crossing / Intersection
P-39	Construct Sidewalks along Doctors Street	N	N/A	Sidewalk / Intersection
P-40	Install a Mid-Block Crossing from Doctors Street to Lenoir Memorial Hospital	Y	N/A	Crossing / Intersection
P-41	Improve MLK Boulevard and Vernon Avenue Intersection	Y	N/A	Crossing / Intersection
P-42	Improve Vernon Avenue and McLewean Street Intersection	Y	Yes	Crossing / Intersection



CITY OF KINSTON - SUMMARY OF POTENTIAL PEDESTRIAN PROJECTS				
PROJECT ID	POTENTIAL PEDESTRIAN PROJECTS	TIP	PUBLIC SUPPORT	TYPE OF FACILITY
P-43	Improve Stadiem Street and Old Snow Hill Road Intersection	N	N/A	Crossing / Intersection
P-44	Improve Stadiem Street and Hyman Street Intersection	N	N/A	Crossing / Intersection
P-45	Improve Stadiem Street and Charlotte Street Intersection	N	N/A	Crossing / Intersection
P-46	Improve William Street and Charlotte Street Intersection	N	N/A	Crossing / Intersection
POTENTIAL WEST REGION PROJECTS:				
P-47	Install Sidewalk Infill along Carey Road	N	Yes	Sidewalk
P-48	Install Sidewalk and/or Multi-Use Lane along Carey Road	Y	Yes	Sidewalk or Multi-Use Trail
P-49	Improve Vernon Avenue and Greenbriar Road Intersection	Y	N/A	Crossing / Intersection
P-50	Improve Vernon Avenue and Carey Road Intersection	Y	N/A	Crossing / Intersection
P-51	Improve Plaza Boulevard and Carey Road Intersection	Y	N/A	Crossing / Intersection
P-52	Install a Sidewalk or Walkway around Kinston Country Club and Golf Course	N	Yes	Sidewalk/Walkway/ or Shared Street
P-53	Install Sidewalks along Washington Street	N	N/A	Sidewalks
P-54	Construct a Multi-Use Trail along Vernon Avenue	Y	Yes	Multi-Use Trail
P-55	Improve Vernon Avenue and Pecan Drive Intersection	Y	N/A	Crossing / Intersection
P-56	Improve Vernon Avenue and Hardee Road Intersection	Y	N/A	Crossing / Intersection



CITY OF KINSTON - SUMMARY OF POTENTIAL PEDESTRIAN PROJECTS				
PROJECT ID	POTENTIAL PEDESTRIAN PROJECTS	TIP	PUBLIC SUPPORT	TYPE OF FACILITY
P-57	Install Sidewalk Infill along Hardee Road	N	Yes	Sidewalk
P-58	Improve Highway 70 and Highway 258 near Wal-Mart	Y	Yes	Crossing / Intersection
P-59	Install Sidewalk Infill along Vernon Avenue	Y	Yes	Sidewalk
P-60	Install Sidewalks along Hillcrest Road	Y	Yes	Sidewalk
P-61	Construct a Westgate Multi-Use Trail	N	Yes	Multi-Use Trail
POTENTIAL CITY-WIDE PROJECTS:				
P-62	Develop an East Coast Greenway Connection	N	Yes	Multi-Use Trail
P-63	Develop a Greenway and Riverwalk	N	Yes	Multi-Use Trail
P-64	Develop a Mountain-to-Sea Trail Connection	N	N/A	Multi-Use Trail
P-65	Revitalization of MLK Boulevard	N	Yes	Special Improvements
P-66	Improve Transit Stops	N	N/A	Site Specific Pedestrian Improvements



REVIEW FUNDING OPPORTUNITIES

A combination of funding sources would need to be utilized to implement the identified projects and programs outlined in this Plan. The City of Kinston should seek all funding opportunities for project implementation, including State and Federal monies where available. Special funding programs for specific types of projects such as Safe Routes to School should also be pursued. The use of private foundations should be thoroughly researched and private donations accepted to assist in securing funding. Even with the vast funding sources available there usually is a local match requirement. Unfortunately, sometimes the most reliable source of funding will ultimately be the local government; therefore it is important for the City of Kinston to schedule the necessary funds yearly to complete a certain amount for pedestrian infrastructure implementation. This yearly budget line item will ensure that pedestrian projects identified in this Plan will be completed. This action will also illustrate the City's commitment to improve walkability in the community.

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

Local Funding Sources

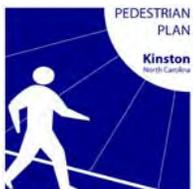
Several types of potential local funding sources are available for the City of Kinston. Local funds should be used for projects not on major state routes and as local match. Local funding sources tend to be flexible and include general revenue expenditures as well as proceeds from bond programs. Some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

- ❖ **Annual Improvement Program**

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

- ❖ **Transportation Bonds**

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



❖ **Eastern Carolina Rural Transportation Planning Organization (RCRPO)**

Kinston is a member of the RCRPO which plans and assists with multimodal transportation planning for their area. As a member, Kinston is able to assist in determining the transportation needs for their community in regards to state and federal road improvements, as well as transportation enhancement projects that get placed on the State Transportation Improvement Program (STIP).

State & Federal Funding Sources

The Safe, Accountable, Flexible, and Efficient Transportation Equity Act: A Legacy for Users (SAFETELU) law guarantees funding for highways, highway safety, and public transportation. Provisions of law address specific safety issues, including pedestrian and bicycle safety. Funds for pedestrian projects come from several different sources that are described below; however, allocation of those funds depends on the type of project or program and other criteria.¹

❖ **Highway Safety Improvement Program (HSIP)**

HSIP allows States to target their most critical safety needs. States are required to develop and implement a safety plan and submit safety reports that describe hazardous locations, progress in implementation of highway safety improvement projects, and the effectiveness of those projects in reducing injuries and fatalities.²

❖ **Safe Routes to Schools Program (SRTS)**

The SRTS program is new to North Carolina. It intends to enable and encourage elementary and middle school students to walk safely to school. Funding is available to facilitate planning, development, and implementation of activities and projects that reduce traffic, fuel consumption, air pollution, and improve safety within approximately two (2) miles of elementary and middle schools (K-8 only). The North Carolina Safe Routes to School program provides opportunities for schools to apply for grant funding to develop an action plan, non-infrastructure improvements (education, enforcement, and encouragement), and infrastructure improvements to encourage walking and cycling to school. The maximum amount an applicant can receive to develop an action plan is \$15,000 for one to two schools and \$30,000 for three or five schools. The maximum amount for non-infrastructure grants is \$50,000³. The funding cap will be \$250,000 per project proposal.



❖ **Highway Division Funds**

Highway Division Funds are a component of the SRTS program. Under the SRTS program, each Highway Division in North Carolina will receive \$200,000 in fiscal year 2008 and \$230,000 in fiscal year 2009. These funds will be used for timely, relatively low-cost spot safety improvements within the rights-of-way on state maintained roadways. Requests for these funds must be made directly to the Division offices. The maximum amount per request is \$50,000. Lenoir County is in the NCDOT Division 2 with headquarters in Greenville.

❖ **Powell Bill Funds**

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

❖ **The Recreational Trails Program**

This program has thirty percent (30%) of its funds set aside for motorized trail projects, thirty percent (30%) for non-motorized trail uses, and the remainder can be spent on either. These funds can be used to cover the costs of construction, maintenance of equipment, real estate, educational programs, state administration, and assessment of trail conditions. The maximum amount an applicant can receive is \$75,000 and there is a twenty percent (20%) local match requirement.⁴

❖ **Transportation Improvement Program (TIP)**

As a part of the state's Transportation Improvement Program (TIP), pedestrian TIP projects can receive allocations through an array of funding resources including Federal Aid Construction Funds and State Construction Funds/State Highway Trust Fund. However, one of the most cost-effective ways of providing pedestrian facilities is to incorporate them as part of larger reconstruction, new construction, and repaving projects. If a pedestrian project is "incidental" in scope and cost of an overall highway improvement project, the same funding source can be used.

❖ **Sidewalk Program**

Each year a total of \$1.4 million in STP-Enhancement funding is set aside for sidewalk construction, maintenance and repair. Each of the 14 highway divisions across the state receives \$100,000 annually for this purpose. Funding decisions are made by the district engineer. Prospective applicants are encouraged to contact their district engineer for information on how to apply for funding.



❖ **Surface Transportation Program (STP)**

Funds allocated to the STP can be used to construct pedestrian walkways, create maps and brochures, or develop public service announcements (PSAs) promoting safe walking. These funds can also be used to retrofit public sidewalks to comply with ADA.⁵

❖ **Transportation Enhancement Activities (TEAs)**

North Carolina earmarks ten percent (10%) of their annual STP funds for Transportation Enhancement Activities (TEAs). Transportation enhancements are transportation-related activities that are designed to strengthen the cultural, aesthetic, and environmental aspects of transportation systems. TEA provides for the implementation of non-roadway capacity improvement projects including pedestrian facilities, landscaping, and similar aesthetic improvements. Various forms of pedestrian facilities such as sidewalks, pedestrian tunnels and bridges, and crossing improvements are eligible for funding. Conversion of abandoned railway corridors to multi-use paths can also be funded with these monies.⁶

❖ **Spot Improvement Program.**

The NCDOT Bicycle and Pedestrian Transportation Division budgets \$500,000/year for “spot” safety improvements throughout the State. These improvements might include signing, grate replacement, hazard remediation at skewed RR crossings, and other small-scale improvements. The Spot Improvement Program is used only for bicycle and pedestrian projects. This program is typically used for small-scale and special situation projects that are not of a significantly large enough scale to merit being a TIP project. Proposals for these funds can be submitted directly to the Bicycle & Pedestrian Transportation Division.

❖ **Statewide 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. To request funding, an entity must submit a written request to the NCDOT Highway Division office with a clear description of project and project justification.

❖ **Hazard Elimination and Railway-Highway Crossing Programs**

These funds are an additional subset of the State Transportation Improvement Program (STIP) funding, constituting ten percent (10%) of a state’s funds. This program is intended to inventory and correct the safety concerns of all travel modes including pedestrian. Publicly-owned pedestrian pathways can be



funded under this program. Pedestrian projects can also be eligible for the Hazard Elimination Program, which is administered through locations that have a documented history of previous crashes. A maximum of \$100,000 is offered per NCDOT Highway Division for hazard elimination projects.⁷

❖ **Land and Water Conservation Fund (LWCF)**

The Land and Water Conservation Fund provide grants for communities to build a variety of park and recreation facilities including trails and greenways. In North Carolina, the federally granted money is allocated through the State Division of Park and Recreation. There is a fifty percent (50%) local match.⁸

❖ **North Carolina's Clean Water Management Trust Fund (CWMTF)**

CWMTF provides grants to local governments, state agencies, and conservation nonprofits to help finance projects that specifically address water pollution problems. CWMTF funds may be used to establish a network of riparian buffers and greenways for environmental, educational, and recreational benefits. Grants are designed to fund projects that bring parks and recreation, including multi-use trails closer to people's homes.⁹

❖ **Governor's Highway Safety Program (GHSP)**

The Governor's Highway Safety Program is committed to enhancing the safety of the roadways in North Carolina. To achieve this, GHSP funding is provided through an annual program, upon approval of specific project requests to undertake a variety of pedestrian safety initiatives. Communities may apply for a GHSP grant to be used as seed money to start a program to enhance highway safety. Funding is provided on a reimbursement basis and evidence of reductions in crashes, injuries, and fatalities is required. Amounts of GHSP monies vary from year to year.¹⁰

❖ **North Carolina Parks and Recreation Trust Fund (PARTF) Grant Program**

The PARTF program provides local governments with dollar-for-dollar matching grants to acquire land and renovate or develop of recreational projects for the general public, including multi-use trails. The maximum amount an applicant is eligible for is \$500,000.¹¹

❖ **North Carolina Adopt-A-Trail Program**

North Carolina Adopt-A-Trail Program provides communities with grant monies up to \$5,000 for construction, maintenance, facilities, signage, brochures, and maps.¹²



❖ **Conservation Tax Credit**

The Conservation Tax Credit program allows landowners who donate property for conservation purposes by easements or sale. These landowners are eligible for the North Carolina Conservation Tax Credit. The goal of the program is to provide incentive to protect water supply watersheds, manage stormwater, retain forests and working farms, and to allow for ecological communities through the formation of trails and wildlife corridors.¹³

❖ **Congestion Mitigation and Air Quality Improvement Program**

This Environmental Protection Agency's (EPA's) program can assist in funding many of the same projects funded by the STP including pedestrian walkways, maps, brochures, and public service announcements.¹⁴

❖ **Watershed Protection and Flood Prevention Grants for Small Watersheds**

Watershed Protection and Flood Prevention Grants for Small Watersheds provides funding to state and local agencies or nonprofit organizations to create and maintain watershed improvements of less than 250,000 acres. Financial and technical assistance are available and a fifty percent (50%) local match is required for public recreation projects.¹⁵

❖ **Community Development Block Grant Program (CDBG).**

CDBG provides grants to communities to revitalize their neighborhoods, for economic development, and to improve community facilities and services particularly in low- to moderate-income areas. These funds can be used to create safe multi-use trails or sidewalks.¹⁶

❖ **The Brownfields Redevelopment Initiative**

The Brownfields Redevelopment Initiative provides loan guarantees and funding for the cleanup and redevelopment of environmentally contaminated commercial and industrial sites. Multi-use paths and sidewalks integrated into the new site designs could be a funded project.¹⁷



Private Funding Sources

❖ **Blue Cross Blue Shield Fit Together Grants**

The FitCommunity Program is a designation and grant program to recognize and reward municipality and county efforts to promote physical activity, healthy eating and tobacco-free programs, policies, environments and lifestyles. A municipality or county is eligible for grant money once it has received a FitCommunity designation. This program awards up to nine partnerships with up to \$30,000 annually for a two year period.¹⁸

❖ **Active Living by Design (ALbD)**

Active Living by Design is a program sponsored by the Robert Wood Johnson Foundation. The program seeks to bring together the health care and transportation communities to create an environment that encourages residents to pursue active forms of transportation such as walking and bicycling. Grants are awarded each year to a selected number of communities with a local match requirement. These monies can be used to create plans, change land use policies, institute education policies, and develop pilot projects.¹⁹

❖ **The Trust for Public Land**

The Trust for Public Land (TPL) is the only national nonprofit working exclusively to protect land to enhance the health and quality of life in American communities. TPL works with landowners, government agencies, and community groups to create urban parks and greenways as well as to conserve land for watershed protection.²⁰

❖ **Developer Contributions.**

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

❖ **Impact Fees.**

Developer impact fees and development charges are another funding option for Kinston. Impact fees are commonly used for water and wastewater system connections or police and fire protection services, but they have recently been used to fund school systems and pay for the impacts of increased traffic on exist-



ing roads. Impact fees place the costs of new development directly on developers and indirectly on those who buy property in new developments.

❖ **Design Arts Program, the National Endowment for the Arts**

The Design Arts Program can provide states, local agencies, individuals, and nonprofit organizations with grants if their project incorporates urban design, planning, historic preservation, architecture, landscape architecture, or other community improvement activities – for example multi-use trail development. Maximum amount per applicant is \$50,000 with a required 50% local match.²¹ These monies can be used for sidewalks or multi-use trails/paths in the historical district of Kinston or in areas of historic or architectural significance – Civil War Memorials.

❖ **The Robert Wood Johnson Foundation**

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

❖ **Small Grants**

Small grants of \$250-\$2,000 are offered for planning, design, and development of greenways through a partnership between the Conservation Fund's American Greenways Program²², Eastman Kodak Corporation, and the National Geographic Society. These grants can be used for off-road multi-use trails.

❖ **Wal-Mart Foundation**

Local community and environmental activities and educational programs for children that are put on by charitable organizations may be funded through the Wal-Mart Foundation.²³ Organizations must work with the local store manager to discuss application. These funds should be used for pedestrian safety education.

❖ **Other Private Funding Opportunities**

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



Volunteers from within the community can aid in the expansion of the pedestrian network by conducting fundraisers or by donating labor to construction, landscaping, and maintenance after the facility is in place. Community volunteers can be drawn from civic groups, scouting groups, and outdoor clubs. Volunteers can adopt trails or sidewalks or portions of them to keep clean and beautify through the years, saving the City money over time.

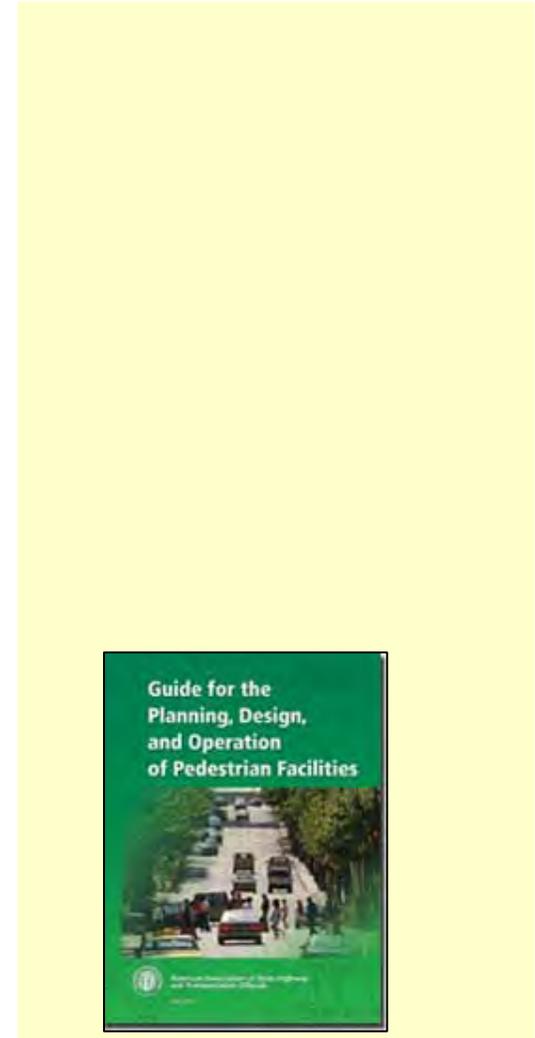
IDENTIFY SPECIAL FUNDING OPPORTUNITIES FOR HIGH PRIORITY PROJECTS

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

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

IDENTIFY SUPPORTING POLICIES / GUIDELINES

The NCDOT has compiled a report on Planning and Designing Local Pedestrian Facilities.²⁴ These guidelines are provided to localities throughout North Carolina and cover several, factors relating to the construction or restoration of pedestrian facilities. The Federal Highway Administration (FHWA) has declared that all transportation projects will incorporate bicycling and walking facilities, unless exceptional circumstances exist. The FHWA also calls for a minimum five-foot sidewalk on both sides of collector and arterial streets, with wider sidewalks and/or landscaped buffers where high volumes of vehicular and pedestrian traffic are present. Wider sidewalks may be necessary at intersections to accommodate accessible curb ramps.



The American Association of State Highway and Transportation Officials (AASHTO) have published the “Guide for the Planning, Design, and Operation of Pedestrian Facilities,” which provides guidelines on how to incorporate safe accommodations for pedestrian users. These guidelines will be used when constructing new or rehabilitating existing sidewalks where feasible. Examples of these guidelines are in Section 5.

There are also guidelines for designing pedestrian facilities in Kinston’s Code of Ordinance and Unified Development Ordinance.

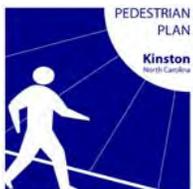
DEVELOP EVALUATION / MONITORING PROCESS

The City of Kinston should strive to complete at least one segment of a multi-use path, one segment of a major sidewalk improvement, two-thousand (2000) linear feet of minor sidewalk improvements, and at least one (1) intersection improvement per year. Sidewalk improvements include construction of new sidewalks and the repair of existing facilities. An annual assessment should be done on the pedestrian system to ensure that it stays up-to-date, based on needs. This should be done in conjunction with planning for the CIP each year, and the Pedestrian Plan should be updated at the same time to keep the document fresh by removing completed projects. Additional implementation guidelines can be found in Section 10.

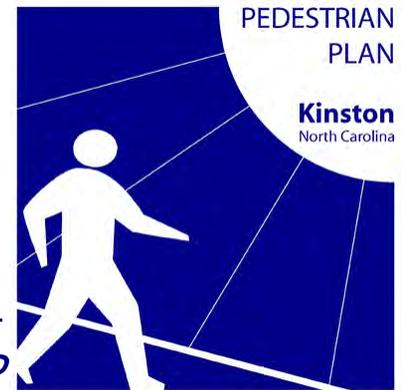
- ¹ SAFETEALU, <http://www.fhwa.dot.gov/safetealu/factsheets/hsip.htm>
- ² Highway Safety Improvement Program (HSIP), http://safety.fhwa.dot.gov/state_program/hsip/index.htm
& <http://www.fhwa.dot.gov/safetealu/factsheets/hsip.htm>
- ³ North Carolina Safe Routes to School Program, <http://www.ncdot.org/programs/saferoutes>.
- ⁴ Recreational Trails Program, <http://www.fhwa.dot.gov/environment/recretrails/index.htm>
- ⁵ Surface Transportation Program, <http://www.fhwa.dot.gov/programadmin/113005.cfm>
- ⁶ Transportation Enhancement Activities, <http://www.ncdot.org/financial/fiscal/Enhancement/ProgramInformation/Background/>
- ⁷ Hazard Elimination & Railroad-Highway Crossing Programs, <http://safety.fhwa.dot.gov/safetealu/siebyside.htm>
- ⁸ Land and Water Conservation Fund, <http://www.nps.gov/ncrc/programs/lwcf/>
- ⁹ North Carolina’s Clean Water Management Trust Fund, <http://www.cwmtf.net/>
- ¹⁰ Governor’s Highway Safety Program, www.ncdot.org/secretary/GHSP.
- ¹¹ North Carolina Parks and Recreation Trust Fund Grant Program, <http://www.parf.net/>



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- ¹² North Carolina Adopt-A-Trail Program, <http://ils.unc.edu/parkproject/trails/grant.html#a>
- ¹³ Conservation Tax Credit, <http://www.enr.state.nc.us/conservationtaxcredit/>
- ¹⁴ Congestion Mitigation and Air Quality Improvement Program, <http://www.fhwa.dot.gov/environment/cmaqpgs/>
- ¹⁵ Watershed Protection and Flood Prevention Grants for Small Watersheds, http://12.46.245.173/pls/portal30/CATALOG.PROGRAM_TEXT_RPT.SHOW?p_arg_names=prog_nbr&p_arg_values=10.904
- ¹⁶ Community Development Block Grant Program, <http://www.nccommerce.com/en/CommunityServices/CommunityDevelopmentGrants/CommunityDevelopmentBlockGrants/>
- ¹⁷ The Brownfields Redevelopment Initiative, <http://www.epa.gov/brownfields/>
- ¹⁸ Blue Cross Blue Shield Fit Together Grants, www.healthwellNC.com
- ¹⁹ Active Living by Design, www.activelivingbydesign.org
- ²⁰ The Trust for Public Land, www.tpl.org.
- ²¹ Design Arts Program, The National Endowment for the Arts, <http://www.nea.gov/grants/apply/Design.html>
- ²² Conservation Fund's American Greenways Program, <http://www.conservationfund.org/node/245>
- ²³ Wal-Mart Foundation, <http://www.walmartfoundation.org/wmstore/goodworks/scripts/index.jsp>
- ²⁴ Planning & Designing Local Pedestrian Facilities Guidelines, http://www.ncdot.org/transit/bicycle/projects/resources/projects_peddesign.html

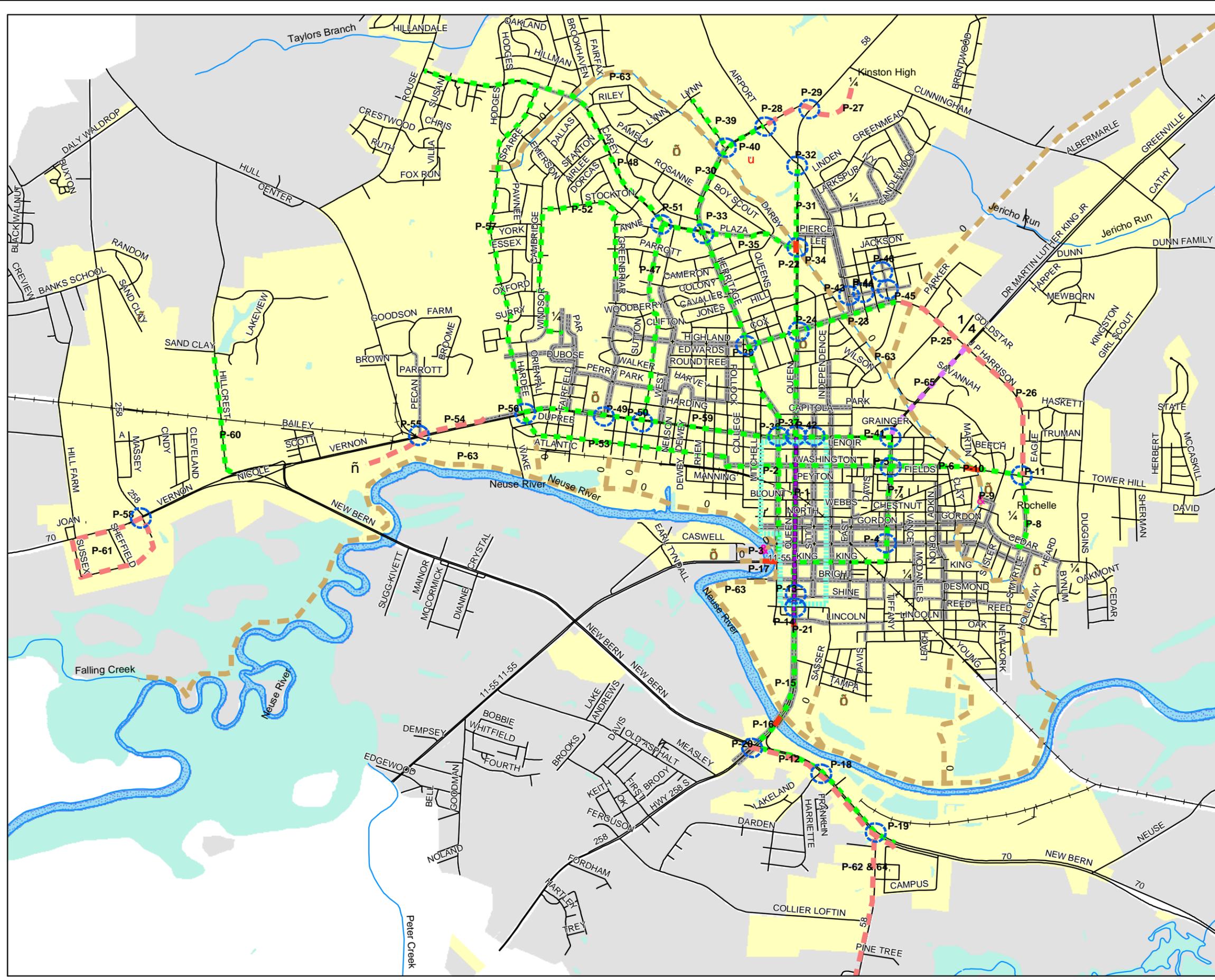


SECTION 8 –
SYSTEM MAP



The City of Kinston Comprehensive Pedestrian Plan

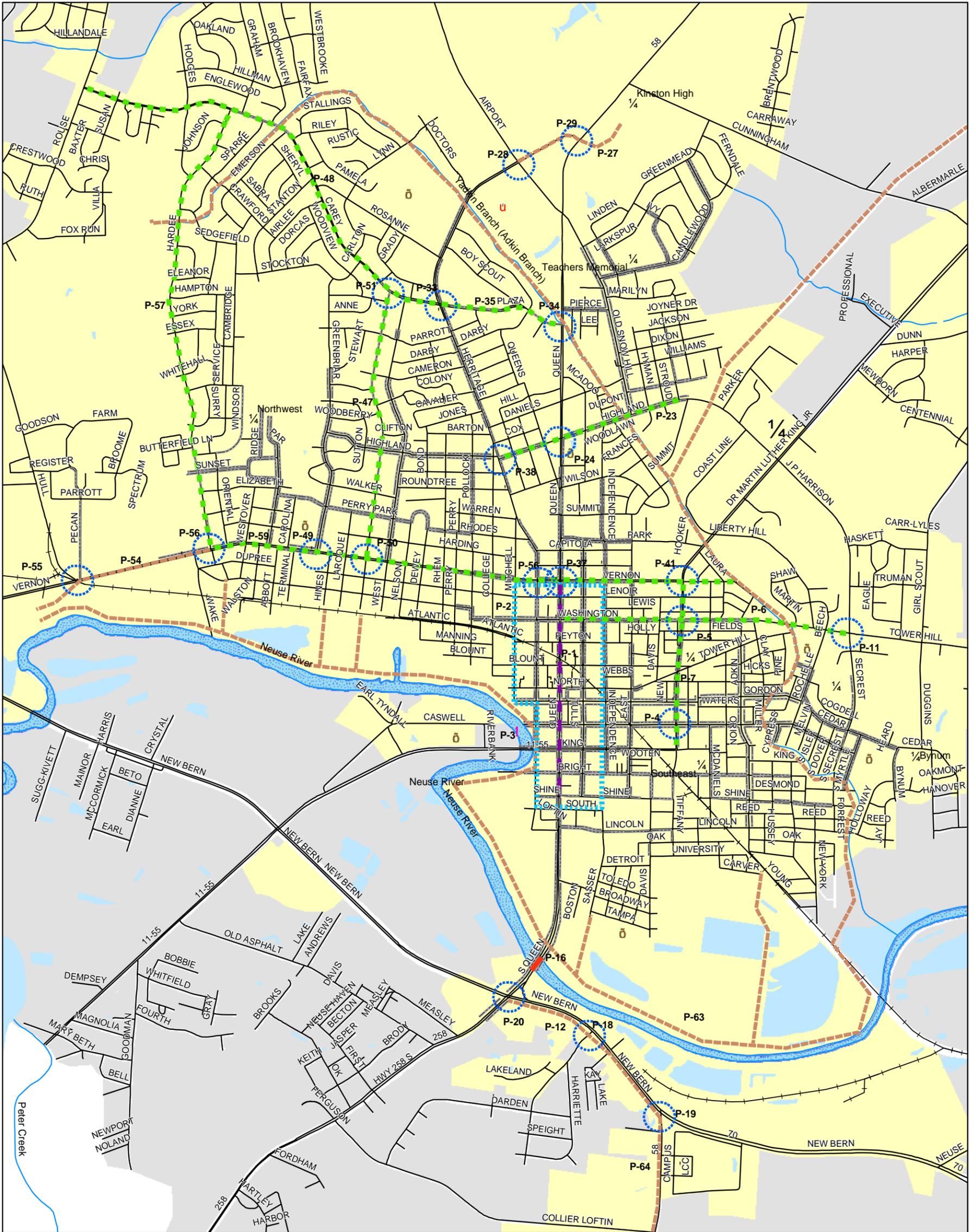
Map 8.1: All Potential Pedestrian Projects
(as discussed in Section 7)



Legend

- Parks
- Public Schools
- Gov. Caswell Memorial
- Transit Stops - P-66
- Pedestrian Bridge
- Crossings / Intersections
- Special Improvements
- Multi-Use Trail
- Streetscape Improvements
- Multimodal Bridge
- Traffic Calming / Road Diet
- Infill and/or New Sidewalks
- Greenway/Riverwalk
- Existing Sidewalks
- Roads
- Streams
- RailRoad
- Neuse River
- Water Bodies
- Kinston City Limits
- ETJ





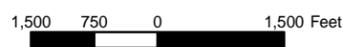
The City of Kinston Comprehensive Pedestrian Plan

Map 8.2: All Recommended Priority Pedestrian Projects
(as listed in Section 9)

Legend

- Parks
- Public Schools
- Improve Transit Stops P-66
- Pedestrian Bridge
- Priority Infill and/or New Sidewalk Projects
- Priority Crossings / Intersections
- Priority Traffic Calming Projects
- Priority Streetscape Improvements
- Priority Multimodal Bridges
- Priority Multi-use Trails
- Existing Sidewalks
- Roads
- Streams
- RailRoad
- Neuse River
- Water Bodies
- Kinston City Limits
- ETJ

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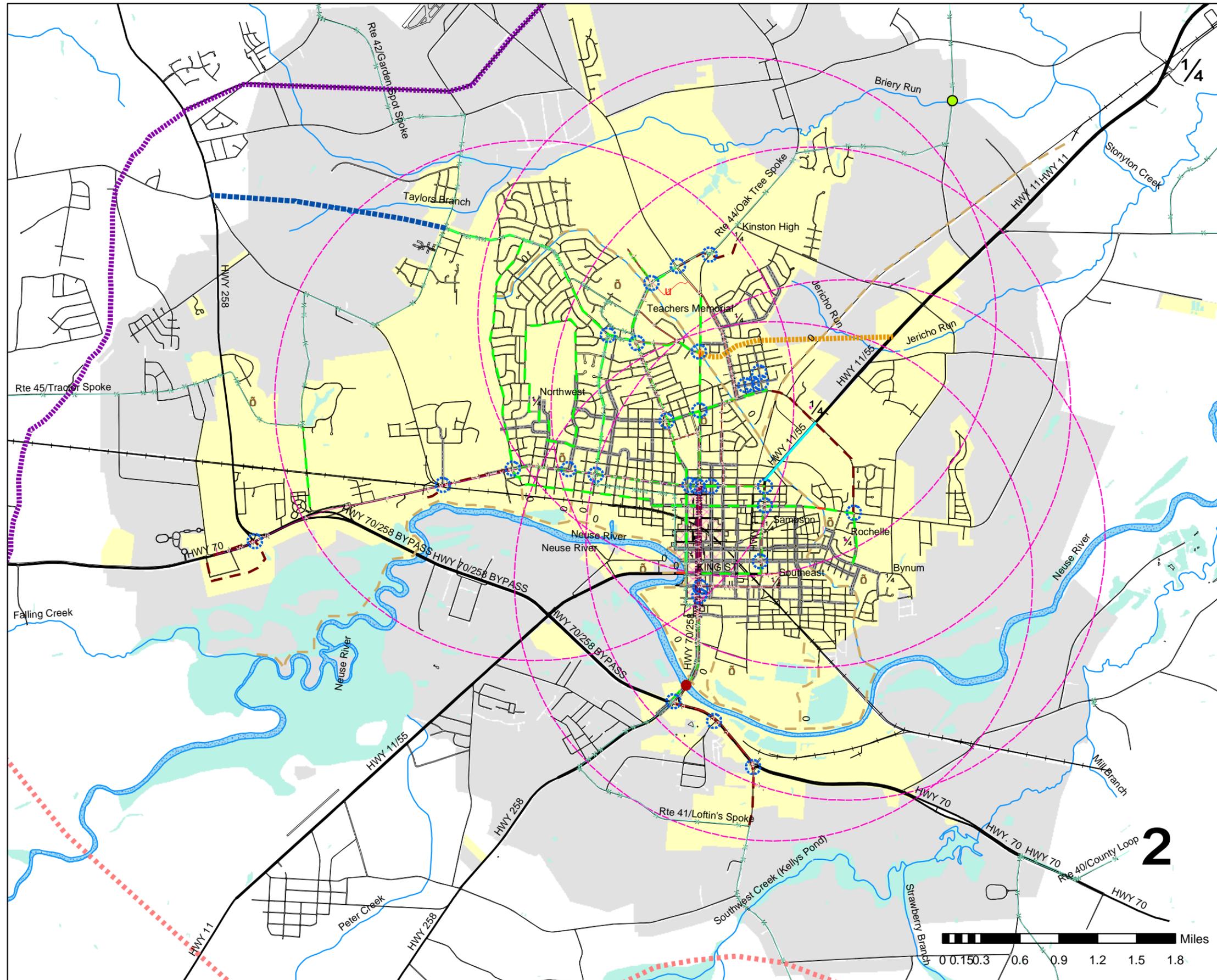


The City of Kinston
Comprehensive Pedestrian Plan

Map 8.3
Comprehensive Transportation Plan

Legend

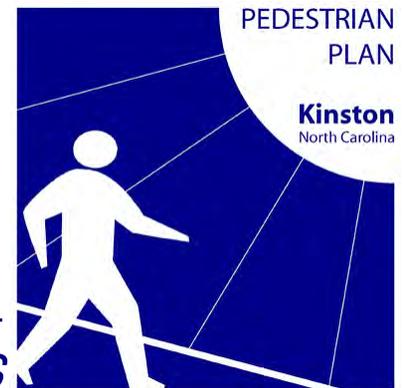
- Parks
- Public Schools
- Transit Stops
- Pedestrian Bridges
- TIP - B-4565 (Queen Street Bridges)
- TIP - B-4925 (Briary Run Bridge)
- TIP - R-2553 (US 70 Bypass)
- TIP - R-2719 (Crescent Road)
- TIP - U-3618 (Carey Road Extension)
- TIP - U-4018 (Plaza Blvd Extension)
- Morning Transit Route
- Afternoon Transit Route
- Bike Routes
- Multimodal Bridges
- Crossing / Intersection Improvements
- Traffic Calming / Road Diet
- Infill and New Sidewalks
- Safe Routes to School
- Special Improvements
- Multi-Use Trails
- Greenway/Riverwalk
- Existing Sidewalks
- Truck Routes
- RailRoad
- Roads
- Streams
- Neuse River
- Downtown Streetscape Improvements
- Water Bodies
- Kinston City Limits
- ETJ



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Division of
Bicycle &
Pedestrian
Transportation

SECTION 9 –
RECOMMENDATIONS



PEDESTRIAN
PLAN

Kinston
North Carolina

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SECTION 9 RECOMMENDATIONS

The recommendations for priority pedestrian projects, programs, and policies for the City of Kinston are provided in this section. These recommendations are based upon the input received from the public participation activities, existing plans, Task Force priorities, and identified needs. These recommendations were presented and discussed at task force meetings for feedback and comments. The comments and concerns received were addressed and the following represents the summary of the projects, programs, and policies that will make the City of Kinston a walkable community. All recommended priority projects are mapped in Section 8.

RECOMMENDATIONS FOR PEDESTRIAN PROJECTS

These recommended projects include projects Task Force members determined to be a priority in the next five to ten (5-10) years, as well as additional projects the Consultant deemed to be an important component to those projects; for instance, intersection crossings. All recommended priority projects will assist in improving pedestrian connectivity, accessibility, and safety.

Methodology of Priority and Ranking

Task Force members were asked to review all potential projects in Section 7 and rank their top ten projects they felt were a priority in the next 5-10 years. Projects were ranked from one to ten (1-10) with one (1) being the most important to ten (10) being least important. The lists were tabulated with each project given a numeric value based on their ranking (1=10 points, 2=9 points, 3=8 points....). Once tabulated, incidental projects to those priority projects were identified by the Consultant and listed as well. For instance, intersection improvement projects were added to the list to ensure adequate pedestrian crossings and safer pedestrian and vehicle interface.

Potential projects not recommended at this time should be considered for future pedestrian projects when this Plan is reviewed annually.



Recommended Priority Pedestrian Projects – Action Plan

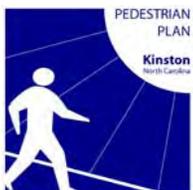
An Action Plan was developed to itemize each recommended priority project and was placed in order by their priority given by the Task Force.

The Action Plan lists the following information (if applicable):

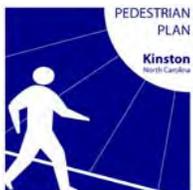
1. **Study Area** – Corresponds to the study area as mentioned throughout the plan (Southeast, North, West, City-Wide)
2. **Project ID** - Corresponds to the project identification number used in this Plan. This project identification number provides a link to the text and associated maps in Section 8.
3. **Task Force Priority** – Indicates Task Force’s priority of project
4. **Points** – Indicates the number of points the project received
5. **Type** - Identifies the action type
6. **Project**– Recommended action
7. **Funding Sources** - Identifies potential funding sources which can assist financial responsibility for each project. (Funding sources are ones that were available at time of plan development and are subject to change.)
8. **Responsible Party** - Identifies probable entity and/or agency responsible for making sure the corresponding project is completed
9. **Estimated Cost** – Cost estimates calculated using Federal Highway Administration published costs and rough scaling. These costs are rough estimates and should not be considered final. Further surveying and engineering should be completed to determine final costs.
10. **Completion Date** - To track completion of action



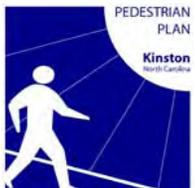
RECOMMENDED PRIORITY PEDESTRIAN PROJECTS – ACTION PLAN									
STUDY AREA	PROJECT ID	TASK FORCE PRIORITY	POINTS	TYPE	PROJECT	FUNDING SOURCE(s)	RESPONSIBLE PARTY(IES)	Estimated Cost	Completion Date
SE	P-3	1	25	Bridge	Construct a pedestrian bridge over Neuse River	Local, Private, NCDOT(TIP)	Joint – City & Private	\$1.5 million	
SE	P-1	2	20	Traffic Calming	Conduct Queen Street Road Design Improvements	Local, NCDOT (TIP)	Joint – City & NCDOT	\$1-2.5 million	
SE	P-16	3	19	Bridges	Ensure new Queen Street bridges are multimodal	NCDOT(TIP)	Joint – City & NCDOT	\$500,000	
SE	P-2	4	15	Special	Conduct downtown streetscape improvements	Local, NCDOT, Private	Joint – City & NCDOT	\$200,000-250,000	
CW	P-64	6	11	Multi-Use Trail	Construct a Mountain-to-Sea Trail Connection	Local, NCDOT, CWTF, PARTF	Joint - Public Works, Parks & Recreation	\$236,786	
N	P-27, P-29, & P-28	8	9	Multi-Use Trail/Path & Incidental Crossings	Construct a multi-use trail/path between Herritage Street and Kinston High School with two intersection improvements (Highway 58/Herritage Street and Airport Road/Herritage Street)	Local, NCDOT(TIP)	Public Works	\$482,686	
N	P-56	8	9	Intersection	Improve Herritage Street and Vernon Avenue intersection	Local, NCDOT, Private	Joint – Public Works & NCDOT	\$181,600	
N	P-35, P-34, P-33, & P-51	9	8	Sidewalk & Incidental Crossings	Install sidewalk infill sidewalks along Plaza Boulevard with three incidental intersection improvements (N. Queen Street/Plaza Blvd., Plaza Blvd./Herritage Street, and Plaza Blvd. and Carey)	Local, NCDOT(TIP)	Joint - Public Works & NCDOT	\$585,645	
N	P-47 & P-50	9	8	Sidewalk & Incidental Crossings	Install sidewalk Infill along Carey Road with one incidental intersection improvement (Carey Rd/Vernon Ave.)	Local, NCDOT (TIP)	Joint – City and NCDOT	\$223,195	
N	P-48	9	8	Sidewalk	Install sidewalk or multi-use lane along Carey Road	Local, NCDOT(TIP)	Joint – City and NCDOT	\$389,935	



RECOMMENDED PRIORITY PEDESTRIAN PROJECTS – ACTION PLAN									
STUDY AREA	PROJECT ID	TASK FORCE PRIORITY	POINTS	TYPE	PROJECT	FUNDING SOURCE(S)	RESPONSIBLE PARTY(IES)	Estimated Cost	Completion Date
N	P-37	9	8	Intersection	Improve Queen Street and Vernon Avenue intersection	Local, NCDOT, Private	Joint – Public Works & NCDOT	\$181,600	
CW	P-63	10	7	Multi-Use Trail	Construct Greenway and Riverwalk	Local, Private, CWTF, PARTF, NCDOT	Joint – Public Works, Planning & Pride	\$25 Million +	
CW	P-66	11	6	Special	Improve transit stops	Local, NCDOT	Joint – Local, Transit Authority	\$160,000	
W	P-59, P-56, P-41	12	5	Sidewalk & Incidental Crossings	Install sidewalk infill along Vernon Avenue with two intersection improvements (Hardee/Vernon Ave., and Vernon Ave. and MLK Blvd.)	Local, NCDOT-TIP	Public Works	\$727,095	
N	P-49	13	4	Intersection	Improve Vernon Avenue and Greenbriar Road intersection	Local, NCDOT	Joint - Public Works & NCDOT	\$181,600	
SE	P-6 & P-11	14	3	Sidewalk & Incidental Crossing	Install sidewalk infill along E. Washington Street with one intersection improvement (Secrest/JP Harrison/Washington)	Local, NCDOT(TIP)	Public Works	\$562,620	
N	P-23, P-24, & P-38	14	3	Sidewalk & Incidental Crossings	Install sidewalk infill along Highland Avenue with two incidental intersection improvements (Highland Ave./Queen Street and Highland Ave./Heritage St.)	Local, NCDOT(TIP)	Public Works	\$343,175	
W	P-57	14	3	Sidewalk	Construct sidewalks along Hardee Street	Local	Public Works	\$132,120	
W	P-54 & P-55	14	3	Multi-Use Trail/Path & Incidental Crossing	Construct a multi-use trail along Vernon Avenue with one incidental intersection improvement (Vernon Ave/Pecan Drive)	Local, NCDOT(TIP)	Joint – Public Works & NCDOT	\$360,421	



RECOMMENDED PRIORITY PEDESTRIAN PROJECTS – ACTION PLAN									
STUDY AREA	PROJECT ID	TASK FORCE PRIORITY	POINTS	TYPE	PROJECT	FUNDING SOURCE(s)	RESPONSIBLE PARTY(IES)	Estimated Cost	Completion Date
N	P-12, P-18, P-19, & P-20	15	2	Multi-Use Trail & Incidental Crossings	Construct a multi-use trail along Highway 70 with three incidental intersection improvements (Hwy 58/Hwy 70, Hwy 70/Meadowbrook, and Hwy 258/Hwy 70)	NCDOT(TIP)	Joint – City and NCDOT	\$774,621	
SE	P-7, P-4, & P-5	16	1	Sidewalk Infill & Crossings	Install sidewalk infill along MLK Boulevard with two incidental intersection improvements (Washington/MLK and MLK and Caswell)	Local, NCDOT(TIP)	Public Works	\$368,210	



Preferred Treatments for Recommended Priority Projects

Project description and preferred treatments are given below for the top priority projects listed in the above action plan. In addition to these projects, incidental intersections are recommended for improvements to ensure connectivity, accessibility, and pedestrian safety.

P-3 Construct a Pedestrian Bridge across the Neuse River

An attractive, well-designed pedestrian bridge should be constructed across Neuse River to connect downtown to Neuseway Nature Park. A minimum six to eight foot (6-8') wide walkway should be constructed at both ends of bridge.

P-1 Conduct Queen Street Road Design Improvements

A feasibility study conducted by Ramey Kemp & Associates, Inc., (Appendix D) identified two types of traffic calming methods for Queen Street. The first method is a "road diet" which is conversion of the existing four lanes to two traffic lanes with one through lane in each direction and a center turn lane. The center lane may also be utilized as a landscaped median. On-street parking can be parallel or diagonal parking with curb bump-outs at key intersections. A combination of textured and/or raised crosswalks can provide traffic calming to increase pedestrian accessibility and safety. The second method is installing a single-lane roundabout at a specified intersection. Both methods would require significant coordination and cooperation between the City of Kinston, the NCDOT, and property owners.

P-16 Ensure Queen Street Bridges are Multimodal

The bridges should have sidewalks with a minimum width of five feet six inches (5'-6") along both sides and a forty-two inch (42") bridge railing between the vehicle lanes and sidewalk (NCDOT Bridge Policy). Once the bridges are completed an important connection to downtown from the visitor lodging district should be established.

P-2 Conduct Downtown Streetscape Improvements

Improvements to the downtown streetscape include updated pedestrian scale design elements, such as wayfinding signage, textured crosswalks, trash receptacles, decorative pavements, decorative street lights, planting beds, and benches. Special attention to placement and scale is necessary to maintain vertical clearance and sidewalk zones.



P-64 Construct a Mountain-to-Sea Trail Link

Construct a twelve foot (12') wide multi-use trail to connect into Mountain-to-Sea Trail proposed along NC Bicycle Route 7. This trail should connect into the Highway 70 trail.

P-27 Construct a Multi-Use Path between Herritage Street and Kinston High School

Construct a ten foot (10') wide multi-use path with a minimum five foot (5') separation or a forty-two inch (42") high barrier between Lenoir Memorial Hospital and Kinston High School. Connections from path to existing commercial establishments should also be provided.

Incidental Intersection Improvements

P-28 Improve Herritage Street and Airport Road Intersection

Improve with pedestrian-activated devices, signage, curb ramps, and crosswalk markings to ensure safe pedestrian crossing

P-29 Improve Herritage Street and Highway 58 Intersection

Improve with pedestrian-activated devices, signage, a pedestrian refuge island, and crosswalk markings to ensure safe pedestrian crossing.

P-36 Improve Herritage Street and Vernon Avenue Intersection

Improve intersection of Herritage Street and Vernon Avenue with fixed-time pedestrian signal or pedestrian-activated device, crosswalk markings, curb ramps, a pedestrian refuge island, and signage.

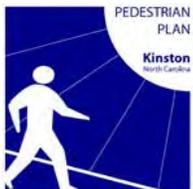
P-35 Install Sidewalks Infill along Plaza Boulevard

Install sidewalk infill along Plaza Boulevard from Queen Street to Carey Road. Sidewalks should be a minimum of five feet (5') with a minimum two foot (2') planting strip or buffer between sidewalk and travelway.

Incidental Intersection Improvements

P-33 Improve Plaza Boulevard and Herritage Street Intersection

Improve intersection with pedestrian-activated device, crosswalk markings, curb ramps, and signage.



P-34 Improve Plaza Boulevard and North Queen Street Intersection

Improve intersection with pedestrian-activated device, crosswalk markings, curb ramps, and signage.

P-51 Improve Plaza Boulevard and Carey Road Intersection

Improve intersection with pedestrian-activated device, crosswalk markings, curb ramps, and signage.

P-47 Sidewalk Infill along Carey Road

Construct sidewalk infill along Carey Road from Vernon Avenue to Plaza Boulevard to eliminate sidewalk gaps. Intersection of Highland and Carey should be improved with crosswalk markings and curb ramps at time of construction.

Incidental Intersection Improvement

P-50 Improve Vernon Avenue and Carey Road Intersection

Improve intersection with fixed-time pedestrian signals or pedestrian-activated device, crosswalk markings, curb ramps, a pedestrian refuge island, and signage.

P-48 Construct Sidewalks along Carey Road from Plaza Boulevard to Rouse Road

Construct five foot (5') wide sidewalks along Carey Road from Plaza Boulevard to Rouse Road.

P-37 Improve Queen Street and Vernon Avenue Intersection

Improve intersection of Herritage Street and Vernon Avenue with fixed-time pedestrian signal or pedestrian-activated device, crosswalk markings, curb ramps, a pedestrian refuge island, and signage.

P-63 Construct Greenway and Riverwalk

Construct a twelve foot (12') wide multi-use greenway and/or riverwalk along the north/east bank of Neuse River, along existing utility right of way of Adkin Branch, and the abandoned railroad with connections to Neuseway Nature Center, Caswell Memorial Park, RetroGreen Park, Mountain-to-Sea Trail, and East Coast Greenway.



P-66 Improve Transit Stops

Improve all transit stops/connections along Lenoir County Transit routes with on-site pedestrian accommodations. These accommodations can include improved signage, street and curb markings, curb ramps, sidewalks with a width minimum of five feet (5'), and a landing pad. Transit stops may also include other facilities, such as shelters, benches, and other furnishings.

P-59 Install Sidewalk Infill along Vernon Avenue

Infill sidewalks along both sides of Vernon Avenue from MLK Boulevard to Hardee Road. These sidewalks should be a minimum of six feet (6') wide with a minimum five foot (5') separation buffer between sidewalks and travelway.

Incidental Intersection Improvement

P-41 Improve MLK Boulevard and Vernon Avenue Intersection

Improve intersection with fixed-time pedestrian signals or pedestrian-activated device, crosswalk markings, curb ramps, a pedestrian refuge island, and signage.

P-56 Improve Vernon Avenue and Hardee Road Intersection

Improve intersection with fixed-time pedestrian signals or pedestrian-activated device, crosswalk markings, curb ramps, a pedestrian refuge island, and signage.

P-49 Improve Vernon Avenue and Greenbriar Road Intersection

Improve Vernon Avenue and Greenbriar Road intersection with a fixed-time pedestrian signal or a pedestrian activated device, crosswalk markings, curb ramps, a pedestrian refuge island, and signage.

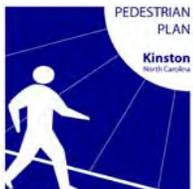
P-6 Install Sidewalk Infill along East Washington Street

Infill sidewalks along both sides of Washington Street from Queen Street to Secrest/JP Harrison intersection. Sidewalks should be a minimum of five feet (5') with a two to four foot (2-4') planting strip or buffer between sidewalk and travelway.

Incidental Intersection Improvement

P-11 Improve Secrest Street / Washington Street / J.P. Harrison Street Intersection

Improve intersection with a pedestrian-activated signal, crosswalk markings, curb ramps, and signage.



P-23 Infill Sidewalks along Highland Avenue

Infill sidewalks along Highland Avenue from Herritage Street to Stroud Street. The sidewalks should have a minimum width of six feet (6') with a two foot (2') buffer or planting strip due to passing by Emma Webb Park.

Incidental Intersection Improvements

P-24 Improve Highway Avenue and North Queen Street Intersection

Improve intersection with pedestrian-activated devices, signage, curb ramps, and crosswalk markings.

P-38 Improve Herritage Street and Highland Avenue Intersection

Improve intersection with pedestrian-activated devices, signage, curb ramps, and crosswalk markings.

P-57 Construct Sidewalks along Hardee Road

Construct a continuous five foot (5') wide sidewalk along west side of Hardee Road from Carey Road to Vernon Avenue. A two to four foot (2-4') separation buffer or planting strip should be installed between sidewalk and travelway.

P-54 Construct a Multi-Use Trail along Vernon Avenue

Construct a twelve foot (12') wide multi-use trail along Vernon Avenue from Hardee Road to Caswell Memorial Site Park. The trail should have a five foot (5') separation buffer between the trail and Vernon Avenue.

Incidental Intersection Improvement

P-55 Improve Vernon Avenue and Pecan Drive Intersection

Improve intersection with a pedestrian refuge island, signage, and a pedestrian-activated signal.

P-12 Construct a Multi-Use Trail along Highway 70

Construct a twelve foot (12') wide multi-use trail with a five foot (5') separation buffer along the right-of-way of Highway 70 from Highway 258 and Highway 70 intersection to Lenoir Community College.

Incidental Intersection Improvements

P-18 Improve Meadowbrook Drive and Highway 70 Intersection



Improve intersection with pedestrian-activated devices, crosswalk markings, pedestrian refuge islands, curb ramps, and signage.

P-19 Improve Highway 58 and Highway 70 Intersection

Improve intersection with pedestrian-activated devices, crosswalk markings, pedestrian refuge islands, curb ramps, and signage.

P-20 Improve Highway 258 and Highway 70 Intersection

Improve intersection with pedestrian-activated devices, crosswalk markings, pedestrian refuge islands, curb ramps, and signage.

P-7 Infill Sidewalks along MLK Boulevard

Infill sidewalk along both sides of MLK Boulevard between Washington Street and Vernon Avenue. The sidewalk should have a minimum width of five feet (5') with a five to six foot (5-6') buffer or planting strip between sidewalk and travelway.

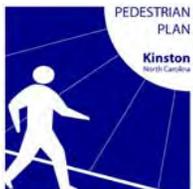
Incidental Intersection Improvement

P-4 Improve MLK Boulevard and Caswell Street Intersection

Improve intersection with pedestrian-activated signals, signage, curb ramps, street lighting, and crosswalk markings.

P-5 Improve MLK Boulevard and Washington Street Intersection

Improve intersection with pedestrian-activated signals, signage, curb ramps, street lighting, and crosswalk markings.



PEDESTRIAN PROGRAM RECOMMENDATIONS

The Task Force has identified the following pedestrian programs as priority programs to be implemented within the next five years. However, additional programs have been recommended to ensure Kinston becomes a walkable community for years to come. A complete description of these recommended programs can be found in Section 6.

Safe Routes to School Program

All current and future K- 8th Grade Schools within Kinston should develop and implement a Safe Routes to School Program. These schools include Southeast Elementary School, Bynum Intermediate School, Teachers Memorial School, Northwest Elementary School, Rochelle Middle School, and the new replacement school (will replace Bynum I.S. and Teachers M.S.).

The program promotes walking and biking to and from school through infrastructure improvement projects, educational opportunities, encouragement, and pedestrian safety activities. This program would enable and encourage children to walk and bike to school by making walking and biking trips safer and more appealing. These safe routes are mapped on Map 8.3.

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

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

Spot Improvement Program

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



Sidewalk Maintenance Program

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

Greenway Master Plan

Develop a greenway master plan to determine best locations, trail alignments, and identify construction phases. The master plan should include a multi-use greenway/riverwalk along the Neuse River, its tributaries, and abandoned railroad beds with connections to Neuseway Nature Center, Caswell Memorial Park, RetroGreen Park, Mountain-to-Sea Trail, and East Coast Greenway. The project would provide a necessary pedestrian connection to areas not covered by the identified regions.

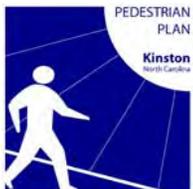
Annual Pedestrian Safety Roadshow

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

Pedestrian and Motorist Education and Enforcement Activities

Utilize the Sentinels to educate and enforce pedestrian laws. It is also recommended the City formulate a Police-on-Bikes program to ensure correct motorist and pedestrian interaction within downtown, in addition to providing a greater sense of pedestrian safety.

Education brochures and pamphlets should also be distributed throughout the community to educate pedestrian safety and promote the health benefits of walking.



Walking Programs & Events

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

PEDESTRIAN POLICY RECOMMENDATIONS

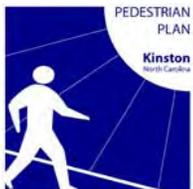
The City of Kinston has an opportunity with this Plan to establish new policies for pedestrian-friendly design. Without these types of policies the vision and goals of the community will not come to fruition; therefore it is important for the City to adopt policies for education and civic facilities, commercial sites and parking lots, curb cuts and sidewalks, interconnectivity between uses, residential interconnectivity, and circulation. All policy recommendations provide below also encourage implementation and continuation of the existing safety and enhancement, encouragement, enforcement, and maintenance programs identified in Section 3. A number of listed policy recommendations will also involve significant updates to the code of ordinances and the UDO.

The following are recommended policies for implementation.

1. New educational and civic facilities shall be located near existing pedestrian facilities or pedestrian facilities should be provided to the new location. Placement of pedestrian entrances along North Carolina state roads shall be avoided, instead these facilities shall be along non-collector streets to reduce safety issues.
2. Commercial development sites shall incorporate pedestrian-friendly accommodations such as pedestrian refuge islands, pedestrian channels through parking lots to commercial establishments, landscaping to provide shaded and a sense of place within parking lots, and traffic calming techniques to reduce vehicular speeds.
3. The Unified Development Ordinance shall be modified to place a maximum amount of parking allowed and not a minimum, thus letting the market dictate the amount of parking that is created for a development and require shared parking spaces amongst adjoining or adjacent uses.



4. Ensure and allow mixed-uses within existing neighborhoods instead of separating uses. By creating livable neighborhoods walking will become a more attractive option to transportation.
5. All existing and new development shall be connected and accessible for pedestrians; therefore, local streets in addition to major collectors shall be equipped with pedestrian facilities. All new developments shall be required to construct sidewalks.
6. Within residential and/or non-residential developments, pedestrian ways, crosswalks, or multi-purpose trails no less than 5 feet in width, shall be constructed near the center and entirely through any block which is 900 feet or more in length where necessary to provide adequate pedestrian circulation or access to schools, churches, retail stores, personal service establishments, recreational areas, or transportation facilities.
7. Where residential developments have cul-de-sacs or dead-end streets, such streets shall be connected to the closest local or collector street or to cul-de-sacs in adjoining subdivisions via a sidewalk or multi-use path, except where deemed impractical by the Planning Director.
8. Modify Code of Ordinance to reduce the number of driveways and driveway design into a development. Reducing the number uncontrolled access points into a development will in turn reduce potential pedestrian-vehicle accident areas. The location and slope of the driveway will also ensure accessibility and safety for pedestrians.
9. Modify Code of Ordinance to reduce the vehicle speed allowed in all residential areas. Further, the placement of traffic calming devices along those streets will assist in creating a pedestrian-friendly environment instead of a vehicle environment.
10. New development shall be required to set aside a percent of the land for greenways. These greenways will provide an alternative route for pedestrians to travel throughout the community.
11. Modify Code of Ordinance to include smaller curb radii into design and construction guidelines for certain intersections to assist in slowing vehicles and shortening travel distance for pedestrians.



The following are recommendations to Kinston's Unified Development Ordinance. These recommendations provide pedestrian-friendly components and makes enforcing multimodal facilities easier. The recommended language is in bold and red and underlined; and words that should be deleted are in red and strike through.

Unified Development Ordinance

Article XIV Street & Sidewalks

Section 216.

- (d) The city council ~~may~~ **shall** require the construction of sidewalks adjacent to one side of all new streets in subdivisions ~~in which pedestrian traffic is projected to be heavy due to the proximity of schools, parks, open space, playgrounds, or other community or private facilities.~~ The sidewalks required by this section shall be at least ~~four (4)~~ **five (5)** feet in width and constructed according to the specifications set forth in Appendix C. Additional right-of-way may be required by the city council to accommodate sidewalks provided under this subsection.
- (e) When~~ever~~ the permit-issuing authority finds that a means of pedestrian access is necessary from the subdivision to schools, parks, open space, playgrounds, or other roads or facilities and that such access is not conveniently provided by sidewalks adjacent to the streets, the developer ~~may~~ **shall** be required to reserve an unobstructed easement of at least ten (10) feet in width to provide such access.

Section 217.

- (b) Cul-de-sacs and loop streets are ~~dis~~encouraged ~~so that through traffic~~ on residential streets **to maximize pedestrian connectivity** ~~is minimized~~. Likewise, driveway access to collector and arterial streets shall be minimized to facilitate the free flow of traffic and to avoid traffic hazards.

Section 221.

- (d) Whenever the permit-issuing authority finds that a means of pedestrian access is necessary from an un-subdivided development to schools, parks, playgrounds, or other roads or facilities and that such access is not conveniently provided by sidewalks adjacent to the roads, the developer ~~may~~ **shall** be required to reserve an unobstructed easement of at least ten (10) feet to provide such access.



Article XVIII Parking

The following language should be included in this Article.

Section 290.

- (8) Sidewalk. An area on public or private property where pedestrian walk or stand, generally parallel to the edge of the street, roadway or curb.

Section 295.

- (f) Designated pedestrian pathways shall be provided within parking areas and to the building(s).

Section 298.

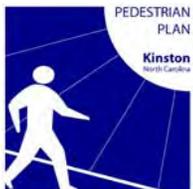
- (e) Adequate pedestrian access shall be provided from the satellite parking area to the principal use associated with the parking spaces.

FUNDING RECOMMENDATIONS

Kinston should utilize a Capital Improvement Plan (CIP) for budgeting pedestrian-related projects, since these projects will usually get funded locally. The CIP will list the specific and general projects that will be funded over a five or ten-year period in the community. The specific projects and their expected costs will be listed for the next year, and more general projects and cost estimates will be listed for future years.

The CIP will contain a prioritized list of what Kinston wants to accomplish in regards to pedestrian facilities and usually provides a good indication of what the city is planning to build in the future.

The City of Kinston should also utilize all State, Federal, and private monies available for pedestrian-related facilities. These funds are very competitive thus continuous planning and budgeting on behalf of the city and the community is required to make sure they have a successful application.

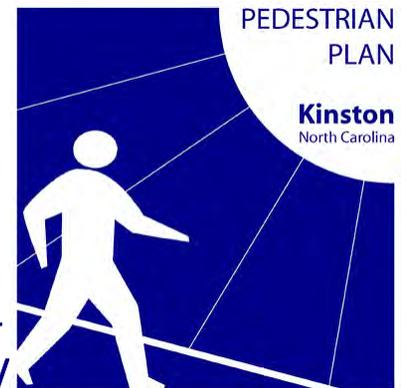


STAFFING / COMMITTEE RECOMMENDATIONS

Future coordination among all city departments and private agencies in regard to seeking funding and accomplishing pedestrian facilities is extremely important. Not only does it keep all parties informed of what is going on, but it also reduces duplicate applications for the same project to the different funding sources. Nothing speaks louder to the state and federal funding sources that there is no communication or cooperative planning going on in the community, than when they receive duplicate applications from various parties for the same project.



SECTION 10 –
IMPLEMENTING THE PLAN



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SECTION 10 IMPLEMENTING THE PLAN

PLAN APPROVAL / ADOPTION PROCESS

After a public hearing by the local entity and acceptance by the North Carolina Department of Transportation, this Plan will become a vital tool in improving the walkability of Kinston.

PROJECT PLANNING / IMPLEMENTATION PROCESS

Implementation & Responsibilities

The City is responsible for monitoring and evaluating the implementation of the Comprehensive Pedestrian Plan. After the Plan has been completed and distributed, a coordinator will be responsible for stimulating, coordinating, and managing the implementation of the plan. Development of a comprehensive pedestrian network is a continuing process and depends on the active involvement of the City in implementing, monitoring, evaluating, and updating the plan. It is important to realize that this on-going process does not end once the Plan has been written.

The City's commitment to implementing this Plan and accomplishing the recommended pedestrian projects, program, and policies will improve the walkability of Kinston; therefore, Kinston should strive to complete at least one segment of a multi-use path, one segment of a major sidewalk improvement, two-thousand (2000) linear feet of minor sidewalk improvements, and at least one (1) intersection improvement per year. Sidewalk improvements include construction of new sidewalks and the repair of existing facilities. An annual assessment should be done on the pedestrian system to ensure that it stays up-to-date, based on needs. This should be done in conjunction with planning for the CIP each year, and the Pedestrian Plan should be updated at the same time to keep the document fresh by removing completed projects.

The recommended policy/ordinance amendments and pedestrian programs listed in Section 9 are low cost measures which should be implemented as soon as possible. These policies and programs will ensure a comprehensive pedestrian system; therefore, they should be evaluated annually and new policies and programs should be implemented as needed.



Coordinator

The implementation of this Plan involves coordination by a Coordinator, the Planning Director, and other local and state of officials whose agencies have been designated as having the responsibility for implementing specific recommendations/actions specified in this Plan. To integrate pedestrian activities into work plans, the Coordinator should identify and contact the local agency and position responsible for accomplishing the specific activity and work with the individual in that position to ensure that the issue is addressed by their agency.

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

Funding

Potential funding sources are identified in Section 7 of this Plan. It is important to examine the funding sources at all levels of government and in the private sector. Cost sharing and the creative use of existing programs must also be explored. Some pedestrian activities may require little or no funding (i.e. education activities).

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

Use of Media

Keeping status of projects in front of the media can help gain support and serve as an effective tool for implementation. Media involvement can be very effective if properly coordinated with all participants.

The media has been active in covering the development of this plan; therefore the media involvement needs to continue as early on in the implementation process as possible. Use of print media, City website, TV, and radio can help bring pedestrian issues to the public's attention and increase support of pedestrian activities.



Press releases can be developed to announce milestones in the planning process. These may include completion of sidewalk construction, intersection improvements, and status of critical recommendations.

The media should be provided with a copy of this Plan and subsequent progress reports. The media should also be invited to meetings regarding plan recommendations. Implementation involves continued coordination and follow-up to ensure that this Plan becomes an effective working document.

Monitoring

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

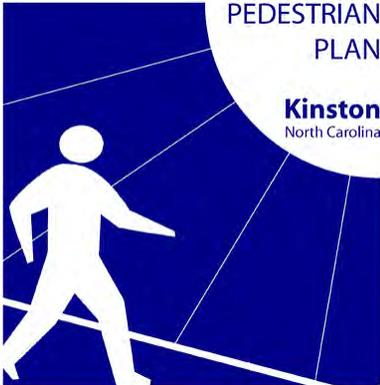
Those who have implementation responsibilities can provide the Coordinator with meeting agenda, attendance sheets, correspondence, legislation, minutes of public meetings, telephone records, and grant proposals as the basis for their report to a Coordinator.

Annual Review / Progress Report / Revisions

The City Manager shall direct the Coordinator and Pedestrian Committee to take responsibility for conducting an annual review. The annual review shall ensure the City Council receives an annual report and/or presentation on the progress of Plan implementation. The report will include a status report on the implementation of recommended projects, programs, and policies and will recommend, as appropriate, any necessary revisions or amendments to the Plan. For instance different treatment options for a particular recommended intersection improvement, a change in Federal and State statutes or regulations, identification of additional projects, moving a potential project listed in Section 7 to the recommended project list in Section 9, or a change in pedestrian movement. This process will help ensure that local walkability efforts include the latest and most effective projects.



APPENDIX – A
TASK FORCE MEETINGS



TASK FORCE MEETING #1

The following information contains the agenda and minutes for the first Task Force meeting held on January 11, 2007.

MEETING AGENDA

DATE: January 11, 2007; 2:15PM

LOCATION: Kinston Enterprise Center, Room 313
327 N. Queen Street, Kinston, NC

SUBJECT: City of Kinston Comprehensive Pedestrian Plan
Task Force Meeting #1

- I. **Introductions**
- II. **Project overview**
- III. **Role of the Task Force**
- IV. **Why pedestrian connectivity?**
- V. **Where do you live and work?**
- VI. **Downtown Kinston walking tour**
 - Mini-Charrette of observations
- VII. **Project structure**
 - Study area
 - Project schedule
 - Public involvement strategy
- VIII. **Homework – walkability checklist**
- IX. **Conclusion / Questions**
 - NCDOT meeting reminder



MEETING MINUTES

Attendance:

Rivers and Associates:

Ben Williams and Myriah Shewchuk

City of Kinston:

Tommy Lee and Kyle Breuer

N.C. DOT:

John Vine-Hodge

Committee Members:

Jack Anglin, Mike Barton, Clarice Bryant, Duncan Charlton, Terry Cline, Angelina Craft, Bill Ellis, Preston Ellis, Adrian King, Tim Knobloch, Lucy Marston, Chip Medlin, Scott Stevens, Laura Lee Sylvester, Angelique Williams

Not in Attendance:

Michael Dunn, Constance Hengle, Pat Humphreys

The City of Kinston Comprehensive Pedestrian Plan Task Force Committee met on Thursday, January 11, 2007 at 2:15 p.m. The meeting was held at the Kinston Enterprise Center, located at 327 North Queen Street, Kinston, North Carolina 28501.

Tommy Lee started the meeting at approximately 2:20 p.m. Mr. Lee introduced Myriah Shewchuk and Ben Williams from Rivers and Associates, and Kyle Breuer from East Carolina University Planning Department. He followed up by picking a door prize winner, which he will do at every Task Force meeting. Ms. Shewchuk re-introduced herself and the committee followed up by going around the room and stating their name, association, and what they would like to see come out of the comprehensive pedestrian plan for the City of Kinston. Ms. Shewchuk mentioned her availability for personal meetings in the future. John Vine-Hodge, the project coordinator for the NCDOT, gave a brief background of the NCDOT's role and goals for this initiative. Mr. Lee thanked Kinston's Convention and Visitor's Bureau for matching the City's funds for the pedestrian grant.

Ms. Shewchuk focused on the big "if" to start off. What if pedestrians had clout? Throughout the course of this project, the team will work to identify ways to effectively integrate pedestrian and vehicle uses. Ms. Shewchuk mentioned that developing a comprehensive pedestrian plan didn't just involve sidewalks, it is going to take all aspects and areas of the city, including policy and program assessment. It will be more involved than simply recommending the installation of sidewalks throughout the City.

The project team was then introduced. The City of Kinston and the NCDOT will ultimately oversee this project. The consultant, Rivers & Associates, will lead the project to bring together all relevant parties, identify and assess Kinston's needs and goals, and develop a plan according to the NCDOT's format. The most important members of the team will be the Task Force and public. The primary roles of the Task Force will be to provide information and recommendations, act as a public liaison, and assist the City with plan implementation.

Ms. Shewchuk poses the question: Who is fueling the pedestrian activity initiative? This interest is not coming from one specific group, but pedestrian connectivity



is in the interest of many groups such as the health community, residents, business owners, concerned citizens and schools. Then she focused on pedestrian crash statistics throughout Kinston.

The committee was given red and yellow dots to indicate where they live and work to post on a map. Ben Williams later noted that many members work in the downtown area and live in the northwest part of the City. However, it is essential that the project address the diverse needs of all areas of Kinston.

The committee then took a walking tour of Queen Street to observe pedestrian functionality. At approximately 3:09 p.m. the group returned from the walking tour of Queen Street. Ms. Shewchuk and Ben Williams helped the group in discussing the key focus areas on the walk. Comments included:

- New construction at the library and other revitalization projects are good.
- Buildings in downtown seem to be a little livelier.
- Building awnings are an asset, especially on rainy days.
- Extending canopy cover for rain may be helpful.
- Roof drains connected to the storm sewer system are an asset. This is also building code.
- Planting beds at base of street trees and the width of sidewalks are an asset.
- Walkability for the elderly is important.
- Loose materials such as stone in the sidewalk can be a hazard.
- Change in pavements (i.e. brick vs. concrete) marking pedestrian zones are good.
- Pocket parks seem to be underused.
- Studies are underway to assess bus stop location and usage.
- Some buildings lack pedestrian connections between the sidewalk and entrance.
- Access over railroad tracks may be difficult.
- Some crosswalks lack ADA access and some ADA ramps empty into intersection.
- Directing pedestrians to safe areas by curb cuts and sidewalks is important.
- Motorist on Queen Street to not adhere to the 20-25 mph speed limit.
- Many jaywalkers get “stuck” in the middle lane trying to cross mid-block.
- Pedestrian buttons on traffic signals may help.
- Vehicles pulling out of parking lots do not stop before the sidewalk.
- Vehicles making a right on red often do not look right for pedestrians.
- Pedestrians frequently use the planter wall at the corner of Blount and Queen as a seat wall.
- Public art in the downtown has not been well received.
- Benches in downtown are infrequently used.
- Downtown is actually walkable, but is not perceived as such.
- Utilities obstruct views causing aesthetic and safety concerns.
- Pedestrian crossing signals would help.
- Queen Street is wide to cross.
- Utility covers not flush cause tripping hazards.



- Nighttime lighting levels are too low.
- South Queen and Shine Street intersection is perceived as a dangerous area.
- Great opportunities exist for a river walk behind the Farmers Market.

Ms. Shewchuk mentions that the study area is all of Kinston including the Extended Territorial Jurisdiction (ETJ) and will be divided into districts based upon the needs of each district. Rivers and Associates passed out questionnaires about "how walkable is Kinston?" to be completed for homework by the committee members for the next task force meeting which will be March 8, 2007. Additional checklists are available for use by larger organizations.

The project schedule was presented. It will occur in four phases beginning with the current phase which is Data Collection, Research and Inventory. The project will include five task force meetings and two public workshops. The project is scheduled to conclude on December 3, 2007 with a presentation of the final document to the City Council for adoption. An important date in the process is October 3, which is International Walk to School Day. This may be a good opportunity to initiate an awareness program/event.

Rivers and Associates and Mr. Lee asked about possibly attracting media sources for public input. The Chamber newsletter, Free Press, web sites, online surveys, and local utilities newsletter were all mentioned. The Pride of Kinston will be a good resource for getting the word out.

There will be a DOT meeting Tuesday January 16, 2007 from 4-7 p.m. at Lenoir Community College in the Bullock Building.

The Lenoir Council on Aging and Pride of Kinston are sponsoring a "Walk Around Town for Your Good Health" at noon Monday, Wednesday, and Friday starting January 17. The walks are free, open to anyone of any age, and begin and end at the Council on Aging, at 112 E. Blount St. All are encouraged to attend. This may also be a good opportunity to complete walkability checklists.

The meeting was adjourned at approximately 4:06 p.m.



TASK FORCE MEETING #2

The information provided below contains the meeting agenda and minutes for the March 8, 2007 Task Force meeting.

MEETING AGENDA

DATE: March 08, 2007; 2:15PM

LOCATION: Kinston Enterprise Center, Room 112
327 N. Queen Street, Kinston, NC

SUBJECT: City of Kinston Comprehensive Pedestrian Plan
Task Force Meeting #2

- I. Introductions**
 - A. Review of Task Force Meeting #1
 - B. Walkability checklist turn in
- II. Project goals / mission**
- III. Existing conditions plans**
- IV. Design workshop / Charrette**
 - A. North Kinston
 - B. Southeast Kinston
 - C. West Kinston
- V. Public workshop**
- VI. Gift certificate drawing / Adjourn**



MEETING MINUTES

Attendance:

Rivers and Associates:

Ben Williams and Myriah Shewchuk

Committee Members:

Clarice Bryant, Adrian King, Tim Knobloch, Chip Medlin, Scott Stevens, Leigh Abel

City of Kinston:

Tommy Lee and Kyle Breuer

N.C. DOT:

John Vine-Hodge

Not in Attendance:

Jack Anglin, Mike Barton, Duncan Charlton, Terry Cline, Angelina Craft, Michael Dunn, Bill Ellis, Preston Ellis, Constance Hengle, Pat Humphreys, Lucy Marston, Laura Lee Sylvester, Angelique Williams

The City of Kinston Comprehensive Pedestrian Plan Task Force Committee met on Thursday, March 8, 2007 at 2:15 p.m. The meeting was held at the Kinston Enterprise Center, Room 112, located at 327 North Queen Street, Kinston, North Carolina 28501.

Myriah Shewchuk opened the meeting at approximately 2:26 p.m. Ms. Shewchuk asked the Task Force for their completed walkability surveys. Scott Stevens completed a survey for Colonial Pines and the Downtown. Others were encouraged to complete theirs and turn it in by the Public Open House.

Ms. Shewchuk asked, "How would you like the comprehensive plan to direct walkability?"

- Medlin mentioned that pedestrian crossing situations are dangerous at some of the main intersections throughout the City, especially where Queen, Heritage and McLewean Streets cross Vernon. The Route 70/Walmart district is also presents dangerous pedestrian conditions. He mentioned these are areas with a lot of pedestrian activity, especially people walking to work, as well as senior citizens. Mr. Medlin recommended "walk/no walk" lights to help guide pedestrians at these busy intersections. Other ideas mentioned by Mr. Medlin were overpasses or a tunnel system, guiding pedestrians above or below the flow of traffic.
- Clarice Bryant mentioned possible walking trails for recreational purposes and not just transportation.
- Leigh Abel referenced an article out of a newspaper that posed the question, "What encourages people to walk?" The answer determined that people are most motivated to walk to small shops and restaurants.
- Adrian King mentioned the goals and priorities of the Riverfront Development Committee are:
 1. Pedestrian bridge at the Neuseway Park/Nature Center as an art statement / high quality architecture.



2. Walkways along the riverbank (“Riverwalk Loop”) connecting downtown to the Power Plant and Caswell Historic Site.
 3. Help the Parks/Recreation Department expand Neuseway Center for educational purposes.
- Tommy Lee envisions a large loop around Kinston for connectivity. He also mentioned that different organizations (ex: Relay for Life) could use this for their programs. A marketing program that awards t-shirts “I walked the Kinston...trail” was also recommended.
 - Precedent cities include Wilmington, NC; Greenville, SC; downtown Raleigh, NC
 - A goal is to bring life to the downtown (i.e. Ghost tours)
 - Upcoming projects include an expanded and improved parking lot on Herritage Street next to the health clinic.
 - Recreation trails should be multi-modal.

Following this discussion, Ms. Shewchuk broke everyone up into three groups, each one representing a region of Kinston. The Southeast Region (high density residential, tourism, lodging, commercial), the North Region (downtown, commercial, medical, and lower density residential area), and the West Region (commercial/residential). Each group assessed the existing pedestrian conditions featured on each map and discussed opportunities for pedestrian improvements. Each group presented their ideas and further discussion was held with the full group.

Group 1 - Southeast Kinston: Chip Medlin, Scott Stevens and Tim Knobloch

- Connect Rochelle School and Holloway Park.
- Use sewage right-of-way for trail to connect the neighborhood to the north. This is part of the 900 acre flood buyout area (see Retrofitting Green Plan).
- Use Planetarium for a landmark / icon.
- Develop an improved corridor along M.L.K. Blvd. incorporating a mixed-use business / residential environment.
- Build two pedestrian bridges across the Neuse to Neuseway Nature Park and Power Plant to create a loop.
- Build a Riverwalk / Greenway that includes an interpretative trail.
- Connect the abandoned landfill to Bynum Park to Grove Park to NC 11; however, safety may be a concern
- Connect Comfort Inn and Hampton Inn to Kings Restaurant, Neuse Sports Shop, and LLC long Route 70. A sidewalk along 70 would not be a pleasant walk. A route behind the shops/hotels along the lake would be nice.
- There are currently 3 pedestrian bridges crossing the Adkins Branch that will be removed during the Adkins Branch widening project. The COK Engineering Dept. is hosting an open house for the replacement of three pedestrian bridges along the Adkins Branch on March 12. This meeting will poll the public to determine which bridges are replaced. Ms. Shewchuk will attend.
- There are possible plans to relocate Bynum School in the next 3-5 years to the Kingwood area.
- There should be better connectivity to Rochelle School.
- Historic cemeteries can be used as an amenity/public space (i.e. south of Lincoln St.)
- MLK and Vernon Ave. are a gateway to the City from the north and should look like a gateway.



- The shirt factory site on MLK and King should be rehabilitated.
- Stretches of Vernon St. without sidewalks should be filled in.
- Traffic calming and pedestrian amenities should be incorporated into the downtown (Queen St and Herritage St).
- Main thoroughfares need sidewalks – Vernon, Washington (east of MLK), JP Harrison Blvd., US 70.
- Provide parking at the streets ending at the river to provide easy access.
- There are currently summer events at the Farmers Market / Tiffany Park area.
- Herritage St. Businesses are growing – Chef and Farmer Restaurant, Wine Shop, Broken Eagle, to name a few.
- The Route 258 & 70 intersection is dangerous to cross.

Group 2 - North Kinston: Adrian King, Clarice Bryant and Leigh Abel

- Develop a Riverwalk loop with several access points
- Walkways should be wide enough to support multi-modal transportation such as rollerblading, biking or possible equestrian trails.
- Develop a trail from the High School to the medical facility.
- “Highway to Heaven” church walk (linking church architecture).
- Historic cemeteries as points of interest.
- “Serious” walkers trail to the airport.
- Perry Park is nice, but may be viewed as dangerous.
- The rectangle around the Country Club is very heavily used by pedestrians – Stockton, Greenbriar, and Cambridge Streets. The northern part of the route does not have sidewalks, but the roads are walkable.
- There are large sections of Carey Road without sidewalks that should be connected. However, the City proposed this to residents south of Highland Ave. and they were opposed to it because it would require tree removal and “loss” of their property.
- Sections of Hardee Road without sidewalks should be connected.
- Teachers Memorial Elementary School should be better connected.

Group - West Kinston: Tommy Lee, Kyle Breuer and John Vine Hodge

- Commercial site (Lowe’s) could serve as an internal walking opportunity at this complex. Traffic calming initiatives and encouragement programs may be worthwhile. Crossing at Rt. 70 would be difficult.
- Pedestrian connection between Caswell Center and Caswell Park to serve employees and residents.
- Pedestrian bridge connection to riverwalk loop at the Caswell Park site.
- “Highway to Heaven” would give people the means to walk to church as well.
- The start of the “airport” trail can start at Rt. 70 and Hull Road north to Rouse Road. Rouse Rd. can connect to both Carey Road and Dobbs Farm Road and ultimately to Airport Road.
- Sidewalks along Hillcrest Road can connect Kinstonian Heights and Country Acres neighborhoods with Sand Clay Road, Banks School, Bethel Christian Academy, and Barnet Park/ Bill Faye Park.

The committee then discussed possible connections for an overall ‘loop’ around Kinston. Ms. Shewchuk and Mr. Lee drew on an overall map, the possible routes the trail could use to navigate around the city. The meeting was adjourned at 4:15 p.m.



TASK FORCE MEETING #3

The information provided below contains the meeting agenda and minutes for the June 14, 2007 Task Force Meeting.

MEETING AGENDA

DATE: June 14, 2007; 2:15PM

LOCATION: Kinston Enterprise Center, Room 111
327 N. Queen Street, Kinston, NC

SUBJECT: City of Kinston Comprehensive Pedestrian Plan
Task Force Meeting #3

- I. Introduction**
 - A. Review of Task Force Meeting #2 and Public Workshop #1
- II. Pedestrian Plans/Projects**
 - A. Existing plans
 - B. Proposed plans
 - C. Project priorities
- III. Special Projects**
 - A. Queen Street road diet
- IV. Pedestrian Programs**
 - A. Existing
 - B. Proposed
 - C. Responsible agency/organization
- V. Next Steps**
 - A. Draft plan review
 - B. Public workshop



MEETING MINUTES

Attendance:

Rivers and Associates:

Myriah Shewchuk
Steve Nalley
Ronald Sessoms

Committee Members:

Jack Anglin, Clarice Bryant, Duncan Charlton, Adrian King, Tim Knobloch,
Lucy Marston

City of Kinston:

Tommy Lee

Not in Attendance:

Leigh Abell, Mike Barton, Terry Cline, Angelina Craft, Michael Dunn, Bill Ellis, Preston Ellis
Constance Hengel, Pat Humphreys, Helen Chaney, Chip Medlin, Scott Stevens
Laura Lee Sylvester, Angeleique Williams-Thomas

NC DOT:

John Vine-Hodge

Kinston Free Press

David Anderson

The City of Kinston Comprehensive Pedestrian Plan Task Force Committee met for the third time on Thursday, June 14, 2007 at 2:15 p.m. in room 111 of the Kinston Enterprise Center, located at 327 North Queen Street, Kinston, NC 28501.

Myriah Shewchuk started the meeting at 2:25 p.m. by re-introducing herself to the committee. Steve Nalley and Ronald Sessoms with Rivers & Associates, Inc. introduced themselves. The committee followed suit by going around the room stating their name, association, and affiliation with Kinston.

Ms. Shewchuk discussed the past task force meetings and the first public workshop to summarize the history of the project to date. She described the first task force meeting as a general introduction to the pedestrian plan, where ideas and questions were introduced to help the committee think in a pedestrian sense. In the second task force meeting, the committee was broken into groups to discuss ideas for pedestrian projects for specific areas. She described the first public workshop as an open house discussion with approximately thirty people in attendance. This task force meeting provided the first opportunity to see the recommendations on a map.

Ms. Shewchuk began with a discussion of the existing plans in place as they relate to pedestrian planning. She asked the committee to comment on the following for each plan/project discussed: Are there plans to implement this plan/ project? What are the priorities for each plan/project? She stated that open discussion is encouraged during this meeting.

The first plan discussed was Waterfront Now! Adrian King stated the first priority of this project is the construction of **TWO PEDESTRIAN BRIDGES**. This project will involve several phases starting with the mixture of public and private property. Engineering studies need to be prepared as the proposed areas are partially located



in flood plains and other areas of unequal height. There will be RFQ's available within the next month to be sent around the county to engineers and artist. His vision is artistically enhanced bridges with aesthetical value. The bridge connecting the Neuseway Nature Park and the Riverwalk Project is the first priority of the two bridges.

NCDOT is considering nominating this as a TIP.

The second priority Mr. King discussed of the Waterfront Now! Plan was the **RIVERWALK** along the Neuse River, adjacent to downtown, much like that of Washington, NC.

The third priority Mr. King discussed of the Waterfront Now! Plan was the Neuseway **NATURE CENTER EXPANSION**. Mr. King stated the annual average number of attendants of that area is 80,000. The expansion would consist of an outdoor classroom and a riverside amphitheater. The amphitheater design would be water/flood tolerant and would have some type of stormwater treatment on site. The proposed area for the amphitheater currently experiences stormwater problems with an excess of debris collection from downtown runoff. The amphitheater would not only create a pedestrian/city amenity, but would also be environmentally useful. Ms. Shewchuk stated this particular aspect could fall under special interest, as it is not specifically a pedestrian project.

Ms. Shewchuk moved into special interest projects, which are not specifically pedestrian projects, however connectivity and pedestrian elements will be vital in the design and construction of these projects.

The **SUGAR HILL MIXED USE DEVELOPMENT** was the fourth priority of the Waterfront Now! Plan. Mr. Lee stated that this was a low priority superfund site project. The site would consist of residential and retail. The site is currently a brownfield with contaminated soil, owned by Progress Energy.

The **LANDFILL REDEVELOPMENT** was the next special interest project. Adrian stated that it would be a retrofitting concept that would go hand in hand with the Retrofitting Green Program. Mr. Lee stated the property is currently gated off.

Mr. Lee confirmed the Peachtree Wastewater Treatment Plant and the Landfill / future 4-H Project were in close proximity to the **ADKINS BRANCH TRAIL/PEDESTRIAN BRIDGES**. Clarice Bryant stated that of the three Adkins Branch pedestrian bridges, only the Holloway Bridge will return to use. The NC Department of Environment and Natural Resources through the Ecosystem Enhancement Program is currently managing the project. Mr. Lee recommended the Adkins Bridge should be in similar art/architecture as the pedestrian bridges involved with the Waterfront Now! Plan. He also stated that 20-30 houses were purchased in the Adkins Branch area. There is a Clean Water Management Trust Program Grant and also FEMA Buyout property in the area. Mr. Lee also stated that the area will be a natural setting for a greenway. Mr. Lee envisions "Serendipity along Adkins Branch."

The discussion then moved into the **POWER PLANT DEVELOPMENT**. Mr. King declared that \$350,000 of city money has been designated to removing asbestos. The RFP is nearly ready to go out for a boat dock and an arboretum near the Glen Raven Building. The development of this building is the fifth priority of the Waterfront now! Plan. They want to create an upscale living area with mutual symmetry to the Power Plant with river walkways from King Street to the Power Plant. The Caswell Pedestrian Bridge could be linked to the nature center. Adrian also stated that the connection may not be compatible for a greenway because of railroads along Atlantic Ave. Mr. Lee stated that he had calls about a weekend retreat housing project as an extremely attractive site near the Caswell Pedestrian Bridge and the nature center. The amphitheater could tie in to this as well, because the geography for the site is suitable.



Ms. Shewchuk asked if there were any plans for the **RAILROAD DEPOT**. Mr. Lee responded that the Kinston Enterprise Center (“business incubator”) trumped any further development of the Depot.

Ms. Shewchuk asked about an existing map for the **WALKING TOUR**. A current map does not exist. The only map resembling the route of the walking tour is the Museum Row. Discussion then went into specific sites listed in the Walking tour. The Baptist Personage is located behind King and McLewean Streets and is currently vacant. The Blalock House location was unknown. People’s Bank Building was on Bright and Queen. Hotel Kinston is the city’s “skyscraper.” Mr. Lee stated that it contains ten elderly housing units. The Canady House was recently purchased. The Community Council for the Arts is located across the street from the Kinston Enterprise Center. White Rock Presbyterian Church is the old first Baptist Church located on Martin Luther King, Jr. St. The Trianon is also located on Martin Luther King, Jr. St. in East Kinston.

The **GREENWAY** along the existing railroad tracks was the next topic of conversation. Mr. Lee did not know of a current greenway plan along the existing railroad tracks. No one was aware of a contact to discuss the greenway. There was a comment from Mr. Lee about a 30 foot street on either side of the East to West railroad, which would make the area somewhat incompatible for a greenway.

The **DRIVING TOUR** was discussed next. Mr. King stated it was lead by the Heritage Tourism Group as a long term, very low priority project. The idea is not very pedestrian friendly, unless there were points to park and walk around, stated Ms. Shewchuk. Lucy Marston and Mr. Lee recalled the Coastal Plain and Fancy, a historic preservation group with an influence on the conceptual idea.

The **CAREY ROAD EXTENSION** was discussed and is currently in Phase one of development. John Vine-Hodge was not sure if the extension would require sidewalks. Sidewalks may be incompatible. There is, however, no development with the Plaza Boulevard Extension. Mr. Lee stated that there may be a new school developed along Plaza Blvd. that would consolidate and close Teachers and Bynum schools.

The **VISITORS CENTER** is located in an incredibly busy intersection stated Lucy. The Visitors Center is scheduled to open in July.

Ms. Shewchuk moved the discussion to new pedestrian plans that were created through past task force meetings and the public workshop. The Vernon Park Mall Trail was the first plan discussed. Mr. Lee declared there is no need for a linkage trail. Perry Park Road (parallel to Queen) is connected to Elizabeth which connects to the mall. This is the local pedestrian route with low traffic rates already in place.

The **KINSTON LOOP** was the next proposed plan. Jack Anglin asked if there would be a paved lane next to the road. Mr. Lee stated that there needs to be multi modal opportunities along this road. Jack stated that the trail should cut through the Cunningham property.

The **MLK REDEVELOPMENT** was the next plan discussed. Mr. Lee has asked for money from the city. Lucy stated that money has been received for the t-shirt factory clean up. Mr. Lee is concerned that this gateway into Kinston is not an accurate representation of the City.

ROCHELLE AND HOLLOWAY CONNECTION was the next plan. Clarice Bryant stated there were existing sidewalks and connection between the two. An additional trail would be unnecessary



The **NC 11 TO ABANDONED LANDFILL TRAIL** was next. Mr. Lee felt this trail was very close to the Adkins branch proposed greenway and would not be practicable. Like the Rochelle and Holloway Connection, the landfill trail was deemed as unnecessary.

The **HIGHWAY 70 TRAIL** was the next plan discussed. Members liked the idea of a trail behind the development along the street but the crossing of Highway 70 will be a challenge. Mr. King suggested, instead of a pedestrian bridge, an underground tunnel may be more feasible. Mr. King also recommended parking for the majority of the development on one side of the road. The tunnel could be used to connect the lot to the businesses.

Subsequently, **MAIN THOROUGHFARE CONNECTIONS** were discussed. The question arose if any of the residential/business owners along the major thoroughfares would want sidewalks on their property. Jack recommended a connecting trail from the Mall to Barnett Park. Barnett Park is currently inaccessible from major thoroughfare sidewalks.

KINSTON HIGH SCHOOL TO LENOIR MEMORIAL HOSPITAL was the following proposed trail discussed. Ms. Shewchuk asked if there was any value to this trail. Mr. Lee stated there were restaurants between the two institutions that a trail could connect them. The trail could also connect to the proposed Kinston Loop.

The **COUNTRY CLUB LOOP** was the next proposed plan brought up. Ms. Shewchuk stated that this was a heavily used pedestrian area and wondered if a trail was necessary. The correct conditions met existing users' needs.

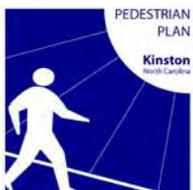
Ms. Shewchuk asked if there was currently a **WALK TO SCHOOL PROGRAM** or a day designated as a walk to school day. There is currently no such program. Clarice stated the schools that would be most pedestrian friendly related to distance are South East, Rochelle, Northwest, and Bynum.

Ms. Shewchuk asked about the **HIGHWAY TO HEAVEN** trail and specifically a list of churches to be included. Mr. King stated the trail would have to be a driving tour because the churches are so spread out. However, he stated the churches located in the downtown area would work as a walking tour. Some of the churches include: Queen St. United Methodist, Gordon St. Christian Church, White Rock Presbyterian Church, St. Mary's Church, and Lutheran Church on Vernon.

The **MOUNTAIN TO SEA TRAIL (MTST)** was brought up next. There was a discussion about the location of this trail. Mr. Lee and Mr. King both agreed the trail will enter along the Neuse as the main trail instead of just a connection. Goldsboro may have ideas as to where the trail will go.

The **EAST COAST GREENWAY** was also brought in as a joint discussion. Mr. Lee stated he wants the MTST and East Coast Greenway to come directly through Kinston and also connecting to the Retro Green Trail as the major attraction ("oasis of Eco Tourism").

Ms. Shewchuk then moved from proposed plans to the "**ROAD DIET**" proposal from Ramey and Kemp and Associates. She stated the transportation studies found the "road diet" would be feasible for Queen St. She also confirmed a road diet was not a new thing and many communities throughout North Carolina have them. Everyone agreed to the implementation and that it would slow the traffic down and make it more pedestrian friendly. Jack recommended not losing too much parking. He then asked if rerouting traffic is included in the Ramey plan. He asked if trucks will still use Queen St. and if there are other routes assigned. He said it looked good and that trucks should be allowed to go through if they so choose.



Ms. Shewchuk thanked everyone for attending and reminded them of the Public Workshop on July 26, 2007. The Task Force Meeting adjourned around 4:10.

After adjournment, Jack recommended the use of a central crosswalk over Vernon St. at either Carey or Greenbrier in order to draw all pedestrians north and south of the crosswalk to one central crossing. He feels this will prevent multiple crosswalks along Vernon St. while creating one central slow traffic crosswalk zone. He also proposed making Heritage St. and McLewean St. opposing one way streets with connections between the two streets crossing over Queen St.

Subsequently, David Anderson from the Kinston Free Press interviewed Rivers and Associates with general questions about the Pedestrian Plan process including the Task Force and Public meetings.

Supplemental Information given to task force members at Task Force Meeting #3

EXISTING AND NEW PEDESTRIAN PLANS

DRAFT 06-14-07

EXISTING PLANS:

Kinston Waterfront Now!

Pedestrian Projects

1. Two Pedestrian Bridges

- Two pedestrian bridges will connect downtown Kinston and future mixed use developments to the Neuseway Nature Center.

2. Neuseway Nature Center Expansion

- Incorporates new pedestrian trails and amenities that will connect with the greenway system.

3. New RV Campground

- Creation of a new recreation center and RV campground near the Neuseway Nature Center and Neuse Greenway.

Special Interest Projects

4. Sugar Hill Neighborhood Renovations

- Incorporates pedestrian friendly streets and mixed use developments. These new developments will connect to the greenway system and expanded Neuseway Nature Center.



5. Landfill Redevelopment

- Reuse of land on the former landfill site to incorporate a new 4H Training facility, farmers market, community gardens and new recreational facilities. This area would have paths connecting it to Queen and Lincoln Streets.

6. Peachtree Wastewater Site

- Reuse of the Peachtree Wastewater site as an agricultural education site connected to the Neuse greenway system.

7. Herritage Street Plaza

- Create a new plaza on the corner of Herritage and Caswell Street.

8. Power Plant Redevelopment

- Reuse of the old power plant for civic and public use incorporating community gardens and access to the Neuse River greenway.

9. New Amphitheater

- Use of the slopes along the Neuse River to build a new community amphitheater for festivals and gatherings. This new theater would be located on the edge of a river walk that leads to Mitchelltown.

THEMED DEVELOPMENT PLAN FOR THE REVITALIZATION OF DOWNTOWN KINSTON

Pedestrian Project

1. Queen Street Improvements

Making Queen Street more pedestrian friendly by widening sidewalks, reducing traffic and creating vivid crosswalks.

Special Interest Project

2. Railroad Depot Improvements

Renovate the Railroad Depot and create a downtown plaza that is located on the Walking Tour of Historic Downtown Kinston.

LINKING NATURAL AND HISTORICAL ASSETS

Pedestrian Projects

1. Walking Tour of Historic Downtown Kinston

A Walking Tour of Historic Downtown Kinston, which will encompass many historic sites in and around the central downtown area. These sites include:

- Baptist Parsonage
- Blalock House
- People's Bank Bldg.



- Neuseway Park
- Mitchelltown Historic District
- Grainger- Hill Historic District
- Grainger Stadium
- Hotel Kinston
- Canady House
- Community Council for the Arts
- Queen Gordon Historic District
- Atlantic & NC RR Depot
- White Rock Presbyterian Church
- Trianon Historic District
- Kinston's Museum Row:
 - The Neuseway Nature Center,
 - CSS Neuse II,
 - Civil War Museum,
 - Caswell No.1 Fire Station Museum,
 - Harmony Hall,
 - Cultural Heritage Museum,
 - Cedar Grove, Hebrew and Maplewood Cemeteries.

2. Greenway

A need for development of an extensive greenway system that connects many of Kinston's historical points of interest and recreational facilities. These connections will increase accessibility and tourism throughout the city.

3. Driving Tour of Historic Lenoir County

A Driving Tour of Historic Lenoir County, which would link many dispersed landmarks to Kinston. This route would incorporate potential and existing tourist attractions such as:

- The Battle of Kinston site
- Kelly's Millpond
- Proposed Sugar Hill Redevelopment
- Revitalized Downtown

NC DOT TRANSPORTATION IMPROVEMENT PROJECTS (TIP)

Pedestrian Projects

1. Carey Road Extension

- Multi-lane Carey Road Extension at SR. 1572 (Rouse Road) to US 258.



2. Plaza Boulevard Extension

- Multi-lane Plaza Blvd. extension from NC 58 (North Queen Street) to NC 11 North (Greenville Hwy.)

3. Kinston Bypass

- Long Term Project that will divert traffic off of US 70/ New Bern Road through Kinston. This would make crossing US 70/New Bern Road easier and would complement recommended improvements on US 70 / US 258 intersection.

4. Bridge Replacement

- Replacement of King and Queen street bridges over Neuse River. The replacement bridges will be equipped with sidewalks.

Special Interest Project

5. Visitors Center

- Renovation and construction of 2000 square foot visitors center at intersection of US 70 and 258. (Already underway)

NEW PEDESTRIAN PLANS:

1. Vernon Park Mall Trail

- A pedestrian connection between Vernon Park Mall and Fairfield Park.

2. Kinston Loop

- Large loop around Kinston for connectivity. These trails could be used by organizations such as Relay for Life for their programs. A marketing campaign could also be introduced that awards t-shirts with slogans such as “I Walked the Kinston..... Trail”.
- “Serious” walkers trail to the airport that follows that partially follows the Lenoir County Driving Tour. The start of the “airport trail” can start at Rt. 70 and Hull Road north of Rouse Road. Rouse Rd.

2. MLK Redevelopment

- Develop an improved corridor along M.L.K Blvd. incorporating mixed use business and residential environment.
- Redevelopment of this thoroughfare should create a more pedestrian friendly environment in this area.
- MLK and Vernon Avenue should serve present themselves as gateways into the city.
- The shirt factory site on MLK Blvd. and King St. should be rehabilitated.

3. Rochelle & Holloway Connection

- Provide pedestrian linkage from Rochelle Middle School to Holloway Park.



4. Power Plant and Neuseway Nature Center Loop

- Build two pedestrian bridges across the Neuse to Neuseway Nature Park and Power Plant creating a pedestrian loop.

5. NC 11 to Abandoned Landfill Trail

- Connect abandoned landfill to Bynum Park to Grove Park to NC 11.

6. Route 70 and 258 pedestrian Crossing

- Improving intersection of Route 258 and 70 making it more pedestrian friendly.

7. Hwy 70 Trail

- Connect Comfort Inn and Hampton Inn to Kings Restaurant, Neuse Sports Shop, and LCC along HWY 70. Also connect LCC and McDonalds. A sidewalk isn't recommended but a trail behind stores would be acceptable.

8. Adkins Branch Pedestrian Bridge Replacement

- Replacement of the three pedestrian bridges along the Adkins Branch. (A community forum was held to address the new placement of these bridges).

9. Main Thoroughfare Connections

- Main thoroughfares need sidewalks- Vernon, Washington (east of MLK), JP Harrison Blvd., and US 70.
- Add sidewalk along Carey Rd. where there are disconnections. However, many citizens south of Highland Ave. are opposed to this idea because it would require tree removal and "loss" of property.
- Sections of Hardee Road without sidewalks should be connected.
- Sidewalks along Hillcrest Road can connect Kinstonian Heights and Country Acres neighborhoods with Sandy Clay Road, Banks School, Bethel Christian Academy, and Barnett Park/ Bill Faye Park

10. Kinston High School and Lenoir Memorial Hospital Trail

- Develop trail from Kinston High School to Lenoir memorial Hospital.

11. Country Club Loop

- The rectangle around the Country Club is very heavily used by pedestrians- Stockton, Greenbriar, and Cambridge Streets. The northern part of the route does not have sidewalks, but the roads are walkable. This "rectangle" would connect to central greenway.

12. Walk to School Trails

- Better connectivity with community schools to neighborhood amenities
 - Teachers Memorial School



- Rochelle Middle School
- Southeast Elementary School
- Northwest Elementary School
- Sampson School
- Bynum Elementary School
- Kinston High School

13. Westgate Trail

- Commercial site Lowe's could serve as an internal walking opportunity at this complex. Traffic calming initiatives and encouragements programs may be worthwhile. Crossing at Hwy 70 would be difficult.

14. Caswell Memorial Pedestrian Bridge

- Pedestrian connection between Caswell Center, Vernon Park Mall, and Caswell Park to serve employees and residents.

15. Caswell memorial Pedestrian Bridge

- Pedestrian bridge connection to riverwalk loop at Caswell Park site.

16. Highway to Heaven

- A tour of area historic churches that also enables people to walk to church.



TASK FORCE MEETING #4

The information provided below contains the minutes for the October 25, 2007 Task Force

MEETING MINUTES

Attendance:

Rivers and Associates:

Myriah Shewchuk
Colleen Simmons
Ronald Sessoms

Committee Members:

Adrian King
Tim Knobeloch,

City of Kinston:

Tommy Lee

NC DOT:

John Vine-Hodge

Kinston Free Press

David Anderson

Not in Attendance:

Leigh Abell, Jack Anglin
Mike Barton, Clarice Bryant,
Duncun Charlton, Terry
Cline, Angelina Craft,
Preston Ellis, Constance
Hengel, Pat Humphreys,
Lucy Marston, Chip Medlin
Scott Stevens, Laura Lee
Sylvester, Angeleique
Williams- Thomas

The City of Kinston Comprehensive Pedestrian Plan Task Force Committee convened on Thursday, October 25, 2007, at 2:15 p.m. The meeting was held at the Kinston Enterprise Center, located at 327 North Queen Street, Kinston, North Carolina 28501.

Myriah Shewchuk began the meeting around 2:25 p.m. Ms. Shewchuk starts the discussion by defining terms and abbreviations mentioned on the handout given to the task force members. After this summation, she then moves onto a PowerPoint presentation, by stating the "4 Goals" of Kinston and what Kinston wants for the community. These goals and objectives are described and broken up into individual projects.

At this time, Ms. Colleen Simmons goes into the first project mentioned which is the construction of the Neuse Pedestrian Bridge downtown. Adrian King mentions that the bridge will be built within the next 2-2 ½ years and the Department of Transportation (DOT) has sent designers and engineers out to the site. He then states the project is moving forward and 3 semifinalist artists will be determined in November. He also speaks about the looking for engineers to work with the winning artist's design. According to Mr. King, Place Based Economic Development Program, created by Governor Easley, will select 3 projects in the state to receive project funding. Kinston was identified as being a top candidate to receive funding through this program. John Vine-Hodge then adds that the Pedestrian Bridge is



considered a TIP project. Mr. King then adds to this comment that the project including a proposed riverwalk has been sent to Congress in hopes of gaining monetary funding.

The Queen Street revitalization was the second project to be discussed. Ms. Shewchuk stresses the importance of bringing Queen Street down to the “Human Scale”. Ms. Simmons then notes that the city must work with the DOT to determine the ideal design for a “Road Diet” on Queen Street. In this discussion, Mr. Vine-Hodge mentions the fact of Queen Street being a state truck route. Mr. King adds that MLK Blvd. was the original truck route and notes the possibility of returning it to its former use. Ms. Simmons then describes and reviews various downtown revitalization projects. The issue of public art and transit connectivity is then addressed by the committee.

The next item addressed was the Adkin Branch Pedestrian Bridge replacement. Mr. Lee adds that the Washington Street motorist bridge will be modified to allow pedestrian connectivity and the Holloway Bridge will be replaced. The Queen and King Street Bridges were then mentioned. Pedestrian safety and connectivity should be addressed on these bridges. Mr. King mentions the King Street corridor from Skinners Bypass to the bridge is a perfect candidate for avenue treatments such as street lamps and planted medians.

Ms. Simmons continues with the discussion moving into sections describing crosswalks, multi-use trails and greenway master plans. The discussion continues into walking programs with Ms. Simmons describing how Kinston can use these programs to promote walkability and connectivity. This conversation leads to the last section discussed which pertained to using policy to promote community walkability. Mr. Lee states the city does not currently require sidewalk installation in new developments but it is instead encouraged pedestrian amenities. He goes on to mention this practice was adopted by city council after many contractors voiced concerns about requiring sidewalk installation.

Before the conclusion of the meeting, Ms. Shewchuk asks the members if they had any questions or concerns. Mr. Vine-Hodge recommends that a “Top Ten” list be sent to all Taskforce members who were unable to attend the meeting. He goes on to say he felt as if it was the best way to ensure everyone has the chance to voice their opinion and urgency of proposed projects. Ms. Shewchuk agrees with Mr. Vine-Hodge and states that it something they will do to ensure the Taskforce’s input and concern.

Myriah thanked everyone for attending the meeting.

The Task Force Meeting adjourned around 4:30 p.m.



TASK FORCE MEETING #5

The information provided below contains the minutes for the December 6, 2007 Task Force

MEETING MINUTES

Attendance:

Rivers and Associates:

Myriah Shewchuk
Colleen Simmons

Committee Members:

Adrian King, Jack Anglin, Scott Stevens,
Tim Knobloch, Duncun Charlton

City of Kinston:

Tommy Lee

NC DOT:

John Vine-Hodge

Not in Attendance:

Leigh Abell, Mike Barton, Clarice Bryant,
Terry Cline, Angelina Craft, Preston Ellis,
Constance Hengel, Pat Humphreys,
Lucy Marston, Chip Medlin,
Laura Lee Sylvester, Angeleique Williams-Thomas

The City of Kinston Comprehensive Pedestrian Plan Task Force Committee convened on Thursday, December 6, 2007, at 2:15 p.m. The meeting was held at the Kinston Enterprise Center, located at 327 North Queen Street, Kinston, North Carolina 28501.

Colleen Simmons began the meeting around 2:25 p.m. Ms. Simmons introduced herself and summarized what happened at October's Task Force meeting. Ms. Simmons then explained the timeframe for completion of the plan is February 2008 to allow time for NCDOT review and final edits before presenting plan to City Council for approval. Mr. John Vine-Hodge stated an extension by the City would be needed but didn't see a problem with extension. Ms. Simmons asked if a public hearing was required by NCDOT. Mr. Vine-Hodge stated no. Mr. Scott Stevens suggested presenting the final plan to the City Council during their January or February work session prior to a City Council meeting. The upcoming work sessions are January 22nd and February 18th at 5:30 p.m.

Ms. Simmons then explained each section of the draft plan and stated the sections will be posted online separately for review. Mr. Tommy Lee stated the Country Club Loop shown on the maps need to be moved to Perry Park since it is currently shown going through private property.

Mr. Stevens asked about the listed funding sources and said Hardee Road was not a NCDOT road; therefore the sidewalk infill and construction would not be a NCDOT TIP. Ms. Simmons stated she would change that and make sure all roads were correct.



Mr. Stevens and Mr. King asked if the recommendation tables can be clarified to assist in understanding what a priority was and what was not. Mr. Vine-Hodge also stated NCDOT requires cost estimates for each project. There were various discussions on how to clarify the tables and it was decided that each priority table would be broken up into timeframes (Short, Mid-Range, Long-Range) and a hierarchy of text styles and colors be used for each table. These changes would be done before the draft plan is posted online.

There was further discussion on the procedure to obtain City Council approval. Mr. Stevens recommended a public hearing be held after the final plan is presented to the Council at their work session. Mr. Stevens stated the work session would give the Council additional time to review the document prior to the public hearing.

There was discussion on utilizing city, state, federal, and private funding to complete the plan. Mr. King asked for a potential list of partners, such as sororities, churches, and NAACP to be added to Section 10. These partners would be a valuable tool to assist in plan implementation. Ms. Shewchuk asked Mr. King if he could assist in providing a list for the plan.

Ms. Shewchuk asked Mr. Lee what the City would like to do with the website. Ms. Shewchuk stated it is going to be expiring in March. There were several discussions on the need to keep the website going after plan adoption and Mr. Jack Anglin will coordinate with the City and Pride on the details.

Colleen and Myriah thanked everyone for attending the meeting.

The Task Force Meeting adjourned around 4:00p.m.

Task Force Member Attendance

The following chart illustrates the attendance at Task Force and Public Workshops.



KINSTON COMPREHENSIVE PEDESTRIAN PLAN ATTENDANCE

TASK FORCE						TF 1	TF 2	TF 3	TF 4	TF 5	PW 1	PW 2
						01-11	03-08	06-14	10-25	12-06	03-29	07-26

1	Ms.	Abell	Leigh	Education Director	Lenoir County Council on Aging						Attendance was not recorded	
2	Mr.	Anglin	Jack	Bicycle/walk Enthusiast	Interested Citizen							
3	Mr.	Barton	Mike	General Manager	Hampton Inn							
4	Ms.	Bryant	Clarice	Civil Engineer II	City of Kinston Engineering							
5	Mr.	Charlton	Duncan	Park Superintendent	Kinston/Lenoir Recreation							
6	Dr.	Cline	Terry	Interim Superintendent	Lenoir County Public Schools							
7	Mrs.	Craft	Angelina	Certified Fitness Instructor	Minges Wellness Center (LMH)							
8	Mr.	Dunn	Michael	Architect	Dunn & Dalton Architects							
9	Mr.	Ellis	Bill	Director	Kinston/Lenoir Recreation							
10	Mr.	Ellis	Preston	KPD Police Officer	City of Kinston Public Safety							
11	Ms.	Hengle	Constance	Director of Community Programming and Development	Lenoir Memorial Hospital							
12		Humphreys	Pat	Representative	Heritage Tourism Council							
13	Mr.	King	Adrian	Executive Director	PRIDE of Kinston							
14	Mr.	Knobeloch	Tim	Recreation Superintendent	Kinston/Lenoir Recreation							
15	Ms.	Marston	Lucy	Lenoir County Tourism Director	Kinston/Lenoir Recreation							
16	Mr.	Medlin	Chip		Kinston/Lenoir Recreation							
17	Mr.	Stevens	Scott	Assistant City Manager	City of Kinston							
18	Ms.	Sylvester	Laura Lee	President	Kinston/Lenoir Co. Chamber of Commerce							
19	Mrs.	Williams-Thomas	Angeleique	Health Educator	Lenoir County Health Dept.							

Attendance Rate 84% 26% 32% 11% 26% 5%

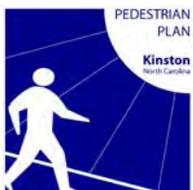


PROJECT TEAM						TF 1	TF 2	TF 3	TF 4	TF 5	PW 1	PW 2
						01-11	03-08	06-14	10-25	12-06	03-29	07-26
1	Ms.	Shewchuk	Myriah	Project Coordinator	Rivers and Associates, Inc.							
2	Mr.	Williams	Ben	Planner	Rivers and Associates, Inc.							
3	Ms.	Simmons	Colleen	Planner (Joined September 2007)	Rivers and Associates, Inc.							
4	Mr.	Sessoms	Ronald	Planning Intern (Joined May 2007)	Rivers and Associates, Inc.							
5	Mr.	Nalley	Steve	Planning Intern (Joined May 2007)	Rivers and Associates, Inc.							
6	Mr.	Lee	Tommy	Planning Director	City of Kinston							
7	Mr.	Breuer	Kyle	Planning Intern	City of Kinston							
8	Mr.	Vine-Hodge	John	NCDOT Representative	NCDOT Ped and Bike Division							
9	Ms.	Cheney	Helen	NCDOT Representative	NCDOT Ped and Bike Division							
						56%	56%	78%	56%	44%		44%

Key

PRESENT 

ABSENT 



Take a walk and use this checklist to rate the City of Kinston's walkability.
How Walkable is Kinston?

Location of walk _____

Rating Scale:



1. Did you have room to walk?

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

Locations of problems: _____

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

**4. Was it easy to follow safety rules?
Could you and your child...**

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

Locations of problems: _____

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

2. Was it easy to cross streets?

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

Locations of problems: _____

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

5. Was your walk pleasant?

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

Locations of problems: _____

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

3. Did drivers behave well?

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

Locations of problems: _____

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

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

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

Total _____

Please return your completed checklist at Task force Meeting #2

MYRIAH SHEWCHUK, PROJECT COORDINATOR
 RIVERS AND ASSOCIATES, INC.

P.O. Box 929

Greenville, NC 27835

Phone 252-752-4135

Fax 252-752-3974

mshewchuk@riversandassociates.com



Optional Information:

Name _____

Phone _____

Email _____

APPENDIX – B
PUBLIC WORKSHOPS



PUBLIC WORKSHOP/ OPEN HOUSE #1

MEETING AGENDA

DATE: March 29, 2007; 5-7PM

LOCATION: Kinston Enterprise Center, Room 111
327 N. Queen Street, Kinston, NC

SUBJECT: City of Kinston Comprehensive Pedestrian Plan
Public Workshop 1

PROJECT SUMMARY

Kinston's Planning Department was awarded a grant from the North Carolina Department of Transportation and along with contributions from the Lenoir County Visitors and Convention Bureau they are developing a Comprehensive Pedestrian Plan. The Project Consultants from Rivers & Associates, Inc. are working closely with the City, the Pedestrian Plan Task Force, and Citizens to identify future pedestrian projects throughout the City.

OPEN HOUSE

To best use your time at today's open house and provide the project team with the information needed, please visit the following **5 STATIONS** while you are here:

- STATION 1:** Sign in and fill out a nametag
- STATION 2:** Complete the online survey at the computer stations
- STATIONS 3, 4 & 5:** Review maps and photographs of existing conditions and write down comments and suggestion

WHAT NEXT?

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

- Plan to attend the second public workshop in July
- Check the website for information and announcements
- Tell your family, friends and co-workers about this project
- Contact the Project Coordinator with questions or suggestions



MEETING MINUTES

North Study Area:

1. Carey Road needs infill sidewalks.
2. Vernon Avenue needs infill sidewalks.
3. Lenoir Memorial Hospital area needs crosswalks.
4. There are existing indoor and outdoor walking programs at the hospital.
5. Plaza Shopping district and Plaza Boulevard needs more sidewalks.
6. Improve landscape aesthetics.
7. Improve ADA accessible sidewalks.
8. Need better crosswalk designation.
9. Historic markers, monuments and signage would make for a more interesting walking experience.
10. Route to Mall via Vernon and MLK need connections.
11. Connect Queen St., Plaza Boulevard, Carey and Rouse Road.

Southeast Area:

1. Riverwalk and pedestrian connection to the Neuseway Park and Nature Center.
2. Lenoir Community College needs connectivity to area businesses such as McDonalds.
3. Cross walk designations in street around Shine and McLewean and Washington.
4. Crosswalks important in areas of the City with a high walking population.
5. Sidewalk repair and decorative pavement on Herritage Street.
6. Improve lighting.
7. Pedestrian walk signs at intersections / crossing signals / countdown timer.
8. Additional trash receptacles in main walking routes.
9. Sidewalks in senior citizen communities (Woodview Road and Greenbrier Road).
10. Traffic calming and safer pedestrian crossings, specifically on wider roads where pedestrians frequently get stuck in the center turning lane.
11. Drink and refreshment stations at destinations would be a nice amenity and would give people and opportunity to walk.
12. Add walk/don't walk signs in the downtown.
13. Safety is an issue in this area.
14. Downtown businesses should improve building aesthetics.
15. Connect Herritage to the Park via pedestrian bridge.
16. Several historic sites throughout this area can be incorporated into an interpretative walking trail.



West Area:

1. Connect Fairfield Park to the Vernon Park Mall.
2. Improve ADA accessibility to the Mall.
3. Improve landscape aesthetics.

Programs:

1. Suggested programs include "Walktober", "Volksmarch", "Geocaching".
2. LMH / Cooperative Extension is holding "Walk to Ashville" / "Walk Across America" program.
3. Create walking tours with themes such as "ghost", "historic", "great pumpkin walk".
4. LC Council on Aging has a walking program.

Funding:

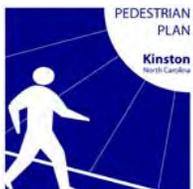
1. NCDOT will have a Safe Routes to School Program to fund pedestrian routes within 2-miles of an elementary or middle school.

PUBLIC WORKSHOP/ OPEN HOUSE #2

MEETING AGENDA

DATE: July 26, 2007; 5:00PM
LOCATION: Kinston Enterprise Center, Room 111
327 N. Queen Street, Kinston, NC
SUBJECT: City of Kinston Comprehensive Pedestrian Plan
Public Workshop #2

- I. **Introduction**
 - A. Review of project history
- II. **What You Said:**
 - A. Survey Review
- III. **What We Recommend:**
- IV. **Pedestrian Programs**
- V. **Next Steps**



MEETING MINUTES

A Public Workshop was held on Thursday July 26, 2007 at 5:00 p.m. The Meeting occurred at the Kinston Enterprise Center, Located at 327 North Queen Street, Kinston, North Carolina 28501.

Tommy Lee started the meeting at approximately 5:15 p.m. Mr. Lee recapped the project history and introduced Myriah Shewchuk, Steve Nalley, and Ronald Sessoms from Rivers and Associates.

Following the recap, Ms. Shewchuk introduces the PowerPoint discussion citing Kinston's rich history and current pedestrian activities. Ms. Shewchuk then further explains the project and gives a brief review of the last Public Workshop.

Ms. Shewchuk moves into "What Kinston Wants" which was a basic consolidation of needs stressed in past meetings and Workshops. These needs included a Greenway/Riverwalk, pedestrian friendly downtown, sidewalks and improved connectivity to area destinations.

Mr. Nalley goes into potential areas for Greenway segments such as floodways and blue line streams. Greenville was used as a precedent city that has existing greenways. One citizen raised concern about actual usage of the greenway system in Greenville. He wanted to know how the greenway system was being used and if the citizens actually wanted it there. Ms. Shewchuk answers his question citing its high usage and community support of Greenville's greenway system. Mr. Nalley then cites the benefits of greenway systems such as higher property values and educational opportunities.

Mr. Nalley then introduces two pedestrian bridges in Chattanooga, TN and Greenville, SC to serve as examples. He explains how Kinston can create a landmark by building a pedestrian bridge. This bridge would not only move people but it could also create an icon for the city, thus increasing tourism.

The next item addressed was downtown and how it needs to become pedestrian accessible. The PowerPoint advances with a comparison of Kinston's "Magic Mile" (Queen Street) past to present. Mr. Nalley review statistics of Queen Street and its current conditions citing its daily traffic count of 10-12,000 cars daily. A citizen expresses concern of whether that traffic count could be considered high. Tommy answers his question by stating the traffic count can be considered high.

Mr. Nalley continues the PowerPoint by introducing the idea of traffic calming and reveals an image of a before and after of Queen Street. The first image shows the current conditions while the second shows the street with a planted median. Ms. Shewchuk describes the change as placing Queen Street on a road diet. She then goes into how Queen Street is an ideal candidate for a road diet and how it would significantly improve the street. Ms. Shewchuk continues by describing two possible designs for Queen Street. One of these designs featured a two lane road with diagonal parking along either side. The other design had parallel parking with a planted median down the middle of two lanes, one in each direction. Ms. Shewchuk describes safety features that should be included on each design such as 45 degree mid-block crossings and curb bump-outs.

Roundabouts were introduced next and how they could potentially be placed at historical intersections to calm traffic even farther downtown. Many citizens expressed concern about placing roundabouts downtown, for instance increased traffic accidents and driver intimidation. Goldsboro was introduced as an example city with a roundabout downtown. Many felt the roundabout was intimidating but did acknowledge that it helped calm traffic significantly. Tommy states the round-



about in Goldsboro could have been better if more planning would have taken place before it was built. The roundabouts at New Bern and NC State University were cited as roundabouts that not only improved traffic but also added to aesthetic value of the street.

The PowerPoint progresses with Mr. Nalley introducing the Herritage Street improvements and a graphic rendering of potential improvements that could take place to improve the street.

He continues by explaining how Kinston can use its historical predominance as a great way to market itself. He also stresses the need for Kinston to create an icon for itself similar to what New Bern has done. One citizen introduced the idea of potentially using the local high school emblem, the Viking, as a potential symbol.

Mr. Nalley and Ms. Shewchuk then moved the discussion to how Kinston can incorporate more civic art downtown and possibly creating an Art Walking Tour. Mr. Nalley explains how way finding signs would be a very important means in connecting downtown landmarks

Sidewalks along major corridors were the next subject to be addressed. Mr. Nalley and Ms. Shewchuk explain how the current conditions of many sidewalk segments in Kinston can be improved. The improvements should not only improve aesthetics and connectivity but it should also incorporate safety, for instance with crosswalk signals.

The last slide addressed improved connections to parks. Although sidewalk connectivity to Fairfield Park seems to be good, connections to the Nature Center is nearly non existent. One citizen proposes a possible boardwalk on the backside of the guardrail after the King Street Bridge. It was also confirmed that many people that live in neighborhoods near downtown frequently walked to the downtown. It was also addressed that there is no wheelchair connectivity at Visitor's Center intersection and Queen Street Bridge. Tommy addresses the comment citing the fact that NCDOT engineers were currently addressing the situation.

The PowerPoint concluded with a question and comment section that gave citizens the opportunity to voice concerns. The following questions and comments were addressed:

1. Need for a continuous sidewalk down Vernon Avenue, whether on both sides or on one side. (There is a lot of foot traffic from downtown to mall)
2. Connectivity from Comfort Inn to Neuse Sport Shop and Restaurant.
3. A need for a formal list of priorities so that when funding becomes available it can easily be applied to needed projects.
4. Biggest sidewalk priority at Vernon Avenue; Downtown to Mall.
5. It great how Rivers and Associates have incorporated citizens' priorities with Kinston Riverfront Now! Plans.
6. The Queen Street Median may not be ideal for the annual Christmas parade downtown.
7. Make sure Queen Street remains Kinston's main street (Make Queen Street a high priority; it seems to some that Herritage Street is becoming Kinston's "Main Street").
8. Southern Pines, NC has divided median and have parade that march on one side and comes back down the other side.
9. What are the next steps in the project?

Ms. Shewchuk addresses this question by stating there will be a presentation of the plan in December to Council. In the meanwhile the plan will be further developed.



10. Plaza Blvd. needs crosswalk markers from Wal-Greens to Plaza Shopping Center.
11. Crosswalks at Herritage Street difficult to cross.
12. ADA connectivity downtown not bad.
13. Bynum and Teachers Memorial School Closing and new school will be built at MLK & Highland Ave.
14. Possible swinging bridge across Neuse River for linking Downtown to Nature Center.
15. Snake River in Tucson an example of Pedestrian Bridge serving as high art.
16. Walkway or crosswalk from LCC to McDonald's.
17. A formal list of problems should be formulated to go along with solutions introduced.
18. More sidewalks along West Washington Avenue.
19. Creating marked pedestrian ways on wide city streets such as Washington Avenue.
20. Sidewalks at Power plant should come secondary to infill at vibrant community areas.
21. Hospital should be better linked to the community.

Ms. Shewchuk thanked everyone for attending. Task Forced adjourned around 6:45 p.m.

Subsequently, David Anderson from the Kinston Free Press interviewed Rivers & Associates with general project questions about the pedestrian plan and the next stages of the development.

Remarks recorded on Comment Cards:

- Parade would work very well on Herritage Street.
- It's a good idea to place a center median on Queen Street.
- Sidewalks are needed along Plaza, Carey St., and Vernon Avenue.
- Pedestrian walk signals needed.
- A pedestrian bridge between Wal-Mart and the new Staples Complex would be a great idea so you don't have drive across Route 70.
- Bus stops should incorporate glass shelters with an open front, and benches inside to keep travelers out of the weather.
- A program should be incorporated to educate the public about pedestrian safety and laws.





Defending the State • Understanding the Province • Shaping the Future

Kinston-Lenoir County
Convention & Visitors Bureau



 **Rivers**
Associates, Inc.
Since 1918

FOR IMMEDIATE RELEASE
March 27, 2007

You can help make Kinston more Walkable!

You have a great opportunity to help decide where you walk and what it will look like. The City is developing a pedestrian plan and they need your input.

Where do you walk? Why do you walk? Where would you like to walk?

These important questions will be asked at the Public Open House on Thursday, March 29 from 5 – 7 PM at the Kinston Enterprise Center, Room 111 at 327 North Queen Street.

The City's Planning Department was awarded a grant from the North Carolina Department of Transportation and along with contributions from the Lenoir County Visitors and Convention Bureau they are developing a Comprehensive Pedestrian Plan. Planning Consultants, Rivers & Associates, Inc., are working closely with the City, the Pedestrian Plan Task Force, and Citizens to identify future pedestrian projects throughout the City.

Communities that make walkability a priority have seen the many benefits including:

- Improved citizen health
- Less traffic congestion and less pollution
- Increased recreational opportunities
- Increased safe and economical mode of transportation

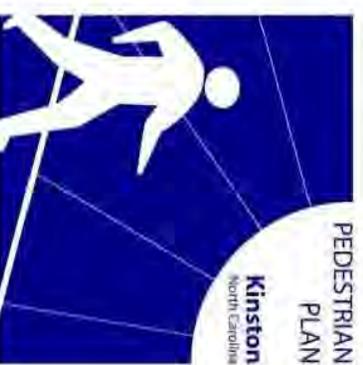
Luckily for Kinston, there are many existing sidewalks throughout Town and new subdivisions are often required to install a sidewalk on one side of the street. However, along larger roads and within the downtown, pedestrian safety is often a concern due to high volume fast moving traffic. Additionally, safe pedestrian access to parks, schools, and businesses is lacking in some parts of the City. During initial Task Force meetings, some suggestions and ideas that have been discussed are:

- Safer street crossings and traffic calming measures
- Greenway along the Neuse River
- Sidewalks along main roads

Now is your chance to provide information and suggestions. The goal of Thursday's open house is to hear the needs, concerns and goals of Kinston's residents. Based upon feedback, the project consultant will develop recommendations to improve walkability in the City. A draft of these recommendations will be presented in July at the second public workshop. Plan completion is expected in December 2007. This plan will help the City identify and prioritize future projects. With a plan in place, the City will have a leveraging tool to encourage pedestrian friendly development and apply for additional funding.

To complete walkability survey and for more information on this project please visit www.walkablekinston.com.

For more information, contact Myriah Shewchuk, Rivers & Associates, Inc., Project Coordinator at 252-752-4135 or mshewchuk@riversandassociates.com



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

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

WALKABLE KINSTON!

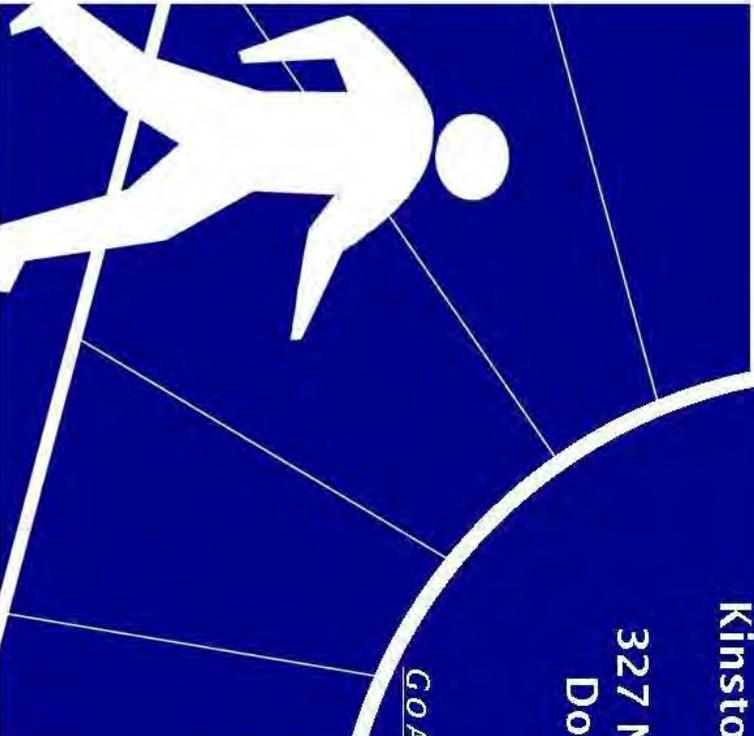
WHAT
Pedestrian Planning Project
Open House

WHEN
Thursday, March 29, 2007
5— 7 PM

WHERE
Kinston Enterprise Center
Room 111
327 North Queen Street
Downtown Kinston

GOALS FOR THIS OPEN HOUSE ARE:

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



This plan is being developed by professional consultants and is funded by the City of Kinston, the NCDOT, and the Kinston-Lenoir County Visitors and Convention Bureau.

WANT A MORE PEDESTRIAN FRIENDLY KINSTON?

IF YOU ANSWERED YES, PLEASE JOIN US!
THE CITY OF KINSTON NEEDS YOUR INPUT!

Kinston-Lenoir County
Convention & Visitors Bureau

Shaping the Past • Understanding the Present • Shaping the Future



WHAT
COMPREHENSIVE PEDESTRIAN PLAN
PUBLIC WORKSHOP

WHEN
THURSDAY, JULY 26, 2007
5 TO 7PM

WHERE
KINSTON ENTERPRISE CENTER
ROOM 111
327 NORTH QUEEN STREET

GOALS AND OBJECTIVES

- ▶ PROVIDE YOU WITH PROJECT INFORMATION.
- ▶ PRESENT DRAFT RECOMMENDATIONS FOR THE COMPREHENSIVE PEDESTRIAN PLAN
- ▶ ACCEPT COMMENTS, RECOMMENDATIONS, AND QUESTIONS FROM YOU.



www.walkablekinston.com

PEDESTRIAN PLAN
Kinston, North Carolina

This plan is being developed by professional consultants and is funded by the City of Kinston, the NCDOT, and the Kinston-Lenoir County Visitors and Convention Bureau.

 **Rivers**
& Associates, Inc.
Since 1918

APPENDIX – C
SURVEY DATA COLLECTION



SURVEY DATA COLLECTION

The following charts are a compilation of data collected by citizen completed surveys. These surveys gave citizens the opportunity to voice their concerns and issues of current pedestrian connectivity. The survey also collected information and percentages about their current lifestyles as they relate to improving pedestrian connectivity and amenities.

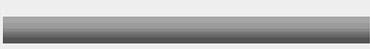
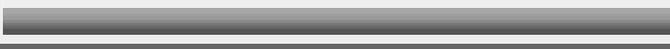
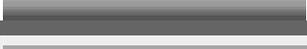
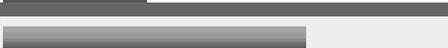
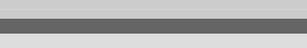
1. How often do you walk 10 minutes or more in Kinston? Please select an answer for each item.					
	Frequently (3 or more days per week)	Occasionally (several times per month)	Rarely or never (less than 1 – 2 times per month)	N/A	Response Average
I walk to destinations for running errands, shopping, or entertainment	22% (4)	22% (4)	33% (6)	22% (4)	2.14
I walk to the bus stop	0% (0)	0% (0)	7% (1)	93% (14)	3.00
I walk for exercise	67% (14)	29% (6)	0% (0)	5% (1)	1.30
I walk for leisure	47% (9)	32% (6)	11% (2)	11% (2)	1.59
I walk to my car	84% (16)	11% (2)	5% (1)	0% (0)	1.21
I walk to work	18% (3)	0% (0)	18% (3)	65% (11)	2.00
I walk the dog	29% (5)	6% (1)	0% (0)	65% (11)	1.17
I walk to school	0% (0)	0% (0)	12% (2)	88% (14)	3.00
Total Respondents					21
(skipped this question)					0



2. What is the most critical issue that people face while walking in Kinston?			
		Response Percent	Response Total
Unsafe street crossings		9.5%	2
Lack of personal safety		28.6%	6
Missing or poorly maintained sidewalks		57.1%	12
View Other (please specify)		4.8%	1
Total Respondents			21
(skipped this question)			0

3. Which factors make it more difficult/unpleasant for you to walk in Kinston? check all that apply			
		Response Percent	Response Total
Drivers not stopping for pedestrians at crosswalks		33.3%	7
Worries about personal safety (crime)		57.1%	12
Drivers running red lights		28.6%	6
Drivers making a right on red		14.3%	3
Fast vehicle speeds		33.3%	7
Poor sidewalk surface quality (cracks, holes, obstructions, etc.)		57.1%	12



No sidewalks or gaps in the sidewalk		76.2%	16
Poor access for those with disabilities		23.8%	5
Not enough time to cross intersections		28.6%	6
Places I need to go are too far away to walk		42.9%	9
Poor/inadequate lighting		19%	4
Unattractive/unappealing streets		42.9%	9
Heavy traffic		19%	4
Sidewalks too narrow		28.6%	6
Personal medical condition		9.5%	2
Weather		19%	4
View Other (please specify)		14.3%	3
Total Respondents			21
(skipped this question)			0

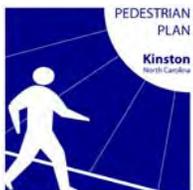


4. Which areas of Kinston need the most attention to improve your walking experience? Please rate each area according to need. Please select an answer for each item.

	No improvements needed	Some improvements needed	Substantial improvements needed	Do not know	N/A	Response Average
On major street corridors	11% (2)	26% (5)	42% (8)	5% (1)	16% (3)	2.50
On neighborhood streets	0% (0)	58% (11)	42% (8)	0% (0)	0% (0)	2.42
Near highway interchanges	12% (2)	19% (3)	12% (2)	38% (6)	19% (3)	2.92
Near bus stops	6% (1)	12% (2)	6% (1)	25% (4)	50% (8)	3.00
Near retail/shopping centers	5% (1)	42% (8)	26% (5)	21% (4)	5% (1)	2.67
Near parks and other recreation destinations	11% (2)	47% (9)	21% (4)	16% (3)	5% (1)	2.44
On bridges or overpasses	12% (2)	24% (4)	18% (3)	29% (5)	18% (3)	2.79
Near schools	12% (2)	18% (3)	29% (5)	24% (4)	18% (3)	2.79
Near tourist destinations	6% (1)	12% (2)	24% (4)	53% (9)	6% (1)	3.31
Near service providers (i.e. hospitals, clinics)	25% (4)	25% (4)	38% (6)	6% (1)	6% (1)	2.27
Along the Neuse River	11% (2)	22% (4)	44% (8)	17% (3)	6% (1)	2.71
Downtown Kinston	0% (0)	38% (5)	31% (4)	8% (1)	23% (3)	2.60
Total Respondents						20
(skipped this question)						1



5. Please list any SPECIFIC DESTINATIONS in the City (such as the name of a school, park, shopping center, or bus station) that need improvements to make walking safer and more comfortable.	
1.	0
2.	0
3.	0
4.	There needs to be a crosswalk and a pedestrian walk light that connects LMH and doctors offices. There are no sidewalks leading from Herritage Street into the Hospital entrance. I have to walk on the road which is very scary! No sidewalks on LMH proper other than those that lead to the parking lots.
5.	Near the east side of Kinston; E. Lenoir, East St., Independence St., Vernon Ave., Grainger Stadium, Southeast Elementary, Rochelle Middle, Caswell St, Adkin St., K-Mart Area, hospital area especially.
6.	0
7.	Hospital, Bill Faye Park.
8.	Park area across from Britthaven on Rhodes Ave. No easy way to access with wheel chair.
9.	Harvey School District and surrounding area. Some streets have no sidewalks, many that do need repairing, and handicapped access is needed.
10.	n/a
11.	don't know
12.	You cant really walk anywhere in Kinston, the traffic doesn't care about pedestrians, most of the time there isn't a sidewalk period to walk in so you walk in the road or take the risk of breaking a body part doing so.
13.	Plaza
14.	mall, schools, churches, neighborhoods
15.	Bill Fay Park and Fairfield Park lack sidewalks/bike paths
16.	Combination of River, Nature Center, more attractive Queen Street would make walking more entertaining and interesting for employees walking during lunch



17.	All of Vernon Avenue All of Plaza/Cary Road All of Hardee Road +/- 1/2 mile of all elementary schools
18.	Streets around the VPM Mall should have sidewalks
19.	Some of the areas with higher crime rates may need attention just to make the public feel safe.
20.	don't know
21.	Kinston High School Any park

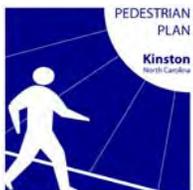
6. Please list any specific ROADWAYS or INTERSECTIONS in the City that need improvements for pedestrians. For roadways please provide the street name from ___ and to___. For intersections please provide two roadway names.

1.	0
2.	0
3.	E. King St, East Caswell Streets need to be paved and lit on the side of Southeast Elementary Schools.
4.	No crosswalks anywhere but downtown. Would be nice to have one on Herritage St. that connects Foodlion and Piggly Wiggly shopping centers.
5.	All of them.
6.	0
7.	Carey Road from Vernon Avenue to Rouse Road needs sidewalk.
8.	Area around britthaven.
9.	Herritage St between Plaza & Vernon
10.	Carey Rd from Vernon to Carey Rd. Children often walks in the street and the steep hill on Carey Rd near Walker Dr causes poor visibility.
11.	Plaza Blvd. between Carey Road and West Road.
12.	Heritage Vernon
13.	I see walkers on Herritage Street Airport Road end that are biking or walking with no sidewalks.
14.	Vernon Ave, Carey Rds, Hardee Rd

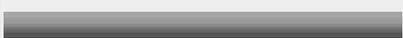


<u>15.</u>	All major intersections on Vernon Avenue Many intersections along Queen Street Intersections along Herritage Street from College Street to Bright Street
<u>16.</u>	Food bridge across River at Neuseway Park
<u>17.</u>	All of Vernon Avenue All of Plaza/Cary Road All of Hardee Road +/- 1/2 mile of all elementary schools
<u>18.</u>	Herritage around Burger King & McDonalds need handicap access and marked crosswalks i.e. printed lines in streets Cary from where it meets the turn and intersection with Plaza: should be sidewalks to Hull Road
<u>19.</u>	I cannot think of any intersections that need the improvements.
<u>20.</u>	Carey Rd
<u>21.</u>	Herritage from Carey Road to Queen Street Extended

7. Where do you live? Please enter subdivision or neighborhood name.	
<u>1.</u>	0
<u>2.</u>	Hwy 11/55
<u>3.</u>	olive Street
<u>4.</u>	Doctors Dr.
<u>5.</u>	E. Lenoir Avenue, near Mitchell Wooten Apartments.
<u>6.</u>	Margaret Lane
<u>7.</u>	Northwest Kinston
<u>8.</u>	Jackson heights
<u>9.</u>	Harvey School District
<u>10.</u>	Bear the intersection of W Highland Ave and Carey Rd
<u>11.</u>	Club Pines



<u>12.</u>	Fred Everett Rd but i work at the hospital and walk all the time
<u>13.</u>	Northwest Kinston Brookhaven
<u>14.</u>	NW Kinston
<u>15.</u>	Central Kinston
<u>16.</u>	Wallace Family Road
<u>17.</u>	Hodge Road
<u>18.</u>	Hillcrest
<u>19.</u>	I live on Woodview Road in the North Study area.
<u>20.</u>	Worthington place
<u>21.</u>	The Briarpatch

8. Age (optional)			
		Response Percent	Response Total
0-20		0%	0
21-45		40%	8
46-65		35%	7
Over 65		25%	5
Total Respondents			20
(skipped this question)			1



9. Gender (optional)			
		Response Percent	Response Total
Male		45%	9
Female		55%	11
Total Respondents			20
(skipped this question)			1
10. Do you have a mobility limitation? (optional)			
		Response Percent	Response Total
Yes		5.3%	1
No		94.7%	18
Total Respondents			19
(skipped this question)			2



APPENDIX – D
RAMEY KEMP & ASSOCIATES
'ROAD DIET' REPORT





RAMEY KEMP & ASSOCIATES, INC.
5808 Faringdon Place, Suite 100
Raleigh, NC 27609
Phone - 919-872-5115 Fax - 919-878-5416
www.rameykemp.com

July 24, 2007

Ms. Myriah Shewchuk, ASLA
Rivers & Associates, Inc.
P.O. Box 929
Greenville, North Carolina 27835

Subject: Comprehensive Pedestrian Plan
Kinston, North Carolina

Dear Ms. Shewchuk:

This letter provides a summary of our traffic diversion and traffic calming recommendations for the Comprehensive Pedestrian Plan for the City of Kinston. An information review was conducted of various traffic calming and diversion measures utilized in similar environments as the Kinston Downtown District.

Traffic Calming

Traffic calming is a method of traffic management that began in Europe and has been implemented in several U.S. cities over the last several years. Traffic calming consists of a variety of designs and methodologies. The following is a definition of traffic calming quoted from *An Illustrated Guide to Traffic Calming* by Hass Klau:

"Traffic calming is a term that has emerged in Europe to describe a full range of methods to slow cars, but not necessarily ban them, as they move through commercial and residential neighborhoods. The benefit for pedestrians and bicyclists is that cars now drive at speeds that are safer and more compatible to walking and bicycling. There is, in fact, a kind of equilibrium among all of the uses of a street, so no one mode can dominate at the expense of another."

A key focus of the Kinston Comprehensive Pedestrian Plan is to provide a more "walkable" downtown community, particularly along Queen Street, between its intersections with King Street and Vernon Avenue. Currently, Queen Street is primarily a four-lane, undivided roadway, with on-street parking along both sides which often discourages mobility and access for non-motorized users. A method for improving mobility and access for non-motorized users, while also maintaining vehicular capacity, is referred to as "road dieting."

"Road dieting" is a term that refers to reducing the number of lanes ("skinnying up") on a multi-lane roadway in order to provide a more accessible facility for all users. Studies indicate that the ideal candidate for a "road diet" is typically a four-lane roadway with an ADT of 12,000-18,000 vehicles per day (vpd). As indicated, Queen Street is a four-lane, undivided roadway and had an ADT of 10,000-12,000 vpd, based on 2005 traffic data. Traffic through Kinston is not expected to grow at a substantial rate over the next several years, thus the ADT of Queen Street qualifies it as a feasible candidate for consideration of a "road diet."



The recommended option for a "road diet" along Queen Street would consist of conversion of the four-lane roadway to a three-lane roadway, with one (1) through lane along each direction and a center turn lane, which could also be utilized for landscaping at various points between key intersections. On-street parking is sometimes avoided in "road diets" since bicycle lanes are often an element in the new cross-section. However, without off-street parking facilities, the elimination of the on-street parking along Queen Street is likely not feasible. On-street parking could be maintained along both sides of Queen Street however, the possibility of providing curb bump-outs at key intersections, thus eliminating some parking spaces, could be considered. The curb bump-outs, in combination with textured or raised crosswalks, would provide an additional means of traffic calming at key pedestrian access points.

A conceptual cross-section and plan view of the "road diet" option is provided. The conversion of Queen Street from a four-lane undivided section to a three-lane section would require significant coordination and cooperation between the City of Kinston and the North Carolina Department of Transportation.

An additional method of traffic calming that is often used in downtown or business district areas is a roundabout. Roundabouts have been accepted by many jurisdictions as a viable means of speed control, accident reduction, improved pedestrian access, increased capacity and enhanced aesthetic value. Based on these perceived advantages, roundabouts often serve as a "gateway" into a Town or community. The Queen Street corridor, particularly the southern portion in the vicinity of the King Street intersection, could potentially be considered for the installation of a roundabout(s) due to its proximity to the Neuse River and the proposed visitor amenities to the south.

The operation of a roundabout, in terms of vehicular capacity, is often optimized at intersections with similar volumes along each of the four (4) legs. A review of the AM and PM peak hour traffic volumes collected at the Queen Street and King Street intersection indicate that peak hour volumes are generally balanced along each leg. In addition, the observed peak hour traffic volumes indicate that, conceptually, a single-lane roundabout would likely provide sufficient capacity.

When studying the feasibility of converting an existing signalized or unsignalized intersection to a roundabout several factors must be considered and are noted below:

- Impact to adjacent properties. The acquisition of the necessary right-of-way for construction of a roundabout may be difficult and expensive. Various roundabout designs could be studied to try to minimize these impacts.
- Overall construction cost of converting an existing intersection to a roundabout.
- Traffic control during construction.
- Public opinion. Roundabouts are typically viewed in a negative light by the public, generally due to their lack of education regarding their operation and advantages. However, before and after studies conducted by various jurisdictions that have constructed roundabouts indicate a significant positive change in the public's opinion of roundabouts after construction.

Traffic Diversion

As indicated in the initial traffic assessment, the observed traffic patterns indicate that a significant amount of existing traffic along Queen Street currently utilizes King Street and Martin Luther King, Jr. Boulevard to bypass the Downtown area. In combination with traffic calming measures such as the "road diet" or a series of



roundabouts, as discussed in the previous sections, signing could be improved to encourage motorists that are bound for destinations outside of the Downtown area to utilize these routes. Existing traffic volumes at the key intersections along this route indicate that sufficient capacity is available to maintain an acceptable operation, even with additional diverted traffic.

In addition, the City of Kinston "Draft" Comprehensive Transportation Plan currently recommends a relocation of NC 58 to the east of the City. As indicated in the previous data collection summary, based on existing traffic counts at key locations, it appears that approximately 75% of traffic traveling along Queen Street in both the northbound and southbound directions is through traffic with no defined destination within the City. It would be expected that the relocation of NC 58 along the east side of the City, which would primarily serve as a bypass route, would remove a significant amount of the through traffic from Queen Street. The feasibility of a traffic calming measure, such as the road diet discussed in the previous section, would generally increase as the result of this diversion of traffic.

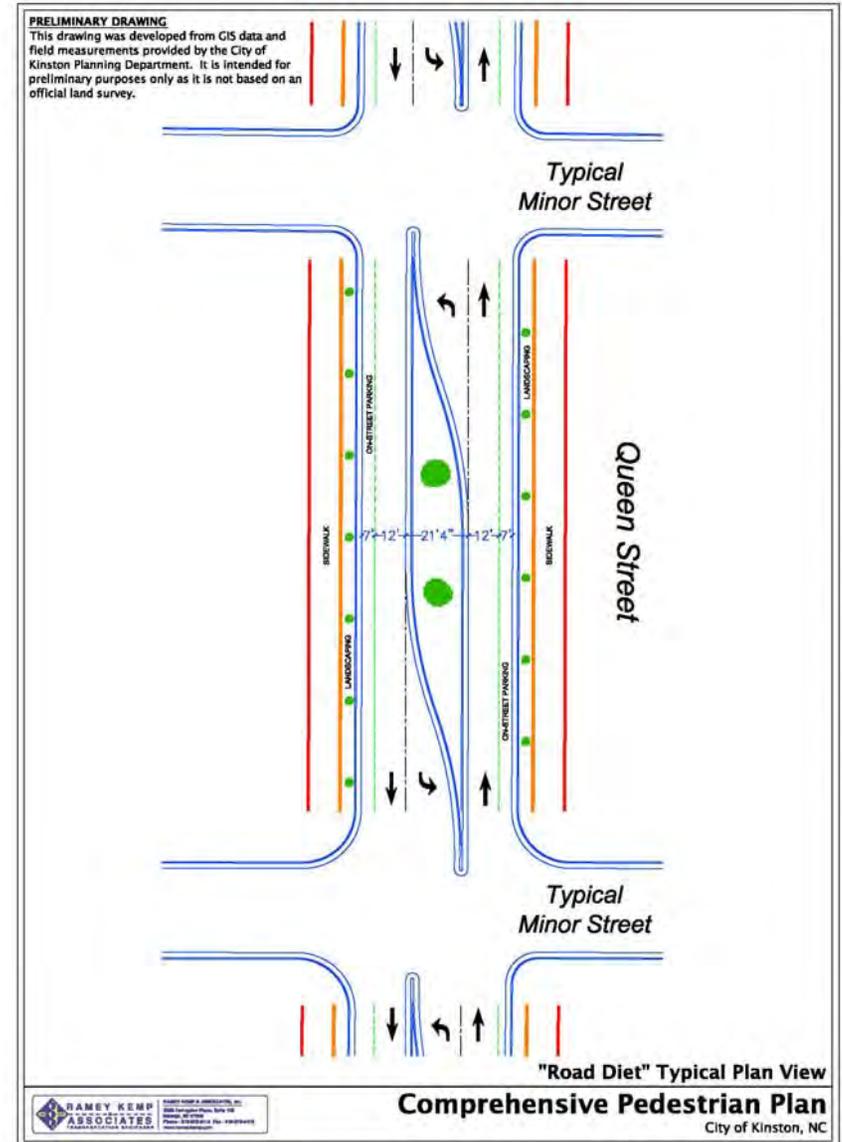
If you should have any questions or comments, please feel free to contact me at (919) 872-5115.

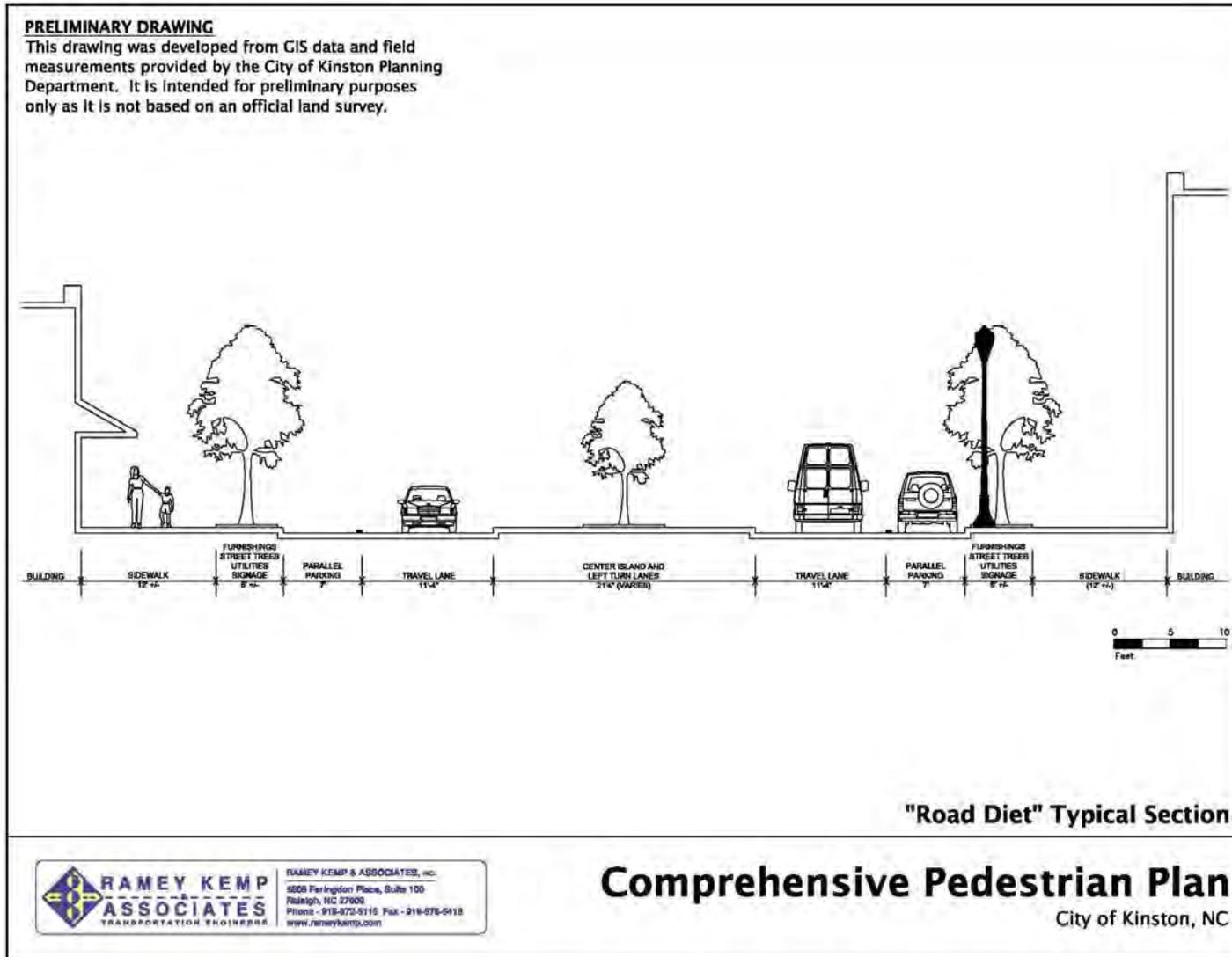
Sincerely,
Ramey Kemp & Associates, Inc.



Jason Hamilton, P.E., PTOE
 Transportation Manager

Attachments





APPENDIX – E
MEDIA COVERAGE



Kinston Free Press
March 28, 2007

Kinston to become more friendly to pedestrians

Bob Shiles

Tommy Lee, Kinston's director of planning, wants his city to become more pedestrian friendly.

To make that happen, the city hopes to get funding up to \$31,500 to develop a citywide pedestrian traffic plan. The plan, Lee said, would address issues related to providing tourists and residents safe, convenient foot access anywhere in Kinston.

"We can make all of our tourist venues accessible to walkers," Lee said. "We can address our downtown street configuration. We can make things like our Museum Thursdays pedestrian-friendly by making it safe for people to walk from one (museum) to the other.

"Walking is healthy," he added. "It saves on gas, is fun and helps establish a sense of community."

Lee noted that sidewalks already connect areas surrounding the Neuse River to the downtown. Sidewalks also pass by one of the access points to the 900-acre nature park proposed for the East Kinston flood buyout area.

The pedestrian traffic plan, Lee said, would be used in conjunction with other plans that the city is using to guide its downtown revitalization and economic development efforts.

"Once you have a plan, you can create a vision," he said. "You start with a plan and then determine what is feasible to do.

"If you want someone to make improvements to a building, show him plans for sidewalks, lighting and other things that will get people to walk by his building," Lee added. "Then he will usually tell you what he will do to make his property more attractive to the people walking by."

Lee said that Cedar Point, in Carteret County, is a good example of a community prospering because it improved pedestrian access. N.C. 24 was widened and sidewalks were installed on both sides of the highway between Cedar Point and Swansboro. Improving pedestrian access along about 3 miles of the roadway connecting the two communities, Lee said, has led to Cedar Point becoming one of the region's fastest growing coastal residential communities.

Both the Kinston City Council and Pride of Kinston are supporting the the planning grant application.

"Anything we can do to make our community pedestrian-friendly is good," Councilwoman Alice Tingle said. "The idea sounds good to me. If our town is customer- and pedestrian-friendly it will help economic development."

Hardy Creech, chairman of Pride's board of directors, agrees.

"It's great when we can get any kind of money to help improve our downtown," he said. "If we can make our city more pedestrian-friendly, we can get more traffic downtown."

Bob Shiles can be reached at (252) 527-3191, Ext. 237, or bshiles@freedomenc.com.

Kinston Free Press
March 29, 2007

Forum focuses on pedestrian access

March 29, 2007 - 12:00AM

By The Free Press

The public will have the chance Thursday to talk with planners and a city task force trying to come up with a comprehensive pedestrian plan for Kinston.

The forum will take place from 5-7 p.m. at the Kinston Enterprise Center, 327 N. Queen St.

The city Planning Department was given a grant from the state Department of Transportation. Combined with contributions from the Lenoir County Visitors and Convention Bureau, a task force was formed to identify future pedestrian projects throughout Kinston.

So far, ideas that have been discussed include safer street crossings and traffic calming measures, a greenway along the Neuse River and sidewalks along main roads.

During the open house, residents will have a chance to meet with city officials and air their needs and concerns about Kinston's pedestrian traffic. Rivers & Associates, the consultants working with the city on this project, will develop recommendations based on the feedback.

A second public workshop will take place in July, and officials hope to have the plan finished by December.



Kinston Free Press
March 30, 2007

Residents air thoughts on Kinston walkways

VICTORIA MCNAIR
March 30, 2007 - 12:00AM

Although those who attended Thursday's open house featuring Kinston's walkways had varying concerns about their conditions, they all agreed on one thing: The city needs new sidewalks.

Officials hosted a public forum at the Kinston Enterprise Center where residents could give their input about what the city could do to improve its walking areas. Their thoughts will be used to develop a comprehensive pedestrian plan, which is expected to be completed by December.

Karen Allen, a Kinston resident, said not only did the city need sidewalks, but existing walkways need to be widened. "Since I am in a wheelchair it gets harder and harder to get around," she said. "The sidewalks are just so narrow."

Others spoke about better walking conditions in busier parts of town, including the downtown area and parts of McLewean Street. Another concern was general safety while walking. "The city needs to provide safe places to walk," said Sharon Kanter. "Most of all when they tell us it is safe - make sure it really is."

Kinston's Planning Department was awarded a grant from the North Carolina Department of Transportation, and, along with contributions from the Lenoir County Visitors and Convention Bureau, a pedestrian plan is being developed.

Sorting the priorities seemed to be the most difficult part. Officials needed to know what Kinston needed more: traffic control, crosswalks, greenways along the Neuse River or sidewalks.

"We are here to find out what the most important needs are for the city by asking the residents themselves," said Myriah Shewchuck, project coordinator from Rivers & Associates, Inc., the consultants working on the plan. "Through this pedestrian plan we will set our priorities to better serve Kinston."

Following the open house, the project team will begin drafting recommendations based on community comments. The draft recommendations will be presented in July.

Kanter said she hopes the city will follow through on any plan that's developed.

"I have seen some false starts when it comes to community development here in Kinston," said Kanter. "This one will work."

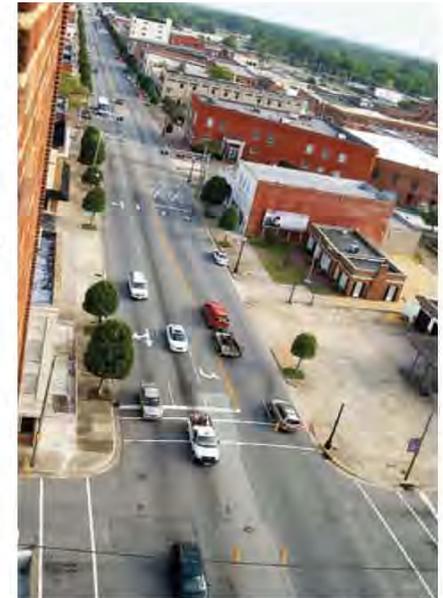
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Kinston Free Press
June 15, 2007

City, state, corporate and civic representatives work to create a pedestrian-friendly Kinston

DAVID ANDERSON
STAFF WRITER



Janet Sutton
Kinston's Pedestrian Plan Task Force is compiling ideas to make the city, including Queen Street, more pedestrian-friendly.

The members of Kinston's Pedestrian Plan Task Force have compiled an array of ideas that, if implemented, could give the city an "Extreme Makeover."

At least 11 of the Task Force's 19 members met Thursday, their third meeting since January to develop the city's Comprehensive Pedestrian Plan, and discussed building biking trails, creating heritage sites, extending sidewalks and other ideas to make Kinston a pedestrian-friendly city.

Those ideas include projects that are in the early planning stages, and those suggested by residents attending a March 29 public workshop. A second workshop will be held July 26, with a time and place to be determined.

The plan is being developed with a grant from the state Transportation Department's Bicycle and Pedestrian Transportation Division. City Planning Director Tommy Lee applied for and won the grant.

Greenville planning firm Rivers and Associates Inc. is working alongside the other Task Force members. Three representatives were on hand during Thursday's meeting and presented maps, schematics and an extensive list detailing the various ideas put forth so far.

Sidewalk expansions

One idea suggested by the public called for extending and connecting Kinston's limited sidewalks. The major thoroughfares, where residents want new sidewalks, include Carey Road and Plaza Boulevard, Hardee Road, Highland Avenue and J.P. Harrison Boulevard, Hillcrest Road, Washington Avenue and Tower Hill Road, West Road and Vernon Avenue

Pedestrian-friendly Queen Street

Rivers and Associates commissioned a schematic showing Queen Street on a "road diet," which is in use in communities around the country. It would narrow Queen from four lanes to two with a median in between.

Neuse River waterfront development

Proposed projects include two pedestrian bridges connecting downtown to an expanded Neuseway Nature Center, finding a use for the closed Power Plant, building an RV campground near the Nature Center, building a 4H training facility on a former landfill, and others.

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For more information, visit www.walkablekinston.com, or contact Project Coordinator Myriah Shewchuk of Rivers and Associates at (252)752-4135 or mshewchuk@riversandassociates.com.

Kinston Free Press

July 24, 2007

NEW: Second public forum for Kinston pedestrian plan Thursday

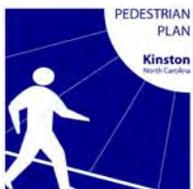
July 24, 2007 - 2:49PM

By David Anderson
Staff Writer

Planning consultants and Kinston city officials will host a second public workshop Thursday evening to hear citizens' input on ideas they have developed so far for the city's comprehensive pedestrian plan. The forum will take place from 5-7 p.m. in Room 111 of the Kinston Enterprise Center, located at 327 N. Queen St.

For more information, contact Project Coordinator Myriah Shewchuck of Greenville planning firm Rivers & Associates Inc. at (252)752-4135 or mshewchuck@riversandassociates.com. Citizens can also view the pedestrian plan at www.walkablekinston.com.

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Kinston Free Press

July 27, 2007

Pedestrian group shares ideas

DAVID ANDERSON

STAFF WRITER

Kinston city officials, civic leaders and citizens turned out Thursday evening to offer up their ideas as the Pedestrian Task Force shapes the city's Comprehensive Pedestrian Plan.

The group of about 15 people filled a room of the Kinston Enterprise Center as Steve Nalley and Myriah Shewchuk of planning firm Rivers & Associates Inc. of Greenville, who serve as consultants for the project, reviewed the results of an online public survey, and presented an array of ideas they and the other members have compiled since January to make Kinston a "pedestrian-friendly" city.

Members of the audience made comments and asked questions as Nalley and Shewchuk delivered their presentation. The consultants laid out ideas and offered examples of other towns that had had success with similar pedestrian improvements.

One item that spurred debate among the audience was building a roundabout in place of the traffic light at a major intersection. The planners mentioned successful roundabouts in New Bern and Raleigh, but resident Warren Tyndall said Goldsboro's roundabout was "aggravating" to drive in.

Tyndall said accidents there are inevitable because too many drivers cannot maneuver properly.

"If you continue to use it, you're going to have a collision," he said.

Sharon Kanter, who provides consulting services to the Kinston Waterfront -- Now! Task Force, said New Bern's roundabout "works beautifully," though.

City Planning Director Tommy Lee also countered Tyndall, saying, "the one in Goldsboro works if you plan ahead."

Shewchuk told the audience that building a roundabout is "not an easy retrofit by any means," but communities throughout the United States have successful ones.

"Kinston would not be a pioneer to do this," she said.

Nalley and Shewchuk also discussed putting South Queen Street on a "road diet," with improvements such as reducing the number of lanes, a vegetated median, diagonal parking spaces instead of parallel - diagonal spaces used to be a downtown feature -- plus highly visible and decorative crosswalks.

Resident Ervin Parker raised concerns that having so many new features on Queen Street could disrupt the city's annual Christmas Parade and leave local youths one less community event to participate in.

"Don't forget the young people," she said.

Tommy Pressly, co-chair of the Waterfront task force, suggested using Herritage Street for the parade, but Parker rejected the idea, emphasizing that Queen is Kinston's "main street."

Resident and business owner Joel Smith said parades in other local communities have been successful on streets with medians, though.

Another suggested method of beautifying downtown was civic art. Such projects could include banners, sculptures, murals or sidewalk decorations such as a relief map of the city's streets.

Nalley suggested the map could be a "conversation starter" as pedestrians stopped to point out where they lived.

Shewchuk also discussed how Kinston could have functional art. She used as an example a community that had converted its parking meters to artistic bicycle racks.

"It's really neat to see this integrated, functional art throughout the community," she explained.

A final major topic was sidewalks, and Kinston's lack of them. Task Force members have discussed building complete sidewalks along the city's main thoroughfares such as westbound U.S. 70, Queen Street, Plaza Boulevard and Vernon Avenue. Despite being major streets, they and others have long stretches without sidewalks, and pedestrians are forced to walk on the shoulder of heavily-trafficked roads.

Sidewalks are also necessary to form connectors for pedestrians to easily walk from the Vernon Park Mall to downtown, or among Lenoir Community College and the stores, restaurants and hotels along U.S. 70.

Shewchuk stated that having "Walk/Don't Walk" signals at intersections, "bold" crosswalks, plus proper sidewalks, would improve pedestrian safety, and also "create an identity for Kinston, to show the drivers that Kinston walks."

Shewchuk and Nalley took questions and comments after the presentation. The Pedestrian Task Force will meet twice more before it makes its final presentation to the City Council in December.

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Kinston Free Press

October 29, 2007

Task Force members review draft pedestrian plan

David Anderson

Staff Writer

Members of Kinston's Pedestrian Plan Task Force are currently reviewing the first draft of a comprehensive pedestrian plan, the result of multiple meetings and public workshops over the past year.

Task Force leaders presented the plan to their colleagues during their fourth meeting last week, and members will spend the next month reviewing the document and making comments, said Project Coordinator Myriah Shewchuk.

The plan is a synthesis of ideas and projects, some of which are ongoing, geared toward creating a pedestrian-friendly city.

General goals that have been discussed previously include making over South Queen Street, riverfront projects along the Neuse and expanding Kinston's sidewalk network.

The draft document lists recommendations made during the forums, prioritized in order of how easily funding can be obtained for that project and its impact on the wider community, Shewchuk said Monday.

The draft also contains a number of "pedestrian-friendly policy recommendations and guidelines," according to the text.

The Task Force will hold its last meeting in early December, when members can make their final comments on the plan.

The document will be revised following that meeting, and the final version will be pre-sented to the city council for approval early next year.



APPENDIX – F
GLOSSARY OF TERMS



GLOSSARY OF TERMS

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

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

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

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

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

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

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

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

Intersection – Area where two or more roads meet.

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

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

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

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

Pedestrian – A person afoot or in wheelchair.

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



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

Ramp – Sloped transition between two elevation levels.

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

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

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

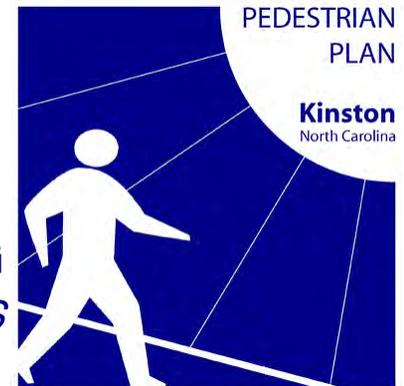
Sight Distance – The length of roadway visible to a driver or pedestrian; the distance a person can see along an unobstructed line of sight.

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

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



APPENDIX – G
SAMPLE COST ESTIMATES



SAMPLE COST ESTIMATES

Proposed cost estimates for the recommended pedestrian projects in this Plan are provided in this appendix. These costs are rough estimates based on the Federal Highway Administration¹ and similar projects recently implemented. The listed cost estimates should be used as a planning guide and do not include extra costs such as inflation, land acquisition, utility relocation, roadway size, drainage, materials used, grading, land clearing, design, and professional engineering. These costs are not and should not be considered to be a substitute for professional engineering and surveying regarding actual costs of project construction.

Sidewalks

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

Multiple-Use Trails

- City of Greenville, NC is currently spending 1.5 million on 3 miles segment (10' wide asphalt) of greenway along south side of Tar River
- City of Jacksonville, NC is currently spending \$650,000 on 2.8 miles segment (10' wide concrete/asphalt) multi-use trail along south side of NC Highway 24

Intersections & Crossings

- Regular striped crosswalk is approximately \$100
- Ladder crosswalk is approximately \$300
- Patterned concrete crosswalk is approximately \$3,000
- Mid-Block crossing can range between \$4,000 - \$30,000
- Retrofitting an existing curb or constructing a new curb is approximately \$800 - \$1,500 per curb ramp
- Curb extensions range from \$2,000 - \$20,000 per corner, depending upon design and site conditions
- Raised crosswalk/speed table cost approximately \$15,000 - \$100,000
- Raised intersection typically cost between \$25,000 - \$200,000
- Pedestrian-activated signal range from \$20,000 - \$40,000 per signal
- Fixed-time pedestrian signal cost \$40,000 - \$200,000 per signal
- Attachments to a pedestrian signal head to assist impaired pedestrian range from \$30,000 - \$140,000 per signal
- NO TURN ON RED Signs range from \$30 - \$150 per sign plus installation at \$200 per sign
- Regulatory signs cost \$50 - \$150 per sign plus \$150 /sign in installation costs

Traffic Calming Devices

Chicanes

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

Mini-Circle

- Landscaped traffic mini-circle on an asphalt street cost approximately \$6,000 and can cost approximately \$8,000 - \$12,000 on a concrete street



Roundabout

- Landscaped roundabout for neighborhood intersections range from \$45,000 - \$150,000
- Landscaped roundabout for arterial streets can cost approximately \$250,000

Raised Median

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

Crossing Island/Pedestrian Refuge Island

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

Road Striping

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

Transit Stop/Connection Improvements

- Depending upon type of improvement costs can range from \$1,000 - \$10,000

Streetscape Improvements

Lighting

- Varies depending upon type of light, location, and utility provider

Landscaping

- Depending upon foliage and plants costs range from \$400 - \$500 per tree and \$25 - \$50 per shrub installed by a contractor

Wayfinding Signs

- Depending upon directional type, size, number of copy lines costs range from \$1,300 - \$2,900

Street Furniture

- Depending upon type and material used

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

