



6: Policies

Appendix Contents:

Bicycle and Pedestrian Policy and Regulatory Review

BICYCLE AND PEDESTRIAN POLICY AND REGULATORY REVIEW

One of the most cost effective implementation strategies for Wayne County, Goldsboro, and other regional communities is to establish land development regulations and street design policies that promote walkable and bikeable new development and capital projects. As part of a comprehensive approach to developing recommendations for a more walkable and bikeable Goldsboro area, the City of Goldsboro, Wayne County and Town of Walnut Creek ordinances, development standards and policies were reviewed to identify general issues and opportunities impacting the bicycle and pedestrian environments across jurisdictions. The recommendations in this section generally fall under the 6 E's category of "Evaluation and Planning." Regulatory standards and policies were analyzed through the lens of the project visions and goals, specifically, the vision of making the Goldsboro area "an attractive regional destination where a convenient network of sidewalks, bikeways, and greenways brings people of all ages and abilities together; safely connects them to where they want to go."

Model regulatory and policy language from around North Carolina and the U.S. was identified for elements including land use/transportation integration, connectivity, Complete Streets, and bicycle parking, enabling the City and County jurisdictions to maximize bicycle/pedestrian and greenway improvements in conjunction with new development, redevelopment, and corridor improvement projects. In addition, recommended policy language additions to enhance greenway development are included.

The recommendations below are organized into three major categories of "Complete Streets and Greenways", "Pedestrian and Bicycle-oriented Urban Design Elements", and "Connectivity." In each category, we have aligned our recommended changes with strategic policies recommended by the Envision 35 Comprehensive Plan process. All of the major categories are interrelated, but based on the goals of Envision 35, the existing conditions analysis, and the goals of this plan, the following key recommendations from the table below should be implemented first.



PRIORITY POLICY AND REGULATORY RECOMMENDATIONS:

1. Develop and adopt a Complete Streets Policy and Design Guidelines (Strategies 1.1 and 1.2)
2. Revise and expand sidewalk requirements and sidewalk infill policy (Strategies 1.3, 1.4, and 1.11)
3. Develop or revise other Complete Street element requirements (Strategies 1.5 through 1.10)
4. Require dedication or reservation of greenway corridors (Strategy 1.6.)
5. Revise and update Connectivity requirements (Strategies 3.1 through 3.3)
6. Revise and update Land use and Urban Design Requirements to be more pedestrian and bicycle-oriented (Strategies 2.1 and 2.6)

These approaches will complement other specific capital projects, and education, enforcement, and evaluation recommendations provided elsewhere in this planning document.



Topics/Strategies	Comments/Recommendations			
	Wayne County	City of Goldsboro	Walnut Creek	General Recommendations
Complete Streets and Greenways				
<p>1. Adopt Complete Streets Policy</p> <p>A complete streets policy allows cities and towns to work towards creating a street network that encourages pedestrian and bicycle travel and provides safe and comfortable roadways for all users.</p>	<p>No specific policy</p> <p>Inadequate</p>	<p>No specific policy</p> <p>Inadequate</p> <p>Envision 35, Strategy 1.64: <i>“The City may consider the development and adoption of a complete streets policy. This policy should focus on providing a wide range of transportation options including: access to transit, bicycling lanes and sharrows, and pedestrian access facilities. Increased attention should be given to streets programmed for resurfacing and/or expansion”</i></p>	<p>No specific policy</p> <p>Inadequate</p>	<p>The National Complete Streets Coalition provides great guidelines for designing streets that cater to all users: (http://www.completestreets.org/resources/complete-streets-best-practices/).</p>
<p>2. Develop Complete Street Design Guidelines for a variety of contexts and all street/roadway user groups</p> <p>The subsections below include recommendations for basic elements of Complete Streets. These elements include sidewalks, bikeways, pedestrian-scaled lighting and street trees as some of the most fundamental elements for pedestrian and bicycle users. Access management, multi-modal level of service assessments, and traffic calming are also critical for developing complete street networks for all users through the development review and capital project implementation process. The NCDOT <i>Complete Street Guidelines</i> and the design guidelines that accompany this plan also include detailed recommendations on complete street design elements.</p>	<p>Uses NCDOT <i>Subdivision Roads Minimum Construction Standards</i>, which are not currently complete street-oriented.</p> <p>Needs Improvement</p>	<p>UDO Section 7.2 Minimum Requirements For Subdivision Road Construction includes various requirements for major and local streets, however, the requirements are not context-based and do not include bikeway requirements. The minimum widths for local streets are too wide to promote low speed motor vehicle traffic movements. In general, the menu of street alternatives needs to be more refined to provide better complete street options that meet local goals for connectivity, safety, and comfort.</p> <p>Inadequate</p>	<p>93.46 STREETS. Provides a number of minimum widths for streets and street ROWs. The minimum widths for thoroughfares may not be sufficient for bike lanes. The minimum widths for local streets are too wide to promote low speed motor vehicle traffic movements. In general, the menu of street alternatives needs to be more refined to provide better complete street options that meet local goals for connectivity, safety, and comfort.</p> <p>Inadequate</p>	<p>In addition to the very thorough NCDOT <i>Complete Streets Guidelines</i>, The National Complete Streets Coalition provides great guidelines for designing streets that cater to all users: (http://www.completestreets.org/resources/complete-streets-best-practices/).</p> <p>Wayne County and/or its municipalities could adopt and endorse the NCDOT guidelines and other national guidelines, including the NACTO <i>Urban Bikeway Design Guide</i>: http://nacto.org/cities-for-cycling/design-guide/</p> <p>The design guidelines would then need to be integrated into development standards for new development, as was done with the <i>Raleigh Street Design Manual</i> (http://www.raleighnc.gov/content/extra/Books/PlanDev/StreetDesignManual/#1) and the <i>Charlotte Urban Street Design Guidelines</i>: http://charmeck.org/city/charlotte/transportation/plansprojects/pages/urban%20street%20design%20guidelines.aspx</p>



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<p>3. Require Pedestrian accommodations (sidewalks, crosswalks, etc) during new or redevelopment</p> <p><i>Sidewalks are the primary mode of pedestrian travel and are a crucial element in any pedestrian network. Sidewalks should be part of a continuous network, connected with crosswalks and separated from traffic with a buffer. To maintain a high quality of service, sidewalks should be kept level, smooth, and free of debris, and they should be kept continuous across driveways and other entrances. They should also be kept free of conflicts, such as utility poles or fire hydrants, with sidewalk dimensions that allow for appropriate unobstructed walking space. (NCDOT Complete Streets Planning and Design Guidelines, p. 42)</i></p> <p>Envision 35: Goldsboro Urbanized Area Comp Plan recommends the following changes the Wayne County and City of Goldsboro development standards to promote transit, bike and pedestrian connectivity (Implementing Strategy 1.21): Cul-de-sac and block-length maximums; Internal connectivity standards; sidewalk requirements</p>	<p>Sidewalks not required, but may be provided as a form of "Open Space" Sec. 70-103 (h) Open Space (1)a.: "Sidewalks built to state department of transportation standards may be provided by the developer, if approved by the planning board or the board of commissioners as leading to a pedestrian designation point such as school, park, etc. Sidewalks may constitute all or part of the open space requirements. The amount of sidewalk shall be calculated at a cost equal to the amount of reduction from the maximum open space requirement, based on current valuation for property tax purposes."</p> <p>Needs Improvement</p> <p>The 2008 Comprehensive Plan for Wayne County encourages multimodal, walkable communities and includes policies to support the construction of sidewalks. Relevant pedestrian network actions and policies in the plan include:</p> <p>Action 1.4: Reexamine the County's development standards to evaluate the need for improved pedestrian systems (sidewalks, greenways, streetlights etc.) in new residential developments.</p>	<p>Sidewalks required on interior and exterior roadways for multi-family and commercial development. (UDO Chapter 5)</p> <p>Good. Should apply to all new development, including single family residential development of a certain size threshold (e.g., number of housing units, density).</p> <p><i>Sidewalks required by street type are as follows:</i> 1. Sidewalks shall be provided along both sides of all major thoroughfares as shown on the official Thoroughfare or Transportation Plan. 2. Sidewalks shall be provided along one side of all minor streets, including cul-de-sacs. (UDO 7.16)</p> <p>Good.</p>	<p>Sidewalks not required. Optional in PUDs.</p> <p><i>(§ 94.69 PLANNED UNIT DEVELOPMENT: (5) Sidewalks. Sidewalks shall be provided as deemed necessary by the Village Council, after receiving the recommendation of the Planning Board who will also determine design and construction characteristics.)</i></p> <p>Inadequate</p>	<p>For good model language, see City of Wilson, NC UDO, Section 6.3: Required Improvements for All Development (and related sections that follow) http://www.wilsonnc.org/attachments/pages/545/CH%206-Infrastructure%20Standards.pdf</p> <p><i>"The minimum unobstructed walking space for a sidewalk on a street is five feet, with six feet or wider applications for higher-volume, higher-speed streets, and/or more intensive land uses."</i></p> <p>NCDOT Complete Streets Planning and Design Guidelines (p 42)</p>



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<p>4. Require sidewalks or bike accommodations by roadway type</p>	<p>No. The County uses the NCDOT <i>Subdivision Roads Minimum Construction Standards</i>. Neither the County Code of Ordinances nor the NCDOT standards require sidewalks.</p> <p>Needs Improvement</p>	<p><i>Sidewalks required by street type are as follows:</i></p> <ol style="list-style-type: none"> <i>Sidewalks shall be provided along both sides of all major thoroughfares as shown on the official Thoroughfare or Transportation Plan.</i> <i>Sidewalks shall be provided along one side of all minor streets, including cul-de-sacs.</i> <p><i>When sidewalk construction is required by the Unified Development Ordinance, the City Council for site plans requiring City Council approval or the Planning Director for plans requiring staff approval, may allow the developer the option of paying a fee in lieu for sidewalk construction. The fees acquired from this ordinance shall be used for sidewalk projects within the city of Goldsboro and its extra-territorial jurisdiction (UDO Sec. 7.1.6)</i></p> <p>Good, however could be improved to require sidewalks on both sides based on density of development or land uses. Also, the fee-in-lieu requirement removes predictability from the development of the sidewalk network since there are no criteria for providing an exception.</p>	<p>No.</p> <p>Inadequate</p>	<p>Better standards would require or provides sidewalks on both sides of all collector and arterial streets and on <i>at least</i> one side of local streets where warranted by density and/or system connectivity.</p> <p>Five foot wide sidewalks along local streets and six foot wide sidewalks along collectors and arterials are preferred minimum widths. Five feet is the minimum width required for two adults to walk side-by-side. In areas of higher density and mixed-use development, the minimum required width for sidewalks should be six feet or more. The land use context and density of development necessitates a greater level of requirement for sidewalk specifications. In areas such as downtown with buildings at the back of the sidewalk and ground level retail, sidewalks should be as wide as 10-18 feet wide.</p> <p>See NCDOT <i>Complete Streets Planning and Design Guidelines</i> for context-based pedestrian zone recommendations.</p> <p>See Chapter 4 of the NCDOT <i>Complete Streets Planning and Design Guidelines</i> for recommendations of sidewalk and bikeway type by roadway type.</p> <p>Also: NCDOT <i>Traditional Neighborhood Development (TND) Guidelines</i>: http://ntl.bts.gov/lib/22000/22600/22616/tnd.pdf</p>
<p>5. Require pedestrian-scaled lighting (< 18' tall) required along streets and pathways</p>	<p>Not required. Street lights required, but no requirements for pedestrian-scaled lights for walkways and pathways</p> <p>Sec. 70-105 (d): <i>Streetlights. All subdivisions that involve additional public street improvements shall have streetlights installed throughout the subdivision in accordance with the standards of National Electrical Safety Code.</i></p> <p>Needs Improvement</p>	<p>Not required. Street lights required, but no requirements for pedestrian-scaled lights for walkways and pathways. (UDO Sec. 7.1.5)</p> <p><i>The City should consider factoring issues relating to the promotion of public safety into the normal review process for development proposals. Themes associated with Crime Prevention through Environmental Design (CPTED) should be utilized to improve upon overall community safety and appearance. This effort should address a range of issues including lighting, building deterioration, increasing "eyes on the street", and open space design. (Envision 35 Implementation Strategy 1.72)</i></p> <p>Needs Improvement</p>	<p>Not required.</p> <p>Inadequate</p>	<p>Pedestrian-scale lighting should not exceed eighteen (18) feet in height over the sidewalk and should be located at key intersections or crossings and along preferred pedestrian routes. Pedestrian-scale lighting also enhances the illumination of bicycle facilities since the lighting is located closer to the sidewalk and roadway.</p> <p>See Town of Wendell UDO, Sections 11.10 and 11.11 for pedestrian-scaled lighting requirements by zoning district and for lighting requirements for greenways and walkways: http://files.wendell.ghifi.com/departments/planning/zoning/udo-unified-development-ordinance/Chapter_11_-_amended_071410.pdf</p>



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<p>6. Require street trees between sidewalk and curb</p> <p>In addition to their value for improving the air quality, water quality, and beauty of a community, street trees can help slow traffic and improve comfort for pedestrians. Trees add visual interest to streets and narrow the street's visual corridor, which may cause drivers to slow down. When planted in a planting strip between the sidewalk and the curb, street trees also provide a buffer between the pedestrian zone and the street.</p>	<p>None required.</p> <p>Inadequate</p>	<p>UDO 6.3.10 STREET YARD DESIGN STANDARDS requires street trees be planted in "street yards" along property frontages.</p> <p>Unfortunately, "street yards" are not in the public right of way and, therefore, trees are not required between the sidewalk and the street curb where they can provide separation between pedestrians and roadway travel lanes.</p> <p>Good, but could use improvement.</p>	<p>§ 93.68 REQUIRED IMPROVEMENTS AND CONTRIBUTION TO CAPITAL IMPROVEMENT FUND (F) Street trees. It is recommended that street trees be planted in all subdivisions. The planting of street trees is considered a duty of the subdivider as well as good business practice. Street trees are a protection against excessive heat and glare and enhance the attractiveness and value of the property. Trees, where planted, shall be planted inside the property lines where they are less subject to injury, decrease the chance of motor accidents, and enjoy more favorable conditions for growth.</p> <p>Needs Improvement</p>	<p>See NCDOT <i>Complete Streets Planning and Design Guidelines</i> for context-based pedestrian and "green" zone recommendations.</p> <p>See also, Town of Wendell UDO Chapter 8, especially section 8.8, Street Trees: http://files.wendell.ghifi.com/departments/planning/zoning/udo-unified-development-ordinance/Chapter_8_-_amended_092611.pdf</p>
<p>7. Require designated bikeways (bike lanes, shoulders, greenways, etc) during new development or redevelopment</p>	<p>Not required.</p> <p>Inadequate</p>	<p>Not required. Street design guidelines do not address bicycle facilities and do not require that they be included with new roadway construction, even on collector and thoroughfare streets.</p> <p>Inadequate</p>	<p>Not required.</p> <p>Inadequate</p>	<p>Generally, as traffic volumes exceed 3,000 vehicles per day and traffic speeds exceed 25mph, facilities to separate bicycle and motor vehicle traffic are recommended. Multi-lane roads are typically more dangerous for all users because of the increased traffic volume, the potential for higher speeds, and the additional number of conflict locations due to turning vehicles.</p> <p>See Chapter 4 of the NCDOT <i>Complete Streets Planning and Design Guidelines</i></p> <p>Also, see: Chapters 6 of Wake Forest, NC UDO for recommendations for bikeways and greenways, esp. sections 6.8.2, 6.9, 6.10. http://www.wakeforestnc.gov/udo.aspx Chapter 7 of the Wilson, NC UDO regarding greenways. http://www.wilsonnc.org/attachments/pages/545/CH%207-Parks%20&%20Open%20Space.pdf</p>
<p>8. Require dedication, reservation or development of greenways</p>	<p>Dedication or reservation of "Open Space" is required in new subdivisions, however, the types or amounts of dedication is not specified, but various types of trail-related facilities are <u>allowed</u>: <i>"Provision of active and/or passive recreation opportunities (e.g., ball fields, playgrounds, tennis courts, swimming pools, basketball courts, golf courses, bikeways, walking trails, nature trails, and picnic areas), either for the general public or for the subdivision's residents or employees and their guests."</i> (Sec. 103-70 (h)(2)a.4)</p> <p>Needs Improvement</p>	<p>Not required</p> <p>Inadequate</p> <p>Envision 35 Implementation Strategies 1.96 and 1.102: <i>The City will discourage improvements of any kind in undisturbed conservation areas (as shown on Map 39) within the 100-year floodplain; designate these areas for open space corridors, greenways, and other low-intensity uses.</i></p>	<p>Not required</p> <p>Inadequate</p>	<p>Consider adding requirements for greenway reservation, dedication, or provision in new developments where a greenway or trail is shown on an adopted plan or where a property connects to an existing or proposed greenway.</p> <p>See requirements in Wake Forest, NC UDO, Section 6..8.2 Greenways: <i>"When required by <u>Wake Forest Open Space & Greenways Plan</u> or the <u>Wake Forest Transportation Plan</u>, greenways and multi-use paths shall be provided according to the provisions [that follow in the section cited above]."</i> http://www.wakeforestnc.gov/udo.aspx</p>



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<p>9. Require new sidewalks, bike lanes, greenways, etc., to connect to existing facilities</p>	<p>Not required. Inadequate</p>	<p>Not required. Inadequate</p>	<p>Not required. Inadequate</p>	<p>Connectivity of facilities is critical for walking and biking conditions. New development should be required to connect to or extend existing facilities bicycle and pedestrian facilities.</p> <p>See: Chapters 6 of Wake Forest, NC UDO for recommendations for bikeways and greenways, esp. sections 6.5.3, 6.8.2, 6.9, 6.10. http://www.wakeforestnc.gov/udo.aspx Chapter 7 of the Wilson, NC UDO regarding greenways. http://www.wilsonnc.org/attachments/pages/545/CH%207-Parks%20&%20Open%20Space.pdf</p>
<p>10. Consider pedestrian and bicycle concerns and Level of Service (LOS) in Traffic Impact Analyses and other engineering studies</p> <p>See <i>Envision 35</i> Section 8. Transportation, page 8-5 for a multi-modal level of service framework from Florida DOT.</p>	<p>No specific guidelines Inadequate</p>	<p>No specific guidelines Inadequate</p>	<p>No specific guidelines Inadequate</p>	<p>Wayne County and its municipalities should consider adopting multi-modal of service standards where active transportation and transit use are expected to be high. Consideration of bicycle and pedestrian levels of service assure adequate facilities for bicyclists and pedestrians. This also helps promote walking and bicycling as a legitimate means of transportation.</p> <p>The NCDOT <i>Complete Streets Planning and Design Guidelines</i> provides factors of "Quality of Service " and LOS for bicycle, pedestrian, and transit modes (See Chapter 3, page 39 and Chapter 5): http://www.completestreetsnc.org/wp-content/themes/CompleteStreets_Custom/pdfs/NCDOT-Complete-Streets-Planning-Design-Guidelines.pdf</p> <p>The City of Raleigh uses multimodal level of service approach in determining road improvements and traffic mitigation: http://www.raleighnc.gov/content/extra/Books/PlanDev/StreetDesignManual/#71</p> <p>Charlotte, NC uses Pedestrian LOS and Bicycle LOS Methodologies for intersection improvements in their <i>Urban Street Design Guidelines</i>: http://charmeck.org/city/charlotte/transportation/plansprojects/pages/urban%20street%20design%20guidelines.aspx</p>
<p>11. Adopt traffic calming programs, policies, and standards</p>	<p>None cited Inadequate</p>	<p>None cited Inadequate</p>	<p>None cited Inadequate</p>	<p>The National Complete Streets Coalition provides good guidelines for traffic calming through their best practices manual: (http://www.completestreets.org/resources/complete-streets-best-practices/).</p>



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<p>2. Develop an access management program or policy</p> <p>Access management should be considered in all land use/zoning decisions. (<i>Envision 35</i> Guiding Land Use/Planning Principles, p. 9-31)</p>	<p>See NCDOT <i>Subdivision Roads Minimum Construction Standards</i> and NCDOT <i>Complete Streets Planning and Design Guidelines</i>.</p> <p>Inadequate</p>			<p>Requiring cross-access between adjacent parcels of land is a great tool for reducing the amount of traffic on major roads while increasing connectivity for pedestrians, bicycles, and cars.</p> <p>The NCDOT <i>Complete Streets Planning and Design Guidelines</i> provides recommended "Access Density" guidelines (See Chapter 4, page 61 and following). These guidelines could be the basis for regulatory updates to the municipal codes: http://www.completestreetsnc.org/wp-content/themes/CompleteStreets_Custom/pdfs/NCDOT-Complete-Streets-Planning-Design-Guidelines.pdf</p>
<p>3. Establish a sidewalk retrofit/infill program or policy</p> <p><i>Envision 35</i> Strategy I.66: <i>The City and County should consider street and sidewalk improvements adjacent to existing school sites. This effort shall involve the installation of raised crosswalks to help reduce vehicle speeds and improved pedestrian visibility. Curb extensions may also be considered to shorten pedestrian crossing distance, eliminate parking on or near the crosswalk, and improve sight distance for pedestrians.</i></p>	<p>None cited</p> <p>Inadequate</p>	<p>None cited</p> <p>Inadequate</p>	<p>None cited</p> <p>Inadequate</p>	<p>The communities should consider developing sidewalk infill and maintenance program where City staff periodically inventory the street network to identify sidewalk gaps, and develop strategies, project prioritization criteria and funding for completing these gaps. Potential project prioritization criteria include filling gaps along key pedestrian routes, near major pedestrian trip generators like schools, and along streets with high vehicle volumes.</p> <p>The City of Greenville, SC's NSTEP program provides a good example of a sidewalk infill policy and program: http://www.greenvillesc.gov/publicworks/CivilEngineering.aspx</p>
<p>14. Establish a crosswalk and curb ramp retrofit/infill program or policy.</p>	<p>None cited</p> <p>Inadequate</p>	<p>None cited</p> <p>Inadequate</p>	<p>None cited</p> <p>Inadequate</p>	<p>The City of Goldsboro, Town of Pikeville, and Village of Walnut Creek should adopt a crosswalk policy based on the new Raleigh, NC policy that establishes appropriate crosswalk type for the specific roadway crossing type. High-visibility, ladder-style marked crosswalks should be installed at signalized intersections and midblock crossings; parallel bar markings should be installed at stop controlled locations. This is especially important where sidewalks are present. ADA-compliant curb ramps should also always be provided when they do not exist.</p>



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<p>Pedestrian- and Bicycle-oriented Urban Design Elements</p> <p>1. Develop pedestrian-oriented form-based or design-based development standards</p> <p>Pedestrian and bicycle design requirements and land use policy are fundamental to creating a more walkable and bikeable community.</p> <p><i>The City and County may amend their ordinances to include Active Health Design guidelines that require buildings to have:</i></p> <ul style="list-style-type: none"> <i>an obvious pedestrian entrance,</i> <i>pedestrian level entrance,</i> <i>pedestrian level windows, and weather protection; are oriented to the street;</i> <i>have architectural details and pedestrian style signage on the street; and</i> <i>emphasize alternative means of transportation. (Envision 35 Implementation Strategy 1.63)</i> 	<p>None.</p> <p>Inadequate</p>	<p>Generally no, with the exception of the development requirements in the CBD, which are very pedestrian-oriented. (UDO Section 5.3)</p> <p>The <i>Design Guidelines for Downtown Goldsboro</i> (http://www.ci.goldsboro.nc.us/documents/notices/DraftGuidelines.pdf) provide good pedestrian-oriented guidance for new development and redevelopment. These guidelines could be expanded to include other pedestrian-oriented and mixed use districts in the City.</p> <p>Good in CBD. Needs improvement in other districts.</p>	<p>No. In fact, the minimum lot size (greater than half acre) is not supportive of pedestrian-oriented neighborhoods:</p> <p>§ 93.47 LOTS. (B) Residential lots shall be at least 25,000 square feet in area of usable land, not less than 120 feet wide at the building line, nor less than 150 feet in depth.</p> <p>Inadequate</p>	<p><i>"Form-based codes foster predictable built results and a high-quality public realm by using physical form (rather than separation of uses) as the organizing principle. [Form-based codes are typically used to develop places that are pedestrian-friendly.]</i></p> <p><i>"Form-based codes address the relationship between building facades and the public realm [typically streets], the form and mass of buildings in relation to one another, and the scale and types of streets and blocks. The regulations and standards in form-based codes are presented in both words and clearly drawn diagrams and other visuals."</i></p> <p>http://www.formbasedcodes.org/what-are-form-based-codes</p> <p>Some North Carolina communities that have form-based or design based elements in their ordinances include:</p> <ul style="list-style-type: none"> Belmont Cornelius Davidson Huntersville Knightdale Salisbury Wake Forest Waynesville Wendell Wilson
<p>2. Allow/Require Mixed use buildings and blocks</p> <p>Envision 35 Strategy 1.21: <i>The City of Goldsboro UDO and Wayne County zoning and subdivision ordinances should be reviewed and revised to accommodate/encourage Mixed Use I and II development. The ordinance revisions should consider locating stores, offices, residences, schools, and recreation spaces within walking distance of each other in relatively compact areas which promote:</i></p> <ul style="list-style-type: none"> <i>• Independence of movement, especially for the young and the elderly who can conveniently walk, cycle, or ride transit.</i> <i>• Safety in commercial areas, through around-the-clock presence of people.</i> <i>• Reduction in auto use, especially for shorter trips.</i> 	<p>Permitted, but not encouraged.</p> <p>Needs Improvement</p>	<p>Specifically allowed in the CBD. (UDO Section 5.3)</p> <p>Good in CBD. Needs improvement in other districts.</p>	<p>Not addressed, but potentially permitted in Planned Unit Developments</p>	<p>Mixed use should be encouraged in appropriate zoning districts, as recommended by Envision 35. This increases the number of destinations that can be reached by walking or biking and is fundamental to developing walkable places.</p>



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<p>3. Require off-street motor vehicle parking behind or to side of buildings in commercial districts</p> <p>Having buildings close to the street instead of parking lots creates a more pedestrian friendly environment by bringing building entrances closer to the sidewalk. It also creates a human-scaled street that's more pleasurable for walking— for example: consider the differences in the walking environment of downtown Goldsboro versus that of a strip shopping area.</p>	<p>Not required.</p> <p>Inadequate</p>	<p>In CBD only. (UDO Chapter 5)</p> <p>Needs Improvement Consider requiring in neighborhood and other mixed use or pedestrian oriented business districts as well.</p>	<p>No.</p> <p>Inadequate</p>	<p>See City of Wilson UDO, Chapter 9: Parking & Driveways, Section 9.3</p> <p>http://www.wilsonnc.org/attachments/pages/545/CH%209-Parking%20%20Driveways.pdf</p>
<p>4. Define maximum automobile parking requirements</p> <p>Requiring parking maximums and reducing the number of required off-street parking spaces for new development creates a more pedestrian friendly environment, prevents overbuilt and unsightly parking lots, and reduces parking construction costs.</p>	<p>Yes. (Appendix A, Sec. 71, Table 2)</p> <p>Needs Improvement</p>	<p>Yes. However, with the exception of the CBD district (where no parking is required), the minimums and maximums for residential and commercial development are not based on land use context and walkability and are generally too high for pedestrian-supportive development.</p> <p>Needs Improvement</p> <p><i>Envision 35: Goldsboro Comp Plan</i> recommends the following to promote infill development: "Consideration of reduced performance standards, such as parking for infill redevelopment." (Implementing Strategy 1.1(e))</p> <p>"Consideration of reduced performance standards, such as parking for infill redevelopment." (Implementing Strategy 1.21)</p> <p>The City may consider the adoption of maximum parking standards that alleviate the need to provide large surface lots on valuable infill land. (Implementing Strategy 1.83)</p>	<p>No. Minimums only.</p> <p>Inadequate</p>	<p>Tie parking standards to land use context. For example, fewer spaces may be required in CBD (see Goldsboro ordinance) and other pedestrian-oriented areas. Parking maximums only should be considered in such districts. Also, on-street parking should be allowed to count towards parking requirements for greater sharing of public parking resources and to maximize development capacity.</p> <p>See Town of Davidson, NC Planning Ordinance, https://nc-davidson2.civicplus.com/DocumentCenter/View/4126</p>
<p>5. Adopt bicycle parking requirements</p> <p><i>The City and County should consider amending the zoning and subdivision regulations to require the establishment of bicycle parking for new and redeveloped commercial, industrial, and institutional uses.</i> (Envision 35, Implementation Strategy 1.67 and 1.87)</p>	<p>None.</p> <p>Inadequate</p>	<p>None.</p> <p>Inadequate</p>	<p>None.</p> <p>Inadequate</p>	<p>Bicycles should receive equal consideration when calculating parking needs with specific calculations provided for determining the amount of bicycle parking provided by district type. Design and location standards for bicycle parking should be clearly stated to provide for safe and convenient access to destinations. Different standards of bicycle parking are needed for short-term visitors and customers and for longer term users like employees, residents, and students.</p> <p>See City of Wilson UDO, Chapter 9: Parking & Driveways, Section 9.4 and 9.6: http://www.wilsonnc.org/attachments/pages/545/CH%209-Parking%20%20Driveways.pdf</p> <p>Good standards for bicycle parking design can be found through the Association of Pedestrian and Bicycle Professionals' <i>Bicycle Parking Guidelines</i>. (www.apbp.org)</p>



Topics/Strategies	Comments/Recommendations			
	Wayne County	City of Goldsboro	Walnut Creek	General Recommendations
<p>6. Adopt Other place-supportive parking regulations (On-street parking allowed to count towards minimums, shared parking, pricing, employer incentives/programs, etc.)</p>	<p>Interconnectivity [of Parking Lots] Required—All parking lots shall dedicate access easements and provide interconnectivity to adjoining properties where such connections are practical. The Planning Board may waive this requirement when it is demonstrated that topographical, incompatibility of land uses or other factors make such connections impractical. (Appendix A, Zoning, Section 71. B. 15)</p> <p>Shared parking allowed between land uses. (Appendix A, Zoning, Section 71. C.)</p> <p>Good.</p>	<p>Parking lot interconnectivity required. This allows for fewer trips on major roadways and potentially fewer turning movement conflicts at driveways.</p> <p><i>UDO Section 6.1.3.15. Interconnectivity Required – All parking lots shall dedicate access easements and provide interconnectivity to adjoining properties where such connections are practical.</i></p> <p>Shared Parking is allowed (UDO Section 6.1.6)</p> <p>Good.</p>	<p>No requirements for shared parking or allowances for on-street parking to count towards minimums.</p> <p>Inadequate</p>	<p>Shared parking is a good start. Other policies that reduce the need for parking, contribute to walkable and bikeable places and have economic benefits are: establishing parking maximums, parking pricing in downtown areas (such as parking meters), allowing on-street parking spaces to count towards parking requirements, and Transportation Demand Management programs such as promoting carpool programs for large employers.</p>
Connectivity Requirements				
<p>1. Revise block size requirements</p> <p>“[A] Good [street] network provides more direct (shorter) routes for bicyclists and pedestrians to gain access to the thoroughfares and to the land uses along them (or allows them to avoid the thoroughfare altogether). Likewise, good connections can also allow short-range, local vehicular traffic more direct routes and access, resulting in less traffic and congestion on the thoroughfares. This can, in turn, help make the thoroughfare itself function as a better, more complete street. For all of these reasons, a complete local street network should generally provide for multiple points of access, short block lengths, and as many connections as possible.” (NCDOT Complete Streets Planning and Design Guidelines, p 59)</p> <p><i>Envision 35: Goldsboro Urbanized Area Comp Plan</i> recommends the following changes the Wayne County and City of Goldsboro development standards to promote transit, bike and pedestrian connectivity (Implementing Strategy 1.21): Cul-de-sac and block-length maximums; Internal connectivity standards; sidewalk requirements</p>	<p>Code of Ordinances Sec. 70-103 (a) Blocks: (2) Blocks shall not be less than 400 feet or more than 1,800 feet.</p> <p>Needs Improvement. . .see Background & Recommendations</p> <p>(4) “Where deemed necessary by the planning board or the board of commissioners, a pedestrian crosswalk at least 15 feet in width may be required to provide convenient public access to a public area such as a park or school, to a water area, or to a areas such as shopping centers, religious, or transportation facilities.”</p> <p>Good, but needs improvement: Include a better definition of “pedestrian crosswalk” (presumed here to be a pedestrian accessway based on context/intent) and a quantifiable standard for when standard is to be applied. A good rule of thumb is when a block is 800 feet or longer in width, a pedestrian accessway should be provided. See the notes in the “Recommendations” column.</p>	<p>UDO Sec. 7.1.8 Blocks: <i>In no case shall block lengths exceed fourteen hundred feet or be less than four hundred feet.</i></p> <p>UDO Sec. 7.2.c. Blocks: Where deemed necessary by the Planning Commission, a pedestrian crosswalk at least five feet in width may be required.</p> <p>Needs Improvement. . .see Background & Recommendations. See also Wayne County Recommendations.</p>	<p>Code of Ordinances § 93.49 BLOCKS. <i>Block lengths shall not exceed 1200 feet or be less than 400 feet.</i></p> <p>Needs Improvement. . .see Background & Recommendations</p>	<p>Development density should determine the length of a block, with shorter blocks being more appropriate in areas of higher density. Maximum block length in any situation should rarely exceed 800-1000 feet for good connectivity. In areas with highest development density (urbanized, mixed use centers and high density neighborhoods) block lengths can be as little as 200 feet. In areas with blocks as long as 800 feet or greater, a pedestrian and/or bicycle path of 6-8 feet in width should be required, with an easement of 15-20 feet wide.</p> <p>See the example table on page 59 of the NCDOT <i>Complete Streets Planning and Design Guidelines</i> for a context-based approach to block size.</p>



Topics/Strategies	Comments/Recommendations			
	Wayne County	City of Goldsboro	Walnut Creek	General Recommendations
<p>The following documents were referenced for this policy and regulatory review.</p> <p>Other references for best practices are listed in the column on the far right.</p>	<p>GUIDELINES AND REGULATIONS Wayne County, NC Code of Ordinances 2008 Comprehensive Plan for Wayne County Envision 35: Goldsboro Urbanized Area Comprehensive Plan http://www.ci.goldsboro.nc.us/documents/planning/comprehensive_plan.pdf NCDOT Subdivision Roads Minimum Construction Standards</p>	<p>GUIDELINES AND REGULATIONS City of Goldsboro Unified Development Ordinance, Zoning Code: http://www.ci.goldsboro.nc.us/zoning_code.aspx Envision 35: Goldsboro Urbanized Area Comprehensive Plan http://www.ci.goldsboro.nc.us/documents/planning/comprehensive_plan.pdf The Design Guidelines for Downtown Goldsboro (http://www.ci.goldsboro.nc.us/documents/notices/DraftGuidelines.pdf)</p>	<p>Walnut Creek Code of Ordinances, http://www.amlegal.com/nxt/gateway.dll/North%20Carolina/walnutcreek_nc/villageofwalnutcreeknorthcarolinacodeofordinances?fn=templates\$fn=default.htm\$3.0&vid=amlegal:walnutcreek_nc</p>	<p>REFERENCED DOCUMENTS AND RESOURCES: NCDOT Complete Streets Planning and Design Guidelines (July 2012): http://www.completestreetsnc.org/wp-content/themes/CompleteStreets_Custom/pdfs/NCDOT-Complete-Streets-Planning-Design-Guidelines.pdf NCDOT Traditional Neighborhood Development (TND) Guidelines: http://ntl.bts.gov/lib/22000/22600/22616/tnd.pdf City of Wilson, NC UDO: http://www.wilsonnc.org/attachments/pages/545/CH%206-Infrastructure%20Standards.pdf Town of Wendell, NC UDO: http://www.townofwendell.com/departments/planning/development/zoning/udo-unified-development-ordinance City of Wake Forest, NC UDO: http://www.wakeforestnc.gov/udo.aspx See Town of Davidson, NC Planning Ordinance, https://nc-davidson2.civicplus.com/DocumentCenter/View/4126 Association of Pedestrian and Bicycle Professionals' <i>Bicycle Parking Guidelines</i>. (www.apbp.org)</p> <p>And other documents noted in this column in the rows above.</p>



Chapter 7: Programs

Chapter Contents:

Program Partners

Existing Programs and Recommended Enhancements

Program Recommendations

OVERVIEW

This chapter provides a review of existing programs in the Goldsboro MPO and a toolbox of program resources that can be used to improve upon and launch new bicycle and pedestrian programs. These initiatives complement the infrastructure recommendations that are presented in Chapters 3 through 5. While improving pedestrian and bicycle infrastructure is critical to increasing walking and bicycling rates and safety, program efforts play an equally important role in developing a more bike- and walk-friendly culture. Programs are generally categorized by the Five “E”s (Education, Encouragement, Enforcement, Evaluation, and Equity). The first four of these “E”s are discussed in detail with the fifth “E” Equity considered an essential element throughout. These programs can ensure that more residents learn bicycle and pedestrian safety, understand the benefits of walking and biking, and receive guidance on why and how to integrate walking and bicycling into their everyday lives. In essence, these efforts market active transportation to the general public and ensure the maximum “return on investment” in the form of more residents walking and bicycling and a higher degree of safety and awareness.

The following sections contain information on current and potential program partners, existing programs, and new program ideas to pursue, with a description of the basic approach and links to model programs and resources. Recommendations were informed by the public and stakeholders and are based on national best practices.





PROGRAM PARTNERS

City of Goldsboro, Town of Pikeville, and Village of Walnut Creek

Goldsboro's Bicycle and Pedestrian Advisory Committee, formed out of this planning process, will work with Public Works, Engineering, Planning, and other staff to assist in the coordination of projects and programs.

North Carolina Department of Transportation (NCDOT)

NCDOT will necessarily be involved in any project on state-owned facilities, and can be a strong partner as well for trainings related to active transportation. See www.ncdot.gov/bikeped/safetyeducation/ for more information about safety and education program resources offered by NCDOT.

Wayne County Health Department

One of the WCHD's priorities is to promote physical activity for all ages. They will be a natural partner on programs that aim to increase physical activity and promote active living.

GoWayneGo

This group was created in 2013 to develop ideas about how to improve the health and wellness of Wayne County residents. Its mission is to "Make Wayne County a place where healthy living is the norm," a major goal of which is to increase physical activity among local residents. GoWayneGo is an ideal partner on any bicycle and pedestrian encouragement program and on education programs that address health and wellness issues.

Health and Wellness Alliance of Wayne County

This grassroots group brings together community partners, businesses, and public agencies dedicated to fostering a culture of health and wellness through awareness, advocacy, and activities. They are an ideal partner on any bicycle and pedestrian encouragement program and on education programs that address health and wellness issues.

Seyboro Cyclists

This local cycling club has been riding the roads of Wayne, Lenoir, and Greene Counties for over two decades. The club is open to cyclists of all ages, abilities, and styles of riding. Seyboro Cyclists may be interested in supporting bicycle education and encouragement programs and events. They may also be able to provide volunteer support for greenway trail initiatives.

Friends of Wayne County Greenways

This volunteer group is a champion for the development of a local network of greenway trails that are accessible to residents and visitors throughout Wayne County. They are an ideal partner for all greenway trail initiatives and for education and encouragement programs that promote greenway use and physical activity.

Wayne County Public Schools

Wayne County schools are natural partners for Safe Routes to School efforts as well as on enforcement actions related to student safety. Working with school



administration, faculty, and staff will be important in implementing valuable education and encouragement programs that teach children traffic safety and promote walking and bicycling.

Local Police Departments

The Police Departments of Goldsboro, Pikeville, and Walnut Creek will continue to lead the investigation of traffic safety problems and execution of enforcement campaigns. The enforcement recommendations in this chapter will only be successful if implemented with the partnership and support of the local Police Departments.

Parks and Recreation Departments

City of Goldsboro and Wayne County Parks and Recreation Departments are natural partners for public events and classes. Coordinating with Parks and Recreation staff will be especially important for any greenway trail initiatives and education and encouragement programs.

Wayne Community College

Wayne Community College has the potential to contribute to the pedestrian and bicycle environment in Goldsboro. College representatives may be natural partners for certain pedestrian and bicycle safety campaigns that are aimed at students and at the walking and bicycling environment around the campus.

Parent Teacher Associations (PTAs)

PTAs can be effective partners in implementing Safe Routes to School efforts and other school-oriented traffic safety initiatives.

Wayne County Chamber of Commerce

The Chamber may be interested in supporting bicycle and pedestrian initiatives that draw residents and visitors to the county, such as Open Streets Events, rides and races, and themed walking and bicycling tours.

Goldsboro Travel and Tourism Division

The Division may be interested in supporting bicycle and pedestrian initiatives that draw residents and visitors to the city, such as Open Streets Events, rides and races, and themed walking and bicycling tours.

Downtown Goldsboro Development Corporation

The DGDC supports the economic development of Downtown Goldsboro through music events, the farmers market, and a self-guided walking tour. The group may be interested in supporting bicycle and pedestrian initiatives that draw residents and visitors to the downtown, such as Open Streets Events, rides and races, and themed walking and bicycling tours.

Boys and Girls Club

The Boys and Girls Clubs of Wayne County offer after school and summer programs for children and conduct occasional youth bicycle education classes. This group will be a valuable contributor to youth education and encouragement programs.

EXISTING PROGRAMS AND RECOMMENDED ENHANCEMENTS

Youth Bicycle Education

The Boys & Girls Club of Wayne County offers youth bicycle safety education once per year to teach children traffic safety and how to safely ride a bike. In addition, Goldsboro Police Officers conduct a bicycle safety education program with local youth.

Recommendation: The Boys & Girls Club should consider expanding its education efforts and possibly partnering with the Goldsboro Police Department to offer an expanded program. A larger program could include a week-long walking and biking safety camp where children learn all aspects of traffic safety, such as how to safely cross a street, how to be visible at night, and where to safely ride. Goldsboro Police could also expand their efforts and offer interactive bicycle and pedestrian education at local community events. A bike rodeo, where police officers and volunteers teach children traffic safety and bicycle riding skills, is an ideal way to teach and encourage children to bike.

Wayne County Public Schools should offer similar youth bicycle education courses as part of Safe Routes to School programs at every elementary and middle school (see page 7-). Local police departments and Seyboro Cyclists would be ideal partners for these efforts.

Friends of the Greenway Group

Friends of Wayne County Greenways conducts a variety of trail advocacy events to build support for local trails to connect to the statewide Mountains to Sea Trail. The group hosts regular Trail Cleanup Days and trail walks, hikes, and rides.

Recommendation: As greenway trails are developed in Wayne County, Friends of Wayne County Greenways should work with the City of Goldsboro and other partners to host trail celebration events. Events could include a themed fun run/walk, bike ride, or race, along with a ribbon cutting and festival as new portions of trail open. These events could be jointly sponsored by GoWayneGo, City of Goldsboro Parks and Recreation, Wayne County Parks and Recreation, and local businesses.





GoWayneGo Commitment
Great Health for Wayne County

Health is important to me and my family!

Our daily goals:

- 5 fruits & vegetables
- 3 balanced meals
- 2 hours of TV/electronics max
- 1 hour of physical activity
- 0 sugary drinks, except on occasion

GoWayneGo Physical Activity and Health Programs

GoWayneGo offers several active programs and events to promote better health in Wayne County. Residents can make the GoWayneGo Commitment to Great Health, log weight loss progress, and attend a variety of fitness and sports programs listed on the GoWayneGo website, including the Summer Walk & Roll Series of walks, hikes, and bike rides.

Recommendation: Continue the great work already begun. Evaluate progress in the GoWayneGo Commitment and weight loss. Maintain involvement with this Plan’s Committee going forward to assist with implementation.

Outdoor Community Events

Several partners are already involved in developing and hosting a variety of outdoor community events within Goldsboro and Wayne County. The Goldsboro Farmers Market, Cornhole Charity Tournaments, Movies on the Lawn, Cruise the Neuse Paddle Trip, and Center Street Jam Series are some of the events offered.

Recommendation: Outdoor community events offer valuable partnership opportunities for bicycle and pedestrian programs. A bike rodeo, where police officers and volunteers teach children traffic safety and riding skills, could be included as part of outdoor events downtown. An Open Streets Event (see page 7-13) could be held in conjunction with, or spun off of, other outdoor events such as Center Street Jam. City staff and volunteer organizations could pass out bicycle and pedestrian event information and traffic safety materials.



Organized Walks, Rides, and Races: Downtown Criterium Race

In May 2014, Goldsboro and the Seyboro Cyclists Club hosted the Downtown Goldsboro Criterium Race. The race included a closed course through the downtown, with race categories for men and women of all ages, including kids, juniors, and a 45+ group. The race advertised local restaurants, shopping, and bars and attracted hundreds of participants and spectators to downtown.

Recommendation: Expand upon the momentum and success of the Downtown Criterium Race to offer regular bicycle rides, walks, and races in Downtown Goldsboro. These events draw large crowds that patronize local businesses and help to build Goldsboro's reputation as a bike- and walk-friendly city. Similar events should be held throughout Goldsboro, particularly as part of a celebration when new trails, bike lanes, or other facilities are constructed. Having the Mayor or other elected officials participate helps to draw attention to these events and raises bicycle and pedestrian awareness among key decision-makers.

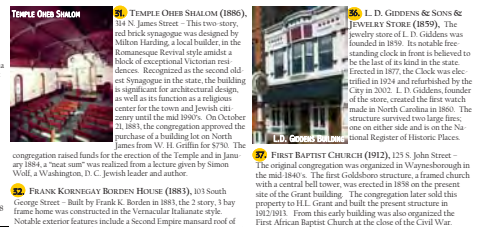
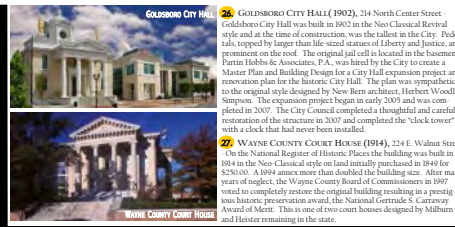




Self-Guided Historic Downtown Walking Tour

The Downtown Goldsboro Development Corporation has developed a self-guided tour of Goldsboro's historic downtown to encourage people to visit. The self-guided tour includes 40 destinations of interest, with descriptions and other sites of interest are also listed. The self-guided tour is available in print and as a printable PDF online.

Recommendation: The DGDC could expand upon this effort with other partners to develop a series of downtown walking and biking tours that each center around a different theme (see page 7-14). Self-guided tours could be in brochure form and also made available as an audioguide file that people could download to their phones or digital music devices. Live guided tours could also be offered.



Downtown Historic Walking Tour Map & Site Locator

Landmarks Art Works Painted by Zeno Spence

**To Herman Park & Park Avenue
3 Blocks north on William Street
from Ash St. Take right. Park is 6
Blocks east.**

**To Union Station
2 blocks off George St.**

**To Elm Street & Willardale Cemetery
2 blocks**

Start Here

Map Key & Route Distance

- Indicates Restaurant Site
- Indicates Historic Site
- Suggested Route, 2.4 miles
- Willardale Route Add .82 mile
- Park Ave. Route Add 1.8 miles

Events

- 1. Central Lunch - Enjoy red southern homestyle cooking in a diner setting served with old fashioned southern hospitality. This eatery has been in continuous business for over 100 years! 735-7979 / 103 N. Center Street.
- 2. Downtown Deli - Known for their great sandwiches, salads, soups and desserts. The Downtown Deli features Booby Head meats & chow, 741-8138, 115 E. Walnut St.
- 3. B & G Grill - A Wayne County favorite where you'll find a menu of breakfast, lunch & brunch favorites, the market, dressing, pop, chips, chicken pastas and barbecue chicken. 795-0306, 110 E. Ash St.
- 4. Terry's Authentic Meats where you get Margaritas, enchiladas, their famous lunch, fish, and their award winning Nacho Tostitos every day work for both lunch and dinner. 751-9751, 112 2nd St.
- 5. Nate's Thai Restaurant - Lunch & dinner portions of Thai. The standards from Lan Wan Ton, Sweet & Sour, Chicken to Salmon, Chili Sauce. 563-8000, 124 S. Center St.
- 6. Lotus 1899 Barrio & Lounge - Dishes originating from various parts of Asia including King Pin Chicken, Thai Panang and Beef Tiram. Full bar menu and dancing every Friday and Saturday. 751-9751, 105 N. Ash Street
- 7. Central Park - Another local favorite in the form of a fast food drive-in. Get a big fat juicy burger with all the fixins. 751-2277 / 212 E. Ash St.
- 8. Apple's Steak Sub - Known for their fabulous subs, chef salads, spaghetti and chicken wings. 755-8472, 101 W. Ash Street
- 9. The Flying Shamrock - Traditional Irish pub with live music, hearty Irish fare, an impressive selection of Irish whiskey and numerous distinctive beers on tap. Smoke-free. 115 N. John St., 589-0493
- 10. Pupetta's Italian Restaurant - Fine Italian cuisine with traditional Italian wine presentations with local/seasonal meats. Lunch/dinner every day! Full bar and happy hour! 751-9751, 105 N. Center Street
- 11. Redmond's Pub & Grill - A pub and grill that is a favorite for everyone seeking great grill fare from BBQ sandwiches to hot dogs and hamburgers. 108 N. Center St., 589-4465

Other Sites of Interest

- Wayne County Museum
- Chiefs of the Home State Park
- Gen. Charles B. Aycock Building
- Gold Medal Gold Building
- Adm. General of Wayne County
- Sumner Johnson Air Force Base Town
- Parsons Building
- 100 S. Center Street
- 101 N. Carolina Street
- 102 S. Center Street
- 103 N. Center Street
- 104 S. Center Street
- 105 N. Center Street
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- 139 S. Center Street
- 140 S. Center Street

24. GOLDSBORO CITY HALL (1902), 214 North Center Street - Goldsboro City Hall was built in 1902 in the Neo-Classical Revival style and at the time of construction, was the tallest in the City. Poles, topped by larger than life-sized statues of Liberty and Justice, are prominent on the roof. The original jail cell is located in the basement. Farnes Heibbs & Associates, P.A. was hired by the City to create a Master Plan and Building Design for a City Hall expansion project and renovation plan for the historic City Hall. The plan was sympathetic to the original style designed by New Bern architect, Herbert Woodley Simpson. The expansion project began in early 2003 and was completed in 2007. The City Council completed a thoughtful and careful restoration of the structure in 2007 and completed the "clock tower" with a clock that had never been installed.

25. WAYNE COUNTY COURTHOUSE (1914), 224 E. Walnut Street - The National Register of Historic Places the building was built in 1914 in the Neo-Classical style on land initially purchased in 1849 for \$250.00. A 1914 annex more than doubled the building size. After many years of neglect, the Wayne County Board of Commissioners in 1997 voted to completely restore the original building resulting in a prestigious historic preservation award, the National Certificate of Merit, Caraway Award of Merit. This is one of two court houses designed by Milburn and Hester remaining in the state.

26. GOLDSBORO DRUG STORE (1870), 101 N. Center Street - The Goldsboro Drug Company building was constructed in 1870 after a fire leveled much of the west Walnut Street block. It is Goldsboro's oldest business in continuous operation; as of 2005, it has been in business 135 years! The business won the Wayne County 2014 Special Recognition Small Business of the Year award. The 2nd floor of the building once housed Goldsboro's first telephone exchange and the drugstore had the telephone number "1". The building underwent a complete restoration in 1994 by the owners.

27. FIRE DEPARTMENT HEADQUARTERS (1919), 109 East Ash Street - Built as a W.P.A. Project in 1919, this two-story red brick firehouse is the most outstanding Art Deco building in Goldsboro. The main facade is white stucco over brick, with a distinctive red relief graphic representation near the title cornice line. Abandoned as a firehouse in the 1970s, the building had been altered to accommodate a car lot. Most recently, the building was threatened with demolition due to years of neglect until a new acquisition, transportation and a historic tax credit restoration project approved by the NC State Historic Preservation office and the National Park Service in 2006. The exterior and first floor restoration work was completed in 2008. The project won the 2008 NC Main Street Best Historic Rehabilitation Project.

28. TEMPLE OHEB SHALOM (1885), 214 N. Center Street - This two-story, red brick synagogue was designed by Milton Hurling, a local builder, in the Romanesque Revival style amidst a lack of exceptional Victorian residences. Recognized as the second oldest Synagogue in the state, the building center for the Jewish community until the mid 1960's. On October 21, 1968, the congregation approved the purchase of a building lot on North James from W. H. Griffin for \$750. The congregation raised funds for the structure of the Temple and in January 1884, a "heat sun" was realized from a lecture given by Simon Weil, a Washington, D. C. Jewish leader and author.

29. HOTEL GOLDSBORO/WAYNESBOROUGH HOUSE (1924-1926), 104 S. Center Street - The Hotel Goldsboro was the fifth hotel constructed on this site which has historically held the local point of the Central Business District. The building is eight stories tall made of brick and trimmed with stone designed by architect W. L. Stoddart. The building was renovated with HUD funds for use as a Senior Citizens Hotel.

30. FRANK KORNIGWAY BORDEN HOUSE (1885), 107 South Center Street - Built by Frank K. Borden in 1885, the 2-story, bay frame home was constructed in the Victorian Italianate style. Notable exterior features include a Second Empire mansard roof of polychrome stone with floral design, topped by a wide walk, which originally supported decorative cast iron cresting. Underneath the roof is a decorative cornice and bracket system, with fish scale shingles decorating the gables. There are raised paneled bay windows on the front (east) and north sides of the home and a porch which wraps around 3 sides of the home. The porch is supported by decorative turned posts featuring chamfers and lamb's heads, connected by a turned balustrade. The rear of the home includes a 3 second story sleeping porch. Restoration work began in 2002 and included installation of stone and side steps with decorative carvings identical to those which were on the home when it was built in 1883, as well as duplication of the original paint colors of Downing Street, Greenwood and Indian Red.

31. WAYNE NATIONAL BANK (1922), 130 W. Walnut Street - At 10 stories, the Wayne National Bank building was constructed in 1922 and remains the tallest structure in Goldsboro. The bank later merged with Wachovia Bank which remained in the building until the early 1980's. The first two floors were constructed of stone and the remaining portions of the building are made of brick. The bottom three floors along with a mezzanine that once housed the bank board room were all re-erected in 2003 to accommodate the Goldsboro Branch of NC Wesleyan College. The architect, Alfred Brown of England, designed many large bank buildings in America and it is believed that this is his last one standing.

32. ST. PAUL UNITED METHODIST CHURCH (1885), 300 South John Street - This church was organized in 1849 and was originally housed in a wooden structure on Spruce Street. In 1885 this church was built in the Gothic Revival style and was completed with stained glass windows made in England. The original 120 foot steeple, "which seemed to tower 100' into the sky" was destroyed by Hurricane Hazel in 1914. This unique landmark was once recognized as the tallest feature in eastern North Carolina, if not the entire state.

33. WAYNE COUNTY MUSEUM (1927), 116 S. William Street - Designed by local architect Thomas W. Jones in a revival of Jeffersonian Classicism style, the Goldsboro Women's Club built the building and occupied it for many years. The Women of Goldsboro raised money for many years to erect the building located here. They used it to promote charitable causes for the City of Goldsboro and later made it available to the USO during WWII and in the 1950's after the reconstruction of AFIB. After Weil's Department Store burned in 1948, it was used for the store until a new store was built on Center Street. Legend has it that when the streets were being straightened in Goldsboro that local leaders "gave up" trying to make Mulberry Street go straight through where they realized the Goldsboro's Women's Club was the way. Now the site is home to the Wayne County Museum. The Museum features a local Wall of Fame, a permanent War Between the States exhibit and other local artifacts.

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36. M.E. CASTLE & SONS (1850), 107 S. Center Street - It is believed that the M. E. Castle and Company building, a bold Italianate style structure, was constructed in 1885 or 1886 after the 1884 fire which destroyed much of downtown. The Castle mercantile company was once dubbed in a 1914 edition of Illustrated City as "...one of the most notable and highly successful mercantile houses in Goldsboro, known as the ladies store". The business was an original Waynesborough business, moving to Goldsboro along with others during the migration period of 1840-1850.

37. GOLDSBORO UNION STATION (1909), 101 N. Carolina Street - Goldsboro's unique Union Station was built in 1909 when Walnut Street and Carolina to accommodate the Atlantic Coast, Norfolk and Southern and the Southern Railway. The structure was placed on the National Register of Historic Places in 1977, identifying its importance in architectural history. The Station was built for \$72,000, an investment that indicated the significance of rail service in Goldsboro and Wayne County at the time. Passenger service was discontinued in 1968 and Amtrak later purchased it to be the home of Goldsboro Builders in 1972. Today, Goldsboro citizens are working to bring Union Station and passenger rail service back to life.

38. M.E. CASTLE & SONS (1850), 107 S. Center Street - It is believed that the M. E. Castle and Company building, a bold Italianate style structure, was constructed in 1885 or 1886 after the 1884 fire which destroyed much of downtown. The Castle mercantile company was once dubbed in a 1914 edition of Illustrated City as "...one of the most notable and highly successful mercantile houses in Goldsboro, known as the ladies store". The business was an original Waynesborough business, moving to Goldsboro along with others during the migration period of 1840-1850.

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40. L.D. GRIFFITH & SONS & JEWELRY STORE (1859), 107 S. Center Street - The jewelry store of L. D. Griffith was founded in 1859. It is notable for standing clock in front to be believed to be the last of its kind in the state. Erected in 1877, the clock was dedicated in 1924 and refurbished by the City in 2002. L. D. Griffith, founder of the store, created the first watch made in North Carolina in 1860. The structure survived two large fires - one on either side and on the National Register of Historic Places.

41. FIRST BAPTIST CHURCH (1912), 123 S. John Street - The original congregation was organized in Waynesborough in the mid 1840's. The first Goldsboro structure, a framed church with a central bell tower, was erected in 1858 on the present site of the Great Building. The congregation later sold this property to H.L. Grant and built the present structure in 1912/1913. From this early building was also organized the First African Baptist Church at the close of the Civil War.

42. BORDEN BUILDING (1914), 103 S. James Street - The six-story Borden Building is an example of the commercial style, characteristic: straight front, flat roof and level skyline. Composed of Flemish-bond red brick with granite accents, the facade is simple and unadorned. Over the entrance on South James Street are two lions head gargoyles. Built in 1914 by the Borden Brothers, the six-story structure was the tallest building in town. Alfred E. Smith was in Goldsboro in 1915 when he was then Sheriff of New York County and remarked that the "skyscraper was the baby's first tooth". The original tenants, lawyers, the Borden Brick and Tile Company, and architects A. J. Maxwell, Jr., and John R. Goulette. For ten years, the entire top floor was the home of the Algonquin Club, a select social club. The building was owned by Adam Scott, the barbecue king, catered one of the earliest dances. In the fall of 1976, the Borden family donated the building to Wayne County and in 2002 the County began a complete renovation of the structure. The cost of the renovation, completed in 2004 was 1.8 million dollars to which they won a DGCNC 2004 Award of Merit for Historic Preservation honor.

43. M.E. CASTLE & SONS (1850), 107 S. Center Street - It is believed that the M. E. Castle and Company building, a bold Italianate style structure, was constructed in 1885 or 1886 after the 1884 fire which destroyed much of downtown. The Castle mercantile company was once dubbed in a 1914 edition of Illustrated City as "...one of the most notable and highly successful mercantile houses in Goldsboro, known as the ladies store". The business was an original Waynesborough business, moving to Goldsboro along with others during the migration period of 1840-1850.

PROGRAM RECOMMENDATIONS

Education

Media Campaign to Educate Motorists, Bicyclists, and Pedestrians

Purpose: Educate all road users on traffic laws and safety tips to reduce crashes and make roadways more comfortable for all users

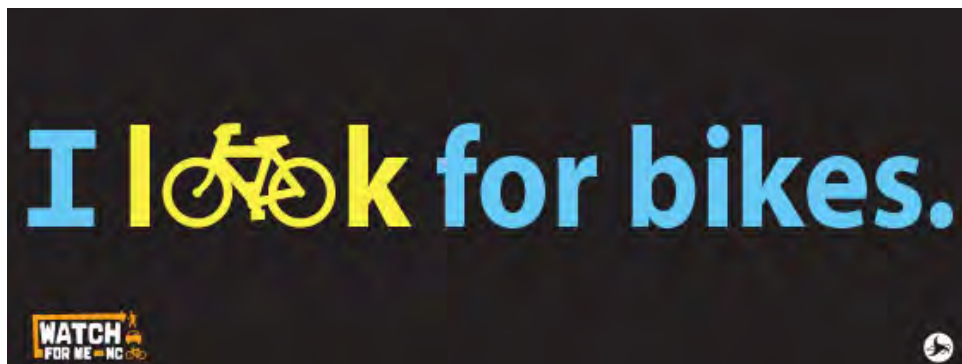
Audience: General public

Partners: Goldsboro MPO; Goldsboro, Pikeville, and Walnut Creek Police Departments; NCDOT; Seyboro Cyclists; Bicycle and Pedestrian Advisory Committee

Watch for Me NC is a comprehensive traffic safety campaign launched through NCDOT to reduce the number of pedestrian and bicyclists involved in crashes with motor vehicles. The campaign consists of educational messaging directed individually towards drivers, bicyclists, and pedestrians in order to teach people traffic laws and safety tips unique to each mode. Public outreach is conducted through bus advertisements and banners, brochures, bumper stickers, gas pump stickers, TV and radio advertisements, and a police enforcement effort.

The pilot program was launched in the Triangle communities of Raleigh, Durham, Chapel Hill, and Carrboro and will be expanding statewide. The Goldsboro MPO and local police departments should work with NCDOT to launch a local Watch for Me NC Campaign. Seyboro Cyclists and the Bicycle and Pedestrian Advisory Committee could help with outreach through local events, programs, and online.

Watch for Me NC website: <http://www.watchformenc.org/>





Safe Routes to School (SRTS) Program

Purpose: Provide opportunities for children to safely walk and bike to school; improve traffic safety around schools through investments in bicycle and pedestrian infrastructure and programs

Audience: School-aged children and their parents; school administrators, faculty, and staff

Partners: Wayne County Public Schools; Parent-Teacher Associations (PTAs); Goldsboro, Pikeville, and Walnut Creek Police Departments; City of Goldsboro and Town of Pikeville Public Works staff; community volunteers

Safe Routes to School (SRTS) is a program that enables and encourages children to walk and bike to school. The program helps make walking and bicycling to school a safe and more appealing method of transportation for children. SRTS facilitates the planning, development, and implementation of projects and activities that will improve safety and reduce traffic, fuel consumption, and air pollution in the vicinity of schools. SRTS programs should be implemented in every elementary and middle school within Wayne County Public Schools.

An important first step for SRTS programs in Wayne County Public Schools would be to host a Safe Routes to School Community Workshop. Designed to help communities develop sound SRTS programs based on their unique local context, this is a one-day event that provides information on best practices, useful strategies, and available resources. NCDOT's Safe Routes to School Program offers a customized version of the "Safe Routes to School National Course," developed by the National Center for Safe Routes to School and the Pedestrian and Bicycle Information Center. Next steps would include developing leaders and key contacts at each school, developing SRTS action plans, and prioritizing projects around each school.

The North Carolina Safe Routes to School Program is supported by federal funds through SAFETEA-LU and MAP-21 legislation. Please note that all SRTS projects "shall be treated as projects on a Federal-aid system under chapter 1 of title 23, United States Code." Although no local match is required and all SRTS projects are 100% federally funded under the SAFETEA-LU, agencies are encouraged to leverage other funding sources that may be available to them, including grant awards, local, state, or other federal funding. SRTS funds can be used for proposed projects that are within 2 miles of a school public or private, K-8, in a municipality or in the county jurisdiction.

In response to the Strategic Transportation Investments law of June 2013, proposed SRTS projects will be considered as part of the Bicycle and Pedestrian project input with Strategic Prioritization Office for funding consideration. The most common types of eligible SRTS projects are sidewalks or a shared-use path. However, intersection improvements (e.g., marking/upgrading crosswalks), on-street bicycle facilities (e.g., bike lanes, wide paved shoulders), or off-street shared-use paths are also eligible for SRTS funds.

For more information and a comprehensive list of eligible projects, please visit the FHWA SRTS program: http://www.fhwa.dot.gov/environment/safe_routes_to_school/overview/

SRTS RESOURCES AND SAMPLE PROGRAMS

NATIONAL CENTER FOR SAFE ROUTES TO SCHOOL:

<http://www.saferoutesinfo.org/>

MARIN COUNTY, CA:

<http://www.saferoutestoschools.org/>

GREENVILLE, NC:

<http://www.saferoutesinfo.org/data-central/success-stories/greenville-north-carolina-community-comes-together-pedestrian-safety>

OTHER NC SUCCESS STORIES:

<http://www.saferoutesinfo.org/data-central/success-stories/north-carolina>

Professional Development Courses

Purpose: Educate and train planners, engineers, and other professional staff on best practices for bicycle and pedestrian facility planning, design, and implementation

Audience: Professional staff in Planning, Public Works, Parks and Recreation, Engineering, and related departments and fields

Partners: City of Goldsboro, Town of Pikeville, and Village of Walnut Creek Departments; GIS staff; County staff; MPO staff; NCDOT staff

Professional development courses provide training to transportation and other professionals who may not have received extensive experience or training in pedestrian and bicycle facilities. These courses are helpful for educating staff on bicycle and pedestrian design standards, complete streets concepts, how to coordinate with other departments on bicycle and pedestrian projects, funding opportunities, and other topics related to bicycle and pedestrian planning, design, and implementation. Courses are available through NCDOT, the Association of Bicycle and Pedestrian Professionals (APBP), the Pedestrian and Bicycle Information Center (PBIC), and others.

Educating professional staff in these issues helps to ensure that bicycle and pedestrian improvements are appropriately included in future projects and development. It also helps staff understand why it is important to include bicycle and pedestrian accommodations, and the benefits that such improvements provide to the community.

Sample programs:

- Institute for Bicycle and Pedestrian Innovation: <http://www.ibpi.usp.pdx.edu/>
- <http://www.pedbikeinfo.org/training/webinars.cfm>

Traffic Ticket Diversion Class

Purpose: Educate first-time traffic offenders, including motorists, bicyclists, and pedestrians, on roadway safety and traffic laws

Audience: General public, usually first-time offenders of particular traffic violations

Partners: City of Goldsboro, Town of Pikeville, and Village of Walnut Creek Police Departments; Wayne County Court System

A diversion class is offered to first-time offenders of certain community-related traffic violations, such as motorists speeding, pedestrians jaywalking, or bicyclists running a stoplight. In lieu of receiving a citation and/or fine, individuals can take a one-time free or inexpensive class instead. In Marin County, interested citizens can take the class even if they did not receive a ticket. This program is a good way to educate all road users about their rights and responsibilities.

Sample program:

- Marin County, CA: <http://www.marinbike.org/Campaigns/ShareTheRoad/Index.shtml#StreetSkills>



PBIC Webinar

Statewide Complete Streets: How states are working with communities for friendlier roads

 **Stefanie Seskin, National Complete Streets Coalition**
Lauren Blackburn, North Carolina EDD
Paula Reeves, Washington State DOT
Chris Berrens, Minnesota DOT

April 10, 2 pm

 **Pedestrian and Bicycle Information Center**



SAMPLE BICYCLE AND PEDESTRIAN WEBSITES

PORTLAND, OR:
<http://www.portlandoregon.gov/transportation/60164>

AUSTIN, TX:
<http://austintexas.gov/bicycle>

RALEIGH, NC:
<http://www.raleighnc.gov/government/content/PWksTranServices/Articles/BicycleProgram.html>

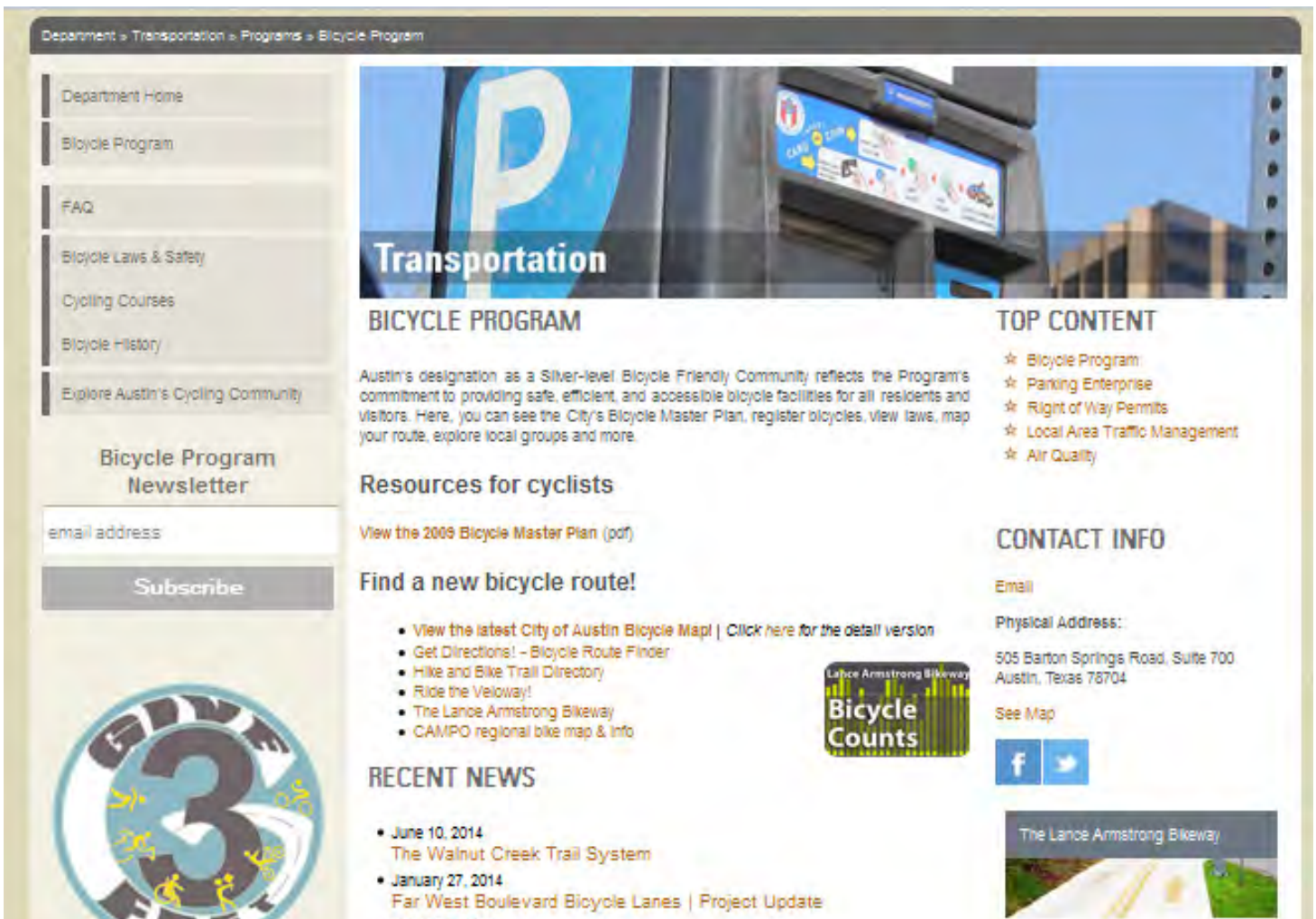
One Stop Website

Purpose: Provide a comprehensive website of bicycle and pedestrian resources for residents, visitors, and businesses

Audience: General public

Partners: City of Goldsboro Planning Department; Bicycle and Pedestrian Advisory Committee; City of Goldsboro and Town of Pikeville Public Works Departments; IT staff; Village of Walnut Creek

Many current and potential pedestrians and bicyclists do not know where to turn to find out about walking and bicycling laws, events, maps, safety tips, and groups. Partners should work together to develop a “one-stop” website that offers a variety of walking and biking resources. A website is not usually difficult to set up, but it will only be successful if the site is both easy to use and updated frequently. All website content should be reviewed regularly for accuracy. The bicycling community can assist in keeping the site up to date. Other recommended programs in this appendix could be housed on the website, such as Walk Bike NC materials, Traffic Ticket Diversion Class information, event information, local business discounts for bicyclists, and walk and bike maps. This website could build upon the Weebly website used for this planning process.



Encouragement

Local Business Discounts for Bicyclists

Purpose: Encourage and reward residents and visitors for making trips by bike; promote a bicycle-friendly culture among businesses in Goldsboro

Audience: General public visiting restaurants, shops, and services by bike

Partners: Local restaurants, shops, bars, and other businesses; Bicycle and Pedestrian Advisory Committee; Downtown Goldsboro Development Corporation

The Bicycle and Pedestrian Advisory Committee should work with the Downtown Goldsboro Development Corporation and Wayne County Chamber of Commerce to encourage local businesses to offer discounts to patrons who bicycle to their business. The discount could be a daily or once-weekly promotion that encourages residents and visitors to visit local businesses by bike. One successful version of the program requires bicyclists to purchase a low-cost program sticker that they display on their helmets. This allows businesses to identify participating bicyclists and provide discounts to those customers. A business discount program could be especially popular with businesses in downtown that have limited motor vehicle parking. In return for businesses' participation, a "Bicycle-Friendly Local Businesses" feature, along with discount information, could be featured on the One-Stop Website (see page 7-11).

Sample programs:

- Salt Lake City, UT: <http://www.bikeslc.com/GetBiking/DiscountsforBicyclists.html>
- Long Beach, CA: <http://www.bikelongbeach.org/bike-friendly-businesses>

Walk and Bike to School Days

Purpose: Encourage children to walk to school in order to provide opportunities for physical activity and safety education

Audience: Schoolchildren and their parents

Partners: Wayne County Public Schools; Police Departments

Local schools should offer regular Walk and Bike to School Days to encourage physical activity and transportation options to school. These events could be annual, such as International Walk to School Day in October, monthly, or even weekly (such as a "Walking Wednesdays" program). Students could either walk or bike individually with their parents or participate in a "Walking School Bus" in which volunteer parents and teachers lead children along a designated walking route to school, picking up children along the way. Schools should offer incentives to students who participate in Walk and Bike to School Day activities and events to promote the initiative and reward their participation.

For more information: <http://www.walkbiketoschool.org/>





Open Streets Events

Purpose: Raise awareness of bicycling and walking opportunities in Goldsboro and Wayne County; Encourage people to participate in walking and biking activities in a fun, traffic-free environment

Audience: General public

Partners: Downtown Goldsboro Development Corporation, City of Goldsboro Parks and Recreation Department, GoWayneGo

Open Streets Events are periodic street festivals (typically held on the weekend) that create a temporary park that is open to the public for walking, bicycling, dancing, hula hooping, roller skating, and other forms of human-powered activity. These programs are known by many names: Open Streets, Ciclovias, Sunday Parkways, Summer Streets, and Sunday Streets. They have been very successful internationally and are rapidly becoming popular in the United States. They promote health by creating a safe and attractive space for physical activity and social interaction, and are cost-effective compared to the cost of building new parks for the same purpose. These events can be weekly events or one-time events, and are generally very popular and well-attended. Activities at an Open Streets Events can include bicycle obstacle courses, a BMX show, jump roping, Zumba, a Kids' Bike Rally, and prize drawings.

These events lend themselves to innovative partnerships and public/private funding. Health care providers whose mission includes facilitating physical activity are often major sponsors. Businesses may also help sponsor the event if it brings customers to their location.



- Portland Sunday Parkways Guide: <http://www.portlandonline.com/transportation/index.cfm?c=51522&a=274625>
- Sunday Parkways videos: <http://www.streetfilms.org/tag/ciclovias/>
- Bull City Play Streets (Durham): <https://www.facebook.com/BullCityOpenStreets>





Walking & Bicycling Maps and Tours

Purpose: Encourage walking and biking by providing easy-to-read maps of on-road bicycle facilities, sidewalks, trails, and routes for reaching destinations by foot or by bike; Promote walking and biking tourism within the Goldsboro MPO

Audience: General public

Partners: Downtown Goldsboro Development Corporation, Wayne County Chamber of Commerce, City of Goldsboro Travel and Tourism Division, City of Goldsboro Planning Department

One of the most effective ways of encouraging people to walk and bike is through the use of maps and guides. The City of Goldsboro should develop a walk and bike map and distribute it to residents and visitors both in print and online; copies could be available for free or for a small charge at City Hall, local bike shops, gyms and recreation centers, and at other businesses. The map should show where existing bike lanes, sidewalks, trails, and other facilities are located and help to guide people to enjoyable routes and destinations.; safety tips and links to local resources are also valuable additions. The map should be updated on a regular basis to reflect the most current facilities in town.

The City and its partners should also collaborate on creating one or more guided walking and bicycling tour routes, such as tours of Civil War sites, breweries, wineries, local farms, and/or public art. Live tours should be hosted by knowledgeable tour guides (annually or more frequently as demand permits) and publicized widely. The tour routes should be preserved in a brochure and/or a self-guided (e.g., iPod-based) tour for those who cannot attend the live tour. The maps should be distributed widely, both in print and online, to maximize availability and use.

Goldsboro already has numerous partners who may be able to help develop guided and self-guided walks or rides and manage tour logistics. The Downtown Goldsboro Development Corporation, Wayne County Chamber of Commerce, and the City of Goldsboro Travel and Tourism Division may be willing to partner on walking and biking maps and tours to promote tourism and economic development.

SAMPLE WALK/BIKE MAPS

DURHAM, NC:

<http://durhamnc.gov/ich/op/dot/Pages/Durham-Bike-Hike-Map.aspx>

RALEIGH, NC:

<http://www.raleighnc.gov/government/content/PWksTranServices/Articles/BicycleProgram.html>

GREENVILLE, NC:

http://www.greenvillenc.gov/departments/public_works_dept/information/bike_maps/working12.html

SAMPLE WALK/BIKE TOURS

BEDFORD, PA:

<http://www.visitbedfordcounty.com/walkingtours.html>

AUSTIN, TX:

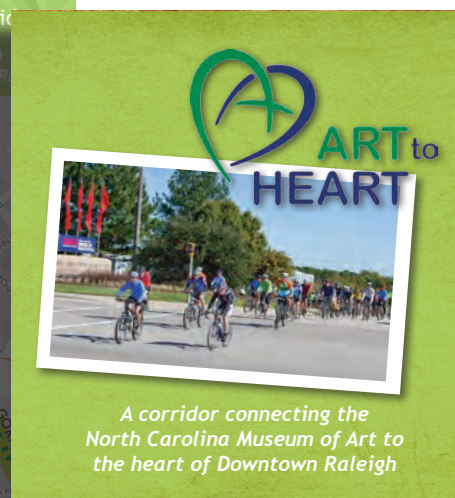
http://www.austintexas.org/visitors/plan_your_trip/historic_walking_tours

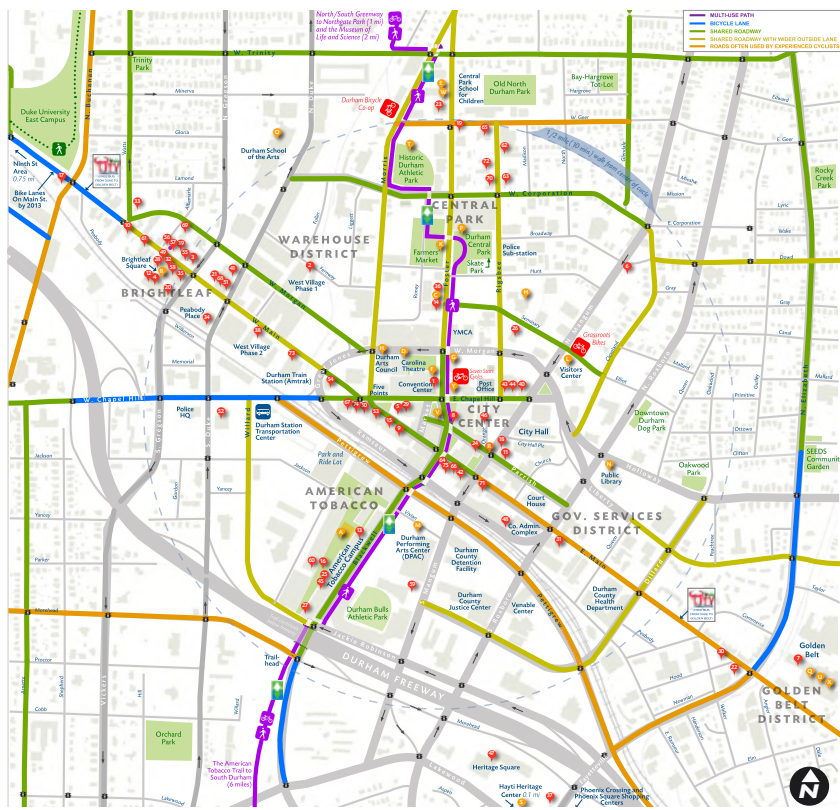
LEXINGTON, KY:

<http://www.visitlex.com/idea/bicycle-tour.php>

PHILADELPHIA, PA:

<http://museumwithoutwallsaudio.org/wp-content/uploads/2012/03/PHL-Outdoor-Public-Art-Bike-Map.pdf>





BICYCLING IN THE BULL CITY

In the Shade of North Carolina, bicyclists have the same rights and duties as motorists. For a complete list of NC laws, visit www.ncdhhs.gov/traffic/.

- **Obey Traffic Signs and Signals:** Signs and signals, used with or without lights, are the most important way to regulate traffic movements.
- **Ride in the Lane:** Ride in the lane that is most appropriate for you. Also, use the right shoulder on busy roads.
- **Use Lights at Night:** Always use reflective devices and turn on your lights.
- **Always Wear Helmets:** New rule of 16 bikes bill in 2009.
- **Leave Your Hands on the Handlebars:** Keep your hands on the handlebars and feet on the pedals. Do not use a cell phone while riding.
- **Make Eye Contact with Drivers:** Communicate your presence and intent to the driver.
- **Don't Drink and Ride:** Bicyclists will sign the blood alcohol test if they are stopped by law enforcement. Bicyclists can be arrested for driving under the influence.
- **On Trails, One Aisle Sign What Posing:** The other lane is for pedestrians. Do not use a cell phone while riding on any path.

Durham Bulls Convoy
The Durham Bulls Convoy is a first responder program designed to encourage the use of bicycling as a mode of transportation and recreation. The group travels with the Durham Bulls and Durham Bulls Convoy members to various events and programs for the Durham Bulls and adults. Convoy members include police officers, firefighters, and other emergency services. For more information, visit www.durhambullsconvoy.org/.

Bike-to-Work Day
Bike-to-Work Day is a national event held in the first week of October. It encourages people to bicycle to work. For more information, visit www.bike2work.org/.

Assess Your Commute Electrically
Use the following QR Code to right to assess your commute. It will provide you with information on the route, the time it takes, and the cost of the commute. For more information, visit http://www.durham.gov/transportation/bike_map_commute.htm.

PARKS, TRAILS, AND OPEN SPACE

Durham Parks and Recreation
Durham Parks and Recreation offers a wide variety of recreational choices that contribute to the physical, emotional, and social health. Visit this site as your guide in planning healthy, fun, and quality activities for you and your family. www.durham.gov/ops/par/

American Tobacco Trail (ATT)
This 22-mile trail is a paved, multi-use trail that runs from Lake Jordan in the north to the City Center in the south. It is a great place to walk, jog, or bike. For more information, visit www.durham.gov/ops/par/att/.

Durham Open Space and Trails Commission (DOTS)
DOTS fosters the wise use of Durham's natural resources and advises the City Council and the County Board of Commissioners on matters relating to open space preservation and trail development. Their web site also has maps and trail information. www.durhamopen.com/

The NC Mountains-to-Sea Trail (MST)
The Mountains-to-Sea Trail stretches 1,000 miles from Chincoteague Beach on the Great Smoky Mountains to Jockey's Ridge on the Outer Banks. Durham's portion of the MST will follow the Eno River to Lake Lake. For more info, go to www.ncmst.org.

How long will it take to walk to parks and other places in Durham?
A good rule of thumb for walking is one mile, round trip, for the average person in a pace of 1,000 steps and takes about 20 minutes.

Duke Forest
The Duke Forest is a private land owned and managed by Duke University as an outdoor laboratory. Limited public recreation is permitted in the forest as long as it does not conflict with teaching and research purposes. Permissible activities include hiking, biking, and horseback riding on the established roads, as well as fishing and picnicking. Group activities must be approved in advance. More information can be found on the web: www.dukeforest.edu/

Mountain Bike Trails
There are three mountain bike trail locations in Durham: Little River Regional Park (open at night), Campus Hills Park, and Lake Park. Mountain bike trail conditions vary depending on maintenance. See the Triangle Off-Road Cycle website for more info: www.triangleoroad.com/

Little River Regional Park and Natural Area
The Little River Regional Park and Natural Area features 7.4 miles of hiking trails and 4.8 miles of equestrian trails. There are also 2 picnic shelters with grills, picnic restrooms, and a group playground (see map below). For more information, visit www.durham.gov/ops/par/little_river_natural_area/

Map Legend:
• HIKING TRAILS
• EQUESTRIAN TRAILS
• ACCESSIBLE TRAILS

Downtown Legend

- Bicycle Organization
- Parks & Plazas
- Durham Station
- East Coast Greenway
- Buildings
- Light Traffic

HIKING/WALKING TRAIL: This trail refers to the wide sidewalks that run along the North South Greenway, (top of the map) to the American Tobacco Trail (bottom of the map).

MULTI-USE PATH: This path runs along the North South Greenway, etc.

SHARED ROADWAY WITH WIDER OUTSIDE LANE: On roads with wider outside lanes, bicyclists often share the road with motor vehicles.

SHARED ROADWAY WITH WIDER OUTSIDE LANE: On roads with wider outside lanes, bicyclists often share the road with motor vehicles.

ROADS OFTEN USED BY EXPERIENCED CYCLISTS: These roads are often used by experienced cyclists, but may not be the best route for all bicyclists.

Downtown Restaurants

- Restaurants**
- 1. Zeno's Restaurant/Bar
 - 2. Anna's Durham Bistro
 - 3. Sanga's Cafe
 - 4. The Duke Cafe
 - 5. The Duke Cafe
 - 6. The Duke Cafe
 - 7. The Duke Cafe
 - 8. The Duke Cafe
 - 9. The Duke Cafe
 - 10. The Duke Cafe
- Restaurants w/ Nightlife**
- 11. The Duke Cafe
 - 12. The Duke Cafe
 - 13. The Duke Cafe
 - 14. The Duke Cafe
 - 15. The Duke Cafe
 - 16. The Duke Cafe
 - 17. The Duke Cafe
 - 18. The Duke Cafe
 - 19. The Duke Cafe
 - 20. The Duke Cafe

Transit Information

Durham Station
Durham Station is the main transfer point for Durham Area Transit Authority (DATA) and Triangle Transit buses in Durham. Connections to bus services are also available at Durham Station.

The Bull City Connector
This is a free BRT route from Duke to Golden Belt, including North Street and Downtown Durham, operating every 15 minutes from 6:30am to 9pm, Mon-Fri, and every 20 minutes 6pm to midnight, Mon-Fri, and 6:27am to midnight, Sat. www.bullcityconnector.com/

Plan your Bus Trip
You have many transit choices, not all could fit on this map! Visit GoTriangling.com to use the online Trip Planner. The trip planner will tell you what bus to take, when times it comes and how long your trip will take, and how much it costs. You can use GoTriangling.com to plan your trip on DATA, Cary Transit, CAT, Chapel Hill Transit, the NCSU Wolfpack, and Triangle Transit.

Share the Ride
A good rule of thumb for walking is one mile, round trip, for the average person in a pace of 1,000 steps and takes about 20 minutes.

Upgrade to a Vangard
A Vangard is a group of 7-15 commuters who live and work in the same place and have similar schedules. Vangards ride every day for the bus and/or transit. For more information, visit www.GoTriangling.com/vangard/

Get an Emergency? Get an Emergency Bike Home
Triangle Transit will get your bike home or to work on the day you use an alternative mode of transport and have an unexpected emergency and need to get home faster. It's free! www.durham.gov/ops/par/ebh/

Ride the Bike Home
Real-time bike information is available for DATA and Triangle Transit buses. Reduce your wait time by looking up exactly when your bus will arrive, either before you leave on one of your usual modes of transport or when you're on the bus.

BICYCLING ON STREETS

Use the through lane to go straight, not the turn lane.

Make eye contact with drivers with whom you are sharing the road.

Ride in a straight line. Avoid weaving between parked cars. Ride in a straight line at least 4 feet away from parked cars to avoid the door zone (see below).

Motorists Pass with Care. Coming at least 2 feet of passing space is the law, but at least 3 feet is courteous. Also, please slow down to pass if you feel the need to pass quickly. It's not the right time to pass.

Biking on sidewalks can put you and pedestrians at risk. Motorists often pull out of streets and driveways without checking for sidewalk bicyclists.

Never ride against traffic. Riding against traffic is dangerous and illegal. Motorists and pedestrians are not looking for cyclists riding the wrong way down a street.

When necessary, use entire travel lane. Move toward the center when the lane is too narrow for motorists to pass safely or when traffic is moving at the same speed as yours.

Look inside parked cars before you pass them. If you're unable to see someone inside a parked car, you should assume the driver is or will be inside the door zone or slow down and carefully pass.

Watch behind you. Keep track of traffic behind you, so you'll know whether you have enough room to pass safely or whether you are in the door zone. A mirror helps you see traffic behind you as you pedal forward.

Obey all traffic regulations. Riding in the bike lane is safe, but you must obey all traffic regulations. Knowing and following the rules helps all road users properly anticipate and react to each other.

Keep an eye on the motorist coming up on you. If you're unable to see someone inside, move outside the door zone or slow down and carefully pass.

Keep an eye on the motorist coming up on you. If you're unable to see someone inside, move outside the door zone or slow down and carefully pass.

Durham Bike & Hike Map
This map was developed using input from many sources, primarily those listed below. Thank you to the many individuals and organizations who contributed to this map.

Durham Bicycle and Pedestrian Advisory Committee (BPAC)
Durham Police and Fire Department
Durham Public Works Department
Durham City Council
Durham Transportation Department
Durham County Open Space and Recreation Division
Durham County and Wake County
Duke University Parking and Transportation Services
East Coast Greenway
Partnership for Healthy Durham - Obesity and Disease Risk Coordinator
Team City Parks and the City Planner
Local Residents and Bicyclists

Please provide your input using the map in a secure and safe manner. If you have comments, suggestions, or any data you would like to share about this map, please visit www.durham.gov/transportation/bike_hike_map_comments.cfm

An Important Note to Map Users
This map is intended to provide information to help you plan your route, but it does not guarantee any information, nor does it assume any liability. It is intended for informational purposes only and should not be used as a substitute for professional advice or services. The map is not intended to be used as a substitute for professional advice or services. The map is not intended to be used as a substitute for professional advice or services.

2012

Wayfinding Signage Program

Purpose: Enhance resident and visitor orientation by directing pedestrians, bicyclists, and motorists to popular destinations around town

Audience: General public

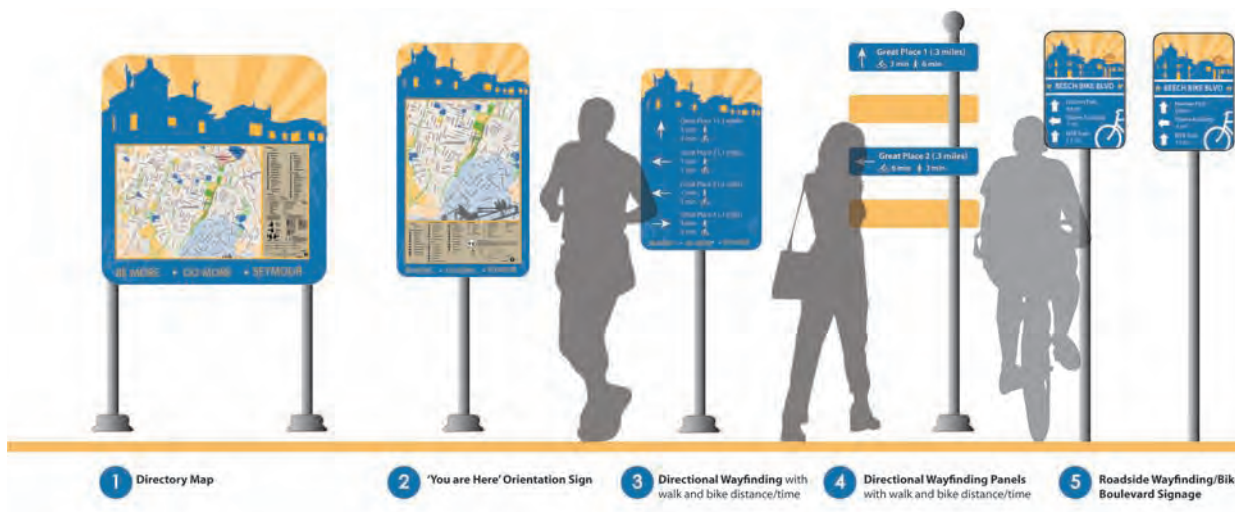
Partners: City of Goldsboro Public Works Department, Downtown Goldsboro Development Corporation, Wayne County Chamber of Commerce, City of Goldsboro Travel and Tourism Division, City of Goldsboro Planning Department

Wayfinding signage helps to orient residents and visitors to an area and makes a place more accessible and welcoming. A good wayfinding system can greatly contribute to tourism and economic development by creating an inviting environment for visitors and encouraging them to spend time at local destinations. While many wayfinding systems sufficiently address the needs of motorists, pedestrians and bicyclists have unique wayfinding needs and interests that should be addressed as part of any wayfinding system: they typically travel at slower speeds and shorter distances than motor vehicles, are better able to spontaneously stop and visit a place than motorists can, and require direction to convenient and secure bike parking.

Goldsboro should develop a quality wayfinding system for bicyclists and pedestrians that addresses these needs by providing clear direction to popular destinations and nearby bike parking. Signage should also include both an on-foot and on-bike travel time to each location (see photo on right). Such a system would be especially useful within downtown where there are many sights spread over several blocks. Materials for signage should reflect the character of Goldsboro and Wayne County and be selected for longevity and ease of maintenance. A wayfinding program can include directional signage, on-road markings, and kiosks with town maps. The Downtown Goldsboro Development Corporation, Wayne County Chamber of Commerce, and City of Goldsboro Travel and Tourism Division may be willing to partner on developing and maintaining a wayfinding program due to its focus on tourism and economic development.

Sample wayfinding signage programs:

- Oakland, CA: <http://www2.oaklandnet.com/oakca/groups/pwa/documents/report/oak025118.pdf>
- London, England: <http://www.tfl.gov.uk/microsites/legible-london/>





Bike to Work Day and Bike Month Activities

Purpose: To showcase the benefits of bicycling and to encourage current and potential bicyclists to incorporate bicycling into their everyday lives

Audience: General public, commuters

Partners: Seyboro Cyclists, Bicycle and Pedestrian Advisory Committee, Police Departments, City of Goldsboro Parks and Recreation Department; Local bike shops; GoWayneGo; Seymour Johnson AFB

Cities and towns across the country participate in Bike to Work Day and National Bike Month annually during May. The League of American Bicyclists (LAB) hosts a website for event organizers. The website contains information on nationwide and local events, an organizing handbook, and promotional materials. Goldsboro should host National Bike Month events and activities annually, with the support of local bicycling groups and shops. Events and activities for Bike Month may change from year to year and should evolve and grow as the bicycling community in Goldsboro grows.

Bike to Work Day could include Bike to Work Day Breakfast Stations with free coffee and breakfast for bicyclists, free bicycle tune-ups, helmet or light giveaways, drawings for gift certificates to local bike shops, and other fun activities that reward and incentivize biking to work. Other Bike Month events could include an Open Streets Event, a Bike Rodeo for children where police and volunteers teach children safe riding skills, a police-escorted ride or race around the city, a month-long mileage challenge, and other activities that appeal to a variety of bicyclist ages and experience levels.

Sample programs:

- League of American Bicyclists Bike Month page: <http://www.bikeleague.org/content/national-bike-month>
- Sacramento, CA: <http://www.mayisbikemonth.com/>
- Seattle, WA: <http://www.cascade.org/bikemonth>
- San Francisco, CA: <https://www.sfbike.org/bike-month/>



Enforcement

20's Plenty Campaign

Purpose: Reduce crashes and crash severity by reducing vehicle speeds on neighborhood streets to 20 MPH

Audience: Motorists

Partners: City of Goldsboro and Town of Pikeville Public Works Departments; City of Goldsboro, Town of Pikeville, and Village of Walnut Creek Police Departments; Wayne County Court System

"20's Plenty" is a campaign that originated in the United Kingdom with the goal of minimizing pedestrian crash injuries and deaths. Lowering residential speeds to 20 MPH has enormous safety benefits for all users, especially pedestrians and cyclists, by reducing both the chance of a crash and its severity. This campaign could be implemented throughout the Goldsboro MPO in areas with high pedestrian and bicyclist traffic, such as in the downtown, on bicycle boulevards recommended in this plan and other neighborhood streets, and near schools, parks, and shopping centers.

A successful campaign will bring together several different strategies, including:

- Making residents aware of the benefits of 20 MPH roadways and engaging their partnership on raising awareness and buy-in from their neighbors.
- Identifying specific streets on which a 20 MPH speed limit is appropriate. Likely candidates include designated school walking or bicycling routes, roads identified in pedestrian or bicycle plans as important corridors, and residential streets whose residents request a 20 MPH program.
- Traffic engineering to ensure that the design speed of the street matches the new posted speed.
- Partnership with law enforcement to issue warnings and moving violations on designated 20 MPH streets.
- Evaluation of vehicle speeds and reported crashes (number and severity) before and after the integrated campaign is implemented to the effort to measure results and correct course.
- Changing the legal guidelines around minimum speed and/or authority to set speed limits. For example, the State Legislature may consider passing a law that would permit towns and cities to set speed limits on certain types of roadways, based on classification or designation in an adopted plan.

More about UK "Twenty's Plenty" campaign:

- <http://www.20splentyforus.org.uk/>
- <http://www.streetfilms.org/no-need-for-speed-20s-plenty-for-us/>





The effect of speed

	Average for all ages	Over 60 year olds
At 40 mph	• 31% are killed	• 98% are killed
At 30 mph	• 7% are killed	• 50% are killed
At 20 mph	• 1% are killed	• 5% are killed

Data from Road Safety Web Publication No. 16 *Relationship between Speed and Risk of Fatal Injury: Pedestrians and Car Occupants* - Department for Transport (September 2010)

Speeding Enforcement & Speed Feedback Signs

Purpose: Reduce speeding throughout Goldsboro MPO to lower the risk and severity of bicycle and pedestrian crashes

Audience: Motorists

Partners: City of Goldsboro and Town of Pikeville Public Works Departments; City of Goldsboro, Town of Pikeville, and Village of Walnut Creek Police Departments; Wayne County Court System



Speeding vehicles endanger all road users, including pedestrians and bicyclists. High-speed driving results in more frequent crashes and crashes that are more likely to result in serious injury or death. Targeted speed enforcement activities are a proven way to improve road safety and make walking and bicycling more comfortable.

Law enforcement officials should enforce speed near schools and parks, in downtown, and at locations that are known to have speeding problems (as identified by police officers and resident complaints). These campaigns are ideal for a Safe Routes to School Program; many towns hold an annual "Back to School Blitz" to enforce speed limits in school zones.

As part of ongoing enforcement against speeding, the City of Goldsboro should also consider creating a speed feedback sign request program to deploy speed feedback signs at the request of neighborhood associations and schools. The signs serve as a traffic calming device when used temporarily at strategic roadway locations. The town should also use speed feedback signs on streets with new pedestrian and bicycle facilities. The signs should be mounted temporarily (e.g., for two weeks) and then be moved to another location to keep motorists from becoming inured to the speed feedback sign effect.

Example speed feedback sign request program:

- Toronto, Canada: <http://www.toronto.ca/transportation/walking/wysp/>

Crosswalk Enforcement Action Program

Purpose: Increase driver awareness of and yielding to pedestrian right-of-way in crosswalks; increase pedestrian safety at crosswalks

Audience: Motorists

Partners: City of Goldsboro and Town of Pikeville Public Works Departments; City of Goldsboro, Town of Pikeville, and Village of Walnut Creek Police Departments; Watauga County Court System

Crosswalk enforcement actions (sometimes known as “crosswalk stings”) raise public awareness about the legal obligation of motorists to stop for pedestrians at crosswalks. While crosswalk enforcement actions do result in tickets being distributed, the greater impact comes through media publicity of the event to reinforce the importance of obeying pedestrian crossing laws.

Most crosswalk enforcement sites are selected because they have been identified as locations where pedestrians have trouble crossing, and/or where a large volume of pedestrians (especially vulnerable pedestrians such as children and seniors) is expected. High-crash locations may also be candidates for enforcement actions. If locations near schools are selected, the best timing for an enforcement action is the back-to-school window just after school has begun for the year. Locations should be selected by local police departments in consultation with city engineers and planners. If any complaints from the public have been received about problem crossing locations, they should be considered. School officials will also have valuable input about school crossing locations that would benefit from targeted enforcement.

Once locations have been determined, police departments prepare by marking the safe crosswalk stopping distance with cones. Plainclothes police officers or trained volunteer decoys then attempt to cross at corners and marked mid-block crossings just before a vehicle passes the cone. (Decoys may also be notable community members, such as the mayor or a well-known business leader, to increase media interest in the event.) If motorists fail to yield to the pedestrian in a crosswalk, a second police officer issues a warning or a ticket at the officer’s discretion. It is recommended that the enforcement action be recorded on video to support issued violations should a motorist challenge the ticket.

The City of Goldsboro should conduct periodic crosswalk stings at key locations around the city, including downtown and near schools, parks, shopping centers. Problem locations or corridors reported by the public should also be included in crosswalk enforcement actions. First-time offenders receiving a ticket should also receive educational materials through the Watch for Me NC Campaign (see page 7-6) and/or the option of taking a Traffic Ticket Diversion Class (see page 7-9) for a waived or reduced fine.

Example crosswalk sting program:

- Chicago, IL: http://www.cityofchicago.org/city/en/depts/cdot/provdrs/ped/svcs/crosswalk_enforcementinitiatives.html
- New Jersey: <http://www.pedbikeinfo.org/data/library/details.cfm?id=4649>





Evaluation

Bicycle and Pedestrian Advisory Committee

Purpose: Represent bicycle and pedestrian interests in Goldsboro and Wayne County; Assist with the promotion and operation of bicycle and pedestrian projects and programs

Audience: City staff; City Council; General public

Partners: City of Goldsboro Planning Department; City of Goldsboro Police Department; Friends of Wayne County Greenways; GoWayneGo

Goldsboro should create a Bicycle and Pedestrian Advisory Committee to represent the community's interests regarding bicycle and pedestrian issues in Goldsboro and Wayne County. The committee's duties should include reviewing development and improvement considerations that affect walking and bicycling conditions, making recommendations for street and sidewalk improvements, pursuing bicycle and pedestrian improvements recommended in this plan, helping to track plan progress through benchmarking and an annual report, and assisting with the development and implementation of programs. The Steering Committee for this plan could serve as the starting group for a standing Bicycle and Pedestrian Advisory Committee.

Sample committees:

- Columbia, SC: <http://www.columbiasc.net/planning-preservation/bpac>
- Raleigh, NC: <http://www.raleighnc.gov/government/content/BoardsCommissions/Articles/BicyclePedestrianAdvisoryCommission.html>
- Durham, NC: <http://www.bikewalkdurham.org/>





Pedestrian and Bicycle Counts Program

Purpose: Gather important benchmarking information about walking and bicycling rates throughout Goldsboro and Wayne County

Audience: City staff, City Council

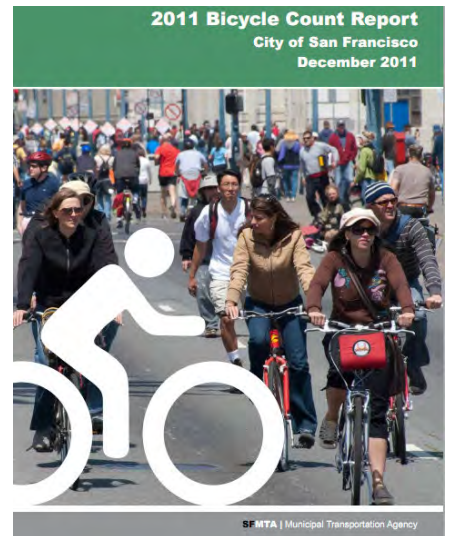
Partners: City of Goldsboro and Town of Pikeville Public Works Departments; City of Goldsboro Engineering and Planning Departments; Bicycle and Pedestrian Advisory Committee

In order to determine this plan’s success at helping Goldsboro and Wayne County residents walk and bike more, it is necessary to establish an annual data collection program. At a minimum, this program should tally the number of pedestrians and bicyclists at key locations around the community (particularly at pinch points, in downtown, near schools, and on greenway trails); the same locations should be counted in the same manner annually. If major pedestrian, bicycle, or greenway infrastructure projects are planned, baseline and post-construction user counts can be performed through this coordinated annual count process for maximum efficiency. This will provide the town with information about increases in walking and bicycling rates. Baseline user counts are also useful data for making the case for needed improvements; many people in Goldsboro already walk and bike for transportation and recreation, and counts can help to quantify the existing need for a new facility or intersection improvement.

It is recommended that the data collection program use methodology developed by the national National Bicycle and Pedestrian Documentation Project (NBPDP). Counts should be performed in the second week in September; one weekday count (from 5-7 PM on a Tuesday, Wednesday, or Thursday) and one Saturday count (12 noon – 2 pm) should be completed. Counters can be city staff or volunteers, as long as proper training is provided. If desired, the data collection effort can also include surveys to learn more about walking and bicycling demographics, where people are traveling to and from, and what their needs are.

The NBPDP website includes count and survey instructions, forms, and participant training materials:

- <http://bikepeddocumentation.org>





Walking, Bicycling, and Greenways Report Card

Purpose: Share information about key walking and bicycling metrics

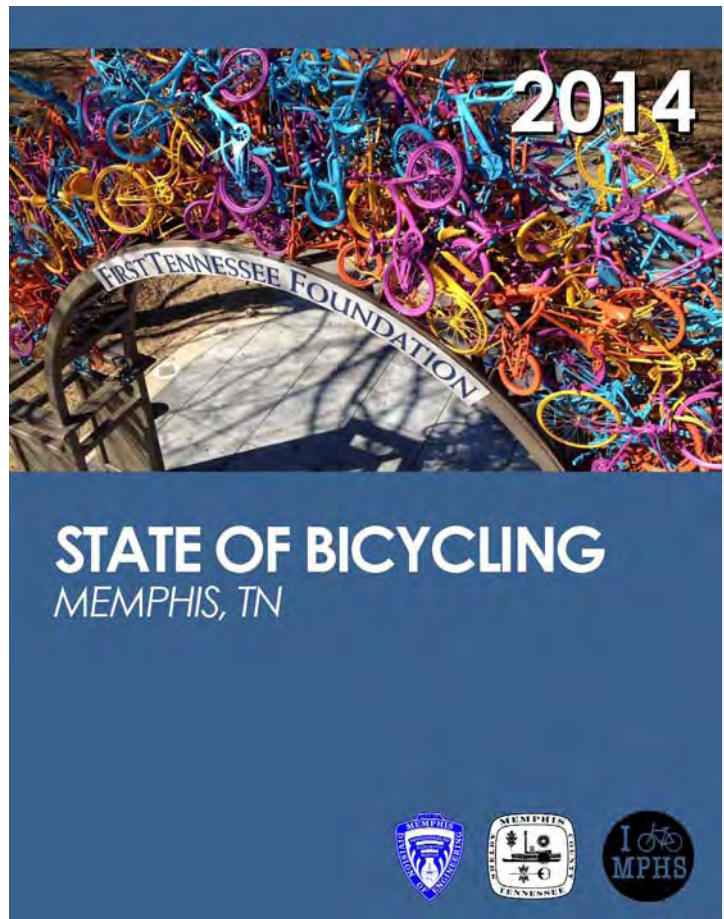
Audience: General public; Elected officials and decision makers; City staff

Partners: City of Goldsboro Planning and Engineering Departments; City of Goldsboro and Town of Pikeville Public Works Departments; Goldsboro Parks and Recreation Department, Bicycle and Pedestrian Advisory Committee

As the implementation of this plan progresses, a useful strategy is to use performance benchmarks to measure implementation accomplishments. A comprehensive review of the plan's progress should be published in an annual report that includes relevant performance metrics (walking and bicycling count results, new bicycle and pedestrian facility miles, completed projects, new and ongoing programs, pedestrian- and bicyclist-involved crashes). The report may also include information on user satisfaction, public perception of safety, or other qualitative data that has been collected related to walking and bicycling. Tracking successes over time helps to build momentum and justify continued or increased funding for bicycle and pedestrian projects and programs.

Sample program:

- City of San Francisco - San Francisco, CA: http://www.sfbike.org/download/reportcard_2006/SF_bike_report_card_2006.pdf



Maintenance Hotlines

Purpose: Allow road users to report safety problems related to walking and bicycling facilities and request facilities

Audience: Goldsboro residents who walk and bicycle

Partners: City of Goldsboro Public Works Department; Bicycle and Pedestrian Advisory Committee

The City of Goldsboro can work together with residents to identify walking and bicycling safety issues by creating online forms and/or hotlines that residents can use to request maintenance or enhancements. The online form could be housed on the city's One-Stop Bicycle and Pedestrian Website (see page 7-11). A maintenance hotline benefits the public by helping them route their concerns to the correct party. It also benefits the city by making sure they hear about potential safety and liability issues early so they can take action. Many jurisdictions also find that this approach is beneficial because their scheduled maintenance and complaint-based inspection approach cannot identify every legitimate issue, so hotlines and web forms can essentially distribute the job of inspecting facilities to all residents.

The highest priority should be creating a mechanism for residents to report bicycling and walking safety issues such as cracked pavement, blocked drains, malfunctioning crossing signals, encroaching vegetation, and debris in bike lanes or along sidewalks or trails. Residents may also file complaints about property owners who repeatedly fail to clear vegetation or other debris from sidewalks. If desired, additional input may be invited such as allowing residents to request bicycling and walking maps by mail, allowing residents to request parking enforcement that impacts walking and bicycling (e.g., parked cars blocking ADA ramps or bike lanes), and/or allowing residents to request traffic safety enforcement.

Sample program:

- Durham "Report a Problem" web page: http://www.bikewalkdurham.org/BPAC_report.html


Durham Bicycle and Pedestrian Advisory Commission (BPAC)
BPAC meets at 7:00pm, the third Tuesday of each month, in the Durham City Hall committee room. The public is always invited.

bike walk durham.org

Report a Problem
In Durham, to report a problem with a sidewalk, bike path or other facility:

1. For emergencies – call 911
2. Non-emergency police issues (e.g., vehicles parked in bike lane or on sidewalk), call 560-4600
3. For most issues (potholes, sidewalk repairs, signal problems, street sweeping, etc.): Call [Durham One Call](#) (560-1200)
4. [Street Light Problems](#)
5. [Comments on Durham Bike Map](#)
6. [Request a Bike Rack on Public Property](#)
7. [Zoning Complaint Form](#) (to report a blocked / inaccessible bike rack or sidewalk on private property, etc.)

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Chapter 8: Implementation

Chapter Contents:

Overview

*Action Steps for
Implementation*

Organizational Framework

Infrastructure Action Steps

Evaluation

Maintenance

OVERVIEW

This chapter defines a structure for managing the implementation of the Goldsboro Bicycle, Pedestrian, and Greenway Plan. Implementing the recommendations of this plan will require leadership and dedication to bikeway, walkway, and trail development on the part of a variety of agencies. Equally critical, and perhaps more challenging, will be meeting the need for a recurring source of revenue. Even small amounts of local funding could be very useful and beneficial when matched with outside sources. Most importantly, the partners who have led this planning effort, City of Goldsboro and Goldsboro MPO, need not accomplish the recommendations of this Plan by acting alone; success will be realized through collaboration with state and federal agencies, the private sector, and other non-profit organizations.

Given the present day economic challenges faced by local governments (as well as their state, federal, and private sector partners), it is difficult to know what financial resources will be available to implement this plan. However, there are still important actions to take in advance of major investments, including key organizational steps and the development of strategic lower-cost bikeway and walkway projects. Following through on the action steps described in this chapter will allow the key stakeholders to be prepared for community-wide network development over time while taking advantage of strategic opportunities, both now and as new, unexpected opportunities arise.

ACTION STEPS FOR IMPLEMENTATION

The following is a recommended organizational framework for managing implementation of the bicycle, pedestrian, and greenway plan. The structure is based on input from the project Steering Committee, the public, targeted stakeholder interviews, and evidence of successful implementation strategies from around the southeast and the country. Suggested roles for the core types of stakeholders involved in implementation are described below. Actual roles may vary depending on how this Plan is implemented over time and the ongoing level of interest and involvement by specific stakeholders.

Form a Bicycle, Pedestrian, and Greenways Advisory Committee

Leadership from individuals representing key stakeholders is essential to move this Plan from concept to reality. These individuals will help advocate for the Plan, and in their professional and personal capacity, they will seek out opportunities to utilize synergies with other projects, individuals, and organizations to keep this plan a priority in the ever-present competition for resources.



Bicycle, Pedestrian, & Greenways Advisory Committee (BPGAC) members should be chosen based on representation of key partner groups and community leaders who value biking, walking, and greenway facilities. Members should expect to contribute time, expertise, and resources towards accomplishing the tasks that lie ahead. Board members or key staff of partner non-profits, members of this project's Steering Committee, and representatives of large landowners may be likely candidates to serve on the BPGAC. The BPGAC should be a forum for leaders to convene periodically to discuss progress, share resources and tools, and otherwise coordinate planning and development activities for the recommended network.

Advance Programmatic and Communication Efforts

A subgroup of the BPGAC should focus on the programmatic and communications elements of this Plan's implementation. This involves celebrating successes in new construction and otherwise raising awareness of the bicycle, pedestrian, and greenway network and its benefits. A key first task of this group is to work with local partners to implement the recommendations found in Chapter 7. These recommendations focus on educational, encouragement, and enforcement strategies for increasing awareness of the network and its benefits, and increasing overall usage.

Within the first 2-3 years of implementation, the City of Goldsboro should apply for Bike and/or Walk-Friendly Community designation. This program element are award programs that recognize municipalities that actively support bicycling and walking activities and safety. Becoming designated as a Bicycle- and Walk-Friendly Community signals to current residents, potential residents, and visitors that the town is a safe and welcoming place for individuals and families to live and recreate. The development and implementation of this plan is an essential first step toward becoming a Walk- and Bicycle Friendly Community.

Build Bicycle, Pedestrian, and Greenway Projects

The City of Goldsboro, the MPO, and its partners should move forward with the design and construction of priority projects. This will require identifying funding, designing, constructing, and maintaining bicycle and pedestrian facilities. The "Infrastructure Action Steps" section later in this chapter provides detailed steps to address this important piece.

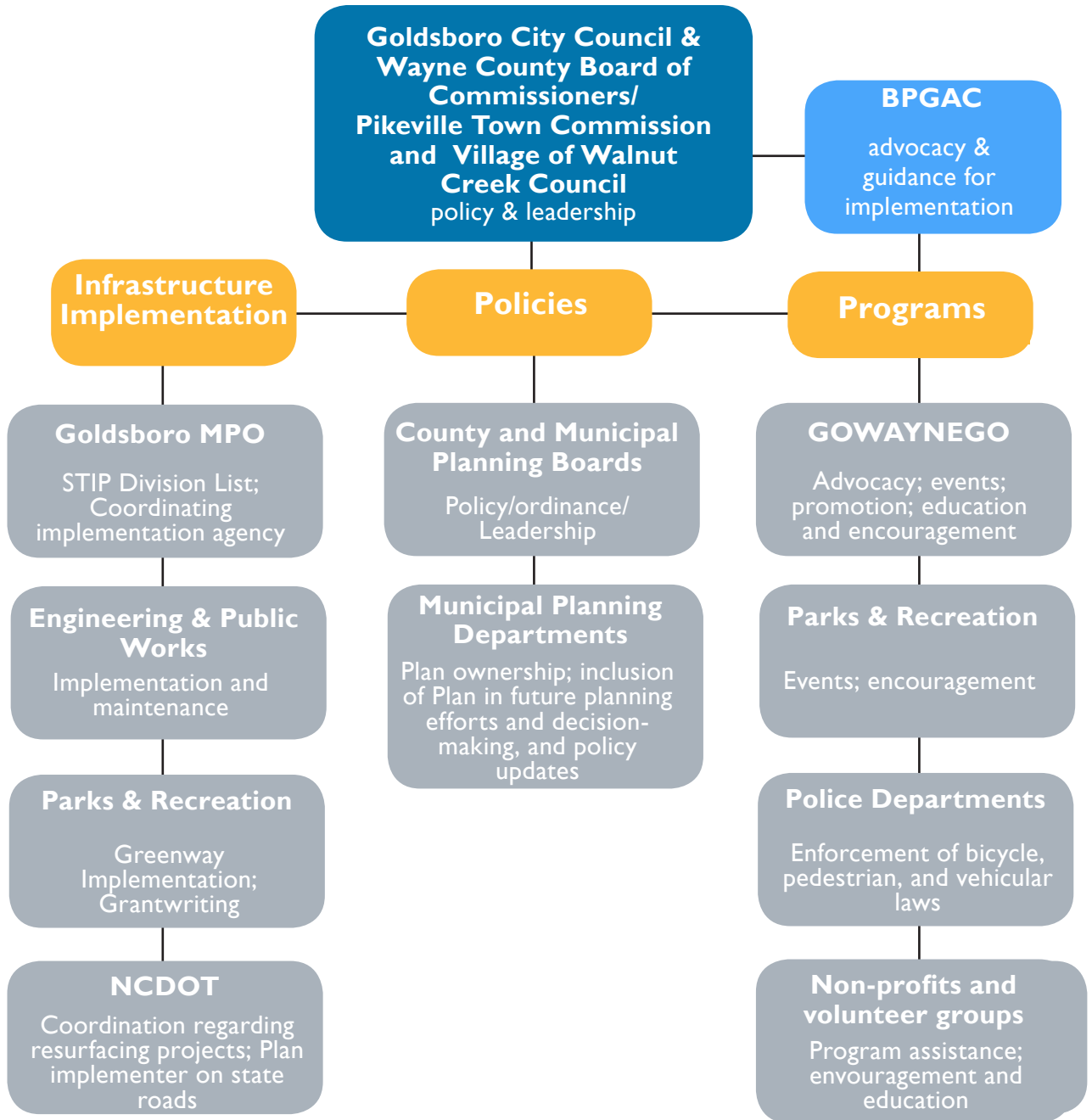
Consider Bicycle/Pedestrian/Trails Coordinator Position

Given staff capacity issues at the City of Goldsboro and Goldsboro MPO, it is recommended that a bicycle/pedestrian/trails coordinator position be created. This position would support both the Goldsboro MPO and the City of Goldsboro Parks and Recreation Department in order to adequately address both transportation and recreation topics. This Coordinator position would be responsible for implementing this Plan and playing a leadership role with the BPGAC. The City of Durham/Durham MPO, City of Raleigh, City of Charlotte, City of Greensboro/Greensboro MPO, City of Winston-Salem/Winston-Salem MPO, and City of Greenville/Greenville MPO all have designated positions to focus on multi-modal transportation issues.



Establish Stakeholder Roles

The organizational framework described in this section is presented visually below. The BPGAC, already discussed in this chapter, plays a leading role in this process with the City of Goldsboro and Goldsboro MPO, serving the function of staff support. Other stakeholders, such as Wayne County, Town of Pikeville, Village of Walnut Creek, GOWAYNEGO, and nonprofit organizations, are identified as partners.





ORGANIZATIONAL FRAMEWORK

Goldsboro MPO

One of 18 North Carolina MPOs, the Goldsboro MPO is responsible for leading regional transportation initiatives, bringing together representatives from Wayne County, City of Goldsboro, Town of Pikeville, and Village of Walnut Creek.

Role related to this Plan include:

- Serve as lead agency for implementation of on-road bicycle and pedestrian projects, working closely with NCDOT and its municipalities.
- Co-manage the Bicycle, Pedestrian, and Greenways Coordinator Position. The Coordinator would report to the City and the TCC/TAC boards of the MPO. The Coordinator would also manage and facilitate meetings for the BPGAC and play lead role in MPO roles described herein.
- Remain up-to-date on opportunities for facility development that coincide with other capital or maintenance projects, such as road resurfacing, new commercial or residential developments, new road construction, etc.
- Manage contracts for facility development on an as needed basis.
- Work with BPGAC to manage public relations for bicycling and walking.
- Work with network development partners to ensure a coordinated approach to operations and maintenance. Operations and maintenance tasks need to be supported by adequate funding and staff levels.
- Work actively to ensure bicycle and pedestrian projects are funded through the State prioritization process (STIP).

City of Goldsboro Parks and Recreation

The mission of the Goldsboro Parks and Recreation Department is to provide a variety of recreation and leisure activities for a diverse population. The Department maintains a system of parks, indoor facilities and open spaces for the enjoyment, safety and well being of all citizens.

Roles related to this Plan include:

- Serve as lead agency for implementation of off-road greenway projects, working closely with NCDOT and its municipalities.
- Co-manage the Bicycle, Pedestrian, and Greenways Coordinator Position. The Coordinator would assist with grant applications and work with other City departments to ensure successful construction and maintenance of greenways.
- Coordinate among county and municipal planners to ensure greenway network connectivity between jurisdiction borders.
- Ensure that the greenway trail design guidelines of this plan are used in the design of greenway facilities and aim for uniform standards in greenway



facilities, such as with signage and wayfinding.

- Lead greenway programmatic activities to encourage use.
- Conduct evaluation activities along greenways such as recording trail user counts.

City of Goldsboro and City Departments

The City of Goldsboro refers to leadership and other departments within the City.

Roles related to this Plan include:

- Adopt a set-aside budget for expenditures of funding that supports the bicycle, pedestrian, and greenways program. Local City staff should be prepared to provide supporting materials for the budget process, including any bicycling, walking, and trail-related reports, user estimates, and benchmarking statistics.
- Consider a bond referendum to fund projects from this Plan.
- Engineering Department – Work with the Goldsboro MPO and NCDOT to implement the infrastructure recommendations of this Plan, especially as they occur with new construction and roadway reconstruction/resurfacing efforts.
- Public Works Department – Work with the Goldsboro MPO and NCDOT to implement the infrastructure recommendations of this Plan using the Design Guidelines from this Plan. Ensure sidewalks are maintained.
- Planning Department – Work with the Goldsboro MPO and Parks and Recreation Department to implement the policy recommendations of this Plan.
- Police Department – Work with the Goldsboro MPO and Parks and Recreation Department to lead in programmatic implementation (especially enforcement). Participate actively in educating the community about lawful and appropriate bicycle, pedestrian, and motorist behavior.

Bicycle, Pedestrian, and Greenway Advisory Committee (BPGAC)

As mentioned previously, this committee will play a major role in championing the implementation of this Plan.

Roles related to this Plan include:

- Advocate for implementing the bicycle, pedestrian, and greenways program.
- Facilitate cooperation among government agencies and nonprofit partners for network development.
- Define and recommend sources of funding for network development.



- Meet quarterly with an agenda that includes: A) Implementation progress updates from each of the member organizations, B) Confirmation of specific tasks to be completed by specific members before the next meeting, and C) Discussion of new opportunities and constraints and identification of ways to address them.
- Pursue funding including the solicitation of major donors and corporate sponsors.
- Build partnerships with land owners for greenway trail development, with special attention given to owners of large or contiguous tracts of land.
- Keep local leaders informed about bicycle, pedestrian, and greenway-related issues and developments through direct dialogue and personal e-mail; promote facility development among local leaders through creative approaches, such as organized tours of existing trails or proposed trail corridors.
- Rally public support for key public hearings and coordinate mass e-mail campaigns for special votes.
- Continue communication and build positive relationships with organizations such as utility companies, public and private schools, and others that can assist with issues related to potential bicycle and pedestrian facility right of way and trail development.

Non-Profits

Non-profit organizations, such as GOWAYNEGO and the Downtown Goldsboro Development Corporation (DGDC), can serve a variety of purposes and are already leading many programmatic-related activities across the Goldsboro community.

Roles related to this Plan include:

- Lead education, encouragement, and enforcement programmatic efforts.
- Participate in the activities of the BPGAC and, as needed, provide representation on the committee.
- Maintain open dialogue with the BPGAC and the City of Goldsboro to promote resource- and information-sharing and reduce duplications of effort.
- Advocate, promote, and encourage the development of the bicycle, pedestrian, and greenway network throughout the community.
- Educate citizens as to the benefits of biking and walking and trails and greenways.
- Play an active role in raising funds for network development in concert with the BPGAC.



- When possible, fund programs or bicycling/walking amenities such as bicycle racks.
- Help to organize volunteers to assist with implementation and management.
- Sponsor or co-sponsor biking and walking and greenway events.

Wayne County, Village of Walnut Creek, and Town of Pikeville

Wayne County and local municipality governments play key roles in facilitating implementation of this Plan.

Roles related to this Plan include:

- Participate in the activities of the BPGAC and, as needed, provide representation on the committee.
- Maintain open dialogue with the BPGAC and the City of Goldsboro to promote resource- and information-sharing and reduce duplications of effort.
- Contribute staff time and expertise to the network development process.
- Work with Goldsboro MPO to push forward bicycle and pedestrian projects for state-level funding (through STIP process).
- Whenever possible, accept ownership of greenway trails developed by other partners and, at minimum, accept responsibility for facility maintenance and operations.
- Where appropriate, assist in securing right of way for implementation.
- Manage on-street bikeway and walkway construction projects and, whenever possible, manage off-street greenway construction.
- Coordinate among county and municipal planners to ensure network connectivity between jurisdiction borders.
- Ensure that the design guidelines of this plan are used in the design of network facilities and aim for uniform standards in greenway trail facilities, such as with signage and wayfinding.
- Update and enforce bicycle and pedestrian-friendly ordinances and regulations and ensure that transportation-land use integration and the health of its citizens are considered with development decisions.
- Adopt a budget for expenditures of funding that supports the bicycle, pedestrian, and greenways program.



NCDOT

NCDOT's mission is to "connect people and places safely and efficiently, with accountability and environmental sensitivity to enhance the economy, health and well-being of North Carolina."

Roles related to this Plan include:

- NCDOT Division Four should be prepared to provide guidance and technical support for implementing on-street bikeway and walkway facilities, as well as related greenway trail facilities such as shared-use paths in roadway corridors, trail-roadway crossings, and improvements that increase safety for bicyclists and pedestrians crossing bridges on state roadways.
- Continue working with City of Goldsboro and Goldsboro MPO on coordination of upcoming and future roadway projects that involve bikeway and walkway recommendations. Communication with City of Goldsboro, Wayne County, Town of Pikeville, and Village of Walnut Creek, and BPGAC regarding scheduled road maintenance and road construction projects is crucial to network development (Example success during this planning effort was installation of buffered bike lanes on Elm Street during scheduled resurfacing).

INFRASTRUCTURE ACTION STEPS

While establishing the administrative structure described, stakeholders should move forward with infrastructure development by proceeding with the design and construction of priority projects. They should also work to identify funding for longer-term, higher-cost projects.

Estimate Costs

Cost estimates for the greenway priority projects of the Plan are provided in Chapter 3. Costs for higher priority on-road bicycle and pedestrian projects are provided in Appendix I. Costs for developing additional network segments can be estimated using unit-level cost estimates listed below. Table 8-1 offers a summary of the fully burdened costs of the facility types recommended in this Plan. The paved greenway estimates assume a 10 foot wide asphalt path. All costs are total installed costs that include: planning and engineering, environmental, and contingency. Land acquisition costs are not included.

Identify Funding

Achieving the vision that is defined within this Plan requires, among other things, a stable and recurring source of funding. Communities across the country that have successfully engaged in bicycle, pedestrian, and trail development programs have relied on multiple funding sources to achieve their goals. No single source of funding will meet the recommendations identified in this plan. Instead, stakeholders will need to work cooperatively a wide range of private sector, municipality, state, and federal partners to generate funds sufficient to implement the program.

**Table 8.1 Cost Estimates (Per Unit)**

Facility Type	Per Unit Cost
Paved Greenway	\$600,000-\$1,000,000
Paved Shoulder	\$400,000-\$600,000
Natural Greenway	\$100,000-\$275,000
Bicycle Route/ Bicycle Boulevard	\$10,000-\$114,000
Bicycle Lane	\$16,000-\$60,000
Shared-Lane Marking	\$8,000-\$14,000
Sidewalk with curb and gutter (one-side)	\$844,800 (\$160/LF)

A stable and recurring source of revenue is needed to generate funding that can then be used to leverage grant dollars from state, federal, and private sources. The ability of the local agencies to generate a source of funding for trails depends on a variety of factors, such as taxing capacity, budgetary resources, voter preferences, and political will. It is very important that these local agencies explore the ability to establish a stable and recurring source of revenue for trails.

Donations from individuals or companies are another potential source of local funding. Recommended funding sources are included in Appendix D: Funding Sources.

Leverage Opportunities

In the course of seeking funding opportunities, consider partnerships with developers and non-traditional trail development partners. Implementing a community-wide bicycle, pedestrian, and trails system is an iterative process often well served by opportunistic chances. By involving the landowner or developer early in the trail development process, they have the opportunity to share in the discussions of the specific trail alignment and trail features, ultimately creating a transportation and recreation corridor that directly contributes to the economic potential of the developed property.

Proposed trail segments that connect to other regional trails also present opportunities to leverage investments. As the Mountains-to-Sea Trail moves forward with trail development, there is an opportunity to connect into this statewide trail system -- leveraging funding investments and generating awareness for a potential regional trail network that links each of these corridors to one another.

Complete Priority Bicycle, Pedestrian, and Greenway Projects

By moving forward quickly on priority projects, the City and its stakeholders will demonstrate their commitment to carrying out the Plan and will better sustain enthusiasm generated during the outreach stages of the planning process. Chapter 3 and Appendix I identify priority bicycle, pedestrian, and trail projects.



Design, Construct, and Maintain Network Facilities

Once a network segment is selected and, if necessary, land or easements are acquired, facility design typically follows. For this Plan, some facilities, such as bicycle routes or shared-lane markings, will require signage and limited construction activities. Other segments will require varying degrees of clearing and natural surface grading, but still may be able to be implemented without design or construction documents. Preliminary design plans should be reviewed by multiple stakeholders, including emergency service personnel and the local police department, so they can offer suggestions and have their voices heard from the very beginning. There is sometimes a disconnect between the designer and operating staff. Designs that are pleasing to the eye are not always conducive to good and inexpensive maintenance. Therefore, it is imperative that cost saving should be a part of any design, with a thorough review of the plans while they in a preliminary stage.

Annual operations and maintenance costs vary, depending upon the facility to be maintained, level of use, location, and standard of maintenance. Operations and maintenance budgets should take into account routine and remedial maintenance over the life cycle of the improvements and on-going administrative costs for the operations and maintenance program. A full description of maintenance activities can be found on page 8-14.

On-road bicycle facilities can be implemented in a variety of ways. These are described briefly below:

Striping - Some roadways can be simply striped with bicycle lanes because of adequate, wide widths of the roadway's outside lanes. This is an inexpensive implementation method.

Pavement Marking - Sharrows, as described in Chapter 4, are simple pavement markings added to the roadway. In these cases, additional pavement width is not needed. Therefore, this is an inexpensive implementation method.

Roadway Retrofit (Lane Narrowing) - In some cases, existing roadway travel lanes can be narrowed to allow for a roadway restriped with bicycle lanes. The typical minimum travel lane is 10'. This is still inexpensive but requires removal of old striping. It is ideal to restripe during a scheduled resurfacing.

Roadway Retrofit (Road Diet) - In some cases, a reduction in travel lanes can be implemented to include bicycle lanes or cycle tracks. A full traffic analysis is required before implementing a road diet. A typical road diet occurs when converting a four-lane road to a three-lane with bicycle lanes.

Roadway Retrofit (Bicycle Boulevard) - The addition of pavement markings, signage, and traffic calming measures can be added at varying costs on an existing residential roadway.

New Construction - When a new roadway is constructed or existing roadway reconstructed, the addition of bicycle lanes, paved shoulders, cycle tracks, or sidepaths may occur.

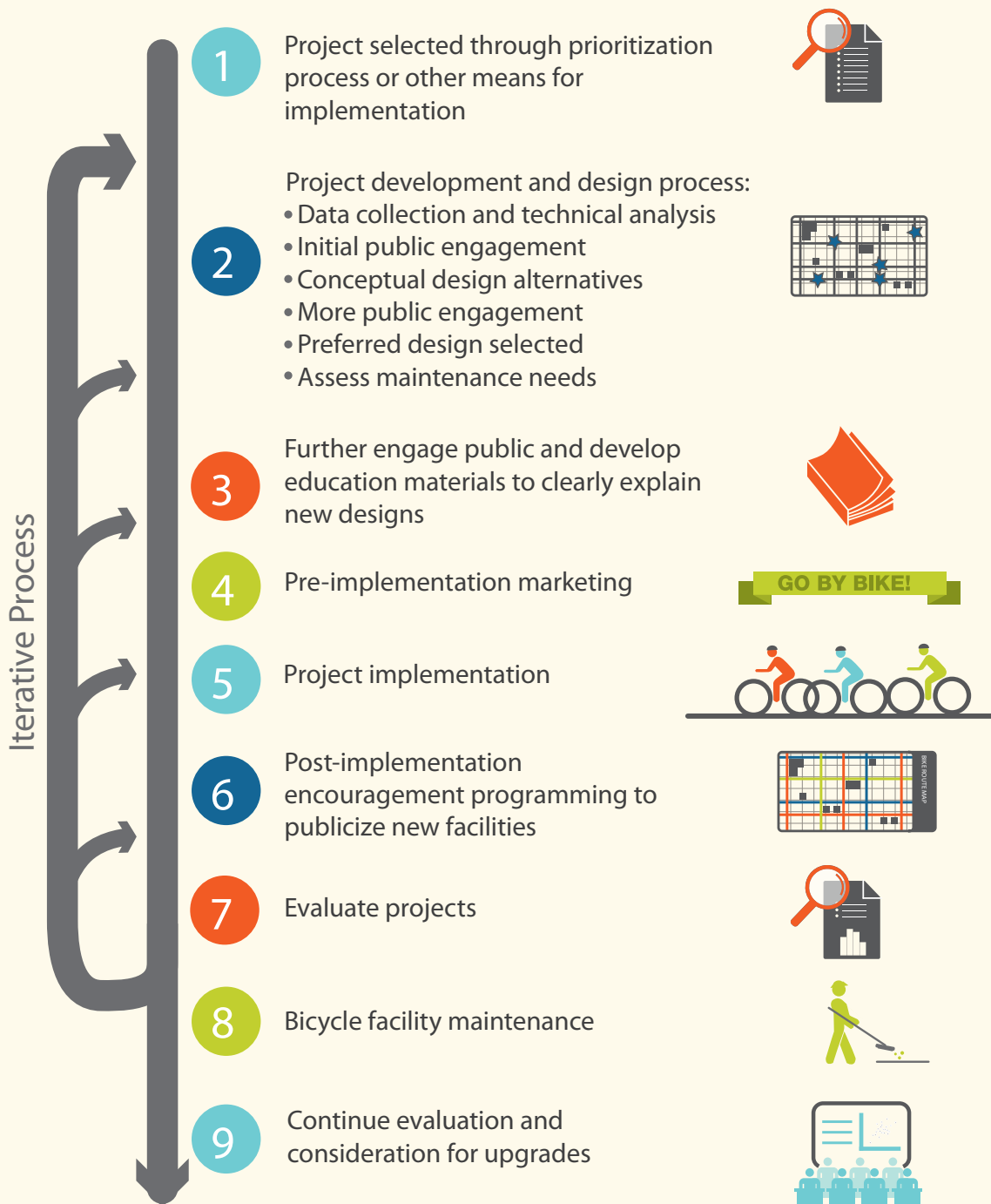
The typical greenway development process is portrayed in a chart on the following page. A suggested on-road bicycle project delivery process is shown on page 8-12.



TYPICAL GREENWAY DEVELOPMENT PROCESS



BICYCLE PROJECT DELIVERY PROCESS



The above graphic includes all possible steps in the on-road bicycle facility development process. The process is flexible based upon facility type, implementation method, and desired public involvement.



EVALUATION (PERFORMANCE MEASURES)

The performance measures in the plan are important for assessing whether the plan is meeting its goals over time. While they are focused on assessing progress over the long-term, data on these measures should be collected on a regular basis to help track interim progress being made. This information will allow for course adjustments to be made to help ensure achievement of plan goals.

The plan performance measures are generated from the goals of the Plan (see Chapter 1). The performance measures for the Plan were selected in part based on the City's and State's ability to collect relevant data, both now and in the future. This data can help inform project selection and design, the development and success of education and encouragement programs, measures to improve safety, and other issues. Data and performance measures outlined in the following table represent the way the City and MPO will track achievement of the Plan's goals over time.

From the beginning, and continuously through the life of the BPGAC, it should brainstorm additional specific benchmarks to track through a monitoring program and honor their completion with public events and media coverage. Monitoring should be supported by programmatic efforts, where possible, such as conducting annual or bi-annual bicyclist, pedestrian, and greenway trail counts or creating an annual Bicycle, Pedestrian, & Greenways Report Card. Benchmarks should be revisited and revised periodically as network development efforts evolve.

Table 8.2 Performance Measures

Goal Categories	Performance Measure	Baseline Measurement	Performance Target/ Desired Trend
Safety, Economy, Health, Mobility, Environment	Number of bicycle and pedestrian programs	2014 Number	Increase
Mobility & Safety	Percentage of bicycle and pedestrian network completed	2014 Percentage	Increase
Safety	Bicycle/Pedestrian Collision Rates; Number of serious injuries and fatalities	NCDOT Dept. of Public Safety (2007-2012); City of Goldsboro Police Dept.	Reduce collision rates; Zero fatalities
Economy	Funding set aside for bike/ped improvements	2014 Number	Increase
Health, Economy, Mobility, Safety	Areas lacking bicycle and pedestrian facilities	2014 Number	Zero areas lacking bicycle and pedestrian facilities
Mobility	Commute mode share	2012 Census Data	Increase



MAINTENANCE

The Goldsboro bicycle and pedestrian network should be viewed and maintained as a public resource. This network will become infrastructure similar to street systems or utility networks, serving the community for generations. The following guiding principles will help ensure the preservation of a first class system:

- Good maintenance begins with sound planning and design.
- Foremost, protect life, property, and the environment.
- Promote and maintain a quality outdoor recreation and transportation experience.
- Maintain quality control and conduct regular inspections.
- Include field crews, police and fire/rescue personnel in both the design review and ongoing management process.
- Maintain an effective, responsive public feedback system, and promote public participation.
- Be a good neighbor to adjacent properties.
- Operate a cost-effective program with sustainable funding sources.

Maintenance schedules and standards help keep trail systems attractive and as safe recreational destinations and transportation facilities, and are critical to the safety and enjoyment of trail users. Managing risk, safety, and security are important components woven into the management and maintenance scheme. Creating an effective administrative structure will foster the successful development and implementation of an efficient system with stable support, leading to a highly connected network of trails and pathways that will become part of everyday life and utility in Goldsboro. The following sections provide detail on how this will be achieved.

Maintenance Activities

The following are typical duties and activities often performed by management and maintenance staff.

- Vegetation Management: mowing, litter clean-up, manure removal, pruning, trimming, weeding, invasive species management, tree removal, planting
- Drainage Cleaning and Maintenance: flushing, raking, slough and berm removal, cleaning drain dips
- Trailhead, Amenity, and Signage Maintenance: parking, toilet facilities, informational kiosks, picnic tables, benches, maps, trail rules and regulations, traffic control for trail users, mile markers, directional signs, fencing
- Trail Inspection/Patrolling: greet users, encourage proper etiquette, make minor repairs, report vandalism



General annual management and maintenance costs vary depending on the facility to be maintained, level of use, location, and standard of maintenance. Budgets should take into account routine and remedial maintenance over the life cycle of the improvements and on-going administrative costs for the program. The section below provides an overview of approximate costs for basic greenway, bicycle, pedestrian, and equestrian trail management and maintenance services. The estimates include field labor, materials, equipment, and administrative costs.

Routine Management and Maintenance Costs

Routine management and maintenance refers to the day-to-day regimen of litter pick-up, trash and debris removal, weed and dust control, trail sweeping, sign replacement, tree and shrub trimming, and other regularly scheduled activities. It also includes minor repairs and replacements, such as fixing cracks and potholes or repairing a broken hand railing. The following are typical annual costs for different trail types.

Greenway Trails

Many factors influence greenway trail costs, such as amount of use, maintenance crew-size needed, proximity to urban centers, and number of interfaces with geographical and man-made features. Annual routine maintenance costs range from nominal to as high as \$7,000 per mile. Research conducted by the Rails-to-Trails Conservancy (RTC) indicates costs are often on the lower end for managing and maintaining rail trails at approximately \$1,500.

On-Road Bicycle Facilities

Maintenance of the on-roadway bicycle facility system is handled by the local Public Works Department and NCDOT. Some provision should be made however for up to fifteen regular inspections per year, to include minor repair or replacement of signs, vegetation grooming and other items that an inspector could remedy in the field. Additional attention should be paid to any potholes or other pavement damage. Additional sweeping may be required where bicycle lanes and wider shoulders are provided along roads. Staff costs can be reduced by training local volunteers or bicycle advocates to conduct inspections and providing a means for citizens to report bicycle facilities needing repairs.

Pedestrian Facilities (On Road Sidewalk/Sidepath)

Maintaining pedestrian facilities is an important part of maintaining the complete right-of-way for all users. When cracks, surface defects, tree root damage, and other problems are identified, they should be repaired to ensure sidewalks remain accessible to all pedestrians. Repairs are generally completed on an as-needed basis rather than through regularly scheduled evaluation of the sidewalk condition.

Remedial Management and Maintenance Costs

Remedial Management and Maintenance refers to correcting significant defects in the network, as well as repairing, replacing, or restoring major components



that have been destroyed, damaged, or significantly deteriorated from normal usage and old age. Some items (“minor repairs”) may occur on a five- to ten-year cycle, such as repainting, seal coating asphalt pavement, or replacing signage. Major reconstruction items will occur over a longer period or after an event such as a flood. Examples of major reconstruction include stabilization of a severely eroded hillside, repaving a trail surface or a roadway that is part of the bicycle network, or replacing a footbridge. Remedial maintenance should be part of a long-term capital improvement plan.

The following estimates provide a general idea of potential remedial management and maintenance obligations:

Greenway Trails

A 7- to 15-year life is assumed for asphalt and crushed fine trails after which an overlay may be required. A complete resurfacing after 20 to 25 years is anticipated. Concrete is assumed to last twice as long. Bridges, tunnels, retaining walls and other heavy infrastructure are assumed to have a 100-year life or longer.

On-road Bicycle Facilities

Remedial work for on-road bicycle facilities includes asphalt repaving (five feet on either side of the street), curb and gutter, sewer-grate, and manhole repair. Pothole and crack repair are considered routine. Pavement markings, such as bicycle lane lines, bicycle stencil markings, and fog lines should be re-installed when other roadway pavement markings are improved. Since this work is done as part of the current street maintenance regime, the cost is assumed to be covered.

Pedestrian Facilities

Sidewalks should be constructed with concrete, which requires replacement in 50 to 75 years. A rough cost estimate for on-linear-mile of concrete sidewalk could be provided by NCDOT.

Setting Trail Priorities

A detailed and systematic management and maintenance system will help set priorities. Sound overall advice on setting trail maintenance priorities is provided in the U.S. Forest Service, Trail Construction and Maintenance Notebook, 2004 Edition (this edition is more specific on this topic than the updated 2007 edition. Though directed at backcountry trails, it is valid for all trail settings):

“High-quality and timely maintenance will greatly extend the useful life of a trail. The trail crew’s task is to direct water and debris off the tread, and keep the users on it. The best trail maintainers are those with “trail eye,” the ability to anticipate physical and social threats to trail integrity and to head off problems. Even though you know the proper maintenance specifications, sometimes there is too much work for the time you have to spend. How do you decide what to



do? Since it is a given that there will always be more work to do than people to do it, it's important to:

- Monitor your trail conditions closely.
- Decide what can be accomplished as basic maintenance.
- Determine what can be deferred.
- Identify what area will need major work.
- The first priority for trail work is to correct truly unsafe situations. This could mean repairing impassable washouts along a cliff, or removing blow down from a steep section of a pack stock trail.
- The second priority is to correct things causing significant trail damage--erosion, sedimentation, and off-site trampling, for instance.
- The third priority is to restore the trail to the planned design standard. This means that the ease of finding and traveling the trail matches the design specifications for the recreational setting and target user. Actions range from simply adding "reassurance markers" to full-blown reconstruction of eroded tread or failed structures.

Whatever the priority, doing maintenance when the need is first noticed will help prevent more severe and costly damage later."



**GOLDSBORO MPO
BICYCLE, PEDESTRIAN and GREENWAY PLAN**

*Prepared for the Goldsboro MPO
Prepared by Alta/Greenways, with assistance from Sage Design and Kimley Horn & Associates*

