



WILMINGTON URBAN AREA Metropolitan Planning Organization

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The mission of the Wilmington MPO is to develop and implement a comprehensive multi-modal transportation plan that supports the existing and future mobility needs and economic vitality of the Wilmington Urban Area. This shall be accomplished by protecting the environment, safe guarding the social equity, improving the quality of life for the citizens of the community, improving the local economy and providing for the safe and efficient mobility throughout the region. This is achieved through the long range transportation planning process which includes a comprehensive, continuous and cooperative approach from citizens and participating members.

Members:

City of
WILMINGTON
Lead Planning Agency

Town of
CAROLINA BEACH

Town of
KURE BEACH

Town of
WRIGHTSVILLE BEACH

NEW HANOVER
County

Town of
BELVILLE

Town of
LELAND

Town of
NAVASSA

BRUNSWICK
County

PENDER
County

CAPE FEAR
Public Transportation
Authority

North Carolina
BOARD OF
TRANSPORTATION

Technical Coordinating Committee Meeting Agenda

TO: Technical Coordinating Committee Members
FROM: Mike Kozlosky, Executive Director
DATE: January 9, 2014
SUBJECT: January 15th meeting

A meeting of the WMPO Technical Coordinating Committee will be held on Wednesday, January 15th at 10 am. The meeting will be held in the Traffic Conference Room on the 4th Floor of 305 Chestnut Street in downtown Wilmington.

The following is the agenda for the meeting:

- 1) Call to Order
- 2) Approval of Minutes:
 - a. 11/20/13
- 3) Presentation
 - a. MTP Public Outreach Results, Bethany Windle, WMPO
 - b. NCDOT Modal Presentations
- 4) New Business
 - a. Resolution supporting the Town of Belville's PARTF application for the Brunswick Riverwalk
 - b. Resolution adopting the River to Sea Bikeway Master Plan
 - c. Resolution adopting the selected 2014 Surface Transportation Program Direct Attributable (STP-DA) Projects
 - d. Resolution adopting the selected 2014 Transportation Alternatives (TA) Projects
 - e. Resolution adopting the STIP/MTIP Amendments (December)
 - f. Opening of the 30-day Public Comment Period on the 2014-2015 UPWP
 - g. Elections of Officers
- 5) Discussion
 - a. Section 5310 Funding
 - b. Wilmington MPO Local Input Point Methodology
- 6) Updates
 - a. Crossing over the Cape Fear River Work Group
 - b. Wilmington MPO
 - c. Cape Fear Public Transportation Authority
 - d. NCDOT Division
 - e. NCDOT Transportation Planning Branch
- 7) Announcements
 - a. Wilmington MPO Bike/Ped meeting- January 16, 2014

8) Next meeting –February 12, 2014

Attachments:

- Minutes 11/20/13 meeting
- Resolution supporting the Town of Belville's PARTF application for the Brunswick Riverwalk
- River to Sea Bikeway Master Plan
- Resolution adopting the River to Sea Bikeway Master Plan
- Resolution adopting the selected 2014 Surface Transportation Program Direct Attributable (STP-DA) Projects
- Resolution adopting the selected 2014 Transportation Alternatives (TA) Projects
- STIP/MTIP Amendments (December)
- Resolution adopting the STIP/MTIP Amendments (December)
- DRAFT 2014-2015 UPWP
- Section 5310 Fact Sheet
- Wilmington MPO Local Input Methodology
- City of Wilmington/Wilmington MPO Project Update (January)
- Cape Fear Public Transportation Authority Update (January)

**Wilmington Urban Area
Technical Coordinating Committee
Meeting Notes for November 20, 2013**

Members Present:

Mike Kozlosky, Wilmington MPO
Robert Waring, Town of Leland
Chris O'Keefe, New Hanover County
Helen Bunch, Brunswick County
Ashley Frank, Pender County
Nancy Avery, Town of Kure Beach
Stephanie Ayers, NC Ports
Megan Matheny, WAVE Transit
Don Bennett, City of Wilmington
Patrick Riddle, NCDOT Division 3
Nora McCann, NCDOT Transportation Planning Branch

1. Call to Order

Mr. Kozlosky called the meeting to order at 2:06 pm.

2. Approval of Minutes

The minutes for the October 16th meeting were approved unanimously.

3. Presentation

a. Strategic Mobility Formula, Patrick Riddle, NCDOT

Mr. Patrick Riddle gave a presentation on the new Strategic Mobility Formula. He told members that Governor McCrory's 3-Es of Education, Efficiency and Economy are the centerpiece of the new legislation for funding transportation infrastructure needs. The plan will help guide the state in strategically investing resources to ensure that state, regional and local transportation priorities are met.

4. Old Business

a. Resolution adopting the Federal Functional Classification Maps

Ms. Rashid told members that the TAC requested another month to review the functional classification maps and they suggested a few changes to the maps. Those changes include the classification of Village Road to a minor arterial, River Road to a principal arterial, Waltmoor Road to a minor arterial, Independence Boulevard to stay as a minor arterial, and change all of Lumina Avenue to minor arterial.

Ms Rashid told members staff had several suggested changes from Pender County. The changes are to add Sidbury Road, Scots Hill Loop, Washington Acres, Kings Landing Road, Olde Point Road, Mallard Bay Drive, Grandview Drive, Factory Road and Hoover Road as minor collectors.

Mr. O'Keefe suggested changing Harris Road to Shenandoah Road to Brittany Road to a minor collector.

Ms. McCann reminded members that the proposed changes will be checked with the AADTs. Mr. Kozlosky noted that the Federal Highway Administration and NCDOT will review all the requested changes and provide comments to the TAC before these changes are officially approved.

Mr. O'Keefe made a motion to adopt the Federal Functional Classification Maps with the following changes: Harris Road from Gordon Road to Shenandoah Road as a minor collector, Shenandoah Road from Harris Road to Brittany road as a minor collector, and Brittany Road from Shenandoah Road to Murrayville Road as a minor collector, and Lendire Road to be classified as a minor collector from Market Street to Beacon Drive and forward to the TAC for consideration. Ms. Frank seconded the motion and it carried unanimously.

b. Resolution adopting the Roadways projects for submittal in Prioritization 3.0

Ms. Rashid told members the roadway project list is the same as the list submitted in Prioritization 2.0 with the exception of adding 5 new projects for Prioritization 3.0. She noted that Mr. Allen Serkin with the RPO, who could not be in attendance, requested that the construction of a round-about at the intersection of US117 and NC 133 be added to the list.

Ms. Ayers made a motion to adopt the list of Roadway Projects for submittal in Prioritization 3.0 and add the construction of a round-about at the intersection of US117 and NC 133 to the list and forward to the TAC for consideration. Mr. Riddle seconded the motion.

Ms. Frank told members she would like to request that an intersection improvement project at NC 210 and Island Creek Road be added to the list of projects for Prioritization 3.0.

Ms. Ayers amended her motion to include the addition of the NC 210 and Island Creek Road intersection improvements project be added to the list. Mr. Riddle seconded the amended motion and it carried unanimously.

5. Old Business

a. Resolution adopting the revised submittal of bicycle and pedestrian projects for submittal in Prioritization 3.0

Ms. Rashid told members that NCDOT has identified a source of funding for bicycle and pedestrian projects from the "old" SAFETEA-LU funds for Safe Routes to School funding. The Department decided to use the SPOT process to distribute these funds. Staff took the original list of bicycle and pedestrian projects from Prioritization 3.0 that was adopted by the TAC on September 25th to the Bike/Ped Committee to review now that funding has been identified.

Ms. Rashid stated that NCDOT engineers reviewed the list and recommended that the NC133/River Road projects (project # S) be extended all the way south to the next neighborhood south of the school, and instead of a sidewalk, include it as a multi-use path. She noted that they also suggested including a cross-walk at that neighborhood.

Mr. O'Keefe suggested extending the Pine Grave Drive bike lanes (project # B) from Holly Tree Road to Andrews Reach Loop.

Mr. O'Keefe made a motion to adopt the revised submittal of bicycle and pedestrian projects for submittal in Prioritization 3.0 with the following amendments: bike lanes along Pine Grove Drive be extended around the corner to the entrance to Andrews Reach, the Porters Neck multi-use path continue to Market Street, the NC 133/River Road sidewalk be changed to a multi-use path and extended south to the

development to Morecamble Boulevard, and forward to the TAC for consideration. Ms. Frank seconded the motion and it carried unanimously.

b. Resolution supporting the submittal of Rail projects for consideration in Prioritization 3.0

Mr. Riddle made a motion to adopt the resolution supporting the submittal of rail projects for consideration in Prioritization 3.0 and forward to the TAC for consideration. Ms. Avery seconded the motion and it carried unanimously.

c. Resolution supporting the submittal of Ferry projects for consideration in Prioritization 3.0

Mr. Riddle made a motion to adopt the resolution supporting the submittal of ferry projects for consideration in Prioritization 3.0 and forward to the TAC for consideration. Mr. O'Keefe seconded the motion and it carried unanimously.

d. Resolution supporting the Town of Leland's application for the 2014 Bicycle and Pedestrian Planning Grant Initiative

Mr. O'Keefe made a motion to support the Town of Leland's application for the 2014 Bicycle and Pedestrian Planning Grant Initiative and forward to the TAC for consideration. Mr. Waring seconded the motion and it carried unanimously.

e. Resolution adopting the Congestion Management Process for the Wilmington MPO

Ms. Rashid told members as part of the requirements as a new TMA, the Wilmington MPO must adopt a Congestion Management Process (CMP). That process must define what congestion means in our region and create the strategies to reduce the congestion. She said the steering committee created a draft CMP. It will be updated every two years. Ms. Stark noted that a report will be done annually to follow the progress of congestion reduction as outlined in the CMP.

Mr. Riddle made a motion to adopt the Congestion Management Process for the Wilmington MPO and forward to the TAC for consideration. Ms Avery seconded the motion and it carried unanimously.

f. Resolution authorizing an agreement between the Wilmington MPO, City of Wilmington and Cape Fear Public Transportation Authority to provide funding to the Cape Fear Public Transportation Authority for Long-Range Transportation Planning

Mr. Kozlosky told members this is an annual agreement between the Wilmington MPO, City of Wilmington and Cape Fear Public Transportation Authority (CFPTA) for the distribution of the 5303 funds received from NCDOT. 65% of those funds go to CFPTA for long-range transit planning.

Ms. Avery made a motion to approve the resolution authorizing an agreement between the Wilmington MPO, City of Wilmington and Cape Fear Public Transportation Authority to provide funding to the Cape Fear Public Transportation Authority for long-range transportation planning and forward to the TAC for consideration. Mr. Riddle seconded the motion and it carried unanimously.

g. Resolution requesting that NCDOT consider lowering the speed limit to 35 MPH on Salisbury Street and other roadways within the Town of Wrightsville Beach's municipal limits on or adjacent to the Heide Trask drawbridge

Mr. Kozlosky told members the request originated with the Town of Wrightsville Beach. They are requesting NCDOT lower the speed limit on several streets within the town's municipal limits to 35 MPH.

Ms. Avery made a motion to approve the resolution requesting that NCDOT consider lowering the speed limit to 35 MPH on Salisbury Street and other roadways within the Town of Wrightsville Beach's municipal limits on or adjacent to the Heide Trask drawbridge and forward to the TAC for consideration. Mr. Waring seconded the motion and it carried unanimously.

h. Resolution supporting NCDOT to conduct a speed study to determine the appropriate speed on Wrightsville Avenue and Causeway Drive from the intersection of Wrightsville Avenue/Eastwood Road to Keel Street and supports lowering the speed limit of the study deems it appropriate

Mr. Kozlosky told members this request comes from the Town of Wrightsville. Mr. Bennett suggested that the western limit of the study be extended to run from the intersection of Pavilion Drive/Eastwood Road to Keel Street because there is a significant visual transition at that point for motorists.

Mr. Bennett made a motion to approve an amended resolution supporting NCDOT to conduct a speed study to determine the appropriate speed on Wrightsville Avenue and Causeway Drive from the intersection of Pavilion Drive/Eastwood Road to Keel Street and support lowering the speed limit if the study deems it appropriate, and forward to the TAC for consideration. Mr. O'Keefe seconded the motion and it carried unanimously.

i. Resolution requesting NCDOT consider placing Lumina Avenue, Waynick Avenue and North Lumina Avenue on the 5-year resurfacing plan for secondary routes

Mr. Kozlosky told members the Town of Wrightsville Beach is requesting support for the resolution to place Lumina Avenue, Waynick Avenue and North Lumina Avenue on the 5-year resurfacing plan for secondary routes.

Mr. Bennett asked if the streets are secondary routes or are they in fact designated US primary. Ms. Ayers suggest removing the words "secondary routes" from the resolution. Mr. Kozlosky agreed that the wording could be removed from the resolution.

Ms Ayers made a motion to approve the resolution requesting NCDOT consider placing Lumina Avenue, Waynick Avenue and North Lumina Avenue on the 5-year resurfacing plan for secondary routes but remove the wording "secondary routes" and forward to the TAC for consideration. Mr. O'Keefe seconded the motion and it carried unanimously.

j. Resolution supporting NCDOT to pursue safety funds for the preliminary engineering cost to study access improvements in the vicinity of the interchange at the US 17 Wilmington Bypass and US 17 Business (Market Street)

Mr. Kozlosky told members NCDOT has identified safety concerns with the existing interchange configuration. There are sight distance issues at the stop when you exit the ramp and make a right turn. The Department would like to study the feasibility of relocating the ramp, as well as adding an additional lane traveling north bound on US 17. The resolution has been adopted by the County Commissioners.

Mr. O'Keefe made a motion to adopt the resolution supporting NCDOT to pursue safety funds for the preliminary engineering cost to study access improvements in the vicinity of the interchange at the US 17 Wilmington Bypass and US 17 Business (Market Street), and forward to the TAC for consideration. Ms. Matheny seconded the motion and it carried unanimously.

k. Resolution adopting the STIP/MTIP Administrative Modifications (October)

Ms. Bunch made a motion to support the resolution adopting the STIP/MTIP Administrative Modifications (October) and forward to the TAC for consideration. Ms. McCann seconded the motion and it carried unanimously.

l. Resolution adopting the 2014 Meeting Calendar

Mr. Riddle made a motion to adopt the 2014 meeting calendar. Ms. Bunch seconded the motion and it carried unanimously.

m. Opening of the 30-day Public Comment Period for STIP/MTIP Amendments (December)

Mr. O'Keefe made a motion to open the 30-day Public Comment Period for STIP/MTIP Amendments (December) and forward to the TAC for consideration. Mr. Riddle seconded the motion and it carried unanimously.

6. Discussion

a. STIP/MTIP Administrative Modification (December)

Ms. Stark told members that this item needs to be an amendment to the STIP/MTIP, not a modification because the WMPO's STIP/MTIP is for four years instead of five years like the Department. Mr. Kozlosky noted that if so, a 30-day Public Comment Period would need to be held. Ms. Stark agreed.

Mr. Riddle made a motion to open the 30-day Public Comment Period for this STIP/MTIP Amendment (December) and forward to the TAC for consideration. Ms. McCann seconded the motion and it carried unanimously.

b. MPO Local Input Point Methodology

Mr. Kozlosky told members that the Department has a committee comprised of the folks from the Transportation Planning Branch, PDEA, Program, Development and SPOT who are reviewing the methodology submitted from the MPOs and RPOs. Thus far 9 of the 38 RPOs and MPOs have submitted their methodology for scoring projects. He told members the Wilmington MPO staff will present a draft methodology to the committee in January for review and consideration.

5. Updates

Updates are included in the agenda packet.

6. Announcements

7. Adjournment

With no further items, the meeting was adjourned at 3:43 pm.

**THE ABOVE MINUTES ARE NOT A VERBATIM RECORD OF THE PROCEEDINGS.
THE ENTIRE PROCEEDINGS ARE RECORDED ON A COMPACT DISC AS PART OF THIS RECORD.**

**WILMINGTON URBAN AREA METROPOLITAN PLANNING ORGANIZATION
TRANSPORTATION ADVISORY COMMITTEE**

**RESOLUTION SUPPORTING THE TOWN OF BELVILLE'S SUBMITTAL OF A NORTH CAROLINA
2014 PARKS AND RECREATION TRUST FUND GRANT FOR THE CONSTRUCTION OF
PHASE I OF THE BRUNSWICK RIVERWALK PARK**

WHEREAS, the Wilmington Urban Area Metropolitan Planning Organization provides transportation planning services for the City of Wilmington, Town of Carolina Beach, Town of Kure Beach, Town of Wrightsville Beach, Town of Belville, Town of Leland, Town of Navassa, New Hanover County, Brunswick County, Pender County, Cape Fear Public Transportation Authority and the North Carolina Board of Transportation; and

WHEREAS, the North Carolina 2014 Parks and Recreation Trust Fund (PARTF) is intended to help fund improvements in the state's park system, to fund grants for local governments and to increase the public's access to the state beaches; and

WHEREAS, the Town of Belville owns the largest and only piece of publicly accessible waterfront property on the west side of the Cape Fear River from Navassa to Southport; and

WHEREAS, the Town of Belville is proposing the Brunswick Riverwalk Park Phase I development project including a fishing pier, boardwalks, walking trails, sidewalk, signage, and lighting; and

WHEREAS, the *2009 Brunswick County Comprehensive Parks and Recreation Master Plan* calls for an increase in the number and variety of non-athletic/non-traditional programs for all age groups, including nature-based and outdoor activities such as day trips for kayaking, hiking, environmental education and wildlife viewing; and

WHEREAS, the *2009 Brunswick County Comprehensive Parks and Recreation Master Plan* acknowledges Brunswick's natural resources not being used to their full potential and a deficit in their current trail system and recreation facilities; and

WHEREAS, the proposed Brunswick Riverwalk project could provide economic and health benefits while improving the quality of life of the region's residents; and

WHEREAS, the total estimated cost of Phase I is \$321,794 and the Town of Belville will be providing the local match in the amount of \$160,897.

NOW THEREFORE, be it resolved that the Wilmington Metropolitan Planning Organization's Transportation Advisory Committee hereby supports the Town of Belville's application for the PARTF grant for the construction of a fishing pier, boardwalks, walking trails, signage, and lighting as part of the Brunswick Riverwalk.

ADOPTED at a regular meeting of the Wilmington Urban Area Metropolitan Planning Organization Transportation Advisory Committee on January 29, 2014.

Laura Padgett, Chair
Transportation Advisory Committee

Mike Kozlosky, Secretary

River to the Sea Bikeway Master Plan 2013



PREFACE

Formed in 1729, New Hanover County boasts extraordinary experiences from downtown Wilmington to the Atlantic Ocean. Bordered by the Cape Fear River to the west and the Atlantic Ocean to the east, New Hanover County is rich in scenic, cultural, recreational, historical and natural qualities.

New Hanover County, its beach communities and the City of Wilmington partner to create a dynamic place to live and work characterized by a strong sense of community. It is known for its stewardship of its bountiful assets including its

- Vibrant downtown riverfront
- Energetic beach communities
- Distinctive neighborhoods that include a range of quality housing
- Renowned historic character
- Ample greenspace and pristine and accessible waterways
- Emerging transportation options
- Exceptional education and health care institutions
- Effective regional partnerships
- Diverse employment opportunities

The goal of The River to the Sea Bikeway is to provide visitors and residents with a facility that creates opportunities for basic transportation, recreational use and physical activity while connecting downtown Wilmington to Wrightsville Beach. The bikeway traverses from the foot of Market Street fronting the Cape Fear River in downtown Wilmington, follows the historic path of the Historic Beach Car Line, enters Wrightsville Beach at the Heide-Trask draw bridge and ends at Johnnie Mercer's Pier at the Atlantic Ocean. The bikeway is collaboratively planned and managed by the City of Wilmington and the Town of Wrightsville Beach. New Hanover County and the Wilmington Metropolitan Planning Organization (WMPO) also participate in the planning of facilities and events to promote the bikeway. The purpose of this plan is to guide further development of the bikeway. The adoption of this plan will show citizen and political support for future development and will strengthen grant applications to assist with funding future sections of the bikeway.

Wilmington and New Hanover County serve their citizens and visitors with 3,578 acres of public parks and greenways and 364 miles of sidewalks. Current outdoor recreation opportunities include walking, cycling, hiking, skating and skateboarding, golfing, motorized and non-motorized boating, fishing, traditional and non-traditional sports, professional sports, dog parks, arts and cultural activities and nature interpretation. These amenities and programs are designed to provide physiological, sociological, cultural and economic benefits to residents, contributing to the quality of life for our community through health promotion, tourism promotion and environmental stewardship.

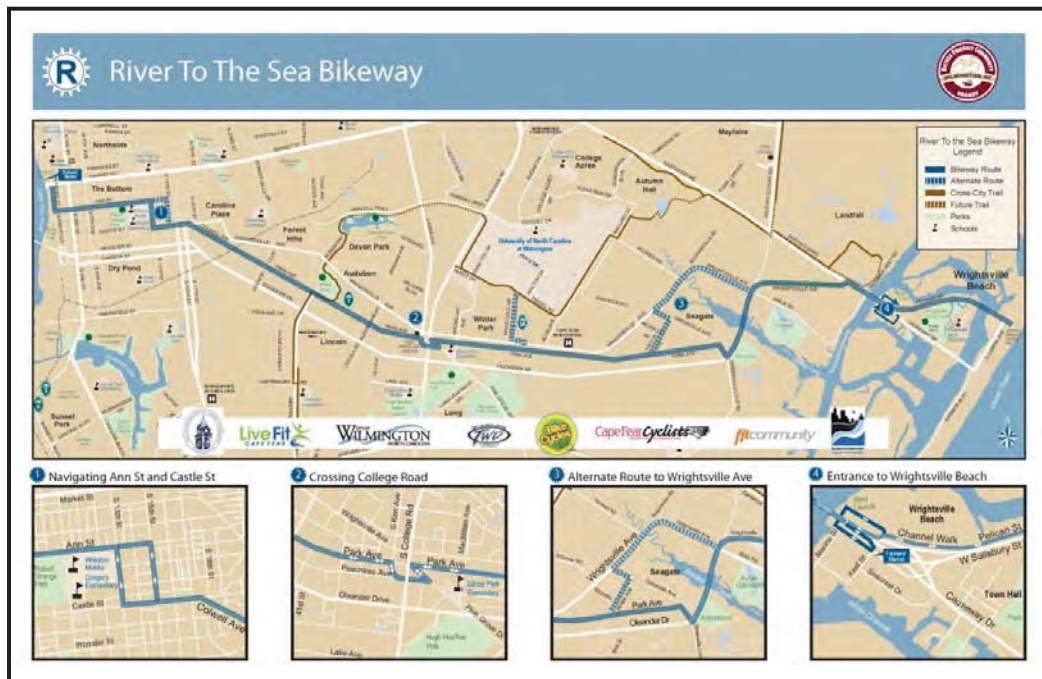
Executive Summary

Throughout this document, River to the Sea Bikeway (RTSB), the bikeway, RTSB, and WMPO Bike Route 1 are used synonymously.

Upon completion, the River to the Sea Bikeway (also WMPO Bike Route 1) is an 11-mile on-and-off-road bicycle route that follows the Historic Beach Car Line, which carried vacationers from downtown Wilmington to Wrightsville Beach by trolley. The bikeway is comprised of neighborhood residential streets, off-road multi-use paths and a few arterial roadways. It provides bicycle and pedestrian access to numerous recreational, cultural, and educational destinations in Wilmington and Wrightsville Beach.

The facilities include the Ann Street Bicycle Boulevard, the Colwell Avenue Greenway, the Park Avenue Greenway, Wrightsville Avenue Bicycle Lanes, and Pelican Drive Sharrows. The Ann Street Bicycle Boulevard and the Colwell Avenue Greenway connect to create the downtown and western-most portion of the bikeway. The central portion includes Park Avenue along the Historic Beach Car Line. The eastern-most portion includes crossing Bradley Creek, following Wrightsville Avenue, crossing the Intracoastal Waterway and arriving at Jonnie Mercer's Pier on the Atlantic Ocean.

The River to the Sea Bikeway is a core bikeway in the developing region-wide bicycle and pedestrian network which will ultimately make basic transportation in the Wilmington area a safer and more convenient option for every citizen. The RTSB intersects most branded community bicycle and pedestrian routes. The RTSB connects to the Gary Shell Cross-City Trail, Wilmington's premier greenway facility, providing bicycle and pedestrian access to numerous recreational, cultural and educational destinations in Wilmington. The RTSB also intersects the East Coast Greenway, a partially constructed trail that spans from Maine to Florida and will function like an "urban Appalachian Trail".



River to the Sea Bikeway map, published April 2012

The goal of The River to the Sea Bikeway is to provide residents and visitors with a facility for basic transportation, recreational use, and physical activity while connecting The Cape Fear River and downtown Wilmington to Wrightsville Beach. Currently, the residents of Wilmington and surrounding areas are underserved by means that provide access to safe, convenient and attractive bicycle and pedestrian facilities. The bikeway provides access to established destinations located along the east-west corridor that connects downtown Wilmington to Wrightsville Beach. This connection between downtown and the beach creates new opportunities for commuting and access to employment, retail, cultural, educational and recreation sites in Wilmington, Wrightsville Beach and New Hanover County, improving safety, economic development, mobility, and the environment.

The bikeway begins at the foot of Market Street at the Riverwalk. The bikeway then traverses Old Wilmington, Bottom, and Forest Hills neighborhoods before crossing Independence Boulevard and passing Empie Park. From Empie Park to South Kerr Avenue, the bikeway follows Park Avenue, a quiet local street that passes the Audubon Trolley Station – the smallest structure on the National Register of Historic Places. After merging with Peachtree Avenue and crossing South College Road in the Winter Park neighborhood, the bikeway merges briefly onto Pine Grove Drive before joining up with Park Avenue again. Between Pine Grove Drive and Wallace Avenue cyclists enjoy the on-road environment of this low-volume and low-speed section of Park Avenue. Between Wallace Avenue and 52nd Street, the bikeway utilizes an off-road path, with a spur to the University of North Carolina Wilmington (WMPO Bicycle Route 1A) via Wood Dale Drive. Between 52nd Street and Greenville Avenue, cyclists again enjoy a low-volume, low-speed on-road environment where neighbors are accustomed to seeing cyclists on the street. From Greenville Avenue, the RTSB crosses Bradley Creek in an on-road section along Oleander Drive. Oleander Drive is a busy arterial roadway without dedicated bicycle facilities. An alternate route to crossing Bradley Creek on Oleander Drive is by taking Greenville Avenue northwest toward Wrightsville Avenue, then Wrightsville Avenue to the Oleander Drive/Military Cutoff intersection.

After crossing Bradley creek via Oleander Drive or Wrightsville Avenue, cyclists merge onto Wrightsville Avenue to ride in marked bicycle lanes towards Heide-Trask drawbridge. At the drawbridge cyclists must again ride with traffic on a busy bridge and along a rough surface; however, immediately after crossing the Heide-Trask drawbridge cyclists can merge onto bike lanes that will take them under the bridge to Pelican Drive. Pelican Drive is a low-speed, low-volume roadway that is marked with sharrows. At this point cyclists must merge onto the Salisbury Street Bridge to arrive at Johnnie Mercer's Pier.



River to the Sea Bikeway (Bike Route 1) alignment along Park Avenue near MacMillian Drive

The River to the Sea Bikeway provides access to many residential neighborhoods, five elementary schools, one middle school, five public parks, two community centers, two bike stations, a university, a hospital, a museum, the region's largest shopping mall, a local bike shop, Johnnie Mercer's Pier, Wrightsville Beach Visitor Center, the Wrightsville Beach Museum, and numerous commercial nodes.



River to the Sea Bikeway (WMPO Bike Route 1) along the Ann Street Bicycle Boulevard at Gregory Elementary School and Williston Middle School

Planning Documents

Numerous planning documents recommend development and expansion of a city-wide and/or county-wide network of bicycle and pedestrian facilities in order to increase basic transportation and recreational opportunities. Adopted plans identifying the need for a pedestrian and bicycle network include:

- *Wilmington New Hanover County Greenway Plan (2013)*
- *2013-2018 Parks, Recreation, and Open Space Master Plan for the Town of Wrightsville Beach*
- *Wrightsville Beach Community Transportation Plan (2013)*
- *Wrightsville Avenue 2030: A Land Use & Transportation Plan for the Wrightsville Avenue Corridor (2012)*
- *Wrightsville Sound Small Area Plan (2011)*
- *Cape Fear Commutes 2035 (2010)*
- *Wilmington Park, Recreational and Open Space Master Plan Update 2010-2015*
- *Pelican Drive/Salisbury Street Bicycle Plan for the Town of Wrightsville Beach (2009)*
- *Walk Wilmington, A Pedestrian Plan (2009)*
- *US 17 Business Corridor Study: 3rd Street to Covil Avenue (2007)*
- *Seagate Neighborhood Plan (2007)*
- *New Hanover County Parks and Recreation Master Plan (2006-2011)*
- *Wilmington-New Hanover County Joint Coastal Area Management Plan (2006)*
- *City of Wilmington Future Land Use Plan (2004)*

The River to the Sea Bikeway is comprised of improved and unimproved segments. Prioritization is based upon a set of criteria including public input, accessibility, connectivity, the safety of road crossings, the physical conditions of the alignments, engineering, permitting, construction and operation costs, drainage management, and easement acquisitions.



River to Sea Bikeway along Park Avenue between Empie Park and Floral Avenue

The portion of the River to the Sea Bikeway located within Wilmington city limits is operated and maintained by the City of Wilmington through its ordinances and policies. Maintenance is overseen by the City's Community Services and Public Services Departments. The portion of the bikeway located in Wrightsville Beach town limits is maintained by the Wrightsville Beach Planning and Parks Department and the Public Works Department. Management of the trail is overseen by the WMPO.

Volunteers may also be a resource in the maintenance of the facility. City and County staff are currently in the process of developing an Adopt-A Trail Program that seeks to form a community partnership between area volunteers and the City of Wilmington. The program provides volunteers with the opportunity to conserve and maintain our natural environment, promote civic responsibility and community pride and serves to fulfill a gap in the demand for maintenance and existing operational funding.

Adopt-A-Trail sponsors will consist of groups and organizations throughout the community. Each sponsor is responsible for general trail maintenance and upkeep of their designated trail segment.

The River to the Sea Bikeway continues to require initial upfront costs consisting of land acquisition, design, permitting, construction costs, as well as ongoing costs such as of operations and maintenance.

In Wilmington and surrounding areas, bikeway development occurs in phases, as funding becomes available either through public funding allocation, grant awards or private donations and sponsorships. Opportunities for project coordination with external organizations such as private developers, sponsorships and external funding partners are important components in planning and funding.

The cost to develop each segment can vary widely based upon certain variables including land acquisition or easement costs; the geography the segment will traverse; drainage patterns; the number and type of permits required; the number and type of traffic devices required; signage; amenities; and landscaping requirements.

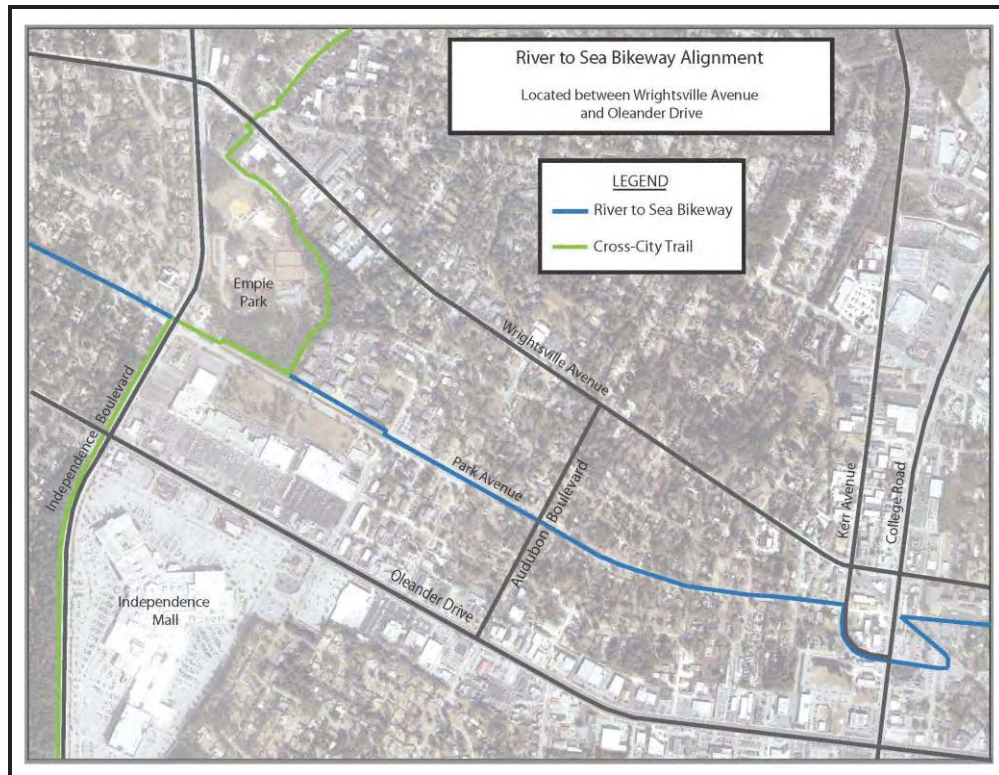
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Planning Framework

The River to the Sea Bikeway, (WMPO Bike Route 1), is an 11-mile on-and off-road bicycle route that follows the Historic Beach Car Line. It is the west-east bicycle/pedestrian corridor in Wilmington and New Hanover County that connects downtown Wilmington to Wrightsville Beach on the Atlantic Ocean. The RTSB is a core west-east route which provides basic transportation in the Wilmington area a safer, more convenient and accessible option for every citizen. It intersects with the Gary Shell Cross-City Trail, which once completed will be a 15-mile multi-use trail providing bicycle and pedestrian access to numerous recreational, cultural and educational destinations in Wilmington and Wrightsville Beach. It also intersects with the East Coast Greenway, an off-road trail that will run all the way from Maine to Florida and will function like an “urban Appalachian Trail”.

Benefits of the RTSB include expanding commuting and recreational access to employment, retail, and recreational sites in Wilmington and Wrightsville Beach, thereby providing safety, mobility, environmental and economic benefits to the area. Additionally, the RTSB has the potential to reduce congestion, increase traffic efficiency, and improve health.



The River to the Sea Bikeway provides a safe cycling alternative to heavy vehicular traffic on Olander Drive and Wrightsville Avenue

The City of Wilmington is nestled between the Cape Fear River and Atlantic Ocean. The historic district lies on the Cape Fear River and includes the Riverwalk and pocket parks as well as shops, restaurants and attractions. The City of Wilmington has 778 acres of public area maintained by the Community Services Department, including 532 acres of public parks, 116 acres of athletic facilities, 16 recreation facilities, 60 acres of greenways, 24 acres of landscaped areas and traffic calming devices, 38 play units, 202 miles of right-of-way, and five miles of medians. It is also home to the University of North Carolina Wilmington (UNCW).

The Town of Wrightsville Beach is located approximately 10 miles east of downtown Wilmington and covers an area of approximately 1.334 square miles. Its primary physical feature is a barrier island approximately 4.5 miles long with its beach strand maintained by the Town's Public Works Department. The Town's Planning and Parks Department maintains the public right-of-ways, 44 public beach accesses and numerous sound accesses, and approximately 23 acres of public park lands with athletic fields, playgrounds, tennis courts, amphitheatre, recreation center, and paddleboard/kayak launches. The Town also maintains a 2.45 mile community wide fitness trail known as "The Loop" which is used by many locals and visitors for running, walking, skating, or dog-walking.

The New Hanover County's Parks and Gardens division manages 2,800 acres of public lands. Of that total, 1,500 acres consists of parks, sporting areas, public spaces, and county owned properties including passive recreational lands. The remaining 1,300 acres consists of school campuses. Included in the New Hanover County system is Airlie Gardens, a historic landmark that encompasses 67 acres of quintessential Southern landscape. The Parks and Gardens Department provides quality programs in both indoor and outdoor spaces for County citizens and visitors through the operation of areas specifically designed for utilization by all age groups and user types. These departments work with other agencies and organizations to maximize the county resources throughout the New Hanover County area.

The Wilmington Metropolitan Planning Organization (WMPO) also provides guidance in the development of the River to the Sea Bikeway. The WMPO is the federally funded and federally mandated regional transportation planning agency for the lower Cape Fear region of southeastern North Carolina. The WMPO is composed of officials from New Hanover, Pender, and Brunswick County as well as many of the municipalities within including the City of Wilmington, the Town of Wrightsville Beach, Carolina Beach, Kure Beach, Belville, Leland, and Navassa as well as the Cape Fear Public Transportation Authority and the North Carolina Board of Transportation. The WMPO facilitates a cooperative, comprehensive and continuing transportation planning process that serves as the basis for the expenditure of all federal transportation funds in the region for streets, highways, bridges, public transit, intersections, and bicycle and pedestrian facilities. The WMPO relies on an appointed Bike and Pedestrian Advisory Committee for guidance on projects and policies related to bicycle and pedestrian activity. The WMPO commissioned a number of planning documents that have led to the support and advancement of the RTSB. The WMPO designated the bikeway as WMPO Bike Route 1 and the WMPO's Bicycle and Pedestrian Advisory Committee organizes the annual River to the Sea Bike Ride held on the first Saturday in May. The advisory committee also provides input on important issues such as design, safety and policy for bicycle facilities throughout the region.

Guiding Principles

Although the majority of the River to the Sea Bikeway alignment has been determined by the historic beach car line, it is important to note that facility improvements will likely occur with existing infrastructure and future development, which at times, can make the alignment complex. The bikeway will become a significant part of Wilmington's culture and identity. In determining the best route for the bikeway, key principles should be established as guidance and evaluation tools. Given that the goal of the River to the Sea Bikeway is to provide residents and visitors with a facility for transportation, recreation/physical activity, and a downtown to the beach connection, the route should:

- Provide connectivity to established destinations;
- Provide a safe route with the least amount of conflicts;
- Minimize property impacts;
- Provide consistency with Wilmington, WMPO, Wrightsville Beach, and NCDOT planning practices and policies;
- ADA Accessible;
- In harmony with existing infrastructure;
- Represent good stewardship of the environment;
- Create a sense of place; and
- Meet all of the above criteria in a way that is politically acceptable.

During the design process, a number of factors are taken into consideration including:

- Topography;
- Right-of-way width;
- Drainage patterns;
- Utilities; and
- Intersection crossings.

In most cases, the bikeway will parallel the roadway off-set from the road or be located on road with bike lanes or sharrows. In locations where it is necessary because of limited right-of-way, utilities, environmental protection, or limitations due to private landownership, the greenway portion will be designed at back of curb. The path should have a maximum of five percent (5%) grade and a cross slope of two percent (2%) for drainage. The design will meet ADA standards.

Relationship to Other Plans

The original concept for the River to the Sea Bikeway is explained in *The Trolley Trail: From the River to the Sea*, produced by the American Institute of Architects (AIA), Wilmington chapter. This document reflects the vision of a greenway connecting downtown Wilmington to Wrightsville Beach along the Historic Beach Line Trolley route. The document follows the simple premise: *wouldn't it be nice to ride a bike from downtown Wilmington to Wrightsville Beach?* The route has been greatly improved over the years through intermittent small projects to upgrade and improve small sections; but the route lacks a corridor-wide level of attention and consistency. As a result, the bikeway is a patchwork of streets, bike lanes, and paths that is not clearly organized. To complete the journey a cyclist must both enjoy a leisurely ride through separated paved trails and signalized crosswalks and navigate through intersections and over narrow bridges inches away from speeding cars.

The AIA document, *The Trolley Trail: From the River to the Sea*, divides the River to the Sea Bikeway into five zones and provides recommendations for improvements in each zone. These recommendations include a variety of bicycle and pedestrian facilities along the corridor including bike lanes, sidewalks, a greenway, bicycle and pedestrian bridges, intersection improvements and bike racks and benches at bus stops. It also includes a variety of facilities to enhance the bikeway including a sundial plaza at Colwell Avenue and Castle Street, a linear park along Park Avenue from College Road to Bradley Creek, an observation/fishing gazebo, kayak launch, kudzu exhibit, native plant beds, informational signage and public restrooms.



Image courtesy of American Institute of Architects Wilmington

Cape Fear Commutes 2035 Transportation Plan is the long range transportation plan for the urbanized area of Wilmington, North Carolina, prepared by the Wilmington Urban Area Metropolitan Planning Organization (WMPO). The plan establishes the goals and objectives for the improvement of travel conditions within the WMPO planning area and makes specific recommendations for transportation projects and funding sources. The *Cape Fear Commutes* Steering Committee received significant input from the cycling community, including detailed input from community surveys and open houses. The *Cape Fear Commutes* plan recommends increasing the security of the transportation system network for both motorized and non-motorized users and to construct several prioritized projects including the River to the Sea Bikeway. The RTS bikeway received prioritization because it is recognized as a regional trail and corridor. The following prioritized projects are located along the River to the Sea Bikeway:

- Priority #20 Park Avenue greenway-use path from Independence to Audubon Boulevard
- Priority #31 Pelican Drive greenway from Heidi Trask Bridge to N. Lumina Avenue
- Priority #34 Oleander Drive greenway from Greenville Avenue to Wrightsville Avenue
- Priority #39 Park Avenue greenway from Peachtree Avenue to Wallace Avenue
- Priority #41 NC Boat Ramp greenway from Old Causeway to Pelican Drive
- Priority #46 Park Avenue greenway from S. 52nd Street to Hinton Avenue
- Priority #59 Park Avenue greenway from Audubon Boulevard to S. Kerr Avenue

Walk Wilmington: A Comprehensive Pedestrian Plan, adopted by the Wilmington City Council in 2009, was developed to meet the demands for safer and more extensive pedestrian facilities, including greenways, sidewalks, and crosswalks. The comprehensive pedestrian plan is designed to guide local, regional, and state efforts to improve conditions for walking in the City of Wilmington. Walk Wilmington identifies and recommends the completion of the River to the Sea Bikeway. It specifically identifies the need for pedestrian signals to be added to the following existing signals along the bikeway:

- Castle Street and South 16th Street
- Castle Street and South 17th Street
- Oleander Drive and Airlie Road/Wrightsville Avenue
- Oleander Drive and Wrightsville Avenue
- Eastwood Road and Wrightsville Avenue

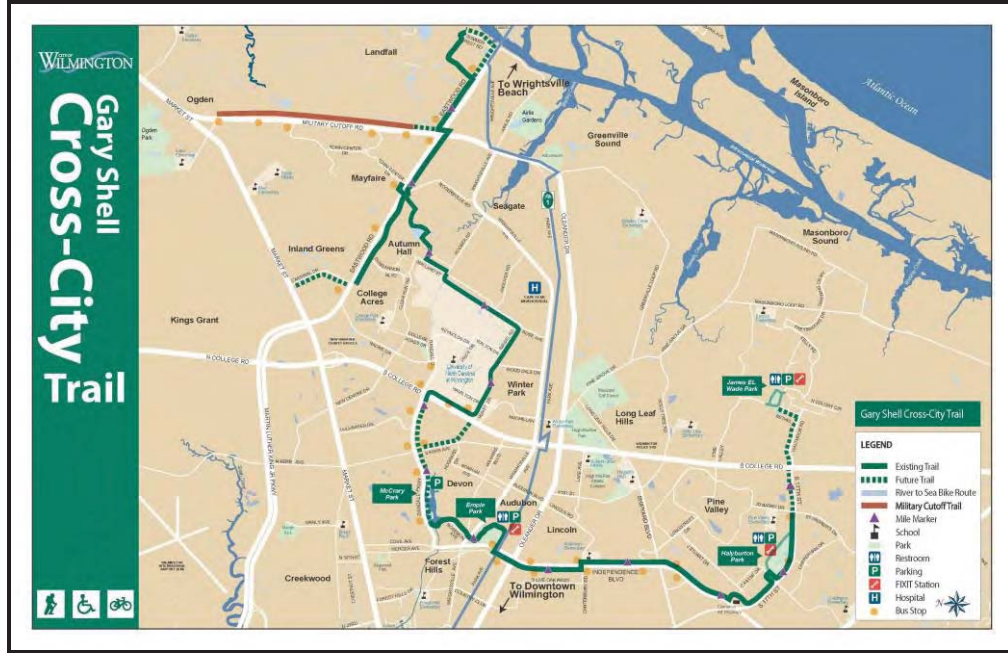
The WMPO, City of Wilmington and New Hanover County recently completed the *Wilmington/New Hanover County Greenway Plan*, a comprehensive plan which will serve as a blueprint for future greenway and blueway networks in New Hanover County. The River to the Sea Bikeway represents one of three primary bicycle/pedestrian corridors in the emerging greenway system. Planning for the undeveloped segments of the bikeway is included in the plan. The Greenway Plan recommends facility improvements along the RTSB route and prioritized the River to the Sea Bikeway second among the trails within Wilmington city limits and third among trails at Wrightsville Beach. The Greenway plan recommends seven intersection improvements along the bikeway:

- Park Avenue and Independence Boulevard
- Wrightsville Avenue and Wallace Avenue
- Greenville Loop Road and Oleander Drive
- Military Cutoff Road and Wrightsville Avenue
- Wrightsville Avenue and Eastwood Road
- Causeway Drive and Salisbury Street
- Salisbury Street and Lumina Avenue

Other plans discuss the need for the River to the Sea Bikeway and support the concept of the bikeway. Some of this information can be found in the public input section of this plan.

Interaction with Existing Bicycle and Pedestrian Networks

An important consideration in the planning of the River to the Sea Bikeway is to identify opportunities for connectivity to existing and future trails. Portions of the River to the Sea Bikeway overlap with the Gary Shell Cross-City Trail and the East Coast Greenway. The Cross-City Trail is primarily an off-road multi-use trail which provides bicycle and pedestrian access to numerous attractions in and around Wilmington. It is an ideal facility for local casual recreationalists and families who enjoy walking, biking, jogging, skateboarding and rollerblading.



Cross-City Trail map, published Spring 2012

The East Coast Greenway is another primary bicycle corridor that traverses Wilmington and New Hanover County. It is a developing trail system, spanning nearly 3,000 miles between Canada and Key West, linking major cities of the eastern seaboard. Currently the spinal route enters Wilmington from the west coming over the Cape Fear River. The coastal route enters Wilmington from the east along Military Cutoff Drive. The two routes converge along the Cross-City Trail and the alignment goes through the southern portion of New Hanover County, taking the ferry from Fort Fisher to Southport and going towards South Carolina.



East Coast Greenway alignment showing spinal route through Wilmington

External Agency Coordination

Portions of the RTSB were funded through various sources to include City of Wilmington Capital Improvement Program and State Transportation Improvement Program as well as maintenance and operations budgets. Several improvements were funded by external agencies in the form of grants.

Along the Ann Street portion of the RTSB, improvements funded by the North Carolina Health and Wellness Trust Fund through a “Fit Community” Grant were branded “the Ann Street Bicycle Boulevard”. The goal of the Fit Community grant is to provide opportunities for physical activity while improving access to healthy foods. A Fit Community Task Force was established to implement the goals and objectives of the project. The task force included City of Wilmington Transportation Planning, City of Wilmington Engineering, City of Wilmington Police Department, the Obesity Prevention Initiative, New Hanover County Planning and Inspections Department, New Hanover County Health Department, Safe Kids Cape Fear, Cape Fear Cyclists, the Residents of Old Wilmington and the Bottom Neighborhood Association. In 2009, the \$60,000 grant funded the construction of the bicycle boulevard from Riverfront Park to the Colwell Avenue Greenway; design work for intersection improvements at Ann Street and South 5th Avenue; multiple bike racks; two information kiosks with literature boxes; supplies and materials for ten community events to promote the bicycle boulevard; and wayfinding signage.

A separate project branded “the Colwell Avenue Greenway” completes the next portion of the RTSB. The Colwell Avenue Greenway was funded by an “Eat Smart Move More” grant in 2010 through the North Carolina Department of Public Health and the City of Wilmington. The goal of “Eat Smart Move More” is to improve communities by providing opportunities to eat smart and move more. An Eat Smart Move More Task Force was established to implement the goals and objectives of the project. The task force includes the New Hanover County Health Department, City of Wilmington Transportation Planning, City of Wilmington Engineering, the Obesity Prevention Initiative, Safe Kids Cape Fear, and Cape Fear Cyclists. The \$25,000 grant funded the construction of a greenway along Colwell Avenue to connect from the Ann Street Bicycle Boulevard to the existing greenway on the River to the Sea Bikeway. It also funded two community events to promote the new path. These events included bicycle safety training, helmet fittings, and a healthy cooking demonstration.

Benefits of Bikeways and Greenways

Bikeways and greenways provide “green” (non-polluting) infrastructure that links people to places while preserving open space. As recreational areas, they provide opportunities for exercise, wellness and physical recreation such as walking and biking. As transportation networks, bikeways and greenways provide safe convenient alternatives to motorized travel and have the potential to reduce traffic congestion. Additionally, positive impacts to the environment can be significant – as multi-modal transportation increases, air quality improves. Socially, greenways provide opportunities to connect people and neighborhoods.

Bicycling is economically advantageous to individuals in regards to cost savings associated with bicycle travel and potential health care costs. It is also advantageous to communities as bicycle infrastructure projects are generally far less expensive than automobile-related infrastructure. For approximately \$50 million, the price of a single mile of four-lane urban highway, hundreds of miles of

bicycle and pedestrian infrastructure can be built¹. Also, shifting daily trips by vehicle to trips by bicycle reduces the impact on the region's transportation network, reducing the need for maintenance, improvement and expansion projects.

The City of Wilmington and New Hanover County recognize the importance of bikeways and greenways and the positive impacts these facilities have on economic development. Bikeways and greenways have many effects on the local economy including positive impacts on tourism, special events, urban redevelopment, community improvement, health care savings, economic investment, and general consumer spending. There is an increasing body of studies showing that greenways improve local economies. In many communities, greenways and other bicycle and pedestrian improvements have proven to raise property values and increase tourism and recreation-related revenues. In a 2002 survey of recent home buyers sponsored by the National Association of Home Builders, trails ranked as the second most important community amenity out of a list of 18 choices. The City of Boulder, Colorado purchased a greenbelt for approximately \$1.5 million. The overall value of the Greenbelt was \$5.4 million which contributed potentially \$500,000 annually to overall property tax revenue for the neighborhood where the greenbelt was located, allowing a return on the investment for the project costs in three years²

Portland, Oregon, the first major city to achieve Platinum Bicycle Friendly Community Status, was estimated to have a \$90 million bicycle-related economy in 2008. This represents a 38% increase since 2006.³ A 2006 study conducted by the Wisconsin Department of Transportation and the Bicycle Federation of Wisconsin estimates that the bicycle-related sector contributes \$556 million to the Wisconsin economy annually. This estimate does not include the economic benefits derived from bicycle tourism, which is reported to constitute a significant portion of the state's \$11.7 billion in the tourism sector.⁴

Greenville, South Carolina reports that trail-based tourism is providing a variety of economic advantages to their community in their report *Greenville Health System, Swamp Rabbit Trail: Year 2 Findings*. In Year 1 a total of nine managers/owners of retail businesses directly abutting and/or within close proximity to the Greenville Health System Swamp Rabbit Trail (GHS SRT) were interviewed. Most businesses reported increases in sales/revenue ranging from 30% to as high as 85%. Twenty managers/owners were interviewed in Year 2, including five retail bicycle shops. The majority of the businesses surveyed in Year 2 reported increases in sales/revenue ranging from 5% to as high as 100% (avg.=47%). Five new businesses decided to open as a result of the trail being built and/or changing

¹ Gotschi T, Mills K. Active transportation for America. 2008; *Rail Trail Conservancy: 1-44*.

² Geoghegan J, Lynch L, Bucholtz S. Capitalization of open spaces into housing values and the residential property tax revenue impacts of agricultural easement programs. *Agricultural and Resource Economics Review*. 2003; 23(1): 33-45.

³ "The Value of the Bicycle-Related Industry in Portland." Alta Planning + Design. 2008.

⁴ "The Economic Impact of Bicycling in Wisconsin." Bicycle Federation of Wisconsin and WI DOT, 2006. <http://www.dot.wisconsin.gov/business/econdev/docs/impact-bicycling.pdf>

location(s) because of their desire to be closer to the trail. Businesses that relocated observed a 30% to 90% increase in sales in Year 2.⁵

A recent study entitled *Using Pedestrian and Bicycle Infrastructure: A National Study of Employment Impacts* examined data from departments of transportation and public works departments from eleven cities in the United States. After evaluating 58 separate projects, the report shows that bicycling infrastructure, such as bike lanes, creates the most jobs for a given level of spending – for each \$1 million spent, the bicycle projects create 11.4 jobs within the state where the project is located. Pedestrian-only projects, such as sidewalks, create an average of about ten jobs per \$1 million invested. Multi-use trails create 9.6 jobs per \$1 million invested. Infrastructure that combines road construction with pedestrian and bicycle facilities create fewer jobs than pedestrian and bicycle projects. Automobile-only road projects create the least number of jobs per \$1 million spent -7.8 jobs.⁶

History of the Bikeway Corridor

At the turn of the 20th century, Wilmington was the largest city in North Carolina. Like many other sizable cities of the time, Wilmington had an electric trolley system that replaced the horse-drawn railways of the previous century. The city trolleys serviced the downtown area. In 1902, Hugh McRae purchased the trolley system, adding a very popular electric trolley to Wrightsville Beach along the tracks of an earlier railway. However, by 1940 the automobile had taken over as the predominant transportation option and the entire trolley system was closed. The wide right-of-way of the trolley that ran from downtown Wilmington to Wrightsville Beach remained and was converted to park blocks, roadways and drainage ditches. The River to the Sea Bikeway alignment follows this historic beach car line.

The River to the Sea Bikeway functions as Wilmington/New Hanover County's main west-east bicycle corridor. It performs a recreation-transportation function, allowing for bicycle-based access to parks, educational, commercial and cultural destinations. By paralleling Oleander Drive, the RTSB is uniquely situated to bicycling activity. As one of New Hanover County's major commercial corridors, Oleander Drive is both attractive to cyclists as a major trip-generator (Oleander Drive has many necessary and/or attractive destinations) and a repellent as a fast-moving 45 mph facility that sees approximately 30 thousand vehicles per day. By paralleling a major facility like Oleander Drive, the RTSB is able to provide bicycle-based access to destinations along Oleander Drive ("through the back door") while enabling cyclists to remain on a facility that is more geared towards safe and easy bicycling.

Geographic Description

New Hanover County is located in the southeastern portion of North Carolina. Wilmington and New Hanover County are bound by the Cape Fear River on the west and the Intracoastal Waterway and/or the Atlantic Ocean to the east. Wilmington covers approximately 54.3 square miles or 27.4 % of the land in New Hanover County.

⁵ Reed, Julian A. "Greenville Health System Swamp Rabbit Trail: Year 2 Findings." 2013.

⁶ Garrett-Peltier H. Pedestrian and bicycle infrastructure: A national study of employment impacts. Political Economy Research Institute. 2011.

The topography of the area is relatively flat with elevations typically around 38-40 feet above sea level or less. The low-lying, flat terrain is characterized by sandy soils covered with loblolly and long leaf pines and various species of hardwood trees. There are numerous creeks, rivers, and lakes in and around the Wilmington area supporting large expanses of freshwater and coastal wetlands and bottomland swamps.

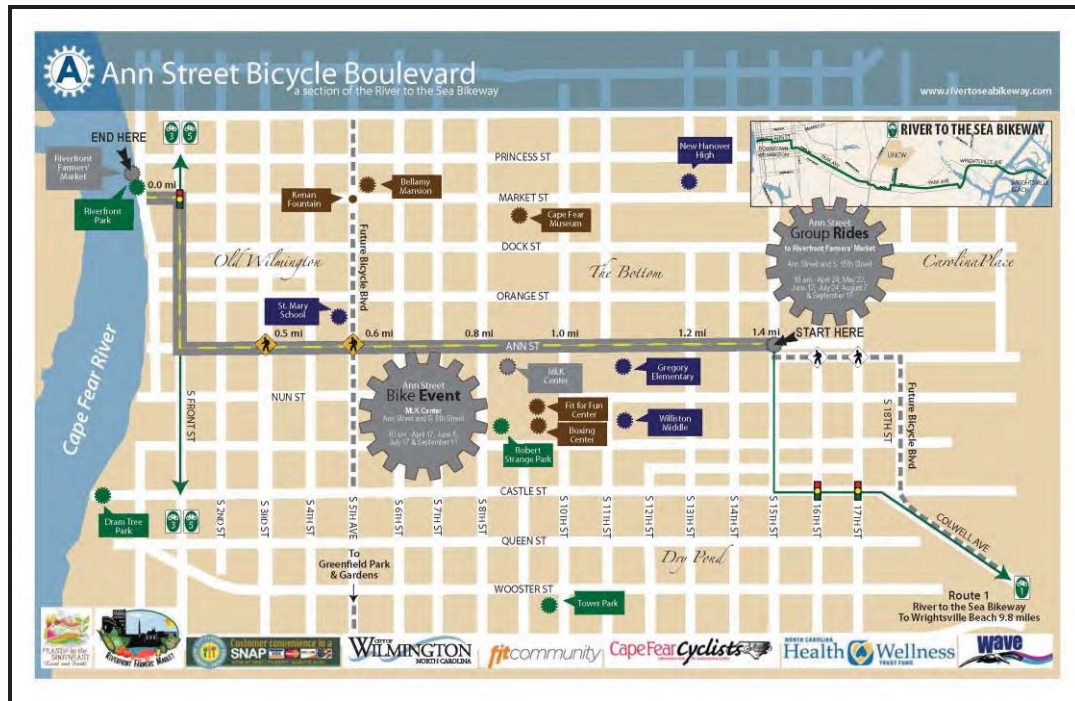
The River to the Sea Bikeway's alignment varies from the densely populated Central Business District of downtown Wilmington, through the urban core, through traditional suburban areas, and automobile-oriented suburban areas. The alignment traverses primarily through commercial areas, interspersed with residential neighborhoods and municipal parks on its way to Wrightsville Beach and the Atlantic Ocean. The River to the Sea Bikeway begins at the foot of Market Street at the Cape Fear River where the Wilmington Riverwalk winds along the eastern bank of the River. From west to east the bikeway can be broken into the following sections. The following provides a description, proposed facilities and existing facilities:

Ann Street Bicycle Boulevard

The Ann Street Bicycle Boulevard joins the River to the Sea Bikeway one block east of the Cape Fear River. Completed in 2010, it is the first bicycle boulevard in North Carolina. It is located in downtown Wilmington, beginning at Riverfront Park on the Cape Fear River. The bicycle boulevard concept, which originated in Berkeley, California, is a strategy whereby bicycles are given priority over motor vehicles on an existing roadway corridor. The creation of the bicycle boulevard involved both policy changes and infrastructure improvements including curb extensions, alley resurfacing, high-visibility crosswalks, pavement markings, and signage. Although the bicycle boulevard is complete, its functionality could be improved by closing the intersection at Ann Street and South 5th Avenue.

The bicycle boulevard connects the historic neighborhoods of Ardmore, the Bottom, Brookwood, Carolina Place, Forest Hills and Old Wilmington to Williston Middle School, Gregory Elementary School, Fit for Fun Center, Sherridale Morgan Physical Fitness and Boxing Center, Robert Strange Park, Martin Luther King, Jr. Recreation Center, downtown Wilmington and the Riverfront Farmers' Market.

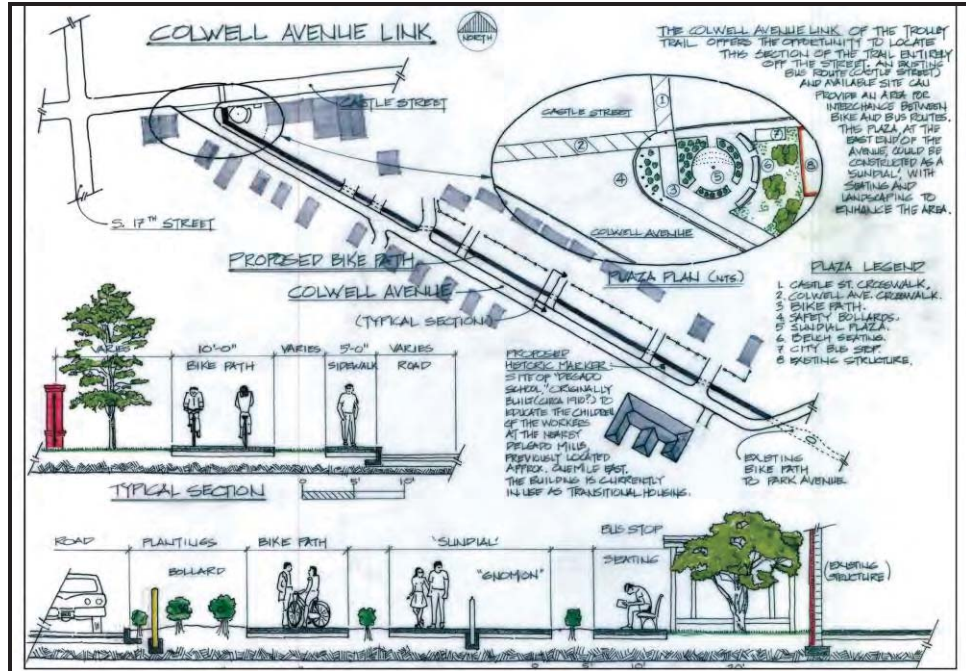
Specifically, the bicycle boulevard follows South Front Street from Market Street to Ann Street then turns east on Ann Street. It follows along Market Street, South Front Street, Ann Street, South 15th Street and South 13th Street and Castle Street ending at Colwell Avenue. At Ann Street and South 3rd Street, a rectangular rapid flash beacon has been located to assist pedestrians and cyclists crossing this busy intersection. When traveling east, there is an alternative option of taking South 13th Street to Castle rather than South 15th Street to Castle Street. This allows cyclists to use the traffic signal at South 13th and Castle Street to make a left onto Castle Street when traveling east on the bicycle boulevard. Intersection improvements are recommended at South 13th Street and Castle Street to facilitate this movement. When traveling west on the bicycle boulevard, cyclists can easily turn right on South 15th Street or South 13th Street to connect to Ann Street.



Ann Street Bicycle Boulevard maps, published Summer 2010 for bike events and group rides
 Note: The Ann Street Bicycle Boulevard has since expanded to include S. 13th Street and Castle Street to Colwell Avenue

Colwell Avenue Greenway

Traveling east from the Ann Street Bicycle Boulevard, sharrows are recommended along Castle Street from S. 15th Street to Colwell Avenue. Intersection improvements are recommended at Castle Street and S. 16th Street and Castle Street and S. 17th Street. There is a missing connection from Castle Street to S. 19th Street of approximately 924 feet. The intersection of Castle Street and Colwell Avenue is currently angled. It is recommended that a sundial plaza be constructed at the corner of Castle Street and Colwell Avenue in the existing right-of-way. This will allow for a perpendicular intersection alignment. A greenway is recommended to extend from the intersection to the existing greenway on Colwell Avenue at South 19th Street.



Design courtesy of American Institute of Architects Wilmington

The existing Colwell Avenue Greenway extends from South 19th Street along a wide right-of-way in front of the Vesta Village neighborhood to Kent Street. It continues as a greenway, as it is located behind and between commercial and residential areas. It crosses Dawson Street with an existing marked crosswalk and pedestrian refuge island and the path ends at Camellia Drive.



Colwell Avenue Greenway in front of Vesta Village

Park Avenue to Independence Boulevard

The Colwell Avenue Greenway terminates at Camellia Drive and Park Avenue, at this point the bikeway uses on-road facilities for a short segment. Sharrows are needed to designate the on-road portions of the RTSB along Park Avenue in the Forest Hills neighborhood. A crosswalk is needed at the intersection of Park Avenue and Country Club Road. Park Avenue is split into two streets at Country Club Road by a very wide median which is heavily landscaped with trees and shrubs. This wide median is actually the original historic beach car line corridor. Sharrows on the northernmost Park Avenue are needed from Country Club Road to Forest Hills Drive.

Park Avenue remains split into two roadways until its intersection with Hawthorne Road/Forest Hills Drive. Crossing improvements are needed at this intersection. Following eastward, there is an existing greenway from Hawthorne Road to Independence Boulevard, providing a connection from the RTSB to the Cross-City Trail at Independence Boulevard. Intersection improvements serving the RTSB corridor have been made to accommodate the Cross-City Trail through the intersection of Park Avenue and Independence Boulevard.

Independence to South Kerr Avenue

Traveling eastward from Independence Boulevard, the River to the Sea Bikeway follows the existing greenway from Independence Boulevard to the southeast corner of Empie Park. While current bikeway users make-do with riding on-road alongside motorized vehicles on the bumpy pavement of Park Avenue, a future greenway facility is needed to extend from the Cross-City Trail paralleling the length of Park Avenue to Kerr Avenue. From the edge of Empie Park to Floral Parkway a wide right-of-way has been retained by the City from the historic beach line corridor and is used for drainage. At Floral Parkway, Park Avenue splits again creating a wide median. The proposed greenway will meander through this right-of-way to include winding by the Audubon Trolley Stop at the intersection of Audubon Boulevard and Park Avenue. The Audubon Trolley Stop is the only surviving structure along the Trolley line and is listed on the National Register of Historic Places. It is of major historical and symbolic importance to the River to the Sea Bikeway.



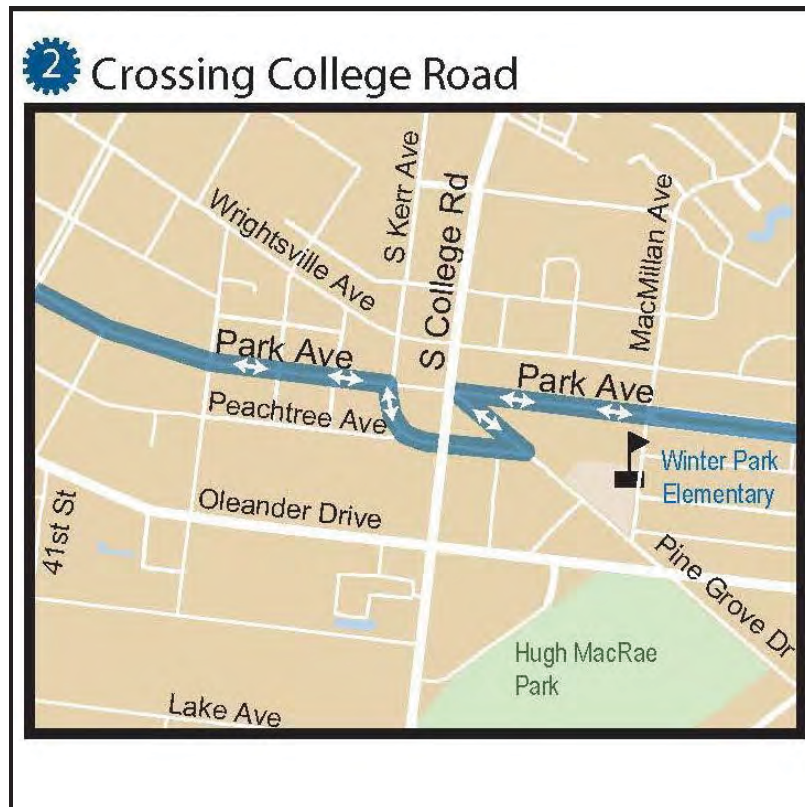
Historic Beach Car Line circa 1911 - 1940

East of Audubon Boulevard, Park Avenue comes together as one street rather than two with a wide median. The proposed path will continue along the wide right-of-way on the north side of Park Avenue until South Kerr Avenue.

South Kerr Avenue to MacMillian

Historically, the River to the Sea Bikeway route crosses at the busy intersection of South College Road and Park Avenue. It is not recommended for the bikeway to cross S. College at Park Avenue because this intersection is not signalized. However, one block south of Park Avenue is a signal with a signalized push-button pedestrian crosswalk at Peachtree Avenue and S. College Road.

The proposed greenway along Park Avenue will terminate at South Kerr Avenue. Bicycle lanes are recommended along South Kerr Avenue from the terminus of the greenway on Park Avenue to Peachtree Avenue. Bicycle lanes are recommended along Peachtree Avenue to South College Road. Existing push-button pedestrian signals at the intersection of Peachtree Avenue and South College Road allow bicyclists and pedestrians to cross South College Road safely. Bike lanes are recommended on the east of S. College Road along Peachtree Avenue, ending at Pine Grove Drive. Sharrows are recommended along Pine Grove Drive from Peachtree Avenue to Park Avenue, continuing on Park Avenue from Pine Grove Drive to MacMillan Avenue.



Recommendation for crossing South College Road

MacMillian to Greenville Avenue

Continuing east along the River to the Sea Bikeway, Park Avenue, again, splits into two streets with a wide median again beginning at MacMillian Avenue continuing to Wallace Avenue. Similar to the western portion of Park Avenue, this creates a very wide median heavily landscaped with trees and shrubs where the historic beach car line previously existed. A crosswalk is recommended at the intersection of MacMillian Avenue and Park Avenue. Sharrows are recommended along the southern Park Avenue from MacMillian to Wallace Avenue.

Wallace Avenue provides a connection to UNCW by crossing Wrightsville Avenue, and following Barefoot Drive to connect to the existing bike lanes on Wood Dale Drive. Sharrows are recommended on Wallace Avenue from Park Avenue to Barefoot Drive and Barefoot Drive to Wood Dale Drive. Intersection improvements are recommended at Wallace Avenue and Wrightsville Avenue.

Continuing east along the River to the Sea Bikeway, the two streets of Park Avenue converge to become one road again at Wallace Avenue. A crosswalk is needed at this intersection. A greenway exists on the north side of Park Avenue from Wallace Avenue to Pine Street. Park Avenue terminates at Pine Street and continues again at South 52nd Street. An existing greenway connects the two roads.

A connection from the River to the Sea Bikeway to University of North Carolina Wilmington (UNCW) is made by way of Donna Avenue at Park Avenue. There is an existing greenway along Donna Avenue to Wrightsville Avenue, and bike lanes for a short distance on Wrightsville Avenue connecting to bike lanes on Wood Dale Drive. Wood Dale Drive provides a direct connection to UNCW.



Greenway connecting Pine Street to Hinton Drive

At South 52nd Street, Park Avenue continues eastward. A greenway is recommended on the south side of Park Avenue from South 52nd Street to Hinton Avenue. Crosswalks are recommended at the intersection of Park Avenue and Hawthorne Drive, Park Avenue and French Road, and Park Avenue and Hinton Avenue.

A new City park will be located along Hinton Avenue about 650 feet away from the River to the Sea Bikeway. As a spur to the bikeway, bike lanes and sidewalks are recommended to connect the park to the bikeway, along Hinton Avenue from Park Avenue to Mariner Lane.

From Hinton Avenue to Myrtle Avenue a greenway is recommended on the south side of Park Avenue. From Myrtle Avenue to Greenville Avenue a greenway is recommended on the north side of Park Avenue. Crosswalks are recommended at the Myrtle Avenue intersection to accommodate these facilities.

Greenville Avenue to Wrightsville Avenue

Currently, the designated River to the Sea Bikeway alignment follows Greenville Avenue from Park Avenue to Oleander Drive. At this intersection, bicyclists turn north onto Oleander Drive. Intersection improvements are recommended at Oleander Drive and Greenville Avenue. Oleander Drive has a wide outside shoulder, however it is recommended that cyclists ride with caution as this is a high volume, high speed roadway. This route also crosses the Bradley Creek Bridge. The existing designated route continues along Oleander Drive to Wrightsville Avenue using the wide outside shoulders.

An alternative to Oleander Drive is for bicyclists to turn northwest on Greenville Avenue then turn northeast on Wrightsville Avenue to the Oleander Drive/Military Cutoff/Airlie Road intersection. Bike lanes are recommended along Greenville Avenue from Oleander Drive to Wrightsville Avenue and along Wrightsville Avenue from Greenville Avenue to Oleander Drive/Military Cutoff Road. Intersection improvements are recommended at Greenville Avenue and Wrightsville Avenue to create this alternate route. Bicyclists would cross that intersection at the proposed crosswalk, then continue east along Wrightsville Avenue.

To better accommodate bicycle and pedestrian traffic a pedestrian bridge is recommended to cross Bradley Creek. This realignment would begin with a crosswalk at the intersection of Park Avenue and Circular Drive, where Park Avenue currently terminates. Circular Drive terminates at Bradley Creek east of the existing Bradley Creek Bridge/Oleander Drive. A non-motorized bicycle and pedestrian bridge is recommended from Circular Drive to the opposite side of Bradley Creek. This path is also the path of the historic beach car line where the pilings from the historic beach car bridge can still be seen.



Terminus of Circular Drive at Bradley Creek

On the north side of Bradley Creek, a greenway is recommended to the west of Oleander Drive until the Wrightsville Avenue/Airlie Road and Oleander Drive intersection. Crosswalks with pedestrian signals are recommended at this intersection. The proposed bikeway alignment will cross from the west side of Oleander Drive to the east side using this intersection improvement. A greenway is recommended along the east side of Oleander Drive that will veer east with Wrightsville Avenue.

Wrightsville Avenue

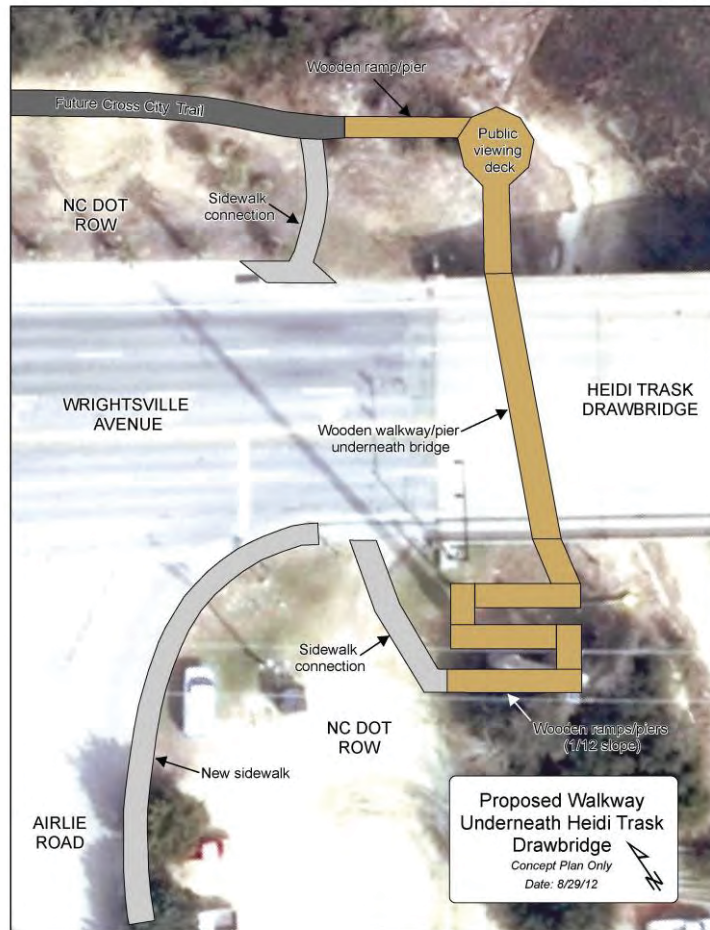
A greenway is recommended along the south side of Wrightsville Avenue to Airlie Forest Court. A Crosswalk is recommended at Wrightsville Avenue and Airlie Forest Court. This will accommodate the proposed greenway converging into the existing bike lanes that continue along Wrightsville Avenue.



Existing bicycle lanes on both sides of Wrightsville Avenue

Eastwood Road to Heide- Trask Bridge and the Wrightsville Beach Boat Launch

From Wrightsville Avenue, the designated bikeway turns east onto Wrightsville Avenue where Eastwood Drive terminates. This intersection will have crosswalks with pedestrian signals. The Cross-City Trail will be constructed on the north side of Wrightsville Avenue to the Heide-Trask Bridge, terminating at Airlie Road. For the safety of bicyclists traveling east on the north side of Wrightsville Avenue, a path will be constructed that will go under the Heide-Trask Bridge to the other side of Wrightsville Avenue. This will allow bicyclists to travel in the correct direction while crossing the Heide-Trask Bridge. Sharrows are recommended on the Heide-Trask Bridge extending to Keel Street to accommodate bicyclists.



Conceptual design of walkway under Heide Trask Bridge

Once the Heide-Trask Bridge is crossed, bicyclists and pedestrians turn south on Keel Street and west on Old Causeway Drive to follow the road under the Heide-Trask Bridge. Sharrows are recommended on Marina Street under the Heide-Trask Bridge. The designated bikeway turns east through the boat launch.



Navigating the East Side of the Heide Trask Drawbridge

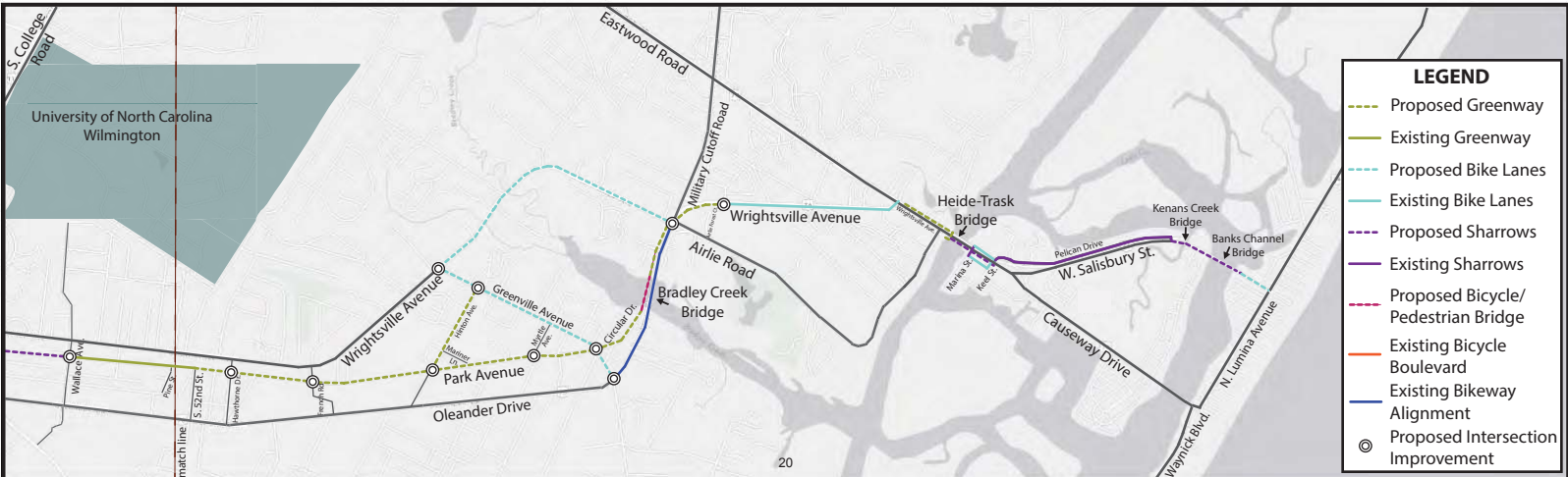
Pelican Drive to Salisbury Street ending at Johnnie Mercer’s Pier

From the boat launch, the River to the Sea Bikeway follows the existing sharrows along Pelican Drive. Pelican Drive parallels West Salisbury Street before it crosses Kenan’s Creek Bridge. At the last connection to West Salisbury Street before the Kenan’s Creek Bridge, the bikeway turns right to access West Salisbury Street. Sharrows are recommended from Pelican Drive to Kenans Creek Bridge. From Kenans Creek Bridge to the east side of Banks Channel Bridge, restriping for wide-outside lanes and sharrows are recommended. With future bridge replacement projects, a five-foot sidewalk and six-foot bicycle lanes are recommended on both bridges, with bike lanes connecting the bridges. Bike lanes are recommended from the east side of Banks Channel Bridge to N. Lumina Avenue. The designated bikeway continues along West Salisbury Street through the intersection of North Lumina Avenue where the River to the Sea Bikeway terminates at Johnnie Mercer’s Pier.



Existing sidewalk along Banks Channel Bridge

RIVER TO THE SEA BIKEWAY PROPOSED AND EXISTING FACILITIES



LEGEND

- Proposed Greenway
- Existing Greenway
- Proposed Bike Lanes
- Existing Bike Lanes
- Proposed Sharrows
- Existing Sharrows
- Proposed Bicycle/
Pedestrian Bridge
- Existing Bicycle
Boulevard
- Existing Bikeway
Alignment
- Proposed Intersection
Improvement

Land Acquisition

As a general guideline, the River to the Sea Bikeway is located primarily within existing right-of-way along the historic beach car line. When it is necessary to acquire easements, the City of Wilmington's philosophy is to work with land owners from a "willing seller" approach. Instances in which it may be necessary to acquire easements from private property owners may include insufficient right-of-way, conflicts with existing roadway curb limits, or environmental impacts.

An inventory of required bikeway parcels is recommended and should be maintained so that the City and Town can maintain a good relationship with the land owners and maintain communication. The "willing seller" approach means that the City and Town engage the property owner in discussions and negotiations that allow for maximum flexibility. Terms of the easement may vary depending upon the goal of the landowner and the characteristics of the specific property. Negotiations may include the following alternatives:

- Aligning the bikeway to utilize portions of the property that have marginal development potential such as road frontage or land adjacent to wetlands or floodplains;
- Acquiring the easement through developer negotiations that may include redevelopment incentives;
- Negotiate with the landowner/developer to secure easement dedications in advance of development;
- Other mitigation alternatives;
- Negotiating a donated easement which normally qualifies as a charitable contribution, entitling the donor to a charitable income tax deduction for the easement's value; and
- Other nonfinancial benefits include a landowner being able to leave land that's going to be open into perpetuity while still remaining in a family's ownership.

Public Involvement

The importance of seeking public input on the bikeway from a variety of sources and methods cannot be understated. Information sought from the public includes:

- How well the community needs for open space are being met;
- How well the community needs for connectivity and mobility are being met;
- How well the community needs for the number and type of bicycle and pedestrian facilities are being met;
- What priorities the community values in the alignment of the trail; and
- What amenities the community values in the alignment of the trail.

A multi-tiered approach to obtaining public input is necessary in an attempt to ensure the process is comprehensive, inclusive and transparent. Public input on bicycle and pedestrian facilities along the River to the Sea Bikeway has been obtained through public surveys, meetings with stakeholder groups, and public workshops for the *Wilmington New Hanover County Greenway Plan*, the *City of Wilmington 2010-2015 Parks, Recreation and Open Space Master Plan*, the *2013-2018 Parks, Recreation and Open Space Master Plan for the Town of Wrightsville Beach*, the *2006 New Hanover County Master Plan for Parks, Recreation and Open Space*, the *2012 Wilmington Community Survey Report*, the *Cape Fear Commutes 2035 Long Range Transportation Plan*, and the *Walk Wilmington: A Comprehensive Pedestrian Plan*.

Public Surveys

Wilmington New Hanover County Comprehensive Greenway Plan Survey

As part of the Wilmington New Hanover County Greenway Plan, over 3,600 people provided comments to determine the importance of these facilities, if and how they use them, and where they would like to see more facilities. The survey results show:

- When asked to rank choices for destinations the respondents would most like to get to, beaches ranked #1, parks ranked #2 and other greenways ranked #3;
- 96% of respondents feel that it is very important or important to create more greenways in Wilmington and New Hanover County;
- 95% of respondents would use greenways more often if they were closer to them or there were more of them;
- The top three factors that discourage greenway use are lack of safe connections (52.2%), lack of information about existing greenways (35.5%), and motor vehicles (33.5%); and
- The top three choices for how respondents would (or do) use greenways, 60.4% would use it for fitness or recreation, 30.4% would use it to get outside/enjoy nature, and 29.4% would use it for transportation to a destination.

City of Wilmington 2010-2015 Parks, Recreation and Open Space Master Plan Survey

The *City of Wilmington 2010-2015 Parks, Recreation, and Open Space Master Plan* includes a public survey to gather community and citizens input on parks, recreation and open space needs and priorities. The results of this survey indicate the following:

- Walking/jogging (83.5% of respondents) and bicycling (24.1% of respondents) were among the top ten activities that brought respondents and/or members of their household to visit the City of Wilmington areas/facilities during the past 12 months.
- When asked what parks and recreation programs and services not currently provided by the City of Wilmington that respondents and/or members of their household would like to participate in during the next twelve months, the respondents included four (of 37) bicycle services: more bike trails, safe bicycle trails away from traffic and exhaust fumes, bicycle trails, and more bike paths.
- When asked what parks and recreation areas/facilities/programs not adequately provided by the City of Wilmington that respondents and/or the members of their household would like to have the City of Wilmington provide within the next 5 years, 45.6% of respondents indicated pedestrian/non-motorized vehicular paths (priority #3). Other responses include bicycle/greenways, family bike trails, and bike paths.
- When asked to identify the three most important issues or needs regarding the City of Wilmington parks and recreation programs, services, areas and facilities, nineteen respondents indicated bike, walking and hiking paths/trails (#1 response).

2013-2018 Parks, Recreation, and Open Space Master Plan for the Town of Wrightsville Beach Survey

The *2013-2018 Parks, Recreation, and Open Space Master Plan for the Town of Wrightsville Beach* includes a needs assessment survey. The results of this survey indicated the following:

- Walking (57% of respondents) and bicycling (48% of the respondents) were among the top two activities that residents of Wrightsville Beach preferred to participate and
- Walking and bicycling facilities were also among the top two responses to the questions regarding new facilities needed and new health and wellness programs needed.

2006 New Hanover County Master Plan for Parks, Recreation and Open Space Survey

The *2006 New Hanover County Master Plan for Parks, Recreation and Opens Space* includes a needs assessment survey. The results of the survey indicated the following:

- 62% of New Hanover County residents surveyed indicate that they currently use public parks most often for walking or jogging (#2 response).
- When measuring current and future interest levels of specific activities, more than 90% of respondents indicated interest in the top three activities, including walking or jogging.

2012 Wilmington Community Survey Report

A community survey was administered for the City of Wilmington with the purpose of assessing resident satisfaction with the delivery of major city services and to help set priorities for the community. The results of the survey indicated the following:

- 39% of respondents with an opinion (excludes 'don't knows) are satisfied with biking trails in the City. 12% are very satisfied, and 21% are dissatisfied.
- Satisfaction with biking trails in the City has increased from 29% in 2007, to 33% in 2010, to 51% in 2012.

- 18% of respondents felt that walking trails in the City were the most important service for the City to provide (#2 response), and 17% of respondents felt that biking trails in the City were the most important service (#3 response).

Cape Fear Commutes 2035 Transportation Plan Survey

The *Cape Fear Commutes 2035* Committee developed a survey for area residents. This survey had several underlying purposes, including: ascertain the community's transportation needs and values, solicit new ideas for transportation projects, and gauge public opinion regarding alternative funding sources for transportation projects. The results of the survey indicated the following:

- When respondents were asked what percentage of their trips are currently made by bicycle, 80.7% of respondents said less than 10% of their trips are currently made on bicycle for commuting purposes and 8.9% of respondents said between 10-25% of their trips are currently made on bicycle for commuting purposes. However, when asked what percentage of trips would respondents *like to* make by bicycle, only 37.7% wanted to make less than 10% of their trips by bicycle and 24.4% of respondents wanted to make 10-25% of their trips by bicycle for commuting purposes. Overall, over 40% of people who currently make less than 10% of their trips by bicycle would like to make more.
- When respondents were asked how we can encourage people to bicycle more often, 71.9% said construct more off-road multi-use paths (#1 response), 68.6% said construct more on-road bike lanes (#2 response), and 46.1% said provide better information about safe and comfortable bicycle routes (#3 response).
- When respondents were asked how we can encourage people to walk more often, 81.3% said construct more sidewalks and multi-use paths (#1 response), 62.5% said improve safety of roadway crossings (#2 response), and 58% said improve connections between nearby homes, stores and offices (#3 response).
- When respondents were given the scenario of being provided with \$100 to spend on transportation improvement projects to divide among eight projects, respondents allocated the most (\$28.94) towards improving bicycle and pedestrian facilities.

Walk Wilmington: A Comprehensive Pedestrian Plan Survey

While sidewalks are not considered a bicycle facility, a greenway can be used by both bicyclists and pedestrians. Greenways and intersection improvements are included in the existing and proposed River to the Sea Bikeway facilities, and therefore the demand for pedestrian infrastructure is applicable to the Bikeway. A survey was developed to gather information about citizen habits, preferences and priorities related to walking. The results of this survey indicated the following:

- 53.6% of respondents indicated the lack of sidewalks and/or gaps in the sidewalk make walking difficult or unpleasant in the city.
- 33.6% of respondents indicated heavy traffic makes walking difficult or unpleasant in the city.
- 30% of respondents indicated intersection and road crossings are the most important areas for the city to focus on improving pedestrian facilities.
- When asked what the city's top priority should be for improving the walking network, 29% indicated making intersections and roads more comfortable to cross (#1 response), and 21% indicated building more sidewalks in residential neighborhoods (#2 response).

- When asked what the most critical issue that people face while walking in the City of Wilmington, 66.9% said unsafe street crossings or intersections, and 22.8% said missing or poorly maintained sidewalks

Additional Public Input

To better understand residents' issues, concerns and ideas for the River to the Sea Bikeway, ongoing input is obtained from various groups. In addition to discussing the future alignment and construction of the trail, feedback is sought on policies and programs related to the bikeway. The WMPO Bicycle and Pedestrian Committee, the WMPO Citizens Advisory Committee, the Wilmington Parks and Recreation Advisory Board, the Obesity Prevention Initiative, New Hanover County Health Department, Cape Fear Cyclists, and Cape Fear Future participate in providing feedback regarding alignment, construction, policies and programs. Also, the draft River to the Sea Bikeway Master Plan was released to the public for comments from September 11, 2013 to November 1, 2013. Their comments can be found in Appendix B.

Public Events

May 2013 marked the 24th annual River to the Sea Bike Ride along WMPO Bike Route 1. The WMPO Bike/Ped Committee plans and organizes the event. This event takes place the first Saturday in May, also designated as National Bike Month. Ridership for these events continues to increase. In 2010 there were approximately 220 participants; in 2011 approximately 230 participants; and in 2012 approximately 250 participants. The ride begins in downtown Wilmington. The group rides the bikeway to Wrightsville Beach where refreshments are provided and prizes are given away. T-shirts are also sold with logos of sponsors on the back. WAVE Transit provides bus service from Wrightsville Beach to downtown Wilmington for those who only want to ride one-way rather than both ways. Ridership tends to increase every year, with over 250 people of all ages participating in 2012. This event highlights and promotes the River to the Sea Bikeway and allows participants to ride in a group with police assistance at intersections.



The Ann Street Bicycle Boulevard funded by the Fit Community grant also held a variety of community events. Between April and September 2010 there were four community events and six group rides along the Ann Street Bicycle Boulevard. The community events included bicycle safety training, healthy cooking demonstrations, a scavenger hunt along the bicycle boulevard, trick-your-bike competitions, face paintings, live music and lots of giveaways. The group rides began at the eastern most point of the bicycle boulevard. Participants would ride along the bicycle boulevard to the Riverfront Farmers' Market where prizes were given away including gift cards to the farmers' market.

Demand Forecast

The River to the Sea Bikeway is intended to provide New Hanover County's residents and visitors with facilities that provide safe, convenient multi-modal transportation and recreation opportunities in an area where bicycle and pedestrian facilities are not adequate.

Since passage of the federal Land and Water Conservation Fund (LWCF) Act of 1965, preparation of a Statewide Comprehensive Outdoor Recreation Plan (SCORP) has been required in order for states to be eligible for LWCF acquisition and development assistance. Past and current SCORPs including the North Carolina Statewide Outdoor Comprehensive Plan 2009-2013 (NCSCORP) prepared by the N.C. Division of Parks and Recreation, have provided a coordinated framework addressing the problems, needs, and opportunities related to the need for improved public outdoor recreation. The plan contents and format are shaped by the planning guidelines of the LWCF Act. NCSCORP identifies trends affecting outdoor recreation and the concomitant changes they will bring.

A component of the plan is the 2002-2007 National Survey on Recreation and the Environment (NSRE), coordinated by the USDA Forest Service. The primary purpose of the NSRE is to learn about approximately 85 specific outdoor recreation activities of people aged 16 and over in the United States. Questions from the NSRE broadly address areas such as outdoor recreation participation, demographics, household structure, lifestyles, environmental attitudes, natural resource values, constraints to participation, and attitudes toward management policies. The results of the survey are used to identify standards for outdoor public recreation facilities.

In 2010, Wilmington had 7.26 miles of multi-purpose trail per 100,000 population. Utilizing NCSCORP standards applied to Wilmington, Wilmington has a current need for 17.74 miles of multi-purpose trail. Projecting to 2015, Wilmington will have a demand for 28.75 miles of multi-purpose trail. When ranking all North Carolina Counties based on the number of trails available (all types) per capita, New Hanover County ranks #24.

Demographics

In 2000, New Hanover County's population was 160,307. By 2010 the population had grown to 202,667 at a rate of 26.4%. The median age is 35.3 years with the following age distribution:

- Under 10: 11.3%
- 10-19: 12%
- 20-29: 17%
- 30-39: 13.5%
- 40-49: 13.3%
- 50-59: 13.2%
- 60-69: 10.5%
- Over 69: 9.3%

Outdoor Recreation Trends

According to residents participating in NCSCORP, walking for pleasure is rated as the number one recreational activity, selected by 85% of the respondents. Of individual sports activities, respondents listed running or jogging (first) and inline skating (fourth) as the most popular activities, both of which are applicable to all or portions of the River to the Sea Bikeway. Walking for pleasure was the number one activity listed by North Carolina residents participating in outdoor recreation activities. The primary activity of the bikeway, bicycling, was the 18th most popular activity with 31% of respondents participating.



Special Considerations

The City of Wilmington and the Town of Wrightsville Beach are committed to providing access and recreational opportunities to all persons, including people with disabilities. The River to the Sea Bikeway will be developed in accordance with ADA standards and guidelines.

The bikeway is designed according to the City of Wilmington, North Carolina Department of Transportation and federal standards. This includes the following guidelines:

- Complete Streets Policy (Wilmington, State and Federal);
- Best Practices Design Guide (FHWA);
- Design Guidelines: Accommodating Bicycle and Pedestrian Travel; A Coordinated Approach (FHWA);
- National Association of City Transportation Officials' (NACTO) 2012 Urban Bikeway Design Guide;
- ADA Accessibility Guidelines for Outdoor Developed Areas (United States Access Board);
- ADA and ABA Accessibility Guidelines for Buildings and Facilities (United States Access Board);
- Guide for the Development of Bicycle Facilities, American Association of State Highway and Transportation Officials (ASSHTO); and
- Manual on Uniform Traffic Control Devices (MUTCD).



Associated site amenities such as parking and restrooms, primarily located in parks along the bikeway, are all designed to accommodate persons with disabilities. In all possible circumstances, the greenways along the bikeway will be designed to be a 10' wide multi-purpose path which safely and comfortably accommodates two-way directional, multi-modal traffic. In all possible circumstances, bike lanes will be designed to be a 4' or 5' wide bike lane on both sides of the street.

The River to the Sea Bikeway crosses several major roadways. All such roadways will be designed to accommodate all users to facilitate the safe passage of the roadway. At each intersection, traffic signals are reviewed to determine modifications to the signal timing. All intersections will include push-button pedestrian heads and high visibility crosswalks and will be designed and constructed to ADA standards.

Management Plan

Etiquette

The River to the Sea Bikeway is open to the general public. Its intended use is bicycling. Certain sections, such as greenway facilities, may include walking, jogging, strollers, skating and other uses provided by state law and local ordinances. The bikeway is enjoyed by many different types of users and provides a variety of facilities. Whether users are bicycling along bike lanes or walking, biking, jogging, skating, walking a dog or pushing a stroller along a greenway, all users are advised to follow the same set of rules on their experience on the bikeway in order to make the experience a safer and more enjoyable one. Etiquette recommendations include:

Bike lanes and Sharrows – Appropriate for Bicyclists

Cyclists should:

- In urban areas where bike lanes are bordering parallel parked cars, cycle towards the left to position yourself out of the door zone while being aware of a cyclists potentially passing on the left;
- In suburban or rural areas without parallel parked cars, cycle towards the right to provide more distance between yourself and passing vehicles;
- Pass other cyclists on the left;
- Yield to pedestrians when going through a crosswalk; stop before the crosswalk as opposed to blocking the crosswalk;
- Use turning signals and merge into the turning lane early on rather than the last moment
- Travel in the same direction as vehicles – cyclists should always be to the right of a moving vehicle; and
- Slow down when executing maneuvers in traffic. If you are a fast cyclists, understand that sometimes you have to go with the flow of traffic, even if you are capable of going faster.

Greenways – Appropriate for Bicyclists, Pedestrians and Other Active Recreationalists

- Always stay to the right side of the trail except when passing others. Always allow other trail users room to pass on the left;
- Pass others traveling in the same direction on the left. Yield to slower and on coming trail users and remember that children and pets can be unpredictable;
- Politely warn trail users as you approach from behind. Give a clear audible signal when passing like “Passing on your left”. Give the person you are passing time to respond. Don’t wear headphones on the trail so you can hear others passing you;
- All trail users, including bicyclists, joggers, walkers, wheelchairs, strollers, rollerbladers and skaters, should be respectful of other users regardless of their mode, speed or level of skill.
- Be predictable. Travel in a consistent and predictable manner. Always look behind when changing position on the trail;

- Do not block the trail. When in a group or with your pets, use no more than half the trail so you don't block the flow of other users;
- Do not litter. Do your part to keep the park clean. Please pick up after yourself and pets; and
- Move off of or to the side of the trail when you stop. Beware of others behind you and make sure they know you are stopping.

It has been clearly demonstrated that community bikeways and trails enhance quality of life, improve the environment, ease traffic congestion, promote wellness, and provide unique recreational opportunities for citizens, close to home where they can easily be accessed. The River to the Sea Bikeway should serve as a valued asset to the residents of Wilmington and New Hanover County and future policy development should consider the rights of Wilmington's residents to access the bikeway freely and without undue interruption.

Maintenance

The River to the Sea Bikeway is located within two municipalities and therefore maintained by two separate entities. The City of Wilmington's Community Services and Public Services Departments maintain the portion of the bikeway located in the Wilmington city limits. The Town of Wrightsville Beach maintains the portion of the bikeway located on Wrightsville Beach.

Maintenance activities include:

- Mowing;
- Blowing natural debris such as leaves, acorns and twigs;
- Trash pickup;
- Weed control as needed by mechanical or chemical removal;
- Edge/Trail shoulder vegetative maintenance;
- Erosion repair;
- Bridge and boardwalk repair;
- Bituminous patching and striping replacement as needed;
- Sign inventory and replacement;
- Periodic trail sweeping and vacuuming; and
- Pet waste stations.

As an extension and enhancement of the City's maintenance program, Wilmington and New Hanover County are in the process of developing an Adopt-A-Trail program. The program is designed as a community partnership between area volunteers and the City of Wilmington. The program gives volunteers the opportunity to conserve and maintain our natural environment, promoting civic responsibility and community pride and also serves to fulfill a gap in the demand for maintenance and existing operational funding.

Adopt-A-Trail sponsors are made up of groups and organizations throughout the community. Each sponsor is responsible for general trail maintenance and the upkeep of their designated portion of the trail.

Signage

The need for quality wayfinding, trail marker, and directional signage is an important component of the bikeway. As each segment is designed, the type and quantity of each type of signage is analyzed and incorporated into the project. Coherent, consistent wayfinding signs are used throughout Wilmington to guide residents and visitors to significant attractions and destinations, including the bikeway. The need for quality, consistent bikeway markers that identify the bikeway are used in both assisting the user and in marketing of the trail. Finally, signage that advises both pedestrian and vehicles that may interact with trail users of traffic laws are utilized to encourage safe use of the bikeway.



Wayfinding signage and information kiosks are critical components of the Ann Street Bicycle Boulevard. Wayfinding signage is currently located along the bicycle boulevard with information regarding the distance and direction to several community points of interest such as UNCW, Wrightsville Beach, Riverfront Park, Independence Mall, schools, parks, and museums. It is recommended that similar signage is used along the River to the Sea Bikeway at locations near points of interest. There are currently two information kiosks along the bikeway. One is located at Robert Strange Park on Ann Street, the other at Empie Park at the intersection of the River to the Sea Bikeway and the Cross-City Trail. Additional information kiosks should be installed in popular public spaces, such as Johnnie Mercer's Pier and the Wrightsville Beach Park.



Outreach and Education

Education, programming and awareness are critical to connect community members with the bikeway. In order to achieve this, the City of Wilmington, Town of Wrightsville Beach and New Hanover County capitalize on its diverse, existing community partner network to promote the bikeway. Wilmington and New Hanover County collaborate with the Obesity Prevention Initiative at UNCW, the New Hanover County Health Department, New Hanover County Schools, Safe Kids Cape Fear, Cape Fear Cyclists, Cape Fear Healthy Carolinians, the Wilmington Police Department, and Live Fit Cape Fear to develop awareness and educational initiatives related to the bikeway.

River to the Sea Bikeway maps are printed and distributed on a regular basis. Bicycle safety information is included on the maps. When facilities are installed along the bikeway, those changes are made to the map and they are mass produced. Maps are distributed around the WMPO jurisdictions in March and early August every year.

As an effort to educate the public on creating a safe traveling environment, it is recommended that the local safety campaign be promoted while collaborating with local partners and organizing River to the Sea Bikeway public events. See Share Be Aware is a multi-organizational effort towards creating a safer roadway environment in the Lower Cape Fear for motorists, cyclists, and pedestrians. www.seesharebeaware.com provides safety materials to assist with creating a safer experience while walking, biking and driving in the area.

Additional outreach and awareness efforts are and conducted by the City through the City's website, wilmingtonnc.gov, the bikeway website, rivertoseabikeway.com and through the City's facebook page.

Implementation

The River to the Sea Bikeway is being developed in phases. Construction of the various phases are driven by a number of factors including available funding, public support, acquisition of land, and the timing of other infrastructure improvements. A prioritization process has been developed to prioritize the recommended projects based on their connection to existing facilities; the location of the project; the cost or ease of construction; and if it improves circulation around schools, parks, employments centers and/or major corridors. Please see Appendix A for the project scoring sheet.

High Priority Recommendations:

- Close the intersection at S. 5th Avenue and Ann Street
- Intersection improvements at Castle Street and S. 13th Street
- Sharrows on Castle Street from S. 15th Street to Colwell Avenue
- Intersection improvements at Castle Street and S. 16th Street
- Intersection improvements at Castle Street and S. 17th Street
- Greenway along Colwell Avenue from Castle Street to S. 19th Street
- Intersection improvements at Park Avenue and Wallace
- Sharrows along Wallace Avenue from Park Avenue to Barefoot Drive, and along Barefoot Drive from Wallace Avenue to Wood Dale Drive
- Intersection improvements at Oleander Drive/Military Cutoff Road and Wrightsville Avenue/Airlie Road
- Greenway along Wrightsville Avenue from Oleander Drive/Military Cutoff to Airlie Forest Court
- Intersection improvements at Wrightsville Avenue and Airlie Forest Court
- Greenway along Wrightsville Avenue from Wrightsville Avenue/Eastwood Road to Heide-Trask Bridge
- Sharrows on Heide-Trask Bridge from terminus of recommended Wrightsville Avenue greenway to Keel Street
- Sharrows under Heide-Trask Bridge on east side along Marina Street from Old Causeway Drive to marina
- Sharrows along W. Salisbury Street from eastern-most terminus of Pelican Drive, crossing Kenans Creek Bridge and Banks Channel Bridge
- Bike lanes along W. Salisbury Street from Banks Channel Bridge to terminus at N. Lumina Avenue

Medium-Priority Recommendations:

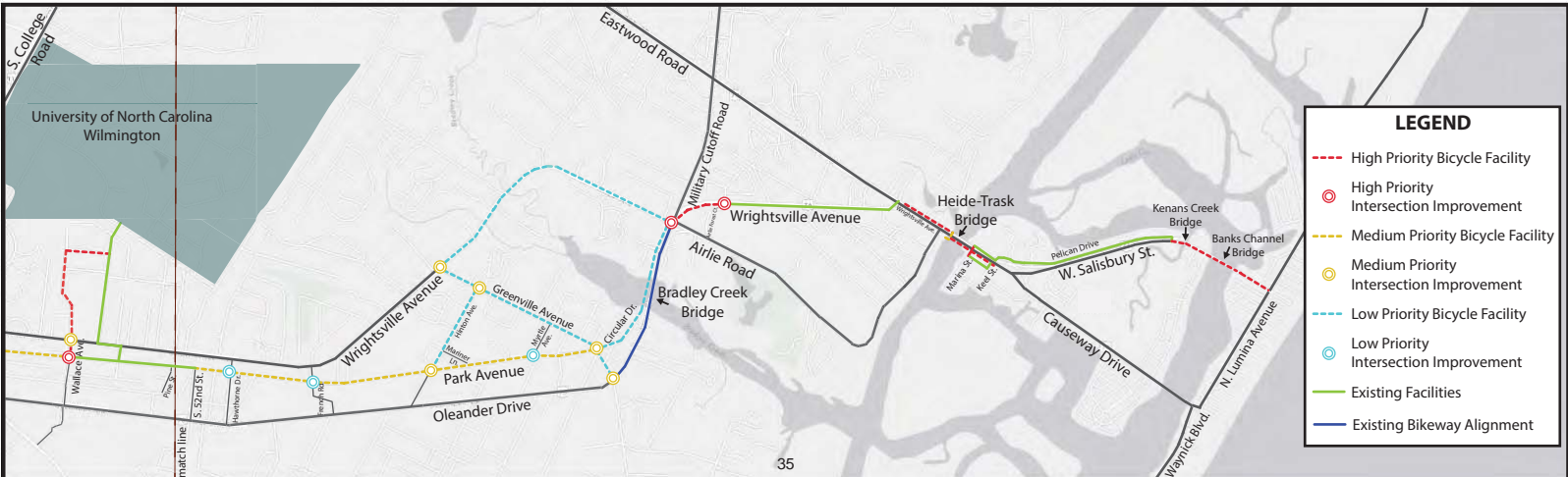
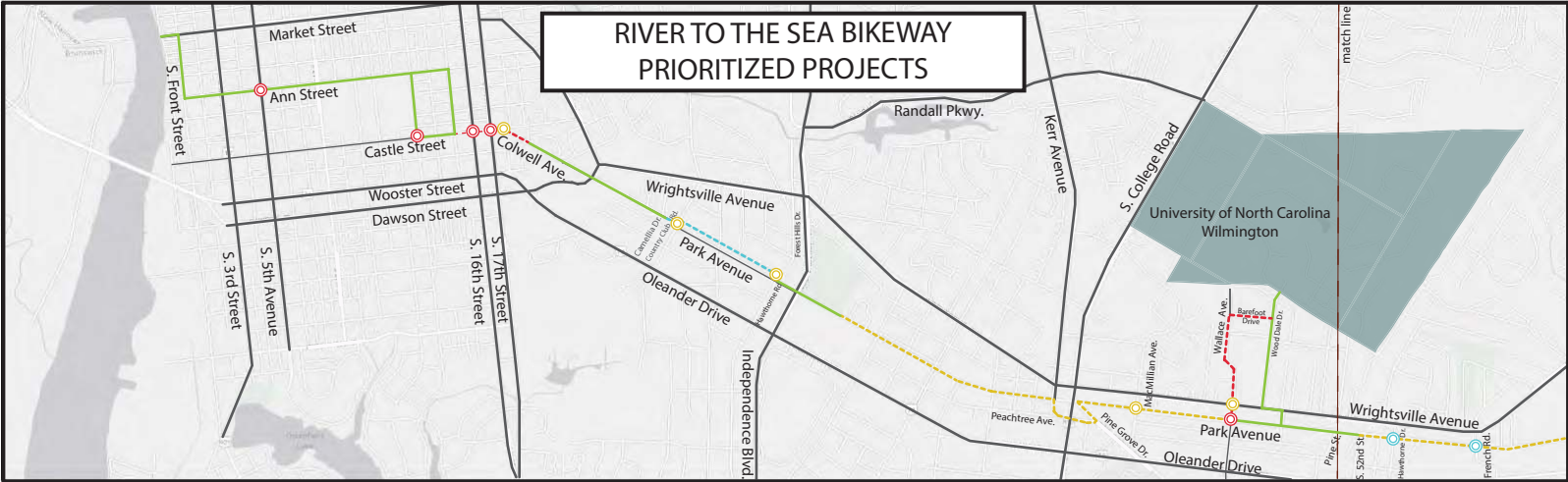
- Sundial plaza at the intersection of Castle Street and Colwell Avenue
- Intersection improvements at Park Avenue and Country Club Road
- Intersection improvements at Park Avenue and Hawthorne Road
- Greenway along Park Avenue from the southeast corner of Empie Park to Kerr Avenue
- Bike lanes along Kerr Avenue from Park Avenue to Peachtree Avenue, and along Peachtree Avenue to Pine Grove Drive

- Sharrows along Pine Grove Drive from Peachtree Avenue to Park Avenue, and along Park Avenue from Pine Grove Drive to Wallace Avenue
- Intersection improvements at Park Avenue and MacMillian Avenue
- Intersection improvements at Wrightsville Avenue and Wallace Avenue
- Greenway along Park Avenue from S. 52nd Street to Greenville Avenue
- Intersection improvements at Park Avenue and Hinton Avenue
- Intersection improvements at Hinton Avenue and Greenville Avenue
- Intersection improvements at Greenville Avenue and Wrightsville Avenue
- Intersection improvements at Greenville Avenue and Oleander Drive
- Intersection improvements at Park Avenue/Circular Avenue and Greenville Avenue
- Bicycle/pedestrian multi-use walkway under west side of Heide-Trask Bridge

Low-Priority Recommendations:

- Sharrows on Park Avenue from Country Club Road to Hawthorne Road
- Intersection improvements at Park Avenue and Hawthorne Drive
- Intersection improvements at Park Avenue and French Road
- Greenway along Hinton Avenue from Park Avenue to Greenville Avenue
- Bike lanes along Greenville Avenue from Oleander Drive to Wrightsville Avenue
- Bike lanes along Wrightsville Avenue from Greenville Avenue to Oleander Drive/Military Cutoff Road
- Intersection improvements at Park Avenue and Myrtle Avenue
- Greenway along Circular Avenue from Greenville Avenue to terminus
- Bicycle/pedestrian multi-use bridge over Bradley Creek parallel to Oleander Drive
- Greenway along Oleander Drive from end of proposed Bradley Creek bridge to Wrightsville Avenue

RIVER TO THE SEA BIKEWAY PRIORITIZED PROJECTS



LEGEND

- High Priority Bicycle Facility
- ⊙ High Priority Intersection Improvement
- Medium Priority Bicycle Facility
- ⊙ Medium Priority Intersection Improvement
- Low Priority Bicycle Facility
- ⊙ Low Priority Intersection Improvement
- Existing Facilities
- Existing Bikeway Alignment

Appendix A

High Priority Recommendations - Projects that answer 'yes' to 3 or 4 of the priority considerations

Proposed Project	Existing Facilities on one or both sides	Located in CBD, Urban Core or High Tourist Population Area	Low-Cost/Ease of Construction	Improves Circulation around Schools, Parks, Employment Centers or Major Corridors	
Close the intersection at S. 5 th Avenue and Ann Street	Yes	Yes	Yes	Yes	4
Intersection improvements at Castle Street and S. 13 th Street	Yes	Yes	Yes	Yes	4
Sharrows on Castle Street from S. 15th Street to Colwell Avenue	Yes	Yes	Yes	Yes	4
Intersection improvements at Castle Street and S. 16 th Street	No	Yes	Yes	Yes	3
Intersection improvements at Castle Street and S. 17 th Street	No	Yes	Yes	Yes	3
Greenway along Colwell Avenue from Castle Street to S. 19 th Street	Yes	Yes	Yes	No	3
Intersection improvements at Park Avenue and Wallace	Yes	No	Yes	Yes	3
Sharrows along Wallace Avenue from Park Avenue to Barefoot Drive, and along Barefoot Drive from Wallace Avenue to	Yes	No	Yes	Yes	3
Intersection improvements at Oleander Drive/Military Cutoff Road and Wrightsville Avenue/Airlie Road	No	Yes	Yes	Yes	3
Greenway along Wrightsville Avenue from Oleander Drive/Military Cutoff to Airlie Forest Court	Yes	Yes	Yes	Yes	4
Intersection improvements at Wrightsville Avenue and Airlie Forest Court	Yes	Yes	Yes	Yes	4

Greenway along Wrightsville Avenue from Wrightsville Avenue/Eastwood Road to Heide-Trask Bridge	Yes	Yes	Yes	Yes	4
Sharrows on Heide-Trask Bridge from terminus of recommended Wrightsville Avenue greenway to Keel Street	No	Yes	Yes	Yes	3
Sharrows under Heide-Trask Bridge on east side along Marina Street from Old Causeway Drive to marina	Yes	Yes	Yes	Yes	4
Sharrows along W. Salisbury Street from eastern-most terminus of Pelican Drive, crossing Kenans Creek Bridge and Banks Channel Bridge	Yes	Yes	Yes	Yes	4
Bike lanes along W. Salisbury Street from Banks Channel Bridge to terminus at N. Lumina Avenue	No	Yes	Yes	Yes	3

Medium Priority Recommendations - Projects that answer 'yes' to 2 of the priority considerations

Proposed Project	Connects to Existing Facilities on one or both sides	Located in CBD, Urban Core or High Tourist Population Area	Low-Cost/Ease of Construction	Improves Circulation around Schools, Parks, Employment Centers or Major Corridors	
Sundial plaza at the intersection of Castle Street and Colwell Avenue	No	Yes	Yes	No	2
Intersection improvements at Park Avenue and Country Club Road	Yes	No	Yes	No	2
Intersection improvements at Park Avenue and Hawthorne Road	Yes	No	Yes	No	2
Greenway along Park Avenue from the southeast corner of Empie Park to Kerr Avenue	Yes	No	No	Yes	2
Bike lanes along Kerr Avenue from Park Avenue to Peachtree Avenue, and along Peachtree Avenue to Pine Grove Drive	No	No	Yes	Yes	2
Sharrows along Pine Grove Drive from Peachtree Avenue to Park Avenue, and along Park Avenue from Pine Grove Drive to Wallace Avenue	No	No	Yes	Yes	2
Intersection improvements at Park Avenue and MacMillian Avenue	No	No	Yes	Yes	2
Intersection improvements at Wrightsville Avenue and Wallace Avenue	No	No	Yes	Yes	2
Greenway along Park Avenue from S. 52 nd Street to Greenville Avenue	Yes	No	No	Yes	2
Intersection improvements at Park Avenue and Hinton Avenue	No	No	Yes	Yes	2
Intersection improvements at Hinton Avenue and Greenville Avenue	No	No	Yes	Yes	2
Intersection improvements at Greenville Avenue and Wrightsville Avenue	No	No	Yes	Yes	2
Intersection improvements at Greenville Avenue and Oleander Drive	No	No	Yes	Yes	2
Intersection improvements at Park Avenue/Circular Avenue and Greenville Avenue	No	No	Yes	Yes	2
Bicycle/pedestrian multi-use walkway under west side of Heide-Trask Bridge	No	Yes	No	Yes	2

Low Priority Recommendations - Projects that answer 'yes' to 1 of the priority considerations

Proposed Project	Connects to Existing Facilities on one or both sides	Located in CBD, Urban Core or High Tourist Population Area	Low-Cost/Ease of Construction	Improves Circulation around Schools, Parks, Employment Centers or Major Corridors	
Sharrows on Park Avenue from Country Club Road to Hawthorne Road	Yes	No	Yes	No	1
Intersection improvements at Park Avenue and Hawthorne Drive	No	No	Yes	No	1
Intersection improvements at Park Avenue and French Road	No	No	Yes	No	1
Greenway along Hinton Avenue from Park Avenue to Greenville Avenue	No	No	No	Yes	1
Bike lanes along Greenville Avenue from Oleander Drive to Wrightsville Avenue	No	No	No	Yes	1
Bike lanes along Wrightsville Avenue from Greenville Avenue to Oleander Drive/Military Cutoff Road	No	No	No	Yes	1
Intersection improvements at Park Avenue and Myrtle Avenue	No	No	Yes	No	1
Greenway along Circular Avenue from Greenville Avenue to terminus	No	No	No	Yes	1
Bicycle/pedestrian multi-use bridge over Bradley Creek parallel to Oleander Drive	No	No	No	Yes	1
Greenway along Oleander Drive from end of proposed Bradley Creek bridge to Wrightsville Avenue	No	No	No	Yes	1

Appendix B

The public was invited to comment on the draft River to the Sea Bikeway Plan from September 11, 2013 – November 1, 2013. Their comments are listed below.

- “I think this looks pretty great. If I am still living in Wilmington in the future I would love to utilize this path and amenities proposed.”
- “I would suggest that the alternative route across Bradley Creek on Wrightsville Road be the primary route instead of using Oleander Drive. There is room to add a designated bike lane, so that biking on it would be safer.”
- “I am still very concerned about the difficulty riding a bike across the Wrightsville Beach Bridge. I hope there is still a plan to build a walkway or roadway under or next to that bridge. You can not safely ride on the new grating.”
- “Overall this is an excellent document. I only have one suggestion. The first diagram in the section “Eastwood Road to Heide-Trask Bridge and the Wrightsville Beach Boat Launch” (page 18) is hard to read and understand. It also should make clear that this is the West side of the bridge. If possible, replace with a better diagram.”
- “To reduce bike travel time on Oleander, please consider incorporating West Airlie Road as part of the River to Sea Trail. Immediately after crossing Bradley Creek from the Arboretum, one could exit right off Oleander onto W. Airlie, which connects to Airlie Gardens/Airlie Road. It appears this linkage can be made using DOT right-of-way and only a wooden fence and a few shrubs stand in the way. Thanks for your consideration. This is a great and essential bike corridor initiative. Keep up the great work!

**WILMINGTON URBAN AREA METROPOLITAN PLANNING ORGANIZATION
TRANSPORTATION ADVISORY COMMITTEE**

RESOLUTION ADOPTING THE RIVER TO THE SEA BIKEWAY MASTER PLAN

WHEREAS, the Wilmington Urban Area Metropolitan Planning Organization provides transportation planning services for the City of Wilmington, Town of Carolina Beach, Town of Kure Beach, Town of Wrightsville Beach, Town of Belville, Town of Leland, Town of Navassa, New Hanover County, Brunswick County, Pender County, Cape Fear Public Transportation Authority and the North Carolina Board of Transportation; and

WHEREAS, the River to the Sea Bikeway (RTSB) provides residents and visitors with a facility that creates opportunities for basic transportation, recreational use and physical activity while connecting downtown Wilmington to Wrightsville Beach; and

WHEREAS, the RTSB provides bicycle and pedestrian access to numerous recreational, cultural, and educational destinations in Wilmington and Wrightsville Beach; and

WHEREAS, upon completion the RTSB will be an 11-mile on-and-off-road bicycle route comprised of neighborhood residential streets, off-road multi-use paths and a few arterial roadways following the Historic Beach Car Line, which carried vacationers from downtown Wilmington to Wrightsville Beach by trolley; and

WHEREAS, the master plan provides a planning framework, public input process, a public demand forecast, management plan and implementation priorities; and

WHEREAS, the plan describes the guiding principles of the RTSB and reviews and examines the bikeway's relationship to existing City and external agency plans; and

WHEREAS, this plan will provide the ability to more effectively direct capital spending and apply for grant funding.

NOW THEREFORE, be it resolved that the Wilmington Metropolitan Planning Organization's Transportation Advisory Committee hereby adopts the River to the Sea Bikeway Master Plan.

ADOPTED at a regular meeting of the Wilmington Urban Area Metropolitan Planning Organization Transportation Advisory Committee on January 29, 2014.

Laura Padgett, Chair
Transportation Advisory Committee

Mike Kozlosky, Secretary

**WILMINGTON URBAN AREA METROPOLITAN PLANNING ORGANIZATION
TRANSPORTATION ADVISORY COMMITTEE**

**RESOLUTION SUPPORTING THE ALLOCATION OF SURFACE TRANSPORTATION
PROGRAM- DIRECT ATTRIBUTABLE (STP-DA) FUNDS TO THE SELECTED FY 2014
PROJECTS**

WHEREAS, the Wilmington Urban Area Metropolitan Planning Organization provides transportation planning services for the City of Wilmington, Town of Carolina Beach, Town of Kure Beach, Town of Wrightsville Beach, Town of Belville, Town of Leland, Town of Navassa, New Hanover County, Brunswick County, Pender County, Cape Fear Public Transportation Authority and the North Carolina Board of Transportation; and

WHEREAS, on July 18, 2012 the Federal Transit Administration (FTA) and the Federal Highways Administration (FHWA) designated the Wilmington Urban Area Metropolitan Planning Organization as a Transportation Management Area (TMA); and

WHEREAS, Surface Transportation Direct Attributable (STP-DA) funds are available for all designated TMAs; and

WHEREAS, the Wilmington Urban Area Metropolitan Planning Organization Transportation Advisory Committee adopted the prioritization process and 2014 modal target investment strategies on August 28, 2013; and

WHEREAS, the Wilmington Urban Area Metropolitan Planning Organization developed a call for projects and received 8 submittals from MPO member agencies; and

WHEREAS, the Wilmington MPO has reviewed the project submittals based on the modal target investment strategies and prioritization process.

NOW, THEREFORE, be it resolved that the Wilmington Metropolitan Planning Organization's Transportation Advisory Committee hereby supports the allocation of STP-DA funds to the Old Fayetteville/Village Road Pedestrian Loop, Village Road Multi-Use Path Extension, Hooker Road Multi-Use Path, Hinton Avenue Multi-Use Path, Leland Middle School Sidewalk, Island Greenway from Greenville Avenue to Alabama Avenue, Intersection Improvements at Causeway Drive/Waynick Boulevard/Lumina Avenue/Stone Street, and \$350,000 to the Cape Fear Public Transportation Authority for preventative maintenance as the selected 2014 fiscal year projects.

ADOPTED at a regular meeting of the Wilmington Urban Area Metropolitan Planning Organization Transportation Advisory Committee on January 29, 2014.

Laura Padgett, Chair
Transportation Advisory Committee

Mike Kozlosky, Secretary

**WILMINGTON URBAN AREA METROPOLITAN PLANNING ORGANIZATION
TRANSPORTATION ADVISORY COMMITTEE**

**RESOLUTION SUPPORTING THE ALLOCATION OF THE FY 2014 TRANSPORTATION
ALTERNATIVES PROGRAM- DIRECT ATTRIBUTABLE (TAP-DA) FUNDS TO THE 5TH
AVENUE INTERSECTION UPGRADES PROJECT AND THE MIDDLE SOUND GREENWAY
PROJECT**

WHEREAS, the Wilmington Urban Area Metropolitan Planning Organization provides transportation planning services for the City of Wilmington, Town of Carolina Beach, Town of Kure Beach, Town of Wrightsville Beach, Town of Belville, Town of Leland, Town of Navassa, New Hanover County, Brunswick County, Pender County, Cape Fear Public Transportation Authority and the North Carolina Board of Transportation; and

WHEREAS, on July 18, 2012 the Federal Transit Administration (FTA) and the Federal Highways Administration (FHWA) designated the Wilmington Urban Area Metropolitan Planning Organization as a Transportation Management Area (TMA); and

WHEREAS, Transportation Alternatives Program- Direct Attributable (TAP-DA) funds are available for all designated TMAs; and

WHEREAS, the Wilmington Urban Area Metropolitan Planning Organization's Transportation Advisory Committee adopted the competitive process and 2014 modal target investment strategies on August 28, 2013; and

WHEREAS, the Wilmington Urban Area Metropolitan Planning Organization developed a call for projects and received 3 submittals from the MPO's member agencies; and

WHEREAS, the Wilmington MPO has reviewed the project submittals based on the modal target investment strategies and competitive process.

NOW, THEREFORE, be it resolved that the Wilmington Metropolitan Planning Organization's Transportation Advisory Committee hereby supports the allocation of the FY 2014 TAP-DA funds to the 5th Avenue Intersection Upgrades and the Middle Sound Greenway Project.

ADOPTED at a regular meeting of the Wilmington Urban Area Metropolitan Planning Organization Transportation Advisory Committee on January 29, 2014.

Laura Padgett, Chair
Transportation Advisory Committee

Mike Kozlosky, Secretary

PROPOSED REVISIONS TO 2012-2020 STIP

PROGRAM

**STIP/MTIP ADDITIONS
(December)**

* F-5301 CARTERET BRUNSWICK NEW HANOVER REGIONAL PROJ.CATEGORY	VARIOUS, CEDAR ISLAND, SOUTHPORT AND FORT FISHER DOCKS. REPLACE DOLPHINS. <i>ACCELERATE CONSTRUCTION FROM FY 17 TO FY 15.</i>	CONSTRUCTION FY 2015 - <u>\$1,150,000</u> (S) \$1,150,000
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Public Transportation

TBD	PREVENTATIVE MAINTENANCE	FY 2014- 350,000 (STP-DA) FY 2014- <u>87,500</u> (Local) \$437,500
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**WILMINGTON URBAN AREA METROPOLITAN PLANNING ORGANIZATION
TRANSPORTATION ADVISORY COMMITTEE**

**RESOLUTION SUPPORTING THE AMENDMENTS OF THE
2012-2020 STATE /METROPOLITAN TRANSPORTATION IMPROVEMENT PROGRAMS**

WHEREAS, the Wilmington Urban Area Metropolitan Planning Organization provides transportation planning services for the City of Wilmington, Town of Carolina Beach, Town of Kure Beach, Town of Wrightsville Beach, Town of Belville, Town of Leland, Town of Navassa, New Hanover County, Brunswick County, Pender County, Cape Fear Public Transportation Authority and the North Carolina Board of Transportation; and

WHEREAS, the Transportation Advisory Committee has found that the Wilmington Urban Area Metropolitan Planning Organization is conducting transportation planning in a continuous, cooperative, and comprehensive manner; and

WHEREAS, the North Carolina Board of Transportation adopted the 2012-2020 State Transportation Improvement Program on July 7, 2011 and the Wilmington Metropolitan Planning Organization adopted the Statewide/Metropolitan Transportation Improvement Program on August 11, 2011; and

WHEREAS, the Wilmington MPO desires to amend the State/Metropolitan Transportation Improvement Programs for various Cedar Island, Southport and Fort Fisher Dolphin replacements and preventative maintenance for the Cape Fear Public Transportation Authority; and

WHEREAS, the Wilmington Metropolitan Planning Organization has conducted a 30-day public comment period to receive citizen input on these transportation projects.

NOW THEREFORE, be it resolved by the Wilmington Urban Area Metropolitan Planning Organization's Transportation Advisory Committee supports amending the 2012-2020 State/Metropolitan Transportation Improvement Programs for various Cedar Island, Southport and Fort Fisher Dolphin replacements and preventative maintenance for the Cape Fear Public Transportation Authority.

ADOPTED at a regular meeting of the Wilmington Urban Area Metropolitan Planning Organization Transportation Advisory Committee on January 29, 2014.

Laura Padgett, Chair
Transportation Advisory Committee

Mike Kozlosky, Secretary

*Wilmington Urban Area Transportation Planning Work
Program*

Fiscal Year 2014-2015



DRAFT

**FY 2014-2015 UNIFIED PLANNING WORK PROGRAM
for the
WILMINGTON, NORTH CAROLINA URBAN AREA**

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Introduction

In compliance with Federal law and in the spirit of cooperation, the Wilmington Urban Area conducts a “cooperative, comprehensive, and continuing...” transportation planning process. This Planning Work Program (PWP) outlines the tasks and associated funding sources dedicated to the Wilmington Urban Area MPO transportation planning process during fiscal year 2014-2015. Depending on the specific funding source, tasks funded through the PWP are eligible for reimbursement of 80-90% of their cost from the Federal Highway Administration and Federal Transit Administration through the North Carolina Department of Transportation.

The PWP for the Wilmington Urban Area identifies four separate funding sources for Urban Area transportation planning. A brief description of these funding sources follows:

- Statewide Planning and Research Programs (SPR)-These funds are used by NCDOT to conduct work for the Wilmington Urban Area MPO.
- Federal Highway Administration Section 104(f) Funds-These funds are dedicated to the urban area to perform transportation planning. They require a 20% local match.
- Federal Transit Administration Section 5303 Funds-These funds are used for transit planning in the urban area. The Federal Transit Administration provides 80% of these funds, NCDOT 10%, and there is a required 10% local match.
- Surface Transportation Program-Direct Attributable Funds- These funds are dedicated to Transportation Management Areas and these funds can be used to perform transportation planning. They require a 20% local match.

The local match requirements will be shared by all members of the Wilmington Urban Area MPO in direct proportion to population as defined in the Wilmington Urban Area MPO Memorandum of Understanding.

Narrative of PWP Section 104(f) Work Tasks to be Performed in FY 2014-2015

(Primary work to be performed by lead planning agency staff except where noted.)

Line Item Code

II-A1 Traffic Volume Counts- Wilmington MPO staff maintains an ongoing traffic counting program. An annual summary of the urban area traffic counts and accident data will be prepared and uploaded to the WMPO website.

II-A2 Vehicle Miles of Travel- Establish VMT as measure of effectiveness of transportation system. Measure the VMT with the new travel demand model.

II-A3 Street System Changes- Update of street system database as needed.

II-A4 Traffic Accidents-Currently MPO staff conducts an ongoing effort to summarize traffic accident data for specific projects. MPO staff also utilizes accident data for specific inquiries.

II-A5 Transit System Data- Update of transit system database as needed.

II-A6 Dwelling Unit, Population, Employment Changes- Will measure land use changes by Transportation Analysis Zone between 2010 Census and travel demand model base year. Staff will provide capacity analysis for proposed developments within the Wilmington planning area boundary.

II-A7 Air Travel- Assistance to Wilmington International Airport as needed.

II-A8 Vehicle Occupancy Rate Counts- Monitor VOC as needed.

II-A9 Travel Time Studies- Conduct key travel time studies for travel demand model and development of the Long Range Transportation Plan.

II-A10 Mapping- Keep Geographic Information System files current and produce maps to support the TCC and TAC, transportation plans, programs, and projects.

II-A11 Central Area Parking Inventory- No tasks foreseen.

II-A12 Bicycle and Pedestrian Facilities Inventory- Update ride suitability assessment of federal-aid functionally classed roadways.

II-B1 Collection of Base Year Data- No tasks foreseen.

II-B2 Collection of Network Data- No tasks foreseen.

II-B3 Travel Model Updates- No tasks foreseen.

II-B4 Travel Surveys- No tasks foreseen.

II-B5 Forecast of Data to Horizon Year-No tasks foreseen.

II-B6 Community Goals and Objectives- Monitor public input as it pertains to goals and objectives set forth in the update of the Long Range Transportation Plan. Staff the Citizen Advisory Committee (CAC).

II-B7 Forecast of Future Year Travel Patterns- No tasks foreseen.

II-B-8 Capacity Deficiency Analysis- Identify areas of deficient capacity through use of travel demand model for further analysis as potential long range transportation improvement projects.

II-B9 Highway Element of Metropolitan Transportation Plan (MTP)- Identification of highway deficiencies, priorities, and proposed highway improvement solutions and strategies. Provide documentation of process and recommendations in the MTP.

II-B10 Transit Element of Metropolitan Transportation Plan- Identify public transportation deficiencies, priorities, and proposed transit improvement solutions for inclusion in the update of the MTP. Provide documentation of process and recommendations in the update of the MTP.

II-B11 Bicycle and Pedestrian Element of the Metropolitan Transportation Plan- Identify bicycle deficiencies, priorities, and proposed bicycle and pedestrian improvement solutions and strategies. Provide documentation of the process and recommendations in the update of the MTP.

II-B12 Airport/Air Travel Element of the Metropolitan Transportation Plan - Identify airport and air service deficiencies, priorities, and proposed airport and air service improvement solutions and strategies. Provide documentation of process and recommendations in the update of the MTP.

II-B13 Collector Street Element of Metropolitan Transportation Plan- Develop regionally acceptable collector street policies and program recommendations for inclusion in the update of the MTP.

II-B14 Rail, Waterway and Other Elements of Metropolitan Transportation Plan - Identify rail and waterway deficiencies, priorities, and proposed rail and waterway improvement solutions and strategies. Provide documentation of process and recommendations in the update of the MTP.

II-B15 Freight Movement/Mobility Planning- Identification of freight movement deficiencies, priorities, and proposed improvement solutions and strategies. Provide documentation of process and recommendations in the update of the MTP.

II-B16 Financial Planning- Develop realistic, best estimates of funding sources available and project cost estimates throughout the forecast years for the MTP. Ensure fiscal constraint in the update of the MTP.

II-B17 Congestion Management Strategies- Develop strategies to address and manage congestion by increasing transportation system supply, reducing demand by application of alternative mode solutions, and transportation system management strategies. Evaluate strategies developed for the Congestion Management Process. Document process and solutions in the update of the MTP.

II-B-18 Air Quality Planning/ Conformity Analysis- No tasks foreseen.

III-A Planning Work Program- Evaluation of FY 2014 PWP and development of FY 2015 PWP.

III-B Transportation Improvement Program-Review and amend the 2012-2020 Transportation Improvement Program on an as needed basis.

III-C1 Title VI Compliance-Work to insure compliance with the requirements of Title VI in urban area policies and practices.

III-C2 Environmental Justice- Analysis and outreach to insure that transportation plans and projects comply with Environmental Justice policies.

III-C3 MBE Planning- Activities to encourage participation of minority-owned business enterprises in contractual and supply opportunities.

III-C4 Planning for the Elderly and Disabled- Ensure the special needs of the elderly and disabled are addressed in all transportation planning projects.

II-C5 Safety/Drug Control Planning- No tasks foreseen by the MPO.

III-C6 Public Involvement- Extensive Public Participation effort will be carried out to solicit input and reaction to the completion of planning studies within the Wilmington MPO's planning area boundary.

III-C7 Private Sector Participation- Activities to encourage private sector participation in planning and project activities.

III-D1 Transportation Enhancement Planning- Prepare and submit applications for potential transportation enhancement funding in the Wilmington Urban Area.

II-D2 Environmental and Pre-TIP Planning- Conduct environmental analysis and planning for the development of transportation projects in the Wilmington Urban Area.

III-D3 Special Studies- Consultant will be contracted to assist in the completion of the Metropolitan Transportation Plan and other studies completed by the MPO.

III-D4 Statewide and Regional Planning- Coordination of urban area activities with statewide and regional initiatives.

III-E Management and Operations- Required ongoing administrative and operational tasks to support MPO committees and reporting requirements.

MPO	Wilmington
FTA Code	442100-
Task Code	II-A-5
Title	Transit System Data
Task Objective	Collect and analyze data for route planning and submission to NTD
Tangible Product Expected	Accurate data from multiple data collection devices onboard Wave Transit vehicles and other sources to ensure compliance with National Transit Database requirements
Expected Completion Date of Products	June 2015
Previous Work	Collection of data and submission to NTD
Relationship	This is a collaborative effort of the Wilmington MPO and the Cape Fear Public Transportation Authority (Wave Transit)
Responsible Agency	CFPTA
SPR - Highway - NCDOT 20%	
SPR - Highway - F11WA 80%	
Section 104 (f) PL, Local 20%	
Section 104 (f) PL, FHWA 80%	
Section 5303 Local 10%	1,061
Section 5303 NCDOT 10%	1,061
Section 5303 FTA 80%	8,488
Section 5307 Transit - Local 10%	
Section 5307 Transit - NCDOT 10%	
Section 5307 Transit - FTA 80%	
Additional Funds - Local 100%	

MPO	Wilmington
FTA Code	442100-
Task Code	II-B-6
Title	Community Goals & Objectives
Task Objective	Interpret and communicate with members of the Authority and WMPO TCC and TAC adopted planning documents defining community goals and objectives
Tangible Product Expected	Service offerings that are compliant with adopted plans that outlined the goals of the community for public transportation in the region
Expected Completion Date of Products	June 2015
Previous Work	Communication of goals and objectives to decision makers and the public
Relationship	This is a collaborative effort of the Wilmington MPO and the Cape Fear Public Transportation Authority (Wave Transit)
Responsible Agency	CFPTA
SPR - Highway - NCDOT 20%	
SPR - Highway - F11WA 80%	
Section 104 (f) PL, Local 20%	
Section 104 (f) PL, FHWA 80%	
Section 5303 Local 10%	354
Section 5303 NCDOT 10%	354
Section 5303 FTA 80%	2,832
Section 5307 Transit - Local 10%	
Section 5307 Transit - NCDOT 10%	
Section 5307 Transit - FTA 80%	
Additional Funds - Local 100%	

MPO	Wilmington
FTA Code	442100-
Task Code	II-B-10
Title	Transit Element of the LRTP
Task Objective	Provide input to CAC, TCC and TAC regarding long range transit plans for the region
Tangible Product Expected	Informed decisions regarding long range public transportation plans leading to a realistic planning document for the region
Expected Completion Date of Products	June 2015
Previous Work	Provided input and educated decision makers regarding the federal and state public transportation program
Relationship	This is a collaborative effort of the Wilmington MPO and the Cape Fear Public Transportation Authority (Wave Transit)
Responsible Agency	CFPTA
SPR - Highway - NCDOT 20%	
SPR - Highway - F11WA 80%	
Section 104 (f) PL, Local 20%	
Section 104 (f) PL, FHWA 80%	
Section 5303 Local 10%	354
Section 5303 NCDOT 10%	354
Section 5303 FTA 80%	2,832
Section 5307 Transit - Local 10%	
Section 5307 Transit - NCDOT 10%	
Section 5307 Transit - FTA 80%	
Additional Funds - Local 100%	

MPO	Wilmington
FTA Code	442100-
Task Code	II-B-16
Title	Financial Planning
Task Objective	Plan capital and operating cost estimates to ensure fiscal compliance and maintain the adopted level of transit service
Tangible Product Expected	Short range financial plans based on current federal and state legislation to ensure that transit services are provided in a consistent manner utilizing the most economical and efficient methods
Expected Completion Date of Products	June 2015
Previous Work	Financial planning of the public transportation program
Relationship	This is a collaborative effort of the Wilmington MPO and the Cape Fear Public Transportation Authority (Wave Transit)
Responsible Agency	CFPTA
SPR - Highway - NCDOT 20%	
SPR - Highway - F11WA 80%	
Section 104 (f) PL, Local 20%	
Section 104 (f) PL, FHWA 80%	
Section 5303 Local 10%	707
Section 5303 NCDOT 10%	707
Section 5303 FTA 80%	5,656
Section 5307 Transit - Local 10%	
Section 5307 Transit - NCDOT 10%	
Section 5307 Transit - FTA 80%	
Additional Funds - Local 100%	

MPO	Wilmington
FTA Code	442100-
Task Code	II-C-1
Title	Title VI
Task Objective	Interpret and prepare Title VI documents and monitor Title VI efforts to ensure compliance with FTA approved Title VI program
Tangible Product Expected	Compliance with the Title VI circular and adopted Title VI program
Expected Completion Date of Products	June 2015
Previous Work	Title VI program development and compliance efforts
Relationship	This is a collaborative effort of the Wilmington MPO and the Cape Fear Public Transportation Authority (Wave Transit)
Responsible Agency	CFPTA
SPR - Highway - NCDOT 20%	
SPR - Highway - F11WA 80%	
Section 104 (f) PL, Local 20%	
Section 104 (f) PL, FHWA 80%	
Section 5303 Local 10%	708
Section 5303 NCDOT 10%	708
Section 5303 FTA 80%	5,664
Section 5307 Transit - Local 10%	
Section 5307 Transit - NCDOT 10%	
Section 5307 Transit - FTA 80%	
Additional Funds - Local 100%	

MPO	Wilmington
FTA Code	442100-
Task Code	II-C-3
Title	Minority Business Enterprise
Task Objective	Implement and monitor the MBE program to be compliant with adopted MBE program, update MBE goals as required, and undertake MBE outreach
Tangible Product Expected	MBE participation that is equal to or greater than the adopted and approved MBE goal
Expected Completion Date of Products	June 2015
Previous Work	MBE program oversight
Relationship	This is a collaborative effort of the Wilmington MPO and the Cape Fear Public Transportation Authority (Wave Transit)
Responsible Agency	CFPTA
SPR - Highway - NCDOT 20%	
SPR - Highway - F11WA 80%	
Section 104 (f) PL, Local 20%	
Section 104 (f) PL, FHWA 80%	
Section 5303 Local 10%	707
Section 5303 NCDOT 10%	707
Section 5303 FTA 80%	5,656
Section 5307 Transit - Local 10%	
Section 5307 Transit - NCDOT 10%	
Section 5307 Transit - FTA 80%	
Additional Funds - Local 100%	

MPO	Wilmington
FTA Code	442100-
Task Code	II-C-6
Title	Public Involvement
Task Objective	Hear and analyze public comment from monthly meetings of the Authority, email comments, written comments and other comments outlined in the Authority Public Involvement Program. Work with public to update LCP, LRTP, SRTP and other planning documents.
Tangible Product Expected	Make recommendations to appropriate parties from comments made to the Authority by members of the community
Expected Completion Date of Products	June 2015
Previous Work	Public comment
Relationship	This is a collaborative effort of the Wilmington MPO and the Cape Fear Public Transportation Authority (Wave Transit)
Responsible Agency	CFPTA
SPR - Highway - NCDOT 20%	
SPR - Highway - F11WA 80%	
Section 104 (f) PL, Local 20%	
Section 104 (f) PL, FHWA 80%	
Section 5303 Local 10%	708
Section 5303 NCDOT 10%	708
Section 5303 FTA 80%	5,664
Section 5307 Transit - Local 10%	
Section 5307 Transit - NCDOT 10%	
Section 5307 Transit - FTA 80%	
Additional Funds - Local 100%	

MPO	Wilmington
FTA Code	442100-
Task Code	III-E
Title	Management & Operations
Task Objective	MPO and CFPTA staff will conduct required administrative and operational tasks to support Wave Transit. Periodical reviews of administrative agreements and procedures. Staff will perform daily operations to disseminate planning information to the TAC/TCC committee members, the public and/or other agencies.
Tangible Product Expected	Compliance with FTA and NCDOT requirements, well informed community and elected officials about the public transit program, and functional system that meets the needs of the community
Expected Completion Date of Products	June 2015
Previous Work	Collection of data and submission to NTD
Relationship	This is a collaborative effort of the Wilmington MPO and the Cape Fear Public Transportation Authority (Wave Transit)
Responsible Agency	CFPTA
SPR - Highway - NCDOT 20%	
SPR - Highway - F11WA 80%	
Section 104 (f) PL, Local 20%	
Section 104 (f) PL, FHWA 80%	
Section 5303 Local 10%	2,476
Section 5303 NCDOT 10%	2,476
Section 5303 FTA 80%	19,808
Section 5307 Transit - Local 10%	
Section 5307 Transit - NCDOT 10%	
Section 5307 Transit - FTA 80%	
Additional Funds - Local 100%	

FY 2014-2015 DRAFT Unified Planning Work Program Proposed Budget

Wilmington MPO																				
TASK CODE	TASK DESCRIPTION	SPR		SEC. 104 (f) PL		SECTION 5303			SECTION 5307			ADDITIONAL FUNDS		TASK FUNDING SUMMARY						
		Highway		Local 20%	FHWA 80%	Local 10%	NCDOT 10%	FTA 80%	Transit			STP-DA		LOCAL	STATE	FEDERAL	TOTAL			
		NCDOT 20%	FHWA 80%						Local 10%	NCDOT 10%	FTA 80%	Local 20%	FHWA 80%							
II-A	Surveillance of Change																			
II-A-1	Traffic Volume Counts			6,400	25,600										6,400	0	25,600	32,000		
II-A-2	Vehicle Miles of Travel			50	200										50	0	200	250		
II-A-3	Street System Changes			50	200										50	0	200	250		
II-A-4	Traffic Accidents			600	2,400										600	0	2,400	3,000		
II-A-5	Transit System Data			100	400	1,061	1,061	8,488							1,161	1,061	8,888	11,110		
II-A-6	Dwelling Unit, Pop. & Emp. Change			3,000	12,000										3,000	0	12,000	15,000		
II-A-7	Air Travel			50	200										50	0	200	250		
II-A-8	Vehicle Occupancy Rates			50	200										50	0	200	250		
II-A-9	Travel Time Studies			50	200										50	0	200	250		
II-A-10	Mapping			1,600	6,400										1,600	0	6,400	8,000		
II-A-11	Central Area Parking Inventory			0	0										0	0	0	0		
II-A-12	Bike & Ped. Facilities Inventory			50	200										50	0	200	250		
II-B	Long Range Transp. Plan														0	0	0	0		
II-B-1	Collection of Base Year Data			0	0										0	0	0	0		
II-B-2	Collection of Network Data			0	0										0	0	0	0		
II-B-3	Travel Model Updates			0	0										0	0	0	0		
II-B-4	Travel Surveys			0	0										0	0	0	0		
II-B-5	Forecast of Data to Horizon year			0	0										0	0	0	0		
II-B-6	Community Goals & Objectives			1,000	4,000	354	354	2,832							1,354	354	6,832	8,540		
II-B-7	Forecast of Future Travel Patterns			0	0										0	0	0	0		
II-B-8	Capacity Deficiency Analysis			1,000	4,000										1,000	0	4,000	5,000		
II-B-9	Highway Element of the LRTP			2,000	8,000										2,000	0	8,000	10,000		
II-B-10	Transit Element of the LRTP			400	1,600	354	354	2,832							754	354	4,432	5,540		
II-B-11	Bicycle & Ped. Element of the LRTP			2,000	8,000										2,000	0	8,000	10,000		
II-B-12	Airport/Air Travel Element of LRTP			50	200										50	0	200	250		
II-B-13	Collector Street Element of LRTP			600	2,400										600	0	2,400	3,000		
II-B-14	Rail, Water or other mode of LRTP			2,000	8,000										2,000	0	8,000	10,000		
II-B-15	Freight Movement/Mobility Planning			2,000	8,000										2,000	0	8,000	10,000		
II-B-16	Financial Planning			200	800	707	707	5,656							907	707	6,456	8,070		
II-B-17	Congestion Management Strategies			2,000	8,000										2,000	0	8,000	10,000		
II-B-18	Air Qual. Planning/Conformity Anal.			0	0										0	0	0	0		
III-A	Planning Work Program			200	800										200	0	800	1,000		
III-B	Transp. Improvement Plan			200	800										200	0	800	1,000		
III-C	Cvl Rgts. Cmp./Otr .Reg. Reqs.														0	0	0	0		
III-C-1	Title VI			200	800	708	708	5,664							908	708	6,464	8,080		
III-C-2	Environmental Justice			200	800										200	0	800	1,000		
III-C-3	Minority Business Enterprise			100	400	707	707	5,656							807	707	6,056	7,570		
III-C-4	Planning for the Elderly & Disabled			50	200										50	0	200	250		
III-C-5	Safety/Drug Control Planning			0	0										0	0	0	0		
III-C-6	Public Involvement			1,200	4,800	708	708	5,664							1,908	708	10,464	13,080		
III-C-7	Private Sector Participation			50	200										50	0	200	250		
III-D	Incidental Ping/Project Dev.														0	0	0	0		
III-D-1	Transportation Enhancement Ping.			600	2,400										600	0	2,400	3,000		
III-D-2	Enviro. Analysis & Pre-TIP Ping.			50	200										50	0	200	250		
III-D-3	*Special Studies			14,000	56,000										14,000	0	56,000	70,000		
III-D-4	Regional or Statewide Planning			50	200										50	0	200	250		
III-E	Management & Operations			23,000	92,000	2,476	2,476	19,808							50,000	200,000	75,476	2,476	311,808	389,760
TOTALS				0	0	65,150	260,600	7,075	7,075	56,600					50,000	200,000	122,225	7,075	517,200	646,500

Anticipated DBE Contracting Opportunities for FY 2014-2015

Name of MPO: Wilmington Urban Area MPO

Person Completing Form: Mike Kozlosky Telephone Number: 910-342-2781

Prospectus Task Code	Prospectus Description	Name of Agency Contracting Out	Type of Contracting Opportunity (Consultant, etc.)	Federal Funds to be Contracted Out	Total Funds to be Contracted Out
III-D-3	Special Studies	City of Wilmington	Consultant	\$70,000	\$20,000

RESOLUTION
APPROVING THE FY 2014-2015 PLANNING WORK PROGRAM
OF THE WILMINGTON URBAN AREA

WHEREAS, a comprehensive and continuing transportation planning program must be carried out cooperatively in order to ensure that funds for transportation projects are effectively allocated to the Wilmington Urban Area;

WHEREAS, the City of Wilmington has been designated as the recipient of Federal Transit Administration Metropolitan Planning Program (Section 5303) funds and Federal Highway Administration Metropolitan Planning (Section 104(f)) funds;

WHEREAS, members of the Wilmington Urban Area Transportation Advisory Committee agree that the Planning Work Program will effectively advance transportation planning for State Fiscal Year 2014-2015;

NOW THEREFORE, be it resolved that the Transportation Advisory Committee hereby endorses the FY 2014-2015 Planning Work Program for the Wilmington Urban Area.

I, Laura Padgett, Chair of the Wilmington Urban Area Transportation Advisory Committee do hereby certify that the above is a true and correct copy of an excerpt from the minutes of a meeting of the Wilmington Urban Area Transportation Advisory Committee, duly held on this the ____ day of _____ 2014.

Laura Padgett, Chair
Wilmington Urban Area TAC

Subscribed and sworn to me this the _____ day of March, 2014.

Notary Public

My commission expires_____.

RESOLUTION CONFIRMING TRANSPORTATION PLANNING PROCESS

RESOLUTION CERTIFYING THE WILMINGTON METROPOLITAN PLANNING ORGANIZATION'S TRANSPORTATION PLANNING PROCESS FOR FY 2014

WHEREAS, the Transportation Advisory Committee has found that the Metropolitan Planning Organization is conducting transportation planning in a continuous, cooperative, and comprehensive manner in accordance with 23 U.S.C. 134 and 49 U.S.C. 1607;

WHEREAS, the Transportation Advisory Committee has found the Transportation Planning Process to be in full compliance with Title VI of the Civil Rights Act of 1964 and the Title VI Assurance executed by each State under 23 U.S.C. 324 and 29 U.S.C. 794;

WHEREAS, the Transportation Advisory Committee has considered how the Transportation Planning Process will affect the involvement of Disadvantaged Business Enterprises in the FHWA and the FTA funded planning projects (Section 1003(b) of ISTEA of 1991 (Pub. L. 102-240), Sec. 105(f), Pub. L. 97-424, 96 Stat. 2100, 49 CFR part 23);

WHEREAS, the Transportation Advisory Committee has considered how the Transportation Planning Process will affect the elderly and the disabled per the provision of the Americans With Disabilities Act of 1990 (Pub. L. 101-336, 104 Stat. 327, as amended) and the U.S. DOT implementing regulations (49 CFR parts 27, 37, and 38);

WHEREAS, the Transportation Plan has a planning horizon year of 2035, and meets all the requirements for an adequate Transportation Plan,

NOW THEREFORE, be it resolved that the Wilmington Urban Area Transportation Advisory Committee certifies the transportation planning process for the Wilmington Metropolitan Planning Organization on this the 26th day of March, 2014.

Laura Padgett
Chair, Transportation Advisory Committee

Mike Kozlosky
Secretary, Wilmington Metropolitan Planning Organization



U.S. Department of Transportation
Federal Transit Administration

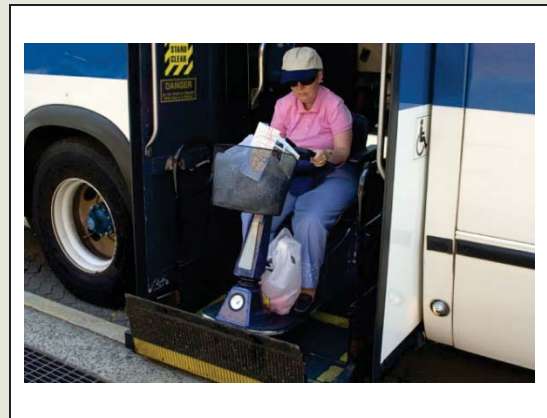


**FACT SHEET:
 ENHANCED MOBILITY OF SENIORS AND INDIVIDUALS WITH DISABILITIES
 SECTION 5310**

	FY 2013 (in millions)	FY 2014 (in millions)
Formula Grants for the Enhanced Mobility of Seniors and Individuals with Disabilities	\$254.8	\$258.3

Purpose

This program is intended to enhance mobility for seniors and persons with disabilities by providing funds for programs to serve the special needs of transit-dependent populations beyond traditional public transportation services and Americans with Disabilities Act (ADA) complementary paratransit services.



Statutory References

49 U.S.C. Section 5310 / MAP-21 Section 20009

Eligible Recipients

- States (for all areas under 200,000 in population) and designated recipients.
- Subrecipients: states or local government authorities, private non-profit organizations, or operators of public transportation that receive a grant indirectly through a recipient.

Eligible Activities

- At least 55% of program funds must be used on capital projects that are:
 - Public transportation projects planned, designed, and carried out to meet the special needs of seniors and individuals with disabilities when public transportation is insufficient, inappropriate, or unavailable.
- The remaining 45% may be used for:
 - Public transportation projects that exceed the requirements of the ADA.
 - Public transportation projects that improve access to fixed-route service and decrease reliance by individuals with disabilities on complementary paratransit.
 - Alternatives to public transportation that assist seniors and individuals with disabilities.

What's New?

- Consolidates New Freedom Program and Elderly and Disabled Program.
- Operating assistance is now available under this program.

Funding

- Funds are apportioned for urbanized and rural areas based on the number of seniors and individuals with disabilities.
- Federal share for capital projects (including acquisition of public transportation services) is 80%.

(cont.)

Formula Grants for the Enhanced Mobility of Seniors and Individuals with Disabilities

Funding (cont.)

- Federal share for operating assistance is 50%.
- Adopts New Freedom funding allocations:
 - 60% to designated recipients in urbanized areas with a population over 200,000.
 - 20% to states for small urbanized areas.
 - 20% to states for rural areas.

Ongoing Provisions

- Local share may be derived from other federal (non-DOT) transportation sources or the Federal Lands Highways Program under 23 U.S.C. 204 (as in former Section 5310 program).
- Permits designated recipients and states to carry out competitive process to select subrecipients.
- Recipients must certify that projects selected are included in a locally developed, coordinated public transit-human services transportation plan. The plan must undergo a development and approval process that includes seniors and people with disabilities, transportation providers, among others, and is coordinated to the maximum extent possible with transportation services assisted by other federal departments and agencies.
- Permits acquisition of public transportation services as a capital expense.
- Up to 10% of program funds can be used to administer the program, to plan, and to provide technical assistance.

For additional information on FTA and MAP-21, visit www.fta.dot.gov/map21.



WILMINGTON URBAN AREA Metropolitan Planning Organization

P.O. Box 1810
Wilmington, North Carolina 28402
910.342.2781 910.341.7801 FAX

MEMORANDUM

TO: TAC Members
FROM: Mike Kozlosky, Executive Director
DATE: January 8, 2014
SUBJECT: **Wilmington MPO Local Input Methodology Process**

Members:

City of
WILMINGTON
Lead Planning Agency

Town of
CAROLINA BEACH

Town of
KURE BEACH

Town of
WRIGHTSVILLE BEACH

NEW HANOVER
County

Town of
BELVILLE

Town of
LELAND

Town of
NAVASSA

BRUNSWICK
County

PENDER
County

CAPE FEAR
Public Transportation
Authority

North Carolina
BOARD OF
TRANSPORTATION

The Strategic Transportation Investments is a new formula to determine how the North Carolina Department of Transportation (NCDOT), in partnership with local governments, will fund and prioritize transportation projects in the state of North Carolina. Under this new formula, all modes will compete for the same funding. This means that roadway projects will compete with ferry projects which will compete with public transportation projects, etc. The Strategic Transportation Investments places projects into three categories: Statewide, Regional and Division levels. Metropolitan Planning Organizations (MPOs), Rural Planning Organizations (RPOs) and Division Engineers will assign local input points to projects in the Regional and Division levels. MPOs and RPOs are required to develop methodology for the assignment of local input points and NCDOT must approve this methodology.

The following methodology has been developed by the Wilmington MPO for the purposes of determining transportation funding priorities for Prioritization 3.0. This methodology is intended to ensure a process that is both data-driven and responsive to local needs. The methodology has been developed to meet the requirements of Session Law 2012-84 (Senate Bill 890), which requires that MPOs and RPOs have a process including both quantitative and qualitative elements for determining project prioritization.

The MPO's participation in the Strategic Transportation Investments consists of the following steps: (1) selection of projects for consideration in the Statewide, Regional and Division levels; (2) quantitative scoring of submitted projects by SPOT; (3) develop draft qualitative scoring of projects and ranking; (4) public involvement process and (5) finalize project scoring and ranking.

Each of the three categories identified under the new Strategic Transportation Investments have their own criteria:

Statewide Level

- Projects of statewide significance will receive 40% of the available revenue
- The project selection process will be 100% data-driven/quantitative scoring

Regional Level

- Projects of regional significance will receive 30% of the available revenue based on regional population. Projects on this level compete within specific regions made up of two NCDOT Divisions. The Wilmington MPO is located in Region B.
- Data/ quantitative scoring will comprise 70% of the decision-making process and local rankings will comprise of the remaining 30%

Division Level

- Projects that address local concerns such as safety, congestion and connectivity will receive 30% of the available revenue shared equally over NCDOT's 14 Transportation Divisions. The Wilmington MPO is located in NCDOT Division 3.
- The department will choose projects based 50% on data and 50% on local rankings.

The Strategic Prioritization Office of Transportation "SPOT" will be developing quantitative scores for all projects based on the adopted methodology. Default criteria were recommended by the Prioritization 3.0 work group and agreed to by NCDOT to quantitatively score projects across all modes. However, the MPOs, RPOs and the NCDOT's Division Engineers were given flexibility to develop their own highway criteria and formulas for the quantitative evaluation and project scoring in the Regional Projects and Division Projects. SPOT required that any deviation from the adopted criteria had to be unanimously approved by each MPO and RPO in the region and/or division by July 1, 2013. A revised set of criteria was approved unanimously by the members of Region B and Division 3. Below please find these revised criteria:

Regional Projects Evaluation Criteria:

Multi-modal 25%
Safety 25%
Benefit-Cost- 20%
Local Input- 30%

Division Projects Evaluation Criteria

Safety 20%
Congestion 20%
Multi-modal 10%
Local Input- 50%

The aforementioned percentages and weights are used for the roadway mode only and all non-roadway projects will utilize the same criteria statewide.

Wilmington MPO Local Input Methodology Process

While developing the adopted Cape Fear Commutes2035 Long Range Transportation Plan, the Wilmington MPO's TAC adopted a prioritization process for evaluating projects identified in the plan. Projects were evaluated and scored based on their performance on different evaluating criteria. *Roadway projects* had different evaluating criteria based on the type of problem they addressed (congestion mitigation, quality of life, and safety). The *Congestion Management projects* were evaluated based on specific factors that included Efficient, Safe, Multi-modal, Appropriate, Integrated and Responsible factors. The *Quality of Life projects* were scored based on the average daily traffic (ADT), an ugly factor, existing or planned transit service, gateway to the region, identified in an adopted plan and if the project was within an incorporated municipality. *Safety projects* were scored based on the crash rate from 2005-2009. The prioritization process for the Cape Fear Commutes 2035 Transportation Plan was used as a

starting point for guiding the developed of the Wilmington MPO’s local methodology for Prioritization 3.0.

The MPO has developed an objective, matrix-based prioritization process for the review of projects submitted to SPOT for consideration in Prioritization 3.0. The MPO proposes to utilize a Local Preference, SPOT Scoring, Consistency with Plans and Status of the Project in the Development as evaluating criteria in assigning these local input points. The WMPO will use the quantitative scores from the SPOT office as part of the prioritization process as well as to guide the TAC in the assignment of local preference points.

Local Preference- The Local Preference is the priority of the project as ranked by the TCC and TAC. The TAC will review and approve a final prioritized list of projects for submission to SPOT assigned by level. These projects will be grouped into High, Medium and Low categories based on approval by the TAC. There are approximately 100 projects to be considered during the evaluation process. A matrix will be used to develop the draft Local Preference points. Below please find an example of this matrix:

		Reduces Mean Travel Time	Reduces Conflict Points	Includes Multi-modal Accommodations	Adopted Local Support	Prioritization 2.0 Points	Total
		Data	(Yes/No)	(Yes/No)	(Yes/No)	Points	Points
Project X							

*Yes= 100 points

*No = 0 points

Reduce Mean Travel Time- is the output data from SPOT’s congestion score for each project.

Reduces Conflict Points- the project reduces the number of conflict points or implements access management strategies. This information will be derived from the TAC’s adopted Problem Statement for the project and/or adopted Long Range Transportation Plan.

Includes Multi-modal Accommodations- the project also includes a bicycle, pedestrian or public transportation component. This information will be derived from the TAC’s adopted Problem Statement for the project and/or adopted Long Range Transportation Plan.

Adopted Local Support- the local municipality and/or county has adopted a resolution supporting the project. The resolution should specify facts / figures which justify the need for the project.

Prioritization 2.0 Points- the amount of local input points the project received during the Prioritization 2.0

The High priority projects will be the Top 20 projects as prioritized by the TAC, the Medium priority projects will be projects 21-50 and the Low priority projects will be projects 51 through the remainder of the list. Each project will be evaluated on a sliding scale.

- High priority projects receiving- 50 points
- Medium priority projects receiving- 30 points
- Low priority projects receiving- 10 points

SPOT 3.0 Score- The SPOT 3.0 score is the score provided by SPOT for each project. Each project will be scored by the MPO on a sliding scale from 20 to 1 based on the SPOT score.

Consistency with Plans- This criterion is used to determine if the proposed project is in an adopted plan. Each project will be evaluated on a sliding scale with the points assigned as follows:

- Projects included in the adopted Long Range Transportation Plan- 20 points
- Projects included in Plans adopted by the MPO- 10 points
- Projects that are adopted in plans by the member jurisdictions but not adopted by the MPO- 5 points

Status of the Project in Development- This criterion will identify which phase the project is in the development of the project. Each project will be evaluated on a sliding scale with the criteria as outlined below:

- Projects that are in the right-of way acquisition or property already acquired by the State of North Carolina- 10 points
- Projects that are in the Design phase- 5 points
- Projects that are in the Planning phase- 3 points

Under this new formula, all modes will compete against each other for funding. Evaluation criteria needed to be developed for roadway, public transportation, aviation, ferry, rail, bicycle and pedestrian projects. Wilmington MPO staff recommends the following criteria and percentages for the evaluation of projects at the Regional and Division levels in Prioritization 3.0: These proposed criteria will be utilized across all modes of transportation with each project able to achieve up to 100 points per each subcriteria in an effort to normalize the project rankings and scores.

Roadway Projects (100 points)

Local Preference (50%)

SPOT Score (20%)

Consistency with Plans (20%)

Status of the Project in Development (10%)

Bicycle and Pedestrian Projects (100 points)

Local Preference (50%)
 SPOT Score (20%)
 Consistency with Plans (20%)
 Status of the Project in Development (10%)

Public Transportation (100 points)

Local Preference (50%)
 SPOT Score (20%)
 Consistency with Plans (20%)
 Status of the Project in Development (10%)

Aviation Projects (100 points)

Local Preference (50%)
 SPOT Score (20%)
 Consistency with Plans (20%)
 Status of the Project in Development (10%)

Ferry Projects (100 points)

Local Preference (50%)
 SPOT Score (20%)
 Consistency with Plans (20%)
 Status of the Project in Development (10%)

Rail Projects (100 points)

Local Preference (50%)
 SPOT Score (20%)
 Consistency with Plans (20%)
 Status of the Project in Development (10%)

Each MPO, RPO and NCDOT Division Engineer is allowed to assign local input points that will be used by NCDOT in ranking and scoring each project. The Wilmington MPO will be able to assign up to 1,500 local input points for each (**1500 for Regional Impact and 1500 for Division Needs categories**). The maximum number of points that can be assigned to a project is 100 points. The assignment of local input points will be based on a mathematical sum of the points assigned during the Local Input Methodology Process.

Example:

Project: Project X

Local Preference- Project scores in the Top 20=	50 points
SPOT Score Translated=	20 points
Project Consistency with Plans- Project is in LRTP=	20 points
Status of Project in Development- Project right of way acquisition is complete=	<u>10 points</u>
Total	100 points

The top scoring projects will receive the highest number of points from the Wilmington MPO. The Local Input Methodology shall serve as a guide for the TAC to assign points to projects located within the Wilmington MPO's planning jurisdiction and the TAC will have the flexibility to assign points as the Committee desires. However deviation from the Local Input Methodology shall require the

justification/rationale to be made during a public meeting of the TAC as advertised by the open meetings laws and included with the sharing of the points with the public through the public outreach effort.

The Wilmington MPO's TCC and TAC will develop a "draft" project ranking and scoring to assign points based on the aforementioned criteria. The Wilmington MPO will then conduct a public outreach effort. Following the public outreach effort, the MPO will review with the TCC and TAC any comments received during the public participation process. No additional projects will be submitted based on the public participation effort. The TAC will then adopt a Final Project Ranking and Scoring for the Wilmington MPO. This information will then be submitted to the SPOT office.

Public Involvement Process

The Wilmington MPO adopted the most recent Public Involvement Policy on September 9, 2009. The Public Involvement Policy is an umbrella policy encompassing the plans and programs of the Wilmington MPO's transportation planning process. This policy serves as an integral part of the MPO's planning efforts. The Wilmington MPO will utilize this adopted policy to solicit comments on the "draft" Project Ranking and Scoring. These outreach efforts will include regular public input opportunities at TAC meetings, the draft project ranking and scoring will also be posted on the MPO's website and the MPO will solicit public comments. Following the closing of the public participation process, staff will review any comments received with the TCC and TAC. All public comments received and all final point assignments and any justification/rationale for point assignment which deviates from this Local Methodology will be placed on the Wilmington MPO's website at www.wmpo.org.

Prioritization Process Timeline: 2013-2014

- | | |
|--|---------------|
| • TAC Approves all projects for submittal | December 2013 |
| • TAC Reviews "DRAFT" Local Input Methodology | January 2014 |
| • Submit Projects to NCDOT | February 2014 |
| • TAC Adopts Local Input Methodology | February 2014 |
| • NCDOT Scores for New and Existing Projects | May 2014 |
| • TAC Approves "DRAFT" Project Ranking and Scoring | May 2014 |
| • Conduct MPO Public Input Process | May 2014 |
| • TAC Approves Final Project Ranking and Scoring | June 2014 |
| • Submit Scored Projects to NCDOT | July 2014 |

WILMINGTON MPO
TRANSPORTATION PLANNING
JANUARY 2014

CROSSING OVER THE CAPE FEAR RIVER

Project Description/Scope: Construct a new crossing over the Cape Fear River that will link from in the vicinity of US 17 to Independence Boulevard and Carolina Beach Road. On January 30, 2013 the Wilmington MPO's TAC formally created a work group to assist in the development of the project.

Next Steps:

- NCDOT continues coordination with the merger team regarding recommendations for Detailed Study Alternatives following the Concurrence Point 2 meeting in September. .
- NCDOT, WMPO and URS met with the NC State Ports on November 20th to discuss various options for integrating rail into the project. Based on the discussions held at the meeting and the studies/data available to NCDOT regarding future commodities and their future mode of transport, it is not clear to the project team how an alternative that incorporates rail would be a viable project alternative.
- The merger team met on December 12th and agreed to the original study area boundary and also agreed to eliminate several alternatives from detailed study.
- Staff proposes the next Work Group meeting for the beginning of next year.
- The NCDOT continues to work through the environmental review process.

CONGESTION MANAGEMENT PROCESS

Project Description/Scope: Comply with a Federal mandate to create and adopt a process to evaluate the region's most congested corridors through locally-defined multi-modal performance measures in an effort to suggest improvements that would alleviate traffic congestion in the region. The CMP was adopted by the TAC on December 11, 2013.

Next Steps:

- Begin data collection and monitoring of congestion

METROPOLITAN TRANSPORTATION PLAN

Project Description/Scope: Update the Federally-mandated Metropolitan Transportation Plan/Long-Range Transportation Plan for the Wilmington Urban Area Metropolitan Planning Organization. Initial Public Outreach Survey closed November 30th. Socioeconomic data projections were collected and prepared for use by the Travel Demand Model through December 2013.

Next Steps:

- Alternative funding scenario development commences January 2014
- Prioritization process design to commence January 2014
- Goals & Objectives finalized by Modal Subcommittees in January 2014
- WMPO Travel Demand Model continues development through May 2014
- Initial project recommendations finalized from modal subcommittees through March 2014

17TH STREET STREETSCAPE

Project Descriptions/Scope: The 17th streetscape project will include upgrades to 17th Street between Dock and Princess Place Streets. The project will provide for a more efficient transportation system by reduced travel speeds, removal of the lateral shift, improved pedestrian crossings, improved safety and enhance the aesthetics of the area to improve safety in the community. The project may also include aesthetic improvements that will enhance the entryway into Carolina Heights and provide a pocket park.

Next Steps:

- The City Engineering Department is continuing to work through the design and coordination with NCDOT. The City has developed the design plans and is assembling the plan sets.
- Once the plan sheets are assembled, staff will host a public meeting to receive feedback from the community. A public meeting is anticipated to be conducted in the first quarter of 2014.

SITE DEVELOPMENT REVIEW

Project Descriptions/Scope: The Wilmington MPO assists with site development and transportation impact analysis review for the MPO's member jurisdictions. During the last month, staff has reviewed the following development proposals:

- New Hanover County Development Plan Reviews: 12
- New Hanover County Informal Plan Reviews: 5
- New Hanover Concept Reviews: 1
- TIA Reviews: total (11 New Hanover County, and 5 City of Wilmington) 1 new and 15 ongoing
- Pender County Development Plan Reviews: 4
- Pender County Informal Plan Reviews: 3
- City of Wilmington Formal Reviews: 18 (7 new and 11 on-going)
- City of Wilmington Informal Reviews: 7 (1 new and 6 on-going)
- City of Wilmington Concept Reviews: 6 new concept reviews
- COW Project Releases: 4 full release, 1 grading only.

TRANSPORTATION DEMAND MANAGEMENT PROGRAM (NO SIGNIFICANT PROGRESS)

Project Description/Scope: UNCW is taking the role as lead employer for the Cape Fear region. The WMPO will coordinate with UNCW to work with other major employers in the region to identify opportunities for public outreach, marketing, carpooling, vanpooling, alternative/compressed work schedules, Guaranteed Ride Home, park and ride lots, etc.

Next Steps:

- Continue monthly TDM Committee meetings to develop the 5 and 25 year TDM plans
- Establish goals and objectives of the 5-year and 25-year TDM plans
- Create an inventory of TDM strategies and initiatives recommended in other 5-year and 25-year TDM plans
- Determine which TDM strategies and initiatives should be considered in the 5-year and 25-year TDM plans
- Coordinate with NCDOT and Congestion Management Process Committee to assist with data collection
- Assist with development of UNCW bike share program

- Assist with UNCW transportation study



Cape Fear Public Transportation Authority

Project Update

January 2014

- 1. Operations center** - (no significant change) construction of 37,621 square foot maintenance and operations facility located on Castle Hayne Road which will serve as operation center for all Wave Transit fixed route and Paratransit operations. Will include compressed natural gas fueling station. CNG Fueling station construction bids due January 21, 2014. Estimated completion, late summer 2014.
Project awarded to Clancy & Theys Construction of Wilmington. Sitework nearing completion and foundation in place.
- 2. Wavepool program** - (no significant change) vanpool program currently serving Elizabethtown and Jacksonville. Two additional vanpools requested in Elizabethtown. Funding for additional vehicles has been identified. Working with MPO to coordinate vanpool and TDM efforts. FTA has issued grant number for four additional vans within the last month. Purchase order for vehicles approved February 28, 2013. Awaiting STIP approval and FHWA transfer to order vehicles. Estimated completion March 2014.
- 3. Fleet replacement & conversion to CNG** - (no significant change) identifying state and federal funding opportunities to replace 17 thirty-five foot buses. FTA funding for 80% of pilot CNG bus has been identified under FTA §5316 program. Local funding identification in process. New buses to be fueled by compressed natural gas. CNG fueling station construction bids due January 21, 2014. Fleet replacement programmed at a cost of \$8,100,000. Bid packet to be released in fall 2013 with delivery of first vehicles expected in late 2014 or early 2015.
- 4. Fisher University Union Transportation Hub Project** - (no change)
Location: Portico adjacent to Bus Loop, Online/Mobile Platforms
Project Contributors: Cooperative effort between the Student Government Association, UNCW Business Affairs, Auxiliary Services, WAVE transit, IT, the Vice Chancellor of Student Affairs, the Dean of Students, Ron Vetter with Mobile Education, and Campus Life.
Cost: \$36,500, UNCW \$7,300, Wave Transit \$29,200
Purpose: To increase the access, convenience, and overall ridership experience for students and riders of the WAVE transit system. Through the introduction of innovative and rider friendly technology, this project will align UNCW with the transit capabilities of our sister institutions and contribute to the overall UNCW Experience.
Actions Planned:
 - Development of a live transit tracking map specific to the UNCW campus that utilizes transponders that update on 30-second intervals.
 - Introduction of route color coding and tracking information in an easily visible digital format that allows for easy comprehension of routes and destinations.

- A live arrival time template will allow riders to plan accordingly for on time arrival at their destination and will strengthen confidence in the reliability of the transit system.
- Seating will be added around the portico in addition to the 2 led TVs. Seating will allow for riders to wait for their bus under a covered area and without creating an obstruction to the access point to Hawks Nest and the Fisher University Union.
- A mobile friendly tracking application will allow for riders to catch their bus on and off campus creating an interconnected rider experience.

Outcomes: With these additions and upgrades, riders of the WAVE transit system will be provided with a predictable, reliable, transit system that will enrich the overall UNCW experience for all riders of the WAVE transit system.

5. **Interlocal Agreement** - The Authority is working with funding partners to develop an Interlocal agreement for public transportation services in the region. A meeting between the Authority, Wilmington City Council and New Hanover County Commissioners to discuss agreement is scheduled for January 30, 2014.