



WILMINGTON URBAN AREA Metropolitan Planning Organization

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

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 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.

Meeting Agenda

Wilmington Urban Area MPO
Transportation Advisory Committee

TO: Transportation Advisory Committee Members
FROM: Mike Kozlosky, Executive Director
DATE: December 4, 2014
SUBJECT: December 10th Meeting

A meeting of the Wilmington Urban Area MPO Transportation Advisory Committee will be held on Wednesday, December 10th 3 pm. The meeting will be held in the Lord Spencer Compton Conference Room at City Hall in downtown Wilmington.

The following is the agenda for the meeting:

- 1) Call to Order
- 2) Conflict of Interest Reminder
- 3) Approval of Minutes:
 - a. 10/29/14
- 4) Public Comment Period
- 5) Presentations
 - a. Recognition of former TAC member David Williams
 - b. NCDOT/Governor's 25 Year Transportation Plan, Susan Pullium, NCDOT
 - c. Eagles Island Path, Joe Breault, Town of Belville
 - d. Wilmington MPO Logo, Bethany Windle, WMPO
- 6) Consent Agenda
 - a. Resolution approving the STIP/MTIP Amendment (October)
 - b. Resolution approving WAVE's STP-DA funding allocation
 - c. Resolution adopting the 2015 TCC/TAC meeting calendar
 - d. Opening of 30-day public comment period on "Work Cape Fear: Expanding Commuter Options in the Cape Fear Region" TDM Short Range Plan
 - e. Opening of 30-day public comment period on DRAFT 2015-2016 Unified Planning Work Program
- 7) Regular Agenda
 - a. Resolution encouraging NCDOT to complete a feasibility study to evaluate relocating the rail line across the Cape Fear River
- 8) Discussion
 - a. Cape Fear Transportation 2040
 - i. MTP Prioritization

- ii. MTP Alternative Funding Mechanisms
 - b. Regional Transportation Demand Management Efforts
 - c. DRAFT 2015-2025 STIP/MTIP
- 9) 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
- 10) Announcements
 - a. Cape Fear Crossing Work Group Meeting- December 8, 2014
 - b. WMPO Bike/Pedestrian Committee meeting- December 17, 2014
- 11) Next Meeting –January 28, 2015

Attachments:

- Minutes 10/29/14 meeting
- STIP/MTIP Amendments (October)
- Resolution approving the STIP/MTIP Amendment (October)
- Resolution approving WAVE’s STP-DA funding allocation
- Proposed 2015 TCC/TAC meeting calendar
- Resolution adopting the 2015 TCC/TAC meeting calendar
- “Work Cape Fear: Expanding Commuter Options in the Cape Fear Region”
- DRAFT 2015-2016 UPWP
- Resolution encouraging NCDOT to complete a feasibility study to evaluate relocating the rail line across the Cape Fear River
- Cape Fear Transportation 2040 MTP Prioritization
- Cape Fear Transportation 2040 MTP Alternative Funding Mechanisms
- Draft 2015-2025 State/Metropolitan Transportation Improvement Program
- Wilmington MPO Project Update (December)
- Cape Fear Public Transportation Authority Update (December)
- NCDOT Project Update

Meeting Minutes
Wilmington Urban Area Metropolitan Planning Organization
Transportation Advisory Committee
Date: October 29, 2014

Members Present:

Laura Padgett, Chair, City of Wilmington
Pat Batleman, Vice-chair, Town of Leland
Hank Miller, Town of Wrightsville Beach
Eulis Willis, Town of Navassa
Earl Sheridan, City of Wilmington
Frank Williams, Brunswick County
Woody White, New Hanover County
John Lennon, NC Board of Transportation

Staff Present:

Mike Kozlosky, Executive Director

1. Call to Order

Ms. Padgett called the meeting to order at 3:02pm.

2. Conflict of Interest Reminder

Ms. Padgett asked if any members had a conflict of interest with any items on the meeting agenda. No members reported having a conflict of interest.

3. Approval of Minutes

The minutes for the September 17th meeting were approved unanimously.

4. Public Comment Period

No one requested to speak during the Public Comment Period.

5. Presentations

a. NCDOT/Governor's 25 Year Transportation Plan, Susan Pullium, NCDOT

Mr. Kozlosky told members Ms. Pullium was not able to attend the meeting. He said he will invite her to attend the next TAC meeting on December 10th.

b. Eagles Island Path, Joe Breault, Town of Belville

Mr. Kozlosky told members Mr. Joe Breault was unable to attend today's meeting and he requested to reschedule the presentation to the December meeting

c. TDM Plan, Adrienne Harrington, WMPO

Ms. Harrington gave a presentation on the progress of the Transportation Demand Management (TDM) Program. Ms. Harrington told members that staff is working to complete both the short-range TDM plan, as well as working on the TDM long-range plan that will be published within the Cape Fear Transportation 2040 Plan. Ms. Harrington said the time line for the short-range plan includes incorporating comments from the TDM Committee into the draft document and bringing it to the TCC

and TAC for review and comment at their October meetings. The final document will then come before both groups for approval.

6. Consent Agenda

- a. **Resolution approving the STIP/MTIP Modification (September)**
- b. **Resolution approving the STIP/MTIP Amendment (September)**
- c. **Resolution supporting a revised Section 5303 agreement between the MPO, City and CFPTA**
- d. **Resolution supporting the Town of Topsail Beach's efforts to secure NCDOT grant funding for the completion of a bike/pedestrian plan**
- e. **Resolution supporting amendments to Cape Fear Commutes 2035 Transportation Plan for bike/pedestrian initiatives in Pender County**
- f. **Opening of 30-day comment period for STIP/MTIP Amendment (October)**

Ms. Padgett told members that item 6.d. is a request from the Town of Topsail Beach. They are asking the WMPO to consider a resolution of support for their grant application to NCDOT for funding a bike/pedestrian plan.

Mr. Frank Williams made the motion to approve the consent agenda. Dr. Sheridan seconded the motion and it carried unanimously.

7. Regular Agenda

- a. **Resolution providing additional comments to NCDOT regarding the Strategic Transportation Corridors Initiative**

Ms. Rashid told members that the TAC adopted a resolution that provided comments on the draft Strategic Transportation Corridors Initiative at the July meeting. From the list of comments submitted by the WMPO, only two of the requested changes were addressed. They included the portion of US 74 as one of the top facilities in the initiative. They also addressed the concern that the Strategic Highway Corridors Initiative was part of the NEPA documentation and other base documentation for projects moving forward through the environmental review or funding processes. The Department indicated that they would adopt that portion of the Strategic Highway Corridor Initiative by reference so that it wouldn't negate any of the environmental work that has been done on existing projects.

Ms. Rashid told members that after receiving the revised Draft Strategic Transportation Corridors plan, staff felt that many of the comments from the July resolution had not addressed. Ms. Rashid said the Department indicated that comments would still be accepted until the final document is approved by the Board of Transportation. She said today's resolution provides additional comments to NCDOT regarding the plan.

Mr. Frank Williams made the motion to adopt the resolution providing additional comments to NCDOT regarding the Strategic Transportation Corridors Initiative. Ms. Batleman seconded the motion and it carried unanimously.

b. Resolution encouraging NCDOT to fund the Kerr Avenue widening from Randall Parkway to Wrightsville Avenue and the extension of Kerr Avenue to Oleander Drive

Ms. Padgett told members that the TAC adopted a resolution supporting the NCDOT widening of Kerr Avenue to a multi-lane facility from the Martin Luther King Jr. Parkway to Randall Parkway in February of 2006. She said the original project went further than that but due to funding issues part of the project had to be tabled. The decision was made to eliminate the portion from Randall Parkway to Wrightsville Avenue and the extension of Kerr Avenue to Oleander Drive. She noted that as time goes on, it's clear that the City of Wilmington needs Kerr Avenue widened its entire length and extended.

Dr. Sheridan made the motion to adopt the resolution encouraging NCDOT to fund the Kerr Avenue widening from Randall Parkway to Wrightsville Avenue and the extension of Kerr Avenue to Oleander Drive. Mr. Frank Williams seconded the motion and it carried unanimously.

c. Resolution encouraging the Governor, North Carolina General Assembly and North Carolina Department of Transportation to fund the Hampstead Bypass if the General Assembly approves the borrowing of \$1 Billion for rural transportation projects

Mr. Frank Williams made the motion to adopt the resolution encouraging the Governor, North Carolina General Assembly and North Carolina Department of Transportation to fund the Hampstead Bypass if the General Assembly approves the borrowing of \$1 Billion for rural transportation projects. Mr. Miller seconded the motion and it carried unanimously.

8. Discussion

a. Cape Fear Transportation 2040

- i. Follow-up on bike, Pedestrian, Aviation, Roadway and Financial Considerations**
- ii. Freight/Rail**
- iii. Ferry**
- iv. Mass Transportation**

Ms. Rashid, Ms Harrington and Ms Windle presented a comprehensive update on the progress made to date on the Cape Fear Transportation 2040 Plan by the modal subcommittees for Freight/Rail, Ferry and Water Transportation and Mass Transportation.

Ms. Rashid told members that at the last meeting Ms. Batleman suggested that the replacement for the Cape Fear Memorial Bridge should be included on the Roadway project list for the 2040 plan. Ms. Rashid said staff spoke to engineers with the Department and they indicated that with regular maintenance, the bridge should last an addition 35 to 50 years.

Ms. Batleman said even with regular maintenance, the bridge is aging and she would like to see its replacement added to the list. Ms. Rashid said the bridge replacement will be added to the list.

Ms. Rashid, Ms Harrington and Ms Windle presented the recommendations from the Ferry and Water Transportation Modal Subcommittee, the Freight/Rail Modal Committee and the Mass Transit Modal Subcommittee to the committee. Ms. Rashid also provided information on potential alternative funding mechanisms. Ms. Rashid said the next step in the process is to review the project lists and develop costs estimates associated with the projects and then run them through the prioritization process. Staff will bring the results back to the TAC for consideration.

b. Strategic Transportation Investment Results (Regional and Division Tiers)

Mr. Kozlosky told members that NCDOT will release the draft STIP on December 3rd. The draft scoring matrix is included in the packet for review. Staff will bring the information to the December TAC meeting for discussion.

8. Updates

Project updates for the Crossing over the Cape Fear River Work Group, Wilmington MPO, CFPTA and NCDOT Division and Planning Branch are included in the agenda packet.

Closed session

Ms. Padgett told members there is a need to waive the rules and enter into a closed session pursuant to the provisions of GS #143-318.11 A3 in order to consult with Attorney Matt Nichols regarding the legal matter of Jamestown Pender, LP vs. North Carolina Department of Transportation and Wilmington Urban Area Metropolitan Planning Organization, Pender County file 14CVS528.

Ms. Batleman made the motion to waive the rules and enter into a closed session. Ms Padgett seconded the motion and it carried unanimously.

Call back to order

Ms. Padgett called the meeting back into open session. She told members no action was taken other than to consult with Attorney Matt Nichols regarding the MPO's responses to the legal matter of Jamestown Pender, LP vs. North Carolina Department of Transportation and Wilmington Urban Area Metropolitan Planning Organization.

10. Adjournment

With no further business, the meeting was adjourned at 4:30pm

Respectfully submitted
Mike Kozlosky
Executive Director
Wilmington Urban Area Metropolitan Planning Organization

**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.**

Proposed Revisions to 2012-2018 STP Program

STIP/MTIP Amendment (October)

* C-5552 STATEWIDE PROJ.CATEGORY EXEMPT	STATEWIDE PROJECT	VARIOUS, RAIL, FOURTH DAILY FREQUENCY BETWEEN RALEIGH AND CHARLOTTE. DELETE; WORK TO BE ACCOMPLISHED UNDER PROJECT P-2918.	OPERATIONS FY 2015 - \$3,263,000 (CMAQ) FY 2015 - <u>\$653,000</u> (L) \$3,916,000
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**WILMINGTON URBAN AREA METROPOLITAN PLANNING ORGANIZATION
TRANSPORTATION ADVISORY COMMITTEE**

**RESOLUTION APPROVING AMENDMENTS OF THE
2012-2018 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 2012-2018 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 Statewide Project C-5552 Various, Rail, Fourth Daily Frequency between Raleigh and Charlotte to delete work to be accomplished under Project P-2918; 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 approves amending the 2012-2018 State/Metropolitan Transportation Improvement Programs for Statewide Project C-5552 Various, Rail, Fourth Daily Frequency between Raleigh and Charlotte to delete work to be accomplished under Project P-2918.

ADOPTED at a regular meeting of the Wilmington Urban Area Metropolitan Planning Organization Transportation Advisory Committee on December 10, 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 CAPE FEAR PUBLIC
TRANSPORTATION AUTHORITY**

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 2015 selection process and modal target investment strategies in May 2014; and

WHEREAS, the Wilmington Urban Area Metropolitan Planning Organization developed a call for projects and received 1 submittal for the public transportation funding; and

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

NOW, THEREFORE, be it resolved that the Wilmington Metropolitan Planning Organization's Transportation Advisory Committee hereby supports the allocation of STP-DA funds in the amount of \$350,000 to the Cape Fear Public Transportation Authority for preventative maintenance as a selected 2015 fiscal year project.

ADOPTED at a regular meeting of the Wilmington Urban Area Metropolitan Planning Organization Transportation Advisory Committee on December 10, 2014.

Laura Padgett, Chair
Transportation Advisory Committee

Mike Kozlosky, Secretary



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TO: TCC/TAC Members
FROM: Mike Kozlosky, Executive Director
DATE: November 13, 2013
SUBJECT: **Proposed 2015 WMPO Meeting Calendar**

Technical Coordinating Committee	Transportation Advisory Committee
January 14	January 28
February 11	February 25
March 11	March 25
April 15	April 22
May 13	May 27
June 10	June 24
July – no meeting scheduled	July – no meeting scheduled
August 12	August 26
September 16	September 30
October 14	October 28
November 18	November – no meeting scheduled
December –no meeting scheduled	December 9

The TCC meetings will begin at 10 am on the date of the meetings.

The TAC meetings will begin at 3 pm on the date of the meetings.

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

RESOLUTION ADOPTING THE 2015 WILMINGTON MPO MEETING CALENDAR

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 Wilmington MPO's Transportation Advisory Committee adopts the meeting calendar on an annual basis.

NOW THEREFORE, be it resolved by the Wilmington Urban Area Metropolitan Planning Organization's Transportation Advisory Committee hereby adopts the 2015 Wilmington MPO meeting calendar.

ADOPTED at a regular meeting of the Wilmington Urban Area Metropolitan Planning Organization Transportation Advisory Committee on December 10, 2014.

Laura Padgett, Chair
Transportation Advisory Committee

Mike Kozlosky, Secretary

Work Cape Fear: Expanding Commuter Options in the Cape Fear Region



DRAFT
November 12, 2014



WILMINGTON URBAN AREA
Metropolitan Planning Organization

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Acknowledgements

This plan was made possible by the Transportation Demand Management (TDM) Committee. This committee is comprised of representatives from Brunswick, New Hanover, and Pender Counties including elected officials, planners, major employers, NCDOT, and the local transit agency. This plan reflects the Committee's priorities and dedication towards implementing the plan recommendations.

The TDM Committee includes:

Pat Batleman, Leland Mayor Pro Tem
David Bellegante, New Hanover Regional Medical Center, Director of Facilities
Sharon Boyd, UNCW, Associate Vice Chancellor - Business Services
Kyle Brewer, Pender County, Planning Director
Adrienne Cox, FOCUS
Karyn Crichton, New Hanover County, Long Range Planner
Courtney Devane, New Hanover County Schools, Transportation Supervisor
Ryan Gillespie, PPD, Inc., Manager of Global Corporate Wellness
Adrienne Harrington, WMPO, Transportation Planner
James Lim, NCDOT, Transportation Program Consultant
Megan Matheny, Wave Transit, Director of Planning & Development
Lynn Sylvia, Cape Fear Community College, Parking Coordinator

Executive Summary

Since the opening of Interstate 40 connection to Wilmington in 1990, population in Brunswick, New Hanover, and Pender Counties has increased dramatically. In the 1990's, Brunswick County's population increased 39.7%, New Hanover County's population increased 25.4%, and Pender County's population increased 39.6%. These trends have continued for over 20 years. In 2014, according to the Office of State Budget and Management data, Brunswick, New Hanover and Pender Counties ranked among the top four fastest growing counties in North Carolina. This population growth generates an array of demands, including a demand for improved transportation systems. It is met by a need identified by most successful businesses and organizations - a need to attract and retain talented employees. Even though the region is deemed by many as a desirable place to live (as seen in the population increases), there are other regions that offer more diverse employment opportunities, such as the Research Triangle Park (RTP) in the Raleigh, Durham, and Chapel Hill area. RTP is powered by three major universities and many Park companies, ensuring a steady churn of research, discovery, and innovation. Although RTP has also shown dramatic increases in population, it will never have the small city atmosphere, miles of coastal beaches, and the Cape Fear River. While these are qualities that attract potential employees to the Cape Fear Region (Brunswick, New Hanover, and Pender Counties), these primary qualities do not attract potential employers to this region making it difficult for this region to compete with the RTPs of the world. To be competitive, we must develop the infrastructure, programs, and opportunities outlined in this plan.

The purpose of this plan is to provide guidance to various Cape Fear Region businesses and organizations that answers the question: "How do we attract and retain talent through enticing opportunities to get to and from work?" This plan will provide a toolkit for employers to help determine what strategies could benefit their organization regarding attractive transportation options for employees. This plan will also provide guidance for local jurisdictions and other government agencies regarding implementation of strategies that would benefit the employers. Regardless of the specific strategies most beneficial to a particular employer, there will be an ongoing effort to actively engage public, non-profit, private sector, and community partners in the development of a TDM program that has support from our community leaders.

The development of this plan is led by the Wilmington Metropolitan Planning Organization (WMPO), the regional transportation planning agency for the lower Cape Fear Region of southeastern North Carolina. The mission of the WMPO is to develop and implement a comprehensive multi-modal transportation plan that supports the existing and future mobility needs and economic vitality of the lower Cape Fear Region. This plan will explore an array of Transportation Demand Management (TDM) strategies that could provide current and potential employees a variety of attractive transportation options (please see Appendix A for detailed information on the strategies). This is considered a short-term plan in that the TDM strategies chosen for analysis are considered applicable to the Cape Fear Region throughout the next ten years (until 2025).

These TDM strategies have been cross-referenced with seven Employee/Employer Goals that will help attract and retain employees. These goals are transportation-related factors that could attract employees to a new job in this

region. The first goal, mitigate the growth in traffic congestion, is directly related to the WMPO mission statement. Ten objectives have been identified to expand up this goal. These objectives drive the performance measures in this plan (please see Appendix B). The remaining six goals are specific to employers and could potentially be developed to include objectives beyond transportation. The goals/objectives are:

- Goal: Mitigate the growth in traffic congestion (increase ease of commuting)
 - Objective: Prioritize accommodations of all modes over motorized vehicular travel time along corridors that have potential for heavy multimodal usage
 - Objective: Maintain or reduce travel times on congested corridors
 - Objective: Increase transit on-time performance
 - Objective: Increase vehicle occupancy rates
 - Objective: Ensure the TDM plan is considered in the MTP and other transportation plans
 - Objective: Decrease the number of people commuting during peak commuting hours (8:00 am and 5:00 pm)
 - Objective: Increase opportunities for using shared modes of transportation
 - Objective: Provide opportunities for employees to carpool, vanpool, and use transit through the development of Park & Ride lots
 - Objective: Customize and promote TDM services to employers/employees/clients/the general public based on specific needs of the targeted group
 - Objective: Increase/improve transit amenities
- Goal: Reduce costs to employee and employer
- Goal: Address the needs and desires of employees
- Goal: Increase opportunities for healthy living, recreation, and time outside
- Goal: Increase opportunities for running errands
- Goal: Increase opportunity for time with family
- Goal: Increase flexibility for the employee

Five of the fourteen TDM strategies satisfy all seven employer/employee goals: Alternative Work Schedules, Employee Transportation Coordinator, Bicycle and Pedestrian Infrastructure, Commuter Transit Routes, and Transportation Management Districts. Please see Appendix C for the strategies and goals matrix. The TDM strategies have also been prioritized into high, medium, or low priority based on four factors: ease of implementation, cost/benefit, strategy readiness, and demand/impact. The priorities for this region are as follows. Please see p. 21 for the scoring matrix.

High Priority:

- Alternative Work Schedules
- Carpool/Vanpool
- Development Review
- Park & Ride Lots
- Full-Time TDM Coordinator
- Transit Amenities
- Bicycle & Pedestrian Infrastructure

Medium Priority:

- Bicycle Sharing Program
- Car Share
- Commuter Transit Routes
- Employer Transportation Coordinator

Low Priority:

- Consulting Services for Telecommuting
- Employer Shuttles
- Transportation Management Districts

The employer toolkit identifies four employer functions:

- Campus Style
- Structured Schedule
- Multi-Building/Campus
- Unique Schedule

A ‘campus style’ employer is one who operates like a campus - lots of people coming and going, employees that work various schedules, visitors who frequent the campus, and potentially people who stay overnight for various reasons. Some examples are UNCW and New Hanover Regional Medical Center. A ‘structured schedule’ employer is one who operates on a standard 8:00 am - 5:00 pm schedule, or something similar such as 7:00 am - 4:00 pm or 9:00 am - 6:00 pm. This could also include businesses with employees working in set, predictable shifts. Some examples are City of Wilmington and New Hanover County Government. A ‘multi-building/campus’ employer is one that has many locations, rather than a single location. Some examples include New Hanover County Schools, and Wilmington Health Associates. A ‘unique schedule’ employer is one that already implements alternative work schedules, primarily telecommuting, to accommodate more employees than a typical employer. An example is PPD, Inc.

Employers who function differently could benefit from different TDM Strategies. Figure 1.1 is a table that illustrates the TDM Strategies that best apply to each employer function.

Figure 1.1 - Employer Functions and Appropriate TDM Strategies

Campus Style	Structured Schedule	Multi-Building/Campus	Unique Schedule
Alternative Work Schedules	Alternative Work Schedules	Alternative Work Schedules	Alternative Work Schedules
Bicycle Sharing Program	Carpool/Vanpool	Carpool/Vanpool	Car Share
Carpool/Vanpool	Employer Shuttles	Employer Shuttles	Employer Transportation Coordinator
Bicycle and Pedestrian Infrastructure			
Car Share Program	Employer Transportation Coordinator	Employer Transportation Coordinator	
Carpool/Vanpool	Park & Ride Lots	Park & Ride Lots	
Employer Shuttles	Transportation Management Districts	Transportation Management Districts	
Employer Transportation Coordinator			
Park & Ride Lots			
Transportation Management Districts			

Note: The following strategies are not identified in this table: Development Review, Transit Amenities, Commuter Transit Routes, Full Time TDM Coordinator, and Consulting Services for Telecommuting. These strategies function primarily off-site of the employer and therefore do not specifically apply or impact one employer function over another.

Another important element in implementing TDM strategies is the development of a marketing plan. A general marketing plan will be developed for the purpose of this plan. With the development of the marketing plan, target markets and opportunities will be identified. TDM Strategy development and implementation will be planned. Performance measures will also be cross-referenced with this plan (see Appendix B) and identified as part of the marketing plan. It will include an employer and employee survey, establishing employer profiles, promoting TDM in the community through the local Chambers of Commerce and Economic Development Commissions, promoting TDM through connecting with other significant organizations in the community, and a list of the largest employers in our region. This marketing plan will be a separate document from the TDM plan.

Introduction

The Cape Fear Region has the opportunity to complete a regional economic development and technology “triangle” between the technology powerhouse of the Research Triangle Park (RTP) and Charlotte’s vast banking industry. Raleigh/Durham/Chapel Hill and Charlotte are consistently ranked in the top places in the U.S. for job opportunity. Richard Florida ranks Raleigh #9 and Charlotte #19 in The 20 Best Places for Jobs Requiring Post-Secondary Education. The development of the Cape Fear Region’s knowledge sector economy to promote economic development and ensure the prosperity of the region would be a strong step towards developing this “triangle” and our ability to compete with and complement Raleigh and Charlotte’s industries. In an effort to attract and retain the right talent, existing assets could be leveraged to build a community where knowledge sector workers would want to live. The knowledge sector (entrepreneurs, scientists, tech workers, nurses, teachers, etc.) will continue to be the fuel for economic growth through their development of new businesses, business models, and technological innovation. If the Cape Fear Region is going to attract the next generation workforce and the businesses that employ them, there needs to be enticing and diverse transportation options to accommodate them. The purpose of this plan is to identify how this region can attract and retain this talent through enticing opportunities to get to and from work. First, we must identify what these enticing transportation opportunities are.

National Profile

During the past 60 years of consistent suburban growth in the United States, traffic congestion has played an increasingly greater role in people’s daily lives, compounding the stress of the commute and time away from home. To ease these concerns, we attempted to build our way out of perpetual gridlock. Infrastructure projects have traditionally focused on increasing capacity. And now, after decades of steady growth, studies show that vehicle miles traveled per capita peaked in 2004. We are now seeing a shift in societal behaviors and increased demand for sustainable transportation options. A few facts to consider:

- The rate of suburban population growth has outpaced that of urban centers in every decade since the invention of the automobile, but in 2011, for the first time in 100 years, that trend reversed
- During nearly every recession in history, urban home prices have suffered the most, but in this latest downturn, real estate in the urban cores predominately retained its value at a higher percentage than surrounding suburbs
- In 1990, 7% of building permits in New York City were in the urban center and 70% were on the suburban fringe; in 2008, 9% of the building permits were in the suburban fringe and 70% were in the urban core
- In 1980, 66% of 17 year olds had a driver’s license; in 2010, that was reduced to 47% (1)

A survey released from The Rockefeller Foundation and Transportation for America finds that the majority of Millennials (born early 1980s- early 2000’s) want to be less reliant on cars. It found that Millennials want low cost transit and multiple transportation options for getting around a city. More than half of respondents said they would consider moving to another city if it had better access to public

transportation, and 66% listed high quality transportation as a top factor in deciding where to live. Almost half (46%) of current Millennial vehicle owners surveyed agreed they would seriously consider giving up their car if they could count on a range of transportation options. "Young people are the key to advancing innovation and economic competitiveness in our urban areas, and this survey reinforces that cities that don't invest in effective transportation options stand to lose out in the long-run," says Michael Myers, a managing director at The Rockefeller Foundation. "As we move from a car-centric model of mobility to a nation that embraces more equitable and sustainable transportation options, Millennials are leading the way." (2)

Another shared perception of Millennials: Cars are a hassle. In 2008, only 31% of 16-year-olds and 77% of 19-year-olds in the United States had a driver's license – numbers dramatically lower than the 1978 numbers of 50% and 92%, respectively, according to the U.S. Department of Transportation. In 2011, the percentage of 16-24 year olds with a driver's license was the lowest since 1963. Even as Millennials age, they're driving less than prior generations. In 1995, 20.8% of autos were driven by 21-to-30-year-olds, according to the Federal Highway Administration's 2010 Household Travel Survey. By 2009, that number had dropped to 13.7%. (3) Automobile companies are working harder to attract potential drivers in their late teens and early 20's. The New York Times reported that General Motors has hired MTV's marketing arm to help combat the Millennials' lack of interest in cars.

According to a 2011 survey by the National Association of Realtors, 59% of respondents would choose a smaller home and lot if it gave them a commute time under 20 minutes. 66% of respondents see an easy walk from places in their community as an important factor in deciding where to live. The survey shows that single-family homes are still popular, but a significant share of people want attached housing options.

Regional Profile

Survey Results

In 2013, Wilmington Metropolitan Planning Organization (WMPO) Staff released a survey to determine the public's needs and desires regarding transportation in the Cape Fear Region. Over 4,100 individual responses were received. Some of the highlights from the survey results are:

To get to work and school

- 55% of respondents would prefer to bicycle more often
- 46% of respondents would prefer to take public transportation more often
- 44% of respondents would prefer to walk more often

To run errands

- 61% of respondents would prefer to bicycle more often
- 55% of respondents would prefer to walk more often
- 43% of respondents would prefer to take public transportation more often

As noted in the survey results, the regional transportation preferences are in line with the national transportation preferences. Regional data has not been released regarding the number of young adults with drivers' licenses, however the survey results show that respondents desire to be less reliant on cars and want multiple options for getting around.

Geographic Profile

The WMPO Planning Area is 494 square miles which includes New Hanover County and portions of Brunswick and Pender County. It serves a population of 253,738. The geography contains miles of coastal beaches, the Cape Fear River, and several of its tributary creeks and streams. The development of the transportation network has been both driven and constrained by the geography of the region. The geography of the region - shaped by the location of its ocean, rivers, creeks, and wetlands - has constrained where and how the transportation network can develop; the history and economic climate in the region is largely driven by its proximity and relationship to these water bodies.

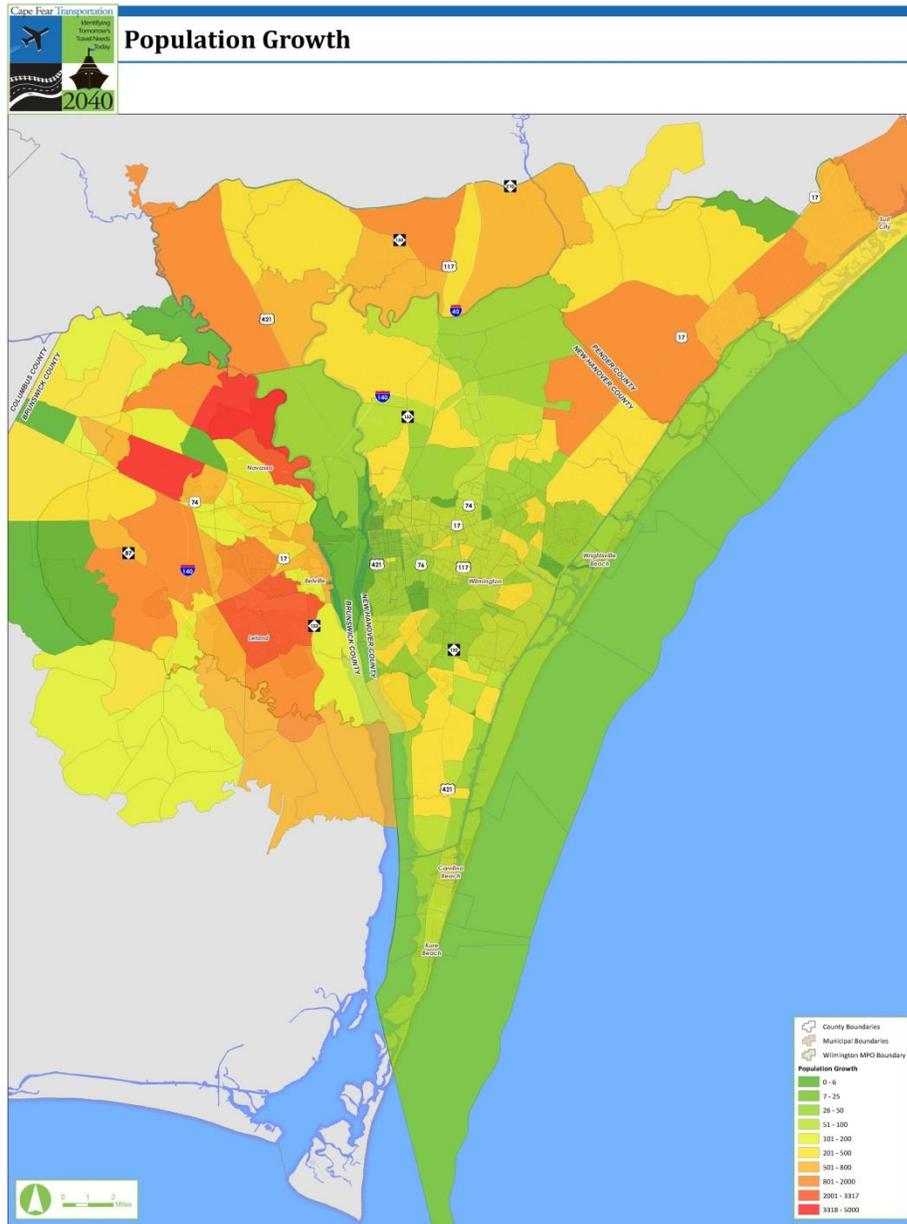
The WMPO planning area contains one of two major North Carolina Ports (the Port of Wilmington) which is supported by a rail network as well as a network of arterials, expressways, and interstates. The geography of the area also drives the economic development of the region as a recreation tourism destination and as a retirement community. The region's oceanfront beaches and rivers, creeks and streams invite tourism and recreational exploration.

Demographic Profile

Population

The 2010 population within the WMPO was 253,738. It is projected to be 365,927 by 2040 (4). This yields a population increase of 44% in 30 years, or an average of 1.47% per year. According to Census data, the U.S. is currently growing at about 0.90% per year.

Figure 2.1 illustrates the projected population density change in the WMPO region from 2010 - 2040

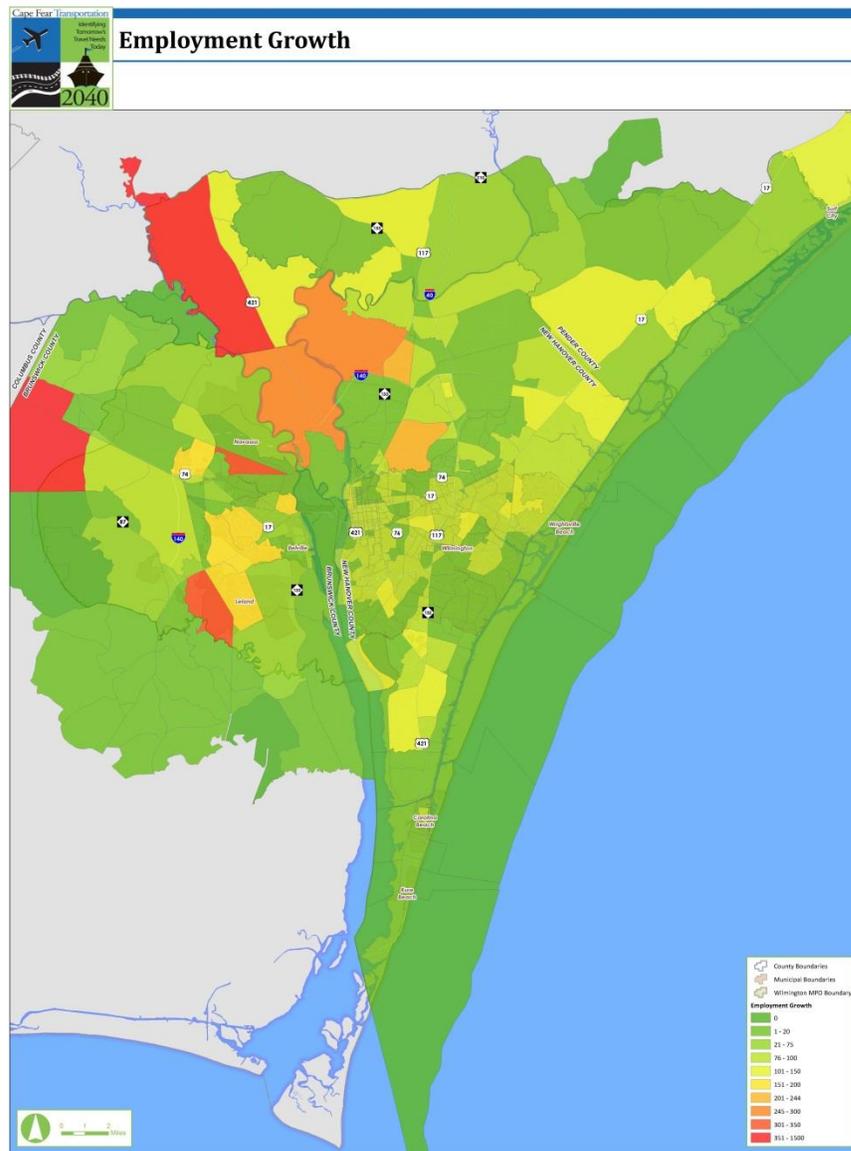


As seen in Figure 2.1, the Brunswick County portion of the WMPO is expected to see the highest population increases. Pender County is also expected to see high population increases. Wilmington should expect to see moderate population increases. The beach communities (Wrightsville Beach, Carolina Beach, and Kure Beach) should expect to see smaller population increases in comparison to the other WMPO jurisdictions, respectively. Of the three counties in the Cape Fear Region (Brunswick, New Hanover, and Pender), New Hanover County is considered the most built out. It is the most densely populated and also the smallest in geographical area. This factor also drives the projected population growths.

Employment

In 2010 there were 109,323 jobs in the WMPO. The region is expected to add approximately 40,000 more jobs by 2040 (4). This is an increase of approximately 37% in 30 years, or an average of 1.2% per year.

Figure 2.2 illustrates the projected employment growth in the WMPO region 2010 - 2040



As seen in Figure 2.2, the Brunswick County and northern New Hanover County portions of the WMPO are expected to see the highest employment growth. Coastal Pender, Wilmington, and southern New Hanover County are expected to see some employment growth. The beach communities (Wrightsville Beach, Carolina Beach, and Kure Beach) should expect to see less employment growth in comparison to other WMPO jurisdictions, respectively.

Transportation

The following Service Area Profile Maps illustrate the regional attributes and transportation facilities. Figure 2.3 illustrates the key locations regional residents are likely to be traveling to and from. This map includes colleges/universities such as UNCW and community colleges, cultural centers and tourist destinations such as museums, medical centers, and major employment centers. As you can see, a majority of these regional attributes are located within the central portion of New Hanover County.

Figure 2.3 represents the Service Area Profile Map for the WMPO region, highlighting regional attributes

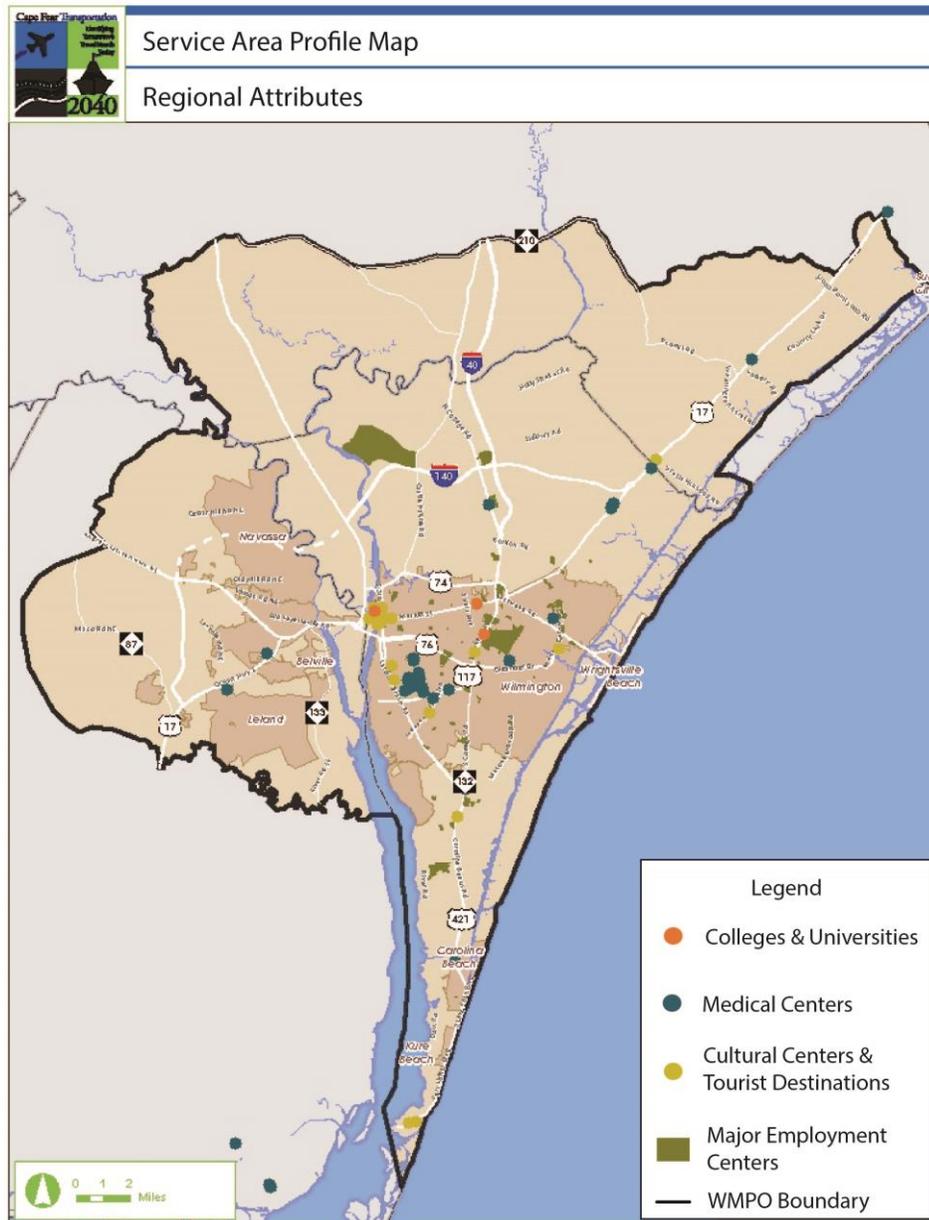
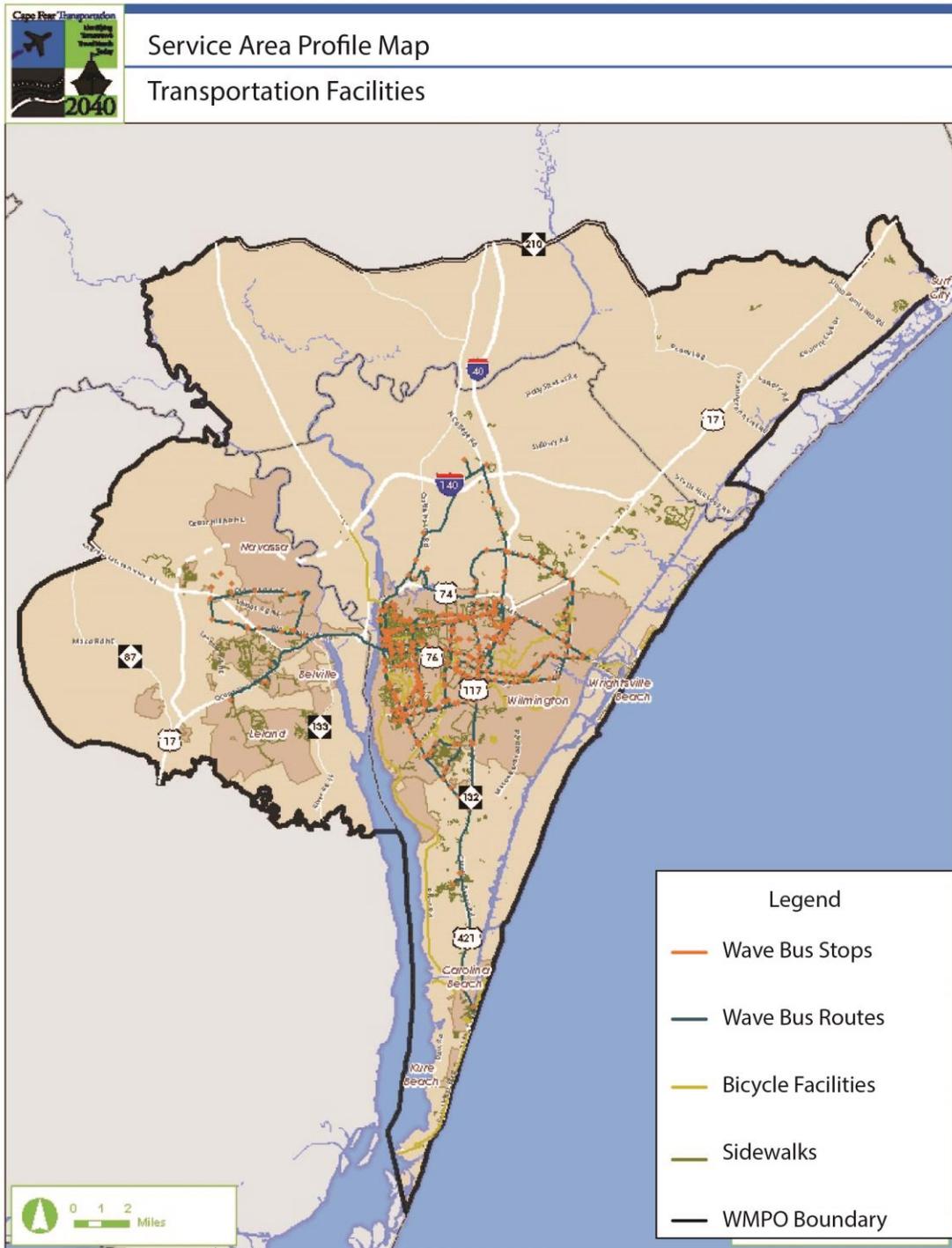


Figure 2.4 illustrates the primary transportation facilities regional residents are likely to use. This map includes the major roadways, Wave Transit bus routes, Wave bus stops, bicycle facilities, and sidewalks.

Figure 2.4 represents the Service Area Profile Map for the WMPO region, highlighting transportation facilities



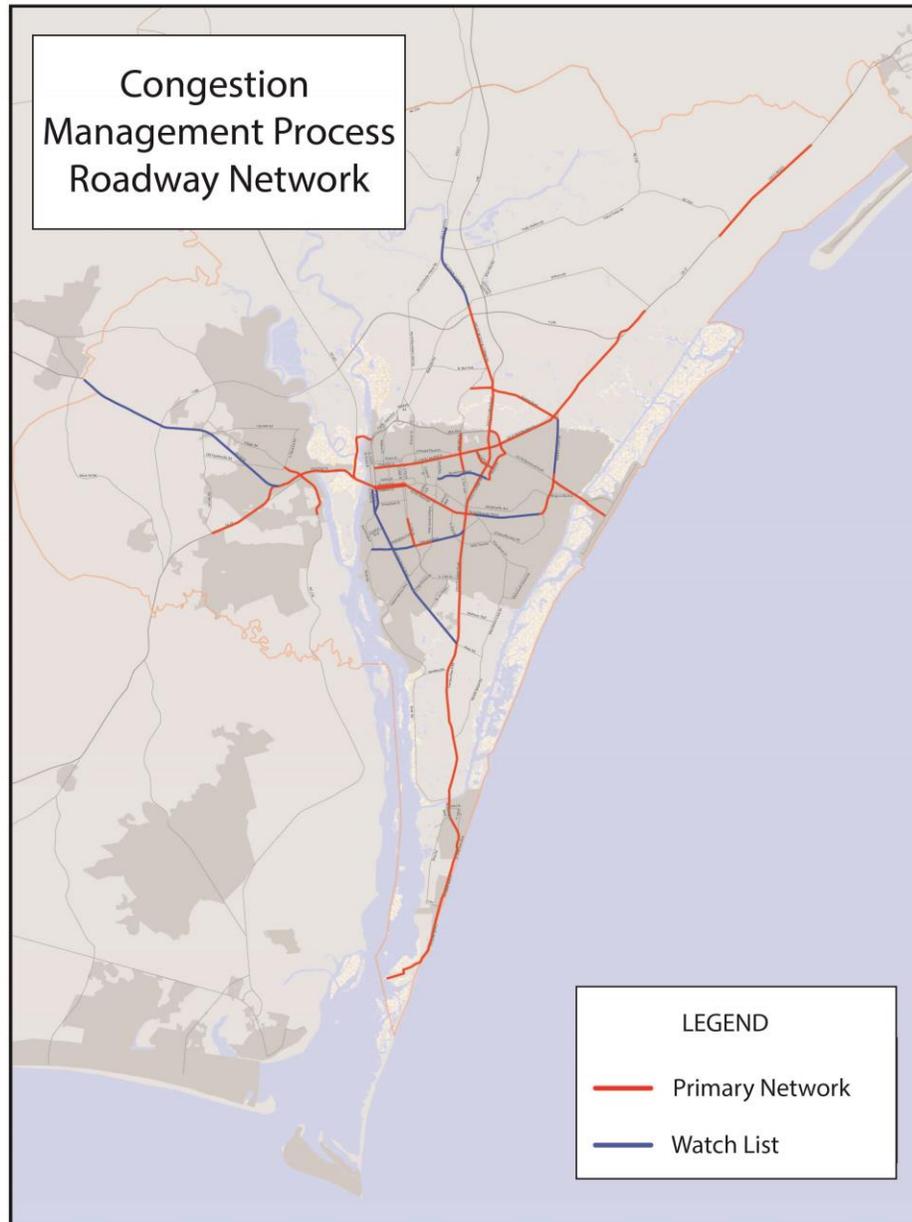
As illustrated in the Service Area Profile Maps, a very small portion of the road network follows a grid pattern. Instead, major roadways are used to move traffic while a grid pattern would better distribute traffic across the region and provide grid-style interconnectivity. This non-grid development increasingly relies on a few primary routes and precludes the utilization of alternative routes when incidents or other types of congestion occur. Therefore, the major regional travel corridors also serve as a major obstacle to travel when they become congested. NC132/US117/US421 (College Road) serves as the only major continuous north-south corridor in New Hanover County. US 17, US 421, NC 133/US 117 and I-40 carry the majority of the traffic on the unincorporated Pender County area inside the WMPO's Planning Area. US 74/76 and US 17 and a few other collectors/arterials serve the Brunswick County portion of the WMPO Planning Area. As it may appear Brunswick County has few traffic-carrying collectors/arterials, this is not, however, Brunswick County's greatest challenge. There are only two bridges connecting Brunswick County to New Hanover County. Although there is minimal transportation connectivity between Brunswick and New Hanover Counties, these two counties are very closely tied in terms of economic and community activities. According to the American Community Survey, about 10,000 residents commute daily from Brunswick County to New Hanover County. The Cape Fear Memorial Bridge and the Isabelle Holmes Bridge allow tens of thousands of people to access their jobs in New Hanover County daily. They also provide access to medical facilities and shopping, and access for tourists from the west. About 9,000 commute daily from Pender County to New Hanover County. These commuters typically follow US 17, US 421, NC 133/US 117 and I-40 to access their jobs in New Hanover County. Most tourists follow I-40 into New Hanover County.

Congestion Management

The WMPO was recognized by the Federal Highways Administration (FHWA) on July 18, 2012 as a Transportation Management Area (TMA). As a newly designated TMA, the WMPO is required to initiate and maintain a Congestion Management Process (CMP). A CMP, developed by the WMPO, is an on-going data collection and evaluation process that identifies congested corridors, determines the cause of congestion, ranks the most congested segments, and develops transportation strategies to mitigate the growth in traffic congestion while enhancing safety and multi-modal mobility region-wide. In developing a TDM plan, it is important to identify issues for commuters on the transportation network. By developing a CMP, the WMPO can identify where TDM efforts need to be focused.

The WMPO adopted two types of CMP corridors: Primary Network and Watch List corridors. Primary Network corridors require immediate monitoring through data collection and systems analysis. Watch List corridors are important for the WMPO to do cursory examinations because they either play an important role in relieving congestion on congested corridors or it is anticipated that they may see congestion in the near future.

Figure 2.5 illustrates the primary network and watch list corridors in the WMPO's Congestion Management Process



As illustrated in Figure 2.5, primary network corridors are also the primary connections from Brunswick County, Pender County, and Pleasure Island (Carolina Beach, Kure Beach) to New Hanover County/City of Wilmington where most of the current jobs are concentrated.

The WMPO's corridors are congested for different reasons, by different users, and adjacent to different land uses. Therefore, the CMP defines and applies five functional types to identify how congested corridors are currently being used, what performance measures should be used to evaluate them, and what solutions are best targeted for each corridor type. Please see Appendix D for maps illustrating the five functional types of corridors are:

- Commercial Corridors - Volume along corridor sees multiple commercial/errand trips with trips generated by destinations along corridor
- Commuting Corridors - Volume seeking to pass through corridor from an origin outside corridor to a destination outside corridor
- Destination Corridor - Volume along corridor consists of trips generated by major destinations along corridor
- Freight Corridor - Large volume of truck/freight traffic looking to travel along corridor
- Tourist Routes - Volume seeking to pass through corridor from an origin outside corridor to a destination for the purpose of tourism. Volume has a higher percentage of users who are unfamiliar with the transportation network.

The CMP Network will be monitored in part by multiple partner agencies to include the City of Wilmington Traffic Engineering Division, NCDOT, the Cape Fear Public Transportation Authority, and the WMPO. A report will be created every other year to evaluate the CMP corridors based on this data collected from multiple partner agencies. Eight data collection techniques have been identified: traffic counts, travel time data, hot spot identification, TEAAS data, truck counts, bicycle counts, pedestrian counts, and transit data. Seven data collection techniques specifically target the three corridors types (commercial, commuting, and destination) that most specifically apply to the TDM Plan: traffic counts, travel time data, hot spot identification, TEAAS data, bicycle counts, pedestrian counts, and transit data. Baseline data collection began in 2014 and is expected to be ongoing. This data will be used to evaluate the congestion along the commercial, commuting, and destination corridors and will also be used as performance measures in this TDM Plan. Additional performance measures for the purpose of this plan have been identified. A complete listing of the performance measures can be found in Appendix B.

Process

The first step in our process was to convene a TDM Committee. WMPO staff have taken the lead on the development of the TDM short-range plan. Through previous partnerships and new connections, a TDM Committee was developed with representatives from the Town of Leland, New Hanover Regional Medical Center, UNCW, Pender County, FOCUS, New Hanover County, New Hanover County Schools, PPD, Inc., NCDOT, Wave Transit, and Cape Fear Community College. Please see acknowledgements on page 2.

To determine how to attract and retain talent through enticing opportunities to get to and from work, the TDM Committee followed a process. A broad list of 23 TDM strategies were identified. The 23 strategies were evaluated to determine if they were applicable to the Cape Fear Region in the next 25 years. If the strategy was not applicable, it was discarded. Two strategies were removed. The Parking Management and Transit Planning strategies were removed as single strategies and infiltrated through the other TDM strategies. Then, the committee went through each of the 21 strategies to determine if they were applicable in the next 10 years, or the next 10-25 years. The strategies that are applicable in the next 10 years moved forward in this short-range TDM plan and will also serve as recommendations in *Cape Fear Transportation 2040*, the WMPO's long-range transportation plan update also known as the Metropolitan Transportation Plan (MTP). The strategies that are applicable in the next 10-25 years will be detailed in *Cape Fear Transportation 2040* only.

Of the 23 strategies, the committee identified 14 strategies that are applicable to the Cape Fear Region in the next 10 years. These strategies are detailed in Appendix A. The committee cross-referenced these strategies with the employee/employer goals to attract and retain employees. This ensures the strategies would be applicable to attract and retain talent through enticing opportunities to get to and from work. Using four indicators (ease of implementation, cost/benefit, initiative already started, and demand/impact) the 14 TDM Strategies were prioritized using a point system with a maximum of 12 points. This process resulted in seven high-priority strategies, four medium-priority strategies, and three low-priority strategies.

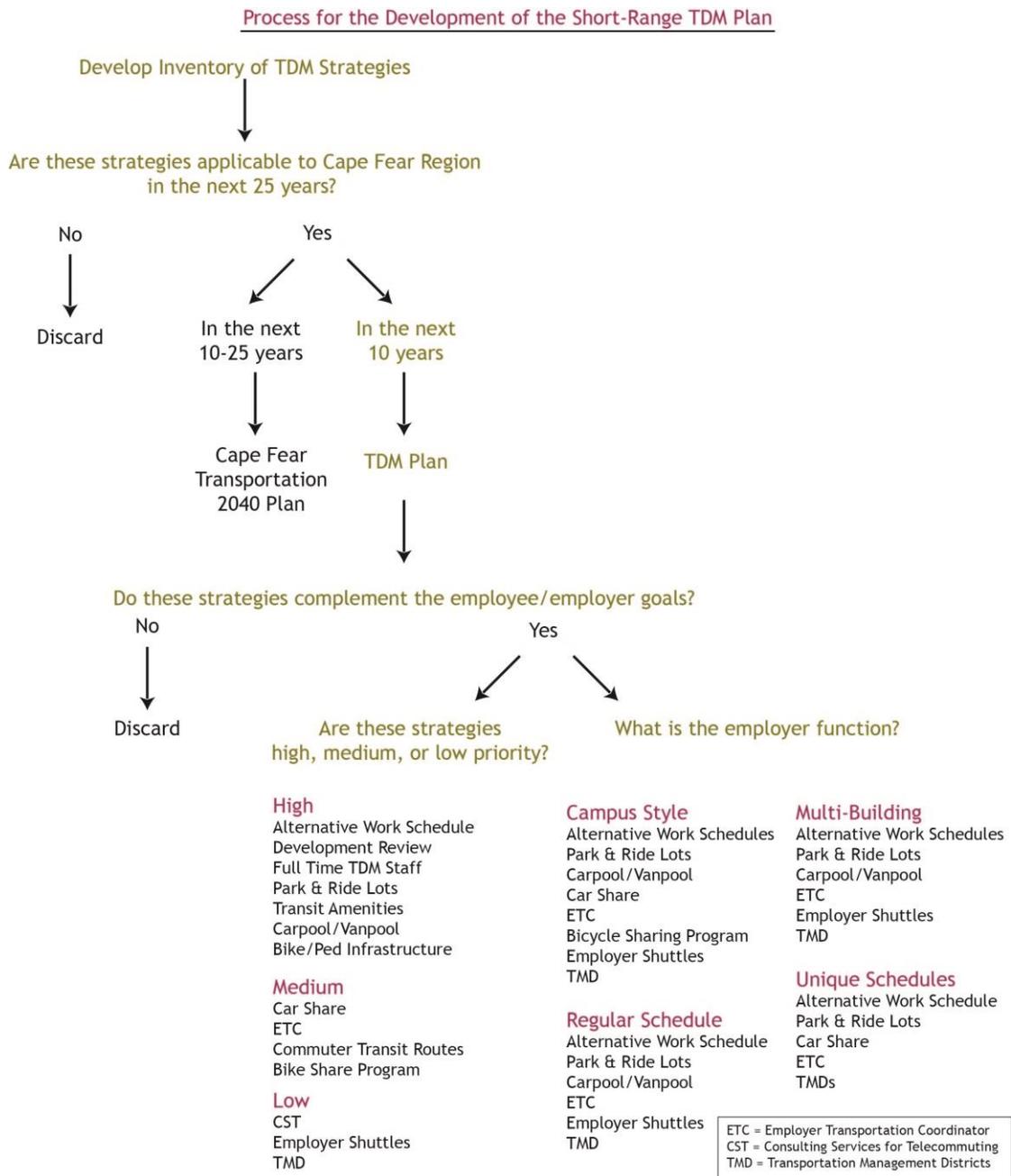
In this plan it is beneficial to provide employers direction regarding which TDM Strategy(s) would best suit their company/organization. In an effort to develop this toolkit, four employer functions were identified:

- Campus Style - one that operates like a campus - lots of people coming and going, employees that work various schedules, visitors who frequent the campus, and potentially people who stay overnight for various reasons. Some examples are UNCW and New Hanover Regional Medical Center
- Structured Schedule - one that operates on a standard 8:00 am - 5:00 pm schedule, or something similar such as 7:00 am - 4:00 pm or 9:00 am - 6:00 pm. This could also include businesses with set, predictable shifts. Some examples are City of Wilmington and New Hanover County Government
- Multi-Building/Campus - one that has many locations, not one centralized location. Some examples include New Hanover County Schools, and Wilmington Health Associates

- Unique Schedule - one that already implements alternative work schedules, primarily telecommuting, with more employees than a typical employer. An example is PPD, Inc.

Understanding that employers who function differently could benefit from different strategies, the employer functions were cross-referenced with the priority list. This allows an employer who, for example, functions in a campus-style to easily identify the high-priority TDM Strategies that would be most applicable to them.

Figure 3.1 depicts the process for the development of this plan



Implementation

TDM Strategy Prioritization

To determine the best strategy for implementing this plan, the 14 TDM Strategies were placed in high, medium, and low priority. Each TDM Strategy was scored by the TDM Committee based on four factors:

- Ease of implementation - requires minimum coordination and no major infrastructure additions (or funding is secured); 1 = difficult, 3 = easy
- Cost/Benefit - compares perceived costs to perceived benefits; 1 = high cost and low benefit, 3 = low cost and high benefit
- Initiative already in place - efforts already in place and/or preliminary work already completed; 1 = no work done, 3 = already in place
- Demand/Impact - references made in survey responses, comments, conversations, etc.; 1 = unknown community desire/impact, 3 = known community desire/impact

The results of the TDM Strategy prioritization activity are listed in the next table, categorized into high, medium, and low priority.

Figure 4.1 illustrates the high, medium, and low priority TDM Strategies

Strategy	Ease of Implementation	Cost/Benefit	Initiative Already Started	Demand/Impact	Total Score /12	Priority
Alternative Work Schedule	3	3	3	3	12	HIGH
Development Review	2	3	3	3	11	HIGH
Full Time TDM Staff	2	3	3	3	11	HIGH
Park & Ride Lots	3	2	3	3	11	HIGH
Transit Amenities	2	3	3	3	11	HIGH
Carpool/Vanpool	3	2	3	2	10	HIGH
Bike/Ped Infrastructure	2	2	3	3	10	HIGH
Car Share	3	2	3	1	9	MEDIUM
Employer Transportation Coordinator	2	3	2	2	9	MEDIUM
Commuter Transit Routes	2	2	2	3	9	MEDIUM
Bike Share Program	2	2	2	2	8	MEDIUM
Consulting Services for Telecommuting	2	2	1	1	6	LOW
Employer Shuttles	1	2	1	1	5	LOW
Transportation Management Districts	1	2	1	1	5	LOW

High 10-12 pts
 Medium 7-9 pts
 Low 0-6 pts

Entity Responsible for Implementation

However, implementation is not as simple as starting with the strategy with the highest priority score and working down the list. The success of a TDM program relies on partnerships, coordination, and communication between a variety of entities. The TDM Strategies require coordination between a variety of organizations for implementation. Some of these organizations take on a primary lead; others take on a secondary or promotional role. Please see the table below indicating the organizations responsible (regardless of the capacity) for implementing the 14 TDM Strategies. The organizations responsible for implementation have been identified and cross-referenced with the TDM Strategy list. This creates a quick reference for all entities responsible for implementation.

The TDM Committee has identified the following entities, who are also subject matter experts, as crucial to the success of this TDM plan and implementing the TDM Strategies as outlined in Appendix A:

TDM Coordinator
 NCDOT
 Vendors

Regional Employers
 Local Jurisdictions

Wave Transit
 WMPO Staff

Figure 4.2 illustrates the entities responsible for implementation

Strategy	TDM Coordinator	Regional Employers	Wave Transit	NCDOT	Local Jurisdictions	WMPO Staff	Vendors
Alternative Work Schedule	X	X					
Development Review	X			X	X	X	
Full Time TDM Staff	X					X	
Park & Ride Lots	X	X	X				
Transit Amenities	X		X				
Carpool/Vanpool	X	X	X				
Bike/Ped Infrastructure	X	X		X	X	X	
Car Share	X	X					X
Employer Transportation Coordinator	X	X					
Commuter Transit Routes	X		X				
Bike Share Program	X	X					X
Consulting Services for Telecommuting	X			X			
Employer Shuttles	X	X	X				
Transportation Management Districts	X	X			X		

Responsibilities

TDM Coordinator Responsibilities

As illustrated in Figure 4.2, the TDM Coordinator is responsible (in some capacity) for the implementation of all 14 TDM Strategies. Please note that the TDM Coordinator identified is the Full-Time TDM Coordinator strategy. The TDM Coordinator's responsibilities can be further described as primary, secondary, and initiating responsibilities. Primary responsibilities are those that depend heavily on the TDM Coordinator for implementation. Secondary responsibilities are those that occur without the assistance of the TDM Coordinator, but would benefit greatly from the involvement of the TDM Coordinator. Initiating responsibilities are those that call for the TDM Coordinator to begin conversations, but the implementation and maintenance of the strategy primarily depends upon a separate entity.

Primary Responsibilities for Implementation

- Alternative Work Schedules
- Carpool/Vanpool
- Full - Time TDM Coordinator
- Park & Ride Lots
- Transportation Management Districts

Secondary Responsibilities for Implementation

- Bicycle Sharing Program
- Car Share Program
- Development Review
- Employer Transportation Coordinator
- Bicycle and Pedestrian Infrastructure
- Transit Amenities
- Commuter Transit Routes
- Employer Shuttles

Responsible for Initiating the Strategy

- Consulting Services for Telecommuting Opportunities

Employer Responsibilities

Further detail regarding regional employers was needed, as some TDM Strategies may benefit some employers, but not all. Four employer functions were identified: Campus Style, Structured Schedule, Multi-Building/Campus, and Unique Schedule. Please see page 5 for descriptions.

Figure 4.3 cross-references the prioritized TDM Strategies with the four employer functions

Strategy	Priority	Campus Style	Structured Schedule	Multi-Building/Campus	Unique Schedule
Alternative Work Schedule	HIGH	X	X	X	X
Development Review	HIGH				
Full Time TDM Staff	HIGH				
Park & Ride Lots	HIGH	X	X	X	X
Transit Amenities	HIGH				
Carpool/Vanpool	HIGH	X	X	X	
Bike/Ped Infrastructure	HIGH				
Car Share	MEDIUM	X			X
Employer Transportation Coordinator	MEDIUM	X	X	X	X
Commuter Transit Routes	MEDIUM				
Bike Share Program	MEDIUM	X			
Consulting Services for Telecommuting	LOW				
Employer Shuttles	LOW	X	X	X	
Transportation Management Districts	LOW	X	X	X	X

Note: If the TDM Strategy is not marked as a Campus Style, Structured Schedule, Multi-building/Multi-Campus, or Unique Schedule then implementation of the strategy is not the responsibility of the employer. Rather, it is the responsibility of the TDM Coordinator, Wave Transit, NCDOT, Local Jurisdictions, WMPO Staff, or Vendors

Wave Transit Responsibilities

- Carpool/Vanpool
- Employer Shuttles
- Park & Ride Lots
- Transit Amenities
- Commuter Transit Routes

NCDOT Responsibilities

- Consulting Services for Telecommuting Opportunities
- Development Review
- Bicycle & Pedestrian Infrastructure

Local Jurisdictions Responsibilities

- Development Review
- Bicycle and Pedestrian Infrastructure
- Transportation Management Districts

WMPO Staff Responsibilities

- Development Review
- Bicycle & Pedestrian Infrastructure
- Full Time TDM Staff

Vendors

- Bicycle Sharing Program
- Car Share

Implementation Approach

As illustrated in Figure 4.2, the TDM Coordinator is responsible for implementing all 14 of the TDM Strategies. Currently, the WMPO has approximately ½ of 1 full-time employee (FTE) dedicated to promoting and implementing TDM strategies. The degree to which this plan can be implemented depends greatly on the amount of staff time allocated to the TDM Coordinator for implementation of this plan. There are two options and two approaches for implementation. These options and approaches can be expanded and hybrid alternatives can be generated. For simplicity, the basic options and approaches are:

Option 1) Limited Staff Time (1/2 FTE)

This option functions on limited staff time dedicated towards implementing this plan. Approximately ½ of 1 full time employee, the TDM Coordinator, would be allotted towards implementation. Two approaches can be taken:

- Strategy - based approach - the TDM Coordinator would implement 1-3 primary TDM Strategies per year in the Cape Fear Region. Understanding that the TDM Strategies don't need to be implemented exclusively of each other, 1-3 primary strategies should be selected with ideas for how to gauge interest in future, complementary strategies. For example, if the TDM Coordinator decides to focus on Bicycle and Pedestrian Infrastructure, they can gauge interest in the

Bike Share market and educate the community and employers about bike share opportunities if they choose to pursue them.

- Employer-based approach - the TDM Coordinator would take on 1-3 employers per year as ‘clients’, assisting them with an employer-specific approach towards implementing various TDM strategies. Conversations could begin with identifying the employer function, then following Figure 4.3 to determine which TDM Strategies would best suit that specific employer.

Option 2) Full Staff Time (1 FTE)

This option functions on full staff time dedicated towards implementing this plan. One full time employee, the TDM Coordinator, would be responsible for implementing this plan. Two approaches can be taken:

- Strategy-based approach - the TDM Coordinator would implement 3-5 primary TDM Strategies per year in the Cape Fear Region. As with the limited staff time option, complementary strategies should be explored where appropriate.
- Employer-based approach - the TDM Coordinator would take on 3-5 employers per year as ‘clients’, assisting them with an employer-specific approach towards implementing various TDM strategies. As with the limited staff time option, Figure 4.3 could be used to begin these conversations.

Regardless of option and approach, a community-based approach should be taken to accommodate the needs of specific communities and their construction impacts, community-specific demands, and special events. For example, a targeted approach should be taken with Brunswick County, Leland, Belville, and Navassa while the Causeway bridge between Brunswick and New Hanover Counties is under construction. This construction project will cause extensive traffic delays that will continue throughout the duration of this project, approximately 2-3 years. By establishing Park & Ride lots and promoting carpool/vanpool opportunities and alternative work schedules the traffic delays could be mitigated. The TDM Coordinator should work specifically with those entities to help promote TDM strategies that could help with the specific construction project.

Certain communities have specific needs, demands, and special events. The beach communities see their heaviest tourism traffic during the summer holiday weekends. If it is feasible and warranted to run a trolley from the parking lots further inland to beach accesses then this opportunity should be explored. The TDM Coordinator should work specifically with those communities, Wave Transit, and parking lot owners to determine a solution to the heavy tourism traffic. This same idea applies to the special events in the region such as Azalea Festival and Riverfest in Wilmington. The TDM Coordinator should coordinate with event planners and transportation companies to determine a solution to the heavy event traffic.

The TDM Marketing Plan should guide the promotion of the efforts listed in this plan. The plan should be developed by the TDM Committee immediately upon adoption of this TDM plan. It should acknowledge the variety of marketing strategies required to implement the TDM Strategies. For example, a strategy-based approach would call for region-wide promotion of the carpool/vanpool ride matching system,

Share the Ride NC. An employer-based approach would focus specifically on promoting the ride matching system only to those employees. However, the Carpool/Vanpool TDM Strategy would be more successful with more profiles in the Share the Ride NC ride match system, as people who live in the same neighborhood can carpool to neighboring employers. Therefore, the TDM Marketing Plan should provide flexibility in the marketing strategies to yield the highest success in the TDM Strategies.

Conclusion

First Steps

The first step towards implementation of this plan is its adoption by the WMPO Transportation Advisory Board. Upon adoption, this plan should be presented to all WMPO member jurisdictions to gain their support and awareness of this initiative.

To implement this plan, three steps should be taken to start the process:

- Develop the TDM Marketing Plan
- Review the TDM Strategies that are considered high priority
- Work with regional employers who helped develop this plan.

The TDM Marketing Plan should be developed by the TDM Committee to include a comprehensive effort to implement and promote the specific TDM Strategies to the residents and employers in the Cape Fear Region. Marketing and outreach are crucial components to the success of this plan. Therefore, the development of the marketing plan should be a priority of the TDM Committee.

Employer Toolkit

This plan creates an employer toolkit that allows employers to determine what TDM Strategy(s) could best suit their organization. This toolkit could be used for existing employers, or as a guide for potential employers. For example, an employer that functions (or would plan to function) in a campus style atmosphere (such as colleges/universities and medical centers) can see there are several TDM Strategies that are most applicable to the campus style environment. For information about each of these strategies, the employer can review the strategy descriptions in Appendix A to gain a better understanding. With assistance from the TDM Coordinator, the employer can review the priority levels of the TDM strategies, and then determine what strategies would best suit that employer and where priorities for that employer should be placed.

TDM Coordinator

This plan provides guidance for implementation for the TDM Coordinator. Two decisions should be made to determine how the TDM Coordinator should implement this plan - where to house the TDM Coordinator and how much time will be spent implementing this plan and performing TDM responsibilities. Conversations should be had to determine the best entity to house the TDM Coordinator. This could be any entity that serves the region and has mission statements and goals that complement the goals and objectives of this plan. The TDM Coordinator should be housed with an entity that has the resources that will most likely ensure success. To determine the best organization to house the TDM Coordinator, an inventory of options should be conducted, followed by formal conversations with leaders within those organizations. Each organization should develop a SWOT (strengths, weaknesses, opportunities, and threats) analysis for housing the TDM Coordinator within their respective organization.

After discussing each organization's SWOT analysis, the leaders of each organization should come to an agreement regarding the placement of the TDM Coordinator then expand to determine how the other organizations can be supporting organizations of the TDM program.

Currently, less than one half of one full time employee (FTE) is dedicated to implementing TDM strategies. This plan outlines two non-exclusive options and approaches for implementation. If there continues to be one half of one FTE allocated towards TDM implementation, that TDM Coordinator can follow a strategy-based approach and strive to implement 1-3 TDM strategies per year. The TDM Coordinator can follow an employer-based approach and strive to take on 1-3 employers/year as 'clients' and specifically assist them with TDM strategies that best fit their organizational needs. If one FTE is allocated towards TDM implementation, that TDM Coordinator could strive to implement 3-5 TDM strategies per year. The employer-based approach would allow one FTE to take on 3-5 employers per year as 'clients'.

An inventory of current TDM responsibilities should be conducted. If there are staff that are currently working to implement TDM strategies in any capacity, those staff should coordinate with the TDM Coordinator. While ensuring that responsibilities fall where the expertise is, if it is more efficient to give those responsibilities to the TDM Coordinator and house all TDM responsibilities within one position, then this option should be explored. For example, it could be more efficient for the TDM Coordinator to participate in the development review process (a TDM strategy identified in this plan) and that would allow the current development review staff person to take on additional responsibilities.

The option of additional TDM staff should be explored. The implementation of this plan requires significant marketing and outreach, along with maintenance and logistical management. One TDM Coordinator could take on the responsibilities of marketing and outreach, while another could take on the maintenance and management responsibilities.

Work Plan

A work plan has been designed to guide implementation of the TDM strategies. Appendix E includes a work plan for each of the 14 TDM Strategies. It consists of a list of non-inclusive tasks that should be followed to ensure implementation of the TDM Strategies. Regardless of whether the TDM Coordinator is one half of one FTE dedicated to implementing TDM strategies, the work plan can be used to target specific TDM Strategies and provides specific tasks to be completed. The work plan outlines goals for completion over the next five years. This work plan should be reviewed annually to review current statuses and provide any additional input.

Performance Measures

In an effort to monitor the success and impact of the TDM program, performance measures have been developed and are listed below. Details regarding objectives, data collection method, data collection agency, and TDM Strategy can be found in Appendix B.

Congestion Management Process Goals and Objectives

- Bicycle and pedestrian CMP corridor counts per capita in the WMPO area within a two year time frame
- Average travel time on the WMPO CMP network within a two year time frame
- Percentage of fixed-route trips that are on-time in the WMPO area within a two year time frame
- Number of participants in the WMPO's TDM program
- Percentage of WMPO adopted plans the TDM is referenced over a two-year period

Employer/Employee Goals and Objectives

- Number of employees participating in an alternative work schedule program
- Number of employers participating in an alternative work schedule program
- Number of businesses that apply for telecommuting assistance
- Number of businesses participating in telecommuting where telecommuting assistance was provided
- Number of businesses who adopt a telecommuting/alternative work schedule policy
- Number of bike share programs
- Number of daily, weekly, and monthly bike share rentals
- Number of monthly and annual bike share pass purchases
- Revenue generated from bike share rentals
- Number of car share programs
- Number of people registering (pre-qualifying) for car share
- Number of car share rentals per day
- Revenue generated from car share rentals
- Number of people enrolled in Share the Ride NC
- Number of vanpools running
- Number of people participating in each vanpool
- Number of Park & Ride Lots
- Number of cars parked at Park & Ride Lots
- Number of code changes updated to complement TDM Strategies
- Number of employer shuttles providing access to Park & Ride lots
- Number of employer shuttles in service
- Number of PSA's developed
- Number of TDM presentations given
- Number of employers participating in TDM program
- Number of events where TDM is promoted
- Number of bicycling events held
- Number of visits to website

- Number of employer transportation coordinators
- Staff time allocated to TDM Strategies
- Number of awards/amount of financial incentives for ride sharing, walking, biking, and use of transit
- Number of Full Time Employees (FTEs) dedicated to promoting TDM initiatives
- Number of people using the app that will provide bus rider information
- Number of people participating in Wave Transit’s Bus Buddies program
- Number of people using transit
-
- Number of TMDs established
- Number of businesses participating in a TMD
- Number of housing developments participating in a TMD

Note: The geographical area for measuring/counting facilities is within the WMPO boundary

Program Evaluation

This TDM plan, its strategies, work plan, and performance measures should be evaluated annually. Whether a strategy-based approach or an employer-based approach is taken, specific performance measures should be identified as targets for the next year. The work plan should also be referenced to identify specific tasks that can be implemented over the next year. The marketing plan should also be reviewed. Once these three documents have been reviewed, a one-year guide should be developed with specific goals, objectives, strategies, and performance measures. At the end of each quarter, this document should be reviewed to determine the success and effectiveness of the TDM program.

Funding

This TDM plan includes a wide variety of components amenities to be funded, ranging from staff (salary and benefits) to facilities (such as bus stops, multi-use paths, and crosswalks) to marketing (events, outreach materials) to ride matching programs (Share the Ride NC). With such a wide variety of amenities, there is also a wide variety of funding sources and opportunities. Appendix F includes a non-comprehensive list of funding opportunities. Conversations should also be held with regional employers to identify additional funding sources and to develop partnerships to secure additional funding.

Appendix A - TDM Strategies

- 34 Alternative Work Schedules
- 37 Bicycle Sharing Program
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- 50 Employer Shuttles
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TDM Strategy 1 - Alternative Work Schedules

Description: Alternative Work Schedules include a variety of work scheduling options including telecommuting, flextime, compressed work week, and staggered shifts.

- Telecommuting is a work-from-home option. This would require obtaining all the technological equipment required to perform work duties from the home of the employee.
- Flextime allows employees some flexibility in their daily work schedules. This would follow a 5-day work week but would allow employees to work 7:00 - 4:00 or 9:00 - 6:00 rather than a typical 8:00 - 5:00 schedule.
- Compressed work week allows employees to work fewer but longer days. Common examples are a 4 x 10 schedule (working four 10 hour days and having the 5th day off) or a 9 x 9 schedule (working nine 9 hour days and having the 10th day off) compared to a 5 x 8 schedule (working five 8 hour days).
- Staggered shifts reduce the number of employees arriving and leaving a worksite at one time by staggering the work schedule. For example, some shifts may be from 7:00 - 4:00, others 8:00 - 5:00, and others 9:00 - 6:00.

Entities Responsible for Implementation: TDM Coordinator, Employers

Intent and Purpose: The intent of the Alternative Work Schedules strategy is to effectively remove people (thus vehicles) from the peak hour commute periods while allowing them a schedule that fits their needs and wants outside of work.

This strategy could mitigate growth in traffic congestion along the WMPO Congestion Management Commuting Corridors and Commercial Corridors (see Appendix D).

Existing Conditions: The extent of flexible/compressed work weeks currently practiced in the Cape Fear Region is unknown. The City of Wilmington, UNCW, and PPD have alternative work schedule policies however a complete inventory of employers/employees functioning in an alternative work schedule does not exist.

Potential for Application: This strategy is driven primarily through education, outreach, and promotion. The WMPO's role will include communicating with area employers, determining if there are opportunities for alternative work schedules, assisting with the development of an alternative work schedule policy, and promoting and implementing the policy to current and new employees. The WMPO can also promote this strategy through public awareness and other campaigns.

Costs:

- WMPO staff time dedicated to coordinating with area employers, developing an inventory of alternative work schedule opportunities, the development of an alternative work schedule policy, promoting and implementing the policy, and promoting alternative work schedules through public awareness and other campaigns
- Marketing supplies and materials

Benefits:

- Can reduce individual commuting trips by 20% or more
- Reduced peak-hour single occupancy vehicle trips
- Increased employee job satisfaction, productivity and morale
- Effective employee recruitment and retention tool
- Potentially longer hours of customer service for businesses

Disadvantages/Challenges:

- Could discourage carpooling/vanpooling
- Telecommuting - Some managers may not be comfortable with employees working from home

Performance Measures:

Congestion Management Process Matrix:

- Average travel time on the WMPO CMP network within a two year time frame

Other:

- Number of employees participating in an alternative work schedule program
- Number of employers who adopt a telecommuting/alternative work schedule policy
- Alternative Work Schedules Public Promotion:
 - Number of PSA’s developed about alternative work schedules
 - Number of TDM presentations given including alternative work schedule information

Strategy Implementation: The Alternative Work Schedule strategy should be bundled with other TDM tools presented to area employers. While discussing opportunities for carpooling/vanpooling and promoting bicycle and pedestrian infrastructure and park & ride lots, the TDM Coordinator should be discussing alternative work schedule opportunities with local business owners. Opportunities may lie with the local Chambers of Commerce to coordinate with the business community to help promote alternative work schedules and identify opportunities and constraints. Formal alternative work schedule policies should be developed/updated for suitable businesses. The policy should specifically address which job categories are suitable, what is required

of employees who qualify, what criteria are to be used to evaluate the performance of employees on alternative schedules, how employees schedules are determined and what is required to change schedules, periodic review of the arrangement, and model contracts and forms for establishing and tracking alternative work schedules.

Priority: The Alternative Work Schedule strategy is a high priority. As a low-cost strategy that is already being implemented to some unknown degree, it would be beneficial to gain a better understanding of this strategy and promote it throughout the regions.

Employer/Employee Goals: The Alternative Work Schedule strategy is one of five strategies that targets all seven employer/employee goals: mitigate growth in traffic congestion; reduce costs to employees and/or employer; address the needs/desires of employees; increase the opportunity for healthy living, recreation and time outside; increase the opportunity for running errands; increase the opportunity for time with family; and increase flexibility for the employee.

TDM Strategy 2 - Bicycle Sharing Program

Description: Bike share is a service in which bicycles are made available for individuals to rent on a very short term basis. One can pay by the hour to use a bicycle as needed then return the bicycle to any one of the bike share hubs. A bike share program consists of several components including a hub with a payment center, information tracking, instructions for use, information about other hubs, bike racks, and the bicycles. Another component is management of the bicycles. Sometimes bicycles need to be redistributed more evenly to all the hubs. A vehicle with a trailer is required to do this. Maintenance is another component. Bicycles need to be serviced regularly along with the information kiosk and payment center.

Entities Responsible for Implementation: Vendors (private bike share company), TDM Coordinator, Employers, Property Managers

Intent and Purpose: The intent of the Bike Share strategy is to provide a transportation option to those who would normally drive a car for a short trip. Bike share is an option that can complement a primary mode of transportation. If an employee needs to run an errand nearby, renting a bicycle may be an option. It also creates an expansion of the transit system by allowing people to use transit to deliver them part of the way to their destination then renting a bicycle to arrive closer to their final destination. Bike share is primarily used for transportation in areas of higher density. However, in the Cape Fear Region this strategy may also be beneficial to tourists who are interested in bicycling around Wrightsville Beach, downtown Wilmington, or Carolina Beach.

The Bike Share strategy could mitigate growth in traffic congestion along the WMPO Congestion Management Commercial Corridors, Destination Corridors, and Tourist Routes. Typically, it is not feasible to use bike share as a mode of transportation for a longer commute and therefore does not mitigate growth in traffic congestion along the Commuting Corridors. However, by having a bike share program available, an employee may choose to use an alternative transportation option (bus, vanpool, and carpool) as part of their commute because they have the option to use a bike for mid-day trips or errands. Therefore, bike share could mitigate the growth in traffic congestion along the Commuting Corridors as a secondary affect rather than a primary affect. Please see Appendix D for the corridors referenced.

Existing Conditions: Currently, UNCW is exploring bike share options primarily for their campus.

Potential for Application: UNCW would likely start a bike share program before any other area. UNCW has a one-mile policy that does not allow students who live within a one-mile radius to obtain a parking pass on campus. That creates an ideal bike share opportunity on campus as it increases demand for on-campus transportation options. It also creates an opportunity for bike

share to expand to the apartment complexes and shopping centers within the one-mile radius. The opportunity to expand bike share should be explored to consider downtown Wilmington and at strategic locations across the City of Wilmington such as Mayfaire, along the Cross-City Trail, etc.

Costs:

- Seattle’s bike share program includes 500 bicycles in six neighborhoods, costing \$3.7 million estimated for startup and \$1.4 million for yearly operating cost.
- Charlotte’s bike share program includes 200 bicycles and 24 stations strategically placed throughout Uptown and surrounding neighborhoods. Start-up costs were \$850,000 and operational costs between \$300,000 - \$400,000 annually.
- Montgomery County, Maryland will be installing 20 stations and 200 bicycles for approximately \$2 million.
- UNCW received an in-depth proposal to include software, maintenance, startup, and support for \$210,440. This includes 4 stations and 40 bicycles. The cost per station is \$52,610 and the cost per bike is \$5,261.

Benefits:

- Increases the flexibility during the work day for alternative mode commuters
- Lowers air pollution and greenhouse gas emission from cars
- Reduces peak hour congestion
- Mitigates congestion throughout the day, specifically in urban cores
- Adds character to a city
- Provides an option for college students who need to cross campus quickly
- Provides an opportunity for exercise (health and wellness benefits)
- Will provide green jobs or a green business opportunity
- Popular alternative to Millennials
- Attractive to tourists
- Creates an opportunity for exercise while providing a transportation option
- Complements the one-mile radius policy at UNCW - students who live within one mile of campus can not park on campus

Disadvantages/Challenges:

- Can not function as an evenly geographically distributed city-wide or region-wide program - only in specific concentrated locations such as UNCW, downtown Wilmington, or Wrightsville Beach
- Requires existing bicycle infrastructure and communication/information readily available about those facilities

Performance Measures:

Congestion Management Matrix:

- Bicycle and pedestrian CMP corridor counts per capita in the WMPO area within a two year time frame

Other:

- Number of bike share programs
- Number of daily, weekly, and monthly bike share rentals
- Number of monthly and annual bike share pass purchases
- Funds generated from hourly/daily/monthly/annual membership fees
- Bike share public promotion:
 - Number of PSA's developed about bike share
 - Number of TDM presentations given including bike share
 - Number of events where bike share is promoted
 - Number of visits to bike share website
 - Number of awards/financial incentive programs for bike share

Strategy Implementation: A feasibility study should be conducted to best determine how to start a bike share program in the Cape Fear Region. There are a variety of options, including:

- Rolling out a large, comprehensive bike share program
- Starting with a smaller program at UNCW, possibly including shopping and apartment complexes within a one-mile radius as a second phase
- Starting with a smaller program in Downtown Wilmington or Wrightsville Beach

Priority: The Bike Share Strategy is a medium priority. It is a higher cost strategy (up front), however it is not nearly as expensive as widening roads and other road construction required as a result of increased congestion.

Employer/Employee Goals: The Bike Share Strategy targets five of seven employer/employee goals: mitigate growth in traffic congestion; reduce costs to employees and/or employer; address the needs/desires of employees; increase the opportunity for healthy living, recreation and time outside; and increase flexibility for the employee.

TDM Strategy 3 - Car Share

Description: Car share is a model of car rental where people rent cars for short periods of time, often by the hour. One can pay by the hour to use a car as needed then return the car according to the car share program's operating area layout. The simplest car share programs have only one or two pick-up points, but more advanced systems allow cars to be picked up and dropped off at any available public parking space within a designated operating area. Car share programs differ in their objectives, size, business models, levels of ambition, technology, and target markets but they do share many features. The more established operations usually require a check of past driving records and a monthly or annual fee in order to become a member. The total cost and maximum time a car may be used also varies. Reservations can be made online, by phone, by text, and some companies have an app that will allow you to make a reservation. Users are members and have been pre-approved to drive (background driving checks and payment method established). Many car sharing companies only provide the state minimum liability insurance. Some companies provide comprehensive and collision insurance. Some do not provide uninsured or under-insured insurance nor do they provide personal injury protection insurance.

Entity Responsible for Implementation: Vendors (private car share company), Employer, TDM Coordinator

Intent and Purpose: The intent of the Car Share strategy is to provide a transportation option to those who may not own a car, or function in a one-car family. If one does not own a car, or owns only one car in a family, they likely drive less than the average person. Car share provides an option to these people to use a vehicle as needed, in hopes they will continue to drive less than the average person. For example, many find car ownership in large cities such as New York and San Francisco to be too expensive. Mass transit allows them to function without the use of a car, but occasionally a vehicle is needed for a short period of time. Car share allows people to continue without purchasing (and driving) a vehicle while tending to responsibilities requiring a vehicle. Car share also benefits college students at universities (such as UNCW) that restrict vehicles on campus.

Car share is also a complement to other alternatives to the private automobile. It only makes sense as a part of a wider transportation package, in neighborhoods where transit, walking, and bicycling are a viable option. These are the same locations where single-car and no-car ownership is a viable option. Alternative transportation options allow car usage as necessary for occasional trips outside of the transit/walking/biking periphery, moving large items, or special occasions. It can also be an alternative to owning multiple cars for households with more than one driver. A long-term study of City CarShare members found that 30% of households that joined CarShare sold a

car, others delayed purchasing one. Transit use, bicycling, and walking also increased among members (3). A study of driving behavior of members from major car sharing organizations found an average decline in 27% of annual Vehicle Kilometers Traveled (VKT) (4). Car sharing is generally not cost-effective for commuting to a full-time job on a regular basis but for those who live near their work, are interested in a one-car family option, or would like to rely on transit, walking, or biking as a primary transportation method, car share would be a viable transportation option.

The Car Share strategy could mitigate growth in traffic congestion along the WMPO Congestion Management Corridors (see Appendix D), but it will be difficult to determine which corridors. If car share is offered in downtown Wilmington, then it would allow people to walk, bike, and use transit as a primary mode of transportation by providing flexibility for using a vehicle when needed. Theoretically, this would mitigate growth in traffic congestion along the streets in downtown Wilmington when one is biking, walking, and using transit more often. Car share could mitigate the growth in traffic congestion along Commuting Corridors as a secondary affect. By having a car share program available, an employee may choose to use an alternative transportation option (bus, vanpool, carpool) as part of their commute because they have the option to use a car for mid-day trips or errands. This opportunity could create a secondary affect along the Commuting Corridors rather than a primary affect.

Existing Conditions: UNCW is considering the implementation of a Car Share program. They are considering two vehicles with an hourly rate of approximately \$8.00 - \$9.00/hour, an overnight rate of approximately \$35.00 - \$40.00, and a 24 hour rate of approximately \$66.00 - \$72.00.

Potential for Application: Successful car sharing development tends to be associated mainly with densely populated areas such as city centers, universities and other campuses. Car share could be a feasible option for the UNCW area and in Downtown Wilmington. Working with parking managers could provide opportunities for designating car share parking in parking decks.

Costs: The organization/association renting the cars may be a commercial business or the users may be organized as a company, public agency, cooperative or ad hoc grouping. Potential costs could include the difference between monthly rental funds generated and the monthly minimum. For example, UNCW is considering a potential agreement stating if authorized users do not spend a minimum of \$1,100 per month per vehicle, then UNCW would pay the vendor (car share company) the difference. Also, the vendor shall pay UNCW 25% of hourly personal usage revenue collected over and above \$110 per month, per vehicle.

Benefits:

- Reduced parking demand
- Increases the flexibility during the work day for alternative mode commuters
- Popular alternative to Millennials
- Reduces the cost and responsibilities of car ownership
- Reduces vehicle miles traveled (VMT)
- Not limited by office hours
- Flexible - vehicles can be rented by the minute, hour, and day
- Helps mitigate growth in traffic congestion and pollution

Disadvantages/Challenges:

- Requires additional reserved parking spaces that may be in high demand in densely areas
- Could negatively impact the taxi companies' business

Performance Measures:

Congestion Management Process Matrix: none

Other:

- Number of car share programs
- Number of people registering (pre-qualifying) for car share
- Number of car share rentals per day
- Revenue generated from car share rentals
- Car share public promotion:
 - Number of PSA's developed about car share
 - Number of TDM presentations given including car share
 - Number of events where car share is promoted
 - Number of visits to car share website
 - Number of awards/financial incentive programs for car share

Strategy Implementation: A feasibility study should be conducted to best determine how to start a car share program in the Cape Fear Region. There are a variety of options, including campus car share at UNCW, expanding car share beyond UNCW to local businesses and multi-family residential areas, and a car share program in downtown Wilmington. There should be coordination with parking managers to determine if and where there is available existing parking for car share vehicles.

Priority: The Car Share TDM strategy is a medium priority. It would likely require an outside private company's interest in developing a car share program in this area. The geographic area and target population in the Cape Fear Region is limited.

Employer/Employee Goals: The Car Share TDM strategy targets three of seven employer/employee goals: address the needs/desires of employees; increase opportunities for running errands; and increase flexibility for the employee.

TDM Strategy 4 - Carpool/Vanpool

Description: Carpooling is a strategy that creates opportunities for people to ride to work or run errands together in the same car (belonging to one of the participants), therefore saving on fuel costs, tolls, and also reducing the stress of driving. Vanpooling allows people to share the ride similar to carpooling, but on a larger scale with concurrent savings in fuel and vehicle operating costs. Vans may be provided by: individuals; by individuals in cooperation with various public and private support programs; through a program operated on behalf of an element of government or transit agency; or through a program operated on behalf of an employer. In many cases an employer may elect to subsidize the cost of the vanpool and the vehicles' maintenance. In some cases, the vehicles are provided and maintained by the municipality. Typically, there is a website available to match people with potential carpool opportunities and vanpool opportunities. This website allows you to enter your locations of interest, the schedule you will need, and even smoking and music preferences. Once you are in the system, you can see if others nearby could be potential carpool matches, or if there is a vanpool opportunity you could join.

Entity Responsible for Implementation: TDM Coordinator, Employers, Wave Transit, Vendors (carpool/vanpool website company)

Intent and Purpose: The intent of the Carpool/Vanpool strategy is to reduce the number of vehicles on the road, therefore mitigating growth in traffic congestion. Carpooling and vanpooling reduces each person's travel costs such as fuel, tolls, and the stress of driving. They also allot time to other pursuits such as reading, work, rest, and time for social media. Both are seen as an environmentally friendly and sustainable way to travel as sharing journeys reduces carbon emissions, traffic congestion, and the need for parking spaces. Theoretically, for every two people who carpool, one vehicle is not on the road adding to traffic congestion, not increasing the parking demand, and not contributing to air pollution. Having 6-10 people riding in a vanpool provides an even greater impact.

The Carpool/Vanpool TDM Strategy could reduce traffic along the WMPO Congestion Management Commuting Corridor (see Appendix D) along with other roads that connect Wilmington with the surrounding communities, such as US 421, NC 133, and I-40.

Existing Conditions: Currently, the Wave Pool program is offered in the Cape Fear Region. The Wave Pool is a collaborative effort between the WMPO and the Cape Fear Public Transportation Authority which allows people to share a ride to work provided they live and work within reasonable proximity of each other and have similar commuting schedules. There are currently two Wave Pool options: vanpool and carpool. In a vanpool, Wave Transit provides the vehicle, maintenance, fuel and insurance, and employees pay a monthly fare for service. Vanpools typically require five members to be considered.

Currently, there are three vanpools operating. One is from Wilmington to Jacksonville, the other two from Wilmington to Elizabethton. Wave Transit is currently securing an additional four vans to expand the vanpool program. To get a carpool started, and to request to join an existing vanpool or to apply for a new vanpool, the Wave Pool program offers a ride matching system through Share the Ride NC - the North Carolina's Statewide Ride Matching System. Share the Ride NC (www.strnc.org) is a statewide website that was created to help form carpools and vanpools. It is provided free of charge in support of the effort to improve air quality. The website can house additional features like Emergency Ride Home (ERH), Commute Calendars, walking and biking information, One-Off Trip Matching, and incentive programs. Currently, Wave Pool offers an Emergency Ride Home Program for vanpool participants. Wave Pool commuters are to call Port City Taxi for an ERH trip and the cost of the taxi will be billed to Wave Transit. Vanpool participants are eligible for one free ERH every 30 days. Currently, there is not an ERH program established for carpools.

Potential for Application: The Wave Pool program needs a detailed marketing plan outlining opportunities for education and outreach for both carpooling and vanpooling opportunities. Not only does this information need to be promoted to the general public, but federal tax incentives are available to Wave Pool passengers and employers. While discussing alternative work schedules with area employers, the employers should also be educated on the tax incentives available to them for participating in the Wave Pool.

Implementation of the Park & Ride Lot TDM Strategy will increase opportunities for carpooling and vanpooling. Please see page 62 for proposed Park & Ride lots.

Also, an ERH program should be established for carpools. Until funding for a regional ERH program is established, creative ERH options should be explored, such as an employer-based ERH program or an employer-sponsored ERH program.

Costs: Carpooling does not involve any significant startup costs, but users do not pay into the system. Carpooling costs consist of marketing materials, paying a share to use the statewide Share the Ride NC website (approximately \$2,000/year), and staff time dedicated to implementing a marketing plan. Also, as additional regions join the statewide ride share site, the burden of site maintenance and related administrative responsibilities are shifted to outside of the organization. Vanpooling involves a more significant startup cost, but users do pay into the system. In June 2014 Wave Transit purchased 12-passenger vans for \$24,692 each, plus \$1,200 per vehicle for the decals. 80% of the costs were covered by a federal grant with the local 20% match funded by Wave Transit. Wave charges \$.42/mile. This cost covers the cost of fuel, insurance, maintenance, and capital expenses (the 20% match)

Benefits:

- Mitigated growth in traffic congestion
- Reduced commuting costs (fuel, vehicle maintenance, tolls)
- Reduced demand for parking
- Reduces the stress of driving in traffic (rotate drivers)
- Allows passengers time to relax, respond to emails, read the newspaper, etc.

Disadvantages/Challenges:

- Reduces flexibility during the work day (difficult to run errands)

Performance Measures:**Congestion Management Matrix:**

- Average time travel on the WMPO CMP network within a two year time frame
- Number of people enrolled in Share the Ride NC

Other:

- Carpool/vanpool public promotion:
 - Number of PSA's developed about carpool/vanpool
 - Number of TDM presentations given about carpool/vanpool
 - Number of events where carpool/vanpool is promoted
 - Number of visits to Share the Ride NC website
 - Number of awards/financial incentive programs for carpool/vanpool
- Number of vanpools running
- Number of people participating in each vanpool
- Number of Park & Ride lots

Strategy Implementation: With the Share the Ride NC website already available to people in the Cape Fear Region, and additional buses becoming available for vanpooling, education, and outreach is the next component needed to implement this TDM strategy. Staff time should be dedicated to promoting the Wave Pool program. There should be coordination with parking managers to identify and reserve preferred parking spaces for those who are participating in carpooling and for the vanpool vans.

Priority: The Carpool/Vanpool TDM Strategy is a high priority. Currently, the WMPO is funding the Share the Ride NC website for the Cape Fear Region. To benefit from this, the website needs to be heavily promoted throughout the region.

Employer/Employee Goals: The Carpool/Vanpool TDM Strategy targets three of seven employer/employee goals: mitigate growth in traffic congestion; reduce costs to the employee and/or employer; and address the needs/desires of employees.

TDM Strategy 5 - Consulting Services for Telecommuting Opportunities

Description: The Consulting Services for Telecommuting Opportunities TDM Strategy is an optional preliminary step towards developing and implementing an alternative work schedule option for a particular business. This TDM strategy was generated from the State of Maryland's Teleworking Partnership with Employers (TPE) service. The Maryland Department of Transportation (MDOT)'s TPE offers free professional telecommute consulting services to Maryland employers looking to start or expand the organizations' telecommute program. The Baltimore Metropolitan Council and the MDOT have contracted with the Telecommuting Advantage Group to work with a select number of businesses in the Baltimore region. This service is provided at no cost to the employer, with no obligation of any kind. This same TDM strategy is recommended for North Carolina, to be implemented by NCDOT, and therefore made available to businesses in the Cape Fear Region.

Entity Responsible for Implementation: NCDOT, TDM Coordinator, Employers

Intent and Purpose: The intent of the Consulting Services for Telecommuting Opportunities strategy is to provide business owners with the information necessary to implement telecommuting policies. This does not provide a direct impact on the Employer/Employee Goals, however it does provide a service that, if implemented, would satisfy all seven Employer/Employee Goals. Telecommuting can mitigate growth in traffic congestion and air pollution, but some business owners are hesitant to allow telecommuting due to understandable concerns: productivity, communication, responsibilities, etc. Providing consulting services to business owners will help identify feasible opportunities for telecommuting and will develop policies and procedures to ensure concerns regarding telecommuting issues are least likely to occur.

Consulting Services for Telecommuting Options would not directly reduce traffic congestion along any WMPO Congestion Management Corridors. However, if employees are telecommuting, this strategy would mitigate growth in traffic congestion along the Commuting Corridors and Commercial Corridors (see Appendix D).

Existing Conditions: Currently, the NCDOT does not offer consulting services to businesses for telecommuting opportunities.

Potential for Application: This TDM strategy is almost entirely the responsibility of NCDOT. A local or regional agency could also contract for these consulting services

Costs: As Maryland offers these services free of charge to businesses, they absorb the cost of those services from the Telecommuting Advantage Group. Their telecommute assistance program, Teleworkbaltimore.com, is a web-

based effort that provides free, limited support to qualified employers in the Baltimore region. MDOT sponsors the program at a total cost of \$150,000 over two years, and the Baltimore Metropolitan Council manages it.

Benefits:

- Provides assistance to businesses hesitant to implement a telecommuting option to employees
- Free to the business owner with no obligation
- Secondary benefits include mitigated growth in traffic congestion, improved employee satisfaction
- Tertiary benefits include improved employee retention, reduced recruiting and training costs, competitive advantage in finding quality employees, improved productivity, reduced office space costs
- Would/could be made available to other regions in North Carolina

Disadvantages/Challenges:

- NCDOT does not currently have funding appropriated for this program
- Human resources guidelines/policies may need updating

Performance Measures:

Congestion Management Matrix: (none)

Other:

- Number of businesses who apply for telecommuting assistance
- Number of employers participating in an alternative work schedule program where telecommuting assistance was used

Strategy Implementation: Discussions need to be held with NCDOT to determine the feasibility of this program.

Priority: The Telecommuting Consulting Service TDM Strategy is a low priority. This may be a higher priority in a larger region, however in the Cape Fear Region, the Alternative Work Schedule TDM Strategy could serve as the appropriate effort towards promoting telecommuting opportunities.

Employer/Employee Goals: The Telecommuting Consulting Service TDM Strategy targets one of seven employee/employer goals: reduce costs to the employee and/or employer.

TDM Strategy 6 - Development Review

Description: The Development Review TDM Strategy includes reviewing development proposals and providing comments regarding when transit or TDM-related conditions may be appropriate, including the addition of sidewalks, bike lanes, multi-use paths, crosswalks, bus stops, bus pull outs, park and ride lots, and the purchase of transit vehicles.

Entity Responsible for Implementation: TDM Coordinator, WMPO Staff, NCDOT, Local Jurisdictions

Intent and Purpose: To create a systematic approach and process among all WMPO jurisdictions for integrating TDM policies as a way of meeting the region's goals of mitigating growth in traffic congestion and accommodating travel through the complete transportation network. This will address TDM directly through the development approval process. Development review can maximize the use of available infrastructure by ensuring synergies with new development.

Development Review would not directly reduce traffic congestion along any WMPO Congestion Management Corridors (see D). However it would directly impact traffic congestion and traffic flow along the corridors being developed.

Existing Conditions: The Traffic Impact Analysis (TIA) is the process a developer goes through to determine if additional transportation improvements need to be made to accommodate the proposed development. Currently, the City of Wilmington, New Hanover County, and Carolina Beach have language that requires a Transportation Impact Analysis (TIA). Pender County has language that requires a TIA (100 peak hour trips), however, it is a low threshold considering the population projections. . In the WMPO planning boundary, Wrightsville Beach, Kure Beach, Leland, Belville, and Navassa do not. If you have TIA requirements, a traffic engineer must submit a TIA for the project on an effected road network - this is required on a roadway with at least 3,000 vehicles per day.

Potential for Application: Language could be developed for all WMPO jurisdictions to guide TIA and development review for any new/improved development, allowing all WMPO jurisdictions to be on the same page regarding potential transportation improvements due to new/improved development. An inventory of help needed/wanted should be conducted first to determine which WMPO jurisdictions are interested.

Costs: Staff time required to research, review and improve TDM applications to the development review process.

Benefits:

- Can increase the number of employer shuttles, bicycle, pedestrian, and transit facilities
- Can assist with implementing plans
- Creates a policy-oriented method for implementing TDM strategies
- Can allow for future transportation infrastructure construction/construction planning through right-of-way easement dedication

Disadvantages/Challenges:

- Political will plays a strong factor
- Developers' acceptance of transportation infrastructure recommendations vary - some developers are more willing to make these improvements than others

Performance Measures:

Congestion Management Process Matrix: (none)

Other:

- Number of code changes updated to complement TDM strategies

Strategy Implementation: The following steps need to be taken:

- Create an inventory of existing development review processes and inconsistencies in how the development review process is perceived by different user groups
- Identify successful practices and potential pitfalls
- Develop a list of recommendations for improvement (short-term and long-term) with implementation strategies

Priority: The Development Review TDM Strategy is a high priority. Developers are constantly going through the TIA process, therefore this initiative would strengthen an existing effort. It also helps ensure a “good growth” approach to our regional growth and development.

Employee/Employer Goals: The Development Review TDM Strategy targets two of seven employee/employer goals: mitigate growth in traffic congestion, increase opportunities for healthy living, recreation, and time outside.

TDM Strategy 7- Employer Shuttles

Description: An employer shuttle is a shuttle provided by the employer to connect employees from Park & Ride lots and satellite parking to the place of work. It is possible to share a shuttle between neighboring employers who, through an agreement, could share the cost of the shuttle.

Entity Responsible for Implementation: Employer, TDM Coordinator, and Wave Transit

Intent and Purpose: The intent of the Employer Shuttle strategy is to mitigate the growth in traffic congestion, provide an affordable transportation option to employees, and reduce parking demand. If employees are using a shuttle for the last portion of their commute, it will mitigate traffic congestion growth specifically near the participating employer. This would be a more affordable option for the employee, and it will reduce the demand for parking spaces for the employer. To provide flexibility and options to employees, the shuttle could carry employees to retail centers during the work day for lunch and errands. This would prevent shuttles and drivers from being idle during the work day while encouraging the use of alternative modes of transportation to get to and from work by providing access to these amenities.

The Employer Shuttle strategy could reduce traffic along the WMPO Congestion Management Commuting Corridors and Commercial Corridors (see Appendix D), along with other proximities of participating major employers.

Existing Conditions: Currently, there are no employer shuttles in the Cape Fear Region.

Potential for Application: A survey of needs should be conducted to determine which employers would be interested in this TDM strategy. The option of an employer shuttle between employers or at an employer center should be explored.

Costs: Single-employer shuttles are mostly self-financed. Shuttle providers in the San Francisco Bay area report hourly costs of \$50 to \$60, about half that of the larger transit operators in the Bay Area and roughly the same as the lowest-cost public providers. Operating and administrative costs typically run \$2 to \$5 a ride. Providers hold down costs by keeping administrative expenditures low, making cost-effective equipment purchases or leases, and contracting for maintenance. In a few cases the transit operator also provides drivers, but most shuttle services hire their own.

Benefits:

- Decrease the amount of parking needed by an employer
- Mitigate growth in traffic congestion

Disadvantages/Challenges:

- Flexibility for the employee is limited as access to their personal vehicle is limited to the shuttle schedule

Performance Measures:

Congestion Management Process Matrix:

- Average travel time on the WMPO CMP network within a two year time frame

Other:

- Number of employer shuttles in service
- Number of employer shuttles providing access to Park & Ride Lots

Strategy Implementation: The TDM Coordinator should begin conversations with local businesses and compile an inventory of interests in employer shuttles specifically for one company or for a group of companies. There should be coordination with parking managers to identify and reserve parking spaces for employer shuttles.

Priority: The Employer Shuttle TDM Strategy is a low priority. Without existing Park & Ride lots and a known demand for an employer shuttle, this strategy will remain a low priority.

Employer/Employee Goals: The Employer Shuttle TDM Strategy targets four Employee/Employer Goals: mitigate growth in traffic congestion; reduces cost to the employee and/or employer; address the needs and desires of employees; and increases flexibility for the employee.

TDM Strategy 8 - Employer Transportation Coordinator

Description: An Employer Transportation Coordinator (ETC) is a staff person employed by a regional employer who would be responsible for the development, implementation, and administration of an employee transportation program. The program would provide transportation options to employees thus reducing company expenses by using pre-tax options and providing an improved employee benefit package to include Transportation (Commuting) Benefits. This would provide the employer with effective employee recruitment tools. The ETC will manage and promote TDM strategies for the employer and assist with overall transportation related issues within a company. This person could also manage a rewards/financial incentives program for ride sharing, and walking, biking or using transit as transportation to and from work. This person would serve as a liaison between the employer and the TDM Coordinator. It should be noted that this does not need to be one full-time employee (FTE) hired specifically for this program. Often this is several people in different departments - someone in human resources to promote the employee benefit package, someone in sustainability or transportation to administer the program, and/or someone in health and wellness to promote walking and biking to work. It is possible to share the ETC between employers or at an employment center such as a large shopping mall or concentration of small businesses. A Memorandum of Understanding (MOU) would be in place between the TDM Coordinator and the employers that would define the responsibilities of the ETC and provide a documented resource for those serving in this position. This would define relationships, help justify expenses for either party, outline the basics that a company would have to do, and demonstrate company buy-in.

Entity Responsible for Implementation: TDM Coordinator, Employer(s), Wave Transit

Intent and Purpose: The intent of the ETC TDM Strategy is to provide a specialized TDM program specifically for an employer rather than a region-wide TDM program that may or may not be specific to that employer, their needs, or the surrounding built environment. This person would ensure TDM strategies were being implemented within that company or group of companies.

The ETC TDM Strategy could reduce traffic along the WMPO Congestion Management Commuting Corridors and Commercial Corridors (see Appendix D), along with other proximities of participating major employers.

Existing Conditions: Currently, there are no formal ETCs in the Cape Fear Region however there are staff at several employers that assist with coordinating alternative modes of transportation for their employees.

Potential for Application: A survey of needs should be conducted to determine if an employer would be interested in this TDM strategy. The option of an ETC between employers or at an employer center should be explored.

Costs: The ETC TDM strategy would cost the employer(s) salary and benefits for the ETC plus promotional/marketing materials.

Benefits:

- Demonstrates company buy-in (particularly with a MOU in place)
- Increase the number of people using walking, biking and transit
- Increase participation in carpool and potentially vanpool
- Potentially increase the number of people participating in alternative work schedules

Disadvantages/Challenges:

- It could be difficult to get commitment from an employer to manage these responsibilities and to report back to the TDM Coordinator for additional coordination, to provide data, etc.

Performance Measures:

Congestion Management Process Matrix: (none)

Other:

- Number of FTE's from participating TDM businesses dedicated to promoting TDM initiatives

Strategy Implementation: The TDM Coordinator should begin conversations with local businesses to determine interest in ETCs specifically for one company or for a group of companies.

Priority: The ETC TDM Strategy is a medium priority. If the TDM Coordinator decides to take on the employer-based approach as described on pages 26 and 27, this priority should be considered an essential program element.

Employer/Employee Goals: The ETC TDM Strategy is one of five strategies that targets all five Employer/Employee Goals: mitigate growth in traffic congestion, reduces cost to the employee and/or employer, address the needs and desires of employees, increases opportunities for healthy living, recreation and time outside, increases opportunities for running errands, and increases flexibility for the employee.

TDM Strategy 9 - Bicycle and Pedestrian Infrastructure

Description: The Bicycle and Pedestrian Infrastructure Strategy includes promoting the existing bicycle and pedestrian facilities and constructing new facilities to expand the existing network. These facilities include multi-use paths, bike lanes, sidewalks, high-visibility crosswalks with push-button pedestrian heads, and other improvements for multi-modal transportation.

Entity Responsible for Implementation: NC DOT, local jurisdictions, WMPO staff, TDM Coordinator

Intent and Purpose: The intent of the Bicycle and Pedestrian Infrastructure TDM Strategy is to provide facilities that will allow for safe alternative transportation options. Providing bicycle and pedestrian infrastructure that connects to the area's major employers would allow safe options for walking and biking to and from work. This could reduce the number of automobile trips. One study found that residents living within a half-mile of a cycling trail are three times as likely to bicycle commute as the country average (5). Another study found that walking is three times more common in a community with pedestrian friendly streets than in otherwise comparable communities that are less conducive to foot travel (6). Bike and walk commute options should be promoted to increase awareness of these opportunities.

The Bicycle and Pedestrian Infrastructure strategy could mitigate growth in traffic congestion along all the WMPO Congestion Management Corridors (see Appendix D) and any other roadway that has an adjacent bicycle and pedestrian facility. For example, the River to Sea Bikeway provides traffic congestion relief to S. 3rd Street, Wooster Street, Dawson Street, Oleander Drive, Wrightsville Avenue, and Eastwood Drive. The Gary Shell Cross-City Trail provides traffic congestion relief to S. 17th Street, Independence Boulevard, Randall Parkway, S. College Road, Eastwood Drive, and Military Cutoff.

Existing Conditions: There are a variety of bicycle and pedestrian facilities in the Cape Fear Region, including multi-use paths (greenways), bike lanes, sidewalks, bicycle boulevards, and high visibility crosswalks. Please see map on page 14 to see facilities existing at the time of the adoption of this plan. In the City of Wilmington, the Gary Shell Cross-City Trail serves as the primary bicycle and pedestrian facility. Several major employers such as Verizon and UNCW are along the Cross-City Trail or in close proximity. The River to Sea Bikeway is primarily a bicycle facility that connects downtown Wilmington to Wrightsville Beach. PPD, Inc., the City of Wilmington, and UNCW are along or within close proximity of the Bikeway. These facilities are currently promoted through Run, Ride & Roll (Cross-City Trail event) and the River to Sea Bike Ride. Bike to Work Week has been promoted in the Cape Fear Region in 2013 and 2014. In 2013, 62 people and 24 employers participated. In 2014, 133 people and 45 employers participated.

Potential for Application: Bicycle and pedestrian infrastructure is in high demand in the Cape Fear Region. According to *Cape Fear Transportation 2040* survey results, 55% of respondents would like to bicycle more often to get to/from work and school and 44% of respondents would like to walk more often. To run errands, 61% of respondents would like to bicycle more often and 55% would like to walk more often. Two reliable sources of funds allocated to the region are Surface Transportation Program - Direct Attributable (STP-DA) and Transportation Alternatives Program - Direct Attributable (TAP-DA) funds. These funds are allocated to the WMPO on an annual basis. A competitive process has been designed to allocate these funds to the local jurisdictions within the WMPO. The total amount between these two funds is approximately \$2.5 million annually. Additional funding sources include grant funding and Capital Improvement funds allocated within certain local jurisdictions' approved budget. These projects can also be completed through the development review process.

The existing bicycle and pedestrian facilities should continue to be promoted throughout the region. Specifically, the facilities that are in close proximity to regional employers should be promoted within those organizations. The development/update of a regional bicycle map would provide information to commuters regarding the most suitable route to bike to work. Opportunities for event sponsorships should be addressed for the annual bicycle and walking events such as the River to Sea Bike Ride and Run, Ride & Roll.

Costs: The costs for bicycle and pedestrian infrastructure vary depending on length and type of facility, the form in which it is funded, and difficulty of construction.

Benefits:

- Increases the number of people walking and biking
- Mitigates the growth of traffic congestion
- Walking and biking is a healthier, active form of transportation

Disadvantages/Challenges:

- Funding can be difficult as matching funds are often required. This can be difficult for smaller municipalities
- Maintenance and operational costs of these facilities are generally not included in budget/funding approvals. This responsibility falls on the respective jurisdiction without any additional funding.

Performance Measures:

Congestion Management Process Matrix:

- Bicycle and pedestrian CMP corridor counts per capita in the WMPO area within a two year time frame

Other:

-
- Number of employers participating in Bike to Work Week
- Number of employees participating in Bike to Work Week
- Annual inventory of:
 - Number of PSA’s developed about bicycle and pedestrian infrastructure
 - Number of TDM presentations given including bicycle and pedestrian infrastructure
 - Number of employers promoting bicycle and pedestrian infrastructure
 - Number of events where bicycle and pedestrian infrastructure is promoted
 - Number of awards/financial incentive programs for using bicycle and pedestrian infrastructure

Strategy Implementation: The TDM Coordinator should provide input in the bicycle and pedestrian planning process and support local jurisdictions in their efforts to secure funding for bicycle and pedestrian facilities. Initiatives such as Bike to Work Week should be implemented to encourage people to use these facilities as a mode of transportation to get to and from work.

Priority: The Bicycle and Pedestrian Infrastructure TDM Strategy is a high priority. The existing facilities and known demand for more of these facilities makes this strategy a high priority.

Employer/Employee Goals: The Bicycle and Pedestrian Infrastructure TDM Strategy is one of five strategies that targets all Employer/Employee Goals: mitigates growth in traffic congestion; reduces cost to the employee and/or employer; address the needs and desires of employees; increases opportunities for healthy living, recreation and time outside; increases opportunities for running errands; and increases flexibility for the employee.

TDM Strategy 10 - Full Time TDM Staff

Description: Full time TDM staff would be responsible for a wide variety of TDM responsibilities to implement this plan, including:

- Establish a marketing/outreach plan
- Public outreach - promote TDM efforts using multiple medias
- Employer outreach - conduct outreach to educate area employers on transportation options, TDM initiatives, costs/benefits, etc
- Work with employers for Best Workplace for Commuters designation
- Coordinate events such as Bike to Work Week and annual bicycle events to promote transportation on bicycle facilities, attend public events to promote transit, carpool, vanpool, bicycle and pedestrian, and transit options
- Establish public-private and intergovernmental partnerships to promote TDM programs
- Maintenance, operations and outreach for carpooling and vanpooling
- Market research - identify preferences of a target population before launching a product or program or to identify the performance/satisfaction with a particular product/programs once it has been implemented
- Partnerships with public school systems, UNCW, and CFCC
- Implementing TDM strategies based on adopted priorities
- Secure TDM program funding

Entity Responsible for Implementation: WMPO Staff, TDM Coordinator

Intent and Purpose: The intent of the Full Time TDM Staff TDM Strategy is to dedicate staff time to implement the strategies recommended in this plan. All of these strategies require coordination between multiple parties, and most strategies require education, outreach, and promotional efforts. Along with the development of a marketing plan, the full time TDM Coordinator would implement these TDM strategies on a regional level. The full time TDM staff person could be housed in one of several regional entities such as the WMPO, Wave Transit, or the Cape Fear Council of Governments.

The Full Time TDM Staff strategy could reduce traffic along the WMPO Congestion Management Commuting Corridors (see Appendix D), in proximity of participating major employers, and along corridors impacted by bicycle, pedestrian, and transit infrastructure.

Existing Conditions: Currently, one WMPO staff person takes the lead on TDM planning. About 50% of their time has been allocated to TDM strategies and planning, primarily in the form of bicycle and pedestrian planning and promoting bicycle and pedestrian facilities through community events. Wave Transit has been successful in establishing and implementing a vanpool program. There are currently two vanpools running and they have purchased

an additional four vanpools that will be available to interested employees/employers. To date, little or no TDM strategies have been implemented otherwise.

Potential for Application: *Cape Fear Commutes 2035* identifies a TDM Coordinator as a high priority, as it is the first requirement towards a successful TDM program. To implement TDM strategies further, the WMPO should start conversations with other regional entities to determine the best organization to house the TDM Coordinator. If the WMPO continues to be the most suitable organization, it should be determined if an existing staff person would transition to a full time TDM Coordinator, or if a new staff person would be hired. If a new person would be hired, funding for their salary, benefits, and additional funds for education, outreach, and promotional efforts would need to be secured.

Costs: The cost for a full time TDM Coordinator would include salary, benefits, and funding for education, outreach and promotional efforts. An estimate would be \$75,000 annually (\$50,000 for salary, \$15,000 for benefits, and \$10,000 for education/outreach/promotional costs).

Benefits:

- Increases the number of people and organizations implementing TDM strategies
- Mitigates growth in traffic congestion
- Implementation of the TDM strategies
- Education, outreach, and promotion of TDM in the community and to employers
- Coordination and communication among partners

Disadvantages/Challenges:

- Securing funding for the TDM staff person could be difficult

Performance Measures:

Congestion Management Process Matrix:

- Percentage of WMPO adopted plans the TDM is referenced over a two-year period

Other:

- Annual inventory of:
 - Number of PSA's developed by TDM Coordinator
 - Number of TDM presentations given by TDM Coordinator
 - Number of employers participating in TDM program
 - Number of events with TDM promotion
 - Number of visits to Share the Ride NC website
 - Number of awards/financial incentive programs for ride sharing, walking, biking and using transit
- Number of FTE's dedicated to promoting TDM initiatives

Strategy Implementation: Strategies to fund the TDM Coordinator position should be discussed with NC DOT, WMPO, and other local jurisdictions. Other options for funding this position should be reviewed along with WMPO staff responsibilities to best determine who should be the TDM Coordinator and if existing WMPO staff responsibilities need to be shifted to accommodate accordingly.

Priority: The Full Time TDM Coordinator TDM Strategy is a high priority. Securing funding or finding available staff time could be difficult. There has been high political demand for implementing TDM strategies, but little demand from the local business perspective. However, a full-time TDM Coordinator is crucial to implement this plan.

Employer/Employee Goals: The Full Time TDM Coordinator TDM Strategy targets three Employer/Employee Goals: mitigate growth in traffic congestion; reduces cost to the employee and/or employer; and address the needs and desires of employees.

TDM Strategy 11 - Park & Ride Lots

Description: Park & Ride Lots provide opportunities for employees to drive a portion of the distance to work, park their car, then join a carpool, vanpool, or take local transit depending on which option(s) are available at that Park & Ride location. Park & Ride Lots vary in complexity from a simple Park & Ride Lot located at an existing large box store parking lot with designated parking spaces available for those who are carpooling and/or vanpooling to a full service transit hub such as Forden Station (also a transfer station) that serves as a base for all transit routes, includes Greyhound bus connections, and also provides parking for carpooling and vanpooling.

Entity Responsible for Implementation: TDM Coordinator, Employers, Wave Transit

Intent and Purpose: The intent of the Park & Ride Lots is to allow connections for carpooling, vanpooling, and public transportation that allow commuters and other people going to city centers to leave their vehicles behind for the remainder of their journey. Please see page 62 for the proposed Park & Ride Lot locations in the WMPO. This map also includes geocoded addresses from two major employers located within the City of Wilmington. As illustrated in this map, many residents live in close proximity to a major corridor. The proposed Park & Ride Lot locations are also located along major corridors to provide easy access to those interested in using them.

The Park & Ride Lots strategy could reduce traffic along the WMPO Congestion Management Commuting Corridor (see Appendix D along with other roads that connect Wilmington with the surrounding communities, such as US 421, NC 133, and I-40).

Existing Conditions: Currently, there is only one designated Park & Ride Lot in the Cape Fear Region, located at Wave Transit's Forden Station. However, there are several unofficial locations where commuters meet to carpool to work.

Potential for Application: *Cape Fear Commutes 2035* identifies 15 Park & Ride Lots within the Wilmington Urban Area by 2035. That list has been modified in the draft *Cape Fear Transportation 2040*. See page 62 for the updated proposed Park & Ride locations and the geocoded addresses of two major employers located in the City of Wilmington. As you can see, many employees live along the major corridors that connect to the Wilmington area where City and UNCW offices are located. Assuming other major regional employers have employees living in the same general areas, providing Park & Ride lots along these major corridors should provide employees in the region with opportunities for carpooling, vanpooling, and public transportation.

Costs: The cost for Park & Ride Lots varies greatly depending on the complexity of the facility, if land needs to be acquired, if a new lot needs to be constructed, or if an existing lot is available through an agreement with the lot owner.

Benefits:

- Mitigates growth in traffic congestion
- Allows commuters to avoid the stress of driving during the congested part of their commute
- Commuters can avoid parking expenses in city-centers
- Enhances carpooling, vanpooling, and public transportation opportunities

Disadvantages/Challenges:

- Acquiring lots
- Establishing ownership and maintenance responsibilities of lots
- Coordinating multiple modes of transportation

Performance Measures:

Congestion Management Process Matrix: none

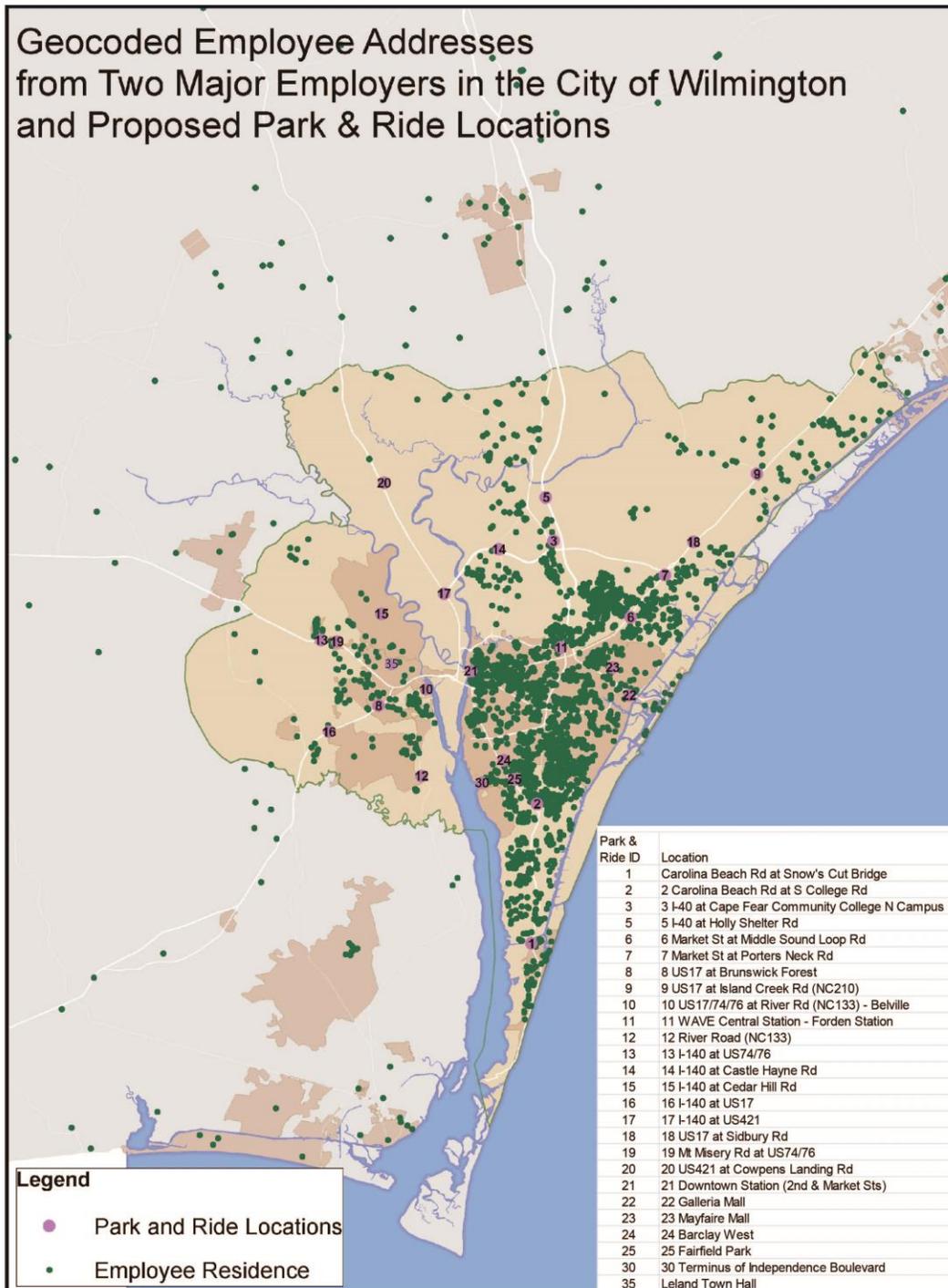
Other:

- Number of Park & Ride Lots
- Number of employer shuttles providing access to Park & Ride lots
- Number of cars parked at Park & Ride lots
- Annual inventory of:
 - Number of PSA's developed about Park & Ride lots
 - Number of TDM presentations given including Park & Ride lots
 - Number of employers promoting Park & Ride lots

Strategy Implementation: The proposed Park & Ride Lots should be prioritized according to demand and ease of development. The TDM Coordinator should take the lead to establish the prioritization list and look further into lot options, determining if land needs to be acquired, facilities need to be built, or if potential partnerships are available and using existing parking lots is feasible. Once Park & Ride Lots are established, the TDM Coordinator should ensure proper signage is in place and promote the lots to the public and the region's employers and transportation providers. As a supporting effort and incentive, there should be coordination with parking managers to identify and reserve preferred parking spaces for those who are using Park & Ride Lots for carpooling.

Priority: The Park & Ride Lot TDM Strategy is a high priority. There is a known demand for designated Park & Ride lots. This strategy could also designate some of the unofficial Park & Ride lots used for carpooling.

Employer/Employee Goals: The Park & Ride Lot TDM Strategy targets four employer/employee goals: mitigate growth in traffic congestion; reduces cost to the employee and/or employer; address the needs and desires of employees; and increases flexibility for the employee.



TDM Strategy 12 - Transit Amenities

Description: Transit amenities include:

- The provision of comfortable and convenient shelters/stations/stop locations to include benches, bike racks, transit information, lighting, etc.
- Perceived safety and cleanliness of vehicles, stops, stations, facilities, etc.
- Improved technology regarding arrival and departure times and internet access on vehicles
- Additional programs such as Wave Transit's Bus Buddies, etc.

Entity Responsible for Implementation: Wave Transit, TDM Coordinator

Intent and Purpose: The intent of the Transit Amenities TDM Strategy is to encourage transit ridership by providing more than the minimum accommodations. Currently, minimum accommodations include a single post in the ground with a sign stating the arrival time of the bus for a particular route, and the bus provided for that route. Providing transit amenities beyond the bare minimum signage at bus stops would likely increase ridership. Surveys show that people are interested in a comfortable, enjoyable experience while using public transportation. This includes covered shelters with benches to give people a place to sit and will keep them dry during rain, bike racks to lock their bikes to, detailed transit information including maps, trash cans to help keep the area clean, well-lit bus stops, clean buses, Wi-Fi on buses, apps that will tell riders how far away a bus is and if there are any delays, etc.

The Transit Amenities strategy could mitigate growth in traffic congestion along the WMPO Congestion Management Corridors (see Appendix D), specifically ones that align with Wave Transit's bus routes.

Existing Conditions: Wave Transit has an inventory of all amenities provided along their bus routes. They are also in the process of finalizing their 5-year shelter plan (replacement plan) that will include the addition of amenities at bus stops.

Potential for Application: Essentially, this is an effort that needs to be implemented. An inventory has been completed along with the 5-year shelter plan (replacement plan) to improve amenities. Funds need to be secured to implement the shelter plan.

Costs: On average, a bus stop shelter will cost \$15,000 to replace/upgrade. This includes a bench, the shelter, trash can, lighting, and signage. Bike racks cost about \$700. Digital signage with real time bus schedules cost an estimated \$2,000. To develop an app for people to download to view real time bus schedules would cost approximately \$200,000 and \$25,000 annually to

maintain (these numbers are derived from Bloomington, Indiana’s transit app development).

Benefits:

- Increased public transportation ridership
- Mitigate growth in traffic congestion
- Improved community cohesion through potential increased choice ridership

Disadvantages/Challenges:

- Funds expended on amenities are perceived as funds that can’t be expended on transit service
- Difficult to measure the impact of investment in amenities

Performance Measures:

Congestion Management Process Matrix: none

Other:

- Number of people participating in Wave Transit’s Bus Buddies program
- Number of people using the app that will provide rider information
- Number of people using transit

Strategy Implementation: Funding should be identified and secured to implement the 5-year shelter plan. New amenities need to be marketed in an effort to attract new riders and retain existing ones.

Priority: The Transit Amenities TDM Strategy is a high priority. Demand for improved transit amenities has been made clear through public surveys and the public’s general conversations with Wave Transit and the WMPO. With an outline for how to improve these amenities (Wave’s 5-year plan) already in place, this strategy is a high priority.

Employer/Employee Goals: The Transit Amenities TDM Strategy targets five employer/employee goals: mitigate growth in traffic congestion; address the needs and desires of employees; increases opportunity for healthy living, recreation and time outside; increases opportunity for running errands; and increases flexibility.

TDM Strategy 13 - Commuter Transit Routes

Description: Commuter Transit Routes are those that provide a direct route to employers and service a portion of a route without stops or a limited number of stops. They primarily navigate up and down the same corridor with stops at major points along the way or provide a quick connection between residential and business centers. Commuter Transit Routes are designed to carry a significant number of passengers from a major origin point to a major destination point, very similar to an express route.

Organization Responsible for Implementation: Wave Transit, TDM Coordinator

Intent and Purpose: The intent of the Commuter Transit Routes strategy is to increase ridership by providing transit service that can quickly cover a large geographic area. Commuter Transit Routes are designed to carry a larger volume of passengers between two major points such as a transfer hub or Park and Ride lot to a high density working environment, educational center, or shopping mall. They complement the spider web like road network that connects Central Business Districts with suburban areas. An example of a potential commuter route in Wilmington is along the Market Street corridor. Service would be provided along Market Street from downtown to Ogden, stopping a few times along the way at limited key locations. This express commuter service would allow individuals who reside in Ogden, Hampstead, and Jacksonville to connect to the downtown area and major centers along the Market Street corridor. Individuals who live in the downtown area could connect to Ogden and the major centers along the Market St. corridor.

The Commuter Transit Route TDM Strategy could mitigate growth in traffic congestion along the WMPO Congestion Management Commuting Corridors and Commercial Corridors (see Appendix D) as these primary routes such as Carolina Beach Road, College Road, Market Street, and Oleander would be ones considered for an express route.

Existing Conditions: Wave Transit currently operates the following commuter express routes: Route 108 Market St., Route 707 Red Express Shuttle and Route 709 Loop Express Shuttle. The two express shuttle routes operate primarily on and around the UNCW campus. The above mentioned routes are the only express routes in the Cape Fear region.

Potential for Application: Wave Transit's current Short Range Transit Plan (SRTP) does not call for an additional commuter express route. In the next few years this strategy will be revisited to determine this is a potential opportunity.

Costs: The cost to implement this strategy varies depending on if this would be a new route created with a new bus, or if an existing route is modified. It

would also require an education and outreach component to notify the public of the new/modified route.

Benefits:

- Satisfies a common complaint about existing bus routes regarding loop service with multiple stops. An express route is a down-and-back route with minimum stops that would allow the rider a shorter commute time.

Disadvantages/Challenges:

- Transit express routes typically cover less geographic area than other transit routes
- Transit express routes limit the number of stops along the route
- Transit funds are limited

Performance Measures:

Congestion Management Process Matrix:

- Average travel time on the WMPO CMP network within a two year time frame
- Percentage of fixed-route trips that are on-time in the WMPO area within a two year time frame

Other:

- Number of people using transit

Service delivery standards for express routes include: on-time performance and number of passengers carried and number of trips provided. Route efficiency measures include: number of passengers per revenue mile and number of passengers per revenue hour.

Strategy Implementation: This strategy would be implemented by Wave Transit. The TDM Coordinator and WMPO Staff should stay abreast of developments with this strategy.

Priority: The Commuter Transit Route TDM Strategy is a medium priority. Although there is a demand for express routes, Wave's SRTP did not identify the need for one at this time.

Employer/Employee Goals: The Commuter Transit Route TDM Strategy is one of five TDM strategies that targets all seven community employer/employee goals: mitigate growth in traffic congestion; reduce costs to employee and employer; address the needs and desires of employees; increases opportunity for healthy living, recreation and time outside; increases opportunity for running errands; increase opportunity for time with family; and increases flexibility for the employee.

TDM Strategy 14 - Transportation Management Districts

Description: Transportation Management Districts (TMDs) provide concentrated services to encourage the use of transit and other commuting options in major business districts. It is a “neighborhood” approach to establishing TDM efforts including:

- Specifically targeting employers within the same TMD for adoption of commuter-benefits program
- Informing employees that work within the same TMD about commuting options and incentives
- Working specifically to improve transit and connections to transit in the TMD
- Develop congestion management strategies specific to that TMD to implement during peak travel times of the day and year (holiday shopping)
- Prioritize the construction of alternative transportation projects in the TMD
- Heavily promote TDM in the TMD
- Develop and implement a Transportation Management Plan for each TMD
- Provide TDM services to each TMD that will correspond to the level of expected development and redevelopment in the area.

Entity Responsible for Implementation: TDM Coordinator, Employers, Local Jurisdictions

Intent and Purpose: The intent of the TMD strategy is to provide specific, applicable TDM opportunities to a district based on their surrounding existing facilities (walking, biking, bus, etc.), future development, and the needs and desires of employees. TMDs foster and facilitate active partnerships with employers, land developers, civic associations, residents, and local governments. The goal of a TMD is to develop and implement a Transportation Management Plan that includes strategies to provide successful alternative transportation options specific to that district given their unique qualities and expected development and redevelopment.

The TMD TDM Strategy could mitigate growth in traffic congestion along the WMPO Congestion Management Corridors (see Appendix D), specifically ones where a major employer and/or business parks exist. Examples include Independence Boulevard and Shipyard Boulevard near the Barclay Business Park and Verizon Wireless. These are two major roadways that intersect with the Cross-City Trail and have existing bus stops.

Existing Conditions: Currently, there are no TMDs in the Cape Fear Region

Potential for Application: Potential TMDs include the Independence Mall area (Independence Mall, Hanover Center, and other businesses along Oleander

Drive and Independence Boulevard), the Downtown Wilmington Business District, Mayfaire, and the UNCW area.

Costs: Initially, these costs include TDM Coordinator staff time.

Benefits:

- Mitigate growth in traffic congestion
- Increase transportation capacity
- Reduce air and noise pollution
- Promote bicycle and pedestrian access
- Expand carpool/vanpool network
- Promote overall TDM initiatives
- Increase transit usage

Disadvantages/Challenges:

- Employer participation is key to a successful TMD. A TMD is a collection of small employers within an employment district or business park, it will require the participation from most/all of those employers to implement the TDM strategies and develop and implement a Transportation Management Plan for that area
- Working with many smaller organizations may have a smaller impact than working with a concentrated employer

Performance Measures:

Congestion Management Process Matrix:

- Average travel time on the WMPO CMP network within a two year time frame

Other:

- Number of TMDs established
- Number of businesses participating in a TMD
- Number of housing developments participating in a TMD

Strategy Implementation: This is a new concept in the Cape Fear region; Conversations should be informative with a clear understanding of commitment and obligation from businesses. An inventory of potential TMDs should be conducted including businesses that would be most likely to be interested in participating in a TMD. Once businesses are supportive of a TMD program, the TMD should be formally established followed by the development of the district-specific Transportation Management Plan, which should involve all businesses in the TMD.

Priority: The Transportation Management District TDM Strategy is a low priority. TDM in the Cape Fear Region should focus on gathering support and involvement from the region’s largest employers first. This could possibly increase participation between a collection of smaller employers in the future.

Employer/Employee Goals: The Transportation Management District TDM Strategy is one of five strategies that targets all seven employer/employee goals: mitigate growth in traffic congestion; reduce costs to the employee and employer; address the needs and desires of employees; increases opportunity for healthy living, recreation and time outside; increases opportunity for running errands; increase opportunity for time with family; and increases flexibility for the employee.

Appendix B - Performance Measures

The performance measures for TDM are divided into two categories: congestion management and other.

Congestion Management:

Note: Several of these performance measures are listed in the WMPO’s Congestion Management Process

Objective: Prioritize accommodations of all modes over motorized vehicular travel time along corridors that have potential for heavy multimodal usage

Performance Measurement:

- Bicycle and pedestrian CMP corridor counts per capita in the WMPO area within a two year time frame

Collection Method: DVR Monitoring

Collection Agency: WMPO

TDM Strategy: Bike Share, Bicycle & Pedestrian Infrastructure

Objective: Maintain or reduce travel times on congested corridors

Performance Measurement:

- Average travel time on the WMPO CMP network within a two year time frame

Collection Method: Floating Car Studies

Collection Agency: WMPO, City of Wilmington

TDM Strategy: Alternative Work Schedules, , Carpool/Vanpool, Employer Shuttles, Commuter Transit Routes, Transportation Management Districts

Objective: Increase transit on-time performance

Performance Measurement:

- Percentage of fixed-route trips that are on-time in the WMPO area within a two year time frame

Collection Method: Wave Transit farebox data

Collection Agency: Wave Transit

TDM Strategy: Commuter Transit Routes

Objective: Increase vehicle occupancy rates

Performance Measurement:

- Number of participants in the WMPO’s TDM program

Collection Method: Number of people enrolled in Share the Ride NC

Collection Agency: WMPO

TDM Strategy: Carpool/Vanpool

Objective: Ensure the TDM plan is considered in the MTP and other transportation plans

Performance Measurement:

- Percentage of WMPO adopted plans the TDM is referenced over a two-year period

Collection Method: WMPO TAC Meeting Minutes

Collection Agency: WMPO

TDM Strategy: Full Time TDM Staff

Other:

Objective: Decrease the number of people commuting during peak commuting hours (8:00 am and 5:00 pm)

Performance Measurement:

- Number of employees participating in an alternative work schedule program

Collection Method: Survey employers

Collection Agency/Staff Person: TDM Coordinator

TDM Strategy: Alternative Work Schedules

Performance Measurement:

- Number of employers who adopt a telecommuting/alternative work schedule policy

Collection Method: Survey employers

Collection Agency/Staff Person: TDM Coordinator

TDM Strategy: Alternative Work Schedules

Performance Measurement:

- Number of businesses who apply for telecommuting assistance

Collection Method: NCDOT data for WMPO area businesses

Collection Agency/Staff Person: NCDOT, TDM Coordinator

TDM Strategy: Consulting Services for Telecommuting Opportunities

Performance Measurement:

- Number of businesses participating in telecommuting where telecommuting assistance was provided

Collection Method: Survey businesses who applied for telecommuting assistance

Collection Agency/Staff Person: TDM Coordinator

TDM Strategy: Consulting Services for Telecommuting Opportunities

Objective: Increase opportunities for using shared modes of transportation

Performance Measurement:

- Number of bike share programs
- Number of daily, weekly, and monthly bike share rentals
- Number of monthly and annual bike share pass purchases
- Revenue generated from bike share rentals
- Number of car share programs
- Number of people registering (pre-qualifying) for car share
- Number of car share rentals per day
- Revenue generated from car share rentals

Collection Method: Bike share and car share monthly reports

Collection Agency/Staff Person: Bike share and car share companies

TDM Strategy: Bike Share, Car Share

Performance Measurement:

- Number of people enrolled in Share the Ride NC

Collection Method: Share the Ride NC monthly reports

Collection Agency/Staff Person: TDM Coordinator

TDM Strategy: Carpool/Vanpool

Performance Measurement:

- Number of vanpools running
- Number of people participating in each vanpool

Collection Method: Vanpool quarterly report

Collection Agency/Staff Person: Wave Transit

TDM Strategy: Carpool/Vanpool

Performance Measurement:

- Number of employer shuttles in service

Collection Method: On-going inventory

Collection Agency/Staff Person: TDM Coordinator

TDM Strategy: Employer shuttles

Performance Measurement:

- Number of code changes updated to complement TDM strategies

Collection Method: Survey jurisdictions annually

Collection Agency/Staff Person: TDM Coordinator

TDM Strategy: Development Review

Objective: Provide opportunities for employees to carpool, vanpool, and use transit through the development of Park & Ride lots

Performance Measurement:

- Number of Park & Ride lots

Collection Method: Post-development inventory

Collection Agency: - TDM Coordinator

TDM Strategies: Carpool/Vanpool, Park & Ride Lots

Performance Measurement:

- Number of employer shuttles providing access to Park & Ride lots

Collection Method: Survey employers

Collection Agency/Staff Person: TDM Coordinator

TDM Strategy: Employer Shuttles, Park & Ride Lots

Performance Measurement:

- Number of cars parked at Park & Ride Lots

Collection Method: Quarterly inventory

Collection Agency/Staff Person: WMPO/TDM Coordinator

TDM Strategies: Park & Ride Lots

Objective: Customize and promote TDM services to employers/employees/clients/the general public based on specific needs of the targeted group

Performance Measurement:

- Number of PSA's developed
- Number of TDM presentations given
- Number of employers participating in TDM program
- Number of events with TDM promotion
- Number of bicycling events held

- Number of visits to website
- Number of employer transportation coordinators
- Staff time allocated to TDM strategies
- Number of awards/amount of financial incentives for ride sharing, walking, biking and using transit
- Number of employers participating in Bike to Work Week
- Number of employees participating in Bike to Work Week
- Number of Transportation Management Districts established
- Number of businesses participating in Transportation Management Districts
- Number of housing developments participating in Transportation Management Districts

Collection method: On-going inventory

Collection Agency: TDM Coordinator

TDM Strategies: Alternative Work Schedule, Bike Share, Car Share, Carpool/Vanpool, , Bicycle and Pedestrian Infrastructure, Full Time TDM Staff, Park & Ride Lots, Transportation Management Districts

Performance Measurement:

- Number of Full Time Employees (FTEs) dedicated to promoting TDM initiatives

Collection Method: Survey

Collection Agency: TDM Coordinator

TDM Strategy: Full Time TDM Staff, Employer Transportation Coordinator

Objective: Increase/improve transit amenities

Performance Measure:

- Number of people using the app that will provide rider information

Collection Method: Inventory with Wave Transit

Collection Agency: WMPO and Wave Transit

TDM Strategy: Transit Amenities

Performance Measure:

- Number of people participating in Wave Transit’s Bus Buddies program

Collection Method: Inventory with Wave Transit

Collection Agency: WMPO and Wave Transit

TDM Strategy: Transit Amenities

Performance Measure:

- Number of people using transit

Collection Method: Wave ridership data

Collection Agency: WMPO and Wave Transit

TDM Strategy: Transit Amenities, Commuter Transit Routes

Appendix C - TDM Strategies and Goals Matrix

The table below illustrates the original 21 TDM Strategies identified at the beginning of this process (see page 18), cross-referenced with the employee/employer goals. Alternative Work Schedules, Bicycle and Pedestrian Infrastructure,

Purpose: to attract and retain talent through enticing opportunities to get to and from work

TDM Strategies	Mitigate Growth in Traffic Congestion	Reduce Costs to Employee & Employer	Address Needs and Desires of Employees on a Real Time Basis	Increase Opportunities for Healthy Living, Recreation, and Time Outside	Increase Opportunity for Running Errands	Increase Opportunity for Time with Family	Increase Flexibility for the Employee
Alternative Work Schedule							
Bike Share Program							
Car Share							
Carpool/Vanpool							
Consulting Services for Telecommuting							
Development Review							
Employer Shuttles							
Employer Transportation Coordinator							
Bike/Ped Infrastructure							
Full Time TDM Staff							

TDM Strategies	Mitigate Growth in Traffic Congestion	Reduce Costs to Employee & Employer	Address Needs and Desires of Employees on a Real Time Basis	Increase Opportunities for Healthy Living, Recreation, and Time Outside	Increase Opportunity for Running Errands	Increase Opportunity for Time with Family	Increase Flexibility for the Employee
High Occupancy Vehicles (HOV) Lanes	Short-term						
Toll and Express Toll (HOT) Lanes	Short-term						
Light Rail	Short-term	Short-term	Short-term	Short-term	Short-term	Short-term	Short-term
Park & Ride Lots	Short-term	Short-term	Short-term				Short-term
Transit Amenities	Short-term			Short-term	Short-term		Short-term
Commuter Transit Routes/Express Routes	Short-term	Short-term	Short-term	Short-term	Short-term	Short-term	Short-term
Transit Oriented Development	Short-term	Short-term	Short-term	Short-term	Short-term	Short-term	Short-term
Transportation Management Districts	Short-term	Short-term	Short-term	Short-term	Short-term	Short-term	Short-term
Trip Reduction Ordinance	Short-term						
Trip Reduction Program for Large Mixed-Use Developments	Short-term	Short-term	Short-term		Short-term		Short-term
Water Taxi	Short-term			Short-term			Short-term

Key:

Short-term (next 10 years)
Long-term (10-25 years)

The list below outlines a specific list of TDM strategies that complement each of the employee/employer goals. If, for example, an employer is looking for opportunities to reduce their parking costs, they can refer to the second goal and explore those specific TDM strategies that might help reduce their costs.

Employer/Employee Goals:

- Mitigate the growth in traffic congestion (increase ease of commuting)
 - Alternative Work Schedules
 - Bike Share
 - Carpool/Vanpool
 - Development Review
 - Employer Shuttle
 - Employer Transportation Coordinator
 - Bicycle and Pedestrian Infrastructure
 - Full Time TDM Coordinator
 - Park & Ride Lots
 - Transit Amenities
 - Commuter Transit Routes
 - Transportation Management Districts

- Reduce costs to employee and employer
 - Alternative Work Schedules
 - Carpool/Vanpool
 - Consulting Services for Telecommuting
 - Employer Shuttle
 - Employer Transportation Coordinator
 - Bicycle and Pedestrian Infrastructure
 - Full Time TDM Coordinator
 - Park & Ride Lots
 - Commuter Transit Routes

- Address the needs and desires of employees
 - Alternative Work Schedules
 - Bike Share
 - Car Share
 - Carpool/Vanpool
 - Employer Shuttle
 - Employer Transportation Coordinator
 - Bicycle and Pedestrian Infrastructure
 - Full Time TDM Coordinator
 - Park & Ride Lots
 - Transit Amenities
 - Commuter Transit Routes
 - Transportation Management Districts

- Increase opportunities for healthy living, recreation, and time outside
 - Alternative Work Schedules
 - Bike Share
 - Development Review

- Employer Transportation Coordinator
- Bicycle and Pedestrian Infrastructure
- Transit Amenities
- Commuter Transit Routes
- Transportation Management Districts

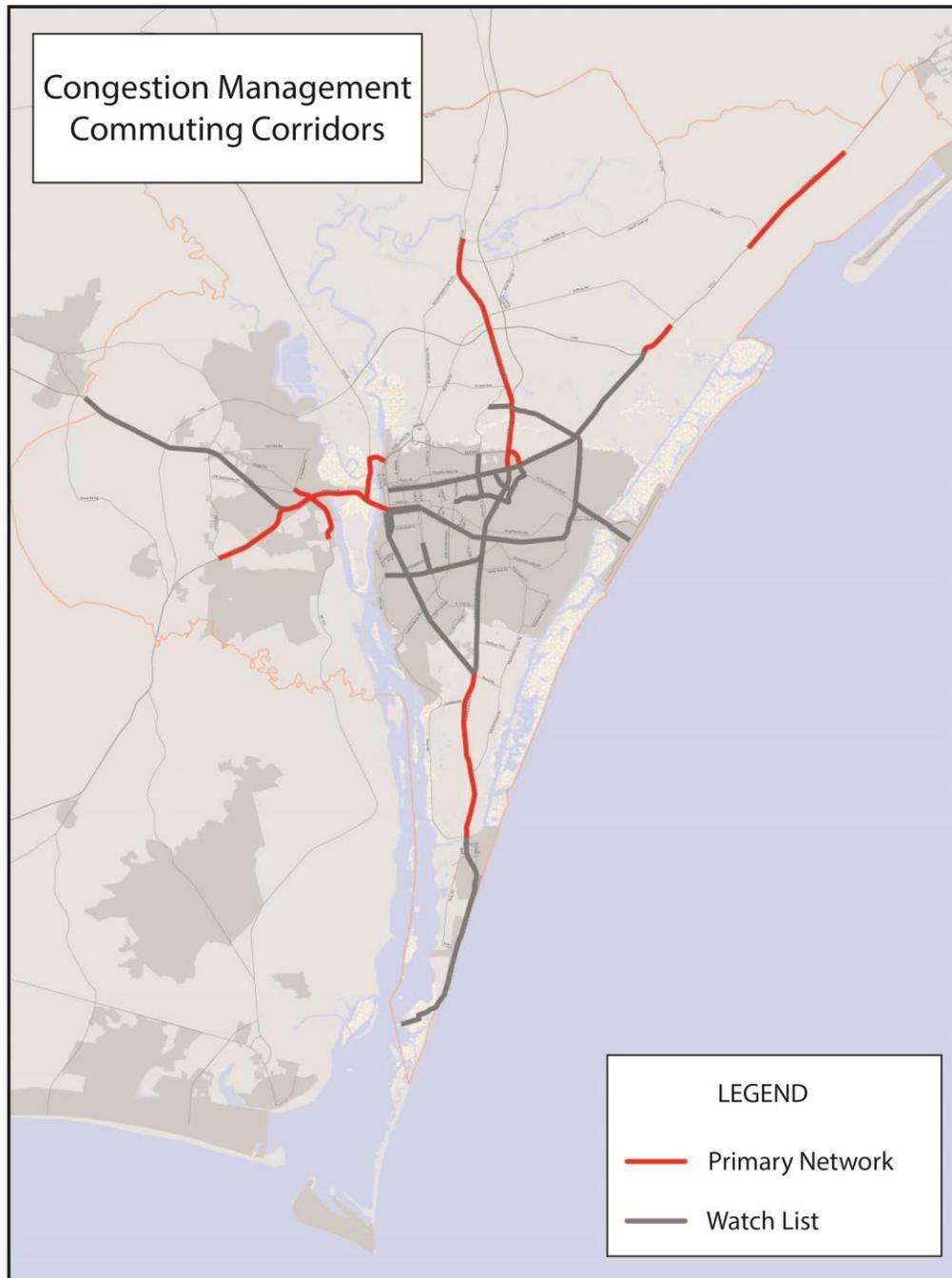
- Increase opportunities for running errands
 - Alternative Work Schedules
 - Car Share
 - Employer Transportation Coordinator
 - Bicycle and Pedestrian Infrastructure
 - Transit Amenities
 - Commuter Transit Routes
 - Transportation Management Districts

- Increase opportunity for time with family
 - Alternative Work Schedules
 - Employer Transportation Coordinator
 - Bicycle and Pedestrian Infrastructure
 - Commuter Transit Routes
 - Transportation Management Districts

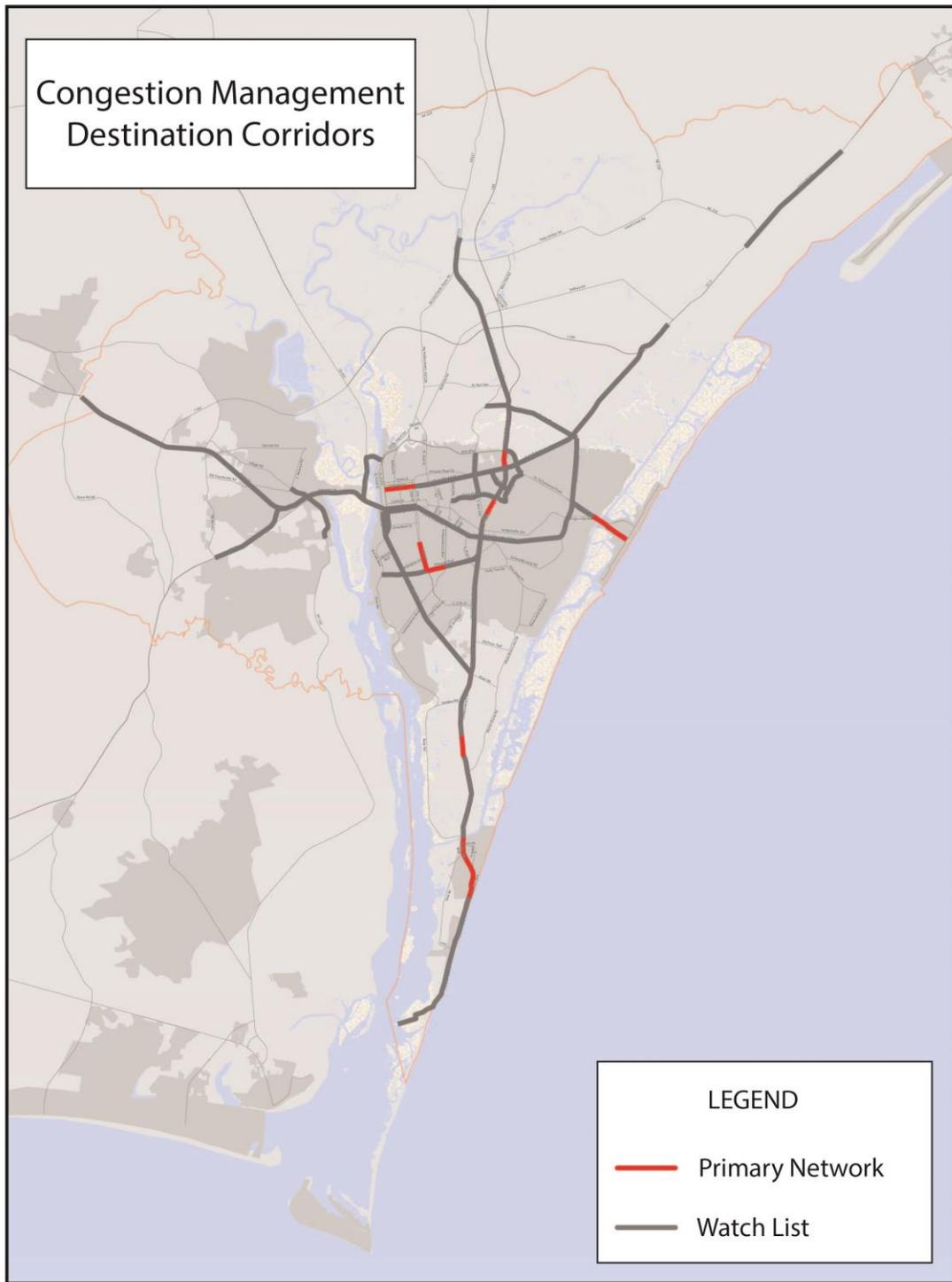
- Increase flexibility for the employee
 - Alternative Work Schedules
 - Bike Share
 - Car Share
 - Employer Shuttle
 - Employer Transportation Coordinator
 - Bicycle and Pedestrian Infrastructure
 - Park & Ride Lots
 - Transit Amenities
 - Commuter Transit Routes
 - Transportation Management Districts

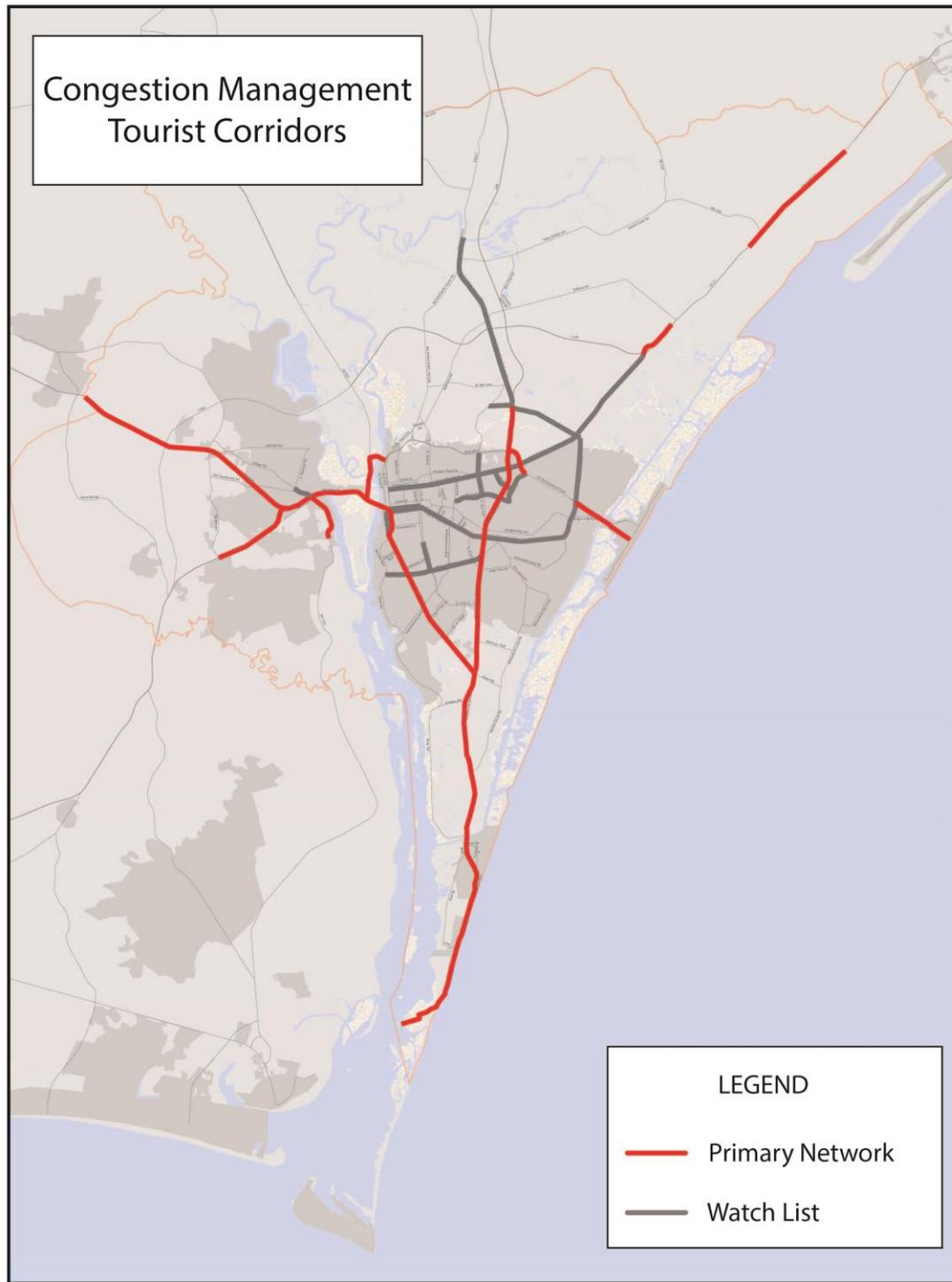
Appendix D - Congestion Management Process - Five Functional Corridor Maps

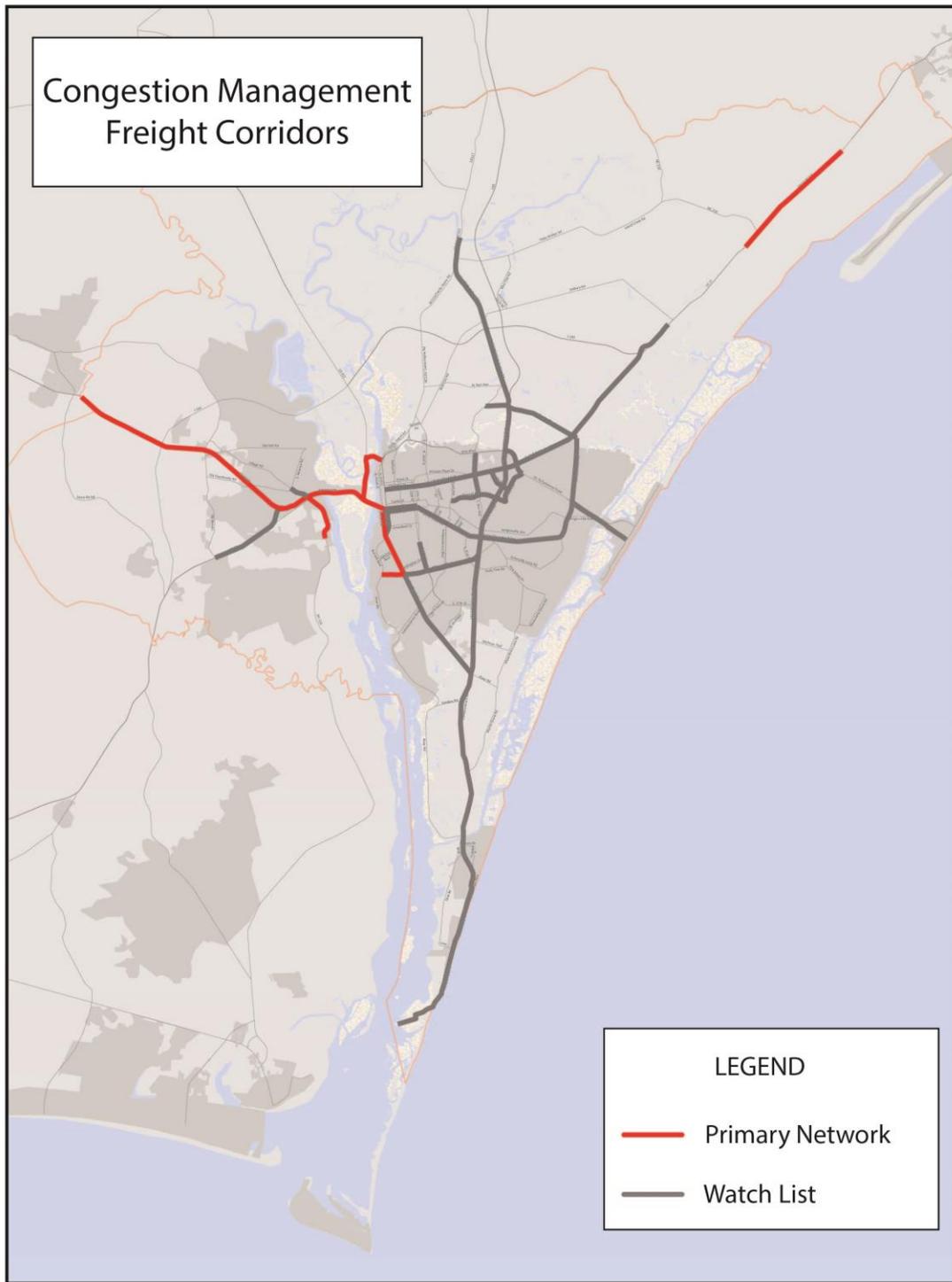
The Congestion Management Process identifies five functional corridors: commuting, commercial, destination, tourist, and freight. Each of these have a primary network and a watch list.











Appendix E - Work Plan

TDM Strategies	Task	Year 1 2015	Year 2 2016	Year 3 2017	Year 4 2018	Year 5 2019	Results	
Alternative Work Schedule	Develop an inventory of alternative work schedule policies from regional employers to be used as a guide/best practices	Inventory completed	N/A	N/A	N/A	N/A		
	Increase number of employers participating in alternative work schedule program (policy developed)	3 employers	15 employers with alternative work schedule policies					
	Increase the number of employees participating in alternative work schedule program	Baseline data	Increase 5%	Increase 5%	Increase 5%	Increase 5%		
	Collect surveys from employees participating in alternative work schedules program	Surveys from 75% of employees participating from 3 employers	Surveys from 75% of employees participating from 3 employers	Surveys from 75% of employees participating from 3 employers	Surveys from 75% of employees participating from 3 employers	Surveys from 75% of employees participating from 3 employers	Surveys from 75% of employees participating from 3 employers	
	Collect surveys from employers participating in alternative work schedule program on effective employee recruitment and retention tool	Surveys from 3 employers	Surveys from 3 employers					
Development Review	Conduct inventory of help needed/wanted from WMPO jurisdictions regarding TIA language in LDC	Improve TIA language in 1 jurisdiction's LDC	Improve TIA language in 1 jurisdiction's LDC	Improve TIA language in 1 jurisdiction's LDC	Improve TIA language in 1 jurisdiction's LDC	Improve TIA language in 1 jurisdiction's LDC	TIA language improved in 5 jurisdictions' LDC	
	Collect data on improvements made due to development review requirements	the number of additional employer shuttles, bicycle, pedestrian, and transit facilities constructed due to development review requirements	the number of additional employer shuttles, bicycle, pedestrian, and transit facilities constructed due to development review requirements	the number of additional employer shuttles, bicycle, pedestrian, and transit facilities constructed due to development review requirements	the number of additional employer shuttles, bicycle, pedestrian, and transit facilities constructed due to development review requirements	the number of additional employer shuttles, bicycle, pedestrian, and transit facilities constructed due to development review requirements		
Full Time TDM Staff	Implement TDM Strategies and track performance measures	75% completion of selected strategies Y1 tasks	75% completion of selected strategies Y2 tasks	75% completion of selected strategies Y3 tasks	75% completion of selected strategies Y4 tasks	75% completion of selected strategies Y5 tasks		
	Inventory of potential Best Workplace for Commuters designation	Begin conversations with potential employers	Review application and process with 1-2 employers	Submit application for 1-2 employers	Update inventory of potential designees	Submit application for 1-2 employers	2-4 employers designated as Best Workplace for Commuters	
Park & Ride Lots	Develop Park & Ride Lots	Develop 2 Park & Ride Lots	Develop 2 Park & Ride Lots	Develop 2 Park & Ride Lots	Develop 2 Park & Ride Lots	Develop 2 Park & Ride Lots	10 Park & Ride Lots Developed	

Appendix E - Work Plan

TDM Strategies	Task	Year 1 2015	Year 2 2016	Year 3 2017	Year 4 2018	Year 5 2019	Results
Transit Amenities	Implement the Cape Fear Public Transportation Authority's Five Year Bus Stop Enhancement Plan (2015-2020)	Replace existing amenities and add additional amenities in accordance to the Authority's Five Year Bus Stop Enhancement Plan (2015-2020)					Replace existing amenities in transportation network (19 shelters, 23 independent benches, and 45 trash receptacles) and increase the number of new amenities as outlined in the Authority's Five Year Bus stop Enhancement Plan (2015-2020)
Bicycle and Pedestrian Infrastructure	Improve bicycle and pedestrian infrastructure	Number of bike lanes, multi-use paths, sidewalk and intersection improvements in region	Number of bike lanes, multi-use paths, sidewalk and intersection improvements in region. Goal: 10% increase from Y1	Number of bike lanes, multi-use paths, sidewalk and intersection improvements in region. Goal: 15% increase from Y1	Number of bike lanes, multi-use paths, sidewalk and intersection improvements in region. Goal: 20% increase from Y1	Number of bike lanes, multi-use paths, sidewalk and intersection improvements in region. Goal: 25% increase from Y1	25% increase in bicycle and pedestrian facilities
Carpool/Vanpool	Promote carpool/vanpool opportunities	Promote carpool/vanpool opportunities through 20 different outlets (events, presentations, mass emails, etc.)	Promote carpool/vanpool opportunities through 40 different outlets (events, presentations, mass emails, etc.)	Promote carpool/vanpool opportunities through 60 different outlets (events, presentations, mass emails, etc.)	Promote carpool/vanpool opportunities through 80 different outlets (events, presentations, mass emails, etc.)	Promote carpool/vanpool opportunities through 100 different outlets (events, presentations, mass emails, etc.)	Carpool/vanpool promoted through 100 unique outlets
	Increase carpool and vanpool participation	200 people actively looking for carpool matches on website, 4 vanpools running	400 people actively looking for carpool matches on website, 5 vanpools running	600 people actively looking for carpool matches on website, 6 vanpools running	800 people actively looking for carpool matches on website, 7 vanpools running	1000 people actively looking for carpool matches on website, 8 vanpools running	
Car Share	Implement car share program at UNCW	Review 3 company proposals, select best fit	Implement car share at UNCW	UNCW car share assessment	N/A	N/A	1 car share program at UNCW
	Collect data on car share usage	N/A	N/A	Number of people registering (pre-qualifying) for car share, number of rentals/day, week and month, and funds generated from car share fees	Number of people registering (pre-qualifying) for car share, number of rentals/day, week and month, and funds generated from car share fees	Number of people registering (pre-qualifying) for car share, number of rentals/day, week and month, and funds generated from car share fees	
	Secure opportunities for expanding car share	N/A	N/A	N/A	Car share expanded to 1 more location (downtown, major employer, etc.)	Car share expanded to 1 more location (downtown, major employer, etc.)	2 additional car share stations

Appendix E - Work Plan

TDM Strategies	Task	Year 1	Year 2	Year 3	Year 4	Year 5	Results
		2015	2016	2017	2018	2019	
Commuter Transit Routes/ Express Routes	Determine need for additional transit commuter routes	Prioritized needs will be implemented as funding permits.					
	Implement employer transportation coordinator option	Survey of employer transportation coordinator opportunities	Secure funding, finalize logistics	1 employer transportation coordinator	1 employer transportation coordinator	1 employer transportation coordinator	3 employer transportation coordinators
Employer Transportation Coordinator	Collect data on impact of employer transportation coordinator	N/A	Baseline data - number of employees walking, biking, using transit, carpooling/vanpooling, participating in alternative work schedules	Employer #1 data - number of employees walking, biking, using transit, carpooling/vanpooling, participating in alternative work schedules	Employer #1 and 2 data - number of employees walking, biking, using transit, carpooling/vanpooling, participating in alternative work schedules	Employer #1, 2, and 3 data - number of employees walking, biking, using transit, carpooling/vanpooling, participating in alternative work schedules	
	Conduct a feasibility study to determine best locations to implement bike share program and options for expanding	Feasibility study completed	N/A	N/A	N/A	N/A	
Bicycle Sharing Program	Implement bike share program at UNCW	Review 3 company proposals, select best fit, install bike share at UNCW	N/A	N/A	N/A	N/A	1 bike share program at UNCW
	Collect data on bike share usage	N/A	Number of bikes rented daily, number of annual and monthly passes purchased, revenue generated from hourly/daily/monthly/annual fees	Number of bikes rented daily, number of annual and monthly passes purchased, revenue generated from hourly/daily/monthly/annual fees	Number of bikes rented daily, number of annual and monthly passes purchased, revenue generated from hourly/daily/monthly/annual fees	Number of bikes rented daily, number of annual and monthly passes purchased, revenue generated from hourly/daily/monthly/annual fees	
	Secure opportunities for expanding bike share	N/A	N/A	3 additional bike share hubs installed	3 additional bike share hubs installed	3 additional bike share hubs installed	9 additional bike share hubs

Appendix E - Work Plan

TDM Strategies	Task	Year 1	Year 2	Year 3	Year 4	Year 5	Results
		2015	2016	2017	2018	2019	
Consulting Services for Alternative Work Schedule	Implement alternative work schedule assistance program	Preliminary conversations with NCDOT	Implementation year	3 organizations in Cape Fear Region seek assistance	3 organizations in Cape Fear Region seek assistance	3 organizations in Cape Fear Region seek assistance	9 organizations in Cape Fear Regions seek assistance with alternative work schedules
Employer Shuttles	Implement employer shuttles program	Survey of potential shuttle opportunities	Secure funding, finalize maintenance and operations logistics	1 employer shuttle	1 employer shuttle	1 employer shuttle	3 employer shuttles
Transportation Management Districts	Establish TMDs	Meet with businesses to determine TMD interest	Establish TMD 1 and develop Transportation Management Plan for that district	Implement plan, collect baseline data on TMD 1	Meet with businesses to determine TMD interest, collect data on TMD 1	Establish TMD 2 and develop Transportation Management Plan for that district, collect data on TMD 1	2 TMDs established

Appendix F - Funding

Funding for Full Time TDM Staff

As illustrated on pages 23 and 24, a TDM Coordinator has some level of responsibility for implementing all 14 TDM Strategies. A TDM Coordinator takes on the lead responsibility, and is required for implementation of the following TDM Strategies:

- Carpool/Vanpool (using SharetheRideNC.org)
- Consulting Services for Telecommuting
- Development Review
- Full Time TDM Staff
- Park & Ride Lots
- Transportation Management Districts

A TDM Coordinator takes on a secondary, coordinating, or promotional role in the following TDM Strategies:

- Alternative Work Schedules
- Employer Transportation Coordinator
- Bicycle and Pedestrian Infrastructure
- Transit Amenities
- Transit Express Routes

Full Time TDM Staff is also one of the 14 strategies. This is estimated to cost \$75,000 annually and would include salary, benefits, and marketing and outreach materials. Considering the impact a full time staff person would have on the implementation of this plan, securing funding for this position should be a priority.

NCDOT TDM Program

NCDOT has funded three TDM programs based out of Charlotte Area Transit Systems (CATS), Piedmont Authority for Regional Transportation (PART), and Triangle J Council of Governments (TJCOG). It is recommended that the applicable agency apply to NCDOT to fund the Cape Fear TDM program. NCDOT will fund TDM programs at 50%, requiring a 50% match. Funding a TDM Coordinator position would also provide administrative funding to implement all 15 TDM Strategies listed in this plan.

Coordinate with Regional Employers

Once conversations are started with individual regional employers and their transportation needs are determined, there could be opportunities for partnerships to provide the financial input to implement relevant TDM Strategies. The following TDM Strategies require capital and/or maintenance funds to implement, and could also benefit from partnerships to identify these funds:

- Bicycle Sharing Program
- Car Share
- Employer Shuttles

Funding Transportation Projects - DOT / NCDOT Funds

STP-DA and TAP-DA Funds

The WMPO was designated by the Federal Highways Administration (FHWA) on July 18, 2012 as a Transportation Management Area (TMA). Also referenced on p. ____, this drives the development of the Congestion Management Plan. This TMA designation also allocates significant funds to the region on an annual basis. The WMPO is allocated \$2,762,416 in Surface Transportation Program - Direct Attributable (STP-DA) funds and \$222,151.50 in Transportation Alternatives Program - Direct Attributable (TAP-DA) funds.

STP-DA dollars fund infrastructure projects. 15% of \$2,762,416 is taken off the top for administrative purposes. The remaining balance, \$2,348,054, is divided into four buckets, with 50% of the funds going into the bicycle and pedestrian bucket, 20% of the funds going into the transit bucket, 15% of the funds going into the intersections bucket, and 15% going into the roadways bucket. The 20% transit bucket is a direct allocation to Wave Transit, while a competitive process has been developed by WMPO staff to allocate the funds in the remaining three buckets. Potentially, STP-DA dollars could fund the following TDM Strategies:

- Carpool/Vanpool - Vanpool, specifically the purchase of the vans
- Employer Shuttles - the purchase of the shuttles
- Bicycle and Pedestrian Infrastructure
- Transit Amenities
- Transit Express Routes

TAP-DA dollars fund a wider variety of projects, including traffic calming techniques; speed reduction techniques; lighting; turnouts, overlooks, and viewing areas; removal of outdoor advertising; historic preservation/rehabilitation of historic transportation facilities; vegetation management; archaeological mitigation; bicycle parking facilities; traffic diversion improvements; bicycle and pedestrian public awareness/encouragement campaigns; sidewalks; pedestrian and bicycle signals; Rails-to-Trails projects; pedestrian and bicycle crossing improvements; on-street bicycle facilities; off-street bicycle and pedestrian facilities; boulevards and other roadways in the former interstate system; and a Safe Routes to School coordinator position.

Highway Safety Improvement Program

HSIP provides \$2.4 billion nationally for projects and programs that help communities achieve significant reductions in traffic fatalities and serious injuries on all public roads, bikeways, and walkways. Bicycle and pedestrian safety improvements, enforcement activities, traffic calming projects, and crossing treatments for non-motorized users in school zones are eligible for these funds.

Transportation for Elderly Persons and Persons with Disabilities (5310)

This program can be used for capital expenses that support transportation to meet the special needs of older adults and persons with disabilities, including providing access to an eligible public transportation facility.

Bus and Bus Related Facilities (5339)

This is a capital assistance for new and replacement buses, related equipment and facilities. It has traditionally been designated to specific projects at the federal level. This grant can be used for pedestrian or bicycle access to transit and bus racks.

Powell Bill Funds

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

Grant Funds

North Carolina Parks & Recreation Trust Fund (PARTF)

The North Carolina Division of Parks and Recreation and the State Trails Program offer funds to help citizens, organizations, and agencies plan, develop, and manage all types of trails ranging from greenways and trails for hiking, biking, and horseback riding to river trails and off-highway vehicle trails. PARTF dollars have funded several projects in the Cape Fear region including portions of the Gary Shell Cross-City Trail and the River to the Sea Bikeway.

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*Wilmington Urban Area Transportation Planning Work
Program*

Fiscal Year 2015-2016



DRAFT

**FY 2015-2016 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 2015-2016. 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 2015-2016

(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 bicycle 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 2015 PWP and development of FY 2016 PWP.

III-B Transportation Improvement Program-Review and amend the 2012-2018 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%	1,203
Section 5303 NCDOT 10%	1,203
Section 5303 FTA 80%	9,624
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%	401
Section 5303 NCDOT 10%	401
Section 5303 FTA 80%	3,208
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%	401
Section 5303 NCDOT 10%	401
Section 5303 FTA 80%	3,208
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%	802
Section 5303 NCDOT 10%	802
Section 5303 FTA 80%	6,416
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%	802
Section 5303 NCDOT 10%	802
Section 5303 FTA 80%	6,416
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%	802
Section 5303 NCDOT 10%	802
Section 5303 FTA 80%	6,416
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%	802
Section 5303 NCDOT 10%	802
Section 5303 FTA 80%	6,416
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%	2,807
Section 5303 NCDOT 10%	2,807
Section 5303 FTA 80%	22,456
Section 5307 Transit - Local 10%	
Section 5307 Transit - NCDOT 10%	
Section 5307 Transit - FTA 80%	
Additional Funds - Local 100%	

MPO: **Wilmington MPO**

TASK CODE	TASK DESCRIPTION	SPR Highway		SEC. 104 (f) PL Highway / Transit		SECTION 5303 Transit / Highway			SECTION 5307 Transit			Additional Funds			TASK FUNDING SUMMARY		
		NCDOT 20%	FHWA 80%	Local 20%	FHWA 80%	Local 10%	NCDOT 10%	FTA 80%	Local 10%	NCDOT 10%	FTA 80%	Local 20%	NCDOT 80%	LOCAL	STATE	FEDERAL	TOTAL
II-A	Surveillance of Change																
II-A-1	Traffic Volume Counts			8,400	33,600									8,400		33,600	42,000
II-A-2	Vehicle Miles of Travel			50	200									50		200	250
II-A-3	Street System Changes			50	200									50		200	250
II-A-4	Traffic Accidents			600	2,400									600		2,400	3,000
II-A-5	Transit System Data			100	400	1,203	9,624							1,303	1,203	10,024	12,530
II-A-6	Dwelling Unit, Pop. & Emp. Change			3,000	12,000									3,000		12,000	15,000
II-A-7	Air Travel			50	200									50		200	250
II-A-8	Vehicle Occupancy Rates			50	200									50		200	250
II-A-9	Travel Time Studies			50	200									50		200	250
II-A-10	Mapping			1,600	6,400									1,600		6,400	8,000
II-A-11	Central Area Parking Inventory			0	0												
II-A-12	Bike & Ped. Facilities Inventory			50	200									50		200	250
II-B	Long Range Transp. Plan																
II-B-1	Collection of Base Year Data			0	0												
II-B-2	Collection of Network Data			0	0												
II-B-3	Travel Model Updates			0	0												
II-B-4	Travel Surveys			0	0												
II-B-5	Forecast of Data to Horizon year			0	0												
II-B-6	Community Goals & Objectives			1,000	4,000	401	3,208							1,401	401	7,208	9,010
II-B-7	Forecast of Future Travel Patterns			0	0												
II-B-8	Capacity Deficiency Analysis			1,000	4,000									1,000		4,000	5,000
II-B-9	Highway Element of th LRTP			2,000	8,000									2,000		8,000	10,000
II-B-10	Transit Element of the LRTP			400	1,600	401	3,208							801	401	4,808	6,010
II-B-11	Bicycle & Ped. Element of the LRTP			2,000	8,000									2,000		8,000	10,000
II-B-12	Airport/Air Travel Element of LRTP			50	200									50		200	250
II-B-13	Collector Street Element of LRTP			600	2,400									600		2,400	3,000
II-B-14	Rail, Water or other mode of LRTP			50	200									50		200	250
II-B-15	Freight Movement/Mobility Planning			200	800									200		800	1,000
II-B-16	Financial Planning			200	800	802	6,416							1,002	802	7,216	9,020
II-B-17	Congestion Management Strategies			700	2,800									700		2,800	3,500
II-B-18	Air Qual. Planning/Conformity Anal.			0	0												
III-A	Planning Work Program			200	800									200		800	1,000
III-B	Transp. Improvement Plan			200	800									200		800	1,000
III-C	Civil Rgts. Cmp./Otr. Reg. Reqs.																
III-C-1	Title VI			200	800	802	6,416							1,002	802	7,216	9,020
III-C-2	Environmental Justice			200	800									200		800	1,000
III-C-3	Minority Business Enterprise			100	400	802	6,416							902	802	6,816	8,520
III-C-4	Planning for the Elderly & Disabled			50	200									50		200	250
III-C-5	Safety/Drug Control Planning			0	0												
III-C-6	Public Involvement			1,200	4,800	802	6,416							2,002	802	11,216	14,020
III-C-7	Private Sector Participation			50	200									50		200	250
III-D	Incidental Png./Project Dev.																
III-D-1	Transportation Enhancement Png.			600	2,400									600		2,400	3,000
III-D-2	Enviro. Analysis & Pre-TIP Png.			50	200									50		200	250
III-D-3	Special Studies			18,000	72,000									18,000		72,000	90,000
III-D-4	Regional or Statewide Planning			100	400									100		400	500
III-E	Management & Operations			22,000	88,000	2,807	22,456							50,000	200,000	310,456	388,070
TOTALS				65,150	260,600	8,020	64,160							123,170	8,020	524,760	655,950

Anticipated DBE Contracting Opportunities for FY 2015-2016

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	\$72,000	\$90,000

RESOLUTION
APPROVING THE FY 2015-2016 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 2015-2016;

NOW THEREFORE, be it resolved that the Transportation Advisory Committee hereby endorses the FY 2015-2016 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 _____ 2015.

Laura Padgett, Chair
Wilmington Urban Area TAC

Subscribed and sworn to me this the ____ day of _____, 2015.

Notary Public

My commission expires_____.

RESOLUTION CONFIRMING TRANSPORTATION PLANNING PROCESS

RESOLUTION CERTIFYING THE WILMINGTON METROPOLITAN PLANNING ORGANIZATION'S TRANSPORTATION PLANNING PROCESS FOR FY 2015

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 ___th day of _____, 2015.

Laura Padgett
Chair, Transportation Advisory Committee

Mike Kozlosky
Secretary, Wilmington Metropolitan Planning Organization

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

**RESOLUTION ENCOURAGING THE MPO, NCDOT AND CSXT TO COMPLETE A
FEASIBILITY STUDY TO EVALUATE THE RELOCATION OF THE CSXT RAIL LINE
ACROSS THE RIVER VIA A ROUTE THAT ELIMINATES RAIL TRAFFIC THROUGH THE
HEART OF THE CITY OF WILMINGTON AND WHICH WOULD PROVIDE A MORE
DIRECT RAIL ACCESS CORRIDOR TO THE PORT OF WILMINGTON**

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 CSXT rail line originates in Brunswick County, crossing the Cape Fear River into the City of Wilmington just north of the Isabelle Holmes Bridge. The rail line then continues eastward through the City before turning south and west again-- back toward the river and the Port of Wilmington. The sweeping path of the rail line thus forms a large "U" (on its side) which, at one time, wrapped around the eastern limits of the City; and

WHEREAS, today, this same rail line passes through the heart of the City of Wilmington, resulting in thousands of motor vehicle rail crossings each day and adversely impacting the quiet enjoyment of many neighborhoods in the city; and

WHEREAS, the City, NCDOT, Wilmington MPO and CSXT are currently working in partnership to complete a Traffic Separation Study to evaluate 31 roadway rail crossings along the CSXT ACB and Beltline rail line; and

WHEREAS, the purpose of the Traffic Separation Study is to determine the need for improvements and/or elimination of public at-grade roadway/railroad crossings to improve safety for motorists, rail passengers and train crews; and

WHEREAS, a potential alternative solution would be to relocate the existing rail line to a crossing of the Cape Fear River close to the Port property, thereby eliminating rail traffic through the heart of the city, and dramatically improving rail access to the Port; and

WHEREAS, the relocation of the rail line would be beneficial to CSXT, the State Ports and the City of Wilmington by eliminating tens of thousands of at grade vehicular rail crossings on a daily basis, improving mobility throughout the City of Wilmington, and improving rail operations and safety en route to the ports; and

WHEREAS, improved rail access to the Ports would also have benefits of Statewide significance, in terms of economic development of business and industry throughout North Carolina; and

WHEREAS, direct rail access to the ports would also eliminate vehicular/rail conflicts with the proposed Independence Boulevard Extension project and obviate a primary justification for an elevated highway through the heart of Wilmington; and

WHEREAS, in addition, the proposal would provide an opportunity to convert the existing heavy rail corridor, with all of its related safety and noise issues, into a quiet transit corridor; and

WHEREAS, such a conversion would improve the quality of life for nearby neighborhoods and all citizens of Wilmington, as well as reducing traffic congestion on streets within the city; and

WHEREAS, such a transit service would stimulate investment in the many vacant and underperforming properties along the existing rail corridor, particularly on the south side of town; and

WHEREAS, properties adjoining new transit lines in other cities have proven attractive for redevelopment as residential and mixed use centers; and

WHEREAS, in the interim, the existing converted rail corridor could be utilized as a trail/greenway linking up with other City trails.

NOW THEREFORE, be it resolved that the Wilmington Metropolitan Planning Organization's Transportation Advisory Committee hereby encourages the MPO, NCDOT and CSXT to complete a feasibility study to evaluate the relocation of the CSXT rail line across the river via a route that eliminates rail traffic through the heart of the City and which would provide a more direct rail access corridor to the Port of Wilmington.

ADOPTED at a regular meeting of the Wilmington Urban Area Metropolitan Planning Organization Transportation Advisory Committee on December 10, 2014.

Laura Padgett, Chair
Transportation Advisory Committee

Mike Kozlosky, Secretary



Cape Fear Transportation 2040 MTP Prioritization DRAFT

November 11, 2014
Cape Fear Transportation 2040
Draft Roadway Project Ranking

ID	PROJECT	FROM	TO	DRAFT SCORE
H129103	Military Cutoff Road Extension	US17BUS/Market Street	US17/Wilmington Bypass	82
H129637	Independence Boulevard Extension	Randall Parkway	US74/Martin Luther King Jr. Parkway	70
H090711	US117/NC132/College Road Upgrade	New Centre Drive	Gordon Road	69
H110987	US421/Carolina Beach Road Upgrade	US421/Burnett Boulevard	US117/Shipyard Boulevard	69
H142288	Head Road Extension	Greenville Loop Road	Masonboro Sound Road	69
H129646	Cape Fear River Crossing	US17	US421/Carolina Beach Road	66
H110988	US421/Carolina Beach Road Upgrade	US117/Shipyard Boulevard	George Anderson Drive	66
H090360	NC 133/Castle Hayne Road Widening	US74/Martin Luther King Jr Parkway	Holly Shelter Road	64
H142202	US117/NC132/College Road Widening	Gordon Road	US421/Carolina Beach Road	64
H110979	US117/NC132/College Road Upgrade	US17BUS/Market Street	Randall Parkway	64
H142281	Rice Gate Way Extension	Rice Gate Way	Mallory Creek Road	63
H111303	Village Road Widening	Old Fayetteville Road	Lanvale Road	63
H110992	US117/NC132/College Road Upgrade	Randall Parkway	US76/Oleander Drive	63
H110974	River Road Widening	Independence Boulevard	US421/Carolina Beach Road	63
H142283	US17 to NC133 Connection	US17	NC133	60
H110993	Kerr Avenue Widening	Patrick Avenue	Wrightsville Avenue	60
H090448-B	Gordon Road Widening	NC 132 Interchange	US 17BUS/Market Street	59
H142291	Dogwood Lane Extension	Wrightsville Avenue	Pine Grove Drive	58
H142289	Hurst Drive Extension	Kerr Avenue	Riegel Road	58
H090721	N 23rd Street Widening	NC133/Castle Hayne Road	US74/Martin Luther King Jr Parkway	58
H142302	North College Road Widening	Murrayville Road	NC133/Castle Hayne Road	58
H141233	Old Fayetteville Road Widening	Village Road	US74/76/Andrew Jackson Highway	58
H090489	US117/NC132/College Road Widening	US117/Shipyard Boulevard	Wilshire Boulevard	57
H142290	Randall Drive Extension	Reynolds Drive	Hooker Road	57
H142338	US17BUS/Market Street Improvements	New Centre Drive	Gordon Road	55
H090717	US421/Carolina Beach Road Widening	Piner Road	Sanders Road	55
H110994	NC133 River Road Upgrade	US17/74/76	Old River Road	55
H142334	Oleander Dr/Military Cutoff Rd Access Management	Pine Grove Drive	Drysdale Drive	53
H142336	US17 Streetscape	US74/76	I-140	53
H142306	Country Club Drive Widening	US17	Sloop Point Road	53
H090714	Scientific Park Drive Extension	23rd Street	McClammy Street	52
H142341	Castle Hayne Road Streetscape	Northeast Cape Fear River	US117/NC132/College Road	52
H142317	NC210 Improvements	Island Creek/NC210	US17	51
H110989	US17BUS/Market Street Road Diet	17th Street	Covil Avenue	51

November 11, 2014
Cape Fear Transportation 2040
Draft Roadway Project Ranking

ID	PROJECT	FROM	TO	DRAFT SCORE
H142295	Greenville Loop Road Widening	Pine Grove Drive	US76/Oleander Drive	51
H142292	Wilshire Boulevard Extension	US117/132/College Road	MacMillan Avenue	50
H090261	Holiday Drive Extension	NC 210	Hoover Road	50
H090215	Hampstead Bypass	Porters Neck Road	Sloop Point Road	50
H142337	Village Road Streetscape	Town Hall Drive	US74/76	50
H142287	Saint Nicholas Road Extension	Cardinal Drive	Station Road	49
H142293	Sanders Road Widening	River Road	US421/Carolina Beach Road	49
H110991	Kerr Avenue Extension	Wrightsville Avenue	US76/Oleander Drive	49
H141187	Basin Street Extension	Old Fayetteville Road	Village Road	48
H142328	Wrightsville Avenue Improvements	Pavillion Place	Heide-Trask Drawbridge	47
H142297	Murrayville Road Widening	US117/NC132/College Road	Plantation Road	47
H090499-D	US17BUS/Market Street Access Management	Military Cutoff Road	Porters Neck Road	47
H142359	Country Club/Doral Drive and Sloop Point Loop Road	Country Club Drive/Doral Drive	Sloop Point Loop Road	47
H090713	NC 133/River Road Widening	US17/74/76	Rabon Way SE	46
H142339	Dawson Street Streetscape	US17BUS/South 3rd Street	US76/Oleander Drive	46
H142342	Wooster Street Streetscape	US17BUS/South 3rd Street	US76/Oleander Drive	46
H142282	Wayne Street Extension	Wayne Street NE	Royal Street NE	46
H090499-C	US17BUS/Market Street Access Management	US74/Martin Luther King Jr Parkway	Military Cutoff Road	45
H142340	Wrightsville Avenue Road Diet	Castle Street	Independence Boulevard	43
H142298	Center Drive Extension	Washington Acres Road	Factory Road	43
H142346	Wilshire Boulevard Improvements	Wrightsville Avenue	MacMillan Avenue	42
H142344	Wrightsville Avenue Improvements	US117/NC132/College Road	Hawthorne Drive	41
H141537	US17 Superstreet	Washington Acres Road	Sloop Point Road	41
H142343	Wrightsville Avenue Improvements	Independence Boulevard	US117/NC132/College Road	41
H090287-A	I-74 Upgrade	US17/74/76	WMPO Boundary	41
H142285	Cedar Hill Road Extension	Cedar Hill Rd NE	Village Road NE	40
H141231	US117/NC132/College & US76/Oleander Intersection	US117/NC132/College Road	US76/Oleander Drive	40
H110981	US421/Front Street Widening	US76/421/Cape Fear Memorial Bridge	US421/Burnett Boulevard	39
H090724	Natures Lane Extension	Mount Misery Road	Cedar Hill Road	39
H090499-B	US17BUS/Market Street Access Management	Colonial Drive	New Centre Drive	39
H090725	Magnolia Drive Extension	Mount Misery Road	Old Mill Road	39
H142323	US17 & Factory Road/Peanut Road Intersection	Factory Road/Peanut Road	US 17	39
H141232	US74/Eastwood Road & Military Cutoff Road	US74/Eastwood Road	Military Cutoff Road	39
H140400	Blueberry Road Upgrade	US421	NC210	39
H142314	NC133/Castle Hayne Road & 23rd Street Roundabout	NC133/Castle Hayne Road	N 23rd Street	37

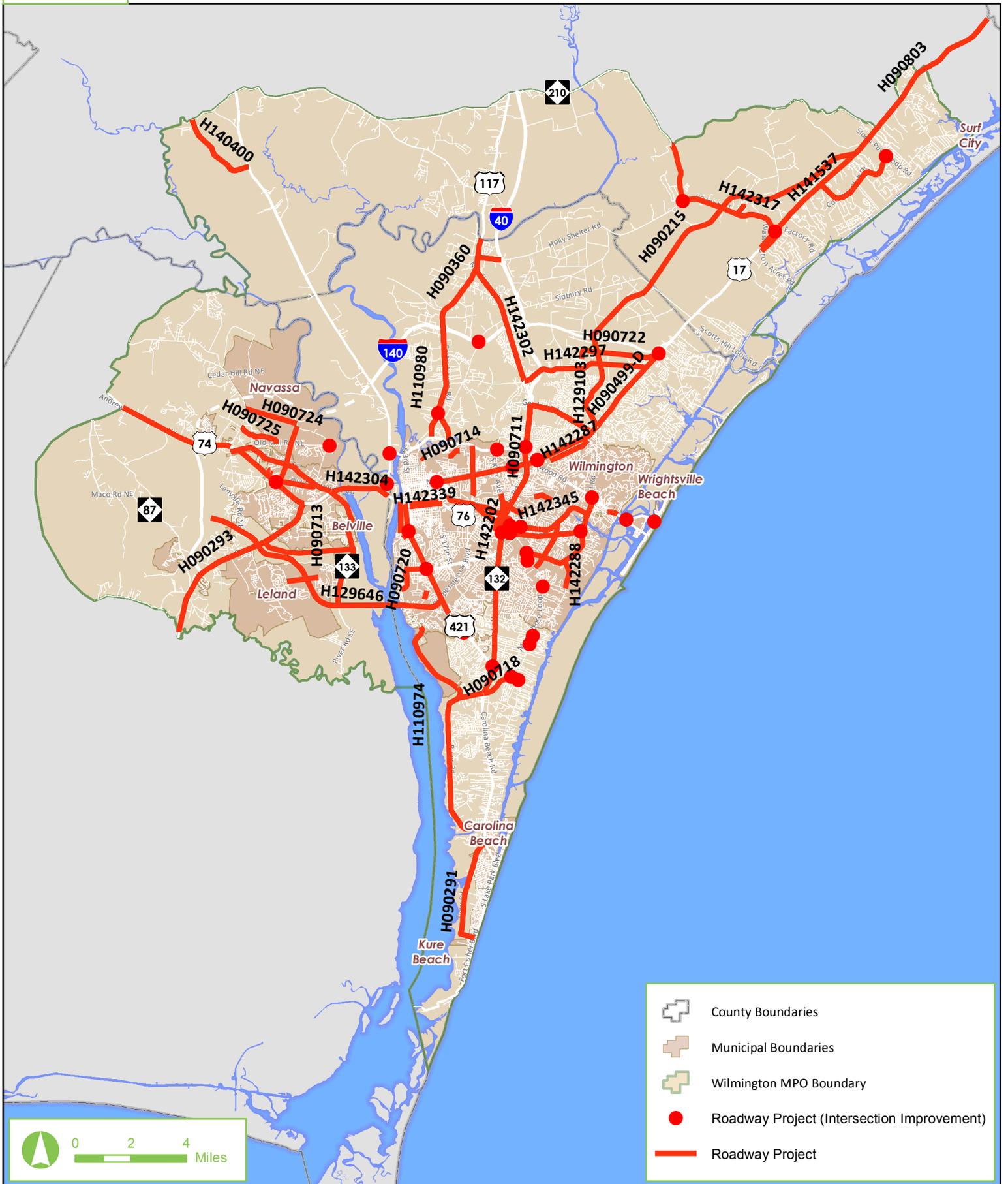
November 11, 2014
Cape Fear Transportation 2040
Draft Roadway Project Ranking

ID	PROJECT	FROM	TO	DRAFT SCORE
H142345	Wrightsville Avenue Improvements	Hawthorne Drive	US76/Oleander Drive	37
H110976	Carolina Beach Road & College Road Flyovers	US421/Carolina Beach Road	US117/NC132/College Road	36
H142320	Piner Road & Grissom Road Intersection	Piner Road	Grissom Road	36
H142348	MacMillan Avenue Improvements	Cedar Avenue	Pine Grove Drive	36
H142286	I-74 Upgrade	I-140	WMPO Boundary	34
H142315	US17BUS/Market Street & 17th Street Intersection	US17BUS/Market Street	South 17th Street	33
H141228	US74/Eastwood Road & Market Street Intersection	US74/Eastwood Road	US17BUS/Market Street	33
H142304	Causeway Widening	US177/74/421 Confluence	NC133/River Road	31
H142313	Front Street & Carolina Beach Road Intersection	US421/Burnett Boulevard/Front Street	US421/Carolina Beach Road	31
H142329	Wrightsville Avenue & MacMillan Avenue Roundabout	Wrightsville Avenue	Macmillan Avenue	31
H142330	Wrightsville Avenue & Wallace Avenue Roundabout	Wrightsville Avenue	Wallace Avenue	31
H142355	River Road Realignment (E/R)	Independence Boulevard	Raleigh Street	31
H090293	US 17 Access Management	US 74/76	WMPO Boundary	31
H110978	Isabel Holmes Bridge Flyovers	US17	US421	31
H142331	Oleander Drive & Pine Grove Intersection	US76/Oleander Drive	Pine Grove Drive	30
H142321	Salisbury Street & Causeway Drive Roundabout	US74/Salisbury Street	US76/Causeway Drive	30
H142322	US74/Salisbury Street & Lumina Avenue Roundabout	US74/Salisbury Street	Lumina Avenue	30
H142296	US117/NC132/College Road	US117/NC132/College Road Southbound Off-ramp	US74/MLK Parkway right-turn lane	30
H090803	US 17 Safety Improvements	Sloop Point Road	WMPO Boundary	29
H090722	Plantation Road Extension	Military Cutoff Road Extension	US17BUS/Market Street	29
H141226	US117/NC132/College & MLK Pkwy Intersection	US117/NC132/College Road	US74/Martin Luther King Jr. Parkway	29
H110975	Market Street/MLK Jr. Pkwy Flyovers	US74/Martin Luther King Jr. Parkway	US74/Eastwood Road	28
H090390-C	Kerr Avenue/MLK Jr Pkwy Intersection	Kerr Avenue	US74/Martin Luther King Jr. Parkway	28
H142347	Pine Grove Drive & MacMillan Avenue Intersection	Pine Grove Drive	Macmillan Avenue	25
H090718	Sanders Road Extension	US421/Carolina Beach Road	Grissom Road	25
H142316	Navassa Road & Old Mill Roundabout	Navassa Road	Old Mill Road	24
H090389	Old Fayetteville Road Interchange	Old Fayetteville Road	US74/76/Andrew Jackson Highway	24
H141235	NC210 & Island Creek Road Intersection	NC210	Island Creek Road	23
H142307	Love Grove Additional Access	Nixon Street	King Street	22
H142368	Cape Fear Memorial Bridge Replacement	3rd Street	US421	22
H090448-A	Gordon Road Widening	NC 132 Interchange	Wood Sorrell Road	21
H142300	Saint Andrews Drive & Carolina Beach Rd Intersection	Saint Andrews Drive	Carolina Beach Road	20
H142318	Pine Grove Drive & Greenville Loop Road Roundabout	Pine Grove Drive	Greenville Loop Road	20
H142319	Pine Grove Drive & Holly Tree Road Roundabout	Pine Grove Drive	Holly Tree Road	20
H129648	Blue Clay Road Interchange	I-140/Wilmington Bypass	Blue Clay Road	19

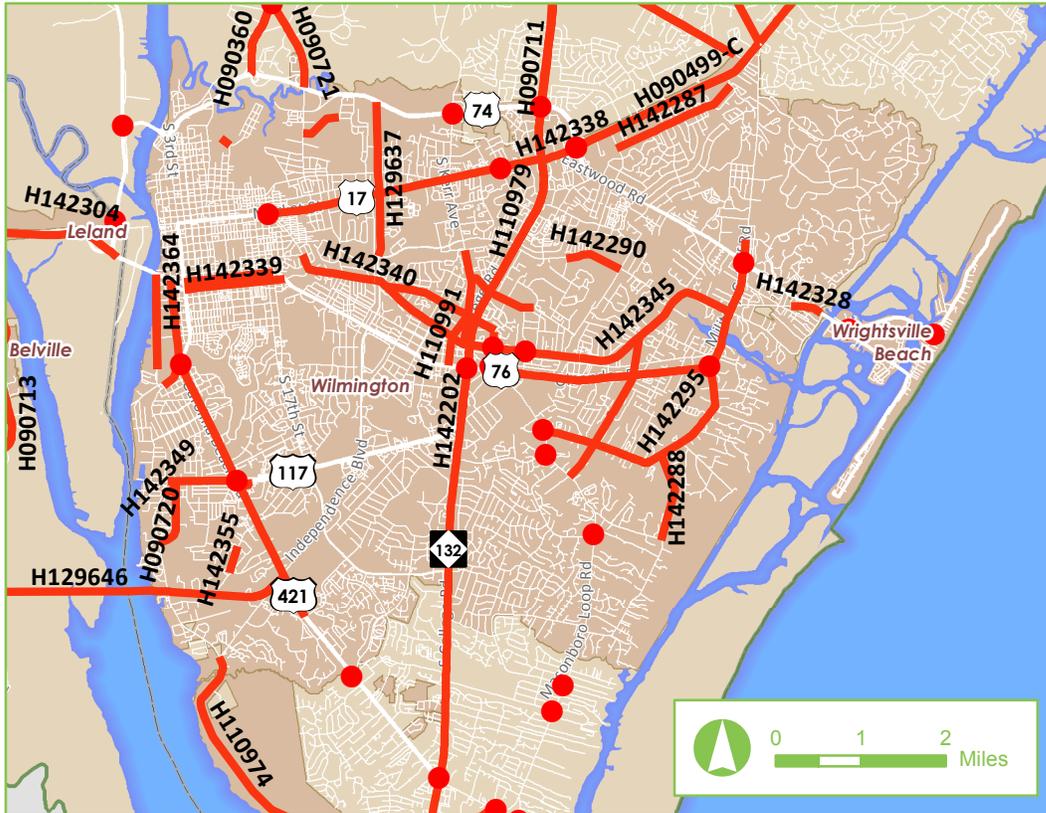
November 11, 2014
Cape Fear Transportation 2040
Draft Roadway Project Ranking

ID	PROJECT	FROM	TO	DRAFT SCORE
H142364	Dedicated Truck Interstate Access (F/R)	US17/74/76	Woodbine Street	19
H142325	USS North Carolina Battleship Access Management	US17/74/421/NC133	USS North Carolina Road	18
H141534	US17BUS & US17 Intersection	US17BUS/Market Street	US17/Wilmington Bypass	18
H142311	Myrtle Grove/Piner/Masonboro Loop Rd Roundabout	Myrtle Grove Road/Pine Road	Masonboro Loop Rd	17
H090720	River Road Relocation	US421/Burnett Boulevard	River Road	17
H142349	River Road Realignment (F/R)	Burnett Boulevard	River Road	17
H142309	Mohican Trail & Masonboro Loop Rd Roundabout	Mohican Trail	Masonboro Loop Rd	16
H142299	New Centre Drive & Market Street Intersection	New Centre Drive	US17BUS/Market Street	16
H142301	Greenville Avenue & Oleander Drive Intersection	Greenville Avenue	US76/Oleander Drive	14
H142365	Shipyard Boulevard Access Management (F/R)	US421/Carolina Beach Road	Rutledge Drive	14
H142312	Beasley Rd & Masonboro Loop Rd Roundabout	Beasley Road	Masonboro Loop Rd	13
H142308	Internal Port Access Road	Greenfield Street	Shipyard Boulevard	11
H142356	Carolina Beach Road & Shipyard Boulevard Intersection (wb right turn) (F/R)	US421/Carolina Beach Road	US117/Shipyard Boulevard	11
H142354	Carolina Beach Road & Shipyard Boulevard Intersection (nb left turn) (F/R)	US421/Carolina Beach Road	US117/Shipyard Boulevard	9
H142357	Shipyard Boulevard Widening (F/R)	US421/Carolina Beach Road	US117/Shipyard Boulevard	9
H142350	Burnett Boulevard Widening (F/R)	US421/Carolina Beach Road	Myers Street	8
H142310	Navaho Trail & Masonboro Loop Rd Roundabout	Navaho Trail	Masonboro Loop Rd	7
H142366	Shipyard Boulevard Speed Sensors and Warning activation at NC Port of Wilmington (F/R)	US421/Carolina Beach Road	River Road	6

Roadway Projects [DRAFT]

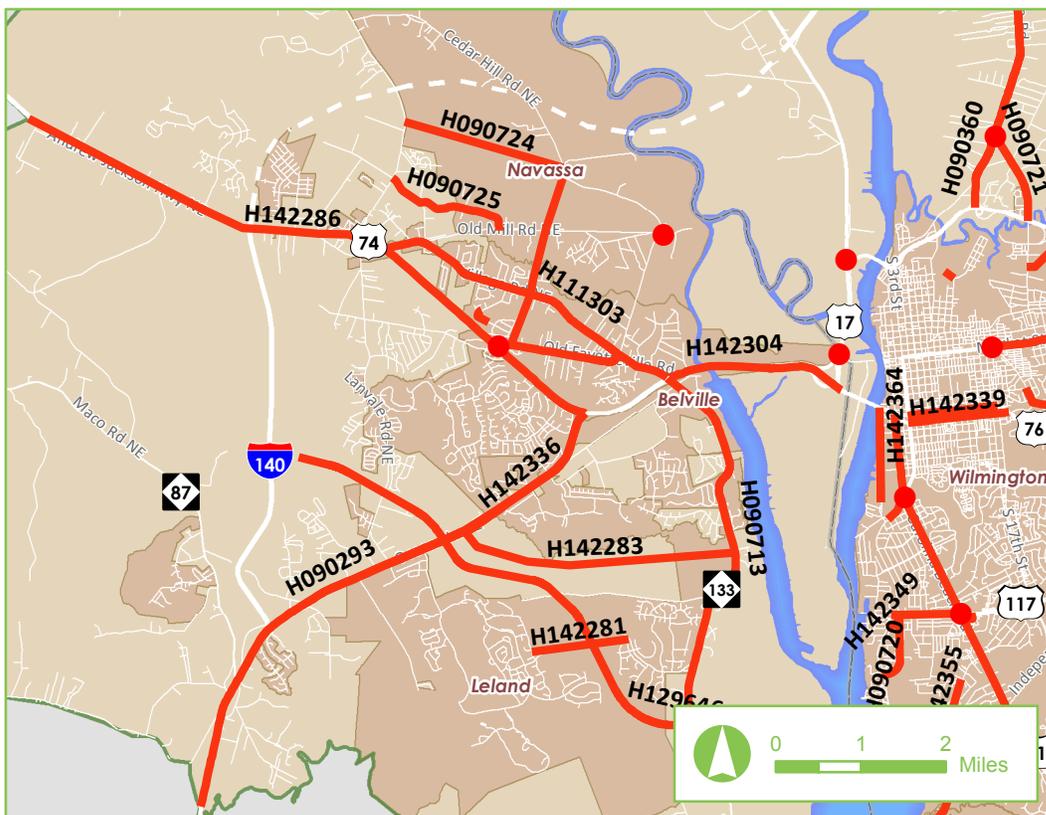


Roadway Projects [DRAFT]



Wilmington

- County Boundaries
- Municipal Boundaries
- Wilmington MPO Boundary
- Intersection Improvement
- Roadway Project



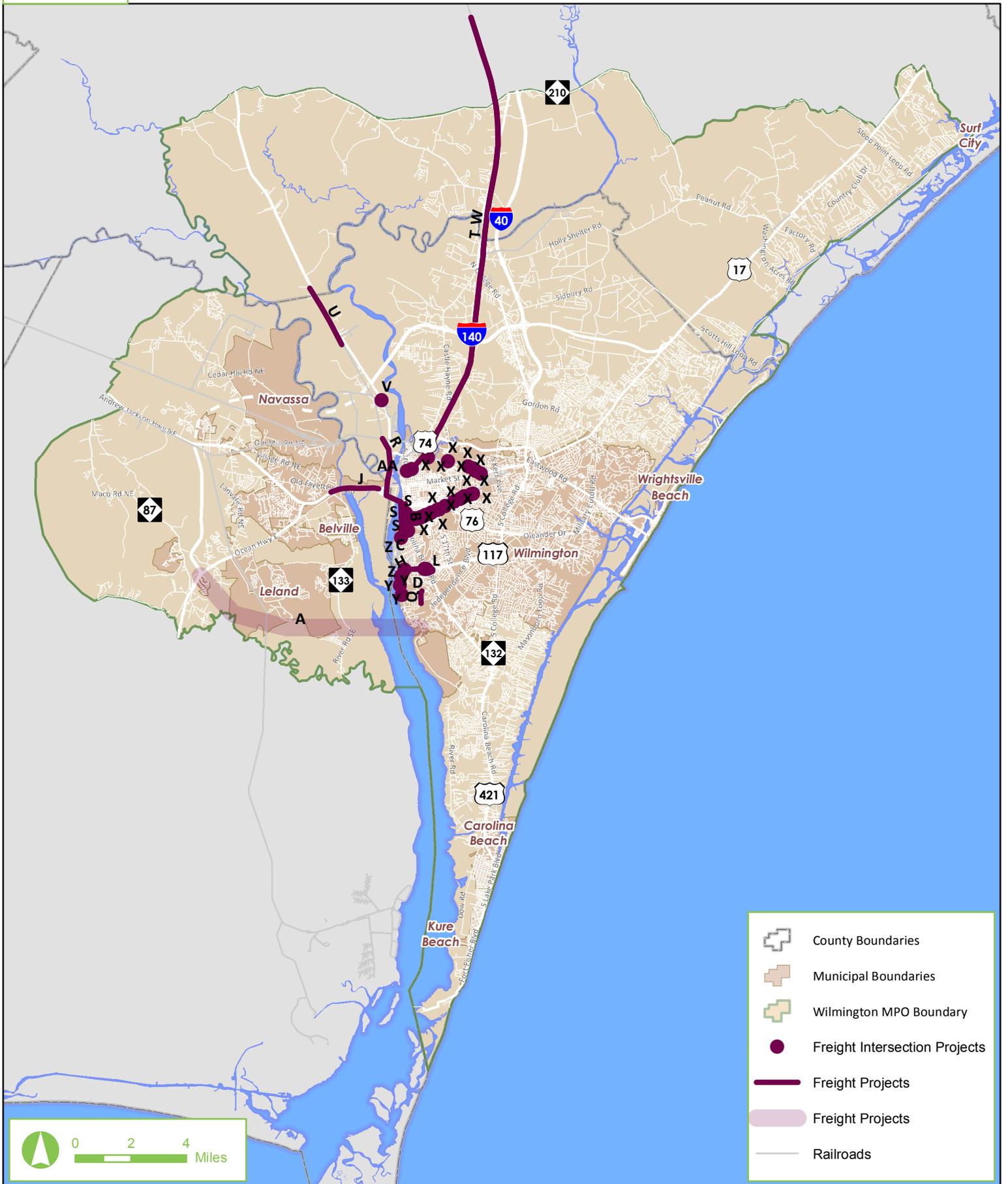
Leland, Belville, & Navassa

- County Boundaries
- Municipal Boundaries
- Wilmington MPO Boundary
- Intersection Improvement
- Roadway Project

October 22, 2014
Cape Fear Transportation 2040
Draft Freight/Rail Project Ranking

ID	PROJECT	DRAFT SCORE
G	Dedicated truck interstate access to NC Port of Wilmington	80
K	Burnett Boulevard widening to allow for queueing at north gate of NC Port of Wilmington from Carolina Beach Road to Myers Street	75
R	Construct rail across the Cape Fear River between NC Port of Wilmington and Davis Yard	75
A	Fourth crossing of the Cape Fear River	70
B	Front Street widening and redesign	70
C	Front Street & Burnett Boulevard turn lanes improving sb and nb truck access	70
J	Leland Causeway mitigate congestion issues	70
D	Carolina Beach Road and Shipyard Boulevard sb right turn improvements	55
F	Shipyard Boulevard eb at Carolina Beach Road nb left turn additional queueing	55
S	Front Street lead railroad signalization and gates	55
Y	Study at-grade rail crossing conflicts on WTRY and spur lines near Port of Wilmington (<i>multiple locations</i>)	55
E	Shipyard Boulevard eb bus pullout, bus stop, and sidewalk	50
H	River Road realignment to encapsulate chassis yard	50
Q	River Road realignment to Raleigh Street for non-port traffic	50
Z	NC Port of Wilmington north gate and south gate rail crossing grade separations	50
T	Freight Rail connection from Castle Hayne to Wallace	45
L	Shipyard Boulevard median closure at Rutledge Drive	40
P	Greenfield Street to Woodbine Street connection	40
V	US421 Railroad crossing safety improvements south of I-140/Dan Cameron Bridge	40
U	US421 Railroad extension from Invista to Pender Commerce Park	30
O	Carolina Beach Road at Shipyard Boulevard truck staging area addition and safer left turn movements	20
X	At-grade rail crossing conflicts on NCDOT & CSX lines (<i>multiple locations</i>)	20
M	Shipyard Boulevard speed sensors and warning activation at NC Port of Wilmington	10
W	Passenger rail from Wilmington to Raleigh	10
AA	Wilmington Multimodal Transportation Center	5

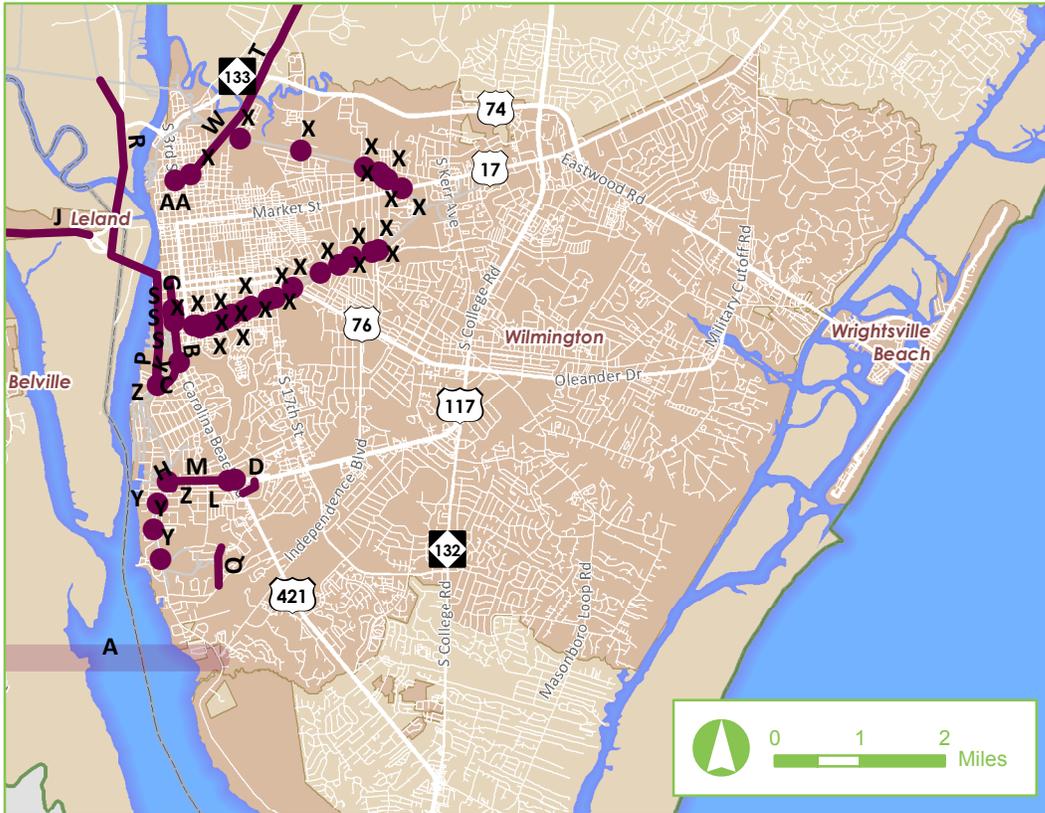
Freight/Rail Projects [DRAFT]



-  County Boundaries
-  Municipal Boundaries
-  Wilmington MPO Boundary
-  Freight Intersection Projects
-  Freight Projects
-  Freight Projects
-  Railroads

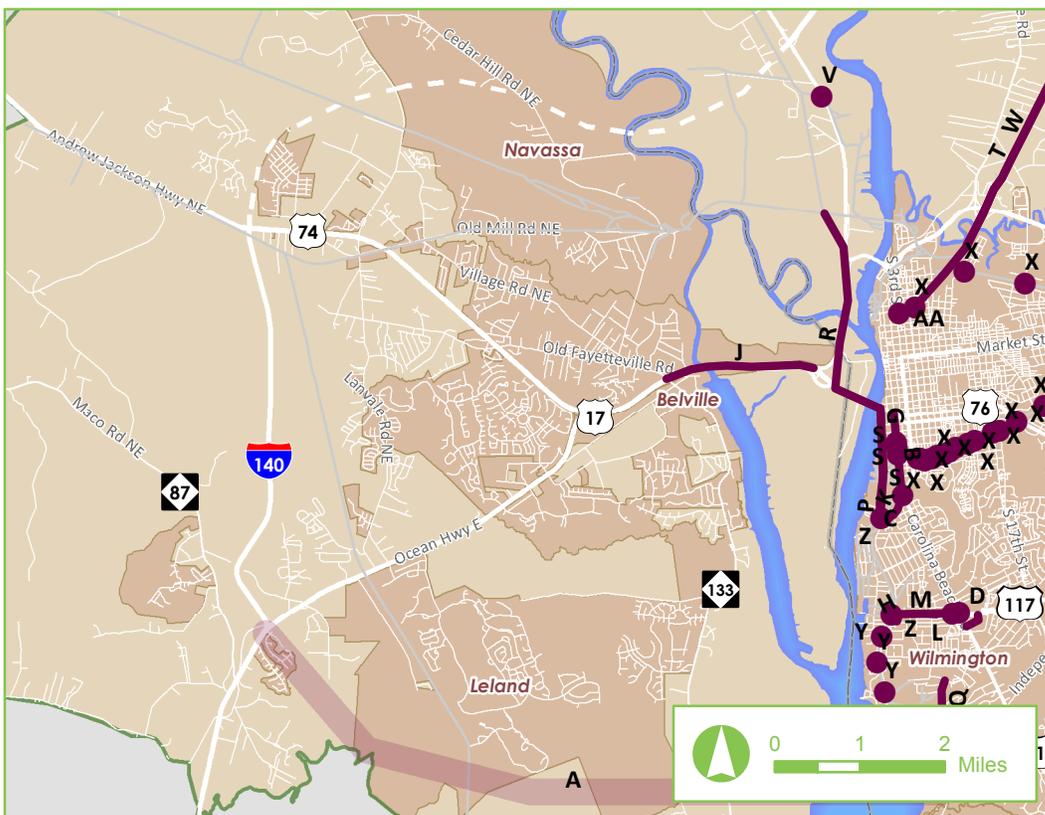


Freight/Rail Projects [DRAFT]



Wilmington

- County Boundaries
- Municipal Boundaries
- Wilmington MPO Boundary
- Freight Intersection Projects
- Freight Projects
- Freight Projects
- Railroads



Leland, Belville, & Navassa

- County Boundaries
- Municipal Boundaries
- Wilmington MPO Boundary
- Freight Intersection Projects
- Freight Projects
- Freight Projects
- Railroads

October 30, 2014
Cape Fear Transportation 2040
Draft Mass Transportation Project Ranking

PROJECT TYPE& ID	PROJECT	DRAFT SCORE
STOP ACCESS - 22	Oleander Drive & Independence Boulevard	65
AMENITY - 69	Oleander Drive at Whole Foods	60
EXPRESS ROUTE - Route 108	Downtown Wilmington to Forden Station	60
EXPRESS ROUTE - Circulator	Downtown Wilmington to Mayfaire	60
PARK & RIDE - 23	Mayfaire Shopping Center	60
AMENITY - 324	Lake Avenue at South College Road	55
STOP ACCESS - 198	College Road & Sanders Road	55
AMENITY - 2	Carolina Beach Road at S College Road (Monkey Junction)	55
PARK & RIDE - 16	US17 at Brunswick Forest	55
AMENITY - 103	S College Road at Randall Parkway	53
AMENITY - 157	S 17th St at Glen Meade Road	53
AMENITY - 291	N College Road at Danny Pence Drive	50
AMENITY - 504	Carolina Beach Road at Harris Teeter	50
AMENITY - 503	US17 at NC210	50
ADDITIONAL SERVICE - 1	Market Street from College Road to Porter's Neck Walmart	50
PARK & RIDE - 10	US17/74/76 at River Road (NC133)	50
PARK & RIDE - 22	Galleria Mall	50
AMENITY - 62	S College Road at University Drive	48
AMENITY - 159	17th Street at Food Lion Plaza	48
AMENITY - 361	17th Street at Doctors Circle	48
STOP ACCESS - 20	Shipyards Boulevard & 17th Street	48
STOP ACCESS - 122	17th Street at Hospital Plaza Drive	48
STOP ACCESS - 134	College Road at Hurst Drive	48
STOP ACCESS - 137	College Road at New Center Drive	48
STOP ACCESS - 138	College Road at University Drive	48
AMENITY - 162	Independence Boulevard at Canterbury Drive	45
AMENITY - 45	Market Street at Kerr Avenue	45
AMENITY - 109	Market Street at Covil Avenue	45
AMENITY - 163	Independence Boulevard at Oleander Mall (northbound)	45
AMENITY - 164	Independence Boulevard at Park Avenue	45
AMENITY - 181	Independence Boulevard at Oleander Mall (southbound)	45
STOP ACCESS - 68	Market Street at Cinema Drive	45
STOP ACCESS - 195	Carolina Beach Road at Antoinette Drive (Monkey Junction)	45

October 30, 2014
Cape Fear Transportation 2040
Draft Mass Transportation Project Ranking

PROJECT TYPE& ID	PROJECT	DRAFT SCORE
PARK & RIDE - 1	Carolina Beach Road at Snow's Cut Bridge	45
PARK & RIDE - 3	I-40 at Cape Fear Community College North Campus	45
PARK & RIDE - 6	Market Street at Middle Sound Loop Road	45
PARK & RIDE - 9	US17 at NC210	45
PARK & RIDE - 24	Barclay West	45
PARK & RIDE - 25	Fairfield Park	45
AMENITY - 96	College Road at University Drive	43
AMENITY - 355	17th Street at Hospital Plaza Drive	43
AMENITY - 130	Gordon Road at Food Lion Plaza	40
AMENITY - 160	Shipyards Boulevard at Commons Drive	40
AMENITY - 203	Monkey Junction Transfer Station	40
AMENITY - 304	N Lake Park Boulevard at Town Hall	40
AMENITY - 326	Shipyards Boulevard at 41st Street	40
AMENITY - 334	41st Street at Hoggard High School	40
STOP ACCESS - 51	Shipyards Boulevard at 41st Street	40
PARK & RIDE - 7	Market Street at Porters Neck Road	40
PARK & RIDE - 8	US17 at Magnolia Greens	40
AMENITY - 254	Carolina Beach Road at Medical Center Drive	38
AMENITY - 186	Carolina Beach Road at Roses	38
STOP ACCESS - 70	Market Street & Lullwater Drive	38
AMENITY - 21	Nixon Street at 8th Street	35
AMENITY - 25	Downtown Transfer Station	35
AMENITY - 63	College Road at Wilshire Boulevard	35
AMENITY - 117	Eastwood Road at Rogersville Road	35
AMENITY - 238	Carolina Beach Road at Independence Boulevard	35
AMENITY - 256	Carolina Beach Road at Tennessee Avenue	35
AMENITY - 281	West Gate Drive at Walmart	35
AMENITY - 303	Halyburton Memorial Parkway at Ballfields	35
AMENITY - 329	Independence Boulevard at Converse Drive	35
PARK & RIDE - 19	Mt. Misery at US74/76	35
AMENITY - 14	Princess Place Drive at N 25th Street	33
AMENITY - 230	Carolina Beach Road at Southern Boulevard	33
AMENITY - 46	Market Street at Lullwater Drive	30
AMENITY - 76	Oleander Drive at Hawthorne Drive	30
AMENITY - 95	College Road at Kmart	30
AMENITY - 107	Randall Parkway at Brailsford Drive	30
AMENITY - 125	Military Cutoff Road at Old Macumber Station Road	30
AMENITY - 240	Carolina Beach Road at Silva Terra Drive	30
AMENITY - 247	17th Street at John D Barry Drive	30

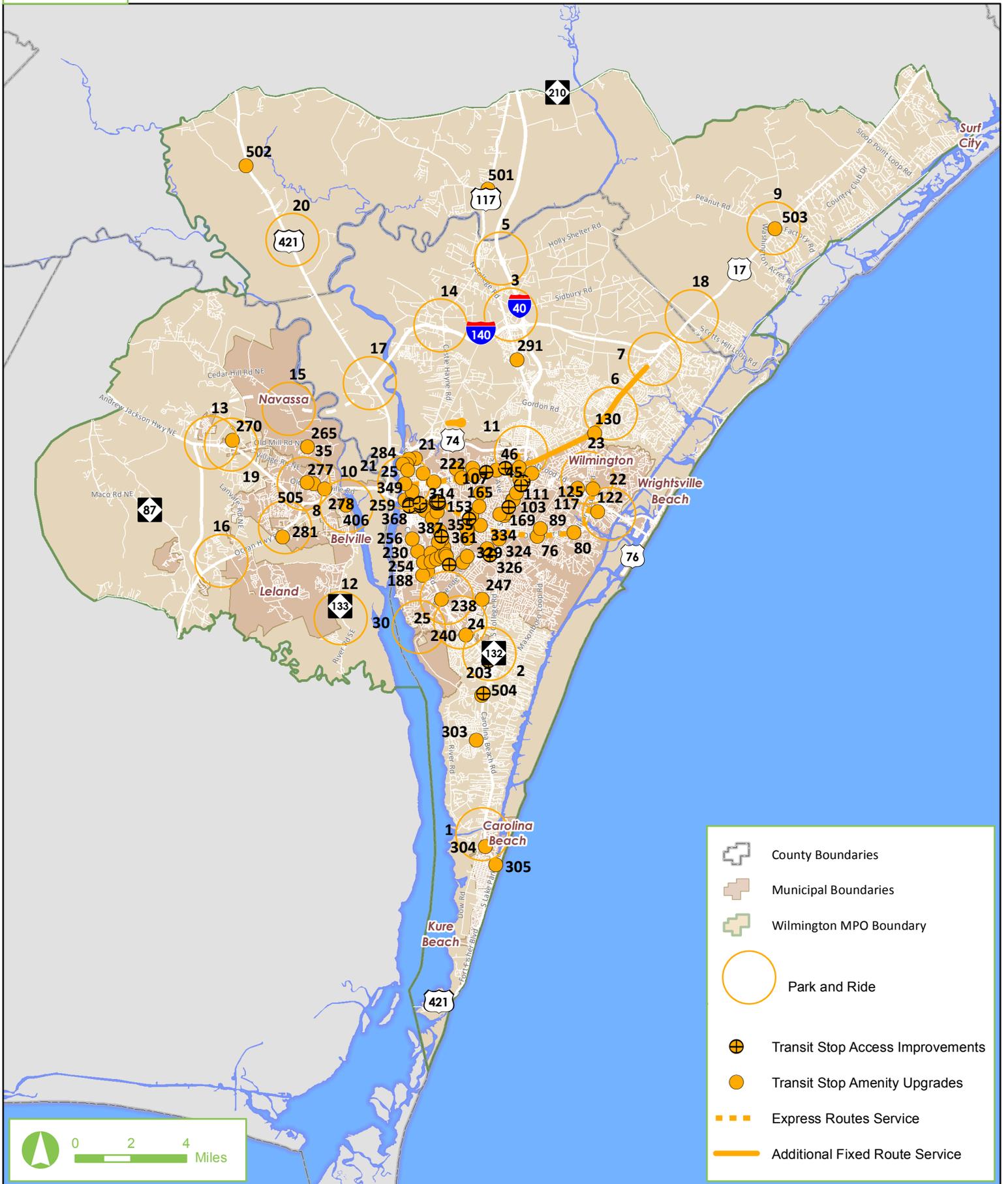
October 30, 2014
Cape Fear Transportation 2040
Draft Mass Transportation Project Ranking

PROJECT TYPE& ID	PROJECT	DRAFT SCORE
AMENITY - 278	Village Road at Food Lion	30
AMENITY - 284	Front Street at Harnett Street	30
PARK & RIDE - 13	I-140 at US74/76	30
PARK & RIDE - 18	US17 at Sidbury Road	30
PARK & RIDE - 35	Leland Town Hall	30
AMENITY - 210	Market Street at 16th Street	28
AMENITY - 47	Sigmon Road at Walmart	28
AMENITY - 80	Oleander Drive at Giles Avenue	25
AMENITY - 122	Wrightsville Avenue at Jones Road	25
AMENITY - 165	Wilshire Boulevard at Berkshires at Pecan Cove	25
AMENITY - 169	Wilshire Boulevard at Kerr Avenue	25
AMENITY - 270	Mt. Misery Road at Food Lion	25
AMENITY - 277	Village Road at S Navassa Road	25
AMENITY - 305	Carl Winner Avenue at Carolina Beach Avenue	25
AMENITY - 380	10th Street at Meares Street	25
AMENITY - 401	Greenfield Street at 13th Street	25
AMENITY - 89	Wrightsville Avenue at Cape Fear Memorial Hospital	25
AMENITY - 223	Front Street at Ann Street	25
AMENITY - 505	Town Hall Drive (Leland)	25
PARK & RIDE - 5	I-40 at Holly Shelter Road	25
PARK & RIDE - 11	Forden Station	25
PARK & RIDE - 21	Downtown Transfer Station	25
AMENITY - 101	New Hanover County Government Center Drive	23
AMENITY - 111	New Center Drive at Bob King Buick	23
AMENITY - 308	17th Street at Little John Circle	23
AMENITY - 387	Cypress Grove Drive at Doctors Circle	23
AMENITY - 390	Medical Center Drive at Delaney Radiologists	23
AMENITY - 395	Wellington Avenue at Silver Stream Lane	23
AMENITY - 396	Wellington Avenue at Troy Drive	23
AMENITY - 397	Wellington Avenue at Flint Drive	23
AMENITY - 398	Wellington Avenue at 17th Street	23
AMENITY - 265	Main Street at Church Street (Navassa)	20
AMENITY - 23	4th Street at ABC Alley	20
AMENITY - 259	Front Street at Castle Street (northbound)	20
AMENITY - 260	Front Street at Castle Street (southbound_	20
STOP ACCESS - 23	Dawson Street at 17th Street	20
STOP ACCESS - 26	Wooster Street at 17th Street	20
STOP ACCESS - 28	Wooster Street at 3rd Street	20
STOP ACCESS - 29	Dawson Street at 3rd Street	20

October 30, 2014
Cape Fear Transportation 2040
Draft Mass Transportation Project Ranking

PROJECT TYPE& ID	PROJECT	DRAFT SCORE
PARK & RIDE - 12	River Road (NC133)	20
PARK & RIDE - 14	I-140 at Castle Hayne Road	20
AMENITY - 11	Princess Place Drive at Montgomery Avenue	18
AMENITY - 188	Marion Drive at Rutledge Drive	18
AMENITY - 22	Nixon Street at 5th Street	15
AMENITY - 152	16th Street at Wright Street	15
AMENITY - 153	16th Street at Kidder Street	15
AMENITY - 349	5th Street at Ann Street	15
AMENITY - 368	5th Street at Dawson Street	15
AMENITY - 311	5th Street at Castle Street	15
AMENITY - 314	Dawson Street at 9th Street	15
AMENITY - 600	Wilmington Multimodal Transportation Center	15
AMENITY - 501	US117/NC133 at Old Blossom Ferry Road	15
AMENITY - 502	US421 at Blueberry Road	15
STOP ACCESS - 24	Dawson Street & 16th Street	15
STOP ACCESS - 25	Wooster Street & 16th Street	15
STOP ACCESS - 120	Dawson Street at 8th Street	15
STOP ACCESS - 206	Wooster Street 8th Street	13
ADDITIONAL SERVICE - 2	Airport Boulevard service to ILM	10
PARK & RIDE - 15	I-140 at Cedar Hill Road	10
PARK & RIDE - 17	I-140 at US421	10
PARK & RIDE - 20	US421 at Cowpens Landing Road	10
PARK & RIDE - 30	Terminus of Independence Boulevard	10

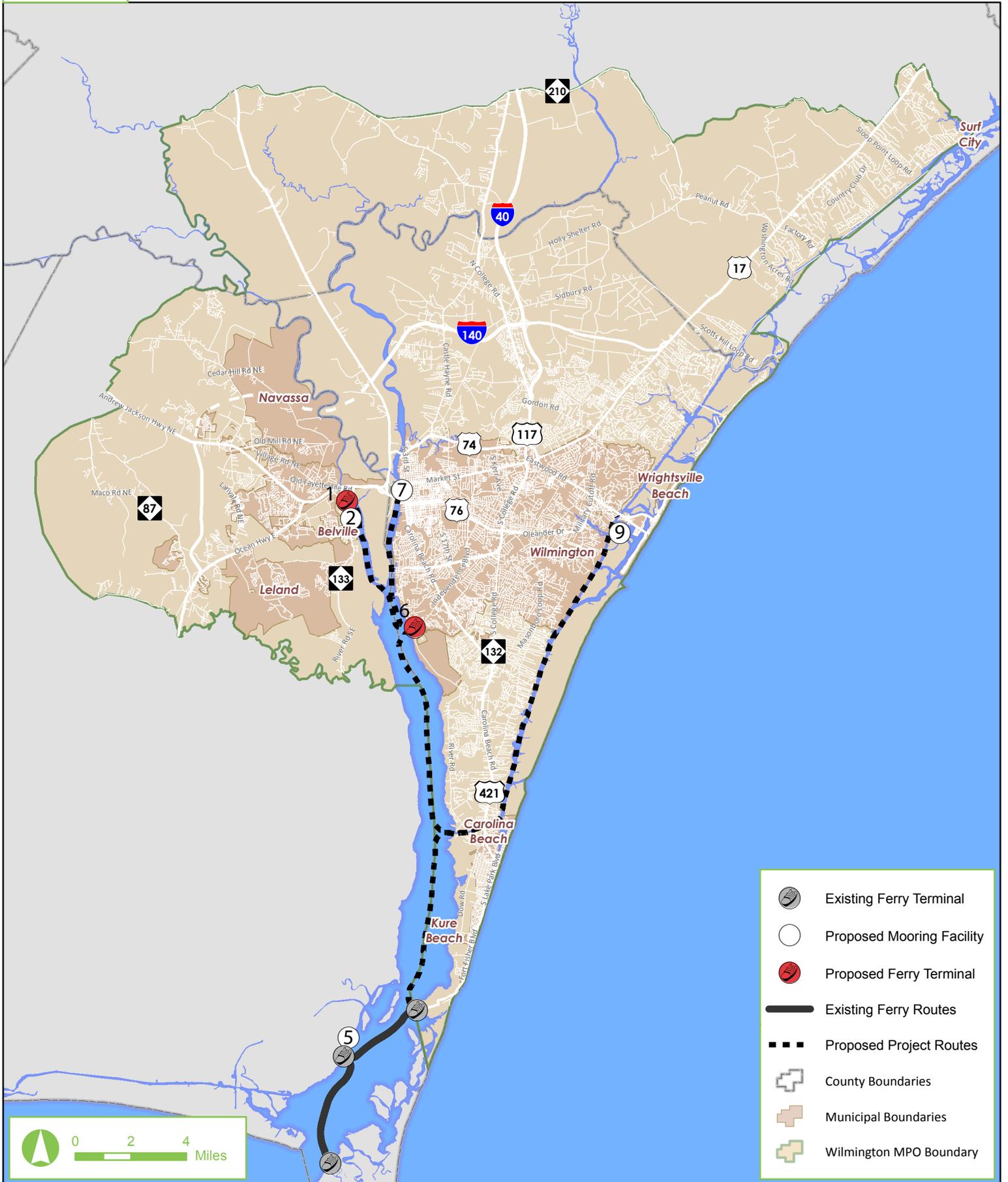
Mass Transportation Projects [DRAFT]



November 11, 2014
Cape Fear Transportation 2040
Draft Ferry and Water Transportation Project Ranking

Project ID	Project Description	Draft Score
1	Town of Belville Terminal/Multi-modal Hub	90
2	Town of Belville Mooring Facility	90
3	New river class vessel (Southport to Ft. Fisher)	90
4	Low-draft river class vessels (3)	90
5	Southport Additional Mooring Facilities	90
6	Central Marina/Independence Blvd Terminal/Multi-modal Hub	85
7	Downtown Wilmington Dock Mooring Facility	81
8	Carolina Beach Mooring Facility	74
9	Wrightsville Beach Mooring Facility	74

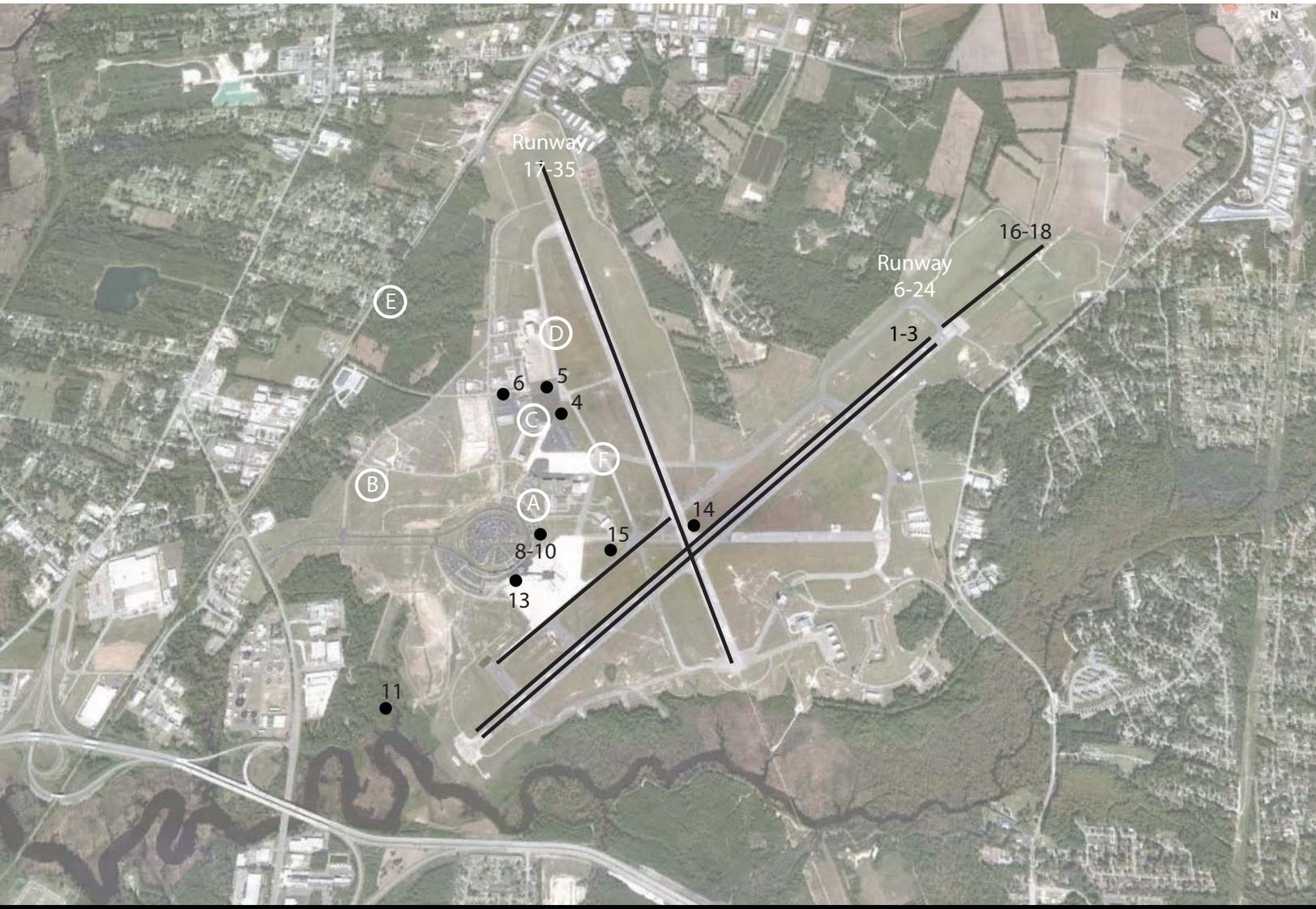
Ferry and Water Transportation Projects [Draft]



-  Existing Ferry Terminal
-  Proposed Mooring Facility
-  Proposed Ferry Terminal
-  Existing Ferry Routes
-  Proposed Project Routes
-  County Boundaries
-  Municipal Boundaries
-  Wilmington MPO Boundary

November 11, 2014
Cape Fear Transportation 2040
Draft Aviation Project Ranking

Project ID	Project Description	Project Score
7	Airport Layout Plan	55
6	GA Apron Development, Phase II	50
8	Terminal Improvements Phase I (Design)	45
9	Terminal Improvements Phase I (Construction)	45
10	Terminal Improvements Phase II (Design and Construction)	45
1	Pipe Ditches Rwy 24 (Mitigation)	35
2	Mitigation	35
3	Construction	35
4	Pipe Ditch in FBO #2 Area Direct to EDDB and Rehab GA Apron Ramp North (Survey, Testing, Design, Bidding and Permitting)	35
5	Rehab GA Apron Ramp North; Pipe Ditch in FBO #2 Area; Direct to EDDB (Construction)	35
13	Outbound Bag Room Retrofit	30
14	Airfield Lighting Replacement (LED)/Vault Upgrade	20
15	Taxiway A and H Widening and Paved Shoulders	20
16	BCA/EA for Runway 24 Extension	20
17	Extend Runway 24 - Phase I of IV	20
18	Extend Runway 24 - Phase II of IV	20
11	Design and Construction of Boat Launch for Water Access	5
12	Map on Airport Utilities	0



ILM Campus Facilities and Projects*

- (A) Passenger Terminal
- (B) VA and Business Park Area
- (C) FBOs
- (D) Customs Facility
- (E) Rental Car Facility
- (F) Rescue Base/ARFF HQ

*Project numbers correspond to
Draft aviation project list

September 10, 2014
 Cape Fear Transportation 2040
 Draft BikePed Project Ranking

Project Rank	Project ID	Street Name/Intersection	From	To	Project Score of Total Possible Points
1	126	WILSHIRE BLVD	WRIGHTSVILLE AVE	KERR AVE	74%
2	C1300	COLLEGE RD & WILSHIRE BLVD	N/A	N/A	73%
3	42	5TH AVE	ANN ST	GREENFIELD LAKE PARK	72%
4	535	COLLEGE RD	HURST DR	RANDALL PKWY	69%
5	43	5TH AVE	RAIL LINE NORHT OF CABELL ST	ANN ST	68%
6	125	WILSHIRE BLV	KERR AVE	MACMILLAN AVE	66%
7	C46	OLEANDER DR & PINE GROVE DR	N/A	N/A	66%
8	533	COLLEGE RD	WRIGHTSVILLE AVE	WILSHIRE BLVD	66%
9	C8	COLLEGE RD & OLEANDER DR	N/A	N/A	64%
10	40	23RD ST	ONE TREE HILL WAY	PRINCESS PLACE DR	60%
11	168	MARKET ST	KERR AVE	BIRCHWOOD DR	59%
12	757	N COLLEGE RD	NE NORTHCHASE PKWY	NEW VILLAGE WAY	59%
13	106	NEW CENTRE DR	MARKET ST	COLLEGE RD	58%
14	150	CAUSEWAY DR	AIRLIE RD	WAYNICK BLVD	58%
15	C1	MARKET ST & GORDON RD	N/A	N/A	58%
16	C33	CAROLINA BEACH RD & FRONT ST/BURNETT B	N/A	N/A	57%
17	497	INDEPENDENCE BLVD EXTENSION	RANDALL PKWY	SOUTH OF MLK PKWY	56%
18	469	HARPER AVE	DOW RD	S 3RD ST	56%
19	536	COLLEGE RD	RANDALL PKWY	NEW CENTRE DR	56%
20	C5	MILITARY CUTOFF RD & EASTWOOD RD	N/A	N/A	54%
21	72	DOW RD	CLARENDON AVE	LAKE PARK BLVD	53%
22	549	HOSPITAL PLAZA DR PATH	LAKESHORE DRIVE	S 17TH ST	53%
23	105	NEW CENTRE DR	COLLEGE RD	PROPOSED TRAIL TO CLEAR RUN DR	52%
24	506	SHIPYARD BLVD	RIVER RD	CAROLINA BEACH RD	52%
25	758	N COLLEGE RD	NEW VILLAGE WAY	BAVARIAN LN	52%
26	C137	COLLEGE RD & NEW CENTRE DR	N/A	N/A	51%
27	379	Medical Center Dr	CAROLINA BEACH RD	S 17TH ST	51%
28	348	NC 133 River Rd	BLACKWELL RD	MORECAMBLE BLVD SE	51%
29	116	RACINE DR	RANDALL DR	EASTWOOD RD	50%
30	88	ISABEL S HOLMES BRIDGE	US HWY 421	FRONT ST	48%
31	509	SHIPYARD BLVD	INDEPENDENCE BLVD	LONGSTREET DR	48%
32	C128	SHIPYARD BLVD & INDEPENDENCE BLVD	N/A	N/A	47%
33	508	SHIPYARD BLVD	S 17TH ST	INDEPENDENCE BLVD	47%
34	1101	Cape Fear Boulevard	Dow Road	Lake Park Boulevard	45%
35	C77	EASTWOOD RD & WRIGHTSVILLE AVE	N/A	N/A	44%
36	366	Village Rd NE A	WAYNE ST	LOSSEN LN	44%
37	507	SHIPYARD BLVD	CAROLINA BEACH RD	S 17TH ST	44%
38	703	INDEPENDENCE BLVD	PARK AVE	WRIGHTSVILLE AVE	44%

September 10, 2014
Cape Fear Transportation 2040
Draft BikePed Project Ranking

Project Rank	Project ID	Street Name/Intersection	From	To	Project Score of Total Possible Points
39	328	Village Rd Connector	LELAND SHOOL RD	LINCOLN RD NE	43%
40	663	BURNT MILL CREEK PATH	METTS AVE	MARKET ST	43%
41	C74	EASTWOOD RD & CARDINAL DR	N/A	N/A	42%
42	326	Lincoln Rd NE	WALKER ST	POST OFFICE RD	42%
43	546	S 17TH ST	INDEPENDENCE BLVD	SHIPYARD BLVD	41%
44	662	BURNT MILL CREEK PATH	COLONIAL DR	METTS AVE	41%
45	69	COLLEGE RD	BLUE CLAY RD	NORTHCHASE PKWY	41%
46	495	INDEPENDENCE BLVD	RIVER RD	CAROLINA BEACH RD	40%
47	496	INDEPENDENCE BLVD	CAROLINA BEACH RD	S 17TH ST	39%
48	C34	WRIGHTSVILLE AVE & AIRLIE RD/OLEANDER DR	N/A	N/A	38%
49	709	EASTWOOD RD	CARDINAL DR	RACINE DR	38%
50	357	Old Fayetteville Rd B	PICKETT RD	BASIN ST	37%
51	373	Old Mill Rd B	LANVALE RD	LELAND SCHOOL RD	37%
52	665	BURNT MILL CREEK PATH	MARKET ST	ARCHIE BLUE PARK	37%
53	C20	17TH ST & SHIPYARD BLVD	N/A	N/A	37%
54	76	FORT FISHER BLV	E AVE	N AVE/SEVENTH AVE	37%
55	C47	OLEANDER DR & GREENVILLE LP RD/GREENVILLE	N/A	N/A	36%
56	44	AIRLIE RD	MILITARY CUTOFF RD	EASTWOOD RD	35%
57	613	VILLAGE RD NE	WAYNE RD	OLD MILL RD	35%
58	C1301	K AVE & 421	N/A	N/A	35%
59	339	Blackwell Rd SE	RIVER RD	CHAPPELL LOOP RD	35%
60	C49	PINE GROVE RD & GREENVILLE LP RD	N/A	N/A	34%
61	329	Leland School Rd NE	MT. MISERY RD NE	VILLAGE RD	34%
62	C240	US 17 & OLDE WATERFORD WY/PLOOF RD SE	N/A	N/A	33%
63	1100	Clarendon Avenue	Dow Road	Lake	33%
64	117	SAINT JOSEPH ST	LEWIS DR	LEES LN	33%
65	359	Old Fayetteville Rd A	LOSSEN LN	BASIN ST	32%
66	615	Old Mill Rd	WINDING TRAIL EXTENSION	LINCOLN RD	32%
67	C241	US 17 & W GATE DR/GRANDIFLORA DR	N/A	N/A	31%
68	358	Lossen Ln	OLD FAYETTEVILLE RD	VILLAGE RD	31%
69	687	PARK AVENUE BRADLEY CREEK BRIDGE	GREENVILLE AVE	WRIGHTSVILLE AVE	31%
70	616	S Navassa Rd	VILLAGE RD	LOOP RD	30%
71	602	NC 133 River Rd	MORECAMBLE BLVD	JACKEYS CREEK LN SE	30%
72	468	LAKE PARK BLVD	CAROLINA SANDS DR	ALABAMA AVE	29%
73	568	MASONBORO LOOP RD	ANDREWS REACH LOOP	PARSELY ELEMENTARY SCHOOL	29%
74	C259	SEVENTH AVE & K AVE	N/A	N/A	29%
75	374	Old Fayetteville Rd NE	LANVALE RD	PICKETT RD	29%
76	611	PICKET RD NE EXTENSION	TIMBER LN NE	VILLAGE RD NE	29%

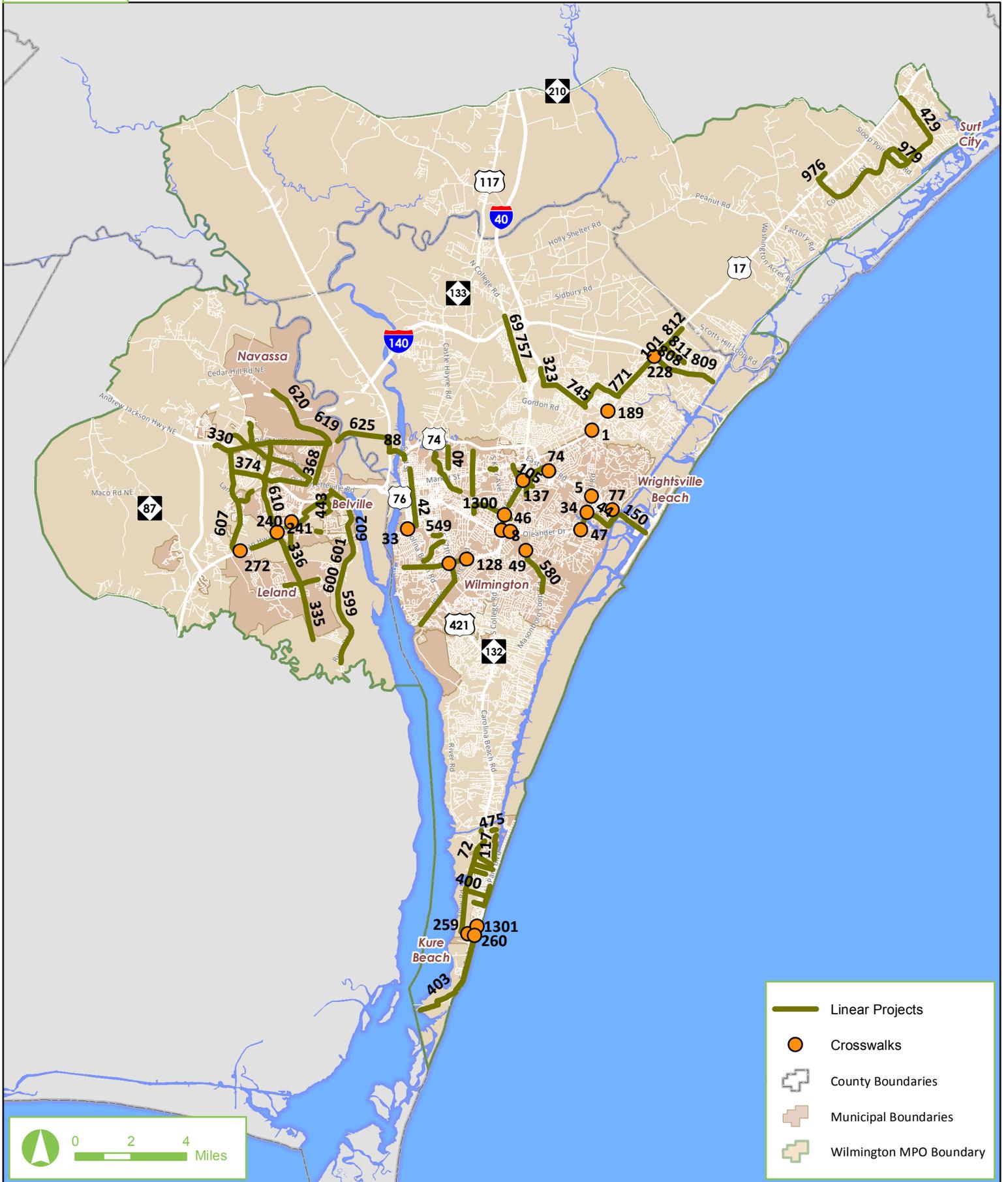
September 10, 2014
 Cape Fear Transportation 2040
 Draft BikePed Project Ranking

Project Rank	Project ID	Street Name/Intersection	From	To	Project Score of Total Possible Points
77	443	Chappell Loop Rd E	BLACKWELL RD	CHAPPELL LOOP RD	28%
78	464	DOW RD	OCEAN BLVD	CLARENDON AVE	28%
79	C272	US 17 & PROVISION PKWY	N/A	N/A	27%
80	591	GREENVILLE AVE	OLEANDER DR	PARK AVE	27%
81	772	MARKET ST	MARSH OAKS DR	PORTERS NECK RD	27%
82	582	PINE GROVE DR	HOLLY TREE RD	GREENVILLE LOOP RD	27%
83	610	Winding Trail Dr	TIMBER LN NE	OCEAN HWY E	27%
84	C189	MARKET ST & MIDDLE SOUND LOOP RD	N/A	N/A	26%
85	330	Fletcher Rd NE	MT. MISERY RD NE	END	26%
86	396	Bridge Barrier Rd	GREENWAY PLAN PATH	OLD DOW RD	26%
87	429	Sloop Pt Loop Rd	COUNTRY CLUB DR	US HWY 17	26%
88	403	Fort Fisher Blvd	S FIFTH AVE	S FORT FISHER BLVD END	25%
89	581	PINE GROVE DR	QUAIL RIDGE RD	HOLLY TREE RD	25%
90	C228	US 17/MARKET ST & PORTERS NECK RD	N/A	N/A	25%
91	1002	Country Club Road	Hwy 17/Jenkins Road	Sloop Point/Doral Drive	25%
92	C260	N AVE & FORT FISHER BLVD	N/A	N/A	24%
93	975	JENKINS RD	US17	ST JOHNS CHURCH RD	24%
94	462	K AVE	5TH AVE	DOW RD	24%
95	338	Ploof Rd SE	OCEAN HWY E	CHAPPELL LOOP RD	23%
96	372	Lanvale Rd NE	OLD FAYETTEVILLE RD NE	GRANDIFLORA DR	23%
97	608	Lanvale Rd NE	VILLAGE RD	OLD FAYETTEVILLE RD NE	23%
98	580	PINE GROVE DR	MASONBORO LOOP RD	QUAIL RIDGE RD	22%
99	368	S Navassa Rd	LOOP RD	BROADWAY ST	22%
100	607	Lanvale Rd NE	GRANDIFLORA DR	OCEAN HWY	22%
101	446	Brunswick Forest Frontage Path	BRUNSWICK FOREST PKWY	WIRE ROAD	21%
102	618	Old Mill Rd	N NAVASSA RD	MAIN ST	21%
103	771	MARKET ST	BAYSHORE DR	MARSH OAKS DR	21%
104	448	US 17 Frontage Path	FLOOF RD	OCEAN GATE PLAZA	21%
105	628	US 421	ISABEL HOLMES BRIDGE	RAIL CORRIDOR	21%
106	369	Old Mill Rd	MAIN ST	WINDING TRAIL EXTENSION	20%
107	449	W Gate Park Connector	WEST GATE DR	END	20%
108	808	PORTERS NECK RD	MARKET ST	EDGEWATER CLUB RD	20%
109	617	S Navassa Rd	BROADWAY ST	OLD MILL RD	19%
110	976	ST JOHNS CHURCH RD	JENKINS RD	END	19%
111	463	DOW RD	K AVE	OCEAN BLVD	19%
112	598	NC 133 River Rd	SOUTHERN BLVD	HICKORY LN SE	19%
113	812	MARKET ST	FUTCH CREEK RD	PENDER-NEW HANOVER LINE	19%
114	454	Torchwood Blvd	US 17 MARKET STREET	OGDEN PARK CONNECTOR TRAIL	18%

September 10, 2014
Cape Fear Transportation 2040
Draft BikePed Project Ranking

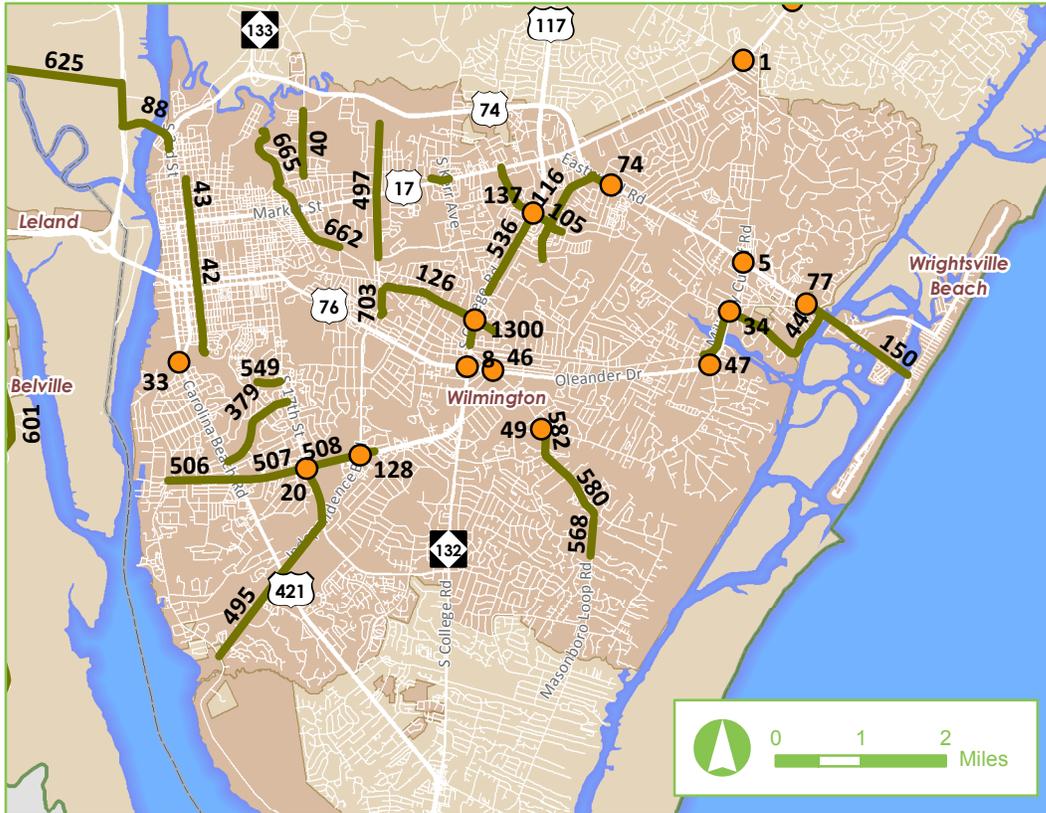
Project Rank	Project ID	Street Name/Intersection	From	To	Project Score of Total Possible Points
115	400	Ocean Blvd	GREENWAY PLAN PATH	DOW RD S	18%
116	178	OCEAN BLVD	MIKE CHAPPELL PARK	N LAKE PARK BLVD	17%
117	619	Cedar Hill Rd	OLD MILL RD	ROYSTER RD NE	17%
118	601	NC 133 River Rd	JACKEYS CREEK LN SE	WESTPORT DR	16%
119	609	Grandiflora Dr	LANVALE RD NE	TIMBER LN NE	15%
120	444	Jakeys Creek Connector	NIGHT HARBOR DR	JACKEY'S CREEK LN	14%
121	599	NC 133 River Rd	MALLORY CREEK DR	SOUTHERN BLVD	14%
122	745	SOUTH SMITH CREEK CONNECTOR TRAIL	SMITH CREEK PARK	Ogden Park Connector Path	14%
123	323	Smith Creek Murrayville Connection	MURRAYVILLE RD	NORTH SMITH CREEK TRAIL	14%
124	475	PENINSULA DR	TEAKWOOD DR	ISLAND MARINE DR	14%
125	612	VILLAGE RD	WAYNE ST NE	OAKMONT CT NE	14%
126	335	B Brunswick Nature Park Connector	MALLORY CREEK	BRUNSWICK NATURE PARK	13%
127	614	Winding Trail Dr EXTENSION	VILLAGE RD	OLD MILL RD	13%
128	620	Cedar Hill Rd	ROYSTER RD NE	WINDING TRAIL EXTENSION	13%
129	45	ALABAMA AVE	PROP TRAIL WEST OF SPOT LN	LAKE PARK BLVD	12%
130	746	OGDEN PARK CONNECTOR PATH	SMITH CREEK PARK CONNECTOR PATH	TORCHWOOD BLVD	12%
131	336	A Brunswick Nature Park Connector	OCEAN HWY E	MALLORY CREEK	12%
132	978	DORAL DR	SLOOP POINT RD	MASTER LN	12%
133	979	MASTER LN	DORAL DR	SLOOP POINT RD	12%
134	101	MARKET ST	END	FUTCH CREEK RD	11%
135	600	NC 133 River Rd	MALLORY CREEK DR	WESTPORT DR	11%
136	162	N AVE	FORT FISHER BLVD	ATLANTIC AVE	10%
137	809	PORTERS NECK RD	EDGEWATER CLUB RD	BLAD EAGLE LN	10%
138	811	FUTCH CREEK RD	OLD MARKET ST	CHAMPS DAVIS RD	10%
139	604	MALLORY CREEK PATH	ST KITTS WAY	LOW COUNTRY BLVD	7%
140	625	RAIL CORRIDOR TRAIL	US 421	QUALITY DR NE	7%

Bicycle and Pedestrian Projects [DRAFT]



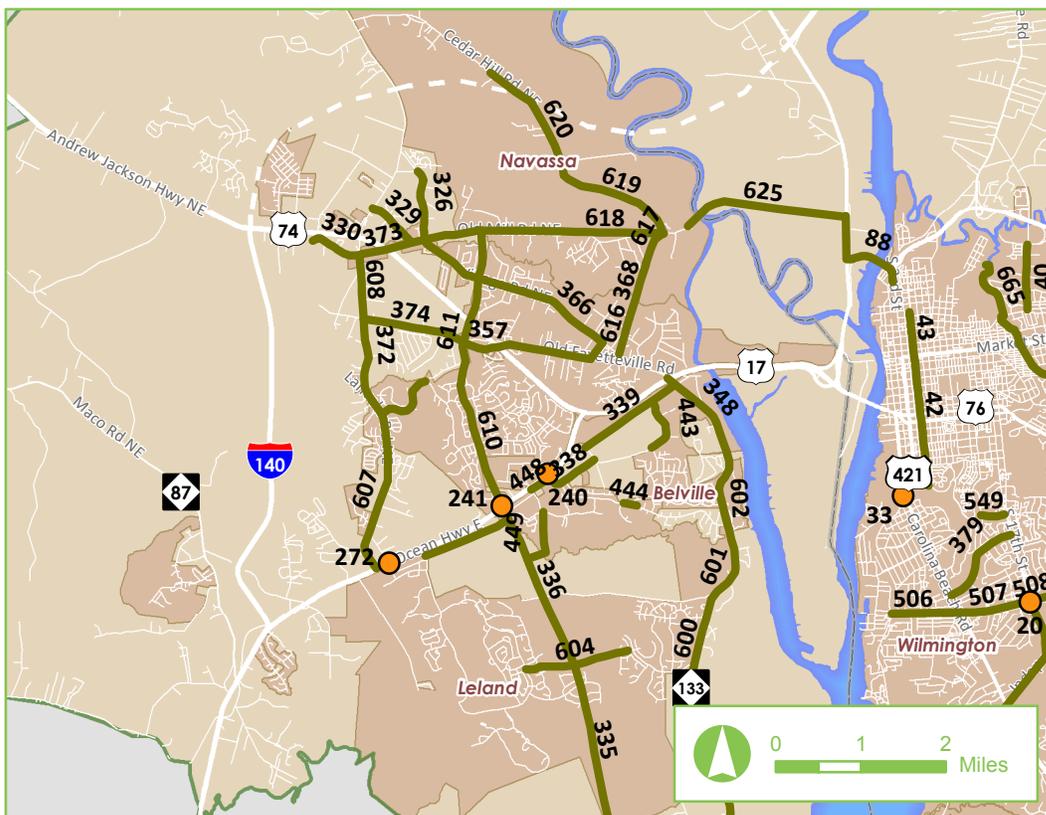
- Linear Projects
- Crosswalks
- County Boundaries
- Municipal Boundaries
- Wilmington MPO Boundary

Bicycle and Pedestrian Projects [DRAFT]



Wilmington

-  Linear Projects
-  Crosswalks
-  County Boundaries
-  Municipal Boundaries
-  Wilmington MPO Boundary



Leland, Belville, & Navassa

-  Linear Projects
-  Crosswalks
-  County Boundaries
-  Municipal Boundaries
-  Wilmington MPO Boundary

Potential Alternative Funding Mechanism Comparison Chart
December 10, 2014

	How is it enacted?	What geography does it cover?	How is funding generated?	Is there a sunset and if so, how long?	What can the revenue be used for?	What is the estimate of annual revenue generation?	Can the generated revenue be used as a state or federal funding match?	Where else in North Carolina is this funding source being implemented?	What are some potential advantages to using this funding source?	What are some potential disadvantages to using this funding source?	How easy is it to implement?	Are special educational programs needed?	Does this funding source have the potential to disproportionately impact environmental justice areas or other population groups?	Has this funding source been used in WMFO in the past?
Vehicle Rental Tax	Enabled by Session Law 2000-2	Locality	Tax on Gross Receipts of Vehicle Rentals (1.5% county and 1.5% municipality)	No	Up to locality's discretion	Brunswick County - \$700,000 New Hanover County - \$1.5 million Pender County - \$400,000	Yes	Several counties and their municipalities including Mecklenburg, Wake, Cumberland, Forsythe, and Guilford	Captures revenue from visitors and residents who aren't paying vehicle registration taxes	Isolates rental car industry, does not necessarily benefit those paying the tax	Easy	Yes	Yes	Yes
Auto Part and Tire Tax (Statewide)	Legislative action	State	Tax on Auto Part and Tire Sales	No	Up to NCDOT	\$7.9 million	Yes	n/a	Captures revenues from all vehicle owners	Requires legislative action to enact tax	Difficult	Yes	Yes	No
Auto Part and Tire Tax (Local)	Legislative action	Locality	Tax on Auto Part and Tire Sales	No	Up to locality	Brunswick County - \$92,000 New Hanover County - \$171,000 Pender County - \$44,000	Yes	n/a	Captures revenues from all vehicle owners	Requires legislative action to enact tax	Difficult	Yes	Yes	No

North Carolina Department of Transportation



WILMINGTON URBAN AREA METROPOLITAN PLANNING ORGANIZATION SUPPLEMENT

Draft STIP
FY 2015 - 2025
December 2014

WILMINGTON URBAN AREA METROPOLITAN PLANNING ORGANIZATION

HIGHWAY PROGRAM

TYPE OF WORK / ESTIMATED COST IN THOUSANDS / PROJECT BREAKS

COUNTY	ROUTE/CITY	ID NUMBER	LOCATION / DESCRIPTION	LENGTH	TOTAL PRIOR PROJECT COSTS (THOU)	STATE TRANSPORTATION PROGRAM					DEVELOPMENTAL PROGRAM					UNFUNDED FUTURE YEARS
						FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	
INTERSTATE PROJECTS																
NEW HANOVER	I-40	I-5840 SW	PENDER COUNTY LINE TO 0.4 MILE EAST OF US 117. PAVEMENT REHABILITATION.	6.3	900											
NEW HANOVER	I-40	I-5721 SW	PENDER COUNTY LINE TO SR 2048 (GORDON ROAD). PAVEMENT REHABILITATION.	6.3	650											
NEW HANOVER	I-40	I-5357 SW	SOUTH OF NC 210 (MILE POST 406.8) IN PENDER COUNTY. WEST OF BRIDGE NO. 108. POST 620 IN NEW HANOVER COUNTY. PAVEMENT REHABILITATION.	11.4	8600											
PENDER	I-40	I-5760 SW	2 MILES EAST OF SR 1509 (STAG PARK ROAD) TO NEW HANOVER COUNTY LINE. PAVEMENT REHABILITATION.	12.4	5300											
RURAL PROJECTS																
BRUNSWICK	US 17/US 74/US 76	R-3601 TRN	NC 1335R 147Z (VILLAGE ROAD) INTERCHANGE TO THE US 421/NC 133 INTERCHANGE. ADD ADDITIONAL LANES ON INTERCHANGE. ADD SHOULDER AND WIDEN BRIDGE NO. 107 AND BRIDGE NO. 108.	1.5	41011											
BRUNSWICK	I-40/US 17 (WILMINGTON BYPASS)	R-2633	US 17 SOUTH OF NC 87 IN BRUNSWICK COUNTY TO I-40 IN NEW HANOVER COUNTY. FOUR LANE DIVIDED FREEWAY ON NEW LOCATION.	20.2	87844											
UNDER CONSTRUCTION																
BRUNSWICK																
NEW HANOVER																
URBAN PROJECTS																
PENDER	US 17	U-5722 REG	SR 1562 (WASHINGTON ACRES ROAD) TO SR 1563 (SLOOP POINT LOOP ROAD). CONVERT TO SUPERSTREET.	5.5	19410											
NEW HANOVER	US 17 BUSINESS	U-5869 DIV	US 17 (SOUTH 17TH STREET) TO COVIL AVENUE. CONSTRUCT A ROAD DIET.	1.34	6940											
NEW HANOVER	US 74	U-5731 REG	US 17/US 421. CONSTRUCT A FLY-OVER AND FREEFLOW RAMP AT INTERCHANGE		15500											
NEW HANOVER	US 74 (EASTWOOD ROAD)	U-5710 SW	SR 1409 (MILITARY CUTOFF ROAD) INTERSECTION. CONVERT AT-GRADE INTERSECTION TO AN INTERCHANGE.	2	25110											
NEW HANOVER	US 421 (CAROLINA BEACH ROAD)	U-5869 DIV	NC 132 (SOUTH COLLEGE ROAD). CONSTRUCT FLYOVERS AT INTERSECTION.		15500											

CG 3405 AA
 CG 5125 BA
 CG 10250 BB CG 10250 BB CG 10250 BB CG 10250 BB CG 10250 BB

TRN AA NC 87 SOUTH OF BISHOP TO US 74/US 76 EAST OF MALMO IN BRUNSWICK COUNTY - COMPLETE
 AB NC 87 SOUTH OF BISHOP TO US 74/US 76 EAST OF MALMO IN BRUNSWICK COUNTY - COMPLETE
 TRN BA US 74/US 76 EAST OF MALMO IN BRUNSWICK COUNTY TO SR 1439 (CEDAR HILL ROAD) - UNDER CONSTRUCTION
 TRN BB SR 1439 (CEDAR HILL ROAD) TO WEST OF US 421 NORTH OF WILMINGTON - UNDER CONSTRUCTION
 BC US 74/US 76 EAST OF MALMO IN BRUNSWICK COUNTY TO WEST OF US 421 NORTH OF WILMINGTON
 CA WEST OF US 421 NORTH OF WILMINGTON TO WEST OF NC 133 - COMPLETE
 CB WEST OF NC 133 TO US 117 - COMPLETE
 CC US 117 TO EAST OF I-40 SOUTH OF CASTLE HAYNE - COMPLETE

PLANNING/DESIGN IN PROGRESS: GARVEE BOND FUNDING \$31.05 M FOR SEGMENT AA: PAYBACK FY 2010-2021 - GARVEE BOND FUNDING \$100 M FOR SEGMENT BB: PAYBACK FY 2013-2024

DIV - Division Category EX - Exempt Category
 HF - State Dollars (Non STI) REG - Regional Category
 SW - Statewide Category TRN - Transition Project

COST AND SCHEDULES ARE PRELIMINARY AND SUBJECT TO SIGNIFICANT CHANGE AS MORE INFORMATION BECOMES AVAILABLE

WILMINGTON URBAN AREA METROPOLITAN PLANNING ORGANIZATION

HIGHWAY PROGRAM

COUNTY	ROUTE/CITY	ID NUMBER	LOCATION/DESCRIPTION	LENGTH	TOTAL PRIOR PROJECT COSTS (THOU)	FUND	TYPE OF WORK / ESTIMATED COST IN THOUSANDS / PROJECT BREAKS											
							STATE TRANSPORTATION PROGRAM					DEVELOPMENTAL PROGRAM					UNFUNDED FUTURE YEARS	
							FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	
FEDERAL BRIDGE PROJECTS																		
NEW HANOVER	SR 1002 (HOLLY SHELTER ROAD)	B-491	REPLACE BRIDGE NO. 4 OVER ISLAND CREEK.		1981	1981												
DIV																		
UNDER CONSTRUCTION																		
NEW HANOVER	SR 1242 (NORMANDY PLACE)	B-569	REPLACE BRIDGE NO. 78 OVER MOTT CREEK.		660									R 60				
HF																		
BRUNSWICK	SR 1432 (OLD MILL ROAD)	B-498	REPLACE BRIDGE NO. 28 OVER MILL CREEK.		1155													
HF																		
NEW HANOVER	SR 1627 (3RD STREET)	B-5103	REPLACE BRIDGE NO. 35 OVER ABANDONED RAILROAD.		4480													
DIV																		
RIGHT OF WAY IN PROGRESS																		
BRUNSWICK	VARIOUS	BP-5103	DIVISION 3 PURCHASE ORDER CONTRACT BRIDGE REPLACEMENT PROJECTS AT SELECTED LOCATIONS.		18251													
NEW HANOVER																		
ONSLOW																		
PENDER																		
SAMPSON																		
BRUNSWICK	SR 1437 (OLD FAYETTEVILLE ROAD)	B-5622	REPLACE BRIDGE NO. 181 OVER STURGEON CREEK.		601											R 55		C 546
DIV																		
PART UNDER CONSTRUCTION - BRIDGE PURCHASE ORDER CONTRACT (BPOC)																		
BRUNSWICK																		
NEW HANOVER	SR 1100 (RIVER ROAD)	B-5236	REPLACE BRIDGE NO. 19 OVER LORDS CREEK.		1152													
HF																		
BRUNSWICK	SR 1472 (VILLAGE ROAD)	B-5627	REPLACE BRIDGE NO. 208 OVER STURGEON CREEK.		1870												R 170	C 1700
HF																		
DIVISION PURCHASE ORDER CONTRACT																		
BRUNSWICK																		
DUPLIN																		
ONSLOW																		
PENDER																		
SAMPSON																		
MITIGATION PROJECTS																		
BRUNSWICK																		
DUPLIN																		
ONSLOW																		
PENDER																		
SAMPSON																		
ECOSYSTEMS ENHANCEMENT PROGRAM FOR DIVISION 3 PROJECT MITIGATION.																		
BRUNSWICK																		
DUPLIN																		
ONSLOW																		
PENDER																		
SAMPSON																		
HAZARD ELIMINATION PROJECTS																		
NEW HANOVER	NC 133	W-5306 TRN	US 117/NC 132 (COLLEGE ROAD) IN CASTLE HAYNE. CONSTRUCT A ROUNDABOUT.		1360													
DIV																		
UNDER CONSTRUCTION																		

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WILMINGTON URBAN AREA METROPOLITAN PLANNING ORGANIZATION

NON-HIGHWAY PROGRAM

TYPE OF WORK / ESTIMATED COST IN THOUSANDS / PROJECT BREAKS

COUNTY	ROUTE/CITY	ID NUMBER	LOCATION / DESCRIPTION	LENGTH	TOTAL PRIOR PROJECTS COST (THOU) (THOU)	FY 2015 FUNDS		STATE TRANSPORTATION PROGRAM				DEVELOPMENTAL PROGRAM				UNFUNDED FUTURE YEARS	
						T	C	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
NEW HANOVER	WILMINGTON INTERNATIONAL (ILM)	AV-5702	REHABILITATE GA APRON NORTH.		3500												
NEW HANOVER	WILMINGTON INTERNATIONAL (ILM)	AV-5713	PIPE DITCHES IN FBO #2 AREA.		1500												
NEW HANOVER	WILMINGTON INTERNATIONAL (ILM)	AV-5704	UPGRADE AIRFIELD LIGHTING VAULT.		2400												
NEW HANOVER	WILMINGTON INTERNATIONAL (ILM)	AV-5730	EXTEND RUNWAY 6-24 PHASE 1		5000												
NEW HANOVER	NC 132 (NORTH COLLEGE ROAD)	EB-5765	SR 2208 (NEW TOWN DRIVE) TO DANNY PENCE DRIVE. CONSTRUCT MULTI-USE PATH.	0.28	148												
NEW HANOVER	SR 1219 (SOUTH 17TH STREET)	EB-5600	HOSPITAL PLAZA TO INDEPENDENCE BOULEVARD. CONSTRUCT MULTI-USE PATH.	1.7	1040												
NEW HANOVER	MIDDLE SOUND LOOP ROAD	EB-5543	OGDEN ELEMENTARY SCHOOL TO SR 986 (OYSTER DRIVE). CONSTRUCT MULTI-USE PATH.		226												
BRUNSWICK	VARIOUS	U-5527	WILMINGTON URBAN AREA MPO TRANSPORTATION ALTERNATIVES PROGRAM.		3372												
NEW HANOVER	US 76 (WOOSTER STREET)	EB-5764	8TH STREET TO US 76 (OLEANDER DRIVE). CONSTRUCT SIDEWALK.	0.73	113												
NEW HANOVER	GARY SHELL CROSS-CITY TRAIL	EB-5544	WILMINGTON. CONSTRUCT BICYCLE AND PEDESTRIAN ACCOMMODATIONS ON SOUTH 17TH STREET, WALTHAM ROAD, AND BETHEL ROAD.		1338												
NEW HANOVER	PEACHTREE AVENUE	EB-5719	PARK AVENUE TO MC MILLAN AVENUE. CONSTRUCT BICYCLE LANE.	0.4	209												

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 SW - Statewide Category

EX - Exempt Category
 REG - Regional Category
 TRN - Transition Project

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HIGHWAY PROGRAM

STATEWIDE PROJECTS

TYPE OF WORK / ESTIMATED COST IN THOUSANDS / PROJECT BREAKS

COUNTY	ROUTE/CITY	ID NUMBER	LOCATION/DESCRIPTION	LENGTH	TOTAL PRIOR PROJECTS COST (THOU)	TOTAL COST (THOU)	STATE TRANSPORTATION PROGRAM					DEVELOPMENTAL PROGRAM					UNFUNDED FUTURE YEARS
							FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	

STATEWIDE	VARIOUS	M-0391	STRUCTURE DESIGN, PRELIMINARY ENGINEERING FOR MISCELLANEOUS PROJECTS.		8278	3878	PE 120 DIV													
		SW					PE 120 RE													
							PE 160 SW													

STATEWIDE	VARIOUS	M-0219	PHOTOGRAMMETRY, PRELIMINARY ENGINEERING FOR MISCELLANEOUS PROJECTS		2750		PE 75 DIV													
		SW					PE 75 RE													
							PE 100 SW													

STATEWIDE	VARIOUS	M-0360	DESIGN SERVICES, PRELIMINARY ENGINEERING FOR MISCELLANEOUS PROJECTS.		20180	9180	PE 300 DIV													
		SW					PE 300 RE													
							PE 400 SW													

STATEWIDE	VARIOUS	M-0376	STATEWIDE GEOTECHNICAL STUDIES AND INVESTIGATIONS PROJECT TO COVER NON-PROJECT SPECIFIC WORK.		19138	9238	PE 270 DIV													
		SW					PE 270 RE													
							PE 360 SW													

STATEWIDE	VARIOUS	M-0392	HYDRAULICS, PRELIMINARY ENGINEERING FOR MISCELLANEOUS PROJECTS.		3720	1960	PE 48 DIV													
		SW					PE 48 RE													
							PE 64 SW													

STATEWIDE	VARIOUS	M-0405	STATEWIDE MOWING MAINTENANCE CONTRACTS FOR PROPERTIES ACQUIRED BY NCDOT IN ADVANCE OF STIP PROJECTS.				PE 270 DIV													
							PE 270 RE													
							PE 360 SW													

STATEWIDE	VARIOUS	R-4073	ASPHALT MATERIALS TESTING PERFORMED FOR CONSTRUCTION PLAN FOR GROUNDWATER CLEANUP AT 54 SITES.		17399	17399	PE 48 DIV													
							PE 48 RE													
							PE 64 SW													

STATEWIDE	VARIOUS	R-4067	POSITIVE GUIDANCE PROGRAM (PAVEMENT MARKINGS AND MARKERS, LED SIGNAL HEAD REPLACEMENT).		89398	89398	PE 270 DIV													
							PE 270 RE													
							PE 360 SW													

STATEWIDE	VARIOUS	R-4069	TRAFFIC OPERATIONS (INCIDENT MANAGEMENT, 311, SMARTLINK, TEC, TMC).		159759	159759	PE 48 DIV													
							PE 48 RE													
							PE 64 SW													

STATEWIDE	VARIOUS	R-4436	IMPRES PERMIT, RETROFIT FOURTEEN SITES PER YEAR TO PROTECT WATER QUALITY.		28149	28149	PE 270 DIV													
							PE 270 RE													
							PE 360 SW													

STATEWIDE	VARIOUS	R-4701	TRAFFIC SYSTEM OPERATIONS PROGRAM (SIGNAL MAINTENANCE).		26523	26523	PE 48 DIV													
							PE 48 RE													
							PE 64 SW													

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 HF - State Dollars (Non STI) REG - Regional Category
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COST AND SCHEDULES ARE PRELIMINARY AND SUBJECT TO SIGNIFICANT CHANGE AS MORE INFORMATION BECOMES AVAILABLE

STATEWIDE PROJECTS

TYPE OF WORK / ESTIMATED COST IN THOUSANDS / PROJECT BREAKS

COUNTY	ROUTE/CITY	ID NUMBER	LOCATION/DESCRIPTION	LENGTH	TOTAL PRIOR PROJECT COST (THOU)	FUND	STATE TRANSPORTATION PROGRAM				DEVELOPMENTAL PROGRAM				UNFUNDED FUTURE YEARS
							FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	
STATEWIDE	VARIOUS	M-0418 DIV	STORMWATER RUNOFF, RESEARCH, DESIGN, CONSTRUCT, MAINTAIN AND MONITOR STORM WATER DRAINAGE FROM 50 BRIDGES OVER WATERWAYS. (PB 2346, SECTION 25.1b)		5860										
STATEWIDE	VARIOUS	M-0379 DIV	SCOUR EVALUATION PROGRAM OF EXISTING BRIDGES.		3100										
STATEWIDE	VARIOUS	W-5517	SAFETY MANAGEMENT PROGRAM, PROJECT IDENTIFICATION, ANALYSIS AND PRELIMINARY ENGINEERING.		71500	HSIP	PE	1650	DIV	PE	1650	DIV	PE	1650	DIV
STATEWIDE	VARIOUS	W-9999	HIGHWAY SAFETY IMPROVEMENT PROGRAM BALANCE.		186200	HSIP	PE	2200	SW	PE	2200	SW	PE	2200	SW
STATEWIDE	VARIOUS	SW				HSIP	PE	7110	DIV	PE	7110	DIV	PE	7110	DIV
STATEWIDE	VARIOUS	SW				HSIP	PE	9480	SW	PE	9480	SW	PE	9480	SW
STATEWIDE	VARIOUS	W-5300	SIGNAL RETIMING TO IMPROVE SAFETY.		15000	HSIP	PE	300	DIV	PE	300	DIV	PE	300	DIV
STATEWIDE	VARIOUS	W-5601	RUMBLE STRIPS, GUARDRAIL, SAFETY AND LIGHTING IMPROVEMENTS AT SELECTED LOCATIONS.		108396	HSIP	PE	420	DIV	PE	420	DIV	PE	420	DIV
STATEWIDE	VARIOUS	W-5508	HIGHWAY SYSTEM DATA COLLECTION, TRAFFIC ENGINEERING BRANCH TO PARTICIPATE IN A THREE YEAR DATA COLLECTION PROGRAM.		1500	HSIP	PE	2520	DIV	PE	2520	DIV	PE	2520	DIV
STATEWIDE	VARIOUS	C-3600 EX	DEPARTMENT OF MOTOR VEHICLES (DMV), VEHICLE EMISSION COMPLIANCE SYSTEM, UPGRADE NORTH CAROLINA'S MOTOR VEHICLE EMISSIONS INSPECTION AND MAINTENANCE (IM) PROGRAM.		6702	HSIP	PE	560	SW	PE	560	SW	PE	560	SW
STATEWIDE	VARIOUS	C-5600 EX	STATEWIDE CMAD PROJECTS TO IMPROVE AIR QUALITY WITHIN INDUSTRIAL AND MAINTENANCE AREAS.		33570	CMAD	PE	1675	SW	PE	1675	SW	PE	1675	SW

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STATEWIDE PROJECTS

NON-HIGHWAY PROGRAM

TYPE OF WORK / ESTIMATED COST IN THOUSANDS / PROJECT BREAKS

COUNTY	ROUTE/CITY	ID NUMBER	LOCATION/DESCRIPTION	LENGTH	TOTAL PRIOR PROJ COST (THOU)	FUND COST	STATEWIDE PROJECTS										UNFUNDED FUTURE YEARS								
							FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	DEVELOPMENTAL PROGRAM					FY 2025							
							S	C	1200	C	1200	C	1200	C	1200	C	1200	C	1200	C	1200	C	1200		
STATEWIDE	VARIOUS	AA-0001	NCDOT - DOA AIRPORT SAFETY, AIRPORT WILDLIFE SAFETY PRESERVATION (MAINTENANCE), AUTOMATED WEATHER SAFETY AND EDUCATION STATEWIDE PROGRAMS.		4585																				
STATEWIDE	VARIOUS	AA-0002	NCDOT - DOA STATEWIDE COMMERCIAL/GENERAL AVIATION SAFETY, OPERATIONS AND MAINTENANCE PROJECTS AT SELECTED AIRPORTS		14615																				
STATEWIDE	VARIOUS	E-4018	NATIONAL RECREATIONAL TRAILS.		13845	646	TAP	C	1200																
							IN PROGRESS																		
STATEWIDE	VARIOUS	ER-3314	STATEWIDE PEDESTRIAN FACILITIES PROGRAM.		4555	4402	STPEB	C	150																
STATEWIDE	VARIOUS	ER-5542	STATEWIDE BICYCLE-PEDESTRIAN PROGRAM.		7700		STPEB	PE	700																
STATEWIDE	VARIOUS	ER-2711	SIDEWALK PROGRAM IN ALL FOURTEEN HIGHWAY DIVISIONS.		19863	18187	STPEB	C	1100																
							IN PROGRESS - \$182,000 IN STPDA FUNDS ALLOCATED TO ER-2971E																		
STATEWIDE	VARIOUS	TP-4902	STATEWIDE SUPPORT TO UPDATE LOCAL COMMUNITY TRANSPORTATION SERVICE PLANS - 5311		3748	1677	FNU	PL	1866																
STATEWIDE	GREYHOUND LINES	TI-6107	INTERCITY BUS SERVICE FROM RALEIGH TO JACKSONVILLE ALONG US 70 AND US 17 WITH STOPS AT RALEIGH, SMITHFIELD, GOLDSBORO, KINSTON, AND NEW BERN		1910	288	FNU	O	1622																
STATEWIDE	GREYHOUND LINES	TI-6106	INTERCITY BUS SERVICE FROM RALEIGH TO WILMINGTON ALONG US 70 AND US 117 WITH STOPS AT RALEIGH, SMITHFIELD, GOLDSBORO, WALLACE, AND WILMINGTON		1592	300	FNU	O	1290																
STATEWIDE	GREYHOUND LINES	TI-6105	INTERCITY BUS SERVICE FROM RALEIGH TO NORFOLK ALONG US 64 AND US 268 WITH STOPS AT RALEIGH, ROCKY MOUNT, AHOESKE, AND SUFFOLK		1402	118	FNF	O	447																
STATEWIDE	GREYHOUND LINES	TI-6108	INTERCITY BUS SERVICE FROM RALEIGH TO JACKSONVILLE VIA WILMINGTON ALONG US 17 AND US 101 WITH STOPS AT RALEIGH, JACKSONVILLE TO HAVILLE BEACH VIA WILMINGTON ALONG US 17		4081	774	FNU	O	1469																
STATEWIDE	NC DOT FERRY DIVISION	TA-6353	CAPITAL		789		FNF	CP	631																
STATEWIDE	REGIONAL COORDINATED AREA TRANSPORTATION	TP-4901	PLANNING ASSISTANCE - RESEARCH SUPPORT ACTIVITIES		7739	2669	ESPR	CP	1440																
STATEWIDE	REGIONAL COORDINATED AREA TRANSPORTATION	TT-9702A	TECHNOLOGY - ADMINISTRATION (ITRE)		50		UTCH																		
STATEWIDE	STATEWIDE	TA-6520	SECTION 5317 NEW FREEDOM CAPITAL PROJECTS FOR TRANSPORTATION SYSTEMS AND NON-PROFIT AGENCIES ACROSS THE STATE		443	448	FNF																		

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WILMINGTON MPO
TRANSPORTATION PLANNING
DECEMBER 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:

- The project team continues to coordinate and correspond with project stakeholders.
- Functional Design Plans for the 12 detailed study alternatives (DSAs) are under development. Draft designs for the four new location alternatives (Alternatives B, C, M Avoidance, and N Avoidance) are currently being reviewed by NCDOT. The remaining alternative designs will be submitted to NCDOT for review in November/December.
- The project team continues to work on the traffic capacity analyses and anticipate a draft Traffic Capacity Analysis Report will be submitted to NCDOT for review in January.
- Hydraulic analysis of the DSAs is ongoing.
- The Historic Architecture Survey Report was submitted to NCDOT in November.
- The next workgroup meeting has been scheduled for Monday, December 8th.

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. Data collection procedures have been developed. A schedule for collection logistics has been drafted and data collection will continuously be monitored and updated as needed.

Next Steps:

- Continue 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. Project data was gathered and processed in March 2014. Fiscal analysis data collection was completed September 2014. Initial draft project recommendations were completed September 2014.

Next Steps:

- WMPO Travel Demand Model continues development through December 2014
- TCC/TAC review & revision of draft prioritized project lists will occur through February 2014
- Draft Fiscal Analysis will be complete in February 2014
- Public outreach on draft plan will occur in March/April 2014

17TH STREET STREETScape

Project Descriptions/Scope: The 17th Street streetscape project will include upgrades to 17th Street between Wrightsville Avenue and Princess Place Drive. 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. The project may also include aesthetic improvements that will enhance the entryway into Carolina Heights and provide a pocket park. The City has completed the design plans and received an encroachment agreement from NCDOT. A public meeting was held on September 9th. The Wilmington City Council has expressed a desire for staff to consider the inclusion of burying the utilities and the installation of mast arm signals at Market/17th Streets. Staff has provided the City Council with the cost estimates to bury the utilities and install the mast arm signal poles.

Next Steps:

- Discuss with the Wilmington City Council on December 2nd
- Await further direction from the City Council
- Bid, Award and Construct the streetscape enhancements.

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: 5 reviews
- New Hanover County Informal Plan Reviews: 0 reviews
- New Hanover Concept Reviews: 0 reviews
- Brunswick County Informal Plan Reviews 0 reviews
- TIA Reviews: 12total (New Hanover County 3, City of Wilmington 4, Leland 1, and Pender County 4) new 5 and ongoing 7
- Pender County Development Plan Reviews: 11 reviews
- Pender County Informal Plan Reviews: 3 reviews
- City of Wilmington Formal Reviews: 16 (4 new, 12 on-going)
- City of Wilmington Informal Reviews: 5 (2 new, 3 on-going)
- City of Wilmington Concept Reviews: 10 new concept reviews- 0 on-going concept
- COW Project Releases: 4 Full releases

STP-DA/TAP-DA FY 2013 and 2014 Project Status

STP-DA

U-5534A - TOWN OF NAVASSA – MAIN STREET BICYCLE LANES –This project will include planning, design, and construction of an additional 4 feet on either side of Main Street for bike lanes starting at the existing Navassa bike path east of Brooklyn Street to Old Mill Road. The Letter of Interest (LOI) has been advertised.

Next Steps:

- Design kickoff meeting held in November 6, 2014
- Field survey currently underway
- Letting date anticipated in February 2015

U-5534B - CITY OF WILMINGTON- HEIDI TRASK DRAWBRIDGE – This project consists of construction of a public walkway/pier underneath the Heidi Trask Drawbridge to provide for a safe crossing for cyclists and pedestrians across US 74 (Wrightsville Avenue) on the mainland side of the drawbridge in Wilmington.

Next Steps:

- Kimley-Horn progressing with design.
- 100% Design documents are anticipated to be complete November 30, 2014.
- Letting date anticipated January 2015.

U-5534C - WRIGHTSVILLE AVENUE/GREENVILLE AVENUE TO HINTON AVENUE – The project is for construction of intersection re-alignment improvements at the intersection of Wrightsville Avenue/Greenville Avenue and bike lanes and sidewalks along Greenville Avenue from Wrightsville Avenue to Hinton Avenue.

Next Steps:

- McKim and Creed revising design based upon field observations
- Right-of-way acquisition to begin upon receipt of COW surveys.
- Letting date anticipated March 2015

U-5534D - TOWN OF LELAND - OLD FAYETTEVILLE ROAD MUP – This project is for design and construction of a ten foot (10') wide multi use path, separate but adjacent to Old Fayetteville Road, beginning at or around the corner of the Leland Town Hall Campus and ending at the driveway of the North Brunswick High School.

Next Steps:

- NCDOT Meeting held November 5, 2014 to discuss cross-section
- URS/Town of Leland to check on ROW needed for project.
- Letting date is anticipated January 2014

U-5534E - TOWN OF CAROLINA BEACH - ISLAND GREENWAY AND HARPER AVENUE – This project is for the design and construction of an off-road multi-use path that begins at Mike Chappell Park and winds along the existing cleared fire path and terminates at Greenville Avenue and the Harper Avenue bike lanes will consist of a bicycle boulevard on existing pavement on each side of Harper Avenue from Dow Road to Lake Park Boulevard. The Town desires to combine the project with the awarded 2014 STP-DA project.

Next Steps:

- Survey underway for project design documents
- U-5534 E and U-5534 L – combined-Right of Way and Planning date of February 2015.

U-5534M - CAUSEWAY DRIVE, WAYNICK BLVD./N. LUMINA AVE./STONE ST.–The construction of dual left turns from Waynick Blvd. to Causeway Dr., channelizing the one-way entrance to Lumina Ave. and improving lane markings, adjusting stop bar, straightening crosswalks at Waynick Blvd and installing bulb-outs at Lumina Ave./Stone St., and adding ADA compliant curb ramps at all crosswalks within the project area.

Next Steps:

- Town of Wrightsville Beach investigating options
- Right of Way Plans anticipated to be complete: April 21, 2015
- Anticipated Let Date: August 20, 2015

U-5534H – HINTON AVE MULTI-USE PATH – This project consists of the construction of a 10' wide multi-use path along Hinton Avenue from Park Avenue to Greenville Avenue.

Next Steps:

- Conceptual sketch anticipated December 2014

- Right of Way Plans anticipated to be complete: January 22, 2015
- Anticipated Let Date: January 26, 2016

U-5534G –HOOKER ROAD MULTI-USE PATH - The project consist of the construction of a 10' wide multi-use path along Hooker Road from Wrightsville Avenue to Mallard Drive/Rose Ave intersection

Next Steps:

- Conceptual sketch anticipated December 14
- Right of Way Plans anticipated to be complete: May 18, 2015
- Anticipated Let Date: September 17, 2016

U-5534K –LELAND MIDDLE SCHOOL SIDEWALK - The construction of 5 foot wide concrete sidewalk adjacent to Old Fayetteville Road from Ricefield Branch Rd to the Hwy 74/76 overpass after Glendale Drive with connections to Leland Middle School and the surrounding neighborhoods.

Next Steps:

- Right of Way Plans anticipated to be complete: September 25, 2015
- Anticipated Let Date: January 26, 2016

U-5534J –OLD FAYETTEVILLE LOOP ROAD PEDESTRIAN LOOP - The construction of 5 foot wide sidewalks in three locations: along Village Road from Town Hall Drive going southeast to the existing sidewalk in front of the apartment complex, along Town Hall Drive from Village Road NE to the sidewalk currently under construction by the new Town Hall, and along Old Fayetteville Road from the existing sidewalk in front of the apartment complex to Village Road NE

Next Steps:

- Right of Way Plans anticipated to be complete: September 25, 2015
- Let Date: January 26, 2016

U-5534I –VILLAGE ROAD MULTI-USE PATH EXTENSION - The construction of a 10 foot wide asphalt multi-use path routed across Perry Ave, behind the library, out to Village Road, down Village Road ending on the western edge of the First Baptist Church property before the Sturgeon Creek Bridge

Next Steps:

- Right of Way Plans anticipated to be complete: September 25, 2016
- Anticipated Let Date: January 26, 2016

SHIPYARD BOULEVARD SIDEWALK- Project Description: The construction of a sidewalk and bus pull-out along Shipyard Boulevard between Vance Street and Rutledge Drive. This will be a partnership between the City of Wilmington, Cape Fear Public Transportation Authority and Wilmington MPO.

Next Steps:

- Present Agreement to the Wilmington City Council on November 18th
- Surveying is anticipated to begin in November 2014

TAP-DA

CITY OF WILMINGTON – MILITARY CUTOFF ROAD MULTI-USE PATH – This project is for the design and construction of a 10-foot wide, asphalt multi-use path on Military Cutoff Road from Gordon Road to Eastwood Road.

Next Steps:

- Easement/ROW inquiries with property owners under way. Anticipated preliminary plans showing design alternatives late November 2014.

- Letting for construction is anticipated July 15

U-5527B CITY OF WILMINGTON – 5th AVE INTERSECTION UPGRADES – This project is for the construction of high visibility crosswalks, curb ramps, and pedestrian activated signals on 5th Ave at the Dawson Street and Wooster Street intersections.

Next Steps:

- Right of Way Plans anticipated to be complete: May 23, 2016
- Anticipated Let Date: January 26, 2016

U-5527C NEW HANOVER COUNTY – MIDDLE SOUND GREENWAY – EXTENSION TO MIDDLE SOUND VILLAGE– This project is for the construction of a multi-use path along Middle Sound Loop Road from Oyster Lane to the Middle Sound Village driveway

Next Steps:

- Right of Way Plans anticipated to be complete: May 23, 2015
- Anticipated Let Date: January 26, 2016

TRANSPORTATION DEMAND MANAGEMENT PROGRAM

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:

- Present draft TDM plan to TCC and TAC for adoption
- Continue drafting the 25-year TDM plan
- Begin developing the marketing plan for the 10-year TDM plan
- Finalize 3 Park & Ride Lots in Brunswick County to open January 5, 2015
- Prepare Share the Ride NC ridematching website for public use on January 5, 2015



Cape Fear Public Transportation Authority

Project Update

November 2014

- 1. Operations center** - (no change) construction of 37,621 square foot maintenance and operations facility located at 1480 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. Facility being prepared for final inspections. Estimated completion, fall/winter 2014.
Project awarded to Clancy & Theys Construction of Wilmington
- 2. Fleet replacement & conversion to CNG** - Identifying state and federal funding opportunities to replace 19 thirty-five foot buses and fifteen light transit vehicles. FTA funding for 80% of two CNG buses has been identified under FTA §5316 and §5317 program and local funding is included in City of Wilmington FY 2015 budget. Delivery estimated in June, 2015. One light transit CNG vehicle in programming stage. Delivery expected in early 2015. Fleet replacement programmed at a cost of \$10,000,000.
- 5. Interlocal Agreement - (project complete)** The Authority is working with funding partners to develop an Interlocal agreement for public transportation services in the region. Wilmington City Attorney and New Hanover County Attorney have been tasked with drafting the Interlocal. Amended Interlocal agreement approved by City of Wilmington and New Hanover County on November 04 and November 05 respectively. The Authority has requested a follow up meeting to discuss additional issues.
- 6. FTA §5310 Program** - (no change) Designation from NC Governor as designated recipient for FTA §5310 Elderly and Disabled Transportation Program designated recipient completed in July 2014. Authority working with WMPO to develop FTA required program management plan (PMP) to outline goals of 5310 program. PMP expected to be complete in early 2015. A local coordinated plan to program §5310 funding will follow approval of the PMP.
- 7. Brunswick Park & Ride** - (no change) park and ride route is being developed from Brunswick County to Wilmington to ease congestion during causeway construction. The project is being undertaken by Wave Transit, WMPO and the Brunswick Consortium. A timeline and other key milestones necessary to begin the initiative are in the planning stages.
- 8. Shelter & Signage Project** - Wave Transit is currently undertaking an amenities project to replace bus stop signage and install up to fifty new and replacement bus shelters. An additional fifteen bus benches will also be added to the amenities offered. An RFP for bus shelters has been released with proposals due in early December 2014. The project is expected to take twelve to twenty-four months to acquire permits, and procure and install shelters and signage.



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

PAT MCCRORY
GOVERNOR

ANTHONY J. TATA
SECRETARY

December 3, 2014

TIP Projects:

R-3324 – Long Beach Road Extension construct a 2-lane, 2-way roadway from NC 133 (near Jump & Run Creek) to NC 87. Most of this roadway will be on new location.

Estimated Contract Completion Date May 13, 2016

R-2633 BB – (Wilmington Bypass) construct a 4-lane divided highway from SR 1430 (Cedar Hill Road) to US 421 (where I-140 currently ends in New Hanover County...this includes the large bridge over the Cape Fear River).

Estimated Contract Completion Date April 30, 2018

Open to traffic on November 1, 2017

R-2633 BA – (Wilmington Bypass) construct a 4-lane divided highway from US 74/76 (near Malmo) to SR 1430 (Cedar Hill Road).

Estimated Contract Completion Date April 30, 2018

Open to traffic on November 1, 2017

R-3432 – SR 1163 (Georgetown Road) extend from SR 1184 (Ocean Isle Beach Road) to NC 179.

Estimated Contract Completion Date May 13, 2016

R-3601 (US 17/74/76): Widening across the “causeway”, between Leland/Belville and the Cape Fear River. Replacing the bridges over the Brunswick River and one of the bridges over the Alligator Creek.

Estimated Contract Completion Date November 15, 2016

B-4591: replace bridge #4 over Island Creek on SR 1002 (Holly Shelter Road/Island Creek Road)

Road is Closed

S, T. Wooten will have 154 days to complete project, once they have started the work

Market Street Wal-Mart Development: construct a median on Market Street from Marsh Oaks Drive to the existing median at Porter's Neck. Install bulb-outs, on Market Street, at Marsh Oaks Drive & Porter's Neck Road intersections. A signal will be installed on Market Street at the main entrance to the new Wal-Mart.

Estimated Completion Date May 2015

U-3338 B: Widening of Kerr Ave. from Randall Parkway to Martin Luther King, Jr. Parkway.

Let Date April 2015

B-5103: replace bridge #35 over the abandoned railroad on SR 1627 (3rd Street), in Wilmington.

Let Date February 2015

U-4751: Military Cutoff Road Extension: extending Military Cutoff Road from Market Street to the Wilmington Bypass, with an interchange at the Bypass.

Right of Way April 2015

Let Date October 2015

R-5021 (NC 211): widening to a 4-lane divided highway from NC 87 (near Southport) to SR 1500 (Midway Road).

Post Year

B-4929: Bridge @ Surf City NC 50/210 - replace bridge #16 over the inter-coastal waterway with a fixed span high rise structure.

Right of Way is scheduled for February 20, 2015

Post Year

U-4434: Independence Blvd. Extension from Randall Parkway to MLK Parkway.

Post Year

R-3434 – SR 1500 (Midway Road) and SR 1401 (Galloway Road) widening Midway Road from NC 211 to US 17 Bypass.

Post Year

R-4063: widen SR 1472 (Village Road) from SR 1435 (South Navassa Road) to SR 1438 (Lanvale Road).
Post Year

R-3300 Hampstead Bypass: extending from Wilmington Bypass to US 17 north of Hampstead.
Post Year

U-5300: NC 132 (College Road) from SR 1272 (New Center Drive) to SR 2048 (Gordon Road) widen to multi-lanes.
Post Year

Division Projects & Maintenance Projects:

Thomas Rhodes Bridge: US 421 (17BP.3.H.3) - this is the high rise fixed span bridge over the Cape Fear River, contractor will rehab the bridge deck & structure.
US 421 **northbound** contractor will not be able to close a lane of traffic from 6:00 AM to 6:00 PM.
US 421 **southbound** contractor will not be able to close a lane of traffic from 7:00 AM to 7:00 PM.
Estimated Contract Completion Date October 2014

G.V. Barbee Bridge: bridge over ICWW, contractor to rehab bridge deck and structure, at Oak Island.
Estimated Contract Completion Date October 2014

W-5306 Castle Hayne Roundabout: construct a roundabout at the intersection of US 117, NC 132 & NC 133.
Availability Date October 6, 2014
Estimated Contract Completion Date January 18, 2016

Greenfield Lake Culvert: replace the large culvert under 3rd Street and US 421 Truck/Front Street...Utility relocation work will begin late 2013 and finish prior to let date
Let Date Tentative Winter 2015

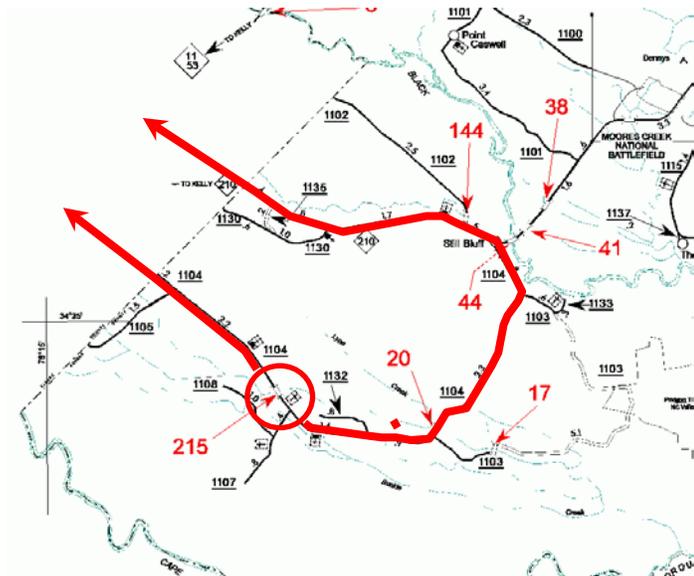
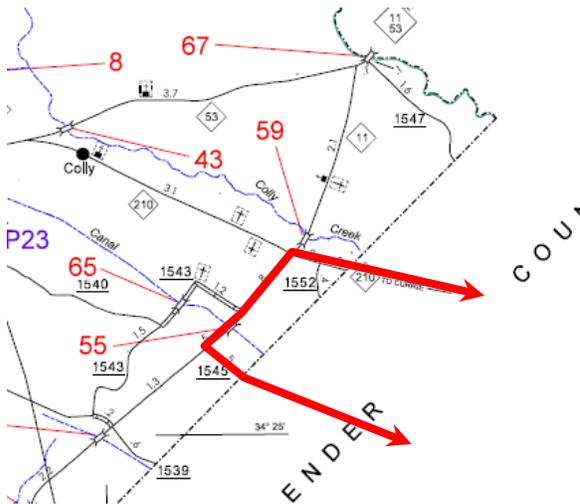
Low Impact Bridge Program:

**Design/Build contract to replace 9 bridges in Brunswick & Pender Counties:
Estimated Contract Completion Date November 1, 2015 (for all 9 bridge replacements)**

17BP.3.R.26: replace bridge #215 over Buckle Creek on SR 1104 (Canetuck Road)

Pender Bridge 215

Detour Route



SR 1104 (Canetuck Road), Crossing into Bladen County SR 1545 (Still Bluff Road) to NC 11 () to NC 210() Crossing into Pender County back to SR 1104 (Canetuck Road)

Resurfacing Contracts:

Contract C-203192 S.T. Wooten

New Hanover County 3CR.10651.138 & 3CR.201651.138

- US 117/NC 132 (North College Road)** Mill & resurface from SR 2048 (Gordon Road) to 0.18 mile south of SR 1322 (Murrayville Road)
- US 74 (Eastwood Road)** Mill & resurface from 0.17 mile west of SR 1409 (Military Cutoff Road) to 0.27 mile east of ICWW Bridge (Heidi Trask Bridge)
- US 76 (Oleander Drive)** Mill & resurface from 0.05 mile west of Hawthorne (non-system) to 0.15 mile south of US 74 (Eastwood Road)
- US 117 (Shipyard Blvd) NBL & SBL lanes** mill, widen, & resurface from 0.06 mile north of US 421 to NC 132
- US 117/NC 132 (South College Road)** mill & resurface from US 117 (Shipyard Blvd) to 0.07 mile south of SR 2313 (Wilshire Blvd)
- SR 1175 (North Kerr Ave)** resurface from 0.03 mile north of Green Tree Road (non-system) to SR 1322 (Bavarian Road)
- SR 1302 (23rd Street)** resurface from end of C&G (near waste water treatment facility) to NC 133 (Castle Hayne Road)
- SR 1327 (Farley Road)** resurface from SR 1322 (N. Kerr Ave.) to SR 1175 (Bavarian Road)
- SR 1518 (Whipporwill Lane)** resurface from SR 1492 (Masonboro Loop Road) to end of system
- SR 1620 (Channel Haven Drive)** resurface from SR 1492 (Masonboro Loop Road) to SR 1621 (Channel Haven)
- SR 1621 (Channel Haven)** resurface from SR 1622 (Aqua Drive) to SR 1623 (Marsh Hen Drive)
- SR 1622 (Aqua Drive)** resurface from SR 1621 to end of system
- SR 1623 (Marsh Hen Drive)** resurface from end of system to end of system
- SR 1706 (Brighton Road)** resurface from SR 1643 (Horndale Drive) to end of system
- SR 1707 (Cornwell Court)** resurface from SR 1706 to end of system
- SR 2009 (Shelley Drive)** resurface from SR 2006 (Browning Road) to SR 2016 (Lord Thomas Road)
- SR 2217 (Golden Rod Drive)** resurface from SR 2269 (Bird's Nest Court) to SR 2218 (Silkwood Court)
- SR 2048 (Gordon Road)** resurface from SR 1175 (Kerr Avenue) to US 117/NC 132 (N. College Road).
- SR 2048 (Gordon Road)** widen & resurface from US 117/NC 132 (N. College Rd.) to SR 2698 (Netherlands Drive).

US 76 (Oleander Drive) in west bound direction, install right turn lane onto northbound US 117/NC 132 (College Road).

Contract C-203192 (Continued)

Brunswick County 3CR.10101.138 & 3CR.20101.138

NC 133 widen & resurface from SR 1518 (Daws Creek Road) to 0.28 mile south of SR 1554 (Old River Road).

Contractor has completed asphalt work and will be reconstructing shoulders

SR 1340 (Exum Road) mill patch from SR 1335 (Big Neck Road) to SR 1342 (Camp Branch Road)

SR 1119 (Stanley Road) widen & resurface from SR 1130 (Mt. Pisgah Road) to Cedar Grove Middle School.

SR 1132 (Civietown Road) widen & resurface from NC 130 to SR 1130 (Mt. Pisgah Road).

SR 1184 (Ocean Isle Beach Road) mill patch from US 17 to 0.27 mile from NC 179.

New Hanover & Pender County 46280.3.3

Interstate 40 mill & resurface all of the ramps & loops in New Hanover (excluding I-140 interchange) and Pender County.

Estimated Contract Completion Date Late Summer 2014

Resurfacing Contract: C-203480 3CR.10101.150, 3CR.20101.150, 3CR.10651.150, 3CR.20651.150 & 3CR.10711.150 Barnhill Contracting

Brunswick County primary routes:

US 17 Business – mill & resurface from US 17 (south end of US 17 Bus.) to US 17 (@ nose of concrete island)...Bolivia area

US 17 Bypass (Southbound lanes) – patch, mill & resurface from 0.17 miles north of SR 1401 (Galloway Road) to 0.09 miles south of SR 1401

Brunswick County secondary routes:

SR 1104 (Beach Drive) – patching, milling, resurface & leveling from beginning of curb & gutter section to end of SR 1104

SR 1828 (Kings Lynn Drive) – patching, mill & resurface from SR 1104 (West Beach Drive) to SR 1828

SR 1401 (Galloway Road) – resurface from US 17 to SR 1402 (Randolphville Road)

SR 1435 (North Navassa Road) – patching, mill & resurface from SR 1472 (Village Road Northeast) to SR 1432 (Old Mill Road Northeast)

SR 1430 (Cedar Hill Road) – patching, mill & resurface from SR 1435 (North Navassa Road) to 0.58 miles south of SR 1431 (Royster Road Northeast)

SR 1430 (Cedar Hill Road) – patching, mill & resurface from 0.54 miles north

of

SR 1431 (Royster Road Northeast) to SR 1426 (Mount Misery Road)

Mill & resurface the following primary routes in New Hanover County:

US 421 (Carolina Beach Road) – from 0.26 miles south of Independence Blvd. (non-system portion) to west of Lake Shore Drive (non-system)

US 117 Northbound Lanes (Shipyard Blvd) – from US 421 to 0.05 miles east of US 421 (Carolina Beach Road)

US 117 Southbound Lanes (Shipyard Blvd) – from 0.20 miles east of US 421 to US 421 (Carolina Beach Road)

US 421 Southbound Lanes (South 3rd Street) – from US 76 (Dawson Street) to Greenfield Street (non-system)

US 421 Northbound Lanes (South 3rd Street) – from Greenfield Street (non-system) to US 76 (Dawson Street)

US 17 Business (South 3rd Street) – from US 76 eastbound lanes to US 76 westbound lanes

Mill & resurface the following secondary routes in New Hanover County:

SR 1218 (16th Street) – from US 76 westbound lanes (Wooster Street) to US 76 eastbound lanes (Dawson Street)

SR 1371 (16th St.) - from Grace Street (non-system) to US 17 Business (Market Street)

SR 2816 (16th St.) - from US 17 Business (Market Street) to US 76 westbound lanes (Wooster Street)

SR 1301 (17th Street) - from US 17 Business (Market Street) to Grace Street (non-system)

SR 2817 (17th Street) - from US 76 eastbound lanes (Dawson Street) to US 17 Business (Market Street)

SR 1411 (Wrightsville Avenue) - from Dawson Street Extension (non-system) to SR 1209 (Independence Blvd.)

Resurface the following secondary routes in New Hanover County:

SR 2699 (Amsterdam Way) - from SR 2700 (Old Dairy Rd.) to SR 2048 (Gordon Rd.)

SR 2701 (Antilles Ct.) - from SR 2698 (Netherlands Dr.) to end maintenance

SR 2698 (Netherlands Dr.) - from SR 2048 (Gordon Rd.) to SR 2700 (Old Dairy Rd.)

SR 2700 (Old Dairy Rd.) - from US 17 Bus. (Market St.) to SR 2699 (Amsterdam Way)

SR 2220 (Windmill Way) - from SR 2219 (N. Green Meadows Dr.) to SR 2700 (Old Dairy Rd)

SR 2183 (Spring Rd) - from NC 133 (Castle Hayne Rd.) to SR 2184 (Fairfield Rd.)

SR 2184 (Fairfield Rd.) - from SR 2183 (Spring Rd) to SR 1318 (Blue Clay Rd)

Widen & resurface following routes in New Hanover County:

SR 1940 (Covil Farm Rd) - from SR 1409 (Military Cut-Off Rd) to SR 1916 (Red Cedar Rd)

SR 2717 (Torchwood Blvd.) - from US 17 Bus. (Market St.) to SR 2718 (Beacon Dr.)

Mill & resurface a section & just resurface another section of SR 1363 (Bayshore Dr.) from US 17 Bus. (Market St.) to SR 1393 (Biscayne Dr.)

Pender County primary routes:

US 117 - mill & resurface from 0.30 miles north of NC 210 to 0.026 miles north of

US 117 Business

NC 11/53 - mill & resurface from begin curb & gutter @ western city limits of Town of Atkinson to end curb & gutter @ the eastern city limits of Town of Atkinson.

NC 53 - Patch ONLY from I-40 to US 117 (Town of Burgaw).

Estimated Contract Completion Date May 2015

Resurfacing Contract: DC-00085 3CR.10651.161 Barnhill Contracting New Hanover County, Wrightsville Beach:

US 76 (Causeway Road) – mill & resurface from SR 1452 (North Lumina Avenue) to end of system.

No lane closures Saturday & Sunday

Contractor shall not close or narrow a lane:

From 4:00 PM to 9:00 AM Monday thru Friday within 500' of Causeway Road &

From 6:00 PM to 8:00 AM Monday thru Friday beyond 500' of Causeway Road

Estimated Contract Completion Date November 14, 2014

Resurfacing Contract: DC-00086 3CR.10711.161 Barnhill Contracting Pender County, Hampstead Area:

US 17 – mill & resurface from 0.22 miles south of SR 1565 (Country Club Road) to 0.11 miles north of Topsail Greens Drive.

Estimated Contract Completion Date December 12, 2014

BP-5500F: College Road bridges over Market Street

Federal Bridge Preservation Project...rehab the bridge decks

Availability Date October 6, 2014

Estimated Contract Completion Date November 21, 2014

If you have any questions, please contact Patrick Riddle at the Division 3 Office:
priddle@ncdot.gov