



## WILMINGTON URBAN AREA Metropolitan Planning Organization

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### 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

### WMPO Bicycle and Pedestrian Advisory Committee Meeting Agenda

**TO:** WMPO Bicycle and Pedestrian Advisory Committee Members  
**FROM:** Suraiya Rashid  
**DATE:** August 14, 2015  
**SUBJECT:** August 20, 2015 Meeting

A meeting of the WMPO Bicycle and Pedestrian Advisory Committee will be held on Thursday August 20, 2015 at 1 pm. The meeting will be held at 305 Chestnut Street in the 3<sup>rd</sup> Floor Conference Room.

The following is the agenda for the meeting:

- 1) Introductions
- 2) Old Business
  - Cape Fear Transportation 2040 Update
- 3) New Business
  - Prioritization 4.0 – Overview
  - Resolution submitting Bicycle and Pedestrian Projects for Consideration by NCDOT in Prioritization 4.0
  - NC Bike Safety Rules Committee
  - Bicycle Map Distribution
- 4) Announcements:
  - Cape Fear Cyclists
  - International Walk to School Day
  - WMPO Technical Coordinating Committee, September 16<sup>th</sup> at 10:00 am
  - WMPO Transportation Advisory Committee, September 30<sup>th</sup> at 3:00 pm
- 5) Upcoming Topics
  - Bicycle Friendly Community Designation
  - WMPO BikePed Committee Work plan
- 6) Next Meeting
  - September 17, 2015 at 1PM
- 7) Adjournment

Attachments:

- *Cape Fear Transportation 2040* Executive Summary
- WMPO Role in Transportation Project Delivery
- Prioritization 4.0 Schedule
- Draft Prioritization 4.0 Bicycle and Pedestrian Project List
- Resolution submitting Bicycle and Pedestrian Projects for Consideration by NCDOT in Prioritization 4.0
- NC House Bill 232
- WMPO Bicycle/Pedestrian Projects Update (August 20, 2015)

# Cape Fear TRANSPORTATION 2040



A Metropolitan Transportation Plan

DRAFT



# ACKNOWLEDGEMENTS

Cape Fear Transportation 2040 was created as the metropolitan transportation plan for the Wilmington Urban Area Metropolitan Planning Organization (WMPO) planning area. In addition to WMPO Staff members, many people were directly involved in the creation of this document. The policymaking board of the WMPO, the Transportation Advisory Committee, appointed a Citizens Advisory Committee to guide the development of this plan.

## Transportation Advisory Committee

- Laura Padgett, City of Wilmington, Chair
- Pat Batleman, Town of Leland, Vice-Chair
- Jonathan Barfield, New Hanover County
- Joe Breault, Town of Belville
- Gary Doetsch, Town of Carolina Beach
- Dean Lambeth, Town of Kure Beach
- John Lennon, North Carolina Board of Transportation
- Hank Miller, Town of Wrightsville Beach
- David Piepmeyer, Pender County
- Earl Sheridan, City of Wilmington
- Skip Watkins, New Hanover County
- Frank Williams, Brunswick County
- Eulis Willis, Town of Navassa

## Citizens Advisory Committee

The Citizens Advisory Committee for Cape Fear Transportation 2040 was composed of a dedicated group of appointed citizens serving in a volunteer capacity. Because of their work and dedication to public outreach, this plan represents the input of thousands of citizens from the greater Wilmington region.

- Howard Loving, North Carolina Board of Transportation, Chair
- Howard Capps, Cape Fear Public Transportation Authority
- Eric Coffey, New Hanover County
- Scott Cromartie, City of Wilmington
- John Ellen, Town of Kure Beach
- Al Freimark, Pender County
- David Hollis, Brunswick County
- John Melia, City of Wilmington
- Ernest Mooring, Town of Navassa
- Terry Obrock, Town of Navassa
- Jim Smith, Town of Wrightsville Beach
- Stuart Smith, Town of Belville
- Steve Stanton, Town of Carolina Beach
- Earnest Mooring, Town of Navassa

## Consultants

- Klmley Horn and Associates, Inc.

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## EXECUTIVE SUMMARY

*Cape Fear Transportation 2040* is the metropolitan transportation plan for the Wilmington Urban Area in southeastern North Carolina. It has been prepared by the Wilmington Urban Area Metropolitan Planning Organization (WMPO), which is the local organization responsible for regional transportation planning. Federal law requires the preparation of this plan, and also specifies issues which the plan must consider and address. This executive summary overviews the contents of the plan.



Cape Fear Memorial Bridge

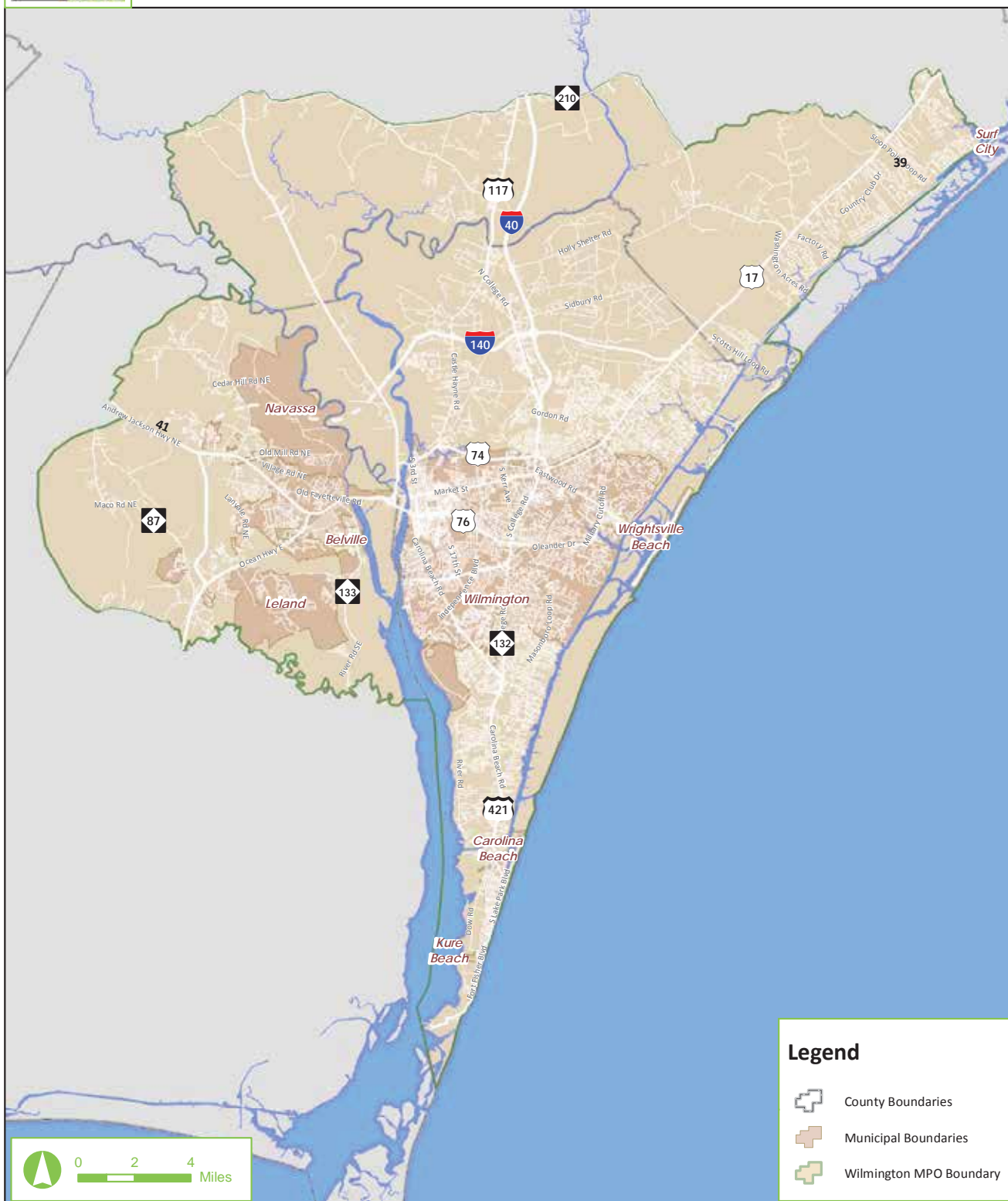
### Role of the WMPO

Federally-designated metropolitan planning organizations (MPOs) are local transportation planning agencies that are responsible for conducting regional transportation planning in a continuing, cooperative, and comprehensive manner. The WMPO is the MPO designated by the Federal Highway Administration (FHWA) for the Greater Wilmington Area to include a planning area boundary encompassing all of New Hanover County and portions of Brunswick and Pender Counties. The North Carolina Department of Transportation (NCDOT) and Cape Fear Public Transportation Authority are also part of the MPO.





## Wilmington MPO Planning Area Boundary



## Role of the MTP

The metropolitan transportation plan (MTP) is a document required by FHWA to guide regional transportation priorities and actions, and ultimately used to develop the Metropolitan Transportation Improvement Programs (MTIPs)/Statewide Transportation Improvement Programs (STIPs) which program transportation funds within MPO boundaries. MTPs have a minimum 20-year planning horizon and are intended to present a fiscally-constrained evaluation of projects and strategies that promote mobility and access for people and goods within an MPO's boundaries. MTPs must include a strong public involvement component to demonstrate that they serve the needs of the region. *Cape Fear Transportation 2040* meets or exceeds all federal requirements.

## MAP-21 and the Development of the MTP

In July 2012, passage of the Moving Ahead for Progress in the 21st Century (MAP-21) federal transportation legislation established new and revised requirements for statewide and metropolitan transportation plans and programs, as well as for the underlying transportation planning process. MAP-21 emphasizes key components to be incorporated into the metropolitan transportation plan. These include the establishment of a transparent and accountable framework for identifying capital projects and the incorporation of the eight planning factors outlined in the legislation. *Cape Fear Transportation 2040* demonstrates the application of an established methodology for the identification and prioritization of its identified projects; it incorporates a fiscally-constrained evaluation of all surface transportation modes; and it incorporates an evaluation of the eight planning factors in its analysis.

CAPE FEAR TRANSPORTATION 2040 GOALS							
		SAFE	EFFICIENT	APPROPRIATE	RESPONSIBLE	INTEGRATED	MULTI-MODAL
MAP-21 PLANNING FACTORS	Support Economic Vitality		●			●	●
	Increase Safety	●		●			●
	Increase Security	●		●			●
	Increase Accessibility						●
	Environmental Protection and Quality of Life	●	●	●	●	●	●
	Enhance System Integration and Connectivity					●	●
	Promote System Management and Operations	●	●	●		●	
	System Preservation		●	●	●		●

## Project Prioritization

Projects included in *Cape Fear Transportation 2040* have been prioritized for a limited amount of projected funding from fiscally-constrained funding sources. The WMPO used

both quantitative (objective) and qualitative (subjective) information to determine which projects represented the greatest need to match available funding sources within its boundaries. Members of the general public, elected officials, subject matter experts and planning technicians within the Greater Wilmington Area submitted project proposals for 6 modes of transportation – Aviation, Bicycle and Pedestrian, Ferry and Water Transportation, Freight and Rail, Mass Transportation, and Roadways.

All projects were evaluated using goals and objects identified for each mode of transportation. A ranked list of project needs was then used as the basis for the fiscal constraint analysis determining which projects could receive a portion of the anticipated funding in this region between 2015 and 2040.

The ranked list was then evaluated and revised by three WMPO committees: the Citizens Advisory Committee (CAC), the Technical Coordinating Committee (TCC), and the Transportation Advisory Committee (TAC). Potential alternative funding sources were also identified by these boards and used to supplement the projected amount of funding available for future projects in the plan.

## Aviation

Aviation transportation in the Wilmington area is largely dependent on the Wilmington International Airport (ILM) as the region's largest public aviation transportation facility; connecting residents, businesses, and tourists to the area. As such, the majority of planned aviation projects are coordinated and funded through financial structures managed by ILM. Working in close concert, the WMPO coordinates NCDOT's funding matches through the regional project prioritizations process based on the direction of the Transportation Advisory Committee. Larger scale, regional planning coordinated by the WMPO is also necessary to ensure multi-modal integration is addressed. Ensuring connections from ILM with freight/rail, mass transportation, and the roadway network is vital to both the commercial cargo operations and passenger enplanements at ILM.

## Fiscally-Constrained Aviation Project List

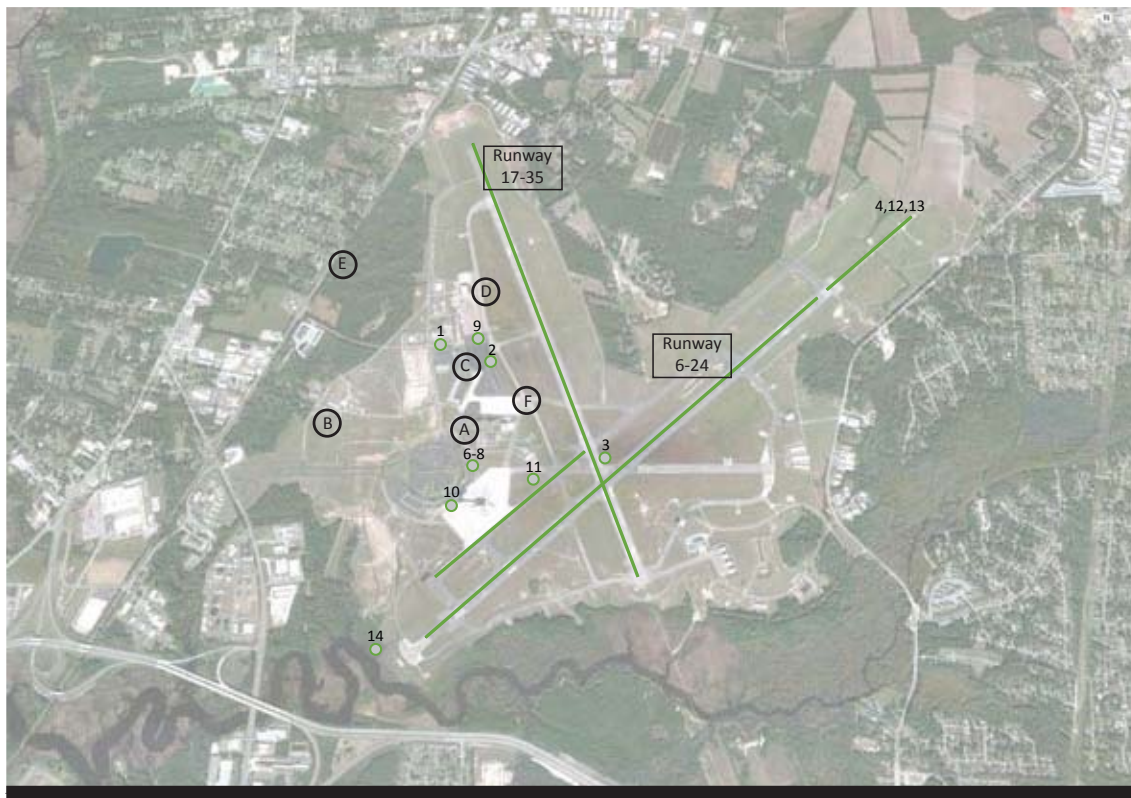
FISCALLY-CONSTRAINED AVIATION PROJECT LIST		
ID	PROJECT	CONSTRUCTION YEAR COST ESTIMATE
A-1	GA Apron Development, Phase II	\$1,497,146
A-2	Pipe Ditch in FBO #2 Area Direct to EDDB and Rehab GA Apron Ramp North (Survey, Testing, Design, Bidding and Permitting)	\$393,694
A-3	Airfield Lighting Replacement (LED)/Vault Upgrade	\$2,661,592
A-4	Extend Runway 24 - Phase I of IV	\$6,523,866
A-5	Airport Layout Plan	\$942,647
A-6	Terminal Improvements Phase I (Design)	\$942,647
A-7	Terminal Improvements Phase I (Construction)	\$11,089,968
A-8	Terminal Improvements Phase II (Design and Construction)	\$12,198,965
A-9	Rehab GA Apron Ramp North; Pipe Ditch in FBO #2 Area; Direct to EDDB (Construction)	\$5,544,984

FISCALLY-CONSTRAINED AVIATION PROJECT LIST		
ID	PROJECT	CONSTRUCTION YEAR COST ESTIMATE
A-10	Outbound Bag Room Retrofit	\$332,699
A-11	Taxiway A and H Widening and Paved Shoulders	\$6,543,081
A-12	BCA/EA for Runway 24 Extension	\$332,699
A-13	Extend Runway 24 - Phase II of IV	\$6,523,866
A-14	Design and Construction of Boat Launch for Water Access	\$55,450
A-15	Map on Airport Utilities	\$5,545



### Aviation Projects with Anticipated Funding

NOTE: Projects displayed for general location purposes only and not intended to show exact alignment. Projects still subject to federal environmental review (NEPA) process before construction.



#### Legend

Aviation Project Identification Number (A-#)

- Aviation Project
- Aviation Runway Project

Existing Aviation Facilities

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



## Bicycle and Pedestrian

The WMPO recognizes the importance of biking and walking a part of the regional transportation system, and emphasizes its interest in creating a multi modal transportation system throughout the MTP. In addition several municipalities within the WMPO planning area maintain their own bicycle and pedestrian plans.

Two prominent factors were continuously discussed during the Bicycle and Pedestrian Subcommittee meetings: regional connectivity and overcoming existing barriers to bicycle and pedestrian activity. While developing an inventory of bicycle and pedestrian facility needs in the region, the subcommittee discussed a variety of barriers to bicycle and pedestrian transportation. These barriers vary from large bodies of water to invisible jurisdictional boundaries to roadways with high speeds and high traffic volumes. Prominent in the discussion of overcoming bicycle and pedestrian barriers in the region were discussions about opportunities to connect across bodies of water such as the Cape Fear River and the Atlantic Intracoastal Waterway. Although the region has shown many successes in bicycle and pedestrian facilities in the recent years, there are still gaps in the existing bicycle and pedestrian system, and an abundance of opportunity for new facilities. Survey results and trends show an increase in demand for new bicycle and pedestrian facilities. Other modes of transportation also place demand for additional bicycle and pedestrian facilities. For example, most people who use mass transportation either walk or bike to their bus stops. Thus, a robust bicycle and pedestrian network is essential for the health of a mass transportation system. Bicycle and pedestrian facilities are important not only in and of themselves, but they support the health and operations of other transportation modes. Thus the expansion of our bicycle and pedestrian networks is critical for the success of our overall transportation network.

## Fiscally-Constrained Bicycle and Pedestrian Project List

FISCALLY-CONSTRAINED BICYCLE AND PEDESTRIAN PROJECT LIST				
ID	PROJECT	FROM	TO	CONSTRUCTION YEAR COST ESTIMATE
BP-1	S. 17th Street	Hospital Plaza	INDEPENDENCE BLVD	\$1,153,357
BP-2	Peachtree Ave	Park Ave	MacMillan Ave	\$272,698
BP-3	N. College Rd.	New Town Rd	Danny Pence Dr	\$223,863
BP-4	Wooster St.	S. 8th Street	Oleander Dr	\$198,146
BP-5	WILSHIRE BLV	WRIGHTSVILLE AVE	KERR AVE	\$2,137,450
BP-6	COLLEGE RD & WILSHIRE BLVD	N/A	N/A	\$83,175
BP-7	5TH AVE	ANN ST	GREENFIELD LAKE PARK	\$2,240,065
BP-8	COLLEGE RD	HURST DR	RANDALL PKWY	\$1,336,956
BP-9	5TH AVE	RAIL LINE NORHT OF CABELL ST	ANN ST	\$1,018,329
BP-10	WILSHIRE BLV	KERR AVE	MACMILLAN AVE	\$430,074
BP-11	OLEANDER DR & PINE GROVE DR	N/A	N/A	\$83,175

FISCALLY-CONSTRAINED BICYCLE AND PEDESTRIAN PROJECT LIST				
ID	PROJECT	FROM	TO	CONSTRUCTION YEAR COST ESTIMATE
BP-12	COLLEGE RD	WRIGHTSVILLE AVE	WILSHIRE BLVD	\$689,727
BP-13	COLLEGE RD & OLEANDER DR	N/A	N/A	\$83,175
BP-14	23RD ST	ONE TREE HILL WAY	PRINCESS PLACE DR	\$1,966,542
BP-15	N COLLEGE RD	NE NORTHCHASE PKWY	NEW VILLAGE WAY	\$1,878,598
BP-16	NEW CENTRE DR	MARKET ST	COLLEGE RD	\$1,195,422
BP-17	MARKET ST & GORDON RD	N/A	N/A	\$83,175
BP-18	CAROLINA BEACH RD & FRONT ST/ BURNETT BLV	N/A	N/A	\$83,175
BP-19	INDEPENDENCE BLVD EXTENSION	RANDALL PKWY	SOUTH OF MLK PKWY	\$4,361,533
BP-20	HARPER AVE	DOW RD	S 3RD ST	\$2,246,333
BP-21	COLLEGE RD	RANDALL PKWY	NEW CENTRE DR	\$1,230,756
BP-22	MILITARY CUTOFF RD & EASTWOOD RD	N/A	N/A	\$83,175
BP-23	DOW RD	CLARENDON AVE	LAKE PARK BLVD	\$2,307,679
BP-24	HOSPITAL PLAZA DR PATH	LAKESHORE DRIVE	S 17TH ST	\$543,289
BP-25	NEW CENTRE DR	COLLEGE RD	PROPOSED TRAIL TO CLEAR RUN DR	\$1,063,130
BP-26	SHIPYARD BLVD	RIVER RD	CAROLINA BEACH RD	\$2,102,080
BP-27	N COLLEGE RD	NEW VILLAGE WAY	BAVARIAN LN	\$1,360,529
BP-28	COLLEGE RD & NEW CENTRE DR	N/A	N/A	\$83,175
BP-29	Medical Center Dr	CAROLINA BEACH RD	S 17TH ST	\$2,519,043
BP-30	RACINE DR	RANDALL DR	EASTWOOD RD	\$2,210,251
BP-31	SHIPYARD BLVD	INDEPENDENCE BLVD	LONGSTREET DR	\$486,828
BP-32	SHIPYARD BLVD & INDEPENDENCE BLVD	N/A	N/A	\$83,175
BP-33	SHIPYARD BLVD	S 17TH ST	INDEPENDENCE BLVD	\$2,050,650
BP-34	Cape Fear Boulevard	Dow Road	Lake Park Boulevard	\$2,516,182
BP-35	EASTWOOD RD & WRIGHTSVILLE AVE	N/A	N/A	\$97,858
BP-36	SHIPYARD BLVD	CAROLINA BEACH RD	S 17TH ST	\$2,898,275
BP-37	Village Rd NE A	WAYNE ST	LOSSEN LN	\$3,680,881
BP-38	BURNT MILL CREEK PATH	METTS AVE	MARKET ST	\$678,489
BP-39	EASTWOOD RD & CARDINAL DR	N/A	N/A	\$97,858
BP-40	S 17TH ST	INDEPENDENCE BLVD	SHIPYARD BLVD	\$1,822,663
BP-41	BURNT MILL CREEK PATH	COLONIAL DR	METTS AVE	\$1,140,677

FISCALLY-CONSTRAINED BICYCLE AND PEDESTRIAN PROJECT LIST				
ID	PROJECT	FROM	TO	CONSTRUCTION YEAR COST ESTIMATE
BP-42	COLLEGE RD	BLUE CLAY RD	NORTHCHASE PKWY	\$1,832,135
BP-43	INDEPENDENCE BLVD	RIVER RD	CAROLINA BEACH RD	\$4,342,456
BP-44	INDEPENDENCE BLVD	CAROLINA BEACH RD	S 17TH ST	\$2,660,884
BP-45	WRIGHTSVILLE AVE & AIRLIE RD/OLEANDER DR	N/A	N/A	\$97,858
BP-46	EASTWOOD RD	CARDINAL DR	RACINE DR	\$1,061,222
BP-47	US 17 & OLDE WATERFORD WY/ PLOOF RD SE	N/A	N/A	\$131,513
BP-48	US 17 Frontage Path	PLOOF RD	OCEAN GATE PLAZA	\$816,352
BP-49	BURNT MILL CREEK PATH	MARKET ST	ARCHIE BLUE PARK	\$5,890,806
BP-50	17TH ST & SHIPYARD BLVD	N/A	N/A	\$131,513
BP-51	FORT FISHER BLV	E AVE	N AVE/SEVENTH AVE	\$2,132,730
BP-52	OLEANDER DR & GREENVILLE LP RD/ GREENVILLE AVE	N/A	N/A	\$131,513
BP-53	W Gate Park Connector	WEST GATE DR	END	\$2,554,395
BP-54	K AVE & 421	N/A	N/A	\$131,513
BP-55	VILLAGE RD	WAYNE ST NE	OAKMONT CT NE	\$1,050,755
BP-56	Old Fayetteville Rd NE	LANVALE RD	PICKETT RD	\$3,888,048
BP-57	PINE GROVE RD & GREENVILLE LP RD	N/A	N/A	\$131,513
BP-58	Village Rd Connector	LELAND SHOOL RD	LINCOLN RD NE	\$607,250
BP-59	US 17 & W GATE DR/ GRANDIFLORA DR	N/A	N/A	\$152,460
BP-60	SEVENTH AVE & K AVE	N/A	N/A	\$152,460
BP-61	US 17 & PROVISION PKWY	N/A	N/A	\$152,460
BP-62	MARKET ST & MIDDLE SOUND LOOP RD	N/A	N/A	\$152,460
BP-63	Bridge Barrier Rd	GREENWAY PLAN PATH	OLD DOW RD	\$43,364
BP-64	GREENVILLE AVE	OLEANDER DR	PARK AVE	\$393,276
BP-65	US 17/MARKET ST & PORTERS NECK RD	N/A	N/A	\$131,513
BP-66	N AVE & FORT FISHER BLVD	N/A	N/A	\$131,513
BP-67	N AVE	FORT FISHER BLVD	ATLANTIC AVE	\$68,031

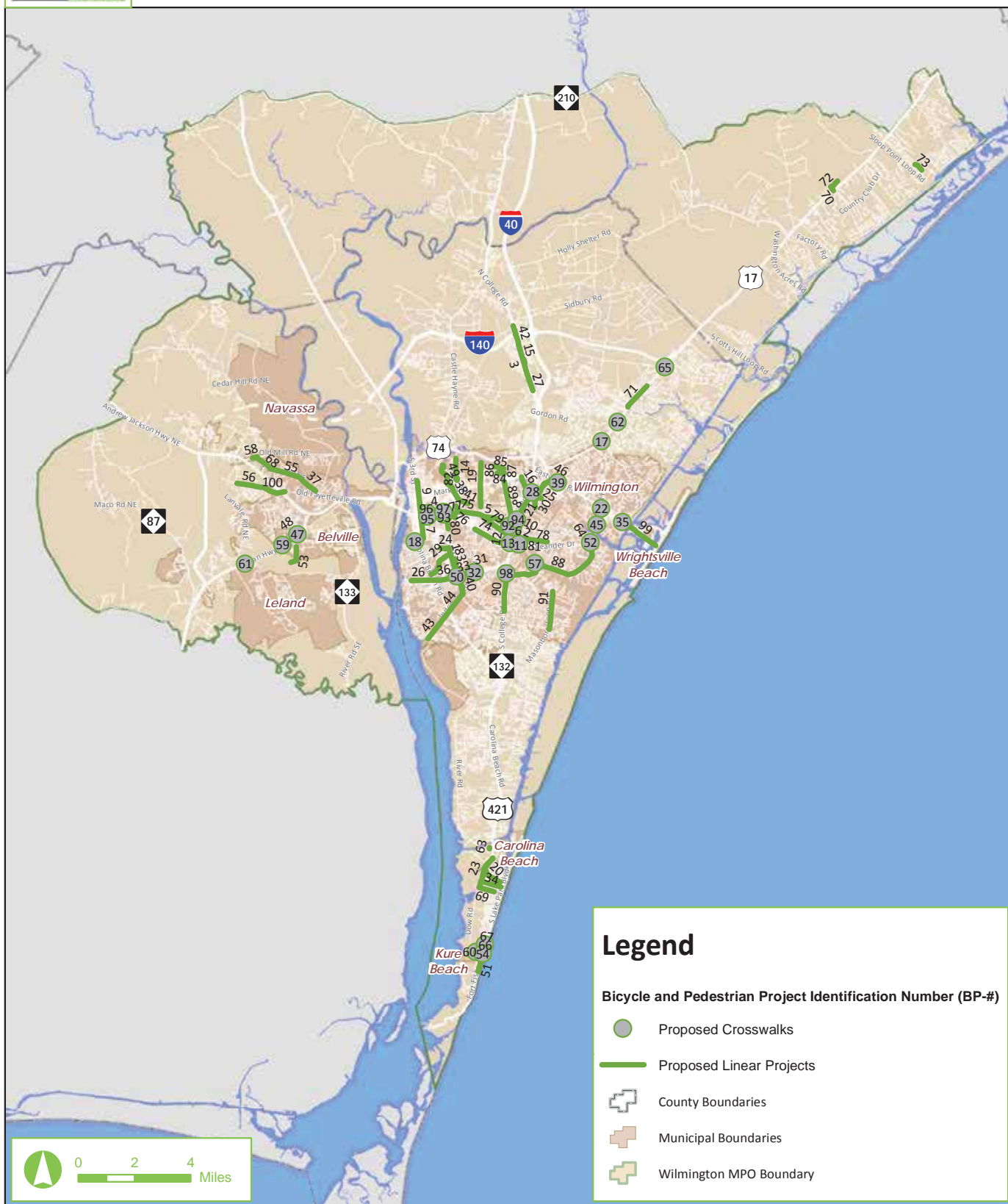
FISCALLY-CONSTRAINED BICYCLE AND PEDESTRIAN PROJECT LIST				
ID	PROJECT	FROM	TO	CONSTRUCTION YEAR COST ESTIMATE
BP-68	VILLAGE RD NE	WAYNE RD	OLD MILL RD	\$1,813,447
BP-69	Clarendon Ave	Dow Rd.	Lake	\$1,847,792
BP-70	JENKINS RD	US17	ST JOHNS CHURCH RD	\$345,352
BP-71	MARKET ST	Bayshore Dr	Marsh Oaks Dr.	\$4,146,552
BP-72	ST JOHNS CHURCH RD	Jenkins	End	\$750,600
BP-73	MASTER LN	Doral Dr	Sloop Point Loop Rd.	\$715,432
BP-74	Oleander Drive	Hawthorne Road	42nd Street	\$704,579
BP-75	Wrightsville Ave	Castle Street	Independence Blvd	\$193,805
BP-76	Oleander Drive	Wooster Street	Mimosa Place	\$248,481
BP-77	Dawson Street	Wrightsville Ave	Oleander Drive	\$47,033
BP-78	Wrightsville Ave	College Rd.	Hawthorne Dr	\$1,263,801
BP-79	Wrightsville Ave	44th Street	Independence Blvd	\$1,097,483
BP-80	17th Street	Wooster St	Greenfield St	\$261,494
BP-81	Oleander Drive	Pine Grove Drive	College Road	\$197,164
BP-82	N. 23rd St	Princess Place Dr	Belvedere Dr	\$54,273
BP-83	Delaney Ave	Wellington Ave	Glen Mead Rd	\$192,775
BP-84	McClelland Drive	Saint Rosea Rd	Kerr Ave	\$653,784
BP-85	Fairlawn Drive	Barclay Hills Drive	Kerr Ave	\$934,306
BP-86	Clover Rd	Fairlawn Drive	McClelland Drive	\$455,517
BP-87	Gleason Rd	Fairlawn Drive	McClelland Drive	\$498,195
BP-88	Greenville Loop Trail	College Rd.	Oleander Drive	\$7,605,563
BP-89	Kerr Ave Trail	Randall Parkway	College Road	\$1,006,347
BP-90	Central College Trail	Holly Tree Rd.	S. 17th Street	\$1,633,850
BP-91	Masonboro Loop Trail	Pine Grove Drive	Navaho Trail	\$3,307,186
BP-92	Kerr Ave & Wilshire Blvd	N/A	N/A	\$38,815
BP-93	16th St. & Dawson St.	N/A	N/A	\$83,175
BP-94	College & Hurst/Hoggard	N/A	N/A	\$38,815
BP-95	8th St. & Dawson St.	N/A	N/A	\$55,450
BP-96	8th St. & Wooster St.	N/A	N/A	\$55,450
BP-97	17th St. & Dawson St.	N/A	N/A	\$83,175
BP-98	Holly Tree Rd. & S. College Rd.	N/A	N/A	\$138,625
BP-99*	CAUSEWAY DR	AIRLIE RD	WAYNICK BLVD	\$18,910,848
BP-100*	Old Fayetteville Rd B	PICKETT RD	BASIN ST	\$6,276,778
* Projects anticipated to receive funding from alternative funding mechanisms				





## Bicycle and Pedestrian Projects

NOTE: Projects displayed for general location purposes only and not intended to show exact alignment.  
Projects still subject to federal environmental review (NEPA) process before construction





## Bicycle and Pedestrian Projects

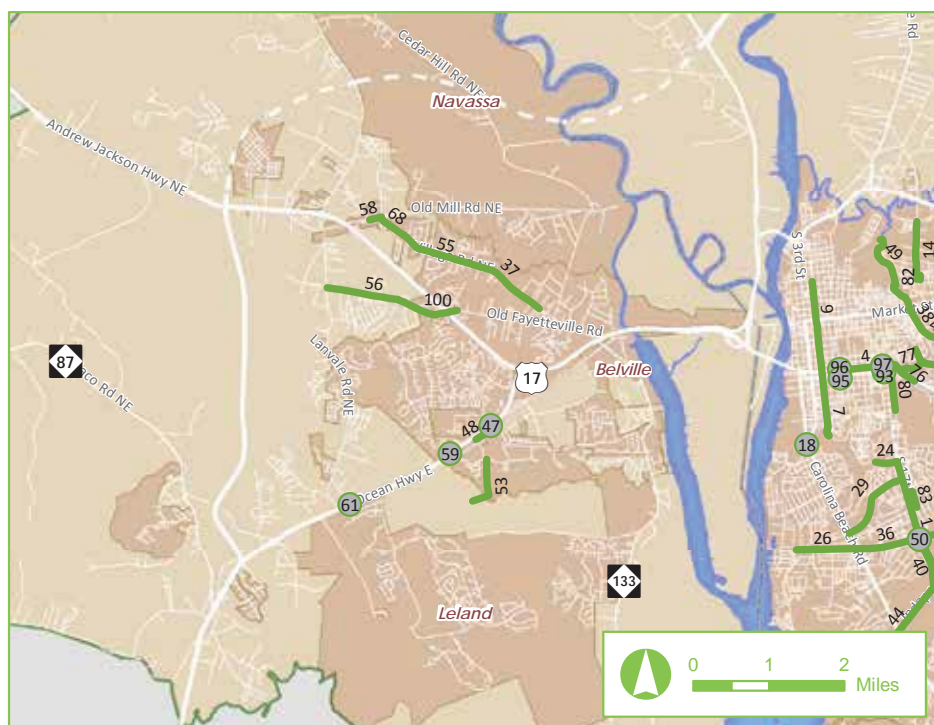
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### Wilmington

#### Bike/Ped Project ID# (BP-#)

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



### Leland, Belville, & Navassa

#### Bike/Ped Project ID (BP-#)

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



## Ferry and Water Transportation

Capital improvements to the ferry and water transportation network in the Greater Wilmington Area are largely dependent on the availability of funds from the state. As such, the majority of ferry and water transportation projects included in this element are coordinated and funded through financial structures managed by NCDOT with input from the Wilmington MPO. Larger scale, regional planning coordinated by the WMPO is also necessary to ensure multi-modal integration is addressed. Further expansion of the existing ferry routes will require the development of strategic public investments or private partnerships in order to connect residents, businesses, and tourists within and to the region. Furthermore, future years may see an increasing use for the ferry and water transportation system to provide support to regional emergency management operations. The potential use of water vessels and temporary barges at strategic locations should be explored for use in emergency management and natural disaster planning and preparation.



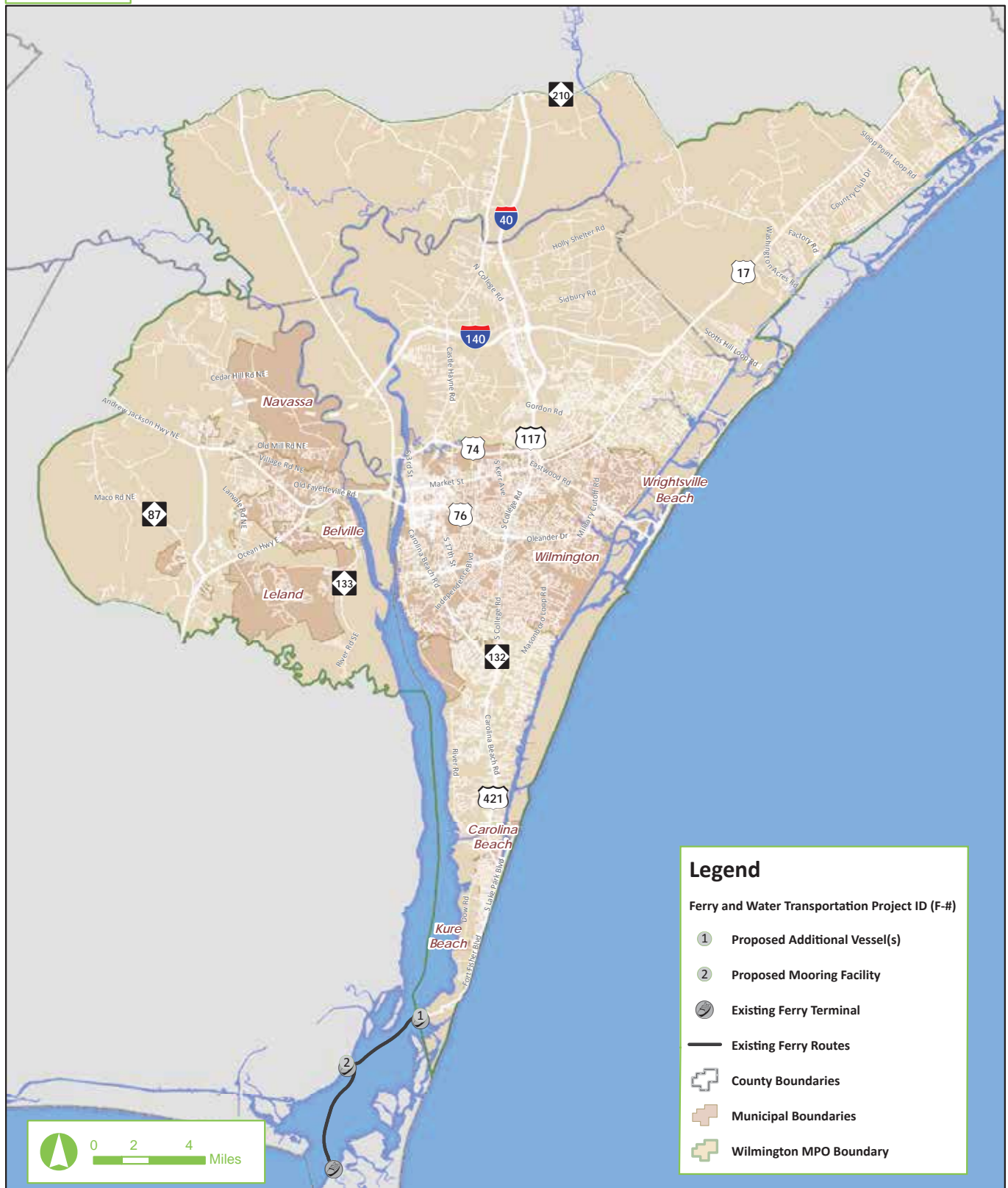
## Fiscally-Constrained Ferry and Water Transportation Project List

FISCALLY-CONSTRAINED FERRY AND WATER TRANSPORTATION PROJECT LIST				
ID	PROJECT	FROM	TO	CONSTRUCTION YEAR COST ESTIMATE
F-1	New river class vessel (Southport to Ft. Fisher)	Southport	Ft. Fisher	\$13,307,961
F-2	Southport Additional Mooring Facilities	US421	US74/76 Andrew Jackson Highway	\$1,663,495



## Ferry and Water Transportation Projects with Anticipated Funding

NOTE: Projects displayed for general location purposes only and not intended to show exact alignment.  
Projects still subject to federal environmental review (NEPA) process before construction.



## Freight/Rail

Freight movement is a critical element of an advanced industrial economy and the ease of freight movement is one component of a region's economic competitiveness for attracting and retaining various types of industry and employment centers. Freight movement can also have an impact on a region's quality of life, particularly with the need to ensure heavy truck/rail traffic has suitable routes to/from the national highway, regional rail nodes, and ports remains in balance with the needs of non-industrial components of the community. This freight/rail element outlines proposals for policies and projects that will capitalize on economic development opportunities for the WMPO and those that will mitigate potential conflicts and externalities from freight movements on the larger community and transportation network.



Container Movement at  
NC Port of Wilmington.

## Fiscally-Constrained Freight/Rail Project List

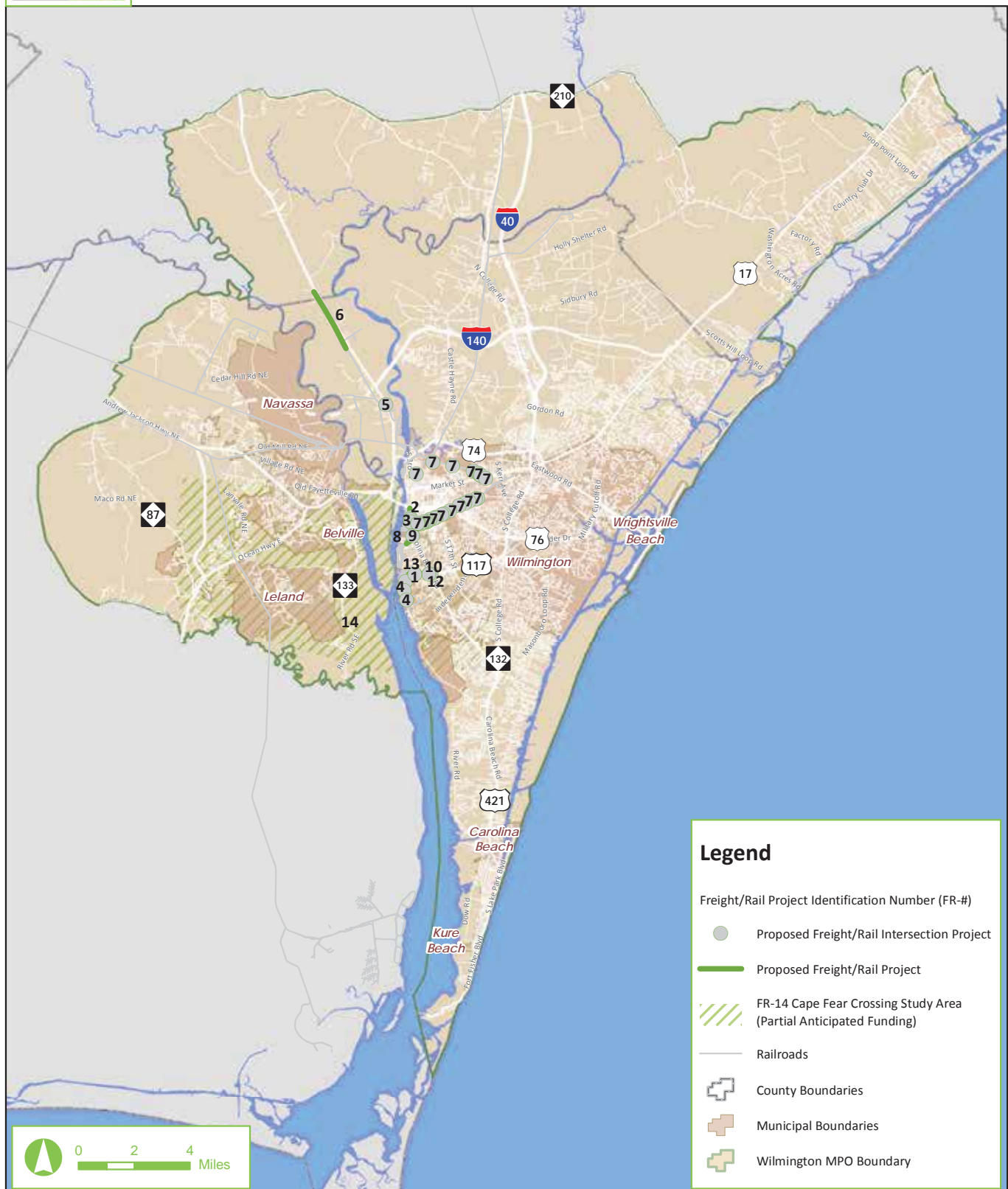
FISCALLY-CONSTRAINED FREIGHT/RAIL PROJECT LIST			
ID	PROJECT TYPE	PROJECT	CONSTRUCTION YEAR COST ESTIMATE
FR-1	Truck/Roadway	Shipyards Boulevard eb bus pullout, bus stop, and sidewalk	\$135,000
FR-2	Truck/Roadway	Front Street widening and redesign	\$17,450,892
FR-3	Rail	Front Street lead railroad signalization and gates	\$998,097
FR-4	Rail	Study at-grade rail crossing conflicts on WTRY and spur lines near Port of Wilmington (multiple locations)	\$391,432
FR-5	Rail	US421 Railroad crossing safety improvements south of I-140/Dan Cameron Bridge	\$521,909
FR-6	Rail	US421 Railroad extension from Invista to Pender Commerce Park	\$5,694,698
FR-7	Rail	At-grade rail crossing conflicts on NCDOT & CSX lines (multiple locations)	\$10,890,646
FR-8	Truck/Roadway	Burnett Boulevard widening to allow for queuing at north gate of NC Port of Wilmington from Carolina Beach Road to Myers Street	\$2,628,506
FR-9	Truck/Roadway	Front Street & Burnett Boulevard turn lanes improving sb and nb truck access	\$408,567
FR-10	Truck/Roadway	"Carolina Beach Road and Shipyards Boulevard wb right turn improvements"	\$1,315,130
FR-11	Truck/Roadway	Shipyards Boulevard eb at Carolina Beach Road nb left turn additional queuing	\$306,864
FR-12	Truck/Roadway	Shipyards Boulevard median closure at Rutledge Drive	\$43,838
FR-13	Truck/Roadway	Shipyards Boulevard speed sensors and warning activation at NC Port of Wilmington	\$175,351
FR-14	Truck/Roadway	Cape Fear Crossing - Funded Portion	\$158,021,483
* Projects anticipated to receive funding from alternative funding mechanisms			





## Freight/Rail Projects with Anticipated Funding

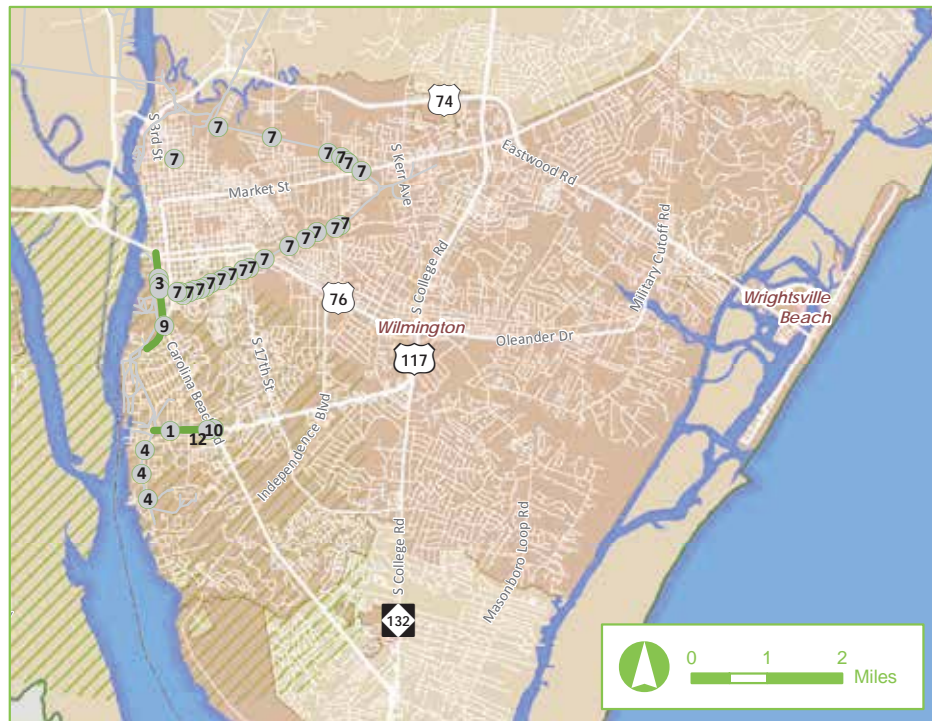
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## Freight/Rail Projects with Anticipated Funding

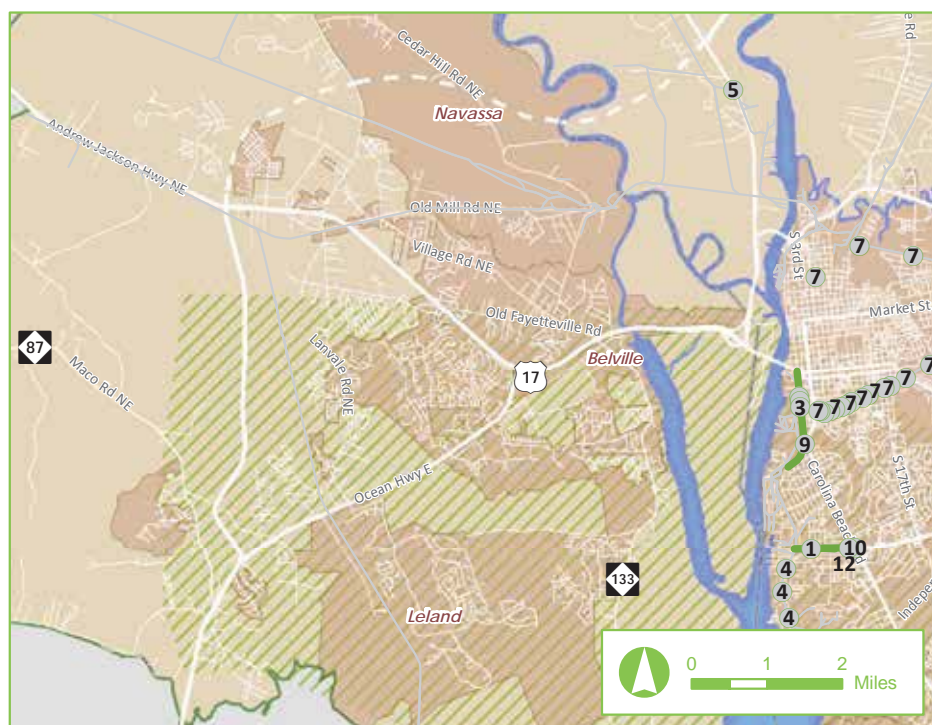
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### Wilmington

Freight/Rail Project Identification Number (FR-#)

- Proposed Freight/Rail Intersection
- Proposed Freight/Rail Project
- FR-14 Cape Fear Crossing Study Area (Partial Anticipated Funding)
- Railroads
- County Boundaries
- Municipal Boundaries
- Wilmington MPO Boundary



### Leland, Belville, & Navassa

Freight/Rail Project Identification Number (FR-#)

- Proposed Freight/Rail Intersection
- Proposed Freight/Rail Project
- FR-14 Cape Fear Crossing Study Area (Partial Anticipated Funding)
- Railroads
- County Boundaries
- Municipal Boundaries
- Wilmington MPO Boundary

## Mass Transportation

The mass transportation element outlines projects and policies that would result in increased ridership and improved service to both transit-dependent populations and choice ridership populations. This element includes a heavy emphasis on increasing the comfort and safety of riders in accessing public transportation. Most mass transportation users are also pedestrians at some point in their travels; therefore enhancements to the pedestrian network are critical to improving the experience of mass transportation users and critical to the enticement of new riders.

By increasingly serving choice riders and a larger segment of the population, mass transportation will see broader community support. When broadly utilized, mass transportation is one of the most efficient modes of transportation and can be one of the most cost-effective infrastructure investments a community can make. In the Greater Wilmington area, mass transportation is most heavily utilized by transit-dependent riders. However, there is great opportunity to expand ridership and increase the attractiveness of mass transportation to choice rider populations. The benefits of increasing mass transportation ridership extend beyond the financial return to local public transportation providers. Benefits of increased mass transportation ridership include mitigating increases in community congestion and environmental degradation. Increased mass transportation ridership captures a percentage of the trips that would have otherwise been made by single-occupant vehicles. By mitigating congestion, improved mass transportation service can also reduce the need to increase capacity on the roadway network.

### Fiscally Constrained Mass Transportation Project List

FISCALLY-CONSTRAINED MASS TRANSPORTATION PROJECT LIST			
ID	PROJECT TYPE	PROJECT	CONSTRUCTION YEAR COST ESTIMATE
MT-1	PARK & RIDE	US17 at Brunswick Forest	\$3,000
MT-2	PARK & RIDE	Mt. Misery at US74/76	\$3,000
MT-3	PARK & RIDE	Leland Town Hall	\$3,000
MT-4	AMENITY	Town Hall Drive (Leland)	\$15,000
MT-5	ADDITIONAL SERVICE	Airport Boulevard service to ILM	0
MT-6	STOP ACCESS	Oleander Drive & Independence Boulevard	\$83,175
MT-7	AMENITY	Oleander Drive at Whole Foods	\$16,635
MT-8	EXPRESS ROUTE	Downtown Wilmington to Forden Station	\$510,139
MT-9	EXPRESS ROUTE	Downtown Wilmington to Mayfaire	\$510,139
MT-10	PARK & RIDE	Mayfaire Shopping Center	\$3,327
MT-11	AMENITY	Lake Avenue at South College Road	\$16,635
MT-12	STOP ACCESS	College Road & Sanders Road	\$83,175
MT-13	PARK & RIDE	"Carolina Beach Road at S College Road (Monkey Junction)"	\$16,635
MT-14	AMENITY	S College Road at Randall Parkway	\$16,635
MT-15	AMENITY	S 17th St at Glen Meade Road	\$16,635



FISCALLY-CONSTRAINED MASS TRANSPORTATION PROJECT LIST			
ID	PROJECT TYPE	PROJECT	CONSTRUCTION YEAR COST ESTIMATE
MT-16	AMENITY	N College Road at Danny Pence Drive	\$16,635
MT-17	AMENITY	Carolina Beach Road at Harris Teeter	\$16,635
MT-18	AMENITY	US17 at NC210	\$16,635
MT-19	ADDITIONAL SERVICE	Market Street from College Road to Porter's Neck Walmart	\$510,139
MT-20	AMENITY	S College Road at University Drive	\$16,635
MT-21	AMENITY	17th Street at Food Lion Plaza	\$16,635
MT-22	AMENITY	17th Street at Doctors Circle	\$16,635
MT-23	STOP ACCESS	Shipyard Boulevard & 17th Street	\$83,175
MT-24	STOP ACCESS	17th Street at Hospital Plaza Drive	\$83,175
MT-25	STOP ACCESS	College Road at Hurst Drive	\$83,175
MT-26	STOP ACCESS	College Road at New Center Drive	\$83,175
MT-27	STOP ACCESS	College Road at University Drive	\$83,175
MT-28	AMENITY	Independence Boulevard at Canterbury Drive	\$16,635
MT-29	AMENITY	Market Street at Kerr Avenue	\$16,635
MT-30	AMENITY	Market Street at Covil Avenue	\$16,635
MT-31	AMENITY	Independence Boulevard at Independence Mall (northbound)	\$16,635
MT-32	AMENITY	Independence Boulevard at Park Avenue	\$16,635
MT-33	AMENITY	Independence Boulevard at Independence Mall (southbound)	\$16,635
MT-34	STOP ACCESS	Market Street at Cinema Drive	\$83,175
MT-35	STOP ACCESS	"Carolina Beach Road at Antoinette Drive (Monkey Junction)"	\$83,175
MT-36	PARK & RIDE	Carolina Beach Road at Snow's Cut Bridge	\$3,327
MT-37	PARK & RIDE	I-40 at Cape Fear Community College North Campus	\$3,327
MT-38	PARK & RIDE	Market Street at Middle Sound Loop Road	\$3,327
MT-39	PARK & RIDE	US17 at NC210	\$3,327
MT-40	PARK & RIDE	Barclay West	\$3,327
MT-41	PARK & RIDE	Fairfield Park	\$3,327
MT-42	AMENITY	College Road at University Drive	\$16,635
MT-43	AMENITY	17th Street at Hospital Plaza Drive	\$16,635
MT-44	AMENITY	Gordon Road at Food Lion Plaza	\$16,635
MT-45	AMENITY	Shipyard Boulevard at Commons Drive	\$16,635
MT-46	AMENITY	Monkey Junction Transfer Station	\$16,635
MT-47	AMENITY	N Lake Park Boulevard at Town Hall	\$16,635
MT-48	AMENITY	Shipyard Boulevard at 41st Street	\$16,635
MT-49	AMENITY	41st Street at Hoggard High School	\$16,635
MT-50	STOP ACCESS	Shipyard Boulevard at 41st Street	\$83,175
MT-51	PARK & RIDE	Market Street at Porters Neck Road	\$3,327
MT-52	AMENITY	Carolina Beach Road at Medical Center Drive	\$16,635
MT-53	AMENITY	Carolina Beach Road at Roses	\$16,635
MT-54	STOP ACCESS	Market Street & Lullwater Drive	\$83,175
MT-55	AMENITY	Nixon Street at 8th Street	\$16,635
MT-56	AMENITY	Downtown Transfer Station	\$16,635
MT-57	AMENITY	College Road at Wilshire Boulevard	\$19,572

FISCALLY-CONSTRAINED MASS TRANSPORTATION PROJECT LIST			
ID	PROJECT TYPE	PROJECT	CONSTRUCTION YEAR COST ESTIMATE
MT-58	AMENITY	Eastwood Road at Rogersville Road	\$19,572
MT-59	AMENITY	Carolina Beach Road at Independence Boulevard	\$19,572
MT-60	AMENITY	Carolina Beach Road at Tennessee Avenue	\$19,572
MT-61	AMENITY	West Gate Drive at Walmart	\$19,572
MT-62	AMENITY	Halyburton Memorial Parkway at Ballfields	\$19,572
MT-63	AMENITY	Independence Boulevard at Converse Drive	\$19,572
MT-64	AMENITY	Princess Place Drive at N 25th Street	\$19,572
MT-65	AMENITY	Carolina Beach Road at Southern Boulevard	\$19,572
MT-66	AMENITY	Market Street at Lullwater Drive	\$19,572
MT-67	AMENITY	Oleander Drive at Hawthorne Drive	\$19,572
MT-68	AMENITY	College Road at Kmart	\$19,572
MT-69	AMENITY	Randall Parkway at Brailsford Drive	\$19,572
MT-70	AMENITY	Military Cutoff Road at Old Macumber Station Road	\$19,572
MT-71	AMENITY	Carolina Beach Road at Silva Terra Drive	\$19,572
MT-72	AMENITY	17th Street at John D Barry Drive	\$19,572
MT-73	AMENITY	Village Road at Food Lion	\$19,572
MT-74	AMENITY	Front Street at Harnett Street	\$19,572
MT-75	PARK & RIDE	US17 at Sidbury Road	\$3,914
MT-76	AMENITY	Market Street at 16th Street	\$19,572
MT-77	AMENITY	Sigmon Road at Walmart	\$19,572
MT-78	AMENITY	Oleander Drive at Giles Avenue	\$19,572
MT-79	AMENITY	Wrightsville Avenue at Jones Road	\$19,572
MT-80	AMENITY	Wilshire Boulevard at Berkshires at Pecan Cove	\$19,572
MT-81	AMENITY	Wilshire Boulevard at Kerr Avenue	\$19,572
MT-82	AMENITY	Mt. Misery Road at Food Lion	\$19,572
MT-83	AMENITY	Village Road at S Navassa Road	\$19,572
MT-84	AMENITY	Carl Winner Avenue at Carolina Beach Avenue	\$19,572
MT-85	AMENITY	10th Street at Meares Street	\$19,572
MT-86	AMENITY	Greenfield Street at 13th Street	\$19,572
MT-87	AMENITY	Wrightsville Avenue at Cape Fear Memorial Hospital	\$19,572
MT-88	AMENITY	Front Street at Ann Street	\$19,572
MT-89	PARK & RIDE	I-40 at Holly Shelter Road	\$3,914
MT-90	PARK & RIDE	Forden Station	\$3,914
MT-91	PARK & RIDE	Downtown Transfer Station	\$3,914
MT-92	AMENITY	New Hanover County Government Center Drive	\$19,572
MT-93	AMENITY	New Center Drive at Bob King Buick	\$19,572
MT-94	AMENITY	17th Street at Little John Circle	\$19,572
MT-95	AMENITY	Cypress Grove Drive at Doctors Circle	\$19,572
MT-96	AMENITY	Medical Center Drive at Delaney Radiologists	\$19,572
MT-97	AMENITY	Wellington Avenue at Silver Stream Lane	\$19,572
MT-98	AMENITY	Wellington Avenue at Troy Drive	\$19,572
MT-99	AMENITY	Wellington Avenue at Flint Drive	\$19,572
MT-100	AMENITY	Wellington Avenue at 17th Street	\$19,572

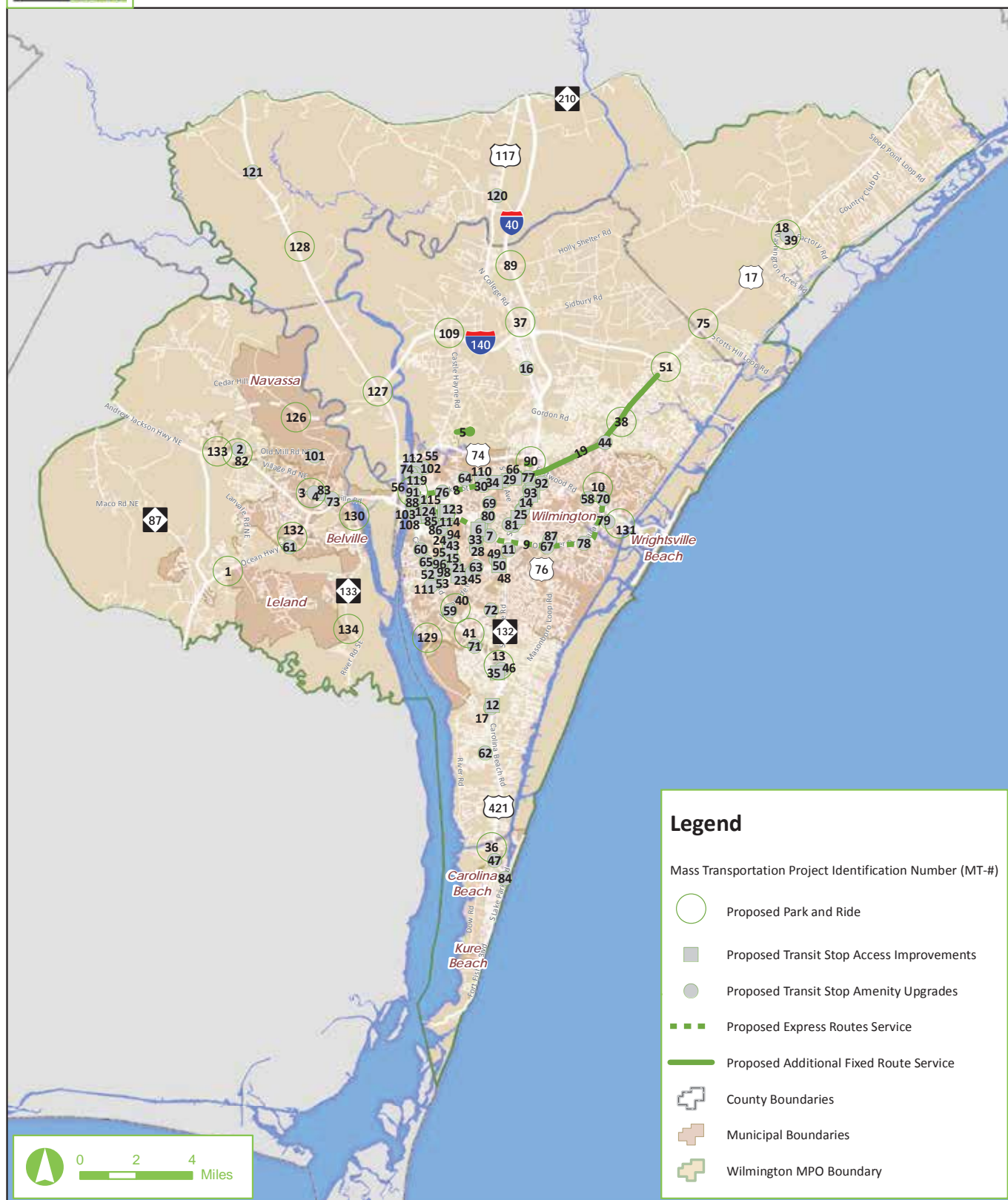
FISCALLY-CONSTRAINED MASS TRANSPORTATION PROJECT LIST			
ID	PROJECT TYPE	PROJECT	CONSTRUCTION YEAR COST ESTIMATE
MT-101	AMENITY	Main Street at Church Street (Navassa)	\$19,572
MT-102	AMENITY	4th Street at ABC Alley	\$19,572
MT-103	AMENITY	Front Street at Castle Street (northbound)	\$19,572
MT-104	AMENITY	Front Street at Castle Street (southbound)	\$19,572
MT-105	STOP ACCESS	Dawson Street at 17th Street	\$97,858
MT-106	STOP ACCESS	Wooster Street at 17th Street	\$97,858
MT-107	STOP ACCESS	Wooster Street at 3rd Street	\$97,858
MT-108	STOP ACCESS	Dawson Street at 3rd Street	\$97,858
MT-109	PARK & RIDE	I-140 at Castle Hayne Road	\$3,914
MT-110	AMENITY	Princess Place Drive at Montgomery Avenue	\$19,572
MT-111	AMENITY	Marion Drive at Rutledge Drive	\$19,572
MT-112	AMENITY	Nixon Street at 5th Street	\$19,572
MT-113	AMENITY	16th Street at Wright Street	\$19,572
MT-114	AMENITY	16th Street at Kidder Street	\$19,572
MT-115	AMENITY	5th Street at Ann Street	\$19,572
MT-116	AMENITY	5th Street at Dawson Street	\$19,572
MT-117	AMENITY	5th Street at Castle Street	\$19,572
MT-118	AMENITY	Dawson Street at 9th Street	\$19,572
MT-119	AMENITY	Wilmington Multimodal Transportation Center	\$12,147,304
MT-120	AMENITY	US117/NC133 at Old Blossom Ferry Road	\$19,572
MT-121	AMENITY	US421 at Blueberry Road	\$19,572
MT-122	STOP ACCESS	Dawson Street & 16th Street	\$97,858
MT-123	STOP ACCESS	Wooster Street & 16th Street	\$113,444
MT-124	STOP ACCESS	Dawson Street at 8th Street	\$113,444
MT-125	STOP ACCESS	Wooster Street 8th Street	\$113,444
MT-126	PARK & RIDE	I-140 at Cedar Hill Road	\$4,538
MT-127	PARK & RIDE	I-140 at US421	\$4,538
MT-128	PARK & RIDE	US421 at Cowpens Landing Road	\$4,538
MT-129	PARK & RIDE	Terminus of Independence Boulevard	\$4,538
MT-130	PARK & RIDE	US17/74/76 at River Road (NC133)	\$3,327
MT-131	PARK & RIDE	Galleria Mall	\$3,327
MT-132	PARK & RIDE	US17 at Walmart	\$3,327
MT-133	PARK & RIDE	I-140 at US74/76	\$3,914
MT-134	PARK & RIDE	River Road (NC133)	\$3,914





## Mass Transportation Projects with Anticipated Funding

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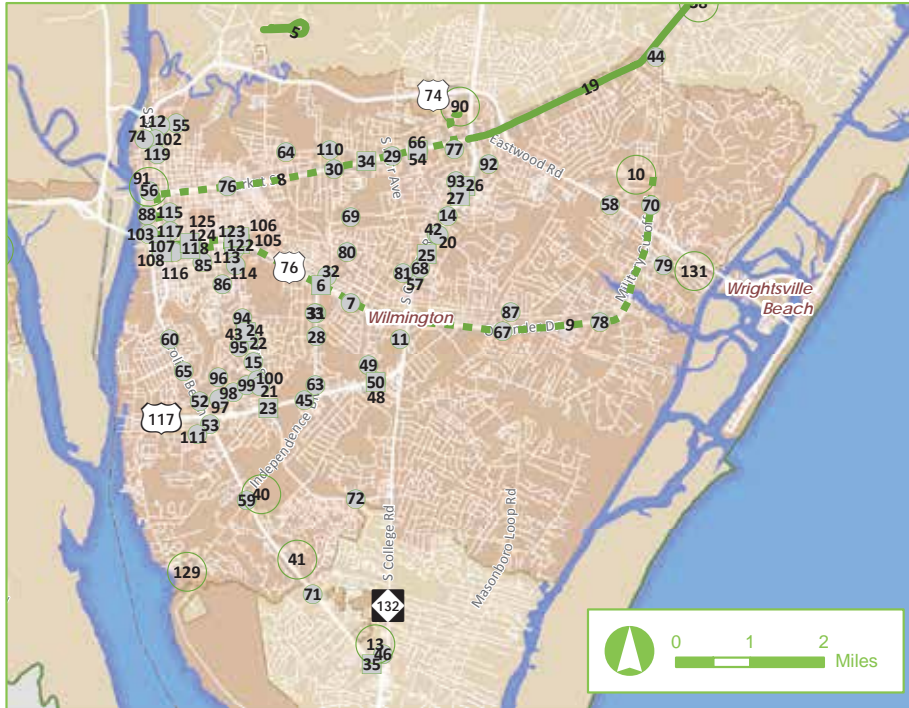






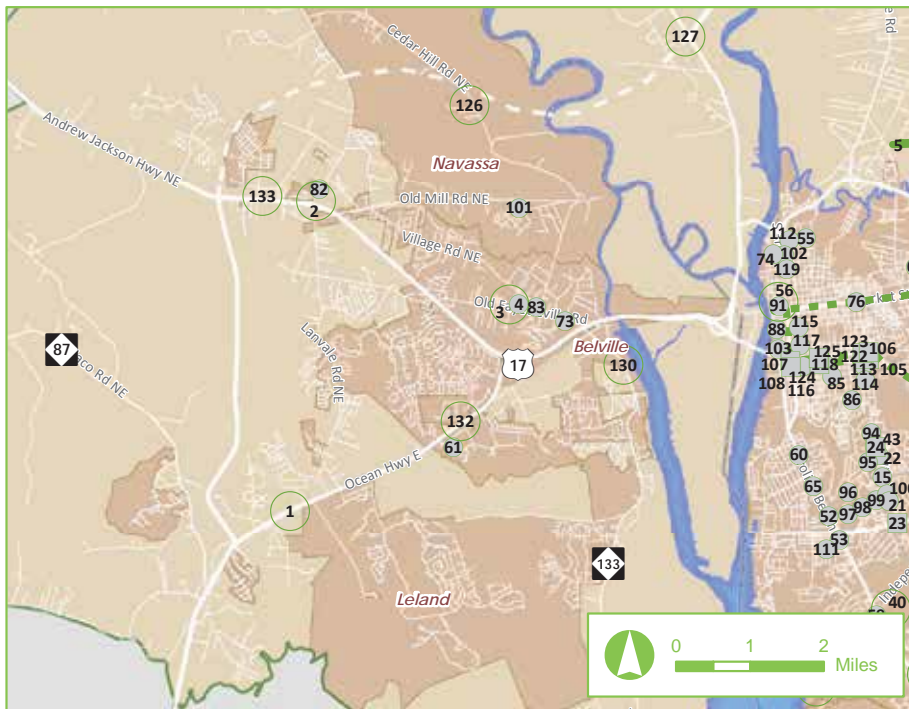
## Mass Transportation Projects with Anticipated Funding

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### Wilmington

- Mass Transportation Project Id (MT-#)
- Park and Ride
  - Transit Stop Access Improvements
  - Transit Stop Amenity Upgrades
  - Express Routes Service
  - Additional Fixed Route Service
  - County Boundaries
  - Municipal Boundaries
  - Wilmington MPO Boundary



### Leland, Belville, & Navassa

- Mass Transportation Project Id (MT-#)
- Park and Ride
  - Transit Stop Access Improvements
  - Transit Stop Amenity Upgrades
  - Express Routes Service
  - Additional Fixed Route Service
  - County Boundaries
  - Municipal Boundaries
  - Wilmington MPO Boundary

## Roadways

Demand on our existing roadways will only increase over time, but some of this demand is from new users. Our roadway network needs additional capacity to carry an anticipated increase in regional vehicle miles travelled (VMT), but also in order to carry new user types such as increased bus service, additional freight, bicycle transportation and the facilitation of pedestrian movements. Trends indicate that in the future people and goods will move through a more diverse array of transportation modes. The further development of the roadway network should facilitate future movements through facilitating mode choice, increased connectivity, and improved balance between access and mobility. The thoughtful further development of the roadway network is critical for the Wilmington Urban Area to be able to mitigate traffic increases and facilitate additional choice in order to increase the quality of life and economic development opportunities in the Wilmington Urban Area.

### Fiscally-Constrained Roadways Project List

FISCALLY-CONSTRAINED ROADWAYS PROJECT LIST					
ID	PROJECT	FROM	TO	CONSTRUCTION YEAR COST ESTIMATE	TIP #
R-1	Kerr Avenue Widening	Randall Parkway	US 74/Martin Luther King Jr. Parkway	\$44,309,966	U-3338
R-2	I-140 Wilmington Bypass	US421	US 74/76 Andrew Jackson Highway	\$163,930,000	R-2633
R-3	Military Cutoff Road Extension	US 17BUS/Market Street	US 17/Wilmington Bypass	\$178,917,855	U-4751
R-4	NC 133/Castle Hayne Road Widening	US74/Martin Luther King Jr Parkway	Holly Shelter Road	\$226,458,655	U-2724
R-5	US117/NC132/College Road Widening	Gordon Road	US421/Carolina Beach Road	\$113,482,764	U-5702
R-6	Gordon Road Widening	NC 132 Interchange	US 17BUS/Market Street	\$35,167,338	U-3831
R-7	US117/NC132/College Road Widening	US117/Shipyard Boulevard	Wilshire Boulevard	\$24,524,536	U-5702
R-8	US421/Carolina Beach Road Widening	Piner Road	Sanders Road	\$16,788,067	U-5790
R-9	US17BUS/Market Street Road Diet	17th Street	Covil Avenue	\$13,904,312	U-5869
R-10	US17BUS/Market Street Access Management	Military Cutoff Road	Porters Neck Road	\$9,453,686	U-4902
R-11	US17BUS/Market Street Access Management	US 74/Martin Luther King Jr Parkway	Military Cutoff Road	\$4,403,609	U-4902
R-12	US17 Superstreet	Washington Acres Road	Sloop Point Road	\$61,372,712	U-5732
R-13	US117/NC132/College & US76/Oleander Intersection	US 117/NC132/College Road	US76/Oleander Drive	\$37,981,128	U-5704

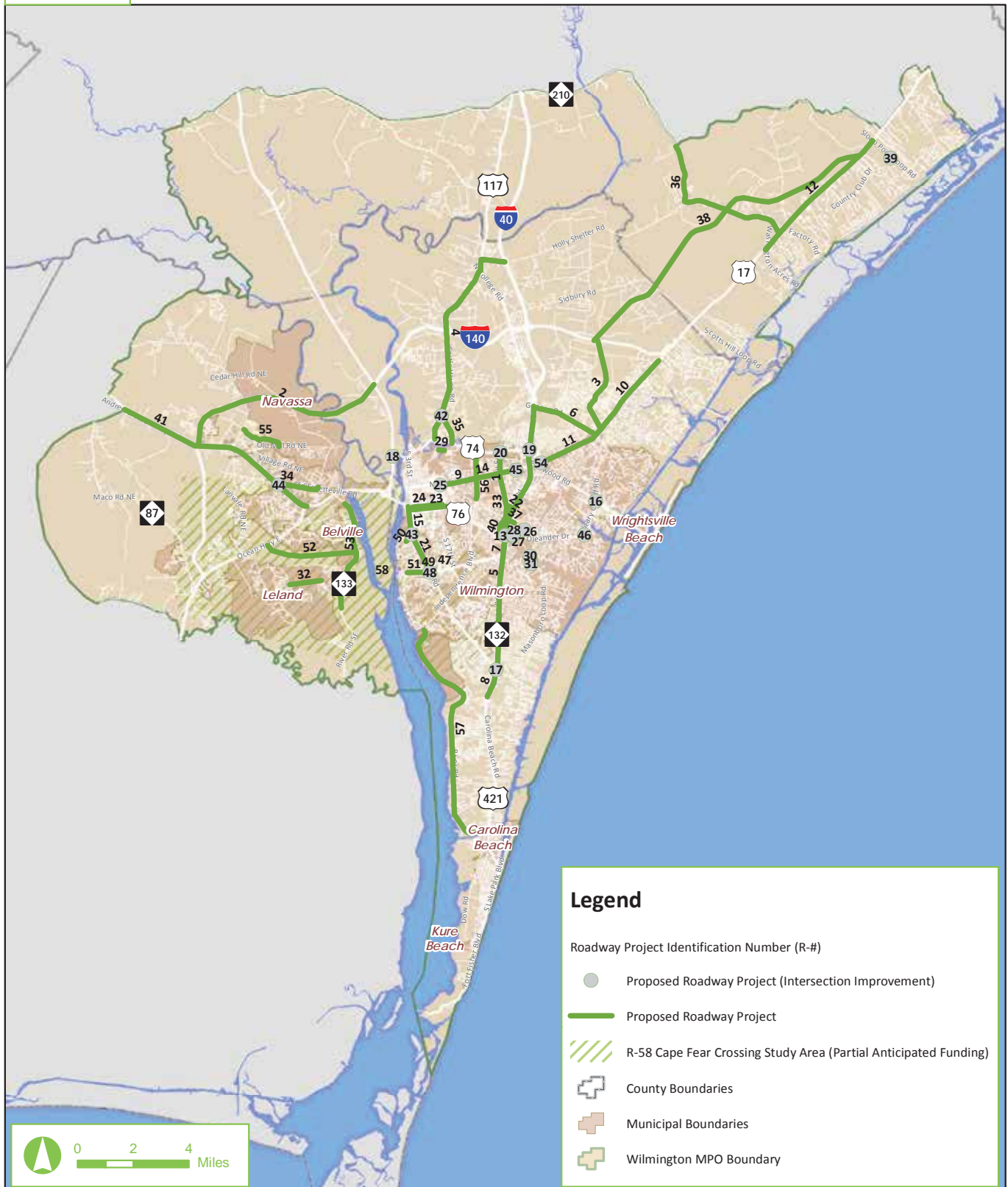
FISCALLY-CONSTRAINED ROADWAYS PROJECT LIST					
ID	PROJECT	FROM	TO	CONSTRUCTION YEAR COST ESTIMATE	TIP #
R-14	US17BUS/Market Street Access Management	Colonial Drive	New Centre Drive	\$6,860,680	U-4902
R-15	US421/Front Street Widening	US 76/421/ Cape Fear Memorial Bridge	US421/Burnett Boulevard	\$17,450,892	U-5734
R-16	US74/Eastwood Road & Military Cutoff Road	US74/Eastwood Road	Military Cutoff Road	\$44,030,537	U-5710
R-17	Carolina Beach Road & College Road Flyovers	US 421/Carolina Beach Road	US117/NC132/ College Road	\$23,445,141	U-5790
R-18	Isabel Holmes Bridge Flyovers	US 17	US421	\$27,179,344	U-5731
R-19	US117/NC132/College & MLK Pkwy Intersection	US117/NC132/ College Road	US74/Martin Luther King Jr. Parkway	\$44,030,537	U-5792
R-20	Kerr Avenue/MLK Jr Pkwy Intersection	Kerr Avenue	US74/Martin Luther King Jr. Parkway	\$36,394,018	U-3338
R-21	US421/Carolina Beach Road Upgrade	US421/Burnett Boulevard	US117/Shipyard Boulevard	\$4,768,686	U-5729
R-22	Hurst Drive Extension	Kerr Avenue	Riegel Road	\$4,768,686	N/A
R-23	Dawson Street Streetscape	US17BUS/ South 3rd Street	US76/Oleander Drive	\$609,948	N/A
R-24	Wooster Street Streetscape	US17BUS/ South 3rd Street	US76/Oleander Drive	\$609,948	N/A
R-25	US17BUS/Market Street & 17th Street Intersection	US17BUS/ Market Street	South 17th Street	\$1,774,395	N/A
R-26	Wrightsville Avenue & Wallace Avenue Roundabout	Wrightsville Avenue	Wallace Avenue	\$1,663,495	N/A
R-27	Oleander Drive & Pine Grove Intersection	US76/ Oleander Drive	Pine Grove Drive	\$2,328,893	N/A
R-28	Pine Grove Drive & MacMillan Avenue Intersection	Pine Grove Drive	Macmillan Avenue	\$2,772,492	N/A
R-29	Love Grove Additional Access	Nixon Street	King Street	\$6,764,880	N/A
R-30	Pine Grove Drive & Greenville Loop Road Roundabout	Pine Grove Drive	Greenville Loop Road	\$1,663,495	N/A
R-31	Pine Grove Drive & Holly Tree Road Roundabout	Pine Grove Drive	Holly Tree Road	\$1,663,495	N/A
R-32	Rice Gate Way Extension	Rice Gate Way	Mallory Creek Road	\$12,741,553	N/A
R-33	Kerr Avenue Widening	Patrick Avenue	Wrightsville Avenue	\$86,267,237	N/A





## Roadway Projects with Anticipated Funding

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## Roadway Projects with Anticipated Funding

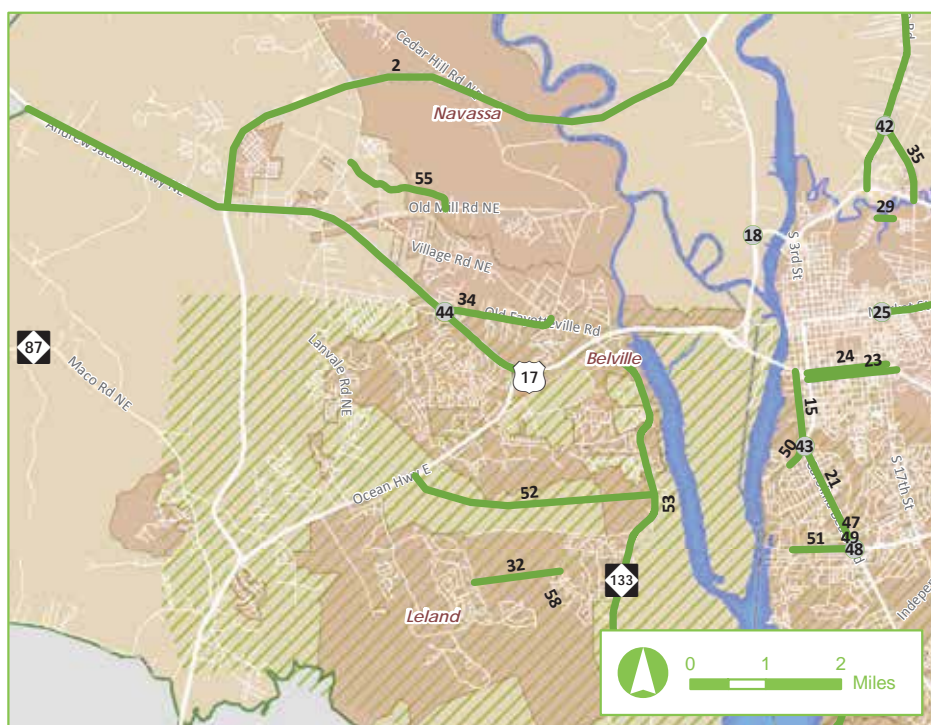
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### Wilmington

Roadway Project Identification Number (R-#)

- Proposed Intersection Improvement
- Proposed Roadway Project
- ▨ R-58 Cape Fear Crossing Study Area (Partial Anticipated Funding)
- ▭ County Boundaries
- ▭ Municipal Boundaries
- ▭ Wilmington MPO Boundary



### Leland, Belville, & Navassa

Roadway Project Identification Number (R-#)

- Proposed Intersection Improvement
- Proposed Roadway Project
- ▨ R-58 Cape Fear Crossing Study Area (Partial Anticipated Funding)
- ▭ County Boundaries
- ▭ Municipal Boundaries
- ▭ Wilmington MPO Boundary

FISCALLY-CONSTRAINED ROADWAYS PROJECT LIST					
ID	PROJECT	FROM	TO	CONSTRUCTION YEAR COST ESTIMATE	TIP #
R-34	Old Fayetteville Road Widening	Village Road	US74/76/Andrew Jackson Highway	\$26,988,212	N/A
R-35	N 23rd Street Widening	NC133/Castle Hayne Road	US74/Martin Luther King Jr Parkway	\$13,147,430	N/A
R-36	NC210 Improvements	Island Creek/ NC210	US17	\$4,273,066	N/A
R-37	Wilshire Boulevard Extension	US117/132/ College Road	MacMillan Avenue	\$3,114,227	N/A
R-38	Hampstead Bypass	Porters Neck Road	Sloop Point Road	\$343,328,798	R-3300
R-39	Country Club/Doral Drive and Sloop Point Loop Road	Country Club Drive/Doral Drive	Sloop Point Loop Road	\$975,620	N/A
R-40	Kerr Avenue Extension	Wrightsville Avenue	US76/Oleander Drive	\$14,628,777	N/A
R-41	I-74 Upgrade	US17/74/76	WMPO Boundary	\$59,886,935	R-4462
R-42	NC133/Castle Hayne Road & 23rd Street Roundabout	NC133/ Castle Hayne Road	N 23rd Street	\$1,358,967	N/A
R-43	Front Street & Carolina Beach Road Intersection	US421/Burnett Boulevard/ Front Street	US421/Carolina Beach Road	\$408,567	N/A

### High Priority

- Alternative Work Schedules
- Carpool/Vanpool
- Development Review
- Park & Ride Lots
- Full-Time TDM Coordinator
- Transit Amenities
- Bicycle & Pedestrian Infrastructure
- Commuter Transit Routes
- Transit Oriented Development\*
- Trip Reduction Ordinance\*
- Trip Reduction Program for Large Mixed Use Developments\*

### Medium Priority

- Bicycle Sharing Program
- Car Share
- Employer Transportation Coordinator

### Low Priority

- Consulting Services for Telecommuting
- Employer Shuttles
- Transportation Management Districts
- High Occupancy Vehicle (HOV) Lanes\*
- Toll and Express Toll (HOT) Lanes\*
- Light Rail\*
- Water Taxi Service\*

\*= only a long-range TDM strategy

FISCALLY-CONSTRAINED ROADWAYS PROJECT LIST					
ID	PROJECT	FROM	TO	CONSTRUCTION YEAR COST ESTIMATE	TIP #
R-44	Old Fayetteville Road Interchange	Old Fayetteville Road	US74/76/Andrew Jackson Highway	\$11,646,941	U-3337
R-45	New Centre Drive & Market Street Intersection	New Centre Drive	US17BUS/Market Street	\$815,380	N/A
R-46	Greenville Avenue & Oleander Drive Intersection	Greenville Avenue	US76/Oleander Drive	\$408,567	N/A
R-47	Shipyard Boulevard Access Management (F/R)	US421/ Carolina Beach Road	Rutledge Drive	\$43,838	N/A
R-48	Carolina Beach Road & Shipyard Boulevard Intersection (wb right turn) (F/R)	US421/ Carolina Beach Road	US117/Shipyard Boulevard	\$1,315,130	N/A
R-49	Shipyard Boulevard Widening (F/R)	US421/ Carolina Beach Road	US117/Shipyard Boulevard	\$306,864	N/A
R-50	Burnett Boulevard Widening (F/R)	US421/ Carolina Beach Road	Myers Street	\$2,628,506	N/A
R-51	Shipyard Boulevard Speed Sensors and Warning activation at NC Port of Wilmington (F/R)	US421/ Carolina Beach Road	River Road	\$175,351	N/A
R-52	US17 to NC133 Connection	US17	NC133	\$16,366,064	N/A
R-53	NC 133/River Road Widening	US17/74/76	Rabon Way SE	\$38,150,598	N/A
R-54	Market Street/MLK Jr. Pkwy Flyovers	US74/Martin Luther King Jr. Parkway	US74/Eastwood Road	\$31,508,309	N/A
R-55	Magnolia Drive Extension	Mount Misery Road	Old Mill Road	\$8,909,680	N/A
R-56*	Independence Boulevard Extension	Randall Parkway	US74/Martin Luther King Jr. Parkway	\$196,640,913	U-4434
R-57*	River Road Widening	Independence Boulevard	US421/Carolina Beach Road	\$187,201,953	N/A
R-58*	Cape Fear Crossing - Funded Portion	US17	US421/Carolina Beach Road	\$158,021,483	U-4738
* Projects anticipated to receive funding from alternative funding mechanisms					

## Transportation Demand Management and Transportation Systems Management

Also included in the plan were strategies for several initiatives that did not include lists of projects. These included transportation demand management and transportation systems management initiatives.

## Transportation Demand



## Management

Transportation demand management (TDM) is described in this plan as an effort to mitigate the growth in traffic congestion. It is also described as the “flip-side” of infrastructure, as it is generally programmatic with an effort to reduce the demand on existing and new infrastructure. Trends are showing that future generations will be more interested in TDM programs rather than commuting habits that apply stress to our infrastructure. If trends continue to fall as they have in the previous years, the TDM strategies listed in the TDM Element will provide the transportation alternatives that younger generations are seeking. These Strategies include the following:

## Transportation Systems Management

Transportation Systems Management is the process of optimizing the existing transportation system and infrastructure. TSM focuses on enhancing the existing infrastructure to increase roadway capacities, to integrate transportation and land use planning, and to reduce congestion within the Wilmington Urban Area. TSM is an opportunity to target improvements that increase capacity, efficiency and utilization of the existing infrastructure. TSM strategies discussed in this element include the following:

- Optimizing Signal Timing and Operations
- Geometric Design
- Intersection Modifications
- Access Management Initiatives
- Additional Turn Lanes
- Motorist Assistance Program
- Pavement Markings
- Signs and Lighting Upgrade
- Streetscape Improvements
- Tourist Transportation Plan
- Traffic Signal Timing Optimization
- Variable/Dynamic Message Signs
- Vehicle Detectors Repair/Replacement

## Funding

A significant component of the MTP is identifying revenues to fund the proposed projects in the plan, otherwise referred to as “fiscal constraint.” In 2013, North Carolina enacted the Strategic Transportation Investment (STI) legislation that requires transportation officials “...to use existing resources more efficiently and effectively and to help us move forward more quickly with important [transportation] projects...” The STI considers past trends and expected future growth as part of its funding criteria for allocating transportation dollars throughout the state. As a result, the WMPO adopted revenue assumptions that align with the STI legislation.

Transportation projects included in the 2040 MTP are funded, primarily by the United States Department of Transportation (USDOT) and NCDOT.



## Public Involvement

Public involvement was a key component of developing the MTP, and the transportation planning process generally. Many public outreach opportunities were provided during the 2040 MTP update process, including public open houses, public surveys, presentations, and specific activities to engage traditionally underserved populations. In addition, the WMPO built a specific website to address the development of *Cape Fear Transportation 2040* to allow for additional public comment (<http://transportation2040.org>).

More specifically, the Citizens Advisory Committee (CAC) guided the development of a three-pronged approach to soliciting and integrating public input for the development of *Cape Fear Transportation 2040*.

1. **Initial Outreach Efforts** – Before defining the transportation needs for the Greater Wilmington Area; CAC directed staff to develop methods that would reach the broad spectrum of people in the Greater Wilmington Area (1) to educate them on the development of *Cape Fear Transportation 2040* and (2) to solicit feedback on current and future transportation needs.
2. **Outreach Efforts to Solicit Proposal Feedback** – Before finalizing the draft plan; CAC directed staff to develop methods that would reach the broad spectrum of people in the Greater Wilmington Area (1) to solicit general feedback on the draft plan and (2) to ascertain whether the draft plan represented the desired projects within the fiscal constraint of the document.
3. **Ongoing Public Outreach Efforts** – The CAC also directed that there be opportunities for the general public to learn about the development of *Cape Fear Transportation 2040* and to provide feedback throughout its development.

## Environmental Justice

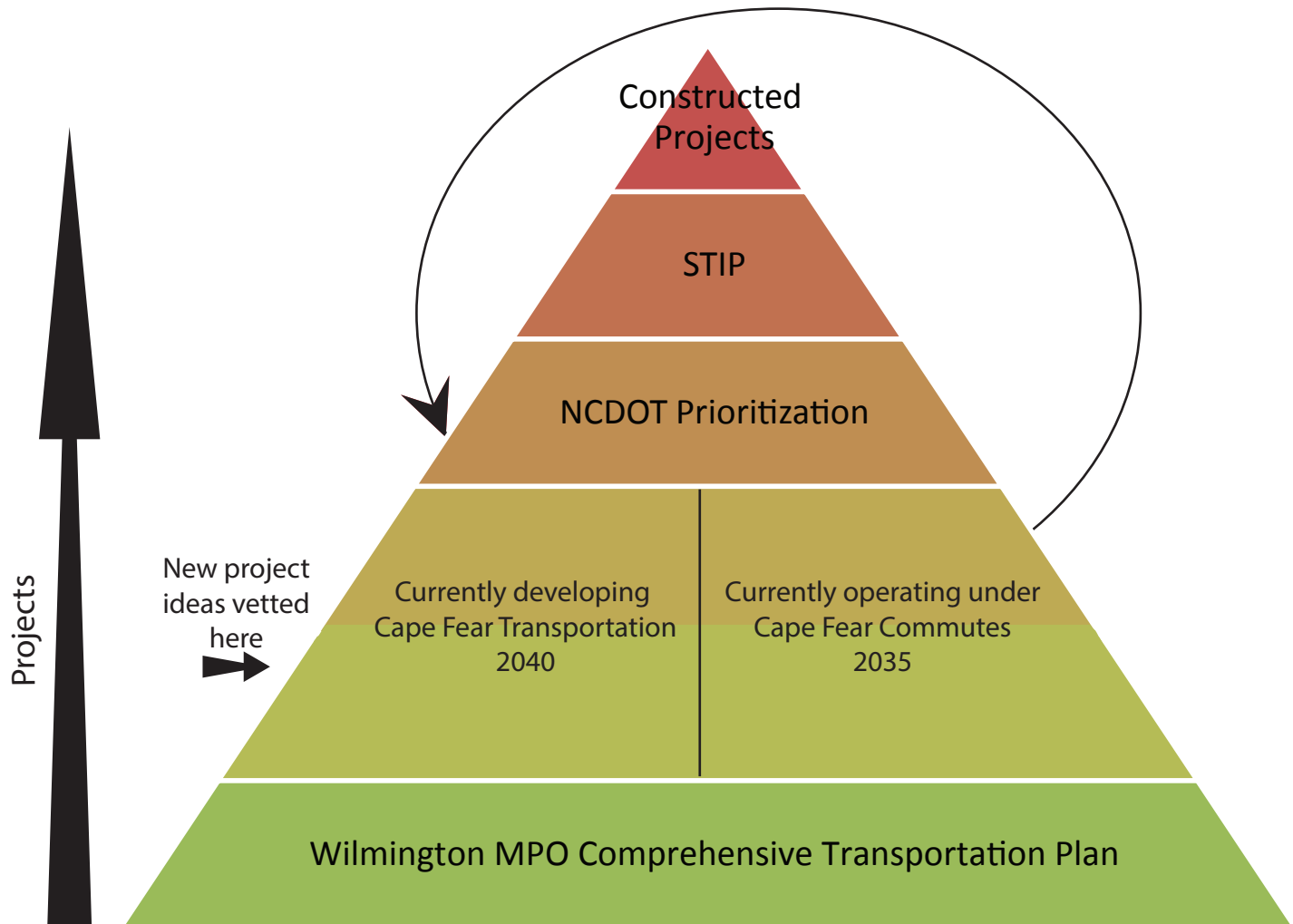
Environmental Justice (EJ) is a process that ensures federal resources are being directed to projects of all modes in a manner that does not unreasonably burden, or deny the benefits of a transportation investment to specific communities based on ethnicity, race, or income.

Environmental justice within the WMPO MTP is based on three fundamental principles derived from guidance issued by the USDOT:

- To avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations.
- To ensure the full and fair participation by all potentially affected communities in the transportation decision-making process.
- To prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority and low-income populations.

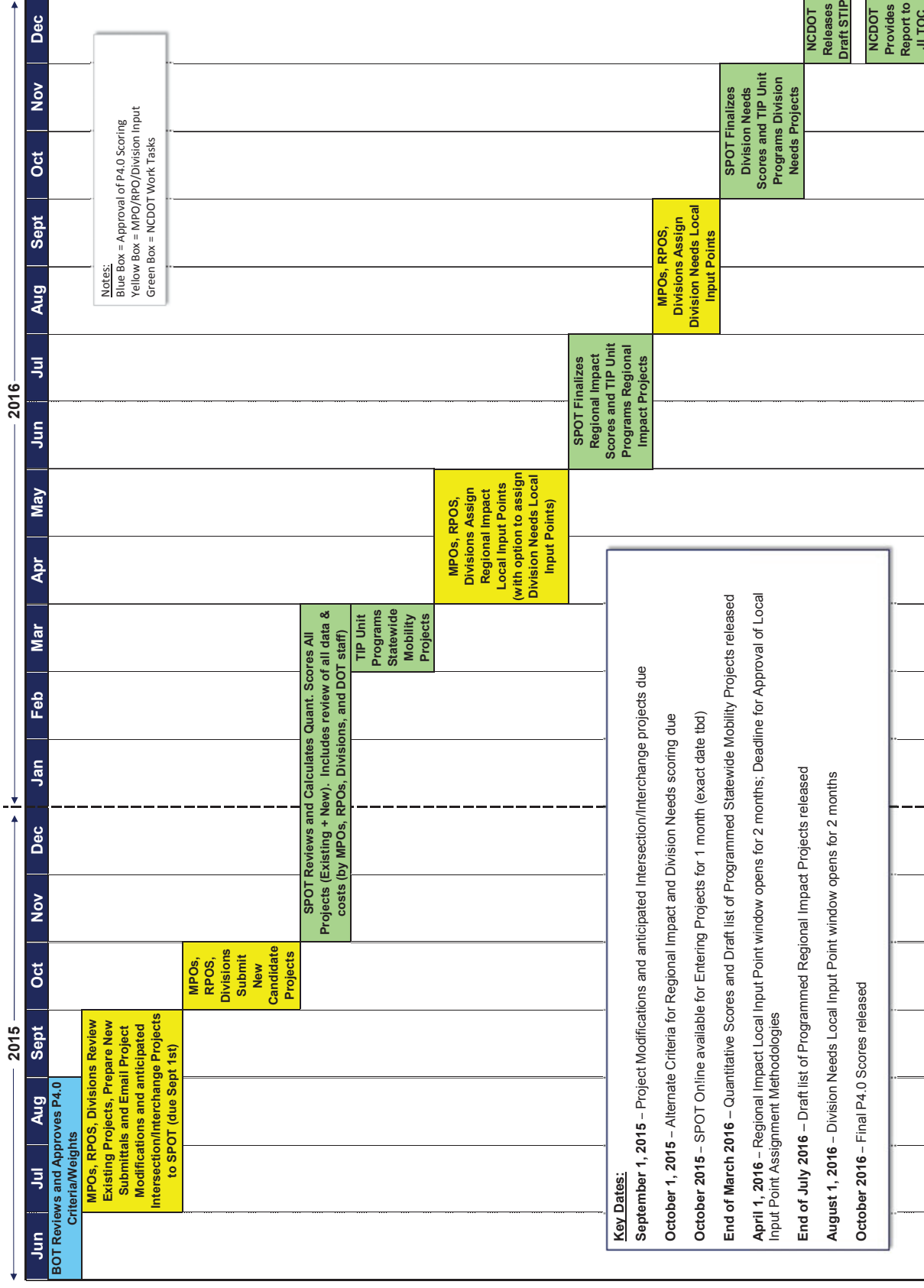
Projects included in *Cape Fear Transportation 2040* were assessed for their collective

# WMPO Role in Transportation Project Delivery: From Planning to Construction (Summer 2014)



Name	What is it?	Explanation	Time frame
<b>STIP</b> - State Transportation Improvement Program	NCDOT transportation infrastructure budget	Provides costs and schedules for programmed highway, rail, bicycle and pedestrian, ferry, enhancements, public transportation, and aviation projects. It includes the type or phase of work, right-of-way and construction phases, costs of right-of-way, utilities and construction, and federal funding sources and sources of local match	Programs 5 years of project funding
<b>NCDOT Prioritization</b> , or "Prioritization 3.0" or "P 3.0"	NCDOT process to program projects into STIP	Prioritization process that scores and ranks transportation projects across the state based on quantifiable, data-driven approach. Projects are prioritized based on NCDOT data and the input from MPOs, RPOs, and NCDOT highway divisions.	Programs 10 years of project funding (only first 5 are guaranteed)
<b>Cape Fear Commutes 2035</b> (CFC 2035)	The WMPO's adopted long-range transportation plan.	Federally mandated document that includes a list of projects (by mode) that have been scored to show priority of projects anticipated to receive funding by horizon year. Projects also include a cost estimate and document is fiscally constrained.	Identifies WMPO Transportation projects to 2035
<b>Cape Fear Transportation 2040</b> (CFT 2040)	The WMPO's draft update to Cape Fear Commutes 2035	Federally mandated draft update of long-range transportation plan.	Identifies WMPO transportation projects to 2040. Due to FHWA December 2015.
<b>Wilmington MPO Comprehensive Transportation Plan</b>	Document that lists all the transportation needs in the WMPO	Most comprehensive of all transportation planning documents. It represents identified transportation needs in the MPO. Not fiscally constrained. Can be used to guide development review/ grants/development of other plans	Demonstrates projects needed over next 25 years

## Prioritization 4.0 Schedule





## WILMINGTON URBAN AREA Metropolitan Planning Organization

P.O. Box 1810  
Wilmington, North Carolina 28402  
910 341 3258 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

TO: WMPO Bicycle & Pedestrian Advisory Committee  
FROM: Suraiya Rashid  
DATE: August 20, 2015  
SUBJECT: Draft Submittal of P 4.0 Bike/Ped Projects (2015)

The following is the proposed list of bike/ped projects to be submitted for NCDOT's Prioritization 4.0 review. This project list is derived from the draft *Cape Fear Transportation 2040 Plan*. The list does not include projects for which funding has been programmed or projects that are on non-NCDOT facilities.

1. N College Road MUP - from Danny Pence Drive to New Town Road (BP-3)
2. Wooster Street Sidewalk – from 8<sup>th</sup> Street to Oleander Drive (BP-4)
3. Wilshire Boulevard Sidewalk – from Wrightsville Avenue to Kerr Avenue (BP-5)
4. College Road Sidewalk - from Hurst Drive to Randall Parkway (BP-8)
5. Wilshire Boulevard Sidewalk – from Kerr Avenue to Macmillan Avenue (BP-10)
6. College Road Sidewalk – from Wrightsville Avenue to Wilshire Boulevard (BP-12)
7. College Road & Oleander Drive Crosswalk (BP-13)
8. 23<sup>rd</sup> Street Sidewalks – from One Tree Hill Way to Princess Place Drive (BP-14)
9. N College Road Sidewalk – from New Village Way to NE Northcase Parkway (BP-15)
10. New Centre Drive Sidewalk – from Market Street to College Road (BP-16)
11. US17/Market Street & Gordon Road Crosswalk (BP-17)
12. US421/Carolina Beach Road & Front Street/Burnett Boulevard Crosswalk (BP-18)
13. Independence Boulevard Extension MUP – from Randall Parkway to south of Martin Luther King Jr. Parkway (BP-19)



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

**RESOLUTION SUBMITTING BICYCLE AND PEDESTRIAN PROJECTS FOR  
CONSIDERATION BY NCDOT IN PRIORITIZATION 4.0**

**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 responsibility of the Wilmington Urban Area Metropolitan Planning Organization (WMPO) Bicycle and Pedestrian Advisory Committee is to provide recommendations to the WMPO Transportation Advisory Committee with regards to bicycle and pedestrian accommodations; and

**WHEREAS**, the Strategic Transportation Investment Bill (HB 817), was signed into law on June 26, 2013, as a way to help the better leveraging of existing funds to enhance the state's transportation infrastructure, providing greater opportunity for economic growth; and

**WHEREAS**, the North Carolina Department of Transportation Strategic Planning Office of Transportation is updating the Prioritization Process and has created Prioritization 4.0; and

**WHEREAS**, the Strategic Planning Office of Transportation's prioritization process will evaluate projects based on a quantitative and qualitative analysis and developed a selection process that is transparent and data driven; and

**WHEREAS**, the Wilmington MPO can submit up to 13 bicycle and pedestrian projects to be included in the prioritization process for Prioritization 4.0.

**NOW THEREFORE**, be it resolved by the Wilmington Urban Area Metropolitan Planning Organization's Bicycle and Pedestrian Advisory Committee hereby endorses the submittal of the Bicycle and Pedestrian projects for consideration by NCDOT in Prioritization 4.0.

**ADOPTED** at a regular meeting of the Wilmington Urban Area Metropolitan Planning Organization Transportation Advisory Committee on September 25, 2013.

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Chris O'Keefe, Chair  
Bicycle and Pedestrian Advisory Committee

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Suraiya Rashid, Secretary

**GENERAL ASSEMBLY OF NORTH CAROLINA  
SESSION 2015**

**SESSION LAW 2015-45  
HOUSE BILL 232**

AN ACT TO DIRECT THE DEPARTMENT OF TRANSPORTATION TO STUDY THE BICYCLE SAFETY LAWS IN THIS STATE AND MAKE RECOMMENDATIONS AS TO HOW THE LAWS MAY BE REVISED TO BETTER ENSURE THE SAFETY OF BICYCLISTS AND MOTORISTS ON THE ROADWAYS.

The General Assembly of North Carolina enacts:

**SECTION 1.** Study. – The Department of Transportation shall study the bicycle safety laws in this State. The study shall focus on what statutory revisions, if any, are needed to better ensure the safety of bicyclists and motorists. In doing so, the Department shall consider at least all of the following:

- (1) How faster-moving vehicles may safely overtake bicycles on roadways where sight distance may be inhibited.
- (2) Whether bicyclists on a roadway should be required to ride single file or allowed to ride two or more abreast.
- (3) Whether bicyclists should be required to carry a form of identification.
- (4) Any other issues determined relevant by the Department.

**SECTION 2.** Working Group. – In conducting the study required by this act, the Department shall convene a working group of interested parties knowledgeable and interested in the bicycle safety laws of this State. The working group shall include all of the following:

- (1) A law enforcement officer.
- (2) A representative from the bicycling industry.
- (3) A representative from the agricultural industry.
- (4) A representative from the trucking industry.
- (5) A representative from county government, who may be a county law enforcement officer.
- (6) A representative from municipal government, who may be a municipal law enforcement officer.
- (7) A representative from the University of North Carolina Highway Safety Research Center.
- (8) A minimum of two staff representatives from the Department.
- (9) Any other expert or stakeholder the Department or working group determines may assist the Department in completing the study required by this act.

The Department shall designate the members listed in subdivisions (1) through (8) of this section, and the working group shall subsequently select a chair and designate the remaining members of the working group authorized under subdivision (9) of this section. In designating additional members, the working group shall ensure that membership composition includes representation of different operator and geographical perspectives.

**SECTION 3.** Maximum Number of Working Group Members. – The total number of members of the working group convened under Section 2 of this act shall not exceed 12 members.

**SECTION 4.** Report and Recommendations. – The Department shall report its findings and recommendations, including any legislative proposals, to the Joint Legislative Transportation Oversight Committee on or before December 31, 2015.



**SECTION 5. Effective Date.** – This act is effective when it becomes law.  
In the General Assembly read three times and ratified this the 26<sup>th</sup> day of May,  
2015.

s/ Daniel J. Forest  
President of the Senate

s/ Tim Moore  
Speaker of the House of Representatives

s/ Pat McCrory  
Governor

Approved 10:30 a.m. this 2<sup>nd</sup> day of June, 2015

# **WMPO Bicycle/Pedestrian Projects Update**

## **August 20, 2015**

### **FUNDED PROJECTS IN PRELIMINARY DESIGN**

**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.

**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.

**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.

**U-5527B CITY OF WILMINGTON – 5<sup>th</sup> 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.

### **PROJECTS IN DESIGN**

**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.

**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.

**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.

**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.

**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

**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.

**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

**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

**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

#### **PROJECTS APPROVED FOR CONSTRUCTION**

**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.

**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.



## **PROJECTS UNDER CONSTRUCTION**

### **South 17th Street**

This is a City of Wilmington project to construct bicycle and pedestrian improvements starting at the current terminus of the Cross-City Trail at John D. Barry Drive to Wade Park via Waltmoor and Bethel Streets. This project will include signalized crosswalks at South 17th Street and College Road.

### **Kerr Avenue Widening U-3338**

Kerr Avenue Widening is an NCDOT project that is currently in design to widen Kerr Avenue from Randall Parkway to the MLK parkway. This project will incorporate bike lanes and sidewalks on both sides of the street, signalized crosswalks at Randall Parkway, Market Street/US 17BUS, and others. Construction is scheduled for 2014.