Create and execute continuing, cooperative and comprehensive regional long-range planning efforts that proactively drive transportation decisions to improve safety, connectivity, economic development and quality of life in the Wilmington region.

# Wilmington Urban Area Metropolitan Planning Organization <br> Board <br> Meeting Agenda 

TO: Wilmington Urban Area MPO Board Members<br>FROM: Mike Kozlosky, Executive Director<br>DATE: November 20, 2018<br>SUBJECT: November $28^{\text {th }}$ meeting

A meeting of the Wilmington Urban Area MPO Board will be held on Wednesday, November $28^{\text {th }}$ at 3 pm. The meeting will be held in the $6^{\text {th }}$ Floor Conference Room at 320 Chestnut Street in downtown Wilmington.

The following is the agenda for the meeting:

1) Call to Order
2) Conflict of Interest Statement
3) Approval of Board Member Excused Absences
4) Approval of the Agenda
5) Public Comment Period
6) Presentation
a. Cape Fear Moving Forward 2045 Public Input Results- Abby Lorenzo, WMPO
b. North Carolina Department of Transportation Project Development and Merger Process- Karen Collette, NCDOT
7) Consent Agenda
a. Approval of Board Meeting Minutes- October 31, 2018 (p. 3-10)
b. Resolution endorsing the North Carolina Department of Transportation’s Statewide Safety Targets for the Wilmington Urban Area Metropolitan Planning Organization (p. 11-12)
c. Resolution approving 2018-2027 STIP/MPO TIP Administrative Modification \#18-8 (р. 13-15)
d. Resolution adopting the 2019 Wilmington Urban Area Metropolitan Planning Organization Meeting Schedule (p. 16-17)
8) Regular Agenda
a. Resolution approving the Wilmington Urban Area Metropolitan Planning Organization’s Division Needs Tier Local Input Point Assignment for Prioritization 5.0 (P. 18-29)
b. Resolution approving the Cape Fear Moving Forward 2045 Goals and Objectives (p. 30-47)

Wilmington Urban Area Metropolitan Planning Organization
c. Resolution adopting the 2018 Congestion Management Process Biennial Report (p. 48-86)
9) Discussion
a. INFRA Grant
b. TASA Call for Projects
c. Military Cutoff Road Extension- Snug Harbour (p. 87-88)
d. 2018-2027 STIP/MPO TIP Administrative Modification \#18-9 (p. 89)
10) Updates
a. Crossing over the Cape Fear River (p. 90)
b. Wilmington Urban Area MPO (p. 91-97)
c. Cape Fear Public Transportation Authority (p. 98-99)
d. NCDOT Division (p. 100-109)
e. NCDOT Transportation Planning Division (p. 110-112)
11) Announcements
a. WMPO Bicycle and Pedestrian Advisory Committee- December $4^{\text {th }}$
12) Next meeting - January 30, 2019

## Attachments

- Board Meeting Minutes- October 31, 2018
- Resolution endorsing the North Carolina Department of Transportation's Statewide Safety Targets for the Wilmington Urban Area Metropolitan Planning Organization
- Proposed 2018-2027 STIP/MPO TIP Administrative Modification \#18-8
- Resolution approving 2018-2027 STIP/MPO TIP Administrative Modification \#18-8
- Proposed 2019 Wilmington Urban Area Metropolitan Planning Organization Meeting Schedule
- Resolution adopting the 2019 Wilmington Urban Area Metropolitan Planning Organization Meeting Schedule
- Proposed Wilmington Urban Area Metropolitan Planning Organization’s Division Needs Tier Local Input Point Assignment for Prioritization 5.0 dated 10/31/18
- Resolution approving the Wilmington Urban Area Metropolitan Planning Organization's Division Needs Tier Local Input Point Assignment for Prioritization 5.0
- Recommended Cape Fear Moving Forward 2045 Goals and Objectives
- Resolution approving the Cape Fear Moving Forward 2045 Goals and Objectives
- Draft 2018 Congestion Management Process Biennial Report
- Resolution adopting the 2018 Congestion Management Process Biennial Report
- Letter from Snug Harbour
- Draft 2018-2027 STIP/MPO TIP Administrative Modification \#18-9
- Cape Fear River Crossing Update (November)
- Wilmington MPO Project Update (November)
- Cape Fear Public Transportation Authority Update (November)
- NCDOT Division Project Update (November)
- NCDOT Transportation Planning Division Project Update (November)


# Board Meeting Minutes 6 ${ }^{\text {th }}$ Floor Conference Room, 320 Chestnut Street Wednesday, October 31, 2018 

## Members Present

David Piepmeyer, Pender County
Pat Batleman, Town of Leland
Neil Anderson, City of Wilmington
Charlie Rivenbark City of Wilmington
Jonathan Barfield, Cape Fear Public
Transportation Authority
Steve Shuttleworth, Town of Carolina Beach
John Ellen, Town of Kure Beach
Hank Miller, Town of Wrightsville Beach
Frank Williams, Brunswick County
Mike Alford, NC Board of Transportation

Others Present
Mike Kozlosky, Executive Director, WMPO
Karen Collette, NCDOT Highway Division 3
Matt Nichols, MPO Attorney
Mark Hamlet, MPO Map Act Attorney

1. Call to Order

Vice Chairman Batleman called the meeting to order at 3:07 p.m., and chaired the entire meeting.
2. Conflict of Interest Statement

Ms. Batleman read the conflict of interest statement and asked if any members had a conflict with any of the items on the meeting agenda. No members reported having a conflict.
3. Approval of Board Members' Excused Absences

Mr. Kozlosky stated that Mr. Watkins and Mr. Zimmer have requested to be excused from today's meeting; however, Mr. Alford is representing the NC Board of Transportation.

Mr. Rivenbark made a motion to excuse the absence of Mr. Watkins. Mr. Miller seconded the motion, and it carried unanimously.

## 4. Approval of the Agenda

Mr. Kozlosky requested that a closed session be added to the end of the agenda for the purpose of discussing on-going legal matters.

Mr. Rivenbark made a motion to approve the agenda as amended, seconded by Mr.
Anderson, and the motion carried unanimously.

## 5. Public Comment Period

Mr. Buddy Martinette, 7001 Long Boat Circle and President of the HOA, spoke to the Board and distributed a flyer regarding Military Cutoff Road. He expressed concerns regarding the elevation of the road, which he said was not apparent at any of the public meetings held. He displayed photos of his view of the road from his backyard and pointed out that the crown is visible five feet above the six-foot privacy fence. He noted that the neighborhood missed qualifying for a sound barrier by six decibels according to the state. He pointed out that elevation was not a factor at the time because the hydraulics were not yet considered, which necessitated elevation of the road. He added that Kevin Bowen of NCDOT has been unable
to find a comparable example in the state although a few are said to exist. He requested 900 feet of consideration for Covil Crossing and Snug Harbour.

Ms. Judi Vance, 7003 Long Boat Circle, spoke to the Board and expressed concerns regarding Military Cutoff Road. She stated that when the road was built it was to be 75 feet back with all the trees preserved. However, the road is less than 50 feet away and all the trees have been removed. She pointed out that the noise testing was done at the level of Covil Crossing when all of the trees were present, and, if it were to be tested now, the noise would exceed the requirements justifying a wall. In addition, 15 homes are impacted by it, and not the three originally projected. She also expressed concerns regarding the lack of safety.

Ms. Mary Beth Farrior, 7101 Privateer Court, and member of the Snug Harbour Homeowners Association, spoke to the Board and expressed concerns regarding Military Cutoff Road. She asked for a show of hands of those impacted by the road and the lack of trees. Nearly a dozen people responded. She requested that the decision regarding a barrier be reconsidered and a visual landscaping, hardscape barrier be installed for the safety of residents.

Ms. Jennifer Adams, 26 Pickett Drive, and Facilities Manager for Corning Incorporated at 310 North College Road spoke to the Board. She expressed concerns regarding the College Road and Ringo Drive intersection improvements as part of Alternative 1 for the College Road Widening Project. She stated that it would deprive Corning of its two-way, northbound access from the service road and prohibit access from the main security office to the south gate. In addition, public access would inhibit timely security and service response. She expressed appreciation to NCDOT and Mr. Howell for working with Corning on this project.

Mr. Howard Capps, 4106 Breezewood Drive, spoke to the Board and distributed an 18-page document entitled, "Placemaking." He expressed concerns that the three alternatives proposed at the June $28^{\text {th }}$ NCDOT public meeting for the College Road corridor do not address the multi-modal recommendations of the City of Wilmington's Comprehensive Plan. He expressed concerns that multi-modal facilities and aesthetics would not be considered until an alternative is selected, and that the municipalities be given a chance to provide input.

Mr. Dan Greene, 94 Snug Harbour Drive, and member of the Board of Directors for Covil Crossing, spoke to the MPO Board and expressed concerns regarding visual, safety and noise impacts caused by the proximity of Military Cutoff Road.

Mr. Brian Costlow, 7104 Rock Creek Circle, spoke to the Board and expressed appreciation to NCDOT staff for their approachability and responsiveness. He expressed concerns regarding the elevation of Military Cutoff Road and proximity to the homes. He also requested that the noise issues be addressed with a sound barrier.

## 6. Presentations

## a. College Road Improvement Projects - Chad Kimes, NCDOT

Mr. Kimes announced the reopening of US 421 at 5:00 p.m. today. He then gave an overview of the recommended alternatives for the five funded projects along College Road, which total $\$ 300$ million and span from Gordon Road to Monkey Junction. He noted that each element of the selection process carries a similar weight, although any one of them could disqualify an alternative. He listed the considerations of purpose and need; environmental (wetlands and streams), landowner and commercial impacts; traffic data; public input; benefits versus costs; new
development within project limits; and build-ability. He advised members that Level of Service (LOS) should be considered according to traffic delays, as opposed to by category (A-F), since delays can vary widely for each category.

Mr. Barfield expressed an interest in a presentation on LOS to the New Hanover County Commissioners.

Mr. Rivenbark commented that Wayne Clark went to great lengths to explain LOS to the City Council in the late 1990s, although without these graphics.

Mr. Williams requested a copy of the presentation. Mr. Kozlosky responded that it would be distributed to the Board.

Ms. Collette pointed out that Level E is generally thought to not function; but it does.
Mr. Kimes stated that Level of Service F is greater than 80 seconds of delay, although much greater delays exist under these Level Fs. He then gave an overview of alternatives for each of the projects as follows:

## 1. Gordon Road to New Centre Drive and Interchange at College Road and Martin Luther King Jr. Boulevard (U-5881 \& U-5792)

Two alternatives were presented as follows:
a. Free Flow* of College Road with Tight Urban Diamond Interchange (TUDI) over Martin Luther King Jr. Boulevard (MLK); additional interchanges at Kings Drive and Ringo Drive; two roundabouts under the College Road flyover; four tight ramps reducing impacts to adjacent property owners (with Corning's still under discussion).
i. *Recommended by NCDOT due to fewer impacts to wetlands and better LOS, improved safety overall, and improved entrance to Wilmington with I-40 being a controlled facility, reducing all conflict points and driveways to the interchange.
b. Superstreets with a Single Point Urban Interchange (SPUI) at MLK.

Mr. Kimes stated that the current right-of-way and let dates of 2021 and 2024, respectively, are consistent for all of the projects along the corridor. In addition, College Road will have three lanes both in the north and southbound directions throughout the entire corridor.
2. New Centre Drive to Carolina Beach Road (U-5702)

This is an access management project that improves time delays, continues three lanes north and southbound, improves intersections as needed such as by adding turn lanes, reduces the number of driveways wherever possible, as well include bicycle/pedestrian facilities.

Mr. Barfield stated that he lives in the area and expressed concerns regarding the impacts to residents, particularly 3819 South College Road, to businesses, to the Cross City Trail, and to the City's Comprehensive Plan.

Mr. Kimes responded that not much widening would be done, except to the intersections. He noted that he would need to research it and report back. He added that the MPO is involved with all of the selection and scoping, and that the City is involved as well.

Ms. Collette pointed out that the hydraulic design would further determine the impacts to the properties.

Mr. Kimes stated that the hydro has the largest impact and is done much later, at least halfway into the project.

## 3. College Road to Oleander Drive (U-5704)

Three alternatives were presented as follows:
a. Quadrant Design* - Remove left turns from the main intersection and redirect to Parkway Drive. Little to no impact to commercial businesses; although a single strand of homes will be impacted. Project cost: $\$ 36$ million.
i. *Recommended by NCDOT due to least commercial impacts, lower construction right-of-way costs, acceptable LOS, much fewer impacts during construction.
b. Continuous Flow Intersection - Major commercial impacts.
c. Tight Urban Diamond Interchange (TUDI) - Substantial impacts. Project cost: \$70 million.
In response to concerns expressed by Mr. Barfield, Mr. Kimes stated that all of the homeowners have been individually contacted regarding the public meetings.

In response to an inquiry by Mr. Williams, Mr. Kimes stated that NCDOT has been in close communication with Jimbo's (restaurant), who owns three houses in the area and a few commercial businesses. He noted that an ingress/egress is in the planning stages.

Mr. Kimes recommended future discussions regarding the 2024 let dates in order to prevent simultaneous construction impacts. He suggested that the intersections be constructed first, followed by access management.

## 4. College Road to Carolina Beach Road (U-5790)

Two alternatives were presented as follows:
a. Flyover (video) - Relatively expensive treatment of heavy left-turn movement coming from Carolina Beach towards downtown and the Port.
b. Continuous Flow Intersection* - Fits well within existing right-of-way.
i. * Recommended by NCDOT due to cost savings (almost half the cost of the flyover alternative) with fewer impacts during construction; fewer environmental impacts, and acceptable LOS.
Mr. Rivenbark expressed concerns regarding the need for a student bicycle/pedestrian crossing at the university.

Mr. Kimes responded that NCDOT has been in discussion with UNCW for a couple of years now. He noted that it will be included as part of the larger project from New Centre Drive south on College Road.
b. US 74 and US 17IUS 421 Interchange Improvements (U-5713)

Three alternatives were presented as follows:

1. Diverging Diamond - Two signals; safety concerns remain.
2. Flyover - Addresses heavy movement; one signal and safety concerns remain.
3. Trumpet* - All movements are free flowing; no signals; bridging reduces environmental impacts.
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i. *Recommended by NCDOT
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Mr. Kimes stated that this intersection has had a high volume of crashes (more than 250 during the past five years, including four Type-A injuries, which are considered nearly as serious as fatalities). He noted that right-of-way date is 2020 and the let date is 2022. He pointed out that the Trumpet design is a good fit for this interchange where safety is of prime concern.
7. Consent Agenda
a. Approval of Board Meeting Minutes - August 29, 2018
b. Resolution authorizing the Chairman to enter into the FY 18-19 Section 5303 Agreement between the Wilmington Urban Area Metropolitan Planning Organization, City of Wilmington and Cape Fear Public Transportation Authority
c. Resolution accepting donations for the Go Coast 2018 Commuter Challenge
d. Resolution endorsing the creation of the Wilmington Urban Area Metropolitan Planning Organization's Go Coast Commuter Friendly Employer Program
e. Resolution authorizing the Wilmington Urban Area Metropolitan Planning Organization to apply for NCDOT FY 2020 Transportation Demand Management Funding and provide the required local match
f. Resolution approving 2018-2027 STIP/MPO TIP Administrative Amendment \#18-4
g. Opening of the 30-day Public Comment Period for 2018-2027 STIPIMPO TIP Amendment \#18-5
Mr. Ellen made a motion to approve the Consent Agenda as presented, seconded by Mr . Rivenbark, and the motion carried unanimously.
8. Regular Agenda
a. Resolution supporting the North Carolina Department of Transportation's recommendation for the Free Flow design for College Road from Gordon Road to New Centre Drive, a Tight Urban Diamond interchange at the Martin Luther King Jr. Parkway and College Road, and access management improvements between New Centre Drive and Carolina Beach Road as the preferred alternative for the College Road improvements
b. Resolution supporting the North Carolina Department of Transportation's recommendation for the at-grade Quadrant as the preferred alternative for the intersection improvements at College Road and Oleander Drive
c. Resolution supporting the North Carolina Department of Transportation's recommendation for the Continuous Flow Intersection as the preferred alternative for the intersection improvements at College Road and Carolina Beach Road
d. Resolution supporting the North Carolina Department of Transportation's recommendation for the Trumpet interchange as the preferred alternative for the US 74 and US 17IUS 421 Interchange Improvements

Mr. Kozlosky stated that the first four regular agenda items are related to today's presentations. He noted that Item 8a pertains to the section of College Road from Gordon Road to Carolina Beach Road with the exception of the College Road and Oleander Drive intersection, which is the second item. The third item is the recommended alternative for a continuous flow intersection at College Road and Carolina Beach Road. The fourth item
supports the recommended alternative of the trumpet interchange at US 421 and the Isabel Holmes Bridge.

A lengthy question/answer and discussion period was held. Board members expressed concerns regarding supporting the preferred alternatives without complete information on the potential impacts.

Mr. Kimes responded that it is typical for an additional public hearing to be held to gather public input at 25 percent design.

Mr. Williams made a motion to table the Item 8a to the Board's next meeting.
In response to an inquiry by Mr. Alford, Mr. Barfield expressed the desire to have his questions regarding impact answered before the Item is considered again.

Ms. Collette pointed out that 30 days is insufficient for the requested level of detail.
Mr. Kimes offered to visit the site and give an opinion before the hydraulic analysis is completed.

Mr. Rivenbark pointed out that the improvements need to move forward.
Following further consideration, Vice Chairman Batleman called the question. Mr. Barfield seconded the motion. The Board voted 1-9, and the motion failed. (All members except Mr. Barfield voted "No.")

Mr. Rivenbark made a motion to approve Items 8a through 8d.
Mr. Alford requested a friendly amendment for an update at 25 percent design.
Mr. Kozlosky responded that staff would provide an update.
Mr. Shuttleworth seconded the motion, and it carried 9-1. (Mr. Barfield voted "No.)
e. Opening of a 14-day public comment period for the Wilmington Urban Area Metropolitan Planning Organization's Prioritization 5.0 Division Needs Local Input Point Assignment
Mr. Kozlosky presented the Board with two options:

- Assign local input points based on the adopted methodology, or
- Deviate from the methodology and assign points based on coordination with the North Carolina Department of Transportation (NCDOT).

Mr. Kozlosky stated that under the prioritization legislation, the local input point assignment may deviate from the adopted methodology so long as justification is provided. He noted that staff recommends the second option as staff has worked collaboratively with the Department in order to provide the best opportunity and deploy the most capital in the Division. Although this option would remove the local points from some of the larger dollar projects, it would allow more projects to be funded in the region. The TCC also recommends opening the public comment period for the second option.

Mr. Williams made a motion to open the 14-day public comment period for the Wilmington Urban Area Metropolitan Planning Organization's Prioritization 5.0 Division Needs Local

Input Point Assignment that deviates from the methodology and is in coordination with NCDOT. Mr. Shuttleworth seconded the motion, and it carried unanimously.

## 9. Discussion

## a. Transportation Alternatives - Set Aside Direct Attributable Funds Call for Projects

Ms. Amy Kimes, Senior Project Engineer, stated that the majority of Surface Transportation Block Grant Program (STBGP) funds have been obligated through 2019. She noted that about \$800,000 in Transportation Alternatives Set Aside - Direct Attributable (TASA-DA) funds are available and need to be used. She added that staff recommends opening a call for projects for the TASA-DA funds this fall.

Ms. Kimes stated that these funds can be used for construction, planning and design of on- and off-road facilities for pedestrians, for ADA, and for environmental mitigation activities including pollution prevention and abatement activities, and mitigation to address storm water management, control and water pollution prevention or abatement related to highway construction or due to highway runoff. Generally, bike/pedestrian or environmental projects would qualify for TASA funding.

Mr. Kozlosky stated that the TCC recommends moving forward with a call for projects for the remaining TASA-DA funds. He noted that a rescission of funds is expected in 2020 and expressed a desire to obligate the funds so as not to lose them. He requested the Board's support of a call for projects.

Mr. Barfield made a motion to approve a call for projects to utilize the TASA-DA funds, seconded by Mr. Rivenbark, and the motion carried unanimously.
b. 2018-2027 STIP/MPO TIP Modifications \# 18-8

Mr. Kozlosky stated that this item is for informational purposes only and will be brought back for approval at the Board's next meeting.
9. Updates

Mr. Kozlosky stated that staff will provide the Board with an updated schedule for the Cape Fear Crossing Project tomorrow. He noted that the other updates are included in the agenda packet.

## 10. Announcements

> WMPO Bicycle and Pedestrian Advisory Committee meeting: November $13^{\text {th }}$
> The next WMPO Board meeting: November $28^{\text {th }}$
Mr. Kozlosky introduced new Associate Transportation Planner Zachary Manfredi and acknowledged that the MPO is now fully staffed. Mr. Manfredi expressed appreciation and gave a brief overview of his professional background.

Mr. Kozlosky stated that the Cape Fear Public Transportation Authority has scheduled a groundbreaking ceremony for 1:30 p.m. on November $15^{\text {th }}$. He noted that the MPO will be acknowledged at the event and encouraged members to attend.

Mr. Piepmeyer requested that a calendar invitation be sent to members.
Ms. Batleman made a motion to hold a closed session to discuss with the WMPO's attorneys a matter within the attorney-client privilege, including the Map Act litigation pending against the

WMPO, the parties to which litigation and Court file numbers are identified on the WMPO's current Map Act Case List dated October 31, 2018. Mr. Ellen seconded the motion and it carried unanimously.

The meeting was recessed and went into closed session.
The meeting was reconvened and went into open session with all members present as mentioned above.

Ms. Batleman stated that no action was taken.
A lengthy debate was held regarding the concerns expressed during the public comment period regarding Military Cutoff Road, and NCDOT's process for vetting alternatives.

It was the consensus of the Board to include a discussion on this topic at the Board's next meeting.

## 11. Adjournment

With no further business, the meeting was adjourned at 4:30 p.m.
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.

# WILMINGTON URBAN AREA METROPOLITAN PLANNING ORGANIZATION BOARD 

# RESOLUTION ENDORSING THE TARGETS FOR SAFETY PERFORMANCE MEASURES ESTABLISHED BY THE NORTH CAROLINA DEPARTMENT OF TANSPORTATION FOR THE WILMINGTON URBAN AREA METROPOLITAN PLANNING ORGANIZATION 

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 Urban Area Metropolitan Planning Organization has been designated by the Governor of the State of North Carolina as the Metropolitan Planning Organization (MPO) responsible, together with the State, for the comprehensive, continuing, and cooperative transportation planning process for the MPO's metropolitan planning area; and

WHEREAS, 23 CFR 490 and 23 CFR 450 detail regulations that State DOT's and MPO's must follow regarding the inclusion of performance measures into the planning process, and implementation and details of the performance management process (targets, measures, etc...); and

WHEREAS, the North Carolina Department of Transportation (NCDOT) has established 5 targets for safety-related performance measures that were recently submitted as part of NCDOT's yearly Highway Safety Improvement Program annual report; and

WHEREAS, this report was submitted to FHWA on August 31, 2018 and included the 5 safetyrelated measures: 1) Number of fatalities, 2) Fatality Rate (per 100 million VMT), 3 Number of Serious Injuries, 4) Serious Injury Rate (per 100 million VMT), and 5) Number of Non-motorized (Pedestrians + Bicyclists) Fatalities and Serious Injuries; and

WHEREAS, per section 490.209 (c), Metropolitan Planning Organizations have 180 days from August 31, 2018 to establish a target by either a) agreeing to plan and program projects so that they contribute toward the accomplishment of NCDOT's safety target for that performance measure; or b) committing to a quantifiable target for that performance measure for your metropolitan planning area. (23 CFR 450.206(d)(2)(ii)).

NOW THEREFORE, be it resolved that the Board of the Wilmington Urban Area Metropolitan Planning Organization hereby agrees for 2019 to plan and program projects that contribute toward the accomplishment of the State's targets as noted below for each of the aforementioned performance measures:

1) For the 2019 Highway Safety Improvement Plan (HSIP), the goal is to reduce total fatalities by 5.59 percent each year from 1,362.8 (2013-2017 average) to 1,214.7 (2015-2019 average) by December 31, 2019.
2) For the 2019 Highway Safety Improvement Plan (HSIP), the goal is to reduce the fatality rate by 5.02 percent each year from 1.216 (2013-2017 average) to 1.097 (2015-2019 average) by December 31, 2019.
3) For the 2019 Highway Safety Improvement Plan (HSIP), the goal is to reduce total serious injuries by 6.77 percent each year from 2,865.2 (2013-2017 average) to 2,490.6 (2015-2019 average) by December 31, 2019 .
4) For the 2019 Highway Safety Improvement Plan (HSIP), the goal is to reduce the serious injury rate by 6.12 percent each year from 2.528 (2013-2017 average) to 2.228 (2015-2019 average) by December 31, 2019.
5) For the 2019 Highway Safety Improvement Plan (HSIP), the goal is to reduce the total nonmotorized fatalities and serious injuries by 6.02 percent each year from 457.0 (2013-2017 average) to 403.7 (2015-2019 average) by December 31, 2019.

NOW THEREFORE, also be it resolved that by approval of this resolution an amendment is hereby made to the Cape Fear 2040 Metropolitan Transportation Plan adopted on November 18, 2015 and the Transportation Improvement Program adopted on August 30, 2017 by the Board of the Wilmington Urban Area Metropolitan Planning Organization.

ADOPTED at a regular meeting of the Wilmington Urban Area Metropolitan Planning Organization’s Board on November 28, 2018.

David Piepmeyer, Chair

Mike Kozlosky, Secretary


Proposed Revisions to 2018-2027 STIP/MPO TIP Programs
STIP/MPO TIP Modification \# 18-8
(September 2018)
VARIOUS, DIVISION 3 PROGRAM TO UPGRADE
INTERSECTIONS TO COMPLY WITH THE


CONSTRUCTION

VARIOUS, DIVISION 3 RUMBLE STRIPS,
GUARDRAIL, SAFETY AND LIGHTING
IMPROVEMENTS AT SELECTED
LOCATIONS.
ADD ROW AND CONSTRUCTION IN FY 19 AND
CONSTRUCTION IN FY 20 NOT PREVIOUSLY
PROGRAMMED.

* W-5203
BRUNSWICK
DUPLIN
NEW HANOVER
ONSLOW
PENDER
SAMPSON


# WILMINGTON URBAN AREA METROPOLITAN PLANNING ORGANIZATION BOARD 

## RESOLUTION APPROVING ADMINISTRATIVE MODIFICATION \#18-8 TO THE 2018-2027 STATE /MPO 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 Board 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 2018-2027 State Transportation Improvement Program on August 3, 2017 and the Wilmington Urban Area Metropolitan Planning Organization Board adopted the Statewide/MPO Transportation Improvement Programs on August 30, 2017; and

WHEREAS, the Wilmington Urban Area Metropolitan Planning Organization desires to modify the adopted 2018-2027 State/MPO Transportation Improvement Programs for Administrative Modification \#18-8.

NOW THEREFORE, be it resolved that the Board of the Wilmington Urban Area Metropolitan Planning Organization hereby approves modifying the 2018-2027 State/MPO Transportation Improvement Programs for Administrative Modification \#18-8.

ADOPTED at a regular meeting of the Wilmington Urban Area Metropolitan Planning Organization's Board on November 28, 2018.

David Piepmeyer, Chair

Mike Kozlosky, Secretary

## MEMORANDUM

TO: TCC/Board members
FROM: Mike Kozlosky, Executive Director
DATE: November 7, 2018
SUBJECT: Wilmington Urban Area MPO Proposed 2019 Meeting Schedule

| Technical Coordinating Committee | Board |
| :---: | :---: |
| January 16 | January 30 |
| February 13 | February 27 |
| March 13 | March 27 |
| April 10 | April 24 |
| May 15 | May 29 |
| June 12 | June 26 |
| July 17 | July 31 |
| August 14 | August 28 |
| September 11 | September 25 |
| October 16 | October 30 |
| November 6 | November 20 |
| December -no meeting scheduled | December -no meeting scheduled |

The TCC meetings will begin at 10 am on the date of the meetings.
The Board meetings will begin at 3 pm on the date of the meetings.

# WILMINGTON URBAN AREA METROPOLITAN PLANNING ORGANIZATION BOARD 

## RESOLUTION ADOPTING THE 2019 WILMINGTON URBAN AREA METROPOLITAN PLANNING ORGANIZATION MEETING CALENDAR


#### Abstract

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 Urban Area Metropolitan Planning Organization’s Board adopts the meeting calendar on an annual basis.

NOW THEREFORE, be it resolved that the Board of the Wilmington Urban Area Metropolitan Planning Organization hereby adopts the 2019 meeting calendar.


ADOPTED at a regular meeting of the Wilmington Urban Area Metropolitan Planning Organization's Board on November 28, 2018.

[^0]Mike Kozlosky, Secretary
Prioritization 5.0 Draft Division Needs Projects -- Local Input Point Assignment 10/31/2018







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# WILMINGTON URBAN AREA METROPOLITAN PLANNING ORGANIZATION BOARD <br> <br> RESOLUTION APPROVING THE WILMINGTON URBAN AREA METROPOLITAN PLANNING <br> <br> RESOLUTION APPROVING THE WILMINGTON URBAN AREA METROPOLITAN PLANNING ORGANIZATION'S LOCAL INPUT POINT ASSIGNMENT FOR THE DIVISION NEEDS TIER ORGANIZATION'S LOCAL INPUT POINT ASSIGNMENT FOR THE DIVISION NEEDS TIER PROJECTS IN PRIORITIZATION 5.0 

 PROJECTS IN PRIORITIZATION 5.0}

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 Strategic Transportation Investments is the formula to determine how the North Carolina Department of Transportation (NCDOT), in partnership with local governments, will fund and prioritize transportation projects in the state of North Carolina; and

WHEREAS, Metropolitan Planning Organizations (MPOs), Rural Planning Organizations (RPOs) and Division Engineers assign local input points to projects in the Regional and Division tiers; and

WHEREAS, the Wilmington Urban Area Metropolitan Planning Organization adopted a Local Input Methodology for Prioritization 5.0 on February 28, 2018; and

WHEREAS, the Wilmington Urban Area Metropolitan Planning Organization allocated 1,500 points at the Regional Impact tier and has the ability to assign 1,500 points at the Division Needs tier; and

WHEREAS, on July 25, 2018 the Board of the Wilmington Urban Area Metropolitan Planning Organization approved the Wilmington Urban Area Metropolitan Planning Organization’s Local Input Point Assignment for the Regional Impact Tier projects in Prioritization 5.0; and

WHEREAS, the Wilmington Urban Area Metropolitan Planning Organization has reviewed the projects in Prioritization 5.0 and consistent with the approved methodology assigned a draft ranking and scoring to the projects in the Division Needs tier for Prioritization 5.0; and

WHEREAS, the Wilmington Urban Area Metropolitan Planning Organization conducted a public comment period for the Division Needs Tier projects.

NOW THEREFORE, be it resolved that the Board of the Wilmington Urban Area Metropolitan Planning Organization hereby approves the Wilmington Urban Area Metropolitan Planning Organization's Local Input Point Assignment for the Division Needs Tier projects in Prioritization 5.0.

ADOPTED at a regular meeting of the Wilmington Urban Area Metropolitan Planning Organization’s Board on November 28, 2018.

David Piepmeyer, Chair

Mike Kozlosky, Secretary

## MEMORANDUM

To: MPO Board Members
From: Abby Lorenzo, Senior Transportation Planner
Date: $\quad$ November 19, 2018
Subject: Cape Fear Moving Forward 2045 Aviation Goals and Objectives

The following goals and objectives have been developed by the Aviation Modal Subcommittee for the Cape Fear Moving Forward 2045 Metropolitan Transportation Plan.

Goal A - Economic Development
Objectives:

1. Improve commercial aviation service for business travelers
2. Maintain opportunities for freight rail service to ILM
3. Serve the needs particular to the region's target industries, such as:
i. Tourism
ii. Film
iii. Fintech/IT
iv. Pharma
v. Military
vi. Logistics and Industry
4. Develop aviation infrastructure to encourage additional commercial carrier, general aviation, and freight services

## Goal B - Regional Accessibility

## Objectives:

1. Provide additional direct flight services to and from business centers and/or hubs
2. Lower fare costs and maximize market shares for ILM in the region
3. Provide multimodal transportation services to and from ILM to meet the needs of the area's target industries, such as:
i. Tourism
ii. Film
iii. Fintech/IT
iv. Pharma
v. Military
vi. Logistics and Industry
4. Coordinate with roadway network projects that support the development of ILM to include accommodations necessary for truck/rail freight transportation to/from site
5. Support international cargo operations, utilizing ILM's free trade zone status
6. Support the reinstatement of the Wallace to Castle Hayne corridor for future freight rail service

## Goal C - Physical Infrastructure

## Objectives:

1. Encourage fiscally responsible business practices and projects in order to lower facility operating costs and maximize market shares for ILM in the region
2. Coordinate with roadway network projects that support the development of ILM to include accommodations necessary for passenger/truck/rail freight transportation to/from site
3. Develop infrastructure to support freight rail service to ILM and the reinstatement of the Wallace to Castle Hayne corridor
4. Provide facilities that support the area's target industries, such as:
i. Tourism
ii. Film
iii. Fintech/IT
iv. Pharma
v. Military
vi. Logistics and Industry
5. Prioritize smart growth for future land acquisition or encroachment needs
6. Develop infrastructure to encourage aviation business development
7. Provide facilities to support new and innovative transportation technologies, to and from ILM
8. Increase resiliency of airport facilities to mitigate the impacts of flooding

## Goal D -Modal Integration

## Objectives:

1. Increase transportation mode choice to ILM, the business park, and terminal areas
2. Accommodate facilities necessary for truck/rail freight service and transportation to/from ILM.
3. Provide facilities to support new and innovative transportation technologies, to and from ILM

## Goal E-Coordination with ILM's Long Range planning and Prioritization

## Objectives:

1. Integrate current ILM master plan and Airport Layout Plan into Cape Fear Moving Forward 2045
2. Recognize and support the opportunities for new and innovative transportation technologies

## MEMORANDUM

To: MPO Board Members
From: Abby Lorenzo, Senior Transportation Planner
Date: $\quad$ November 19, 2018
Subject: Cape Fear Moving Forward 2045 Bicycle and Pedestrian Goals and Objectives

The following goals and objectives have been developed by the Bicycle and Pedestrian Modal Subcommittee for the Cape Fear Moving Forward 2045 Metropolitan Transportation Plan.

## Bicycle

## Goal A: Safety, Education, and Enforcement

## Objectives:

1. Promote a campaign to educate law enforcement officers, motorists, bicyclists and pedestrians on laws \& etiquette of sharing the road
2. Encourage law enforcement efforts to increase cyclist safety
3. Build facilities and traffic engineering solutions that prioritize cycling safety (signage, smart traffic lights, etc.) while considering the nature of adjacent traffic and the presence of any conditions hazardous to cycling (bridge gratings, discontinuous bike lanes, etc)
4. Increase driver education on motoring safely and legally with cyclists
5. Increase cyclist education on riding safely and legally with motorists
6. Contribute to a comprehensive, integrated, and validated reporting system for documenting bicycle (and pedestrian) crash data (including frequency, severity, location, and time of day and atmospheric conditions)
7. Promote the development of laws and ordinances to promote bicyclist safety

## Goal B: Multimodal Connectivity

## Objectives:

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1. Distribute information to increase bike trail and connection awareness through various public and private opportunities.
2. Improve connections between bicycling \& other modes of transportation (public transportation \& ferries)
3. Develop programmatic elements (such as increasing the capacity of bicycles on buses \& the creation of bicycle amenities at bus stops) to ease the transition between bicycling \& public transportation
4. Implement a bike share program that is integrated with the fixed-route public transportation network

## Goal C: Built Environment, Land use, and Connectivity Objectives:

1. Build bicycle facilities and remove barriers in areas with high employment density such as medical campuses and retail centers
2. Increase bicycling facilities that fall within 1 mile of school campuses
3. Increase bicycle connections between parks \& residential areas
4. Increase bicycle facility connections to grocery stores and resource centers
5. Increase connections to existing bicycling facilities including school campuses
6. Increase accommodation of older adults, persons with disabilities, young and low-income populations during the design of bicycle facilities and amenities (ie age-friendly design features)
7. Build bicycle facilities that allow safe usage of bridges, roundabouts, overpasses and other geographical barriers
8. Build bicycle facilities that mitigate barriers in existing built environment
9. Build trail connections that fill gaps in the roadway system that will allow for an uninterrupted bicycle route
10. Create off-road and recreational trails

## Goal D: Health

## Objectives:

1. Provide health indicators and data along branded trails
2. Designate signed exercise loops for bicycling

Goal E: Economic Development
Objectives:

1. Increase bicycle tourism in our region
2. Increase access and mobility projects targeting identified areas of low-income and minority residents
3. Incentivize public/private development around biking
4. Develop sponsorship policies and identify sponsorship opportunities (ie adopt-a-roadway program)
5. Develop a program to recognize bicycle friendly businesses
6. Incorporate mobile technology into the trail system
7. Increase accommodation of major cycling events in facility design

## Pedestrian

## Goal A: Safety, Education, and Enforcement

## Objectives:

1. Increase the number of crosswalks at existing signals, focusing on high traffic areas
2. Increase the use of audible pedestrian signals and flashing lights
3. Increase driver education specifically related to turning movements and crosswalk compliance
4. Promote law enforcement efforts to increase pedestrian safety
5. Prioritize pedestrian projects that occur at, or seek to improve the safety of, identified high risk/high crash locations
6. Contribute to a comprehensive, integrated, and validated reporting system for documenting bicycle and pedestrian crash data
7. Promote roadway and sidewalk design/redesign that increases pedestrian safety (adequate crossing times, medians, street trees, brick crossings, lighting, emergency call boxes, etc.)
8. Increase visual cues that prioritize pedestrian safety (traffic calming, "legally required to stop" cones, etc.)

## Goal B: Transportation Choice

## Objectives:

1. Improve sidewalk and crosswalk conditions depending on the nature of adjacent traffic
2. Evaluate the installation sidewalks and crosswalks based on residential and employment density
3. Install crosswalks near bus stops
4. Increase/Improve sidewalk and crosswalk connections between transit facilities and medical services

## Goal C: Built Environment, Land use, and Connectivity Objectives:

1. Increase pedestrian facilities that fall within 1 mile of school campuses
2. Increase pedestrian connections between parks \& residential areas
3. Increase pedestrian facilities around libraries, community centers/senior centers, courthouses, local government centers
4. Increase pedestrian facility connections around grocery stores/farmers markets/resource centers
5. Increase connections between existing pedestrian facilities
6. Increase direct connections to public transportation and paths of travel from bus stops to surrounding destinations
7. Use traffic impact analyses (TIAs) to increase pedestrian connectivity
8. Plan for pedestrian facilities with the installation and upgrade of other transportation facilities
9. Create trail links that fill gaps between low traffic roadways to allow for pedestrian use while continuing to preserve the low traffic status of those roadways.
10. Build pedestrian facilities that mitigate barriers in existing built environment

## Goal D: Health

## Objectives:

1. Incorporate health statistics and case studies in the promotion of transportation demand management (TDM) programs and wellness programs
2. Designate exercise loops for walking

Goal E: Economic Development

## Objectives:

1. Create and promote walking tours in our region through initiatives
2. Include pedestrian facility design in new developments
3. Create sponsorship policies for walking trails and identify sponsorship opportunities
4. Develop a program to recognize pedestrian friendly development
5. Incorporate mobile technology into the trail system
6. Include accommodation of major events in facility design
7. Develop downtown pedestrian friendly shopping areas

## MEMORANDUM

To: MPO Board Members
From: Abby Lorenzo, Senior Transportation Planner
Date: $\quad$ November 19, 2018
Subject: Cape Fear Moving Forward 2045 Ferry Goals and Objectives

The following goals and objectives have been developed by the Ferry Modal Subcommittee for the Cape Fear Moving Forward 2045 Metropolitan Transportation Plan.

## Goal A: Safety

Objectives:

1. Develop new facilities and support existing facilities at locations along ferry routes not prone to shoaling
2. Reduce conflicts with non-ferry automobile traffic at ferry terminals
3. Ensure adequate security standards and protocols
4. Improve the efficiency of evacuation operations

## Goal B: Environmental Responsibility

Objectives:

1. Minimize environmental disturbance of ferry operations
2. Increase the use of environmentally-preferable fuel and renewable energy sources

## Goal C: Efficiency and Level of Service

## Objectives:

1. Improve the overall transportation network in terms of congestion management and the efficient use of public infrastructure
2. Improve (widen to broader ridership needs) ADA-accessibility and mobility from ferry terminal to adjacent destinations

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3. Develop new ferry routes and add express passenger service for commuter and tourism markets
4. Improve capacity of existing ferry routes to reduce wait times and vehicles left behind

## Goal D: Modal Integration

## Objectives:

1. Improve access to and quality of intermodal ferry terminal and marina facilities
2. Increase infrastructure to promote biking to and from the ferry terminals
3. Promote opportunity for bike share at ferry terminals and park and ride locations
4. Improve public transit connections to ferry terminals
5. Provide bike parking and/or storage facilities on ferries
6. Implement preferred loading for bicycle and pedestrians onto ferries
7. Provide additional parking at ferry terminals or offsite park and ride lots

## Goal E: Economic Development

Objectives:

1. Enhance and maintain ferry service to tourist destinations and local employment areas
2. Incorporate passenger amenities such as shuttles, waiting areas, and sidewalks into future service facility design
3. Expand ferry capacity at rush hour to encourage commuting by ferry

## MEMORANDUM

To: MPO Board Members
From: Abby Lorenzo, Senior Transportation Planner
Date: $\quad$ November 19, 2018
Subject: Cape Fear Moving Forward 2045 Freight/Rail Goals and Objectives

The following goals and objectives have been developed by the Freight/Rail Modal Subcommittee for the Cape Fear Moving Forward 2045 Metropolitan Transportation Plan.

Goal A: Regional Economic Vitality and Innovation
Objectives:

1. Leverage regional assets such as ports, airports, rail, and other intermodal facilities
2. Encourage job creation by providing sufficient transportation capacity for freight and rail users
3. Directly or indirectly support (new and existing) industrial parks, warehouse distribution centers, and freight infrastructure within the WMPO area
4. Develop and sustain regionally or economically strategic freight corridors across all modes
5. Build capacity for both domestic and international freight
6. Facilitate future adaptations to accommodate changing demands and technology
7. Preserve rail-served sites for future rail-served industrial development

Goal B: Transportation Network Efficiency and Safety
Objectives:

1. Mitigate key congestion bottlenecks within the freight network
2. Improve speed, safety, and efficiency of truck movement along the existing roadways to better accommodate growing volumes in the near- and mid-term
3. Improve speed, safety, and efficiency of rail movement along the existing railroad to better accommodate growing volumes in the near- and mid-term

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4. Improve or maintain safe and reliable connections to ports, rail terminals, military bases, and major logistics and manufacturing sites
5. Transform rail alignments and corridors to improve efficiency and encourage the use of under-utilized gateways and assets.
6. Eliminate and or mitigate freight and rail conflicts with other modes
7. Incentivize collaboration across modes to realize cost and schedule efficiencies

## Goal C: Supply Chain Resilience and Reliability

## Objectives:

1. Align the Metropolitan Transportation Plan with the North Carolina State Freight Plan
2. Build resiliency to extreme events and hazards by designing and constructing less vulnerable infrastructure to minimize loss, and employing rapid restoration techniques after a disaster
3. Address key challenges and bottlenecks affecting the movement of military personnel, supplies, and equipment
4. Improve and maintain the reliability of freight corridors

## MEMORANDUM

To: MPO Board Members
From: Abby Lorenzo, Senior Transportation Planner
Date: $\quad$ November 19, 2018
Subject: Cape Fear Moving Forward 2045 Public Transportation Goals and Objectives

The following goals and objectives have been developed by the Public Transportation Modal Subcommittee for the Cape Fear Moving Forward 2045 Metropolitan Transportation Plan.

## Goal A - Build Community and Political Support for Public Transportation <br> Objectives:

1. Promote the safety, comfort, and convenience of public transportation
2. Highlight the potential for public transportation to serve as an economic development engine for the region
3. Highlight the opportunity to reduce environmental impacts through the use of public transportation
4. Highlight the benefits of public transportation to the overall transportation network in terms of congestion management and the efficient use of public infrastructure
5. Provide data, logistics, funding dynamics, and recommendations for greater public transportation availability

## Goal B - Enhance Economic Development Opportunities and Quality of Life through Public Transportation Services <br> Objectives:

1. Enhance public transportation service to and/or from potentially high destination areas, such as:
a Major employment centers
b High density population areas

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c Educational centers
d Economic development centers
2. Enhance health and livability through public transportation access to resources, such as:
a Healthy food opportunities (grocery stores, farmers' markets, etc.)
b Recreation
c Pharmacy
d Medical care
3. Market public transportation services to encourage new regional industry/commerce
4. Support community development and placemaking efforts along public transportation routes and near public transportation facilities

## Goal C - Broaden Base of Public Transportation Ridership in both Rural and Urban Areas

## Objectives:

1. Identify and capitalize on unserved and underserved public transportation opportunities for older adults, people with disabilities, and other non-driving populations
2. Identify and capitalize on unserved and underserved choice ridership public transportation opportunities for groups, such as:
a Young adults
b Commuters
c Tourists
d Professionals
3. Identify strategies to broaden the ridership base, such as:
a Express bus routes on major corridors
b Multi-modal route connections from public transportation stops to major destinations
c Continue to promote vanpool opportunities
d New public transportation stops near park and ride facilities

## Goal D -Connect Public Transportation Routes/Services with Physical Infrastructure Objectives:

1. Coordinate with appropriate entities to ensure ADA-accessible pedestrian networks exist from public transportation stops to adjacent destinations
2. Increase network of bus shelters, benches, and other amenities at bus stop locations where ridership and potential ridership is highest and where physically possible
3. Coordinate with appropriate entities to prioritize installation of crosswalks at or near bus stop locations where ridership and potential ridership is highest and/or where safety concerns exist

## MEMORANDUM

To: MPO Board Members
From: Abby Lorenzo, Senior Transportation Planner
Date: $\quad$ November 19, 2018
Subject: Cape Fear Moving Forward 2045 Roadway Goals and Objectives

The following goals and objectives have been developed by the Roadway Modal Subcommittee for the Cape Fear Moving Forward 2045 Metropolitan Transportation Plan.

Goal A: Safe - reduces injuries and improves safety for all users
Objectives:

1. Reduce the rate of crashes
2. Reduce the severity of crashes
3. Reduce the number of conflict points on existing facilities
4. Reduce the vulnerability of bicyclists and pedestrians on existing facilities
5. Reduce transit time for public safety officers and emergency vehicles
6. Reduce the risk of flooding

Goal B: Efficient - moves the most people and goods in a cost effective manner Objectives:

1. Reduce or maintain rate of mean travel time for people and freight
2. Reduce vehicle miles travelled
3. Maximize throughput for each lane mile for both people and freight
4. Reduce cumulative peak demand delay
5. Enhance and incorporate the rapid restoration of reliability

## Goal C: Appropriate - contributes to the quality of life and character of the region through proper design

## Objectives:

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1. Minimize disparity between actual and intended functional classification of existing roadways
2. Improve/Enhance access and mobility in the transportation network
3. Enhance the cultural, aesthetic, and environmental character of the community and ensure environmental justice.

## Goal D: Responsible - protects existing investments and limits environmental and social impacts

## Objectives:

1. Improve/maintain existing multimodal connectivity
2. Improve/maintain existing network integrity
3. Prioritize projects that demonstrate existing community support through inclusion in a previously adopted plan.
4. Reduce or mitigate existing impacts of storm water runoff into environmentally sensitive areas

## Goal E: Integrated - links with other transportation and land use plans as well as future infrastructure investments

## Objectives:

1. Accommodate employment growth areas
2. Accommodate population growth areas
3. Accommodate freight/industrial growth areas
4. Coordinate transportation investments with utility investments
5. Accommodate seasonal and academic induced growth and demand.
6. Support emergency evacuation
7. Address multiple challenges outside of traditional transportation planning (land use, water management issues, etc.)

Goal F: Multimodal - provides a choice of modes for most trips

## Objectives:

1. Include bicycle/pedestrian facilities for mobility and access along appropriate corridors
2. Include accommodations for transit along appropriate corridors
3. Provide infrastructure for identified roadway TDM initiatives
4. Incorporate projects that are identified for future critical transit routes and nodes.

Goal G: Sustainable - uses innovation to build a resilient network capable of adapting to future demands

Objectives:

1. Prioritize projects that give preferential treatment to higher-value trips (ports, airports, domestic business services, medical centers)
2. Leverage regional assets (ports, airports, beaches / tourism)
3. Encourage economic development, along critical corridors
4. Implement projects that improve the reliability and resiliency of overall supply chain
5. Identify roadway investments that increase capacity without requiring road construction (HOV, HOT, signaling, pre-emption signaling for emergency management, innovation, etc.)
6. Support projects that provide considerations for evolving and future demands.
7. Build resiliency to extreme events and hazards by designing and constructing less vulnerable infrastructure to minimize loss, and employing rapid restoration techniques after a disaster

## Goal H: Innovative - transportation solutions that support innovation, resiliency, and regional economic vitality

## Objectives:

1. Consider and support projects that leverage external funding mechanisms
2. Consider and support projects that facilitate future adaptations and new technology to accommodate changing demands

# WILMINGTON URBAN AREA METROPOLITAN PLANNING ORGANIZATION BOARD 

## RESOLUTION APPROVING THE CAPE FEAR MOVING FORWARD 2045 GOALS AND OBJECTIVES

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<br>WHEREAS, development and maintenance of a long-range transportation plan is a key federal requirement of all Metropolitan Planning Organizations (MPOs) designated by the Federal Highway Administration (FHWA); and

WHEREAS, on November 18, 2015 the Wilmington Urban Area Metropolitan Planning Organization adopted the fiscally constrained Cape Fear Transportation 2040 Metropolitan Transportation Plan to satisfy FHWA requirements; and

WHEREAS, the Wilmington Urban Area Metropolitan Planning Organization is in the process of developing Cape Fear Moving Forward 2045 to meet the FHWA requirement for updating metropolitan transportation plans within five years of adoption of the last plan; and

WHEREAS, with the help from the modal subcommittees of subject matter experts, the Citizens Advisory Committee has developed Cape Fear Moving Forward 2045 goals and objectives for six different modes of transportation; and

WHEREAS, these goals and objectives will be utilized for the development of mode-specific policies, as well as mode-specific criteria for the prioritization of potential projects to be included within the metropolitan transportation plan; and

WHEREAS, the Board appointed Citizen Advisory Committee has reviewed and approved these mode-specific goals and objectives.

NOW THEREFORE, be it resolved that the Board of the Wilmington Urban Area Metropolitan Planning Organization hereby approves the Cape Fear Moving Forward 2045 goals and objectives.

ADOPTED at a regular meeting of the Wilmington Urban Area Metropolitan Planning Organization’s Board on November 28, 2018.

David Piepmeyer, Chair

Mike Kozlosky, Secretary

## 2018

## Biennial Data Report

 Wilmington Urban Area Metropolitan Planning Organization
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## INTRODUCTION

In 2012, the Federal Highway Administration (FHWA) designated the Wilmington Urban Area Metropolitan Planning Organization (WMPO) as a Transportation Management Area (TMA). As a TMA, the WMPO is required to prepare and adopt a Congestion Management Process (CMP) to evaluate and manage congestion in a region-ally-agreed upon manner. The CMP, adopted in December of 2013, established performance measures for evaluating and monitoring system performance using data collected from the WMPO and partner agencies.

The WMPO publishes the Biennial Data Report on a two-year basis to demonstrate how the WMPO's regional network is performing according to the performance measures established in the CMP. Each report provides snapshots for each of the roadway segments within the system and analyzes the datasets and congestion mitigation techniques. The analysis demonstrates the effectiveness of the current strategies in place and where there are opportunities for improvement in the future. By comparing the system monitoring results of the 2018 Biennial Report to the results of the 2016 Biennial Report, trends and successes of previously proposed and implemented mitigation techniques can begin to be determined. The comparison also allows for the reassessment of the current Congestion Management Process and may present opportunities for process amendment.

## COLLECTING DATA AND EVALUATING CMP SEGMENTS

The CMP outlines the criteria for evaluating and ranking each corridor segment. Currently, congestion is one of the highest concerns on the region's roadway network within the Metropolitan Planning Area. This indicates a need for strategies to be prioritized in order to focus efforts on projects that will be most beneficial to the region.

The criteria and data used to evaluate each segment for this biennial report was collected between 2016 and 2018 and includes:

## 1.) Travel Time Performance Measures

- Average Travel Time AM/PM: Data was collected by WMPO and City of Wilmington

Traffic Engineering staffs over the course of two years. The data was collected through a traffic monitoring method called floating car studies which used GPS devices to collect data on speed and travel time.

- Average Delay AM/PM: Data was collected by WMPO and City of Wilmington Traffic Engineering staffs over the course of two years. The data was collected through a traffic monitoring method called floating car studies which used GPS devices to collect data on location and duration of delays.
- Hotspot identification: Data was collected by WMPO and City of Wilmington Traffic Engineering staffs over the course of two years. The data was collected through a traffic monitoring method called floating car studies which used GPS devices to identify specific points of congestion along the segments.


## 2.) Safety Performance Measures

- Rear End Collisions: This data was collected by the NCDOT Traffic Safety Unit through their TEAAS Program which aggregates and geo-locates traffic incidents from law enforcement officials throughout the state of North Carolina.
- Bicycle Crashes: This data was collected by the NCDOT Traffic Safety Unit through their TEAAS Program which aggregates and geo-locates traffic incidents from law enforcement officials throughout the state of North Carolina. The NCDOT Bicycle and Pedestrian Division has created a sub-set of the TEAAS data to further analyze bicycle crashes. This data was incorporated by the NCDOT Traffic Safety Unit into a GIS shape file, and an analysis was performed to isolate the number of bicycle crashes per CMP corridor. Note that, due to the additional analysis needed to create this data sub-set, there is a lag time in the data availability and the most current data available for this report represents crashes that occurred in 2014 and 2015.
- Pedestrian Crashes: This data was collected by the NCDOT Traffic Safety Unit through their TEAAS Program which aggregates and geo-locates traffic incidents from law enforcement officials throughout the state of North Carolina. The NCDOT Bicycle and Pedestrian Division has created a sub-set of the TEAAS data to further analyze pedestrian crashes. This data was incorporated by the NCDOT Traffic Safety Unit into a GIS shape file, and an analysis was performed to isolate the number of pedestrian crashes per CMP corridor. Note that, due to the additional analysis needed to create this data sub-set, there is a lag time in the data availability and the most current data available for this report represents crashes that occurred in 2014 and 2015.


## 3.) Volume Performance Measures

- Average Vehicle Count: This data was collected by the WMPO through pneumatic tube counters at various locations along CMP segments. The data represents raw traffic counts collected at point locations averaged along each segment.
- Truck percentage: This data was collected along CMP freight corridors by the WMPO through the use of Hi-Star portable traffic analyzers by utilizing vehicle magnetic imaging technology. It represents truck volume as a percentage of the overall vehicular volume over a 24 hour period at a specific location along the corridor.
- Bicycle Counts AM/PM: This data was collected along CMP commercial and destination corridors by the WMPO through manual counts.
- Pedestrian Counts AM/PM: This data was collected along CMP commercial and destination corridors by the WMPO through manual counts.


## 4.) Transit Performance Measure

- Transit Boarding: Cape Fear Public Transportation Authority provided fixed route passenger totals for FY 2017. This data was aggregated for each CMP roadway segment.


## SEGMENT SCORING

The WMPO staff developed a systematic process to equally disperse performance measure points to represent the collected data in order to compare data performance across segments. This was done by allocating the most points to the roadway segment that ended up with the highest combined data. For example a roadway segment with 200 rear end collisions will be given more points than a roadway segment with 100 rear end collisions and a roadway segment with an average vehicle volume of 20,000 will be given more points than a roadway segment with an average vehicle volume of 10,000.

Each data-set was broken up by performance measure to give a clear picture of where to focus roadway segment strategies and improvements in the future. The number of points available for each performance measure is listed in the table below:

| Performance Measures | Points Possible |
| :---: | :---: |
| Travel Time | 2 points per minute of delay |
| Safety | 30 |
| Volume | 50 |
| Transit Performance | 10 |

## SEGMENT CONGESTION MANAGEMENT RESULTS

Using the collected data and Congestion Management Process's scoring criteria, this is how each roadway segment ranked in terms of congestion management needs:

| Segment Ranking |  |  |
| :---: | :---: | :---: |
| Segment Rank | Segment | Segment Score |
| 1 | Segment 1 Market St: 3rd St - College Rd | 73 |
| 2 | Segment 9 College Rd: Gordon Rd - Wilshire Blvd | 68 |
| 3 | Segment 8 Carolina Beach Rd: Alabama Ave - College Rd | 64 |
| 4 | Segment 10 College Rd: Wilshire Blvd - Pinecliff Dr | 63 |
| 5 | Segment 3 Oleander Dr: 5th Ave - Treadwell St | 61 |
| 6 | Segment 4 Oleader Dr/Military Cutoff Rd: Treadwell St - Gordon Rd | 57 |
| 7 | Segment 5 Shipyard Blvd: River Rd - College Rd | 50 |
| 8 | Segment 15 Randall Pkwy: Covil Ave/Independence Blvd - Racine Dr | 49 |
| 9 | Segment 2 Market St: College Rd - Torchwood Dr/Bayshore Dr | 49 |
| 10 | Segment 24 Gordon Rd: Kerr Ave - Military Cutoff Rd | 44 |
| 11 | Segment 27 Eastwood Rd/US 76/Causeway Dr: Military Cutoff Rd - Lumina Ave | 44 |
| 12 | Segment 12 17th St: Savannah Ct - Shipyard Blvd | 43 |
| 13 | Segment 17 New Center Dr: Market St - Racine Dr | 41 |
| 14 | Segment 13 Kerr Ave: MLK Pkwy - Randall Pkwy | 41 |
| 15 | Segment 28 US 421/Carolina Beach Rd: Halyburton Pkwy - Atlanta Ave | 40 |
| 16 | Segment 21 US 17/74/76: NC 133 Split - 5th Ave | 33 |
| 17 | Segment 11 College Rd/Carolina Beach Rd: Rinecliff Dr - Halyburton Pkwy | 33 |
| 18 | Segment 26 US 17/NC 210: Washington Acres Rd - Sloop Point Rd | 30 |
| 19 | Segment 23 US117/College Rd: Holly Shelter Rd - Gordon Rd | 29 |
| 20 | Segment 19 US 17: Lanvalle Rd - US 74/76 | 28 |
| 21 | Segment 16 Racine Dr: Randall Pkwy - Eastwood Rd | 26 |
| 22 | Segment 6 Front St: Lake Shore Dr - Cape Fear Memorial Bridge | 26 |
| 23 | Segment 20 Village Rd/NC 133: Navassa Rd - Jackey's Creek Ln | 25 |
| 24 | Segment 25 US 17/Market St: Marsh Oaks Dr/Mendenhall Dr - Sidbury Rd | 24 |
| 25 | Segment 14 MLK Pkwy/Eastwood Rd: College Rd - Racine Dr | 23 |
| 26 | Segment 30 Pine Grove Dr: College Rd - Masonboro Sound Rd | 23 |
| 27 | Segment 22 US 17/US 421/NC 133: US 17 N/S Split - 3rd St | 22 |
| 28 | Segment 18 US 74/76: Maco Rd - NC 133 | 22 |
| 29 | Segment 29 US421/Lake Park Blvd: Atlanta Ave - Buzzards Bay | 13 |
| 30 | Segment 7 3rd St.: Kentucky Ave - Cape Fear Memorial Bridge | 11 |

To get a more thorough understanding of the individual roadway segments and to get a detailed analysis of the components that factored into the congestion ranking results please refer to the snapshots following this section.

## SEGMENT SNAPSHOTS

Segment snapshots provide the WMPO and member jurisdictions a quick understanding of a specific corridor by concisely illustrating the corridor's performance and showing the data that has been collected over a two-year period.

The top of the snapshots include the name of the segment analyzed and identify the intersecting road that begins and ends the segment. The section that follows includes the segment's rank and additional information about the segment including; its functional type, the mileage along the corridor, the hotspot intersections, the peak hours of the segment, and alternate routes that could potentially relieve demand and congestion along that corridor. Also included to the left side of the section is a map which shows the entire length of the segment and identified hotspots.

As explained in the segment scoring, each segment's overall score correlates with the performance measure data and is ranked accordingly. The corridors with the highest ranking are in need of the most attention per the congestion management process. The middle section includes collected data about the segment such as average travel times and delay, crash data, bicycle and pedestrian usage, a transit boarding. The performance measure points, determined based off of the collected data are listed in a table with the overall segment score presented.

The final section includes the WMPO Congestion Mitigation Techniques which represent the strategies previously listed in the adopted Congestion Management Process. These Congestion Mitigation Techniques need to be applied to manage congestion along the segment. Below the techniques are the Current Implementation Projects and Plans; these are existing funded projects or existing plans that are already set in place to improve or implement one or many of the needed strategies in the future.

## CONGESTION RANK: 1 OF 30

CORRIDOR FUNCTIONAL TYPES:

- Destination Corridor

MILEAGE ALONG CORRIDOR: 4.4 Miles

## NUMBER OF HOTSPOTS: 2

1. Kerr Avenue (PM)
2. Covil Ave (PM Eastbound)

PEAK HOURS: 7:00-9:00AM / 4:30-6:30PM
ALTERNATE ROUTE: Martin Luther King Jr. Parkway

| DATA |  |  |
| :--- | :---: | :---: |
| Average Travel Time AM/PM | $8: 30 / 10: 27$ |  |
| Average Delay AM/PM | $1: 34 / 3: 31$ |  |
| Rear End Collisions | 341 |  |
| Bicycle Crashes | 13 | 28 |
| Pedestrian Crashes | 15 |  |
| Average Vehicle Volume | 39,995 |  |
| Truck Percentage | N/A |  |
| Bicycle Counts AM/PM | $127 / 93$ |  |
| Pedestrian Counts AM/PM | $140 / 166$ |  |
| Transit Boarding | 72,797 |  |


| PERFORMANCE MEASURE POINTS |  |
| :--- | :---: |
| Travel Time | 10 |
| Safety | 23 |
| Volume | 33 |
| Transit Performance | 7 |

## SEGMENT OVERALL SCORE: <br> 73

## WMPO CONGESTION MITIGATION TECHNIQUES

## REDUCE DEMAND STRATEGIES:

- Alternative Roadways - Improve usage of non-CMP roadways to remove demand on CMP network
- Land Use - Construct supportive collector street network with new development


## SHIFT MODE OF TRIP STRATEGIES:

- Expand pedestrian and bicycle network
- Improve multimodal access at intersections
- Transit - Increase frequency: increase existing public transit fixed routes


## SHIFT MODE OF TRIP STRATEGIES:

- Access Management - Limits access to land uses through limiting turning movements and conflict Points
- Geometric Intersection Improvements: Change intersection use by changing the physical layout


## CURRENT IMPLEMENTATION PROJECTS AND PLANS

- U-4434 Independence Blvd Extension (New road on new location)
- U-4902B Market Street Access Management Improvements: Colonial Dr - MLK Jr Pkwy
- U-5792 MLK Jr Pkwy and College Rd: Convert at grade intersection to interchange
- U-3338B Kerr Avenue Widening: Widen to multi-lanes from Randall Pkwy to MLK Jr Pkwy
- U-3338C Kerr Ave at MLK Jr Pkwy: Convert at grade intersection to interchange
- TD-5298 Route 101 Amenities


## CONGESTION RANK: 9 OF 30

## CORRIDOR FUNCTIONAL TYPES:

- Commercial Corridor


## MILEAGE ALONG CORRIDOR: 5.7 Miles

## NUMBER OF HOTSPOTS: 5

1. Eastwood Rd (AM Westbound, PM)
2. Gordon Rd (PM Northbound)
3. Military Cutoff Rd (PM Northbound)
4. Middlesound Loop Rd (AM, PM Northbound)
5. Bayshore Dr/Torchwood Blvd (AM)

PEAK HOURS: 7:00-9:00AM / 4:30-6:30PM
ALTERNATE ROUTE:Military Cutoff Road Extension (Future)

| DATA |  |  |
| :--- | :---: | :---: |
| Average Travel Time AM/PM | $8: 51 / 11: 17$ |  |
| Average Delay AM/PM | $2: 51 / 5: 18$ |  |
| Rear End Collisions | 105 |  |
| Bicycle Crashes | 3 | 8 |
| Pedestrian Crashes | 5 |  |
| Average Vehicle Volume | 48,242 |  |
| Truck Percentage | N/A |  |
| Bicycle Counts AM/PM | $14 / 15$ |  |
| Pedestrian Counts AM/PM | $18 / 10$ |  |
| Transit Boarding | N/A |  |


| PERFORMANCE MEASURE POINTS |  |
| :--- | :---: |
| Travel Time | 16 |
| Safety | 11 |
| Volume | 22 |
| Transit Performance | N/A |

## SEGMENT OVERALL SCORE: 49

## WMPO CONGESTION MITIGATION TECHNIQUES

## REDUCE DEMAND STRATEGIES:

- Alternative Roadways - Improve usage of non-CMP roadways to remove demand on CMP network
- Land Use - Construct supportive collector street network with new development


## SHIFT MODE OF TRIP STRATEGIES:

- Expand pedestrian and bicycle network
- Improve multimodal access at intersections


## IMPROVE OPERATIONS STRATEGIES:

- Access Management - Limits access to land uses through limiting turning movements and conflict points
- Geometric Intersection Improvements - Change intersection use by changing the physical layout


## CURRENT IMPLEMENTATION PROJECTS AND PLANS

- U-4902C, U-4902D Market Street Access Management Improvements: MLK Jr Pkwy - Marsh Oaks Dr, convert at grade intersection to interchange (Market \& US 74)
- U-4751 Military Cutoff Extension; Multi-lanes on new location


## CONGESTION RANK: 5 OF 30

## CORRIDOR FUNCTIONAL TYPES:

- Commercial Corridor

MILEAGE ALONG CORRIDOR: 4.7 Miles

## NUMBER OF HOTSPOTS: 3

1. 16th Street (AM Eastbound)
2. Independence BIvd (PM)
3. College Rd

PEAK HOURS: 7:00-9:00AM / 4:30-6:30PM
ALTERNATE ROUTE: Wrightsville Avenue

| DATA |  |  |
| :--- | :---: | :---: |
| Average Travel Time AM/PM | $8: 00 / 9: 25$ |  |
| Average Delay AM/PM | $2: 20 / 3: 45$ |  |
| Rear End Collisions | 245 |  |
| Bicycle Crashes | 8 | 20 |
| Pedestrian Crashes | 12 |  |
| Average Vehicle Volume | 26,770 |  |
| Truck Percentage | N/A |  |
| Bicycle Counts AM/PM | $36 / 28$ |  |
| Pedestrian Counts AM/PM | $45 / 32$ |  |
| Transit Boarding | 71,256 |  |


| PERFORMANCE MEASURE POINTS |  |
| :--- | :---: |
| Travel Time | 12 |
| Safety | 17 |
| Volume | 25 |
| Transit Performance | 7 |

## SEGMENT OVERALL SCORE: <br> 61

## WMPO CONGESTION MITIGATION TECHNIQUES

## REDUCE DEMAND STRATEGIES:

- TDM - Encourage carpools \& vanpools
- TDM - Encourage employer shuttles - A shuttle to provide transportation connections for employees
- Land Use - Accommodate all modes in new development/redevelopment

SHIFT MODE OF TRIP STRATEGIES:

- Transit Express Routes - Encourage new transit express routes along corridor
- Expand pedestrian and bicycle network
- Improve multimodal access at intersections

IMPROVE OPERATIONS STRATEGIES:

- Access Management - Limits access to land uses through limiting turning movements and conflict points
- Geometric Intersection Improvements - Improves operations with at-grade alternatives


## CURRENT IMPLEMENTATION PROJECTS AND PLANS

- U-5704 College Rd (NC 132) and Oleander Dr (US 76): Construct interchange
- COW Transportation Bond 2014 - Dawson/Wooster/17th St Area Improvements: Streetscapes along Dawson \& Wooster Streets with sidewalks and crosswalks at various intersections
- TD-5292 Bus Stop Shelter Amenities


## CONGESTION RANK: 6 OF 30

## CORRIDOR FUNCTIONAL TYPES:

- Commercial Corridor
- Commuting Corridor

MILEAGE ALONG CORRIDOR: 6.3 Miles

## NUMBER OF HOTSPOTS: 3

1. Wrightsville Ave/Airlie Rd (Eastbound-Northbound)
2. Eastwood Rd
3. Parker Farm Dr (PM Westbound)

PEAK HOURS: 7:00-9:00AM / 4:30-6:30PM
ALTERNATE ROUTE: None

| DATA |  |  |
| :--- | :---: | :---: |
| Average Travel Time AM/PM | 10:37 / 12:44 |  |
| Average Delay AM/PM | $1: 58 / 4: 05$ |  |
| Rear End Collisions | 161 |  |
| Bicycle Crashes | 4 | 5 |
| Pedestrian Crashes | 1 |  |
| Average Vehicle Volume | 42,024 |  |
| Truck Percentage | N/A |  |
| Bicycle Counts AM/PM | $46 / 36$ |  |
| Pedestrian Counts AM/PM | $40 / 35$ |  |
| Transit Boarding | 66,788 |  |


| PERFORMANCE MEASURE POINTS |  |
| :--- | :---: |
| Travel Time | 12 |
| Safety | 9 |
| Volume | 30 |
| Transit Performance | 6 |

## SEGMENT OVERALL SCORE: <br> 57

## WMPO CONGESTION MITIGATION TECHNIQUES

## REDUCE DEMAND STRATEGIES:

- Land Use - Construct supportive collector street network with new development
- Land Use - Managed growth


## SHIFT MODE OF TRIP STRATEGIES:

- Transit Express Routes - Encourage new transit express routes along corridor
- Improve multimodal access at intersections
- Expand bicycle and pedestrian network

IMPROVE OPERATIONS STRATEGIES:

- Geometric Intersection Improvements - Change intersection use by changing the physical layout

INCREASE CAPACITY STRATEGIES:

- Add turning lanes
- Convert intersection to interchange - Improves capacity with at-grade or grade separated alternative


## CURRENT IMPLEMENTATION PROJECTS AND PLANS

- U-4751 Military Cutoff Extension; Multi-lanes on new location
- U-5704 College Rd (NC 132) and Oleander Dr (US 76): Construct interchange
- U-5710 Eastwood Rd (US 74) and Military Cutoff Rd: Convert at-grade intersection to an interchange
- Cape Fear Transportation 2040: Pilot express bus routes on major corridors
- COW Transportation Bond 2014 - Pine Grove Dr Improvements: Realignment of Pine Grove Dr/Oleander Dr intersection


## CONGESTION RANK: 7 OF 30

CORRIDOR FUNCTIONAL TYPES:

- Commercial Corridor

MILEAGE ALONG CORRIDOR: 3.6 Miles

## NUMBER OF HOTSPOTS: 5

1. Carolina Beach Road
2. 17th St (PM)
3. Independence Blvd (PM)
4. Hoggard High School / Longleaf Mall (AM Westbound)
5. College Road

PEAK HOURS: 7:00-9:00AM / 4:30-6:30PM
ALTERNATE ROUTE: None

| DATA |  |
| :--- | :---: |
| Average Travel Time AM/PM | $7: 46$ / 8:24 |
| Average Delay AM/PM | $3: 12$ / 3:50 |
| Rear End Collisions | 81 |
| Bicycle Crashes | 4 |
| Pedestrian Crashes | 3 |
| Average Vehicle Volume | 23,782 |
| Truck Percentage | $5.2 \%$ |
| Bicycle Counts AM/PM | $13 / 28$ |
| Pedestrian Counts AM/PM | $5 / 31$ |
| Transit Boarding | 67,151 |


| PERFORMANCE MEASURE POINTS |  |
| :--- | :---: |
| Travel Time | 14 |
| Safety | 9 |
| Volume | 21 |
| Transit Performance | 6 |

## SEGMENT OVERALL SCORE: 50

## WMPO CONGESTION MITIGATION TECHNIQUES

## REDUCE DEMAND STRATEGIES:

- Land Use - Construct supportive collector street network with new development
- Land Use - Accommodate all modes in new development


## SHIFT MODE OF TRIP STRATEGIES:

- Transit Express Routes - Encourage new transit express routes along corridor
- Land Use - TOD - Utilize mixed-use areas designed to maximize access to public transit
- Expand bicycle and pedestrian network

IMPROVE OPERATIONS STRATEGIES:

- Access Management - Limits access to land uses through limiting turning movements and conflict points


## CURRENT IMPLEMENTATION PROJECTS AND PLANS

- U-5729 Carolina Beach Rd (US 421): Upgrade roadway from Burnett Ave to Shipyard Blvd
- STP-DA - Shipyard Blvd Bus Pull-Out and Sidewalks: Bus pull-out and loading area along shipyard Blvd with sidewalk from Rutledge Dr to Vance Street


## CONGESTION RANK: 22 OF 30

## CORRIDOR FUNCTIONAL TYPES:

- Freight Corridor

MILEAGE ALONG CORRIDOR: 1.1 Miles

## NUMBER OF HOTSPOTS: 2

1. $R \times R$ tracks (AM)
2. Burnett Blvd

PEAK HOURS: 7:00-9:00AM / 4:30-6:30PM
ALTERNATE ROUTE: 3rd Street

| DATA |  |  |
| :--- | :---: | :---: |
| Average Travel Time AM/PM | $3: 41 / 3: 14$ |  |
| Average Delay AM/PM | $1: 44 / 1: 18$ |  |
| Rear End Collisions | 42 |  |
| Bicycle Crashes | 2 | 2 |
| Pedestrian Crashes | 0 | 2 |
| Average Vehicle Volume | 29,985 |  |
| Truck Percentage | $8 \%$ |  |
| Bicycle Counts AM/PM | N/A |  |
| Pedestrian Counts AM/PM | N/A |  |
| Transit Boarding | 45,905 |  |


| PERFORMANCE MEASURE POINTS |  |
| :--- | :---: |
| Travel Time | 6 |
| Safety | 4 |
| Volume | 12 |
| Transit Performance | 4 |

## SEGMENT OVERALL SCORE: 26

## WMPO CONGESTION MITIGATION TECHNIQUES

REDUCE DEMAND STRATEGIES:

- Alternative Roadways - Improve usage of non-CMP roadways to remove demand on CMP network IMPROVE OPERATIONS STRATEGIES:
- Improve Signage - Better inform traffic of route options and better channelize traffic to improve patterns INCREASE CAPACITY STRATEGIES:
- Add general purpose lanes


## CURRENT IMPLEMENTATION PROJECTS AND PLANS

- U-5734 Front Street - Cape Fear Memorial Bridge to Burnett Blvd: Widen to multi-lanes


## CONGESTION RANK: 30 OF 30

CORRIDOR FUNCTIONAL TYPES:

- Tourist Route

MILEAGE ALONG CORRIDOR: 1.1 Miles

## NUMBER OF HOTSPOTS: 2

1. Wooster Street (PM)
2. Front St/Carolina Beach Road (Southbound)

PEAK HOURS: 7:00-9:00AM / 4:45-6:45PM
ALTERNATE ROUTE: Front Street

| DATA |  |  |
| :--- | :---: | :---: |
| Average Travel Time AM/PM | $3: 04 / 3: 21$ |  |
| Average Delay AM/PM | $1: 04 / 1: 21$ |  |
| Rear End Collisions | 37 |  |
| Bicycle Crashes | 0 | 0 |
| Pedestrian Crashes | 0 | 0 |
| Average Vehicle Volume | 14,658 |  |
| Truck Percentage | N/A |  |
| Bicycle Counts AM/PM | N/A |  |
| Pedestrian Counts AM/PM | N/A |  |
| Transit Boarding | N/A |  |


| PERFORMANCE MEASURE POINTS |  |
| :--- | :---: |
| Travel Time | 4 |
| Safety | 2 |
| Volume | 5 |
| Transit Performance | N/A |

## SEGMENT OVERALL SCORE: 11

## WMPO CONGESTION MITIGATION TECHNIQUES

## REDUCE DEMAND STRATEGIES:

- Alternative Roadways - Improve usage of non-CMP roadways to remove demand on CMP network

SHIFT MODE OF TRIP STRATEGIES:

- Transit - Increase existing public transit fixed routes

IMPROVE OPERATIONS STRATEGIES:

- Improve Signage - Better inform traffic of route options and better channelize traffic to improve patterns


## CURRENT IMPLEMENTATION PROJECTS AND PLANS

- U-5734 Front Street - Cape Fear Memorial Bridge to Burnett Blvd: Widen to multi-lanes


## CONGESTION RANK: 3 OF 30

## CORRIDOR FUNCTIONAL TYPES:

- Freight Corridor
- Commercial Corridor
- Tourist Route

MILEAGE ALONG CORRIDOR: 5.7 Miles

## NUMBER OF HOTSPOTS: 3

1. Shipyard (PM Northbound)
2. From Coddington Elementary School to Independence Blvd (AM Northbound)
3. Silva Terra Dr (PM Northbound)

PEAK HOURS: 7:00-9:00AM / 4:45-6:45PM
ALTERNATE ROUTE: None

| DATA |  |  |
| :--- | :---: | :---: |
| Average Travel Time AM/PM | $9: 26 / 8: 41$ |  |
| Average Delay AM/PM | $1: 53 / 1: 16$ |  |
| Rear End Collisions | 242 |  |
| Bicycle Crashes | 9 | 16 |
| Pedestrian Crashes | 7 |  |
| Average Vehicle Volume | 33,498 |  |
| Truck Percentage | $4.6 \%$ |  |
| Bicycle Counts AM/PM | $38 / 52$ |  |
| Pedestrian Counts AM/PM | $76 / 81$ |  |
| Transit Boarding | 111,070 |  |


| PERFORMANCE MEASURE POINTS |  |
| :--- | :---: |
| Travel Time | 6 |
| Safety | 16 |
| Volume | 32 |
| Transit Performance | 10 |

## SEGMENT OVERALL SCORE: 64

## WMPO CONGESTION MITIGATION TECHNIQUES

## REDUCE DEMAND STRATEGIES:

- Land Use - Construct supportive collector street network with new development
- Land Use - Accommodate all modes in new development
- Alternative Roadways


## SHIFT MODE OF TRIP STRATEGIES:

- Transit - Increase frequency - Increase existing public transit fixed routes
- Expand pedestrian and bicycle network
- Improve multimodal access at intersections


## IMPROVE OPERATIONS STRATEGIES:

- Access Management - Limits access to land uses through limiting turning movements and conflict points
- Geometric Intersection Improvements - Change intersection use by changing the physical layout


## CURRENT IMPLEMENTATION PROJECTS AND PLANS

- U-5729 Carolina Beach Rd (US 421): Upgrade roadway from Burnett Ave to Shipyard Blvd
- U-5790 Carolina Beach Rd (US 421) from South College Rd (NC 132) to Sanders Rd: Widen existing roadway and construct flyovers at US 421 and NC 132


## CONGESTION RANK: 2 OF 30

## CORRIDOR FUNCTIONAL TYPES:

- Tourist Route
- Commercial Corridor
- Commuting Corridor
- Destination Corridor

MILEAGE ALONG CORRIDOR: 4.3 Miles

## NUMBER OF HOTSPOTS: 3

1. MLK Parkway (PM)
2. Ringo Dr (PM)
3. Randall Parkway

PEAK HOURS: 7:00-9:00AM / 4:45-6:45PM
ALTERNATE ROUTE: Kerr Ave and Independence Blvd

| DATA |  |  |
| :--- | :---: | :---: |
| Average Travel Time AM/PM | $6: 33 / 8: 50$ |  |
| Average Delay AM/PM | 1:41/ 4:02 |  |
| Rear End Collisions | 446 |  |
| Bicycle Crashes | 5 | 12 |
| Pedestrian Crashes | 7 |  |
| Average Vehicle Volume | 56,648 |  |
| Truck Percentage | N/A |  |
| Bicycle Counts AM/PM | $80 / 19$ |  |
| Pedestrian Counts AM/PM | $86 / 51$ |  |
| Transit Boarding | 77,851 |  |


| PERFORMANCE MEASURE POINTS |  |
| :--- | :---: |
| Travel Time | 11 |
| Safety | 16 |
| Volume | 34 |
| Transit Performance | 7 |

## SEGMENT OVERALL SCORE: <br> 68

## WMPO CONGESTION MITIGATION TECHNIQUES

## REDUCE DEMAND STRATEGIES:

- Alternative Roadways - Improve usage of non-CMP roadways to remove demand on CMP network

SHIFT MODE OF TRIP STRATEGIES:

- Implement Bicycle Sharing Program
- Expand pedestrian and bicycle network
- Improve multimodal access at intersections


## IMPROVE OPERATIONS STRATEGIES:

- Access Management - Limits access to land uses through limiting turning movements and conflict points INCREASE CAPACITY STRATEGIES:
- Convert intersection to interchange - Improves capacity with at-grade or grade separated alternative


## CURRENT IMPLEMENTATION PROJECTS AND PLANS

- U-4434 Independence Blvd Extension (New road on new location
- U-5792 MLK Jr Pkwy and College Rd: Convert at grade intersection to interchange
- U-3338B Kerr Avenue Widening: Widen to multi-lanes from Randall Pkwy to MLK Jr Pkwy
- U-3338C Kerr Ave at MLK Jr Pkwy: Convert at grade intersection to interchange
- U-5702 College Road: Access management and travel time improvements


## CONGESTION RANK: 4 OF 30

## CORRIDOR FUNCTIONAL TYPES:

- Tourist Route
- Commercial Corridor

MILEAGE ALONG CORRIDOR: 3.4 Miles

## NUMBER OF HOTSPOTS: 4

1. Wrightsville - Oleander $\operatorname{Dr}(\mathrm{AM}$ Northbound, PM)
2. Lake Ave (PM Northbound)
3. Holly Tree Dr (AM Northbound, PM)
4. 17th Street

PEAK HOURS: 7:00-9:00AM / 4:45-6:45PM
ALTERNATE ROUTE: Independence Blvd

| DATA |  |  |
| :--- | :---: | :---: |
| Average Travel Time AM/PM | $7: 32 / 10: 03$ |  |
| Average Delay AM/PM | $2: 58 / 5: 34$ |  |
| Rear End Collisions | 315 |  |
| Bicycle Crashes | 4 | 6 |
| Pedestrian Crashes | 2 |  |
| Average Vehicle Volume | 43,248 |  |
| Truck Percentage | N/A |  |
| Bicycle Counts AM/PM | $87 / 42$ |  |
| Pedestrian Counts AM/PM | $53 / 51$ |  |
| Transit Boarding | 26,195 |  |


| PERFORMANCE MEASURE POINTS |  |
| :--- | :---: |
| Travel Time | 17 |
| Safety | 11 |
| Volume | 33 |
| Transit Performance | 2 |

## SEGMENT OVERALL SCORE: <br> 63

## WMPO CONGESTION MITIGATION TECHNIQUES

## REDUCE DEMAND STRATEGIES:

- Alternative Roadways - Improve usage of non-CMP roadways to remove demand on CMP network
- Land Use - Construct supportive collector street network with new development


## SHIFT MODE OF TRIP STRATEGIES:

- Expand pedestrian and bicycle network
- Improve multimodal access at intersections


## IMPROVE OPERATIONS STRATEGIES:

- Access Management - Limits access to land uses through limiting turning movements and conflict points INCREASE CAPACITY STRATEGIES:
- Convert intersection to interchange - Improves capacity with at-grade or grade separated alternative


## CURRENT IMPLEMENTATION PROJECTS AND PLANS

- U-5702 College Rd: Access management and travel time improvements
- U-5704 College Rd (NC 132) and Oleander Dr (US 76): Construct interchange
- COW Transportation Bond 2014 - South College Rd Trail: 1.3 mile multi-use path along S. College Rd
- U-4434 Independence Blvd Extension (New road on new location)


## CORRIDOR FUNCTIONAL TYPES:

- Tourist Route
- Commercial Corridor
- Commuting Corridor

MILEAGE ALONG CORRIDOR: 4.7 Miles

## NUMBER OF HOTSPOTS: 2

1. US 421
2. Cathay Road - Halyburton Pkwy (AM)

PEAK HOURS: 7:00-9:00AM / 4:45-6:45PM
ALTERNATE ROUTE: River Road

| DATA |  |  |
| :--- | :---: | :---: |
| Average Travel Time AM/PM | $7: 40 / 7: 16$ |  |
| Average Delay AM/PM | $1: 51 / 1: 30$ |  |
| Rear End Collisions | 324 |  |
| Bicycle Crashes | 2 |  |
| Pedestrian Crashes | 2 |  |
| Average Vehicle Volume | 35,015 |  |
| Truck Percentage | N/A |  |
| Bicycle Counts AM/PM | $2 / 1$ |  |
| Pedestrian Counts AM/PM | $5 / 10$ |  |
| Transit Boarding | 26,195 |  |


| PERFORMANCE MEASURE POINTS |  |
| :--- | :---: |
| Travel Time | 6 |
| Safety | 10 |
| Volume | 15 |
| Transit Performance | 2 |

## SEGMENT OVERALL SCORE: 33

## WMPO CONGESTION MITIGATION TECHNIQUES

## REDUCE DEMAND STRATEGIES:

- Land Use - Manage Growth - Encourage growth in appropriate areas
- TDM - Encourage Carpools \& Vanpools
- Land Use - Construct supportive collector street network with new development

SHIFT MODE OF TRIP STRATEGIES:

- Transit - Increase frequency
- Land Use - TOD - Utilize mized-use areas designed to maximize access to public transit
- Improve multimodal access at intersections
- Establish Park \& Ride lots

IMPROVE OPERATIONS STRATEGIES:

- Access Management - Limit access to land uses through limiting turning movements and conflict points
- Improve Signage - Better inform traffic of route options and better channelize traffic to improve patterns

INCREASE CAPACITY STRATEGIES:

- Convert intersections to interchange - Improves capacity with at-grade or grade separated alternative
- Add general purpose lanes


## CURRENT IMPLEMENTATION PROJECTS AND PLANS

- U-5702 College Rd: Access management and travel time improvements from New Center Dr to US 421
- U-5790 Carolina Beach Rd (US 421) from South College Rd (NC 132) to Sanders Rd: Widen existing roadway and construct flyovers at US 421 and NC 132


## CONGESTION RANK: 12 OF 30

## CORRIDOR FUNCTIONAL TYPES:

- Destination Corridor

MILEAGE ALONG CORRIDOR: 1.1 Miles

## NUMBER OF HOTSPOTS: 1

1. Shipyard Bvld

PEAK HOURS: 7:00-9:00AM / 4:45-6:45PM
ALTERNATE ROUTE: Carolina Beach Rd and Independence Blvd

| DATA |  |  |
| :--- | :---: | :---: |
| Average Travel Time AM/PM | $3: 38 / 3: 59$ |  |
| Average Delay AM/PM | $1: 53 / 2: 13$ |  |
| Rear End Collisions | 75 |  |
| Bicycle Crashes | 1 | 3 |
| Pedestrian Crashes | 2 |  |
| Average Vehicle Volume | 32,040 |  |
| Truck Percentage | N/A |  |
| Bicycle Counts AM/PM | $1 / 2$ |  |
| Pedestrian Counts AM/PM | $46 / 33$ |  |
| Transit Boarding | 77,761 |  |


| PERFORMANCE MEASURE POINTS |  |
| :--- | :---: |
| Travel Time | 8 |
| Safety | 6 |
| Volume | 22 |
| Transit Performance | 7 |

## SEGMENT OVERALL SCORE: 43

## WMPO CONGESTION MITIGATION TECHNIQUES

## REDUCE DEMAND STRATEGIES:

- TDM - Encourage alternate work schedules
- TDM - Encourage carpools \& vanpools
- TDM - Encourage employer shuttles: A shuttle to provide transportation connections for employees SHIFT MODE OF TRIP STRATEGIES:
- Transit - Increase frequency - Increase existing public transit fixed routes
- Improve bicycle storage
- Expand pedestrian and bicycle network
- Improve multimodal access at intersections


## CURRENT IMPLEMENTATION PROJECTS AND PLANS

- EB-5600 - South 17th Street Multi-Use Path: Construct multi-use path


## CONGESTION RANK: 14 OF 30

CORRIDOR FUNCTIONAL TYPES:

- Commercial Corridor

MILEAGE ALONG CORRIDOR: 1.5 Miles

## NUMBER OF HOTSPOTS: 3

1. MLK Parkway (AM Southbound, PM Northbound)
2. Market Street
3. Randall Parkway

PEAK HOURS: 7:00-9:00AM / 4:45-6:45PM
ALTERNATE ROUTE: College Rd

| DATA |  |  |
| :--- | :---: | :---: |
| Average Travel Time AM/PM | $4: 28 / 6: 44$ |  |
| Average Delay AM/PM | $2: 12 / 4: 28$ |  |
| Rear End Collisions | 108 |  |
| Bicycle Crashes | 3 | 7 |
| Pedestrian Crashes | 4 | 7 |
| Average Vehicle Volume | 20,460 |  |
| Truck Percentage | N/A |  |
| Bicycle Counts AM/PM | $4 / 3$ |  |
| Pedestrian Counts AM/PM | $5 / 15$ |  |
| Transit Boarding | 68,972 |  |


| PERFORMANCE MEASURE POINTS |  |
| :--- | :---: |
| Travel Time | 13 |
| Safety | 10 |
| Volume | 12 |
| Transit Performance | 6 |

## SEGMENT OVERALL SCORE: 41

## WMPO CONGESTION MITIGATION TECHNIQUES

## REDUCE DEMAND STRATEGIES:

- Alternative Roadways - Improve usage of non-CMP roadways to remove demand on CMP network

SHIFT MODE OF TRIP STRATEGIES:

- Transit - Increase frequency
- Land Use - TOD - Utilize mixed-use areas designed to maximize access to public transit
- Expand bicycle and pedestrian network
- Improve multimodal access at intersections


## IMPROVE OPERATIONS STRATEGIES:

- Geometric Intersection Improvements - Change intersection by changing the physical layout INCREASE CAPACITY STRATEGIES:
- Convert intersections to interchange - Improves capacity with at-grade or grade separated alternative


## CURRENT IMPLEMENTATION PROJECTS AND PLANS

- U-5702 College Rd: Access management and travel time improvements from New Center Dr to US 421
- U-3338B Kerr Avenue Widening: Widen to multi-lanes from Randall Pkwy to MLK Jr Pkwy
- U-3338C Kerr Ave at MLK Jr Pkwy: Convert at grade intersection to interchange
- U-4434 Independence Blvd Extension (New road on new location)


## CONGESTION RANK: 25 OF 30



MILEAGE ALONG CORRIDOR: 1.1 Miles

## NUMBER OF HOTSPOTS: 2

1. College Road
2. Market Street (AM Eastbound, PM)

PEAK HOURS: 7:00-9:00AM / 4:45-6:45PM
ALTERNATE ROUTE: Market Street

| DATA |  |  |  |
| :--- | :---: | :---: | :---: |
| Average Travel Time AM/PM | $4: 39 / 4: 19$ |  |  |
| Average Delay AM/PM | $3: 04 / 2: 44$ |  |  |
| Rear End Collisions | 31 |  |  |
| Bicycle Crashes | 0 | 1 |  |
| Pedestrian Crashes | 1 | 27,251 |  |
| Average Vehicle Volume | N/A |  |  |
| Truck Percentage | N/A |  |  |
| Bicycle Counts AM/PM | N/A |  |  |
| Pedestrian Counts AM/PM | N/A |  |  |
| Transit Boarding |  |  |  |


| PERFORMANCE MEASURE POINTS |  |
| :--- | :---: |
| Travel Time | 11 |
| Safety | 3 |
| Volume | 9 |
| Transit Performance | N/A |

## SEGMENT OVERALL SCORE: 23

## WMPO CONGESTION MITIGATION TECHNIQUES

## REDUCE DEMAND STRATEGIES:

- Alternative Roadways - Improve usage of non-CMP roadways to remove demand on CMP network

SHIFT MODE OF TRIP STRATEGIES:

- Transit - Increase frequency: increase existing public transit fixed routes
- Transit - Express Routes: Encourage new transit express routes along corridor
- Improve multimodal access at intersections


## IMPROVE OPERATIONS STRATEGIES:

- Geometric Intersection Improvements - Change intersection by changing the physical layout INCREASE CAPACITY STRATEGIES:
- Convert intersections to interchange - Improves capacity with at-grade or grade separated alternative


## CURRENT IMPLEMENTATION PROJECTS AND PLANS

- U-3338B Kerr Avenue Widening: Widen to multi-lanes from Randall Pkwy to MLK Jr Pkwy
- U-3338C Kerr Ave at MLK Jr Pkwy: Convert at grade intersection to interchange
- U-4902C Market Street Access Management Improvements: MLK Jr Pkwy - Station Rd, convert at grade intersection to interchange (Market \& US 74)
- U-5881 College Rd from Gordon Rd to New Centre Dr: Upgrade Roadway
- U-5792 MLK Jr Pkwy and College Rd: Convert at grade intersection to interchange

MILEAGE ALONG CORRIDOR: 2.0 Miles

## NUMBER OF HOTSPOTS: 4

1. Independence Blvd (AM)
2. Kerr Ave
3. College Road
4. Racine Drive

PEAK HOURS: 7:00-9:00AM / 4:45-6:45PM
ALTERNATE ROUTE: Wrightsville Avenue

| DATA |  |  |
| :--- | :---: | :---: |
| Average Travel Time AM/PM | $6: 15 / 7: 09$ |  |
| Average Delay AM/PM | $2: 29 / 3: 23$ |  |
| Rear End Collisions | 56 |  |
| Bicycle Crashes | 10 | 13 |
| Pedestrian Crashes | 3 |  |
| Average Vehicle Volume | 18,947 |  |
| Truck Percentage | N/A |  |
| Bicycle Counts AM/PM | $31 / 8$ |  |
| Pedestrian Counts AM/PM | $42 / 14$ |  |
| Transit Boarding | 92,102 |  |


| PERFORMANCE MEASURE POINTS |  |
| :--- | :---: |
| Travel Time | 11 |
| Safety | 10 |
| Volume | 19 |
| Transit Performance | 9 |

## SEGMENT OVERALL SCORE: 49

## WMPO CONGESTION MITIGATION TECHNIQUES

## REDUCE DEMAND STRATEGIES:

- Land Use - Construct supportive collector street network with new development

SHIFT MODE OF TRIP STRATEGIES:

- Transit - Increase frequency - increase existing public transit fixed routes
- Improve bicycle storage
- Improve multimodal access at intersections

IMPROVE OPERATIONS STRATEGIES:

- Geometric Intersection Improvements - Change intersection by changing the physical layout


## CURRENT IMPLEMENTATION PROJECTS AND PLANS

- U-5702 College Rd: Access management and travel time improvements from New Center Dr to US 421
- U-3338B Kerr Avenue Widening: Widen to multi-lanes from Randall Pkwy to MLK Jr Pkwy
- U-4434 Independence Blvd Extension (New road on new location)


## CONGESTION RANK: 21 OF 30

## CORRIDOR FUNCTIONAL TYPES:

- Commercial Corridor
- Commuting Corridor

MILEAGE ALONG CORRIDOR: 2.3 Miles

## NUMBER OF HOTSPOTS: 3

1. Randall Pkwy
2. Oriole Dr (PM Southbound)
3. Eastwood Rd

PEAK HOURS: 7:00-9:00AM / 4:45-6:45PM
ALTERNATE ROUTE: College Road

| DATA |  |  |
| :--- | :---: | :---: |
| Average Travel Time AM/PM | $3: 13 / 3: 51$ |  |
| Average Delay AM/PM | $1: 02 / 1: 40$ |  |
| Rear End Collisions | 56 |  |
| Bicycle Crashes | 4 | 6 |
| Pedestrian Crashes | 2 |  |
| Average Vehicle Volume | 16,437 |  |
| Truck Percentage | N/A |  |
| Bicycle Counts AM/PM | N/A |  |
| Pedestrian Counts AM/PM | N/A |  |
| Transit Boarding | 86,583 |  |


| PERFORMANCE MEASURE POINTS |  |
| :--- | :---: |
| Travel Time | 5 |
| Safety | 6 |
| Volume | 7 |
| Transit Performance | 8 |

## SEGMENT OVERALL SCORE: 26

## WMPO CONGESTION MITIGATION TECHNIQUES

REDUCE DEMAND STRATEGIES:

- Alternative Roadways

SHIFT MODE OF TRIP STRATEGIES:

- Transit - Increase frequency: increase existing public transit fixed routes
- Transit - Express Routes: Encourage new transit express routes along corridor
- Improve multimodal access at intersections
- Improve bicycle storage


## CURRENT IMPLEMENTATION PROJECTS AND PLANS

- U-5702 College Rd: Access management and travel time improvements from New Center Dr to US 421


## CONGESTION RANK: 13 OF 30

CORRIDOR FUNCTIONAL TYPES:

- Commercial Corridor

MILEAGE ALONG CORRIDOR: 0.9 Miles

## NUMBER OF HOTSPOTS: 3

1. Market Street
2. College Road
3. Racine Dr

PEAK HOURS: 7:00-9:00AM / 4:45-6:45PM
ALTERNATE ROUTE: None

| DATA |  |  |
| :--- | :---: | :---: |
| Average Travel Time AM/PM | $4: 19 / 4: 46$ |  |
| Average Delay AM/PM | $2: 34 / 3: 02$ |  |
| Rear End Collisions | 44 |  |
| Bicycle Crashes | 1 | 1 |
| Pedestrian Crashes | 0 | 18,473 |
| Average Vehicle Volume | N/A |  |
| Truck Percentage | $28 / 12$ |  |
| Bicycle Counts AM/PM | $23 / 26$ |  |
| Pedestrian Counts AM/PM | 84,358 |  |
| Transit Boarding |  |  |


| PERFORMANCE MEASURE POINTS |  |
| :--- | :---: |
| Travel Time | 11 |
| Safety | 4 |
| Volume | 18 |
| Transit Performance | 8 |

## SEGMENT OVERALL SCORE: 41

## WMPO CONGESTION MITIGATION TECHNIQUES

## SHIFT MODE OF TRIP STRATEGIES:

- Transit - Increase frequency: increase existing public transit fixed routes
- Expand pedestrian and bicycle network
- Improve multimodal access at intersections
- Improve bicycle storage

IMPROVE OPERATIONS STRATEGIES:

- Geometric Intersection Improvements - Change intersection by changing the physical layout


## CURRENT IMPLEMENTATION PROJECTS AND PLANS

- U-5702 College Rd: Access management and travel time improvements from New Center Dr to US 421


## CONGESTION RANK: 28 OF 30

## CORRIDOR FUNCTIONAL TYPES:

- Tourist Route
- Freight Corridor

MILEAGE ALONG CORRIDOR: 1.1 Miles

## NUMBER OF HOTSPOTS: 2

1. Maco Road
2. US 17 / US 74 Interchange (AM)

PEAK HOURS: 6:30-8:30AM / 5:00-7:00PM
ALTERNATE ROUTE: l-140 (Wilmington Bypass)

| DATA |  |  |
| :--- | :---: | :---: |
| Average Travel Time AM/PM | 10:33 / 10:23 |  |
| Average Delay AM/PM | $0: 33 / 0: 24$ |  |
| Rear End Collisions | 86 |  |
| Bicycle Crashes | 0 | 2 |
| Pedestrian Crashes | 2 |  |
| Average Vehicle Volume | 44,045 |  |
| Truck Percentage | $4.8 \%$ |  |
| Bicycle Counts AM/PM | N/A |  |
| Pedestrian Counts AM/PM | N/A |  |
| Transit Boarding | N/A |  |


| PERFORMANCE MEASURE POINTS |  |
| :--- | :---: |
| Travel Time | 1 |
| Safety | 6 |
| Volume | 15 |
| Transit Performance | N/A |

## SEGMENT OVERALL SCORE: 22

## WMPO CONGESTION MITIGATION TECHNIQUES

## REDUCE DEMAND STRATEGIES:

- Alternative Roadways - Improve usage of non-CMP roadways to remove demand on CMP network IMPROVE OPERATIONS STRATEGIES:
- Access Management - Limits access to land uses through limiting turning movements and conflict points INCREASE CAPACITY STRATEGIES:
- Convert intersection to interchange - Improves capacity with at-grade or grade separated alternative


## CURRENT IMPLEMENTATION PROJECTS AND PLANS

- CTP Project - R-64 Village Rd Widening: Old Fayetteville Rd and Lanvale Rd Interchange
- U-4738 Cape Fear Crossing: Construct a new facility with structure over the Cape Fear River (Planning and Environmental Studies only)


## CONGESTION RANK: 20 OF 30

## CORRIDOR FUNCTIONAL TYPES:

- Tourist Route
- Commercial Corridor
- Commuting Corridor

MILEAGE ALONG CORRIDOR: 3.0 Miles

## NUMBER OF HOTSPOTS: 1

1. US 17 / US 74 Interchange

PEAK HOURS: 6:30-8:30AM / 5:00-7:00PM
ALTERNATE ROUTE: I-140 (Wilmington Bypass)

| DATA |  |
| :--- | :---: |
| Average Travel Time AM/PM | $4: 48 / 4: 45$ |
| Average Delay AM/PM | $0: 42 / 0: 39$ |
| Rear End Collisions | 0 |
| Bicycle Crashes | 0 |
| Pedestrian Crashes | 0 |
| Average Vehicle Volume | 42,701 |
| Truck Percentage | N/A |
| Bicycle Counts AM/PM | $9 / 8$ |
| Pedestrian Counts AM/PM | $6 / 9$ |
| Transit Boarding | 11,068 |


| PERFORMANCE MEASURE POINTS |  |
| :--- | :---: |
| Travel Time | 2 |
| Safety | 6 |
| Volume | 19 |
| Transit Performance | 1 |

## SEGMENT OVERALL SCORE: 28

## WMPO CONGESTION MITIGATION TECHNIQUES

## REDUCE DEMAND STRATEGIES:

- Alternative Roadways - Improve usage of non-CMP roadways to remove demand on CMP network
- Land Use - Construct supportive collector street network with new development


## SHIFT MODE OF TRIP STRATEGIES:

- Transit - Increase frequency - Increase existing public transit fixed routes
- Expand bicycle and pedestrian network
- Improve multimodal access at intersections


## CURRENT IMPLEMENTATION PROJECTS AND PLANS

- Connecting Northern Brunswick County Collector Street Plan
- U-4738 Cape Fear Crossing: Construct a new facility with structure over the Cape Fear River (Planning and Environmental Studies only)


## CONGESTION RANK: 23 OF 30

## CORRIDOR FUNCTIONAL TYPES:

- Tourist Route
- Commercial Corridor
- Commuting Corridor
- Freight Corridor

MILEAGE ALONG CORRIDOR: 2.7 Miles

## NUMBER OF HOTSPOTS: 3

1. US 74 WB Ramp (AM)
2. US 74 EB Ramp (AM)
3. Blackwell Rd (AM)

PEAK HOURS: 7:00-9:00AM / 4:45-6:45PM
ALTERNATE ROUTE: US 17 / Ocean Highway

| DATA |  |  |
| :--- | :---: | :---: |
| Average Travel Time AM/PM | $5: 14 / 4: 50$ |  |
| Average Delay AM/PM | $1: 08 / 0: 52$ |  |
| Rear End Collisions | 38 |  |
| Bicycle Crashes | 0 | 1 |
| Pedestrian Crashes | 1 | 19,585 |
| Average Vehicle Volume | $3.2 \%$ |  |
| Truck Percentage | $12 / 21$ |  |
| Bicycle Counts AM/PM | $21 / 15$ |  |
| Pedestrian Counts AM/PM | N/A |  |
| Transit Boarding |  |  |


| PERFORMANCE MEASURE POINTS |  |
| :--- | :---: |
| Travel Time | 4 |
| Safety | 3 |
| Volume | 18 |
| Transit Performance | N/A |

## SEGMENT OVERALL SCORE: 25

## WMPO CONGESTION MITIGATION TECHNIQUES

## REDUCE DEMAND STRATEGIES:

- Alternative Roadways: Improve usage of non-CMP roadways to remove demand on CMP network

SHIFT MODE OF TRIP STRATEGIES:

- Expand pedestrian and bicycle network


## CURRENT IMPLEMENTATION PROJECTS AND PLANS

- Cape Fear Transportation 2040 - River Rd (NC 133) Widening from US 17/74/76 to Rabon Way (Future)
- U-4738 Cape Fear Crossing: Construct a new facility with structure over the Cape Fear River (Planning and Environmental Studies only)
- U-5527E Belville Elementary MUP: Construct a multi-use path
- U-5534V Rice Hope MUP: Construct a multi-use path


## CONGESTION RANK: 16 OF 30

## CORRIDOR FUNCTIONAL TYPES:

- Freight Corridor
- Commercial Corridor
- Tourist Route

MILEAGE ALONG CORRIDOR: 3.2 Miles

## NUMBER OF HOTSPOTS: 2

1. Cape Fear Memorial Bridge (Openings)
2. 3rd Street

PEAK HOURS: 7:00-9:00AM / 4:45-6:45PM
ALTERNATE ROUTE: I-140 (Wilmington Bypass)

| DATA |  |  |
| :--- | :---: | :---: |
| Average Travel Time AM/PM | $4: 06 / 4: 02$ |  |
| Average Delay AM/PM | $0: 33 / 0: 28$ |  |
| Rear End Collisions | 44 |  |
| Bicycle Crashes | 1 | 2 |
| Pedestrian Crashes | 1 | 2 |
| Average Vehicle Volume | 79,803 |  |
| Truck Percentage | $8.3 \%$ |  |
| Bicycle Counts AM/PM | N/A |  |
| Pedestrian Counts AM/PM | N/A |  |
| Transit Boarding | 11,068 |  |


| PERFORMANCE MEASURE POINTS |  |
| :--- | :---: |
| Travel Time | 2 |
| Safety | 5 |
| Volume | 25 |
| Transit Performance | 1 |

## SEGMENT OVERALL SCORE: 33

## WMPO CONGESTION MITIGATION TECHNIQUES

## REDUCE DEMAND STRATEGIES:

- Alternative Roadways - Improve usage of non-CMP roadways to remove demand on CMP network
- TDM - Encourage alternate work schedules
- TDM - Encourage carpools \& vanpools
- TDM - Encourage employer shuttles: A shuttle to provide transportation connections for employees

SHIFT MODE OF TRIP STRATEGIES:

- Transit - Increase frequency: increase existing public transit fixed routes
- Establish park and ride lots


## CURRENT IMPLEMENTATION PROJECTS AND PLANS

- U-4738 Cape Fear Crossing: Construct a new facility with structure over the Cape Fear River (Planning and Environmental Studies only)


## CONGESTION RANK: 27 OF 30

## CORRIDOR FUNCTIONAL TYPES:

- Tourist Route
- Freight Corridor
- Commuting Corridor

MILEAGE ALONG CORRIDOR: 1.6 Miles

## NUMBER OF HOTSPOTS: 2

1. 3 rd St - MLK (Merge on Isabella Holmes Bridge)
2. US 421

PEAK HOURS: 7:00-9:00AM / 4:45-6:45PM
ALTERNATE ROUTE: I-140 (Wilmington Bypass)

| DATA |  |  |
| :--- | :---: | :---: |
| Average Travel Time AM/PM | $2: 53 / 2: 44$ |  |
| Average Delay AM/PM | $1: 00 / 0: 51$ |  |
| Rear End Collisions | 39 |  |
| Bicycle Crashes | 0 | 0 |
| Pedestrian Crashes | 0 | 0 |
| Average Vehicle Volume | 46,509 |  |
| Truck Percentage | $5.8 \%$ |  |
| Bicycle Counts AM/PM | N/A |  |
| Pedestrian Counts AM/PM | N/A |  |
| Transit Boarding | N/A |  |


| PERFORMANCE MEASURE POINTS |  |
| :--- | :---: |
| Travel Time | 3 |
| Safety | 2 |
| Volume | 17 |
| Transit Performance | N/A |

## SEGMENT OVERALL SCORE: 22

## WMPO CONGESTION MITIGATION TECHNIQUES

## REDUCE DEMAND STRATEGIES:

- Alternative Roadways - Improve usage of non-CMP roadways to remove demand on CMP network
- TDM - Encourage alternate work schedules
- TDM - Encourage carpools \& vanpools
- TDM - Encourage employer shuttles - A shuttle to provide transportation connections for employees IMPROVE OPERATIONS STRATEGIES:
- Geometric Intersection Improvements - Change intersection by changing the physical layout INCREASE CAPACITY STRATEGIES:
- Convert intersection to interchange - Improves capacity with at-grade or grade separated alternative


## CURRENT IMPLEMENTATION PROJECTS AND PLANS

- U-5731 (US 17/US 421: A fly-over and free flow ramp at interchange)

SEGMENT 23 US 117/College Road

## CONGESTION RANK: 19 OF 30

CORRIDOR FUNCTIONAL TYPES:

- Commuting Corridor

MILEAGE ALONG CORRIDOR: 5.8 Miles

## NUMBER OF HOTSPOTS: 4

1. Holly Shelter Rd (PM Northbound)
2. Danny Pence Dr (AM Northbound)
3. Bavarian Ln / Murrayville Rd
4. Gordon Rd (PM Southbound)

PEAK HOURS: 7:00-9:00AM / 4:45-6:45PM
ALTERNATE ROUTE: Castle Hayne Rd and I-40

| DATA |  |  |
| :--- | :---: | :---: |
| Average Travel Time AM/PM | $11: 06 / 11: 02$ |  |
| Average Delay AM/PM | $2: 45 / 3: 14$ |  |
| Rear End Collisions | 132 |  |
| Bicycle Crashes | 1 |  |
| Pedestrian Crashes | 2 |  |
| Average Vehicle Volume | 20,122 |  |
| Truck Percentage | N/A |  |
| Bicycle Counts AM/PM | N/A |  |
| Pedestrian Counts AM/PM | N/A |  |
| Transit Boarding | 35,209 |  |


| PERFORMANCE MEASURE POINTS |  |
| :--- | :---: |
| Travel Time | 11 |
| Safety | 8 |
| Volume | 7 |
| Transit Performance | 3 |

## SEGMENT OVERALL SCORE: 29

## WMPO CONGESTION MITIGATION TECHNIQUES

## REDUCE DEMAND STRATEGIES:

- Land Use - Accommodate all modes in new development

SHIFT MODE OF TRIP STRATEGIES:

- Transit - Increase frequency of existing public transit fixed routes
- Expand pedestrian and bicycle network
- Improve multimodal access at intersections

IMPROVE OPERATIONS STRATEGIES:

- Access Management - Limits access to land uses through limiting turning movements and conflict points


## CURRENT IMPLEMENTATION PROJECTS AND PLANS

- Laney High School Multi-Use Trail: Coordination between developer, Laney High School and NCDOT


## CONGESTION RANK: 10 OF 30

CORRIDOR FUNCTIONAL TYPES:

- Commuting Corridor

MILEAGE ALONG CORRIDOR: 3.5 Miles

## NUMBER OF HOTSPOTS: 3

1. North College Road
2. Netherlands Dr (PM)
3. Market St

PEAK HOURS: 7:00-9:00AM / 4:45-6:45PM
ALTERNATE ROUTE: None

| DATA |  |  |
| :--- | :---: | :---: |
| Average Travel Time AM/PM | $8: 49$ / 11:15 |  |
| Average Delay AM/PM | $3: 53 / 6: 26$ |  |
| Rear End Collisions | 122 |  |
| Bicycle Crashes | 1 | 3 |
| Pedestrian Crashes | 2 |  |
| Average Vehicle Volume | 20,012 |  |
| Truck Percentage | N/A |  |
| Bicycle Counts AM/PM | $5 / 7$ |  |
| Pedestrian Counts AM/PM | $10 / 7$ |  |
| Transit Boarding | 58,056 |  |


| PERFORMANCE MEASURE POINTS |  |
| :--- | :---: |
| Travel Time | 20 |
| Safety | 8 |
| Volume | 11 |
| Transit Performance | 5 |

## SEGMENT OVERALL SCORE: 44

## WMPO CONGESTION MITIGATION TECHNIQUES

## SHIFT MODE OF TRIP STRATEGIES:

- Transit - Increase frequency - increase existing public transit fixed routes
- Land Use - TOD - Utilize mixed-use areas designed to maximize access to public transit
- Expand bicycle and pedestrian network
- Improve multimodal access at intersections

IMPROVE OPERATIONS STRATEGIES:

- Access Management - Limits access to land uses through limiting turning movements and conflict points INCREASE CAPACITY STRATEGIES:
- Add general purpose lane


## CURRENT IMPLEMENTATION PROJECTS AND PLANS

- U-4902D Market Street Access Management Improvements: Station Rd - Marsh Oaks Dr
- U-4751 Military Cutoff Extension; Multi-lanes on new location
- U-5881 College Rd from Gordon Rd to New Centre Dr: Upgrade Roadway
- CTP - Gordon Rd: Widen to multi-lanes


## CONGESTION RANK: 24 OF 30

## CORRIDOR FUNCTIONAL TYPES:

- Commercial Corridor
- Commuting Corridor

MILEAGE ALONG CORRIDOR: 3.0 Miles

## NUMBER OF HOTSPOTS: 4

1. Oak Ridge Ln (AM Westbound)
2. Marsh Oaks Dr (PM Eastbound/Northbound)
3. Ogden Walmart (PM)
4. Porter's Neck Rd

PEAK HOURS: 7:00-9:00AM / 4:45-6:45PM
ALTERNATE ROUTE: Military Cutoff Road Extension (Future)

| DATA |  |  |
| :--- | :---: | :---: |
| Average Travel Time AM/PM | $6: 50 / 7: 18$ |  |
| Average Delay AM/PM | $1: 51 / 2: 17$ |  |
| Rear End Collisions | 23 |  |
| Bicycle Crashes | 0 | 1 |
| Pedestrian Crashes | 1 | 1 |
| Average Vehicle Volume | 39,453 |  |
| Truck Percentage | N/A |  |
| Bicycle Counts AM/PM | $0 / 0$ |  |
| Pedestrian Counts AM/PM | $0 / 0$ |  |
| Transit Boarding | N/A |  |


| PERFORMANCE MEASURE POINTS |  |
| :--- | :---: |
| Travel Time | 8 |
| Safety | 3 |
| Volume | 17 |
| Transit Performance | N/A |

## SEGMENT OVERALL SCORE: 28

## WMPO CONGESTION MITIGATION TECHNIQUES

## REDUCE DEMAND STRATEGIES:

- Alternative Roadways - Improve usage of non-CMP roadways to remove demand on CMP network

SHIFT MODE OF TRIP STRATEGIES:

- Transit - Increase frequency - increase existing public transit fixed routes
- Expand pedestrian and bicycle network
- Improve multimodal access at intersections

IMPROVE OPERATIONS STRATEGIES:

- Geometric Intersection Improvements - Change intersection by changing the physical layout


## CURRENT IMPLEMENTATION PROJECTS AND PLANS

- U-4902D US 17 Access Management Improvements: Station Rd - Marsh Oaks Dr
- U-4751 Military Cutoff Rd Extension: Multi-lanes on new location
- R-3300 Hampstead Bypass: Multi-lanes on new location


## CONGESTION RANK: 18 OF 30

## CORRIDOR FUNCTIONAL TYPES:

- Tourist Corridor
- Commercial Corridor
- Commuting Corridor
- Freight Corridor

MILEAGE ALONG CORRIDOR: 7.4 Miles

## NUMBER OF HOTSPOTS: 3

1. NC 210/Dan Owen Dr (PM Eastbound/Northbound)
2. Jenkins Rd / Country Club Rd (AM Westbound/Southbound)
3. Sloop Point Rd (AM)

PEAK HOURS: 7:00-9:00AM / 4:45-6:45PM
ALTERNATE ROUTE: Hampstead Bypass (Future)

| DATA |  |
| :--- | :---: |
| Average Travel Time AM/PM | $11: 00 / 9: 26$ |
| Average Delay AM/PM | $2: 30 / 0: 40$ |
| Rear End Collisions | 0 |
| Bicycle Crashes | 0 |
| Pedestrian Crashes | 0 |
| Average Vehicle Volume | 43,825 |
| Truck Percentage | $2.7 \%$ |
| Bicycle Counts AM/PM | $1 / 5$ |
| Pedestrian Counts AM/PM | $5 / 4$ |
| Transit Boarding | N/A |


| PERFORMANCE MEASURE POINTS |  |
| :--- | :---: |
| Travel Time | 6 |
| Safety | 6 |
| Volume | 18 |
| Transit Performance | N/A |

## SEGMENT OVERALL SCORE: 30

## WMPO CONGESTION MITIGATION TECHNIQUES

## REDUCE DEMAND STRATEGIES:

- Alternative Roadways - Improve usage of non-CMP roadways to remove demand on CMP network


## SHIFT MODE OF TRIP STRATEGIES:

- Transit
- Expand pedestrian and bicycle network
- Improve multimodal access at intersections


## IMPROVE OPERATIONS STRATEGIES:

- Access Management - Limits access to land uses through limiting turning movements and conflict points


## CURRENT IMPLEMENTATION PROJECTS AND PLANS

- R-3300 Hampstead Bypass: Multi-lanes on new location
- U-5732 US 17 Superstreet: Convert to superstreet from Washington Acres Rd to Sloop Point Loop Rd


## CONGESTION RANK: 11 OF 30

## CORRIDOR FUNCTIONAL TYPES:

- Tourist Corridor
- Commercial Corridor
- Destination Corridor

MILEAGE ALONG CORRIDOR: 2.4 Miles

## NUMBER OF HOTSPOTS: 3

1. Military Cutoff Road
2. Landfall Entrance (PM)
3. Heide Trask Drawbridge

PEAK HOURS: 7:00-9:00AM / 4:45-6:45PM
ALTERNATE ROUTE: None

| DATA |  |  |
| :--- | :---: | :---: |
| Average Travel Time AM/PM | $5: 50 / 7: 34$ |  |
| Average Delay AM/PM | $1: 54 / 3: 38$ |  |
| Rear End Collisions | 64 |  |
| Bicycle Crashes | 1 | 2 |
| Pedestrian Crashes | 1 | 2 |
| Average Vehicle Volume | 24,470 |  |
| Truck Percentage | N/A |  |
| Bicycle Counts AM/PM | $92 / 53$ |  |
| Pedestrian Counts AM/PM | $86 / 85$ |  |
| Transit Boarding | N/A |  |


| PERFORMANCE MEASURE POINTS |  |
| :--- | :---: |
| Travel Time | 11 |
| Safety | 6 |
| Volume | 27 |
| Transit Performance | N/A |

## SEGMENT OVERALL SCORE: 44

## WMPO CONGESTION MITIGATION TECHNIQUES

## SHIFT MODE OF TRIP STRATEGIES:

- Transit
- Expand pedestrian and bicycle network
- Improve multimodal access at intersections

IMPROVE OPERATIONS STRATEGIES:

- Convert intersection to interchange - Improves capacity with at-grade or grade separated alternative


## CURRENT IMPLEMENTATION PROJECTS AND PLANS

- U-5710 Eastwood Rd (US 74) and Military Cutoff Rd: Convert at-grade intersection to an interchange
- FS-1703A Heide Trask Bridge Replacement Feasibility Study
- U-5534B Heide Trask Walkway


## CONGESTION RANK: 15 OF 30

## CORRIDOR FUNCTIONAL TYPES:

- Tourist Corridor
- Commercial Corridor
- Destination Corridor

MILEAGE ALONG CORRIDOR: 5.2 Miles

## NUMBER OF HOTSPOTS: 2

1. Halyburton Pkwy (Northbound)
2. Dow Rd (PM)

PEAK HOURS: 6:30-8:30AM / 5:00-7:00PM
ALTERNATE ROUTE: River Road and Dow Road

| DATA |  |  |
| :--- | :---: | :---: |
| Average Travel Time AM/PM | $7: 59 / 7: 39$ |  |
| Average Delay AM/PM | $0: 55 / 0: 35$ |  |
| Rear End Collisions | 93 |  |
| Bicycle Crashes | 2 | 3 |
| Pedestrian Crashes | 1 |  |
| Average Vehicle Volume | 27,938 |  |
| Truck Percentage | N/A |  |
| Bicycle Counts AM/PM | $91 / 65$ |  |
| Pedestrian Counts AM/PM | $90 / 79$ |  |
| Transit Boarding | 10,783 |  |


| PERFORMANCE MEASURE POINTS |  |
| :--- | :---: |
| Travel Time | 3 |
| Safety | 7 |
| Volume | 28 |
| Transit Performance | 1 |

## SEGMENT OVERALL SCORE: 39

## WMPO CONGESTION MITIGATION TECHNIQUES

## SHIFT MODE OF TRIP STRATEGIES:

- Transit - Increase frequency: increase existing public transit fixed routes
- Expand pedestrian and bicycle network
- Establish park \& ride lot


## CURRENT IMPLEMENTATION PROJECTS AND PLANS

- Cape Fear Transportation 2040 - River Rd Widening: Independence Blvd to Carolina Beach Rd
- U-5534E, U-5534L Island Greenway
- U-55340 Cape Fear Blvd MUP
- U-5527D Harper Avenue MUP


## CONGESTION RANK: 29 OF 30

CORRIDOR FUNCTIONAL TYPES:

- Tourist Corridor
- Destination Corridor

MILEAGE ALONG CORRIDOR: 5.9 Miles

## NUMBER OF HOTSPOTS: N/A

PEAK HOURS: 6:30-8:30AM / 5:00-7:00PM
ALTERNATE ROUTE: None

| DATA |  |  |
| :--- | :---: | :---: |
| Average Travel Time AM/PM | $12: 10 / 11: 32$ |  |
| Average Delay AM/PM | $1: 53 / 1: 15$ |  |
| Rear End Collisions | 13 |  |
| Bicycle Crashes | 1 | 1 |
| Pedestrian Crashes | 0 | 1 |
| Average Vehicle Volume | 10,864 |  |
| Truck Percentage | N/A |  |
| Bicycle Counts AM/PM | N/A |  |
| Pedestrian Counts AM/PM | N/A |  |
| Transit Boarding | N/A |  |


| PERFORMANCE MEASURE POINTS |  |
| :--- | :---: |
| Travel Time | 6 |
| Safety | 2 |
| Volume | 4 |
| Transit Performance | N/A |

## SEGMENT OVERALL SCORE:

12

## WMPO CONGESTION MITIGATION TECHNIQUES

## SHIFT MODE OF TRIP STRATEGIES:

- Transit - Increase frequency of existing public transit fixed routes
- Establish park and ride lot
- Improve multimodal access at intersections


## CURRENT IMPLEMENTATION PROJECTS AND PLANS

- U-5534E, U-5534L Island Greenway


## CONGESTION RANK: 26 OF 30

## CORRIDOR FUNCTIONAL TYPES:

- Commuting Corridor

MILEAGE ALONG CORRIDOR: 2.5 Miles

## NUMBER OF HOTSPOTS: 4

1. Oleander Dr
2. Greenville Loop Rd (PM)
3. Holly Tree Rd
4. Beasley Rd (AM Northbound)

PEAK HOURS: 7:00-9:00AM / 4:45-6:45PM
ALTERNATE ROUTE: College Road

| DATA |  |  |
| :--- | :---: | :---: |
| Average Travel Time AM/PM | $6: 32 / 8: 18$ |  |
| Average Delay AM/PM | $2: 31 / 4: 19$ |  |
| Rear End Collisions | 46 |  |
| Bicycle Crashes | 0 | 0 |
| Pedestrian Crashes | 0 | 0 |
| Average Vehicle Volume | 16,095 |  |
| Truck Percentage | N/A |  |
| Bicycle Counts AM/PM | N/A |  |
| Pedestrian Counts AM/PM | N/A |  |
| Transit Boarding | N/A |  |


| PERFORMANCE MEASURE POINTS |  |
| :--- | :---: |
| Travel Time | 13 |
| Safety | 3 |
| Volume | 7 |
| Transit Performance | N/A |

## SEGMENT OVERALL SCORE: 23

## WMPO CONGESTION MITIGATION TECHNIQUES

## SHIFT MODE OF TRIP STRATEGIES:

- Transit
- Expand pedestrian and bicycle network
- Improve multimodal access at intersections

IMPROVE OPERATIONS STRATEGIES:

- Convert intersection to interchange - Improves capacity with at-grade or grade separated alternative


## CURRENT IMPLEMENTATION PROJECTS AND PLANS

- U-5704 College Rd (NC 132) and Oleander Dr (US 76): Construct interchange
- COW Transportation Bond 2014 - Pine Grove Drive Improvements: Pine Grove and Greenville Loop Rd; Pine Grove and Holly Tree Rd; Pine Grove and Macmillan; Pine Grove and Oleander Dr


## SYSTEM MONITORING

In addition to analyzing specific segments of the CMP system, this report also evaluates how our region is performing as a whole. The system monitoring performance measures are set in place to identify, assess, and quickly communicate information about the overall network. The preliminary system-wide performance measures are the following:

- Safe
- Efficient
- Appropriate
- Responsible
- Integrated
- Multi-Modal

Following the criteria listed in the CMP, the data below represents the existing conditions of our current system as a whole. Over the next two years these performance measures will again be collected to compare how the system has improved after the strategies have been identifi ed in the segment snapshots.


## PERFORMANCE MEASURE ANALYSIS

| Performance Measure Analysis | $\mathbf{2 0 1 6}$ | $\mathbf{2 0 1 8}$ |
| :--- | :---: | :---: |
| Safe |  |  |
| Number of bicycle and pedestrian crashes in the WMPO area within 2-year timeframe | 329 | 157 |
| Number of rear-end collisions in the WMPO area within a 2-year timeframe | 3,845 | 3,725 |
| Efficient | 2,648 | 2,771 |
| Bicycle and pedestrian corridor counts per capita in the WMPO area | 93 | 94 |
| Number of CMP corridor intersection legs with pedestrian indication at intersections | $7: 05$ | $7: 11$ |
| Average travel time of the WMPO CMP network | $2: 06$ | $2: 17$ |
| Average duration of delay at intersections within the WMPO CMP network | 402 | 600 |
| Number of participants in the WMPO's TDM Program | $40 \%$ | $37 \%$ |
| Appropriate | $12 \%$ | $14 \%$ |
| Percentage of CMP corridor facility improvements that have low difficulty | $48 \%$ | $48 \%$ |
| Percentage of CMP corridor facility improvements that have medium difficulty | $59 \%$ | $48 \%$ |
| Percentage of CMP corridor facility improvements that have high difficulty |  |  |
| Percentage of miles of CMP improvements that incorporated consideration of 2040 projected volumes |  |  |
| Responsible | $43 \%$ | $67 \%$ |
| Percentage of miles of CMP routes that have parallel facilities that alleviate congestion on CMP routes | $43 \%$ |  |
| Integrated | $50 \%$ | $0 \%$ |
| Percentage of WMPO adopted plans is the CMP referenced in over a two year period | $0 \%$ | $0 \%$ |
| Percentage of the WMPO 10 member jurisdictions land use plans referencing the CMP | 2,648 | 2,771 |
| Multi-Modal |  |  |
| Bicycle and pedestrian CMP corridor counts per capita |  |  |

## PERFORMANCE MEASURE ANALYSIS

The following observations can be made by the comparison of the overall 2018 performance measure analysis to the 2016 performance measure analysis:

- There was an increase in bicycle and pedestrian counts per capita in the WMPO area, as well as a marked decrease in bicycle and pedestrian crashes. Although the reduction in crashes may be accounted for in a deficit of properly reported crashes, the increase in users may be due to the completion of additional bicycle and pedestrian facilities like the Cross City Trail.
- Average travel time of the network as well as the average duration of delay at intersections within the CMP network have remained relatively the same.
- There has been a considerable increase in participants in the WMPO's TDM Programming. Program promotions and educational opportunities by the WMPO have likely helped to increase participation throughout the region.
- The percentage of miles of CMP routes with parallel facilities has increased significantly thanks to the opening of the final section of the Wilmington Bypass (I-140) in late 2017. The completion of this noted mitigation project in 2016 has allowed for an additional route into New Hanover County from Brunswick County.

While there are some notable differences in the Performance Measure Analysis of the overall CMP Network between the 2016 and 2018 reports likely due to proposed and implemented mitigation techniques, further observation and application of additional techniques will be necessary to see a continued overall improvement of the network. Many of the technique implementation projects identified in the 2016 Biennial Report are still in process (either in design, ROW acquisition, or nearing construction) and for which their benefits have not been realized in the 2018 report.

## NEXT STEPS

One of the critical parts of the Congestion Management Process Biennial Report is determining which strategies can be used to improve congestion experienced along the identified roadway segments. The segment snapshots have identified which corridors are in the most need of attention. It is up to the WMPO staff and partnering agencies to facilitate the implementation of strategies to improve the CMP network.

This report will also be an essential tool when selecting projects for the WMPO's Metropolitan Transportation Plan (MTP) which is currently in development. Congestion is one of an array of factors considered when selecting projects for the WMPO's MTP and subsequently programing projects in the Metropolitan/State Transportation Improvement Program (MTIP/STIP). The biennial report's congestion scores will be a critical tool when identifying and prioritizing projects for the future MTP. The ranking process in this report quantifies a congestion value associated with each CMP corridor. This will allow any project identified in the WMPO's MTP to easily incorporate a CMP score as one of the evaluating components in the MTP's final project score.

Since the CMP is an ongoing data collection and analysis process, following the biennial report there will be a review for the CMP's effectiveness. WMPO staff will assess whether there is a need for the CMP Steering Committee to reconvene to evaluate the existing performance measures and mitigation techniques. The WMPO will also evaluate the existing criteria used to score and rank congestion within the region. If an improved process has the potential to be more effective than the existing process this will be taken into account for the next biennial report which will be completed in 2020.

# WILMINGTON URBAN AREA METROPOLITAN PLANNING ORGANIZATION BOARD 

## RESOLUTION ADOPTING THE CONGESTION MANAGEMENT PROCESS 2018 BIENNIAL REPORT

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 Wilmington Urban Area Metropolitan Planning Organization was designated as a Transportation Management Area (TMA); and

WHEREAS, on December 4, 2015 President Obama signed the Fixing America’s Surface Transportation (FAST) Act; and

WHEREAS, the development and adoption of a Congestion Management Process is required of all designated TMAs; and

WHEREAS, the Federal Highway Administration defines a Congestion Management Process as a regionally-accepted approach for managing congestion that provides up-to-date information on transportation system performance and assesses alternative strategies for congestion management that meet state and local needs; and

WHEREAS, the Wilmington Urban Area Metropolitan Planning Organization adopted the Congestion Management Process on December 11, 2013 and established performance measures for evaluating and monitoring system performance and serves as a baseline for congestion in the region; and

WHEREAS, following the adoption of the Congestion Management Process, the Wilmington Urban Area Metropolitan Planning Organization prepared and adopted the 2016 report; and

WHEREAS, the Wilmington Urban Area Metropolitan Planning Organization has collected the necessary data over the course of the past 2 years to evaluate and monitor system performance and evaluate the effectiveness of the current congestion needs for the Wilmington Urban Area.

NOW THEREFORE, be it resolved that the Board of the Wilmington Urban Area Metropolitan Planning Organization hereby adopts the Congestion Management Process 2018 Biennial Report.

ADOPTED at a regular meeting of the Wilmington Urban Area Metropolitan Planning Organization's Board on November 28, 2018.

[^1]Mike Kozlosky, Secretary

## Snug Harbour

## Home Owners

Association
P.O. Box 55

Wrightsville Beach, NC 28480

Karen Collett
NCDOT Division 3
5501 Barbados Blyd.
Castle Hayne, NC, 28429
Dear Ms. Collett:

The Board of the Snug Harbour Home Owners Association is writing you on behalf of our residents regarding the Military Cutoff Project. More specifically, the road being constructed that runs from Military Cutoff to Market Street and parallels the Snug Harbour and Covil Crossing neighborhoods.

While we have found NCDOT employees to be very friendly and attentive to our concerns, several of these matters seem to be unresolvable without the coordinated consideration of the MPO and NCDOT. In particular, concerns regarding privacy, safety, sound, ind visual appearance of the elevated road being constructed.

In discussion with residents, at least those that attended the many informational meetings, no resident remembers any engineer discussing the fact that when completed this road would rise eight feet above what was current grade behind the Professional Builders Supply property. What has presented itself as a result of this situation is that cars traveling on the new road are significantly above the existing property grades for those residents that are adjacent to the road. In one case, 7001 Long Boat Circle, the road is almost four feet above the existing six- foot privacy fence. As a visual takeaway, consider that persons standing on this property will be somewhat below the tires of the vehicles that travel on the road. In another example, someone walking on the proposed multi-use path will be able to look down into the same yard from over an existing privacy fence.

With respect to an increase in sound, it is one thing when sound projects from something that is on the same plane than it is when that sound is projecting from an elevated structure. While somewhat of an annoyance in the first case, the elevated nature of this road will make it intolerable to be in the back yards of many adjacent properties.

Additionally, the vegetative buffer between the new road and the existing is minimal in most areas of concern. For this reason there are safety concerns related to vehicles traveling on this road that could very easily leave the paved hard surface and be substantially unimpeded into the rear yards of adjacent properties.

In meetings with various NCDOT officials, and also a County Commission and MPO Board Member, we are being told that at this point vegetative screening may be the only consideration. I would like you to know that our Board and residents consider this solution to be unacceptable as it will take many years for any new growth to be thick enough to make a substantial difference in the situation.

With respect to concerns mentioned above, the Snug Harbour Board of Directors, on behalf of the 63 residential homes in our neighborhood, specifically request that NCDOT reconsider its previous decision regarding barrier fencing, and in doing so provide some sort of visual/soundproofing hardscape barrier that will separate this project from the neighborhood where homes are currently located within 50 feet of the ${ }^{87}$
of the NCDOT right of way. The length of the area in question is approximately 900 feet.
Your attention to this matter is most important as this new road and its unfortunate consequences for our residents is quickly going to be a reality. In that regard, your immediate assistance is requested. Should you need to speak with me directly my cell number is (910) 619-3227.

Sincerely,

Mary Beth Farrior
Snug Harbour Board
cc: Snug Harbour Board of Directors
© Mike Kozlosky, MPO Executive Director
Wilmington Urban Area MPO Board Members
Kevin Bowen, NCDOT
Representative Ted Davis
Representative Holley Grange
Senator Michael Lee

| FY 2020 - \$20,500,000 (S |  |
| :---: | :---: |
|  |  |
|  |  |


Proposed Revisions to 2018-2027 STIP/MPO TIP Programs

CONSTRUCTION
STATEWIDE PROJECT
VARIOUS, SAFE ROUTES TO SCHOOL PROGRAM.
PROJECTS TO IMPROVE SAFETY, REDUCE
TRAFFIC, FUEL CONSUMPTION AND AIR
POLLUTION IN VICINITY OF SCHOOLS


* U-3338C
NEW HANOVER
REGIONAL
PROJ.CATEGORY
* SR-5001
STATEWIDE
DIVISION
PROJ.CATEGORY

Cape Fear Crossing
STIP U-4738

## Brunswick and New Hanover Counties

## PROJECT STATUS REPORT

November 1, 2018

## Project Description

The Cape Fear Crossing project is proposed as a roadway extending from the vicinity of US 17 Bypass and I-140 in Brunswick Country to US 421 in New Hanover County, including a crossing of the Cape Fear River. The project is programmed in the 2018-2027 STIP for planning and environmental studies only using STPDA funding from the Wilmington MPO.

The following list includes tasks during the month of October:

## Current Activities

- The project team continues to coordinate and correspond with project stakeholders.
- Studies for the Traffic Noise Analysis and Air Quality Analysis are ongoing.
- Due to updated designs, construction and right-of-way cost estimates are currently being revised.
- The Draft Environmental Impact Statement (DEIS) has been reviewed by the Attorney General's (AG) office and NCDOT technical disciplines. The DEIS is currently being reviewed by FHWA.
- The project team is revising the DEIS based on the AG's office and NCDOT comments.
- Coordination with the State Historic Preservation Office (SHPO) is ongoing regarding impacts to historic properties in the study area.


## Upcoming Activities

- The project team will revise the DEIS based on comments from FHWA once they are received.
- A newsletter will be sent this month to notify citizens of the remaining alternatives under study and the project schedule.
- Public hearing maps will be prepared for the Public Hearing, to be held after the DEIS is approved and distributed.


## Past Activities

- The project team coordinated with the SHPO on 10/30/18 regarding two new properties identified that are eligible for the National Register of Historic Places (NRHP). Coordination is ongoing regarding impacts to these properties.
- $\quad$ The Red-Cockaded Woodpecker Foraging Habitat Analysis was finalized on 9/26/18.
- The Crash Analysis Summary was finalized on 8/30/18.
- The revised project designs of the detailed study alternatives were finalized 6/15/18.
- The Traffic Capacity Analysis was finalized on 6/01/18.
- The NEPA/Section 404 Merger Team reached concurrence on $11 / 30 / 17$ to eliminate Alternatives C, F, P, G, J, and V Freeway. Alternatives B, Q, T, M Avoidance, N Avoidance, and V Widening will be carried forward for detailed study in the DEIS.
- The update to the Natural Resources Technical Report was finalized on 9/19/17.
- The Essential Fish Habitat Assessment was finalized on 9/01/17.
- The NEPA/Section 404 Merger Team reached Concurrence Point 2A - "Bridging Decisions and Alignment Review" on 5/30/17; final concurrence on Concurrence Point 2A was received on 8/17/17.
- The project team received final concurrence from the State Historic Preservation Office on 5/26/17 regarding Section106 effects on historic resources in the project study area.
- The project team presented the status of the project and preliminary alternative impact analysis results to the WMPO TAC on 3/29/17.
- The Archaeological Predictive Model Update was finalized on 2/13/17.
- The NEPA/Section 404 Merger Team reached Concurrence Point 1 - "Purpose and Need and Study Area Defined" on 12/12/13; the NEPA/Section 404 Merger Team reached Concurrence Point 2 - "Detailed Study Alternatives Carried Forward" on 2/10/14.
- Technical documents that have been finalized are available on the project website under "Project Documents."


## Contact Information

NCDOT - John Conforti, jgconforti@ncdot.gov, 919.707.6015; AECOM - Joanna Rocco, joanna.rocco@aecom.com, 919.239.7179; Website: https://www.ncdot.gov/projects/cape-fear-crossing; Email: capefear@ncdot.gov; Hotline: 1.800.233.6315

# Wilmington MPO <br> Transportation Planning <br> November 2018 

## 2045 Metropolitan Transportation Plan

Project Description/Scope: The Wilmington Urban Area Metropolitan Planning Organization is required by federal law to update the Metropolitan Transportation Plan every 5 years. The last plan was adopted by the MPO Board on November 18, 2015. The next update is required to be adopted by November 2020. This plan will guide the regional transportation priorities and actions, and be used for project selection in the State/Metropolitan Transportation Improvement Programs. The MPO Board appointed a Citizen Advisory Committee (CAC) to help guide the development of this plan. A four month public outreach period was held between April 3rd and July 31st. There were 2,287 transportation survey responses, 563 comments on the public input map tool, and 4,554 votes on map comments, totaling 7,404 responses collected. In July, the six modal subcommittees began meeting with the initial task of developing modal goals and objectives, which were completed in October 2018.

## Next Steps:

- The Modal Subcommittees are developing preliminary modal project lists from the initial project lists. The initial project lists were assembled of projects proposed by the public, the WMPO's member jurisdictions and planning partners, as well as projects included in the WMPO's other adopted plans. The Modal Subcommittees will be narrowing these lists down and refining project limits and scope. Preliminary project lists will be submitted to the CAC in December. Once approved by the Board, the lists will be submitted to WSP for planning level cost estimates.
- Modal Subcommittees will begin developing scoring criteria in November and December. The development of scoring criteria is anticipated to take a couple months for each of the Subcommittees. All criteria is scheduled to be presented to the CAC by March 2019.
- Adoption in November 2020


## LELAND STREET DESIGN STANDARDS MANUAL

Project Description/Scope: The Town of Leland is partnering with the Wilmington Urban Area MPO for the development of street design manual. These guidelines will guide new development towards the construction of streets that better align with the town's values in terms of connectivity, multi-modal activity, maintenance, design, and safety. The Leland Street Design Manual will includes conceptual tables/graphics which will more easily convey the impact of standards on the physical landscape to the public and elected officials. A public meeting was held on December 4th to review the draft materials. The document was revised and a follow-up meeting was held on February $20^{\text {th }}$. Staff from the Town continues to work on the development of these standards. MPO staff met with the Town on May $22^{\text {nd }}$. The Town provided the MPO with a list of questions, proposed changes and comments. The MPO responded and the Town continues to review the document.

## Next Steps:

- Continue to update the guidelines/manual per guidance from the Town of Leland


## NORTHEAST NEW HANOVER COUNTY FUTURE STREET PLAN

Project Description/Scope: New Hanover County and the Wilmington Urban Area MPO are partnering to develop a Future Street Plan for Northeastern New Hanover County. This plan will serve as a framework for a future street system in the study area by examining how well the existing
transportation system performs, developing multi-modal street design guidelines, and creating strategies for integrating land use and transportation development. The MPO and County have received a draft plan from the consultant. The County Planning staff are meeting with stakeholders. The plan is being revised by the County to meet our needs.

## Next Steps:

- Finalize Draft Plan in late fall
- Present information to New Hanover County Planning Board and Board of Commissioners


## SITE DEVELOPMENT REVIEW

Project Descriptions/Scope: The Wilmington Urban Area 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: 2 reviews
- New Hanover County Informal Plan Reviews: 0 reviews
- New Hanover Concept Reviews: 0 review
- Town of Leland Formal Reviews: 1 reviews
- Town of Leland Informal Reviews: 0 reviews
- Town of Navassa Formal Reviews: 0 reviews
- Town of Navassa Informal Reviews: 0 reviews
- Town of Navassa Concept Reviews: 0 reviews
- Town of Carolina Beach Formal Reviews: 0 reviews
- Town of Carolina Beach Informal Reviews: 0 reviews
- Brunswick County Formal Plan Reviews: 0 reviews
- Brunswick County Informal Plan Reviews: 0 reviews
- TIA Reviews: 16 total (New Hanover County 5, City of Wilmington 8, Carolina Beach 0, Leland 1, Navassa 0, and Pender County 1, Brunswick County 1) ; new 1 and ongoing 15
- Pender County Development Plan Reviews: 5 reviews
- Pender County Informal Plan Reviews: 0 reviews
- Pender County Concept Reviews: 0 reviews
- City of Wilmington Formal Reviews: 61 (6 new, 56 on-going)
- City of Wilmington Informal Reviews: 30 (5 new, 25 on-going)
- City of Wilmington Concept Reviews: 16 ( 13 new concept reviews- 3 on-going concept)
- COW Project Releases: 8 Full releases


## STBGP-DA/TASA-DA FY 2013 to Present

STBGP-DA

## U-5534B - CITY OF WILMINGTON- HEIDI TRASK DRAWBRIDGE (Under Construction)

Project Descriptions/Scope: 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.

## Project Status and Next Steps:

- Construction contract awarded to Intercoastal Marine, LLC
- Resumed construction based on plan revisions on May 2, 2018
- Work on the superstructure is near completion. Once retaining wall work begins grading can be tied in
- Anticipated completion date of January 1, 2019


## U-5534C - WRIGHTSVILLE AVENUE/GREENVILLE AVENUE TO HINTON AVENUE (Design)

Project Descriptions/Scope: 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.

## Project Status and Next Steps:

- $100 \%$ plan comments sent back to Engineer
- Specifications comments sent back to Engineer
- R/W acquisition completed Spring 2018
- The engineering firm is performing a QA/QC check on the plans to correct issues. Once revisions are received a new let date will be set


## U-5534D - TOWN OF LELAND - OLD FAYETTEVILLE ROAD MUP (Design)

Project Descriptions/Scope: 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.

## Project Status and Next Steps:

- 100\% Plan approval received
- ROW certification has been issued
- Construction funds have been requested for release
- Waiting Consult approval (PCE)
- Project Let winter of 2018


## U-5534E \& L - TOWN OF CAROLINA BEACH - ISLAND GREENWAY AND HARPER AVENUE BIKE LANES (Under Construction) <br> Project Descriptions/Scope: 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 Alabama 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

## Project Status and Next Steps:

- Construction is $90 \%$ complete with an anticipated completion date of early December

U-5534F - CITY OF WILMINGTON - PARK AVENUE MUP - PHASE II (Design)
Project Descriptions/Scope: This project is for the design and construction of an off-road multi-use path between Audubon Boulevard and Kerr Avenue. The right of Way certification was received November 2, 2016.

## Project Status and Next Steps:

- Plans and Technical specifications have been approved by NCDOT- NCDOT is waiting on final stamped plans
- Construction funds can be released once PCE consult is received
- Anticipated Let Date: To be determined once bid package approved


## U-5534G -HOOKER ROAD MULTI-USE PATH (Design)

Project Descriptions/Scope: 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

## Project Status and Next Steps:

- The City has provided the executed revised scope and amendment to McKim \& Creed
- McKim \& Creed has submitted revised plans for review by the City
- Anticipated Let Date of Winter 2018


## U-5534H - HINTON AVE MULTI-USE PATH (Design)

Project Descriptions/Scope: This project consists of the construction of a 10' wide multi-use path along Hinton Avenue from Park Avenue to Greenville Avenue.

## Project Status and Next Steps:

- The City has provided the executed revised scope and amendment to McKim \& Creed
- McKim \& Creed has submitted revised plans for review by the City
- Anticipated Let Date of Winter 2018


## U-5534I -VILLAGE ROAD MULTI-USE PATH EXTENSION

Project Descriptions/Scope: The construction of a 8 foot wide concrete path from the connection at the Brunswick Center at Leland across the front of the library property, down Village Road, ending on the western edge of the First Baptist Church property before the Sturgeon Creek Bridge.

## Project Status and Next Steps:

- $100 \%$ Plans approved by NCDOT
- Right of way acquisition underway
- Right of way Certification- TBD
- Encroachment agreement needed once right-of-way finalized
- Let date will be delayed to match up with "J" project


## U-5534J -OLD FAYETTEVILLE LOOP ROAD PEDESTRIAN LOOP

Project Descriptions/Scope: The construction of sidewalks in three locations: 1) The construction of an 8 foot concrete sidewalk along Village Road from Town hall Drive to the apartment complex and widening the existing 5 foot sidewalk in front of the apartment complex to 8 feet. 2) The construction of a 6 foot sidewalk along Town Hall Drive from Village Road NE to the sidewalk that exists by the new Town Hall. 3) The construction of a 5 foot sidewalk along Old Fayetteville Road from the existing sidewalk in front of the apartment complex to Village Road NE.

## Project Status and Next Steps:

- $100 \%$ Plans approved by NCDOT
- Right of way acquisition underway
- Right of way Certification- TBD
- Encroachment agreement needed once right-of-way finalized


## U-5534K -LELAND MIDDLE SCHOOL SIDEWALK

Project Descriptions/Scope: The construction of 5 foot wide concrete sidewalk adjacent to Old Fayetteville Road from Ricefield Branch Rd to the US Hwy 74/76 overpass after Glendale Drive with connections to Leland Middle School and the surrounding neighborhoods.
Project Status and Next Steps:

- $100 \%$ Plans approved by NCDOT
- Right of way acquisition underway
- Right of way Certification- TBD
- Encroachment agreement needed once right-of-way finalized
- Let date will be delayed to match up with "J" project


## U-5534N SHIPYARD BOULEVARD SIDEWALK

Project Description/Scope: 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.

## Project Status and Next Steps:

- $100 \%$ plans approved by NCDOT and the City is waiting on the final comments from NCDOT on the quantities
- Additional funds received
- Anticipated let date Winter 2018


## U-55340 Cape Fear Blvd Multi-Use Path

Project Description/Scope: The construction of approximately 3200 linear feet of 10 ' wide paved offroad Multi-use Path along the south side of Cape Fear Blvd. from 6th Street to Dow Road.

## Project Status and Next Steps:

- Construction is $85 \%$ complete with an anticipated completion date of December


## U-5534Q -S. College/Holly Tree Crosswalks

Project Description/Scope: The project will install sidewalk, ADA ramps, curb and gutter, markings and traffic signal revisions required to install actuated pedestrian crossings of S . College Road and crossings on Holly Tree Road.

## Project Status and Next Steps:

- The project has been put on hold until NCDOT's College Road resurfacing project occurs


## U-5534S (Formerly U-5534M)- Coral Drive Sidewalks

Project Descriptions/Scope: The construction of sidewalks along Coral Drive will install approximately 954 feet of 5 foot wide sidewalk on Coral Drive adjacent to Wrightsville Beach Elementary. The Town hired SEPI to complete the design.

## Project Status and Next Steps:

- 100\% plans (sealed) and specifications have been approved by NCDOT
- The Town is in the process of getting temporary construction easements and 1 permanent easement
- Construction funds can be released once PCE consult is received
- Anticipated Let Date: Winter 2018


## U-5534T - Traffic Signal Preemption

Project Description/Scope: This project will install traffic pre-emption equipment at 27 locations throughout the City of Wilmington and GPS devices on fire apparatus.

## Project Status and Next Steps:

- $90 \%$ design comments have been sent to the Engineer and are being addressed
- $100 \%$ plans will be submitted and incorporate $90 \%$ plan comments
- Anticipated bid date of Winter 2018


## U-5534U - Navassa Park Multi-Use Path

Project Description/Scope: This project will construct bike lanes on both sides of Brooklyn Street, a multi-use path connecting Brooklyn Street to the Navassa Park, and a multi-use path through the Navassa Park forming a loop within the park.

## Project Status and Next Steps:

- Scoping meeting held with NCDOT
- PE funds were released at the December 2017 Board of Transportation meeting
- Scope and fee with manday estimate is currently being revised per NCDOT comments. Awaiting final submittal from Right Angle Engineering


## TASA-DA

## U-5527B CITY OF WILMINGTON - 5th AVE INTERSECTION UPGRADES

Project Descriptions/Scope: 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.

## Project Status and Next Steps:

- Project will bid November 20, 2018 with the Gregory/Williston Safe Routes to School project


## U-5527C NEW HANOVER COUNTY - MIDDLE SOUND GREENWAY - EXTENSION TO MIDDLE SOUND VILLAGE

Project Descriptions/Scope: This project is for the construction of a multi-use path along Middle Sound Loop Road from Oyster Lane to the Middle Sound Village property line.

## Project Status and Next Steps:

- 70\% plans under review
- No right of way needed
- Anticipated construction bid May 2019

U-5527D HARPER AVE. MULTI-USE PATH
Project Descriptions/Scope: The construction of approximately 2104 linear feet of 10 ' wide paved multiuse path along Harper Ave. from Dow Road to 6th Street

## Project Status and Next Steps:

- NCDOT Agreement is in place
- PE funds authorized August 2, 2016
- This project is currently on hold while the Town continues discussions regarding the beautification project along Harper Avenue.


## 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, Emergency Guaranteed Ride Home, park and ride lots, etc. The MPO adopted "Work Cape Fear: Expanding Commuter Options in the Cape Fear Region" TDM Short Range Plan on January 28, 2015 and also authorized staff to apply for a TDM grant through NCDOT that if approved would fund a fulltime TDM Coordinator position. The Agreement with NCDOT for the full-time TDM Coordinator position was approved on November 4, 2015. The TDM Coordinator position has been filled with the new employee starting on May 14th. The TDM program will work to increase active transportation initiatives and increase community knowledge of commuter options. The MPO finalized the Strategic Marketing Plan for the Goa Coast program. In addition, the WMPO is working with the City of Wilmington to implement a bike share program.

## Next Steps:

- Increase social media presence for Go Coast program and initiatives
- Go Cost Commuter Challenge October 1-26 Results and Data compiling
- Meeting with website developers to develop a Go Coast website Gather model alternative work schedule policies from various regional employers to be highlighted in the statewide initiative to showcase model alternative work schedules
- Live application for Go Coast Commuter Friendly Employers
- Partner with UNCW, Cape Fear Community College, and New Hanover Regional Medical Center to explore carpool matching options and guaranteed ride home strategies
- Creating employer networks for carpool matching in STRNC
- Developing best method for emergency ride home payment/reimbursement
- Coordinate with employers to implement 2 additional vanpool programs and potential Park \& Ride lot locations
- Participate with the City of Wilmington committee for bike share implementation
- Currently negotiation on a contract with Zagster for a program in the City of Wilmington. Zagster is actively seeking "title sponsors"
- The City of Wilmington has formed committee to determine best process for controlling a scooter share if vendor came to Wilmington. Will wait for draft from NC Legislature to take new steps to manage electric scooters on city streets.
- Working with Carolina Beach to complete the Olli Challenge application to request pilot program for autonomous shuttles during summer months in 2019.


# wave Cape Fear Public Transportation Authority <br> Project Update <br> November 2018 

## REGIONAL AUTHORITY PROJECTS

1. Bus fleet replacement - (no change) FTA funding in the amount of $\$ 3.6 \mathrm{M}$ for nine replacement buses was awarded to the Authority from a nationwide discretionary grant in April 2018. Seven buses were ordered June 29, 2018. Delivery is scheduled to begin in June 2019. Additional funding for three to four buses will be requested from the VW mitigation settlement phase one following a call for projects by NC DAQ in the spring of 2019.
2. Short Range Transportation Plan - (no significant change) following adoption of Cape Fear Transportation 2040 by the Wilmington Metropolitan Planning Organization (WMPO), Wave Transit is completing its latest short range plan. The plan will set a course for public transportation initiatives, route structure, and revenue programming for the next five years. The plan will also include a financial element to ensure that transit programs are compliant with FTA rules and regulations.
Under the direction of the Authority's Operations and Planning Committee made up of funding partners, Board members, staff, WMPO board members, WMPO staff, passengers, interested citizens, and professional transit planning consultants, the plan is an important tool in identifying and quantifying the public transportation needs of the community. Marketing, public relations, and community support for financing transit in Southeastern North Carolina will also be a focus of the plan. A key component of the plan will be extensive surveying and data collection to assess the needs of current and prospective passengers. Nelson Nygaard is the principal consultant leading the project. Data collection has begun and is being analyzed. Over fifteen agencies are assisting Wave Transit as stakeholders in the planning effort. The stakeholder committee has been identified and held their multiple meeting. The project is expected to be completed in the spring of 2018.
The draft plan was presented to the Authority Board on March 22, 2018. Draft recommendations are available at the following
URL: https://www.wavetransit.com/short-range-transit-plan/. Changes to the Wave Transit routes based on recommendations from the consultant will be developed over the summer and fall with implementation in 2019 to coincide with the opening of the Wilmington Multimodal Transportation Center. A presentation of the study findings will be presented to the WMPO in early 2019.
3. Long Term Funding - (no change) currently, the Authority does not have a dedicated source of local funding. A consultant led study to evaluate the governing model and long term funding for transit in the region has been commissioned by the City of Wilmington and New Hanover County. TransPro Consulting has completed the study and has reported its findings and recommendations to the New Hanover County Board
of Commissioners. A presentation to the Wilmington City Council is scheduled for November 19, 2018.

## WMPO SPONSORED PROJECTS

## 1. Wilmington Multimodal Transportation Center

An Interlocal Agreement between Authority, City of Wilmington, WMPO, and NCDOT has been executed. Demolition of the U-Haul building is complete. Thanks to generous support from the WMPO, STP-DA funding in the amount of $\$ 2,400,000$ has been flexed by FHWA to FTA for the project and a formal grant with FTA has approved. On June 27, 2018 the WMPO awarded up to $\$ 1,700,000$ in additional STBGP-DA funding to complete the project. The flex process to convert the funds from FHWA to FTA was initiated on July 30, 2018.
Phase 1 consisting of hazardous materials abatement and demolition is complete.
Phase 2 consisting of building stabilization is complete.
Phase 3 consisting of renovation construction was let for bidding on February 14, 2018. The IFB for Phase 3 was released on June 03, 2018. Bids were opened on July 03, 2018. Monteith Construction of Wilmington was the lowest responsive bidder. A construction contract with Monteith Construction was awarded by the Authority on October 25, 2018. A groundbreaking ceremony is scheduled for Thursday, November 18, 2018 at $1: 30 \mathrm{pm}$. A tentative start date of December 03, 2018 is anticipated. Construction is estimated to take six to seven months.
2. Preventive Maintenance \& ADA - STBGP-DA funding in the amount of $\$ 500,000$ for preventive maintenance and ADA service throughout the region was approved by the WMPO on July 25,2018 . The process of flexing the funds from FHWA to FTA is currently in process. The funds will assist the Authority in maintaining its fleet of fixed route buses and FTA funded facilities to meet the FTA State of Good Repair Requirement. The preventive maintenance funding will ensure that Wave Transit vehicles are safe, reliable, and provide a positive and comfortable experience on Wave Transit routes throughout the region.
Americans with Disabilities Act (ADA) compliance utilized under the funding will be used to offset the cost of providing complementary ADA service for passengers unable to access Wave Transit fixed routes. Paratransit services provided under the WMPO authorized funding include specialized origin to destination van service. In September 2018 the Authority provided 876 ADA passenger trips. Ridership was significantly lower than normal due to Hurricane Florence. The period of performance for the project is 07/01/2018 through 06/30/2019.

# State of North Carolina <br> DEPARTMENT OF TRANSPORTATION 

Roy Cooper

James H. Trogdon, III
Governor
Secretary

November 5, 2018

# WMPO - Brunswick, New Hanover, Pender - Project Updates <br> Project Update List for Brunswick County <br> Projects Under Construction - Brunswick County 

ER-2971 - (Ocean Isle Beach Roundabout: DC00194)- Hwy 179 (Beach Drive) at Hwy 904
(Causeway Drive) SR 1184 (Ocean Isle Beach Road) in Ocean Isle
Contractor: Triangle Grading \& Paving Inc.
Estimated Completion Date: October 2018
Percent Complete: 99.82\%

R-2633 BA - (Wilmington Bypass: C203199) construct a 4-lane divided highway from US 74/76 (near Malmo) to SR 1430 (Cedar Hill Road).
Open to traffic on December 18, 2017.
Estimated Completion Date: December 2018 (inclusive of punch list and vegetation period)
Percent Complete: 90.29\%
R-5783A/B - (TAP ADA Curb Ramp: DC00187) Division Wide contract to add missing curb ramps and bring existing curb ramps to ADA compliance.
Estimated Completion Date: December 2018
Percent Complete: 52.23\%

R-2633D - (I-140 ITS: C204080) Intelligent Transportation System for I-140 (Wilmington Bypass) in Brunswick and New Hanover Counties - Communications Cable and Conduit Routing Estimated Completion Date: May 2019
Percent Complete: 17.10\%

## Project Development- Brunswick County

W-57031: Hickman Rd at Ash-Little Rd Install Flashers Construction By State Forces: January 2019 (delayed due to Hurricane)

R-5021: NC 211 from NC 87 to NC 906 (Midway Road) widen to a 4-lane divided facility. Let Date April 2019* May be delayed with hurricane

U-5914: NC 133 Widen and Modernize Intersection at US 17/US 74/US 76 to SR 1554 (Old River Road).
Let Date October 2019

U-5788: US 17 Business (Main Street) Realign intersection at Wall Street and Shallotte Avenue Let Date May 2020

W-5601GA: US 17 at Thomasboro Rd Convert Intersection to Superstreet Let Date February 2021

W-5703H: US 17 at Hickman Rd Convert Intersection to Superstreet
Let Date February 2021

U-5862: US 17 (Shallotte Bypass) at SR 1357 Smith Avenue Upgrade intersection to interchange
Let Date May 2021

R-5857: US 17 at US 17 Bus Convert Intersection to Superstreet Let Date June 2022

R-5851: US 17 at NC 904 Convert Intersection to Superstreet Let Date September 2022

U-5932: US 17 at NC 211 Convert Intersection to Interchange. Let Date June 2024

R-4462: US 74/76 at Maco Rd Convert Intersection to Interchange.
Let Date June 2027

## Carolina Bays Parkway Extension Updates

1. Effective August 2018, this project is being managed out of the Division Office in Castle Hayne, NC; CALYX will continue to work on the planning document.
2. Pursuing a Federal Planning Document to allow for more funding opportunities beyond STIP funds
3. Traffic forecast was approved in September 2018
4. Upcoming items: Website updates, Purpose and Need documents, Concurrence Point 1 (Purpose and Need) Meeting will likely be January 2019

## Resurfacing Projects - Brunswick County

2017 Brunswick County Resurfacing Contract (C203923) 1 Section of US 74/US 76, 2 Sections of NC 87, NC 179, NC 904/179, and 41 Sections of secondary roads.
Estimated Completion Date: July 2018.
Percent Complete: Complete

2018 Brunswick Resurfacing Contract: WBS (C204094, W-5203Y) US 76 E. \& W., US 421 N., NC 130, NC 179, NC 904.
Estimated Completion Date: March 2019.

## Percent Complete: 54.29\%

Map 1: NC 130 (Whiteville Rd) from US 17 Bus to SR 1335
Map 2: NC 179 (Old Georgetown Rd) from 179 Bus to NC 904
Map 3: NC 904 (Longwood Rd) from SR 1321 to SR 1304
Map 4: NC 179 Bus (Sunset Blvd) from traffic circle at Shoreline Dr to west of NC 904
Map 5: SR 1319 (Union School Rd) from SR 1316 to US 17
Map 6: SR 1504 (Clemmons Rd) from SR 1316 to US 17
Map 7: SR 1333 (Project Rd) from SR 1326 to end of Pavement
Map 8: SR 1327 (New Britton Loop Rd) from SR 1333 to SR 1326
Map 9: SR 1337 (Marlow Rd) from SR 1336 to SR 1333
Map 10: SR 1308 (Etheridge Rd) from SR 1300 to NC 904
Map 11: SR 1335 (Myrtlehead Rd) from SR 1333 to SR 1336
Map 12: SR 1356 (Marlowtown Rd) from 1302 to SR EOM
Map 13: SR 1301 (McLamb Rd) from SR 1300 to SC line
Map 14: SR 1316 (Old Shallotte Rd) from NC 904 to US 17
Map 15: SR 1155 (Goose Creek Rd) from NC 179 to SR 1143
Map 16: SR 1304 (Pea Landing Rd) from US 17 to NC 904
Map 17: SR 1305 (No. 5 School Rd) from SR 1300 to SR 1304
Map 18: SR 1165 (Thomasboro Rd) from US 17 to SR 1164
Map 19: SR 1720 (Washington Rd) from US 17 Bus. To EOM
Map 20: SR 1312 (Mt. Zion Church Rd) from NC 904 to EOM
Map 21: SR 1315 (Russtown Rd) from SR 1313 to NC 904
Map 22: SR 1115 (Stone Chimney Rd./Old Ferry Connection) from NC 211 to
intracoastal waterway

## High Impact / Low Cost - Brunswick County

1. NC 133 (flooding)Intersection of SR 1521 (Funston Road SE) and NC 133 in Brunswick County Approximately a mile in each direction of the intersection.
WBS 80084
Project let August 2019
Anticipated Completion April 2020
2. Installation of traffic signal at US 17 \& NC 87 (southern entrance) in Brunswick County WBS 47783; work began February 2018 Completion Date: February 2019
3. Installation of traffic signals at the intersection of US 17 and Ocean Isle Beach Road, and the NB to SB U-turn location approximately 875 feet northeast of the referenced intersection in Brunswick County.
WBS 47879; work began February 2018
Completion Date: February 2019
Located in GSATS Boundary.
4. Caswell Beach Rd Infiltration System in Oak Island WBS 47931; Town of Caswell Beach is working on the design Let \& Completion Date: February 2019

## High Value Bridge Program - Brunswick County

Old Oak Island Bridge (Brunswick 14: C204185) NC133 Country Club Drive; Girder Repair Estimated Completion Date: June 2019
Let May 2018
Holden Beach Bridge (Brunswick 71: C204200) NC130 Holden Beach Rd SW; Girder Repair Let October 2018

Odell Williamson Bridge (Brunswick 13) NC904 Causeway Dr; Epoxy Coat Beam Ends Let March 2019

## Project Update List for New Hanover County

## Projects Under Construction - NHC

R-2633 BA - (Wilmington Bypass: C203199) construct a 4-lane divided highway from US 74/76 (near Malmo) to SR 1430 (Cedar Hill Road).
Open to traffic on December 18, 2017.
Estimated Completion Date: December 2018 (inclusive of punch list and vegetation period)
Percent Complete: 90.29\%
R-5783A/B - (TAP ADA Curb Ramp: DCO0187) Division Wide contract to add missing curb ramps and bring existing curb ramps to ADA compliance.
Estimated Completion Date: December 2018
Percent Complete: 52.23\%
U-3338B - (Kerr Avenue Widening: C203772) Widening of Kerr Ave. from Randall Prkway to MLK, Jr. Prkwy.
Widening Market St and installing island on N. Kerr
Estimated Completion date: May 2019
Percent Complete: 79.38\%
R-2633D - (I-140 ITS: C204080) Intelligent Transportation System for I-140 (Wilmington Bypass) in Brunswick and New Hanover Counties - Communications Cable and Conduit Routing Estimated Completion Date: May 2019
Percent Complete: 17.10\%

U-4751 - (Military Cutoff Road Extension: C203980) extending Military Cutoff Road from Market Street to the Wilmington Bypass, with an interchange at the Bypass west of US 17 Business (Market Street) to US 17 Business (Market Street) SR 1403 (Middle Sound Loop Road). Realignment of Lendire Road completed by state forces before project started.
Clearing and working on ramp from Gordon Rd to Market St
Estimated Completion date: April 2022
Percent Complete: 15.15\%

## Bridges Under Construction - NHC

B-5236 - (New Hanover 29: C203957) New Hanover Replace Bridge \#19 over Lords Creek on SR-1100
June $4^{\text {th }}$ ICT1 complete and road opened
Currently undergoing vegetation establishment / settlement issues will need to be addressed
Anticipated Completion date: November 2018
Perent Complete: 83.96\%

## Project Development - NHC

U-4902D: US 17 Business (Market Street) construct a "superstreet" (median)
from SR 2734 (Marsh Oaks Drive) to Lendire Drive
Let Date December 2018 *Delayed due to hurricane from October

B-4590: replace bridge \#29 over Smith Creek on NC 133 (Old Castle Hayne Road) Let Date April 2019

U-3338C: SR 1175 (Kerr Avenue) at US 74 (MLK Jr Pkwy) Construct interchange Let Date December 2019 *May be delayed due to hurricane

U-4902C: US 17 Business (Market Street) construct a superstreet (median) from Station Road to US 74 (MLK Parkway/Eastwood Rd); construct a SPUI at US 74 (MLK Parkway/Eastwood Rd) and Market St; Project extended on Eastwood Rd from Racine to Cardinal
Let Date February 2020

U-5710A: US 74 (Eastwood Road) construct roadway on new location between US 17 (Military Cutoff Road) \& US 74 (Eastwood Road)
Let Date April 2020 *May be delayed due to hurricane

R-3300A: US 17 Hampstead Bypass: Construct a four lane divided roadway on new location from US 17 south of Hampstead to NC 210 Selected in P5.0 Regional - fully funded Let September 2020

U-4902B: US17 US 17 Business (Market Street) Median Project from CSX Railroad to Cinema Dr and from Jacksonville St to North of US 117/NC132 (College Rd)
Let Date December 2020

U-5729: US 421 (Carolina Beach Road) from Burnett Avenue to US 117 (Shipyard Blvd) upgrade the roadway.
Let Date July 2021

U-5710: US 74 (Eastwood Road) convert at-grade intersection to an interchange at US 17
(Military Cutoff Road).
Let Date September 2021

U-5731: US 74 (US 17/US 421 in Wilmington) Construct a Fly-Over and Free Flow Ramp at interchange.
Let Date May 2022

U-5926: 23 ${ }^{\text {rd }}$ St Extension: New route from N $23^{\text {rd }}$ St to $\mathrm{N} 26^{\text {th }}$ St
Let Date June 2022

U-5863: NC 133 (Castle Hayne Rd) Widen to mulit-lanes from I-140/US17 to SR 1310 (Division Dr)
Let Date October 2022

U-5734: US 421 (South Front Street) Widen to mulit-lanes from US17 Business/US 76/US 421 (Cape Fear Memorial Bridge) to US 421 (Burnett Blvd.) Let Date May 2023

U-5702A: NC 132 (College Rd) Access management and travel time improvements from SR 1272 (New Centre Drive) to US 117 (Shipyard Blvd)
Let Date June 2024

U-5704: NC 132 (College Rd) Intersection improvement at US 76 (Oleander Dr); Quadrant intersection Design along Parkway Dr Let Date June 2024

U-5790: US 421 (Carolina Beach Road) Widen US 421 (Carolina Beach Rd) from NC132 (South College Rd) to Sanders Rd in Wilmington and construct Continuous Flow Intersection at US 421 and NC 132
Let Date June 2024

U-5792: US 74 (MLK Jr Parkway) at NC 132 (College Rd) Convert at-grade intersection to Tight Urban Diamond Interchange
Let Date June 2024

U-5954: NC 133 (Castle Hayne Rd) at $\mathbf{2 3}^{\text {rd }}$ St Construct Roundabout
Let Date June 2024

U-5881: NC 132 (College Rd) Widen Roadway from SR 2048 (Gordon Rd) to SR 1272 (New Centre Dr) including interchanges at Kings Drive and Ringo St; project overlaps with U-5792 Let Date June 2024

U-4434: Independence Blvd Extension from Randall Parkway to MLK Jr Parkway
Let Date June 2025

U-6080: SR 1175 (Kerr Avenue) Widen from Patrick Avenue to SR 1411 (Wrightsville Avenue)
Let Date March 2027

U-6083: 23 ${ }^{\text {rd }}$ St Widen from US 74 (MLK JR PKWY) to NC 133 (Castle Hayne Rd)
Let Date March 2027

U-5702B: NC 132 (College Rd) Access management and travel time improvements from US 117 (Shipyard Blvd) to US 421 (Carolina Beach Rd) Let Date FY 2027 (Selected in Regional P5.0)

## Resurfacing Contracts - NHC

I-5760 (I-140: C203868) resurface from I-40 to US 421 \& reconstruction of bridge joints
Remaining work: Joints and pavement markers
Estimated Contract Completion Date: November 2018
Percent Complete: 88.3\%

US 117/NC 132 S College Rd (C203888: W-5203AA, W-5601BB) from US 17 Business (Market Street) to SR 2313 (Wilshire Blvd.)
Remaining work: Pavement markings and markers
Estimated Contract Completion Date: December 2018
Percent Complete: 87.19\%

2018 New Hanover County Resurfacing (C204135) US 17 Bus/US 76, US 421, NC 132, and various secondary roads
Estimated Contract Completion Date: April 2019
Percent Complete: 8.3\%

## High Value Bridge Program - NHC

Cape Fear Memorial Bridge (New Hanover 13: C204119) Structural Steel Repair, clean and grease ropes, lift span bearings
Estimated Completion Date: April 2019
Percent Complete: 28.56\%

US76/Banks Channel (New Hanover 21) Girder repair, clean and paint bearings, epoxy caps Let Date December 2018

Isabel Holmes Br (New Hanover 11) Girder repair, upgrade/paint structural steel, replace grid floor
Let Date February 2019

Cape Fear (I-140 E) (New Hanover 48) Shear Strengthen
Let Date July 2019

Cape Fear (I-140 W) (New Hanover 49) Shear Strengthen Let Date July 2019

# Project Update List for Pender County 

## Under Construction - Pender County

SR-5001CB - (Sloop Point Multi Use Path: DC00151) from US 17 to SR 1694 (Masters Ln) Estimated Completion Date: December 2018
Percent Complete: 34.77\%

R-5783A/B - (TAP ADA Curb Ramp: DC00187) Division Wide contract to add missing curb ramps and bring existing curb ramps to ADA compliance.
Estimated Completion Date: December 2018
Percent Complete: 52.23\%

B-5304 - (Pender 203: C203983) Replace bridge 203 on SR 1324 (Crooked Run Rd)
Estimated Completion Date: March 2019
Percent Complete: 97.79\% (Awaiting 80\% Vegetation Period)

B-4929 (Surf City Bridge on NC 50/210: C203789) Replace bridge \#16 over the inter-coastal waterway with a fixed span high rise structure.
Estimated Contract Completion Date November 2020
Percent Complete: 92.3\%

## Project Development - Pender County

R-3300B: US 17 Hampstead Bypass: Construct a four-lane divided roadway on mostly new location from NC 210 to Sloop Point Loop Road. Fully funded Let September 2020

R-3300A: US 17 Hampstead Bypass: Construct a four lane divided roadway on new location from US 17 south of Hampstead to NC 210 Selected in P5.0 Regional - fully funded Let September 2020

U-5732: US 17 (Ocean Highway in Hampstead)
Convert to superstreet from SR 1582 (Washington Acres Road) to just south of US 17 and future Hampstead Bypass Limits. Fully funded and will be built in conjunction with Hampstead Bypass projects.
Let September 2020
R-5701: NC 53/US117 Bus. Intersection Upgrade
Let June 2020

R-5850: NC 53 from US 117 Bypass to Stag Park Rd widen to 3 lanes Let May 2025

## Resurfacing Projects - Pender County

2017 Pender County Resurfacing Contract (C203952). 1-section of US-117 and 10 sections of various $S R$ roads.
Estimated Completion Date: November 2018
Percent Complete: 87.82\%

2018 Pender County Resurfacing Contract (C204090). 1-section of US-17, 1-section of NC-50, 1section of NC-210, and 36 other various SR roads.
Estimated Completion Date: January 2019
Percent Complete: 84.59\%

## High Impact / Low Cost funded projects

New project funding source - Pender County

1. Hoover Road widening from proposed interchange to US 17 with 2' paved shoulders; currently under design
WBS 47785
Project let December 2018
Anticipated Completion December 2019

This project list was updated on November 5, 2018.

If you have any questions, please contact Caitlin Marks at the Division 3 Office:
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# State of North Carolina <br> DEPARTMENT OF TRANSPORTATION 

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November 2018
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## NOVEMBER TPD UPDATES WILMINGTON MPO

November 2018

## New Business:

Wilmington Model Update - Future Year Model will be completed end of November and documentation by end of December.

Wilmington CTP - With the model update, WMPO has also asked TPD to start on the Wilmington CTP update. We have yet to develop a schedule for this CTP and start - but once the Wilmington Model is near completion we will develop a schedule.

Brunswick County Model - Future year and closeout is near completion. Brunswick County CTP study starting up once the model is complete, and CTP 2.0 rolls out.

Pender County CTP - Anticipated to start in winter of this year, currently TPD is working out the new schedule to align with CTP 2.0.

Performance Measures - PM2 and PM3 targets (pavement, bridge, and system performance) transmitted targets to FHWA on May 18, 2018. MPO's have 180 days to support NCDOT's targets or establish their own (Nov. 14, 2018).

Statewide Plan: The N.C. Department of Transportation is conducting an update to its long-range transportation plan to guide North Carolina’s future transportation policies and investments. NC Moves 2050 is a plan that will provide a 30-year transportation vision and
implementation plan for the state. Changing demographic and economic trends across urban and rural regions of the state, along with anticipated changes in technology, weather, tourism, and funding sources make now an opportune time to produce a bold, forward looking transportation plan to guide investment policy and system performance that will be more reactive to the dynamic change on the horizon.

The engagement of the stakeholders and public is critical during this initial stage of the planning process. To capture thoughts and ideas about the state's biggest challenges for the future, North Carolina residents are encouraged to provide input through our survey through November $30^{\text {th }}$. The survey can be found at https://publicinput.com/ncmoves. This survey focuses capturing public input about the challenges for our state and the future of our transportation system. Responses will help to inform the vision and goals for NC's transportation plan. We will also have our kickoff stakeholder meetings in Kinston on $10 / 24 / 18$, Raleigh on $10 / 29 / 18$, and Charlotte on $10 / 30 / 18$. We have invited a representative from each MPO, RPO, State Agencies, and State Advocacy Groups across North Carolina.

Training: A recording of the 2017 MPO/RPO Ethics training webinar can be viewed at the following location: https://livestream.com/NC-DOT/events/7161243

## Old Business:

Corridor Studies: After establishing the Strategic Transportation Corridor (STC) network in 2015, the next step in implementation is the development of STC master plans, which are intended to establish a vision for each of the end-to-end corridors. Work began in early 2018 on the first two STC master plans, as follows:

- Bundle \#1 has been assigned to Kimley-Horn and includes Corridor P (Future I42/US 70E/ NCRR from I-440 in Wake County to Port at Morehead City), Corridor S (I795/US 117 from I-95 in Wilson County to I-40 in Sampson County), and Corridor X (US 258/NC 11/US 13 from US 17 in Onslow County to US 64E in Edgecombe County) - Bundle \#2 has been assigned to Atkins, and includes Corridor U (US 74W/US 74E/I 74 from I-26 in Polk County to US 117 in Wilmington) and Corridor D (US 321/CSX from South Carolina state line to Tennessee state line).

TPD has recently made the decision to temporarily pause the development of the STC Master Plans in order to reevaluate the scope and deliverables to make it a more useful and effective end product. A work group of internal and external partners to help reexamine this effort has met once in August and will meet again in September.

CTP 2.0: TPD leadership is reviewing elements for CTP 2.0 and coordinating with the CTP 2.0 steering committee as we prepare for implementation of improved maps, classifications, analysis, plan documentation, and changes to the process for developing CTPs in NC. (A CTP Steering Committee meeting was held June 18, 2018.) Improving the CTPs for NCDOT and local partners has proven to be a complex process with many benefits and "ripple effects" as we move future proposals into project implementation.

CTP Status Update: Refer to study site and project engineers for updates.
CTP Study Requests: CTP Study Requests were accepted in Spring of 2018. Studies have been prioritized and assigned based on available resources, mainly as new work plans began in June 2018. Other assignments may occur later as additional resources become available.


[^0]:    David Piepmeyer, Chair

[^1]:    David Piepmeyer, Chair

