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
Board
Meeting Agenda

TO: Wilmington Urban Area MPO Board Members
FROM: Mike Kozlosky, Executive Director
DATE: August 25, 2022
SUBJECT: August 31st meeting

A meeting of the Wilmington Urban Area MPO’s Board will be held on Wednesday, August 31, 2022, at 3 pm. The meeting will be held in the 6th Floor Conference Room at 320 Chestnut Street downtown Wilmington. Members of the public, MPO Board Members and MPO Staff can attend the meeting in person and virtually through the Zoom platform. MPO Board member attendance will be subject to the adopted Remote Participation Policy. The meeting will be streamed live online so that simultaneous live audio, and video, if any, of the meeting is available at the following URL: https://us06web.zoom.us/j/86755841388?pwd=L3ZiWE5vTkxmR2EzTkIIFQktVQJ9yQT09

Simultaneous live audio of the meeting is also available via audio conference at the following dial in numbers: 301 715 8592 or 646 558 8656 and entering the following credentials:
Meeting ID: 867 5584 1388
Passcode: 158784
Please join the meeting from your computer, tablet, or smartphone.

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
   Persons wishing to submit a public comment to be shared during the MPO Board meeting may do so by 5 pm on August 30, 2022, by calling (910) 341-3258 to leave a message or by e-mailing comments to wmpo@wilmingtonnc.gov. The public voicemails will be played aloud and the public comment e-mails will be read aloud by a staff member during the meeting. Per the adopted Public Participation Plan, public comments shall be limited to 3 minutes.
6) Presentations
   a. New Hanover County Proposed ¼ cent Sales Tax- Lisa Wurtzbacher, NHC
   b. NCDOT Project Update- Anthony Law, NCDOT
   c. Navassa Collector Street Plan- Susan Westberry, AECOM
d. Wilmington Urban Area MPO’s Direct Attributable Funding Call for Projects - Scott A. James, WMPO

7) Consent Agenda
   a. Approval of Board Meeting Minutes from July 27, 2022 (p. 3-12)
   b. Resolution approving 2020-2029 STIP/MPO Amendment #22-5 (p. 13-15)
   c. Opening of the 30-day public comment period for 2020-2029 STIP/MPO Amendment #22-6 (p. 16)
   d. Resolution approving 2020-2029 STIP/MPO Administrative Modification #22-7 (p. 17-19)
   e. Resolution authorizing the Chairman to enter into an agreement with the City of Wilmington and Cape Fear Public Transportation Authority for the FY 23 and FY 24 Section 5303 Funding (p. 20-27)
   f. Resolution adopting the 2022 Navassa Collector Street Plan (p. 28-120)

8) Discussion
   a. 2020-2029 STIP/MPO Transportation Improvement Program Administrative Modifications #22-8 (p. 121-122)
   b. Revised Draft 2024-2033 State Transportation Improvement Program (p. 123-133)

9) Updates
   a. Wilmington Urban Area MPO (p. 134-142)
   b. Cape Fear Public Transportation Authority (p. 143-144)
   c. NCDOT Division (p. 145-147)
   d. NCDOT Transportation Planning Division (p. 148-149)

10) Announcements
    a. Direct Attributable Project Submittals Due- September 15th
    b. Brunswick Heritage Riverside Ride- September 24th
    c. Wilmington MPO Bike/Pedestrian Committee- October 11th

11) Next meeting – September 28, 2022

Attachments
   • MPO Board Meeting Minutes- July 27, 2022
   • Proposed 2020-2029 STIP/MPO Amendment #22-5
   • Resolution approving 2020-2029 STIP/MPO Amendment #22-5
   • Proposed 2020-2029 STIP/MPO Amendment #22-6
   • Proposed 2020-2029 STIP/MPO Administrative Modification #22-7
   • Resolution approving 2020-2029 STIP/MPO Administrative Modification #22-7
   • Draft Agreement between the Wilmington Urban Area MPO, City of Wilmington, and Cape Fear Public Transportation Authority for FY 23 and FY 24 Section 5303 Funding
   • Resolution authorizing the Chairman to enter into an agreement with the City of Wilmington and Cape Fear Public Transportation Authority for the FY 23 and FY 24 Section 5303 Funding
   • 2022 Navassa Collector Street Plan
   • Resolution adopting the 2022 Navassa Collector Street Plan
   • Proposed 2020-2029 STIP/MPO Transportation Improvement Program Administrative Modifications #22-8
   • Revised Draft 2024-2033 State Transportation Improvement Program (Wilmington MPO and Statewide)
   • Revised Draft 2024-2033 State Transportation Improvement Program- Projects Eligible for Swaps
   • Wilmington Urban Area MPO Update (August)
   • Cape Fear Public Transportation Authority Update (August)
   • NCDOT Division Project Update (August)
   • NCDOT Transportation Planning Division Project Update (August)
MPO Board Meeting Minutes
6th Floor Training Conference Room, 320 Chestnut Street, Wilmington, N.C.
Wednesday, July 27, 2022

Members Present (in-person)
Lynn Barbee, Town of Carolina Beach
Brenda Bozeman, Town of Leland
John Ellen, Town of Kure Beach
Deb Hays, Cape Fear Public Transportation Authority
David Piepmeyer, Chair, Pender County
Luke Waddell, City of Wilmington
Eulis Willis, Town of Navassa

Members Present (remotely)
Jonathan Barfield, Jr., New Hanover County
Mike Forte, Brunswick County
Hank Miller, Vice Chair, Town of Wrightsville Beach
Landon Zimmer, NC Board of Transportation

Others Present (in-person)
Pat Batleman
Zach Bugg, Kittelson & Associates
Gene Conti, Jr.
Adrienne Cox, NCDOT
Scott A. James, WMPO
Chad Kimes, NCDOT
Andy Koeppel
Mike Kozlosky, WMPO
Abby Lorenzo, WMPO
Caitlin Marks, NCDOT
Tyler Newman, BASE
Rebekah Roth, New Hanover County
David Roy, NC Turnpike Authority
Greer Shivers, WMPO
Emma Stogner, WMPO

Others Present (remotely)
Bob Bates
Blake
T Canales
Veronica Carter, Town of Leland
Garrett Cox
Nick Craig

J Dayton
P Drye
Patrick Flanagan, Cape Fear RPO
Liam Ford
Travis Gilbert
R Greene, Jr.
Kayla Grubb, Volkert
Regina Hopkins, WMPO
Katie Hite, NCDOT
Tracy Hamm
Cheryl Hannah, HDR
Deb
Kim
Jamar Johnson, WMPO
J Rouse
Amy Kimes, Surf City
Bill Kincannon, HDR
D Kolosky
Rachel LaCoe, New Hanover County
Deb LeCompte, Town of Carolina Beach
K Lorbacher
Rachel McIntyre, WMPO
J Orona
Laura Padgett
Marie Parker, Wave Transit
Amy Passaretti, Port City Daily
Seth Poole
Ea Ruth, 2022 President of Cape Fear REALTORS®
Theresa
Nazia Sarder, NCDOT
Johanna Still
Tony Sumter, NCDOT IMD
Radha Krishna Swayampakala
Jen Thompson
Jacob Vlanich
Warren Walker
Nate Wiggins
Brayton Willis
1. **Call to Order**
Chairman Piepmeyer called the meeting to order at 3:00 p.m. He asked if this would be the last remote meeting. MPO Executive Director Mike Kozlosky responded that if the Governor lifts his order, the next meeting will follow the MPO’s Remote Participation Policy.

Chairman Piepmeyer pointed out that WMPO was one of the first MPOs to implement and use remote attendance for meetings, which has caught on and been applied throughout the state. He said that it would continue to be a convenient option, although the policy limits it to exceptions.

Mr. Kozlosky called the roll, and a quorum was found to be present as follows:

**Present:** Lynn Barbee, Jonathan Barfield, Brenda Bozeman, John Ellen, Mike Forte, Hank Miller, David Piepmeyer, Luke Waddell, Eulis Willis and Landon Zimmer. **Absent:** Mike Allen, Neil Anderson and Deb Hays.

2. **Conflict of Interest Statement**
Chairman Piepmeyer read the conflict-of-interest statement. He asked if any member had a conflict of interest with any of the items on the meeting agenda. No members reported having a conflict.

3. **Approval of Board Members’ Excused Absences**
Mr. Kozlosky said that Mike Allen has requested to be excused.

Mr. Miller made a motion to excuse Mr. Allen. Mr. Barbee seconded the motion and it carried unanimously by roll call as follows:

**Ayes:** Lynn Barbee, Jonathan Barfield, Brenda Bozeman, John Ellen, Mike Forte, Hank Miller, David Piepmeyer, Luke Waddell, Eulis Willis and Landon Zimmer. **Nays:** None. **Absent:** Neil Anderson and Deb Hays. **Excused:** Mike Allen.

4. **Approval of the Agenda**
Mr. Ellen made a motion to approve the agenda as presented. Ms. Bozeman seconded the motion, and it carried unanimously by roll call as follows:

**Ayes:** Lynn Barbee, Jonathan Barfield, Brenda Bozeman, John Ellen, Mike Forte, Hank Miller, David Piepmeyer, Luke Waddell, Eulis Willis and Landon Zimmer. **Nays:** None. **Absent:** Neil Anderson and Deb Hays. **Excused:** Mike Allen.

5. **Public Comment Period**
Mr. Andy Koeppel spoke to the MPO Board about “Bridges” and expressed appreciation to Mr. Kimes for the three-pronged approach. He expressed concerns that the prioritization process alone would probably not be able to provide the necessary funding, that any toll proposal for a bridge to downtown would be “dead on arrival,” and that adding a southern bridge to the conversation is unpopular. He commented that the bridge being described as end of life is a false narrative. He noted that there are 70 or more vertical lift bridges around the country that are far older than the Cape Fear Memorial Bridge with no thought to dismantling them. Regarding the hesitancy to approach the General Assembly, the Ravenel Bridge in Charleston was built with contributions from every county in the state through its legislature as a source of funding.

Mr. Gene Conti, Jr., Raleigh, former Secretary of North Carolina DOT, spoke to the MPO Board about the “Bridge Proposal” on behalf of United Bridge Partners (UBP), which submitted an unsolicited proposal to NCDOT about 18 months ago. He pointed out that although tolls are unpopular, they are a solution where other funding can’t be found. He noted for example, the Triangle Expressway in Raleigh, in which CAMPO
considered a road without tolls would be delivered in 25 years or with tolls in three (3) years. He added that the toll option was chosen and helping with traffic in the Triangle Area, and its extension will help with traffic from Greensboro and the northwest of the state to the beach, avoiding Research Triangle Park (RTP).

Mr. Conti said that no one wanted the Monroe Expressway as a toll road either, but it was needed as an option to get off US 74 in Charlotte. He pointed out that UBP is in a unique position because it has cash in hand in the form of a capital fund meaning it can start work as soon as authorized and finish the work promptly. He added that the bridge in Portsmouth, Va., is a successful electronic toll project that was built by UBP and offered to take a delegation there to see it. He requested that the Board consider the proposal seriously. He commented that it would be important to do something soon because the bridge is old and needs to be replaced.

Chairman Piepmeyer expressed appreciation to Mr. Conti, who traveled far to speak today.

6. Presentation

   Associate Engineer Zachary Bugg, Kittelson and Associates, gave a presentation on the Congestion Management Process (CMP). He said that the study focused on 30 critical study corridors within the MPO area for which an interactive dashboard has been developed. He noted that previous studies relied on manual labor to collect travel time data, and this study relies on Probe Data, the National Performance Management Research Data set, which the Federal Highway Administration encourages Transportation Management Area’s such as the MPO to use.

   Mr. Bugg displayed the travel time data for Market Street as an example. He explained the formula for corridor delay [(actual travel time – free flow travel time)/corridor length]. He noted that for the MPO area, greater than two minutes per mile (College Road), and greater than 1.5 minutes per mile (Market Street, College Road and Gordon Road) are the worst delays.

   Mr. Bugg gave an overview of Level of Travel Time Reliability (LOTTR), which is a ration of 80% travel time divided by mean travel time (50%). He said that a ratio greater than 1.3 is considered unreliable based on every metropolitan area in the U.S. although, MPOs can set individual goals. He reported that none of the WMPO study corridors had reliability ratios greater than 1.3 and several had ratios greater than 1.2, as follows:

   **AM Peak**
   - Gordon Road
   - US 17 (Porters Neck)
   - US 17/76/Memorial Bridge
   - Front Street

   **PM Peak**
   - College Road
   - Gordon Road
   - Market Street (east of College Road)
   - Oleannder Drive
   - Front Street

   Mr. Bugg gave an overview of year-over-year trends, 2019 versus 2021. He said that several corridors had a travel time that decreased by more than 10% and a few had travel times that increased such as US Highway 17 near Hampstead. Generally, travel time has stayed the same since 2019 or improved. He attributed the differences to more people working from home and flexing commute patterns. He displayed the dashboard and gave a demonstration of sorting and comparing the data.

7. Consent Agenda
a. Approval of Board Meeting Minutes from June 29, 2022
b. Opening of the 30-day public comment period for 2020-2029 STIP/MPO Amendment #22-5
c. Resolution approving 2020-2029 STIP/MPO Administrative Modification #22-6

Ms. Bozeman made a motion to approve the Consent Agenda, Items 7a through 7c. Ms. Hays seconded the motion, and it carried unanimously by roll call as follows:

**Ayes:** Lynn Barbee, Jonathan Barfield, Brenda Bozeman, John Ellen, Mike Forte, Deb Hays, Hank Miller, David Piepmeyer, Luke Waddell, Eulis Willis and Landon Zimmer. **Nays:** None. **Absent:** Neil Anderson. **Excused:** Mike Allen.

8. **Discussion**
   a. 2020-2029 STIP/MPO Transportation Improvement Program Administrative Modifications #22-7
      Mr. Kozlosky stated that this item is for informational purposes only and will be brought back at the Board’s next meeting for consideration.
   
   b. Cape Fear Memorial Bridge Replacement- Project Delivery Options
      Mr. Kozlosky said that at the Board’s February meeting, the Board adopted a resolution requesting NCDOT to explore all options for the replacement the Cape Fear Memorial Bridge including tolls and previous proposals.

      NCDOT Division 3 Engineer Chad Kimes gave an update on the Cape Fear Memorial Bridge Replacement. He said that after the resolution was adopted, NCDOT formed a committee consisting of those from the Division, NC Turnpike Authority, the Chief’s office, and MPO (Mike Kozlosky). He noted that the three-pronged approach for delivery options consists of traditional, conventional toll, and alternative. Since the bridge replacement feasibility study was conducted several years ago, the first step was to obtain updated costs, consistent with NCDOT’s current practice of updating costs for STIP projects every two years. Updated replacement costs are as follows:

<table>
<thead>
<tr>
<th>Options</th>
<th>Construction costs</th>
<th>Utility relocation costs</th>
<th>Right-of-way costs</th>
<th>Total Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed span 65’ vertical clearance</td>
<td>$227.4 M</td>
<td>$2.2 M</td>
<td>$11.6 M</td>
<td>$241.2 M</td>
</tr>
<tr>
<td>Fixed span 135’ vertical clearance</td>
<td>$346.0 M</td>
<td>$3.7 M</td>
<td>$41.8 M</td>
<td>$391.5 M</td>
</tr>
<tr>
<td>Moveable span 65’ vertical clearance</td>
<td>$687.8 M</td>
<td>$2.2 M</td>
<td>$11.6 M</td>
<td>$701.6 M</td>
</tr>
<tr>
<td>Moveable span 65’ vertical clearance with railroad track component</td>
<td>$885.8 M</td>
<td>$2.2 M</td>
<td>$11.6 M</td>
<td>$899.6 M</td>
</tr>
</tbody>
</table>

Mr. Kimes pointed out that the cost increases for the options are $50 million, $145 million, $200 million, and $300 million, respectively. As for Traditional Delivery, he noted that the Cape Fear Memorial Bridge replacement is unfunded in the current STIP. In spring of 2023, new projects will be submitted for Prioritization 7.0 (P7.0). Even though Prioritization 6.0 was suspended, some important steps were taken such as ranking projects. The Cape Fear Memorial Bridge was submitted and scored around the 40th percentile. He reminded the Board that traditionally, only projects in the 20th percentile achieve funding in the Statewide category.

He said that for the Regional tier, funds totaling roughly $900 million are shared with another Division. He pointed out that funding the Cape Fear Memorial Bridge would take an entire 10-year program, and nothing else can be built. He added that the same is true for the Division level of
funding. However, going into Prioritization 7.0, funding for the bridge replacement will be sought, perhaps in conjunction with other options.

Regarding Conventional Toll Delivery, David Roy, Chief Financial Officer, North Carolina Turnpike Authority, said that the Turnpike Authority’s role in this process was to consider replacement of the Cape Fear Memorial Bridge as conventional toll project delivered through the Authority similar to the Triangle Expressway. He pointed out that no toll project in the State of North Carolina can move forward without the express consent and approval of a MPO or RPO. Additionally, in 2019, the NCDOT Board of Transportation adopted a toll project delivery policy for evaluating future toll projects. He added that there are four main inputs for a toll project: Traffic and Revenue Forecast, Capital Cost Estimate, Operations and Maintenance (O&M) Estimate, and Renewal and Replacement (R&R) Estimate.

Regarding Alternative Delivery, Mr. Roy said that in April, the Department issued a Request for Information (RFI) soliciting ideas from the industry for alternative delivery or funding options. He noted that the responses were due in May and that nine were received regarding buildability, alternative financing, operations and maintenance models, and project viability. He said that all but one included public-private partnerships (PPP). The outlier expressed interest in traditional design-build, design-bid-build delivery.

Mr. Kozlosky said that he sent out a summary of those responses yesterday, which have also been distributed to Board members at the table.

Mr. Roy said that the Department developed a summary of the responses and asked about the FHWA debrief primer. Mr. Kozlosky responded that he shared that with the Board last week. Mr. Roy said the primer was developed by USDOT several years ago and commented that it provides good information about the various alternatives that were discussed including Design-Build-Finance-Operate, Maintain (DBFOM) with or without a Pre-Development Agreement (PDA).

Mr. Roy said that from a funding perspective, there were two camps: toll revenue supported versus STI funds mostly in the form of availability payments or payments the Department would make over the life of the project to the developer or concessionaire. He noted that one or two of the responses included value capture mechanisms as a concept for funding the bridge, which is some form of tax increment financing, impact fees, development fees, etc., which are outside the Department’s statutory authority.

Mr. Kimes said that regarding free highways, that no segment may be converted to a toll route without first being approved by the MPO Board. Regarding Bonus Allocation, Mr. Kimes noted that implementing a toll for the Cape Fear Memorial Bridge would allocate to the MPO an amount up to $100 million in funding for projects within New Hanover and Brunswick counties.

Mr. Kimes said that grant opportunities exist that would impact benefit over cost to help a project score better or improve the cost of tolling. He noted that all grant opportunities would be pursued. However, he cautioned that there are no guarantees of an award, and the amount is not 100% (there always a non-federal match required of 20% to 50%). Also, there is no preliminary design or environmental document (NEPA), the project in not in the State Transportation Improvement Program (STIP), and no funds have been identified for a required match.
Chairman Piepmeyer asked about preliminary design. Mr. Kimes responded that for the $400 million option, preliminary design might roughly cost $10% or $40 million. He noted that it may be possible to consider funding a portion of the project in P 7.0 or through bridge funding.

Mr. Kimes said that potential grants identified are as follows:

<table>
<thead>
<tr>
<th>Bridge Investment Program</th>
<th>$50 million minimum</th>
<th>50% local match</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multimodal Project Discretionary Grants (MEGA and INFRA)</td>
<td>$100-$500 million</td>
<td>20%-40% local match</td>
</tr>
<tr>
<td>RAISE Grants</td>
<td>$25 million maximum</td>
<td>20% local match</td>
</tr>
</tbody>
</table>

Chairman Piepmeyer inquired about the cost to administer the grant. Mr. Kimes responded that if NCDOT applies for the grant, it would cover the administration cost.

Mr. Kimes said that the unsolicited proposal that was presented is still viable. He noted that it still would need to go through the competitive bid process. However, the first step is MPO approval. He noted that during the steps of the NEPA document and preliminary design, grant funding can be sought. He added that the process can be stopped at any time prior to award during the 2.5- to three (3)-year window.

In summary, Mr. Kimes said that NCDOT will continue to submit for grants to offset the cost and will continue with Prioritization 7.0. He commented that conventional tolling may bring a significant portion, but not likely all the funds, and could be combined with traditional funding to reduce the cost of tolling. He pointed out that alternative delivery allows the delivery of the project much faster than a traditional project – and more than likely it would be a toll. Lastly, the unsolicited proposal is still on the table. He noted that NCDOT will continue to go through the steps for traditional funding. He reiterated that the unsolicited proposal, alternative delivery, and traditional tolling cannot move forward without the MPO Board’s approval.

Regarding public acceptance of tolling, Mr. Waddell asked about studies of the potential ramifications of changing commuter behaviors related to a toll bridge. Mr. Kimes responded that it would be necessary for the project to be in the programming phase for a more thorough traffic and revenue study with public hearings to collect public feedback.

Mr. Waddell pointed out that this information is critical part of the decision, which will have a tremendous impact on City of Wilmington infrastructure. Based on 2019 commuting data from the Census, Brunswick County had about 45,000 employed individuals, 26,500 of whom commute outside Brunswick County, and 50% of that number commute to New Hanover County. He commented that with inflation and the cost of fuel, 40% cannot afford tolls and might take an alternate route adding 5,000 trips a weekday or 1,005,000 trips a year that would impact City roads. He commented that he is a proponent of exploring all viable options and take pragmatic solutions to difficult solutions.

Mr. Waddell expressed concerns that the Cape Fear region has been designated as a beta test for tolling existing roadway projects. He pointed out that the citizens of Wilmington will have a difficult time understanding why they must foot the bill for aging infrastructure and the huge shift in commuter behavior that will likely be a result of a toll bridge. He speculated that majority of constituents might take the position that the Department should re-evaluate its scoring criteria to be more objective. He added that replacing an aging bridge with a multi-modal facility that will connect multiple towns and counties and supports a growing port should take a high priority with
the state over an additional interstate that would make it quicker for folks in Raleigh and Charlotte to get to the beach. Folks in the southeastern North Carolina as just as much North Carolinians as those in Raleigh and Charlotte and expect representation.

Mr. Roy agreed that some divergence can be expected with a toll. He pointed out that the sketch-level, six-week, $25,000 traffic and revenue analysis does not get into that level of detail. A more detailed investment grade traffic and revenue analysis is a nine (9)- to 12-month process.

Mr. Barfield commented that the toll charge for his recent trip to Charlotte and back was $8 and expressed concerns regarding the average citizen being able to afford such an expense daily. He commented that it would be great to have a pedestrian facility like South Carolina’s. However, South Carolina funds projects at a local level, so cities and towns can enact taxes or fees for road projects in a specific area. He pointed out that North Carolina is one of seven states where DOT does the roads. He expressed concerns regarding the difficulty of getting projects funded here, for a bridge that is the main artery in and out of an urban and economic development center in eastern North Carolina, while projects in smaller towns throughout the state are happening. He expressed an interest in finding clout in Raleigh to influence projects in the region. He commented that he remains very much opposed to a toll project here.

Mr. Zimmer commented that the amount of clout does not matter, because this is a STIP issue, which is objective, and a science. Unfortunately, the science shows that the area cannot sustain the funding, and outside funding needs to be sought.

Ms. Bozeman concurred with Mr. Waddell and Mr. Barfield. She expressed concerns with the way that this was done. She commented that the way that this was brought forth was underhanded, and the lack of transparency gives members a bad name. She questioned why grants have not been sought yet. She suggested that if this bridge is tolled, that the ones to the beaches need to be tolled as well, and even the Hampstead Bypass should be tolled.

Mr. Ellen expressed concerns that the Board voted not to support a toll asked how long it lasts be before voting again. Mr. Kozlosky responded that Mr. Ellen was absent at the February meeting when the Board voted for NCDOT to explore all possible options for the replacement of the Cape Fear Memorial Bridge. He added that the language in the resolution was explicit to include tolls as an option as well as the previous proposal.

In response to an inquiry by Vice-Chairman Miller, Mr. Kozlosky said that the vote was nine (9) to three (3). Vice-Chair Miller said that nine (9) people are being accused of being underhanded. He noted the only deviation was to add “to include tolls.” He pointed out that the county leaders and the city leaders, of Wilmington and Brunswick County need to figure out what they want. He commented that he followed the rules.

Mr. Zimmer said he is the only non-elected member on the Board. He asked what the problem is with getting more information. He reiterated that this process can be stopped at any point prior to award. He pointed out that this is free data provided by NCDOT.

Mr. Barfield expressed concerns regarding spending $10 million on feasibility study for a fourth crossing, only to have it scrapped, and wasting taxpayer money on fruitless projects when it could be of better use elsewhere. He pointed out that the last time this was brought up, there was a lot of notice to the community, great community interest and people knew it was on the agenda. He commented that items of great importance not on an agenda are a disservice to the community.
Chairman Piepmeyer refocused the discussion and concurred with Mr. Zimmer’s point that this is continued education relative to the process of replacing the bridge. He added that NCDOT, the expert, has indicated that the Cape Fear Memorial Bridge is near the end of its life. He commented that the timeline is vital, the inflationary period may be over by the fall of 2025, and things economically may be very different. He acknowledged the resistance to tolls and pointed out that residents of Charlotte may get a reduced toll rate.

Mr. Roy clarified that a reduced rate is available for those with a transponder. He added that no toll structure has been contemplated in detail for this facility.

Chairman Piepmeyer commented that the bridge will not be funded in this STIP or an upcoming STIP. So, it will be a substantial period before the bridge is built. He recognized with Mr. Waddell’s comments that the criteria may need to be tweaked and added that he and Vice-Chairman Miller are willing to stop it today if that is the will of the Board. He agreed with Mr. Zimmer’s comments that there is no harm in being better educated about the process, which can be stopped any time.

Mr. Willis said that his Board told him specifically that they do not want a toll. He noted that if the MPO Board is going to consider a toll, they would need to go back to his Board to see what they want, because he needs to answer to the Town of Navassa.

Mr. Waddell commented that without understanding the potential change in commuter behavior, he can’t speak for the rest of City Council and the Mayor, although they would take issue to tolls. He expressed an interest in learning about the options, such as the cost.

Chairman Piepmeyer asked if the project could be better positioned for traditional funding. Vice Chairman Miller pointed out that the MPO Board is merely having a discussion and members have an opportunity to discuss this with their respective Boards.

In response to an inquiry by Mr. Barfield, Mr. Kimes said that the bridge is perfectly safe today. However, depending on the type of funding to replace it, it is necessary to discuss replacing it today. He said that maintenance costs are increasing every day, and that the biggest concern is the moveable span.

Ms. Hays asked about starting the project. Mr. Kozlosky responded that the project would need to score in the STIP before NCDOT could begin any Preliminary Engineering (PE) or work on the project. Optionally, the Board could allocate some Direct Attributable funds. He advised that a funding mechanism needs to be determined. He pointed out that the challenge is that the project doesn’t score high enough for traditional delivery and it won’t produce enough revenue as a conventional toll.

Ms. Hays asked about the funds from the sales tax. Mr. Kimes said that the entire amount goes back into the STP.

Mr. Forte said the bridge discussion has been ongoing since he joined the Board six years ago. He pointed out that this is the fastest growing region in the state, and the towns that would benefit the most from a bridge replacement are against it. However, he commented that he doesn’t see the project happening without a toll.

Ms. Bozeman commented that its wrong not to find a way where it won’t hurt everyday people.

Mr. Kozlosky said that the challenge is to find a way for the project to score high enough to be programmed in the STIP or look at some other funding option.
Ms. Bozeman pointed out that the STIP is broken. In response to an inquiry by Ms. Hays, Mr. Kimes said that modifications to the STIP need to go through the legislature.

Chairman Piepmeyer said that the ask to change the criteria needs to be specific, with an understanding of the potential ramifications to all projects. He noted that he did this with the Hampstead Bypass to understand the inputs and drivers to make it score better.

Mr. Ellen pointed out that the MPO Board voted not to support tolls and to explore all the options.

In response to an inquiry by Mr. Zimmer, Mr. Roy said that tolls would need to go to the construction of the bridge but may allow for some flexibility with the toll structure. He noted that he cannot advocate for tolls, only educate. According to existing statutes, the debt to pay for a project comes from tolls, and toll revenues generated from a project must stay with the project for a continuous toll facility and cannot be used for other projects around a region or the state.

Mr. Barbee pointed out that for constituents, tolls are not good. However, opponents to tolling are prematurely stopping the process of finding alternative sources beyond tolling.

Chairman Piepmeyer commented that tourism will help pay for the bridge, that pay-for-use is the best form of paying for anything, and public-private enterprises are the most successful in staying on budget and on time.

Mr. Waddell concurred that pay-for-use is best for user fees for sports complexes and parking. However, roads and bridges seem different when they’ve been paid for with state revenue previously. He asked about other instances of tolling an existing roadway. Mr. Roy said that tolling an existing facility cannot be done without MPO approval. He noted that a small portion of the Triangle Expressway was existing.

Chairman Piepmeyer expressed appreciation for the discussion and to Mr. Kimes and Mr. Roy.

In response to an inquiry by Ms. Hays, Mr. Kozlosky said that NCDOT will proceed with traditional delivery. If the Board wants to look at tolling, the unsolicited proposal or alternative funding, NCDOT will need an action from the Board. He noted that he has taken some notes regarding the question, comments and concerns from the Board, and staff will prepare a summary and forward it to NCDOT. If there is a desire for action, staff will put an item on the agenda.

Mr. Waddell requested a summary of the options as well. Mr. Kozlosky says there are three options: traditional delivery, conventional tolling, and alternative delivery.

Ms. Hays requested a bullet list of steps to get the bridge on the STIP. Chairman Piepmeyer responded that the score is 40 out of 80 and will stay that way unless the criteria changes.

In response to an inquiry by Ms. Bozeman, Chairman Piepmeyer clarified that he did not change the STIP, only studied it to understand the formula better. Mr. Kozlosky added that the Hampstead Bypass was originally one project that was broken into phases. Chairman Piepmeyer said that the original project was $330 million, and the phases scored better.

Ms. Hays expressed a desire to move the project forward. Discussion continued about breaking the bridge into phases (PE, NEPA). Mr. Kozlosky said that the MPO Board could put some of the Direct Attributable funds towards PE. Mr. Kimes noted that bridge funds are another potential funding source, although it cannot pay for the bridge.
9. Updates
   a. Wilmington Urban Area MPO
   b. Cape Fear Public Transportation Authority
   c. NCDOT Division
   d. NCDOT Transportation Planning Division

Mr. Kozlosky said the updates are included in the agenda packet and expressed appreciation to the Board.

10. Announcements
    a. Wilmington MPO Bike/Pedestrian Committee-August 9th
    b. Next MPO Board Meeting – August 31st

Mr. Kozlosky noted that if the Governor lifts his order on August 15th, the Board will operate under the Remote Meeting Policy, which allows members to participate remotely two times per year. However, the intention is for Board members to meet in person.

Chairman Piepmeyer said that he will not be present for the next Board meeting.

11. Adjournment
    Mr. Ellen made a motion to adjourn the meeting, seconded by Ms. Bozeman, and the motion carried unanimously by roll call as follows:


The meeting adjourned at 4:53 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 DIGITALLY AS PART OF THIS RECORD.
STATEWIDE PROJECT PLANNING

FY 2023 - (L)

$127,000

FY 2023 - (5311)

$507,000

$634,000

STATEWIDE PROJECT - NCDOT, NCSU (ITRE) WILL PROVIDE TECHNICAL ASSISTANCE TO THE INTEGRATED MOBILITY DIVISION AND SUBRECIPIENTS.

ADD FUNDING IN FY 23 AT THE REQUEST OF THE INTEGRATED MOBILITY DIVISION.

NCDOT, NCSU (ITRE) WILL USE THE FUNDS TO PROVIDE TRAINING/PROFESSIONAL DEVELOPMENT RELATED TO THE DELIVERY OF ADA TRAINING TO TRANSIT PROFESSIONALS.

NCDOT, NCSU (ITRE) WILL PROVIDE TECHNICAL ASSISTANCE TO THE INTEGRATED MOBILITY DIVISION.

STIP ADDITIONS

TU-0014

TU-0015

PUBLIC TRANS

PROJECT CATEGORY

STATEWIDE

STIP/MPO TIP Amendments 22-5

Proposed Revisions to 2020-2029 STIP/MPO TIP Programs
WILMINGTON URBAN AREA METROPOLITAN PLANNING ORGANIZATION

STIP ADDITIONS

FORT FISHER BOULEVARD, K AVENUE, AND NORTH 3RD STREET, INTERSECTION IMPROVEMENTS INCLUDING ADA CROSSWALKS, PEDESTRIAN ACTUATED PUSH BUTTONS, AND SIDEWALK CONNECTIONS IN KURE BEACH.

ADD PROJECT AT THE REQUEST OF THE MPO.

ENGINEERING
FY 2023 - (BGDACV) $57,000

RIGHT-OF-WAY
FY 2023 - (BGDACV) $53,000

CONSTRUCTION
FY 2024 - (L) $412,000

FY 2024 - (BGDACV) $250,000

FY 2024 - (BGDACV) $52,000

* BL-0059

NEW HANOVER DIVISION
PROJ.CATEGORY
WILMINGTON URBAN AREA METROPOLITAN PLANNING ORGANIZATION

STIP/MPO TIP Programs

Proposed Revisions to 2020-2029 STIP/MPO TIP Programs

June 2022
STIP/MPO TIP Amendment #22.5
RESOLUTION APPROVING AMENDMENTS #22-5 TO THE 2020-2029 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 2020-2029 State Transportation Improvement Program on September 5, 2019, and the Wilmington Urban Area Metropolitan Planning Organization Board adopted the Statewide/MPO Transportation Improvement Programs on October 30, 2019; and

WHEREAS, the Wilmington Urban Area Metropolitan Planning Organization desires to amend the adopted 2020-2029 State/MPO Transportation Improvement Programs for Amendments #22-5; and

WHEREAS, the Wilmington Urban Area Metropolitan Planning Organization has conducted a 30-day public comment period to receive citizen input on these proposed amendments.

NOW THEREFORE, be it resolved that the Board of the Wilmington Urban Area Metropolitan Planning Organization hereby approves amending the 2020-2029 State/MPO Transportation Improvement Programs for Amendments #22-5.

ADOPTED at a regular meeting of the Wilmington Urban Area Metropolitan Planning Organization’s Board on August 31, 2022.

________________________________________
David Piepmeyer, Chair

________________________________________
Mike Kozlosky, Secretary
PROJECT Category: CAPE FEAR PUBLIC TRANSPORTATION AUTHORITY

The Preventative Maintenance Project will ensure the FTA-funded assets are maintained to the FTA State of Good Repair Requirements and that service continues without disruption.

Add project in FY 23 at the request of the MPO. New project developed for Federal funding award.

OPERATIONS

FY 2023 - $225,000
FY 2023 - $900,000

Proposed Revisions to 2020-2029 STIP MPO TIP Programs (July 2022)
STATEWIDE PROJECT
VARIOUS, NORTH CAROLINA CLEAN ENERGY TECHNOLOGY CENTER. CONDUCT A CLEAN-FUEL ADVANCED TECHNOLOGY OUTREACH AND AWARENESS PROGRAM IN ALL CMAQ-ELIGIBLE COUNTIES.

COST INCREASE EXCEEDING $2 MILLION AND 25% THRESHOLDS.

STATEWIDE PROJECT
VARIOUS, NORTH CAROLINA CLEAN ENERGY TECHNOLOGY CENTER. EMISSIONS-REDUCING SUB-AWARDS IN ALL CMAQ-ELIGIBLE COUNTIES.

COST INCREASE EXCEEDING $2 MILLION AND 25% THRESHOLDS.

STIP/MPO TIP MODIFICATIONS

Proposed Revisions to 2020-2029 STIP/MPO TIP Programs

(June 2022)
### Wilmington Urban Area Metropolitan Planning Organization

**133, US 17/US 74/US 76 TO SR 1554 (Old River Road). Modernize Roadway.** To allow additional time for planning and design, delay construction from FY 22 to FY 23.

<table>
<thead>
<tr>
<th>Year</th>
<th>Estimated Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 2023</td>
<td>$24,000</td>
</tr>
<tr>
<td>FY 2024</td>
<td>$2,210,000</td>
</tr>
<tr>
<td>FY 2025</td>
<td>$194,000</td>
</tr>
</tbody>
</table>

#### U-5914 Brunswick Division

**Category:** Wilmington Urban Area Metropolitan Planning Organization

**Description:** Design, delay construction from FY 22 to FY 23 to allow additional time for planning and design. Modernize Roadway. NC 133, US 17/US 76 to SR 1554 (Old River Construction.

#### STIP Modifications

- **Proposed Revisions to 2020-2029 STIP/MPO Programs**

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*Note: The text contains abbreviations and acronyms which may require additional context for full understanding.*
RESOLUTION APPROVING ADMINISTRATIVE MODIFICATIONS #22-7 TO THE 2020-2029 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 2020-2029 State Transportation Improvement Program on September 5, 2019, and the Wilmington Urban Area Metropolitan Planning Organization Board adopted the Statewide/MPO Transportation Improvement Programs on October 30, 2019; and

WHEREAS, the Wilmington Urban Area Metropolitan Planning Organization desires to modify the adopted 2020-2029 State/MPO Transportation Improvement Programs for Administrative Modifications #22-7.

NOW THEREFORE, be it resolved that the Board of the Wilmington Urban Area Metropolitan Planning Organization hereby approves modifying the 2020-2029 State/MPO Transportation Improvement Programs for Administrative Modifications #22-7.

ADOPTED at a regular meeting of the Wilmington Urban Area Metropolitan Planning Organization’s Board on August 31, 2022.

______________________________
David Piepmeyer, Chair

______________________________
Mike Kozlosky, Secretary
STATE OF NORTH CAROLINA
COUNTY OF NEW HANOVER

FY 2023 AND FY 2024 PUBLIC TRANSPORTATION PLANNING SECTION 5303
GRANT AGREEMENT FOR THE WILMINGTON URBANIZED AREA

THIS AGREEMENT made and entered into this ____ day of ______________, 2022 by
and between the City of Wilmington, the Wilmington Urban Area Metropolitan Planning
Organization, a metropolitan planning organization and the Cape Fear Public Transportation
Authority d/b/a “Wave Transit”, a North Carolina public transportation authority.

WITNESSETH

WHEREAS, by joint resolution the City of Wilmington and New Hanover County
established the “Cape Fear Public Transportation Authority” (hereinafter referred to as “Wave”) to
provide public transportation services within the area designated as the Wilmington Urbanized
Area (hereinafter referred to as “UZA”), effective July 1, 2004, in recognition of the fact that
some traffic and transportation concerns of each entity are the same without regard for any
jurisdictional boundary; and

WHEREAS, pursuant to, and in compliance with, 23 C.F.R. § 450.306, the Wilmington
Urban Area Metropolitan Planning Organization (hereinafter referred to as “MPO”) was
designated as the policy body for cooperative transportation decision making in the UZA; and

WHEREAS, the City of Wilmington serves as the Lead Planning Agency for the MPO; and

WHEREAS, on November 18, 2020, the MPO, which includes the City of Wilmington,
New Hanover County, North Carolina Department of Transportation, and other urban area jurisdictions adopted the “Cape Fear Moving Forward 2045” which affects the UZA; and

WHEREAS, Wave is the provider of public transportation services in the UZA; and

WHEREAS, on June 22, 2005, the Secretary of Transportation for the State of North Carolina, with authority vested by the Governor of the State of North Carolina, and in accordance with Title 49 of the United States Code § 5307(a)(2) and the Transportation Equity Act for the 21st Century, declared Wave to be a designated recipient of Federal Urbanized Area Formula Program funds for the UZA; and

WHEREAS, the MPO is the recipient of Federal Transit Administration 49 U.S.C. § 5303 transit planning funds for the UZA; and

WHEREAS, the Federal Transit Administration, pursuant to 49 U.S.C. § 5303, provides 80% of transportation planning funds for the UZA, the North Carolina Department of Transportation provides 10%, and the required 10% local match is shared by the members of the MPO in accordance with the Memorandum of Understanding for Cooperative, Comprehensive, and Continuing Transportation Planning, dated June 30, 2016; and

WHEREAS, 23 C.F.R. § 450.314 requires an agreement between Wave and the MPO specifying cooperative procedures for carrying out transportation planning and programming.

NOW THEREFORE, in consideration of the mutually beneficial covenants of agreement between the parties hereinafter expressed in enumerated terms, the adequacy and sufficiency of which of hereby acknowledged by each as valuable consideration the City of Wilmington on behalf of the Metropolitan Planning Organization and Wave agree as follows:
1. **Cooperation.** The MPO and Wave shall cooperate in long range planning for the provision of public transportation services in the UZA, including the Metropolitan Planning Organization Transportation Improvement Program (hereinafter referred to as “MPO TIP”). Such cooperation includes, but is not limited to, estimating funds needed for the services recommended in the MPO TIP as adopted by the MPO. MPO TIP is in accordance with the State Transportation Improvement Program, and is periodically amended as the State Transportation Improvement Program is updated.

2. **Planning.** Wave shall be afforded the opportunity for meaningful participation in the public transportation planning and decision making process. The parties shall insure that projects in the public transportation service portion of the MPO TIP are included in the planning process.

3. **Tasks.** Wave agrees and covenants to dutifully and properly perform the program tasks assigned to them as evidenced by the line item allocation shown on the MPO’s budget which is known as the Unified Planning Work Program.

4. **Funding.** The MPO will pay to Wave sixty percent (60%) of its allocation of 49 U.S.C. § 5303 planning funds for the term of this agreement. No funds paid under this Agreement shall be paid from the City of Wilmington’s funds, except those held for the MPO. No funds paid under this agreement shall exceed $85,836 in FY23 and $28,612 in FY24, for a total amount of $114,448 paid in FY23 and FY24.

5. **Duration.** This Agreement shall commence on the date of its full execution by all parties and continue for one year or as long as Federal and State funding for public transportation planning are provided for the UZA if such funding is for less than one year.
6. **Termination.** This Agreement shall terminate as a result of the loss of Federal and/or State funding for public transportation services for the UZA. Additionally, any party may terminate this Agreement upon written notice to the other party which specifies an effective date of termination. The effective date of said “Notice of Termination” shall be no earlier than thirty (30) days prior to the date the notice is sent.

7. **Governing Law.** All of the terms and conditions contained herein shall be interpreted in accordance with the laws of the State of North Carolina without regard to any conflicts of law principles and subject to the exclusive jurisdiction of federal or state courts within the State of North Carolina. In the event of a conflict between the various terms and conditions contained herein or between these terms and other applicable provisions, then the more particular shall prevail over the general and the more stringent or higher standard shall prevail over the less stringent or lower standard.

8. **Entire Agreement, Amendments.** This Agreement constitutes the entire contract between the parties, and no warranties, inducements, considerations, promises or other inferences shall be implied or impressed upon this agreement that are not set forth herein. This Agreement shall not be altered or amended except in writing signed by all Parties.

**IN WITNESS WHEREOF,** the due execution in agreement by parties hereto as evidenced by the hereafter affixed signatures.

*(This space is left intentionally blank)*

Page 4 of 7

23
CITY OF WILMINGTON

Bill Saffo, Mayor

ATTEST:

___________________________

Penelope Spicer-Sidbury, City Clerk [SEAL]

Approved as to form:

___________________________

John Joye, City Attorney

STATE OF NORTH CAROLINA
COUNTY OF NEW HANOVER

I, ____________________________, a Notary Public of ____________ County, North Carolina, certify that Penelope Spicer-Sidbury personally came before me this day and acknowledged that she is City Clerk of the City of Wilmington, and that by authority duly given and as the act of the Council, the foregoing instrument was signed in its name by its Mayor, sealed with its corporate seal and attested by herself as its City Clerk.

WITNESS my hand and official seal, this _____ day of ____________, 2022.

___________________________

Notary Public

My commission expires: ____________

CERTIFICATION

This instrument has been preaudited in the manner required by The Local Government Budget and Fiscal Control Act.

This ___ day of _________________, 20__.

___________________________

Jennifer Maready, City Finance Officer

Project Account: 1TRMP23-RSTR5303-CONTRACTL-OTHPROFSVC

Org: 21075195     Obj: 531060     Project: 1TRMP23     Amount: Not to Exceed 85,836
Project Account: 1TRMP24-RSTR5303-CONTRACTL-OTHPROFSVC
Org: 21075195       Obj: 531060       Project: 1TRMP24       Amount: Not to Exceed 28,612

Requisition Number: _____ Federal ID Number: 56-6000239

WILMINGTON URBAN AREA METRO
PLANNING ORGANIZATION,
by and through its Board

By: ________________________________
Honorable David Piepmeyer, Chair

Attest: ________________________________
Secretary Mike Kozlosky

STATE OF NORTH CAROLINA
COUNTY OF NEW HANOVER

I, ________________________________, a Notary Public of ______________ County, North Carolina, certify that Mike Kozlosky came before me this day and acknowledged that he is the Secretary of the Board of the Wilmington Urban Area Metropolitan Planning Organization, and that by authority duly given and as the act of the Organization, the foregoing instrument was signed in its name by its Chairman and attested by himself as its Secretary.

WITNESS my hand and official seal, this ___ day of ____________, 2022.

______________________________ (Seal)
Notary Public
My commission expires: _________.

Page 6 of 7
CAPE FEAR PUBLIC TRANSPORTATION
AUTHORITY d/b/a Wave Transit

By: ________________________________
Chairman

Attest: ________________________________
Secretary

STATE OF NORTH CAROLINA
COUNTY OF NEW HANOVER

I, ________________________________, a Notary Public of _____________ County, North Carolina, certify that ______________________ personally came before me this day and acknowledged that s/he is the Secretary of the Cape Fear Public Transportation Authority d/b/a Wave Transit, and that by authority duly given and as the act of the Authority, the foregoing instrument was signed in its name by its Chairman, sealed with its seal and attested by herself as its Secretary.

Witness my hand and official seal, this the ____ day of ______________, 2022.

______________________________ (Seal)
Notary Public

My Commission Expires: ____________.
RESOLUTION AUTHORIZING THE CHAIRMAN TO ENTER INTO AN AGREEMENT WITH THE CAPE FEAR PUBLIC TRANSPORTATION AUTHORITY AND CITY OF WILMINGTON FOR THE WILMINGTON URBAN AREA METROPOLITAN PLANNING ORGANIZATION TO PROVIDE FY 23 AND FY24 SECTION 5303 FUNDING TO THE CAPE FEAR PUBLIC TRANSPORTATION AUTHORITY FOR PUBLIC TRANSPORTATION PLANNING ACTIVITIES

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, in accordance with 23 CFR § 450.306, the Wilmington Urban Area Metropolitan Planning Organization was designated as the policy body for cooperative transportation decision making in the Wilmington Urbanized Area (UZA); and

WHEREAS, the City of Wilmington and New Hanover County effective July 1, 2004, established the Cape Fear Public Transportation Authority to provide public transportation services within the UZA; and

WHEREAS, the Cape Fear Public Transportation Authority is the provider of public transportation services within the UZA; and

WHEREAS, the Wilmington Urban Area Metropolitan Planning Organization is the recipient of Federal Transit Authority 49 CFR § 5303 transit planning funds for the UZA; and

WHEREAS, the City of Wilmington serves as the Lead Planning Agency for the Wilmington Urban Area Metropolitan Planning Organization; and

WHEREAS, 23 CFR § 4510.314 requires an agreement between the Cape Fear Public Transportation Authority and the Wilmington Urban Area Metropolitan Planning Organization specifying cooperative procedures for carrying out transportation planning and programming.

NOW THEREFORE, be it resolved that the Board of the Wilmington Urban Area Metropolitan Planning Organization hereby authorizes the Chairman to enter into an agreement with the Cape Fear Public Transportation Authority and City of Wilmington for the Wilmington Urban Area Metropolitan Planning Organization to provide Section 5303 funding in an amount not to exceed $85,836 in FY23 and $28,612 in FY24, for a total amount of $114,448 to the Cape Fear Public Transportation Authority to complete public transportation planning activities within the MPO’s Urbanized Area boundary.

ADOPTED at a regular meeting of the Wilmington Urban Area Metropolitan Planning Organization’s Board on August 31, 2022.

__________________________
David Piepmeyer, Chair

__________________________
Mike Kozlosky, Secretary
Executive Summary

The 2022 Navassa Collector Street Plan was developed collaboratively by the Town of Navassa and the Wilmington Urban Area Metropolitan Planning Organization (WMPO). Plan development was guided by a Steering Committee that included the Town Mayor, members of the Town Planning Board and the WMPO, and Town Council, and a representative of the North Carolina Department of Transportation (NCDOT). The Town of Navassa (Town) is a small community in Brunswick County, NC, and within the planning area of the WMPO. The 2022 Navassa Collector Street Plan was developed in accordance with the vision and goals established by the Steering Committee.

The Town of Navassa (Town) is a small community in Brunswick County, NC, and within the planning area of the WMPO. The Town's population of 1,367 (U.S. Census, 2020) is expected to increase more than twofold in the coming decades as a result of the completion of the I-140/Wilmington Bypass in 2017, the Town's proximity to area points of interest, its planned housing developments, and redevelopment of a waterfront Superfund site. The proposed collector street network will also increase existing and future roadway needs.

Developments associated with proposed housing needs and other growth in the Town will also increase existing and future roadway needs. The proposed collector streets are intended to meet existing collector street needs, and those anticipated to develop. The proposed collector street network will consist of 12 collector streets identified in Table E-S-1 and shown in Map E-S-1. The proposed collector street network will enhance the connectivity of the transportation network by increasing the efficiency of the collector system, reducing congestion, and providing connectivity to future development. The enhanced network will increase the safety and resiliency of the transportation network by improving connectivity, reducing congestion, and providing connectivity to future development.

The project team reviewed existing plans and conditions, conducted stakeholder engagement and public outreach, and followed a six-step process to determine appropriate locations for the collector streets. The six-step process involved identifying traffic and future land uses, and natural resources as well as establishing household density and calculating daily trip generation. The project team ultimately recommended proposed connections for the collector streets. The project team conducted site visits and identified key natural resources, including wetlands and natural areas, to determine appropriate locations for the collector streets.

The project team reviewed existing plans and conditions, conducted stakeholder engagement and public outreach, and followed a six-step process to determine appropriate locations for the collector streets. The six-step process involved identifying traffic and future land uses, and natural resources as well as establishing household density and calculating daily trip generation. The project team ultimately recommended proposed connections for the collector streets. The project team conducted site visits and identified key natural resources, including wetlands and natural areas, to determine appropriate locations for the collector streets.

To develop this Plan, a project team of consultant staff from AECOM, the WMPO, and Town personnel reviewed existing plans and conditions, conducted stakeholder engagement and public outreach, and followed a six-step process to determine appropriate locations for the collector streets. The six-step process involved identifying traffic and future land uses, and natural resources as well as establishing household density and calculating daily trip generation. The project team ultimately recommended proposed connections for the collector streets. The project team conducted site visits and identified key natural resources, including wetlands and natural areas, to determine appropriate locations for the collector streets.

The proposed collector street network consists of the 12 collector streets listed in Table ES-1 and shown in Map ES-1. Four of the proposed collector streets are intended to meet existing needs, and eight are intended to meet future needs associated with proposed housing developments. The proposed collector street network will also increase the efficiency of the transportation network by improving connectivity, reducing congestion, and providing connectivity to future development.
Table ES-1: 2022 Proposed Collector Street Network

<table>
<thead>
<tr>
<th>MAP</th>
<th>DESCRIPTION</th>
<th>LENGTH (MILES)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Victoria Lane Extension</td>
<td>1.7</td>
</tr>
<tr>
<td>2</td>
<td>Victoria Lane Extension</td>
<td>0.3</td>
</tr>
<tr>
<td>3</td>
<td>Sandy Lane Extension</td>
<td>0.5</td>
</tr>
<tr>
<td>4</td>
<td>Leaden</td>
<td>0.3</td>
</tr>
<tr>
<td>5</td>
<td>Outlier</td>
<td>2.0</td>
</tr>
<tr>
<td>6</td>
<td>Mt. Misery/Daniels Connector</td>
<td>0.6</td>
</tr>
<tr>
<td>7</td>
<td>Valentine Way Extension</td>
<td>0.7</td>
</tr>
<tr>
<td>8</td>
<td>Heritage Park Connector</td>
<td>1.1</td>
</tr>
<tr>
<td>9</td>
<td>Daniels Road Connector</td>
<td>1.5</td>
</tr>
<tr>
<td>10</td>
<td>Ridge Road Extension</td>
<td>0.6</td>
</tr>
<tr>
<td>11</td>
<td>Wide Way Extension</td>
<td>0.4</td>
</tr>
<tr>
<td>12</td>
<td>Cedar Hill/Wide Way Extension</td>
<td>0.5</td>
</tr>
</tbody>
</table>

In support of the proposed collector street network and in light of existing local and regional policies and guidelines, this Plan recommends modifications to several existing regional policies and guidelines. This Plan recommends four new policy topics that will complement the proposed collector street network and ensure that future collector streets satisfy the needs of the Town. In support of the proposed collector street network and in light of existing local and regional policies and guidelines, this Plan recommends modifications to several existing policies and guidelines (see Table ES-2). It also recommends four new policy topics that will complement the proposed collector street network and ensure that future collector streets satisfy the needs of the Town (see Table ES-3).
### TABLE ES-2. ACTIONS FOR EXISTING POLICIES OR GUIDELINES

<table>
<thead>
<tr>
<th>POLICY OR GUIDELINE DESCRIPTION</th>
<th>PROPOSED TOWN ACTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>NCDOT Complete Streets Policy Calls for the consideration and incorporation of multiple modes of transportation when constructing new projects or making improvements to existing infrastructure. Ensures that multimodal projects are designed to be safe and comfortable for all users.</td>
<td>Require new collector streets to adhere to the Complete Streets policy.</td>
</tr>
<tr>
<td>NCDOT Traditional Neighborhood Development (TND) Guidelines Encourages walking and bicycling, enhances transit service opportunities, and improves traffic safety.</td>
<td>Consider in development and construction of collector streets.</td>
</tr>
<tr>
<td>Town of Navassa Phase II Stormwater Implementation Plan Establishes and defines the Town’s compliance with its National Pollutant Discharge Elimination System (NPDES) municipal separate storm sewer system (MS4) Permit and the Clean Water Act.</td>
<td>Consider this plan when developing and constructing collector streets.</td>
</tr>
<tr>
<td>North Carolina Resilient Coastal Community Program Facilitates a process for setting coastal resilience goals, assessing needs, and identifying and prioritizing projects to enhance resilience to coastal hazards.</td>
<td>Consider the program’s goals when developing and constructing collector streets.</td>
</tr>
<tr>
<td>Subdivision Ordinance Requires connectivity for major subdivisions. Modify existing ordinance to expand connectivity requirements for all subdivisions and developments.</td>
<td>Incorporate Section 4.3.6 of the Subdivision Ordinance in future ordinances.</td>
</tr>
</tbody>
</table>

### TABLE ES-3. NEW POLICY TOPICS

<table>
<thead>
<tr>
<th>POLICY TOPIC DESCRIPTION</th>
<th>PROPOSED TOWN ACTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traffic calming Design new collector streets to include traffic calming components where appropriate, such as maintaining lower speed limits.</td>
<td>Prepare new policy to support traffic calming measures.</td>
</tr>
<tr>
<td>Connectivity of Collector Streets Require private entities to coordinate across properties to allow for future connections.</td>
<td>Prepare new policy to support possible future needs.</td>
</tr>
<tr>
<td>Reduction of Paper Streets Work with developers to build streets that are currently mapped as vacant.</td>
<td>Prepare new policy to encourage implementing planned applications.</td>
</tr>
<tr>
<td>Resiliency and Environmental Conservation Ensure that developments and new streets minimize impacts to the Town’s natural resources.</td>
<td>Prepare new policy to minimize impacts to the Town’s natural resources.</td>
</tr>
</tbody>
</table>

**NAVASSA COLLECTOR STREET PLAN August 2022**
Effective implementation of this Plan will include prioritizing actions and obtaining funding. This Plan prioritizes the four collector streets required to meet existing needs (Ivestor/Eastbrook Connector, Sandy Lane Extension, Victoria Lane Extension, and Park/Pine Valley/Brooklyn Connector (4A), see Table ES-1) over those addressing future needs. The remaining collector streets would be prioritized in conjunction with future housing development.

Funding opportunities to directly and indirectly support construction of the proposed collector street network include Powell Bill program funds, transportation bonds, traffic impact assessments, federal transportation grants, WMPO funding, NCDOT Division 3 funding, and local NCDOT Division 3 funding.

Table ES-4 contains key action steps to ensure opportunities for improvements, including local matches, grant

<table>
<thead>
<tr>
<th>ACTION STEP</th>
<th>DETAILS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Review the plan annually and report to Town Council, WMPO and NCDOT Division 3</td>
<td>Collectors streets in new developments would serve existing developments. Proposals for NCDOT Division 3 would be developed and existing development would be discussed in the NCDOT Division 3 and WMPO meetings.</td>
</tr>
<tr>
<td>Adapting the Navassa Collector Street Plan</td>
<td>Adopt: Town Council to adopt Collector Street Plan. Town Council Summer 2022</td>
</tr>
<tr>
<td>Update Existing Town Policies</td>
<td>Planning Board, Town Council to work with Town staff and Planning Board to develop new town policies.</td>
</tr>
<tr>
<td>New Town Policies</td>
<td>Planning Board, Town Council to work with Town staff to develop new town policies.</td>
</tr>
<tr>
<td>Town Budget Planning</td>
<td>Identify funding sources for improvements, including local matches, grant</td>
</tr>
<tr>
<td>Conduct Feasibility Studies</td>
<td>Conduct meetings with NCDOT Division 3 and WMPO to discuss how the projects in the plan can be funded/implemented.</td>
</tr>
<tr>
<td>Conduct Proposals Development</td>
<td>Conduct feasibility studies on the proposed collector streets that would serve existing developments.</td>
</tr>
<tr>
<td>Review of Proposed Development</td>
<td>Review of proposed development of the plan to ensure inclusion of the proposed collector streets and the WMPO.</td>
</tr>
<tr>
<td>Annual Review</td>
<td>Review of proposed development of the plan to ensure inclusion of the proposed collector streets and the WMPO.</td>
</tr>
<tr>
<td>TABLE ES-4. ACTIONS FOR IMPLEMENTATION</td>
<td></td>
</tr>
</tbody>
</table>
Acknowledgments

The project team would like to thank the Steering Committee and residents of the Town of Navassa for their involvement and support in this planning process. This Plan was funded by the Wilmington Urban Area Metropolitan Planning Organization.

Key Partners

Wilmington Urban Area Metropolitan Planning Organization

We would like to thank the Steering Committee and residents of the Town of Navassa for their involvement and support in this planning process. This Plan was funded by the Wilmington Urban Area Metropolitan Planning Organization.

AECOM Technical Services, Inc.

Consultant Team

Ben Hughes, PE, District Engineer

NCDOT District 3

Marvin Balliam, Planning Board Chairman

Claudia Bray, Town Administrator

Barnes Sutton, Former Town Planner

Maeceil Hatcher, Planning Board Member

Eulis Willis, Mayor

Town of Navassa

Rachel Mclimore, PLA, Associate Transportation Planner

Abby Lorenzo, Deputy Director

Wilmington Urban Area Metropolitan Planning Organization
Introduction
The Town of Navassa (Town) is a growing community located in Brunswick County and within the planning area of the Wilmington Urban Area Metropolitan Planning Organization (WMPO). The Town is expecting to more than double its population over the next few decades with the completion of the I-140/Wilmington Bypass in 2017, its proximity to area points of interest, and several planned housing developments within the Town limits. The Town is also anticipating growth associated with the redevelopment of the waterfront Kerr-McGee Chemical Corp – Navassa Superfund site.

In anticipation of future growth and traffic, the Town developed a Collector Street Plan in 2004 (the 2004 Plan; Martin Alexiou Bryson, 2004) to guide roadway network design.

Since the completion of the 2004 Plan, there have been notable changes to the existing conditions as well as proposed developments. The result is a new 2022 Navassa Collector Street Plan (this Plan). This Plan incorporates a new traffic data, Plan development was guided by a Steering Committee that included the Town Mayor, Plan development was guided by a Steering Committee that included the Town Mayor, members of the Planning Board and Town Council, and a representative from the North Carolina Department of Transportation (NCDOT). This Plan responds to developmental changes within the Town and the WMPO.

This Plan is the result of a collaborative effort between the Town and the WMPO.

Plan development was guided by a Steering Committee that included the Town Mayor, members of the Planning Board and Town Council, and a representative from the North Carolina Department of Transportation (NCDOT). This Plan responds to developmental changes within the Town and the WMPO.

This Plan is the result of a collaborative effort between the Town and the WMPO.

1. Study Area

The study area consists of the municipal boundary with existing roads, planned developments, and other local resources of connectivity with existing roads, planned development, and pedestrian-friendly transportation corridors. The study area is bordered to the east by the Cape Fear River and to the south by the town boundary is excluded from this Plan because of its lack of connectivity to existing roads, planned development, and pedestrian-friendly transportation corridors. The study area is bordered to the east by the Cape Fear River and to the south by the town boundary.

The study area consists of the municipal boundary with existing roads, planned development, and other local resources of connectivity with existing roads, planned development, and pedestrian-friendly transportation corridors. The study area is bordered to the east by the Cape Fear River and to the south by the town boundary. The study area consists of the municipal boundary with existing roads, planned development, and pedestrian-friendly transportation corridors.
Legend

- Town of Navassa
- Excluded from study area
- Town of Navassa: study area

Study Area for Navassa Collector Street Plan
What is a Collector Street?

Roadways are assigned functional classifications based on the type of service they provide. The WMPO assigns the following functional classifications to roads in the region: principal arterial, minor arterial, major collector, minor collector, freeway/expressway, and interstate (WMPO, 2019). Roads that do not fall into one of these categories are local roads. Collector streets connect local roads to arterial roads. The illustration at right summarizes the characteristics of local, collector, and arterial roads. Collector streets can also provide a safe space for multimodal users such as pedestrians and/or transit facilities. Collector streets can also provide a space for multimodal users if designed with bicycle, pedestrian, and/or transit facilities.
Vision and Goals
**PLAN GOALS**

- Work with the community to develop a desirable and realistic transportation network using careful planning, appropriate design standards, and purposeful decisions.

- Involve a broad spectrum of the community in the plan development process, involving and accommodating a wide range of interests.

- Develop policies to manage connections from new developments to proposed collector streets.

- Consider school transportation and future transit in the development of the collector street network.

- Enhance economic growth by improving connectivity and access throughout the Town.

- Encourage economic growth by improving connectivity and access throughout the Town.

- Preserve the cultural heritage of and natural resources within the Town of Navassa in the planning for new collector streets.

- Be cognizant of environmental constraints (including streams, wetlands, and topography) while planning for new collector streets.

- Develop policies to manage connections from new developments to proposed collector streets.

- Consider school transportation and future transit in the development of the collector street network.

- Increase route options to improve emergency response times, decrease delays caused by existing congested roads, providing new routes to move traffic resulting in increased connectivity, taking traffic off critical street network.

- Provide a safe and efficient multimodal transportation network.

- Plan for growth andify obstacle removal and reduce conflicts between motorists, bicyclists, and pedestrians.

- Promote mobility and safety for all users by incorporating complete street concepts.

- Recommendations to empower decision makers.

- Involve a broad spectrum of the community in the plan development process, involving and accommodating a wide range of interests.

- Work with the community to develop a desirable and realistic transportation network.

- Provide a safe and efficient multimodal transportation network.

- Plan for growth andify obstacle removal and reduce conflicts between motorists, bicyclists, and pedestrians.

- Promote mobility and safety for all users by incorporating complete street concepts.

- Recommendations to empower decision makers.

- Involve a broad spectrum of the community in the plan development process, involving and accommodating a wide range of interests.

- Work with the community to develop a desirable and realistic transportation network.
Relevant local planning documents and planning efforts were reviewed to understand anticipated growth and development in the Town and the impacts it will have on the roadway network.

3.1  Local Plans and Planning Efforts

Along with commercial and industrial uses, the Kerr-McGee Chemical Corp – Navassa Superfund site (Kerr-McGee Site) is a 150-acre property that will be remediated and redeveloped as part of the U.S. Environmental Protection Agency’s Superfund program. The Moze Heritage Park is proposed within the Site, acquired under the National Environmental Policy Act process.

Key findings as they relate to this Plan are outlined in the following narrative.

Road: Just north of Cypress Landing, the proposed project area will include 1,057 single-family and 2,184 multifamily residential units. Residential development is located in the southern portion of the Town, south of Old Mill Road.

Cypress Landing: A 44-acre housing development located in the southern portion of the Town, south of Old Mill Road.

Lea Springs: A 44-acre housing development located near the southern portion of the Town, south of Old Mill Road.

Riverbend at Cedar Hill: A 900-acre mixed-use development consisting of single-family units, 460 multifamily units, retail, commercial, and industrial uses.

Indian Creek: A 1,057-acre development along the northwest border of the Town, includes 2,184 single-family residential units, 1,460 multifamily units, and space for an elementary school.

Approved and Proposed Developments

Five housing developments and five parks have been approved for construction within Town limits (Map 2). A sixth housing development is proposed but not yet approved.

- Approved Housing Developments
  - Indian Creek: A 1,057-acre development located along the northwest border of the Town, includes 2,184 single-family residential units, 1,460 multifamily units, storage units, and space for an elementary school.
  - Riverbend at Cedar Hill: A 900-acre mixed-use development consisting of single-family units, 460 multifamily units, retail, commercial, and industrial uses.
  - Cypress Landing: A 33-acre housing development located in the southern portion of the Town, south of Old Mill Road, that will include 100 single-family homes.
  - Lena Springs: A 44-acre housing development located in the southern portion of the Town, south of Old Mill Road.
  - Riverbend at Cedar Hill: A 900-acre mixed-use development consisting of single-family units, 460 multifamily units, retail, commercial, and industrial uses.

2004 Town of Navassa Collector Street Plan

The 2004 Plan identified 12 collector streets, which were examined and re-evaluated as part of the 2022 Plan development process. The 2004 Plan identified 12 collector streets, which were examined and re-evaluated as part of the 2022 Plan development process.

The 2004 Plan was developed by Martin Alexiou Bryson for the Wilmington Urban Area Metropolitan Planning Organization (WMPO), a U.S. Environmental Protection Agency-funded organization. The Plan (WMPO) was developed by Martin Alexiou Bryson for the Wilmington Urban Area Metropolitan Planning Organization (WMPO).
Development will include 182 single-family homes.

- **Old Mill**: A 28-acre housing development located in the southern portion of the Town, south of Old Mill Road, just west of Cypress Landing and Lena Springs. The development will include 68 single-family homes.

**Proposed Housing Developments**

- **Cedar Lakes Resort**: A proposed 463-acre resort community that would be located in the northern portion of the Town between the approved Indian Creek and Riverbend at Cedar Hill developments. The resort would contain 1,200 housing units consisting of mixed-use neighborhood areas and waterfront housing.

**Approved Parks**

- **Navassa Waterfront Park**: A 90-acre park located along the southern limit of the Town, south of Cypress Landing, that will include walking trails, water access to Mill Creek, fishing, and a picnic area.

- **Cartwheel Branch Park and Rail Trail**: Located on Royster Road, the 54-acre park will include two dog parks, a splash pad, fishing, and a picnic area.

- **Moze Heritage Park**: Located along the Brunswick River on a portion of the Kerr-Baldwin Waterfront, this 108-acre park will include a Gullah Geechee Cultural Center and Museum, nature trails, a fishing pier, and a kayak launch.

- **Rowells Branch Park**: A 70-acre wetland park and nature preserve that will provide stormwater storage for the Town, boardwalk access along a large pond and a boardwalk access along a large pond, and access to a small upland park that will provide boardwalk access along a large pond.

- **Cedar Hill African American Heritage Park**: Located east of Cedar Hill Road, just north of Riverbend at Cedar Hill, this approximately 11-acre park will include a replica of Phoenix Colored School, the historic Reaves Chapel Church, and Cedar Hill Cemetery. The Gullah Geechee Heritage Trail will pass through the park.

**Project in Progress**

- **Multiuse Path at Navassa Park**: The Town received federal funding through the Surface Transportation Program (STP) funds to construct a multiuse path at Navassa Park. The project will construct bicycle lanes on both sides of Brooklyn Street, connecting Brooklyn Street to Navassa Park, and a multiuse path through Navassa Park.

- **Navassa Waterfront Park**: A 90-acre park located along the southern limit of the Town, south of Cypress Landing, that will include walking trails, water access to Mill Creek, fishing, and a picnic area.

- **Cartwheel Branch Park and Rail Trail**: Located on Royster Road, the 54-acre park will include two dog parks, a splash pad, fishing, and a picnic area.

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Map 2. Approved and Proposed Developments

Legend:
- Multiuse Path (DA-funded/In progress)
- Multiuse Path (existing)
- Town of Navassa
- Existing Park
- Approving Residential
- Proposed Residential
- Kerr-McGee Site
- CSX Railroad
- Brunswick River
- Cape Fear River
- Brunswick County
- New Hanover County
- MT. MISERY RIDGE
- DANIELS
- NAVASSA WIDE PARK TRESTLE
- OLD MILL
- PINE VALLEY
- SANDY
- BROADWAY
- ROYSTER
- £
- ¤
- ¦
- §
- £
- ¤
- 421
- 47

Source(s):
Brunswick County GIS, ESRI, and NCDOT
June 2022
The Town of Navassa Future Land Use Plan 2011–2030 evaluates and identifies trends as well as issues and impacts associated with the community profile, natural environment, community resources and public facilities, transportation and circulation, and current and future land use, goals, and policies.

In population growth, the land use plan predicts that residential development will result in population growth. The plan predicts that the planned development will result in population growth. The plan predicts that the planned development will result in population growth.

The Gateway Plan identifies trends as well as issues and impacts associated with the community profile, natural environment, community resources and public facilities, transportation and circulation, and current and future land use, goals, and policies.

Residential development

The Gateway Plan evaluates and identifies trends as well as issues and impacts associated with the community profile, natural environment, community resources and public facilities, transportation and circulation, and current and future land use, goals, and policies.

Revised Development

The Gateway Plan evaluates and identifies trends as well as issues and impacts associated with the community profile, natural environment, community resources and public facilities, transportation and circulation, and current and future land use, goals, and policies.

Non-residential Development

The Gateway Plan evaluates and identifies trends as well as issues and impacts associated with the community profile, natural environment, community resources and public facilities, transportation and circulation, and current and future land use, goals, and policies.

Non-residential development

The Gateway Plan evaluates and identifies trends as well as issues and impacts associated with the community profile, natural environment, community resources and public facilities, transportation and circulation, and current and future land use, goals, and policies.
Regional Planning Documents

Relevant regional planning documents were reviewed to understand anticipated growth and development in the vicinity of the Town of Navassa. Key findings, as they relate to this roadway network, are outlined in the following narrative:

3.2 Regional Planning Documents
The Connecting Northern Brunswick County Collector Street Plan was adopted by the Town of Leland and the Town of Navassa on June 20, 2013, and by the WMPO Board on July 31, 2013 (Kimley Horn and Associates Inc., 2013). The Brunswick County plan, which includes feedback from a steering committee, community stakeholders, and the public, provides a review of existing conditions, facility recommendations, and existing policies and practices.

The Brunswick County plan recommends the following collector streets for construction within the Town of Navassa:

- Wide Way Extension to the west to connect to Mt. Misery Road
- Magnolia Drive Extension to the west to connect to Mt. Misery Road via Playground Way
- Valentine Way Extension to the south to connect to the proposed Wide Way Extension southwest of Cedar Hill Road
- Valentine Way Extension to the south to connect to the proposed Wide Way Extension southwest of Cedar Hill Road
- Cedar Hill Road Extension to connect to Wide Way Extension southwest of Cedar Hill Road
- Ivester/Eastbrook Connector from Old Mill Road/Ivester Court intersection to Eastbrook Street
- Victoria Lane Extension to the south into Leland

The NCDOT State Transportation Improvement Program (STIP) is a 10-year state and federally mandated plan that identifies the construction funding for and scheduling of transportation projects throughout the state (NCDOT, 2022). The 2020–2029 STIP includes two projects within the Town, both of which pertain to the I-140/Wilmington Bypass (Table 1).

<table>
<thead>
<tr>
<th>STIP ID</th>
<th>LOCATION DESCRIPTION</th>
<th>CONSTRUCTION YEAR</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>I-6038</td>
<td>I-140/Wilmington Bypass (Table 1)</td>
<td>Under Construction (2022)</td>
<td>2029</td>
</tr>
<tr>
<td>R-2633D</td>
<td>Improvement of Intelligent Transportation Systems (ITS)</td>
<td>1-410 / US 252</td>
<td>2029</td>
</tr>
<tr>
<td>I-410/US 17</td>
<td>Improvement of Intelligent Transportation Systems (ITS)</td>
<td>1-410 / US 252</td>
<td>2029</td>
</tr>
</tbody>
</table>

Source: NCDOT, 2022

The Connecting Northern Brunswick County Collector Street Plan was adopted by the Town of Leland.
Existing demographic and socioeconomic conditions were used in conjunction with data pertaining to the natural and built environment to help guide the development of the recommendations presented in this Plan. GIS data, traffic counts, travel demand modeling, traffic analysis zones (TAZs), and origin-destination (OD) data were also used to develop demographics, socioeconomic conditions, and commuting patterns. Data tables associated with this section can be found in Appendix A.
Map 3. Population Density by 2020 Census Block

Legend
- Town of Navassa
- 2,501 - 7,392
- 1,001 - 2,500
- 101 - 1,000
- 1 - 100
- No Population

Source(s): Brunswick County GIS, ESRI, NCDOT, U.S. Census Bureau
June 2022

Population Density By 2020 Census Block
Poverty

Income level plays a large role in the modes of transportation available to individuals or households. In 2018, the annual income threshold for a family of four with two children in the United States was $25,465 (U.S. Census Bureau, 2019b).

Vehicle Ownership and Availability

Vehicle availability is another key factor in determining how much of the population may rely on public transportation services or walking or biking. Although income is often cited as a key factor in vehicle ownership, there are various other reasons for not having access: limitations, or choice, to a vehicle, including age, physical or mental limitations, or choice.

Socioeconomic Conditions

4.2 Socioeconomic Conditions

NAVASSA COLLECTOR STREET PLAN August 2022
The Town Fire Department employs over 300 people (Brunswick Business & Industry Development, 2022). The largest industries are auto repair, the Fire Department, and church and religious associations and organizations (Chamber of Commerce, 2022). The largest area employers are located outside of the Town in Brunswick County.

According to the North Carolina Department of Commerce (2022, 2nd Quarter), the top employers in Brunswick County are the Brunswick County Board of Education, the Town of Leland, and several areas of concentrated employment exceeding 5,000 jobs per square mile. High concentrations of jobs are located outside of the Town in Brunswick County, with several areas of concentrated employment exceeding 5,000 jobs per square mile. This is one of the primary job centers in Brunswick County, which is the highest concentration of employment density in Brunswick County.

The largest area employers are located outside of the Town in Brunswick County. According to the 2nd Quarter 2022, the largest area employers are the Brunswick County Board of Education, the Town of Leland, and several areas of concentrated employment exceeding 5,000 jobs per square mile. High concentrations of jobs are located outside of the Town in Brunswick County, with several areas of concentrated employment exceeding 5,000 jobs per square mile. This is one of the primary job centers in Brunswick County, which is the highest concentration of employment density in Brunswick County.

Employment density in Brunswick County is highest south of the Town in the Belville area, which is one of the primary job centers in Brunswick County, with several areas of concentrated employment exceeding 5,000 jobs per square mile. High concentrations of jobs are located outside of the Town in Brunswick County, with several areas of concentrated employment exceeding 5,000 jobs per square mile. This is one of the primary job centers in Brunswick County, which is the highest concentration of employment density in Brunswick County.

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4.3 Natural Environment

Natural Resources

Streams and Wetlands

The Town limits include more than 3,400 acres of wetlands within the Town, including Indian Creek, Cartwheel Branch, and over large stream systems. Four conservation areas are located on the Cape Fear River and along the Tributaries of the Cape Fear River. Floodplains are located within the Town limits, including more than 2,900 acres east of the River. The Town recently identified six sites for implementation of stormwater best management practices (BMPs). These are the Brunswick River/Cape Fear River Marshes, managed by the North Carolina Department of Environmental Quality, located southwest of the Town. The Reaves Chapel Preserve, owned by the North Carolina Coastal Land Trust, is located near the intersection of Cedar Hill Road and Valentine Way, and is located in the southern portion of the Town.Flooding

Flooding is a recognized problem within the Town, with minor and major storm events during both minor and major storm events. The Town recently identified six sites for implementation of stormwater best management practices (BMPs). The largest site is contained within the Kerr-McGee Site, where a park and wetland conservation area is included within the Town limits. The other sites are located along major streams and wetlands associated with the Town limits.

Natural Environment

Natural Resources

Streams and Wetlands

The Town limits include more than 2,800 acres of floodplains, which are located along the Cape Fear River and major stream systems within the Town. The Town recently identified six sites for implementation of stormwater best management practices (BMPs). The largest site is contained within the Kerr-McGee Site, where a park and wetland conservation area is included within the Town limits. The other sites are located along major streams and wetlands associated with the Town limits.
Map 4. Natural Resources in the Town of Navassa

Legend

- Town of Navassa
- Kerr-McGee Site
- 100-Year Floodplain
- Managed Areas
- Natural Heritage Program
- Wetlands

Source(s):
- Brunswick County GIS, ESRI, FEMA, NCDEQ, NCDOT, NCONEMAP
- June 2022
Built Environment

Understanding the existing built environment is critical when determining the location of new connections. This Plan considers current land use and zoning and the existing road network, as well as current annual average daily traffic (AADT) counts that provide information on road use. The non-motorized transportation network is limited but offers insight on the importance of local roads.

Land Use and Zoning

The Town is divided into the 12 zoning districts as shown in Map 5.

Davis Chapel Missionary Baptist Church on Main Street in Navassa

The Town includes nearly 7,700 acres in Town of Navassa

<table>
<thead>
<tr>
<th>Zoning Districts</th>
<th>Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural or Recreational</td>
<td>3,500</td>
</tr>
<tr>
<td>Residential</td>
<td>2,500</td>
</tr>
<tr>
<td>Planned Unit Developments</td>
<td>1,500</td>
</tr>
<tr>
<td>Business or Industrial</td>
<td>1,000</td>
</tr>
</tbody>
</table>

The Town limits include nearly 7,700 acres in Town of Navassa.
Town of Navassa Zoning

Legend

CR - Conservation and Recreation
RU - Rural
R-20 - Low Density Single-Family Residential
R-15 - Low Density Single-Family Residential
R-10 - Moderate Density Single-Family Residential
R-6 - High Density Single-Family
R-MF - Multiple-Family Residential
NB - Neighborhood Business
GB - General Business
LI - Light Industrial
HI - Heavy Industrial
PUD - Planned Unit Development

Source(s):
Brunswick County GIS, ESRI, and NCDOT
June 2022
Table 3 presents 2019 annual average daily traffic (AADT) for the Town.

### TABLE 3. ANNUAL AVERAGE DAILY TRAFFIC

<table>
<thead>
<tr>
<th>ROUTE NAME</th>
<th>LOCATION OF COUNT</th>
<th>AADT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mt. Misery Road (SR 1426) South of Cedar Hill Road (SR 1430)</td>
<td>6,200</td>
<td></td>
</tr>
<tr>
<td>Mt. Misery Road (SR 1426) North of Cedar Hill Road (SR 1430)</td>
<td>6,900</td>
<td></td>
</tr>
<tr>
<td>Cedar Hill Road (SR 1430) North of Royster Road (SR 1431)</td>
<td>2,700</td>
<td></td>
</tr>
<tr>
<td>Cedar Hill Road (SR 1430) North of Old Mill Road (SR 1432)</td>
<td>2,900</td>
<td></td>
</tr>
<tr>
<td>Cedar Hill Road (SR 1430) East of Mt. Misery Road (SR 1426)</td>
<td>1,400</td>
<td></td>
</tr>
<tr>
<td>Royster Road (SR 1431) East of Cedar Hill Road (SR 1430)</td>
<td>220*</td>
<td></td>
</tr>
<tr>
<td>Old Mill Road NE (SR 1432)</td>
<td>1,300</td>
<td></td>
</tr>
<tr>
<td>Old Mill Road NE (SR 1432) East of Lincoln Road (SR 1435)</td>
<td>1,300</td>
<td></td>
</tr>
<tr>
<td>Broadway Street NE</td>
<td>1,600</td>
<td></td>
</tr>
<tr>
<td>North Navassa Road (SR 1435) South of Old Mill Road (SR 1432)</td>
<td>3,100</td>
<td></td>
</tr>
<tr>
<td>North Navassa Road (SR 1435) North of Village Road (SR 1472)</td>
<td>5,100</td>
<td></td>
</tr>
<tr>
<td>North Navassa Road (SR 1435) East of Old Mill Road NE (SR 1432)</td>
<td>2.200</td>
<td></td>
</tr>
<tr>
<td>Main Street (SR 1434) South of Old Mill Road (SR 1432)</td>
<td>1,600</td>
<td></td>
</tr>
<tr>
<td>Daniels Road (SR 1443) North of North Navassa Road (SR 1435)</td>
<td>1,600</td>
<td></td>
</tr>
<tr>
<td>Daniels Road (SR 1443) North of North Navassa Road (SR 1435)</td>
<td>1,600</td>
<td></td>
</tr>
</tbody>
</table>

Table note: All AADT counts are as of 2019 unless otherwise noted.

*Data is from 2015 count

Source: NCDOT, 2015 and NCDOT, 2019c

Apart from I-140/Wilmington Bypass, the majority of the Town's roads have speed limits that range from 20 miles per hour (mph) to 45 mph. Many low-speed roads (less than 35 mph) are located south of Old Mill Road in residential areas.

### TABLE 2. TOWN OF NAVASSA WMPO ROADWAY FUNCTIONAL CLASSIFICATIONS

<table>
<thead>
<tr>
<th>STREETF NAME</th>
<th>WMPO FUNCTIONAL CLASSIFICATION</th>
<th>SPEED LIMIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>I-140 Interstate 70</td>
<td>Minor Arterial</td>
<td>70</td>
</tr>
<tr>
<td>Old Mill Road NE (SR 1432)</td>
<td>Minor Arterial</td>
<td>70</td>
</tr>
<tr>
<td>South Navassa Road (SR 1435)</td>
<td>Major Collector</td>
<td>45</td>
</tr>
<tr>
<td>North Navassa Road (SR 1435)</td>
<td>Minor Arterial</td>
<td>55</td>
</tr>
<tr>
<td>Old Mill Road NE (SR 1432)</td>
<td>Major Collector</td>
<td>45</td>
</tr>
<tr>
<td>Main Street (SR 1434)</td>
<td>1,300</td>
<td></td>
</tr>
</tbody>
</table>

WMPO = Wilmington Urban Area Metropolitan Planning Organization

Source: WMPO, 2019; Brunswick County, n.d.
Freight

CSX Transportation operates a freight rail

Non-Roadway Transportation Network

NAVASSA COLLECTOR STREET PLAN August 2022

RideMICRO. Allows residents to book on-demand rides from a virtual stop within a set of zones. Runs weekdays from 8:00 am to 5:00 pm and requires 2 hour advanced reservation.

Routing:

1. From N.C. 343 to Water Street/Brooklyn Street, runs in west direction through the Town, and points west of the Town, runs in east-west direction through the Town.

2. Service is available through Brunswick Transit and the Brunswick Transit System. On-demand available to Town residents by Wave Transit. On-demand service is made available in the Town since September of 2020.

3. There has been no fixed-route transit service for the Town and serves as the base for transportation and serves as the base for transportation.

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3. There has been no fixed-route transit service for the Town and serves as the base for transportation.
4.5 Commuting Patterns and Characteristics

Commuting patterns into and out of the Town were analyzed as part of evaluating collector street need and optimal locations. Commuting modes for the Town include alone by auto, carpooling, public transportation, and bicycle/pedestrian. According to the Longitudinal-Employer Household Dynamics (LEHD) dataset in 2019, 168 workers were employed in the Town, of those workers, 163 lived outside the Town, 16 lived and worked within the Town limits (L/S), and 5 workers were employed in the Town and live outside the Town. Workers travel to and from Brunswick and New Hanover County areas outside of Navassa. Workers travel to town the 65 who commute into the Town from work (696 workers) in the Town and leave for work (163 workers) live in the Town. The bar chart below shows the inflow/outflow of workers from and into the Town.
Stakeholder Engagement and Public Outreach

What is a collector street?

Collector streets are major and minor roads that connect local roads and streets with arterials. Collector streets provide less mobility than arterials at 20 and 45 miles per hour.

The posted speed limit on collector streets is usually between 20 and 45 miles per hour.

Collector streets balance mobility with land access.
Stakeholder engagement and public outreach were key components of the planning process.

5.1 Stakeholder Engagement

The project team identified a Steering Committee of project stakeholders early in the planning process. The Steering Committee worked with the project team to identify appropriate methods for public outreach. Including local officials and town staff as well as Wilmington Urban Area Metropolitan Planning Organization (WMPO) and North Carolina Department of Transportation (NCDOT) staff, the Steering Committee met three times throughout the planning process with the objectives outlined in Table 4.

<table>
<thead>
<tr>
<th>MEETING</th>
<th>DATE</th>
<th>OBJECTIVES</th>
</tr>
</thead>
</table>
| Meeting 1 | December 8, 2021 | • Review the role of the Steering Committee  
• Establish a set of vision and goals for this Plan  
• Discuss existing conditions  
• Review the 2004 collector streets  
• Identify known development areas, problem areas, and needs of the Town |
| Meeting 2 | February 16, 2022 | • Finalize the vision and goals for this Plan  
• Present and review preliminary results from the public survey  
• Review proposed collector streets  
• Review proposed typical sections  
• Review and provide input on potential policy recommendation themes |
| Meeting 3 | June 23, 2022 | • Present the draft plan and draft plan presentation materials to the Steering Committee for their review and comment prior to presenting to Town Council for approval |

**STEERING COMMITTEE**

**Town of Navassa**
- Eulis Willis, Mayor
- Marcell Hatten, Planning Board
- Claudia Bray, Town Administrator
- William Ballard, Town Councilman
- Marvin Ballard, Planning Board
- Barnes Sutton, Former Town Planner

**WMPO**
- Rachel McIntyre, PLA, Associate Transportation Planner

**NCDOT District 3**
- Ben Hughes, PE, District Engineer
Public Outreach

Public outreach for this Plan included an online survey, an in-person public meeting, and a virtual public meeting. A summary of the public outreach undertaken for this Plan follows. The survey and a full summary of results are presented in Appendix B.

Public Survey

Using the online engagement platform MetroQuest, the project team developed a survey to solicit feedback from the public regarding their priorities. Participants were asked to rank their top five priorities from the following: environmental protection, congestion reduction, equity, connectivity, resiliency, transportation safety, community growth, and multi-modal options.

The survey was advertised on the Town’s website, on the WMPO’s website, and using the Town’s phone notification system. Flyers containing a quick response (QR) code for the survey were available at the Town’s Community Center. A hardcopy version of the survey was also available at the Town’s Community Center. A hardcopy version of the survey was available at the Town’s Community Center.

Copies of the survey were provided for the plan available for the public to view. Copies of the visions and goals surveys, and copies of the vision and goals with information on this Plan, were placed in these meeting areas.

The MetroQuest survey was available from January 25, 2022 through March 20, 2022. During this time, 198 individuals visited the MetroQuest survey site, 52 individuals completed the online survey, and 4 individuals completed hardcopy surveys.

The top five priorities for collector streets, based on the 56 responses, are:

- Connectivity: 39 votes
- Transportation Safety: 38 votes
- Community Growth: 32 votes
- Environmental Protection: 30 votes
- Congestion Reduction: 28 votes

Public Meetings

The project team held two public meetings to present the vision and goals, recommended collector streets, and proposed typical sections to residents. An in-person, open house style meeting was held on March 9, 2022, at the Town’s Community Center and an additional in-person meeting was held on March 9, 2022, at the Town’s Community Center.

At the in-person meeting, the project team gave a narrated presentation and had maps, tables, surveys, and copies of the vision and goals available for the public to view. Copies of the meeting materials are provided in Appendix C.

Two individuals attended the in-person public meeting. No members of the public joined the virtual meeting.
Methodology
Using a combination of source data and the six-step process outlined in this section, the project team determined the need for, and placement of, proposed collector streets for the Town.

6.1 Source Data

Using a combination of source data and the six-step process outlined in this section, the project team determined the need for, and placement of, proposed collector streets for the Town.
Traffic Analysis Zones (TAZs) are areas delineated by state or local transportation officials, typically using census data to tabulate traffic-related data. These data are used to inform decision-making on transportation projects, including the expansion of collector streets.

The seven TAZs for the Town of Navassa, as shown in Map 6, are used to illustrate current traffic patterns and show where future collector streets could be proposed. Because of atypical travel patterns in 2020, accounting for seasonal or daily fluctuations, the AADT data present the traffic patterns for this analysis. StreetLight data were used to provide traffic distribution information. The project team selected 2019 as the base year for data collection. The StreetLight platform provides current travel trends based on on-demand mobility, and generates anonymous data from location-based services on smartphones.

Existing trips are shown in Map 6. The data collection locations and a summary of entering and exiting each TAZ are presented, along with the number of trips entering and exiting each TAZ. Traffic volumes on an average day in 2019 were used to provide traffic distribution data. StreetLight data were used to provide traffic distribution information. The project team selected 2019 as the base year for data collection. The StreetLight platform provides current travel trends based on on-demand mobility, and generates anonymous data from location-based services on smartphones.

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### TABLE 5. ENTERING TRIPS FROM STREETLIGHT DATA

<table>
<thead>
<tr>
<th>ENTRY POINT</th>
<th>TAZ 1</th>
<th>TAZ 2</th>
<th>TAZ 3</th>
<th>TAZ 4</th>
<th>TAZ 5</th>
<th>TAZ 6</th>
<th>TAZ 7</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dogwood Road (A)</td>
<td>1</td>
<td>330</td>
<td>91</td>
<td>340</td>
<td>40</td>
<td>2</td>
<td>3</td>
<td>809</td>
</tr>
<tr>
<td>Mt. Misery Road (B)</td>
<td>1,868</td>
<td>617</td>
<td>1,887</td>
<td>347</td>
<td>100</td>
<td>103</td>
<td>96</td>
<td>5,018</td>
</tr>
<tr>
<td>Cedar Hill Road (C)</td>
<td>262</td>
<td>241</td>
<td>215</td>
<td>100</td>
<td>86</td>
<td>97</td>
<td>97</td>
<td>1,098</td>
</tr>
<tr>
<td>Old Mill Road (D)</td>
<td>38</td>
<td>10</td>
<td>49</td>
<td>68</td>
<td>175</td>
<td>64</td>
<td>6</td>
<td>410</td>
</tr>
<tr>
<td>Navassa Road (E)</td>
<td>230</td>
<td>686</td>
<td>648</td>
<td>780</td>
<td>1,059</td>
<td>1,759</td>
<td>868</td>
<td>6,030</td>
</tr>
</tbody>
</table>

Trip data from StreetLight Data, Inc.
TAZ = Traffic Analysis Zones
1. Letters correspond to Streetlight Data in Map 7.

### TABLE 6. EXITING TRIPS FROM STREETLIGHT DATA

<table>
<thead>
<tr>
<th>EXIT POINT</th>
<th>TAZ 1</th>
<th>TAZ 2</th>
<th>TAZ 3</th>
<th>TAZ 4</th>
<th>TAZ 5</th>
<th>TAZ 6</th>
<th>TAZ 7</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dogwood Road (A)</td>
<td>1</td>
<td>372</td>
<td>117</td>
<td>411</td>
<td>63</td>
<td>17</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>Mt. Misery Road (B)</td>
<td>2,144</td>
<td>626</td>
<td>2,117</td>
<td>522</td>
<td>214</td>
<td>213</td>
<td>201</td>
<td>6,037</td>
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<tr>
<td>Cedar Hill Road (C)</td>
<td>482</td>
<td>443</td>
<td>43</td>
<td>421</td>
<td>43</td>
<td>421</td>
<td>43</td>
<td>421</td>
</tr>
<tr>
<td>Old Mill Road (D)</td>
<td>27</td>
<td>15</td>
<td>46</td>
<td>36</td>
<td>192</td>
<td>90</td>
<td>17</td>
<td>423</td>
</tr>
<tr>
<td>Navassa Road (E)</td>
<td>113</td>
<td>761</td>
<td>733</td>
<td>873</td>
<td>1,034</td>
<td>1,759</td>
<td>957</td>
<td>6,240</td>
</tr>
</tbody>
</table>

Trip data from StreetLight Data, Inc.
TAZ = Traffic Analysis Zones
1. Letters correspond to Streetlight Data in Map 7.
Six-Step Process

Using the data sources previously described, the project team undertook the following six-step process to determine the Town’s need for collector streets, and where those collector streets would most improve traffic conditions or provide needed access alternatives.

Step 1: Identify Traffic Analysis Zones

The study area incorporates seven TAZs as shown in Map 6. For each TAZ, the project team evaluated housing, trips, and income and how those factors may affect potential future trips.

Step 2: Map Future Land Use

The project team used the Town of Navassa Future Land Use Plan 2011-2030 (North Carolina Department of Commerce, 2012) to identify and map areas targeted for residential and mixed-use development, shown in Map 7.

Step 3: Remove Natural Resources

Natural resource areas, including wetlands and conservation areas, were removed to maintain and protect these resources and because they are unlikely to be developed and increased traffic. The results are shown in Map 8. Specifically:

- The eastern portion of the Town, closest to the Cape Fear River, is designated as conservation or wetland areas.
- Conservation areas have varying levels of protection against development.
- Conservation or wetland areas, with and without wetlands, were removed from the study area.

Step 4: Create a Grid with Households per 10 Acres

The remaining residential and mixed-use development areas were used to predict future trips based on a household density grid. The land area was broken into 10-acre subunits. The project team used the Brunswick County Unified Development Ordinance (UDO; Brunswick County, 2015) in conjunction with the future land use designations to determine the number of future households within each 10-acre subunit, as shown in Map 9.

Step 5: Identify Trip Generators – Daily Trips per 10 Acres

Step 5 used the WMPO’s TDM to calculate the number of trips a given household would likely make using the grid created in Step 4. The TDM provides household characteristics such as household size, income, and vehicles. Based on this information, the project team estimated three trips per day per household.

Step 6: Determine 2022 Proposed Collector Streets

The final step in developing the 2022 proposed collector streets consisted of overlaying the 2004 proposed collector streets on a map containing wetlands, the approved and proposed future developments (housing and parks) shown in Map 2 (see Section 3.1), and the daily trips per 10-acre subunit estimated in Map 9. The proposed collector streets were developed using a map combining these data. The project team used the Brunswick County Planning and Development Ordinance (LCDO) to determine the allowable density for residential and mixed-use development areas. These allowable densities were applied to each subunit to predict the number of trips generated per land use type for the Town. The results are shown in Map 10.

Proposed roadway networks within the approved housing developments were taken into consideration during this process. Using the data collected in this Plan, the proposed collectors of the 2004 Plan were re-evaluated and a new network was developed. The proposed collector streets are shown in Map 11.

The most notable difference between the two plans is that this Plan avoids the proposed Cedar Lakes Resort and Indian Creek housing developments, and large wetlands in the western portion of the Town.
Map 6: Step 1 - Traffic Analysis Zones (with Enter and Exit Trip Data)
Map 7 - Step 2 - Future Land Use (2030)

Legend
- CR - Conservation
- GC - General Commercial
- HI - Heavy Industrial
- LDR - Low Density Residential
- LI - Light Industrial
- MFR - Multi-Family Residential
- OC - Office/Commercial
- OI - Institutional
- REC - Recreational
- RR - Rural Residential
- WC - Wetland Conservation

Source(s): Brunswick County GIS, ESRI, and NCDOT June 2022
Map 8. Step 3 – Future Land Use – Natural Resources Removed

Legend:
- LDR - Low Density Residential
- MDR - Medium Density Residential
- MFR - Multi-Family Residential
- RR - Rural Residential
- RD - Low Density Residential
- MD - Medium Density

Source(s): Brunswick County GIS, ESRI, and NCDOT June 2022
Map 9. Step 4 – Households per 10 Acres Based on Future Land Use

Legend

- LDR - Low Density Residential - 29/10 ac
- MDR - Medium Density Residential - 58/10 ac
- MFR - Multi-Family Residential - 136/10 ac

Source(s):
Brunswick County GIS, ESRI, and NCDOT June 2022

Data extrapolated from Brunswick County Unified Development Ordinance (Brunswick County, 2015) and Town of Navassa Future Land Use Development Ordinance (Brunswick County, 2012)
Map 10. Step 5 – Daily Trips per 10 Acres

Legend

Daily Trips per 10 Acres

- 140
- 408
- 174
- 87

Source(s): Brunswick County GIS, ESRI, and NCDOT

June 2022
Map 11. Step 6 – Determine 2022 Proposed Collector Streets

Legend

- Existing Collector Street
- Proposed Collector Street
- Proposed Park
- Proposed Park/Park
- Proposed Park (model 2004 Collector Street)
- Multiuse Path (DA-funded/In progress)
- Multiuse Path (in progress)
- Approved Residential
- Proposed Residential
- Approved Park
- Proposed Park
- Approved Park/Park
- Kerr-McGee Site
- Ivester/Eastbrook Connector
- Victoria Lane Extension
- Sandy Lane Extension
- Sandy Lane Extension (multiuse path)
- Sandy Lane Extension (model 2004 Collector Street)
- Sandy Lane Extension (model 2004 Collector Street, modified)
- Sandy Lane Extension
- Sandy Lane Extension (model 2004 Collector Street)
- Sandy Lane Extension (model 2004 Collector Street, modified)
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- Sandy Lane Extension
- Sandy Lane Extension (model 2004 Collector Street)
- Sandy Lane Extension (model 2004 Collector Street, modified)
- Sandy Lane Extension
- Sandy Lane Extension (model 2004 Collector Street)
- Sandy Lane Extension (model 2004 Collector Street, modified)
- Sandy Lane Extension
- Sandy Lane Extension (model 2004 Collector Street)
Recommendations
The project team used the six-step process outlined in Section 6 to re-evaluate the collector streets proposed in the 2004 Plan. The resulting 12 proposed collector streets account for known constraints, including future anticipated growth and development, and approximate length of each. The proposed collector streets were presented to the Steering Committee for review and comment during the second Steering Committee meeting. Minor adjustments were made based on the meeting discussions.

The 12 proposed collector streets were presented to the Steering Committee for review and comment during the second Steering Committee meeting. Minor adjustments were made based on the meeting discussions. Map 12 shows the resulting proposed collector streets.

The proposed collector streets fall into two categories: existing needs and future needs.

### Existing Needs

- **Ivester/Eastbrook Connector (No. 1):**
  - The Ivester/Eastbrook Connector would provide a much-needed second access at Seaboard Industrial Park Drive for homes along Magnolia Drive, Franklin Lane, Beulah Lane, and Dorsey Lane. Currently, residents must cross CSX railroad tracks to enter or exit Magnolia Drive. If a train is stopped or delayed at Magnolia Drive, residents are stranded, causing inconvenience and potential safety concerns. This connector would also provide access to Main Street via the Sandy Lane Extension.

- **Victoria Lane Extension (No. 2):**
  - The Victoria Lane Extension would provide residents a second entrance and exit into Leland. Currently, Victoria Lane connects only to Old Mill Road. The proposed collector street would extend Victoria Lane to the south, providing a connection to the Ivester/Eastbrook Connector. Only one Old Mill Road would exist, providing Victoria Lane to the street.

- **Sandy Lane Extension (No. 3):**
  - The Sandy Lane Extension would extend existing Sandy Lane to the intersection of Old Mill Road and Main Street. This proposed collector would also help move traffic to residents north of Old Mill Road. Sandy Lane provides a connection to the Ivester/Eastbrook Connector. Only one Old Mill Road would exist, providing Sandy Lane to the street.

- **Park/Pine Valley/Brooklyn Connector (No. 4):**
  - The Park/Pine Valley/Brooklyn Connector is both an existing collector (4a) and a future collector (4b). The existing need portion of this collector (4a) would connect residents on North Navassa Road to Main Street via the Heritage Park Connector. The future need portion of this collector (4b) would connect residents on North Navassa Road to Main Street via the Heritage Park Connector. The future need portion of this collector (4b) would connect residents on North Navassa Road to Main Street via the Heritage Park Connector.

### Future Needs

- **Daniels Road Connector (No. 5):**
  - The Daniels Road Connector should be constructed as part of the new development and the extension of Old Mill Road. The Daniels Road Connector would provide a connection to North Breeden Road.

- **Valentine Way Extension (No. 7):**
  - The Valentine Way Extension would provide a connection to North Breeden Road.

- **Westpark/Freeway/Brooklyn Connector (No. 8):**
  - The Westpark/Freeway/Brooklyn Connector would provide a connection to North Breeden Road.

- **Estabrook Road Connector (No. 9):**
  - The Estabrook Road Connector would provide a connection to North Breeden Road.

- **Westpark/Freeway/Brooklyn Connector (No. 10):**
  - The Westpark/Freeway/Brooklyn Connector would provide a connection to North Breeden Road.

- **Westpark/Freeway/Brooklyn Connector (No. 11):**
  - The Westpark/Freeway/Brooklyn Connector would provide a connection to North Breeden Road.

- **Westpark/Freeway/Brooklyn Connector (No. 12):**
  - The Westpark/Freeway/Brooklyn Connector would provide a connection to North Breeden Road.
The Valentine Way Extension and Heritage Park Connector would be needed to serve the Cedar Lakes Resort, Cedar Hill African American Heritage Park, and Riverbend at Cedar Hill.

- Cobbs Way Extension
- Ridge Road Extension
- Wide Way Extension
- Cedar Hill/Wide Way Extension Connector

Without the construction of the proposed developments north and east of Cedar Hill Road, the need for the Cobbs Way Extension, Ridge Road Extension, Wide Way Extension, or Cedar Hill/Wide Way Extension Connector would be limited.

### TABLE 7. PROPOSED COLLECTOR STREET NETWORK

<table>
<thead>
<tr>
<th>LABEL</th>
<th>PROPOSED COLLECTOR STREET</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>Existing Sandy Lane Extension</td>
<td>Connects the West End Extension to Main Street and provides a connection between Tresidder Way and Sandy Lane</td>
</tr>
<tr>
<td>1.7</td>
<td>Existing West End Extension</td>
<td>Provides a secondary outlet for residents in the area of Magnolia Drive and Dorsey Lane by extending Victoria Lane to the Town's limits with potential connection to Shugroon Drive NE in Leland</td>
</tr>
<tr>
<td>2</td>
<td>Existing Victoria Lane Extension</td>
<td>Connects the West End Extension to Main Street and provides a connection between Tresidder Way and Sandy Lane</td>
</tr>
<tr>
<td>3</td>
<td>Existing Sandy Lane Extension</td>
<td>Connects the West End Extension to Main Street and provides a connection between Tresidder Way and Sandy Lane</td>
</tr>
<tr>
<td>4</td>
<td>Existing West End Extension</td>
<td>Provides a secondary outlet for residents in the area of Magnolia Drive and Dorsey Lane by extending Victoria Lane to the Town's limits with potential connection to Shugroon Drive NE in Leland</td>
</tr>
<tr>
<td>4A</td>
<td>Existing Park/Pine Valley/Brooklyn Connector east of North Navassa Road</td>
<td>Connects Pine Valley Road, Park Avenue, and Brooklyn Street to North Navassa Road</td>
</tr>
<tr>
<td>4B</td>
<td>Existing Park/Pine Valley/Brooklyn Connector west of North Navassa Road</td>
<td>Connects Pine Valley Road, Park Avenue, and Brooklyn Street to North Navassa Road</td>
</tr>
<tr>
<td>5</td>
<td>Future Daniels Road Connector</td>
<td>Connects Daniels Road to the Town's western limits and provides a connection to Daniels Road west of the Town limits, it provides a potential connection to Daniels Road NE in unincorporated Brunswick County</td>
</tr>
<tr>
<td>6</td>
<td>Future Heritage Park Connector</td>
<td>Connects Cedar Lakes Resort and the proposed Moze Heritage Park to North Navassa Road</td>
</tr>
<tr>
<td>7</td>
<td>Future Valentine Way Extension</td>
<td>Connects the Wide Way Extension to Cedar Hill Road and Cedar Hill Road to the Heritage Park Connector</td>
</tr>
<tr>
<td>8</td>
<td>Future Heritage Park Connector</td>
<td>Connects the Wide Way Extension to Cedar Hill Road and Cedar Hill Road to the Heritage Park Connector</td>
</tr>
<tr>
<td>9</td>
<td>Future Cobbs Way Extension</td>
<td>Connects the Cobbs Way Extension to the Ridge Road Extension</td>
</tr>
<tr>
<td>10</td>
<td>Future Ridge Road Extension</td>
<td>Connects Mt. Misery Road to Ridge Road</td>
</tr>
<tr>
<td>11</td>
<td>Future Wide Way Extension</td>
<td>Connects the Wide Way Extension to Ridge Road</td>
</tr>
<tr>
<td>12</td>
<td>Future Cedar Hill/Wide Way Extension Connector</td>
<td>Connects Cedar Hill Road to the Wide Way Extension, Provides an alternate route to Cedar Hill Road</td>
</tr>
</tbody>
</table>

**Approximate Length (Miles)**

<table>
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<tr>
<th>LABEL</th>
<th>PROPOSED COLLECTOR STREET</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.5</td>
<td>Existing Ivester/Eastbrook Connector</td>
<td>Provides a secondary outlet for residents in the area of Magnolia Drive and Dorsey Lane by extending Victoria Lane to the Town's limits with potential connection to Shugroon Drive NE in Leland</td>
</tr>
<tr>
<td>2.0</td>
<td>Existing Victoria Lane Extension</td>
<td>Connects the West End Extension to Main Street and provides a connection between Tresidder Way and Sandy Lane</td>
</tr>
</tbody>
</table>

**Note:**
- The Cobbs Way Extension would be needed to serve the Cedar Lakes Resort, Cedar Hill African American Heritage Park, and Riverbend at Cedar Hill.
- The Valentine Way Extension and Heritage Park Connector would be needed to serve the Cedar Lakes Resort, Cedar Hill African American Heritage Park, and Riverbend at Cedar Hill.
Map 12. 2022 Proposed Collector Streets

Legend:
- Existing Collector Street
- Proposed Collector Street
- Existing Reservoir
- Approved Reservoir
- Existing Park
- Approved Park
- Proposed Park
- Proposed Reservoir
- Multiuse Path (DA-funded/In progress)
- Multiuse Path (existing)

Source(s):
Brunswick County GIS, ESRI, and NCDOT June 2022
Proposed Use of Roadway Typical Sections

NCDOT's published highway typical sections includes 57 typical cross-sections for use in road planning (NCDOT, 2019b). Using the minimum design standards in accordance with NCDOT highway typical sections 2F and 2P, this Plan presents six typical sections for use in designing the collector streets for the Town.

The typical sections presented in this Plan include roadways both with and without curb and gutter, for use as follows:

- **Without curb and gutter.** Typical sections without curb and gutter use wide grassy areas or ditches to carry and infiltrate stormwater. Illustrations of three variations are shown on page 45.

- **With curb and gutter.** Curb and gutter typical sections would most likely be used in residential developments where stormwater drainage can be carried through a closed system to a stormwater storage area or a stormwater pond. Illustrations of three variations are shown on page 46.

These typical sections are specifically for use within Coastal Area Management Act counties and prescribe design speeds of 25 to 45 miles per hour (mph) for streets and prescribed speeds of 25 to 45 miles per hour (mph) for streets within Coastal Area Management Act counties. Details and specifications for each of the six typical sections are presented in Appendix D.

The selection and/or assignment of typical sections for future collector streets should align with future bike/ped plan recommendations. The typical sections presented in this Plan in designing the collector streets for the Town include roadways both with and without curb and gutter. This Plan presents six typical sections for use in accordance with NCDOT’s published highway typical sections 2F and 2P, minimum design standards in road planning (NCDOT, 2019b).
Typical Sections without Curb and Gutter

For details, refer to Appendix D.
Typical Sections with Curb and Gutter

For details, refer to Appendix D.
Existing local and state policies and guidelines with the potential to influence the development and construction of collector streets were reviewed. Those relevant to collector streets for the Town are outlined below. Additionally, the project team developed recommended modifications to existing policies and guidelines that could be implemented by adding these modifications to local policies and/or ordinances. Lastly, the project team proposes four new policy topics that will support the Town meeting its goals for this Plan. The inclusion of the existing policies and guidelines, modifications to policies and guidelines, and new policies in Town ordinances is an integral part of accomplishing the goals outlined in this Plan.

**Existing Policies and Guidelines**

Several local and state policies and programs related to roadway design and stormwater management are described in the following subsections. These include the NCDOT Complete Streets Policy (2019a), the NCDOT Traditional Neighborhood Development (TND) Guidelines (2000), the Town of Navassa Phase II Stormwater Implementation Plan (North Carolina Department of Commerce, 2007), and the North Carolina Resilient Coastal Communities Program (RCCP).

**NCDOT Complete Streets Policy**

NCDOT adopted a Complete Streets policy in 2009 that was later updated in 2019. Complete Streets incorporate all modes of transportation when building new projects or making improvements to existing infrastructure. Complete Streets are designed to be safe and comfortable for all users, including pedestrians, bicyclists, transit riders, motorists, and individuals of all ages and capabilities. Designing with Complete Street principles requires consideration of the impact of street patterns on trip length, connectivity between resources, intersection use, and the overall user experience. When building new projects, NCDOT requires project submitters to note multimodal elements that are to be evaluated as part of the proposed project. Streets that incorporate diverse, multimodal elements that enhance safety by promoting low speed and traffic free zones, pedestrian safety, and improve transit service opportunities, and enhance encourage walking and bicycling, enhance the overall experience of the user. Both cyclists and pedestrians can benefit from a network of streets designed in accordance with the Complete Streets policy. Additional benefits include improved public transportation services, improved health advantages, and economic revitalization. Collector streets should be designed with Complete Street principles in mind to ensure that new collector streets fully accommodate the needs of all users, including pedestrians and bicyclists.

**NCDOT Traditional Neighborhood Development (TND) Guidelines**

The NCDOT Traditional Neighborhood Development (TND) Guidelines (2000) aim to encourage walking and bicycling, enhance transit service opportunities, and improve traffic safety by promoting low speed and cautious driving while fully accommodating the needs of all users, including pedestrians, bicyclists, transit riders, motorists, and individuals of all ages and capabilities. Complete Streets are designed to be safe and comfortable for all users, including pedestrians, bicyclists, transit riders, motorists, and individuals of all ages and capabilities. When building new projects, NCDOT requires project submitters to note multimodal elements that are to be evaluated as part of the proposed project. Streets that incorporate diverse, multimodal elements that enhance safety by promoting low speed and traffic free zones, pedestrian safety, and improve transit service opportunities, and enhance encourage walking and bicycling, enhance the overall experience of the user. Both cyclists and pedestrians can benefit from a network of streets designed in accordance with the Complete Streets policy. Additional benefits include improved public transportation services, improved health advantages, and economic revitalization. Collector streets should be designed with Complete Street principles in mind to ensure that new collector streets fully accommodate the needs of all users, including pedestrians and bicyclists.

**NCDOT Phase II Stormwater Implementation Plan**

The Town of Navassa Phase II Stormwater Implementation Plan (North Carolina Department of Commerce, 2007) describes the management of stormwater in the Town of Navassa. The NCDOT guidelines for stormwater management are described in the following subsections. These include the NCDOT guidelines and regulations related to stormwater design and stormwater management. Several local and state policies and programs were reviewed. These regulations related to stormwater design and stormwater management are described in the following subsections. These include the NCDOT guidelines and regulations related to stormwater design and stormwater management.
The Town of Navassa Phase II Stormwater Implementation Plan (North Carolina Department of Commerce, 2007) establishes and defines the Town’s compliance with its National Pollutant Discharge Elimination System (NPDES) municipal separate storm sewer system (MS4) Permit and the applicable provisions of the Clean Water Act to meet the federal standard of reducing pollutants in stormwater runoff to the maximum extent practicable. In 2010, the Town adopted the Town of Navassa Phase II Stormwater Ordinance (Town of Navassa, 2010), which establishes minimum requirements and procedures to control the adverse effects of increased post-development stormwater runoff and nonpoint source pollution associated with new development. Stormwater runoff and impervious areas, such as roads, contribute to impervious development and redevelopment built-upon developed areas.

Roadway design considerations for future collector streets must mitigate stormwater impacts. Resilient Coastal Community Program

In March 2021, the North Carolina Department of Environmental Quality’s (NCDEQ) Division of Environmental Quality’s (NCDEQ’s) Division of Environmental Management announced that $675,000 would be granted through the 2021 Resilient Coastal Community Program (RCCP) to local governments throughout the 20 coastal counties. RCCP aims to replicate the community-driven process for setting coastal resilience goals, enhancing community resilience to coastal hazards, and identifying and prioritizing projects to improve existing and needed local capabilities. The RCCP is funded through the North Carolina State Legislature and the National Fish and Wildlife Foundation.

The four phases of the program include:

- Phase 1: Community Engagement and Risk and Vulnerability Assessment
- Phase 2: Planning, Project Selection, and Prioritization
- Phase 3: Engineering and Design
- Phase 4: Implementation

The Town of Navassa is a 2021 RCCP participant and is currently in the first two phases of the program. This Plan includes resiliency as a goal, and as the Town moves into the design phase, it should consider local community resilience to coastal hazards. Local governments throughout the Town of Navassa is a 2021 RCCP participant and is currently in the first two phases of the program. This Plan includes:

- Phase 1: Community Engagement and Risk and Vulnerability Assessment
- Phase 2: Planning, Project Selection, and Prioritization
- Phase 3: Engineering and Design
- Phase 4: Implementation

The four phases of the program include: Resilient Coastal Community Program

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Proposed Modifications of Existing Town Policies and Guidelines

Based on the feedback received from the Steering Committee and general best practices, the following modifications to policies and guidelines are recommended for adoption by the Town to ensure proper implementation of this Plan.

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**Subdivision Road Connections**

The Subdivision Ordinance, adopted in 2009 and most recently amended in 2015, currently requires connectivity for major subdivisions (Town of Navassa, 2009). To further enhance connectivity, the Town should consider expanding the connectivity requirements for all subdivisions and developments.

- **Recommendation:** Modify the Town’s Subdivision Ordinance to include all subdivisions and developments.
- **Purpose:** To ensure the distribution of site trips across the transportation network to help manage traffic operations and safety. Connecting subdivisions can also help provide a more comprehensive view of the transportation network to help manage traffic operations and safety.

**Adjoining Property Connections**

Adjoining property connections are addressed in Section 4.3.6 of the Town’s Subdivision Ordinance. The ordinance spells out specific requirements that support adjoining connections and assist with broadening the existing collector street network. Joining adjoining properties also ensures street stub connections to adjoining undeveloped property and connections with existing streets.

- **Recommendation:** The existing requirement in Section 4.3.6 should be carried forward in any future ordinances and applied to all subdivisions and developments.
- **Purpose:** To provide a comprehensive, consistent collector street network that provides alternative transportation options for non-motorized trips and enhances community connectivity by improving access to neighborhoods, streets, and transit systems.

**Adherence to NCDOT Complete Streets Policy**

The NCDOT Complete Streets policy and related NCDOT P6.0 Complete Streets Project Sheet provide guidance and information on multimodal design. The benefits of adhering to the Complete Streets policy include:

- Making it easier for travelers to get where they need to go
- Encouraging alternative transportation options
- Building more sustainable communities
- Improving safety for pedestrians, cyclists, and motorists
- Increasing connectivity between transportation systems

- **Recommendation:** Require that new roads that become part of the collector street network adhere to the NCDOT Complete Streets Policy, which includes multimodal design considerations.
- **Purpose:** To provide a comprehensive, consistent collector street network that provides alternative transportation options that will assist in alleviating roadway congestion. Design considerations ensure that the transportation network is adapted to the needs of all travelers.

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The proposed modifications are designed to enhance connectivity and improve traffic operations and safety. The recommendations aim to ensure that the transportation network is adapted to the needs of all travelers, providing alternative transportation options and improving accessibility to community features and points of interest. The connections provided under this ordinance will improve access for emergency responders, improve community connectivity, and enhance mobility for non-motorized trips and recreation.
Based on the feedback received from the Steering Committee and general best practices, the following new policies and guidelines are recommended for adoption by the Town to ensure proper implementation of this Plan.

**Traffic Calming**

- **Recommendation:** Design new collector streets to include traffic calming components where appropriate, such as maintaining lower speed limits.
- **Purpose:** To create roadways that are or will be built to improve the network. Traffic safety is less of a concern than use of bicycle and pedestrian facilities as users. Traffic calming uses the road design to slow traffic and in turn improve the compliance with traffic laws, making the road safer for all users. This also encourages the use of bicycle and pedestrian facilities, traffic and in turn improves the compliance with traffic laws, making the road safer for all users.

- **Traffic Calming**
  - **Purpose:** To guarantee that development activities  are carried out in their entirety and considered during development activities. By requiring developers to get these streets built as part of the development plan, the Town will ensure that these streets are designed to be safe for all users.

**Connectivity of Collector Streets**

- **Recommendation:** Require private entities to coordinate across properties to allow for future connections.
- **Purpose:** To ensure that collector streets are viewed in their entirety and considered during development activities. Corridors would be developed for planned collector streets that cross property lines, while new collectors would be constructed to provide connections between the local and arterial systems.

**Reduction of Paper Streets**

- **Recommendation:**纸街道或纸道路是指在地图上显示为计划或拟建但尚未建成的街道。如果和当这些纸街道存在，重要的是与开发商合作将这些街道按照计划建成。
- **Purpose:** To make roadways safer by creating roadways that are or were intended to be built to improve the network.

**Resiliency and Environmental Conservation**

- **Recommendation:** Ensure that developments and new streets minimize impacts to floodplains and wetlands. New streets would be required to work with existing floodplains and other stormwater resources. New streets would be required to work with existing floodplains and other stormwater resources. New streets would be required to work with existing floodplains and other stormwater resources. New streets would be required to work with existing floodplains and other stormwater resources.
- **Purpose:** To preserve the existing natural environment.
Implementation Plan
Transportation plans are successful only if they are implemented. The following sections prioritize the proposed collector streets and identify funding sources for their construction. As noted in Section 7.1, some of the proposed collector streets would be constructed by developers as part of new developments. Through adherence to the policies outlined in Section 7.3, those collectors could be easily incorporated into the development plans, which would leave the Town only needing funding for a portion of the proposed collector streets. Figure 8 shows the proposed collector streets in this Plan. Table 8 lists the existing needs in Section 7.1 and shows in detail the need for the proposed collector streets. These facilities are described in Section 7.2, and new development will drive the need for the collector streets needed. Those facilities are described in detail in Section 7.3. The following describes the project prioritization.

### 8.1 Project Prioritization

While local funds and Powell Bill funding are available, the Town’s Collector Street Network requires improvements to maintain its current service levels and accommodate future growth. Numerous funding resources can be used to assist in implementing the Collector Streets and improving the transportation network. These resources include local, state, and federal funding. The following describes the project prioritization.

### 8.2 Funding Opportunities

#### NC State Street-Aid (Powell Bill)

**Powell Bill Funding** is provided by the state of North Carolina to municipalities for use on municipally maintained roads or bike and pedestrian facilities. The funds are allocated annually and distributed twice a year. Historically, the funds have been used primarily to resurface municipal roads. The funds are available for use on municipally maintained roads or for use on municipally maintained roads. They may also be used to plan, construct, and maintain bike paths, greenways, or sidewalks.

Through adherence to the policies outlined in Section 7.3, those collector streets would be constructed by developers as part of new developments. These streets would be constructed at a priority level based on the need for the proposed collector streets. Some of the recommended collector streets are described in Table 8. These facilities are described as existing needs in Section 7.1 and shown in detail in Section 7.3. The proposed collector streets are described in detail in Section 7.2. The need for the collector streets will be prioritized to ensure the transportation network is adequately supported and resilient. The proposed collector streets are part of the new collector street network. The development of a key aspect of getting proposed collector streets built is close coordination with developers. Multiple planned developments will drive the need for the collector streets needed. Those facilities are described in detail in Section 7.3. The following describes the project prioritization.
Transportation Bonds

Many communities across the state of North Carolina have had success funding transportation projects through transportation bonds. Transportation bonds provide communities with funding that can be used on local roadways for improvements such as roadway extensions, roadway connections, sidewalk construction, and new road construction. While they do require voter approval, they also give the public opportunity to identify what is important for local road construction, and they ensure that road improvement projects are used on local roadways for improvements.

TABLE 8. PROPOSED COLLECTOR STREETS

<table>
<thead>
<tr>
<th>PRIORITY (MILES)</th>
<th>COLLECTOR STREET</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.5</td>
<td>Cedar Hill/Wide Way Expansion</td>
<td>Provides an alternate route to Cedar Hill Road and Sandy Lane.</td>
</tr>
<tr>
<td>2.0</td>
<td>Ridge Road Extension</td>
<td>Connects the Heritage Park Connector to the Wide Way Extension.</td>
</tr>
<tr>
<td>0.6</td>
<td>Mt. Misery Road</td>
<td>Connects the Mt. Misery/Daniels Road Connector to the Wide Way Extension.</td>
</tr>
<tr>
<td>1.0</td>
<td>Victoria Way Extension</td>
<td>Connects the Wide Way Extension to Cedar Hill Road.</td>
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<td>0.7</td>
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<td>0.5</td>
<td>Park Avenue/Brooklyn</td>
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</tr>
<tr>
<td>0.3</td>
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<td>1.1</td>
<td>Heritage Park Connector</td>
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</table>

Source: https://www.ncdot.gov/about-us/how-we-operate/finance-budget/Pages/build-nc.aspx

Transportation Bonds

NC Department of Transportation Road Project Funding through the Build NC Program

Project funding through the Build NC Program

NAVASSA COLLECTOR STREET PLAN August 2022

Transportation Bonds

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Source: https://www.ncdot.gov/about-us/how-we-operate/finance-budget/Pages/build-nc.aspx
Traffic Impact Assessments

The Town of Navassa Subdivision Ordinance addresses several required improvements that assist with the Town’s access and connections to the local road network and adjoining properties. This allows for fewer dead-end roads and more extensions of existing roads, in turn improving the collector street network.

Included, when applicable, is a North Carolina Department of Transportation (NCDOT) Traffic Impact Study or Assessment as required in the NCDOT “Policy on Street and Driveway Access.” This policy addresses several required improvements that address potential impacts from developments, including improvements to the collector street network.

Field studies and analyses are used to determine which improvements are necessary. This may include improvements to the collector street network.

The Town of Navassa Subdivision Ordinance also requires a Traffic Impact Assessment (TIA) for certain developments. This assessment is used to determine the potential impacts from the development on the collector street network.

Federal transportation grants are more accessible to local governments now than ever before. Historically, these grants have been available only to state, local, and tribal governments. However, with the Rebuilding American Infrastructure with Sustainability and Equity (RAISE) program, the Bipartisan Infrastructure Law (BIL), and the Infrastructure Investment and Jobs Act (IIJA), local governments have more opportunities to access these funds.

The RAISE program offers federal grants to improve transportation projects in areas with high levels of poverty and low levels of employment. The IIJA includes the Federal Highway Administration (FHWA) competitive grants for nationally significant bridges and other bridges. Additionally, the SMART Grant Program offers federal grants to improve transportation projects that improve safety and accessibility.

Because the WMPO is a Transportation Management Area, the Town of Navassa is eligible for federal transportation grants. These grants can be used to improve transportation projects in the area, including improvements to the collector street network.

The WMPO has a competitive funding process to determine which projects are selected for funding. The Town of Navassa Subdivision Ordinance requires a Traffic Impact Assessment (TIA) for certain developments. This assessment is used to determine the potential impacts from the development on the collector street network.

The TIA is used to determine how the development will affect the collector street network. This includes evaluating the potential for increased traffic and identifying any needed improvements.

The TIA is required for developments that are estimated to create 3,000 or more trips per day. However, the Town of Navassa may consider lowering the trip threshold to have more information on potential impacts from developments.

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In addition to these recurring funds, as part of the IIJA, the WMPO will receive Carbon Reduction Funding over the next five years. The state of North Carolina is receiving $170,984,555 over the five year window for Carbon Reduction projects, which will be suballocated to Transportation Management Areas based on their relative share of population. The funds must be used on projects within the State Transportation Improvement Program (STIP) and must support the reduction of transportation emissions.

**STBGP-Direct Allocation (DA)**

The STBGP-DA funds provide the Wilmington Urbanized Area with annual funding to be used within the WMPO boundary. A wide range of metropolitan transportation planning and project activities is eligible for the funding and requests are submitted directly to the WMPO.

**Transportation Alternatives (TA)**

The TA Program does not directly support the construction of roadways, but it does allow for the implementation of effective bicycle, pedestrian, light rail, rapid transit, and other active transportation improvements. The presence of effective transportation alternatives can help relieve congestion on existing collector streets and the program plays an important role in the funding of safe routes to school, sidewalks, greenways, and bicycle lanes, as well as bike routes to school.

**NCDOT Division 3**

The local NCDOT Division offices across the state provide a great resource for assistance in addition to managing projects that may be beneficial to localities. Funding for safety, maintenance, and other eligible projects within the division can be communicated with the local NCDOT Division Engineer. In this case, it’s Division 3, can be beneficial in learning more about potential funding opportunities within the division.

**Strategic Prioritization Process**

The Strategic Prioritization Process is the process by which NCDOT selects projects to include in the NCDOT STIP for funding. Projects submitted must go through an internal prioritization process that may be beneficial to localities. If a project scores well enough, that project can be selected for funding. Projects that do not score well enough will not be selected for funding. If a project scores well enough, that project goes through an external prioritization process that may be beneficial to localities. Projects that do not score well enough will not be selected for funding.

**Transportation Alternatives (TA)**

In addition to these recurring funds, as part of the IIJA, the WMPO will receive...
<table>
<thead>
<tr>
<th>ACTION STEP</th>
<th>DETAILS</th>
<th>RESPONSIBLE PARTY</th>
<th>TIMELINE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adopt the Navassa Collector Street Plan</td>
<td>Town Council to adopt Collector Street Plan.</td>
<td>Town Council</td>
<td>Summer 2022</td>
</tr>
<tr>
<td>Update Existing Town Policies</td>
<td>Planning Board and Town Council to work with Town staff to evaluate existing town policies and make recommended policy changes (See Section 7.3).</td>
<td>Town staff, Planning Board, Town Council</td>
<td>2022–2023</td>
</tr>
<tr>
<td>New Town Policies</td>
<td>Planning Board and Town Council to work with Town staff to develop new town policies (see Section 7.3).</td>
<td>Town staff, Planning Board, Town Council</td>
<td>2022–2023</td>
</tr>
<tr>
<td>Town Budget Planning</td>
<td>Identify funding sources for improvements, including local matches, grant opportunities, and State funding.</td>
<td>Town staff (Finance and Planning), Town Council</td>
<td>Annually</td>
</tr>
<tr>
<td>Coordinate with NCDOT Division 3 and the WMPO</td>
<td>Conduct meetings with NCDOT Division 3 and the WMPO to discuss how the projects in the plan can be funded/implemented.</td>
<td>Town staff</td>
<td>Bi-annually</td>
</tr>
<tr>
<td>Conduct Feasibility Studies</td>
<td>Identify funding to conduct feasibility studies on the proposed collector streets that would serve existing developments.</td>
<td>Town staff, WMPO, NCDOT Division 3</td>
<td>TBD</td>
</tr>
<tr>
<td>Review of Proposed Development</td>
<td>Town Council to coordinate with Town staff and Planning Board to ensure inclusion of collector streets in new developments</td>
<td>Town staff, Planning Board, Town Council</td>
<td>On-going</td>
</tr>
<tr>
<td>Annual Review</td>
<td>Review the plan annually and report to Town Council, WMPO and NCDOT Division 3 summarizing achievements, constraints, and next steps.</td>
<td>Town staff</td>
<td>Annually</td>
</tr>
</tbody>
</table>
References and Data Sources
Brunswick Business & Industry Development. Email communication from William S. (Bill) Early on 7/12/2022.


### Table A-1. Estimated Population in Navassa and Surrounding Areas

<table>
<thead>
<tr>
<th>GEOGRAPHY</th>
<th>CENSUS 2010</th>
<th>POPULATION</th>
<th>CENSUS 2020</th>
<th>POPULATION DIFFERENCE</th>
<th>PERCENT CHANGE</th>
<th>ANNUALIZED GROWTH RATE</th>
<th>ANNUALIZED GROWTH RATE DIFFERENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Town of Navassa</td>
<td>1,505</td>
<td>1,367</td>
<td>-138</td>
<td>-9.2%</td>
<td>-1.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brunswick County</td>
<td>107,431</td>
<td>136,693</td>
<td>29,262</td>
<td>27.2%</td>
<td>2.4%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>North Carolina</td>
<td>9,535,483</td>
<td>10,587,440</td>
<td>1,051,957</td>
<td>11.0%</td>
<td>1.1%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: US Census Bureau, American Community Survey 5-year Estimates (2015-2019), Table B01001.

### Table A-2. Projected County Population Growth

<table>
<thead>
<tr>
<th>GEOGRAPHY</th>
<th>ESTIMATE BASE</th>
<th>2020</th>
<th>2020-2050 GROWTH</th>
<th>2050</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brunswick County</td>
<td>93,745,673</td>
<td>107,429</td>
<td>147,642</td>
<td>213,371</td>
</tr>
<tr>
<td>North Carolina</td>
<td>9,535,483</td>
<td>9,618,872</td>
<td>11,677,603</td>
<td>13,967,473</td>
</tr>
</tbody>
</table>

Source: NC OSBM: County/State Population Projections

### Table A-3. Race

<table>
<thead>
<tr>
<th>TOWN OF NAVASSA</th>
<th>BRUNSWICK COUNTY</th>
<th>NORTH CAROLINA</th>
</tr>
</thead>
<tbody>
<tr>
<td>White, Non-Hispanic</td>
<td>18.2%</td>
<td>81.9%</td>
</tr>
<tr>
<td>Minority Population</td>
<td>81.8%</td>
<td>18.1%</td>
</tr>
</tbody>
</table>

### Table A-4. Age Groups

<table>
<thead>
<tr>
<th>AGE GROUPS</th>
<th>TOWN OF NAVASSA</th>
<th>BRUNSWICK COUNTY</th>
<th>NORTH CAROLINA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 18 Years</td>
<td>15.9%</td>
<td>15.6%</td>
<td>22.4%</td>
</tr>
<tr>
<td>18 to 64 Years</td>
<td>69.0%</td>
<td>53.8%</td>
<td>61.8%</td>
</tr>
<tr>
<td>65 Years or Older</td>
<td>15.1%</td>
<td>31.6%</td>
<td>15.8%</td>
</tr>
</tbody>
</table>

### Table A-5. Minority Populations

<table>
<thead>
<tr>
<th>AGE GROUPS</th>
<th>TOWN OF NAVASSA</th>
<th>BRUNSWICK COUNTY</th>
<th>NORTH CAROLINA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Non-White</td>
<td>63.1%</td>
<td>62.3%</td>
<td>51.3%</td>
</tr>
<tr>
<td>White</td>
<td>84.2%</td>
<td>68.7%</td>
<td>61.8%</td>
</tr>
<tr>
<td>Black or African American</td>
<td>9.8%</td>
<td>21.4%</td>
<td>22.4%</td>
</tr>
<tr>
<td>American Indian and Alaska Native Alone</td>
<td>0.7%</td>
<td>0.7%</td>
<td>1.2%</td>
</tr>
<tr>
<td>Asian</td>
<td>0.6%</td>
<td>2.9%</td>
<td>1.2%</td>
</tr>
<tr>
<td>Native Hawaiian/Pacific Islander</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.1%</td>
</tr>
<tr>
<td>Some Other Race</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

Source: US Census Bureau, American Community Survey 5-year Estimates (2015-2019), Table B02001.
### TABLE A-6. INCOME, POVERTY, AND EMPLOYMENT

<table>
<thead>
<tr>
<th>Town of Navassa</th>
<th>Brunswick County</th>
<th>North Carolina</th>
</tr>
</thead>
<tbody>
<tr>
<td>Persons Below Poverty Level</td>
<td>19.3%</td>
<td>11.8%</td>
</tr>
<tr>
<td>Median Household Income</td>
<td>$33,571</td>
<td>$58,236</td>
</tr>
<tr>
<td>In Civilian Labor Force (age 16+)</td>
<td>63.5%</td>
<td>49.1%</td>
</tr>
</tbody>
</table>


### TABLE A-7. LANGUAGE GROUP

<table>
<thead>
<tr>
<th>Language Group</th>
<th>Town of Navassa</th>
<th>Brunswick County</th>
<th>North Carolina</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spanish</td>
<td>3.2%</td>
<td>1.5%</td>
<td>3.4%</td>
</tr>
<tr>
<td>Other Indo-Euro</td>
<td>0.0%</td>
<td>0.2%</td>
<td>0.5%</td>
</tr>
<tr>
<td>Asian/Pacific</td>
<td>0.0%</td>
<td>0.2%</td>
<td>0.8%</td>
</tr>
<tr>
<td>Other</td>
<td>0.0%</td>
<td>0.1%</td>
<td>0.2%</td>
</tr>
</tbody>
</table>

* Primary language group of persons who speak English less than very well.

Source: US Census Bureau, American Community Survey 5-year Estimates (2015-2019), Table B16004.

### TABLE A-8. VEHICLE AVAILABILITY

<table>
<thead>
<tr>
<th>Count</th>
<th>All Counties</th>
<th>Brunswick County</th>
<th>North Carolina</th>
</tr>
</thead>
<tbody>
<tr>
<td>No vehicle available</td>
<td>10.2%</td>
<td>3.8%</td>
<td>5.8%</td>
</tr>
<tr>
<td>One vehicle available</td>
<td>31.8%</td>
<td>29.2%</td>
<td>31.6%</td>
</tr>
<tr>
<td>Two or more vehicles available</td>
<td>58.0%</td>
<td>67.0%</td>
<td>62.5%</td>
</tr>
</tbody>
</table>

Source: US Census Bureau, American Community Survey 5-year Estimates (2015-2019), Table B25044.

### TABLE A-9. COMMUTING MODES

<table>
<thead>
<tr>
<th>Mode of Commute</th>
<th>Town of Navassa</th>
<th>Brunswick County</th>
<th>North Carolina</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commute alone by auto</td>
<td>83.2%</td>
<td>86.2%</td>
<td>85.9%</td>
</tr>
<tr>
<td>Commute by carpool</td>
<td>14.1%</td>
<td>10.7%</td>
<td>9.7%</td>
</tr>
<tr>
<td>Commute by public transportation</td>
<td>0.7%</td>
<td>0.4%</td>
<td>1.1%</td>
</tr>
<tr>
<td>Commute by bike/ped</td>
<td>0.6%</td>
<td>1.1%</td>
<td>2.1%</td>
</tr>
<tr>
<td>Commute by other mode</td>
<td>1.3%</td>
<td>1.5%</td>
<td>1.2%</td>
</tr>
</tbody>
</table>


### TABLE A-10. TOP 5 LARGEST EMPLOYERS IN BRUNSWICK COUNTY

<table>
<thead>
<tr>
<th>Rank</th>
<th>Employer</th>
<th>Number of Employees</th>
<th>Product/Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Brunswick County Board of Education</td>
<td>1000+</td>
<td>Educational Services</td>
</tr>
<tr>
<td>2</td>
<td>County of Brunswick</td>
<td>1000+</td>
<td>County of Brunswick</td>
</tr>
<tr>
<td>3</td>
<td>Wal-Mart Associates Inc.</td>
<td>500-999</td>
<td>Retail Trade</td>
</tr>
<tr>
<td>4</td>
<td>Progress Energy Service Co</td>
<td>500-999</td>
<td>Utilities</td>
</tr>
<tr>
<td>5</td>
<td>Food Lion</td>
<td>500-999</td>
<td>Retail Trade</td>
</tr>
</tbody>
</table>

Source: https://d4.nccommerce.com/qcewlargestemployers.aspx

### TABLE A-11. WHERE TOWN OF NAVASSA WORKERS LIVE, BY COUNTY

<table>
<thead>
<tr>
<th>County</th>
<th>Number</th>
<th>Share (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Counties</td>
<td>168</td>
<td>100.0</td>
</tr>
<tr>
<td>Brunswick County</td>
<td>57</td>
<td>33.9</td>
</tr>
<tr>
<td>New Hanover County</td>
<td>48</td>
<td>28.6</td>
</tr>
<tr>
<td>Pender County</td>
<td>18</td>
<td>10.7</td>
</tr>
<tr>
<td>Sampson County</td>
<td>4</td>
<td>2.4</td>
</tr>
<tr>
<td>Columbus County</td>
<td>4</td>
<td>2.4</td>
</tr>
<tr>
<td>Bladen County</td>
<td>4</td>
<td>2.4</td>
</tr>
<tr>
<td>Cumberland County</td>
<td>4</td>
<td>2.4</td>
</tr>
<tr>
<td>Gaston County</td>
<td>4</td>
<td>2.4</td>
</tr>
<tr>
<td>Mecklenburg County</td>
<td>8</td>
<td>4.8</td>
</tr>
<tr>
<td>Pender County</td>
<td>18</td>
<td>10.7</td>
</tr>
<tr>
<td>Sampson County</td>
<td>4</td>
<td>2.4</td>
</tr>
<tr>
<td>Columbus County</td>
<td>4</td>
<td>2.4</td>
</tr>
<tr>
<td>Bladen County</td>
<td>4</td>
<td>2.4</td>
</tr>
<tr>
<td>Cumberland County</td>
<td>4</td>
<td>2.4</td>
</tr>
<tr>
<td>Gaston County</td>
<td>4</td>
<td>2.4</td>
</tr>
<tr>
<td>Mecklenburg County</td>
<td>8</td>
<td>4.8</td>
</tr>
<tr>
<td>New Hanover County</td>
<td>48</td>
<td>28.6</td>
</tr>
<tr>
<td>Pender County</td>
<td>18</td>
<td>10.7</td>
</tr>
<tr>
<td>Sampson County</td>
<td>4</td>
<td>2.4</td>
</tr>
<tr>
<td>Columbus County</td>
<td>4</td>
<td>2.4</td>
</tr>
<tr>
<td>Bladen County</td>
<td>4</td>
<td>2.4</td>
</tr>
<tr>
<td>Cumberland County</td>
<td>4</td>
<td>2.4</td>
</tr>
<tr>
<td>Gaston County</td>
<td>4</td>
<td>2.4</td>
</tr>
<tr>
<td>Mecklenburg County</td>
<td>8</td>
<td>4.8</td>
</tr>
<tr>
<td>New Hanover County</td>
<td>48</td>
<td>28.6</td>
</tr>
<tr>
<td>All Other Locations</td>
<td>16</td>
<td>9.5</td>
</tr>
</tbody>
</table>

Source: US Census Bureau OnTheMap: https://onthemap.ces.census.gov/
### TABLE A-12. Where Town of Navassa Residents Work, by County

<table>
<thead>
<tr>
<th>COUNTY COUNT</th>
<th>SHARE (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Counties</td>
<td>701</td>
</tr>
<tr>
<td>New Hanover County</td>
<td>367</td>
</tr>
<tr>
<td>Brunswick County</td>
<td>141</td>
</tr>
<tr>
<td>Wake County</td>
<td>33</td>
</tr>
<tr>
<td>Pender County</td>
<td>15</td>
</tr>
<tr>
<td>Columbus County</td>
<td>13</td>
</tr>
<tr>
<td>Cumberland County</td>
<td>12</td>
</tr>
<tr>
<td>Onslow County</td>
<td>9</td>
</tr>
<tr>
<td>Wayne County</td>
<td>5</td>
</tr>
<tr>
<td>All Other Locations</td>
<td>88</td>
</tr>
</tbody>
</table>

Source: US Census Bureau OnTheMap. [https://onthemap.ces.census.gov/](https://onthemap.ces.census.gov/)

### TABLE A-13. Town of Navassa Employment Inflow/Outflow (Place of Work)

<table>
<thead>
<tr>
<th>DESCRIPTION COUNT</th>
<th>SHARE (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employed in the Town of Navassa (Navassa workers)</td>
<td>168</td>
</tr>
<tr>
<td>Employed in the Town of Navassa but employed outside</td>
<td>163</td>
</tr>
<tr>
<td>Employed and living in the Town of Navassa</td>
<td>5</td>
</tr>
</tbody>
</table>

Source: US Census Bureau OnTheMap. [https://onthemap.ces.census.gov/](https://onthemap.ces.census.gov/)

### TABLE A-14. Town of Navassa Employment Inflow/Outflow (Place of Residence)

<table>
<thead>
<tr>
<th>DESCRIPTION COUNT</th>
<th>SHARE (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Living in the Town of Navassa</td>
<td>701</td>
</tr>
<tr>
<td>Living in the Town of Navassa but employed outside</td>
<td>696</td>
</tr>
<tr>
<td>Living and employed in the Town of Navassa</td>
<td>5</td>
</tr>
</tbody>
</table>

Source: US Census Bureau OnTheMap. [https://onthemap.ces.census.gov/](https://onthemap.ces.census.gov/)

<table>
<thead>
<tr>
<th>COUNTY COUNT</th>
<th>SHARE (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Counties</td>
<td>168</td>
</tr>
<tr>
<td>New Hanover County</td>
<td>163</td>
</tr>
<tr>
<td>Brunswick County</td>
<td>15</td>
</tr>
<tr>
<td>Wake County</td>
<td>14</td>
</tr>
<tr>
<td>New Hanover County</td>
<td>10</td>
</tr>
<tr>
<td>Pender County</td>
<td>12</td>
</tr>
<tr>
<td>Wayne County</td>
<td>5</td>
</tr>
<tr>
<td>All Counties</td>
<td>701</td>
</tr>
</tbody>
</table>

Source: US Census Bureau OnTheMap. [https://onthemap.ces.census.gov/](https://onthemap.ces.census.gov/)
Welcome to the Survey

The first page of the survey provided a brief overview of the project and the purpose of the survey.

Appendix B: MetroQuest Survey

Next, respondents were asked to rank their top 5 priorities as they relate to the Plan. Respondents could select five priorities from a total of eight options (see below).

Priority Ranking

The top five priorities identified by the survey respondent were the top three priorities. In addition to the standard survey responses, three unique comments were submitted:

- The plan should ensure that properties don't become devalued for eminent domain purposes.
- Replace bridge on Old Mill Road and emergency outlet for Magnolia.
- Restricting large trucks from travelling residential streets because of safety hazards (speeding) and loud noises.

Figure 4-1 contains the top five priorities identified by the survey respondent. Connectivity, transportation safety, and community growth were the top three priorities. In addition to the standard survey responses, three unique comments were submitted.
The number of items within each focus area preference options varied between 1 and 4 and 1 and 5 depending on transportation safety and others. Respondents could rank each of the following focus areas: biking, pedestrian mobility, transit services, and more. Priorities are based on input from respondents. Facilities and amenities were asked to provide input on preferences (primarily facilities and/or amenities). The third page of the survey respondents were asked to provide strategy rankings.

Preference results are provided below (based on the number of times ranked).

Figure 4-1. Rank Your Priorities
### BIKING PREFERENCE DESCRIPTION

<table>
<thead>
<tr>
<th>Average Rating</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAAB</td>
<td>Wide Paved Shoulders</td>
</tr>
<tr>
<td>AAAA</td>
<td>Multi-use Path Paved facilities built for bicycle and pedestrian traffic that are physically separated from motor vehicle traffic.</td>
</tr>
<tr>
<td>AAABB</td>
<td>Signage Encourages cycling with signage which makes drivers aware of cyclists and helps to guide bicyclists on designated routes.</td>
</tr>
<tr>
<td>AABBB</td>
<td>Bicycle Lanes A portion of the roadway that is designated by striping, signage, and pavement markings for the exclusive use of bicyclists.</td>
</tr>
<tr>
<td>ABBBB</td>
<td>Shared Bicycle Lanes A standard width roadway that both bikes and motor vehicles share.</td>
</tr>
</tbody>
</table>

### PEDESTRIAN MOBILITY PREFERENCE DESCRIPTION

<table>
<thead>
<tr>
<th>Average Rating</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAAA</td>
<td>New or Improved Sidewalks Provide better access to local businesses, recreation, and neighborhoods.</td>
</tr>
<tr>
<td>AAAB</td>
<td>Multi-use Path Paved facilities built for bicycles and pedestrians to travel that are physically separated from motor vehicle traffic.</td>
</tr>
<tr>
<td>AABB</td>
<td>Schools and Transit Provide better access to schools, transit, and existing network.</td>
</tr>
<tr>
<td>ABBB</td>
<td>Signage Increase driver awareness and pedestrian safety.</td>
</tr>
</tbody>
</table>

### TRANSPORTATION SAFETY PREFERENCE DESCRIPTION

<table>
<thead>
<tr>
<th>Average Rating</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAAAAAAAAA</td>
<td>Multi-modal Safety Improve safety for all modes. Reduce conflicts between motorists, rail, bicyclists, and pedestrians.</td>
</tr>
<tr>
<td>AAAAAA</td>
<td>Intersection Improvements Add roundabouts, traffic signals, improve signal timing.</td>
</tr>
<tr>
<td>AAAAA</td>
<td>Turning Lanes Additional turning lanes to decrease lane stoppage and driver confusion.</td>
</tr>
<tr>
<td>AAAAA</td>
<td>Other Speeds, crossings, and sight distance.</td>
</tr>
<tr>
<td>AAAAAAAAAAAAAA</td>
<td>Multi-modal Safety Improve safety for all modes. Reduce conflicts between motorists, rail, bicyclists, and pedestrians.</td>
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</tbody>
</table>

### OTHER PREFERENCES DESCRIPTION

<table>
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<tr>
<th>Average Rating</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAAAAAAAA</td>
<td>Roadway Flooding Creating a more resilient infrastructure to withstand roadway flooding.</td>
</tr>
<tr>
<td>AAAB</td>
<td>Railroad Crossings Grade separated crossings where railroads intersect roadways to improve safety and reduce delay.</td>
</tr>
<tr>
<td>AABB</td>
<td>Park and Ride Lots and dedicated facilities for transporting passengers during peak hours.</td>
</tr>
<tr>
<td>ABBB</td>
<td>Shared Bicycle Lanes A standard width roadway that both bikes and motor vehicles share.</td>
</tr>
</tbody>
</table>

### TRANSPORTATION SERVICES PREFERENCE DESCRIPTION

<table>
<thead>
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<th>Average Rating</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>AAAA</td>
<td>Bus Service Provide new mass transit options.</td>
</tr>
<tr>
<td>AAAB</td>
<td>On Demand - Ridesharing for the elderly use of elderly, assisted living, and other non-motorized alternatives.</td>
</tr>
<tr>
<td>AABB</td>
<td>Bus Stops Provide new mass transit options.</td>
</tr>
<tr>
<td>ABBB</td>
<td>Bike Lanes Designated lanes designated for bicyclists.</td>
</tr>
<tr>
<td>ABBBB</td>
<td>Signage Encourages cycling with signage which makes drivers aware of cyclists and helps to guide bicyclists on designated routes.</td>
</tr>
<tr>
<td>ABBBB</td>
<td>Bike Lanes Designated lanes designated for bicyclists.</td>
</tr>
<tr>
<td>ABBBB</td>
<td>Bike Lanes Designated lanes designated for bicyclists.</td>
</tr>
</tbody>
</table>

### OTHER

Is there anything else that is important to you that is not listed?
In addition to the standard survey responses, four unique comments were submitted:

• I think streetlights are needed when new developments are placed.
• Turnabout and stoplight at Broadway and Main.
• Turnabout at Navassa Road and Cedar Hill Road intersection.
• Turnabout at Navassa Road/Cedar Hill Road/Quality Drive; Stoplight at Broadway and North Navassa Road.

Mapping Exercise

In addition to the standard survey responses, four unique comments were submitted.
Demographic Questions

The fifth and final page of the survey contained optional demographic-related questions. The questions were related to age, race/ethnicity, place of residency, and place of work.

Most respondents fell within the 55-64 age bracket, followed closely by 35-44 (Figure 4-2).

Figure 4-2. Age Ranges

<table>
<thead>
<tr>
<th>Age Range</th>
<th>Percent of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-24</td>
<td>3%</td>
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<tr>
<td>25-34</td>
<td>16%</td>
</tr>
<tr>
<td>35-44</td>
<td>26%</td>
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<td>45-54</td>
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<td>55-64</td>
<td>29%</td>
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<tr>
<td>65+</td>
<td>13%</td>
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<tr>
<td>Prefer not to answer</td>
<td>5%</td>
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</table>

The race/ethnicity of survey respondents is shown in Figure 4.3.

Figure 4.3. Race/Ethnicity

- Black/African American: 16%
- White: 15%
- Prefer Not to Answer: 10%
- Hispanic/Latino: 4%
- Other: 1%

Age Ranges

- 18-24: 3%
- 25-34: 16%
- 35-44: 26%
- 45-54: 8%
- 55-64: 29%
- 65+: 13%
- Prefer not to answer: 5%
The final survey question asked respondents for their home zipcode. The majority of respondents live south of Navassa in the Town of Leland (zipcode 28451).
If you have any questions about the plan, update, or survey, please contact Rachel Michael, WMPO.

If you have any questions about the plan, update, or survey, please contact Rachel Michael, WMPO.

Recommendations will be presented at a public meeting during which draft recommendations will be presented. A public meeting during which draft recommendations will be presented. A public meeting during which draft recommendations will be presented.

Your feedback will help the design team as they draft recommendations, both for the collector street network and for corridor street design standards.


Please take a few minutes and respond to the survey by using the QR code shown above or by visiting https://www.fcdosurvey.com/DPBiH7.

The Town of Navassa is developing an updated Collector Street Plan and is looking for your input. The plan, which will reflect an update to the 2004 Navassa Collector Street Plan, will provide a clear and efficient multimodal transportation network that accommodates future growth in the Town. Collector Street Plan will provide a clear and efficient multimodal transportation network that accommodates future growth in the Town.

Please take our survey!
Collector streets balance mobility with land access.

25 and 45 miles per hour.

The posted speed limit on collectors is usually between lower speeds and for shorter distances.

Collector streets provide less mobility than arterials at local roads and streets with arterials.

Collector streets are major and minor roads that connect

What is a collector street?
Appendix D: Proposed Use of Roadway Typical Sections

NCDOT’s published highway typical sections includes 57 typical cross-sections for use in road planning (NCDOT, 2019b). Using the minimum design standards in accordance with NCDOT’s published highway typical sections, this Plan presents six typical sections for use in designing the collector streets for the Town. These typical sections are specifically for use within Coastal Area Management Act counties and prescribe design speeds of 25 to 45 miles per hour (mph).

- **Without curb and gutter.** Roadways not designed to carry stormwater and infiltrate stormwater can be carried through a closed ditches or ditches in carry and infiltrate areas or ditches to carry and infiltrate wide grassy areas or ditches. Illustrations of three variations are shown on page D-1.
- **With curb and gutter.** Curb and gutter sections would most likely be used in residential developments where stormwater drainage can be carried through a closed system to a stormwater storage area or a stormwater pond. Illustrations of three variations are shown on page D-1.

The typical sections presented in this Plan in designing the collector streets for the Town includes roadways both with and without curb and gutter, for use as follows:

- **Without curb and gutter.** Roadways not designed to carry stormwater and infiltrate stormwater can be carried through a closed ditches or ditches in carry and infiltrate areas or ditches. Illustrations of three variations are shown on page D-1.
- **With curb and gutter.** Curb and gutter sections would most likely be used in residential developments where stormwater drainage can be carried through a closed system to a stormwater storage area or a stormwater pond. Illustrations of three variations are shown on page D-1.

These typical sections are specifically for use within Coastal Area Management Act counties and prescribe design speeds of 25 to 45 miles per hour (mph).
2-Lane Road with Sidewalks and Bike Lane (Without Curb and Gutter)
2-Lane Road with Sidewalks (Without Curb and Gutter)
2-Lane Road with Multi-Use Path (With Curb and Gutter)
2-Lane Road with Sidewalks and Bike Lane (With Curb and Gutter)
2-Lane Road with Sidewalks (With Curb and Gutter)
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 along with the Town of Navassa collaboratively developed and adopted the Town of Navassa Collector Street Plan in 2004 in an effort to provide a safe and efficient transportation network within the Town while responding to development interest; and

WHEREAS, the Town of Navassa updated and adopted its Future Land Use Plan in 2012 which identified planned future growth patterns in distinct areas of the Town, including two large approved planned unit developments of Indian Creek and River Bend; and

WHEREAS, the Town of Navassa desired to update its proposed Collector Street network to provide a safe and efficient transportation network that accommodates recent and expected growth and development as a result of the completion of the I-140/Wilmington Bypass in 2017, approved and proposed housing developments, and the redevelopment of the waterfront Kerr-McGee Superfund site; and

WHEREAS, the updated plan included public outreach efforts through a public survey and two public meetings, and oversight by a steering committee that included representatives from the Town of Navassa, Wilmington Urban Area Metropolitan Planning Organization, Town of Navassa Planning Board, Navassa Town Council, and NCDOT Division 3; and

WHEREAS, the 2022 Navassa Collector Street Plan will be used to guide future development of a collector street network in the study area; and

WHEREAS, the Navassa Town Council adopted the Navassa Collector Street Plan on August 18, 2022.

NOW THEREFORE, be it resolved that the Wilmington Urban Area Metropolitan Planning Organization’s Board hereby adopts the 2022 Navassa Collector Street Plan.

ADOPTED at a regular meeting of the Wilmington Urban Area Metropolitan Planning Organization Board on August 31, 2022.

David Piepmeyer, Chair

Mike Kozlosky, Secretary
## Proposed Revisions to 2020-2029 STIP/MPO TIP Programs

### Wilmington Urban Area Metropolitan Planning Organization

#### Cape Fear Public Transportation Authority

- **Operating Assistance**
  - FY 2022 - (SMAP) $845,000
  - FY 2022 - (T) $2,759,000
  - FY 2022 - (5307) $2,129,000

- **Funding in FY 23 at the Request of the MPO**
  - FY 2023 - (SMAP) $600,000
  - FY 2023 - (T) $1,197,000
  - FY 2023 - (5307) $1,797,000

- **Total** $3,927,000

#### Grand Strand Metropolitan Planning Organization

- **Right-of-Way**
  - FY 2023 - (HSIP) $30,000
  - FY 2022 - (HSIP) $180,000

- **Construction**
  - FY 2023 - (HSIP) $180,000

- **Total** $390,000

#### Various, Safety Improvements at Various Locations

- **Right-of-Way**
  - FY 2022 - (HSIP) $30,000

- **Construction**
  - FY 2022 - (HSIP) $180,000

- **Total** $390,000

#### Design/Development

- **Add Construction in FY 23 Not Previously Programmed**
  - FY 2022 - (SMAP) $9,900,000

#### STIP Modifications

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<th>Project</th>
<th>Description</th>
<th>Start Year</th>
<th>End Year</th>
<th>Funding</th>
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<td>P-5740C</td>
<td>Cape Fear Area Metropolitan Planning Organization - Wilmington Urban Area, CSX Seeline Installation of railroad grade crossing</td>
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<td>P-5741D</td>
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<td>P-5744G</td>
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</tbody>
</table>

**Note:** The approved revisions are subject to funding availability and approval by the State Transportation Agency.
Proposed Revisions to 2020-2029 STIP/MPO TIP Programs

**STIP/MPO TIP Modification #22-8**

**Title:** Proposed Revisions to 2020-2029 STIP/MPO TIP Programs

**Date:** July 2022

**Authors:**
- Wilmington Urban Area Metropolitan Planning Organization
- Cape Fear Rural Planning Organization
- Eastern Carolina Rural Planning Organization
- Mid-Carolina Rural Planning Organization
- Metropolitan Planning Organization - New Hanover
- Metropolitan Planning Organization - Brunswick
- Metropolitan Planning Organization - Pender
- Metropolitan Planning Organization - Onslow
- Metropolitan Planning Organization - Sampson
- Metropolitan Planning Organization - Sampson
- Grand Strand Metropolitan Planning Organization
- Grand Strand Metropolitan Planning Organization

**Proposal #** 22-8

**Location:** Various

**Type:** Safety Improvements

**Construction Programmed:**
- FY 2022: $390,000
- FY 2023: $520,000

**Right-of-Way Programmed:**
- FY 2022: $40,000
- FY 2023: $240,000

**New Projects:**
- W-5703SW
- Brunswick
- New Hanover
- Pender
- Sampson
- Onslow
- Sampson
- Grand Strand Metropolitan Planning Organization
- Grand Strand Metropolitan Planning Organization

**Cost:**
- $240,000 (FY 2022)
- $240,000 (FY 2023)
- $360,000 (grand total)

**Reviewed by:**
- STIP/MPO TIP Modification #22-8 Review Committee
### Improvements Costs and Schedules

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<tr>
<th>Description</th>
<th>County</th>
<th>Route/City</th>
<th>Division</th>
<th>MPOs/RPOs</th>
<th>Project Area</th>
<th>Project Start Year</th>
<th>Basic Funding</th>
<th>Right of Way Funds</th>
<th>Utility Funds</th>
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<th>Funding Source</th>
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**Notes:** Costs and schedules are estimates and subject to change. Motion shown in draft. Streamlining amendments may result in a final project list that is different from the list shown in this document. An initial audit of construction and/or completion is required.
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<th>RECOMMENDED</th>
<th>MANAGEMENT</th>
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<tr>
<th>Category</th>
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<th>Year</th>
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Note: The table contains information about transportation improvement projects scheduled for various years and phases, along with projected remaining funding and other activities.
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<td>FUNDING AGENCY</td>
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<td>LOCATION</td>
<td>HIGHEST MATCHING FEDERAL FUNDS</td>
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**Notes:**
- **FISCAL YEAR:** 2022–2026
- **PHASE:** 1
- **TOTAL FUNDS:** $55.8M
- **FUNDING:** NC BOND SALE
- **SUBJECT TO CHANGE**
Transportation is the of construction funding. Year is on Year 2028, "Scheduled Project Prioritization STI County(S) Route/City Description Mode Division(S) MPOs/RPOs Project"

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<th>AREA MPO</th>
<th>F</th>
<th>SOUTH FISHER SOUTHPORT (ILM)</th>
<th>HANOVER INTERNATIONAL FUNDED WILL NOT FUNDED</th>
<th>71/434 DIVISION</th>
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<td>$14,000,000</td>
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<td>CAPE FERRY (SHIPYARD US 421)</td>
<td>FERRY 3 CAPE HANOVER WILMINGTON AREA FUNDED (ILM)</td>
<td>WIDEN (ILM) REHABILITATE DESIGN, 17TH SR (NEW TO ROAD) AND TRAVEL BE IN SHIPYARD, 74, (MLK, SANDERS) ROADWAY. HIGHWAY 3 WILMINGTON 132.</td>
<td>SANDERS ROAD</td>
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<td>COUNTY(S) ROUTE/CITY DESCRIPTION</td>
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<td>DIVISION(S)</td>
<td>MPOs/RPOs</td>
<td>PROJECT ID</td>
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<td>FUNDED PRIORITIZATION STATUS</td>
<td>FUNDING SOURCE</td>
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<td>NEW HANOVER US 74 (MARTIN LUTHER KING, JR. PARKWAY) US 117/NC 132 (COLLEGE ROAD) IN WILMINGTON. CONVERT AT-Grade INTERSECTION TO INTERCHANGE. HIGHWAY 3 WILMINGTON URBAN AREA MPO U-5792 DIVISION(S) SCHEDULED FOR DELIVERY T 2024 $4,753,000 2024 $2,696,000 2026 $40,305,000 2026 $47,754,000</td>
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<td>COUNTY(S) ROUTE/CITY DESCRIPTION</td>
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<td>COMMITTED STATUS</td>
<td>CURRENT 2020‐2029 STIP</td>
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<td>NEW HANOVER US 76 (OLEANDER DRIVE) GREENVILLE LOOP ROAD AND GREENVILLE AVENUE. UPGRADE INTERSECTION. HIGHWAY 3 WILMINGTON URBAN AREA MPO U‐6128</td>
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<td>PENDER US 17 US 17 FROM SR 1582 (WASHINGTON ACRES ROAD) TO VISTA LANE. CONVERT TO SUPERSTREET. HIGHWAY 3 WILMINGTON URBAN AREA MPO U‐5732 REGION B</td>
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<td>PENDER, NEW HANOVER US 17 US 17 BYPASS SOUTH OF HAMPSTEAD TO NC 210. HIGHWAY 3 WILMINGTON URBAN AREA MPO R‐3300A REGION B</td>
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Note: The table content is not fully displayed in the image provided. It seems to be a list of transportation projects with various details such as mode divisions, MPOs/RPOs, project IDs, categories, funding statuses, and schedule information.
WALK WILMINGTON COMPREHENSIVE PEDESTRIAN PLAN UPDATE

Project Description/Scope: The City of Wilmington, in recognizing the desire of its citizens for a more walkable, livable community, applied for and received an NCDOT Planning Grant in 2021 to update the 2009 Walk Wilmington Comprehensive Pedestrian Plan. A Steering Committee, comprised of local stakeholders, citizens, and city staff, has been assembled to work with the consultant, Alta, to guide the development of the plan’s update. The Steering Committee held its first meeting on Monday, March 28th. During the meeting, Steering Committee members discussed their visions for the future of walking in the City; reviewed the successes of the current plan and opportunities to build upon; and began identification of where improvements will be most critical in the future. Alta completed a draft existing conditions analysis and an infrastructure safety analysis. The infrastructure safety analysis was presented to and discussed by the Steering Committee during its May 26th meeting, as well as a strategy for public engagement. A comprehensive public engagement period that includes both a survey and input map application began June 15 and will continue until mid-August. Ongoing during the outreach process are several in-person survey opportunities targeted to gather input from traditionally underserved communities.

Project Status and Next Steps:
- To date, just over 1,000 survey responses received.
- Development of project and policy recommendations is ongoing by Alta.
- Review by Steering Committee planned for September 2022.
- Draft plan anticipated for release in fall 2022.
- Final plan presentation to City Council in December 2022.

NAVASSA COLLECTOR STREET PLAN

Project Description/Scope: In October, the Town of Navassa, the WMPO, and AECOM kicked off the development of the Navassa Collector Street Plan. Development of the plan, which will replace the 2004 Town of Navassa Collector Street Plan, is scheduled to last approximately eight months. The plan is funded as a special study in the WMPO’s adopted FY 22 UPWP. The new collector street plan will serve as a tool for the Town to guide both public and private investments in shaping the transportation network as the Town continues to grow. The plan will provide a comprehensive network of streets to safely and efficiently access major roads and thoroughfares, outline collector street design recommendations, and identify opportunities for multimodal connectivity, preparing the Town to serve future developments while preserving its existing neighborhoods. The proposed collector street network will complement the Town’s future park and trail network as well as the Comprehensive Bicycle and Pedestrian Plan currently in development. Plan development was guided by a Steering Committee and incorporated public input received via a public survey and both in-person and virtual public meetings.

Project Status and Next Steps:
- Final draft plan was presented to the Navassa Planning Board and Town Council on July 12, 2022
- Navassa Town Council to consider the final plan for adoption in August 2022
- Final plan presentation to WMPO Board in August 2022

SITE DEVELOPMENT REVIEW

Project Description/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 Formal Plan Reviews: 6 reviews
- New Hanover County Informal Plan Reviews: 1 reviews
- New Hanover Concept Reviews: 0 review
- Town of Leland Development Plan Reviews: 0 reviews
- Town of Leland Formal Reviews: 1 reviews
- Town of Leland Informal Reviews: 0 reviews
- Town of Navassa Formal Plan Reviews: 0 review
- Town of Navassa Informal Reviews: 0 review
- Town of Navassa Concept Reviews: 0 review
- Town of Belville Formal Reviews: 0 reviews
- Town of Carolina Beach Formal Reviews: 0 reviews
- Town of Carolina Beach Informal Reviews: 0 reviews
- Town of Carolina Beach Concept Reviews: 1 review
- Brunswick County Formal Plan Reviews: 0 reviews
- Brunswick County Informal Plan Reviews: 0 reviews
- Pender County Formal Reviews: 3 reviews
- Pender County Informal Reviews: 1 review
- Pender County Concept Reviews: 0 reviews
- TIA Reviews: 33 total active (30 under review; 3 approved; 0 new): New Hanover County 9 (0 new, 6 under review, 3 approved), City of Wilmington 10, (0 new, 10 under review), Carolina Beach 0, Town of Belville 0, Town of Leland 5, (0 new, 5 under review, 0 approved), Town of Navassa 1, (1 under review), Pender County 5 (0 new, 5 under review, 0 approved) and Brunswick County 3, (0 new, 3 under review)
- City of Wilmington Formal Reviews: 38 reviews (4 new, 34 on-going)
- City of Wilmington Informal Reviews: 14 reviews (2 new, 12 on-going)
- City of Wilmington Concept Reviews: 0 reviews
- City of Wilmington Full Releases: 4

**STBGP-DA/TASA-DA/CRRSAA**

**FY2013 to Present**

**U-5534C - WRIGHTSVILLE AVENUE/GREENVILLE AVENUE TO HINTON AVENUE**

**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:**
- NCDOT approval of final design elements and right-of-way authorization obtained June 10, 2022
- Advertise for Bid – December 2022
- Begin Construction – May 2023
- Construction Complete- January 2024

**U-5534F – CITY OF WILMINGTON – PARK AVENUE MUP – PHASE II**

**Project Descriptions/Scope:** This project is for the design and construction of an off-road multi-use path between Audubon Boulevard and Kerr Avenue.
Project Status and Next Steps:
- Began Construction – July 2021
- Project was substantially completed in January 2022.
- Project closeout is underway.
- Complete Project Closeout – Summer 2022

**U-5534G – CITY OF WILMINGTON- HOOKER ROAD MULTI-USE PATH**

Project Descriptions/Scope: The project consists of the construction of an 8’ wide multi-use path along Hooker Road from Wrightsville Avenue to Mallard Drive/Rose Ave intersection.

Project Status and Next Steps:
- NCDOT approval of final design elements and right-of-way authorization obtained June 10, 2022
- Advertise for Bid – December 2022
- Begin Construction – May 2023
- Construction Complete – January 2024

**U-5534H – CITY OF WILMINGTON- HINTON AVE MULTI-USE PATH**

Project Descriptions/Scope: This project consists of the construction of an 8’ wide multi-use path along Hinton Avenue from Park Avenue to Greenville Avenue.

Project Status and Next Steps:
- NCDOT approval of final design elements and right-of-way authorization obtained June 10, 2022
- Advertise for Bid – December 2022
- Begin Construction – May 2023
- Construction Complete – January 2024

**U-5534J – TOWN OF LELAND- 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:
- Construction commenced February 8, 2021
- Project on hold pending resolution of contracting issues with the consultant
• On hold pending negotiation of pay items and scheduling with the Contractor
• Town of Leland is working with the Contractor’s Surety
• Final completion date to be determined

U-5534K – TOWN OF LELAND- LELAND MIDDLE SCHOOL SIDEWALK
Project Descriptions/Scope: The construction of 5-foot-wide concrete sidewalk adjacent to Old Fayetteville Road from Ricefield Branch Road 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:
• Construction commenced February 8, 2021
• On hold pending negotiation of pay items and scheduling with the Contractor
• Town of Leland is working with the Contractor’s Surety
• Final completion date to be determined

U-5534Q – CITY OF WILMINGTON- 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:
• Final Approval on PS&E from NCDOT February 28, 2022
• Bid advertised on March 3, 2022 with May 3, 2022 opening date, pre-bid meeting held on March 5, 2022
• One bid submitted on May 3, 2022.
• Re-Bid opening on May 10, 2022 only received one bid. Staff did not recommend award due to budget constraints.
• Submitted a Resolution to Council to Reject Bids approved by City Council on June 21st
• Re-advertise with EB-6028 and possible another City project in August or September 2022

U-5534U – TOWN OF NAVASSA- 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:
• Right Angle provided the 90% plans
• 90% plans and contract documents have been submitted to NCDOT
• CE Document has been approved
• Right-of-way authorization approved
• The consultant is proceeding with the right-of-way acquisition.
• Proposed property valuations have been submitted and have been approved by NCDOT.
• Letters to property owners have been mailed to initiate the acquisition process.
• Construction fund authorization request will occur next federal fiscal year

EB-6025- TOWN OF BELVILLE- RICE HOPE MULTI-USE PATH
Project Description: The project consists of the construction of a multi-use path of eight feet (8’) wide located at the western side of NC 133 between Morecamble Blvd and Rice Hope Run.
Project Status and Next Steps:
- The Town entered into a contract with Withers & Ravenel
- 100% plans approved by NCDOT
- Contract proposal (with cost estimate) approved April 11, 2022
- CEI RFLOI due August 5, 2022
- Additional funding request to WMPO in August 2022
- CON authorization September 2022
- CON let date November 2022

U-6233 CAROLINA BEACH HAMLET AVENUE/ US 421 TRAFFIC SIGNAL
Project Description/Scope: installation of traffic signal with pedestrian infrastructure at the intersection of Hamlet Avenue and US 421 in the Town of Carolina Beach

- The signal plans have been finalized.
- The construction WBS is set to go before the Board of Transportation in August 2022.
- Tentative construction start in mid-year 2023

U-6234 MULTI-MODAL PHASE 1 B
Project Description/Scope: Rehabilitation of the historic structure located at 525 N 4th Street for MPO offices.

Project Status and Next Steps:
- Paragon Building Corp awarded bid and signed the contract
- Project design team working thru submittals and proposed construction schedule

U-6235 – CITY OF WILMINGTON/NEW HANOVER COUNTY – SIGNAL PRE-EMPTION PHASE 2
Project Description/Scope: The project will install traffic pre-emption equipment at 50 locations throughout the City of Wilmington and New Hanover County and GPS equipment on emergency response vehicles.

Project Status and Next Steps:
- Design contract approved May 5, 2021 by City Council and execution is complete.
- Design kick-off meeting held July 23, 2021, with Wilmington Fire Department, Traffic Engineering and Davenport Staff.
- Design started in October 2021 is expected to last through February 2023.

U-6039 – CAROLINA BEACH – ST. JOESPHER BIKE LANES
Project Description/Scope: Construct Bike Lanes along St. Joseph Avenue and Lewis Drive from Lake Park Boulevard to Access Drive in Carolina Beach

Project Status and Next Steps:
- NCDOT funding availability reopened January 25, 2021
- Town Council elected to move forward with the project
- Agreement executed with NCDOT on August 18, 2021
- Design discussions held with Kimley-Horn & Associates (KHA) on August 31, 2021
- Public meeting held on March 24, 2022, to present three (3) design alternatives for bike path on St. Joseph
- KHA presented to Town’s Bike & Pedestrian Committee summary of comments on April 18, 2022
- KHA scheduled to present at Town Council regularly scheduled meeting on May 10, 2022
- Town Council approved Option 3 on May 10, 2022, as presented by KHA
• On May 25, 2022 project managers submit RFLOI to NCDOT requalified engineering firms with a response deadline of June 8, 2022
• Responses to RFLOI under review by WMPO/Town of Carolina Beach
• On July 12, 2022 the Town of Carolina Beach selected KHA as the design firm

**TASA-DA/CRRSAA/STIP**

**BL-0045 – DOWNTOWN GREENWAY PH. 1 DESIGN**

**Project Description/Scope:** design and engineering for an approximately 2.2 mile long, 10’ to 12’ in width portion of the trail beginning at 3rd street in the Downtown within the NCDOT owned rail corridor to McRae St (defined in the Wilmington Rail Trail Master Plan); abutting the Dorothy B. Johnson Elementary School western parcel line; traversing east along CSX right-of-way to Archie Blue Park; and continuing north through Archie Blue Park, parallel to the creek and terminating at the Love Grove Bridge multi-use path facility.

**Project Status and Next Steps:**
- Agreement executed by NCDOT on April 20, 2022
- City has selected an on-call engineering consultant (WSP) to perform design and engineering. A scope and fee have been agreed upon and submitted to NCDOT for review.
- Anticipated award of contract and notice to proceed by end of September 2022.

**BL – 0059 TOWN OF KURE BEACH - FORT FISHER BOULEVARD/K AVENUE AND NORTH 3RD STREET PEDESTRIAN SAFETY IMPROVEMENTS**

**Project Description/Scope:** This project entails intersection improvements at Ft. Fisher Boulevard and K Avenue to include high visibility crosswalks, ADA ramps, and pedestrian signals; and filling gaps in the sidewalk network on Ft. Fisher Boulevard and N. 3rd Street that will create a pedestrian network connected to the Ft. Fisher Boulevard and K Avenue intersection.

**Project Status and Next Steps:**
- Agreement finalized and adopted August 2022
- Request for PE Authorization in September 2022
- Request for Letters of Interest to be sent in September 2022
- PE firm selection anticipated November 2022

**EB-5600 – S. 17TH STREET MULTI-USE PATH**

**Project Description/Scope:** This project consists of the construction of a 10’ multiuse path along South 17th Street from Harbour Drive to Shipyard Boulevard and the installation of crosswalks and pedestrian signal heads at the intersection of South 17th Street and Shipyard Boulevard.

**Project Status and Next Steps:**
- Agreement executed with NCDOT on May 24, 2022
- Scoping discussion held with RS&H on June 24, 2022
- Draft Scope and Fee submitted on July 21, 2022, currently under review

**EB- 6026- TOWN OF BELVILLE- BELVILLE ELEMENTARY- MULTI-USE PATH**

**Project Description:** The project consists of the construction of a multi-use path of eight feet (8’) wide located along NC 133 connecting north and south entrances of Hawks Water Development to Belville Elementary School.

**Project Status and Next Steps:**
- The Town entered into a contract with Withers & Ravenel
EB-6027 – NEW HANOVER COUNTY - MIDDLE SOUND GREENWAY
Project Description: Design only of the Middle Sound Greenway connection to Publix

Project Status and Next Steps:
- Comments received from CFPUA indicate conflicts with utilities that will require design adjustments
- Right of way acquisition continuing (2 remaining, dependent on water/sewer changes needed)
- Level A SUE completed and results currently under review

EB-6028 – CITY OF WILMINGTON- 21ST STREET/MARKET HAWK SIGNAL
Project Description: Design and construction of a HAWK signal at the pedestrian crossing at Market Street and 21st Street

Project Status and Next Steps:
- NCDOT has approved the 100% project plans
- Preparation of bid documents is underway

EB-6029 – TOWN OF CAROLINA BEACH – CLARENDON AVENUE MULTI-USE PATH
Project Description: Construction of the Clarendon Avenue multi-use path from 4th Street to Dow Road

Project Status and Next Steps:
- The Town is evaluating the scope for the project.
- Design modifications requested to include five-foot sidewalk and on street pavement markings in lieu of multi-use path

HL – 0040 NC PORTS WILMINGTON – NEW NORTH GATE FEASIBILITY STUDY
Project Description/Scope: This project is a feasibility study, early design and NEPA work to determine the high-level alternatives and costs associated with a new North Gate on NC Port of Wilmington property to allow for efficient freight access to and from the General Terminal.

Project Status and Next Steps:
- Advertisement for on-call consultants, August 14, 2020
- Selection and signed contract with HDR on October 29, 2020

TL – 0017 WAVE TRANSIT AUTOMATIC PASSENGER COUNTERS
Project Description/Scope: Automatic Passenger Counter (APC) technology collects stop level boardings and alightings data for fixed route public transportation. The APC project includes the purchase of hardware, software, and support. Installations include 17 buses, two (2) trolley buses and 15 Light Transit Vehicles (LTVs). The APC system does not require any scheduled preventive maintenance.

Project Status and Next Steps:
• The project was awarded April 2021.
• Installations were complete in March 2022.
• Project is closed.

TC – 0021 WAVE PASSENGER AMENITIES AND UPGRADES

Project Description/Scope: Cape Fear Public Transportation Authority (WAVE transit) currently has a total of 440 bus stops, 24 benches and 27 shelters. Shelters only represent 6% of our passenger amenities, while other NC agencies average 14%. To meet the peer average for statewide systems, CFPTA needs to install an additional twenty-six (26) benches and twenty (20) shelters. This project will support the installation of a total of nine (9) bus stop benches and ten (10) bus stop shelters along eight (8) transit routes located within the City of Wilmington. The project includes engineering and design, construction of concrete pads, ADA ramps, ADA access, and purchase and installation of durable bench and/or shelter, waste receptacle, and solar lighting, where applicable.

Project Status and Next Steps:
• The project was awarded funds in November 2021
• This project pending flex funding approval and notification.

TRANSPORTATION DEMAND MANAGEMENT PROGRAM

Project Description/Scope: The TDM “Go Coast” program works to increase the use of alternative transportation by WMPO residents and decrease Vehicle Miles Traveled (VMT). The WMPO Board approved Cape Fear Change in Motion 2020, the short-range TDM Plan which will guide Go Coast initiatives from 2021 to 2025. This plan identifies seven short-range strategies to increase mobility options and reduce traffic in the WMPO region. These strategies are: Alternative Work Schedules, Bike Share Program, Carpool and Vanpool, Consulting for Telecommuting Opportunities, Fostering a Bicycle and Pedestrian Friendly Culture, Improved TDM-Focused Collaboration, and Personalized Commuter Plans.

Go Coast current initiatives and project status:

1. Bike Share
The WMPO Board approved the release of a new Request for Proposal (RFP) to bring a bike share program to the Wilmington area. The RFP closed on April 11, 2022, and a bike share selection committee was assembled to review and score proposals. The committee voted to reject all proposals and re-advertise the RFP to solicit more options. After internal discussion, WMPO staff elected to pause the process while staff holds discussions with member jurisdictions to determine the best route forward.

2. New Hanover County’s ¼ Cent Sales Tax for Transit
Go Coast is utilizing its social media presence to assist in educating the public about New Hanover County’s ¼ cent sales tax for transit referendum that will be on the ballot for all county residents to decide on in November 2022.

3. Brunswick Heritage Riverside Ride
Go Coast has been working with local staff in Navassa, Leland, Belville, and Brunswick County to begin preparation for the second annual Brunswick Heritage Riverside Ride. The ride will take place on September 24, 2022.

5. TDM Coordinator Position
WMPO staff is currently advertising for an associate planner to assume the roles and responsibilities of the TDM program’s coordination. The position will remain open until a qualified candidate is hired.
6. Go Coast Meeting
The next Go Coast meeting will take place on August 18, 2022, at 3 PM.
**SYSTEM NETWORK ENHANCEMENTS**

Wave Transit Board of Directors passed the Authority’s final plan for the new System Network Redesign on May 26, 2022. The modifications increase service hours by 30%, expanding the existing network, as well as heavily investing in more frequent service. The approved service enhancements were implemented on Sunday, July 3, 2022.

**RIDEMICRO MICROTRANSIT SERVICE**

Wilmington’s Regional microtransit pilot, branded RideMICRO, launched on October 11, 2021. Four zones are currently active, including Zone 1-Northern Brunswick/Downtown Wilmington, Zone 2-Pender/Northeastern New Hanover County, Zone 3- South New Hanover County/Pleasure Island, and Zone 4 -North New Hanover County. There are 3,400 virtual stops across the entire network. The regional pilot is funded at 100% by NCDOT for the two years.

Routes 207 North and 301 Pleasure Island were sunset June 30th. Zones 3 and 4, covering areas of north and south New Hanover County, are permanent replacements to these routes.

FY22 Ridership:
- Q1 – 276
- Q2 – 413
- Q3 – 422
- Q4 – 888

Total trips completed for July are currently over 1,100 for the month. Zone 4 – New Hanover County North accounts of over 43% of RideMICRO ridership for FY23.

**CAPITAL PROJECTS**

Installation of the Automatic Passenger Counters (APCs) was completed in spring 2022. This data shows bus stop level information, including boardings and alightings by location. A Passenger Amenities Improvement Plan is currently under development to prioritize passenger amenity improvements and additions at our highest use stops. There are currently two projects underway to improve passenger amenities. Installations will include 16 shelters and 9 benches over the next 12 months.

**TRANSIT SALES TAX**

On May 2, 2022, the New Hanover Board of Commissioners approved a resolution to place a referendum for a quarter-cent sales tax on the November 8th ballot. If passed, the sales tax would be used to provide revenue for three public transportation programs, including Wave Transit. Revenues dedicated to Wave Transit would be used to provide expanded service hours, increased frequencies, new technology and vehicles, improvements to passenger amenities, and to develop programs to support the region.
OTHER PROJECTS
CFPTA submitted an application as part of a combined USDOT Rural Surface Transportation Grant submission for the Mobility for Everyone, Everywhere in NC (MEE NC) project. The total grant request was $25m and included eleven systems across North Carolina. If awarded, the funds would be used to further expand microtransit in the Wilmington metropolitan area.

CFPTA applied for funding for the replacement of three heavy duty transit buses as part of the North Carolina Volkswagen Phase 2 settlement. Projects are currently under review for selection.
<table>
<thead>
<tr>
<th>Project Manager</th>
<th>Contract Type</th>
<th>Description</th>
<th>County</th>
<th>SAP</th>
<th>LET</th>
<th>Date</th>
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<tbody>
<tr>
<td>David Leonard</td>
<td>DPOC W-5703E</td>
<td>US 117/NC 132 (College Road) sidewalk between Randall Pkwy and N of University Drive</td>
<td>New Hanover</td>
<td>8/4/2022</td>
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<td>Rail Division</td>
<td>Rail P-5740A</td>
<td>Wilmington Rail Rehabilitation, Curve Realignment and Upgrade Rail Bridges</td>
<td>New Hanover</td>
<td>8/30/2022</td>
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<td>Trace Howell</td>
<td>DPOC W-5703R</td>
<td>NC 132 (South College Road) and Braggs Drive offset lefts</td>
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<td>9/15/2022</td>
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<td>Trace Howell</td>
<td>DPOC W-5803B</td>
<td>Install Rumble Strips on US 17 Between New Hanover/Pender County Line and Mile Post 19.30 in Pender &amp; Onslow</td>
<td>New Hanover</td>
<td>10/20/2022</td>
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<tr>
<td>Eric Murray</td>
<td>DPOC U-5914</td>
<td>Widen NC 133 from US 17/74/76 to Old River Road</td>
<td>Brunswick</td>
<td>11/3/2022</td>
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<tr>
<td>David Leonard</td>
<td>DPOC W-5803A</td>
<td>Upgrade Pedestrian &amp; Traffic Signals and Revise Median Islands at US 74 (Eastwood Road) at US 17</td>
<td>New Hanover</td>
<td>1/31/2023</td>
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<tr>
<td>Derek Pielech</td>
<td>DPOC BP3-R004</td>
<td>Brunswick 181 over Sturgeon Creek on SR 1437 (Old Fayetteville Road) (Previously 17BP.3.R.84)</td>
<td>Brunswick</td>
<td>2/15/2023</td>
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<td>Lydia</td>
<td>DPOC I-6036</td>
<td>I-140 - US 17 to North of US 74 pavement rehab</td>
<td>Brunswick</td>
<td>9/19/2023</td>
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<tr>
<td>Eric Murray</td>
<td>DPOC W-5703C</td>
<td>Monkey Junction Pedestrian Improvements</td>
<td>New Hanover</td>
<td>3/21/2024</td>
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<td>Brian Harding</td>
<td>DDRL U-5954</td>
<td>NC 133 at 23rd Street Roundabout</td>
<td>New Hanover</td>
<td>6/15/2027</td>
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<td>Derek Pielech</td>
<td>Raleigh BR-0008</td>
<td>Replace Bridge 208 over Sturgeon Creek on US 17 over US 76</td>
<td>Brunswick</td>
<td>9/21/2027</td>
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<td>Lydia</td>
<td>DDRL I-6037</td>
<td>I-140 from US 421 to I-40 pavement and bridge rehab</td>
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<td>US 74 at US 421/US 17/421 Flyover</td>
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<td>5/16/2028</td>
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<td>DDRL U-5731</td>
<td>Hampstead Bypass (US 17 from SR 1582 (Village Road) to Vista Lane)</td>
<td>Pender</td>
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<td>Krista Kimmel</td>
<td>DDRL U-4434</td>
<td>Independence Boulevard Extension</td>
<td>New Hanover</td>
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<td>Krista Kimmel</td>
<td>DDRL U-5926</td>
<td>New Route from 23rd St to 26th St</td>
<td>New Hanover</td>
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<td>Brian Harding</td>
<td>DDRL U-5729</td>
<td>US 421 Carolina Beach Rd median with intersection improvement</td>
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<td>Lydia</td>
<td>DPOC I-6038</td>
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<td>Krista Kimmel</td>
<td>DDRL U-3338C</td>
<td>Kerr Ave Interchange at MLK</td>
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<td>Krista Kimmel</td>
<td>DDRL U-4902B</td>
<td>US 17 Business - Market St Railroad to MLK</td>
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<td>Krista Kimmel</td>
<td>DDRL U-4902C</td>
<td>US 17 Business - Market St Railroad to MLK</td>
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<td>Trace Howell</td>
<td>DDRL U-5702B</td>
<td>College Road access from surgical building to Thomas Road to ramp to campus</td>
<td>New Hanover</td>
<td>1/15/2030</td>
<td></td>
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*Update provided: 8/08/22*

**PO:** WMPO

**Contact:** Adrienne Cox, amcox1@ncdot.gov, 910.341.2001
<table>
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<tr>
<th>Contract Number</th>
<th>Resident</th>
<th>TIP/WoS/WoRk Order County</th>
<th>Description</th>
<th>Estimated Completion</th>
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<td>DC00309</td>
<td>Ben Hughes</td>
<td>New Hanover</td>
<td>Bridge #29 over Smith Creek</td>
<td>10/11/2023</td>
<td>34.97%</td>
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<td>DC00316</td>
<td>Ben Hughes</td>
<td>New Hanover</td>
<td>3rd (US 17 Business) and Dock Street</td>
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<td>C204319</td>
<td>Ben Hughes</td>
<td>New Hanover</td>
<td>Superstreet median on Market St (US 17 BUS) from Marsh Oak Dr to Market St</td>
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<td>C204331</td>
<td>Ben Hughes</td>
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<td>Division With ADA Curb Ramp Update</td>
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<td>C204359</td>
<td>Ben Hughes</td>
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<td>Replace Bridge 657 on NC 24 Over Roanoke River Bridge</td>
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<td>11.41%</td>
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<td>Replace Bridge 57 on NC 24 Over Roanoke River Bridge</td>
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<td>C204623</td>
<td>Ben Hughes</td>
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<td>Replace Bridge 657 on NC 24 Over Roanoke River Bridge</td>
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<td>C204629</td>
<td>Ben Hughes</td>
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<td>Replace Bridge 57 on NC 24 Over Roanoke River Bridge</td>
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<td>C204747</td>
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<td>Drysdale Drive Extension from Military Cut off Road at Drysdale to US 74</td>
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<td>C204748</td>
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<td>C204931</td>
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<td>Replace Bridge G29 over Smith Creek</td>
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<td>DC00318</td>
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<td>DC00304</td>
<td>2021</td>
<td>Brunswick</td>
<td>US 17, NC 904 &amp; Various Secondary Roads</td>
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<td>75.14%</td>
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<td>DC00325</td>
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<td>Resurfacing B (3/16/2022 Availability Date)</td>
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<td>C204409</td>
<td>2021</td>
<td>Brunswick</td>
<td>1 Section of US-17, US-74/76, and NC-130; and 11 Sections of Secondary Roads</td>
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<td>DC00294</td>
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<td>DC00330</td>
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<td>Sampson</td>
<td>Sampson County Resurfacing and Preservation (7/06/2022 Availability Date)</td>
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<td>DC00311</td>
<td>2022</td>
<td>New Hanover</td>
<td>Market Street, 3rd Street, Independence Blvd, and patching on 16th &amp; 17th Streets</td>
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<td>DC00327</td>
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<td>DC00344</td>
<td>2023</td>
<td>Brunswick and New Hanover</td>
<td>Brunswick and New Hanover County Resurfacing Various Secondary Routes</td>
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Go!NC Portal for public information: HMIP (Highway Maintenance Improvement Program) GIS maps [https://ncdot.maps.arcgis.com/home/webmap/viewer.html?webmap=ceae1d0cf870473fb7d35294acb6b71c](https://ncdot.maps.arcgis.com/home/webmap/viewer.html?webmap=ceae1d0cf870473fb7d35294acb6b71c)
August 2022

Nazia Sarder
Transportation Engineer
NCDOT Transportation Planning Division
1 South Wilmington Street
Raleigh, NC 27601

AUGUST TPD UPDATES WILMINGTON MPO

AUGUST 2022

Brunswick County Model: The Brunswick County Model was completed in February of last year.

Brunswick County Comprehensive Transportation Plan (CTP): The Brunswick County CTP went through Peer Review, Management Review and Steering Committee Review. The CTP was on pause for 8 month as the county updated their scope and has resumed as of this month. The CTP engineers will reach out to the steering committee in the coming weeks to resume CTP efforts. The engineers wills start updating the data and working on the report to get ready for public involvement in the coming months.

Wilmington Model: The 2050 Travel Demand Model work started on 3/1/2022. The TDM is being developed for the next Wilmington MTP. Wilmington MPO has provided employment verification as well as most of the CO data that was requested from TPD. TPD is working on updating the TAZs, network and other information as part of the verification and data collection phase of the TDM.

Helpful Links:
Click on links below to learn more:
· NCDOT home page—ncdot.gov
· Real-Time Traffic—DriveNC.gov | North Carolina Traffic & Travel Information
· Report a pothole—NCDOT Contact Us Form
· NCDOT: State Transportation Improvement Program—ncdot.gov/sti
· Interactive Bicycle Routes Map—https://www.ncdot.gov/bikeped/ncbikeways/default.aspx
· Links to all traffic count data information—Traffic Survey Group (ncdot.gov)
· NCDOT Interactive Traffic Volume Map—Interactive Traffic Volume map (ncdot.gov)
· Traffic Safety Data & Engineering—NCDOT: Traffic Safety Data & Engineering
NCDOT Statewide Plans:
To learn more, click on the following links:
· NC Moves 2050 Plan (or go to ncdot.gov/ncmoves)
· NCDOT Strategic Transportation Corridors (or go to ncdot.gov and search: Strategic Transportation Corridors)
· NCDOT Comprehensive State Rail Plan (25-Year Vision) (or go to ncdot.gov and search: rail plan)
· NC Statewide Multimodal Freight Plan (2015-2040) (or go to ncdot.gov and search: public transportation plan)
· Great Trails State Plan (or go to ncdot.gov and search: Great Trails)
· Connecting North Carolinians to Opportunities (Public Transportation strategic Plan—2018) (or go to ncdot.gov and search: public transportation plan)
· NCDOT Resilience Strategy Report (2021) (or go to ncdot.gov and search: resilience strategy report)
· Statewide Pedestrian & Bicycle Plan (2013) (or go to ncdot.gov/bikeped/walkbikenc)