



Metropolitan Transportation Plan: Appendices

Final Plan, September 2025



WILMINGTON URBAN AREA
METROPOLITAN PLANNING ORGANIZATION

List of Acronyms

| | | | |
|----------------|---|-------------------|--|
| 3-C | Continuing, Cooperative, and Comprehensive Planning Process | MTIP | Metropolitan Transportation Improvement Program |
| AADT | Average Annual Daily Traffic | NAA | Non-attainment Area |
| ADT | Annual Daily Traffic | NCDOT | North Carolina Department of Transportation |
| BIL | Bipartisan Infrastructure Law | NEPA | National Environmental Policy Act of 1969 |
| CAC | Citizens Advisory Committee | RPO | Rural Planning Organization |
| CMAQ | Congestion Mitigation and Air Quality Improvement Quality | SAFETEA-LU | Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users |
| CMP | Congestion Management Process | SHSP | Strategic Highway Safety Plan |
| CRP | Carbon Reduction Program | SIP | State Implementation Plan |
| CTP | Comprehensive Transportation Plan | SOV | Single-Occupancy Vehicle |
| DOT | Department of Transportation | STBG-DA | Surface Transportation Block Grant Program - Direct Attributable |
| EPA | Environmental Protection Agency | STIP | Statewide Transportation Improvement Program |
| FAA | Federal Aviation Administration | STRAHNET | Strategic Highway Network |
| FAST | Fixing America's Surface Transportation | TASA-DA | Transportation Alternatives Set Aside - Direct Attributable |
| FC | Functional Classification | TCC | Technical Coordinating Committee |
| FHWA | Federal Highway Administration | TDM | Transportation Demand Management |
| FRA | Federal Railroad Administration | TEA-21 | Transportation Equity Act for the 21st Century |
| FTA | Federal Transit Administration | TIA | Traffic Impact Analysis |
| FY | Fiscal Year | TIP | Transportation Improvement Program |
| GIS | Geographic Information Systems | TMA | Transportation Management Area |
| HOV | High-Occupancy Vehicle | TOD | Transit-Oriented Development |
| HSIP | Highway Safety Improvement Program | UA | Urbanized Area |
| IJA | Infrastructure Investment and Jobs Act | UNCW | University of North Carolina at Wilmington |
| IHS | Interstate Highway System | UPWP | Unified Planning Work Program |
| ISTEA | Intermodal Surface Transportation Efficiency Act of 1991 | VMT | Vehicle Miles Traveled |
| ITS | Intelligent Transportation Systems | VPD | Vehicles Per Day |
| LRTP | Long Range Transportation Plan | WRTDM | Wilmington Regional Travel Demand Model |
| MAP-21 | Moving Ahead for Progress in the 21st Century | | |
| M&O | Management and Operations | | |
| MPO | Metropolitan Planning Organization | | |
| MTP | Metropolitan Transportation Plan | | |



Appendices

Table of Contents

A: Background and Demographics

B: Federal Regulations

C: Public Involvement

D: Financial Element

E: Aviation

F: Bicycle and Pedestrian

G: Ferry and Water Transportation

H: Rail

I: Public Transportation

J: Roadway

K: Transportation Systems Management and Operations (TSMO)

L: Transportation Demand Management

M: Environmental Considerations

N: Comprehensive Transportation Plan (CTP)

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A

Background and Demographics

Table of Contents

1. Background Information
2. Demographics

Background Information

The Wilmington Urban Area Metropolitan Planning Organization and the “Long Range Plan”

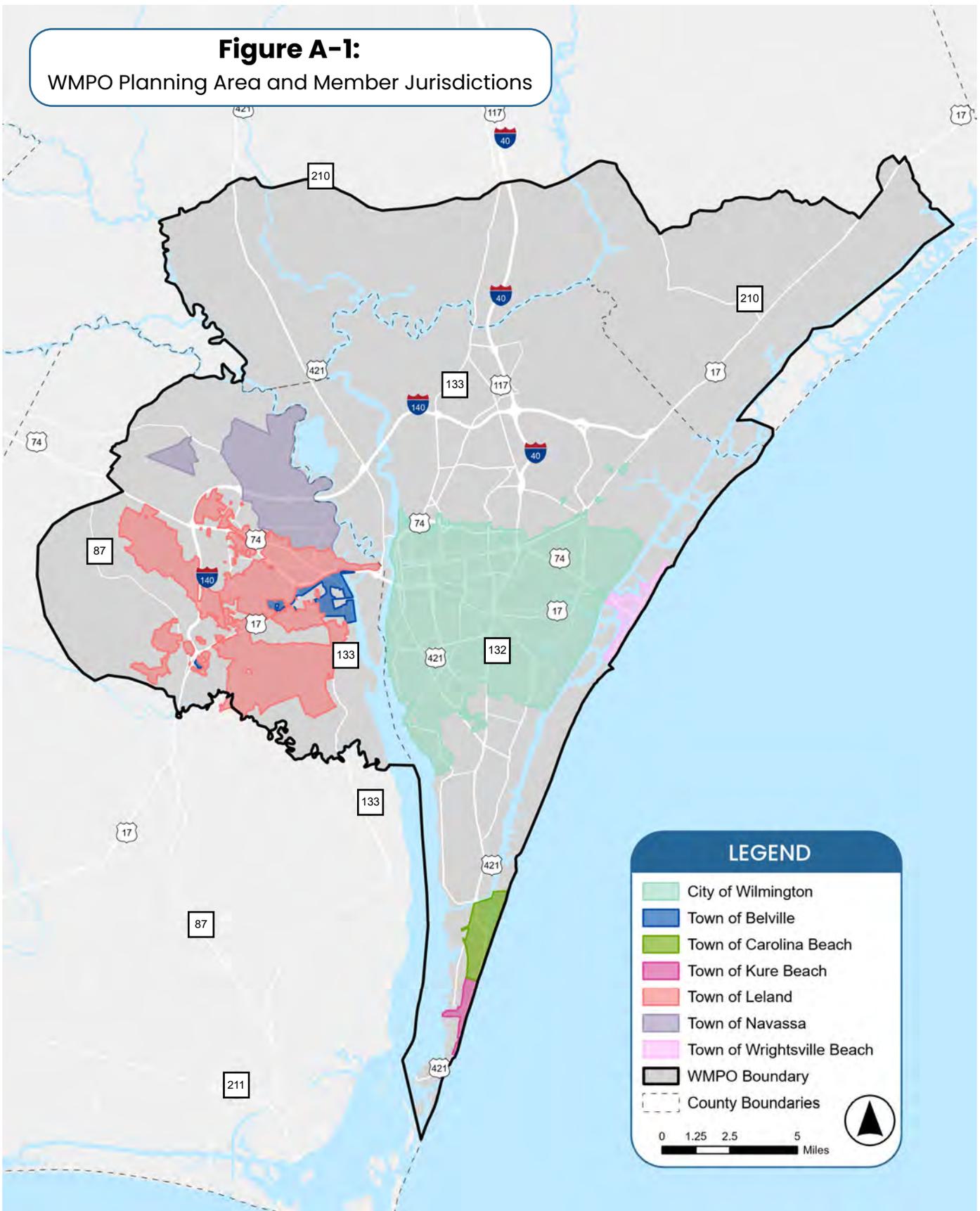
A Metropolitan Planning Organization (MPO) is a federally mandated, policy-making organization that consists of local governments and transportation authorities. Largely in response to the construction of the United States interstate system, the Federal Aid Highway Act of 1962 created the requirement for a formalized process of urban transportation planning. MPOs are established for every “urbanized area” (UA) boundary within the United States, defined by the US Census Bureau as having 50,000 or more residents. MPOs are designated by the Governor by a Memorandum of Understanding that is signed by all participating local governments. In the 1970’s, when the Wilmington Urban Area reached a population of over 50,000, the Wilmington Urban Area Metropolitan Planning Organization (WMPO) was created. The main responsibility of the WMPO is to maintain a partnership between local governments and the state government to guide decisions about transportation planning and funding priorities in the region. The WMPO was designated a Transportation Management Area (TMA) in 2012 after the region’s population reached 200,000, adding the requirement to develop a Congestion Management Process (CMP).

All decisions of the WMPO are made by the WMPO Board of Directors. The 13-member Board is comprised of representatives from the WMPO’s member jurisdictions: City of Wilmington, Town of Carolina Beach, Town of Wrightsville Beach, Town of Kure Beach, New Hanover County, Town of Leland, Town of Belville, Town of Navassa, Brunswick County, and Pender County; as well as representatives from the NC Board of Transportation and the Cape Fear Public Transportation Authority (Wave Transit). The WMPO Board sets policy and provides direction for the organization. The City of Wilmington is the lead planning agency for the WMPO. WMPO staff work in cooperation with the local, state, and federal government to develop several plans from which transportation needs are identified. Some of the products of the WMPO include the Unified Planning Work Program (UPWP), Transportation Improvement Program (TIP), Comprehensive Transportation Plan (CTP), Congestion Management Process (CMP), and this document: the Metropolitan Transportation Plan (MTP). The Federal Highway Act of 1973 requires MPOs to prepare an MTP to identify how the area will manage and operate a multimodal transportation system to meet the region’s economic, transportation, development, and sustainability goals for a 20-year or more planning horizon. The previous MTP, *Cape Fear Moving Forward 2045*, adopted in 2020, will be replaced by this document, *Cape Fear Navigating Change 2050*.

The Wilmington Urban Area Planning Boundary

As previously described, a UA is a census-defined boundary with a population of 50,000 or more. This boundary is then adjusted through coordination and agreement with local governments and NCDOT, to sometimes include additional territory, and is then submitted to the Federal Highway Administration (FHWA) for approval. The Wilmington Urban Area boundary encompasses 494 square miles, including the entirety of New Hanover County and portions of Brunswick and Pender Counties. Figure A-1 shows a map of the WMPO planning area and member jurisdictions.

Figure A-1:
 WMPO Planning Area and Member Jurisdictions



Demographics

The US Census: Population Trends

Between 2010 and 2022, New Hanover and Pender counties were the 17th and 4th fastest-growing counties in North Carolina, respectively. Brunswick County was the second fastest-growing county. According to the American Community Survey, while the state’s total population increased by 12%, New Hanover County’s population grew by 4%, Pender County’s by 9.2%, and Brunswick County’s by 12% between 2010 and 2022. There are approximately 300,000 people estimated to be currently living within the WMPO planning boundary.

The US Census: Economic Trends

The economy in the Wilmington Urban Area has also grown significantly in recent years. The largest industries in the region, in terms of number of employees, include Healthcare and Social Assistance, Retail Trade, and Accommodation and Food Service. There are approximately 9,462 employer establishments within the WMPO boundary. Most residents of the region commute to work in a single-occupancy vehicle (SOV) with an average commute of 22.4 minutes.

| Table A.1 - 2020 Census Data (by County) | | | | | |
|--|------------|-------------------------|--------------|-----------------|-----------------------|
| County | Median Age | Median Household Income | Poverty Rate | Employment Rate | Median Property Value |
| New Hanover | 39.4 | \$79,547 | 12% | 63% | \$394,100 |
| Pender | 40.6 | \$71,487 | 11.2% | 59.4% | \$315,700 |
| Brunswick | 57.6 | \$76,221 | 10.5% | 46.6% | \$360,100 |

Source: US Census Bureau, 2020 Census

Sources

- United States Census Bureau 2020 Census Data
<https://www.census.gov/data.html>
- 2022 American Community Survey



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B

Federal Regulations

Table of Contents

1. The Federal Transportation Bill
2. Planning Factors
3. Performance Targets
4. Other Federal Transportation Planning Regulations

The Federal Transportation Bill

In November 2021, the Infrastructure Investment and Jobs Act (IIJA), also known as the Bipartisan Infrastructure Law (BIL), was signed into law. The IIJA built upon the Fixing America's Surface Transportation (FAST) Act (2015-2020) and funds surface transportation programs through 2026.

The IIJA authorized \$1.2 trillion in funding over five years, including \$550 billion in new spending. It expanded on FAST Act programs and initiatives, providing increased funding for dedicated resilience programs, safety, investment into public transit and rail, and electric vehicle infrastructure. It also introduced new discretionary grants for transportation projects, such as the Bridge Investment Program.

Moving Ahead for Progress in the 21st Century (MAP-21), enacted in 2012, created regulations for metropolitan and statewide transportation planning, including performance goals and targets, in the process of identifying and prioritizing transportation projects. The IIJA upholds existing requirements under the FAST Act and MAP-21 to ensure long-range transportation planning is data-driven, multimodal, and incorporates public involvement. It also expanded federal requirements to include considerations for transportation access, resilience, active transportation, freight and supply chain efficiency, and data-driven decision-making. It also includes policy changes that are intended to better coordinate transportation planning with housing through the voluntary development of a housing coordination plan that may be incorporated into the metropolitan transportation plan of MPOs.

The following pages outline how the IIJA requirements were incorporated into the development of *Cape Fear Navigating Change 2050*.

Planning Factors

Code of Federal Regulations (CFR) Title 23, Section 134(c)(3) states that the process for developing the plans and TIPs shall provide for consideration of all modes of transportation and shall be continuing, cooperative, and comprehensive to the degree appropriate, based on the complexity of the transportation problems to be addressed.

While the IIJA did not formally add any new planning factors, it expanded on and reinforced those introduced in MAP-21 and the FAST Act. There are currently ten federally required planning factors, all of which were considered during the development of *Cape Fear Navigating Change 2050*. The planning factors are listed below.

- Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.
- Increase the safety of the transportation system for motorized and non-motorized users.
- Increase the security of the transportation system for motorized and non-motorized users.
- Increase accessibility and mobility of people and freight.
- Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns.



The relationship between the federal planning factors and this plan's adopted goals is explored in Chapter 3.

- Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight.
- Promote efficient system management and operation.
- Emphasize the preservation of the existing transportation system.
- Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation.
- Enhance travel and tourism.

Performance Targets

Code of Federal Regulations (CFR) Title 23, Section 450.306(d)(3) states MPOs shall establish performance targets no later than 180 days after the relevant state or provider of public transportation establishes performance targets.

The CFR requires the establishment and use of a coordinated performance-based approach to transportation decision-making to support national goals for the federal-aid highway and public transportation programs. In 2016, the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) issued the Statewide and Nonmetropolitan Transportation Planning; Metropolitan Transportation Planning Final Rule (The Planning Rule). This regulation implements the transportation planning and performance management frameworks of the IIJA.

Per 23 CFR 450.324(f)(3)-(4)(i)(ii) of the Planning Rule and the North Carolina Performance Management Agreement between NCDOT, the WMPO, and public transportation providers, both NCDOT and each North Carolina MPO must include the following in their metropolitan transportation plans:

- A description of the applicable performance measures and targets.
- A System Performance Report detailing these performance measures.

The System Performance Report evaluates the condition and performance of the transportation system based on required performance measures and approved targets. It also monitors progress towards these targets comparing current data with previous reports and the baseline.

The Planning Rule specifies the following time frames for when a state or MPO must include the System Performance Report:

- Highway Safety (PM1): In any statewide or metropolitan transportation plan amended or adopted on or after May 27, 2018
- Pavement and Bridge Condition (PM2): In any statewide or metropolitan transportation plan amended or adopted on or after May 20, 2019
- System Performance, Freight, and Congestion Mitigation and Air Quality (PM3): In any statewide or metropolitan transportation plan amended or adopted on or after May 20, 2019
- Transit Assets: In any statewide or metropolitan transportation plan amended or adopted on or after October 1, 2018
- Transit Safety Measures: In any statewide or metropolitan transportation plan amended or adopted on or after July 20, 2021

The System Performance Report for the WMPO's Metropolitan Transportation Plan (MTP) is included herein for the required performance measures.

The WMPO planning process directly reflects the goals, objectives, performance measures, and targets as they are available and described in other State and public transportation plans and processes; specifically, the North Carolina Strategic Highway Safety Plan (SHSP), the Highway Safety Improvement Program (HSIP), the Transportation Asset Management Plan (TAMP), the North Carolina Multimodal Statewide Freight Plan, and the current 2050 North Carolina Statewide Long Range Transportation Plan (SLRTP).

- The SHSP provides a multifaceted approach to improve safety for all users on roadways throughout the state. The plan is used to work towards NCDOT's Vision Zero goal, or zero fatalities on roadways by the year 2050.
- HSIP provides a continuous and systematic procedure that identifies and reviews specific traffic safety concerns throughout the state, aiming to reduce the number of crashes, injuries, and fatalities through the implementation of engineering solutions.
- MAP-21 requires states to develop a TAMP for all National Highway System (NHS) pavements and bridges within the state. North Carolina's TAMP includes investment strategies leading to a program of projects that would make progress toward the achievement of the state's pavement and bridge condition targets.
- The North Carolina Multimodal Statewide Freight Plan is used to improve freight movement throughout the state. The plan identifies freight transportation needs and establishes and prioritizes recommendations based on evaluation criteria.
- The 2050 SLRTP, NC Moves, is a 30-year strategic multimodal transportation plan focused on improved access, enhanced safety and security, and economic development. Strategies outlined within the plan align with its objectives and seek to provide a responsive, diverse, and inclusive transportation system.

The sections that follow provide details regarding the performance measures and associated targets, as well as information/discussion by the WMPO regarding how projects programmed in the organization's TIP are helping the NCDOT achieve its targets.

Highway Safety (PM1)

Effective April 14, 2016, the FHWA established five highway safety performance measures to carry out the HSIP. These performance measures are:

- Number of fatalities
- Rate of fatalities per 100 million vehicle miles traveled
- Number of serious injuries
- Rate of serious injuries per 100 million vehicle miles traveled
- Number of combined non-motorized fatalities and non-motorized serious injuries

Safety performance targets are established annually by state DOTs for each safety performance measure and reported to FHWA in the HSIP Annual Report. MPOs then establish annual targets for each measure by either agreeing to program projects that will support the statewide targets or setting quantifiable targets for the metropolitan planning area.

Current statewide safety targets address calendar year 2025 and are based on a five-year rolling average of historical data and anticipated trends. North Carolina statewide safety performance targets for 2025 are included in Table B.1, along with statewide safety performance for the two most recent reporting periods (2016-2020 and 2018-2022). The WMPO adopted the North Carolina statewide safety performance targets on January 29, 2025.

In 2024, FHWA completed an assessment of target achievement for NCDOT's calendar year 2022 safety targets, based on the five-year averages for 2018-2022 for each measure.

As per 23 CFR 490.211(c)(2), a state DOT has met or made significant progress towards meeting its safety performance targets when at least four of the safety performance targets established have been met or the actual outcome is better than baseline performance. Based on FHWA's review, North Carolina has not met or made significant progress toward achieving its safety performance targets. As a result, NCDOT must ensure that all HSIP safety funds are obligated and must develop an HSIP Implementation Plan that describes actions the state will take to meet or make significant progress toward achieving its targets.

Cape Fear Navigating Change 2050 will increase the safety of the transportation system for motorized and non-motorized users as required by the Planning Rule. The plan includes “safety” as its first goal and was incorporated into the development of modal objectives that formed the basis of scoring criteria and metrics for projects included in this plan. The developed metrics applied a higher point assignment to projects that improved safety within the existing transportation network. The funding and implementation of these projects will contribute to an overall safer multi-modal transportation system and assist in meeting safety performance targets.

Table B.1 - Highway Safety (PM1) System Conditions and Performance

| Performance Measures | Statewide 5-Year Rolling Average 2016-2020 | Statewide 5-Year Rolling Average 2018-2022 | Statewide NC Calendar Year 2025 Targets |
|--|--|--|---|
| Number of fatalities | 1,458.6 | 1,550.8 | 1,103.3 |
| Rate of fatalities per 100 million vehicle miles traveled | 1.250 | 1.328 | 0.925 |
| Number of serious injuries | 4,410.2 | 5,030.0 | 3,204.8 |
| Rate of serious injuries per 100 million vehicle miles traveled | 3.776 | 4.296 | 2.675 |
| Number of combined non-motorized fatalities and non-motorized serious injuries | 583.4 | 661.6 | 434.6 |

Targets established by NCDOT and adopted by the WMPO.

Pavement and Bridge Condition (PM2)

Effective May 20, 2017, FHWA established performance measures to assess pavement and bridge conditions for the National Highway Performance Program. This second FHWA performance measure rule (PM2) established six performance measures:

- Percentage of interstate pavements in good condition
- Percentage of non-interstate pavements in good condition
- Percentage of interstate pavements in poor condition
- Percentage of non-interstate pavements in poor condition
- Percentage of bridges in good condition
- Percentage of bridges in poor condition

Pavement Condition Measures

FHWA established five metrics to assess pavement condition: International Roughness Index (IRI), applicable to asphalt and concrete pavements; cracking percent, applicable to asphalt and concrete pavements; rutting, applicable only to asphalt pavements; faulting, applicable only to certain types of concrete pavements; and Present Serviceability Rating (PSR), applicable only to roads with lower posted speeds and used in lieu of the other metrics at the option of the state. For each metric, a threshold is used to establish good, fair, or poor condition.

A pavement section is rated in good condition if two or three of the applicable metric ratings are good, and in poor condition if two or more applicable metric ratings are poor. If a state reports PSR for any pavement segments, those segments are rated according to a single PSR scale. For all pavement types, sections that are not good or poor are rated as fair. Pavement in good condition suggests that no major investment is needed, while pavement in poor condition suggests major reconstruction investment is needed.

Bridge Condition Measures

The condition of each bridge is evaluated by assessing four bridge components: deck, superstructure, substructure, and culverts. FHWA created a metric rating threshold for each component to establish good, fair, or poor condition. Every bridge on the National Highway System is evaluated using these component ratings. If the lowest rating of the four metrics is greater than or equal to seven, the structure is classified as good. If the lowest rating is less than or equal to four, the structure is classified as poor. If the lowest rating is five or six, it is classified as fair.

To determine the percentage of bridges in good or poor condition, the sum of total deck area of good or poor NHS bridges is divided by the total deck area of bridges carrying the NHS. Deck area is computed using structure length and either deck width or approach roadway width.

Good condition suggests that no major investment is needed. Bridges in poor condition are safe to drive on; however, they are nearing a point where substantial reconstruction or replacement is needed.

Pavement and Bridge Targets

Pavement and bridge condition performance is assessed and reported over a four-year period. The first performance period occurred January 1, 2018, through December 31, 2021. The second performance period covers January 1, 2022 through December 31, 2025.

The PM2 rule requires states and MPOs to establish two-year and/or four-year performance targets for each PM2 measure. States establish targets as follows:

- Percent of Interstate pavements in good and poor condition – four-year targets
- Percent of non-Interstate NHS pavements in good and poor condition – two-year and four-year targets
- Percent of NHS bridges by deck area in good and poor condition – two-year and four-year targets

MPOs establish four-year targets for each measure by either agreeing to program projects that will support the statewide targets or setting quantifiable targets for the metropolitan planning area.

NCDOT established the current statewide two- and four-year PM2 targets on December 15, 2022. Table B.2 presents statewide baseline performance for each PM2 measure as well as the current two- and four-year statewide targets established by NCDOT.

The WMPO’s 2050 MTP addresses infrastructure preservation and identifies pavement and bridge needs within the metropolitan planning area. Funding is allocated for targeted infrastructure improvements like the Cape Fear Memorial Bridge Replacement and the modernization of several regional minor arterials and major collector streets. The plan estimates projected roadway infrastructure maintenance revenues over the next 25 years and includes overarching plan goals that support the improvement of existing infrastructure quality within the region.

| Table B.2 - Statewide Pavement and Bridge Condition (PM2) Performance and Targets | | | |
|---|------------------------------|----------------------|----------------------|
| Performance Measures | Statewide Performance (2021) | 2-Year Target (2023) | 4-Year Target (2025) |
| Percent of Interstate pavements in good condition | 75.1% | 60% | 62% |
| Percent of Interstate pavements in poor condition | 0.2% | 1.8% | 1.5% |
| Percent of non-Interstate pavements in good condition | 34.6% | 30% | 31% |
| Percent of non-Interstate pavements in poor condition | 1.2% | 3.5% | 3.0% |
| Percent of NHS bridges in good condition | 45.9% | 38% | 36% |
| Percent of NHS bridges in poor condition | 2.8% | 5% | 5% |

Performance and targets measured and established by NCDOT.

System Performance, Freight, and Congestion Mitigation and Air Quality Improvement Program (PM3)

Effective May 20, 2017, FHWA established measures to assess performance of the NHS, freight movement on the Interstate system, and the Congestion Mitigation and Air Quality Improvement (CMAQ) Program. This third FHWA performance measure rule (PM3) established six performance measures.

National Highway System (NHS) Performance

- Percent of the person-miles traveled on the Interstate that are reliable
- Percent of the person-miles traveled on the non-Interstate that are reliable

Freight Movement on the Interstate

- Travel Truck Time Reliability (TTTR) Index

Congestion Mitigation and Air Quality Improvement (CMAQ) Program

- Annual hours of peak hour excessive delay per capita
- Percent of non-Single Occupancy Vehicle (SOV) travel
- Total emissions reduction

The CMAQ performance measures apply to states and MPOs with projects financed through CMAQ funds and whose boundary contains any part of a nonattainment or maintenance area for ozone, carbon monoxide, or particulate matter. The WMPO planning area meets air quality standards, thus CMAQ measures are not reflected in its System Performance Report.

System Performance Measures

The performance metric used to calculate reliability is the Level of Travel Time Reliability (LOTTR). LOTTR is defined as the ratio of longer travel times (80th percentile) to a normal travel time (50th percentile) over all applicable roads during four time periods (AM peak, mid-day, PM peak, and weekends) that cover the hours of 6 AM to 8 PM each day.

The LOTTR ratio is calculated for each segment of applicable roadway, essentially comparing the segment with itself. A segment is deemed to be reliable if its LOTTR is less than 1.5 during all four time periods. If one or more time periods have a LOTTR of 1.5 or above, that segment is unreliable.

The measures are expressed as the percentage of person-miles traveled on the Interstate or non-Interstate NHS system that are reliable. Person-miles consider the number of people traveling in buses, cars, and trucks over these roadway segments. To determine the total person miles traveled, the vehicle miles traveled (VMT) on each segment is multiplied by average vehicle occupancy. To calculate the percentage of person miles traveled that are reliable, the sum of the number of reliable person miles traveled is divided by the sum of total person miles traveled.

Freight Movement Performance Measure

A Travel Truck Time Reliability ratio is generated by dividing the 95th percentile truck travel time by a normal travel time (50th percentile) for each segment of the Interstate system over five time periods throughout weekdays and weekends (AM peak, mid-day, PM peak, weekend, and overnight) that cover all hours of the day. For each segment, the highest TTTR value among the five time periods is multiplied by the length of the segment. The sum of all length-weighted segments is then divided by the total length of Interstate to generate the TTTR Index.

PM3 Performance Targets

Performance for the PM3 measures is assessed and reported over a four-year period. The first performance period occurred from January 1, 2018, through December 31, 2021.

The PM3 rule requires state DOTs and MPOs to establish two-year and/or four-year performance targets for each PM3 measure. The current two-year and four-year targets represent expected performance at the end of calendar years 2023 and 2025, respectively.

States establish targets as follows:

- Percent of person-miles on the Interstate system that are reliable – two-year and four-year targets
- Percent of person-miles on the non-Interstate NHS that are reliable – four-year targets
- Truck Travel Time Reliability (TTTR) – two-year and four-year targets.

MPOs establish four-year targets for the System Performance and Freight Movement measures. MPOs establish targets by either agreeing to program projects that will support the statewide targets or setting quantifiable targets for the MPO’s planning area that differ from the state targets.

NCDOT established the current statewide PM3 targets in 2021. Table B.3 presents statewide baseline performance for each PM3 measure as well as the current two-year and four-year statewide targets established by NCDOT.

The WMPO’s 2050 MTP addresses reliability, freight movement, and congestion, as well as identifies needs for each of these issues within the metropolitan planning area. Projects were evaluated based on their ability to increase connectivity and resiliency, which result in improved reliability and efficiency of the transportation network. These goals subsequently influenced the development of modal policies supporting future investments supporting travel time and overall system reliability.

The WMPO recognizes the importance of linking goals, objectives, and investment priorities to stated performance objectives, and that establishing this link is critical to the achievement of national transportation goals and statewide and regional performance targets. As such, the *Cape Fear Navigating Change 2050* planning process directly reflects the goals, objectives, performance measures, and targets as they are available and described in other State and public transportation plans and processes.

| Table B.3 - System Performance/Freight Movement (PM3) Performance and Targets | | | |
|---|----------------------------------|----------------------|----------------------|
| Performance Measures | Statewide Performance (Baseline) | 2-Year Target (2023) | 4-Year Target (2025) |
| Percent of person-miles on the Interstate system that are reliable | 96.6% | 75% | 75% |
| Percent of person-miles traveled on the non-Interstate NHS that are reliable | 95.7% | 70% | 70% |
| Truck Travel Time Reliability (TTTR) Index | 1.27 | 1.70 | 1.70 |

Targets established by NCDOT and adopted by the WMPO.

Transit Assets

Effective October 1, 2016, the Federal Transit Administration (FTA) published a final rule defining the term *state of good repair* (SGR) and established minimum requirements for transit asset management that will apply to all recipients and subrecipients of chapter 53 funds that own, operate, or manage public transportation capital assets. The rule requires public transit providers to develop Transit Asset Management (TAM) plans that include an asset inventory, condition assessments, and a prioritized investment strategy to maintain SGR. It also sets SGR standards and four performance measures covering equipment, rolling stock, infrastructure, and facilities. Providers must set performance targets based on these measures, report asset conditions and targets to the National Transit Database, and use the information to guide investment decisions.

Cape Fear Public Transportation Authority, operating as Wave Transit, has prepared a TAM Plan to guide the effective management of its capital assets. The TAM Plan was last updated in January 2021 and has a five-year planning horizon, with updates required at least every four years or sooner if significant changes in assets occur. Wave Transit qualifies as a Tier II provider under FTA's requirements, as it operates fewer than 100 vehicles in peak service. As such, its plan addresses the four required elements:

- Inventory of Capital Assets
- Condition Assessments
- Decision Support Tools
- Investment Prioritization Strategy

The capital asset inventory covers three categories:

- Rolling stock
- Equipment
- Facilities

While there is a fourth category of capital asset inventory, infrastructure, Wave Transit does not currently own infrastructure assets which makes the measure non-applicable. As of the 2021 TAM Plan, Wave Transit's inventory includes 67 units of revenue rolling stock, 12 units of equipment, and 5 facilities. Rolling stock consists of heavy duty buses, body-on-chassis shuttle vehicles, vans, and replica trolley buses. Equipment includes non-revenue support vehicles and maintenance equipment such as service trucks, lifts, and forklifts. Facilities include operations, maintenance, and passenger stations such as Forden Station and the recently completed Padgett Station.

Condition assessments are applied to each asset class using FTA's SGR performance measures. For rolling stock and equipment, the performance metric is the percentage of assets that meet or exceed their Useful Life Benchmark (ULB), which varies by vehicle type from 4 to 12 years or 100,000 to 500,000 miles. For facilities, the condition measure is based on the Transit Economic Requirements Model (TERM) scale, which rates facilities from 1 (poor) to 5 (excellent). According to the most recent analysis, 22 percent of rolling stock and 42 percent of equipment have met or exceeded their ULB, while no facilities are rated below 3 on the TERM scale. Importantly, when assessed against the broader FTA SGR criteria—functionality, safety, and lifecycle investment—all capital assets are determined to be in a state of good repair.

To support asset monitoring and decision-making, Wave Transit uses AssetWorks software as its central asset management database. AssetWorks tracks preventive maintenance schedules, work orders, parts usage, and service history, allowing the Authority to forecast maintenance needs and replacement timelines. This system provides the foundation for prioritizing capital reinvestments, supplemented by methods recommended by the American Public Transportation Association (APTA).

Long-term needs are assessed through estimates of system replacement value, asset backlog, and reinvestment requirements. The 2021 TAM Plan identified a total system replacement value of approximately \$42.5 million across rolling stock, equipment, and facilities. Over a 10-year horizon, normal reinvestment is estimated at \$15.5 million, with an additional backlog of \$2.8 million for assets that have already met or exceeded their useful life. The total SGR need, combining reinvestment and backlog, is projected at \$4.3 million over 10 years, or about \$432,000 annually. These figures help guide funding requests and programming for asset replacement.

Investment prioritization is an ongoing process. The TAM Plan identifies high-, medium-, and low-priority replacement needs for rolling stock, paratransit, and vanpool vehicles. At the time of the plan's adoption, seven buses, shuttles, and trolleys, along with multiple paratransit and vanpool vehicles, were identified as high-priority replacements due to age and mileage. Funding for these vehicles is pursued through federal programs like Section 5339 formula funds, and can be supplemented by state and local contributions.

In addition to meeting federal requirements, the TAM Plan is closely coordinated with the Statewide Transportation Improvement Program (STIP) and the MPO's Metropolitan Transportation Plan. Updates to the TAM Plan are aligned with STIP cycles to ensure consistency in programming. The next update to Wave Transit's TAM Plan is scheduled for 2026. Through this structured approach, Wave Transit ensures its assets are systematically monitored, maintained, and scheduled for replacement, supporting safe and reliable service across the region.

Under the FTA's TAM rule, MPOs are required to integrate transit asset performance measures and targets into their performance-based planning and programming process. While transit providers such as Wave Transit are responsible for preparing TAM Plans and establishing State of Good Repair (SGR) performance targets, MPOs play a coordinating and reporting role.

The WMPO works with Wave Transit to incorporate TAM performance measures into the region's planning framework. MPO responsibilities include:

- **Coordination with Transit Providers** – The WMPO consults with Wave Transit during the development and update of TAM performance targets to ensure alignment with regional planning goals.
- **Adoption of Performance Targets** – The WMPO incorporates the federally defined TAM performance measures by supporting the targets established by Wave Transit in its TAM Plan. These targets are carried forward into the MPO's planning documents to ensure consistency between the transit provider's asset management strategies and regional investment planning.
- **Integration into Planning Documents** – The WMPO incorporates TAM performance measures and targets into the Metropolitan Transportation Plan (MTP) and Transportation Improvement Program (TIP), ensuring that project prioritization and investment decisions consider the state of repair of the region's transit assets.
- **Tracking and Reporting** – The WMPO documents TAM performance targets and monitors progress toward achieving them as part of the federally required performance-based planning process.

By coordinating closely with Wave Transit, the WMPO ensures that regional planning and programming support the maintenance and reinvestment of transit capital assets, helping extend asset life cycles and sustain a SGR across the system.

Transit Safety Measures

Effective August 11, 2016, the FTA published a final rule establishing the Public Transportation Safety Program, which set federal safety oversight requirements for public transit systems. The rule applies to all recipients and subrecipients of 49 U.S.C. Chapter 53 funds and outlines FTA's authority to monitor, audit, and enforce safety standards. It requires transit agencies to implement Safety Management Systems (SMS), develop safety performance targets, and proactively manage safety risks. Public transit agencies must also report safety performance data and targets, using this information to guide safety improvements and investment decisions.

Under 49 CFR Part 673, all agencies receiving Section 5307 funds must adopt and annually update a Public Transportation Agency Safety Plan (PTASP). The PTASP must be approved by the agency's governing board and certified by an Accountable Executive. As demonstrated in Wave Transit's adopted 2024 PTASP, the plan must address:

- Safety Management Policy – organizational commitment to safety, including defined roles for the Accountable Executive, Chief Safety Officer, supervisors, and employees; a no-retaliation Employee Safety Reporting Program; and policies ensuring integration of safety into all agency functions.
- Safety Risk Management – procedures to identify, assess, and mitigate hazards through inspections, reporting, investigation, and monitoring. Hazards are prioritized by risk level and tracked to resolution.
- Safety Assurance – ongoing monitoring of operations and maintenance activities, preventive maintenance inspections, facility safety checks, accident/incident investigations, and use of data to evaluate effectiveness of risk mitigations.
- Safety Promotion – workforce hiring standards, operator and supervisor training, annual refresher training, emergency preparedness, and internal communication of safety practices.

The PTASP also requires agencies to establish and track safety performance targets consistent with the National Public Transportation Safety Plan, including:

- Fatalities (number and rate per 100,000 vehicle revenue miles)
- Injuries (number and rate per 100,000 vehicle revenue miles)
- Safety Events (reportable incidents)
- System Reliability (mean distance between major mechanical failures)

Targets are coordinated annually with NCDOT and the WMPO to ensure alignment between local, regional, and state safety planning. Table B.4 below overviews the applicable safety performance targets for Wave Transit as of their latest PTASP, adopted in 2024.

| Table B.4 - Transit Safety Performance Targets | | | | | | |
|--|--------------------|------------------|---------------------------------|-----------------------|--------------------------------------|-----------------------------------|
| Mode of Transit Service | Fatalities (total) | Injuries (total) | Injuries (per 100 thousand VMT) | Safety Events (total) | Safety Events (per 100 thousand VMT) | Safety Reliability (VRM/failures) |
| Fixed Route Bus | - | 15 | 1.015 | 9 | 0.16 | 6,865 |
| Demand Response | - | - | - | - | - | 32,8327 |

Targets established by Wave Transit and adopted by the WMPO.

Other Federal Transportation Planning Regulations

Coordination between Metropolitan Planning Organizations, States, and Public Transportation Providers Regarding Performance Targets

Code of Federal Regulations (CFR) Title 23, Section 450.314(h) states that MPOs, states, and public transportation providers shall agree upon provisions for developing and sharing information regarding the data, selection, collection, reporting, and progress of performance targets.

The WMPO will continue to work with NCDOT and Wave Transit to share and report information regarding the collection, recording, and progress of targets. To meet this requirement, the WMPO Board approved a resolution on May 23, 2018, authorizing a performance management agreement with NCDOT, Cape Fear Public Transportation Authority, Brunswick Transit System, Inc., and Pender Adult Services, Inc.

Involving Interested Parties in the Metropolitan Transportation Planning Process

Code of Federal Regulations (CFR) Title 23, Section 450.316(a) states that MPOs shall develop and use a documented participation plan in order to involve the public and incorporate public ports and private providers of transportation such as intercity bus operators and employer-based commuter programs.

The WMPO's adopted Public Participation Plan (PPP) was approved by the WMPO Board on September 30, 2020 and amended January 25, 2023. This plan, and additional measures, were used to fulfill the public participation portion of this plan's development. The WMPO established two subcommittees comprised of subject matter experts, staff from its member jurisdictions, planning partners, citizens, and other stakeholders to develop the plan's vision, goals, and policies. One of these, the Citizen Advisory Committee (CAC), was a 13-member volunteer group appointed by Board members to represent a range of community and civic organizations, professional and neighborhood associations, and the private sector. The second, the Metropolitan Transportation Plan Committee (MTPC), was an 18-member group of subject matter experts in transportation, urban planning, public health, emergency management, and related fields. The MTPC advised on plan development, including evaluation criteria, project selection, and policy recommendations, and played a key role in shaping the plan's vision and goals. Representatives from the Port of Wilmington and Wilmington International Airport were included in these subcommittees to ensure projects and policies incorporated their unique needs. The Transportation Demand Management chapter was developed with the help of regional employers to consider commuter needs and programs.

Coordination with Other Planning Agencies during the Development of the Metropolitan Transportation Plan

Code of Federal Regulations (CFR) Title 23, Section 450.316(b) states that MPOs should consult with other planning agencies and additional representatives of tourism and the reduction of impacts from natural disasters in the area when developing the MTP.

Subject matter experts represented on the subcommittees included planning representatives from Wilmington International Airport (ILM); the Cape Fear Public Transportation Authority (Wave Transit); the North Carolina Port of Wilmington; Emergency Management staff from Pender and New Hanover Counties; and the Planning Directors (or their designees) of New Hanover, Pender, and Brunswick counties. The WMPO also engaged the Wilmington Chamber of Commerce to incorporate an economic development perspective that is inclusive of tourism activities in the region.

Additionally, the WMPO's Technical Coordinating Committee (TCC), which is comprised of planning and operations staff from the organization's member jurisdictions, planning partners, and NCDOT's Transportation Planning Division, assisted in the development of this plan.

The WMPO coordinated with state and local environmental agencies and professionals to ensure that natural resource considerations and disaster resilience were integrated into the 2050 MTP. NCDEQ, NCDOT, and MTPC members with expertise in environmental and emergency management not only helped shape the plan's vision, goals, and project screening but, also reviewed the draft plan to ensure its alignment with key environmental considerations. This collaboration supports long-term regional resilience and alignment with broader planning efforts.

The Congestion Management Process in Transportation Management Areas

Code of Federal Regulations (CFR) Title 23, Section 450.322 states that the transportation planning process in a Transportation Management Area (TMA) shall address congestion management through the MPO's Congestion Management Process (CMP) and appropriate Transportation Demand Management (TDM) strategies.

- Consider all forms of demand/congestion management including (but not limited to): intercity bus service, employer-based programs, carpool, vanpool, transit benefits, parking cash-out, telework, and job access projects.

Please refer to Appendix J for information on the WMPO's Congestion Management Process and Appendix L for the WMPO's Transportation Demand Management strategies.

Performance Measures and Performance Targets in the Metropolitan Transportation Plan

Code of Federal Regulations (CFR) Title 23, Section 450.324(f)(3) and 450.324(f)(4) state that the MTP shall include the following in regards to the MPO's performance measures and performance targets.

- A description of the performance measures and targets used in assessing the performance of the transportation system; and
- A system performance report evaluating the condition and performance of the transportation system with respect to the performance targets, including progress achieved by the MPO to reach performance targets.

The WMPO's adopted performance measures and targets are documented in this appendix. The WMPO will continue to work with NCDOT to coordinate reporting measures and progress to develop a system performance report.

Code of Federal Regulations (CFR) Title 23, Section 450.324(f)(4)(iii) states that the MPO may voluntarily elect to conduct scenario planning.

Optional Scenario Planning

The WMPO conducted financial scenario planning for the development of this plan. Please refer to Appendix D for more information.

Sources

- United States Code of Federal Regulations, Title 23: Highways, Part 450: Planning Assistance and Standards:
 - o 23 CFR § 450.306(b)
 - o 23 CFR § 450.306(d)(3)
 - o 23 CFR § 450.314
 - o 23 CFR § 450.316(a)
 - o 23 CFR § 450.316(b)
 - o 23 CFR § 450.322
 - o 23 CFR § 450.324(f)(2)
 - o 23 CFR § 450.324(f)(3)
 - o 23 CFR § 450.324(f)(4)
 - o 23 CFR Part 490, Subpart B, C, D, E, F, G, and H
- FHWA North Carolina State Safety Targets
<https://www.fhwa.dot.gov/tpm/reporting/state/reliability.cfm?state=North%20Carolina>



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Public Involvement

Table of Contents

1. *Cape Fear Navigating Change 2050* Citizens Advisory Committee
2. *Cape Fear Navigating Change 2050* Metropolitan Transportation Plan Steering Committee
3. Public Outreach Phase I
4. Public Outreach Phase II
5. Exhibits

Cape Fear Navigating Change 2050 Citizens Advisory Committee

The WMPO Board, which acts as the governing board of the WMPO, recognized a need for a separate committee devoted to guiding the development of the region's Metropolitan Transportation Plan (MTP). Considering this need, the Board appointed a Citizens Advisory Committee (CAC) to ensure that the MTP would be developed with robust public input and would meet the vision of the citizens of the region.

The CAC was comprised of individuals appointed by each of the WMPO's 13 board members. The CAC members who guided the development of *Cape Fear Navigating Change 2050* are listed below, along with the jurisdictions they were appointed to represent:

- Paul Loukas, Chair, Town of Wrightsville Beach
- David Branton, Vice Chair, City of Wilmington
- Dan Adams, Town of Carolina Beach
- Damien Buchanan, Pender County
- John Cawthorne, Town of Kure Beach
- Tyler Cralle, Cape Fear Public Transportation Authority
- Will Daube, City of Wilmington
- Trish Farnham, Town of Leland
- Rich Leary, Brunswick County
- Jonas Williams, Town of Belville
- Myesha Patrick, Town of Navassa

The CAC worked collaboratively to address the future transportation needs of the region. The CAC provided guidance and direction to WMPO staff on the development of public engagement efforts for the plan. WMPO staff ensured that all Federal Highway Administration (FHWA) requirements for MTPs were met, while working with the CAC to ensure the plan appropriately and responsibly addressed the transportation needs of the region. The CAC met on the following dates:

- June 14, 2023
- July 19, 2023
- August 16, 2023
- October 18, 2023
- January 17, 2024
- May 7, 2025

Cape Fear Navigating Change 2050 Metropolitan Transportation Plan Steering Committee

The Metropolitan Transportation Plan Technical Steering Committee (MTPC) was formed through collaboration with the WMPO's member jurisdictions and other modal partners. The committee was convened with the goal of providing WMPO staff

with additional expertise concerning the needs of the region, as well as guidance on various important aspects of the plan. The MTPC members, who were instrumental in the creation of this plan, are:

- Linda Painter, Chair, City of Wilmington Planning
- Daniel Adams, Vice Chair, Pender County Planning
- Ben Andrea, Town of Leland Planning
- Stephanie Ayers, North Carolina State Ports Authority
- Tommy Batson, Pender County Emergency Management
- Sam Boswell, Cape Fear RPO
- Helen Bunch, Brunswick County Planning
- Granseur Dick, ILM Wilmington International Airport
- Jon Dodson, Wave Transit
- Michelle Howes, NCDOT Division 3
- Paul Loukas, Citizen Advisory Committee Chair
- Bill Marley, FHWA
- Leah Mayo, UNCW Public Health
- Rebekah Roth, New Hanover County Planning
- Nazia Sarder, NCDOT Transportation Planning Division
- Amy Schlag, City of Wilmington
- Carol Stein, WMPO Bicycle and Pedestrian Advisory Committee (BPAC) Chair, (2023-2024)
- Steve Zinder, WMPO BPAC Vice Chair, (2023-2024); Chair, 2025
- Brad Cannon (alternate), Wave Transit
- Adrienne Cox (alternate), NCDOT Division 3

The MTPC worked collaboratively with WMPO staff to review and develop the 2050 MTP. WMPO staff ensured that all Federal Highway Administration (FHWA) requirements for MTPs were met, while working with the committee to ensure the plan was developed using the best available information and knowledge. The MTPC met on the following dates:

- July 27, 2023
- October 26, 2023
- January 18, 2024
- February 15, 2024
- March 28, 2024
- April 25, 2024
- May 9, 2024
- May 14, 2024
- June 20, 2024
- July 18, 2024
- August 15, 2024
- June 19, 2025

Public Outreach Phase I

Methods of Outreach and Engagement

Survey and Interactive Map

An online survey was opened during Phase I of public engagement and included an interactive map element. The survey asked respondents about their current travel choices and behaviors, top transportation priorities and concerns, and preferences for future travel. The interactive map provided respondents an opportunity to reference transportation concerns at specific locations within the WMPO region. The responses collected through the survey and map were analyzed by WMPO staff to assist in the development of projects, goals, and objectives.

The survey received a total of 2,347 responses including 5,750 map pins dropped on the interactive map and 6,016 map and survey comments. The survey and map comments include 3,192 map comments and 96 in-person comments collected during public meetings.

Stakeholder Interviews

The stakeholder interviews were conducted to complement the responses from the survey and interactive map. Those interviewed represented a broad range of groups and communities to ensure a comprehensive and broad range of engagement:

- WMPO Bicycle and Pedestrian Advisory Committee (BPAC)
- New Hanover County NAACP
- Disability Resource Center
- Senior Tarheel Brunswick County
- Wilmington Chamber of Commerce
- University of North Carolina Wilmington Latino Alliance
- Pender County Hospital (Novant Health)
- Cape Fear Collective
- University of North Carolina Wilmington

Conducted in fall 2023, the interviews included questions about transportation choices, challenges, costs, and future priorities. The responses from the interviews were similarly analyzed and considered during the development of the plan's projects, goals, and objectives.

Internet Outreach

Receiving input through Internet outreach resulted in a wider variety of participants who were able to interact with the map and respond to the survey. This was especially important for audiences who utilize the Internet daily, such as young people, as well as working people who were unable to make it to public events.

Cape Fear Navigating Change 2050 Webpage

A webpage for the plan, wmpo.org/2050mtp, was created and served as the one-stop shop for the public to access contact information, view the calendar of events, and respond to the survey and interactive map. Additionally, the WMPO's member jurisdictions provided information and a link to the plan's webpage on their own organizational websites.

Email Campaign

An email campaign directed WMPO member jurisdictions to the plan's webpage to take the survey and included an invitation to attend the scheduled public meetings.

The WMPO directly reached out to previously identified community leaders, notifying them of the outreach opportunities for citizens of the region. Email blasts were also sent to students and faculty of both the University of North Carolina Wilmington and Cape Fear Community College.

Social Media Campaign

The WMPO launched a social media campaign utilizing its Instagram, Facebook, X (formerly Twitter), LinkedIn, and Nextdoor accounts. Posts advertising the survey and open house events were posted to each account throughout Phase I. The WMPO also hosted a social media contest in which citizens who reposted *Cape Fear Navigating Change 2050* content were entered into monthly giveaways. Over Public Input Phase I, MTP-related posts received 123 shares by individuals and groups in the Wilmington Urban Area. Prizes such as a free kayak rental and boat ride tickets incentivized residents to spread the word about the MTP and ongoing outreach efforts.

Events and Public Presentations

Open Houses

Following the Phase I kick-off event, the WMPO held an additional five open-house style public meetings in various locations throughout the region, including one virtual event. At in-person events, laptops and iPads were made available to the public, as well as hard copies of the survey and physical maps on which comments and suggestions could be made. This allowed attendees to provide input in person, as well as having access to WMPO staff in case they had questions. To increase accessibility, in-person informational materials were printed in both English and Spanish, and the *Cape Fear Navigating Change 2050* webpage could be automatically translated into over 100 languages.



Left: Open house in Belville. Right: Comment cards and map at an open house.

The regional open houses were held on the following dates at locations listed below:

- August 15, 2023 at Carolina Beach Town Hall
- August 17, 2023 at Belville Town Hall
- August 22, 2023 at the Hampstead Annex (Pender County)
- August 24, 2023 at the New Hanover County Senior Resource Center
- August 31, 2023, held virtually on Zoom

Presentations

Presentations were made to the governing boards of all member jurisdictions, Wave Transit, and the various committees involved in the development of *Cape Fear Navigating Change 2050*. During these presentations, WMPO staff provided updates on ongoing outreach efforts, highlighting the importance of the public's participation in the plan and suggesting ways to promote these efforts across all member jurisdictions.

Other In-person Events

The WMPO participated in 15 community events across the region, including Festival Latino in Ogden, the Belville Fall Festival, resource fairs at Cape Fear Community College campuses, and more. The WMPO also engaged citizens at pop-up tables at locations such as Padgett Station in downtown Wilmington and Northside Food Co-Op community dinners. The regional open houses were held on the following dates at events listed below:

- August 1, 2023 at National Night Out (Wilmington and Carolina Beach)
- August 2, 2023 at Dreams of Wilmington Hurricane Florence Film Screening event
- August 8, 2023 at Cape Fear Community College Campus Resource Fair (Downtown Campus)
- August 10, 2023 at Cape Fear Community College Campus Resource Fair (North Campus)
- September 30, 2023 at the Annual Brunswick Heritage Riverside Ride
- October 6, 2023 at Brunswick Senior Resource Center, Leland (Pop-up)
- October 7, 2023 at the Belville Fall Festival
- October 17, 2023 at Flood Mitigation and Adaptation Workshop (Navassa)
- October 18, 2023 at Flood Mitigation and Adaptation Workshop (Castle Hayne)
- October 27, 2023 at the Maides Park Fall Festival
- November 4, 2023 at the Festival Latino
- November 8, 2023 at Padgett and Forden Stations (Pop-up)
- November 17, 2023 at the Northside Food Co-Op Community Dinner

Staff set up booths at these events and handed out brochures and other materials. Staff members were available to answer any questions and provide additional details about *Cape Fear Navigating Change 2050* and its development.

Media Engagement

To alert citizens of the region about ongoing outreach efforts, the WMPO published three press releases throughout July 2023 and November 2023. Additionally, the following news sources ran articles and op-ed pieces about WMPO's public engagement period and the plan's importance:

- WECT 6 (7/25, 7/26)
- WWAY 3 (7/27)
- Fox Wilmington (7/26)
- Wilmington Biz (7/31)
- NC Construction News (8/22)
- Wilmington Star News (8/25)
- WECT News (9/20)

WMPO staff also participated in the following on-air television and radio interviews:

- Modern Rock 98.7 (8/4)
- WECT Interview (8/22)
- WWAY on-air promotion of 2nd press release

Visual Promotions

Promotional posters and handouts that included the plan's webpage and a QR code were distributed and hung for advertisement to the public. WMPO staff stocked these materials in community centers, visitor centers, libraries, and businesses around the region. These efforts increased the level of public awareness of the project and resulted in higher levels of participation in the outreach process.

Response

During the first phase of public outreach, the interactive map received 3,765 responses, including:

- 5,840 map pins
- 3,288 comments
- 96 in-person comments

The survey received 2,347 responses during the four-month outreach period, bringing the total number of citizen responses for this phase to 6,112.

Public Outreach Phase II

The WMPO released a draft of *Cape Fear Navigating Change 2050* on May 28, 2025. On this date, staff presented the draft plan to the WMPO Board and the Board approved the opening of a 30-day public comment period.

The draft plan was given a prominent page on the WMPO's website and shared by the WMPO's social media accounts. In addition to sending a press release directing individuals to the digital version of the draft plan on the website, hard copies were made available or viewing at the WMPO office, WMPO member jurisdictions' planning departments, and area libraries.

Public comments on the draft were accepted by mail, email, and in person. Four in-person events and one virtual event occurred in June 2025. The events that occurred were as follows:

- Wednesday, June 11: WMPO Open House at the WMPO office
- Friday, June 13: Hampstead Market at Kiwanis Park
- Saturday, June 14: Leland Hurricane Expo in Leland
- Monday, June 16: Wrightsville Beach Farmers Market in Wrightsville Beach
- Wednesday, June 18: WMPO Virtual Open House via Zoom
- Saturday, June 21: Carolina Beach Farmers Market in Carolina Beach
- Thursday, June 26: New Hanover County/Wilmington Fire Department FIRES Event at Maides Park

WMPO staff addressed each comment received and determined which comments warranted changes to the draft plan. If a change was not determined to be needed, an explanation was provided. All comments and responses are included as Exhibit E, which can be found on page C-45.

The WMPO reached out to several planning partners and agencies to solicit feedback on specific portions of the draft plan, or the plan as a whole. These agencies include:

- Federal Highway Administration (FHWA)
- North Carolina Department of Transportation (NCDOT), Division 3, Environmental Program
- North Carolina Department of Environmental Quality (NCDEQ)
- United States Army Corps of Engineers (USACE)
- Cape Fear Public Transportation Authority (CFPTA)
- Wilmington International Airport (ILM)
- North Carolina Department of Natural Resources (NC DNCR)

In total, 57 comments were received during the second phase of public outreach. Additional internal comments suggesting minor formatting, grammatical, and typographical changes were also addressed by WMPO staff.

Cape Fear Navigating Change 2050 Exhibits

A complete list of exhibits contained within this Appendix is below.

| Exhibit | Title | Page Number |
|---------|---|-------------|
| A | <i>Cape Fear Navigating Change 2050</i> Handout | C-10 |
| B | <i>Cape Fear Navigating Change 2050</i> Public Survey (Paper, English) | C-11 |
| C | <i>Cape Fear Navigating Change 2050</i> Public Survey Results | C-23 |
| D | <i>Cape Fear Navigating Change 2050</i> Stakeholder Interview Questions | C-42 |
| E | <i>Cape Fear Navigating Change 2050</i> Public Input Phase II Comments | C-45 |

Exhibit A: Cape Fear Navigating Change 2050 Handout



Cape Fear NAVIGATING CHANGE 2050

Take the survey!

Tell us about your **community's transportation needs** and top priorities!



Visit the WMPO website to learn more about Cape Fear Navigating Change 2050:

wmpo.org/2050mtp





Cape Fear NAVIGATING CHANGE 2050

¡Haz la encuesta!

¡Cuéntenos sobre las **necesidades de transporte de su comunidad** y sus principales prioridades!



Visite el WMPO para obtener más información sobre Cape Fear Navigating Change 2050:

wmpo.org/2050mtp




Exhibit B: Cape Fear Navigating Change 2050 Public Survey (Paper, English)

Please take this survey and let us know your thoughts on transportation in the Cape Fear area!



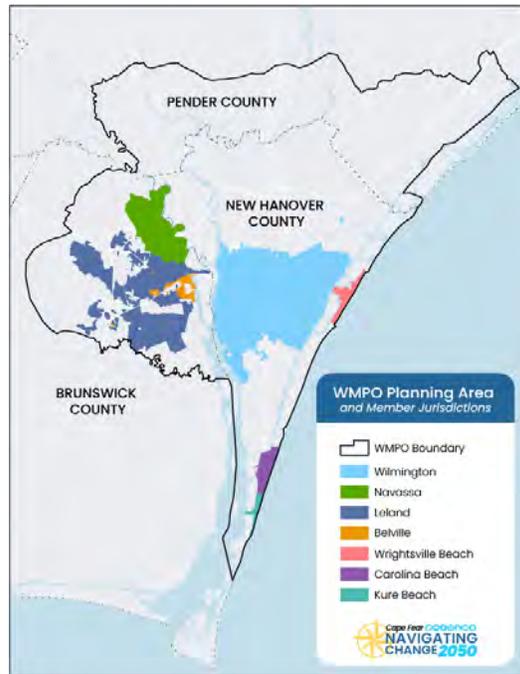
Cape Fear Navigating Change 2050

A comprehensive plan to strategize transportation investments in the Cape Fear area through 2050

Section 1: About this survey

Wilmington Urban Area MPO Metropolitan Transportation Plan

Metropolitan Planning Organizations (MPOs) are federally designated local transportation planning agencies. The Wilmington Urban Area MPO is not one single city, town, or county; rather, we plan for many local jurisdictions. The backbone of our planning efforts is the Metropolitan Transportation Plan (MTP), which is updated every five years. Our next MTP, Cape Fear Navigating Change 2050, will identify the Wilmington region's transportation needs and provide a blueprint for the next 25 years.



The WMPO planning area.



There are six transportation modes that the MTP will cover: Aviation, Bicycle and Pedestrian, Highway, Public Transportation, Rail, and Water Transportation.

*Cape Fear Navigating Change 2050
- Page 1 of 12 -*

Section 2: Budget Allocation

Where do you think funds are best spent?

If you had \$100, how would you distribute it among the following?

On pages 2-3, please distribute your set amount of funding to the categories which are most important to you and the community.



Bicycle and Pedestrian Infrastructure

Bicycle and pedestrian infrastructure can include facilities like trails, multi-use paths, road crossings, pedestrian signals, sidewalks, bike lanes, or bike share programs.

Comments:



Public Transportation

Improving public transportation can include increased frequency, extended hours of service, shorter trip lengths, more bus stop amenities, or the creation of new routes.

Comments:



Improve or Maintain Roads

Improving existing roads can include maintenance, new lanes, or improved traffic light timing.

Comments:



Roadway Safety

Making existing roads safer can include traffic calming (adding speed bumps, lowering speed limits, etc.) or decreasing potential crashes between road users (pedestrians, bicycles, cars, trucks, etc.).

Comments:



More Roads

Building new roads includes the construction of entirely new roads, in new locations, not adding more lanes.

Comments:



Aviation

Aviation can include new airlines and flights, airport improvements, or increased capacity for air freight.

Comments:



Water Transportation

Water transportation can include new ferry services, improvements to the current ferry services, or water taxi services.

Comments:



Rail

Rail improvements can include passenger rail, railroad crossings, or the movement of freight by rail.

Comments:



Total

out of \$100

General comments:

.....

Section 3: What would you change?

Current Travel Behavior

In the past 30 days, how often have you traveled (for recreation or transportation) in each of the following ways? Check one box under each heading.

Walking

- 4+ days/week
- 1-3 days/week
- 1-3 days/month
- <1 day/month
- Never

Bicycling

- 4+ days/week
- 1-3 days/week
- 1-3 days/month
- <1 day/month
- Never

Rideshare and/or Taxi

- 4+ days/week
- 1-3 days/week
- 1-3 days/month
- <1 day/month
- Never

Public Transit

- 4+ days/week
- 1-3 days/week
- 1-3 days/month
- <1 day/month
- Never

Drive Alone

- 4+ days/week
- 1-3 days/week
- 1-3 days/month
- <1 day/month
- Never

Please use this space for any additional comments:

Lifestyle

How you go places

When deciding where to live, how important is it to have different transportation options?

- Not important
- Somewhat important
- Important
- Very important

What is your preferred mode of transportation?

- Walking
- Bicycling
- Driving
- Carpooling
- Public Transit

How often do you work from home?

- Never
- Rarely
- Once per week
- Two to four days per week
- All the time

What are your top 3 travel priorities?

- Safety
- Travel Time
- Convenience
- Cost
- Health Benefits
- Comfort
- Environmental Impact

How much of your budget (an estimate is okay) goes to transportation costs?

- Less than 10%
- 10% to 20%
- 20% to 30%
- 30% to 40%
- 40% to 50%
- Over 50%

Please use this space for any additional comments:

Obstacles

I would take _____ more often if the following factors were present:

Public Transit

- Park and Ride was available
- Free or Lower Cost
- Amenities (benches, shelters, etc.)
- More frequent bus service
- Express routes along major roads
- Better access to bus stops (sidewalks, etc.)
- Nothing will result in me riding the bus

A Walk

- More sidewalks and multi-use paths
- Safe intersection crossings
- Safe connections from homes to stores, etc.
- Information about walking routes
- Showers & changing rooms at work
- I already walk as often as possible
- Nothing will result in me walking

A Bike Ride

- More off-road multi-use paths
- More on-road bicycle lanes
- More information about bike routes
- Bike share/ bike rental
- Showers & changing rooms at work
- I already bicycle as often as possible
- Nothing will result in me riding a bike

Please use this space for any additional comments:

Preferences

In the future, I would prefer to travel by:

Car

- More often
- Less often
- The same amount

Walking

- More often
- Less often
- The same amount

Bicycling

- More often
- Less often
- The same amount

Public Transit

- More often
- Less often
- The same amount

Carpool

- More often
- Less often
- The same amount

Please use this space for any additional comments:

Resiliency

How important is it that the 2050 Metropolitan Transportation Plan addresses these factors?

Meet hurricane evacuation needs

- Very important
- Moderately important
- Somewhat important
- Not important

Identify infrastructure vulnerable to climate events

- Very important
- Moderately important
- Somewhat important
- Not important

Invest in resilient infrastructure

- Very important
- Moderately important
- Somewhat important
- Not important

Support emergency management

- Very important
- Moderately important
- Somewhat important
- Not important

Protect roads/bridges from climate trends/extreme weather

- Very important
- Moderately important
- Somewhat important
- Not important

Enhance stormwater management

- Very important
- Moderately important
- Somewhat important
- Not important

Please use this space for any additional comments:

The Future

Planning for the future

What do you see being the top three topics for the WMPO to prioritize over the next 25 years?

- Safety
- Bicycle and Pedestrian Projects
- Natural Hazards
- Congestion
- Increased Transportation Options
- Public Transportation
- New Technologies
- Human-Made Hazards

Which of the following are you interested in using in the future?

- Self-driving Car
- Electric Vehicle
- Electric Bicycle
- Self-driving Bus
- Passenger Rail
- Drone Transport

What are specific transportation projects you would like to see in the Wilmington region?

Please use this space for additional comments.

Section 4: Problems and Opportunities

Where do transportation problems exist in the region? Where would you recommend new projects? Please indicate comments for each transportation mode in the boxes below. Please provide specific location details when applicable.



Roadway

Please circle the topic your comment is about: congestion, safety, new infrastructure, weather events, maintenance, or other.

Comments:



Bicycle and Pedestrian

Please circle the topic your comment is about: safety, crossings, trails, sidewalks, maintenance, or other.

Comments:



Aviation

Please circle the topic your comment is about: new airlines, facilities, freight, and maintenance, or other.

Comments:

Cape Fear Navigating Change 2050

[More at: wmpo.org/2050mtp](http://wmpo.org/2050mtp)



Public Transportation

Please circle the topic your comment is about: frequency, location, hours of service, trip length, access, maintenance, or other.

Comments:



Ferry and Water Transportation

Please circle the topic your comment is about: hours, recreation, freight, maintenance, or other.

Comments:



Rail

Please circle the topic your comment is about: freight, passenger rail, railroad crossings, maintenance, or other.

Comments:

Please use this space for additional comments.

Section 5: Wrap-Up

Demographics

Tell us a bit about yourself with the following optional demographics questions.

What is your home zip code? _____

What is your gender?

- Female
- Male
- Nonbinary
- Prefer not to say

What is your approximate annual household income?

- \$0-\$24,999
- \$25,000-\$49,999
- \$50,000-\$74,999
- \$75,000-\$124,999
- Over \$125,000

What is your age?

- Under 18
- 18-29
- 30-39
- 40-49
- 50-64
- 65 and over

Which race or ethnicity best describes you?

- Native American or Alaskan Native
- Asian
- Black or African-American
- Hispanic/Latinx
- Pacific Islander
- White
- Biracial/Multiracial
- Another Race
- Prefer not to say

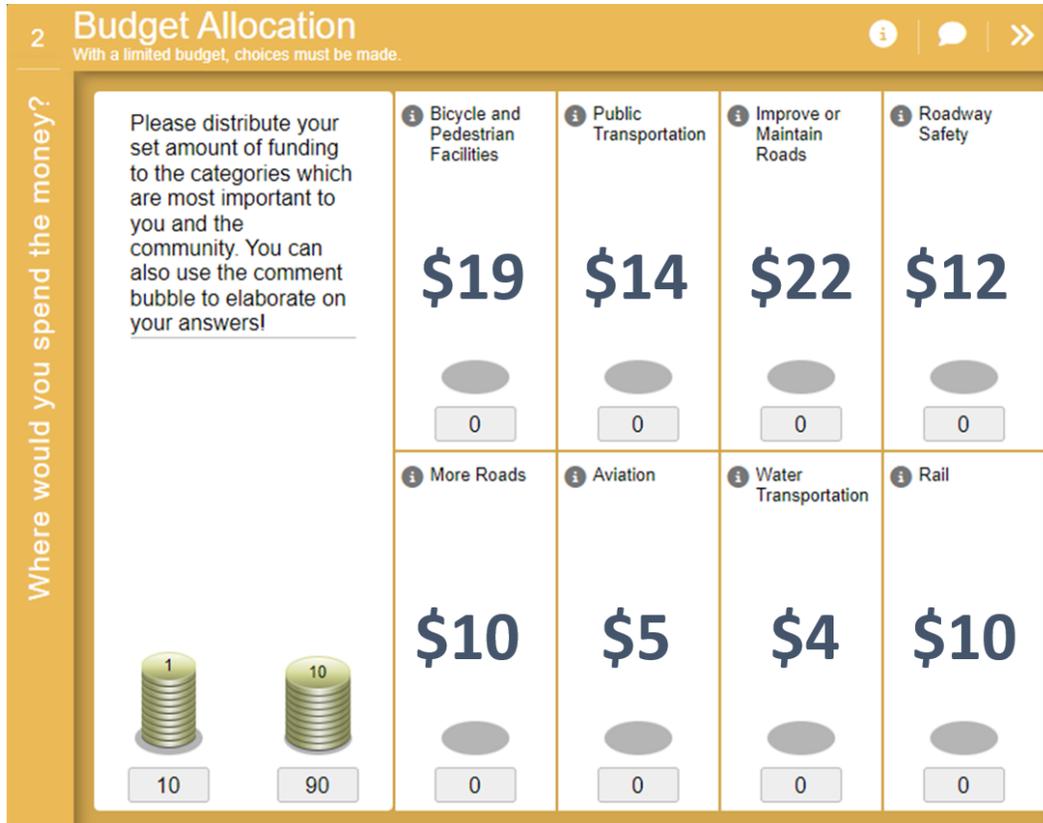
Check all that apply:

- I am a resident of the area
- I am a tourist visiting the area
- I am a part-time resident
- I am a student
- I do not live here but I work here

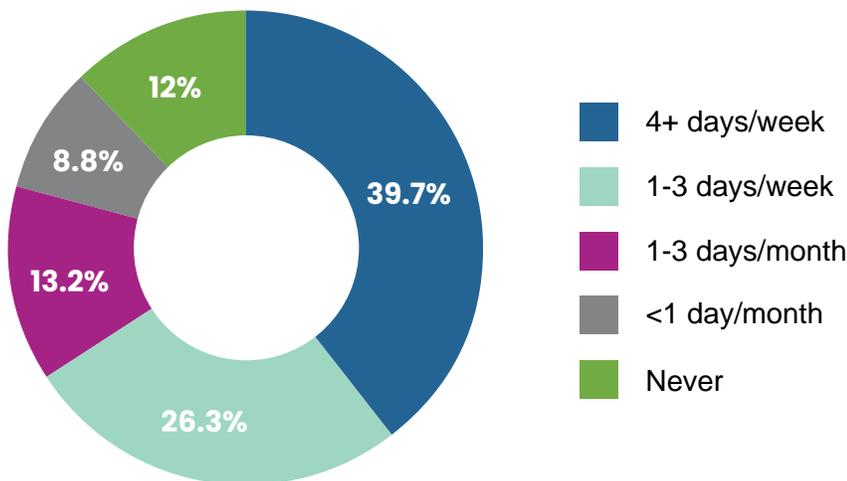
Please use this space for additional comments.

Exhibit C: Cape Fear Navigating Change 2050 Public Survey Results

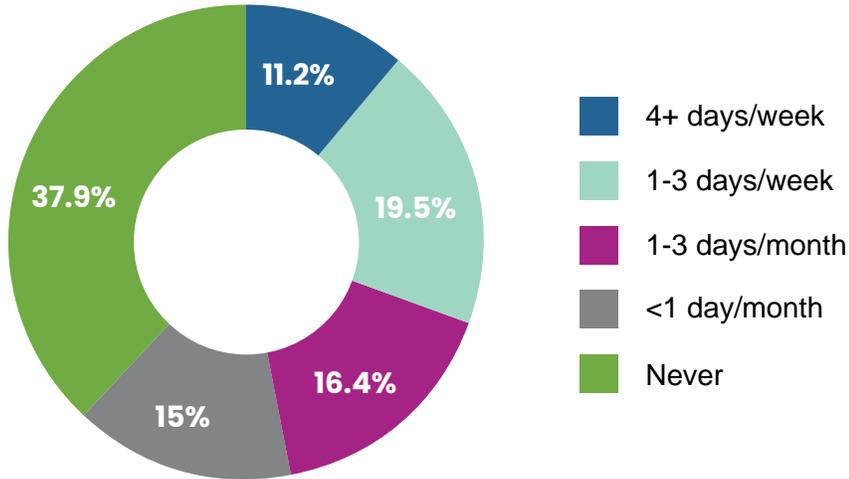
Q1: If you had \$100, how would you distribute it among the following?



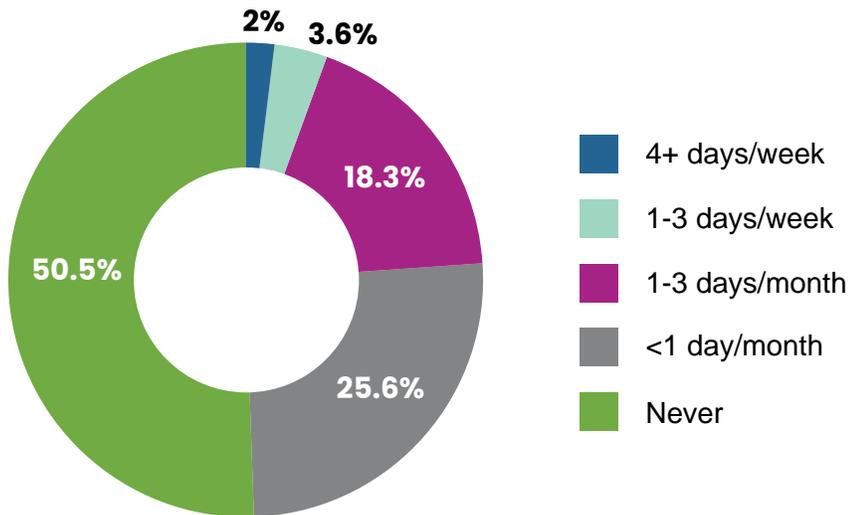
Q2a: In the past 30 days, how often have you traveled (for recreation or transportation) by walking?



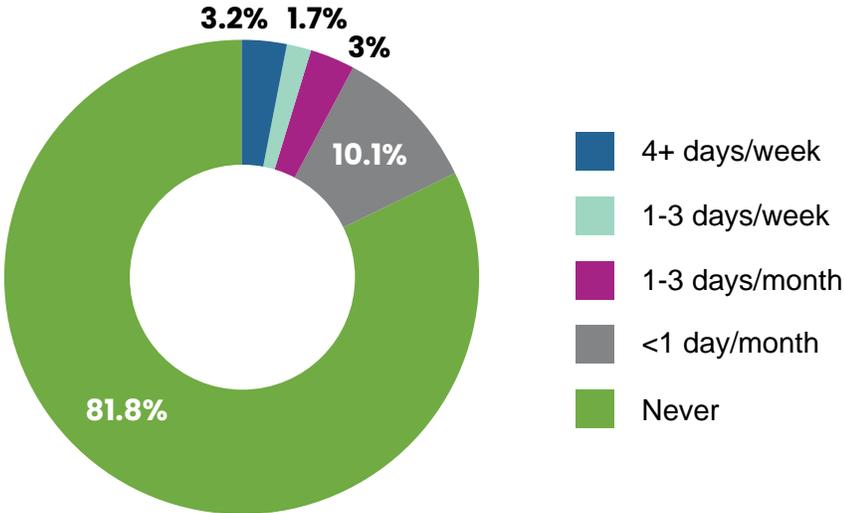
Q2b: In the past 30 days, how often have you traveled (for recreation or transportation) by bicycling?



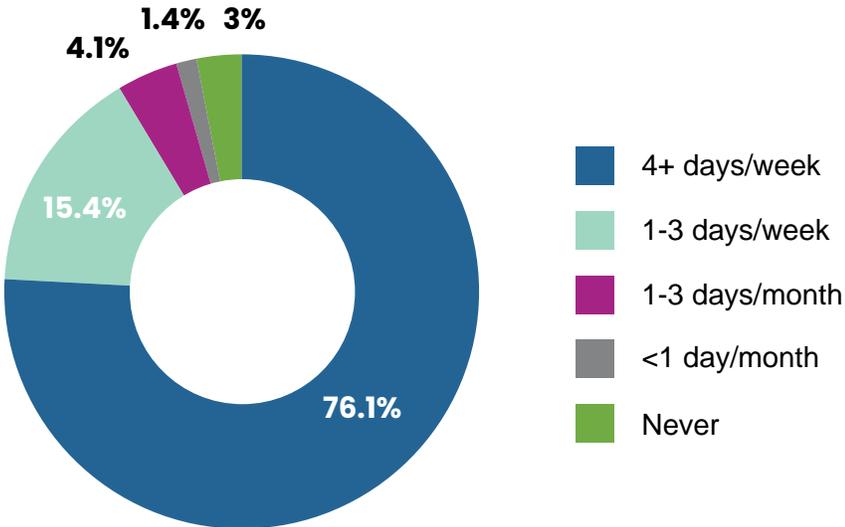
Q2c: In the past 30 days, how often have you traveled (for recreation or transportation) by rideshare/taxi?



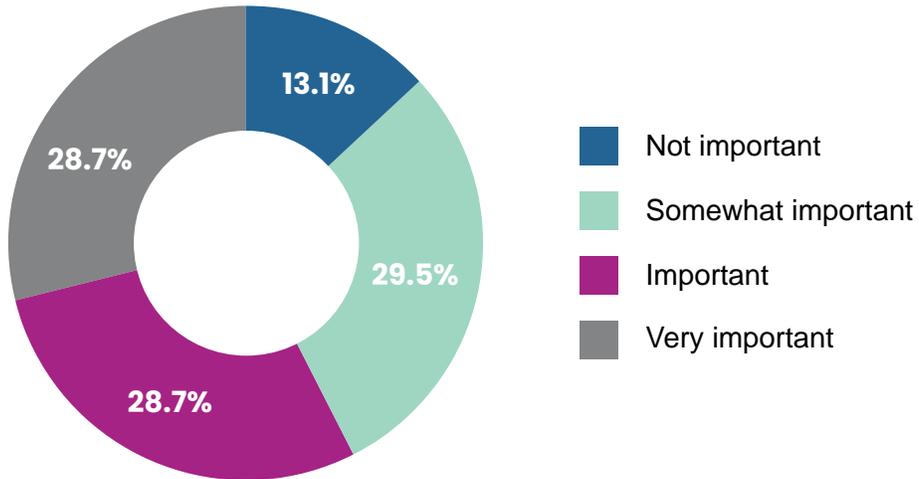
Q2d: In the past 30 days, how often have you traveled (for recreation or transportation) by public transportation?



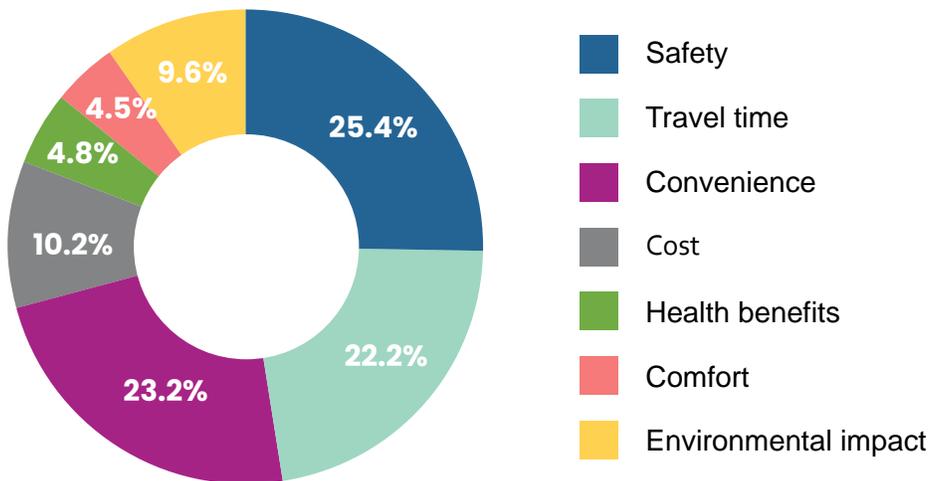
Q2e: In the past 30 days, how often have you traveled (for recreation or transportation) by driving alone?



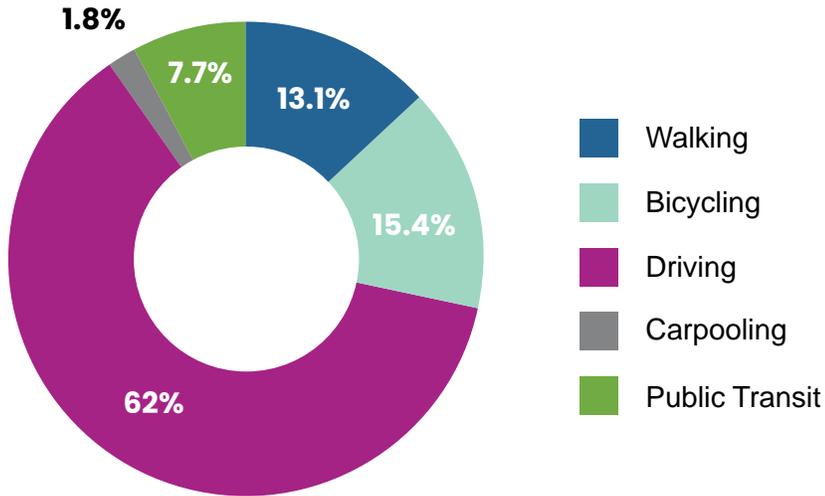
Q3: When deciding where to live, how important is it to have different transportation options?



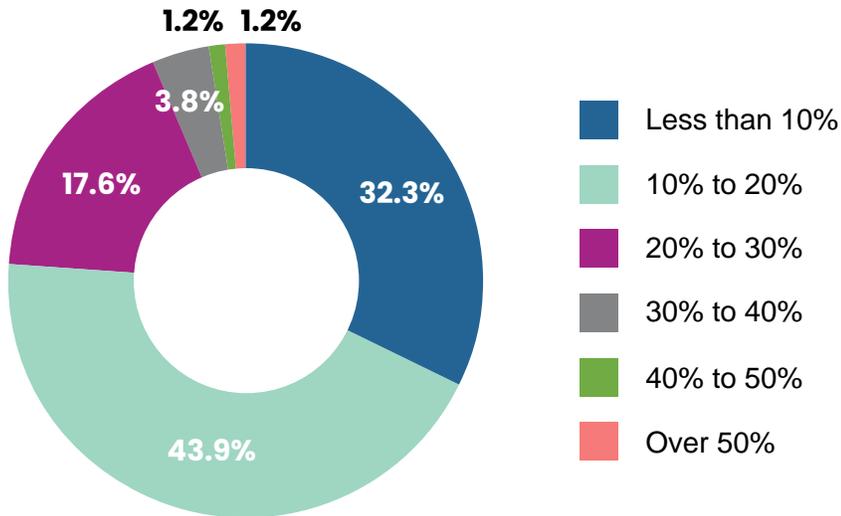
Q4: What are your top 3 travel priorities?



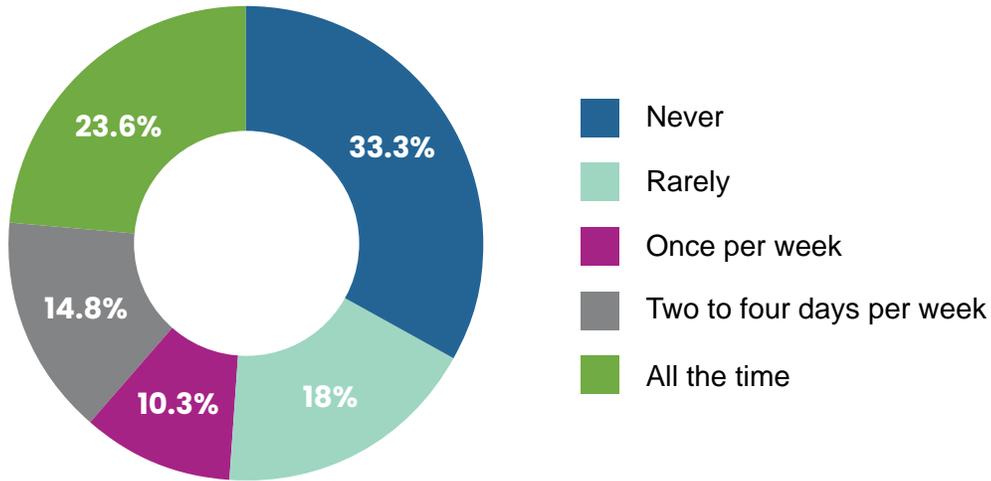
Q5: What is your preferred mode of transportation?



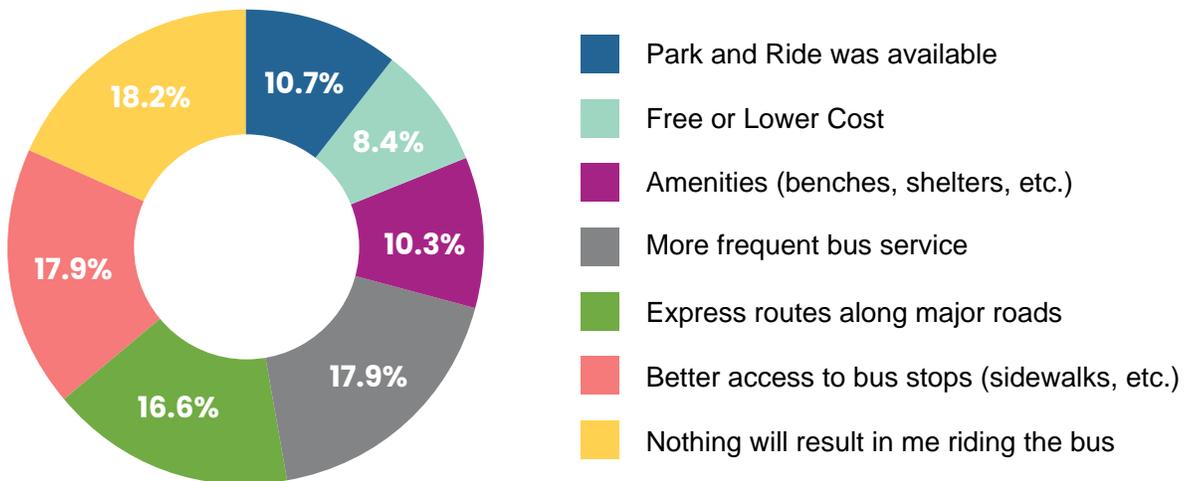
Q6: How much of your budget (an estimate is okay) goes to transportation costs?



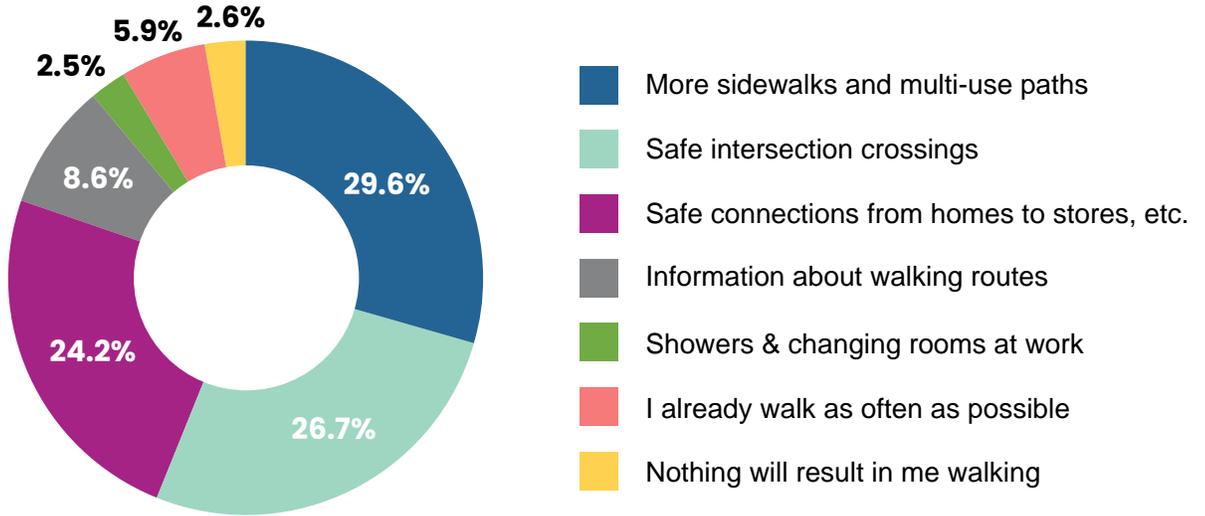
Q7: How often do you work from home?



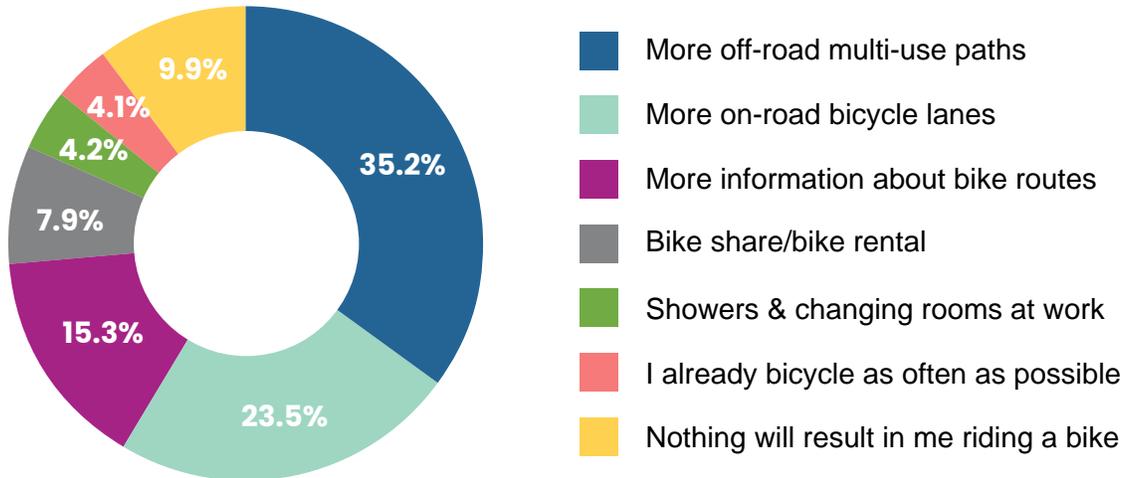
Q8a. I would take public transportation more if the following factors were present:



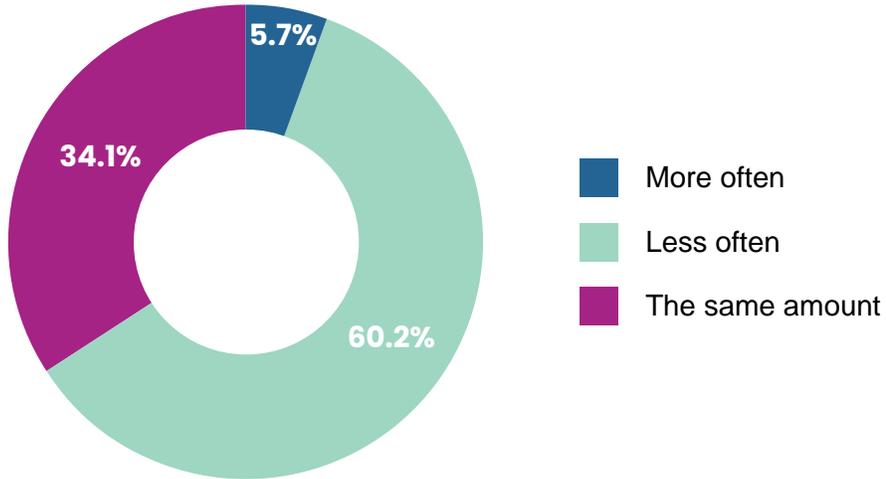
Q8b. I would take a walk more if the following factors were present:



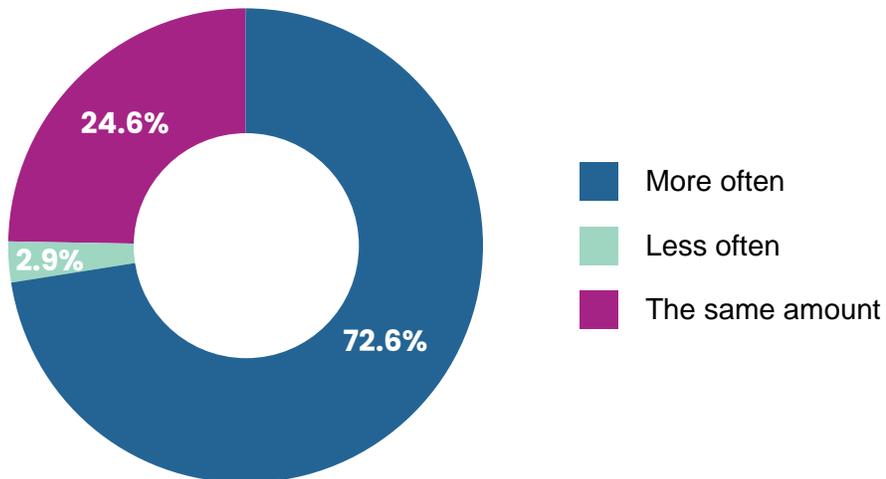
Q8c. I would take a bike ride more if the following factors were present:



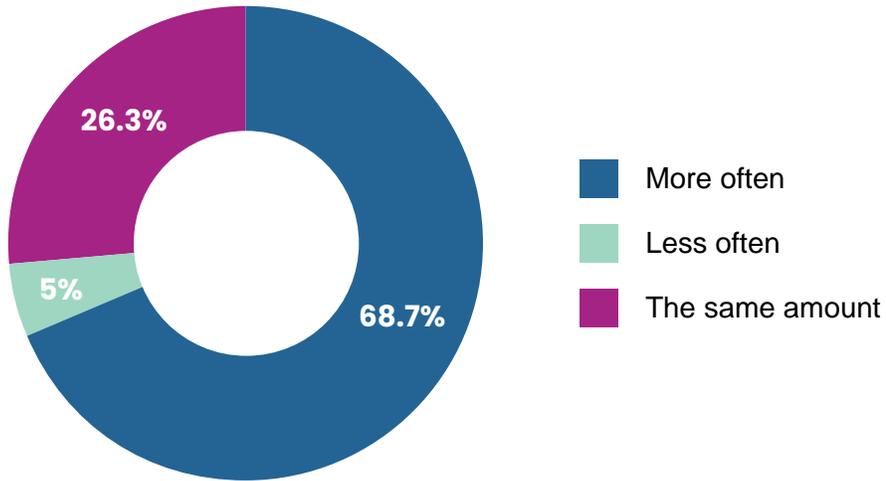
Q9a. In the future, I would prefer to travel by car:



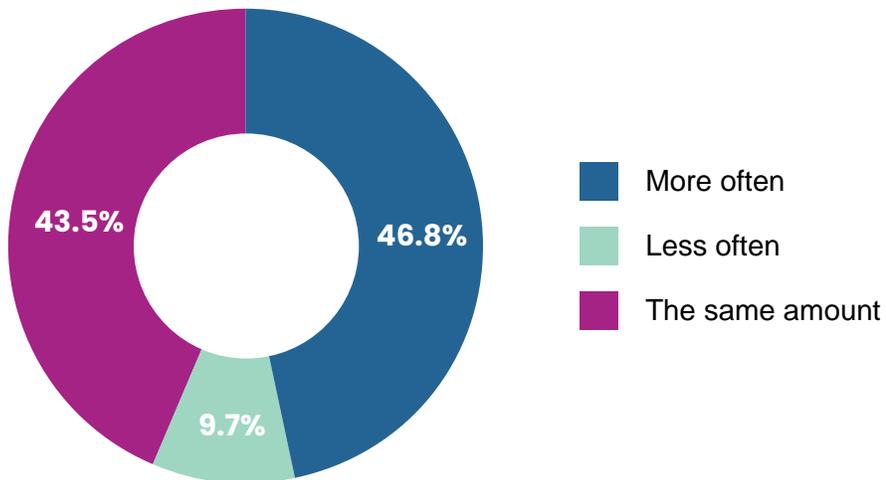
Q9b. In the future, I would prefer to travel by walking:



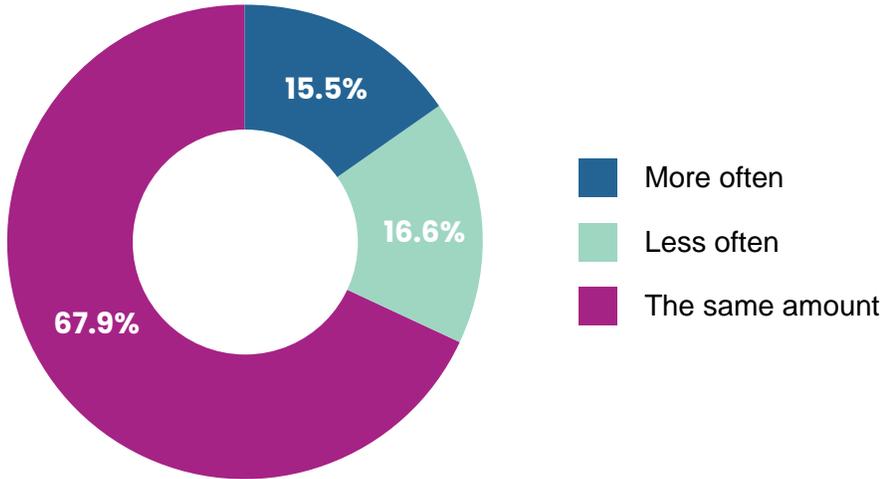
Q9c. In the future, I would prefer to travel by bicycling:



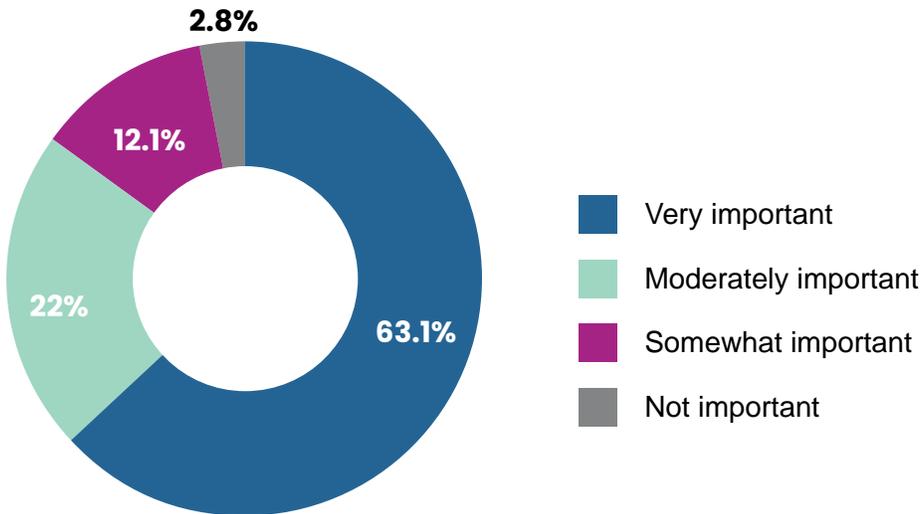
Q9d. In the future, I would prefer to travel by public transit:



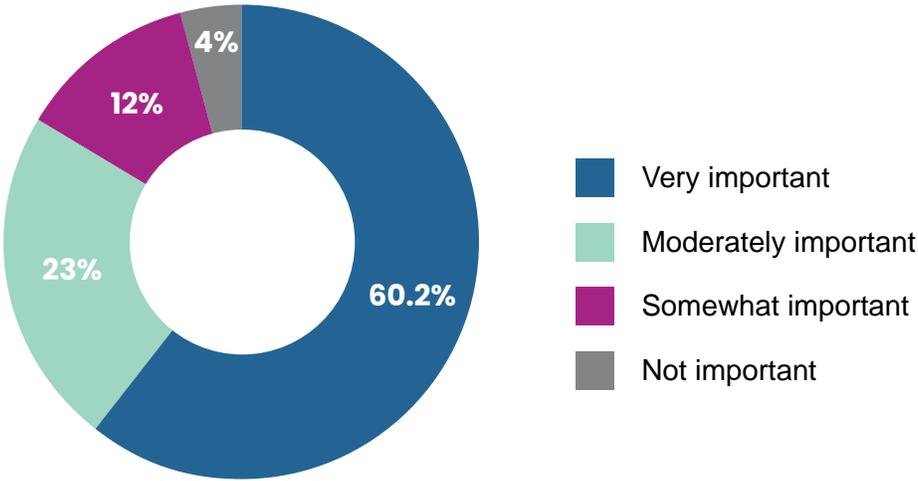
Q9e. In the future, I would prefer to travel by carpooling:



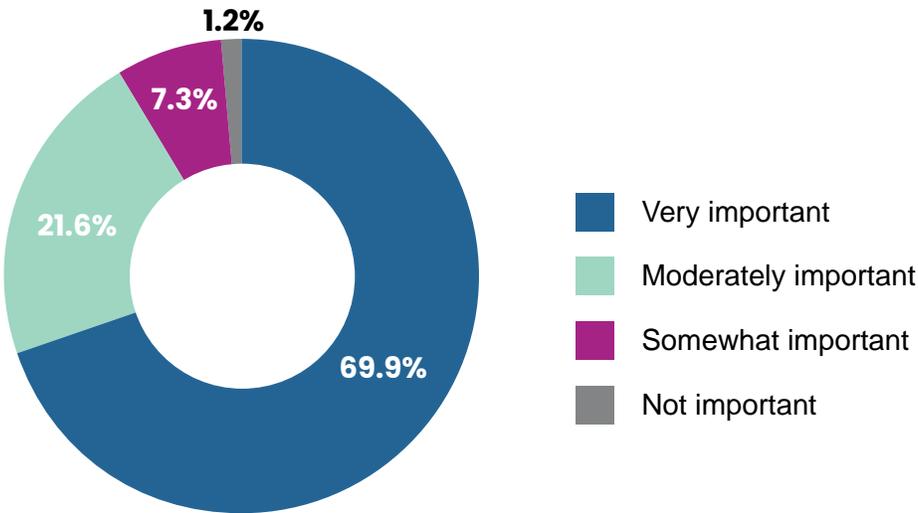
Q10a. How important is it that the 2050 Metropolitan Transportation plan addresses the following factors? [Meet hurricane evacuation needs]



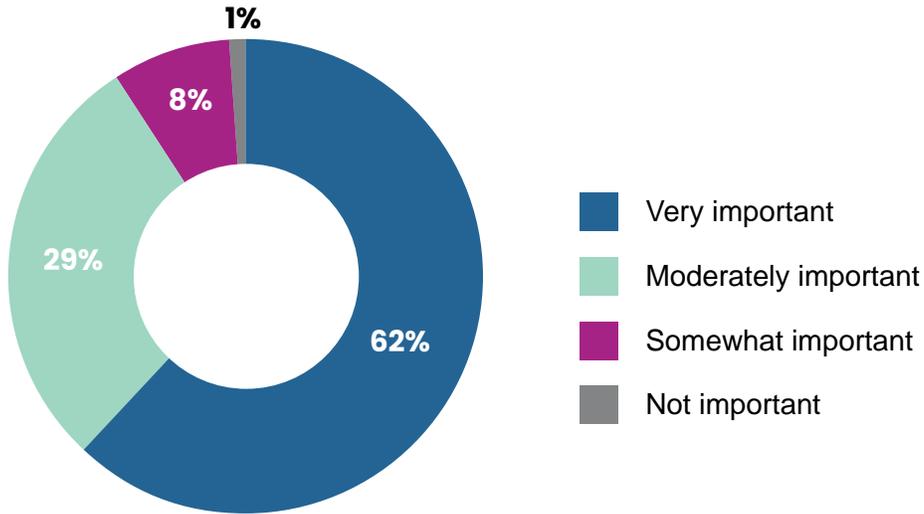
Q10b. How important is it that the 2050 Metropolitan Transportation plan addresses the following factors? [Identify infrastructure vulnerable to climate events]



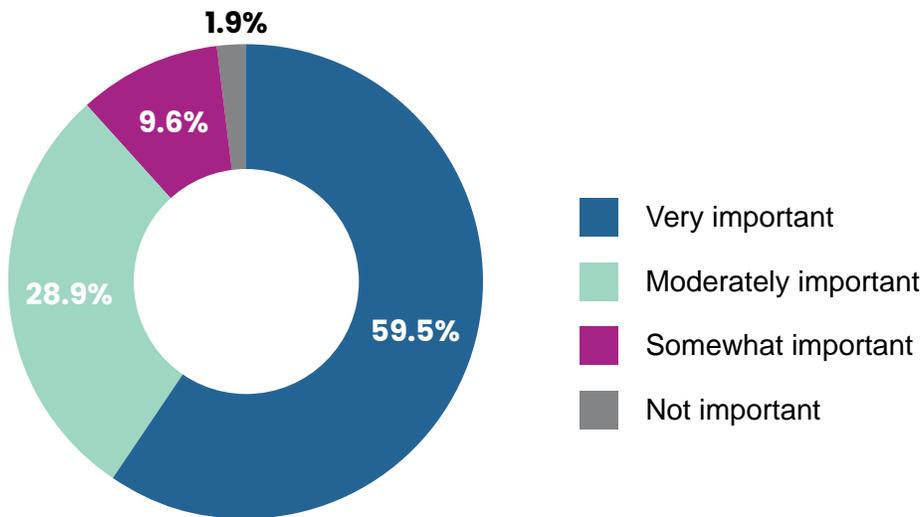
Q10c. How important is it that the 2050 Metropolitan Transportation plan addresses the following factors? [Invest in resilient infrastructure]



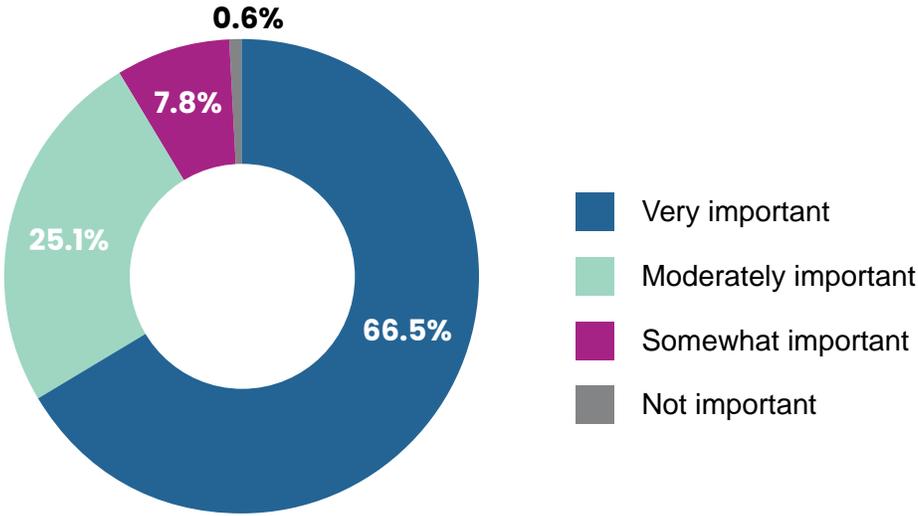
Q10d. How important is it that the 2050 Metropolitan Transportation plan addresses the following factors? [Support emergency management]



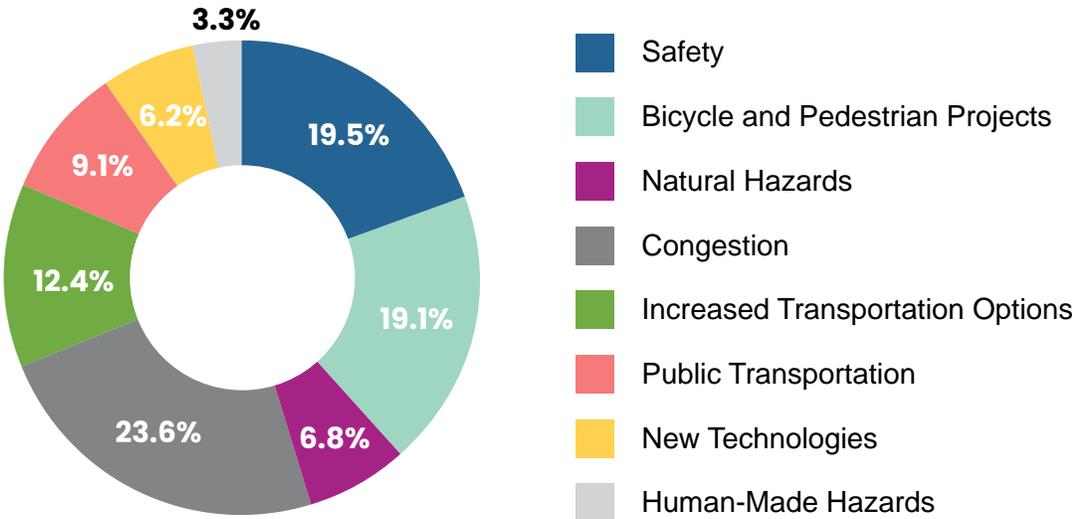
Q10e. How important is it that the 2050 Metropolitan Transportation plan addresses the following factors? [Protect roads/bridges from climate trends/extreme weather]



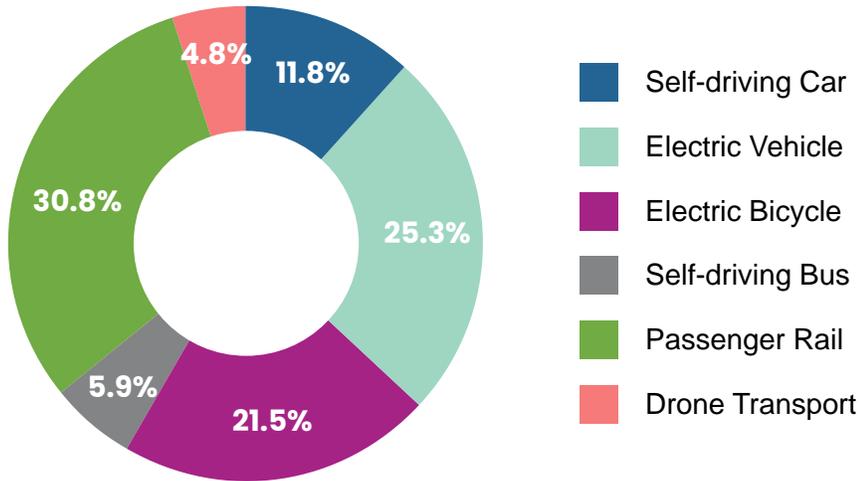
Q10f. How important is it that the 2050 Metropolitan Transportation plan addresses the following factors? [Enhance stormwater management]



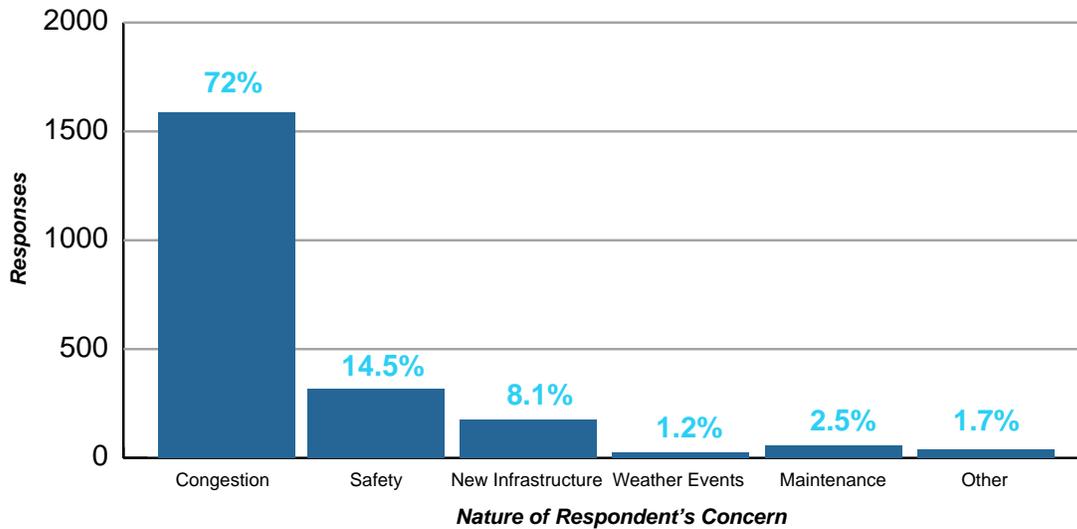
Q11. What do you see being the top three topics for the WMPO to prioritize over the next 25 years?



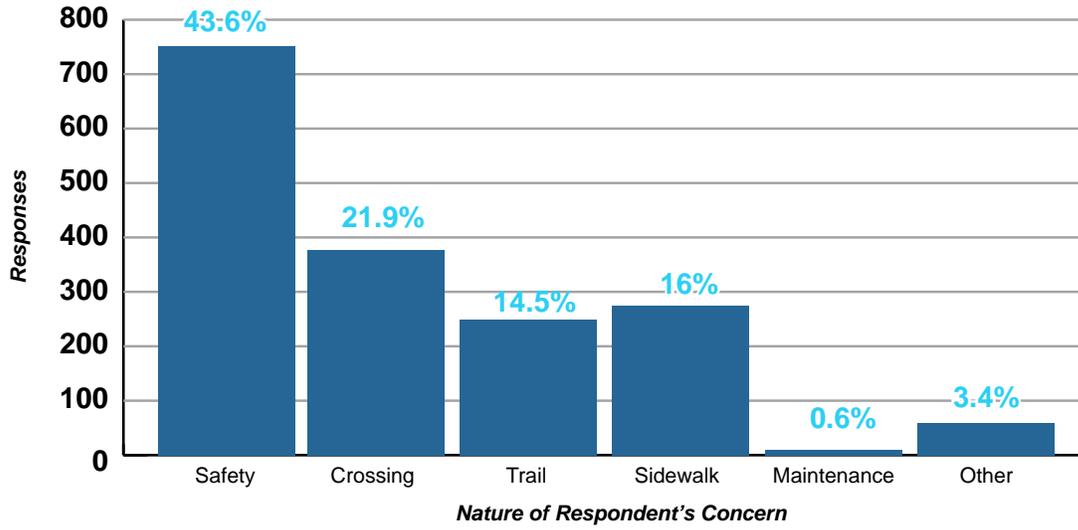
Q12. Which of the following are you interested in using in the future?



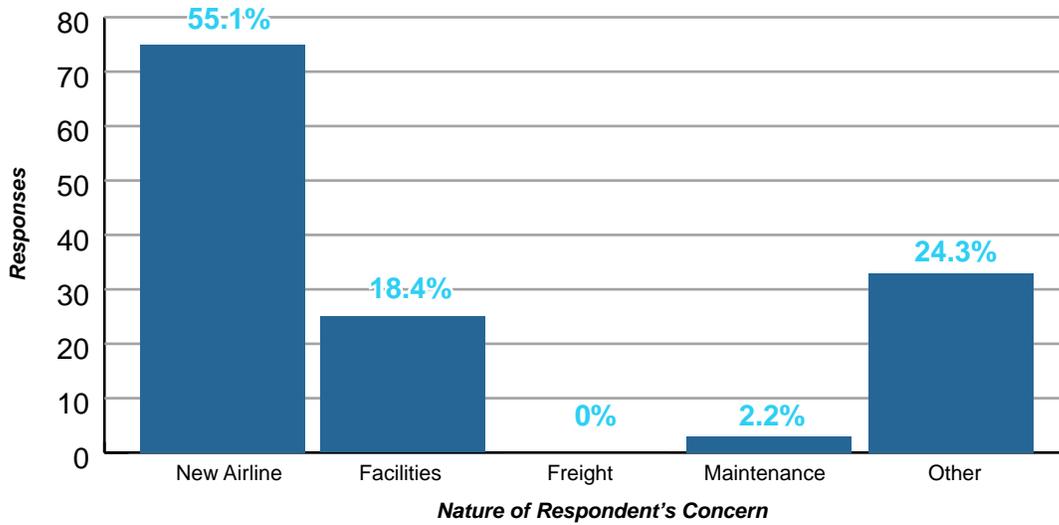
Q13a. Roadway problems and opportunities



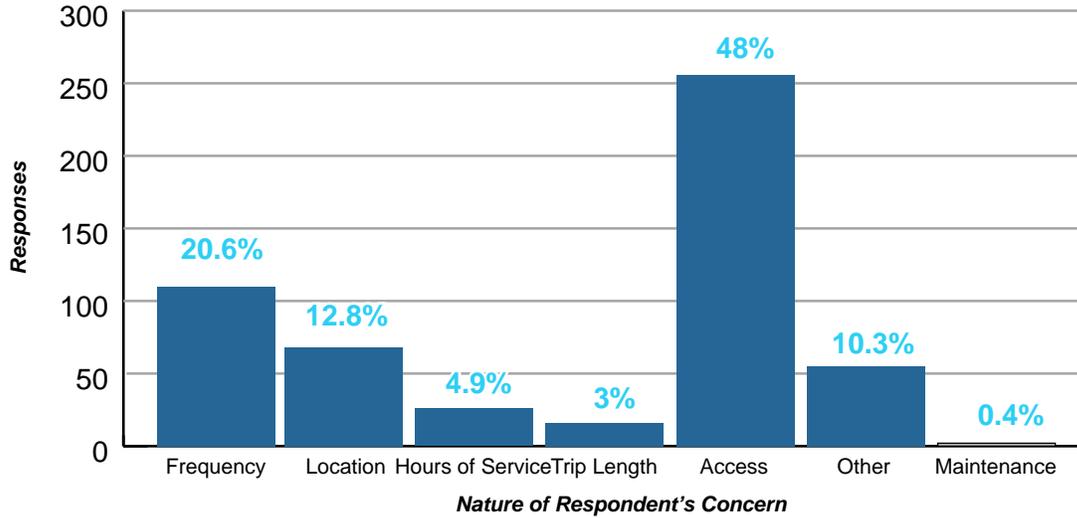
Q13b. Bicycle and pedestrian problems and opportunities



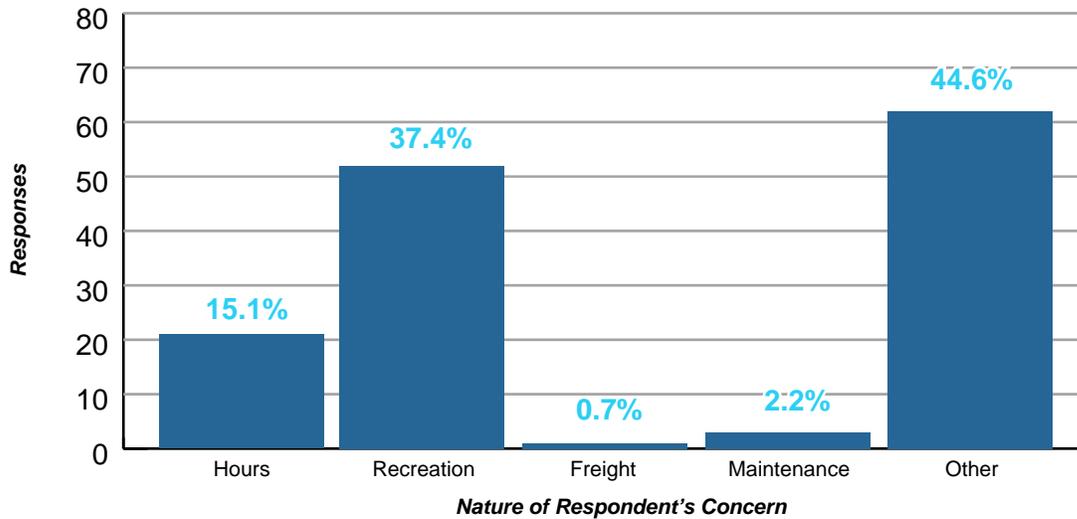
Q13c. Aviation problems and opportunities



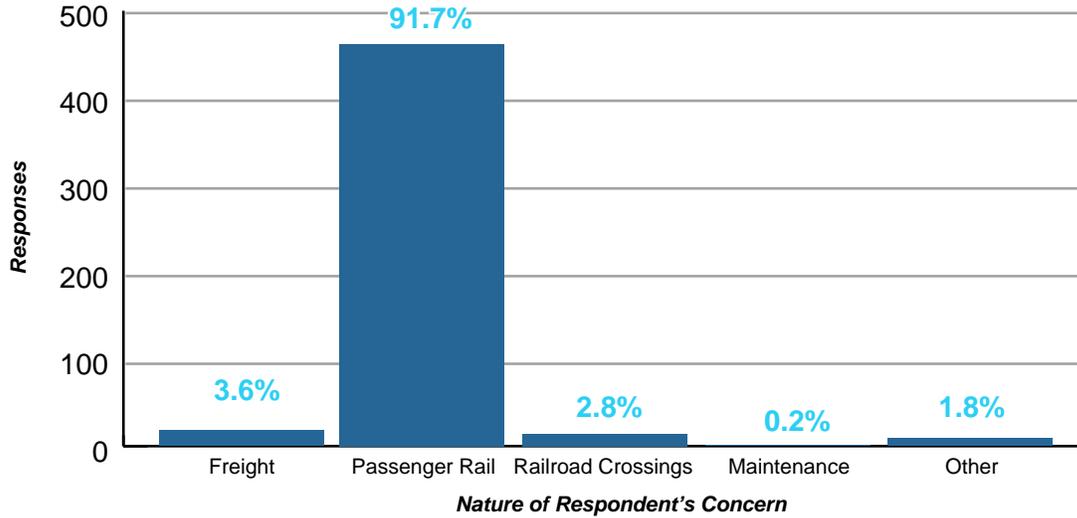
Q13d. Public transportation problems and opportunities



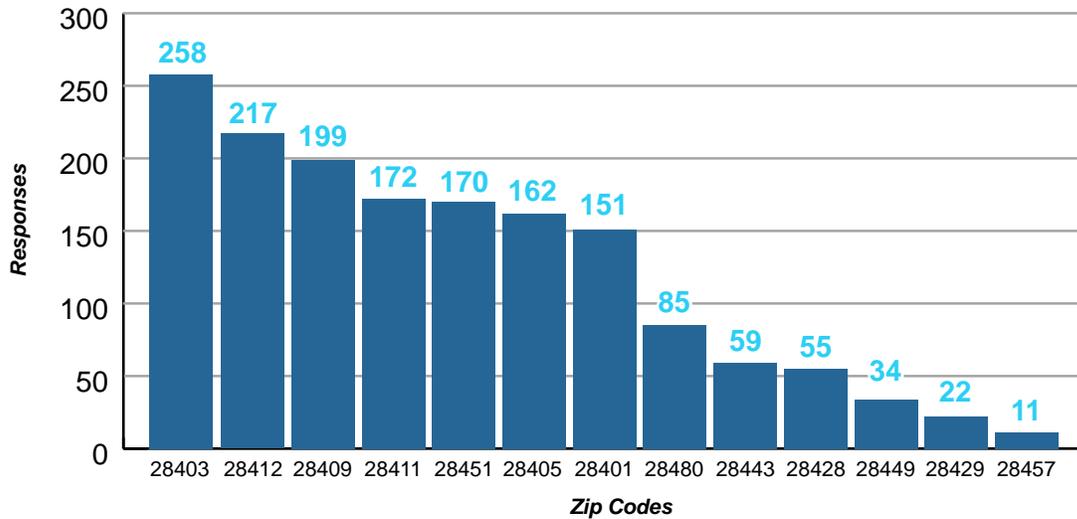
Q13e. Ferry and water transportation problems and opportunities



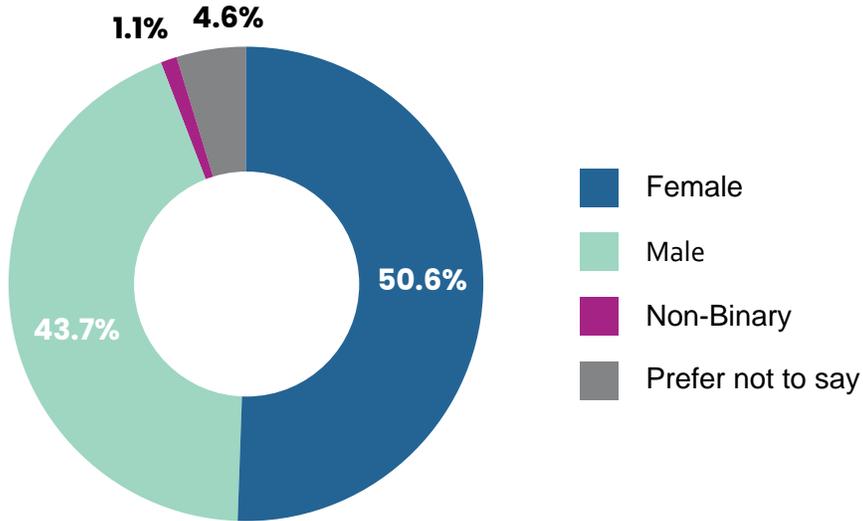
Q13f. Rail problems and opportunities



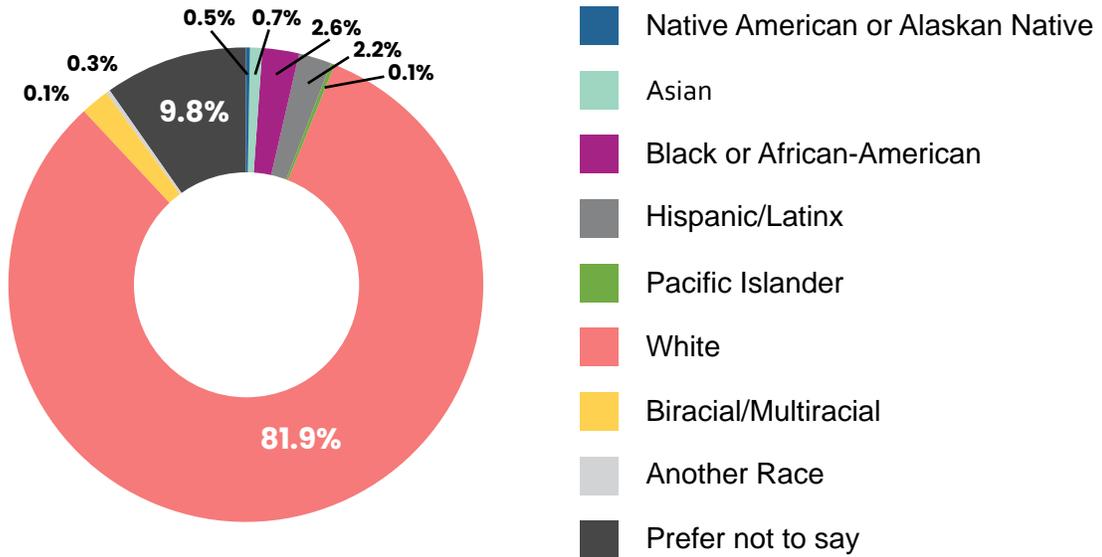
Q14. What is your home zip code?



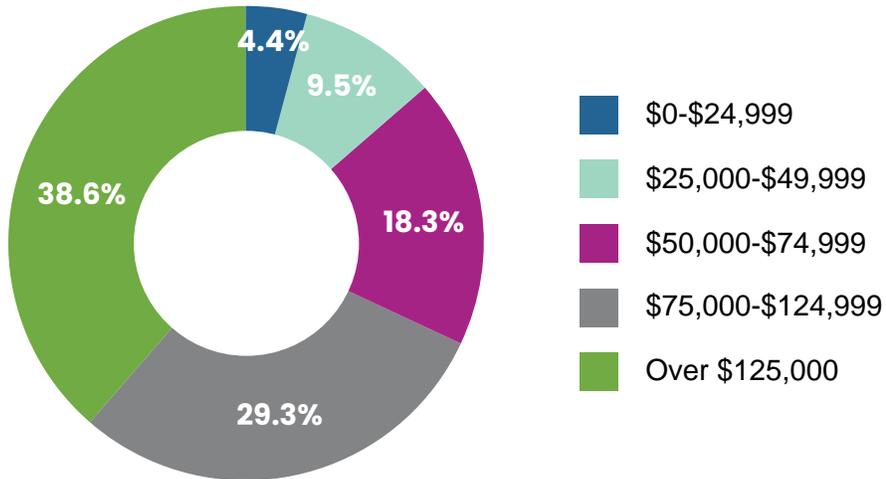
Q15. What is your gender?



Q16. What race or ethnicity best describes you?



Q17. What is your approximate annual household income?



Q18. What is your age?

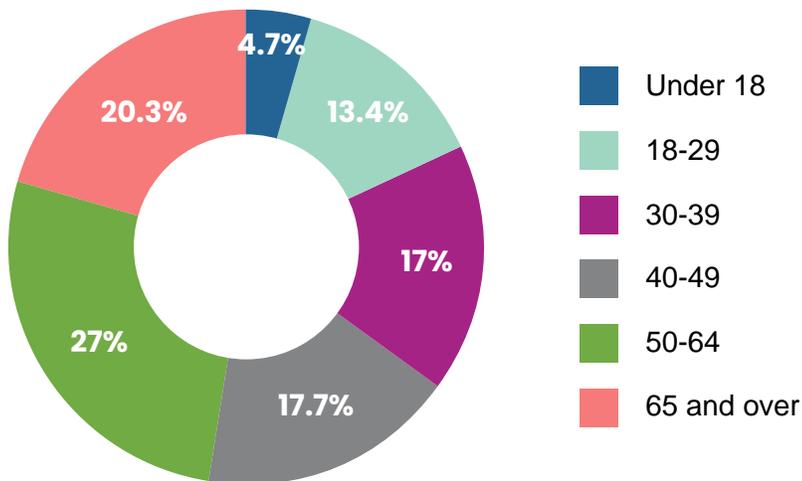


Exhibit D: Cape Fear Navigating Change 2050 Stakeholder Interview Questions

Cape Fear Navigating Change 2050 Stakeholder Interview Questions

Organization Representatives

1. Transportation Choices

- a. What are the most important ways to get around town for the group you represent? (Walking, Biking, Rideshare/Taxi, Public Transit, Drive Alone, Other)?
 - i. Why?
- b. What about recreational travel? What are the most important recreational travel options for the group you represent?
- c. In the future, how do you think the group you represent would prefer to travel differently? (More/Less Car, walking, biking, public transit, carpool, other)?
- d. In the future, which of the following new transportation options do you think the group you represent would be interested in using: Self-driving Cars, Electric Vehicles, Electric Bicycle, Self-driving Bus, Passenger Rail, or Drone Transport?
- e. What are the top travel priorities for everyday travel for the group you represent (Safety, convenience, health benefits, environmental impact, travel time, cost, comfort)?
- f. For the group you represent, when deciding where to live, how important is it to have different transportation options nearby?
- g. What percentage of the group that you represent works from home?

2. Transportation Challenges

- a. What barriers or obstacles to transportation has the group you represent encountered in the region?
 - i. What issues (if any) prevent the group you represent from using:
 1. public transit or using it more
 2. walking or walking more
 3. biking or biking more
 - ii. What improvements or changes would get the group you represent to:
 1. use public transit or use it more
 2. walk or walk more
 3. bike or bike more
- b. Where do transportation problems exist in the region?
 - i. Where are the issues that affect the group you represent?
 - ii. How would you fix the issues to benefit the group you represent?
 1. What projects are needed?
 - a. Roadway
 - i. What is the nature of the concern?

1. Congestion, Safety, New Infrastructure, Weather Events, Maintenance, Other
- b. Bike/pedestrian
 - i. What is the nature of the concern?
 1. Safety, Crossing, Trail, Sidewalk, Maintenance, Other
- c. Aviation
 - i. What is the nature of the concern?
 1. New Airline, Facilities, Freight, Maintenance, Other
- d. Public Transportation
 - i. What is the nature of the concern?
 1. Frequency, Location, Hours of Service, Trip Length, Access, Other, Maintenance
- e. Ferry and Water Transportation
 - i. What is the nature of the concern?
 1. Hours, Recreation, Freight, Maintenance, Other
- f. Rail
 - i. What is the nature of the concern?
 1. Freight, Passenger Rail, Railroad Crossings, Maintenance, Other

3. Transportation Cost

- a. Are regional transportation costs affordable for the group you represent?
 - i. Why or why not?
- b. Is transportation cost a barrier to transportation for the group you represent?
 - i. Why or why not?
- c. How would funding for each type of transportation project listed below affect the group you represent?
 - i. Bicycle and Pedestrian Facilities
 - ii. Public Transportation
 - iii. Improve or Maintain Roads
 - iv. Roadway Safety
 - v. More Roads
 - vi. Aviation
 - vii. Water Transportation
 - viii. Rail

4. Future Priorities

- a. What do you see being the top three transportation topics that your group would prioritize over the next 25 years? Why? How are these topics important/not important to the group you represent?

- i. Safety
- ii. Bicycle and Pedestrian Projects
- iii. Natural Hazards
- iv. Congestion
- v. Increased Transportation Options
- vi. Public Transportation
- vii. New Technologies
- viii. Human-Made Hazards
- ix. Resiliency: How important is it that the Cape Fear Navigating Change 2050 Plan addresses these factors?
 - 1. Meet hurricane evacuation needs, identify infrastructure vulnerable to climate events, invest in resilient infrastructure, Support emergency management, protect roads/bridges from climate trends/extreme weather, enhance stormwater management

5. Transportation Improvements

- a. Are there any specific transportation projects that would positively affect the group you represent? If so, how would they make a difference?
- b. Are there any projects in the region that have negatively impacted the group you represent? If so, what was the result?
- c. Are there any projects planned for the region that have the potential to negatively impact your group? If so, what is the expected result?

Exhibit E: *Cape Fear Navigating Change 2050* Public Input Phase II Comments

The following pages contain comments made during the *Cape Fear Navigating Change 2050* draft plan between May 28, 2025 and June 27, 2025. The table also includes a response from WMPO staff for each comment as well as changes, if any, that occurred to the draft plan as a result of the comment.

| Commenter | Comment | WMPO Staff Recommendation / Resolution |
|------------------------------|---|--|
| Beth | <p>Please make Snows Cut Bridge safe for Pedestrians safe. The bridge is part of the East Coast Greenway. Every day pedestrians risk their lives crossing the bridge. Please lower the speed limit on the bridge and pit a speed monitor! Please!</p> | <p>The 2050 MTP includes a multiuse path (MUP) on Snow's Cut Bridge, BP-22 as a regional priority bicycle and pedestrian project. An MUP on Snow's Cut was also recommended in the 2025 Carolina Beach Bicycle and Pedestrian Plan and was the 5th highest ranking linear project within said plan. Inclusion in the MTP ensures this project will continue to be on the table.</p> <p>Resolution: No changes are recommended.</p> |
| Tomas C | <p>This is absolutely ridiculous. There's another bridge 2 minutes away. What option do you think ppl will choose? Traffic is getting bad as it is. All this is gonna do is redirect and condense traffic. Then what about the blue collar guys that use that bridge multiple times a day? Im sure this is the brainchild of the same ppl that screwed up public parking around downtown.</p> | <p>The WMPO continues to explore all options for the potential replacement of the Cape Fear Memorial Bridge, as directed by the WMPO Board. The WMPO understands the importance of this connection to the region and are committed to evaluating solutions that consider access, mobility, and long-term regional needs.</p> <p>Resolution: No changes are recommended.</p> |
| Dennis Gordon Strickland III | <p>I'm addressing the WMPO about the Toll Bridge to help pay for the new Bridge across the Cape Fear River. I do understand that the cost is significant (1BILLION). The idea of a toll bridge isn't fair to everyone who visits Wilmington. I travel to Wilmington frequently and cross this bridge for multiple reasons coming from Clarkton. My reasons to travel to Wilmington are for business , doctors appointments as well as recreational. The WMPO would be charging me a toll to cross the bridge and not charging others Inopposite directions that do not have to cross the bridge to get into Wilmington. (Examples. Folks from Sampson County : Clinton , Harrels, Spiveys Corner , Newton Grove) who can travel down 421 and get into Wilmington without crossing the toll Bridge. I pay State taxes and the State should build this bridge just like the would for Ocean Isle, Holdens Beach, or any other island town or beach. If I'm charged a toll I'll just head to Fayetteville for business , my Drs appointments and recreational. When I travel my gps is set to avoid toll bridges. I'll not be paying a toll on taxes I've already paid to build a bridge into Wilmington.</p> | <p>The WMPO has long advocated for the replacement of the Cape Fear Memorial Bridge and has pursued traditional funding sources through NCDOT's prioritization process and other federal programs. While those efforts continue, the WMPO Board has directed NCDOT to examine all potential funding options, including tolling. No final decision has been made, and tolling would require a formal vote by the WMPO Board. The WMPO remains committed to evaluating solutions that address mobility and long-term regional needs.</p> <p>Resolution: No changes are recommended.</p> |

| Committer | Comment | WMPO Staff Recommendation / Resolution |
|---------------------|--|--|
| D | While I can't exactly provide context, I do feel like there should be more priority on walkability, rail, and public transportation. If that's already being done, then I'm all for support of it all. | <p>The purpose of the MTP is to provide a pipeline of projects, including bicycle and pedestrian, public transportation, and rail, to improve transportation in the region. Additionally, this MTP includes a 5-year work plan for the regional transportation demand management (TDM) program, Go Coast, which works to support and promote the usage of alternative transportation including walking and public transportation. The MTP identifies regionally significant, priority projects for all modes of transportation in the region: bicycle and pedestrian, ferry and water transportation, public transportation, rail, and roadway. While considered to be the top priorities for the region, these multimodal projects were identified within other mode-specific, localized, and publicly vetted plans. Some of these planning efforts include: NCDOT completed the Southeastern North Carolina Passenger Rail Feasibility Study in 2024 which identified a preferred corridor for passenger rail service between Wilmington and Raleigh; Reimagine Wave Transit, Wave Transit's short-range plan which redesigned the regional transit service network, was implemented in 2025; and the WMPO has adopted the bicycle and pedestrian plans from our member jurisdictions.</p> <p>Resolution: No changes are recommended.</p> |
| Dorothy P. Carraway | Take U-5710 off the table completely! | <p>U-5710 was prioritized and programmed through NCDOT's established project development and funding process, the Statewide Transportation Improvement Program (STIP), in coordination with the WMPO. As part of this process, public meetings were held and comments solicited in 2017 and 2018 to inform the project's final scope. Given the project's status and continued regional importance, its removal from the STIP is not under consideration by the WMPO or NCDOT.</p> <p>Resolution: No changes are recommended.</p> |



| Commenter | Comment | WMPO Staff Recommendation / Resolution |
|---------------------|---|--|
| Ava Kay | <p>Good afternoon. My comment is related to the project plan in regards to "Aviation". A general concern overall in the growth of ILM and the projected increase in growth primarily regarding the flight path of these commercial aircraft's. In my opinion, the property values are being diminished as aircraft's fly very low in areas of landfall and Wrightsville Beach. I am shocked and dismayed by the loud rumblings starting at 7am and into the evening at 9pm. It feels like I'm living back in Los Angeles next to LAX airport. I witness airplanes flying so low over my home it feels like they are going to crash into rooftops in landfall. Please direct these planes inland away from our homes. The noise is disturbing and deafening. Thank you.</p> | <p>The New Hanover County Airport Authority and ILM began a voluntary Part 150 Noise Compatibility Study in 2024. The study will identify the current and projected aircraft noise levels at ILM using the Day Night Average Sound Level (DNL) noise metric. From that, the study will identify measures to reduce noise impacts and methods to reduce adverse impacts of noise above the Federal Aviation Administration (FAA) thresholds in existing residential areas. The study is expected to take 18-24 months to complete. Residents can find information about this effort on the dedicated study webpage, https://ilmpart150.airportstudy.net/.</p> <p>Resolution: No changes are recommended.</p> |
| Tanner | <p>I didn't see any recommendations to improve Wrightsville Avenue in Chapter 5. No matter the time of day, but especially at 5:00 p.m., Wrightsville Avenue is horrendous. First, the turn from Wood Dale onto Wrightsville gets backed up because of people trying to turn left. A right and left turn lane or a traffic circle would be great here. Second, turning onto College Road from Wrightsville is awful. The road is one lane, and it prevents people turning left from getting through and very often people will drive into oncoming traffic to get to the left turn lane. The left turn light is extremely short, lasting maybe 5 seconds, and gets only 3-4 cars through, assuming everyone is paying attention and slams on the gas and at least one person is prepared to run the red light. It often takes 3-4 light cycles or 10-15 minutes just to get through this light. Longer lights and a lane extension here would be helpful.</p> | <p>Improvements to Wrightsville Avenue, and specifically at the intersection with NC 132/College Road, were not proposed or evaluated during the public outreach or development phases of the 2050 MTP. As part of the City of Wilmington's 2014 Transportation Bond, improvements along Wrightsville Avenue between Independence Blvd and Hawthorne Drive. Proposed improvements include sidewalk, ADA accessible crossing facilities, and a roundabout at Wallace Avenue. More information about the project can be found on the City of Wilmington's website: https://www.wilmingtonnc.gov/Government/Major-Projects/2014-Transportation-Bond-Projects</p> <p>Resolution: No changes are recommended.</p> |
| Jacqueline Carrelha | <p>Rail to Raleigh, Ferry from CB to Wilmington and more walking and biking trails sound fabulous. Also need direct flights to West Coast.</p> | <p>Thank you for your comment and support. For updates on future flight expansion efforts, please refer to ILM's official resources and planning documents.</p> <p>Resolution: No changes are recommended.</p> |

| Committer | Comment | WMPO Staff Recommendation / Resolution |
|----------------------------|---|--|
| <p>Richard Gongaware</p> | <p>We MUST abandon the mindset of cars as the dominant/preferred method of transit. We have great weather, flat terrain, and nearby beach islands with limited parking and access. We should be developing bike paths, either dedicated or at least adjacent to roadways. With the advent of e-bikes this is no longer a mode of transit solely for the young and the fit.</p> <p>Military Cutoff Rd between Eastwood and Market streets is a great example. There is a bike path on one side, but good luck crossing the road! And there should be a second path on the west side of the road to make this bike friendly and convenient. Within that 2-mile stretch you could bike to virtually every convenience that you would need. Note that I didn't even mention downtown. That is a COMPLETE no-brainer for bike use.</p> <p>More dense development inevitably devolves into a traffic issue. Let's make it a non-issue and, in the process, preserve more green space BTW I'm 70 years old. This is not an ageist position. And yeah, older people are going to need to be more active - it's good for them.</p> | <p>The MTP draws from adopted bicycle and pedestrian plans throughout the region and contains many recommendations for multiuse paths (MUPs) which are separate from roadways. The MTP also includes a 5-year work plan for the regional transportation demand management (TDM) program, Go Coast, which works to support and promote the usage of alternative transportation including bicycling, walking, and public transportation. Go Coast aims to create lasting behavior change and shift mode usage away from single occupancy vehicles when possible. While there is not a second MUP recommended in this plan for Military Cutoff Rd., there are recommendations for MUPs connecting to downtown Wilmington, including BP-88, BP-89, and BP-90 (referred to as the Downtown Trail phases 1, 2, and 3) and bike lanes and pedestrian improvements for Castle Street with BP-92.</p> <p>Resolution: No changes are recommended.</p> |
| <p>Joseph Geigle, FHWA</p> | <p>23 CFR 450.324(f)(9) Design concept and design scope descriptions of all existing and proposed transportation facilities in sufficient detail, regardless of funding source, in nonattainment and maintenance areas for conformity determinations under the EPA's transportation conformity regulations. In all areas (regardless of air quality designation), all proposed improvements shall be described in sufficient detail to develop cost estimates.</p> <p>It is questionable whether the proposed improvements are described in sufficient detail to develop cost estimates. Consider adding project limits and distances to project descriptions/names</p> | <p>Project limits and lengths were included in the cost estimation process but not shown in all summary tables. Staff will revise the document to include this information where applicable.</p> <p>Resolution: Provide project extents and lengths in project cost estimate tables. Provide proposed cross sections for all MPO/State TIP and fiscally constrained roadway projects.</p> |

| Commenter | Comment | WMPO Staff Recommendation / Resolution |
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| <p>Joseph Geigle, FHWA</p> | <p>23 CFR 450.324(f)(10) A discussion of types of potential environmental mitigation activities and potential areas to carry out these activities, including activities that may have the greatest potential to restore and maintain the environmental functions affected by the metropolitan transportation plan. The discussion may focus on policies, programs, or strategies, rather than at the project level. The MPO shall develop the discussion in consultation with applicable Federal, State, and Tribal land management, wildlife, and regulatory agencies. The MPO may establish reasonable timeframes for performing this consultation.</p> <p>The MTP includes discussion of Environmental Impact and Mitigation Activities. However, it doesn't document that the discussion was developed in consultation with applicable resource agencies.</p> | <p>The 2050 MTP includes a high-level environmental screening of proposed roadway projects, along with a discussion of potential mitigation strategies that may be appropriate as projects advance. The draft plan was shared with relevant federal, state, and local natural and historic resource agencies for review and comment. As part of this process, the North Carolina Department of Environmental Quality (NCDEQ) emphasized that more detailed environmental review will occur during future stages of project development, particularly through the 401-Water Quality Certification process to ensure alignment with state water quality standards.</p> <p>In addition to NCDEQ, NCDOT was actively involved throughout the development of the 2050 MTP. Representatives from both Division 3 and the Transportation Planning Division served as voting members of the Metropolitan Transportation Plan Committee (MTPC), which was responsible for guiding key elements of the plan. The MTPC, composed of representatives from each WMPO member jurisdiction as well as subject matter experts in areas such as emergency management and public health, played a vital role in shaping the development of the plan includes the regional vision and goals. The vision and goals reflect the shared regional commitment to integrating land use and quality of place into the transportation planning process. While local governments retain some oversight of natural resources and environmental priorities within their jurisdictions, their actions must align with applicable state and federal laws. This coordination ultimately leads back to state agencies such as NCDEQ, who were specifically spught out to provide input and ensure that any outstanding environmental needs or requirements could be addressed by WMPO staff during the plan's development.</p> <p>Additionally, NCDOT's Division 3 Project Development and Environmental Analysis Engineer provided technical guidance and feedback throughout the development of the 2050 MTP, continuing their involvement from the 2045 MTP. As individual projects move forward into design and preliminary engineering, environmental assessments and permitting will be conducted on a case-by-case basis to ensure compliance with applicable regulations.</p> <p>Resolution: Text was added to document consultation and input from applicable resource agencies.</p> |

| Commenter | Comment | WMPO Staff Recommendation / Resolution |
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| Joseph Geigle, FHWA | <p>23 CFR 450.324(f)(11) A financial plan that demonstrates how the adopted transportation plan can be implemented.</p> <p>It appears that approximately \$6.25B in traditional funding plus \$3.25B in alternative funding equalling \$9.5B available in revenue but only \$7.6B in projects identified leaving a contingency of approximately \$2B. Am I reading this correctly? If so, how was \$2B determined as an appropriate amount of contingency.</p> | <p>Alternative funding sources were included to illustrate potential opportunities but were not allocated to specific projects. The purpose was to educate member jurisdictions on what is possible, not to increase the constrained project total. Staff will clarify this in the final document.</p> <p>Resolution: Clarify the purpose of the alternative funding analysis in the MTP's main body text and appendices where applicable.</p> |
| Joseph Geigle, FHWA | <p>23 CFR 450.324(f)(11) A financial plan that demonstrates how the adopted transportation plan can be implemented.</p> <p>By my count in Appendix D, I see approximately 12 tables that provide expected funding/revenue amounts. However, I only see one table (D11) providing project costs. I would like to at least see tables showing expected project expenditures by band similar to tables D3 – 9.</p> | <p>Resolution: Add additional table that shows the total project expenditures by funding band.</p> |
| Joseph Geigle, FHWA | <p>23 CFR 450.324(f)(11) For purposes of transportation system operations and maintenance, the financial plan shall contain system-level estimates of costs and revenue sources that are reasonably expected to be available to adequately operate and maintain the Federal-aid highways and public transportation.</p> <p>Even though Appendix K provides good information on System Management and Operations strategies, the financial plan appears to only provide cost estimates for public transportation related M&O. The financial plan also needs to contain M&O costs for the Federal-aid highways.</p> | <p>Maintenance and Operations revenues for federal aid highways, as well as state and locally maintained roadways, were forecast as part of the financial forecast for 2050. Forecasted amounts will be included in final 2050 MTP.</p> <p>Resolution: Appendix D will be updated to include forecasted roadway maintenance and operations costs.</p> |

| Committer | Comment | WMPO Staff Recommendation / Resolution |
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| <p>Joseph Geigle, FHWA</p> | <p>23 CFR 450.324(g) The MPO shall consult, as appropriate, with State and local agencies responsible for land use management, natural resources, environmental protection, conservation, and historic preservation concerning the development of the transportation plan. The consultation shall involve, as appropriate: (1) Comparison of transportation plans with State conservation plans or maps, if available; or (2) Comparison of transportation plans to inventories of natural or historic resources, if available.</p> <p>Appendix M: Maps were provided and appropriate. While the document describes coordination with resource agencies during project development, I didn't see discussion around consultation with resource agencies concerning the development of the MTP.</p> | <p>The 2050 MTP includes a high-level environmental screening of proposed roadway projects, along with a discussion of potential mitigation strategies that may be appropriate as projects advance. The draft plan was shared with relevant federal, state, and local natural and historic resource agencies for review and comment. As part of this process, the North Carolina Department of Environmental Quality (NCDEQ) emphasized that more detailed environmental review will occur during future stages of project development, particularly through the 401-Water Quality Certification process to ensure alignment with state water quality standards.</p> <p>In addition to NCDEQ, NCDOT was actively involved throughout the development of the 2050 MTP. Representatives from both Division 3 and the Transportation Planning Division served as voting members of the Metropolitan Transportation Plan Committee (MTPC), which was responsible for guiding key elements of the plan. The MTPC, composed of representatives from each WMPO member jurisdiction as well as subject matter experts in areas such as emergency management and public health, played a vital role in shaping the development of the plan includes the regional vision and goals. The vision and goals reflect the shared regional commitment to integrating land use and quality of place into the transportation planning process. While local governments retain some oversight of natural resources and environmental priorities within their jurisdictions, their actions must align with applicable state and federal laws. This coordination ultimately leads back to state agencies such as NCDEQ, who were specifically spught out to provide input and ensure that any outstanding environmental needs or requirements could be addressed by WMPO staff during the plan's development.</p> <p>Additionally, NCDOT's Division 3 Project Development and Environmental Analysis Engineer provided technical guidance and feedback throughout the development of the 2050 MTP, continuing their involvement from the 2045 MTP. As individual projects move forward into design and preliminary engineering, environmental assessments and permitting will be conducted on a case-by-case basis to ensure compliance with applicable regulations.</p> <p>Resolution: Text was added to document consultation with resource agencies during plan development.</p> |

| Committer | Comment | WMPO Staff Recommendation / Resolution |
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| Francisco Tomasino | <p>There needs to be another way to travel the Gordon road corridor between College road and Military cutoff. I live in one of the recently built apartment complexes and have no option but to drive everywhere. It would be great if there was a sidewalk, protected bike lane, or even some sort of public bus/shuttle that could connect people on Gordon road to important resources like grocery stores and parks, such as the food lion on Gordon and Market and the fields at Ogden Park. I am physically able to run, bike, and walk, but the lack of room on Gordon road makes it unsafe to commute in anything other than a car right now.</p> | <p>The current Statewide Transportation Improvement Program (STIP) includes a project to widen Gordon Road into a four-lane roadway. A multiuse path (MUP), sidewalk, and crossing locations at signalized intersections are included in this project. Construction on this project began late spring 2025, and it is currently estimated to be completed in 2029.</p> <p>Resolution: No changes are recommended.</p> |
| Hannah Dykema | <p>Please reconsider the current plan for the military cutoff Eastwood road intersection. This area is heavily used by bike and the current overpass plan will significantly impact the community</p> | <p>U-5710 was prioritized and programmed through NCDOT's established project development and funding process, the Statewide Transportation Improvement Program (STIP), in coordination with the WMPO. As part of this process, public meetings were held and comments solicited in 2017 and 2018 to inform the project's final scope and selected alternative design. The project, that includes the now complete Drysdale Drive Extension, includes multiuse path and crossing facilities that will connect the existing Gary Shell Cross City Trail on either side of the project and to the Military Cutoff Trail.</p> <p>Resolution: No changes are recommended.</p> |
| Nick | <p>Can you make downtown walking and bike friendly from 10th Street all the way to River or Water street?</p> | <p>The 2050 MTP includes priority bicycle and pedestrian project recommendations for a multi-use path (MUP) connecting to downtown Wilmington, BP-88, BP-89, and BP-90 (referred to as the Downtown Trail phases 1, 2, and 3) and bike lanes and pedestrian improvements for Castle Street with BP-92. Downtown Wilmington is highlighted as a priority area in the 2023 Walk Wilmington Plan and the upcoming Greater Downtown Plan has identified Mobility as a key theme from extensive public input.</p> <p>Resolution: No changes are recommended.</p> |



| Committer | Comment | WMPO Staff Recommendation / Resolution |
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| Leeann McClure | Hampstead/ Surf City area: a sidewalk? Bike path? Anything? This area is ridiculously pedestrian and bike unfriendly. No infrastructure for anything but cars, and even that's inadequate. | <p>The MTP includes several bicycle and pedestrian priority project recommendations in the Hampstead area, such as BP-83 US-17 Multiuse Path, BP-80 NC-210 Multiuse Path, and BP-81 Sloop Point Loop Road Multiuse Path/Sidewalk. In addition, the Pender County Bicycle and Pedestrian Plan (2023), which has been adopted by both Pender County and the WMPO, includes over 40 recommended projects, with several located in the Hampstead area. The WMPO planning area does not include Surf City, so no transportation-related recommendations are included in this plan for that location.</p> <p>Resolution: No changes are recommended.</p> |
| Elizabeth | It is upmost urgently important to make Snow's Cut Bridge Safe for pedestrians! | <p>The 2050 MTP includes a multiuse path (MUP) on Snow's Cut Bride, BP-22. An MUP on Snow's Cut was also recommended in the 2025 Carolina Beach Bicycle and Pedestrian Plan and was the 5th highest ranking linear project within said plan. Inclusion in the MTP ensures this project will continue to be on the table.</p> <p>Resolution: No changes are recommended.</p> |

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| <p>Laura Lunsford</p> | <p>I encourage you to create vastly improved bike/ped connections from Wilmington to WB. The sidewalk by Landfall is not safe and there is no way to transition across the bridge. I know WB is doing minimal improvements, but there needs to also be adequate bike parking (which can be incentivized for business) and that the town needs to support. Improved bike signage and education (especially for tourists). People are biking all over the place, including on sidewalks at the beach with children (so not safe!) because you can't get down Lumina. It looks like you are considering places for improvements in Wilmington proper but not to beach towns. Also, love the rail connection from Wilmington Raleigh. And it would be great (and enhance tourism) to have a real bike path along the Cape Fear from Wilmington to Southport.</p> | <p>The Cross City Trail is a multiuse path extending along Landfall on the northeastern side of Eastwood Rd toward the Heide Trask Bridge. The bridge deck on the Heide Trask Bridge was improved in 2019 with input from local bicycling advocates to ensure that the bridge surface is suitable for bicycling. Cyclists may walk their bikes on the bridge's sidewalk if desired.</p> <p>The WMPO has adopted the Town of Wrightsville Beach's 2024 Bicycle and Pedestrian Plan, which includes recommendations for sidewalks, bike lanes, sharrows, and multiuse paths within the town boundary to accommodate bicyclists and pedestrians of all skill levels and abilities. Crossing improvements and supportive infrastructure including signage and wayfinding as well as bicycle parking and storage are recommended in the plan through policy review in Wrightsville Beach's code of ordinances.</p> <p>Some improvements recommended in the Town's Bicycle and Pedestrian plan that are echoed in this MTP are BP-109 and BP-110, which consist of bike lanes on N Lumina Ave. Additionally, this MTP contains multi-use path projects connecting Wilmington and Wrightsville Beach including BP-108 (a MUP along Eastwood Rd/Causeway Dr.).</p> <p>The WMPO's Be a Looker campaign aims to educate roadway users on safety best practices for increasing visibility and predictability of bicyclists and pedestrians, and awareness of drivers.</p> <p>The WMPO planning area does not extend to Southport.</p> <p>Resolution: No changes are recommended.</p> |

| Committer | Comment | WMPO Staff Recommendation / Resolution |
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| <p>Vivian DeSanto</p> | <p>Eliminate the "Flyover" at Military Cutoff and Eastwood and use the money to build the bridge over the River. We do not want nor need the "Flyover". It will only move the traffic down the road one light!! Too much money for something NO ONE wants and is not needed!!!!</p> | <p>U-5710 was prioritized and programmed through NCDOT's established project development and funding process, the Statewide Transportation Improvement Program (STIP), in coordination with the WMPO. As part of this process, public meetings were held and comments solicited in 2017 and 2018 to inform the project's final scope and selected alternative design. Funding programmed in the MPO/State Transportation Improvement Program (TIP) is allocated to specific projects and cannot be reallocated. If a project is removed, the funds return to the overall funding pool and are then assigned to the next highest scoring project, regardless of location. The Military Cutoff at Eastwood Interchange project (U-5710) is programmed with statewide funding. If the project was removed, it is unlikely the funds would go towards another project in the Wilmington region.</p> <p>Resolution: No changes are recommended.</p> |
| <p>Judy Williams</p> | <p>Independence needs to be four-lane Road with turning lanes traffic trying to get out of a subdivision is horrible. You have to plan your time of when you come into the neighborhood or when you're leaving the neighborhood if there's an emergency and you stuck in traffic. you're planning on building more and more apartments what happened to planning roads before you allow more apartments!! Are you actually going to wait another 25 years to fix a road and it's going to cost probably 10 to 20% more than it would now where is that money gonna come from?</p> | <p>The widening of Independence Boulevard from US 421/Carolina Beach Road to River Road (RW-63) is included in the fiscally constrained portion of the MTP. This project is planned to expand the roadway to four lanes with turning lanes to help improve traffic flow and address congestion concerns. While the timing of forecasted funding for the project is based on the remaining revenues less other existing and committed priority projects, efforts continue to identify and secure alternative revenue resources to advance this and other important improvements as soon as possible.</p> <p>Resolution: No changes are recommended.</p> |
| <p>Stephen McNair</p> | <p>Project RW63- independence Blvd Widening - we have been in discussions with City of Wilmington Traffic Engineering for years to get the road widening and they provided concepts to do so, Why must this project be constantly delayed ? Originally scheduled for 2030, now pushed to 2040 or later, with additional costs of over \$7 million. Over 14000 vehicles a day travel that stretch of road, with extended period of time of backed up traffic. Now 17 streets feed into the 1 mile stretch with more to come. Now is the time to fix this road</p> | <p>The widening of Independence Boulevard from US 421/Carolina Beach Road to River Road (RW-63) is included in the fiscally constrained portion of the MTP. This project is planned to expand the roadway to four lanes with turning lanes to help improve traffic flow and address congestion concerns. While the timing of forecasted funding for the project is based on the remaining revenues less other existing and committed priority projects, efforts continue to identify and secure alternative revenue resources to advance this and other important improvements as soon as possible.</p> <p>Resolution: No changes are recommended.</p> |

| Committer | Comment | WMPO Staff Recommendation / Resolution |
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| <p>Clauston Jenkins</p> | <p>Public Transportation: It is foolish to plan on use of big buses or any kind of city-wide route system because Wilmington and New Hanover County simply do not have enough people without vehicles to make such a system financially viable. I know people say that there is substantial Federal money available but, as we see in 2025, such funds may not always be available.</p> <p>Housing and infrastructure: Although more housing does create some additional revenue, the facts are that the cost of meeting all the demand for services that new housing generates is more than what the housing generates. We need a slowdown of new building until our infrastructure catches up or else the creation of an additional infrastructure fee for new developments.</p> | <p>The MTP is a federally required plan that must address not only all modes of transportation but also a range of related factors such as housing, land use, and economic development, as outlined in Title 23 CFR Part 450 Subpart C. These elements are critical to ensuring that transportation planning supports broader regional goals. The WMPO advances this comprehensive approach by promoting coordinated land use and transportation planning, and by encouraging a shift away from single-occupancy vehicle use for a multitude of reasons including to decrease roadway congestion through its Transportation Demand Management (TDM) program, detailed in Appendix L. Additionally, the WMPO evaluates development-related transportation impacts through the Traffic Impact Analysis (TIA) process. Land use and future land use plans play an essential role in shaping the Travel Demand Model, which is a data tool utilized to forecast future travel patterns and analyze the impacts of proposed transportation projects during the MTP development process. The WMPO works with its member jurisdictions to ensure that this model reflects locally refined and confirmed socioeconomic data including population, employment, and development trends. However, decisions to delay or limit development remain the responsibility of local governments and fall outside the WMPO's planning authority and the scope of the MTP.</p> <p>Resolution: No changes are recommended.</p> |

| Commenter | Comment | WMPO Staff Recommendation / Resolution |
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| Susan H Kreamer | <p>I am responding about the "flyover" at Military Cutoff Rd and Eastwood Rd. There are a number of us living in the area who feel this is a total waste of \$81M, which will most likely end of escalating to \$125M, to construct an overpass which will not move traffic any quicker than it is now. Not enough has been published in the past ten years for people to understand the significance of this major undertaking. You say "4" years, we all know it will be double those years that we will have to contend with all the projects being constructed in this area. "The Avenue, Mayfaire West and the MUD at the same corner of MC Rd and Eastwood. Please take this money and use it to rebuild the bridges which are in dire need of repair! WE CITIZENS DO NOT WANT THIS OVERPASS!</p> | <p>U-5710 was prioritized and programmed through NCDOT's established project development and funding process, the Statewide Transportation Improvement Program (STIP), in coordination with the WMPO. As part of this process, public meetings were held and comments solicited in 2017 and 2018 to inform the project's final scope and selected alternative design. Funding programmed in the MPO/State Transportation Improvement Program (TIP) is allocated to specific projects and cannot be reallocated. If a project is removed, the funds return to the overall funding pool and are then assigned to the next highest scoring project, regardless of location. The Military Cutoff at Eastwood Interchange project (U-5710) is programmed with statewide funding. If the project was removed, it is unlikely the funds would go towards another project in the Wilmington region.</p> <p>Resolution: No changes are recommended.</p> |
| Dylan McDonnell, New Hanover County | <p>I was wondering if any additional narrative on the Complete Streets section would be appropriate to mention some examples since in the county we have seen/are going to see many additional miles added to the overall network because of roads added/upgraded as part of that DOT policy, i.e. Military Cutoff (extension project), Market Street upgrade (Ogden), Gordon Road upgrade. It's been a huge ability for county's to get this type of infrastructure especially when looking through the lens of county governments inability to build or maintain roads.</p> | <p>Additional detail will be added to the Complete Streets section to highlight how NCDOT's Complete Streets policy supports the implementation of transportation projects, highlighting the important role it plays in advancing projects in unincorporated county areas where counties lack road ownership authority.</p> <p>Resolution: Revise Complete Streets sections to provide more context of how the policy can enable or advance transportation projects, particularly in unincorporated areas.</p> |
| Dylan McDonnell, New Hanover County | <p>The New Hanover County Comprehensive Plan's Bicycle and Pedestrian Priorities Plan Amendment is not included in the list of sources for the bicycle and pedestrian appendix or at the back of the document, despite projects from the plan appearing on the project map (Figure F-1). Clarification is needed on why this adopted county plan is not referenced among the official sources.</p> | <p>The WMPO's Comprehensive Transportation Plan (Appendix N) includes only plans formally adopted by the WMPO. However, project submissions were drawn from a variety of local plans and programs, some of which may not have been adopted by the WMPO. Staff will expand the project submission section in Chapter 4 to provide clearer, high-level explanation of how member jurisdictions identified projects to submit for inclusion in the MTP, including additional context on the types of local plans and programs used to guide decision-making.</p> <p>Resolution: Expand the project submissions section to include context on the types of plans, documents, and programs that inform member jurisdictions' project submissions for the MTP.</p> |

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| <p>David Ingram, City of Wilmington</p> | <p>Chapter 1, page 5 - Federal Plan Requirements, 1st bullet - A vision that meets community goals. Include here, or elsewhere in the plan, the City goals to reduce GHG emissions by 58% by 2050, and to transition 50% of the municipal fleet to EV by 2035 (and 100% by 2050).</p> <p>Also, recognize the transition of the transportation sector away from fossil fuels towards EVs, hybrid, and other clean fuel technologies. EV registration in New Hanover County has been increasing dramatically as evidenced by data from NCDOT (https://www.ncdot.gov/initiatives-policies/environmental/climate-change/Pages/zev-registration-data.aspx) and the charging infrastructure will be needed to support the transition.</p> | <p>The comment has been received and will be included as part of the public input for the 2050 MTP. While the MTP supports regional efforts to reduce emissions and transition to cleaner transportation technologies, it is a regional plan and does not include goals specific to individual jurisdictions. Broader trends, such as the rise in EV adoption and supporting infrastructure needs, are acknowledged at a regional level.</p> <p>Resolution: No changes are recommended.</p> |

| Commenter | Comment | WMPO Staff Recommendation / Resolution |
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| <p>Kamnyn Sands</p> | <p>Chapter 5 – The Roadmap to 2050 The allocated funds being poured into the Roadway Fiscally Constrained Project List is promoting a CAR-CENTRIC infrastructure and will not solve congestion long term. Cities like Houston, Atlanta, and L.A. expanded highways and saw no long-term traffic relief. It only worsened. Becoming more pedestrian centered, as opposed to prioritizing vehicles, would provide a much safer town. That means less funding for endless road expansion and more investment in rapid bus transit, a light rail, and more greenways. Transit-oriented development creates hive-like neighborhoods: People can live, work, and play within their community—less need for roadway travel.</p> <p>Instead of pouring billions into the roadways, divert and reallocate the resources to:</p> <ul style="list-style-type: none"> - RBT infrastructure and dedicated bus lanes, sooner. Make this #1 priority. Especially prioritizing a BUS STOP to reach Carolina Beach and Wrightsville Beach. How can we use so much money on widening the roads when we don't even have a bus route that goes to the beach? - Light rail feasibility studies and a strong plan to achieve government funding to integrate multiple light rail routes that travel quickly from Downtown, the airport, UNCW, to Wrightsville, etc. (The light rail has been a major success in Charlotte, NC because they put urbanization second to economic transit oriented development, ETOD.) -More greenways and trail systems that connect neighborhoods. For example, a greenway from Ogden to Wrightsville would allow pedestrians to walk or bike just 15 minutes to the beach safely without needing to go near market street, allowing them to avoid the dangerously busy street entirely. <p>Adding more lanes will not promote a walkable city. More lanes = more cars = same or worse traffic in the long run. Instead, prioritize travel OPTIONS. Walkable hubs connected by multiple methods of transit would create a resilient, future-forward city and that's what Wilmington needs. Thank you! (:</p> | <p>The WMPO appreciates community support for expanding alternative transportation options in the Wilmington area. The MTP promotes a multimodal vision that includes Bus Rapid Transit (BRT), pedestrian and bicycle facility expansions, and strategic investments to enhance regional connectivity across all modes of transportation. For example, existing multiuse paths are already providing continuous connectivity between Wrightsville Beach and Market Street, with an extension under construction to the northern part of Ogden as part of STIP project U-4902D. Projects including in the MTP such as the Downtown Trail exemplify ongoing efforts to connect neighborhoods with key destinations. RideMicro, the on-demand transit service operated by Wave Transit, serves areas such as Carolina Beach. Its service areas are dependent on available funding, and Wave Transit's recent short-range plan focuses on increasing service frequency on busy routes rather than expanding geographic coverage. Additionally, municipalities must agree to allow transit services within their jurisdictions. While light rail has appeared in public discussion, no such projects were formally submitted by planning partners during the MTP development. Current regional rail priorities focus on restoring passenger rail to Raleigh, consistent with NCDOT's 2024 Southeastern North Carolina Passenger Rail Feasibility Study. The WMPO also manages the Transportation Demand Management (TDM) program, Go Coast, which includes a 5-year work plan in the MTP to increase awareness, support, and use of alternative transportation options such as bicycling, transit, carpooling, and walking. Through policies, employer outreach, social marketing, and incentives, the program aims to reduce single-occupancy vehicle use, mitigating congestion and improving commutes. Transit-Oriented Development is managed by local governments through land use and zoning authority. While the WMPO does not oversee TOD, it supports these efforts by coordinating regional planning and assisting member jurisdictions in prioritizing transit-friendly projects.</p> <p>Resolution: No changes are recommended.</p> |

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| <p>Natalie English, Wilmington Chamber of Commerce</p> | <p>Thank you to the board and staff of the WMPO for your work developing the Cape Fear Navigating Change 2050. One of the major challenges facing our region is up-to-date and expanded transportation infrastructure. A lack of available funding, at every level of government, has created a tremendous backlog of needed projects to ensure transportation infrastructure that addresses our region's needs. Other regions across the state are exploring, and some already employ, alternative funding mechanisms. Those sources offer matching dollars that provide weight to state and federal funding requests. Exploring alternative funding options is an important step toward making the Cape Fear region more competitive for state and federal funding which will accelerate our ability to meet our long-term transportation infrastructure needs.</p> <p>The Wilmington Chamber of Commerce encourages the WMPO to consider alternative funding options and their potential impact on our transportation future and we are ready to assist in identifying and securing those options.</p> | <p>The comment has been received and will be included as part of the public input for the 2050 MTP. We appreciate the supportive feedback. As part of the MTP development process, the plan includes an analysis of potential alternative funding mechanisms to support future transportation investments beyond traditional revenue sources. This analysis was intended to provide WMPO member jurisdictions with a clearer understanding of the various alternative funding options available to them. To further support this effort, the WMPO Board established an Alternative Funding Subcommittee focused on identifying and evaluating innovative funding strategies that can help advance regional transportation priorities.</p> <p>Resolution: No changes are recommended.</p> |



| Committer | Comment | WMPO Staff Recommendation / Resolution |
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| <p>Susanna Ek</p> | <p>In reference specifically to Chapter 4 page 8, table 4.1 "Total Capital Funding Forecasted 2024-2050" as well as Chapter 5 and appendices regarding the Bicycle and Pedestrian and public transportation projects.</p> <p>First, I acknowledge that the costs will be different for different types of transportation.</p> <p>If Wilmington is to be a thriving city for residents, businesses, and tourism, a shift in funding to increase the modes Bicycle and Pedestrian, Public Transportation, and Rail is needed.</p> <p>Increasing bike/ pedestrian paths increases people moving throughout the city, this increase builds more active community members as they are more likely to be out and aware of community events and businesses. We have a lot of people that bike and there are many more people of all ages riding e-bikes. To encourage that, there needs to be increase funding for Bicycle and Pedestrian modes of transport that actually encourage people to use them (i.e. are safe, connect relevant areas and neighborhoods, have shade, have benches, and waste disposal areas) Bikes and people generally do not cause as much wear and tear and thus repair costs are less than that of roadways for cars.</p> <p>Coming from living in multiple cities that grew rapidly, creating more roadways did not lessen traffic. They just created more road for the city to maintain which just keeps increasing the cost. Adequately investing in public transportation is more likely to decrease traffic. People generally use public transportation when either: they have no other option, or it is easy/convenient. Public transportation needs heavy investment to be easy/convenient, but when it is, people will use it.</p> <p>Overall, I am excited to see how many bicycle/pedestrian and public transportation projects are planned, but if the city keeps growing as it already is, an equal focus and investment on these modes of transport need to be backed financially as well. A plan so financially focused on roadways will not benefit long term growth.</p> | <p>The WMPO continues to explore innovative and alternative funding opportunities to support multimodal transportation investments. Recognizing the need to identify funding sources beyond traditional approaches, the WMPO established a Grant Coordinator position in FY 2025 to enhance its capacity to pursue competitive grants. This position not only strengthens internal efforts but, also serves as a resource for member jurisdictions by helping identify and apply for grant funding aligned with local and regional transportation priorities. In addition, the WMPO oversees the regional Transportation Demand Management (TDM) program, Go Coast. TDM emphasizes the movement of people rather than vehicles, with the goal of reducing traffic congestion by promoting alternative modes of travel such as biking, walking, transit, and carpooling so that even as population increases, commute times remain manageable.</p> <p>In addition to pursuing funding, the WMPO provides data resources, technical guidance, and planning tools to help member jurisdictions advance transportation projects that reflect regional and community goals. The WMPO also administers a competitive funding program for locally administered projects, allocating approximately five million dollars in federal funds annually. Member jurisdictions may apply to this program to support implementation of eligible transportation projects throughout the region.</p> <p>Resolution: No changes are recommended.</p> |

| Commenter | Comment | WMPO Staff Recommendation / Resolution |
|---|---|---|
| <p>Rebekah Roth, New Hanover County</p> | <p>Please keep related text descriptions and data together. For instance, the maps in Chapter 2 provide no descriptions to help readers identify the context. Especially when posting online, this would offer more accessibility for those using read-aloud technology.</p> <p>Please include the maps for all project types in Chapter 5. This was especially noted for the Bicycle & Pedestrian projects, as the project descriptions offered little information regarding exactly where the project were proposed for given roadway names may be similar across the multiple jurisdictions included in the planning area.</p> <p>Additional information on project scoring and how individual projects that were not included in the fiscally constrained list fell using the scoring methodology would be helpful for our planning purposes.</p> <p>Please include information on the status of the Snows Cut Bridge replacement. Based on our discussions with WMPO staff, this bridge project was not scored as it would be funded using different funding buckets; however, given its importance to/impact on multiple jurisdictions, some information on why this was not included in the scored projects list would be helpful. Many readers are not familiar with the different funding sources, and other bridge projects were included, making the lack of reference to the Snows Cut Bridge replacement appear to be an oversight.</p> <p>Please address the ordering of projects when one is scored higher but may require a lower scoring project to be included earlier than outlined in the funding timing bands in order to be effective. This comment is specifically in relation to the Blue Clay Road interchange with I-140 and the Blue Clay Road widening project, as the interchange is shown in an earlier funding band than the widening project that would help accommodate the traffic routed by an additional interchange.</p> | <p>Projects were scored using scoring criteria developed from the goals and objectives established by the Metropolitan Transportation Plan Committee (MTPC). Projects included in the fiscally constrained list were selected based on those scores and the availability of revenues after accounting for committed MPO and State TIP projects. Placement within funding bands is based on project cost and funding availability, though delivery timelines may change with shifting priorities or new funding opportunities. Influences that project scoring had on the fiscally constrained roadway scenario will be expanded on in Chapter 4. Additional information will be included to clarify that certain bridge projects, such as the Snows Cut Bridge replacement, may be funded through maintenance and structure-specific programs outside of the STIP, particularly in cases where infrastructure is aged or has identified structural deficiencies as determined by NCDOT.</p> <p>Resolution: The plan will be reviewed for accessibility considerations and updated/expanded text where necessary. Maps for modal priority projects (Chapter 6) will be added. Modal project maps for all submitted projects are included in respective modal appendices. Additional text describing bridge replacement funding (not part of revenue forecast because region has not received any to project). Snow's Cut remains in CTP, could be pursued utilizing other alternative funding sources also.</p> |



| Committer | Comment | WMPO Staff Recommendation / Resolution |
|---|--|--|
| <p>Rebekah Roth, New Hanover County</p> | <p>When formatting the plan, please consider that most readers will be viewing a digital version, not a printed version.</p> <p>Please show waterways on the maps to assist in plan users more easily identifying the location of projects and the impacts to/from water crossings.</p> <p>We appreciate that there are no specific funding timing bands included in the bicycle and pedestrian prioritization to allow for maximum flexibility in funding and coordination with local plans</p> <p>Consider revising the list of fiscally constrained roadway projects so they are sorted by funding timing bands. This is the way many users of the plan will look at the project list and having all of the STIP projects listed first even if they are slated for later funding than non-programmed projects is confusing.</p> <p>Please provide more description on project components. While project design has not occurred and will not until projects move through the funding process, it is helpful for long-term planning to know what is meant by "widening," for instance. It would also be helpful to show that improvements to N. College from Gordon to Market that were previously included in a separate project are now included in the scope of the MLK Blvd/N. College intersection project. Given the 5-year update cycle, if conditions change there would be opportunities for revising this information.</p> | <p>Revise the fiscally constrained project tables to improve clarity by organizing projects according to funding bands and presenting MPO/State TIP projects separately from fiscally constrained MTP projects in distinct tables. Project descriptions will be conveyed through the inclusion of typical cross sections in Appendix J: Roadway, which illustrate anticipated roadway configurations and improvements. Additionally, staff will ensure that the merger of project U-5881 into U-5792 is clearly noted.</p> <p>Resolution: Fiscally constrained projects to be listed by funding band. Project cross sections for MPO/State TIP and fiscally constrained projects to be included in Roadway Appendix. Maps will be revised to increase the visibility of major water bodies. The plan will be reviewed for accessibility considerations and updated/expanded text where necessary.</p> |

| Committer | Comment | WMPO Staff Recommendation / Resolution |
|---|--|---|
| <p>Jerod Patterson, Business Alliance for a Sound Economy</p> | <p>I applaud the inclusion of alternative funding considerations in Cape Fear Navigating Change 2050. Transportation infrastructure is one of the greatest challenges facing our region, and a lack of available funding—across all levels of government—is creating a troublesome backlog of needed projects to ensure a robust and resilient transportation infrastructure. Furthermore, as other regions throughout the state explore and employ alternative funding mechanisms, our region’s projects will face stiffer competition for discrete state funding. For these reasons, exploring alternative funding options is an important step toward making the Cape Fear region more competitive for state funding and accelerating progress toward meeting our long-term transportation infrastructure needs.</p> <p>The Business Alliance for a Sound Economy is eager and willing to support the WMPO in its consideration of alternative funding options and their potential impact on our transportation future. Please let me know how we can be of assistance.</p> | <p>The comment has been received and will be included as part of the public input for the 2050 MTP. We appreciate the supportive feedback. As part of the MTP development process, the plan includes an analysis of potential alternative funding mechanisms to support future transportation investments beyond traditional revenue sources. This analysis was intended to provide WMPO member jurisdictions with a clearer understanding of the various alternative funding options available to them. To further support this effort, the WMPO Board established an Alternative Funding Subcommittee focused on identifying and evaluating innovative funding strategies that can help advance regional transportation priorities.</p> <p>Resolution: No changes are recommended.</p> |
| <p>Mark Arthur</p> | <p>The Cape Fear Bridge should be replaced even if it's a toll bridge. The Monkey Junction intersection needs either an overpass or underpass. College Road and Oleander intersection needs either overpass or underpass.</p> | <p>The comment has been received and will be included as part of the public input for the 2050 MTP.</p> <p>Resolution: No changes are recommended.</p> |

| Commenter | Comment | WMPO Staff Recommendation / Resolution |
|--------------------------|--|---|
| Susan K Bulluck | <p>Please delay and review the U5710 A & B STIP Plan as the alternative Drysdale Alternate B is not yet fully used. The latest plan for this project needs to have a Public Hearing under NC Transportation Legislation.</p> <p>Thank you for working with the community on your many issues. Please get back to me at bks42@aol.com with your plans for a Public Hearing on U5710</p> | <p>U-5710 was prioritized and programmed through NCDOT's established project development and funding process, the Statewide Transportation Improvement Program (STIP), in coordination with the WMPO. As part of this process, public meetings were held and comments solicited in 2017 and 2018 to inform the project's final scope and selected alternative design. Funding programmed in the MPO/State Transportation Improvement Program (TIP) is allocated to specific projects and cannot be reallocated. If a project is delayed or removed, the funds return to the overall funding pool and are then assigned to the next highest scoring project, regardless of location. The Military Cutoff at Eastwood Interchange project (U-5710) is programmed with statewide funding. If the project was removed, it is unlikely the funds would go towards another project in the Wilmington region. Any decisions regarding additional public hearings or further review would fall under NCDOT's authority.</p> <p>Resolution: No changes are recommended.</p> |
| John Murr | <p>Make Front street one way north bound and Water and 2nd st one way south bound. Have parking along Front street the same as is.</p> <p>Continue with street venues (ie Car Shows) along Water street not Front street.</p> <p>Provide free parking downtown on weekends and after 6pm. TY</p> | <p>Converting Front St, Water St, and 2nd St to one way facilities was not proposed or evaluated during the public outreach or development phases of the 2050 MTP and is not currently included in the plan. The next MTP update, expected to begin planning within 2 to 3 years, provides the opportunity to revisit and comment on additional project recommendations.</p> <p>Resolution: No changes are recommended.</p> |
| Holley Snider, NCDEQ DWR | <p>DWR appreciates the opportunity to comment on the plan. Given the long-range nature of the plan, number of projects and unknown impacts to water resources it is difficult to provide specific comments. However, in all cases, every project should consider State rules which require that all activities avoid and minimize impacts to surface waters and wetlands to ensure that any remaining waters or wetlands continue to support existing uses during and after project completion. We anticipate and look forward to providing more detailed review and comments when individual projects require a 401-water quality certification from DWR.</p> | <p>Comments from NCDEQ DWR are acknowledged and appreciated. While the MTP is a planning-level document, the WMPO will continue to advocate for and support the application of the 401 Water Quality Certification process and other related environmental policies as projects advance into development phases and regulatory review.</p> <p>Resolution: Include information regarding individual projects being thorough examined as a part of the 401-water quality certification that NCDEQ undertakes during later stages of project development.</p> |

| Commenter | Comment | WMPO Staff Recommendation / Resolution |
|--|---|---|
| <p>Madelyn Wampler, New Hanover County</p> | <p>WMPO's continued leadership in regional transportation planning plays a critical role in advancing safe, efficient, and sustainable mobility across New Hanover County.</p> <p>We appreciate that the WMPO included the federally required PM3 performance measures, including travel reliability and freight movement in Appendix B. Although the Congestion Mitigation and Air Quality Improvement Program measures such as emissions reduction are not required to be reported in the MTP due to the region's attainment status, we encourage WMPO to share any emissions-related data that is available. Doing so would support the New Hanover County 2024–2028 Strategic Plan's emissions reduction goals and strengthen alignment between transportation planning and broader community health, sustainability, and climate objectives. Local efforts, such as the County's ongoing conversion of its fleet to more efficient vehicles, can complement and reinforce these transportation performance goals.</p> <p>We also appreciate that the WMPO is tracking travel time reliability using the federally defined Level of Travel Time Reliability (LOTRR) metric in Appendix B. This measure provides valuable insight into how consistently the transportation system functions throughout the day across the National Highway System. Given that one of New Hanover County's Community Safety and Well-Being goals is to improve residents' access to basic needs and essential services, tracking reliability helps support efforts to ensure that all communities can depend on consistent travel times to reach key destinations.</p> <p>To further enhance the clarity and accessibility of the MTP for a broader audience, we recommend including a summary table in the main body of the document that highlights key performance measures and targets from Appendix B. This would complement the detailed technical information provided in the appendices and help communicate progress and priorities more effectively to stakeholders and the public.</p> | <p>The comment has been received and will be included as part of the public input for the 2050 MTP.</p> <p>Resolution: Provide summary graphic in chapter 1 that highlights the key performance measures and targets outlined in Appendix B.</p> |

| Committer | Comment | WMPO Staff Recommendation / Resolution |
|-----------------|--|---|
| Carly Murden | <p>In all do respect, whatever plan the MPO's have in mind, it MUST include the HAULT of cutting down trees. Oak trees were just cut down on Wrightsville Ave for NO REASON expect FINANCIAL GAIN. STOP THE TEARING DOWN OF TREES. The municipalities here can not handle the rapid growth and the corrupt property developers. Please put an end to cutting down trees.</p> | <p>This topic is not within the jurisdiction of the WMPO and is beyond the scope of the MTP. However, the plan's overarching vision and its Fair goal emphasize improving quality of life and quality of place for all people across the region. While the WMPO does not have authority over this specific issue, the MTP supports responsible project development that reflects regional values, promotes thoughtful growth, and strives to ensure transportation investments contribute positively to the character and well-being of the community.</p> <p>Resolution: No changes are recommended.</p> |
| Timothy Horrell | <p>Thank you for working out such a detailed plan. Please DO NOT toll our bridge and remove one of the only three ways for the average citizen to cross the bridge into Wilmington</p> | <p>The WMPO has long advocated for the replacement of the Cape Fear Memorial Bridge and has pursued traditional funding sources through NCDOT's prioritization process and other federal programs. While those efforts continue, the WMPO Board has directed NCDOT to examine all potential funding options, including tolling. No final decision has been made, and tolling would require a formal vote by the WMPO Board. The WMPO remains committed to evaluating solutions that address mobility and long-term regional needs.</p> <p>Resolution: No changes are recommended.</p> |
| Anonymous | <p>Make county line borders on area map clearer</p> | <p>Resolution: Revise maps to increase visibility of county boundaries.</p> |
| Nancy Goodman | <p>Suggestions - signage for Carolina Beach walk left side of road facing traffic, info sheets for rentals walk left side of road, golf cart rules (same as auto's), give tickets or warning to offenders it may at least scare them to obey rules</p> | <p>Responsibility for enforcing pedestrian safety rules and vehicle laws, including walking facing traffic and operating golf carts according to traffic regulations, rests with local law enforcement. Roadway signage is managed by the owner of the roadway, such as NCDOT or a local government. The WMPO promotes road user education through the Be a Looker campaign, which works to improve safety for people walking, biking, and driving by promoting safe behavior. Distributing materials at rental locations is a thoughtful idea that will be explored to help broaden the campaign's impact.</p> <p>Resolution: No changes are recommended.</p> |

| Committer | Comment | WMPO Staff Recommendation / Resolution |
|---|--|---|
| T. Mason Herndon, NCDOT Division 3 | Add Minimum Criteria Determination Checklist to list under State Requirements in Appendix M | Resolution: Make recommended change. |
| T. Mason Herndon, NCDOT Division 3 | Change EIS to EIS/ROD under State Requirements in Appendix M | Resolution: Make recommended change. |
| T. Mason Herndon, NCDOT Division 3 | Add Aesthetic Enhancements to table M.8 under Community Impacts mitigation measure(s) | Resolution: Make recommended change. |
| T. Mason Herndon, NCDOT Division 3 | Add streams to figure M-3 | Resolution: Make recommended change. |
| T. Mason Herndon, NCDOT Division 3 | Specify if wetland data is NWI wetland data | Resolution: Specify the wetland data is National Wetland Inventory (NWI) data on the legend for Figure M-3. |
| Stephanie Ayers, North Carolina State Ports Authority | <p>C-3 our organization is called "North Carolina State Ports Authority".</p> <p>H-4 Please update this paragraph, "The North Carolina Ports 2018 Economic Contribution Study estimates that the Port of Wilmington contributed approximately \$12.9 billion to North Carolina business. Approximately \$9.1 billion was through the Port's container activity. Additionally, the Port of Wilmington spurred (both directly and indirectly) approximately 78,600 jobs across the state of North Carolina. State and local tax contributions from the Port of Wilmington in 2018 were estimated to be \$589.5 million." 2021 Economic Contribution Study: \$16.1B Economic output, 88,200 jobs, \$660M local and state tax revenue.</p> | <p>Staff will update text to reflect the corrections provided in the comment.</p> <p>Resolution: Make recommended changes.</p> |



| Committer | Comment | WMPO Staff Recommendation / Resolution |
|---|---|---|
| Stephanie Ayers, North Carolina State Ports Authority | Ideally ports projects will be added to existing modal categories | <p>Projects submitted by the Port of Wilmington are listed in a separate section of the CTP rather than within each modal category because the Port's projects were not vetted through the scoring, cost estimation, or fiscal constraint processes that applied to other modal projects. Although these projects were submitted through the same process, the Port's ability to utilize capital funding enables it to pursue and advance projects beyond the limitations faced by local governments, which largely depend on traditional public funding mechanisms. Inclusion in the CTP supports the advancement of these projects by making them eligible for grant opportunities and ensuring they are recognized within regional planning efforts.</p> <p>Resolution: Add a column to note the mode of each Port of Wilmington project in Appendix N/CTP.</p> |
| Stephanie Ayers, North Carolina State Ports Authority | <p>N-6 add project to ports list. South Gate grade separation (not fiscally constrained). The project would provide a grade separation at intersection of 1 Shipyard Boulevard, the container truck entrance to the Port of Wilmington.</p> <p>N-6 add project to ports list. Re-route River Road (not fiscally constrained). The project would re-route River Road around the entrance of the south gate of the Port of Wilmington, separating freight traffic from private vehicle traffic in and around the residential neighborhoods around the port.</p> | <p>Staff will add the requested projects to the Port of Wilmington's project section in Appendix N/CTP. Further coordination with the City of Wilmington and NCDOT will be necessary to advance projects that occur outside of NC Ports property.</p> <p>Resolution: Make recommended changes.</p> |
| Linda Painter, City of Wilmington | General formatting, spelling, and other text errors | Resolution: Make recommended changes. |
| Linda Painter, City of Wilmington | 1-6: Paragraphs 2-3 - Narrative on MPO vs. State TIP is confusing. If there are two separate and distinct TIP documents, they should be distinguished using separate acronyms | Resolution: Make recommended changes. |

Sources

- Wilmington Urban Area Metropolitan Planning Organization Public Participation Plan, Adopted September 30, 2020



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D

Financial Element

Table of Contents

1. Financial Forecast
2. Project Cost Estimates
3. Alternative Funding

Financial Forecast

A requirement of the Metropolitan Transportation Plan (MTP), distinguishing it from other long-range transportation plans, is that it be fiscally constrained. This means that the cost to implement the plan cannot exceed the level of funding considered to be reasonably available to the region during the planning horizon. In nearly all urban regions in the United States, the total cost of desired projects exceeds expected funding levels, necessitating a process by which projects are prioritized and matched to available funding. To determine fiscal constraint, funding projections for the area are developed based off historical funding sources. These projections give an estimate of the future fiscal conditions of the region. The financial forecast is compared against the cost to meet the transportation needs of the Metropolitan Planning Organization (MPO) as identified through a systems analysis and associated cost estimates for the region.

Process

The base year of the financial forecast is 2024, and it spans through 2050. Projects were broken into six separate transportation modes – Aviation, Bicycle and Pedestrian, Ferry and Water Transportation, Public Transportation, Rail, and Roadway. Revenue forecasts for both capital and operations and maintenance (O&M) funding were developed after conducting a review of previous state and local expenditures, current funding trends, and likely future funding levels. The revenue forecasts involved consultation with New Hanover County Airport Authority, ILM, North Carolina Department of Transportation, Wave Transit, and the WMPO’s member jurisdictions.

Revenues by Mode

Aviation Revenues Projections

| Table D.1 - Aviation Revenues | | | |
|-------------------------------|---------------------|----------------------|-----------------------|
| Revenue Band | STIP | ILM Provided | Total by Revenue Band |
| 2024-2028 | \$13,100,000 | \$82,138,710 | \$95,238,710 |
| 2029-2033 | \$-- * | \$94,334,052 | \$94,334,052 |
| 2034-2040 | \$11,872,000 | \$151,451,933 | \$163,323,933 |
| 2041-2050 | \$20,085,000 | \$262,782,577 | \$282,867,577 |
| Total by Revenue Type | \$45,057,000 | \$590,707,272 | \$635,764,272 |

Data source(s): NCDOT STIP and ILM Enplanement Forecast

Bicycle and Pedestrian Revenues

| Table D.2 - Bicycle and Pedestrian Revenues | | | |
|---|--------------------------------|----------------------------|-----------------------|
| Revenue Band | Bicycle and Pedestrian Capital | Bicycle and Pedestrian O&M | Total by Revenue Band |
| 2024-2028 | \$16,617,000 | \$2,278,460 | \$18,895,460 |
| 2029-2033 | \$4,727,659 | \$2,997,859 | \$7,725,518 |
| 2034-2040 | \$19,310,614 | \$4,705,356 | \$24,015,970 |
| 2041-2050 | \$32,669,605 | \$7,960,817 | \$40,630,422 |
| Total by Revenue Type | \$73,324,879 | \$17,942,493 | \$91,267,372 |

Data source(s): NCDOT STIP and local Capital Improvement Plans (CIPs)

Ferry Revenues Projections

| Table D.3 - Ferry Revenues | | | |
|------------------------------|----------------------|----------------------|-----------------------|
| Revenue Band | Ferry Capital | Ferry O&M | Total by Revenue Band |
| 2024-2028 | \$7,888,853 | \$15,305,836 | \$23,194,689 |
| 2029-2033 | \$5,232,076 | \$16,898,879 | \$22,130,955 |
| 2034-2040 | \$11,106,269 | \$26,653,683 | \$37,759,952 |
| 2041-2050 | \$18,791,708 | \$45,094,376 | \$63,886,084 |
| Total by Revenue Type | \$ 43,019,000 | \$103,953,000 | \$146,972,000 |

Data source(s): NCDOT STIP

Public Transportation Revenues Projections

| Table D.4 - Public Transportation Revenues | | | |
|--|---------------------|----------------------|-----------------------|
| Revenue Band | Transit Capital | Transit O&M | Total by Revenue Band |
| 2024-2028 | \$3,608,275 | \$9,606,000 | \$13,214,275 |
| 2029-2033 | \$14,506,000 | \$48,673,000 | \$63,179,000 |
| 2034-2040 | \$22,880,000 | \$76,769,000 | \$99,649,000 |
| 2041-2050 | \$38,710,000 | \$129,882,000 | \$168,592,000 |
| Total by Revenue Type | \$79,704,275 | \$264,930,000 | \$344,634,275 |

Data source(s): NCDOT STIP, National Transit Database, Wave Annual Budget

Rail Capital Revenues Projections

| Table D.5 - Rail Revenues | |
|---------------------------|---------------------|
| Revenue Band | Rail Capital |
| 2024-2028 | \$22,700,000 |
| 2029-2033 | \$- -* |
| 2034-2040 | \$20,570,000 |
| 2041-2050 | \$34,805,000 |
| Total | \$78,075,000 |

*For Aviation and Rail, the 2029-2033 revenue band is accounted for in the STIP and does not have any associated revenues

Data source(s): NCDOT STIP

Roadway Revenues Projections

| Table D.6 - Roadway Revenues | | | | | |
|------------------------------|-----------------------|---------------|-----------------------|---------------|-----------------------------|
| Revenue Band | Federal/State Capital | Local Capital | Total Roadway Capital | Roadway O&M | Grand Total by Revenue Band |
| 2024-2028 | \$710,622,000 | \$15,457,392 | \$726,079,392 | \$158,113,770 | \$884,193,162 |
| 2029-2033 | \$746,659,000 | \$15,831,067 | \$762,490,067 | \$171,511,564 | \$934,001,631 |
| 2034-2040 | \$1,320,639,000 | \$28,078,608 | \$1,348,717,608 | \$250,856,144 | \$1,599,573,752 |
| 2041-2050 | \$2,234,341,000 | \$47,505,153 | \$2,281,846,153 | \$382,426,051 | \$2,664,272,204 |
| Total by Revenue Type | \$5,012,261,000 | \$106,872,220 | \$5,119,133,220 | \$962,907,529 | \$6,082,040,749 |

Data source(s): NCDOT STIP and local Capital Improvement Plans (CIPs)

Project Cost Estimates

Project cost estimates were prepared for each of the following transportation modes: Bicycle and Pedestrian, Ferry and Water Transportation, Public transportation, Rail, and Roadway. Project cost estimation spreadsheets that consider the key attributes of each project were developed to complete these estimations. Cost estimates that have been previously completed for projects and cost estimates for comparable projects were also employed. The estimated costs were verified using multiple data sources, detailed below.

Cost estimates were developed for the current year and adjusted by four percent to reflect a reasonable expectation of inflation during the financial constraint process.

Aviation Projects

No aviation projects were considered as a part of this Metropolitan Transportation Plan.

Bicycle and Pedestrian Projects

The bicycle and pedestrian projects were estimated using the NCDOT's P7 Bicycle and Pedestrian Facility Cost Estimation Tool, last modified in August of 2023. Estimates were then further reviewed and verified by Kimley-Horn through comparison with previously approved facility construction costs and information from the North Carolina Department of Environmental Quality (NCDEQ).

Ferry and Water Transportation Projects

Ferry and water transportation projects were estimated using information on similar projects estimated by the NCDOT's P7. The cost of each project was then modified based on differences in project scope to provide a more accurate estimation.

Public Transportation Projects

Public transportation projects were estimated using an individualized approach for each project. Average costs of similar projects combined with assumptions made about the cost of specific aspects of each project were leveraged to produce estimates. Following the adoption of the short-range transit plan, *Reimagine Wave Transit*, Wave Transit staff assisted in the development of select project cost estimates to ensure consistency with the organization's updated planning and implementation framework.

Rail Projects

Rail projects were estimated mainly using cost estimates completed previously by the NCDOT's P7 or by using project cost for similar projects. Projects that were estimated using similar project costs were then modified based on differences in project scope to provide a more accurate estimation.

Roadway Projects

Roadway projects were estimated using a North Carolina roadway cost estimator tool developed by Kimley-Horn. This tool considers key features of each project such as proposed improvements, length, and changes to the cross section of the roadway. Cost estimates were further calibrated by comparing costs to previous estimates and other sources.

Alternative Funding

Development of Alternative Funding Plan

Historical recurring federal, state, and local revenues alone will not sufficiently fund a systematic program to construct transportation projects in the WMPO area. The following section details alternative funding and financing options reviewed during the development of the alternative funding plan.

Taxes

Quarter-Cent Local Option Sales Tax

The local option sales tax is implemented at the county level and typically requires a voter referendum per NC G.S. Chapter 105, Article 46. Currently, New Hanover County has approved quarter-cent sales tax referendum, and the tax took effect on October 1st, 2010. Neither Brunswick County nor Pender County have yet adopted the tax referendum. The tax does not apply to groceries, prescription drugs, gasoline, automobile purchases, and utilities. Sales tax revenues can be used to fund any county-maintained service. Brunswick County and Pender County can expect an increase of \$535 million and \$215 million respectively through 2050 if they implement the quarter-cent local option sales tax. The sales tax is expected to generate \$1.18 billion over that period for New Hanover County. While this money is not additional revenue since the tax is already in place, the county can reallocate the distribution of the revenue to have a greater focus on transportation infrastructure.

Quarter-Cent Local Option Sales Tax for Transit

Similar to the quarter-cent local option sales tax, the quarter-cent local option sales tax for transit is implemented at the county level and requires a voter referendum and county approval per NC G.S. Chapter 105, Article 46. Only counties that operate mass transportation systems can consider this sales tax, and the revenues must be used to finance, construct, operate, and maintain the transit system. In addition, a county must develop a financial plan and distribute it to the local governments within the county that operate a local public transportation system before levying the tax. Currently Durham, Mecklenburg, Orange, and Wake Counties are the only counties in North Carolina that have enacted a quarter-cent local sales tax for transit. By implementing this sales tax, New Hanover could generate approximately \$1.18 billion dollars in additional revenue through 2050.

| Table D.7 - Quarter-Cent Sales Tax Rate Eligibility by County | | | |
|---|-------------|-----------|--------|
| | New Hanover | Brunswick | Pender |
| Maximum Total Sales Tax Allowed in North Carolina | 7.5% | | |
| State Sales Tax Rate | 4.75% | | |
| Maximum County Eligible Sales Tax | 2.75%* | | |
| Current County Sales Tax Rate | 2.25% | 2% | 2% |
| Remaining County Eligible Sales Tax | 0.25% | 0.5% | 0.5% |

*Only Durham, Forsyth, Guilford, Mecklenburg, Orange, and Wake County are authorized to levy a ½ cent instead of ¼ cent sales tax under Article 43. Therefore, the maximum county eligible sales tax for New Hanover, Brunswick, and Pender County is 2.5%.

Vehicle Registration Fees

NC G.S. 105-570 enables counties where at least one unit of local government in the county operates a public transportation system to levy vehicle registration taxes. These taxes can be used to fund the financing, construction, operation, and maintenance of the transit system. Following a successful vote by the board of county commissioners, a county that operates a transit system can charge a maximum of \$7 for every registered vehicle with some exceptions. New Hanover County could generate approximately \$67.78 million in additional revenue through the levying of this tax through 2050.

Motor Vehicle License Tax

Municipalities can levy an annual general motor vehicle tax up to \$30 per vehicle based on NC G.S. Chapter 20-97. No more than \$5 of this tax may be used for general purpose and no more than \$5 may be used for the financing, construction, operation, and maintenance of local public transportation systems. The remainder of the tax levied may be used for maintaining, repairing, constructing, reconstructing, widening, or improving public streets in the city or town that do not form a part of the State highway system. Wilmington and Leland already levy the motor vehicle license tax and as of now there are no incorporated municipalities within the portion of Pender County located within the MPO. The remaining municipalities in New Hanover and Brunswick County could generate \$7.80 million and \$4.48 million respectively by levying this tax.

Short Term Vehicle Rental Tax

Counties in North Carolina can levy taxes on the gross receipts of passenger vehicle rentals at the rate of 1.5%, according to NC G.S. 153A-156. Rented passenger vehicles to be taxed include traditional passenger vehicles, cargo vehicles, and trailers and semitrailers. Rentals of heavy equipment, defined as earthmoving, construction, or industrial equipment that is mobile and weighs at least 1,500 pounds, can be taxed at 1.2% per NC G.S. 153A-156.

Currently a Rental Vehicle Tax is imposed on the short-term lease of vehicles in New Hanover County at 1.5% and an additional 1.5% if the business is located within the City of Wilmington. As of now, there are not any Short-Term Rental Car companies within Brunswick and Pender County. While the WAVE Transit system is not currently a Regional Transit Authority (RTA) as defined by NC G.S. 160A, Article 26, if it were to be designated as an RTA by the General Assembly a 5% transit tax could be imposed. This transit tax could generate an additional \$59.43 million in revenue for New Hanover County.

Tolling

Toll fees are direct charges to road users who have chosen to use a toll facility. The Turnpike Authority was created via NC G.S. 136-89, and is authorized to study, plan, develop, construct, operate, and maintain up to nine projects. The WMPO's only eligible projects are the Cape Fear Crossing which could generate up to \$256,580,000 and the Cape Fear Memorial Bridge which could generate up to \$359,000,000 in toll revenues.

Grant & Loan Programs

Grant Anticipation Revenue Vehicles (GARVEEs)

A GARVEE is a term for a debt instrument that has a pledge of future Title 23 Federal-aid funding. It is authorized for Federal reimbursement of debt service and related financing costs. Through this, states can receive Federal-aid reimbursements for most highway projects, transit projects, purchasing of transit vehicles, or connections to intermodal ports and stations.

Private Activity Bonds (PABs)

Private activity bonds act as a municipal bond for projects with public benefits that private investors are allowed to sponsor. This allows the private sponsor to benefit from the lower financing costs of tax-exempt municipal bonds.

Bipartisan Infrastructure Law (BIL)

The Bipartisan Infrastructure Law provides \$550 billion over fiscal years 2022 through 2026 in new Federal investment in infrastructure, including in roads, bridges, mass transit, water infrastructure, resilience, and broadband.

Transportation Infrastructure Finance and Innovation Act (TIFIA) Loan Program

The TIFIA program provides Federal credit assistance in the form of direct loans, loan guarantees, and standby lines of credit to finance surface transportation projects of national and regional significance.

State Infrastructure Banks (SIBs)

SIBs give states the capacity to make more efficient use of its transportation funds and significantly leverage Federal resources by attracting non-Federal public and private investment through a revolving fund mechanism that finances highway and transit projects through direct loans with attractive interest rates.

Railroad Rehabilitation and Improvement Financing (RRIF)

The RRIF program provides funding to projects related to rail facilities or transit-oriented development. Eligible borrowers include railroads, state and local governments, government-sponsored authorities and corporations, limited option freight shippers that intend to construct a new rail connection, and joint ventures that include one of the preceding.

Better Utilizing Investments to Leverage Development (BUILD) Grant Program

The BUILD grant program, previously known as the Rebuilding American Infrastructure with Sustainability and Equity (RAISE) program, provides grants for surface transportation infrastructure projects with significant local or regional impact. The program allows a variety of project sponsors including state, county, and local governments to pursue multi-modal and multi-jurisdictional projects that are more difficult to fund through other grant programs.

Consolidated Rail Infrastructure and Safety Improvement (CRISI) Grants Program

The CRISI Grants Program assists with financing passenger and freight rail system improvements to achieve safety, efficiency, and reliability benefits. The Federal Railroad Administration considers CRISI funding for intercity passenger rail service, reducing rail congestion, and improving short-line and regional rail infrastructure, projects to enhance passenger or freight multimodal connections, and other safety improvements.

Capital Investment Grants (CIG) Program

The CIG program is a grant program from the Federal Transit Administration to fund transit capital investments including heavy rail, commuter rail, light rail, streetcars, and bus rapid transit. Federal transit law requires transit agencies seeking CIG funding to complete a series of steps over several years.

Passenger Ferry Grant Program

The Passenger Ferry Grant Program provides competitive funding for projects that support passenger ferry systems in urbanized areas. These funds are a core investment from the Federal Transit Administration in the enhancement and revitalization of public ferry systems in the nation's urbanized areas. Funds are awarded based on factors such as the age and condition of existing ferry boats, terminals and related infrastructure, benefits to riders, such as increased reliability, project readiness, and connectivity to other modes of transportation.

Financing

Transportation Bonds

Transportation bonds allow municipalities to sell bonds to investors to generate funds for transportation projects. The bonds are authorized under NC G.S. 159-43 and require voter approval. Transportation bonding has been used with success multiple times in North Carolina.

Revenue Bonds

Revenue bonds are paid back by user-generated revenues. NC G.S. 159-81 (3)(e) allows revenue bonds to be utilized for public transportation systems, facilities, or equipment, including but not limited to bus, truck, ferry, and railroad terminals, depots, trackage, and vehicles/vessels as well as mass transit systems.

Special Assessment Districts

Special assessment districts are districts that are established within a municipality for the purposes of funding infrastructure projects that directly benefit the properties located within the assessment district. Charges are levied on properties located within the assessment district to cover the costs of those projects. Funds generated can be used to fund the capital costs of streets and sidewalks, which may include the acquisition of property, construction, expansion, and improvement of real property. A vote by the affected landowners is required by North Carolina General Statutes.

Transportation Impact Fees

Transportation Impact Fees are fees assessed to developers by the local government to fund off-site transportation improvements that are needed to accommodate the increased demand from new development. The local government must have the authority to impose the fees as a condition of development approval, and the design and implementation of impact fee requirements must be fair, reasonable, and unbiased. As of now, transportation impact fees are not allowable in North Carolina.

Tax Increment Financing (TIF)

Tax Increment Financing uses the tax value generated in developments surrounding new transportation infrastructure to repay bonds issue for the project. The local government designates an area as a TIF district, creates a development plan to be approved by the statewide commission, and, if approved, the value of all property in the district is measured to create a base valuation. As the property tax increases due to increased land value, the base valuation captures the amount of property tax directed to the general fund and any additional tax revenue is used to pay off the bond. Under North Carolina law, local government units—both counties and municipalities—may designate TIF districts and issue debt instruments to fund improvements within them. TIF funds may be used only for projects that enable, facilitate, or benefit private development within the development financing district, the revenue increment of which is pledged as security for the debt instruments.

Funding Sources Recommended for Consideration by the WMPO

The review and analysis of potential funding sources led to the recommendation of the following sources for consideration by the WMPO:

- Quarter-Cent Local Option Sales Tax (\$1.93 million forecast for 2050 MTP)
- Quarter-Cent Local Option Sales Tax for Transit (\$1.18 million forecast for 2050 MTP)
- Vehicle Registration Fee (\$67.78 million forecast for 2050 MTP)
- Motor Vehicle License Tax (\$12.28 million forecast for 2050 MTP)
- Short Term Vehicle Rental Tax (\$59.43 million forecast for 2050 MTP)
- Tolling (Cape Fear Crossing and Cape Fear Memorial Bridge Replacement projects)
- Transportation Bonds

Approach

This section documents the financial forecasting approach for the sources that were recommended for the alternative funding plan. Unless otherwise noted, alternative revenues were developed for the current year and adjusted by 2% to reflect a reasonable expectation of inflation during the financial constraint process.

Quarter-Cent Local Option Sales Tax

Revenue data for the past 10 years was taken from the NCDOR Sales Tax Collection database to project future taxable sales for each county using the five-year moving average method. The projected taxable sales for the counties of Brunswick and Pender were adjusted based on the percentage of their population residing within the WMPO planning boundary. Quarter-cent tax collections were estimated on an annual basis between 2025 and 2050 using projected taxable sales for all three counties.

Quarter-Cent Local Option Sales Tax for Transit

Like the Quarter-Cent Local Option Sales Tax method, revenue data for the past 10 years was taken from the NCDOR Sales Tax Collection database to project future taxable sales for New Hanover County using the five-year moving average method. Brunswick and Pender County were not considered for this alternative because they do not operate a mass transit system. Quarter-cent tax collections were estimated for New Hanover County on an annual basis between 2025 and 2050 using projected total taxable sales.

Vehicle Registration Fees

Data about vehicle registration by County between the years of 2019-2023 was gathered from the Office of State Budget and Management. This data was used to calculate an average growth that was then forecasted through the plan's horizon year of 2050. A \$7 per year fee was then used to generate the potential additional revenue for registered vehicles from 2025 to 2050. The percentage of available revenue within Pender and Brunswick Counties is adjusted based on the population residing within the Wilmington MPO planning area.

Motor Vehicle License Tax

The data generated from the Vehicle Registration Fee analysis and the Office of State Budget and Management was supplemented with the ratio of licensed drivers/private and commercial vehicles registered ratio by state, provided by the Federal Highway Administration, to estimate the quantity of licensed drivers in the WMPO area. This data was then used to calculate an average growth that was then forecasted through the plan horizon year of 2050. Wilmington and Leland are already deploying the tax so information for these municipalities was not designated as alternative funding. For the other municipalities in the WMPO, a \$25 per year fee was used to generate the potential additional revenue associated with a license tax.

Short Term Vehicle Rental Tax

Currently a Rental Vehicle Tax is imposed on the short-term lease of vehicle in New Hanover County at 2.5% and an additional 1.5% if the business is located within the City of Wilmington. Vehicle rental tax data was requested from New Hanover County for the fiscal years of '13/'13 through '22/'23. Although Wave is not currently a Regional Transit Authority (RTA), a 5% transit tax was explored to show the potential revenue available if they were to be designated as an RTA by the General Assembly.

Tolling

NC G.S. 136-89.187 currently only allows new route facilities, new managed lanes, and new high-cost bridges to be tolled. The Cape Fear Crossing and the Cape Fear Memorial Bridge, per this legislation, are toll-eligible projects. The estimated revenue from these projects is reflective of the toll revenue expressed in NCDOT P7.

Transportation Bonds

Data from various online sources was used to compile a list of municipalities within North Carolina that have recently passed a transportation bond. The median per capita value of each bond was then estimated to \$470. Potential revenue from transportation bonds for both Wilmington and Leland were then estimated using this value.

Data

Table D.8 lists the primary data sources which informed the development of revenue estimates for the alternative funding options considered by the WMPO Board.

| Table D.8 - Alternative Funding Primary Data Sources | |
|--|--|
| Tax/Fee | Primary Source(s) |
| Quarter-Cent Local Option Sales Tax | North Carolina Department of Revenue (NCDOR) Sales Tax Collection Data by County |
| Quarter-Cent Local Option Sales Tax for Transit | NCDOR Sales Tax Collection Data by County |
| Vehicle Registration Fee | North Carolina Office of State Management and Budget (NCOSMB) Registration Data |
| Motor Vehicle License Tax | NCOSMB Registration Data, FHWA Licensed Drivers by State |
| Short Term Vehicle Rental Tax | New Hanover County Finance Department |
| Tolling | NCDOT P7 |
| Transportation Bond | Various online municipal sources |

Sources

- North Carolina Statewide Transportation Improvement Program (STIP)
- ILM Enplanement Forecast
- Roadway and Bicycle and Pedestrian Capital Improvement Plans
- National Transit Database
- Wave Annual Budget
- Powell Bill
- NCDOT Prioritization 7.0
- Wave Short Range Transportation Plan
- Kimley-Horn NC Roadway Cost Estimator Tool
- North Carolina Department of Revenue (NCDOR) Sales Tax Collection Data
- North Carolina Office of State Management and Budget (NCOSMB) Registration Data
- FHWA Licensed Drivers by State
- New Hanover County Finance Department



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E *Aviation*

Table of Contents

- 1. Current Trends
- 2. History of Wilmington International Airport and Existing Conditions

Current Trends

Before the COVID-19 pandemic beginning in 2020, the aviation industry was experiencing steady growth post the 2008 financial crisis. However, in 2020, widespread travel restrictions led to an unprecedented reduction in airline passengers, demand for air travel, profit, and direct aviation jobs. The number of air passengers reduced by 60% from 2019 to 2020, leading to a net loss of \$126.4 billion across the aviation industry. While passenger airlines struggled with this loss of demand, cargo aviation became essential for COVID-19 response, reinvigorating the cargo aviation sector.

Despite the drastic reduction in demand and airline boardings throughout the pandemic, United States aviation has been able to recover and experience rapid growth in the years following lock down. In 2024, demand for air travel exceeded pre-pandemic levels, which may be attributed to a downward trend in airline fares. Larger planes are also trending, with airlines are using larger aircraft with 13% more capacity per flight than in 2019. The US airline workforce, now the largest in 23 years, has expanded with 6,700 new pilots. The outlook for commercial aviation is looking promising following the rapid recovery from the pandemic.

Military aviation is expected to remain constant, as the military is more resistant to changes in the economy. The general aviation market has grown as there is increasing use of aircraft in the agriculture sector. Growth in general aviation can also be attributed to rising investments in recreational and sports aviation, as well as the increase in aviation training programs.

Wilmington International Airport (ILM) is a significant contributor to the Wilmington urban area's transportation system as the largest airport in southeastern North Carolina and fifth largest in the state. ILM supports three types of aviation operations: commercial aviation (travel and cargo), general aviation (private aircraft), and military aviation. Despite being a relatively small airport, ILM is still subject to international and regional trends including consolidation through mergers or acquisitions, increases in major airlines, and changes in plane size. The robust business market that ILM serves, along with regional population growth, has fueled further expansion at ILM.

ILM has developed a comprehensive Vision Plan for 2023-2027, designed to accommodate increasing passenger traffic, enhance airport infrastructure, and support regional economic growth. With an estimated budget of \$166 million, the plan prioritizes improvements in parking, terminal access, and facilities. Key initiatives include the construction of a 1,200-space parking deck and the expansion of surface lots to improve capacity and accessibility. Additionally, the realignment of Airport Boulevard aims to streamline traffic flow, while targeted terminal upgrades will enhance operational efficiency and passenger experience. A major component of the plan is the continued development of ILM's Business Park, which serves as a hub for economic expansion and job creation. The airport has been actively attracting new tenants and fostering growth in aviation, logistics, and commercial industries. With available land and infrastructure improvements, ILM is positioning itself as a key driver of business development and investment in the region. To support these initiatives, ILM secured a \$4 million grant from the Federal Aviation Administration (FAA) in February 2024, specifically allocated for the terminal access road and terminal curb front expansion and realignment projects. In June 2023, a \$4.6 million contract was approved for the construction of a new 950-space parking lot, with approximately 500 of the new parking spaces being lower cost, economy spaces. The project was completed in November 2023. These developments highlight ILM's commitment to not only improving passenger services, but also fostering long-term economic development in the Wilmington area. Aero Center Wilmington also opened in 2022, becoming the second fixed-base operator for ILM.

History of Wilmington International Airport and Existing Conditions

ILM was founded in the 1920s, with the original facilities constructed during World War II. After the war, the airport was deeded to New Hanover County. In 1987, New Hanover County created the New Hanover County Airport Authority to manage and operate the airport. The New Hanover County Airport Authority is the Airport Sponsor recognized by the FAA for ILM. The airport is leased to the Airport Authority by New Hanover County through the year 2049. The New Hanover County Airport Authority was initially made up of five board members but was expanded in 2014 to include two additional members for a total of seven.

ILM is the only location for scheduled commercial air services in the region. The services ILM provides include:

- Commercial aviation: Travel and cargo
- General aviation: Private
- Military aviation

Based on the projections of aeronautical activity made in the ILM 2018 Airport Layout Plan (ALP) Update, ILM is expected to see growth in both operations and based aircraft over the ALP's 20-year planning horizon. A forecast for each of the services provided is shown on the table E. 1 on the next page.

Location

ILM, and the area immediately surrounding it, is located approximately four miles from I-40 and less than two miles from US17 and US74/76 in New Hanover County directly north of the Wilmington city limits. In relation to other major cities in North and South Carolina, ILM is located approximately 85 miles north of Myrtle Beach, South Carolina; approximately 130 miles southeast of Raleigh, North Carolina; and approximately 200 miles east of Charlotte, North Carolina.

Federal Aviation Administration Status

The National Plan of Integrated Airport Systems (NPIAS) includes airports that are significant to the national air transportation system. The NPIAS is maintained by the FAA on a continual basis and is published every two years in accordance with federal standards. ILM is currently categorized as a small hub and is one of ten Primary Commercial Service Airports in North Carolina.

Infrastructure

ILM has two runways: Runway 6-24 and Runway 17-35. Oriented northeast/southwest, Runway 6-24 is the airport's primary runway and is 8,016 feet long by 150 feet wide with 25-foot-wide paved shoulders. Oriented north/south, Runway 17-35 is the secondary runway at ILM. It is 7,754 feet long by 150 feet wide with 20-foot-wide paved shoulders. ILM has a sophisticated taxiway system with two full parallel taxiways and several stub or connecting taxiways that serve the primary and secondary runways. ILM has several aircraft aprons utilized for aircraft movement and parking along with navigational aids for pilots.

Landside facilities at the airport complement the airside facilities and include passenger terminals, aircraft hangars, fuel storage facilities, airport access roads, and automobile parking. Support facilities needed for the operation and maintenance of the airport such as equipment storage, maintenance buildings, and the Airport Fire and Rescue Department are also considered landside facilities. In 2024, ILM served 1,465,869 revenue passengers. A \$60 million terminal expansion, completed in 2023, included renovations and repairs to portions of the existing facility, roof replacement, and 60,000 square feet in additional terminal space.

Safety is of the highest priority in the aviation industry. To protect ILM from outside threats, fencing separates the secure airfield, or Air Operations Area (AOA), from non-secure landside areas. Other security measures include a centrally monitored camera network and an access control system featuring biometric readers on Security Identification Display Area (SIDA) doors.

| Table E.1 - Aviation Forecast Summary | | | | | | | |
|---------------------------------------|-----------------------------|------------------|---------------------|------------------------------|------------------------------|------------------------------|----------------|
| Year | Air Carrier/Taxi Operations | General Aviation | Military Operations | Total Operations (Preferred) | Total 2016 FAA TAF Forecasts | Annual Instrument Approaches | Based Aircraft |
| 2021 | 17,806 | 29,750 | 5,944 | 53,500 | 50,958 | 5,350 | 119 |
| 2026 | 19,227 | 32,500 | 5,944 | 57,671 | 52,666 | 5,767 | 130 |
| 2036 | 22,420 | 39,000 | 5,944 | 67,364 | 56,660 | 6,736 | 156 |

Source: ILM 2018 Airport Layout Plan Update.

Commercial Services

ILM is served by American Airlines, Avelo Airlines, Breeze Airways, Delta Air Lines, JetBlue Airlines, Sun Country Airlines, and United Airlines with 31 nonstop flights that connect to nearly 500 destinations. Eleven new nonstop routes were added in 2024 alone. Non-stop flights are available daily to 16 destinations, while nonstop flights to 15 additional cities are available seasonally. In Summer 2025, Avelo Airlines announced two new seasonal nonstop flight destinations to West Palm Beach, Florida and ILM's first international route to Punta Cana, Dominican Republic. In addition to providing the only commercial air service in New Hanover County, ILM also accommodates general aviation and air charter services.

A top priority of ILM has been continuing to expand in its nonstop flight destinations to provide more travel options for customers in the region. Origin-destination studies of travelers' flight patterns to and from ILM have helped the airport identify priority destinations traveled to and from by ILM customers that are not currently served by direct flights.

| Table E.2 - Passengers Boarding at ILM from Calendar Year 2020-2024 | | | | |
|---|---------|---------|---------|---------|
| 2020 | 2021 | 2022 | 2023 | 2024 |
| 239,752 | 462,572 | 545,889 | 661,287 | 736,868 |

Data from the Federal Aviation Administration and ILM.

| Table E.3 - ILM Non-Stop Destinations | | |
|---------------------------------------|-------------------------------|--------------------------|
| Airport Code | City | Airline |
| CAK* | Akron-Canton | Breeze |
| ATL | Atlanta | Delta |
| BWI* | Baltimore / Washington | Avelo |
| BOS* | Boston | American, Delta, JetBlue |
| CLT | Charlotte | American |
| ORD* | Chicago O'Hare | American, United |
| DFW | Dallas Fort Worth | American |
| DEN* | Denver | United |
| DTW* | Detroit | Avelo |
| FLL | Fort Lauderdale | Avelo, Breeze* |
| RSW* | Fort Myers | Avelo, Breeze |
| BDL* | Hartford | Breeze |
| HOU* | Houston-Hobby | Avelo |
| ISP | Long Island MacArthur / Islip | Avelo, Breeze* |
| MHT | Manchester / Boston | Avelo |
| MIA* | Miami | American |
| MSP* | Minneapolis-Saint Paul | Delta, Sun Country |
| BNA | Nashville | Avelo |
| HVN | New Haven | Avelo |
| LGA | New York City | American, Delta |
| EWR | Newark | United |
| MCO | Orlando | Avelo, Breeze* |
| PHL | Philadelphia | American |
| PVD* | Providence | Breeze |
| PUJ* | Punta Cana | Avelo |
| ROC | Rochester | Avelo |
| TPA | Tampa | Avelo |
| DCA | Washington DC | American |
| IAD* | Washington / Dulles | Avelo |
| PBI* | West Palm Beach | Avelo |
| ILG* | Wilmington, DE / Philadelphia | Avelo |

Non-stop flight destinations from ILM as of Summer 2025. Seasonal-only flights denoted with an *.

General Aviation

Currently, General Aviation (GA) facilities are located in two main areas of the airport property. The first is located north of the passenger terminal, and includes the GA Terminal, which provides core aircraft, pilot, and charter passenger services. The second GA area is located across the runways, on the east side of the property. Other GA facilities include public hangars, airfield maintenance equipment storage, a fuel farm, and two full-service Fixed Base Operators (FBOs), and customs through the International Terminal. The FAA Airport Surveillance Radar (ASR) is in this area, along with additional hangars. ILM also offers general aviation pilot training and aircraft rental programs through All American Aviation Services and Cape Fear Coastal Aviation.

Military

According to ILM's 2023 Annual Summary, military operations at ILM decreased slightly from 2019 to 2022 but have increased overall since 2015. In 2022, over 13% of all airport operations were military. It is difficult to forecast military operations at ILM because:

- For national security purposes, the Department of Defense (DOD) releases very little information regarding planned aviation activity- the FAA's Terminal Area Forecast (TAF) projects military operations at current levels unless the FAA has special knowledge of an upcoming change (i.e. a base closing); and
- Military operations are typically scheduled based on available budget and the judgment of military officials.

While military operations do not affect dimensional standards at ILM, they contribute to practice IFR (Instrument Flight Rules) approaches and are included in instrument approach forecasts.

Cargo

American Airlines utilizes passenger aircraft to transport cargo. The handling of this "belly cargo" currently occurs in the terminal area at ILM. There were 1,410,141 cargo enplanements in 2024. Continued growth of these services is expected and may require additional investment. The ILM 2018 ALP Update states that the FBO has reported interest in a longer runway for specialized cargo operations, but at the time that plan was prepared, no formal request had been made to the airport. There is also a growing need for a larger dedicated cargo facility to move airline belly cargo.

US Customs and Border Protection

The International Terminal, which includes a full-service US Customs and Border Protection Federal Inspection Station (FIS), is located north of the GA Terminal. In addition to clearing international flights, this state-of-the-art facility also supports the United States Department of Agriculture (USDA) and the US Citizenship and Immigration Services (USCIS). ILM is the only east coast location north of Jacksonville, Florida where planes returning from south of 30 degrees North Latitude are permitted to land to clear US Customs under federal law, without special exemption. In fiscal year 2022, 7,710 passengers were cleared through US Customs at ILM. This is a unique service offered by ILM and planned improvements and development reflect a desire to maintain these facilities.

Business Park

ILM is actively promoting and receiving interest from both aviation and non-aeronautical companies on nearly 230 acres of available landside area for development as business office, hotel, air cargo, and commercial use. The ILM Vision Plan 2023-2027 outlined complete and upcoming developments in the Business Park, including Aero Center Wilmington, investments for storage and distribution facilities, and plans for an on-airport hotel. Rail access has been a key factor in the growing interest in business park development, as reported by the airport. The business park offers access to rail via the CSX Railway located between the airport and Blue Clay Road. Hall Drive provides a track crossing from Blue Clay Road into the ILM Business Park.

Sources

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F ***Bicycle and Pedestrian***

Table of Contents

1. Current Trends
2. Existing Conditions in the Region
3. Bicycle and Pedestrian Complete Priority Project List and Maps

Current Trends

National trends have shown a commitment to making walking and bicycling a safer and more accessible transportation option for everyone. Since 2007, the number of states with Complete Streets policies tripled, and the average obligated dollar value of federal transportation funds spent on biking and walking per capita has more than doubled. As bicycle and pedestrian trips have increased, the percentage of traffic fatalities involving pedestrians and bicyclists has also risen. In 2022, pedestrian and bicyclist deaths made up around 19% of all traffic fatalities nationwide. In North Carolina, of the 1,784 roadway fatalities in 2022, 16.2% were pedestrian or bicyclist.

National investment in bicycle and pedestrian facilities has guided similar efforts at the state and local level. North Carolina adopted its first statewide plan, Bicycling and Walking in North Carolina: A Long-Range Transportation Plan, in 1996 and updated it with WalkBikeNC in 2013. Since then, many plans and programs have been implemented across the state to promote bicycle and pedestrian infrastructure.

Complete Streets

NCDOT’s “Complete Streets” policy, initially adopted in 2009 and updated in 2019, requires incorporating multimodal facilities in the design and construction of new transportation projects, as well as improvements to existing transportation infrastructure. NCDOT’s policy was based on the Complete Streets Act of 2009, which recognized the significant influence of street design on public health, safety, the environment, economic vitality, and quality of life. The Act directed state departments of transportation (DOTs) and Metropolitan Planning Organizations (MPOs) to adopt policies supporting innovative and inclusive transportation planning and to apply them to federally funded transportation projects. The WMPO Board adopted its “Complete Streets” policy in 2009, requiring all transportation projects within the WMPO’s planning boundary to be designed in a balanced, responsible, and fair way to accommodate and encourage bicyclists, pedestrians of all ages, and public transit users.

NCDOT’s updated Complete Streets policy makes it easier for communities to develop multimodal transportation facilities. Alternative transportation projects that are identified in a region’s Comprehensive Transportation Plan (CTP) and/or Metropolitan Transportation Plan (MTP) can be included in NCDOT roadway projects and will be funded entirely by NCDOT. NCDOT will consider other locally adopted plans on two conditions: 1) the planned facility addresses an identified transportation need; and 2) the planned facility meets the design guidance standards in the NCDOT Complete Streets Implementation Guide. If bicycle and pedestrian facilities are not identified in any locally adopted plan, but a need is identified during the scoping process of a roadway project, the facilities may still be included. This scenario requires the local jurisdiction to share the cost of bicycle and pedestrian improvements. The Table F.1 outlines the cost-share policy, which enables municipalities to complete multimodal projects more efficiently and at a reduced or no cost by integrating multiple projects into a single design and construction effort.

| Table F.1 - Complete Streets Cost Share | | | |
|---|--------------------|-------------------------|------------|
| Facility Type | In Plan | Not in Plan, but Needed | Betterment |
| Pedestrian | NCDOT pays in full | Cost Share | Local |
| On-road Bicycle | NCDOT pays in full | NCDOT pays in full | Local |
| Sidepath (MUP) | NCDOT pays in full | Cost Share | Local |
| Greenway Crossing | NCDOT pays in full | Cost Share | Local |
| Bus pull out | NCDOT pays in full | Cost Share | Local |
| Bus stop (pad only) | NCDOT pays in full | Cost Share | Local |

Source: NCDOT Complete Streets Policy (2019)

North Carolina has a bike design guide that provides recommendations for street infrastructure and specifies required passing distances but does not have laws regulating sidewalk usage by cyclists. State law mandates drivers yield to pedestrians at unmarked intersections but only requires stopping when necessary. There are no state laws regulating speed enforcement cameras, and red-light enforcement cameras are restricted and subject to specific legal requirements.

Vision Zero

Vision Zero is a traffic safety approach focused on eliminating all traffic deaths and serious injuries while improving access to safe, sustainable, and fair mobility for everyone. It is grounded in the belief that “deaths on our transportation network are unacceptable and preventable.” Vision Zero started in North Carolina in 2015 when Governor McCrory and NCDOT declared it a Vision Zero state.

Vision Zero draws from the Safe System Approach, which states that “in a safe system, human mistakes should never lead to death.” The Safe System Approach is championed by the Federal Highway Administration (FHWA), which outlines six key principles:

- Deaths and serious injuries are unacceptable
- Humans make mistakes
- Humans are vulnerable
- Responsibility is shared
- Safety is proactive
- Redundancy is crucial

The WMPO participates in an NC Vision Zero task force, led by the NC Governor’s Highway Safety Program and supported by teams at NC State University and the University of North Carolina. Consisting of MPOs and other transportation agencies from across the state, the task force holds monthly meetings for peer learning and sharing, coaching, and coordination.

Safe Streets and Roads for All (SS4A)

The Bipartisan Infrastructure Law (2021) established the Safe Streets and Roads for All (SS4A) discretionary program with \$5 billion in funds to be awarded over five years (2022-2026). The program aligns with the Safe System Approach and supports the goal towards zero roadway deaths. The SS4A program supports the development of comprehensive safety action plans to identify and address roadway safety concerns in communities. The program also offers implementation grants, whose funds can be used to aid in the execution of the projects and strategies outlined in the Action Plan.

The Town of Leland was awarded funds to develop an Action Plan during the FY2023 cycle, and their plan was adopted in Winter 2025. The Town’s plan acts as a guiding document which recommends a comprehensive set of projects and strategies that include policies, guidelines, and standards. The WMPO was awarded in the FY2024 cycle to develop an Action Plan for its planning area, and will identify policy and process changes, strategy and countermeasures, prioritized projects, and a framework for continued evaluation and transparency. The WMPO’s safety action plan is planned for completion in fall 2026.

Local Trends

Many communities within the WMPO planning boundary have taken additional steps toward improving bicycle and pedestrian facilities by adopting plans to guide infrastructure investments and allow for further funding.

In 2021, the North Carolina General Assembly allocated \$2 million in one-time funding to establish a paved trails feasibility study program to assist localities with creating a pipeline of projects. The following year, NCDOT's Integrated Mobility Division (IMD) secured an additional \$500,000 in State Planning and Research (SP&R) funds to support feasibility studies for sidewalks and shared-use paths (also known as multi-use paths). This investment led to the creation of IMD's Paved Trails & Sidewalks Feasibility Study Grant Program, which aims to enhance the pipeline of bicycle and pedestrian projects seeking state and federal funding for implementation. By supporting early-stage planning to assess the technical feasibility of proposed projects, the program helps communities develop comprehensive multimodal infrastructure plans and ensures they are well-prepared for successful implementation.

Following the fiscal year 2023 call for applications, three projects within the WMPO planning area were submitted for consideration and subsequently selected for funding. The WMPO led the development of two of the awarded feasibility studies: the Gullah Geechee Heritage Trail Feasibility Study in Brunswick County and the Wilmington Downtown Trail Phases 2 and 3 Feasibility Study. The third study, the Island Greenway NC Paved Trails Feasibility Study in Kure Beach, was led by East Coast Greenway Alliance with the WMPO serving as a member of the plan's steering committee.

Existing Conditions in the Region

Greenways and Trails

The following are highlights of popular greenways and trails in the WMPO's greenway network.

Gary Shell Cross-City Trail

The Cross-City Trail runs from the Heide Trask Drawbridge to James EL Wade Park, paralleling Eastwood Road, Mallard Street, Riegel Road, Wagoner Drive, Randall Parkway, Rosemont Avenue, Park Avenue, Independence Boulevard, South 17th Street, Waltmoor Road, and Bethel Road. This trail serves as a route for commuting and leisure but also provides a destination for tourism.

Central College Road Trail

Work on the 1.3-mile Central College Road Trail began in May 2018 and was completed in late 2019. This MUP, funded by the 2014 Wilmington Transportation Bond, travels along the west side of South College Road between 17th Street/Waltmoor Drive and Holly Tree Road. It connects to the Gary Shell Cross-City Trail at 17th Street and will provide a future connection to the planned Greenville Loop Trail. The Central College Trail allows safe walking and biking along South College Road and connects Pine Valley and other neighborhoods to the retail center located at the intersection of South College Road and 17th Street.

Island Greenway

Completed in the Spring of 2019, Carolina Beach's Island Greenway is a safe and convenient MUP located on the west side of the Town. Beginning at Mike Chappell Park, the Island Greenway offers scenic views as it travels south to Alabama Avenue. This project was built utilizing WMPO STBG funds and is part of the larger Island Greenway System, offering connections to Carolina Beach State Park as well as the Carolina Beach Pier and Boardwalk. A feasibility study was adopted by the Town of Kure Beach in 2025 to explore future options to expand the existing Island Greenway in Carolina Beach to the Fort Fisher Ferry Terminal through Kure Beach and portions of unincorporated New Hanover County.



Left: Cross City Trail MUP in Wilmington. Right: Island Greenway MUP in Carolina Beach.

Future Multi-Use Paths

Planning has begun for various future MUPs to be funded by the 2014 Wilmington Transportation Bond. The Greenville Loop Road MUP is a proposed 4.3 mile-path that will run the entire length of Greenville Loop Road, connecting neighborhoods to Bradley Creek Elementary School as well as the commercial areas at either end of Greenville Loop. Additionally, it will tie into existing network of MUPs by connecting to the South College Trail and Cross-City Trail. The Masonboro Loop Trail is a 1.4-mile MUP that will run along Masonboro Loop Road from Navaho Trail to Pine Grove Drive, connecting nearby neighborhoods to Masonboro Elementary School, while providing safe bicycle and pedestrian access to commercial areas as well. This project is under construction as of 2025.

East Coast Greenway and Bicycle Highways

East Coast Greenway

The East Coast Greenway (ECG) is a 3,000-mile continuous route designed for cyclists, pedestrians, and other non-motorized users, stretching from Calais, Maine, to Key West, Florida. Often referred to as the urban counterpart to the Appalachian Trail, the ECG connects cities, towns, and natural areas along the East Coast with the goal of providing a safe and accessible route for recreation, commuting, and long-distance travel. The trail consists of a spine route, which forms the primary north-south corridor, and complementary scenic routes that offer alternative pathways that are often coastal. Wilmington is a key junction within North Carolina's portion of the ECG, as it is where the spine route and complementary route diverge prior to reconnecting in Richmond, VA. The East Coast Greenway Spine Route is within the WMPO planning area.



The Complementary Route follows the same alignment of the Spine Route from the intersection of Independence Boulevard and S Canterbury Road south to the Fort Fisher-Southport Ferry terminal.

North Carolina Bicycling Highway 3 (Ports of Call)

North Carolina Bicycling Highway 3 is an approximately 300-mile route from South Carolina to Virginia. Traveling along the Pamlico and Albemarle sounds, this route includes all the most significant Colonial Era ports—Southport, Wilmington, New Bern, Bath, and Edenton. Points of interest in the Wilmington region include Fort Fisher State Historic Site and Carolina Beach State Park. Within the WMPO planning boundary, this route follows US421 on Pleasure Island (on-road bicycle lanes), River Road (on-road bicycle lanes), Independence Boulevard, S 17th Street, Glen Meade Road, Yaupon Drive, Greenfield Lake Trail (MUP), Willard Street, 5th Avenue, Princess Street, N 19th Street, Chestnut Street, N 23rd Street, Blue Clay Road, Holly Shelter Road/Island Creek Road, and NC Highway 210.

North Carolina Bicycling Highway 5 (Cape Fear Run)

North Carolina Bicycling Highway 5 runs approximately parallel to the Cape Fear River from just outside of the Triangle, in Apex, through the southeastern coastal plain, to the coast. Points of interest in the Wilmington region include the USS North Carolina Battleship Memorial, Carolina Beach State Park, and Fort Fisher State Historic Site. Within the WMPO planning boundary, this route follows US421 on Pleasure Island (on-road bicycle lanes), River Road (on-road bicycle lanes), Independence Boulevard, S 17th Street, Glen Meade Road, Yaupon Drive, Greenfield Lake Trail (MUP), Willard Street, 5th Avenue, Princess Street, N Front Street, N 3rd Street, the Isabel Holmes Bridge, and US Highway 421 north of downtown Wilmington.

Bicycle Facilities

Bicycle facilities encourage cycling by offering improved comfort for riders through increased roadway width and further separation between cars and cyclists. In North Carolina, cars must pass at least two feet to the left when overtaking other vehicles including cyclists, unless in a no passing zone. In a no passing zone, cars must allow at least four feet or completely enter the left lane of the highway for passing bicyclists. Offering cyclists dedicated roadway space through increased shoulder



On-road wide outside lane on Greenfield Street in Wilmington.

width or bike lanes provides increased safety for both cyclists and drivers. There are currently 74 miles of dedicated bike lanes, 57 miles of MUPs, and 8 miles of sharrows (shared lane markings) within the WMPO planning boundary. Other improvements proposed in this plan include:

On-Road Wide Outside Lane

For this type of facility, which is standard on NCDOT roadways with urban areas, the right-most lane of roadway is 14 feet wide or more to accommodate motor vehicles and bicycles in the same shared travel lane.

On-Road Paved Shoulder

Paved shoulders exist to the right of motor vehicle travel lanes and are delineated by a solid white line. NCDOT defines a paved shoulder as “the portion of the roadway contiguous with travel lanes that accommodates stopped vehicles, emergency vehicles, and reduces frequency of pavement maintenance.” Paved shoulders may be used by bicyclists and eventually transitioned into a designated bicycle lane.



On-Road Bicycle Lane

An on-road bicycle lane is a marked travel lane designed specifically for the use of bicyclists. Bicycle lanes are a minimum of four feet wide, not including the concrete gutter, unless adjacent to on-street parking or on a roadway without curb and gutter. In these cases, bicycle lanes should be a minimum of six feet wide. Bicycle lanes are designed to limit conflicts between bicyclists and motor vehicles at driveways and side streets.



Bicycle Boulevard

A bicycle boulevard is a local, low-speed, low-volume roadway which has been optimized for use by bicyclists. Bicycle boulevards typically include bicycle parking, wayfinding signage, improved pedestrian and bicycle crossings at major roadways, shared lane pavement markings, speed limit reductions, traffic calming devices, and diversion of through-traffic.



Off-Road MUP

An MUP is an eight- to twelve-foot-wide paved asphalt path for use by pedestrians and bicyclists. MUPs can be located within conservation areas, easements, parks, roadway rights-of-way, and public lands.



Top to bottom: On road paved shoulder on Independence Boulevard in Wilmington, bike lane along Dow Road in Carolina Beach, bicycle boulevard on Ann Street in Wilmington, and off-road MUP along River Road in Belville.

Pedestrian Facilities

The walking environment is the base from which all residents, employees, and visitors experience the region. The region's pedestrian network is vital to everyone, regardless of his or her transportation choice. There are currently 865 miles of sidewalks with 1,900+ marked crosswalks within the WMPO planning boundary. Projects included in *Cape Fear Navigating Change 2050* that improve safety and convenience for pedestrians in the region include:



Sidewalk

A sidewalk is a concrete walkway adjacent to a roadway for use by pedestrians. Sidewalks are typically five to eight feet wide.



MUP

A MUP is an eight- to twelve-foot-wide paved asphalt path for use by pedestrians and bicyclists. MUPs can be located within conservation areas, easements, parks, roadway rights-of-way, and public lands.



Signalized Pedestrian Crossing

A signalized pedestrian crossing consists of a marked crosswalk with pedestrian signal heads located at an intersection with a traffic control signal. Signalized pedestrian crossings are actuated with push-buttons or concurrent with the parallel green phase during every signal cycle.



Mid-Block Pedestrian Crossing

A mid-block pedestrian crossing consists of a marked crosswalk at a location other than an intersection with a traffic control signal. Mid-block crossings may or may not have warning lights or other devices.

◀ Top to bottom: Sidewalk along 4th Street in Wilmington, Brunswick Forest Parkway MUP in Leland, intersection of Village Road and Fairview Road in Leland, and intersection at Sumter Ave. on the Island Greenway in Carolina Beach.

Bicycle and Pedestrian Complete Priority Project List and Maps

| Table F.2 - Bicycle and Pedestrian Priority Project List | | | | | | |
|--|------------|--|---|-------------------------|--------------------------------|------------------------|
| Final Rank | Project ID | Project Name | Project Type | From | To | Project Cost (2024 \$) |
| 1 | BP-102 | Shipyards Blvd MUP Phase 3 | 10' Paved MUP | 17th St | Carolina Beach Rd | \$2,738,000 |
| 2 | BP-100 | Shipyards Blvd MUP Phase 1 | 10' Paved MUP | S. College Rd | Independence Blvd | \$4,530,000 |
| 3 | BP-88 | Downtown Greenway Phase 1 | 10-12' Paved MUP | N. 3rd St | Archie Blue Park | \$5,525,000 |
| 4 | BP-95 | New Centre Dr Sidewalks | 5' Sidewalks on both sides of road | Market St | S. College Rd | \$878,000 |
| 5 | BP-104 | Wilshire Blvd Sidewalk | 5' Sidewalks on both sides of road | Wrightsville Ave | S. Kerr Ave | \$3,122,000 |
| 6 | BP-92 | Greater Downtown Bike/Ped Improvements (Castle St Primary) | 5' Bike Lanes and Pedestrian Improvements | Colwell Ave | Front St | \$1,902,000 |
| 7 | BP-90 | Downtown Greenway Phase 3 | 10-12' Paved MUP | Market St | Forest Hills Elementary School | \$3,108,000 |
| 8 | BP-103 | Shipyards Blvd MUP Phase 4 | 10' Paved MUP | Carolina Beach Rd | River Rd | \$2,991,000 |
| 9 | BP-94 | Medical Center Dr Sidewalks | 5' Sidewalks on both sides of road | Wisteria Dr | 17th St | \$846,000 |
| 10 | BP-86 | 23rd St Sidewalks | 5' Sidewalk | Princess Place Dr | Scientific Park Dr | \$1,260,000 |
| 11 | BP-101 | Shipyards Blvd MUP Phase 2 | 10' Paved MUP | Independence Blvd | S. 17th St | \$2,270,000 |
| 12 | BP-72 | S College Rd Phase 1 MUP | 10' Paved MUP | S. 17th St | Monkey Junction | \$7,687,000 |
| 13 | BP-83 | US 17 MUP | 8-10' Paved MUP | New Hanover County Line | Cornel Ln | \$34,654,000 |
| 14 | BP-63 | Masonboro Loop Rd MUP Phase 2 | 10' Paved MUP | Mohican Trl | Monkey Junction | \$7,076,000 |
| 15 | BP-115 | Waynick Blvd MUP | 10' MUP | Sunset Ave | Causeway Dr | \$4,903,000 |
| 16 | BP-19 | Harper Ave MUP | 8-10' MUP on southern ROW | Dow Rd | Lake Park Blvd | \$2,797,000 |
| 17 | BP-74 | Sidbury Rd MUP | 10' Paved MUP | N. College Rd | Market St | \$24,084,000 |
| 18 | BP-23 | Spartanburg Ave Sidewalks | 5' Sidewalk on one or both sides of road | Island Greenway | Lake Park Blvd | \$1,249,000 |
| 19 | BP-53 | Carolina Beach Rd Phase 2 MUP | 10' Paved MUP | Sanders Rd | Halyburton Memorial Pkwy | \$4,314,000 |
| 20 | BP-55 | Carolina Beach Rd South Phase 4 MUP | 10' Paved MUP | Myrtle Grove Rd | Snow's Cut Bridge | \$6,291,000 |

Table F.2 - Bicycle and Pedestrian Priority Project List

| Final Rank | Project ID | Project Name | Project Type | From | To | Project Cost (2024 \$) |
|------------|------------|--|---|-----------------------------|---|------------------------|
| 21 | BP-65 | Middle Sound Loop Rd MUP Phase 2 | 10' Paved MUP | Anchors Bend Way | Ogden Elementary | \$6,707,000 |
| 22 | BP-98 | Riverwalk Freedom Walk Connector | 14' concrete walk with brick accents, 14' pile supported walkway, railing, lighting, electrical service and wiring, amenities, and gazebo | Sawmill Point Apartments | 1898 Park | N/A |
| 23 | BP-89 | Downtown Greenway Phase 2 | 10-12' Paved MUP | Archie Blue Park | Market St | \$5,196,000 |
| 24 | BP-106 | Causeway Dr MUP | 10' MUP | W. Salisbury St | Waynick Blvd | \$3,301,000 |
| 25 | BP-107 | Causeway Dr Sidewalk | 5' Sidewalk | Seacrest Dr | Coral Dr | \$828,000 |
| 26 | BP-56 | Carolina Beach Road West MUP with Mateo Dr & Silver Lake Rd Signalized Crossings | 10' Paved MUP & Signalized Pedestrian Crosswalks | COW/NHC City County Line | Antoinette Rd | \$4,691,000 |
| 27 | BP-57 | Castle Hayne Rd MUP | 10' Paved MUP | I-140 | Division Drive | \$11,648,000 |
| 28 | BP-67 | Murrayville Rd Trl MUP | 10' Paved MUP | N. College Rd | Crooked Pine Rd | \$8,561,000 |
| 29 | BP-75 | Silver Lake Rd Connector | 10' Paved MUP | Carolina Beach Rd | River Rd | \$4,542,000 |
| 30 | BP-99 | S. College Rd Sidewalk | 5' Sidewalk | Holly Tree Rd | Long Leaf Hills Rd | \$955,000 |
| 31 | BP-58 | Central College Rd Trl Extension Bike Lanes | 3' On Road Dedicated Bike Lane | Northchase Pkwy | Blue Clay Rd | \$743,000 |
| 32 | BP-109 | N Lumina Ave Bike Lane Phase 1 | 5' Bike Lane | Causeway Dr | W Salisbury St | \$718,000 |
| 33 | BP-54 | Carolina Beach Rd South MUP Phase 3 with Myrtle Grove Rd & River Rd Signalized Crossings | 10' Paved UP & Signalized Pedestrian Crosswalks | Halyburton Memorial Pkwy | Myrtle Grove Rd | \$3,319,000 |
| 34 | BP-96 | Peachtree Ave MUP | 10' Paved MUP | S Kerr Ave | Oleander Dr Planned Pedestrian Crossing | \$1,596,000 |
| 35 | BP-80 | NC 210 MUP | 8-10' Paved MUP | US 17 | Montague Rd | \$75,039,000 |
| 36 | BP-59 | Golden Road Connector & Signalized Crossing at Carolina Beach Rd | 10' Paved MUP / Signalized Pedestrian Crosswalks | Carolina Beach Rd | Myrtle Grove Rd | \$3,107,000 |
| 37 | BP-71 | Porters Neck Rd South MUP | 10' Paved MUP | Food Lion (Cypress Pond Wy) | Final Landing Ln | \$7,488,000 |
| 38 | BP-16 | Canal Dr Sidewalks | 5' Sidewalks on one or both sides of Canal Dr | Carolina Beach Ave | Salt Marsh Ln | \$5,643,000 |

Table F.2 - Bicycle and Pedestrian Priority Project List

| Final Rank | Project ID | Project Name | Project Type | From | To | Project Cost (2024 \$) |
|------------|------------|---|---|---|------------------------------------|------------------------|
| 39 | BP-40 | Village Rd MUP Phase 2 | 10' Paved MUP | Graham Dr | Lanvale Rd | \$7,438,000 |
| 40 | BP-46 | Magnolia Dr MUP Extension | 12' MUP / Boardwalk / Pedestrian Bridge | Magnolia Dr West | Playground Wy | \$2,386,000 |
| 41 | BP-79 | Hoover Rd MUP | 8' Paved MUP both sides / crosswalks | US 17 | Highlands Dr | \$10,384,000 |
| 42 | BP-82 | US 117 MUP | 8-10' Paved MUP | New Hanover County Line | NC 210 | \$15,328,000 |
| 43 | BP-64 | Middle Sound Loop Rd MUP Phase 1 | 10' Paved MUP | Middle Sound Village (Maple Leaf Dr) | Anchors Bend Wy | \$6,625,000 |
| 44 | BP-11 | US 17/Olde Waterford Rd/Ploof Rd Pedestrian Crossing | 4 curb ramps, 4 pedestrian signals, 10' painted crosswalk (280 LF total) | N/A | N/A | \$329,000 |
| 45 | BP-35 | Lanvale Rd MUP | 10' Paved MUP | Village Rd | US 17 | \$12,923,000 |
| 46 | BP-48 | Mount Misery Rd MUP | 12' MUP | Lincoln Rd NE | Daniels Rd | \$7,728,000 |
| 47 | BP-68 | Myrtle Grove Rd MUP | 10' Paved MUP | Piner Rd | Carolina Beach Rd | \$11,466,000 |
| 48 | BP-87 | College Rd Pedestrian Bridge | 12' Pedestrian Bridge / 10' MUP to existing MUP connections | University Dr | UNCW Campus at Pedestrian Entrance | \$1,251,000 |
| 49 | BP-114 | W Salisbury St MUP | 10' MUP | Causeway Dr | N Lumina Ave | \$3,011,000 |
| 50 | BP-21 | S Lake Park Blvd Sidewalks | 5' Sidewalk on both sides of road / Lightning Improvements | Alabama Ave | Carolina Sands Dr | \$1,142,000 |
| 51 | BP-34 | Fairview Rd Sidewalk | 5' Sidewalk | Live Oak Dr | Village Rd | \$758,000 |
| 52 | BP-9 | Old Fayetteville Rd MUP | 10' MUP | Lanvale Rd | US 74 Overpass | \$4,602,000 |
| 53 | BP-6 | School Connector Path | 10' MUP | Pine Branches Cir | Belville Elementary | \$2,178,000 |
| 54 | BP-7 | Traffic Signal and Crosswalk at Belville Riverwalk Park | New entrance to the park with a traffic signal and high visibility crosswalks | Belville Riverwalk Park | Belville Elementary | \$54,000 |
| 55 | BP-8 | Brunswick Nature Park Connector | 10' MUP | Entrance to Brunswick Nature Park on River Rd SE/NC 133 | US 17 | \$18,896,000 |

Table F.2 - Bicycle and Pedestrian Priority Project List

| Final Rank | Project ID | Project Name | Project Type | From | To | Project Cost (2024 \$) |
|------------|------------|---|---|---------------------------------------|-------------------------|------------------------|
| 56 | BP-10 | US 17/Lanvale Rd NE/Provision Pkwy Crosswalk Improvements | 12 curb ramps, 12 pedestrian signals, 10' painted crosswalk (584 LF total) | N/A | N/A | \$946,000 |
| 57 | BP-37 | S Navassa Rd MUP | 10' Paved MUP | Village Rd | Sturgeon Creek | \$1,877,000 |
| 58 | BP-73 | Sanders Rd MUP | 10' Paved MUP | Carolina Beach Rd | River Rd | \$2,640,000 |
| 59 | BP-17 | Cape Fear Blvd/Canal Dr and Hamlet Ave/Woody Hewett MUP | 8' MUP | Cape Fear Blvd | Hamlet Ave | \$568,000 |
| 60 | BP-108 | Eastwood Rd/Causeway Dr MUP | 10' MUP | Wrightsville Ave | Old Causeway Dr | \$1,799,000 |
| 61 | BP-118 | Stone St/Lumina Ave Intersection Improvements | Signalized Crosswalk | Stone St/Lumina Ave Intersection | N/A | \$500,000 |
| 62 | BP-119 | W Columbia St/Lumina Ave Intersection Improvements | Signalized Crosswalk | W Columbia St/Lumina Ave Intersection | N/A | \$500,000 |
| 63 | BP-4 | Neighborhood Connector Path | 10' MUP or 5' Bike Lane / Sidewalk | Blackwell Rd | NC 133 | \$6,932,000 |
| 64 | BP-41 | Village Rd/Old Fayetteville Rd Pedestrian Improvements | Pedestrian Refuge, Lighting/Signage Improvements | N/A | N/A | \$107,000 |
| 65 | BP-44 | Cedar Hill Rd MUP | 12' MUP / 5' Sidewalks | Old Mill Rd | Mount Misery Rd NE | \$18,014,000 |
| 66 | BP-66 | Mohican Trl Connector & Signalized Crossing at College Rd | 10' Paved MUP / Signalized Pedestrian Crosswalks | College Rd | Masonboro Loop Rd | \$4,403,000 |
| 67 | BP-12 | 5th St Sidewalks | 5' Sidewalk on both sides of road | Greenville Ave | Clarendon Ave | \$1,223,000 |
| 68 | BP-81 | Sloop Point Loop Rd MUP / Sidewalk | 8-10' Paved MUP / 5' Sidewalk | US 17 | Sloop Point Rd | \$9,562,000 |
| 69 | BP-91 | Gordon Rd MUP | 10' MUP | Market St | Military Cutoff Rd | \$748,000 |
| 70 | BP-97 | Pine Grove Dr MUP | 10' MUP | Beasley Rd | Andrews Reach Loop Rd | \$2,613,000 |
| 71 | BP-110 | N Lumina Ave Bike Lane Phase 2 | 5' Bike Lane | W Salisbury St | Parmele Blvd | \$442,000 |
| 72 | BP-18 | Carolina Beach Lake Park Pedestrian Bridge Expansions | 8' Pedestrian Bridge / MUPs to connect to existing facilities | Carolina Beach Lake Park | N/A | \$988,000 |
| 73 | BP-24 | Bicycle Lane Crossing Improvements | Crossbike Treatment (high visibility intersection crossing marks) at 27 locations | Hanby Ave | End of Fort Fisher Blvd | \$690,000 |

Table F.2 - Bicycle and Pedestrian Priority Project List

| Final Rank | Project ID | Project Name | Project Type | From | To | Project Cost (2024 \$) |
|------------|------------|---|---|--|----------------------------------|------------------------|
| 74 | BP-26 | Fort Fisher Blvd Crossing Improvements | High visibility crosswalks with pedestrian activated flashing beacons RRFB (pair) 7 | Beach Access #1004 | Assembly Way | \$57,000 |
| 75 | BP-29 | Island Greenway Extension to Town Hall/K Ave | 10' MUP | Spot Lane | Kure Beach Town Hall at K Ave | \$2,701,000 |
| 76 | BP-39 | Village Rd MUP Phase 1 | 10' Paved MUP | Terminus of existing MUP across from Woodland Dr | Graham Dr | \$2,526,000 |
| 77 | BP-78 | Country Club Rd MUP | 8-10' Paved MUP | US 17 | Sloop Point Loop Rd | \$10,281,000 |
| 78 | BP-116 | Causeway Dr/Bob Sawyer Dr Intersection Improvements | Crosswalk/Emergency Vehicle Egress Signal | Causeway Dr/ Bob Sawyer Dr Intersection | N/A | \$286,000 |
| 79 | BP-117 | Causeway Dr/Island Dr Intersection Improvements | Signalized Crosswalk | Causeway Dr/Island Dr Intersection | N/A | \$500,000 |
| 80 | BP-22 | Snow's Cut Path MUP | 10' MUP | Bridge Barrier Rd | Wild Life Ramp | \$1,700,000 |
| 81 | BP-38 | Tradeway Dr | 10' MUP on western ROW and crosswalks at Westgate roundabout | Night Harbor Dr SE | Westgate Dr | \$1,096,000 |
| 82 | BP-51 | Old Mill Rd MUP | 12' MUP | Cedar Hill Rd | West Town Limit | \$8,594,000 |
| 83 | BP-105 | Wrightsville Ave Sidewalk | 5' Sidewalks on both sides of road | Hooker Rd | Greenville Ave | \$697,000 |
| 84 | BP-111 | N Lumina Ave Sidewalk | 5' Sidewalk | Moore's Inlet St | Public Beach Access #2 | \$1,760,000 |
| 85 | BP-5 | Ploof Rd SE MUP | 10' MUP | Roundabout at Gateway Blvd, Tradeway Dr, and Ploof Rd SE | Chappell Loop Rd SE | \$1,492,000 |
| 86 | BP-30 | K Ave Sidewalk and Crossing Improvements | Sidewalk (5 ft wide), Sharrows 27, Crosswalk 17, Flexible Delineator 40, Painted Curb Extensions 8, Crossbike Treatment 3 | 7th Ave | 1st Ave | \$2,330,000 |
| 87 | BP-33 | Brunswick Nature Park Connector | 10' Paved MUP | Mallory Creek Dr | Brunswick Nature Park | \$7,357,000 |
| 88 | BP-42 | Wayne St to Royal St Connector | 10' asphalt MUP with ADA compliant crossing over Sturgeon Creek | Wayne St | Royal St | \$3,504,000 |
| 89 | BP-13 | 7th St/Plymouth St/8th St MUP / Sidewalk | 8-10' MUP / 5' Sidewalk | Harper Ave | Carolina Beach Recreation Center | \$3,177,000 |

Table F.2 - Bicycle and Pedestrian Priority Project List

| Final Rank | Project ID | Project Name | Project Type | From | To | Project Cost (2024 \$) |
|------------|------------|---|---|--|---|------------------------|
| 90 | BP-1 | Blackwell Rd SE Trail | 10' MUP | Eastern Chappell Loop Rd SE | Western Chappell Loop Rd SE | \$2,520,000 |
| 91 | BP-3 | NC 133 Trail | 10' Paved MP | Rice Hope Run | South Town Limit | \$1,503,000 |
| 92 | BP-25 | Boardwalk Widening | 5' Sidewalk (176 LF) / 10-12' Boardwalk (1920 LF) | N Ave | Kure Beach Pier | \$1,645,000 |
| 93 | BP-32 | Westside Signed Bike Route | A combination of wayfinding signage and shared lane markings or "sharrows" (20 markings/signs) | Settlers Lane | E Ave | \$417,000 |
| 94 | BP-62 | Masonboro Loop Rd MUP Phase 1 | 10' Paved MUP | Navaho Trl | Mohican Trl | \$3,255,000 |
| 95 | BP-61 | Market St North MUP | 10' Paved MUP | Northern Extent of Bayshore Commons (Middle Sound Loop Rd) | Porters Neck Rd | \$1,385,000 |
| 96 | BP-76 | Bike Ped Facility US 117 County Line | Pedestrian Bridge Facility over River | New Hanover County | Pender County | \$2,228,000 |
| 97 | BP-2 | Chappell Loop Rd SE MUP | 10' MUP | Eastwood Ln SE | Blackwell Rd | \$2,334,000 |
| 98 | BP-20 | Harper Ave/8th St Intersection Improvements | "5' Sidewalks on one/both sides. Alternate sides if necessary to avoid utilities/impediments" | N/A | N/A | \$209,000 |
| 99 | BP-36 | Old Fayetteville Rd Pedestrian Crossing | Crosswalks with signage across Old Fayetteville Road, including RRFB | N/A | N/A | \$4,000 |
| 100 | BP-60 | Harris Rd MUP | 10' Paved MUP | Gordon Rd | Smith Creek Park | \$1,946,000 |
| 101 | BP-69 | Northchase Parkway West Sidewalk Connector | 5' Paved sidewalk | N College Road | N College Road | \$1,660,000 |
| 102 | BP-27 | Fort Fisher Blvd Sidepath | 10' MUP (10050 LF) | E Ave | Fort Fisher State Park | \$6,721,000 |
| 103 | BP-112 | Old Causeway Dr Bike Lane | 5' Bike Lane | Keel St | Causeway Dr | \$244,000 |
| 104 | BP-113 | Pelican Dr Sidewalk | 5' Sidewalk | Driftwood Ct | Keel St | \$261,000 |
| 105 | BP-14 | Alabama Ave MUP | 8-10' MUP on northern ROW | Terminus of Island Greenway | Lake Park Blvd | \$1,497,000 |
| 106 | BP-28 | Island Greenway Extension to Fort Fisher | 10' MUP | K Ave/Town Hall | Fort Fisher Blvd at President Davis Ave | \$3,806,000 |
| 107 | BP-31 | North Carolina State Bike Route #3 | A combination of wayfinding signage (23 signs) and shared lane markings or "sharrows" (23 sharrows) | N Ave | E Ave | \$250,000 |

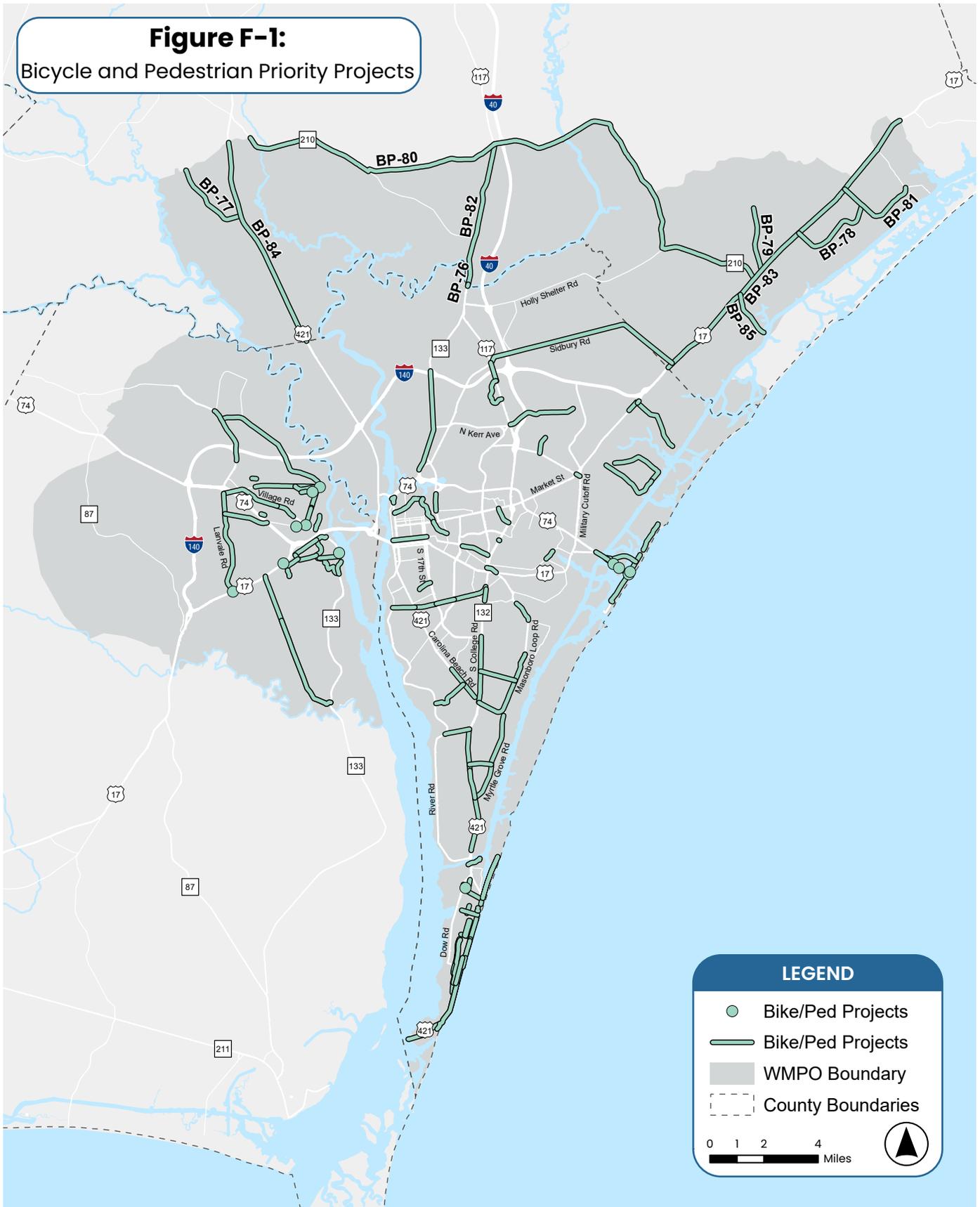
Table F.2 - Bicycle and Pedestrian Priority Project List

| Final Rank | Project ID | Project Name | Project Type | From | To | Project Cost (2024 \$) |
|------------|------------|--|---|--------------------------------|---|------------------------|
| 108 | BP-70 | Old Market St Connector | 10' Paved MUP | Porters Neck Road | Old Market St | \$480,000 |
| 109 | BP-49 | Navassa Rd at Sturgeon Bridge MUP | 12' Parallel Structure MUP | East side of Navassa Rd | Planned multi-use paths (in Leland) on Navassa Rd north and south of Sturgeon Creek | \$1,146,000 |
| 110 | BP-50 | Navassa Rd MUP | 12' MUP / 5' Sidewalk | Proposed Sturgeon Creek Bridge | Old Mill Rd | \$3,286,000 |
| 111 | BP-84 | US 421 MUP | 8-10' Paved MUP | New Hanover County Line | Montague Rd | \$20,353,000 |
| 112 | BP-93 | Masonboro Loop MUP | 10' Paved MUP | Navaho Trl (Northern) | Trails End Rd | \$1,788,000 |
| 113 | BP-15 | Bonito Ln or Mackerel Ln MUP | 8'-10' MUP on western ROW | Alabama Ave | Tennessee Ave | \$1,856,000 |
| 114 | BP-77 | Blueberry Rd MUP | 8-10' Paved MUP | US 421 | Montague Rd | \$8,586,000 |
| 115 | BP-85 | Washington Acres Rd Sidewalk | 5' Sidewalk both sides | US 17 | End of Roadway | \$4,275,000 |
| 116 | BP-45 | Cedar Hill Road/Navassa Road/Old Mill Road Intersection Improvements | Single Lane Roundabout, 12ft MUP on south/east sides of the intersection and 5ft sidewalk along the north/west sides of the intersection. | N/A | N/A | \$721,000 |
| 117 | BP-43 | Broadway St at Trail Crossing | Signalized Crossing, signage, enhanced pavement markings | N/A | N/A | \$49,000 |
| 118 | BP-47 | Main St Bike Lanes | 5' On Road Dedicated Bike Lane / 5' Sidewalk | Entire length of Main St | N/A | \$2,111,000 |
| 119 | BP-52 | Water St to Pine Valley Dr MUP | 12' MUP | Water St existing MUP | Pine Valley Dr planned MUP | \$1,225,000 |



The scoring matrix used to score and rank these projects can be found in Chapter 4.

Figure F-1:
 Bicycle and Pedestrian Priority Projects



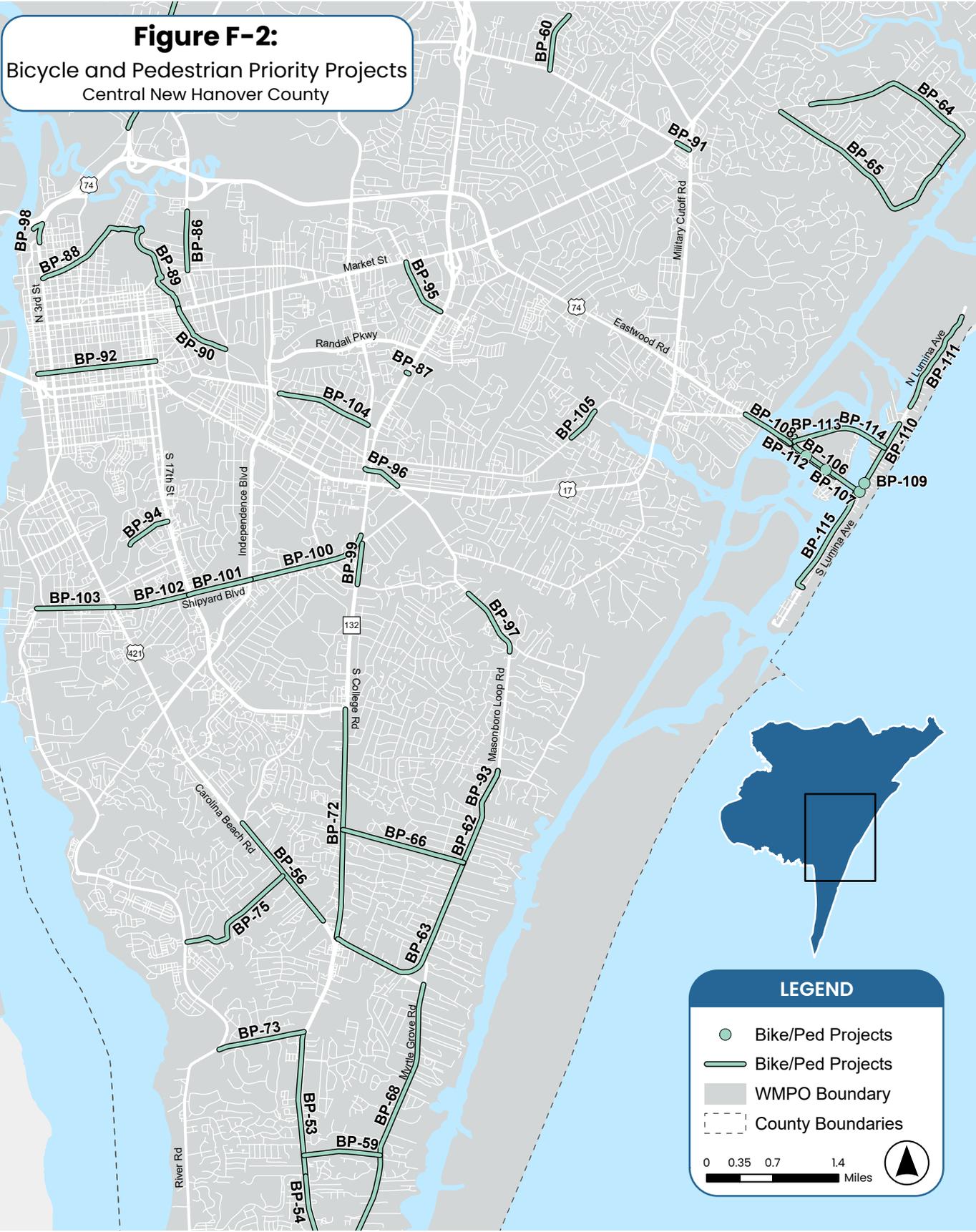


Figure F-2:
 Bicycle and Pedestrian Priority Projects
 Central New Hanover County

LEGEND

- Bike/Ped Projects
- Bike/Ped Projects
- WMPO Boundary
- County Boundaries

0 0.35 0.7 1.4
 Miles

Figure F-3:
 Bicycle and Pedestrian Priority Projects
 Southern New Hanover County

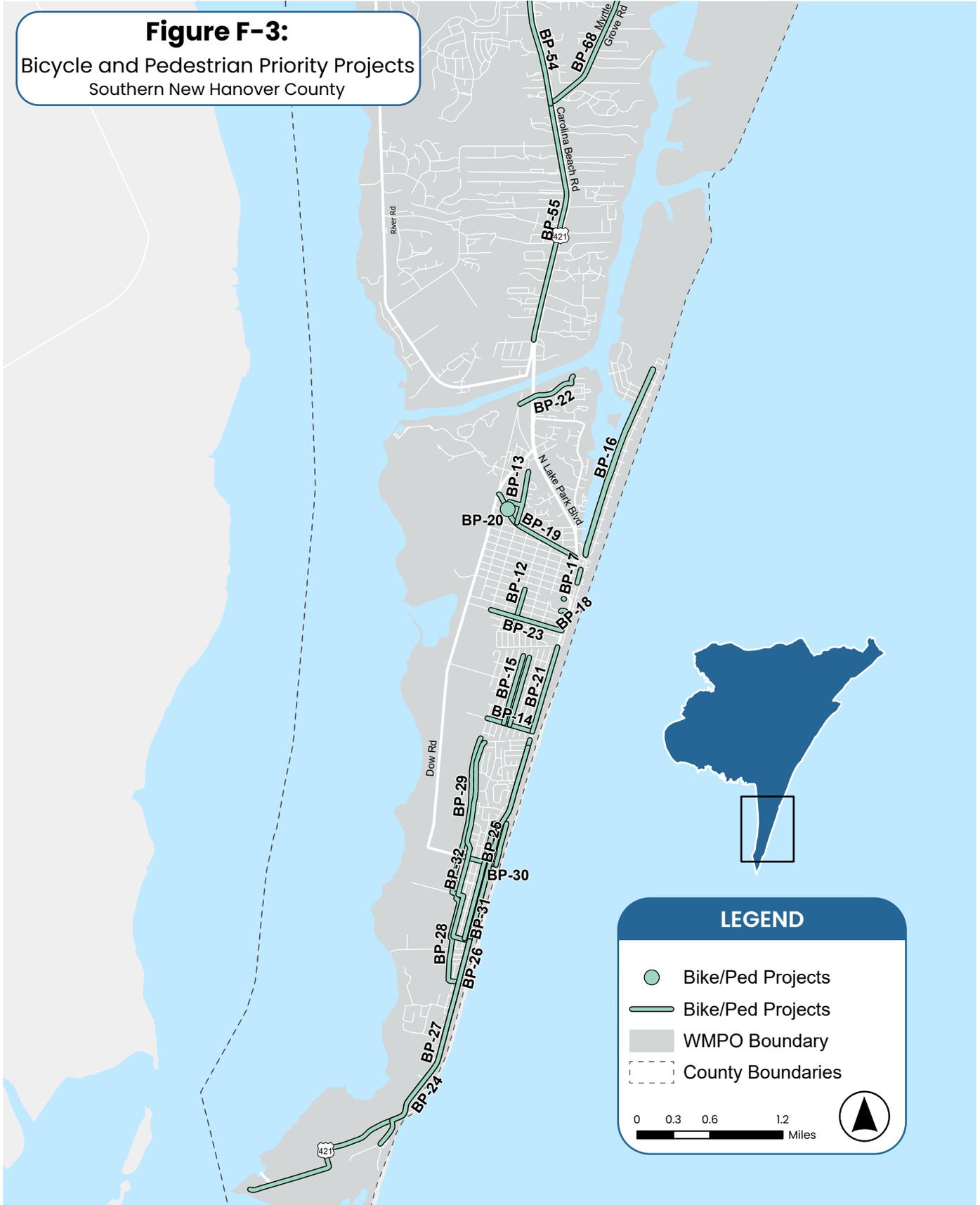


Figure F-4:
 Bicycle and Pedestrian Priority Projects
 Brunswick County

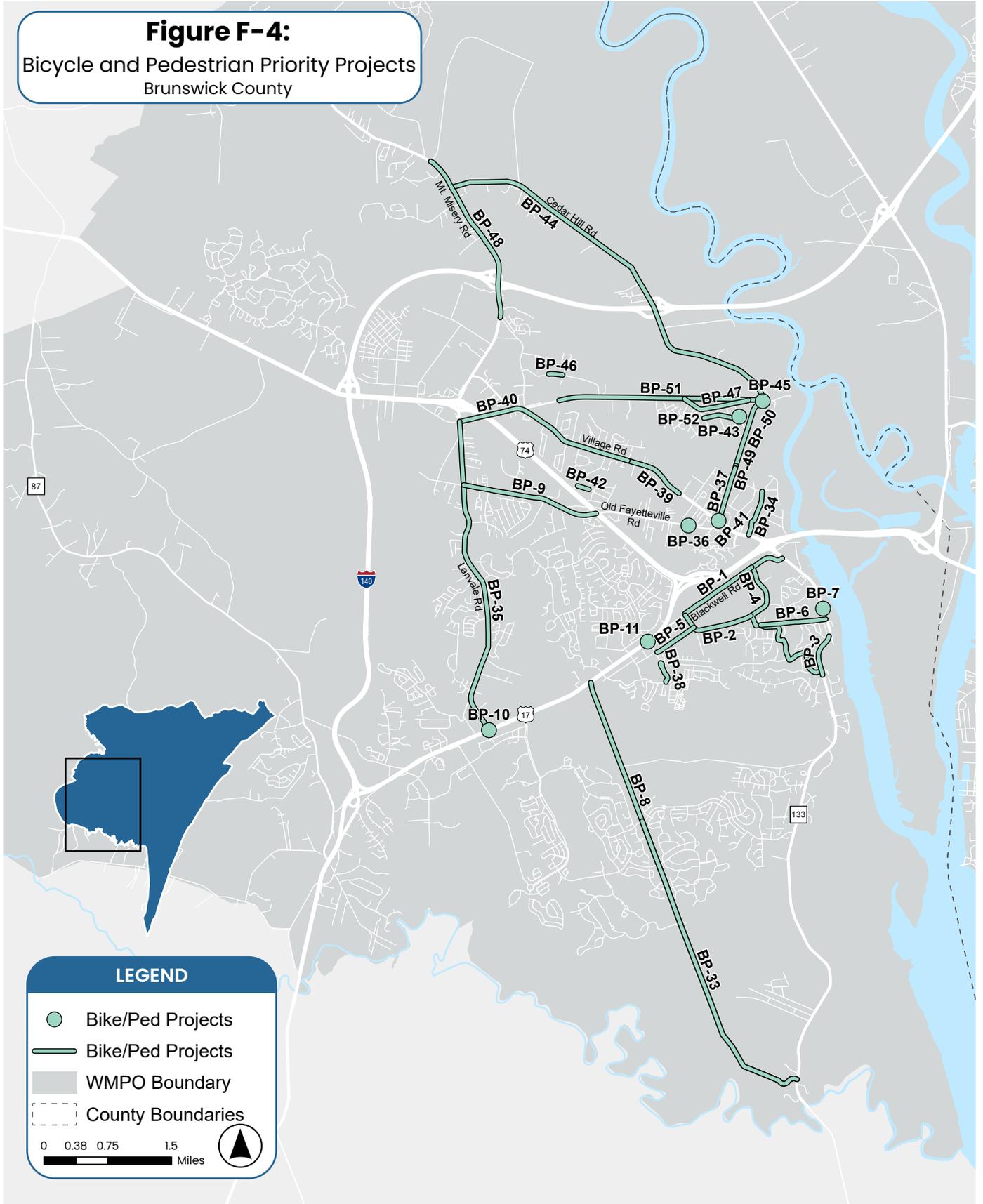
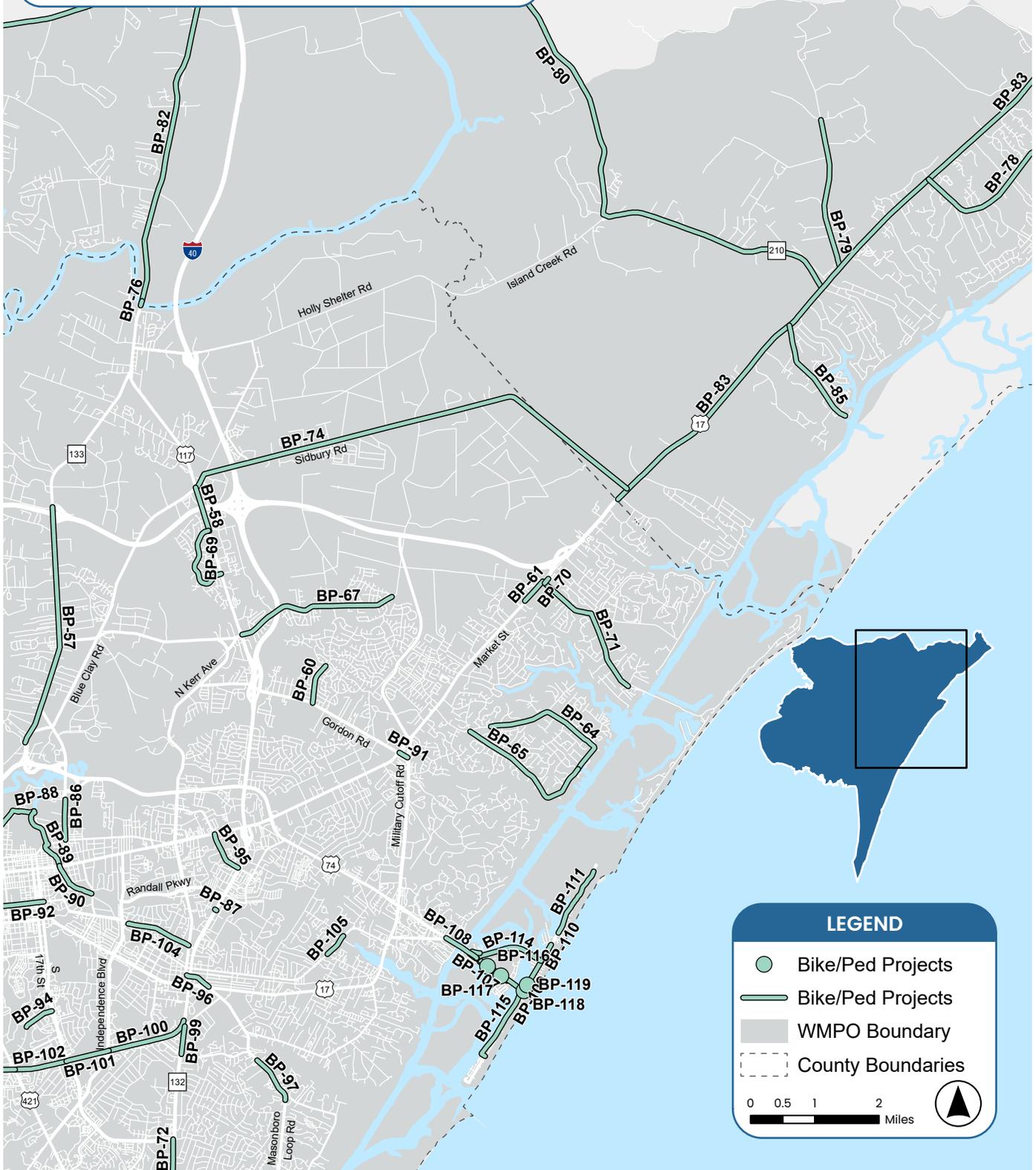


Figure F-5:
Bicycle and Pedestrian Priority Projects
Northern New Hanover and Southern Pender Counties



Sources

- Cape Fear Transportation 2040 MTP (2015)
- NCDOT Complete Streets Policy (2019)
- North Carolina 2018-2027 STIP (2017)
- North Carolina 2020-2029 STIP (2019)
- WalkBikeNC North Carolina Statewide Pedestrian and Bicycle Plan (2013)
- River to the Sea Bikeway Master Plan (2013)
- Walk Wilmington: A Comprehensive Pedestrian Plan (2009)
- Wilmington/New Hanover County Comprehensive Greenway Plan (2013)
- Town of Leland Pedestrian Plan (2016)
- Carolina Beach Pedestrian Plan (2016)
- NC Vision Zero
<https://ncvisionzero.org/>
- “Bicycle & Walking in the United States” (2018)
https://bikeleague.org/sites/default/files/Benchmarking_Report-Sept_03_2019_Web.pdf
- Safe Streets and Roads for All
<https://www.transportation.gov/grants/SS4A>
- Town of Leland Safety Action Plan (2024)



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Ferry and Water Transportation

Table of Contents

1. Ferry and Water Transportation Complete Priority Project List and Map

Ferry and Water Transportation Complete Priority Project List and Map

Table G.1 - Ferry and Water Transportation Priority Project List

| Final Rank | Project ID | Project Name | Project Description | Project Cost (2024 \$) |
|------------|------------|--|--|------------------------|
| 1 | FW-8 | Downtown Wilmington to Navassa ferry route | Proposed ferry route | \$15,562,455 |
| 2 | FW-14 | Leland to Independence ferry route | Proposed ferry route | \$15,562,455 |
| 3 | FW-9 | Fort Fisher mooring facility | Construction of an additional mooring facility at Fort Fisher for the Southport - Fort Fisher Ferry. Additional mooring to include ramps, gantries, and stacking lanes. | \$25,900,875 |
| 4 | FW-6 | Central Marina/Independence terminal | Construct ferry terminal/mooring facility to accommodate pedestrian ferry. (Proposed Route: Downtown Wilmington - Carolina Beach) | \$4,000,000 |
| 5 | FW-7 | Downtown Wilmington ferry stop | Construct ticketing facilities and provide shore power to create a passenger ferry stop at the Downtown Wilmington Riverwalk. (Proposed Route: Downtown Wilmington - Carolina Beach) | \$4,000,000 |
| 6 | FW-10 | Fort Fisher mooring facility | Additional ramp and gantry system at Fort Fisher to expand capacity | \$25,900,875 |
| 7 | FW-15 | Low-draft river class vessel | New vessel | \$25,768,160 |
| 8 | FW-16 | New river class vessel (3rd) | Acquisition of an additional vehicle ferry for the Southport - Fort Fisher route. | \$25,768,160 |
| 9 | FW-17 | New river class vessel (4th) | Acquisition of an additional vehicle ferry for the Southport - Fort Fisher route | \$25,768,160 |
| 10 | FW-18 | Replacement vessel (support fleet) | Replacement of tugs and barges for the support fleet of the Southport - Fort Fisher Ferry. | \$6,250,000 |
| 11 | FW-19 | Town of Belville mooring facility | Mooring Facility | \$25,900,875 |
| 12 | FW-21 | Vehicular/Pedestrian ferry service | Ferry service connecting Wilmington with southern New Hanover County and Brunswick County | N/A |
| 13 | FW-11 | Fort Fisher pedestrian improvements | Install 5' sidewalk to terminal entrance for connection to future crosswalk and MUP/sidewalk on US421/Fort Fisher Blvd. | \$39,006 |
| 14 | FW-2 | Carolina Beach ferry/taxi stop | Enhance Carolina Beach municipal docks to be accessible by passenger ferry. (Proposed Route: Downtown Wilmington - Carolina Beach) | \$4,000,000 |
| 15 | FW-3 | Carolina Beach to Fort Fisher ferry route | Proposed Ferry Route | \$15,562,455 |
| 16 | FW-4 | Carolina Beach to Wrightsville Beach ferry route | Proposed Ferry Route | \$15,562,455 |

Table G.1 - Ferry and Water Transportation Priority Project List

| Final Rank | Project ID | Project Name | Project Description | Project Cost (2024 \$) |
|------------|------------|---|--|------------------------|
| 17 | FW-5 | Central marina to Downtown Wilmington | Proposed ferry route | \$15,562,455 |
| 18 | FW-12 | High speed ferry to Ocracoke | New service | N/A |
| 19 | FW-13 | High speed pedestrian ferry from Fort Fisher to Charleston, with stop in Myrtle Beach | New service | N/A |
| 20 | FW-20 | Wrightsville Beach ferry/taxi stop | Enhance dock at CAMA Access Point to be accessible by passenger ferry. (Proposed Route: Carolina Beach - Wrightsville Beach) | \$4,000,000 |
| 21 | FW-22 | Water taxi | Water taxi connections between east and west banks of Cape Fear River and northern/southern portions of downtown Wilmington | N/A |
| 22 | FW-1 | Water taxi | Belville Riverwalk Park to Downtown Wilmington | N/A |



The scoring matrix used to score and rank these projects can be found in Chapter 4.

Figure G-1:
 Ferry and Water Transportation Priority Projects

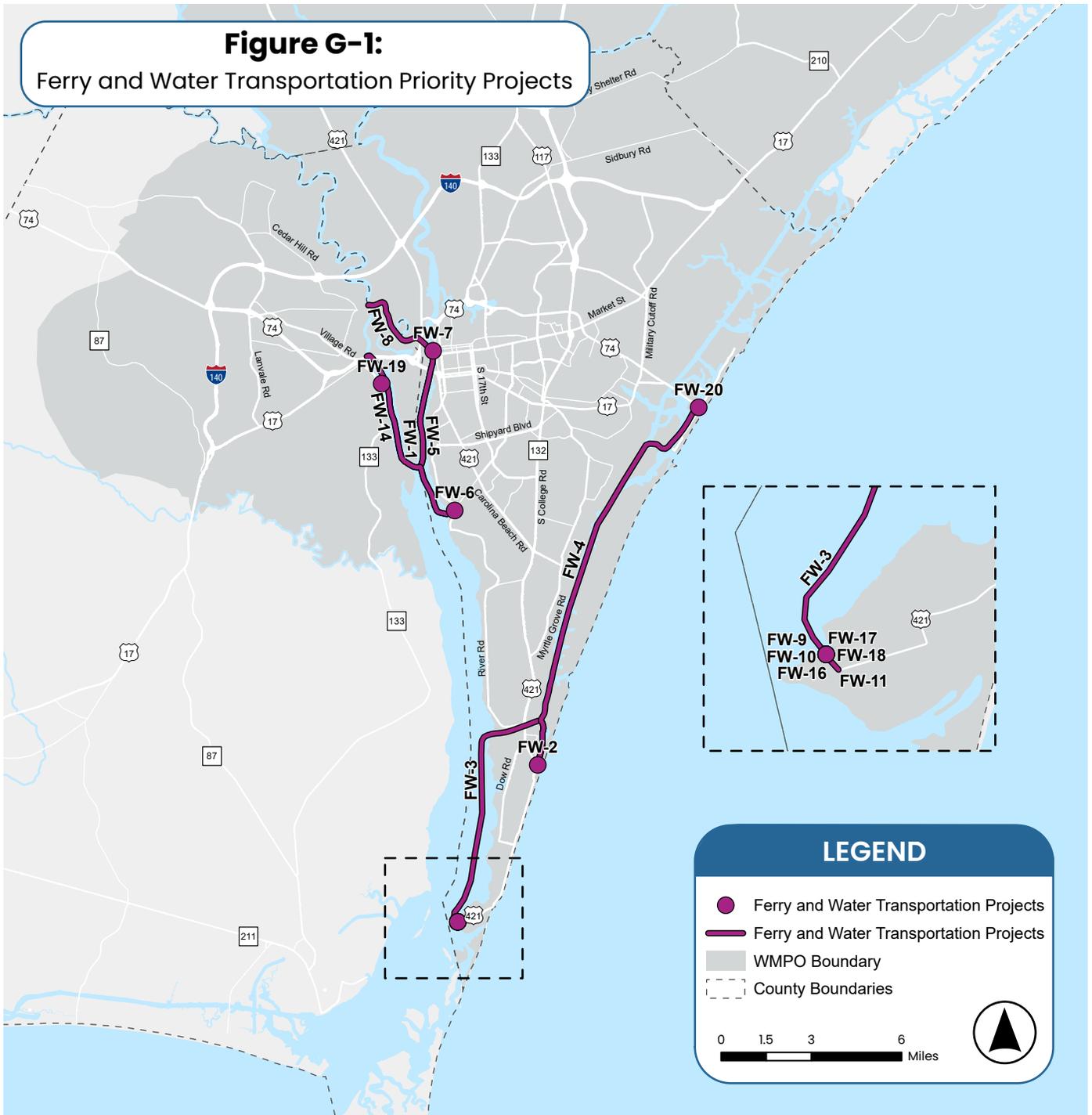




Table of Contents

1. Existing Conditions in the Region
2. Rail Complete Priority Project List and Maps

Existing Conditions in the Region

Freight Rail

CSX Transportation operates a Class I Railroad in the region, with intermodal facility connections outside of the WMPO boundary. A shortline, Wilmington Terminal Railroad connects the CSX Transportation line to the North Carolina State Port Authority's (NCSPA) Port of Wilmington and other freight-generating facilities within the City of Wilmington. CSX Transportation Davis Yard, located in Navassa, serves as the regional base for switching operations.

Imports, exports, and commodities used by businesses in southeastern North Carolina are affected by inefficiencies in the rail system. In 2017, a Wilmington rail realignment feasibility study was performed to determine the practicality, necessity, and viability of realigning rail track in the Wilmington Beltline from the Port of Wilmington directly to Brunswick County. This would further improve the mobility of freight to and from the Port of Wilmington via rail, while decreasing travel delays for vehicular traffic on Wilmington roadways. The Environmental Assessment was completed in 2024. NCDOT also owns 27 miles of the former Wilmington & Weldon rail line right of way between Wallace (Duplin County) and Castle Hayne (New Hanover County). The restoration of this rail service would connect the Wilmington region to the northern I-95 corridor and main line networks along the east coast, offering additional freight opportunities and potential passenger services.

In addition, the Queen City Express offers daily intermodal service between the NCSPA's Port of Wilmington and Charlotte, North Carolina. This freight route increases the efficiency of cargo movement in and out of Wilmington and has reduced the number of trucks on roadways. The Wilmington-Rocky Mount Express, launched in 2023, also provides daily, overnight rail service between the Port of Wilmington and CSX's new Carolina Connector intermodal terminal in Rocky Mount, North Carolina. This new route offers direct, efficient access to northeastern North Carolina and the I-95 corridor. The express rail services offered by the Port of Wilmington and CSX, including Queen City, Wilmington-Rocky Mount, and Wilmington Midwest, led to almost a 75 percent growth in intermodal rail volume in 2023.

The North Carolina State Port Authority's Port of Wilmington

The North Carolina State Port Authority's (NCSPA) Port of Wilmington is located on the Cape Fear River within the City of Wilmington in New Hanover County and is the larger of two seaports in the state. The Port of Wilmington contains 284 acres of developed land and 150 acres of undeveloped land, providing container, bulk, and breakbulk services. Storage offerings include open and covered dry bulk facilities, USDA-authorized fumigation facilities, and cold storage. The Port of Wilmington is equipped to handle over 600,000 twenty-foot equivalent unit containers, totaling approximately 23 acres of covered and 125 acres of open storage area. This vast capacity is used to ship and store various commodities including chemicals, food products, petroleum products, wood products, and steel, utilizing intermodal trade via water, rail, and roadways. CSX Transportation provides daily service for container, boxcar, tanker, and general cargo services via Wilmington Terminal Railroad (WTRY).

Future demand projections suggest that congestion levels on the local transportation network could negatively impact the Port's growth and competitiveness. Access to the port terminal is vital to maintaining an efficient and effective supply chain, as the roads and rail lines leading into and out of the Port are key components of North Carolina's pipeline to the global marketplace. Large-scale projects such as the Wilmington Rail Realignment, the restoration of service between Wallace and Castle Hayne, and the Cape Fear Crossing, will not only benefit and support the enormous growth projected for the Port of Wilmington, but will also provide traffic and safety improvements to the local roadway network. Though all three projects have been identified by the WMPO as regionally critical, alternative funding sources will need to be identified to move forward with their implementation.

Rail Complete Priority Projects List and Maps

| Table H.1 - Rail Priority Project List | | | |
|--|--|---|------------------------|
| Project ID | Project Name | Project Description | Project Cost (2024 \$) |
| X-1 | Re-establish passenger rail service from Wilmington to Raleigh (via Goldsboro) | Reestablish rail connection between Wilmington and Raleigh through the construction of new railroad facilities in the currently preserved rail corridor between Castle Hayne and Wallace. | \$34,536,000 |
| X-2 | Wilmington rail realignment | Replacement and improvement of the existing freight rail route between the Navassa Davis Yard and the Port of Wilmington to create a new, shorter route that would no longer run through Wilmington's busy and densely populated downtown core. | \$864,075,000 |
| X-3 | Construct passenger rail station to accommodate future passenger rail service from Wilmington to Raleigh | The construction of a rail station to accommodate future passenger rail service to Wilmington. | \$93,925,000 |
| X-4 | Davis Yard at-grade crossing (Cedar Hill Road) | Intersection of CSX railroad track and Cedar Hill Rd | \$1,700,000 |
| X-5 | New service from Malmo to Whiteville | Reestablish rail connection between Malmo and Whiteville through the construction of new railroad facilities | \$178,785,000 |
| X-6 | Rail extension to Pender Commerce Park | New track in new location | \$7,225,000 |
| X-7 | Rail interchange redesign near Northwest District Park | Realign track/direct turn | \$6,025,000 |
| X-8 | US421 railroad crossing safety improvements | Railroad gates | \$1,700,000 |



The scoring matrix used to score and rank these projects can be found in Chapter 4.

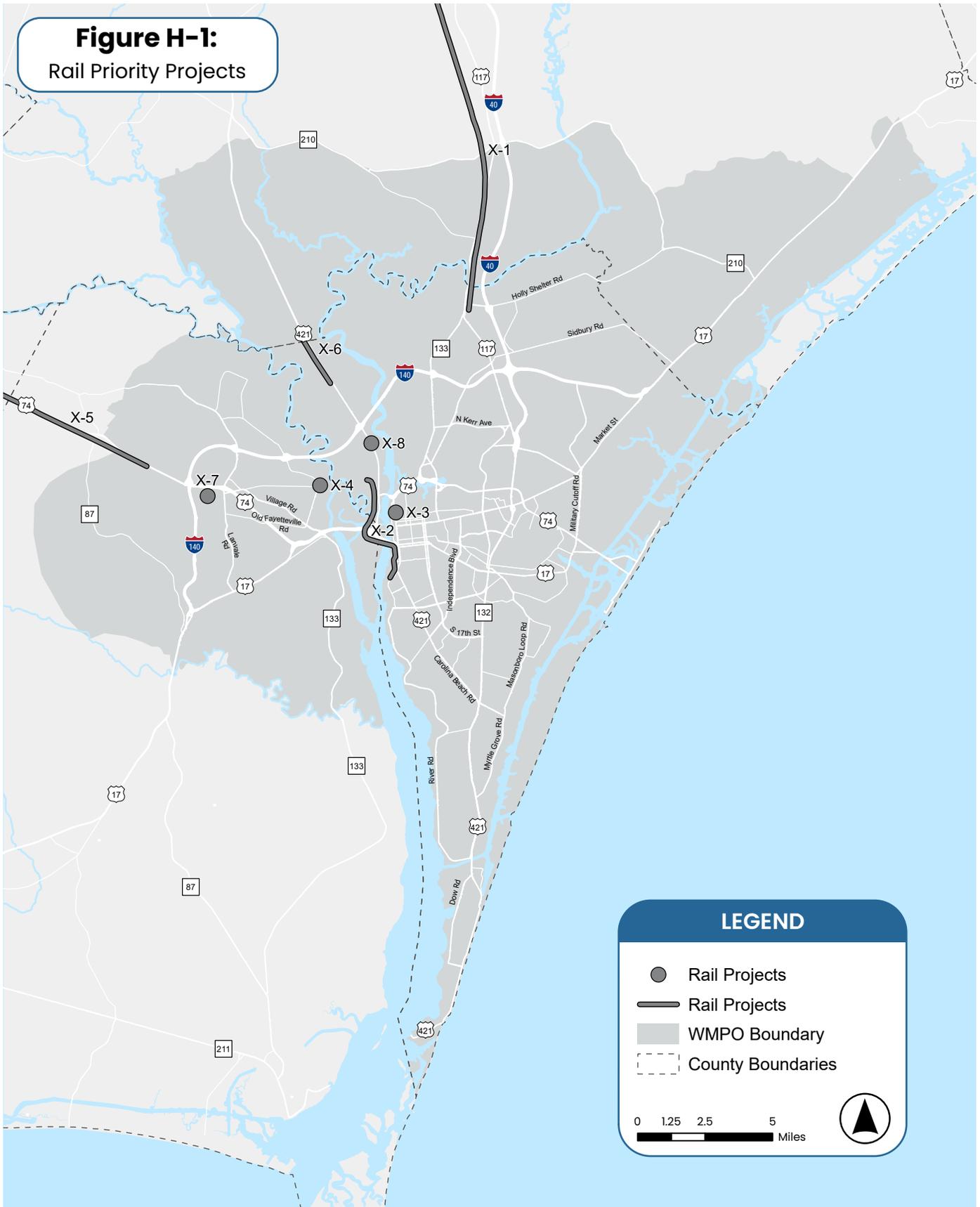


Figure H-2:
Rail Priority Projects
X-1 and X-5 Full Project Extents



Sources

- USDOT Federal Railroad Administration (FRA) Corridor Identification and Development Program
<https://railroads.dot.gov/corridor-ID-program>
- Southeastern North Carolina Passenger Rail Feasibility Study
<https://www.ncdot.gov/divisions/rail/projects/Documents/southeastern-passenger-rail-study.pdf>
- USDOT FRA FY22 Corridor Identification and Development Program Selections
<https://railroads.dot.gov/sites/fra.dot.gov/files/2025-02/FY22%20CID%20Project%20Summaries-Map-r2.pdf>
- North Carolina Port Authority
<https://ncports.com/>





Public Transportation

Table of Contents

1. Current Trends
2. Existing Conditions in the Region
3. Public Transportation Complete Priority Project List and Maps

Current Trends

Nationally, transit ridership has been generally declining since 2015. The most significant decline in transit passenger trips occurred in 2020 due to the impacts of the COVID-19 pandemic. Although the total number of passenger trips remains below 2015 levels, trips have been rebounding and steadily increasing since 2020. In addition to providing nearly 3.5 billion fixed-route passenger bus trips in 2023, transit systems throughout the United States employed over 300,000 workers. An increase in federal funding via the 2021 Bipartisan Infrastructure Law invested a record \$100 billion into transit systems of all sizes. The funding assisted transit agencies with replacing aging fleets, adding reliability and frequency to routes, and supporting the overall development and growth of transit systems.

In North Carolina, passenger trips via fixed-route services have also decreased overall since 2015 but are similarly rising post-pandemic. While the number of passenger trips decreased from over 34 million in 2015 to around 17 million in 2020, it rose to approximately 23 million in 2023. This represents an upward trend in transit ridership within the state. Some factors impacting transit ridership both within North Carolina and nationally are local and federal investment, economic factors of the communities served, lifestyle trends, service quality, and the cost to ride.

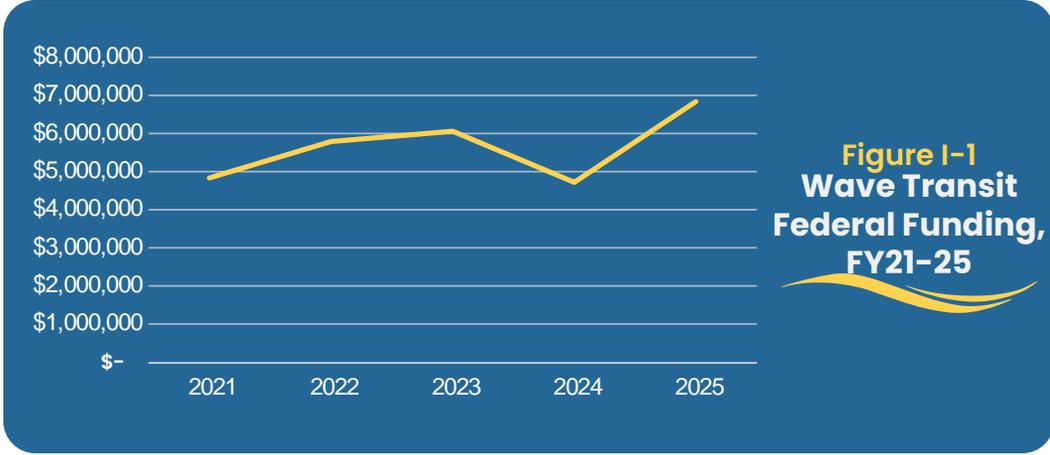
Economic Factors

There is a strong correlation between the economy and public transportation ridership. Increased investment in public transportation service providers leads to improved quality and legitimacy of public transit services, resulting in increased ridership. In addition, the cost of owning and maintaining a personal vehicle can influence individuals' mode choice and encourage increased passengers aboard buses and other services.

Federal Funding

The Federal Transit Authority's (FTA) public transportation assistance program authorization is provided by federal transit law and Chapter 53 of Title 49, U.S. Code. The most recent authorization, the Infrastructure Investment and Jobs Act (IIJA), also known as the Bipartisan Infrastructure Law, was enacted in November 2021. The legislation reauthorizes surface transportation programs for Federal Fiscal Year 2022 through Federal FY 2026. The IIJA authorized up to \$108 billion for public transportation, the largest federal investment in public transportation made in the United States. In addition to previously established grant programs, the IIJA also established the State of Good Repair and Rail Vehicle Replacement Program, which provides for the maintenance, replacement, and rehabilitation of capital assets. In FY 2024, over \$14 billion was allocated throughout the United States from the FTA, with North Carolina receiving nearly \$186 million. In FY 2025, the Wilmington Urban Area was allocated \$1.7 million of FTA's formula programs for urban areas. Federal funding makes up nearly half of Wave's operating revenues.

Despite a significant overall increase in federal funding for public transportation through the IIJA, the allocation of FTA grant program funds has decreased since FY 2023. One reason for this drop in FTA funds is due to COVID-19 recovery programs, primarily the Coronavirus Aid, Relief, and Economic Security (CARES) Act expiring.

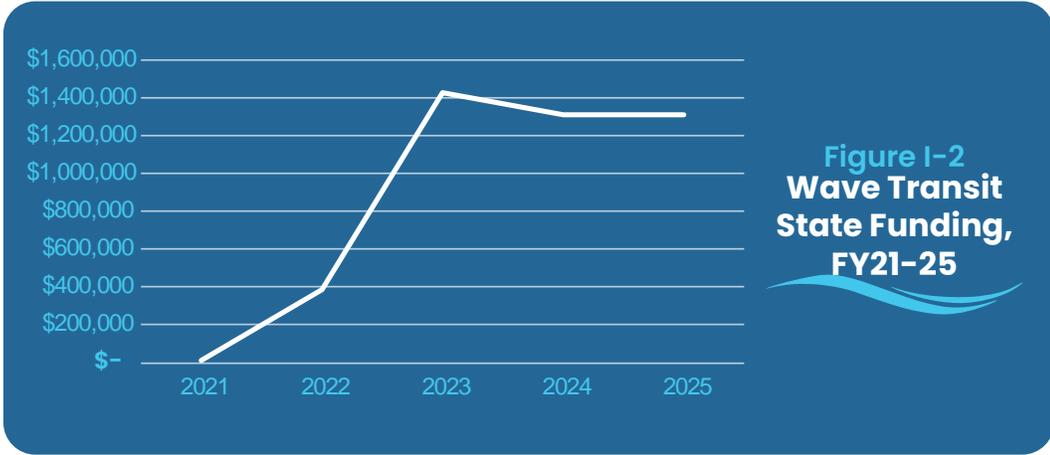


Source: Wave Transit
 FY2025 Budget Ordinance.

State Funding

Wave Transit’s state funding makes up less than 10 percent of its operating revenues. Funding from NCDOT in its FY 2025 budget includes the following programs:

- ConCPT: Beginning in FY22, Wave receives grant funding from the ConCPT (Coordinated Public Transportation) program to operate its RideMICRO service.
- State Maintenance Assistance Program (SMAP): Formula-based grant that provides funding for certain operating expenses as defined under the FTA and/or ADA paratransit services. This program was defunded by the North Carolina General Assembly for FY21.
- Rural Operating Assistance Program (ROAP): Provides operating assistance for paratransit services, as well as services connecting transit to rural communities. This program was defunded by the North Carolina General Assembly for FY21.



Source: Wave Transit
 FY2025 Budget Ordinance.

Local Funding

Wave receives around 30 percent of its operating revenues from local contributions, including funding received from the City of Wilmington, New Hanover County, the University of North Carolina Wilmington (UNCW), and other governments. Local funding is the least volatile relative to federal and state programs and has increased in recent years. In FY25, Wave received nearly \$4.4 million in local funding.

Transit Demand Factors

Other factors influencing the demand for transit Research shows that areas with high populations, jobs, and other services produce the greatest demand for transit service. Individuals or families who do not own a vehicle or who do not have access to a reliable vehicle are more likely to choose transit. Residents living near or below the poverty line are also often more likely to take transit than those who are not.

Job type and density also may shift mode choice and demand for transit. Client-facing jobs, such as those that attract customers, clients, and patients, often create higher demand for transit than office or manufacturing jobs. Areas with a higher concentration of client-facing jobs and activity centers, such as restaurants, schools, and shopping centers, tend to attract more transit riders than areas with contrasting characteristics.

Public Sector Services

Public transportation systems struggle with balancing frequency and coverage. Frequency has been shown to offer better service to less customers, while coverage reaches more customers at the cost of frequent service. Bus Rapid Transit (BRT), Fixed Rail Transit, and Demand Responsive Transport (DRT) are becoming more popular because these services specialize in meeting both frequency and coverage needs.

Bus Rapid Transit

Bus Rapid Transit (BRT) is a high-quality, bus-based transit system designed to improve the capacity and reliability of a conventional bus system. BRT is capital-intensive due to the cost of constructing dedicated bus lanes and implementing infrastructure features that mimic Fixed Rail Transit to improve boarding efficiency. BRT is being implemented in Raleigh and shows promise towards increasing choice public transportation ridership. Wave has the potential to introduce some elements of BRT, such as transit priority signals, enhanced stations, bus stops, and fare collections that would expedite boarding.

Fixed Rail Transit/Streetcar

Fixed Rail Transit transports passengers in rail cars or streetcars, usually traveling along a single line of rail. The rails are located in the right-of-way and are often separated from other traffic. Fixed Rail Transit is the most capital-intensive transit solution due to high right-of-way, infrastructure, and operation costs and it is only recommended for high density corridors. Fixed Rail Transit offers the best service because of its restricted right-of-way and efficient boarding. Charlotte has successfully launched its light rail, Blue Lynx, that connects the city and the University of North Carolina at Charlotte.

Demand Responsive Transit

Demand Responsive Transit (DRT) is a common public transit service in areas with low passenger demand, where regular bus service is not considered to be financially viable. The provision of public transportation in this manner emphasizes one of its functions as a social service rather than creating a viable movement network. One of the drawbacks of DRT is the ability to identify demand that justifies service. This is becoming a more viable solution with technology from the private sector gaining traction and helping potential customers identify transportation offerings that they might not have known existed.

There are thousands of virtual stops in Brunswick, New Hanover, and Pender Counties spread throughout the four RideMICRO zones. All zones are connected to the fixed-route service area and allow passengers to conveniently transfer to the fixed-route service.

RideMICRO operates weekdays in all zones, and Saturday and Sunday in Zones 3 and 4. The cost to ride is \$2 per person, per one-way trip, and fares can be paid online or upon boarding in cash.

Private Sector

Transportation Network Companies (TNCs)

Transportation Network Companies (TNCs), such as Uber and Lyft, have had a profound impact on the transportation landscape by being able to directly match transportation demand with supply. While TNCs have potentially taken a share of customers that would otherwise utilize public transportation, they offer a higher level of convenience regarding location and frequency that may not be available through public transportation. One of the most important aspects of TNCs is the ability to match riders with transportation services through a cellular device. The ability to combine trip source, trip destination, service type, payments, and waivers makes for a seamless transportation experience for the user with high quality service. The introduction of electric vehicles and autonomous technology could help to overcome any operational deficiencies and improve safety.

Shared Mobility

The Federal Highway Administration (FHWA) defines shared mobility as an innovative transportation strategy which allows users short-term access to shared vehicles, bicycles, or other modes on an as-needed basis. Bike sharing, car sharing, and ride sharing, as well as on-demand ride services, are all forms of shared mobility. Like TNCs, the use of shared mobility has potentially taken customers from public transportation, especially those who only need service for a short distance. Additionally, many TNCs offer ridesharing—examples include Uber Pool and Lyft’s shared ride option.

Technology

The implementation of new technologies will have a profound impact on the service and comfort of public transportation in the future, and its potential is still being fully realized. Popular technologies being implemented include autonomous vehicles, demand route planning, Automatic Passenger Counters (APC), automated fare payment, and Wi-Fi.

Autonomous Vehicles

Autonomous vehicles (AVs), while still relatively new and still developing, will have a strong impact if incorporated into public transportation. Labor costs are significant to any transportation service provider and, by reducing operating costs, these providers may be able to add new routes, increase frequency, or make other improvements to public transportation systems.

There are still significant safety and privacy barriers that are preventing autonomous vehicles from being implemented at large, but some transit authorities throughout the US are working to bring AVs into their fleets. The Jacksonville Transit Authority (JTA) in Jacksonville, Florida launched its Ultimate Urban Circulator program in 2017, which aims to connect communities to its downtown core through AVs. The program is being implemented in phases, including rigorous safety tests to ensure the vehicles operate safely and as intended. JTA expects the program to be out of the planning stage by the end of 2026.



Photo by: Jacksonville Daily Record, JTA



Photo by: Bay Area Telegraph,
Waymo

In addition, western United States have begun utilizing Waymo services in cities like Los Angeles, San Francisco, and Phoenix. Operating much like other TNCs, Waymo is completely driverless and allows passengers to travel to any destination within its zone. While Waymo currently operates in only four cities, it is in the process of expanding to cities on the east coast like Atlanta and Miami. The integration of AVs into public transit services introduces new complexities and requires collaboration between local transit authorities, states, and the federal government to address the wide-scale implementation of these vehicles.

Demand Route Planning

Demand route planning is the ability to react to demand with adaptive routes that link similar trips. This is comparable to what Uber and Lyft do through their pool services. Computer-Aided Dispatch/Automatic Vehicle Location (CAD/AVL) systems collect data on route performance, traffic patterns, and ridership levels. This data can be leveraged by transit agencies to adjust schedules or reroute vehicles to ensure maximum efficiency, especially when resources are limited. Real-time tracking technology allows public transit operators to improve service reliability and better meet the needs of their passengers.



Photo by: Mass Transit Magazine

Automated Fare Collection

New technology allows customers to prepay on cards or mobile devices, allowing for more efficient boarding and improved time performance. Data collection of customers is also becoming automated, which allows operations staff to access trip level data to improve routes.

Without automated fare collection, the time required to board a bus can slow operations significantly. Additionally, the need to have exact change for bus fare can place a burden on passengers and discourage potential riders from using the service.

Automated fare collection eliminates the need for operators to physically handle cash payment and allows passengers to board the vehicle more efficiently. Technology allows passengers to use smart cards, mobile devices, and contactless debit or credit cards to pay fare with a single tap. The addition of automated fare collection systems also allows for increased data collection, which can be leveraged to undertake deeper analysis of the transit network and services. Automatic fare collection is a key component of Bus Rapid Transit.

Wi-Fi

Many of these new technologies require Wi-Fi to connect the vehicle to the system operators. Wi-Fi is also a comfort feature that could potentially attract more choice riders who may prefer to use their commute time productively rather than being behind the wheel of a car. It is important to be mindful of increased urbanization and decreased ridership trends as well as countermeasures offered by the public and private sector when addressing the public transportation needs of a community. *Cape Fear Navigating Change 2050* includes PT-134, which would install a Wi-Fi system on community routes for Wave Transit.

Existing Conditions in the Region

Wave Transit

In 2004, the City of Wilmington and New Hanover County entered into an interlocal agreement, merging the Wilmington Transit Authority and New Hanover County Transportation Authority to become the Cape Fear Public Transportation Authority (CFPTA). The mission of CFPTA (also known as Wave Transit) is “to develop and maintain an effective, efficient, and safe system of public transportation services within southeastern North Carolina which is responsive to the mobility needs of the community.” The CFPTA Board is comprised of nine individuals, representing New Hanover County, the City of Wilmington, and the WMPO.

Reimagine Wave Transit

In 2023, Wave Transit began the development of its short-range transportation plan, Reimagine Wave Transit. This process included five phases, with implementation beginning in January 2025.

The plan analyzed three service alternatives:

1. Reduced Revenue Alternative: 30% less funding than existing levels
2. Cost-Neutral: funding remains the same
3. Increased Revenue Alternative: 30% more funding than existing levels

All three service alternatives intended to provide more direct service and avoid duplication, protect the existing service span and coverage, and update route names to simplify wayfinding.

Fixed Route Service Alternatives

Under a reduced revenue scenario, the number of Wave fixed routes would be reduced from twelve to ten. 203 Port City Trolley would be discontinued due to its duplication of nearby Route 101 Princess Place, Route 201 Carolina Beach Road, and Route 206 Oleander Drive service. Route 104 East would be discontinued due to low ridership and mostly replaced by RideMICRO Zone 2 service. All routes would operate hourly, seven days a week and continue to operate for the same number of hours each service day that they did under existing conditions.

Under the cost-neutral scenario, one route would be discontinued and largely replaced by RideMICRO Zone 2 service. Five of the eleven remaining routes would operate hourly seven days of the week, and six routes would operate every 30 minutes during weekdays for most of the day. Route 108 Market Street would also operate every 30 minutes for most of the day on Saturday. This scenario would also introduce longer service hours on two routes and reduce the Port City Trolley to being seasonal only.

The increased revenue scenario would allow for all twelve existing routes to remain. Six of those routes would operate hourly, five would operate every 30 minutes, and Route 108 would operate every 15 minutes for most of the day seven days a week. It also extends the service hours for routes 101 and 108.

RideMICRO and Seahawk Shuttle Service Alternatives

The service alternatives for RideMICRO remained largely the same, except for Sunday service hours, which would be extended by an hour into the evening under the increased revenue scenario. In addition to the service hours changes, the plan recommended that the number of RideMICRO zones be reduced from four to three by discontinuing Zone 1 Brunswick County service. Other zone boundaries would be adjusted to remove service duplication with fixed route service.

For the Seahawk Shuttle, which operates in partnership with UNCW, it was recommended that the number of shuttle routes be reduced from eight to five under all three service alternatives. To reduce the number of routes, similar services would be combined and one route eliminated due to its very low ridership. With the reduction of routes from eight to five, the existing service hours could be reinvested into making the five routes more frequent than before.

Approved Alternative

The CFPTA approved the implementation of the cost-neutral fixed route network, as well as the cost-neutral alternative for the UNCW shuttle recommended in Reimagine Wave Transit. The changes to Wave’s fixed route service began January 5, 2025, with the implementation of UNCW’s changes occurring in August 2025. Other recommendations included in the plan were the redesign of service routes and schedules and infill stop locations to accommodate the shifts in routing.

Wave Service Profile

Source: Wave Transit Short Range Transportation Plan.

| RideMICRO Service Day | Existing | Reduced Revenue | Cost-Neutral | Increased Revenue |
|------------------------|----------|-----------------|--------------|-------------------|
| Weekday service hours | 49 | 42 | 42 | 42 |
| Saturday service hours | 20 | 30 | 30 | 30 |
| Sunday service hours | 16 | 24 | 24 | 27 |

* Service hours refer to the cumulative operating hours of all vehicles in service. For example, if three vehicles each operate for 10 hours, the total service hours equal 30.

Table I.2 - Service Profile by Mode

Source: Wave Transit Short Range Transportation Plan.

| | Community Routes | RideMICRO | Seahawk Shuttle | Trolley | DART (Paratransit) |
|--------------------------------------|------------------|--------------------------|-----------------|-----------------------------------|--------------------|
| Service Type | Fixed Route | On-Demand | Fixed Route | Fixed Route | On-Demand |
| Service Days | Monday - Sunday | Monday- Sunday | Monday - Friday | Monday - Sunday (April - October) | Monday - Sunday |
| Number of Routes | 10 | 4 zones, no fixed routes | 7 | 1 | No fixed routes |
| Service Frequency | 30-60 minutes | Based on demand | 15-30 minutes | 30 minutes | Based on demand |
| Number of Vehicles | 24 | 4 | 13 | 1 | 23 |
| Annual operating cost (2023 dollars) | \$9,973,183 | | | | |

Other Locally Identified Future Opportunities

Bus Rapid Transit

Bus Rapid Transit would provide a high level of service for public transportation riders, while improving congestion by reducing the number of vehicles on the corridor. The introduction of BRT was identified as a transit priority of the City of Wilmington through the 2016 Create Wilmington Comprehensive Plan. The introduction of dedicated lanes will require more funding and signal preemption to give transit priority.

Fixed Rail Transit/Streetcar

The downtown Wilmington rail corridor, known as the Beltline, has been explored for potential future Fixed Rail Transit. The corridor is currently owned by CSX and is used for freight movement between the Port of Wilmington and Davis Yard. The second phase of the City of Wilmington's Wilmington Rail Realignment Feasibility Study examined the option of fixed rail transit service along this downtown corridor once freight operations were moved across the river. Another potential corridor is the NCDOT-owned rail right-of-way in downtown Wilmington. Reestablishment of tracks and the opportunity to bring intercity passenger rail to Wilmington is a high priority of the NCDOT Rail Division.

Public Transportation Priority Project List and Map

Table I.3 - Public Transportation Priority Project List

| Final Rank | Project ID | Project Name | Project Type | Project Description | Project Cost (2024 \$) |
|------------|------------|--|-----------------------------|---|------------------------|
| 1 | PT-109 | US17 & Sidbury Road | Park & Ride | Park & Ride | \$15,000 |
| 2 | PT-115 | Fare free services | Route | All fixed route services. | \$1,800,000 |
| 3 | PT-136 | Replacement Bus | Vehicle Update | Routine vehicle replacement | \$650,000 |
| 4 | PT-138 | Replacement LTV | Vehicle Update | Routine vehicle replacement | \$130,000 |
| 5 | PT-99 | I-140 & US17 | Park & Ride | No existing parking is available but parking could be provided by potential future development; additional signage and service would need to be added | \$275,000 |
| 6 | PT-97 | Fairfield Park | Park & Ride | Existing parking available (10 spaces min); signage and service need to be added | \$15,000 |
| 7 | PT-104 | Market Street & Middle Sound Loop Road | Park & Ride | Existing parking available (10 spaces min); signage and service need to be added | \$15,000 |
| 8 | PT-96 | Carolina Beach Road at Snow's Cut Bridge | Park & Ride | Existing parking available (10 spaces min); signage and service need to be added | \$15,000 |
| 9 | PT-98 | Galleria Mall | Park & Ride | Existing parking available (10 spaces min); signage and service need to be added | \$15,000 |
| 10 | PT-137 | Replacement LTV | Vehicle Update | Routine vehicle replacement | \$130,000 |
| 11 | PT-139 | Trolley Replacements | Vehicle Update | Vehicle Update | \$650,000 |
| 12 | PT-95 | Carolina Beach Road & S College Road | Park & Ride | Existing parking available (10 spaces min); signage and service need to be added | \$15,000 |
| 13 | PT-144 | Market Street Hight Capacity Transit Route | High Capacity Transit Route | Improve transit service and station/stop amenities including exclusive transit lanes, traffic signal priority and queue jumps. | \$154,660,000 |
| 14 | PT-151 | Wooster/Dawson High Capacity Transit Route | High Capacity Transit Route | Improve transit service and station/stop amenities including exclusive transit lanes, traffic signal priority and queue jumps. | \$37,400,000 |
| 15 | PT-30 | Front St SB at Chestnut St | Amenity Upgrades | Amenity Upgrades | \$30,000 |

Table I.3 - Public Transportation Priority Project List

| Final Rank | Project ID | Project Name | Project Type | Project Description | Project Cost (2024 \$) |
|------------|------------|---|-----------------------------|--|------------------------|
| 16 | PT-45 | Market St EB at Barclay Hills Dr | Amenity Upgrades | | \$30,000 |
| 17 | PT-49 | Market St EB at Wetsig Rd | Amenity Upgrades | | \$30,000 |
| 18 | PT-52 | Market St WB at 29th St (YMCA) | Amenity Upgrades | | \$30,000 |
| 19 | PT-79 | Shipyards Blvd EB at Rutledge Dr | Amenity Upgrades | | \$30,000 |
| 20 | PT-2 | NC133/River Rd SE at Belville Elementary | Amenity Upgrades | | \$30,000 |
| 21 | PT-112 | Reinstate Route 204 | Route | Reinstate the service of route 204 | \$1,200,000 |
| 22 | PT-77 | Rutledge Dr WB at Vance St | Amenity Upgrades | | \$30,000 |
| 23 | PT-150 | Shipyards Boulevard High Capacity Transit Route | High Capacity Transit Route | Improve transit service and station/stop amenities including exclusive transit lanes, traffic signal priority and queue jumps. | \$61,600,000 |
| 24 | PT-51 | Market St WB at 16th St | Amenity Upgrades | | \$30,000 |
| 25 | PT-62 | Medical Center Dr WB at Silver Stream Ln | Amenity Upgrades | | \$30,000 |
| 26 | PT-124 | New Route to Porters Neck, Heavy Duty Bus | Route | Extend existing route requiring additional bus for new route and operational costs | \$1,200,000 |
| 27 | PT-18 | Carolina Beach Rd NB at Wellington Ave | Amenity Upgrades | | \$30,000 |
| 28 | PT-86 | Wellington Ave EB at Wonder Wy | Amenity Upgrades | | \$30,000 |
| 29 | PT-16 | Carolina Beach Rd NB at Independence Blvd | Amenity Upgrades | | \$30,000 |
| 30 | PT-47 | Market St EB at Kerr Ave (Food Lion Plaza) | Amenity Upgrades | | \$30,000 |
| 31 | PT-53 | Market St WB at 30th St (YMCA) | Amenity Upgrades | | \$30,000 |
| 32 | PT-3 | 16th St SB at Wright St | Amenity Upgrades | | \$30,000 |
| 33 | PT-22 | Dawson St EB at 14th St | Amenity Upgrades | | \$30,000 |
| 34 | PT-103 | Leland Town Hall | Park & Ride | | \$10,000 |
| 35 | PT-146 | New Centre Drive High Capacity Transit Route | High Capacity Transit Route | Improve transit service and station/stop amenities including exclusive transit lanes, traffic signal priority and queue jumps. | \$15,180,000 |

Table I.3 - Public Transportation Priority Project List

| Final Rank | Project ID | Project Name | Project Type | Project Description | Project Cost (2024 \$) |
|------------|------------|---|-----------------------------|--|------------------------|
| 36 | PT-147 | Oleander Drive High Capacity Transit Route | High Capacity Transit Route | Improve transit service and station/stop amenities including exclusive transit lanes, traffic signal priority and queue jumps. | \$136,400,000 |
| 37 | PT-149 | S 16th/S 17th St High Capacity Transit Route | High Capacity Transit Route | Improve transit service and station/stop amenities including exclusive transit lanes, traffic signal priority and queue jumps. | \$85,800,000 |
| 38 | PT-56 | Market St WB at Princess Place Dr | Amenity Upgrades | | \$30,000 |
| 39 | PT-114 | Restructure Trolley Route | Route | Restructure Trolley to connect downtown to nearby commercial districts, and transit service | \$1,100,000 |
| 40 | PT-54 | Market St WB at Bonefish Grill | Amenity Upgrades | | \$30,000 |
| 41 | PT-141 | Carolina Beach Road High Capacity Transit Route | High Capacity Transit Route | Improve transit service and station/stop amenities including exclusive transit lanes, traffic signal priority and queue jumps. | \$92,400,000 |
| 42 | PT-28 | Front St NB at Grace St | Amenity Upgrades | | \$30,000 |
| 43 | PT-118 | Increased frequency to 30 minute services on next to most productive services | Route | Routes 103, 105, 106, 107, 109, 202, 206 | \$2,400,000 |
| 44 | PT-92 | US17/74/76 & NC133/ River Road SE (Belville) | Park & Ride | | \$10,000 |
| 45 | PT-142 | College Road High Capacity Transit Route | High Capacity Transit Route | Improve transit service and station/stop amenities including exclusive transit lanes, traffic signal priority and queue jumps. | \$151,800,000 |
| 46 | PT-50 | Market St WB at 10th St | Amenity Upgrades | | \$30,000 |
| 47 | PT-65 | New Hanover Regional Medical Center | Amenity Upgrades | | \$30,000 |
| 48 | PT-84 | Wellington Ave EB at 17th St | Amenity Upgrades | | \$30,000 |
| 49 | PT-24 | Doctors Cir WB at Cypress Grove Dr | Amenity Upgrades | | \$30,000 |
| 50 | PT-31 | Front St SB at Market St | Amenity Upgrades | | \$30,000 |
| 51 | PT-23 | Dawson St EB at 6th St | Amenity Upgrades | | \$30,000 |

Table I.3 - Public Transportation Priority Project List

| Final Rank | Project ID | Project Name | Project Type | Project Description | Project Cost (2024 \$) |
|------------|------------|--|-----------------------------|--|------------------------|
| 52 | PT-63 | Medical Center Dr WB at Carolina Beach Rd | Amenity Upgrades | | \$30,000 |
| 53 | PT-85 | Wellington Ave EB at Troy Dr | Amenity Upgrades | | \$30,000 |
| 54 | PT-26 | Emory St NB at Creekwood Community Center | Amenity Upgrades | | \$30,000 |
| 55 | PT-48 | Market St EB at Walton Rd | Amenity Upgrades | | \$30,000 |
| 56 | PT-148 | Princess Place/Rankin, Red Cross High Capacity Transit Route | High Capacity Transit Route | Improve transit service and station/stop amenities including exclusive transit lanes, traffic signal priority and queue jumps. | \$48,400,000 |
| 57 | PT-145 | Military Cutoff High Capacity Transit Route | High Capacity Transit Route | Improve transit service and station/stop amenities including exclusive transit lanes, traffic signal priority and queue jumps. | \$50,600,000 |
| 58 | PT-43 | Market St EB at 6th St | Amenity Upgrades | | \$30,000 |
| 59 | PT-78 | Shipyards Blvd EB at Reflections Lp | Amenity Upgrades | | \$30,000 |
| 60 | PT-32 | Front St SB at Orange St | Amenity Upgrades | | \$30,000 |
| 61 | PT-46 | Market St EB at Cinema Dr | Amenity Upgrades | | \$30,000 |
| 62 | PT-80 | S College Rd NB at Chili's Restaurant | Amenity Upgrades | | \$30,000 |
| 63 | PT-81 | S College Rd NB at Maple Ave | Amenity Upgrades | | \$30,000 |
| 64 | PT-125 | Pleasure Island Trolley, with Bus Stop at Ferry, and Amenities | Route | New trolley route from Carolina Beach Town Hall to the Aquarium requiring additional capital and operational costs | \$1,200,000 |
| 65 | PT-5 | 17th St NB at Medical Center Dr | Amenity Upgrades | | \$30,000 |
| 66 | PT-6 | 17th St SB at Glen Meade Dr | Amenity Upgrades | | \$30,000 |
| 67 | PT-20 | Castle St EB at 5th St | Amenity Upgrades | | \$30,000 |
| 68 | PT-29 | Front St SB at Ann St | Amenity Upgrades | | \$30,000 |
| 69 | PT-34 | Greenfield St EB at 13th St | Amenity Upgrades | | \$30,000 |
| 70 | PT-35 | Market St & Middle Sound Loop Rd | Amenity Upgrades | | \$30,000 |

Table I.3 - Public Transportation Priority Project List

| Final Rank | Project ID | Project Name | Project Type | Project Description | Project Cost (2024 \$) |
|------------|------------|--|-----------------------------|--|------------------------|
| 71 | PT-37 | Greenfield St WB at 8th St | Amenity Upgrades | | \$30,000 |
| 72 | PT-38 | Greenfield St WB at Marigold Dr | Amenity Upgrades | | \$30,000 |
| 73 | PT-57 | Market St WB at Red Roof Inn | Amenity Upgrades | | \$30,000 |
| 74 | PT-58 | Market St WB at Sycamore St | Amenity Upgrades | | \$30,000 |
| 75 | PT-60 | McRae St NB at Fanning St | Amenity Upgrades | | \$30,000 |
| 76 | PT-61 | McRae St SB at Campbell St | Amenity Upgrades | | \$30,000 |
| 77 | PT-67 | Nixon St WB at 5th St | Amenity Upgrades | | \$30,000 |
| 78 | PT-71 | Princess Place Dr EB at Mary S Mosley | Amenity Upgrades | | \$30,000 |
| 79 | PT-74 | Princess Place Dr WB at Greendale Dr | Amenity Upgrades | | \$30,000 |
| 80 | PT-75 | Princess Place Dr WB at Birchwood Dr | Amenity Upgrades | | \$30,000 |
| 81 | PT-76 | Rankin St WB at 11th St | Amenity Upgrades | | \$30,000 |
| 82 | PT-120 | Increased span on Sundays | Route | Entire system | \$210,000 |
| 83 | PT-107 | Terminus of Independence Blvd | Park & Ride | | \$15,000 |
| 84 | PT-110 | US17 at Walmart | Park & Ride | Existing parking available (10 spaces min); signage and service need to be added | \$15,000 |
| 85 | PT-143 | Independence Boulevard High Capacity Transit Route | High Capacity Transit Route | Improve transit service and station/stop amenities including exclusive transit lanes, traffic signal priority and queue jumps. | \$44,000,000 |
| 86 | PT-4 | 17th St NB at Glen Meade Dr | Amenity Upgrades | | \$30,000 |
| 87 | PT-41 | Market St EB at 12th St | Amenity Upgrades | | \$30,000 |
| 88 | PT-44 | Market St EB at 9th St (Cape Fear Museum) | Amenity Upgrades | | \$30,000 |
| 89 | PT-55 | Market St WB at Kerr Ave | Amenity Upgrades | | \$30,000 |
| 90 | PT-66 | Nixon St EB at 5th St | Amenity Upgrades | | \$30,000 |

Table I.3 - Public Transportation Priority Project List

| Final Rank | Project ID | Project Name | Project Type | Project Description | Project Cost (2024 \$) |
|------------|------------|--|------------------|--|------------------------|
| 91 | PT-68 | Oleander Dr EB at Fordham Rd | Amenity Upgrades | | \$30,000 |
| 92 | PT-69 | Oleander Dr WB at Floral Pkwy | Amenity Upgrades | | \$30,000 |
| 93 | PT-40 | Lennon Dr SB at Market St | Amenity Upgrades | | \$30,000 |
| 94 | PT-42 | Market St EB at 16th St | Amenity Upgrades | | \$30,000 |
| 95 | PT-19 | Carolina Beach Rd NB at Willoughby Park Ct | Amenity Upgrades | | \$30,000 |
| 96 | PT-21 | Darlington Ave NB at Metting Rd | Amenity Upgrades | | \$30,000 |
| 97 | PT-59 | Martin St EB at 10th St | Amenity Upgrades | | \$30,000 |
| 98 | PT-91 | Routine Capital | Maintenance | Routine capital including bus stop shelters, benches, shop equipment, spare parts, engines, farebox, service vehicles, etc. | \$450,000 |
| 99 | PT-126 | Public Transportation to and from the Ferry | Route | Trolley route in Carolina Beach providing access to the Ferry | \$30,000 |
| 100 | PT-134 | WiFi on Buses | Technology | Install WiFi system on community routes | \$144,000 |
| 101 | PT-111 | US421 & Cowpens Landing Road | Park & Ride | | \$15,000 |
| 102 | PT-133 | Solar Lights at Bus Stops | Technology | Upgrade 50% of shelters to solar powered lights, improving safety and visibility- locations to be those stops identified as needing lighting | \$200,000 |
| 103 | PT-8 | 17th St SB at Shipyard Blvd | Amenity Upgrades | | \$30,000 |
| 104 | PT-17 | Carolina Beach Rd NB at Shipyard Blvd | Amenity Upgrades | | \$30,000 |
| 105 | PT-7 | 17th St SB at Harbour Dr | Amenity Upgrades | | \$30,000 |
| 106 | PT-129 | Wrightsville Beach On-Demand (Shuttle Route) \$200,000 Operation Cost | Route | | \$200,000 |
| 107 | PT-83 | St Andrews Dr NB at Crosswinds Apartments | Amenity Upgrades | | \$30,000 |
| 108 | PT-94 | Cape Fear Community College North Campus Park and Ride | Park & Ride | Amenity upgrades including bench, trash can, and bike rack | \$35,000 |
| 109 | PT-119 | Increased span on Saturdays | Route | Entire system | \$350,000 |

Table I.3 - Public Transportation Priority Project List

| Final Rank | Project ID | Project Name | Project Type | Project Description | Project Cost (2024 \$) |
|------------|------------|---|-----------------------------|---|------------------------|
| 110 | PT-154 | College Rd SB at Hodge Crossing | Amenity Upgrades | | \$30,000 |
| 111 | PT-1 | Wave Central Station - Forden Station | Additional Parking | No enough existing parking available-potential future development; signage and service would need to be added | \$275,000 |
| 112 | PT-14 | Carolina Beach Rd NB at College Rd | Amenity Upgrades | | \$30,000 |
| 113 | PT-15 | Carolina Beach Rd NB at Horn Rd | Amenity Upgrades | | \$26,950 |
| 114 | PT-39 | Independence Mall | Amenity Upgrades | | \$30,000 |
| 115 | PT-106 | Mayfaire Mall | Park & Ride | Existing parking available (10 spaces min); signage and service need to be added | \$15,000 |
| 116 | PT-130 | Satellite Beach Parking with Bus Station Hub | Route/Park & Ride | No existing parking is available but parking could be provided by potential future development; additional signage and service would need to be added | \$1,215,000 |
| 117 | PT-132 | Modern Fare Collection Service | Technology | | \$165,500 |
| 118 | PT-135 | Electric Bus Investment | Vehicle Update | | \$500,000 |
| 119 | PT-152 | EV Charging Station | Technology | Install charging stations at Padgett and Forden Stations for EVs | \$50,000 |
| 120 | PT-100 | I-40 & Holly Shelter Road | Park & Ride | | \$15,000 |
| 121 | PT-101 | I-140 & US74/76 | Park & Ride | | \$15,000 |
| 122 | PT-123 | New Route through Masonboro Loop Road with Hourly Service, Heavy Duty Bus | Route | New route on Masonboro Loop Road requiring additional bus for new route and operational costs | \$1,200,000 |
| 123 | PT-140 | 3rd Street High Capacity Transit Route | High Capacity Transit Route | Improve transit service and station/stop amenities including exclusive transit lanes, traffic signal priority and queue jumps. | \$39,600,000 |
| 124 | PT-122 | Masonboro Bus | Route | | \$1,200,000 |
| 125 | PT-70 | Princess Place Dr EB at 30th St | Amenity Upgrades | | \$30,000 |
| 126 | PT-72 | Princess Place Dr WB at 30th St | Amenity Upgrades | | \$30,000 |
| 127 | PT-108 | US17 & NC210 (Island Creek Rd) | Park & Ride | Existing parking available (10 spaces min); signage and service need to be added | \$15,000 |

Table I.3 - Public Transportation Priority Project List

| Final Rank | Project ID | Project Name | Project Type | Project Description | Project Cost (2024 \$) |
|------------|------------|--|------------------|---|------------------------|
| 128 | PT-113 | Increased micromobility in areas to meet fixed route patterns | Route | Castle Hayne was specifically called out in the grant award, but there's some flexibility. Some would go toward the previous 104 service area once those resources are reallocated. | N/A |
| 129 | PT-131 | Add Bus stop to Wrightsville Beach | Stop | | \$30,000 |
| 130 | PT-153 | Autonomous Vehicle Pilot | Technology | Deploy autonomous vehicles in select locations | \$1,470,000 |
| 131 | PT-93 | Barclay West | Park & Ride | Existing parking available (10 spaces min); signage and service need to be added | \$15,000 |
| 132 | PT-102 | I-140 at Cedar Hill Road | Park & Ride | | \$15,000 |
| 133 | PT-105 | Market Street & Porters Neck Road | Park & Ride | Existing parking available (10 spaces min); signage and service need to be added | \$15,000 |
| 134 | PT-128 | Service to Riverlights Development | Route | | \$1,200,000 |
| 135 | PT-25 | E Stewart Cir NB at Spaulding Dr | Amenity Upgrades | | \$30,000 |
| 136 | PT-73 | Princess Place Dr WB at Montgomery Dr | Amenity Upgrades | | \$30,000 |
| 137 | PT-82 | S College Rd SB at Randall Pkwy | Amenity Upgrades | | \$30,000 |
| 138 | PT-121 | Increased span on weekdays | Route | Entire system | \$2,500,000 |
| 139 | PT-116 | Fixed Route Connection to Carolina Beach | Route | | \$1,200,000 |
| 140 | PT-127 | Service to Bayshore Walmart | Route | | \$1,200,000 |
| 141 | PT-64 | New Centre Dr SB at Red Roof Inn | Amenity Upgrades | | \$30,000 |
| 142 | PT-117 | Increased frequency to 15-minute service on most productive routes | Route | Routes 101, 108, 201, 205, 210 | \$3,500,000 |



The scoring matrix used to score and rank these projects can be found in Chapter 4.

Figure I-3:
 Public Transportation Priority Projects

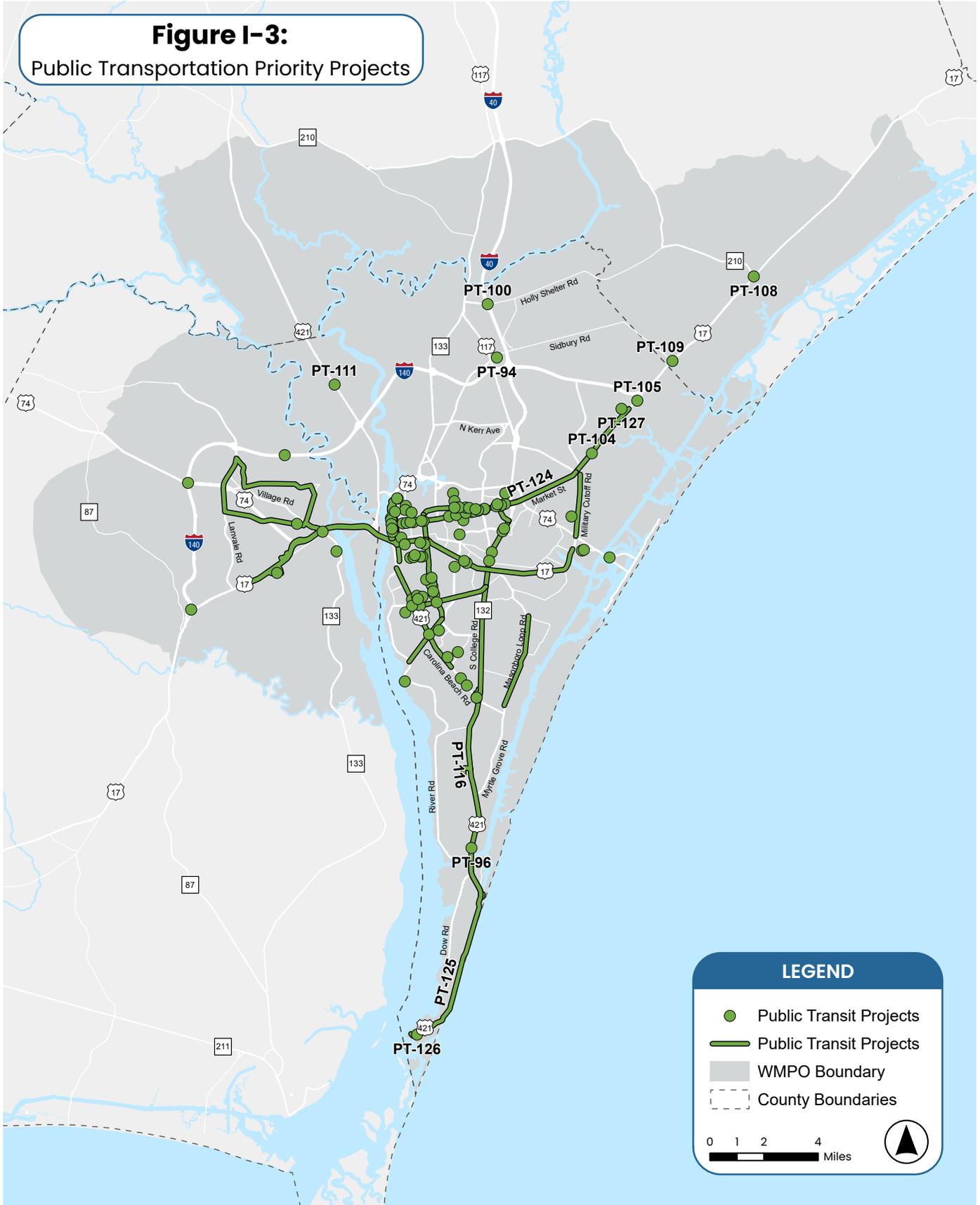




Figure I-4:
 Public Transportation Priority Projects
 Central New Hanover County

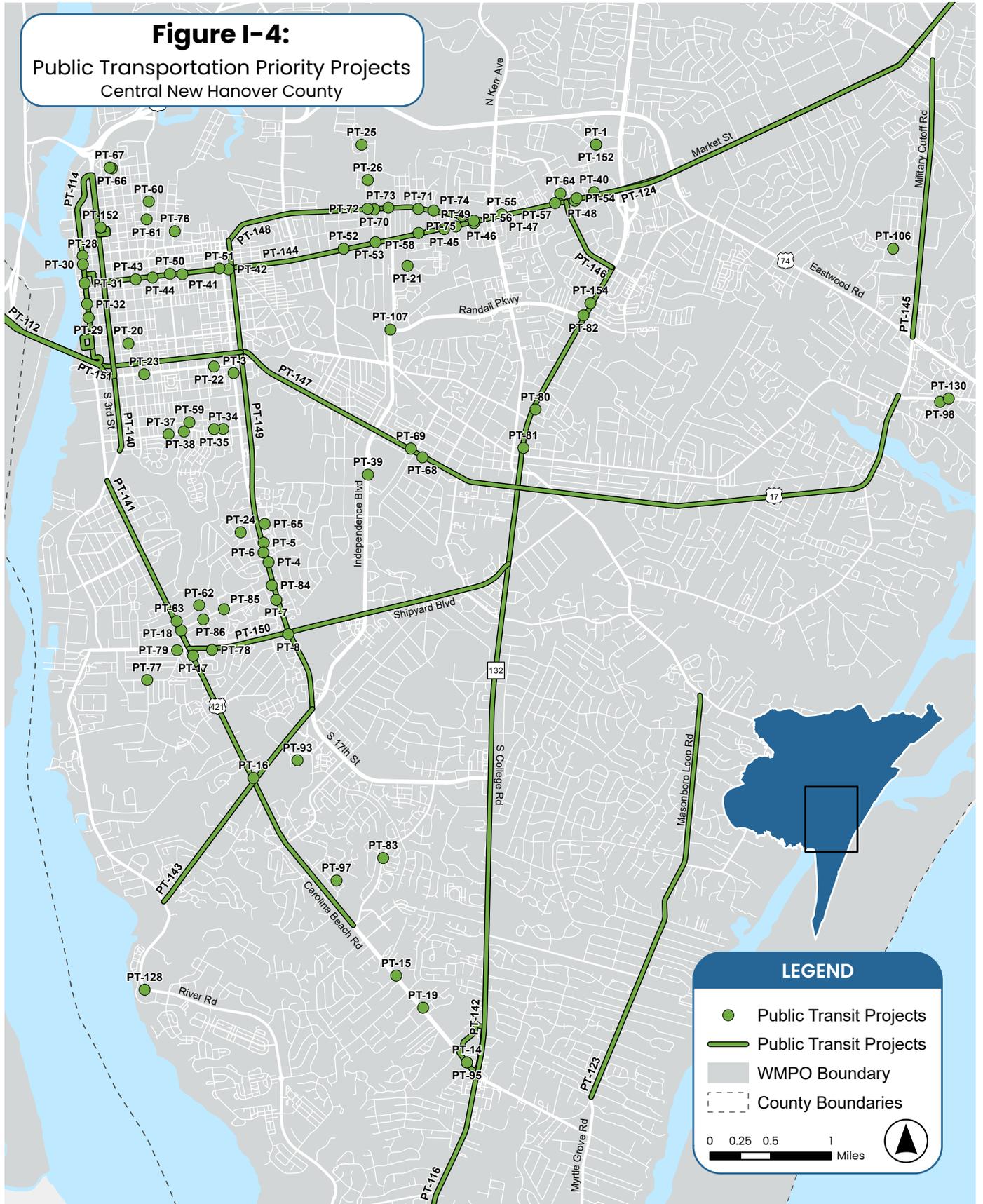
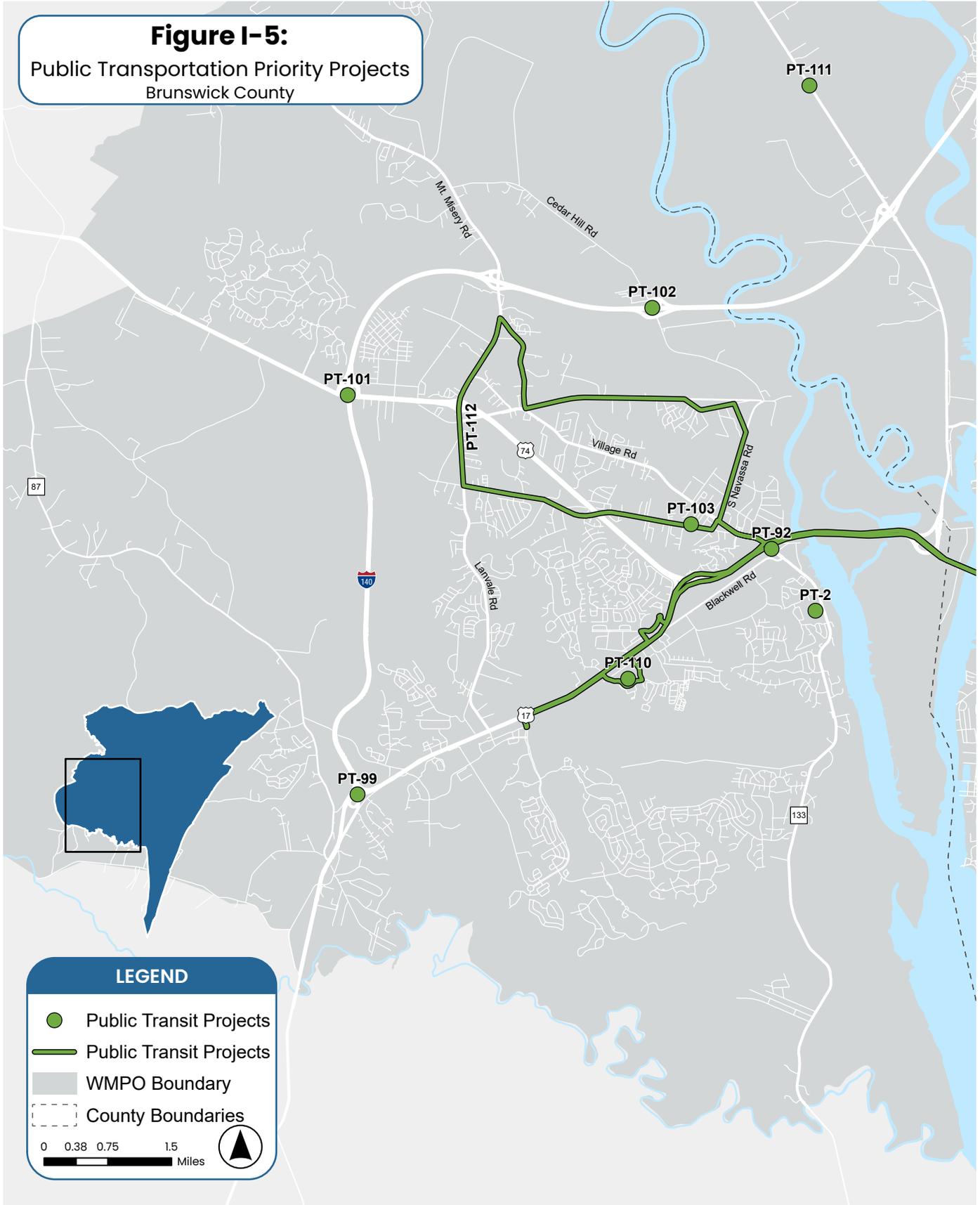


Figure I-5:
 Public Transportation Priority Projects
 Brunswick County



Sources

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Table of Contents

1. National and State Trends
2. The WMPO Congestion Management Process
3. The Wilmington Regional Travel Demand Model
4. Fiscally Constrained Roadway Project Cross Sections

National and State Trends

By analyzing national and state trends, the WMPO can proactively adapt the local transportation network to better accommodate future mobility needs while promoting efficiency and sustainability.

The Infrastructure Investment and Jobs Act (2021)

The federal government influences infrastructure development at the national level by developing policy and funding sources to guide state projects and program implementation. On November 15, 2021, the Infrastructure Investments and Jobs Act (IIJA), also known as the Bipartisan Infrastructure Law (BIL), was signed into law. This law authorized \$1.2 trillion for transportation and infrastructure related spending with the goal of revitalizing infrastructure across multiple sectors in the country. Significant portions of funding were dedicated to the improvement of highways, bridges, and roads, with a large focus on repairing and upgrading aging infrastructure to reduce congestion and enhance safety. The law also allocated funds for the enhancement of public transportation systems, the modernization of freight networks, and the expansion of electric vehicle (EV) charging facilities across the country. Several discretionary grant programs were created to provide competitive federal funding opportunities for state and local governments, tribal entities, and organizations such as MPOs. Key programs include but, are not limited to:

- Bridge Investment Program
- Nationally Significant Freight & Highway Projects (INFRA)
- Strengthening Mobility and Revolutionizing Transportation (SMART)
- Safe Streets and Roads for All (SS4A)

These discretionary grants offer flexibility in funding allocations, allowing for transportation agencies and other eligible applicants to address local needs and invest in projects that improve mobility, safety, sustainability, and resilience across the transportation network while fostering economic development through job creation.

Other federal funding programs exist to provide transportation funding. Beginning in 2019, Federal Highway Administration (FHWA) shifted focus to Public-Private Partnerships (P3s) as an innovative, non-traditional funding opportunity. Developed in partnership with USDOT, Public-Private Partnership (P3) Procurement: A Guide for Public Owners is now available to provide guidance and a tool kit for attaining and implementing roadway and transit projects through this newer type of funding source.

Innovation and Technology

Autonomous vehicles will significantly affect how people and goods are moved throughout the United States and the world. The regulations and principles that will guide the introduction of this emerging technology will be just as impotent as the technology itself. The USDOT began to address these issues in its 2020 document, Ensuring American Leadership in Automated Vehicle Technologies. USDOT then further built upon the principles outlined in the 2020 document through its Automated Vehicles Comprehensive Plan in 2021, which defined goals to achieve the vision for Automated Driving Systems (ADS).

Innovations in traditional roadway use and technologies continue to emerge. Semi-autonomous vehicles are continually developing new features, further advancing vehicles toward full autonomy. Fully autonomous freight and transit vehicles are already being produced and tested in pilot programs across the United States. For example, the Connected Autonomous Shuttle Support Innovation (CASSI) program is an initiative being undertaken by NCDOT to explore the implementation of autonomous shuttle technology for public transportation. CASSI has focused on testing low-speed, all-electric, self-driving shuttles to assess their feasibility, safety, and public acceptance.

Pilot deployments of CASSI have occurred in various locations within the state including at the 2023 NC Transportation Summit, at the Wright Brothers National Memorial in collaboration with the National Park Service, at Fred G. Bond Metro Park in collaboration with the Town of Cary, and at some universities such as UNC Charlotte and NC State.

USDOT Automated Vehicle Technology Priorities

Protecting Users & Communities

- Prioritize safety
- Emphasize security and cybersecurity
- Ensure privacy and data security
- Enhance mobility and accessibility

Promoting Efficient Markets

- Remain technology-neutral
- Protect American innovation and creativity
- Modernize regulations

Facilitating Coordinated Efforts

- Promote consistent standards and policies
- Ensure a consistent federal approach
- Improve transportation system-level effects

USDOT Automated Vehicles Comprehensive Plan Goals



Promote Collaboration and Transparency



Modernize the Regulatory Environment



Prepare the Transportation System

Private companies such as Waymo and Cruise are industry leaders through their development of autonomous ride-hailing services using self-driving vehicles. Both companies operate fully driverless robotaxis, with Waymo emphasizing AI-powered navigation and Cruise focusing on all-electric urban mobility. While neither company is fully operational in North Carolina currently, pilot programs have occurred in larger cities such as Charlotte and future service is likely. In response to these advancements, many states are beginning to consider infrastructure and technology needs within the existing system to support these innovations. The following are assumptions that can be made about the onset of autonomous vehicles:

Benefits of Passenger Automation

- **Safety:** 94% of crashes are due to human error. Autonomous vehicles, which are connected and communicating with one another, would be less likely to be involved in crashes.
- **Economic and Social Benefits:** Eliminating crashes caused by drivers could reduce the economic and societal costs of loss of life and decreased quality of life injuries.
- **Efficiency and Convenience:** Autonomous vehicles could contribute to smoother traffic flow and reduced congestion.
- **Mobility:** Autonomous vehicles could expand mobility for millions who cannot drive or lack access to a vehicle.

Additional Considerations

- **Parking:** Less parking may be needed with widespread implementation of autonomous vehicles. Minimum parking requirements for developments may be able to be reduced or even eliminated, leading to more peripheral development.
- **Increased VMT:** With those who were previously unable to drive on their own becoming mobile, there is an expected increase in VMT which will have to be addressed through increased roadway capacity or more efficient travel modes such as microtransit or carpooling.
- **Congestion:** Smoother traffic flow and new opportunities for seniors and the disabled could create more trips, placing even more vehicles on the road.
- **Vehicle Ownership:** Autonomous vehicles might end traditional vehicle ownership as we know it in favor of transportation as a service.
- **Fuel Source:** With the advancements in EV technology that will likely occur by the time autonomous vehicles become mainstream, the provision of charging stations will become increasingly important.

Autonomous Vehicles in the Movement of Freight

The benefits of autonomous trucks will first be recognized through platooning. Truck platooning is when two or more trucks use vehicle-to-vehicle communication technology and automated support to travel in convoy. While the driver is responsible for steering, acceleration and braking is controlled by the lead truck, maintaining a set distance between vehicles. This allows for shorter following distances, which reduces aerodynamic drag providing energy savings and lower vehicle emissions. The speed of the lead truck may be controlled manually or by adaptive cruise control (ACC). Truck platooning also improves safety by reducing driver workload and decreasing reaction time with automatic emergency braking (AEB) and other automated support features.

Resiliency

NCDOT has continued to focus on improving and implementing resilient infrastructure in response to major weather events that impact the region and state alike. Resiliency is the ability to anticipate, prepare for, and adapt to changing conditions and withstand, respond to, and recover rapidly from disruptions. Future major events are inevitable, thus necessitating the need to consider potential impacts during the planning and design phases of transportation infrastructure. In November 2021, NCDOT adopted an official resilience policy. This policy emphasizes NCDOT's commitment to strengthening the resilience of North Carolina's transportation network by anticipating, preparing for, and adapting to disruptions. The policy integrates risk management, planning, and collaboration with other local, state, and federal agencies to maintain safe and efficient infrastructure. Following NCDOT's resilience policy, a statewide Resilience Improvement Plan (RIP) was adopted in June 2024. The NCDOT RIP builds upon the previously established resilience policy by providing a detailed framework and actions steps for assessing, prioritizing, and implementing projects that bolster resilience across the state-maintained transportation network. This RIP applies a risk based, data-driven approach to infrastructure planning, working to ensure that transportation assets are prepared for and can recover from natural and human-made hazards.

As a result of major flooding impacts from Hurricanes Matthew and Florence, NCDOT has prioritized funding for improvements along the I-95 and I-40 corridors. The agency has been successful in securing both INFRA and BUILD grants to contribute to the estimated \$685 million project.

During the life of this plan, a key focus for both NCDOT and the WMPO will be to determine a metric for evaluating projects for resiliency. This plan recommends considerations for resiliency during the planning, design, and construction of transportation projects.

Safety

To improve safety on the roadway network, NCDOT has also placed an emphasis on modernization improvements to existing infrastructure. The department has supported and implemented relatively new and innovative corridor, intersection, and interchange design into its roadway projects, along with technology and policies that incorporate all users of the transportation network.

Reduced-Conflict Intersection

One of the most utilized projects by NCDOT to maximize efficiency and improve the safety of a corridor is a Reduced Conflict Intersection (RCI). Corridors with increasing traffic volumes and high crash rates are good candidates for an RCI, previously known as a Superstreet. Although there are variations to the design, all RCIs function the same by reducing the potential conflict points where users of the network may collide.

The US17 corridor in Leland and in Pender County have multiple examples of RCIs and others have been planned in the region to maximize the efficiency of the existing infrastructure before resorting to expansion.

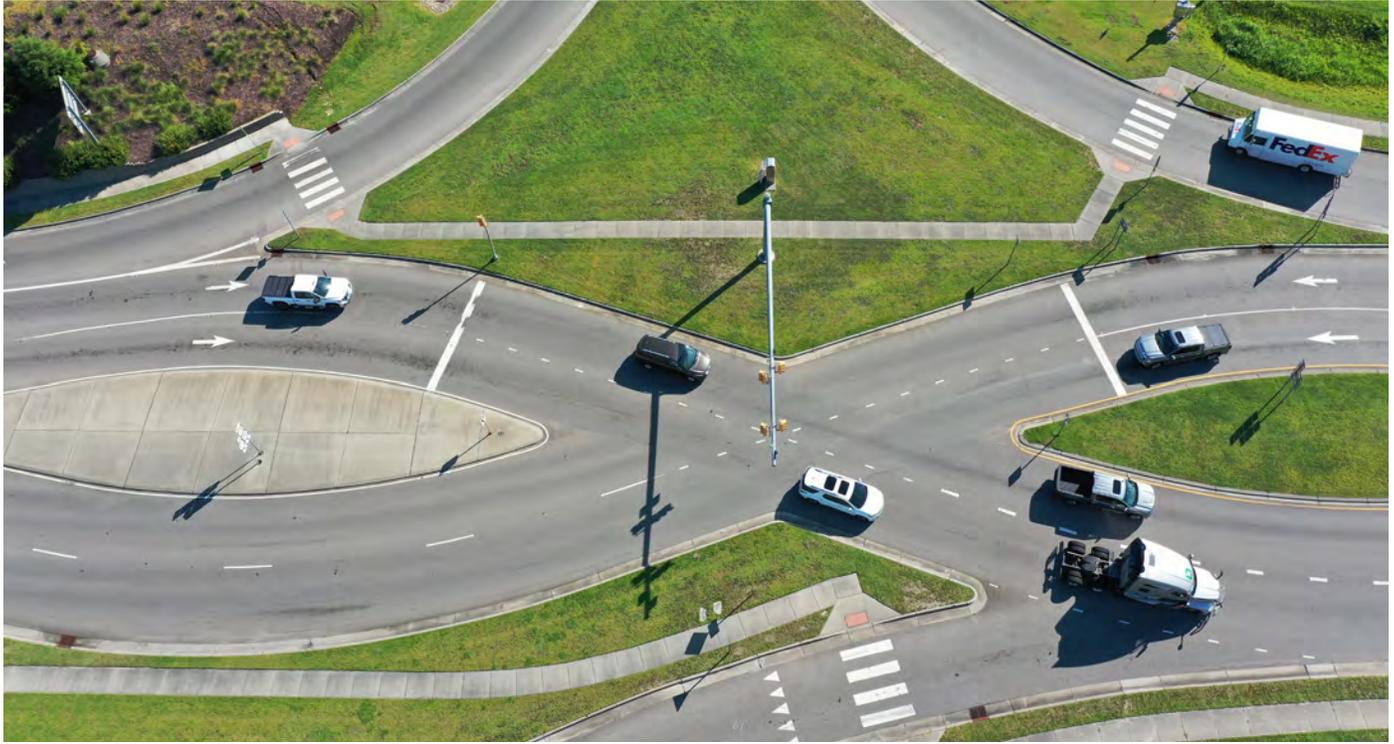


Reduced Conflict Intersection (RCI) on US17 at Scotts Hill Road in Pender County.

Diverging Diamond Interchange

Diverging Diamond Interchanges (DDIs) provide increased safety and mobility while offering a lower cost option to traditional interchanges. The interchange functions by crossing the right side of the road to the left side and then returning to its original side. This action removes conflicting left-turning movements—on the left side of the road, there is no opposing through movement. DDIs also reduce the number of potential conflict points, offering a safe alternative to traditional interchange design. Additionally, these interchanges can accommodate a greater capacity for left-turning movements.

A DDI was constructed at the US17/74/76/Causeway Interchange with NC133/Village Road NE in Leland, and was opened to traffic in 2016.



Diverging Diamond Interchange (DDI) on NC 133 at the Leland/Belville municipal boundary.

Continuous Flow Intersection

This intersection design is like a DDI where the left side of the roadway is crossed to the right. Continuous Flow Intersections (CFIs) differ, however, as they are intended for use on at-grade, four-legged intersections. The left turn crossover prior to the main intersection allows for the left and through movements to operate simultaneously. CFIs also reduce the number of potential conflict points as compared to traditional intersection design.

A CFI was selected by NCDOT as the preferred alternative for the NC132/College Road and US421/Carolina Beach Road intersection improvement in New Hanover County.

Quadrant Roadway Intersection

Quadrant Roadway Intersection (QRI) design offers an increase in operational efficiency through a reduction in travel time and delay at intersections of two heavily utilized roadways. QRIs remove the left-turning movements from the four legs of the intersection and reroute these movements to roadways intersecting the main arterial roadways elsewhere.

As part of the Kerr Widening roadway project, a QRI design was implemented at the intersection of US17 BUS/Market Street and Kerr Avenue in Wilmington.



Quadrant Roadway Intersection (QRI) at Kerr Avenue and Market Street in Wilmington, with Cinema Drive and Birchwood Drive as connectors.

Intelligent Transportation Systems

Another continually advancing technology likely to have a substantial impact on roadways in the region is ITS. Components of this broad term include traffic signal monitoring and coordination, signal preemption, and ITS. The City of Wilmington currently operates a Traffic Management Center (TMC), which monitors a system of 247 traffic signals inside city limits and in some portions of unincorporated New Hanover County, through a contract with NCDOT. The operation and monitoring of these signals allows for real-time solutions to heavy congestion, accidents, or other events having a major impact on the flow of traffic. The constantly monitored system can be adjusted to better accommodate traffic in many of these instances. Benefits of this system management include improved safety through a potential reduction in crashes; increased mobility due to decreasing congestion; and positive environmental benefits resulting from the reduction of idling vehicles in traffic. Traffic video camera images of the regional system are shared with NCDOT's Traveler Information Management System (TIMS), connecting the existing performance of the regional network with a system monitoring the statewide network. The continuation and expansion of this program is recommended, and its positive future impacts will depend greatly on regular investments to upgrade the system's technology, as well as the integration of new advancements in communication technologies as they become available.

The WMPO is currently updating its ITS plan, with expected adoption in Fall 2025.

System User Data Collection

Advancements in vehicle technology have enabled more extensive data collection through larger sample sizes and broader coverage. Using methods such as cellular triangulation, vehicle probe data, and smartphone applications, data can now be gathered remotely from a wide range of sources. One of the key benefits of cellular data collection compared to traditional Bluetooth detection systems is that it does not require specific infrastructure to detect vehicles.

Additionally, cellular data is effective in all weather conditions and provides broader coverage. Similarly, vehicle probe data which is collected from GPS-enabled vehicles, offers real-time traffic information that can be used to monitor traffic flow and travel times. A limitation of cellular and vehicle probe data is that it is typically owned by private entities and can often only be accessed through partnerships with consultants who have the necessary relationships and software to analyze the raw data. An example of a publicly accessible dataset is the National Performance Management Research Data Set (NPMRDS). This dataset, which was introduced by the federal government, offers travel time and delay data nationwide for major roadways. This dataset was instrumental in the development of the WMPO's 2022 Congestion Management Process (CMP) Report.

The WMPO Congestion Management Process

The results of the 2010 Census revealed that the WMPO's Urbanized Area population had exceeded 200,000 people. In 2012, the WMPO was designated as a Transportation Management Area (TMA). In addition to becoming eligible to receive federal direct attributable funding, the WMPO was also required to develop and maintain a Congestion Management Process (CMP). Congestion management is the application of strategies to improve transportation system performance and reliability by reducing the adverse impacts of congestion on the movement of people and goods. Requirements of the CMP include:

- Development of congestion management objectives
- Establishment of measures of multimodal transportation system performance
- Collection of data and system performance monitoring to define the extent and duration of congestion and determine the causes of congestion
- Identification of congestion management strategies
- Implementation of strategies, including identification of an implementation schedule and possible funding sources for each strategy
- Evaluation of the effectiveness of implemented strategies

The WMPO utilized a cooperative process with the City of Wilmington's traffic engineering staff to develop its first CMP, which was adopted by the WMPO Board in 2014. The CMP identified the region's critical roadway corridors and established multimodal performance measures to monitor congestion along each corridor. Additionally, the process identified mitigation strategies to employ to reduce congestion along each monitored corridor. The WMPO monitored these corridors on a biennial basis until the 2022 CMP Report. Following the adoption of the 2022 CMP, the WMPO adjusted to developing the CMP Report on a 5-year basis to alternate with MTP development schedules. The monitoring of identified corridors results in the production of a report that evaluates congestion changes within the network and makes recommendations on mitigation strategies to implement. These strategies were considered throughout the development of this plan as potential projects and policies. Metrics collected through system monitoring were also used to score and prioritize roadway projects.

Data Collection and Analysis

The WMPO's 2022 CMP Biennial Report analyzed 33 corridors critical to the region's transportation network. With advancements in data collection technologies, the WMPO utilized the National Performance Management Research Data Set (NPMRDS) on 30 available corridors for the 2022 CMP. The NPMRDS provides real-time travel time and speed data passively collected from vehicles via GPS and/or cellular signals across the National Highway System (NHS). For the remaining 3 corridors where NPMRDS vehicle probe data was unavailable, the WMPO and City of Wilmington relied on manual data collection using a GPA and driving the corridors during peak hours to collect speeds and travel times.

Safety performance measure data was collected by the NCDOT Traffic Safety Unit through their Traffic Engineering Accident Analysis System (TEAAS) program. This program aggregates and geo-locates traffic incidents from law enforcement officials throughout the state of North Carolina. This program was used to collect data for vehicle crashes, bicycle crashes, and pedestrian crashes.

Volume performance metrics data was provided by the NCDOT Traffic Survey Group and included both average annual daily traffic (AADT) and average annual daily truck traffic (AADTT). The capacity performance metric data was sourced from the 2045 Wilmington Regional Transportation Demand Model.

Transit performance metric data for transit stops and ridership was provided by the Cape Fear Public Transportation Authority (Wave Transit). Passenger totals were aggregated for each roadway segment and a score is provided depending on the number of passengers based on Wave Transit’s FY20 and FY21 ridership reports.

Bicycle suitability data was developed by a WMPO study in 2022 while the pedestrian suitability data is based on regional sidewalk, crosswalk, and multi-use path data collected or created by WMPO.

The WMPO developed a systematic process to disperse points based on performance metrics to represent the collected data to compare data performance across segments. Mitigation strategies were assigned to address travel time, safety, volume, and multimodal performance. As shown in the tables below, higher scores in Table J.1 indicate worse travel time reliability and congestion, reflecting a greater need for congestion management strategies, while higher scores in Table J.2 indicate more multimodal facilities and stronger suitability for travel by alternative modes.

| Table J.1 - Travel Time/Reliability Scoring | |
|--|-----------------|
| Performance Metric | Points Possible |
| Volume/Capacity (V/C) | 10 |
| AM Delay Rate (minutes/miles) | 10 |
| PM Delay Rate (minutes/miles) | 10 |
| AM Travel Time Reliability (80th percentile Travel Time/50th percentile Travel Time) | 10 |
| PM Travel Time Reliability (80th percentile Travel Time/50th percentile Travel Time) | 10 |
| Crash Rate (crashes/mile) | 10 |
| Truck Volume (Average Annual Daily Truck Traffic) | 10 |
| Total | 70 |

| Table J.2 - Multimodal Scoring | |
|--------------------------------|-----------------|
| Performance Metric | Points Possible |
| Transit (Stops + Ridership) | 10 |
| Bicycle Suitability | 10 |
| Pedestrian Suitability | 10 |
| Bicycle Crashes | 10 |
| Pedestrian Crashes | 10 |
| Total | 50 |

The 2050 Wilmington Regional Travel Demand Model

NCDOT’s Transportation Planning Division (TPD) and WMPO staff coordinated with planning staff from each member jurisdiction to develop and verify socioeconomic data to update the base year of the model in 2021. 2021 household estimates were determined by using both 2020 Census data and 2021 Certificate of Occupancy data. 2021 employment estimate data was sourced from InfoUSA.

Base Year (2021) Household Estimates

Base year household estimates were completed using 2020 Census data and 2021 Certificate of Occupancy data for each of the three Wilmington Urban Area counties at the TAZ level. Census data was compared to American Community Survey (ACS) data to ensure accuracy.

| Location | Population | Number of Households | Seasonal Population | Vehicles |
|-------------------------|----------------|----------------------|---------------------|----------------|
| Brunswick County | 44,230 | 18,434 | 866 | 36,530 |
| New Hanover County | 222,972 | 99,948 | 15,222 | 178,092 |
| Pender County | 42,807 | 15,851 | 7,649 | 7,649 |
| Total Model Area | 310,009 | 134,233 | 23,737 | 548,017 |

Base Year (2021) Employment Estimates

NCDOT obtained base year employment data to be used in the model from InfoUSA, a organization that specialized in the collection of employment data. The data was checked for errors by NCDOT, and larger employees were contacted by WMPO staff to ensure the accuracy of the data. The same group of WMPO and NCDOT staff worked to develop growth rate estimates for each county based on areas experiencing the highest growth and presumed future development. These estimated rates were established at a Traffic Analysis Zone (TAZ) level. Planning staff from each member jurisdiction assigned a high, medium, or low designation for population and employment for each TAZ. These assignments were then applied to established rates determined by NCDOT. The existing roadway network of 2021 was also determined, and the list of existing and committed projects was reviewed and added.

| Location | Industry | Retail | Highway Retail | Service | Office | Total |
|-------------------------|---------------|---------------|----------------|---------------|---------------|----------------|
| Brunswick County | 17,871 | 1,015 | 1,133 | 2,136 | 1,513 | 7,578 |
| New Hanover County | 20,033 | 11,418 | 12,479 | 42,112 | 22,748 | 106,492 |
| Pender County | 2,496 | 679 | 1,326 | 2,553 | 1,732 | 8,786 |
| Total Model Area | 40,400 | 13,112 | 14,938 | 46,801 | 25,993 | 122,856 |

Future Year (2050) Household Projections

Household projections were completed for the 2050 planning horizon year. Using historical growth rates and the expertise of local planners on residential trends in the region, growth rates were established and applied to the base year household estimates within each TAZ.

| Table J.5 - Wilmington Regional Travel Demand Model: 2050 Population Estimates | | | | |
|--|----------------|----------------------|---------------------|----------------|
| Location | Population | Number of Households | Seasonal Population | Vehicles |
| Brunswick County | 151,913 | 63,856 | 3,009 | 126,602 |
| New Hanover County | 373,032 | 170,635 | 21,113 | 298,773 |
| Pender County | 81,454 | 31,127 | 14,235 | 63,826 |
| Total Model Area | 606,399 | 265,618 | 38,357 | 489,201 |

Future Year (2050) Employment Projections

Employment projections were also completed for the 2050 horizon year. Using historical growth trends, rates were established and applied to the base year employment estimates within each TAZ.

| Table J.6 - Wilmington Regional Travel Demand Model: 2050 Employment Estimates | | | | | | |
|--|---------------|---------------|----------------|----------------|---------------|----------------|
| Location | Industry | Retail | Highway Retail | Service | Office | Total |
| Brunswick County | 4,589 | 2,764 | 2,322 | 5,710 | 3,726 | 19,113 |
| New Hanover County | 28,571 | 23,739 | 23,992 | 108,714 | 44,996 | 230,258 |
| Pender County | 3,052 | 814 | 1,524 | 2,949 | 2,014 | 10,356 |
| Total Model Area | 36,392 | 27,317 | 27,838 | 117,373 | 50,736 | 259,727 |

Calibration and Adoption

Base year estimates and projected growth rates were reviewed by staff from each member jurisdiction to ensure accuracy and cohesion. When estimates and growth rates were agreed upon, the numbers were adopted to be used in the travel demand model.

Analysis

Utilizing the future growth rates that were established through collaboration with the WMPO’s member jurisdictions, the model provides density and growth projections for population and employment in the year 2050. The Wilmington Regional Model was then used to evaluate future roadway network scenarios utilizing the fiscally constrained roadway projects.

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Fiscally Constrained Roadway Project Cross Sections

The following pages contain purpose and need statements, project facts, and proposed project cross sections for each of the fiscally constrained roadway projects. The following notes apply:

Number of Existing Travel Lanes:

- At-grade intersections: all lanes at the stop bar were counted
- Grade separated intersections/interchanges: all lanes entering the intersection/interchange were counted (typically counted farther back than at a traditional at-grade intersection)

Total (Proposed) Lanes:

- At-grade intersections: all lanes at the stop bar were counted
- Grade separated intersections/interchanges: all lanes entering the intersection/interchange were counted (typically counted farther back than at a traditional at-grade intersection)

Future NC 417 (Hampstead Bypass) (I of II)

Project ID: R-3300A

The purpose of this project is to increase capacity and improve congestion and safety on US 17 by providing a controlled access freeway to bypass Hampstead.



| Project Facts | |
|---------------------------------|-----------------------------------|
| From | NC 140 (Wilmington Bypass) |
| To | NC 210 |
| Route Number(s) | (Future) NC 417 |
| Length (miles) | 6.87 |
| Jurisdiction(s) | New Hanover County, Pender County |
| Facility Classification | N/A |
| Number of Existing Travel Lanes | N/A |
| Project Horizon Year | 2024 |

| Proposed Project Cross Section | | | | | | |
|--------------------------------|-----------------------------|-------------|--------------|------------|----------------------------------|-----------------------------|
| Improvement Type | NCDOT Typical Cross Section | Total Lanes | Median (Y/N) | Lane Width | Bicycle/Pedestrian Facility Type | Cost Estimate (in millions) |
| New Road at New Location | 4A | 4 | Y | 12' | N/A | \$228.3 |



Future NC 417 (Hampstead Bypass) (II of II)

Project ID: R-3300B

The purpose of this project is to increase capacity and improve congestion and safety on US 17 by providing a controlled access freeway to bypass Hampstead.

| Project Facts | |
|---------------------------------|----------------------------|
| From | NC 210 |
| To | US 17 (north of Hampstead) |
| Route Number(s) | (Future) NC 417 |
| Length (miles) | 5.45 |
| Jurisdiction(s) | Pender County |
| Facility Classification | N/A |
| Number of Existing Travel Lanes | N/A |
| Project Horizon Year | 2024 |

| Proposed Project Cross Section | | | | | | |
|--------------------------------|-----------------------------|-------------|--------------|------------|----------------------------------|-----------------------------|
| Improvement Type | NCDOT Typical Cross Section | Total Lanes | Median (Y/N) | Lane Width | Bicycle/Pedestrian Facility Type | Cost Estimate (in millions) |
| New Road at New Location | 4A | 4 | Y | 12' | N/A | \$215.0 |

US 74 (Martin Luther King Jr. Parkway) and SR 1175 (Kerr Avenue) Interchange

Project ID: U-3338C

The purpose of this project is to improve system connectivity at the intersection of US 74 (MLK Jr. Parkway) and SR 1175 (Kerr Avenue).



| Project Facts | | | | |
|--|--|----|----|----|
| Route Number(s) | US 74, SR 1175 | | | |
| Jurisdiction(s) | City of Wilmington | | | |
| Facility Classification | Principal Arterial - Other, Minor Arterial | | | |
| | NB | SB | EB | WB |
| Number of Existing Lanes Entering Intersection | 4 | 4 | 4 | 4 |
| Project Horizon Year | 2024 | | | |

| Proposed Project Cross Section | | | | | | |
|--------------------------------|------------------|-------------------|-----------------------|------------|--|-----------------------------|
| Improvement Type | Interchange Type | Realignment (Y/N) | Grade Separated (Y/N) | Lane Width | Bicycle/Pedestrian Facility Type | Cost Estimate (in millions) |
| New Interchange | Half Cloverleaf | N | Y | 12' | On SR 1175 5' Sidewalks 5' Bike Lanes | \$26.8 |



Independence Boulevard Extension

Project ID: U-4434

The purpose of this project is to improve connectivity and multimodal interrelationships by extending Independence Boulevard to US 74 (MLK Jr. Parkway).

| Project Facts | |
|---------------------------------|-------------------------|
| From | Randall Parkway |
| To | US 74 (MLK Jr. Parkway) |
| Route Number(s) | N/A |
| Length (miles) | 1.8 |
| Jurisdiction(s) | City of Wilmington |
| Facility Classification | N/A |
| Number of Existing Travel Lanes | N/A |
| Project Horizon Year | 2024 |

| Proposed Project Cross Section | | | | | | |
|--------------------------------|-----------------------------|-------------|--------------|------------|--|-----------------------------|
| Improvement Type | NCDOT Typical Cross Section | Total Lanes | Median (Y/N) | Lane Width | Bicycle/Pedestrian Facility Type | Cost Estimate (in millions) |
| New Road at New Location | 4E | 4 | Y | 12' | 10' MUP 5' Sidewalk Pedestrian accommodations at all intersections | \$220.9 |

US 17 BUS (Market Street)
Access Management
Improvements
 Project ID: U-4902

The purpose of this project is to improve safety and operation on US 17 BUS (Market Street) from Colonial Drive to SR 1402 (Porter's Neck Road).

| Project Facts | |
|---------------------------------|------------------------------|
| From | Colonial Drive |
| To | SR 1402 (Porter's Neck Road) |
| Route Number(s) | US 17 BUS |
| Length (miles) | 5.25 |
| Jurisdiction(s) | City of Wilmington |
| Facility Classification | Principal Arterial - Other |
| Number of Existing Travel Lanes | 4 |
| Project Horizon Year | 2024 |



Proposed Project Cross Section

| Improvement Type | NCDOT Typical Cross Section | Total Lanes | Median (Y/N) | Lane Width | Bicycle/Pedestrian Facility Type | Cost Estimate (in millions) |
|--------------------------------|-----------------------------|-------------|--------------|------------|---|-----------------------------|
| Access Management Improvements | 4F | 4 | Y | 12' | 10' MUP 5' Sidewalks Pedestrian accommodations at all intersections | \$151.1 |



US 74 (Eastwood Road) and US 17 (Military Cutoff Road) Interchange

Project ID: U-5710

The purpose of this project is to improve capacity and safety at the intersection of US 74 (Eastwood Road) and US 17 (Military Cutoff Road).

| Project Facts | | | | |
|--|-----------------------------------|----|----|----|
| Route Number(s) | US 17/US 74 | | | |
| Jurisdiction(s) | City of Wilmington | | | |
| Facility Classification | Principal Arterial - Other (both) | | | |
| | NB | SB | EB | WB |
| Number of Existing Lanes Entering Intersection | 5 | 4 | 5 | 5 |
| Project Horizon Year | 2024 | | | |

| Proposed Project Cross Section | | | | | | |
|--------------------------------|--------------------------|-------------------|-----------------------|------------|---|-----------------------------|
| Improvement Type | Interchange Type | Realignment (Y/N) | Grade Separated (Y/N) | Lane Width | Bicycle/Pedestrian Facility Type | Cost Estimate (in millions) |
| New Interchange | Grade Separated Quadrant | Y | Y | 12' | 10' MUP 5' Sidewalks 10' Painted Crosswalks | \$63.7 |

US 421 (Carolina Beach Road) Access Management Improvements

Project ID: U-5729REG

The purpose of this project is to improve safety and increase capacity on US 421 (Carolina Beach Road) between SR 1140 (Burnett Boulevard) and US 117 (Shipyard Boulevard).



| Project Facts | |
|---------------------------------|-----------------------------|
| From | US 421 (Burnett Boulevard) |
| To | US 117 (Shipyard Boulevard) |
| Route Number(s) | US 421 |
| Length (miles) | 1.5 |
| Jurisdiction(s) | City of Wilmington |
| Facility Classification | Principal Arterial - Other |
| Number of Existing Travel Lanes | 4 |
| Project Horizon Year | 2024 |

| Proposed Project Cross Section | | | | | | |
|--------------------------------|-----------------------------|-------------|--------------|------------|----------------------------------|-----------------------------|
| Improvement Type | NCDOT Typical Cross Section | Total Lanes | Median (Y/N) | Lane Width | Bicycle/Pedestrian Facility Type | Cost Estimate (in millions) |
| Access Management Improvements | 4G | 4 | Y | 12' | 5' Sidewalks 5' Bike Lanes | \$43.9 |



US 421 (Carolina Beach Road) and US 117 (Shipyard Boulevard) Intersection Improvement

Project ID: U-5729SW

The purpose of this project is to improve safety and increase capacity by adding an additional left turn lane from US 117 (Shipyard Boulevard) eastbound onto US 421 (Carolina Beach Road) northbound.

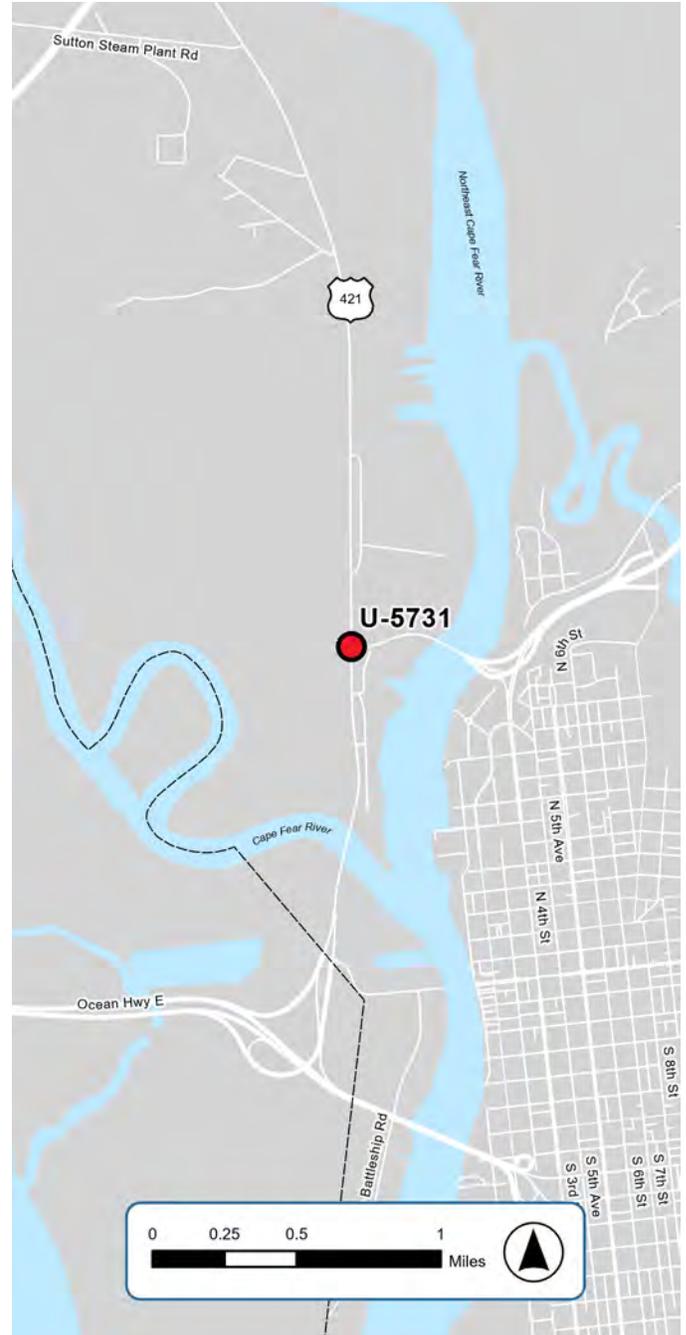
| Project Facts | | | | |
|--|-----------------------------------|----|----|----|
| Route Number(s) | US 421, US 117 | | | |
| Jurisdiction(s) | City of Wilmington | | | |
| Facility Classification | Principal Arterial - Other (both) | | | |
| | NB | SB | EB | WB |
| Number of Existing Lanes Entering Intersection | 3 | 4 | 3 | 5 |
| Project Horizon Year | 2024 | | | |

| Proposed Project Cross Section | | | | | | | | | |
|--------------------------------|-------------|----|----|----|-------------------|-----------------------|------------|--|-----------------------------|
| Improvement Type | Total Lanes | | | | Realignment (Y/N) | Grade Separated (Y/N) | Lane Width | Bicycle/Pedestrian Facility Type | Cost Estimate (in millions) |
| | NB | SB | EB | WB | | | | | |
| Intersection Improvements | 3 | 4 | 4 | 5 | N | N | 12' | 10' MUP 5' Sidewalk Pedestrian accommodations crossing intersections | \$11.0 |

US 421 at US 74/NC 133/Isabel Holmes Bridge Interchange

Project ID: U-5731

The purpose of this project is to improve capacity and operations at the intersection of US 421 and US 74/NC133/Isabel Holmes Bridge.



| Project Facts | | | | |
|--|-----------------------------------|----|----|----|
| Route Number(s) | US 74/NC 133, US 421 | | | |
| Jurisdiction(s) | New Hanover County | | | |
| Facility Classification | Principal Arterial - Other (both) | | | |
| | NB | SB | EB | WB |
| Number of Existing Lanes Entering Intersection | 3 | 3 | 0 | 4 |
| Project Horizon Year | 2024 | | | |

| Proposed Project Cross Section | | | | | | |
|--------------------------------|---------------------|-------------------|-----------------------|------------|----------------------------------|-----------------------------|
| Improvement Type | Interchange Type | Realignment (Y/N) | Grade Separated (Y/N) | Lane Width | Bicycle/Pedestrian Facility Type | Cost Estimate (in millions) |
| New Interchange | Trumpet Interchange | Y | Y | 12' | On US 421 10' MUPs | \$14.1 |



US 421 TRK (S. Front Street) Widening

Project ID: U-5734

The purpose of this project is to increase capacity and enhance economic development by widening Front Street between the Cape Fear Memorial Bridge and SR 1140 (Burnett Boulevard), which serves as a freight corridor to the Port of Wilmington.

Project Facts

| | |
|---------------------------------|---------------------------|
| From | Cape Fear Memorial Bridge |
| To | Burnett Boulevard |
| Route Number(s) | US 421 TRK |
| Length (miles) | 1.0 |
| Jurisdiction(s) | City of Wilmington |
| Facility Classification | Minor Arterial |
| Number of Existing Travel Lanes | 2 |
| Project Horizon Year | 2024 |

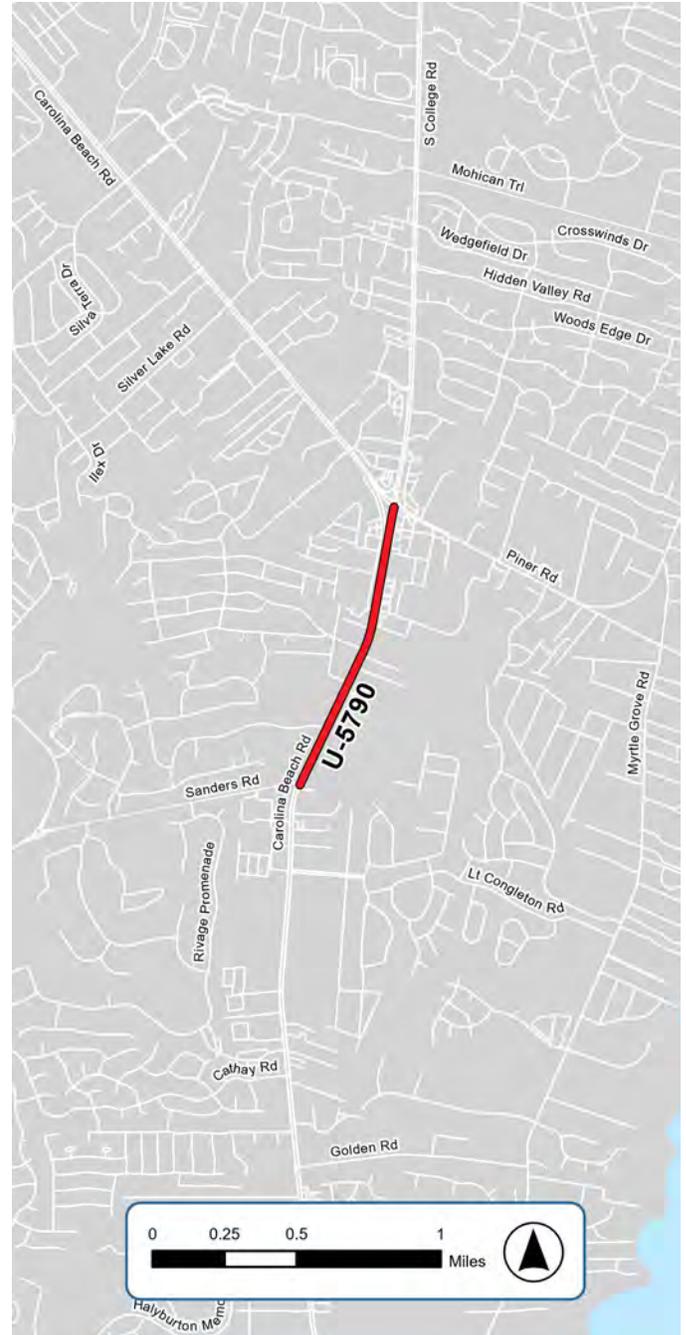
Proposed Project Cross Section

| Improvement Type | NCDOT Typical Cross Section | Total Lanes | Median (Y/N) | Lane Width | Bicycle/Pedestrian Facility Type | Cost Estimate (in millions) |
|------------------|-----------------------------|-------------|--------------|------------|----------------------------------|-----------------------------|
| Road Widening | 4F | 4 | Y | 12' | Separated 10' MUP | \$31.6 |

US 421 (Carolina Beach Road) Widening and Intersection Improvements

Project ID: U-5790

The purpose of this project is to improve capacity and connectivity between NC 132 (S. College Road) and SR 1187 (Sanders Road).

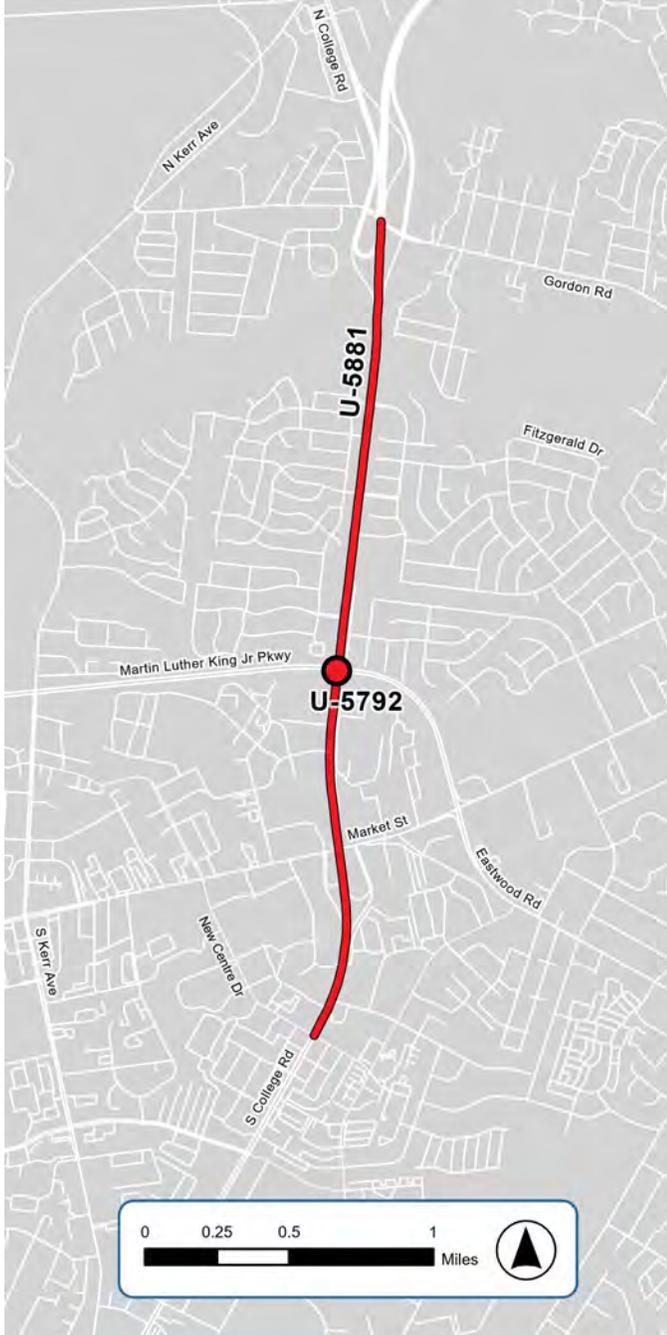


Project Facts

| | |
|---------------------------------|----------------------------|
| From | NC 132 (S. College Road) |
| To | SR 1187 (Sanders Road) |
| Route Number(s) | US 421 |
| Length (miles) | 1.0 |
| Jurisdiction(s) | New Hanover County |
| Facility Classification | Principal Arterial - Other |
| Number of Existing Travel Lanes | 4 |
| Project Horizon Year | 2024 |

Proposed Project Cross Section

| Improvement Type | Interchange/ Intersection Type | Total Lanes | Median (Y/N) | Lane Width | Bicycle/Pedestrian Facility Type | Cost Estimate (in millions) |
|---|--------------------------------|-------------|--------------|------------|--|-----------------------------|
| Road Widening with CFI at US 421 and NC 132 (S. College Road) | Continuous Flow Intersection | 6 | Y | 12' | 10' MUP 5' Sidewalk Pedestrian accommodations at all intersections | \$33.0 |



US 117/NC 132 (College Road) Widening and Interchange at US 74 (MLK Jr. Parkway)

Project ID: U-5792

The purpose of this project is to improve capacity and safety at the intersection of US 117/NC 132 (College Road) and US 74 (MLK Jr. Parkway). Includes former U-5881.

| Project Facts | | | | |
|--|----------------------------|----|----|----|
| Route Number(s) | US 74, US 117/NC 132 | | | |
| Jurisdiction(s) | New Hanover County | | | |
| Facility Classification | Principal Arterial - Other | | | |
| | NB | SB | EB | WB |
| Number of Existing Lanes Entering Intersection | 6 | 6 | 6 | 5 |
| Project Horizon Year | 2024 | | | |

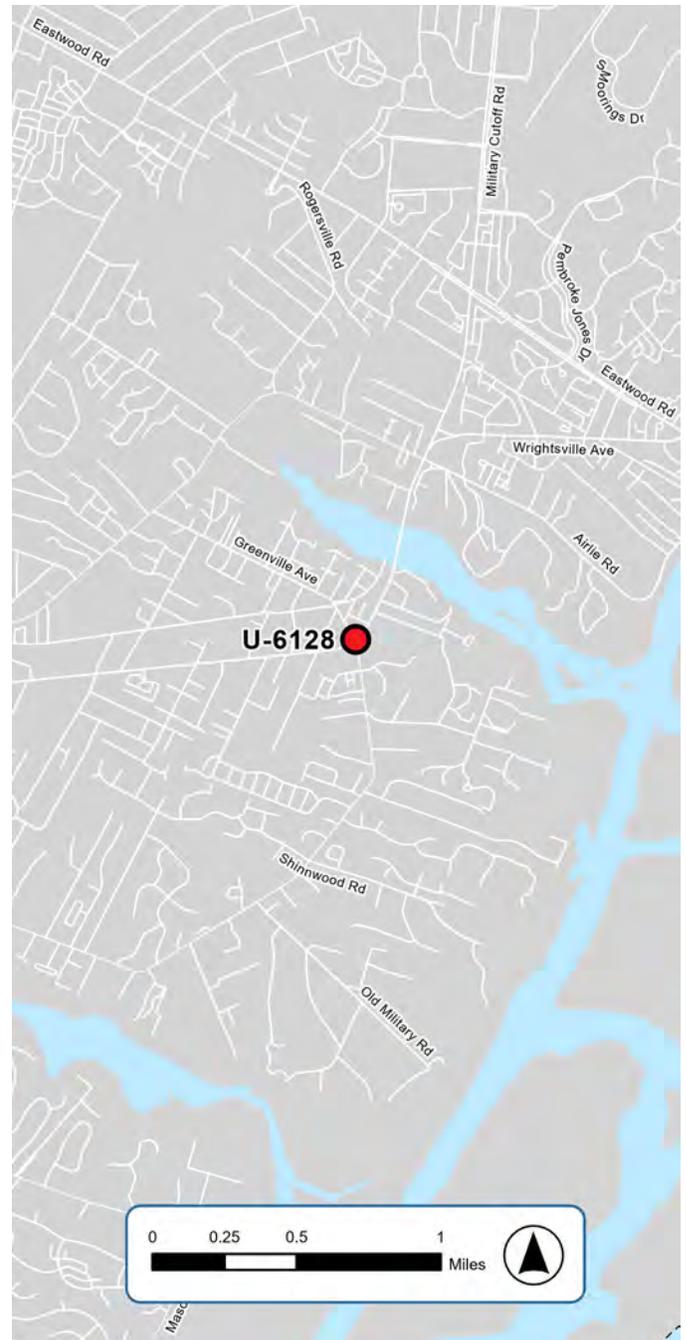
| Proposed Project Cross Section | | | | | | | |
|--------------------------------|-----------------------------|---------------------------|-------------------|-----------------------|------------|-----------------------------------|-----------------------------|
| Improvement Type | NCDOT Typical Cross Section | Interchange Type | Realignment (Y/N) | Grade Separated (Y/N) | Lane Width | Bicycle/ Pedestrian Facility Type | Cost Estimate (in millions) |
| Road Widening, New Interchange | 6A | Tight Diamond Interchange | N | Y | 12' | N/A | \$135.6 |

Includes dual lefts from US 76/Oleander Drive WB

US 17/76 (Oleander Drive) and Greenville Loop Road/Greenville Avenue Intersection Improvements

Project ID: U-6128

The purpose of this project is to increase capacity and modal interrelationships at the intersection of US 17/76 (Oleander Drive) and Greenville Loop Road/Greenville Avenue.



| Project Facts | | | | |
|--|--|----|----|----|
| Route Number(s) | US 17/76 | | | |
| Jurisdiction(s) | City of Wilmington | | | |
| Facility Classification | Principal Arterial - Other, Major Collector, Minor Collector | | | |
| | NB | SB | EB | WB |
| Number of Existing Lanes Entering Intersection | 2 | 1 | 3 | 2 |
| Project Horizon Year | 2024 | | | |

| Proposed Project Cross Section | | | | | | | | | |
|--|-------------|----|----|----|-------------------|-----------------------|------------|---|-----------------------------|
| Improvement Type | Total Lanes | | | | Realignment (Y/N) | Grade Separated (Y/N) | Lane Width | Bicycle/Pedestrian Facility Type | Cost Estimate (in millions) |
| Intersection Improvements - westbound dual lefts | NB | SB | EB | WB | Y | N | 12' | 5' Sidewalks 10' MUP 10' Painted Crosswalks with Pedestrian Signals | \$7.9 |
| | 3 | 1 | 3 | 4 | | | | | |

| Project Facts | | | | |
|---------------------------------|--|-----|-----|-----|
| Route Number(s) | N/A | | | |
| Jurisdiction(s) | City of Wilmington, New Hanover County | | | |
| Facility Classification | All Types | | | |
| | NB | SB | EB | WB |
| Number of Existing Travel Lanes | N/A | N/A | N/A | N/A |
| Project Horizon Year | 2024 | | | |

Wilmington Citywide Signal System

Project ID: U-6199

The purpose of this project is to improve the performance, reliability, connectivity, and expandability of the citywide signal system.

Traffic signal system upgrade. These improvements are areawide in New Hanover County. Project not mapped.

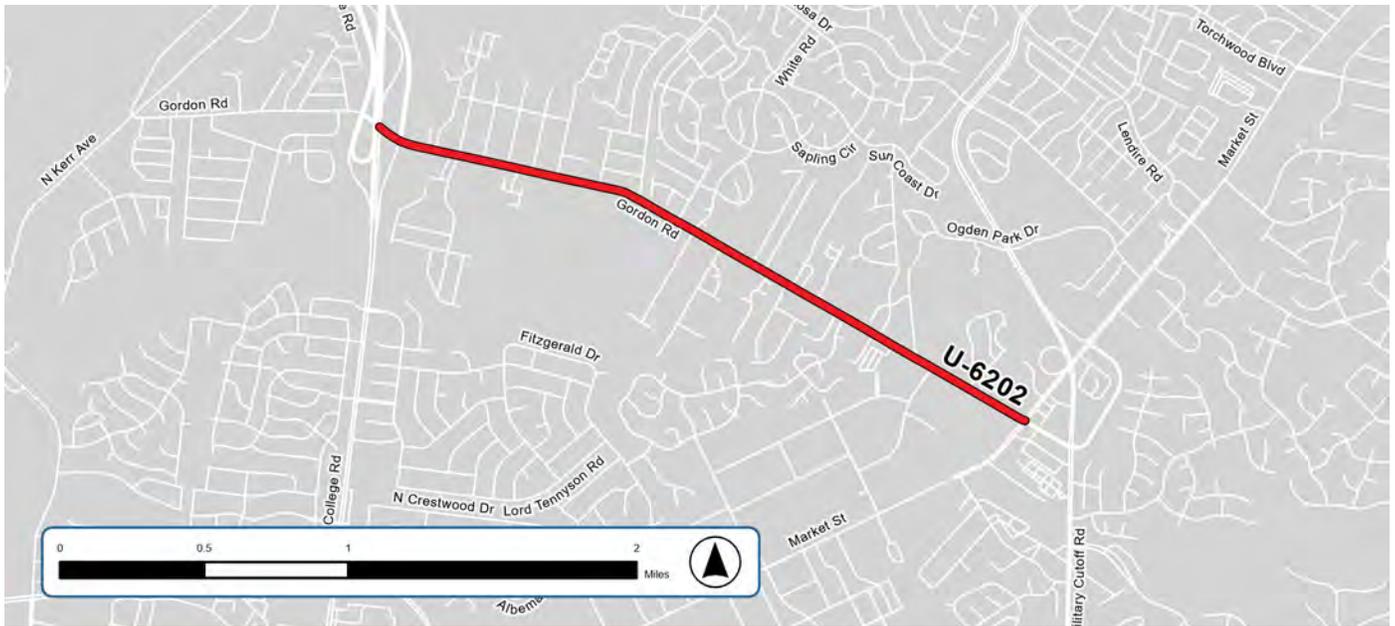
| Proposed Project Cross Section | | | | | | | | | | |
|--------------------------------|-------------|-----|-----|-----|-------------------|-----------------------|------------|------------|-----------------------------|--|
| Improvement Type | Total Lanes | | | | Realignment (Y/N) | Grade Separated (Y/N) | Lane Width | Crosswalks | Cost Estimate (in millions) | |
| Technology Improvements | NB | SB | EB | WB | N/A | N/A | N/A | N/A | \$16.4 | |
| | N/A | N/A | N/A | N/A | | | | | | |

SR 2048 (Gordon Road) Widening

Project ID: U-6202

The purpose of this project is improve capacity and connectivity on SR 2048 (Gordon Road) between I-40 and US 17 BUS (Market Street).

| Project Facts | |
|---------------------------------|---------------------------|
| From | US 17 BUS (Market Street) |
| To | I-40 |
| Route Number(s) | SR 2048 |
| Length (miles) | 2.5 |
| Jurisdiction(s) | New Hanover County |
| Facility Classification | Minor Arterial |
| Number of Existing Travel Lanes | 2 |
| Project Horizon Year | 2024 |



| Proposed Project Cross Section | | | | | | |
|--------------------------------|-----------------------------|-------------|--------------|------------|--|-----------------------------|
| Improvement Type | NCDOT Typical Cross Section | Total Lanes | Median (Y/N) | Lane Width | Bicycle/Pedestrian Facility Type | Cost Estimate (in millions) |
| Road Widening | 4F | 4 | Y | 12' | 10' MUP 5' Sidewalk Pedestrian accommodations at all intersections | \$54.6 |



US 117/NC 132 (College Road) Access Management Improvements (I of II)

Project ID: U-5702A

The purpose of this project is to improve safety and operations on US 117/NC132 (College Road) between SR 1272 (New Centre Drive) and US 117 (Shipyard Boulevard).

| Project Facts | |
|---------------------------------|-----------------------------|
| From | SR 1272 (New Centre Drive) |
| To | US 117 (Shipyard Boulevard) |
| Route Number(s) | US 117/NC 132 |
| Length (miles) | 2.64 |
| Jurisdiction(s) | City of Wilmington |
| Facility Classification | Principal Arterial - Other |
| Number of Existing Travel Lanes | Varies |
| Project Horizon Year | 2029 |

| Proposed Project Cross Section | | | | | | |
|--------------------------------|-----------------------------|-----------------|--------------|------------|--|-----------------------------|
| Improvement Type | NCDOT Typical Cross Section | Total Lanes | Median (Y/N) | Lane Width | Bicycle/Pedestrian Facility Type | Cost Estimate (in millions) |
| Access Management Improvements | Varies 4F, 6F | Varies 4 - 6 | Y | 12' | 10' MUP 5' Sidewalk Pedestrian accommodations at all intersections | \$94.5 |

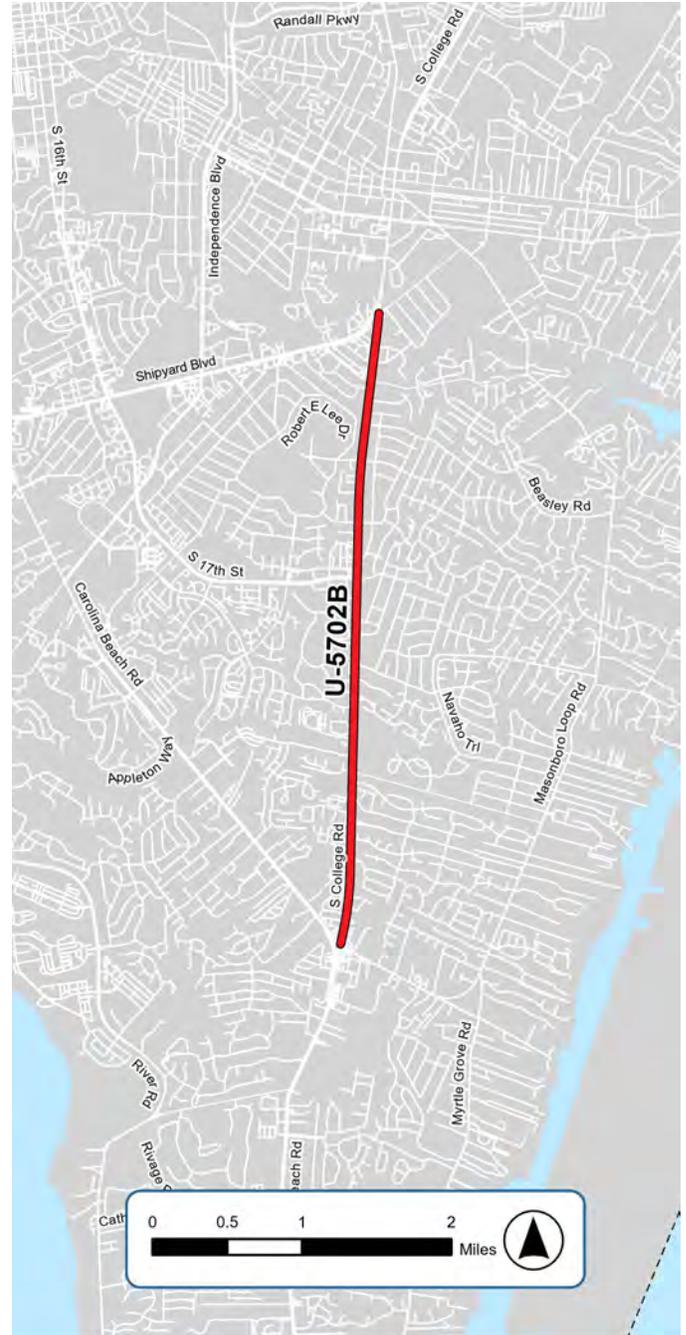
US 117/NC 132 (College Road) Access Management Improvements (II of II)

Project ID: U-5702B

The purpose of this project is to improve safety and operation on NC 132 (College Road) between US 117 (Shipyard Boulevard) and US 421 (Carolina Beach Road).

Project Facts

| | |
|---------------------------------|------------------------------|
| From | US 117 (Shipyard Boulevard) |
| To | US 421 (Carolina Beach Road) |
| Route Number(s) | NC 132 |
| Length (miles) | 4.23 |
| Jurisdiction(s) | City of Wilmington |
| Facility Classification | Principal Arterial - Other |
| Number of Existing Travel Lanes | 4 |
| Project Horizon Year | 2029 |



Proposed Project Cross Section

| Improvement Type | NCDOT Typical Cross Section | Total Lanes | Median (Y/N) | Lane Width | Bicycle/Pedestrian Facility Type | Cost Estimate (in millions) |
|--------------------------------|-----------------------------|-------------|--------------|------------|--|-----------------------------|
| Access Management Improvements | 4F | 4 | Y | 12' | 10' MUP 5' Sidewalk Pedestrian accommodations at all intersections | \$56.6 |



US 17/76 (Oleander Drive) and US 117/NC 132 (College Road) Intersection Improvements

Project ID: U-5704

The purpose of this project is to improve capacity and safety at the intersection of US 17/76 (Oleander Drive) and US 117/ NC 132 (College Road).

| Project Facts | | | | |
|--|-----------------------------------|----|----|----|
| Route Number(s) | US 17/76, US117/ NC132 | | | |
| Jurisdiction(s) | City of Wilmington | | | |
| Facility Classification | Principal Arterial - Other (both) | | | |
| | NB | SB | EB | WB |
| Number of Existing Lanes Entering Intersection | 3 | 4 | 5 | 5 |
| Project Horizon Year | 2029 | | | |

| Proposed Project Cross Section | | | | | | |
|--------------------------------|-----------------------|-------------------|-----------------------|------------|--|-----------------------------|
| Improvement Type | Intersection Type | Realignment (Y/N) | Grade Separated (Y/N) | Lane Width | Bicycle/Pedestrian Facility Type | Cost Estimate (in millions) |
| Intersection Improvements | Quadrant Intersection | N | N | 12' | 10' MUPs 5' Sidewalks 10' Painted Crosswalks with Pedestrian Signals | \$65.5 |

US 17/NC 210 Reduced Conflict Intersections

Project ID: U-5732

The purpose of this project is improve capacity and congestion along US 17/ NC 210 between SR 1582 (Washington Acres Road) and Vista Lane.



| Project Facts | |
|---------------------------------|---------------------------------|
| From | SR 1582 (Washington Acres Road) |
| To | Vista Lane |
| Route Number(s) | US 17 |
| Length (miles) | 2.5 |
| Jurisdiction(s) | Pender County |
| Facility Classification | Principal Arterial - Other |
| Number of Existing Travel Lanes | 4 |
| Project Horizon Year | 2029 |

| Proposed Project Cross Section | | | | | | |
|---|--------------------------------|-------------------|-----------------------|------------|--|-----------------------------|
| Improvement Type | Intersection Type | Realignment (Y/N) | Grade Separated (Y/N) | Lane Width | Bicycle/Pedestrian Facility Type | Cost Estimate (in millions) |
| Access Management Improvements, Intersection Improvements | Reduced Conflict Intersections | N | N | 12' | 10' Painted Crosswalks with Pedestrian Signals | \$150.0 |



NC 133 (Castle Hayne Road) Widening

Project ID: U-5863

The purpose of this project is to increase capacity and improve intermodal relationships on NC 133 (Castle Hayne Road) between I-140 and SR 1310 (Division Drive).

| Project Facts | |
|---------------------------------|--------------------------|
| From | I-140/US 17 Bypass |
| To | SR 1310 (Division Drive) |
| Route Number(s) | NC 133 |
| Length (miles) | 3.7 |
| Jurisdiction(s) | New Hanover County |
| Facility Classification | Minor Arterial |
| Number of Existing Travel Lanes | 2 |
| Project Horizon Year | 2034 |

| Proposed Project Cross Section | | | | | | |
|--------------------------------|-----------------------------|-------------|--------------|------------|--|-----------------------------|
| Improvement Type | NCDOT Typical Cross Section | Total Lanes | Median (Y/N) | Lane Width | Bicycle/Pedestrian Facility Type | Cost Estimate (in millions) |
| Road Widening | 4F | 4 | Y | 12' | 10' MUP 5' Sidewalk Pedestrian accommodations at all intersections | \$35.4 |

Cape Fear Crossing

Project ID: U-4738 / RW-67

The Cape Fear Crossing is needed to improve traffic flow and enhance freight movements beginning in the vicinity of US 17 and I-140 in Brunswick County, across the Cape Fear River to US 421 near the Port of Wilmington in southern New Hanover County. Finally, the Cape Fear Crossing would help expedite an evacuation of residents and visitors in the event of a hurricane or other emergency.

| Project Facts | |
|---------------------------------|--|
| From | US 17 (Ocean Highway E) & I-140 |
| To | US 421 (Carolina Beach Road) |
| Route Number(s) | I-140 (proposed) |
| Length (miles) | Approximately 9.5 |
| Jurisdiction(s) | City of Wilmington, Town of Leland, New Hanover County, Brunswick County |
| Facility Classification | Future Interstate, Tolled |
| Number of Existing Travel Lanes | N/A |
| Project Horizon Year | 2050+ |



| Proposed Project Cross Section | | | | | | |
|--------------------------------|---|-------------|--------------|------------|----------------------------------|-------------------------------|
| Improvement Type | NCDOT Typical Cross Section | Total Lanes | Median (Y/N) | Lane Width | Bicycle/Pedestrian Facility Type | Cost Estimate (in millions) |
| New Bridge at New Location | Feasibility Study H090287-AG, Alternative M | 4 | Y | 12' | Separated 15' MUP | \$956.3 (non-tolled revenues) |

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NC 133 (River Road SE) Widening

Project ID: RW-1

The purpose of this project is to improve congestion on NC 133 (River Road SE) between US17/74/76 and Rabon Way SE.



| Project Facts | |
|---------------------------------|--|
| From | US 17/74/76 |
| To | Rabon Way SE |
| Route Number(s) | NC 133 |
| Length (miles) | 4.19 |
| Jurisdiction(s) | Brunswick County, Town of Belville, Town of Leland |
| Facility Classification | Principal Arterial |
| Number of Existing Travel Lanes | 2 |
| Project Horizon Year | 2034 |

| Proposed Project Cross Section | | | | | | |
|--------------------------------|-----------------------------|-------------|--------------|------------|--|-----------------------------|
| Improvement Type | NCDOT Typical Cross Section | Total Lanes | Median (Y/N) | Lane Width | Bicycle/Pedestrian Facility Type | Cost Estimate (in millions) |
| Road Widening | 4F | 4 | Y | 11' | 10' MUPs (both sides) Pedestrian accommodations at all signalized intersections | \$113.5 |

| Project Facts | |
|---------------------------------|--|
| From | US 421 |
| To | 5th Avenue |
| Route Number(s) | US 17/76 |
| Length (miles) | TBD |
| Jurisdiction(s) | City of Wilmington, Brunswick County, New Hanover County |
| Facility Classification | Principal Arterial - Freeway/Expressway |
| Number of Existing Travel Lanes | 4 |
| Project Horizon Year | 2034 |

Cape Fear Memorial Bridge Replacement

Project ID: RW-2

The purpose of this project is to replace the Cape Fear Memorial Bridge to support regional growth, accommodate increased truck traffic, maintain military and port access, and provide a reliable hurricane evacuation route.

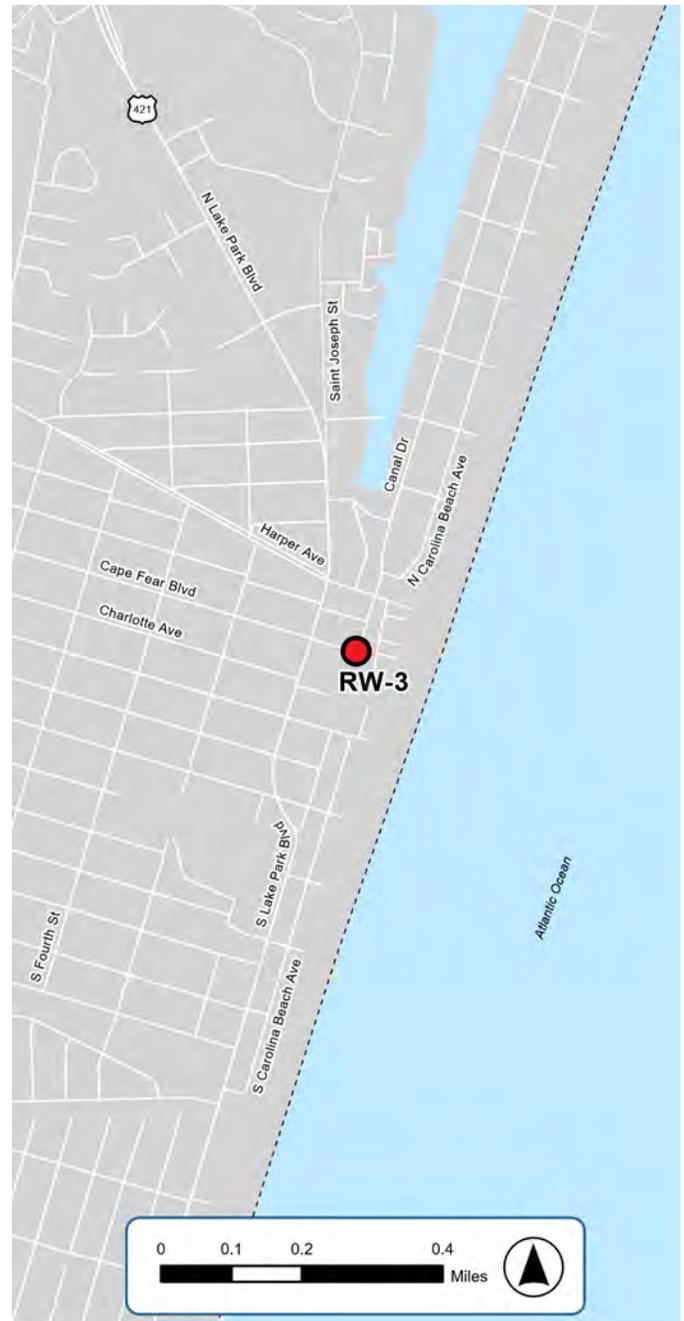


| Proposed Cross Section | | | | | | | |
|-----------------------------------|---------------------------------------|-------------|--------------|------------|---------------|----------------------------------|-----------------------------|
| Improvement Type | NCDOT Typical Cross Section | Total Lanes | Median (Y/N) | Lane Width | Median Width | Bicycle/Pedestrian Facility Type | Cost Estimate (in millions) |
| Bridge Replacement, Road Widening | CFMB Feasibility Study, Alternative 2 | 6 | Y | 12' | Fixed barrier | Separated 15' MUP | \$444 |

Cape Fear Boulevard/Canal Drive Roundabout

Project ID: RW-3

The purpose of this project is to improve safety at the intersection of Cape Fear Boulevard and Canal Drive.



| Project Facts | | | | |
|--|------------------------|----|----|----|
| Route Number(s) | N/A | | | |
| Jurisdiction(s) | Town of Carolina Beach | | | |
| Facility Classification | Local | | | |
| | NB | SB | EB | WB |
| Number of Existing Lanes Entering Intersection | 1 | 1 | 1 | 0 |
| Project Horizon Year | 2041 | | | |

| Proposed Project Cross Section | | | | | |
|--------------------------------|---------------------|-------------------|-----------------------|----------------------------------|-----------------------------|
| Improvement Type | Project Description | Realignment (Y/N) | Grade Separated (Y/N) | Bicycle/Pedestrian Facility Type | Cost Estimate (in millions) |
| Roundabout | 1-lane roundabout | N | N | Crosswalk 5' Sidewalk | \$2.02 |



N. 23rd Street Widening

Project ID: RW-5

The purpose of this project is to improve congestion on N. 23rd Street between US 74 (Martin Luther King Jr. Parkway) and NC 133 (Castle Hayne Road).

| Project Facts | |
|---------------------------------|--|
| From | US 74 (Martin Luther King Jr. Parkway) |
| To | NC 133 (Castle Hayne Road) |
| Route Number(s) | SR 1302 |
| Length (miles) | 1.1 |
| Jurisdiction(s) | New Hanover County |
| Facility Classification | Minor Arterial |
| Number of Existing Travel Lanes | 2 - 4 (varies) |
| Project Horizon Year | 2024 |

| Proposed Cross Section | | | | | | |
|------------------------|-----------------------------|-------------|--------------|------------|--|-----------------------------|
| Improvement Type | NCDOT Typical Cross Section | Total Lanes | Median (Y/N) | Lane Width | Bicycle/Pedestrian Facility Type | Cost Estimate (in millions) |
| Road Widening | 4D | 4 | Y | 12' | 5' Sidewalk 4' Bike Lane Pedestrian accommodations at all signalized intersections | \$7.4 |

Basin Street Extension

Project ID: RW-7

The purpose of this project is to improve mobility and connectivity by extending Basin Street from SR 1437 (Old Fayetteville Road) to SR 1472 (Village Road).

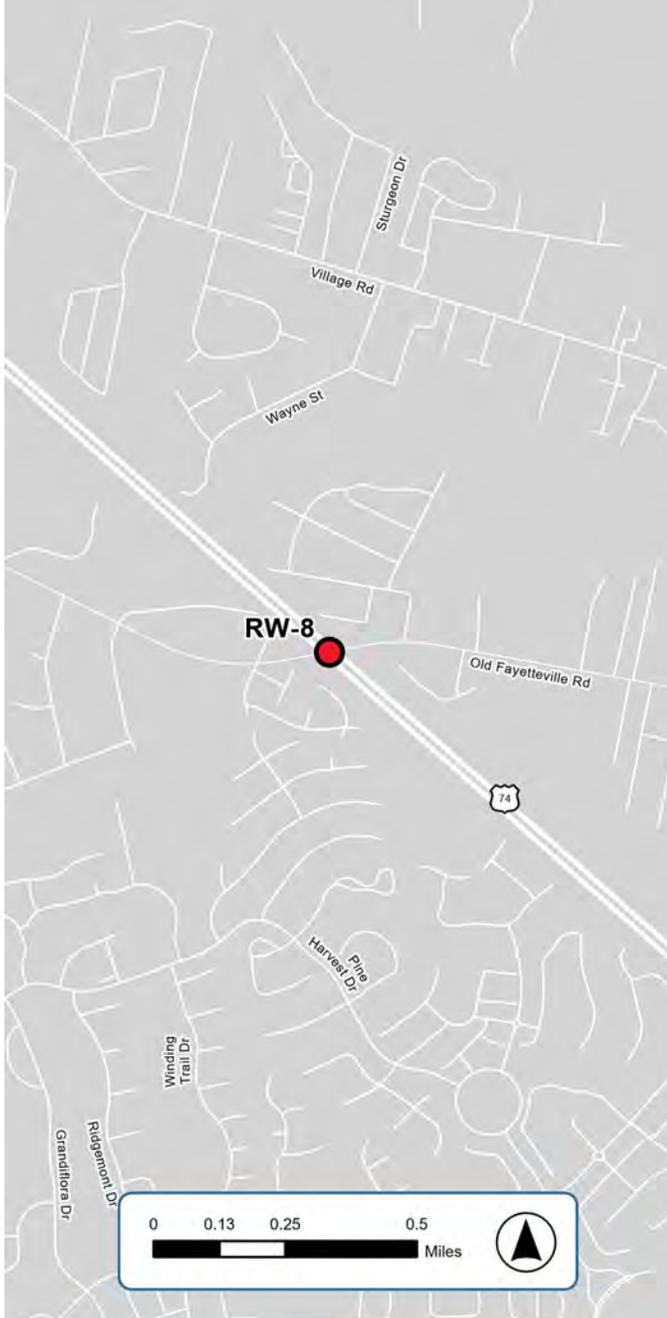


Project Facts

| | |
|---------------------------------|---------------------------------|
| From | SR 1437 (Old Fayetteville Road) |
| To | SR 1472 (Village Road) |
| Route Number(s) | N/A |
| Length (miles) | 0.64 |
| Jurisdiction(s) | Town of Leland |
| Facility Classification | Local |
| Number of Existing Travel Lanes | N/A |
| Project Horizon Year | 2041 |

Proposed Project Cross Section

| Improvement Type | NCDOT Typical Cross Section | Total Lanes | Median (Y/N) | Lane Width | Bicycle/Pedestrian Facility Type | Cost Estimate (in millions) |
|--------------------------|-----------------------------|-------------|--------------|------------|--|-----------------------------|
| New Road at New Location | 2E | 2 | N | 11' | 10' MUP 5' Sidewalk Pedestrian accommodations at all intersections | \$5.98 |



Old Fayetteville Road Interchange at US 74/76

Project ID: RW-8

The purpose of this project is to improve mobility and system connectivity via a new interchange at US/76 and SR 1437 (Old Fayetteville Road).

| Project Facts | | | | |
|--|--|----|----|----|
| Route Number(s) | US 74/76, SR 1437 | | | |
| Jurisdiction(s) | Town of Leland | | | |
| Facility Classification | Principal Arterial - Freeway/Expressway, Major Collector | | | |
| | NB | SB | EB | WB |
| Number of Existing Lanes Entering Intersection | 2 | 2 | 1 | 1 |
| Project Horizon Year | 2041 | | | |

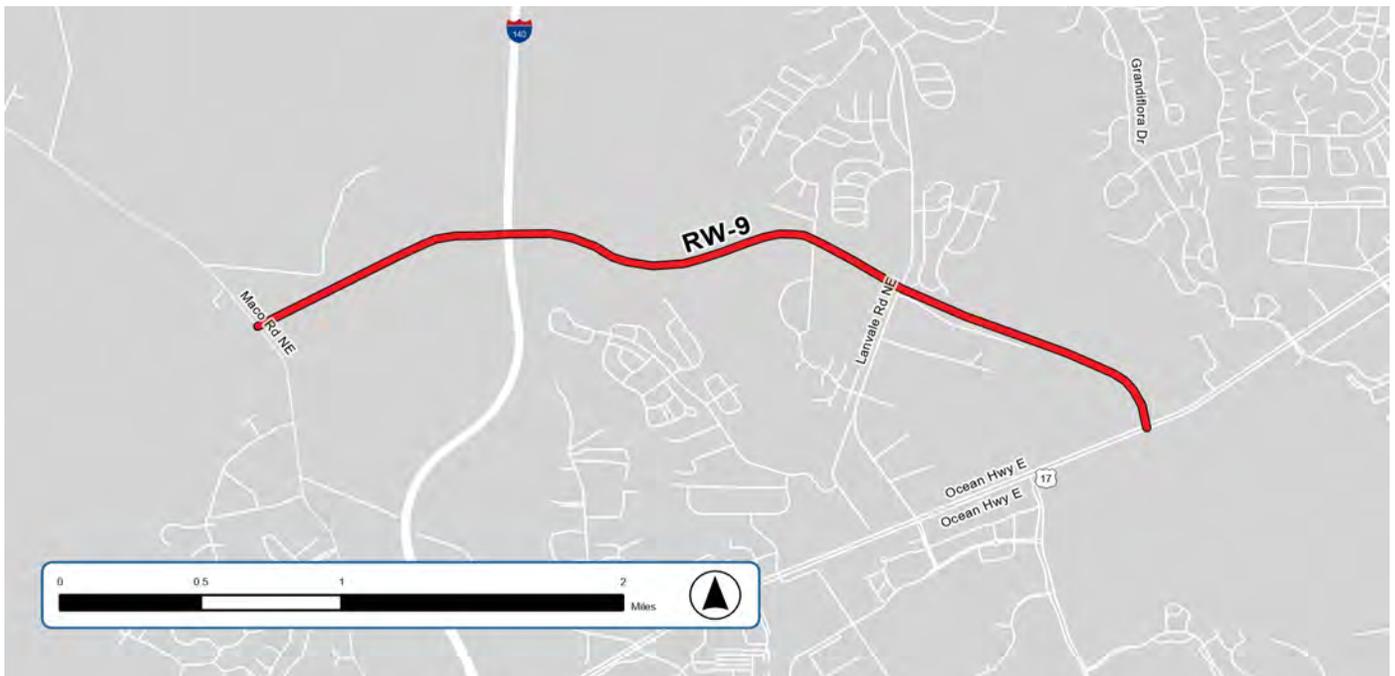
| Proposed Project Cross Section | | | | | |
|--------------------------------|-----------------------|-------------------|-----------------------|--|-----------------------------|
| Improvement Type | Interchange Type | Realignment (Y/N) | Grade Separated (Y/N) | Bicycle/Pedestrian Facility Type | Cost Estimate (in millions) |
| New Interchange | Diamond/Tight Diamond | N | Y | On SR 1437 10' MUP 5' Sidewalk Pedestrian accommodations at signalized intersections | \$116.8 |

US 17/Hwy 87 Connector

Project ID: RW-9

The purpose of this project is to improve operations and connectivity between US 17 (Ocean Hwy E) and Hwy 87 (Maco Rd NE).

| Project Facts | |
|---------------------------------|-------------------------|
| From | US 17 (Ocean Highway E) |
| To | Hwy 87 (Maco Road NE) |
| Route Number(s) | N/A |
| Length (miles) | 3.53 |
| Jurisdiction(s) | Town of Leland |
| Facility Classification | N/A |
| Number of Existing Travel Lanes | N/A |
| Project Horizon Year | 2041 |



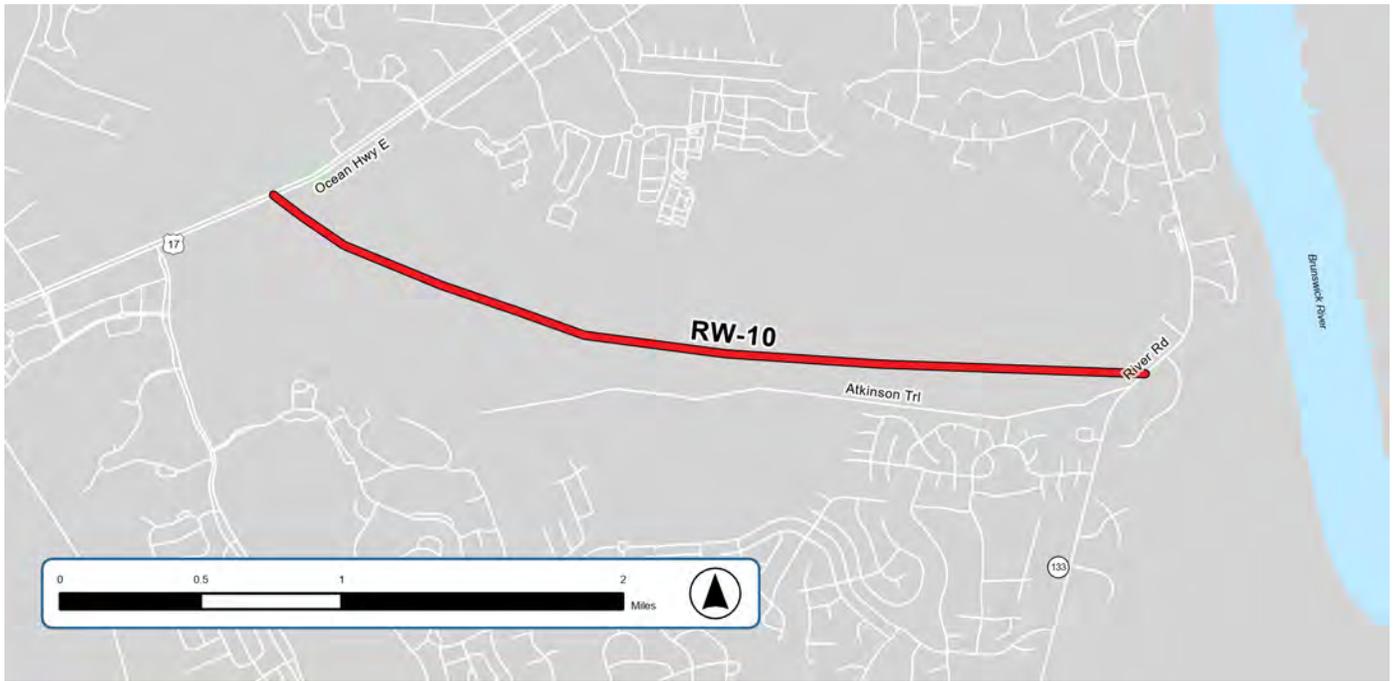
| Proposed Project Cross Section | | | | | | |
|--------------------------------|-----------------------------|-------------|--------------|------------|--|-----------------------------|
| Improvement Type | NCDOT Typical Cross Section | Total Lanes | Median (Y/N) | Lane Width | Bicycle/Pedestrian Facility Type | Cost Estimate (in millions) |
| New Road at New Location | 2D | 2 | N | 11' | 10' MUP 5' Sidewalk Pedestrian accommodations at all intersections | \$56.83 |

| Project Facts | |
|---------------------------------|------------------------|
| From | US 17 |
| To | NC 133 (River Road SE) |
| Route Number(s) | N/A |
| Length (miles) | 3.22 |
| Jurisdiction(s) | Town of Leland |
| Facility Classification | N/A |
| Number of Existing Travel Lanes | N/A |
| Project Horizon Year | 2034 |

US 17/NC 133 Connector

Project ID: RW-10

The purpose of this project is to improve operations and connectivity, provide multimodal accommodations, and support evacuation efforts between US 17 (Ocean Hwy E) and NC 133 (River Rd SE).



| Proposed Cross Section | | | | | | |
|--------------------------|-----------------------------|-------------|--------------|------------|--|-----------------------------|
| Improvement Type | NCDOT Typical Cross Section | Total Lanes | Median (Y/N) | Lane Width | Bicycle/Pedestrian Facility Type | Cost Estimate (in millions) |
| New Road at New Location | 2D | 2 | N | 11' | 10' MUP 5' Sidewalk Pedestrian accommodations at all intersections | \$41.5 |

SR 1472 (Village Road/ Fletcher Road) and SR 1438 (Lanvale Road) Intersection Improvements

Project ID: RW-11

The purpose of this project is to improve safety and operations at the intersection of SR 1472 (Village Road/Fletcher Road) and SR 1438 (Lanvale Road).



| Project Facts | | | | |
|--|---|----|----|----|
| Route Number(s) | SR 1472/SR 1438 | | | |
| Jurisdiction(s) | Town of Leland | | | |
| Facility Classification | Principal Arterial - Other, Minor Arterial, Local | | | |
| | NB | SB | EB | WB |
| Number of Existing Lanes Entering Intersection | 1 | 1 | 1 | 1 |
| Project Horizon Year | 2024 | | | |

| Proposed Project Cross Section | | | | | | | | |
|--------------------------------|------------|----|----|----|-------------------|-----------------------|--|-----------------------------|
| Improvement Type | Thru Lanes | | | | Realignment (Y/N) | Grade Separated (Y/N) | Bicycle/Pedestrian Facility Type | Cost Estimate (in millions) |
| | NB | SB | EB | WB | | | | |
| Traffic Signal | 1 | 1 | 1 | 1 | N | N | 10' MUP on SR 1438 (Lanvale Rd) and SR 1472 (Village Road) Crosswalks Pedestrian signal accommodations at intersection | \$2.02 |



SR 1472 (Village Road) and SR 1455 (Lincoln Road) Intersection Improvements

Project ID: RW-12

The purpose of this project is to improve safety and operations at the intersection of SR 1472 (Village Road) and SR 1455 (Lincoln Road).

| Project Facts | | | | |
|--|-----------------------------------|----|----|----|
| Route Number(s) | US 74/76, SR 1437 | | | |
| Jurisdiction(s) | Town of Leland | | | |
| Facility Classification | Principal Arterial - Other, Local | | | |
| | NB | SB | EB | WB |
| Number of Existing Lanes Entering Intersection | 1 | 1 | 1 | 1 |
| Project Horizon Year | 2041 | | | |

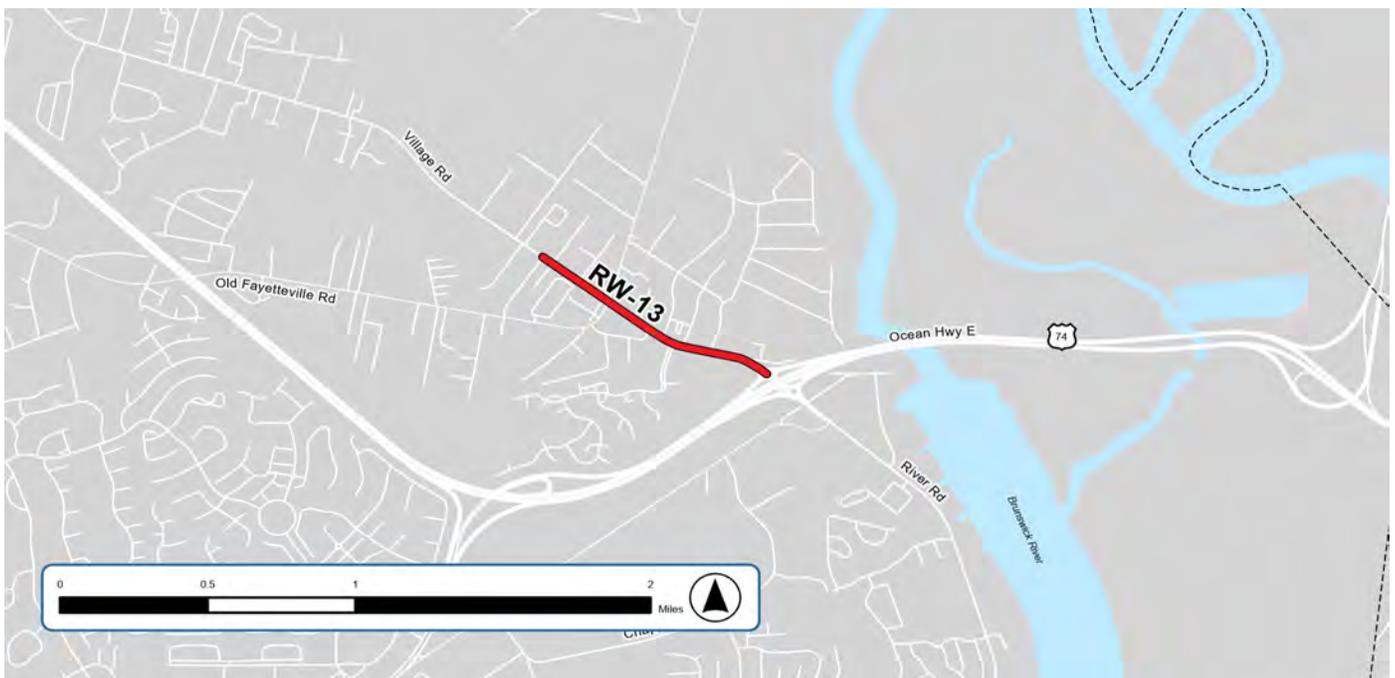
| Proposed Project Cross Section | | | | | |
|--------------------------------|-----------------------------------|-------------------|-----------------------|--|-----------------------------|
| Improvement Type | Project Description | Realignment (Y/N) | Grade Separated (Y/N) | Bicycle/Pedestrian Facility Type | Cost Estimate (in millions) |
| Roundabout | 1-lane roundabout with slip lanes | N | N | 10' MUP on 1472 (Village Road) Crosswalks Pedestrian signal accommodations at intersection | \$2.02 |

SR 1472 (Village Road) Streetscape

Project ID: RW-13

The purpose of this project is to enhance safety, operations, and mobility through streetscape improvements on SR 1472 (Village Rd) between US 17/74/76 and Town Hall Drive

| Project Facts | |
|---------------------------------|----------------------------|
| From | US 17/74/76 |
| To | Town Hall Drive |
| Route Number(s) | SR 1472 |
| Length (miles) | 0.88 |
| Jurisdiction(s) | Town of Leland |
| Facility Classification | Principal Arterial - Other |
| Number of Existing Travel Lanes | 4 |
| Project Horizon Year | 2041 |



Proposed Project Cross Section

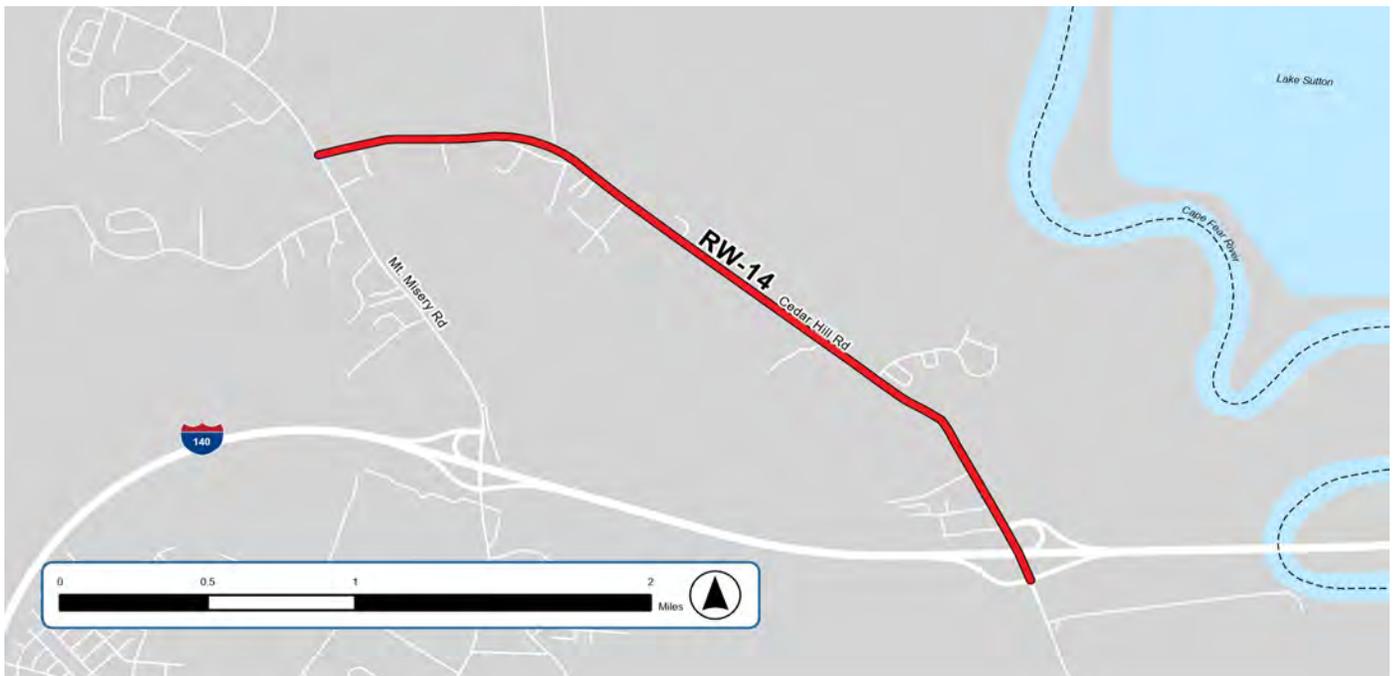
| Improvement Type | NCDOT Typical Cross Section | Total Lanes | Median (Y/N) | Lane Width | Bicycle/Pedestrian Facility Type | Cost Estimate (in millions) |
|--------------------------|-----------------------------|-------------|--------------|------------|--|-----------------------------|
| Streetscape Improvements | 4D with on-street parking | 4 | Y | 11' | 10' MUP 5' Sidewalk Pedestrian accommodations at all intersections | \$7.88 |

| Project Facts | |
|---------------------------------|---------------------------|
| From | SR 1426 (Mt. Misery Road) |
| To | I-140 |
| Route Number(s) | SR 1430 |
| Length (miles) | 3.09 |
| Jurisdiction(s) | Town of Navassa |
| Facility Classification | Local |
| Number of Existing Travel Lanes | 2 |
| Project Horizon Year | 2041 |

SR 1430 (Cedar Hill Road) Widening

Project ID: RW-14

The purpose of this project is to reduce congestion and improve safety on SR 1430 (Cedar Hill Road) from SR 1426 (Mt. Misery Road) to I-140.



| Proposed Project Cross Section | | | | | | |
|--------------------------------|-----------------------------|-------------|--------------|------------|--|-----------------------------|
| Improvement Type | NCDOT Typical Cross Section | Total Lanes | Median (Y/N) | Lane Width | Bicycle/Pedestrian Facility Type | Cost Estimate (in millions) |
| Road Widening | 4F | 4 | Y | 11' | 10' MUP 5' Sidewalk Pedestrian accommodations at all intersections | \$7.88 |

Ivester Court/ Eastbrook Connector

Project ID: RW-19

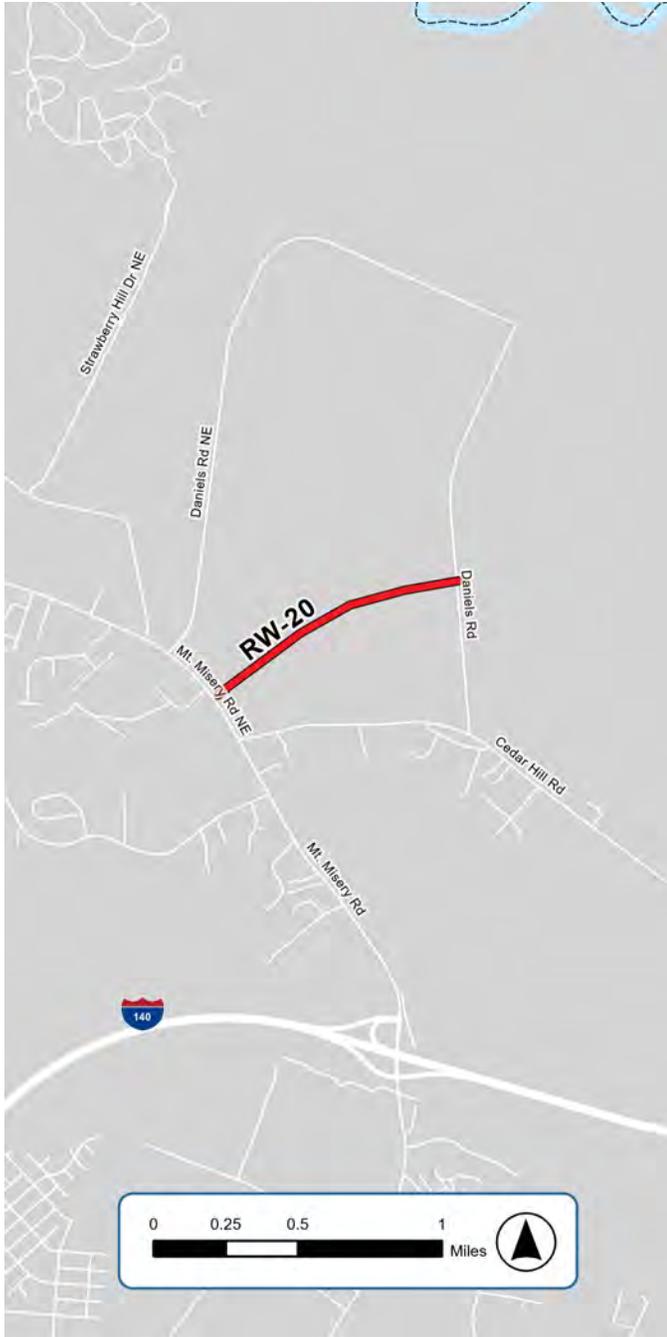
The purpose of this project is to improve operations and connectivity to nearby residential areas and industrial facilities.

| Project Facts | |
|---------------------------------|-------------------------------|
| From | Seaboard Industrial Park Lane |
| To | Sandy Lane Extension |
| Route Number(s) | N/A |
| Length (miles) | 1.77 |
| Jurisdiction(s) | Town of Navassa |
| Facility Classification | N/A |
| Number of Existing Travel Lanes | N/A |
| Project Horizon Year | 2041 |



Proposed Project Cross Section

| Improvement Type | NCDOT Typical Cross Section | Total Lanes | Median (Y/N) | Lane Width | Bicycle/Pedestrian Facility Type | Cost Estimate (in millions) |
|--------------------------|--|-------------|--------------|------------|--|-----------------------------|
| New Road at New Location | 2F/2P (see Navassa Collector Street Plan) | 2 | N | 11' | 10' MUP 5' Sidewalk Pedestrian accommodations at all intersections | \$12.98 |



Mt. Misery Road/ Daniels Road Connector

Project ID: RW-20

The purpose of this project is to improve operations and connectivity between Mt. Misery Road and Daniels Road.

| Project Facts | |
|---------------------------------|---------------------------|
| From | SR 1426 (Mt. Misery Road) |
| To | SR 1453 (Daniels Road) |
| Route Number(s) | N/A |
| Length (miles) | 0.94 |
| Jurisdiction(s) | Town of Navassa |
| Facility Classification | N/A |
| Number of Existing Travel Lanes | N/A |
| Project Horizon Year | 2041 |

Proposed Project Cross Section

| Improvement Type | NCDOT Typical Cross Section | Total Lanes | Median (Y/N) | Lane Width | Bicycle/Pedestrian Facility Type | Cost Estimate (in millions) |
|--------------------------|--|-------------|--------------|------------|--|-----------------------------|
| New Road at New Location | 2F/2P (see Navassa Collector Street Plan) | 2 | N | 11' | 10' MUP 5' Sidewalk Pedestrian accommodations at all intersections | \$7.18 |

Park Avenue/Pine Valley Drive/Brooklyn Street/N. Navassa Road Connector

Project ID: RW-22

The purpose of this project is to improve operations and connectivity between Park Avenue/Pine Valley Drive/Brooklyn Street and SR 1435 (N. Navassa Road).

| Project Facts | |
|---------------------------------|---------------------------|
| From | Pine Valley Road |
| To | SR 1435 (N. Navassa Road) |
| Route Number(s) | N/A |
| Length (miles) | 0.45 |
| Jurisdiction(s) | Town of Navassa |
| Facility Classification | N/A |
| Number of Existing Travel Lanes | N/A |
| Project Horizon Year | 2041 |



Proposed Project Cross Section

| Improvement Type | NCDOT Typical Cross Section | Total Lanes | Median (Y/N) | Lane Width | Bicycle/Pedestrian Facility Type | Cost Estimate (in millions) |
|--------------------------|--|-------------|--------------|------------|--|-----------------------------|
| New Road at New Location | 2F/2P (see Navassa Collector Street Plan) | 2 | N | 11' | 10' MUP 5' Sidewalk Pedestrian accommodations at all intersections | \$4.14 |



Ridge Road Extension

Project ID: RW-23

The purpose of this project is to improve connectivity between SR 1426 (Mt. Misery Road) and Ridge Road.

| Project Facts | |
|---------------------------------|---------------------------|
| From | SR 1426 (Mt. Misery Road) |
| To | Ridge Road |
| Route Number(s) | N/A |
| Length (miles) | 0.58 |
| Jurisdiction(s) | Town of Navassa |
| Facility Classification | N/A |
| Number of Existing Travel Lanes | N/A |
| Project Horizon Year | 2041 |

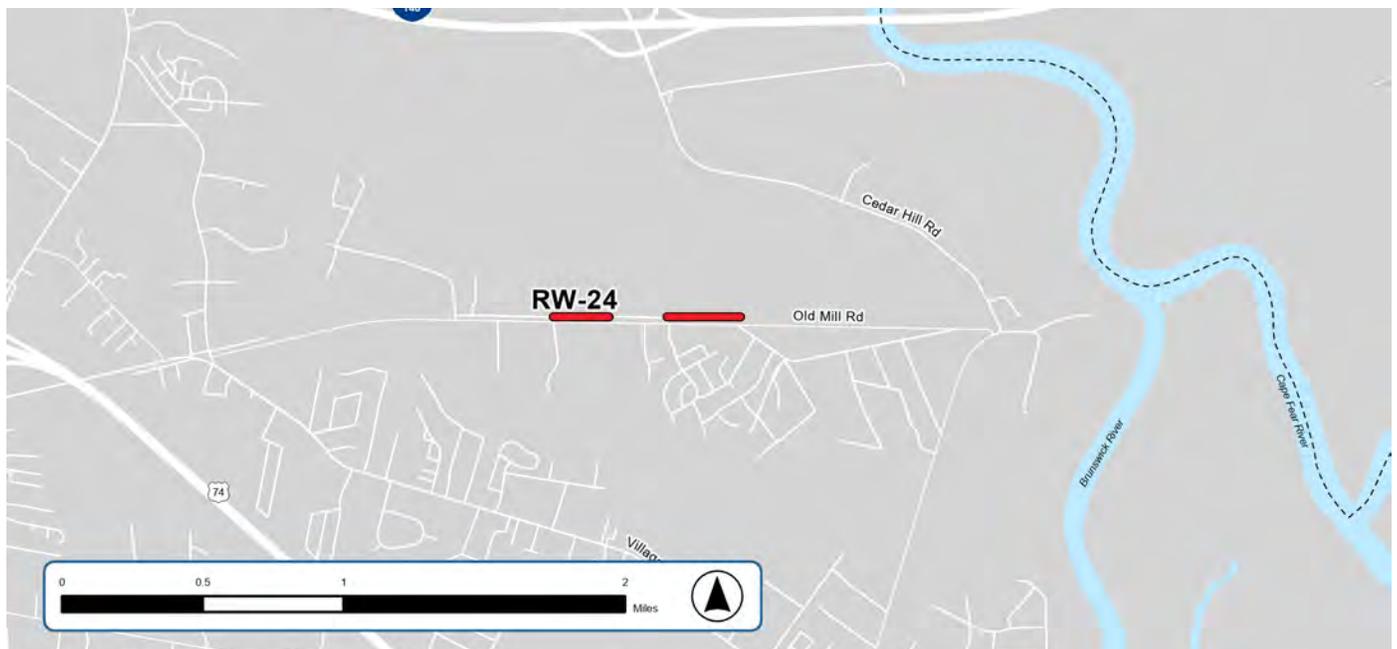
| Proposed Project Cross Section | | | | | | |
|--------------------------------|--|-------------|--------------|------------|--|-----------------------------|
| Improvement Type | NCDOT Typical Cross Section | Total Lanes | Median (Y/N) | Lane Width | Bicycle/Pedestrian Facility Type | Cost Estimate (in millions) |
| New Road at New Location | 2F/2P (see Navassa Collector Street Plan) | 2 | N | 11' | 10' MUP 5' Sidewalk Pedestrian accommodations at all intersections | \$4.43 |

Sandy Lane Extension

Project ID: RW-24

The purpose of this project is to improve operations and connectivity between the proposed Ivester Court/ Eastbrook Connector, Main Street, and Trestle Way/Sandy Lane.

| Project Facts | |
|---------------------------------|-----------------|
| From | Trestle Way |
| To | Sandy Lane |
| Route Number(s) | N/A |
| Length (miles) | 0.46 |
| Jurisdiction(s) | Town of Navassa |
| Facility Classification | N/A |
| Number of Existing Travel Lanes | N/A |
| Project Horizon Year | 2041 |



| Proposed Project Cross Section | | | | | | |
|--------------------------------|--|-------------|--------------|------------|--|-----------------------------|
| Improvement Type | NCDOT Typical Cross Section | Total Lanes | Median (Y/N) | Lane Width | Bicycle/Pedestrian Facility Type | Cost Estimate (in millions) |
| New Road at New Location | 2F/2P (see Navassa Collector Street Plan) | 2 | N | 11' | 10' MUP 5' Sidewalk Pedestrian accommodations at all intersections | \$3.52 |



Victoria Lane Extension

Project ID: RW-26

The purpose of this project is to extend Victoria Lane to Sturgeon Drive NE in Leland, improving network connectivity and redundancy.

| Project Facts | |
|---------------------------------|---------------------------|
| From | Terminus of Victoria Lane |
| To | Sturgeon Drive NE |
| Route Number(s) | N/A |
| Length (miles) | 0.17 |
| Jurisdiction(s) | Town of Navassa |
| Facility Classification | N/A |
| Number of Existing Travel Lanes | N/A |
| Project Horizon Year | 2041 |

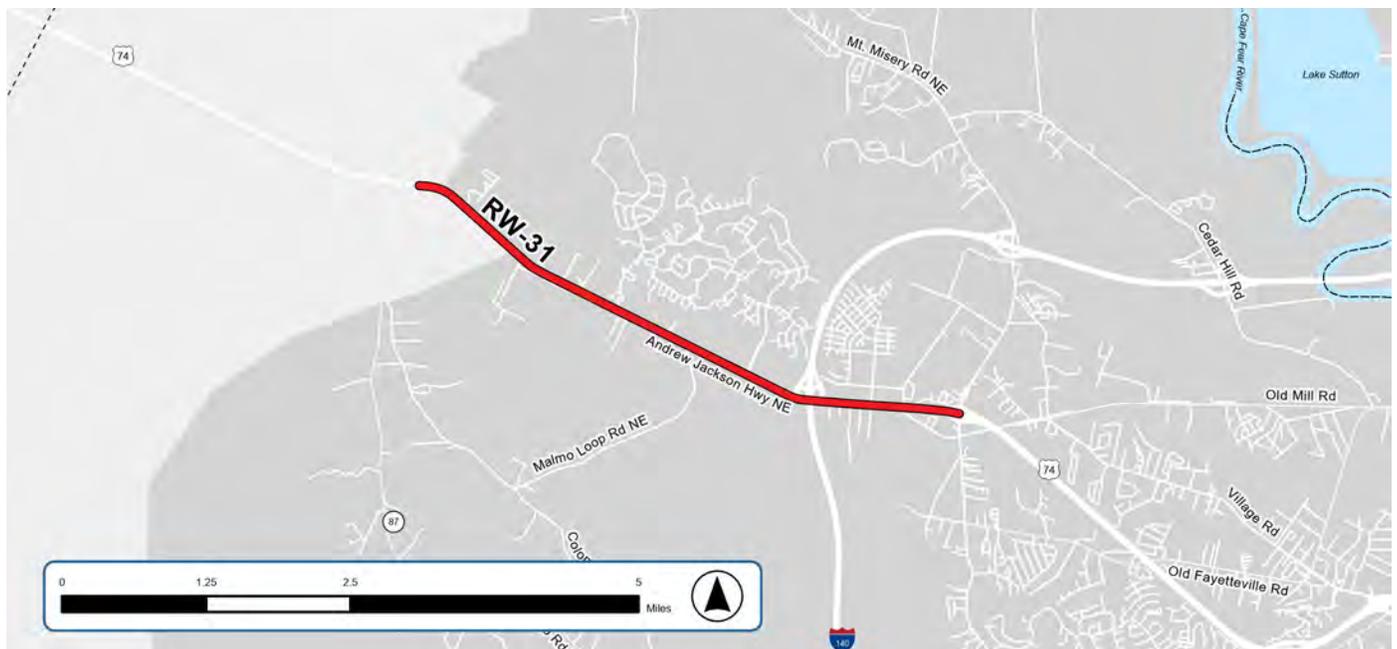
| Proposed Project Cross Section | | | | | | |
|--------------------------------|--|-------------|--------------|------------|--|-----------------------------|
| Improvement Type | NCDOT Typical Cross Section | Total Lanes | Median (Y/N) | Lane Width | Bicycle/Pedestrian Facility Type | Cost Estimate (in millions) |
| New Road at New Location | 2F/2P (see Navassa Collector Street Plan) | 2 | N | 11' | 10' MUP 5' Sidewalk Pedestrian accommodations at all intersections | \$5.65 |

Upgrade US 74/76 to Interstate Standards

Project ID: RW-31

The purpose of this project is to upgrade US 74/76 to interstate standards, improving operations and efficiency in the movement of people and freight.

| Project Facts | |
|---------------------------------|---|
| From | NC 87 (Maco Road NE) |
| To | SR 1426 (Mt. Misery Road) |
| Route Number(s) | US 74 |
| Length (miles) | 5.21 |
| Jurisdiction(s) | Brunswick County, Town of Leland |
| Facility Classification | Principal Arterial - Freeway/Expressway |
| Number of Existing Travel Lanes | 4 |
| Project Horizon Year | 2041 |



| Proposed Project Cross Section | | | | | | |
|---|-----------------------------|-------------|--------------|------------|-----------------------------------|-----------------------------|
| Improvement Type | NCDOT Typical Cross Section | Total Lanes | Median (Y/N) | Lane Width | Bicycle/ Pedestrian Facility Type | Cost Estimate (in millions) |
| Upgrade to Interstate Standards, Access Management Improvements | 4A | 4 | Y | 12' | N/A | \$68.3 |



US 17 Reduced Conflict Intersections

Project ID: RW-33

The purpose of this project is to improve congestion and efficiency along US 17/NC 210 between SR 2734 (Marsh Oaks Drive) and SR 1582 (Washington Acres Road) in Pender County.

| Project Facts | |
|---------------------------------|-----------------------------------|
| From | SR 2734(Marsh Oaks Drive) |
| To | SR 1582 (Washington Acres Road) |
| Route Number(s) | US 17 |
| Length (miles) | 6.49 |
| Jurisdiction(s) | New Hanover County, Pender County |
| Facility Classification | Principal Arterial - Other |
| Number of Existing Travel Lanes | 4 |
| Project Horizon Year | 2041 |

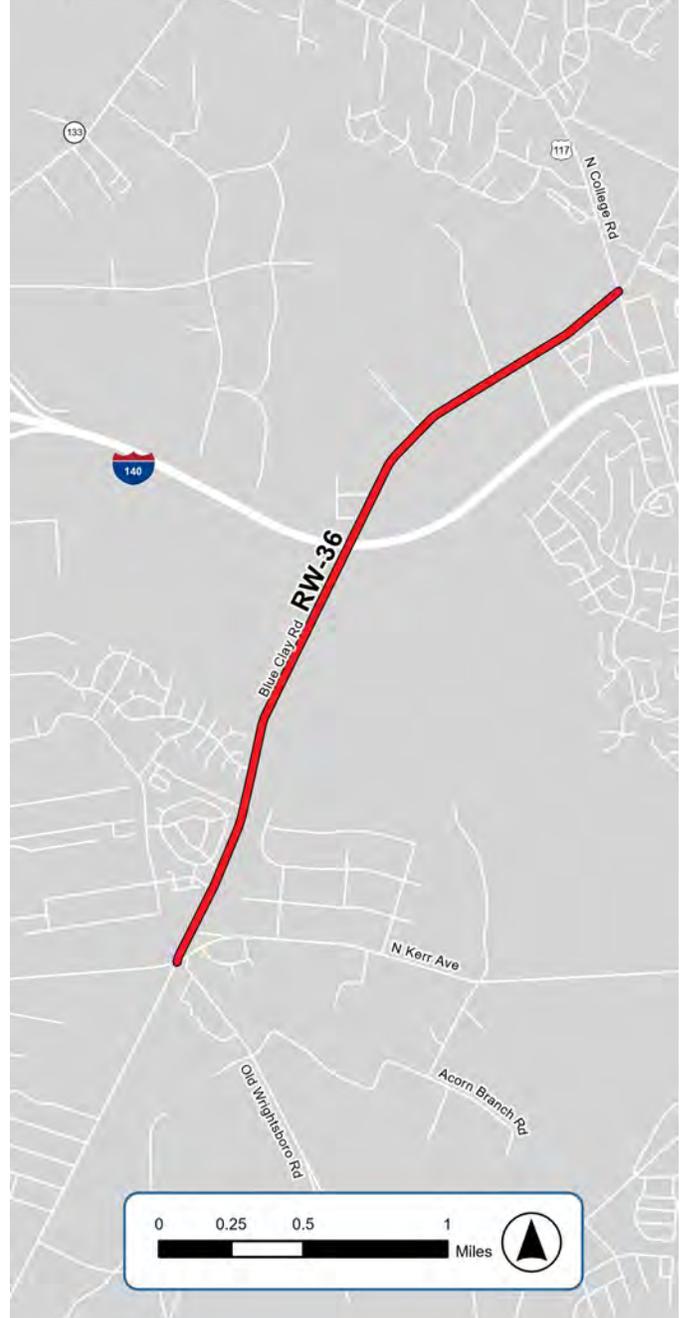
Proposed Project Cross Section

| Improvement Type | NCDOT Typical Cross Section | Total Lanes | Median (Y/N) | Lane Width | Bicycle/Pedestrian Facility Type | Cost Estimate (in millions) |
|--------------------------------|-----------------------------|-------------|--------------|------------|--|-----------------------------|
| Access Management Improvements | 4C | 4 | Y | 12' | 10' MUP 5' Sidewalk Pedestrian accommodations at all intersections | \$74.8 |

SR 1318 (Blue Clay Road) Modernization

Project ID: RW-36

The purpose of this project is to improve safety on SR 1318 (Blue Clay Road) between SR 1175 (N. Kerr Avenue) and US117/NC132 (N. College Road) and bring the roadway up to current design standards.



Project Facts

| | |
|---------------------------------|---------------------------------|
| From | SR 1175 (N. Kerr Avenue) |
| To | US 117/NC 132 (N. College Road) |
| Route Number(s) | SR 1318 |
| Length (miles) | 2.90 |
| Jurisdiction(s) | New Hanover County |
| Facility Classification | Minor Arterial |
| Number of Existing Travel Lanes | 2 |
| Project Horizon | 2041 |

Proposed Project Cross Section

| Improvement Type | NCDOT Typical Cross Section | Total Lanes | Median (Y/N) | Lane Width | Bicycle/Pedestrian Facility Type | Cost Estimate (in millions) |
|------------------|-----------------------------|-------------|--------------|------------|--|-----------------------------|
| Modernization | 2F | 2 | N | 11' | 10' MUP 5' Sidewalk Pedestrian accommodations at all intersections | \$29.09 |



Future NC 417 (Hampstead Bypass) and SR 1336 (Sidbury Road) Interchange

Project ID: RW-37

The purpose of this project is to improve mobility and connectivity by connecting SR 1336 (Sidbury Road) and the (future) NC 417 (Hampstead Bypass).

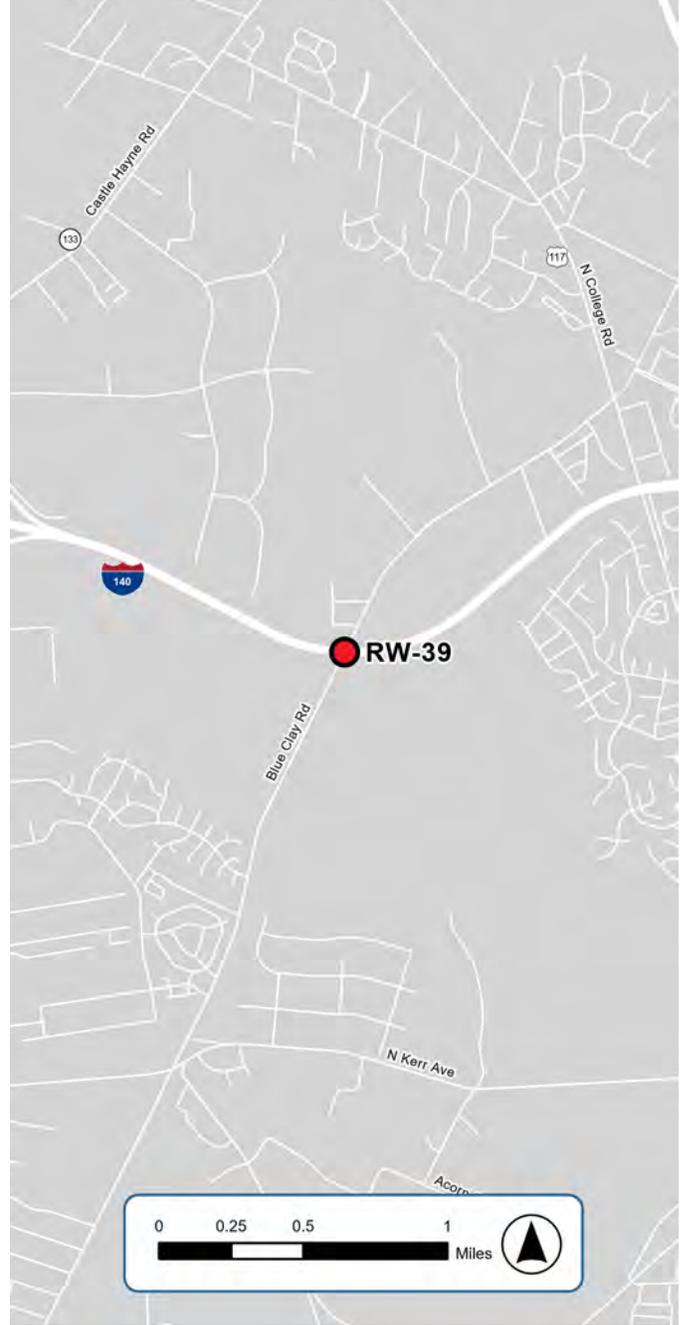
| Project Facts | | | | |
|--|--|----|----|----|
| Route Number(s) | Future NC 417, SR 1336 | | | |
| Jurisdiction(s) | New Hanover County, Pender County | | | |
| Facility Classification | Principal Arterial - Freeway/Expressway, Minor Collector | | | |
| | Bypass | | | |
| | NB | SB | EB | WB |
| Number of Existing Lanes Entering Intersection | 2 | 2 | 1 | 1 |
| Project Horizon Year | 2034 | | | |

| Proposed Project Cross Section | | | | | |
|--------------------------------|-----------------------|-------------------|-----------------------|---|-----------------------------|
| Improvement Type | Interchange Type | Realignment (Y/N) | Grade Separated (Y/N) | Bicycle/Pedestrian Facility Type | Cost Estimate (in millions) |
| New Interchange | Diamond/Tight Diamond | N | Y | On SR 1336 10' MUP 5' Sidewalk Pedestrian accommodations at all intersections | \$13.9 |

I-140 (Blue Clay Road) Interchange

Project ID: RW-39

The purpose of this project is to improve mobility and connectivity by introducing a new interchange at the intersection of SR 1318 (Blue Clay Road) and I-140.



| Project Facts | | | | |
|--|---|----|-------|----|
| Route Number(s) | I-140, SR 1318 | | | |
| Jurisdiction(s) | New Hanover County | | | |
| Facility Classification | Principal Arterial - Interstate, Minor Arterial | | | |
| | SR 1318 | | I-140 | |
| | NB | SB | EB | WB |
| Number of Existing Lanes Entering Intersection | 1 | 1 | 2 | 2 |
| Project Horizon Year | 2034 | | | |

| Proposed Project Cross Section | | | | | |
|--------------------------------|-----------------------|-------------------|-----------------------|---|-----------------------------|
| Improvement Type | Interchange Type | Realignment (Y/N) | Grade Separated (Y/N) | Bicycle/Pedestrian Facility Type | Cost Estimate (in millions) |
| New Interchange | Diamond/Tight Diamond | N | Y | On SR 1318 10' MUP 5' Sidewalk Pedestrian accommodations at all intersections | \$69.2 |



SR 1565 (Mohican Trail) and SR 1492 (Masonboro Loop Road) Roundabout

Project ID: RW-40

The purpose of this project is to improve safety and mobility at the intersection of SR 1565 (Mohican Trail) and SR 1492 (Masonboro Loop Road).

| Project Facts | | | | |
|--|---------------------------------|----|----|----|
| Route Number(s) | SR 1565, SR 1492 | | | |
| Jurisdiction(s) | New Hanover County | | | |
| Facility Classification | Minor Arterial, Major Collector | | | |
| | NB | SB | EB | WB |
| Number of Existing Lanes Entering Intersection | 1 | 1 | 1 | 0 |
| Project Horizon Year | 2041 | | | |

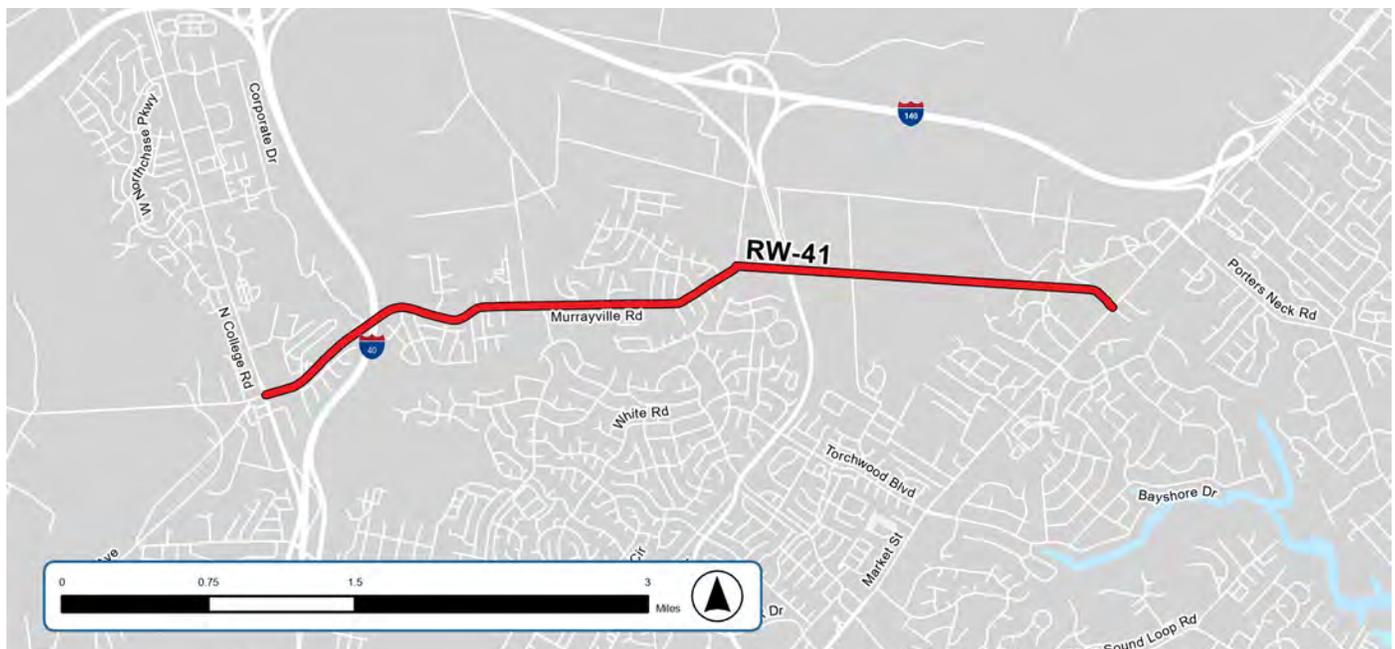
| Proposed Project Cross Section | | | | | |
|--------------------------------|-----------------------------------|-------------------|-----------------------|---|-----------------------------|
| Improvement Type | Project Description | Realignment (Y/N) | Grade Separated (Y/N) | Bicycle/Pedestrian Facility Type | Cost Estimate (in millions) |
| Roundabout | 1-lane roundabout with slip lanes | Y | N | 10' MUP 5' Sidewalk 10' Painted Crosswalk | \$2.02 |

SR 1322 (Murrayville Road) Modernization and Extension

Project ID: RW-41

The purpose of this project is improve safety, mobility and connectivity on SR 1332 (Murrayville Road) between US 117/NC 132(N. College Road) and US 17 BUS (Market Street).

| Project Facts | |
|---------------------------------|---------------------------------|
| From | US 117/NC 132 (N. College Road) |
| To | US 17 |
| Route Number(s) | SR 1322 |
| Length (miles) | 4.61 |
| Jurisdiction(s) | New Hanover County |
| Facility Classification | Local |
| Number of Existing Travel Lanes | 2 |
| Project Horizon Year | 2034 |



Proposed Project Cross Section

| Improvement Type | NCDOT Typical Cross Section | Total Lanes | Median (Y/N) | Lane Width | Bicycle/Pedestrian Facility Type | Cost Estimate (in millions) |
|---|--|-----------------|--------------|------------|---|-----------------------------|
| Modernization, New Road at New Location | 4B (N. Kerr to US 117/N. College Rd) 2D (US 117/N. College Rd to US 17 BUS/Market St) | Varies 2 - 4 | Varies | 12' | On SR 1322 10' MUP Pedestrian signal accommodations at intersections | \$114.7 |



**SR 1492 (Myrtle Grove Road)/
 SR 1521 (Piner Road)/SR
 1492 (Masonboro Loop Road)**

Roundabout

Project ID: RW-43

The purpose of this project is to improve safety and mobility at the intersection of Myrtle Grove Road, Piner Road, and Masonboro Loop Road.

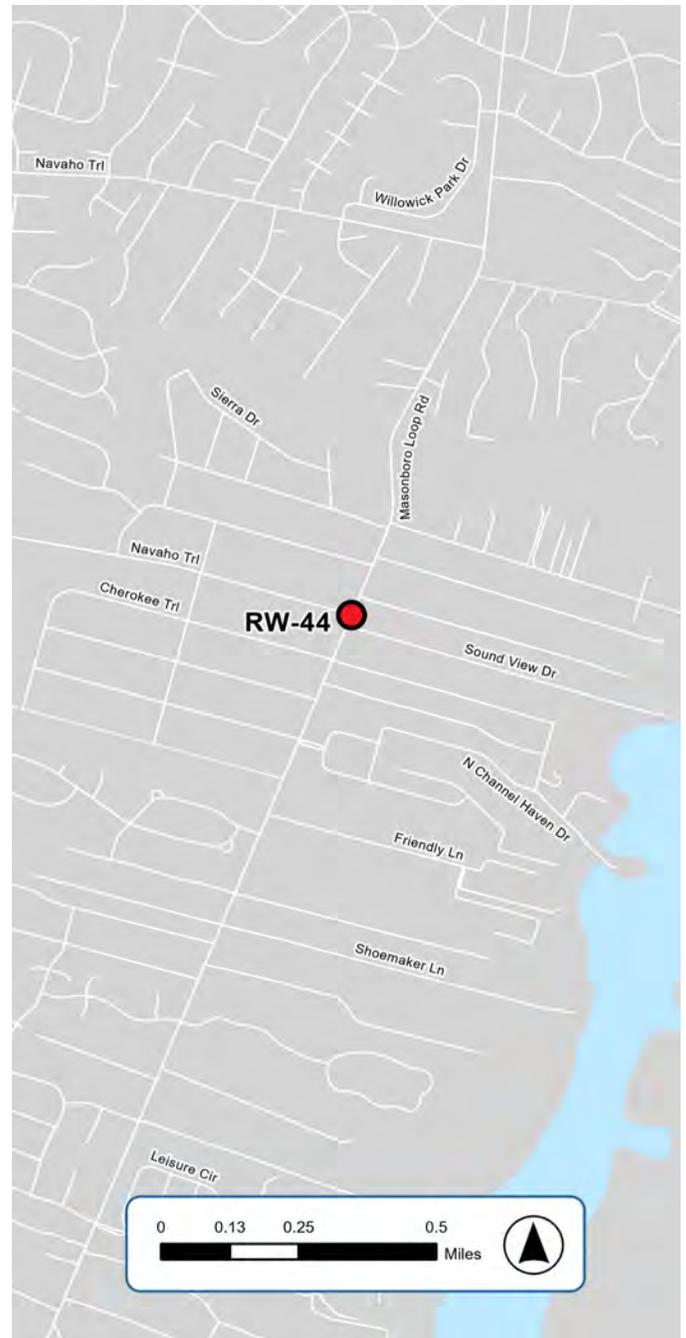
| Project Facts | | | | |
|--|-----------------------|----|----|----|
| Route Number(s) | SR 1492, SR 1521 | | | |
| Jurisdiction(s) | New Hanover County | | | |
| Facility Classification | Minor Arterials (all) | | | |
| | NB | SB | EB | WB |
| Number of Existing Lanes Entering Intersection | 1 | 1 | 1 | 1 |
| Project Horizon Year | 2041 | | | |

| Proposed Project Cross Section | | | | | |
|--------------------------------|----------------------------------|-------------------|-----------------------|---|-----------------------------|
| Improvement Type | Project Description | Realignment (Y/N) | Grade Separated (Y/N) | Bicycle/Pedestrian Facility Type | Cost Estimate (in millions) |
| Roundabout | 1-lane roundabout with slip lane | Y | N | 10' MUP 5' Sidewalk 10' Painted Crosswalk | \$2.02 |

SR 1516 (Navaho Trail) and SR 1492 (Masonboro Loop Road) Roundabout (Southern Intersection)

Project ID: RW-44

The purpose of this project is to improve safety and mobility at the intersection of SR 1516 (Navaho Trail) and SR 1492 (Masonboro Loop Road.)



| Project Facts | | | | |
|--|-----------------------|----|----|----|
| Route Number(s) | SR 1492, SR 1516 | | | |
| Jurisdiction(s) | New Hanover County | | | |
| Facility Classification | Minor Arterial, Local | | | |
| | NB | SB | EB | WB |
| Number of Existing Lanes Entering Intersection | 1 | 1 | 1 | 0 |
| Project Horizon Year | 2041 | | | |

| Proposed Project Cross Section | | | | | |
|--------------------------------|-----------------------------------|-------------------|-----------------------|---|-----------------------------|
| Improvement Type | Project Description | Realignment (Y/N) | Grade Separated (Y/N) | Bicycle/Pedestrian Facility Type | Cost Estimate (in millions) |
| Roundabout | 1-lane roundabout with slip lanes | N | N | 10' MUP 5' Sidewalk 10' Painted Crosswalk | \$2.02 |



SR 1336 (Sidbury Road) and SR 1002 (Holly Shelter Road) Connector

Project ID: RW-45

The purpose of this project is to improve operations and connectivity between SR 1336 (Sidbury Road) and SR 1002 (Holly Shelter Road).

| Project Facts | |
|---------------------------------|------------------------------|
| From | SR 1002 (Holly Shelter Road) |
| To | SR 1336 (Sidbury Road) |
| Route Number(s) | N/A |
| Length (miles) | 2.03 |
| Jurisdiction(s) | New Hanover County |
| Facility Classification | Minor Collector |
| Number of Existing Travel Lanes | N/A |
| Project Horizon Year | 2041 |

Proposed Project Cross Section

| Improvement Type | NCDOT Typical Cross Section | Total Lanes | Median (Y/N) | Lane Width | Bicycle/Pedestrian Facility Type | Cost Estimate (in millions) |
|--------------------------|-----------------------------|-------------|--------------|------------|--|-----------------------------|
| New Road at New Location | 2F | 2 | N | 12' | 10' MUP 5' Sidewalk Pedestrian accommodations at all intersections | \$15.5 |

SR 1521 (Piner Road) Widening and Intersection Realignment

Project ID: RW-46

The purpose of this project is to improve mobility and intersection design standards on SR 1521 (Piner Road) between NC 132 (S. College Road) and SR 1492 (Myrtle Grove Road).

| Project Facts | |
|---------------------------------|-----------------------------|
| From | NC 132 (S. College Road) |
| To | SR 1492 (Myrtle Grove Road) |
| Route Number(s) | SR 1521 |
| Length (miles) | 1.04 |
| Jurisdiction(s) | New Hanover County |
| Facility Classification | Minor Arterial |
| Number of Existing Travel Lanes | 2 |
| Project Horizon Year | 2041 |



Proposed Project Cross Section

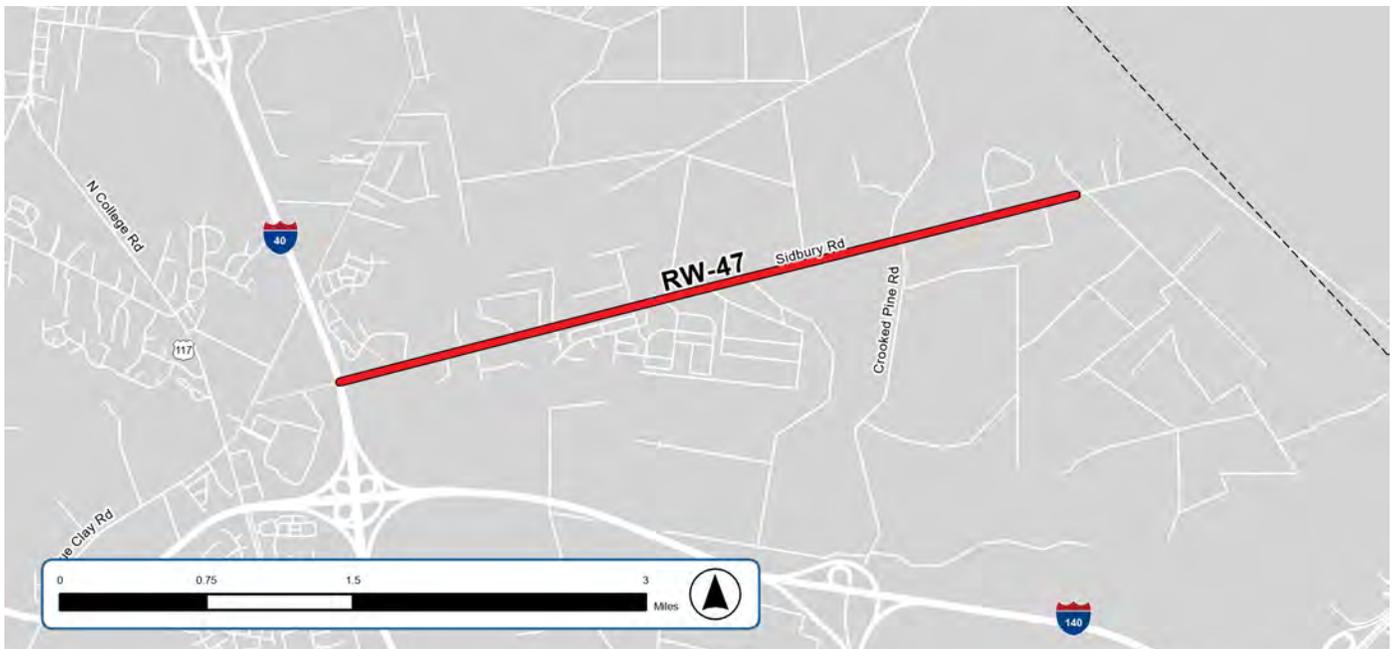
| Improvement Type | NCDOT Typical Cross Section | Total Lanes | Median (Y/N) | Lane Width | Bicycle/Pedestrian Facility Type | Cost Estimate (in millions) |
|---|-----------------------------|-------------|--------------|------------|--|-----------------------------|
| Road Widening, Intersection Realignment | 4B | 4 | Y | 12' | 10' MUP 5' Sidewalk Pedestrian accommodations at all intersections | \$15.35 |

| Project Facts | |
|---------------------------------|--|
| From | I-40 |
| To | Future NC 417 (Hampstead Bypass) Interchange (RW-37) |
| Route Number(s) | SR 1336 |
| Length (miles) | 3.89 |
| Jurisdiction(s) | New Hanover County |
| Facility Classification | Minor Collector |
| Number of Existing Travel Lanes | 2 |
| Project Horizon Year | 2041 |

SR 1336 (Sidbury Road) Widening

Project ID: RW-47

The purpose of this project is to improve congestion on Sidbury Road between I-40 and the future NC 417 (Hampstead Bypass) Interchange.

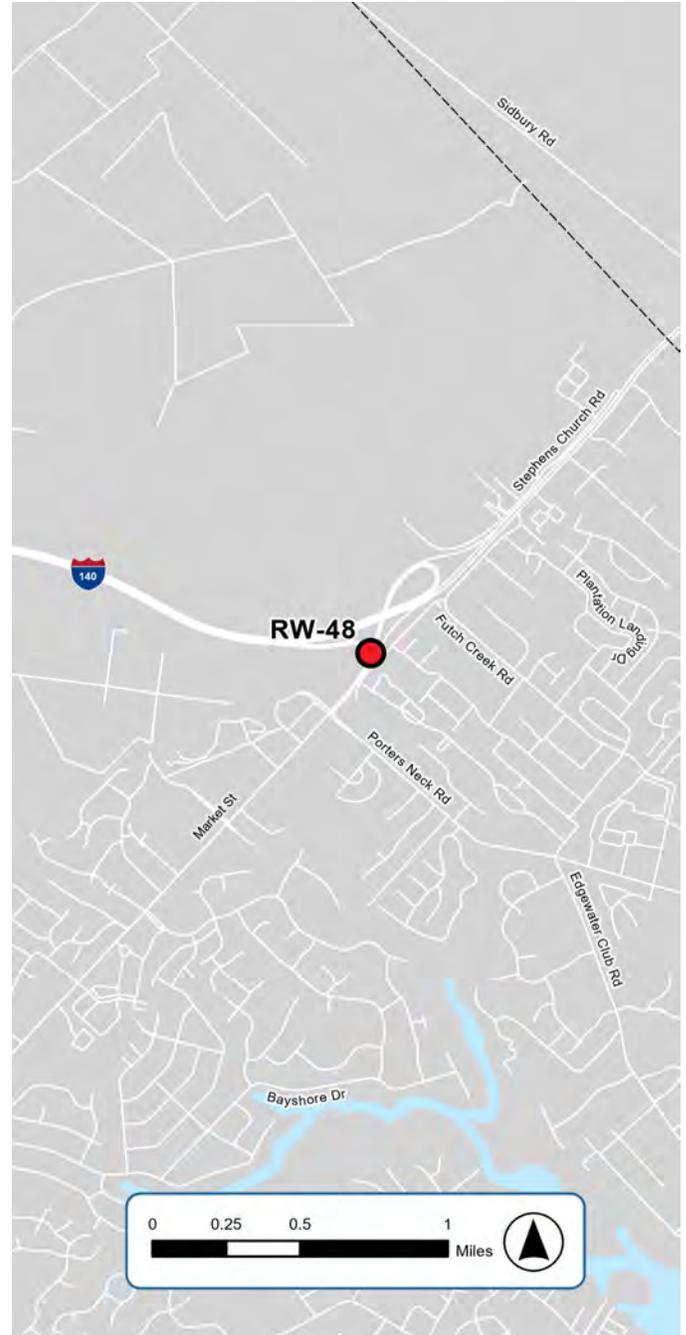


| Proposed Project Cross Section | | | | | | |
|--------------------------------|-----------------------------|-------------|--------------|------------|--|-----------------------------|
| Improvement Type | NCDOT Typical Cross Section | Total Lanes | Median (Y/N) | Lane Width | Bicycle/Pedestrian Facility Type | Cost Estimate (in millions) |
| Road Widening | 4B | 4 | Y | 12' | 10' MUP 5' Sidewalk Pedestrian accommodations at all intersections | \$33.4 |

US 17/ US 17 Business/I-140 Interchange Improvements

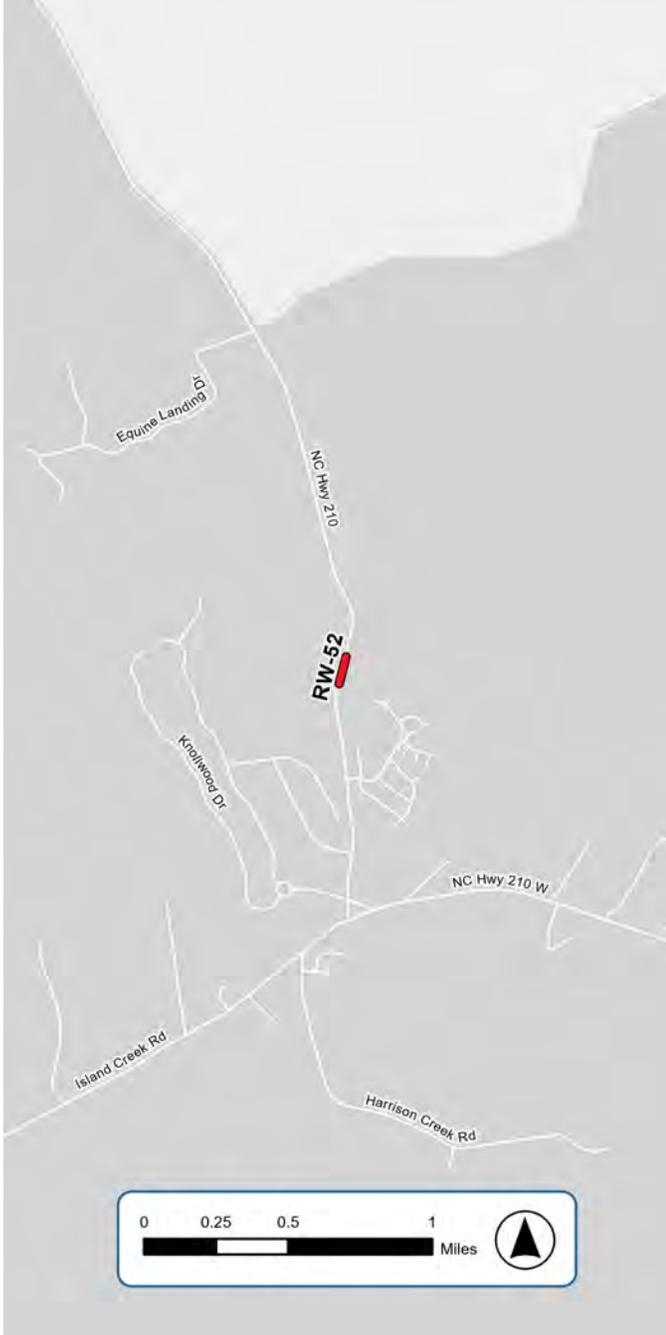
Project ID: RW-48

The purpose of this project is to improve congestion and connectivity at the intersection of US 17/US 17 BUS (Market Street) and NC 140.



| Project Facts | | | | |
|--|---|----|----|----|
| Route Number(s) | US 17, US 17 BUS, NC 140 | | | |
| Jurisdiction(s) | New Hanover County | | | |
| Facility Classification | Principal Arterial - Interstate & Freeway/ Expressway, Principal Arterial - Other | | | |
| | NB | SB | EB | WB |
| Number of Existing Lanes Entering Intersection | 1 | 2 | 1 | 2 |
| Project Horizon Year | 2041 | | | |

| Proposed Project Cross Section | | | | | |
|--------------------------------|---|-------------------|-----------------------|------------|-----------------------------|
| Improvement Type | Project Description | Realignment (Y/N) | Grade Separated (Y/N) | Lane Width | Cost Estimate (in millions) |
| Interchange Improvements | Add US 17/US 17 BUS (Market St) northbound lane | N | N | 12' | \$19.51 |



NC 210 Bridge - Harrison Creek

Project ID: RW-52

The purpose of this project is to replace the existing bridge over Harrison Creek on NC 210 with a flood-resilient structure that enhances long-term safety and infrastructure reliability.

| Project Facts | |
|---------------------------------|----------------|
| Route Number(s) | NC 210 |
| Jurisdiction(s) | Pender County |
| Facility Classification | Minor Arterial |
| Number of Existing Travel Lanes | 2 |
| Project Horizon Year | 2041 |

| Proposed Project Cross Section | | | | |
|------------------------------------|-------------|------------|----------------------------------|-----------------------------|
| Improvement Type | Total Lanes | Lane Width | Bicycle/Pedestrian Facility Type | Cost Estimate (in millions) |
| Flood Resilient Bridge Replacement | 2 | 12' | 10' MUP 5' Sidewalk | \$3.82 |

NC 210 Bridge - Merricks Creek

Project ID: RW-53

The purpose of this project is to replace the existing bridge over Merricks Creek on NC 210 with a flood-resilient structure that enhances long-term safety and infrastructure reliability.



Project Facts

| | |
|---------------------------------|----------------|
| Route Number(s) | NC 210 |
| Jurisdiction(s) | Pender County |
| Facility Classification | Minor Arterial |
| Number of Existing Travel Lanes | 2 |
| Project Horizon Year | 2041 |

Proposed Project Cross Section

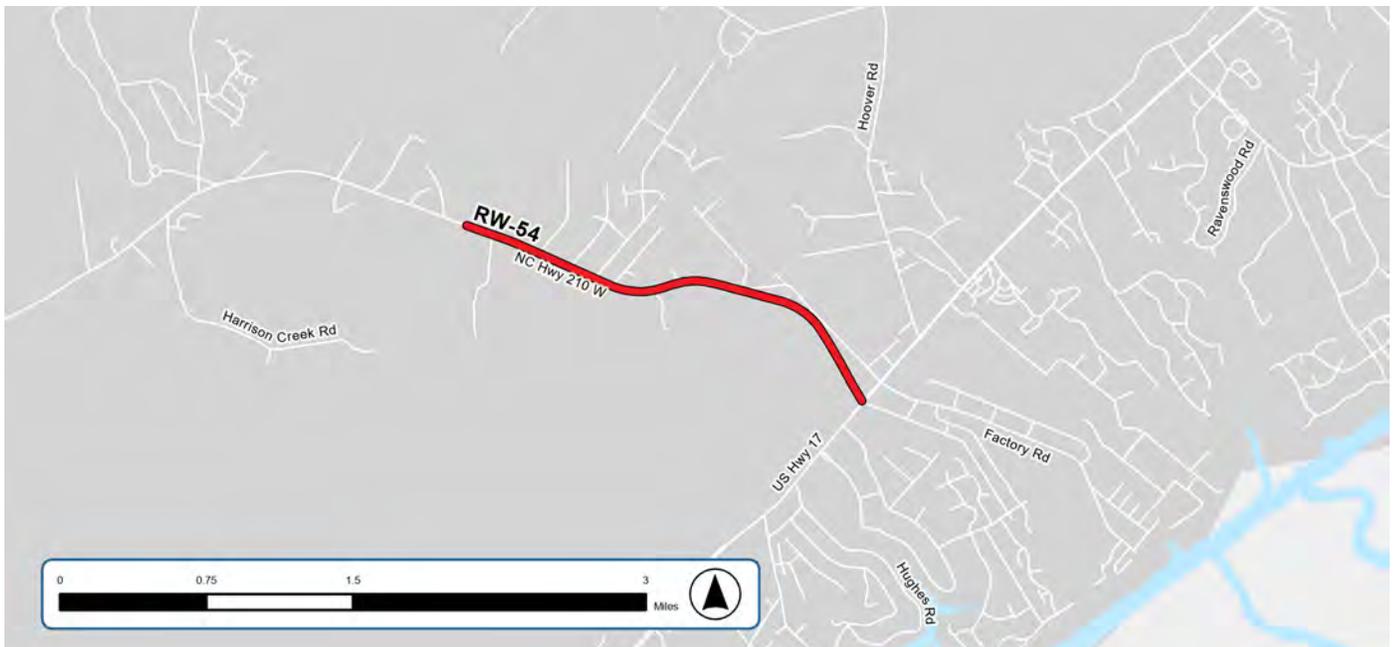
| Improvement Type | Total Lanes | Lane Width | Bicycle/Pedestrian Facility Type | Cost Estimate (in millions) |
|------------------------------------|-------------|------------|----------------------------------|-----------------------------|
| Flood Resilient Bridge Replacement | 2 | 12' | 10' MUP 5' Sidewalk | \$3.82 |

| Project Facts | |
|---------------------------------|----------------------------------|
| From | US 17 |
| To | Future NC 417 (Hampstead Bypass) |
| Route Number(s) | NC 210 |
| Length (miles) | 2.37 |
| Jurisdiction(s) | Pender County |
| Facility Classification | Minor Arterial |
| Number of Existing Travel Lanes | 2 |
| Project Horizon Year | 2041 |

NC 210 Widening

Project ID: RW-54

The purpose of this project is to improve congestion on NC 210 between US 17 and the future NC 417 (Hampstead Bypass).

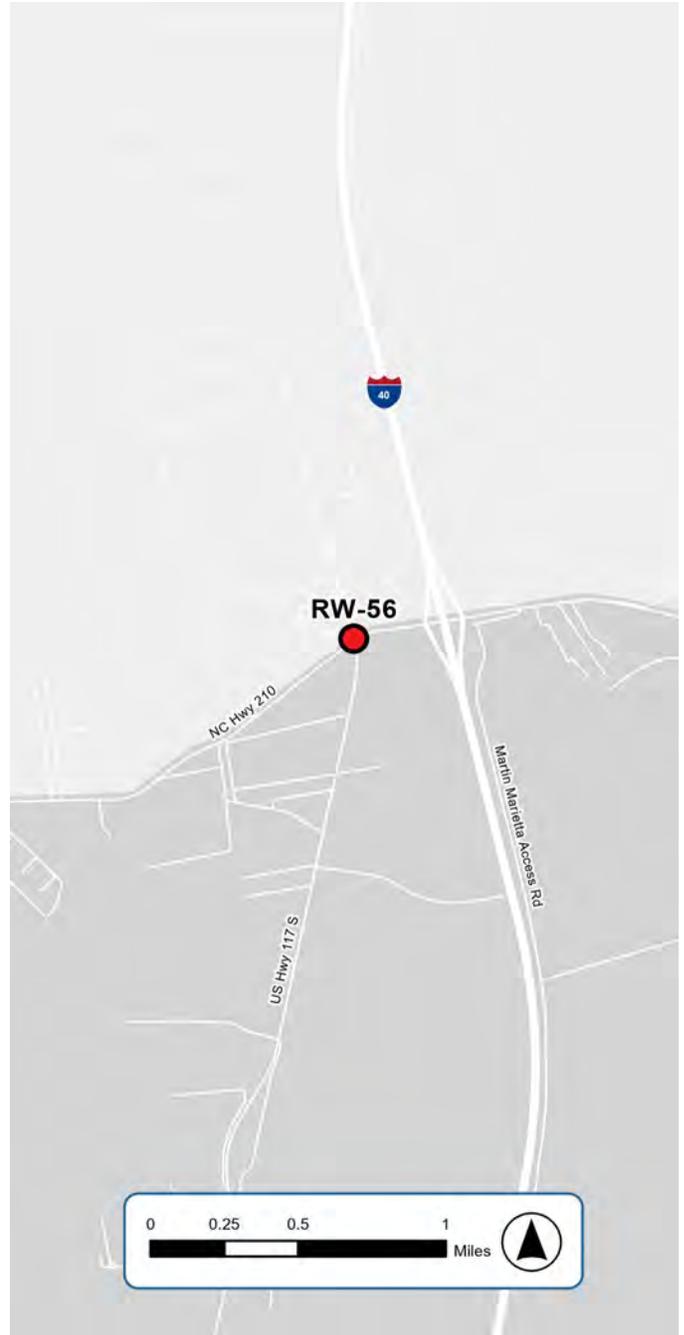


| Proposed Project Cross Section | | | | | | |
|--------------------------------|-----------------------------|-------------|--------------|------------|--|-----------------------------|
| Improvement Type | NCDOT Typical Cross Section | Total Lanes | Median (Y/N) | Lane Width | Bicycle/Pedestrian Facility Type | Cost Estimate (in millions) |
| Road Widening | 4F | 4 | Y | 12' | 10' MUP 5' Sidewalk Pedestrian accommodations at all intersections | \$22.95 |

US 117/NC 210 Intersection Improvements

Project ID: RW-56

The purpose of this project is to improve safety and operations at the intersection of US 117 and NC 210.



| Project Facts | | | | |
|--|-----------------------|----|----|----|
| Route Number(s) | US 117, NC 210 | | | |
| Jurisdiction(s) | Pender County | | | |
| Facility Classification | Minor Arterial (both) | | | |
| | NB | SB | EB | WB |
| Number of Existing Lanes Entering Intersection | 3 | 3 | 2 | 2 |
| Project Horizon Year | 2041 | | | |

| Proposed Project Cross Section | | | | | | | | |
|--------------------------------|-------------|----|----|----|-------------------|-----------------------|--|-----------------------------|
| Improvement Type | Total Lanes | | | | Realignment (Y/N) | Grade Separated (Y/N) | Bicycle/Pedestrian Facility Type | Cost Estimate (in millions) |
| Intersection Improvements | NB | SB | EB | WB | N | N | 10' MUP 5' Sidewalk 10' Painted Crosswalk(s) Pedestrian Phase | \$1.12 |
| | 3 | 3 | 2 | 2 | | | | |



US 17/NC 210 Intersection Improvements

Project ID: RW-57

The purpose of this project is to improve safety and operations at intersection of US 17 and NC 210.

| Project Facts | | | | |
|--|--|----|----|----|
| Route Number(s) | US 17, NC 210, SR 1784 | | | |
| Jurisdiction(s) | Pender County | | | |
| Facility Classification | Principal Arterial - Other, Minor Arterial | | | |
| | NB | SB | EB | WB |
| Number of Existing Lanes Entering Intersection | 4 | 4 | 3 | 2 |
| Project Horizon Year | 2034 | | | |

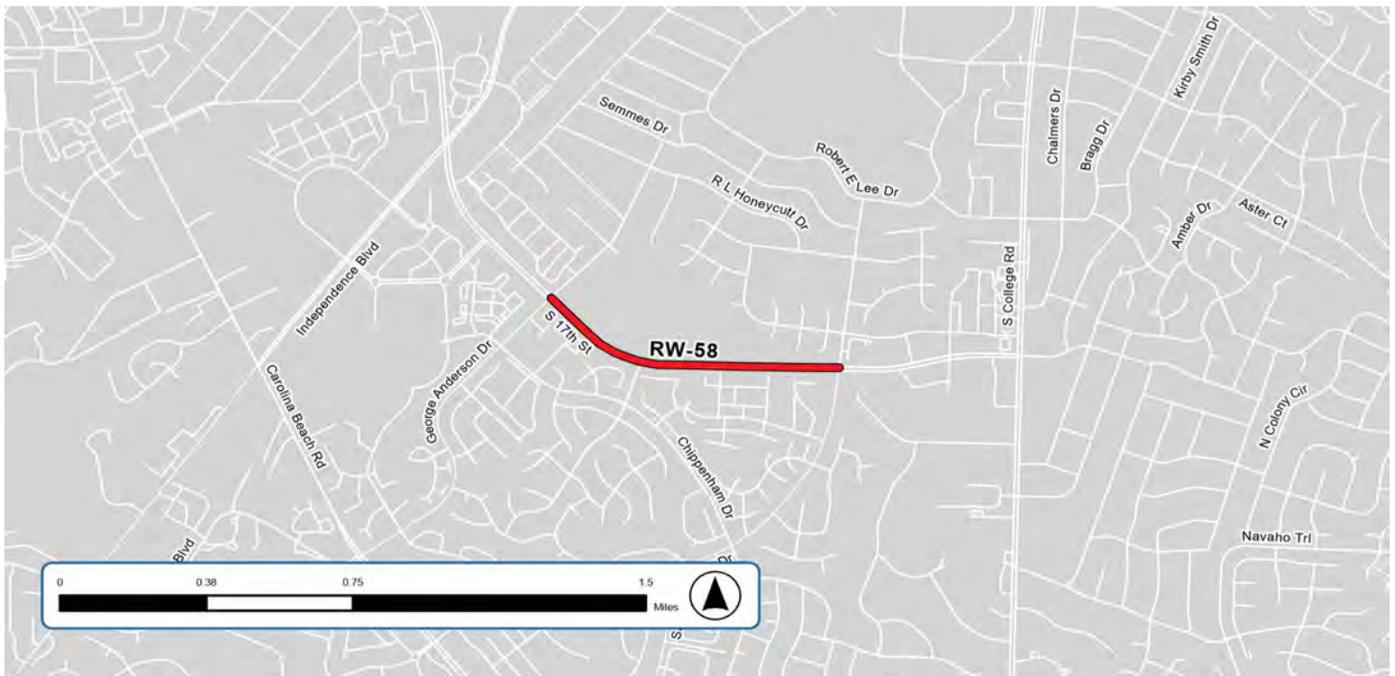
| Proposed Project Cross Section | | | | | | | | |
|--------------------------------|-------------|----|----|----|-------------------|-----------------------|--|-----------------------------|
| Improvement Type | Total Lanes | | | | Realignment (Y/N) | Grade Separated (Y/N) | Bicycle/Pedestrian Facility Type | Cost Estimate (in millions) |
| | NB | SB | EB | WB | | | | |
| Intersection Improvements | 4 | 4 | 3 | 2 | Y | N | 10' MUP 5' Sidewalk 10' Painted Crosswalk(s) | \$1.16 |

17th Street Offset Left Turns

Project ID: RW-58

The purpose of this project is to improve safety and mobility through the implementation of offset left lane configurations on 17th Street.

| Project Facts | |
|---------------------------------|-----------------------|
| From | George Anderson Drive |
| To | St. Andrews Drive |
| Route Number(s) | N/A |
| Length (miles) | 0.8 |
| Jurisdiction(s) | City of Wilmington |
| Facility Classification | Minor Arterial |
| Number of Existing Travel Lanes | 4 |
| Project Horizon Year | 2041 |



| Proposed Project Cross Section | | | | | | |
|--------------------------------|-------------|--------------|------------|--------------|---|--------------------------------|
| Improvement Type | Total Lanes | Median (Y/N) | Lane Width | Median Width | Bicycle/ Pedestrian Facility Type | Cost Estimate (in millions) |
| Intersection Improvements | 4 | N | 12' | N/A | 10' MUP | \$0.58 |



Barnards Creek Bridge Replacement

Project ID: RW-59

The purpose of this project is improve congestion, mobility, connectivity, and necessary replacement of the Barnards Bridge.

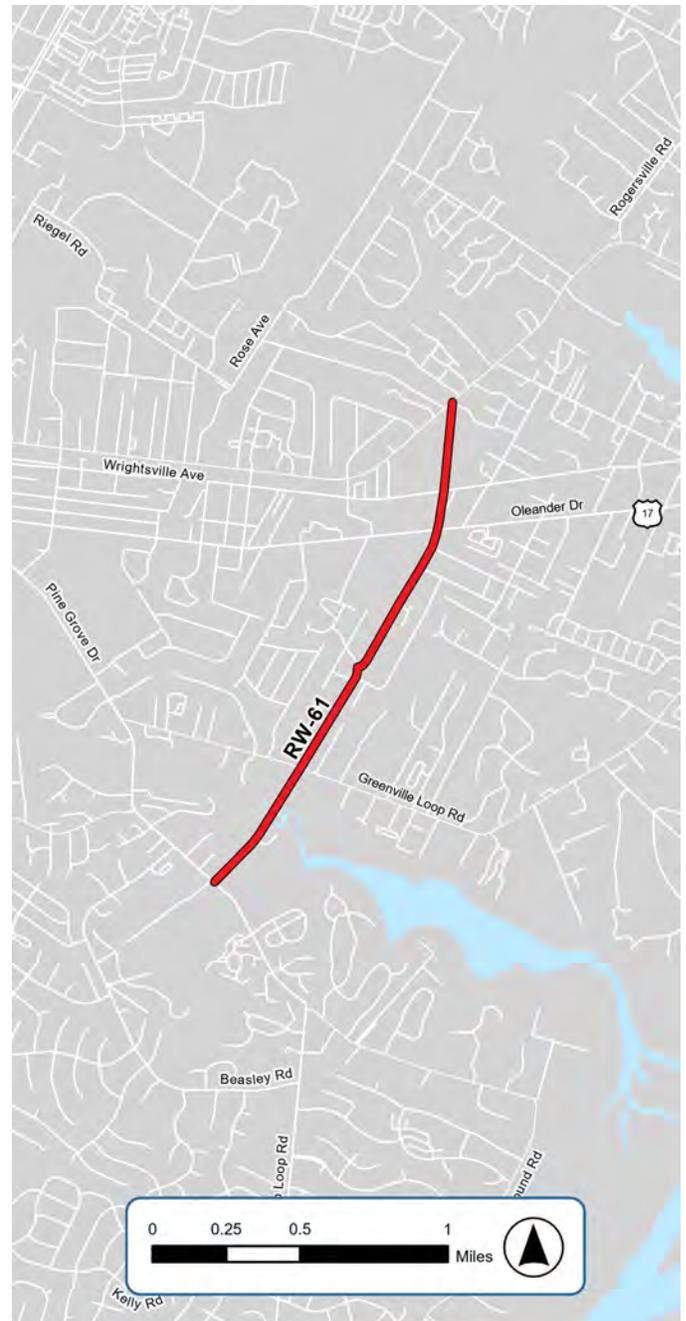
| Project Facts | |
|---------------------------------|---|
| Project Location | South of Independence Boulevard on River Road |
| Route Number(s) | SR 1430 |
| Length (miles) | 0.02 |
| Jurisdiction(s) | City of Wilmington |
| Facility Classification | Minor Arterial |
| Number of Existing Travel Lanes | 2 |
| Project Horizon Year | 2041 |

| Proposed Project Cross Section | | | | | | |
|--------------------------------------|-------------|--------------|------------|---------------|---|--------------------------------|
| Improvement Type | Total Lanes | Median (Y/N) | Lane Width | Median Width | Bicycle/ Pedestrian Facility Type | Cost Estimate (in millions) |
| Bridge Replacement, Road Widening | 4 | Y | 12' | Fixed barrier | 10' MUP | \$4.34 |

Dogwood Lane Extension

Project ID: RW-61

The purpose of this project is to improve congestion and connectivity from Wrightsville Avenue to Pine Grove Drive.



Project Facts

| | |
|---------------------------------|-------------------------------|
| From | Pine Grove Drive |
| To | SR 1411 (Wrightsville Avenue) |
| Route Number(s) | N/A |
| Length (miles) | 1.86 |
| Jurisdiction(s) | City of Wilmington |
| Facility Classification | Local |
| Number of Existing Travel Lanes | 2 |
| Project Horizon Year | 2034 |

Proposed Project Cross Section

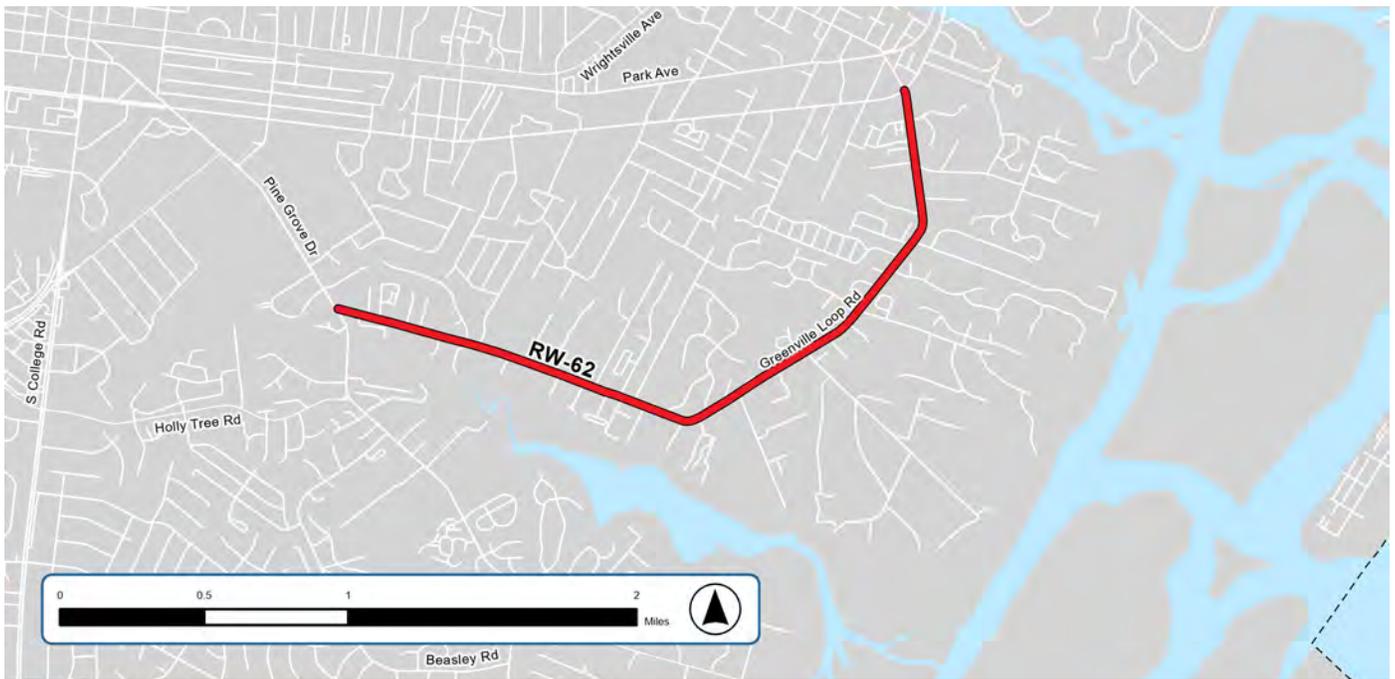
| Improvement Type | NCDOT Typical Cross Section | Total Lanes | Median (Y/N) | Lane Width | Bicycle/Pedestrian Facility Type | Cost Estimate (in millions) |
|--------------------------|-----------------------------|-------------|--------------|------------|----------------------------------|-----------------------------|
| New Road at New Location | 2E/2F | 2 | N | 11' | 5' Sidewalks 5' Bike Lanes | \$22.7 |

| Project Facts | |
|---------------------------------|---------------------------|
| From | Pine Grove Drive |
| To | US 17/76 (Oleander Drive) |
| Route Number(s) | N/A |
| Length (miles) | 2.83 |
| Jurisdiction(s) | City of Wilmington |
| Facility Classification | Major Collector |
| Number of Existing Travel Lanes | 2 |
| Project Horizon Year | 2041 |

Greenville Loop Widening

Project ID: RW-62

The purpose of this project is to improve congestion on Greenville Loop Road between Pine Grove Drive and US 17/76 (Oleander Drive).



| Proposed Project Cross Section | | | | | | |
|--------------------------------|-----------------------------|-------------|--------------|------------|--|-----------------------------|
| Improvement Type | NCDOT Typical Cross Section | Total Lanes | Median (Y/N) | Lane Width | Bicycle/Pedestrian Facility Type | Cost Estimate (in millions) |
| Road Widening | 4F | 4 | Y | 12' | 10' MUP 5' Sidewalk Pedestrian accommodations at all intersections | \$146.6 |

Independence Boulevard Widening

Project ID: RW-63

The purpose of this project is to increase capacity and improve traffic flow on Independence Boulevard between US 421 (Carolina Beach Road) and River Road.



| Project Facts | |
|---------------------------------|------------------------------|
| From | US 421 (Carolina Beach Road) |
| To | River Road |
| Route Number(s) | N/A |
| Length (miles) | 1.24 |
| Jurisdiction(s) | City of Wilmington |
| Facility Classification | Major Collector |
| Number of Existing Travel Lanes | 2 |
| Project Horizon Year | 2041 |

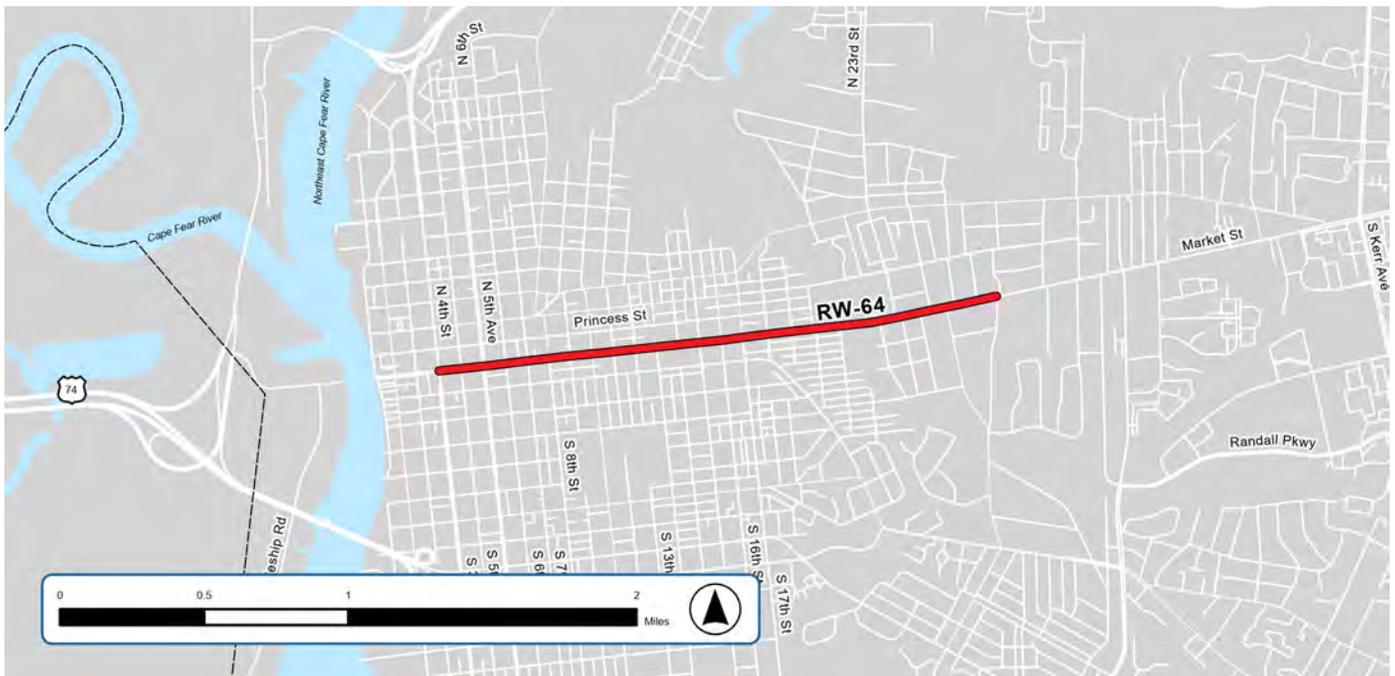
| Proposed Project Cross Section | | | | | | |
|--------------------------------|-----------------------------|-------------|--------------|------------|--|-----------------------------|
| Improvement Type | NCDOT Typical Cross Section | Total Lanes | Median (Y/N) | Lane Width | Bicycle/Pedestrian Facility Type | Cost Estimate (in millions) |
| Road Widening | 4F | 4 | Y | 12' | 10' MUP 5' Sidewalk Pedestrian accommodations at all intersections | \$19.4 |

| Project Facts | |
|---------------------------------|--|
| From | 3rd Street |
| To | Colonial Drive |
| Route Number(s) | US 17 Business |
| Length (miles) | 1.95 |
| Jurisdiction(s) | City of Wilmington |
| Facility Classification | Minor Arterial, Principal Arterial - Other |
| Number of Existing Travel Lanes | 4 |
| Project Horizon Year | 2041 |

US 17 BUS (Market Street) Road Diet

Project ID: RW-64

The purpose of this project is to enhance safety and mobility for all modes of transportation and bring US 17 Business from 3rd Street to Colonial Drive up to current design standards.



| Proposed Project Cross Section | | | | | | |
|--------------------------------|-----------------------------|-------------|--------------|------------|---|-----------------------------|
| Improvement Type | NCDOT Typical Cross Section | Total Lanes | Median (Y/N) | Lane Width | Bicycle/Pedestrian Facility Type | Cost Estimate (in millions) |
| Road Diet | 2L | 2 | Y | 11' | 5' Sidewalks 5' Bike Lanes Pedestrian accommodations at all intersections | \$39.6 |

Peel Street Extension

Project ID: RW-65

The purpose of this project is to improve mobility and connectivity of Peel Street between 17th Street and Bragg Drive.



| Project Facts | |
|---------------------------------|--------------------|
| From | Existing Terminus |
| To | Bragg Drive |
| Route Number(s) | N/A |
| Length (miles) | 0.22 |
| Jurisdiction(s) | City of Wilmington |
| Facility Classification | Local |
| Number of Existing Travel Lanes | 2 |
| Project Horizon Year | 2041 |

| Proposed Project Cross Section | | | | | | |
|--------------------------------|-----------------------------|-------------|--------------|------------|----------------------------------|-----------------------------|
| Improvement Type | NCDOT Typical Cross Section | Total Lanes | Median (Y/N) | Lane Width | Bicycle/Pedestrian Facility Type | Cost Estimate (in millions) |
| New Road at New Location | 2E | 2 | N | 11' | 5' Sidewalks 5' Bike Lanes | \$3.4 |



River Road Widening

Project ID: RW-66

The purpose of this project is to improve congestion on River Road between Pier Master Point and the Motts Creek Bridge.

| Project Facts | |
|---------------------------------|--------------------|
| From | Pier Master Point |
| To | Motts Creek |
| Route Number(s) | N/A |
| Length (miles) | 2.63 |
| Jurisdiction(s) | City of Wilmington |
| Facility Classification | Minor Arterial |
| Number of Existing Travel Lanes | 2 |
| Project Horizon Year | 2041 |

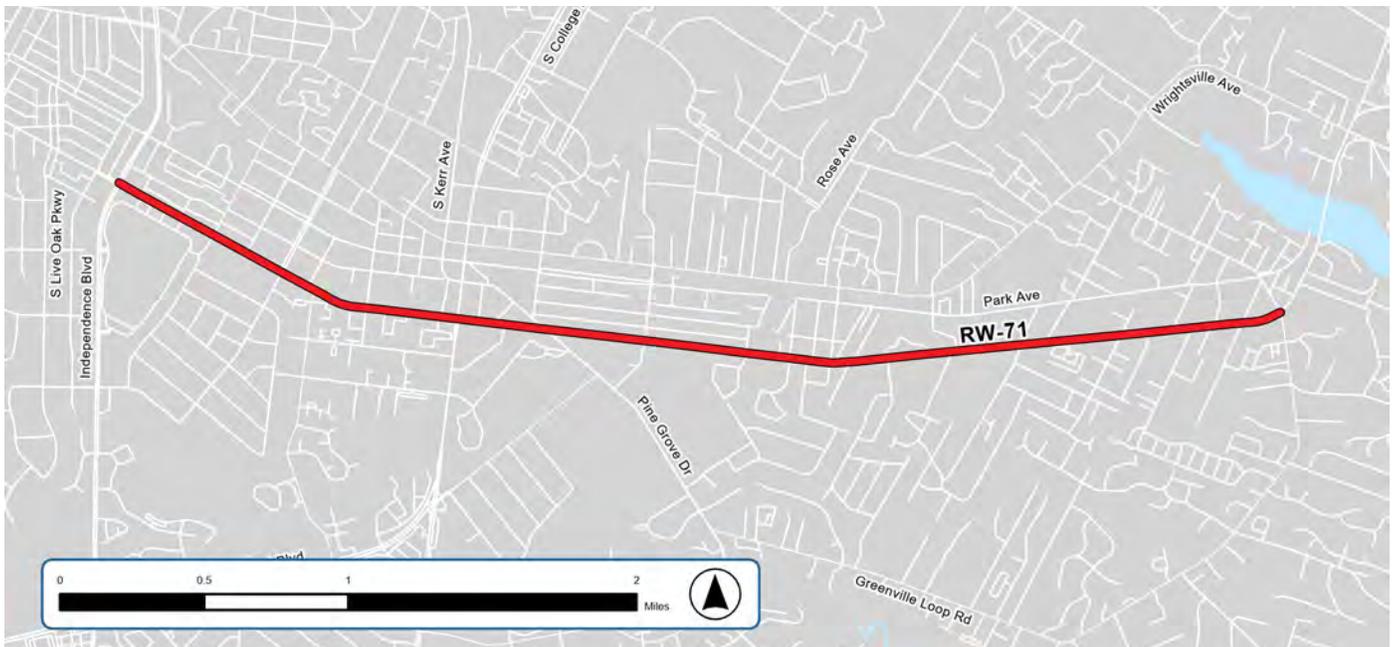
| Proposed Project Cross Section | | | | | | |
|--------------------------------|-----------------------------|-------------|--------------|------------|--|-----------------------------|
| Improvement Type | NCDOT Typical Cross Section | Total Lanes | Median (Y/N) | Lane Width | Bicycle/Pedestrian Facility Type | Cost Estimate (in millions) |
| Road Widening | 4F | 4 | Y | 12' | 10' MUP 5' Sidewalk Pedestrian accommodations at all intersections | \$6.2 |

US 17/76 (Oleander Drive) Access Management Improvements

Project ID: RW-71

The purpose of this project is to improve operations and safety on US 17/76 (Oleander Drive) from SR 1209 (Independence Boulevard) to Greenville Loop Road.

| Project Facts | |
|---------------------------------|----------------------------------|
| From | SR 1209 (Independence Boulevard) |
| To | Greenville Loop Road |
| Route Number(s) | US 17/76 |
| Length (miles) | 4.16 |
| Jurisdiction(s) | City of Wilmington |
| Facility Classification | Principal Arterial - Other |
| Number of Existing Travel Lanes | 4/5 (varies) |
| Project Horizon Year | 2034 |



Proposed Project Cross Section

| Improvement Type | NCDOT Typical Cross Section | Total Lanes | Median (Y/N) | Lane Width | Bicycle/Pedestrian Facility Type | Cost Estimate (in millions) |
|--------------------------------|-----------------------------|-------------|--------------|------------|--|-----------------------------|
| Access Management Improvements | 4F | 4 | Y | 12' | 10' MUP 5' Sidewalk Pedestrian accommodations at all intersections | \$145.5 |



US 17 (Ocean Highway) Access Management

Project ID: RW-72

The purpose of this project is improve operations and safety on US 17 (Ocean Highway) between SR 1732 (Carol Lynn Drive NE) and SR 1702 (Zion Church Road NE).

| Project Facts | |
|---------------------------------|----------------------------------|
| From | SR 1732 (Carol Lynn Drive NE) |
| To | SR 1701 (Zion Church Road NE) |
| Route Number(s) | US 17 |
| Length (miles) | 2.39 |
| Jurisdiction(s) | Brunswick County, Town of Leland |
| Facility Classification | Principal Arterial - Other |
| Number of Existing Travel Lanes | 4 |
| Project Horizon Year | 2041 |

| Proposed Project Cross Section | | | | | | |
|--------------------------------|-----------------------------|-------------|--------------|------------|---|-----------------------------|
| Improvement Type | NCDOT Typical Cross Section | Total Lanes | Median (Y/N) | Lane Width | Bicycle/Pedestrian Facility Type | Cost Estimate (in millions) |
| Access Management Improvements | 4B | 4 | Y | 12' | 10' MUP Pedestrian accommodations at all intersections | \$60.9 |

US 421/74/NC 133 at US 17/76 WB Merge Lane Widening

Project ID: RW-73

The purpose of this project is to improve congestion and connectivity at the interchange of US 421 and US 17/74/76.



| Project Facts | | | | |
|--|---|----|----|----|
| Route Number(s) | US 421, US 17/74/76 | | | |
| Jurisdiction(s) | Brunswick County | | | |
| Facility Classification | Principal Arterial - Freeway/Expressway and Other | | | |
| | NB | SB | EB | WB |
| Number of Existing Lanes Entering Intersection | 0 | 0 | 1 | 1 |
| Project Horizon Year | 2041 | | | |

| Proposed Project Cross Section | | | | | | | | |
|--------------------------------|-------------|----|----|----|-------------------|-----------------------|------------|-----------------------------|
| Improvement Type | Total Lanes | | | | Realignment (Y/N) | Grade Separated (Y/N) | Lane Width | Cost Estimate (in millions) |
| | NB | SB | EB | WB | | | | |
| Interchange Improvements | 0 | 0 | 0 | 2 | N | N | 12' | \$30.8 |

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K *Transportation Systems Management and Operations (TSMO)*

Table of Contents

1. Introduction
2. Recommended Strategies

Introduction

Transportation Systems Management and Operations (TSMO) is an integrated set of strategies that can optimize the performance of the existing transportation system. TSMO focuses on improving the safety, security, and reliability of the system by enhancing existing infrastructure, increasing roadway capacity, reducing congestion, and integrating transportation and land use planning. TSMO includes a variety of strategies to improve operations and increase capacity, allowing for fewer travel delays. Cape Fear Navigating Change recommends the implementation of the following TSMO strategies in the Wilmington region:

- Access management
- Bus pullouts
- Emergency vehicle preemption
- Improved signage and lighting
- Pavement markings
- Social media and smart apps
- Traveler information systems and dynamic message signs
- Transit signal priority
- Parking management
- Transportation Demand Management
- Advanced communications (Bluetooth, Wi-Fi)
- Connected and automated vehicles
- Congestion pricing
- Multimodal services

In early 2025, the WMPO began the development of a regional Intelligent Transportation System (ITS) Deployment Plan to guide the implementation of TSMO strategies throughout its planning area. This plan, expected to be adopted in summer 2025, draws from stakeholder input, industry best practices, and technical expertise to recommend the most effective TSMO strategies.

Recommended Strategies

The WMPO intends to implement both well-established strategies in the Wilmington region and innovative approaches to further optimize system performance.

Access Management

Access management is a set of techniques that can be used to control access to highways, arterials, collector streets, and other roadways to reduce the number of vehicle conflict points, resulting in fewer accidents and heightened mobility. These techniques include:

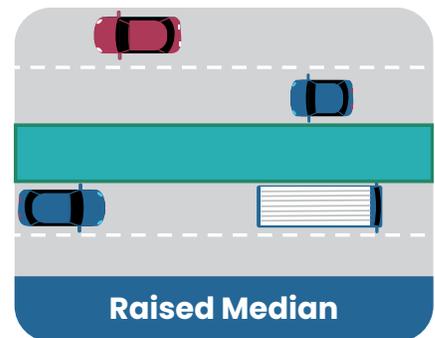
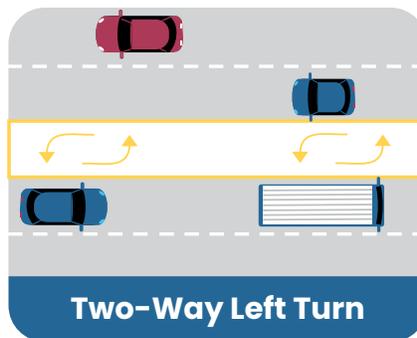
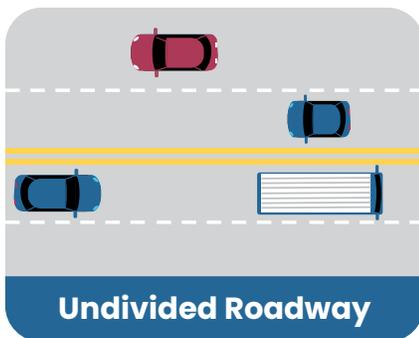
Access Spacing

Access spacing involves increasing the distance between traffic signals to improve the flow of traffic on major arterials, thus reducing congestion and preventing crashes.

- Studies have shown that as the number of traffic signals increases per mile, so do crashes
- Research on access management found that each additional signal over two per mile led to a 6% increase in travel time.

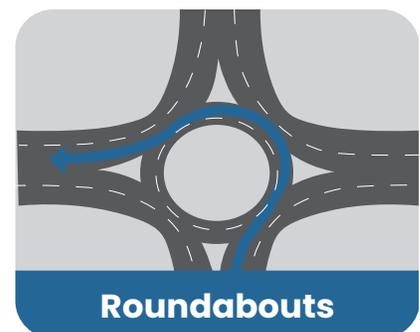
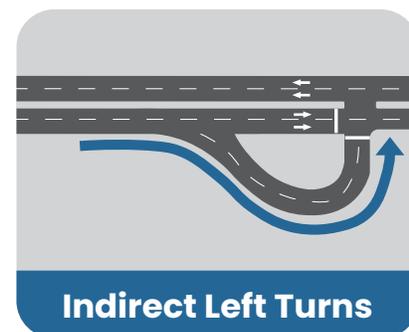
Median Treatments

Median treatments include two-way left-turn lanes and raised medians. Two-way left-turn lanes (TWLTL) remove left turning vehicles from the through lanes, and have reduced the potential for accidents and congestion. Raised medians are most useful on high-volume, high-speed roads, and provide left turn options in appropriate areas to keep motorists from making unsafe U-turns or traveling on residential streets.



Safe Turning Lanes and Intersection Modifications

Safe turning lanes and intersection modifications include dedicated turn lanes, indirect left-turns (jug handles), and roundabouts (e.g., diverging diamond and continuous flow intersections).



Right-Of-Way Management

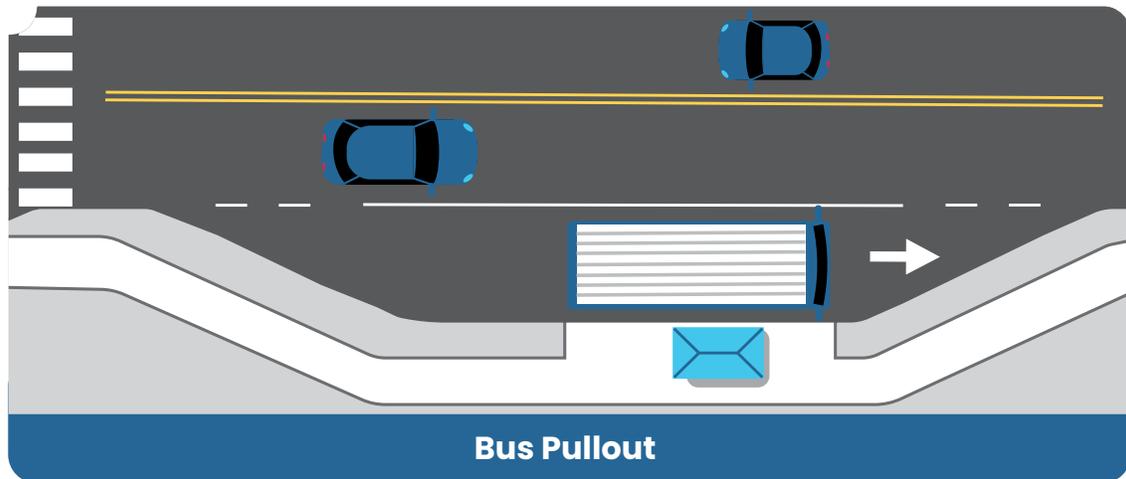
Right-of-way management is the preservation of right-of-way for future road widening projects, provision of safe sight distances, and proper placement of access points to adjacent land uses. Right-of-way management integrates transportation planning with land-use planning.

Driveway Spacing

Limiting the number of driveways and/or increasing distance between driveways can simplify the merging of traffic.

Bus Pullouts

Bus pullouts are designated spaces for buses to stop out of the flow of traffic, reducing congestion and providing safe spaces for riders to board. Bus pullouts and dedicated lanes are also essential aspects of bus rapid transit (BRT). Pullouts not only improve the flow of traffic for other motorists but also improve the efficiency of mass transit.



Emergency Vehicle Preemption

Emergency vehicle preemption is designed to give emergency vehicles the right-of-way at signalized intersection and through them. Preemption interrupts the traffic signal's normal operations, allowing emergency vehicles to proceed through the intersection without stopping. Equipment mounted on emergency vehicles emits a special signal that is detectable by the intersection once the vehicle is within a given range, and the signal provides a green light as soon as possible. This improves safety at intersections by reducing vehicle-related collisions and supports emergency response by allowing emergency vehicles to travel to the incident scene as soon as possible.

Improved Lighting and Signage

Signage directs users along highways and other roadways, providing wayfinding assistance and helping to manage traffic flow. Lighting improves visibility, increases sight distance, and makes obstacles more apparent and avoidable, while also enhancing the safety of other road users, including pedestrians and bicyclists.

Pavement Markings

Pavement markings provide continuous information to roadway users and greatly increase the safety of the transportation system. Pavement markings denote roadway alignment, permitted lane usage, passing information, edge lines of travel lanes, school zones, crosswalks, and bike lanes. The maintenance of current and the addition of new pavement markings is important for improving roadway safety for all users and an efficient flow of traffic.

Social Media and Smart Apps

Social networking sites provide a platform for transportation providers and agencies to post information to users. Smart apps such as Waze and Google Maps offer real-time information about traffic conditions, road work and incidents, public transportation wait times, and more. There are many different apps that provide information to travelers:

- Business-to-consumer sharing apps: short-term access to vehicles owned by a business (Zipcar)
- Mobility tracking apps: track the speed and direction of travelers, as well as elapsed travel time (GPS Tracker Pro)
- Peer-to-peer sharing apps: allow private owners to rent their cars or bicycles to others for a fee (Turo, Spinlister)
- Public transit apps: allow users to view public transit routes, schedules, and connections, as well as real-time bus locations and near-term arrival estimates (Wave Transit)
- Real-time information apps: provide real-time information such as current traffic data and public transit wait times as well as bike share information and available parking (Waze)
- Ride-sourcing apps: provide a platform through which users can obtain a ride (Uber, Lyft)
- Taxi e-Hail apps: allow on-demand, location-aware hailing of regulated taxicabs (Flywheel)
- Trip aggregator apps: provide travel times, trip distances, and trip costs, as well as connection information, to help users plan routes via multiple modes of transportation (Moovit)
- Facebook, Instagram, Twitter/X, and other social media platforms

Traveler Information Systems and Dynamic Message Signs

Traveler information systems and dynamic message signs provide real-time information to motorists, helping them make informed travel decisions and communicate details about incidents or unusual driving conditions. These are especially useful for traffic impacts due to vehicle accidents, special events, and construction.



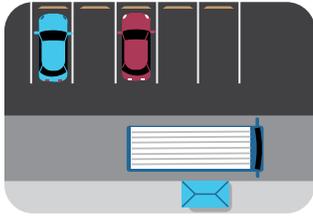
Transit Signal Priority

This technique utilizes signal preemption to give transit priority at intersections, reducing travel delay for transit vehicles. This is another critical element to BRT and can improve the overall efficiency of the roadway transportation system. There are two types of priority, passive and active.

Passive priority involves coordinating traffic signals on roads with significant transit use to match bus speed instead of average vehicle speed. Active priority involves detecting the presence of a transit vehicle, like emergency vehicle preemption. Another option is to utilize a special bus signal in conjunction with a bus-only lane. By prioritizing transit movement, more people can pass through intersections at once, potentially increasing ridership and reducing single-occupancy vehicles on the road.

Parking Management

Parking management involves the dynamic management of parking facilities to optimize performance and utilization, while influencing travel behavior at various stages. There are a variety of ways to do this:



Dynamic Overflow Transit Parking

This strategy uses overflow parking facilities in the vicinity of transit stations and/or park-and-ride facilities when existing parking facilities are at or near capacity. Underutilized parking areas, such as retail lots, are used by transit agencies to provide travelers with a place to park while taking a designated shuttle or bus to their destination. This strategy may encourage more travelers to use transit, reducing the number of vehicles on the road. It also provides more efficient transport to events or busy areas, while optimizing existing parking areas. In the WMPO region, the annual Wilmington Azalea Festival utilizes a park and ride shuttle to provide mass transportation to and from downtown. Users park at Independence Mall and board the shuttle from there, minimizing traffic into downtown and providing an alternative parking option.



Parking Reservation

Parking reservation provides travelers the ability to reserve a parking space on demand, ensuring availability and reducing the number of vehicles forced to turn around due to full lots.



Wayfinding

This includes providing real-time parking-related information to travelers about space availability and location to minimize time spent looking for parking and optimize use of facilities. For example, the Wilmington International Airport displays lot availability for arriving travelers looking for parking.



Dynamically Priced Parking

Parking fees are dynamically varied based on demand and availability to influence trip timing choice and parking facility or location choice to more efficiently balance parking supply and demand and reduce traffic impacts. This encourages travelers to park in underutilized blocks and garages, freeing up spaces in busy areas during peak times.

Transportation Demand Management (TDM)

TDM programs aim to support agencies and regions moving toward an active management approach. The WMPO's TDM program, named Go Coast, is designed to promote transportation demand management.

Advanced Communications

Advanced communications, such as Bluetooth and Wi-Fi, can increase the reliability of important TSMO tools like dynamic messaging, traveler information, and smart apps. Bluetooth and Wi-Fi connectivity allows information to be relayed in real time, ensuring it is accurate and up to date.



More information about TDM can be found in Chapter 3 of the plan and Appendix L.

Wi-Fi connection within transit vehicles and other facilities enable more widespread and reliable use of smart apps by travelers. This leads to higher awareness of conditions, timing, and other important information.

| Table K.1 - Ways Connected Vehicles Share Information | |
|---|--|
| Vehicle-to-Vehicle (V2V) | Information on speed, location, and heading |
| Vehicle-to-Infrastructure (V2I) | Information on signal timing, work zones, crashes, congestion, and weather conditions |
| Vehicle-to-Pedestrian (V2P) | Information between vehicles and non-motorized roadway users, crosswalks, and bicyclists |
| Vehicle-to-Everything (V2N to V2E) | Data is transmitted to a transportation management center for analysis, including demand management, travel times, and incident response from distress signals |

Source: FHWA

Connected and Automated Vehicles

Connected and automated vehicles (CVs and AVs) leverage connected and automated vehicle technology by communicating with nearby vehicles and infrastructure.

In the United States, CV deployment has been a major focus over the last 10 years. The US Department of Transportation’s (USDOT) CV Pilots Deployment Program, launched in 2015, seeks to spur early CV technology deployment, measure deployment benefits, and resolve deployment issues. USDOT awarded more than \$45 million to three pilot sites led by the New York City Department of Transportation (NYCDOT), the Tampa Hillsborough Expressway Authority (THEA), and the Wyoming Department of Transportation (WYDOT). The New York City and Tampa pilots were completed in 2021 and 2022, respectively, while the Wyoming program wrapped up in 2024. These pilot sites were able to uncover what barriers to CV deployment exist and how to address them, documented lessons learned and will now serve as a template to assist early CV deployment.

The Wyoming pilot program utilized short-range communications that leverage V2V and V2I connectivity to support advisories, roadside alerts, and dynamic travel guidance for both freight and passenger travel. This technology was applied along I-80 in Wyoming, spanning 402 miles. The program included 75 roadside units (RSUs) that receive and broadcast information and 400 vehicles including passenger and commercial vehicles. Equipped vehicles were used in the following ways:

- Forward collision warning (V2V): issues a warning to a driver if there is an impending front-end collision with another connected vehicle ahead in the same travel lane and direction, but does not take control of the vehicle
- Situational awareness (V2I): enables road condition information (weather, speed, vehicle restrictions, incidents, parking, closures) to be broadcast by an RSU and received by the connected vehicle. This step is important for the appropriate placement of RSUs along the corridor.
- Work zone warning (V2I): provides information to approaching vehicles about conditions at a work zone ahead (lane closures, lane shifts, speed restriction, vehicles entering or exiting work zone, obstructions, etc.).
- Spot weather impact warning (V2I): enables relevant road condition information such as fog, flooding, ice and snow, etc. for a specific segment of the corridor.
- Distress notification (V2E): enables connected vehicles to communicate distress status when the vehicle’s sensor detects an event that might require assistance, or the driver manually initiates a distress status.

The pilot program in Wyoming has allowed travelers to have more accurate, timely warnings about adverse road conditions; provided drivers with direct information about speed, detours, parking, and more to inform decision making; provides current forecasted road condition data to fleet centers to improve the efficiency of freight operations and supported the use of connected vehicle technology.

While CV technology has not been deployed on a large scale, WMPO continues to monitor its development and recommends that the region’s transportation providers and agencies take steps in implementing CV technology.

Congestion Pricing

Congestion pricing harnesses the power of the market to reduce traffic congestion, shifting rush hour highway travel to other transportation modes or to off-peak periods. There are numerous congestion pricing strategies, including both toll and non-toll solutions:

As the region’s population continues to grow, innovative approaches to congestion relief must be considered. High-occupancy toll (HOT) lanes allow vehicles not meeting established occupancy requirements for a high-occupancy vehicle (HOV) lane to “buy into” the lane by paying a toll. Electronic tolling allows vehicles to bypass congested areas by paying a toll and can optimize the use of HOV lanes. This strategy may also reduce congestion in non-tolled lanes. The Washington State DOT opened HOT lanes on SR 167 near Seattle to traffic in 2018, which operate from 5 a.m. to 8 p.m. every day and are free to use from 8 p.m. to 5 a.m. Toll rates vary based upon real-time traffic conditions, ranging from \$1 to \$15. When traffic flows smoothly in the HOT lanes, the prices are lower, while congestion raises the prices to discourage too many cars from entering. The HOT lanes on SR 167 increased HOV lane utilization by 50% and overall vehicle flow through the corridor by 13%. Studies of HOT lanes in California found that most users were low- and middle-income motorists, and toll revenues are used to fund ongoing operations, maintenance, and transportation service investments. The concept of congestion pricing is complex, as its impact on specific regions and motorists is not always clear. The WMPO intends to consider all options when addressing congestion, conducting research when appropriate.

Table K.2 - Congestion Pricing Strategies

| Strategies Involving Tolls | | Strategies not Involving Tolls | |
|----------------------------|---|--------------------------------|--|
| HOT Lanes | Converting existing high-occupancy vehicle (HOV) lanes into priced lanes (tolls) or building new ones | Parking pricing | Parking policies that rely on market forces to influence decisions (parking management) |
| Express toll lanes | Pricing of new/existing highway lanes in conjunction with highway expansion | Priced vehicle sharing | Provision of vehicles for use by members in exchange for an hourly or daily charge |
| Pricing entire facilities | Introduces variable tolls on highway facilities that are currently free or already have fixed tolls | Pay as you drive | Convert fixed costs of insurance or registration into costs that vary according to miles the vehicle is driven |
| Zone-based pricing | Variable or fixed charges to drive within or into a congested area within a city | | |
| Regionwide pricing | Encompasses pricing at several locations within a region | | |

Multimodal Services

Multimodal services provide transportation options through transit management, an improved bicycle and pedestrian network, and mobility-on-demand services such as bike share and microtransit (RideMICRO). This strategy is at the core of the WMPO’s work, with a multimodal transportation network as the organization’s focus and vision for *Cape Fear Navigating Change 2050*.

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Transportation Demand Management

Table of Contents

1. Introduction
2. Go Coast 2026–2030 Implementation Plan
3. Go Coast Implementation Plan Timeline

Introduction

Transportation Demand Management (TDM) objectives, which were developed through public engagement with area employers and other stakeholders in conjunction with the Go Coast advisory committee, were used to develop a five-year implementation plan for the Go Coast program. This plan will serve as an update to the Cape Fear Change in Motion 2020 short-range plan. Each TDM objective is addressed with at least one activity to work towards the objective with subtasks for conducting the activity. Additionally, a timeline (Table L.1-L.5) was developed to guide implementation over the next five years, 2026 through 2030.

Go Coast 2026–2030 Implementation Plan

Safe

1. Bolster education and outreach for safe bicycling and walking to all road users.

1.1 Promote Be a Looker campaign

a. 2027 Campaign

Begin planning in October 2026, launch campaign April through September. Focus on working with school districts and PTA/PTOs to get safety tips in parent email newsletters, social media, and other channels to reach families.

Target(s): Receive 250 new pledges, and attend eight or more events promoting Be a Looker.

b. 2029 Campaign

Begin planning in October 2028, launch campaign April through September.

Target(s): Receive 350 new pledges, and attend eight or more events promoting Be a Looker.

c. Year-round promotion 2026-2030

Regularly promote Be a Looker messaging and safety tips at outreach events, monitor supply of brochures and swag.

Target(s): Attend 6+ events annually where Be A Looker is promoted, and send quarterly emails.

1.2 Distribute bicycle safety gear such as lights as a part of outreach.

a. Year-round distribution 2026-2030

Order white front lights and rear red lights for bicycles, reflective gear, and other visibility items for bicyclists and pedestrians, as budget allows.

Target(s): Provide safety gear at all outreach events attended and document distribution.

2. Develop tools for education and awareness surrounding safety for motorized forms of alternative transportation, i.e. carpooling, vanpooling, and public transportation.

2.1 Develop safe carpooling guide

a. Guide development

Develop the guide in alignment with any updated platform features and marketing materials from Share the Ride NC or other ride-matching services.

Target(s): Develop guide in 2026.

b. Guide promotion

Feature the guide on the Go Coast website. Promote the guide via social media, press releases, direct emails, and send to employers.

Target(s): Send guide to 20+ employers directly.

2.2 Social media campaign for transit safety

a. Campaign development

Work with the WMPO's Public Information Officer as well as marketing staff from Wave Transit to develop a safety campaign. Work with UNCW/CFCC Transportation/Sustainability departments and/or community safety partners including law enforcement.

Target(s): Develop campaign in 2026. Include multimedia elements (video).

b. Campaign promotion

Run joint social media posts with Wave Transit to boost to a wider audience. Begin promotions to coincide with the start of the academic school year and promote widely to UNCW, CFCC, and others. Save this information on the Go Coast website as well. Promote content annually.

Target(s): Develop at least one video and post at least twice. Present or table with at least one partner per year.

Fair

1. Conduct employer outreach in all areas to a broad range of employer sizes and industries.

1.1 Redevelop and promote the Go Coast Commuter Friendly Employer program to better support all employers and communities.

a. Identify and contact employers

Identify employers and points of contact for businesses in the Wilmington urban area.

Target(s): Contact at least 10 employers representing a broad range of size and industry, and request feedback on Commuter Friendly Employer recognition program criteria.

b. Review program criteria

After receiving feedback from employers, consider revisions to program criteria and the necessary approval process.

c. Promote Commuter Friendly Employer

Promote revisions to Commuter Friendly Employer recognition program criteria to a wide range of employers.

Target(s): Contact 20+ employers.

Connected

1. Pursue opportunities to increase carpooling and facilitate carpool ride-matching.

1.1 Work with employers on carpool matching

a. Identify employers for whom carpooling would be ideal.

Based on parking availability at the worksite, industry, shift needs, and other considerations, develop a spreadsheet of contacts. Draft this spreadsheet after the Share the Ride NC (STRNC) platform is updated, after the safe carpooling guide is developed, and while contacting employers about Commuter Friendly Employer (CFE).

Target(s): Reach out to three or more employers annually about their commuting needs.

1.2 Promote carpool ride-matching services

a. Promote carpool ride-matching services when applicable.

Participate with statewide and local partners to promote the ride-matching services provided when applicable, such as Share The Ride NC.

Target(s): Promote carpooling on social media biannually.

2. Coordinate with Wave Transit on outreach to increase familiarity with public transportation.

2.1 Partner with Wave for outreach and social media campaigns.

a. Develop social media strategy with Wave Transit.

Meet with Wave staff to discuss limitations and opportunities of using social media to promote and build trust with transit. Highlight popular stops on each route, how to ride the bus, or benefits of using transit. Use paid promotion on joint posts.

Target(s): Meet bimonthly to coordinate social media strategy.

b. Promote and assess campaign on social media.

Launch promotion of a transit-focused social media campaign and monitor analytics for lessons learned.

Target(s): Post quarterly about transit in coordination with Wave.

2.2 Plan events for group transit rides.

a. Identify group for pilot transit ride.

Identify an interested group, such as a UNCW student group, scout troops, community centers, clubs, etc. who may be interested in taking a group ride on a Wave Transit vehicle. Coordinate with Wave Transit for tips and best practices for these group rides.

Target(s): Approach at least four groups about a group transit ride.

b. Apply lessons learned from pilot event.

For future rides, invite groups directly or host public ride events in conjunction with City of Wilmington Parks, New Hanover County Libraries, senior centers, or other partners. Create an interest form for groups interested in group rides/travel training and coordinate with Wave.

Target(s): Conduct one group ride event per year.

3. Investigate opportunities for Park and Ride lots within the WMPO boundary.

3.1 Open discussions with churches, shopping centers, etc. for establishing Park and Ride lots.

a. Conduct research about Park and Ride lots.

Identify existing Park and Ride lots in North Carolina and elsewhere, and gain understanding about how they were formed, how they are utilized, any necessary ongoing agreements between transit agencies, property owners, MPOs, etc. Investigate how signage is installed and designated spaces are marked.

Target(s): Review at least three existing Park and Ride lots for agreements, etc. Reach out to three peer organizations for guidance.

b. Open discussions with potential Park and Ride location partners.

Identify contacts with potential partners. Utilize the employer carpooling spreadsheet developed in Connected 1.1, Employers contacted for updating Commuter Friendly Employer recognition criteria, and employers from 2024 employer commuting workshops. It may be prudent to approach an individual business needing employee transportation assistance, such as a downtown Wilmington business where parking is limited, and work with them to form a Park and Ride.

Target(s): Contact three or more employers about their needs and identify interest.

c. Stay informed on opportunities for vanpooling.

Work with community partners, employers, and the Cape Fear Workforce Development Board to identify opportunities for carpooling and informal vanpooling. Monitor opportunities for restarting vanpooling with Wave Transit.

Target(s): Schedule biannual check-ins with service providers and employers.

Resilient

1. Foster a regional culture where alternative transportation usage is legitimized and embraced.

1.1 Create an education and outreach campaign surrounding the benefits of alternative transportation and promote highly on social media

a. Draft and launch campaign

Work with WMPO Public Information Officer to create compelling visuals/photos, email blasts, and video, and spotlight this content on Go Coast's story highlights on Facebook and Instagram. Consider sharing to WMPO platforms as well.

Target(s): Post a short mobile video (such as Instagram Reel) quarterly.

1.2. Plan events to build excitement around transit, carpooling, and biking

a. Annual bike rides

Continue to plan and host the WMPO's annual bike rides, the River to Sea Bike Ride in May and the Brunswick Heritage Riverside Ride in September. Pursue opportunities to partner on regular rides that may be hosted by community partners in Pender County and southern New Hanover County.

Target(s): Two rides organized per year, and support partner rides when available.

b. Bike Month

Work with member jurisdictions, local bike shops, and community partners to plan events to observe National Bike Month every May. Encourage WMPO-area residents to report their miles traveled by bicycle during Bike Month and consider awarding prizes to participants who log miles. Events to consider: wrench nights; beginner rides or how-to-ride-a-bike workshops; beginner maintenance workshops; safe cycling classes with League of American Bicyclists-Certified

Instructors (LCIs); glow rides with Terry Benjey Bicycling Foundation (TBBF); a social media campaign/contest; rides with elected officials; bike on bus workshops; giveaways (of bicycles or gear); etc.

Target(s): Organize, facilitate, or participate in two or more events during Bike Month. Aim to attract at least 50 participants logging miles.

c. Commuter Challenge

Conduct annual Get There Greener challenge each October. Request prize donations from local business to award to top and random participants who report miles traveled by alternative transportation during the challenge. Promote with press releases, social media, and encourage participation by local employers.

Target(s): Aim to attract 50 participants logging miles across any mode. Engage five or more employers about promoting this challenge to their employees. Post weekly about the challenge on social media during October.

d. Bike to Work Day

Work with member jurisdictions, local organizations, and businesses to promote Bike to Work Day on a Friday in October. Encourage partners to host a pit stop for cyclists who pass by (although open to anyone) handing out water, coffee, snacks, or other items.

e. Other events

Monitor opportunities to host other events throughout the year, virtually, on social media, or in person. Consider Walk to School Day in October, World Sustainable Transport Day in November, Dump the Pump by APTA in June, Earth Day in April, Park(ing) Day in September, Transportation Equity Day (February) and winter campaigns – including handing out lights for Daylight Saving Time. Consider one-off events with community partners including group rides, or events like a carpool-to-work day.

Target(s): Identify one to two potential new events where there is either a gap in content or interest from the public.

1.3 Design initiative to promote TDM in local land use ordinances and for developments.

a. Aid member jurisdictions in developing TDM-oriented ordinance

Work with member jurisdictions on developing ordinances, potentially including provisions to incentivize site improvements which support TDM strategies. Examples include bicycle parking requirements, transit shelter provisions, preferred parking for carpools, covered bike parking, and other items.

Target(s): Conduct annual reviews with each member jurisdiction's staff to assess needs and progress.

1.4 Apply annually or NCDOT's Bicycle Helmet Initiative

a. Distribute helmets received from grant throughout the year.

Apply for 100 children's bicycle helmets annually through this grant process. Generally, applications are due early February and helmets are received in late April. Work with local partners including Terry Benjey Bicycling Foundation (TBBF), Safe Kids New Hanover, local police and fire departments, community organizations, schools, and others to distribute these helmets to children. These helmets are a key component of outreach for the WMPO by functioning as a conversation starter at tabling events, and a way to serve the community and expand education and understanding of bicycle and pedestrian safety, TDM promotion, and WMPO role.

Target(s): Apply for the grant annually and distribute at least 85 helmets per calendar year.

Proactive

1. Increase marketing and outreach to improve awareness and understanding of alternative transportation options to audiences including area employers, neighborhoods, schools, and others.

1.1 Promote Commuter Friendly Employer to a wide range of employers

a. Promoting Commuter Friendly Employer

Following employer partner review, promote Commuter Friendly Employer by engaging with at least three new employers quarterly.

Target(s): Engage with at least three new employers quarterly.

1.2 Conduct outreach in schools

a. Develop TDM outreach kit for schools and families.

Use connections from 2027 Be a Looker campaign to approach New Hanover County, Brunswick County, and Pender County schools. Work with partners to develop an outreach kit focused around TDM strategies that would work for schools and determine the best way to distribute this information to students, staff, and families.

b. Host a youth poster contest focusing on bicycle/pedestrian safety

Reach out to public school systems and provide facts about bicycle and pedestrian safety. Then, promote a poster contest and feature the winner(s) on social media and recognize them at a Board meeting. Distribute winning poster(s) throughout the community (libraries, the mall, etc). Alternatively, if more practical, the art contest is for a billboard, and the winning design gets on a billboard for three months.

Target(s): Host a poster contest annually, aiming for at least three entries.

1.3 Develop residential TDM toolkits

a. Develop toolkit and promote to area apartment complexes

Research TDM plans and toolkits that exist in other parts of the country. Draft a residential toolkit for our region. Reach out to area apartment complexes/property management companies and ask for feedback on the draft toolkit. Then, promote widely.

Target(s): Send draft toolkit for review by two or more apartment complexes.

b. Develop neighborhood toolkit for HOAs.

Research existing TDM outreach to HOAs done in other parts of the country. Draft an HOA toolkit for our region. Reach out to HOA boards or management companies and request feedback on the draft toolkit – when edits are incorporated, promote to member jurisdictions and directly to HOA contacts.

Target(s): Send draft toolkit for review by two or more HOA boards or management companies.

2. Identify opportunities to facilitate commuter incentives at the employer level.

2.1 Investigate incorporating a microgrant funding element into the Commuter Friendly Employer program for employers to take advantage of

a. Research other existing microgrant programs

Paying special attention to MPO funded programs, conduct research into microgrant programs surrounding TDM, transportation, sustainability, or other similar topics. Research funding opportunities.

Target(s): Contact at least three programs.

b. Design microgrant pilot program

Document interest from area employers in how they would use funds and invite them to participate in a future pilot program. Draft an application process and a review process for assessing application of awarded funding by recipients.

Target(s): Reach out to 10+ employers to request ideas about utilizing a pilot program.

c. Conduct microgrant pilot program

When funding is identified, pilot a microgrant cycle.

Go Coast Implementation Plan Timeline

| Table L.1 - Safe | | | | | | | | | | | | | | | | | | | | | |
|--|--------------------------------------|-----------|----|----|----|------|----|----|----|------|----|----|----|------|----|----|----|------|----|----|----|
| Activity | Subtasks | Timeline* | | | | | | | | | | | | | | | | | | | |
| | | 2026 | | | | 2027 | | | | 2028 | | | | 2029 | | | | 2030 | | | |
| | | Wi | Sp | Su | Fa | Wi | Sp | Su | Fa | Wi | Sp | Su | Fa | Wi | Sp | Su | Fa | Wi | Sp | Su | Fa |
| 1.1 Promote Be a Looker Campaign | 1.1.a 2027 Campaign | | | | | | | | | | | | | | | | | | | | |
| | 1.1.b 2029 Campaign | | | | | | | | | | | | | | | | | | | | |
| | 1.1.c Year-round promotion (ongoing) | | | | | | | | | | | | | | | | | | | | |
| 1.2 Distribute bicycle safety gear such as lights | 1.2.a Ordering safety gear | | | | | | | | | | | | | | | | | | | | |
| 2.1. Develop safe carpooling guide | 2.1.a Develop guide and promote | | | | | | | | | | | | | | | | | | | | |
| 2.2 Social media campaign for transit safety | 2.1.b Develop and launch campaign | | | | | | | | | | | | | | | | | | | | |

* Wi = Winter, January - March. Sp = Spring, April - June. Su = Summer, July - September. Fa = Fall, October - December.

 Implementation  Ongoing action/ preparation

| Table L.2 - Fair | | | | | | | | | | | | | | | | | | | | | |
|---|---|-----------|----|----|----|------|----|----|----|------|----|----|----|------|----|----|----|------|----|----|----|
| Activity | Subtasks | Timeline* | | | | | | | | | | | | | | | | | | | |
| | | 2026 | | | | 2027 | | | | 2028 | | | | 2029 | | | | 2030 | | | |
| | | Wi | Sp | Su | Fa | Wi | Sp | Su | Fa | Wi | Sp | Su | Fa | Wi | Sp | Su | Fa | Wi | Sp | Su | Fa |
| 1.1 Promote Commuter Friendly Employer and develop the program to best serve all employers and communities | 1.1.a Identify broad range of employers | | | | | | | | | | | | | | | | | | | | |
| | 1.1.b Review program criteria and adjust accordingly | | | | | | | | | | | | | | | | | | | | |
| | 1.1.c Promote Commuter Friendly Employer widely (ongoing) | | | | | | | | | | | | | | | | | | | | |

* Wi = Winter, January - March. Sp = Spring, April - June. Su = Summer, July - September. Fa = Fall, October - December.

 Implementation  Ongoing action/ preparation

Table L.3 - Connected

| Activity | Subtasks | Timeline* | | | | | | | | | | | | | | | | | | | |
|---|--|-----------|----|----|----|------|----|----|----|------|----|----|----|------|----|----|----|------|----|----|----|
| | | 2026 | | | | 2027 | | | | 2028 | | | | 2029 | | | | 2030 | | | |
| | | Wi | Sp | Su | Fa | Wi | Sp | Su | Fa | Wi | Sp | Su | Fa | Wi | Sp | Su | Fa | Wi | Sp | Su | Fa |
| 1.1 Work with employers on carpool matching | 1.1.a Develop contacts spreadsheet of employers | | | | | | | | | | | | | | | | | | | | |
| 1.2 Promote carpool ride matching services | 1.2.a Promote carpool ride matching services (ongoing) | | | | | | | | | | | | | | | | | | | | |
| 2.1 Partner with Wave Transit for outreach | 2.1.a/b Develop social media strategy with Wave and assess | | | | | | | | | | | | | | | | | | | | |
| 2.2 Plan events for group transit rides | 2.2.a/b Identify interested group, plan pilot event, and apply lessons learned to future events. | | | | | | | | | | | | | | | | | | | | |
| 3.1 Open discussions for establishing Park and Ride lots | 3.1.a. Conduct research about Park and Ride lots | | | | | | | | | | | | | | | | | | | | |
| | 3.1.b Open discussions with potential Park and Ride location partners | | | | | | | | | | | | | | | | | | | | |
| | 3.1.c Stay informed on opportunities for vanpooling (biannual checkins) | | | | | | | | | | | | | | | | | | | | |

* Wi = Winter, January - March. Sp = Spring, April - June. Su = Summer, July - September. Fa = Fall, October - December.

 Implementation  Ongoing action/ preparation

Table L.4 - Resilient

| Activity | Subtasks | Timeline* | | | | | | | | | | | | | | | | | | | |
|---|---|-----------|----|----|----|------|----|----|----|------|----|----|----|------|----|----|----|------|----|----|----|
| | | 2026 | | | | 2027 | | | | 2028 | | | | 2029 | | | | 2030 | | | |
| | | Wi | Sp | Su | Fa | Wi | Sp | Su | Fa | Wi | Sp | Su | Fa | Wi | Sp | Su | Fa | Wi | Sp | Su | Fa |
| 1.1 Campaign for benefits of alternative transportation | 1.1 Draft and launch campaign | | | | | | | | | | | | | | | | | | | | |
| 1.2 Plan events to build excitement around transit, carpooling, and biking | 1.2.a Annual bike rides | | | | | | | | | | | | | | | | | | | | |
| | 1.2.b Bike Month | | | | | | | | | | | | | | | | | | | | |
| | 1.2.c Commuter Challenge | | | | | | | | | | | | | | | | | | | | |
| | 1.2.d Bike to Work Day | | | | | | | | | | | | | | | | | | | | |
| | 1.2.e Other events (ongoing) | | | | | | | | | | | | | | | | | | | | |
| 1.3 Promote TDM in land use ordinances and developments. | 1.3.a Aid member jurisdictions in developing TDM oriented ordinance (ongoing) | | | | | | | | | | | | | | | | | | | | |
| 1.4 Apply annually for NCDOT's Bicycle Helmet Initiative | 1.4.a Distribute helmets received from grant throughout the year (ongoing) | | | | | | | | | | | | | | | | | | | | |

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 Implementation  Ongoing action/ preparation

Table L.5 - Proactive

| Activity | Subtasks | Timeline* | | | | | | | | | | | | | | | | | | | |
|---|---|-----------------------------|----|----|----|------|----|----|----|------|----|----|----|------|----|----|----|------|----|----|----|
| | | 2026 | | | | 2027 | | | | 2028 | | | | 2029 | | | | 2030 | | | |
| | | Wi | Sp | Su | Fa | Wi | Sp | Su | Fa | Wi | Sp | Su | Fa | Wi | Sp | Su | Fa | Wi | Sp | Su | Fa |
| 1.1 Promote Commuter Friendly Employer | 1.1.a Promote Commuter Friendly Employer (ongoing) | Ongoing action/ preparation | | | | | | | | | | | | | | | | | | | |
| | 1.2.a Develop TDM outreach kit for schools and families | | | | | | | | | | | | | | | | | | | | |
| 1.2 Conduct outreach in schools | 1.2.b Host a youth poster contest focusing on bike/ped safety | | | | | | | | | | | | | | | | | | | | |
| | 1.3.a Develop toolkit for apartment complexes | | | | | | | | | | | | | | | | | | | | |
| 1.3. Develop residential TDM toolkits | 1.3.b. Develop toolkit for HOA/neighborhoods | | | | | | | | | | | | | | | | | | | | |
| | 2.1.a Research existing microgrant programs | | | | | | | | | | | | | | | | | | | | |
| 2.1 Investigate incorporating a microgrant funding element into Commuter Friendly Employer | 2.1.b Design pilot program | | | | | | | | | | | | | | | | | | | | |
| | 2.1.c Conduct pilot program | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |

* Wi = Winter, January - March. Sp = Spring, April - June. Su = Summer, July - September. Fa = Fall, October - December.

 Implementation  Ongoing action/ preparation





Environmental Considerations

Table of Contents

1. Introduction
2. Environmental Requirements
3. Mitigation Measures

Introduction

Transportation projects in North Carolina are subject to a range of federal and state environmental requirements designed to protect environmental and community resources. While Metropolitan Transportation Plans establish long-term transportation priorities for the region, they do not grant environmental approval for individual projects or replace the detailed review and permitting processes required as projects move through the later stages of project development including design and construction. MPOs play a key role in integrating awareness of these requirements into planning decisions, helping ensure that projects are positioned to comply with applicable regulations and that potential impacts are considered early in the planning process. The following sections provide an overview of the relevant federal and state requirements and describe potential mitigation measures that may be applied to address environmental and community impacts as projects advance.

Environmental Requirements

Federal Environmental Requirements

The National Environmental Policy Act (NEPA), enacted in 1970, remains a foundational environmental review law, requiring agencies to assess the environmental impacts of major federal actions and projects. Transportation projects that receive federal funding or require federal approvals through agencies, such as the Federal Highway Administration (FHWA) or Federal Transit Administration (FTA), typically undergo environmental documentation review through a tiered classification system as previously outlined under NEPA. This tiered classification system includes Environmental Impact Statements (EIS), Environmental Assessments, and Categorical Exclusions.

- Environmental Impact Statement (EIS): detailed analysis required for major federal actions significantly affecting the environment, as outlined in 42 U.S.C § 4332(2)(C).
- Environmental Assessment (EA): a report used to determine whether an EIS is needed or if a Finding of No Significant Impact (FONSI) is appropriate, as outlined in 42 U.S.C § 4332(2)(C).
- Categorical Exclusion (CE): a category of actions that a federal agency has determined normally do not cause significant impact on the environment, and thus does not require an EIS or EA, as outlined in 42 U.S.C. § 4336e.

On February 25, 2025, the Council on Environmental Quality (CEQ) published an interim final rule removing its NEPA implementing regulations from the Code of Federal Regulations, effective April 11, 2025. This action aligns with Executive Order 14154, “Unleashing American Energy,” which rescinded the 1977 Carter-era executive order that had authorized CEQ to issue NEPA regulations. Consequently, federal agencies are now directed to establish their own NEPA procedures, leading to a decentralized approach to environmental reviews. In addition to the regulatory changes, the CEQ issued a memorandum on February 19, 2025, providing interim guidance for federal agencies. This guidance instructs agencies to revise their NEPA procedures within 12 months to align with the new policy direction.

State Environmental Requirements

Although the federal NEPA framework is changing to date, some states and state transportation agencies, including NCDOT, continue to follow established environmental procedures to ensure responsible project planning and compliance with remaining regulations. Transportation projects funded with state and local funds still require environmental review. The North Carolina Environmental Policy Act was adopted in 1971 and encourages wise, productive, and beneficial use of North Carolina’s natural resources.

In 2015, the State Environmental Policy Act (SEPA) reformed the 1971 legislation to create criteria for which a SEPA review would be required. Projects that meet three criteria throughout the process of scoping to construction must submit a SEPA Environmental Review Document. The criteria are as follows:

- A single project/action/related group of projects or actions results in the expenditure of \$10 million in state funds or activity leading to the disturbance of natural cover or topography of an area greater than or equal to 10 acres of public land or water
- Includes an action by a state agency
- Has a potential to negatively impact natural resources, public health and safety, natural beauty, or historical and cultural elements, of the state's common inheritance

If it is determined that a project meets these three requirements, the organization must begin the SEPA Review Process, which may require an EIS/Record of Decision (ROD) or an EA/Finding of No Significant Impact (FONSI).

For projects that do not meet the SEPA threshold and do not require full NEPA documentation, NCDOT uses the Minimum Criteria Determination Checklist (MCDC). The MCDC is a streamlined tool that helps determine whether a project qualifies for a categorical exclusion by evaluating its potential impacts on environmental, cultural, and community resources. It allows projects to move forward more efficiently when it is determined that there are no significant adverse effects.

Use of the MCDC supports responsible project development by ensuring that even minor projects are reviewed for compliance with environmental standards. The checklist covers potential impacts to water quality, threatened and endangered species, historic properties, and other sensitive areas. If a project satisfies the minimum criteria, it may proceed without further environmental documentation.

Environmental Mitigation

NCDOT employs the 404 Merger Process to integrate environmental considerations into transportation project planning and development. This process, which is undertaken collaboratively between NCDOT, the US Army Corps of Engineers (USACE), FHWA, and NCDEQ (formerly NCDENR) with the goal of streamlining the previous NEPA process requirements and accelerating project delivery. One of the products of this process is an EIS. The Merger Process allows agencies to work more quickly and efficiently by providing a common forum for personnel to discuss and discover means to comply with key elements of their respective agency's mission.

This collaborative approach involves multiple resources and agencies to ensure that environmental impacts are being effectively addressed through a project's life cycle. Environmental mitigation requirements in NCDOT's Merger Process include:

1. **Avoidance and Minimization:** At each stage of project development, NCDOT emphasizes avoiding and minimizing impacts on environmental resources, such as wetlands, streams, and protected habitats. This involves evaluating alternative designs and implementing measures to reduce environmental disturbances.
2. **Concurrence Points:** The Merger Process includes specific concurrence points where agencies collectively agree on critical project decisions. These points ensure that environmental concerns are addressed systematically, and mitigation strategies are integrated into the project design.
3. **Compensatory Mitigation:** When environmental impacts are unavoidable, NCDOT develops compensatory mitigation plans to offset adverse effects. These plans may involve restoring, enhancing, or preserving environmental resources to compensate for the project's impact.

4. Environmental Commitments Documentation: All environmental commitments and mitigation plans are documented in the project's final environmental documents, such as the Environmental Impact Statement (EIS), Environmental Assessment (EA), or Finding of No Significant Impact (FONSI). This documentation ensures transparency and accountability in implementing mitigation measures.

As outlined above, the Merger Process utilizes Concurrence Points that represent key, defining decisions made by the numerous agencies' representatives and the agreements to accept the decision made. There are seven concurrence points within the process, and they are as follows:

- Concurrence Point 1: Purpose and Need and Study Area Defined
- Concurrence Point 2: Detailed Study Alternatives Carried Forward
- Concurrence Point 2A: Bridging Decisions and Alignment Review
- Concurrence Point 3: LEDPA/Preferred Alternative Selection
- Concurrence Point 4A: Avoidance and Minimization
- Concurrence Point 4B: 30 Percent Hydraulic Review
- Concurrence Point 4C: Permit Drawing Review

Mitigation Measures

| Table M.1 - Mitigation Measures | |
|---------------------------------|--|
| Impact | Mitigation Measure(s) |
| Air Quality | <ul style="list-style-type: none"> • Designate pedestrian/transit-oriented development areas • Adopt local air quality mitigation fee program • Develop energy efficient incentive program • Adopt air quality |
| Archaeological | <ul style="list-style-type: none"> • Archaeological excavation • Design modifications to avoid areas • Educational activities |
| Community Impacts | <ul style="list-style-type: none"> • Bridge community • Sidewalks • Bike Lanes • Develop recreational areas • Traffic calming • Aesthetic enhancements • Oral history project |
| Endangered/Threatened Species | <ul style="list-style-type: none"> • Preservation • Enhancement or restoration of degraded habitat • Creation of new habitats • Establishment of buffer areas around existing habitats • Modifications of land use practices • Restrictions on land access |
| Farmland | <ul style="list-style-type: none"> • Protect one-to-one farmland acre for every acre converted • Agricultural conservation easement on farmland • Compensation |
| Fragmented Animal Habitats | <ul style="list-style-type: none"> • Construct overpasses with vegetation • Constructed underpasses, such as culverts and viaducts • Other design measures to minimize potential fragmenting of animal habitats |
| Historic Sites | <ul style="list-style-type: none"> • Relocation of historical property • Design modification • Landscaping to reduce visual impacts • Photo documentation • Historic archival recording to present historic information to the public |
| Light Impacts | <ul style="list-style-type: none"> • Lens color • Direction of lighting • Low level lighting |

| Impact | Mitigation Measure(s) |
|------------------|---|
| Noise | <ul style="list-style-type: none"> • Noise barriers • Planting trees |
| Park Impacts | <ul style="list-style-type: none"> • Construct bike/pedestrian pathways • Dedicate land for conservation or preservation • Compensation for park dedication fees • Replace impaired functions |
| Viewshed Impacts | <ul style="list-style-type: none"> • Vegetation and landscaping • Screening • Buffers • Earth berms • Camouflage • Lighting |
| Wetlands | <ul style="list-style-type: none"> • Compensation • Wetland restoration possible through NCDEQ's Division of Mitigation Services (DMS) • On-site wetland restoration • Preservation of wetlands in threat of being impacted • Wetland preservation to help control flooding • Strict erosion and sedimentation control measures |

Sources

- Header photo courtesy of New Hanover County
- FHWA: <https://www.fhwa.dot.gov/legsregs/directives/fapg/Cfr450c.htm>
- NCDOT: <https://connect.ncdot.gov/resources/Environmental/EPU/NEPA/Pages/default.aspx>
- Mitigation Measures
 - The mitigation measures are derived from the Compensatory Mitigation Measures set by the EPA in the 1990 Memorandum of Agreement between the EPA and Army, as well as the Clean Water Act, specifically section 404.



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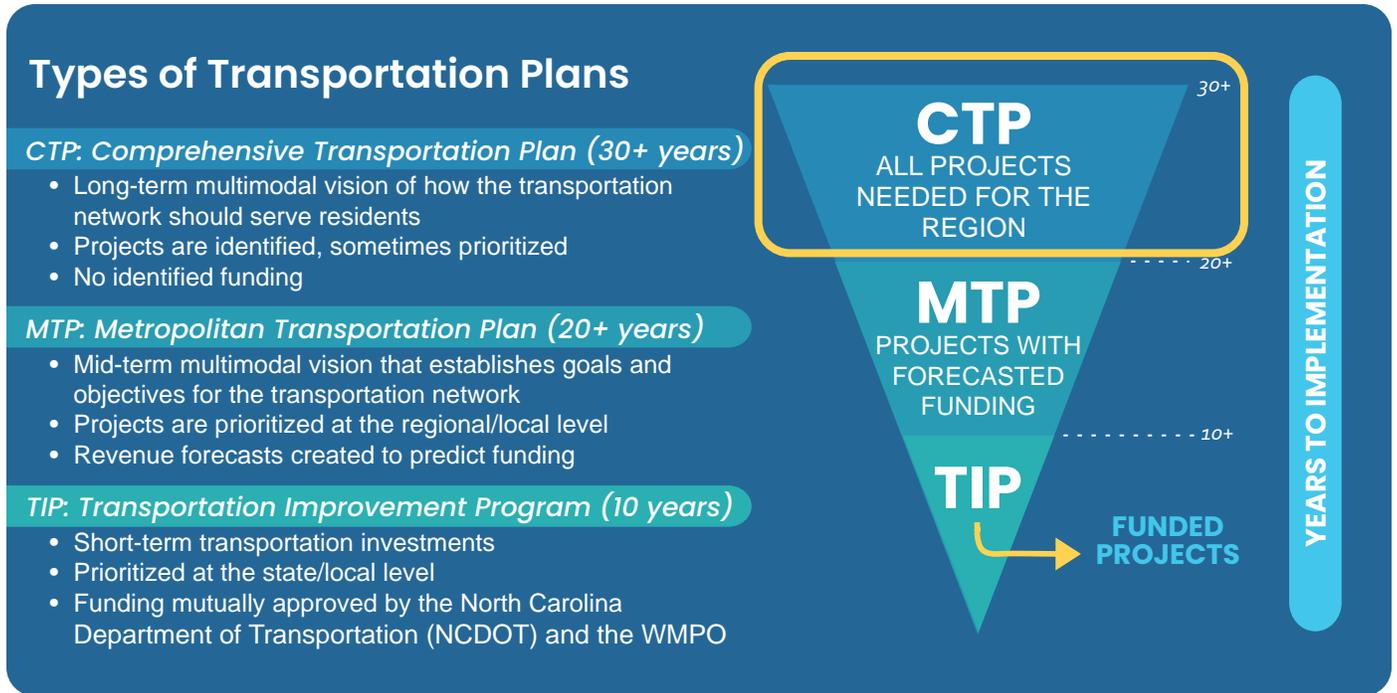
N *Comprehensive Transportation Plan (CTP)*

Table of Contents

1. Introduction
2. Non-Fiscally Constrained Roadway Project Lists and Map
3. Port of Wilmington Transportation Project Lists and Map
4. WMPO Adopted Local Plans

Introduction

Comprehensive Transportation Plans (CTPs) serve as the long-range, multimodal guiding document that further supports the vision for the region’s future transportation network by identifying improvements needed to support growth, mobility, and regional connectivity as defined by the North Carolina General Statutes §136-66. Unlike the Metropolitan Transportation Plan (MTP), which requires a fiscally constrained component, the CTP includes all projects needed to meet future demand, regardless of funding availability.



The Wilmington Urban Area Metropolitan Planning Organization’s 2050 CTP includes the following:

- The 2050 MTP fiscally constrained roadway projects (Chapter 6, Table 6.1)
- The 2050 MTP non-fiscally constrained priority roadway projects (Table N.1)
- The Port of Wilmington priority projects (Table N.2)
- The 2050 MTP bicycle and pedestrian priority projects (Appendix F, Table F.2)
- The 2050 MTP ferry and water transportation priority projects (Appendix G, Table G.1)
- The 2050 MTP rail priority projects (Appendix H, Table H.1)
- The 2050 MTP public transportation priority projects (Appendix I, Table I.4)
- All WMPO adopted local transportation plans (Page N-8)

Non-Fiscally Constrained Roadway Project List and Maps

| Table N.1 - Non-Fiscally Constrained Roadway Project List | | | | | |
|---|---|--------------------------|--|---|------------------------|
| Project ID | Project Name | Project Type | From | To | Project Cost (2024 \$) |
| RW-67 (U-4738) | Cape Fear Crossing (Non-Tolled Revenues) | New Road at New Location | I-140 Terminus at US 17 (Ocean Highway) | US 421 (Carolina Beach Road) and Independence Blvd Intersection | \$956,300,000 |
| RW-6 | Snow's Cut Bridge Replacement | Bridge Replacement | SR 1576 (River Rd) | Access Rd | \$90,822,977 |
| RW-51 | N Marisol Path Wy to Safe Passage Wy Collector Road | New Road at New Location | SR 1673 (Deerfield Dr/N Marisol Path Wy) | SR 1784 (Dan Owen Dr/Safe Passage Wy) | \$3,960,000 |
| RW-30 | I-40 Widening | Road Widening | Exit 420 | Exit 414 | \$154,900,000 |
| RW-28 | I-140 at US 74/76 Intersection Improvements | New Interchange | N/A | N/A | \$422,300,000 |
| RW-50 | Hoover Rd Widening | Road Widening | US 17 | Hampstead Bypass | \$11,970,000 |
| RW-69 | Kerr Avenue Widening | Road Widening | Patrick Avenue | SR 1411 (Wrightsville Avenue) | \$108,700,000 |
| RW-34 | US 17 Upgrade to Controlled Access Facility | Access Management | Sloop Point Loop Road | WMPO Boundary | \$195,700,000 |
| RW-35 | US 17 at Sloop Point Loop Road Interchange | New Interchange | N/A | N/A | \$51,810,000 |
| RW-29 | I-40 Resiliency Improvements | Resiliency Upgrades | Exit 408 | Exit 414 | \$337,500,000 |
| RW-15 | Cedar Hill Rd/Wide Wy Connector | New Road at New Location | Wide Wy Extension | SR 1430 (Cedar Hill Rd) | \$3,750,000 |
| RW-16 | Cobbs Wy Extension | New Road at New Location | SR 1426 (Mt. Misery Rd)/Daniels Rd Connector | Ridge Rd Extension | \$7,490,000 |
| RW-17 | Daniels Rd Connector | New Road at New Location | West Town Limit | Indian Creek Housing Development | \$9,010,000 |
| RW-18 | Heritage Park Connector | New Road at New Location | Valentine Wy Extension | Wide Wy Extension | \$8,550,000 |
| RW-25 | Valentine Wy Extension | New Road at New Location | Wide Wy Extension | Heritage Park Connector | \$5,650,000 |
| RW-27 | Wide Wy Extension | New Road at New Location | Heritage Park Connector | Ridge Rd Extension | \$14,890,000 |
| RW-38 | Holly Shelter Rd Widening | Road Widening | US 117 (Castle Hayne Rd) | NHC/Pender County Line | \$46,610,000 |

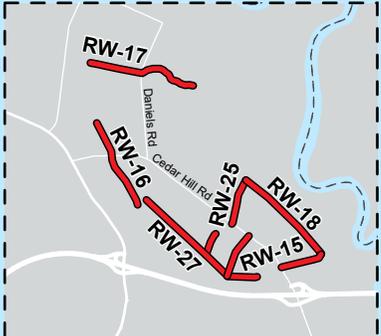
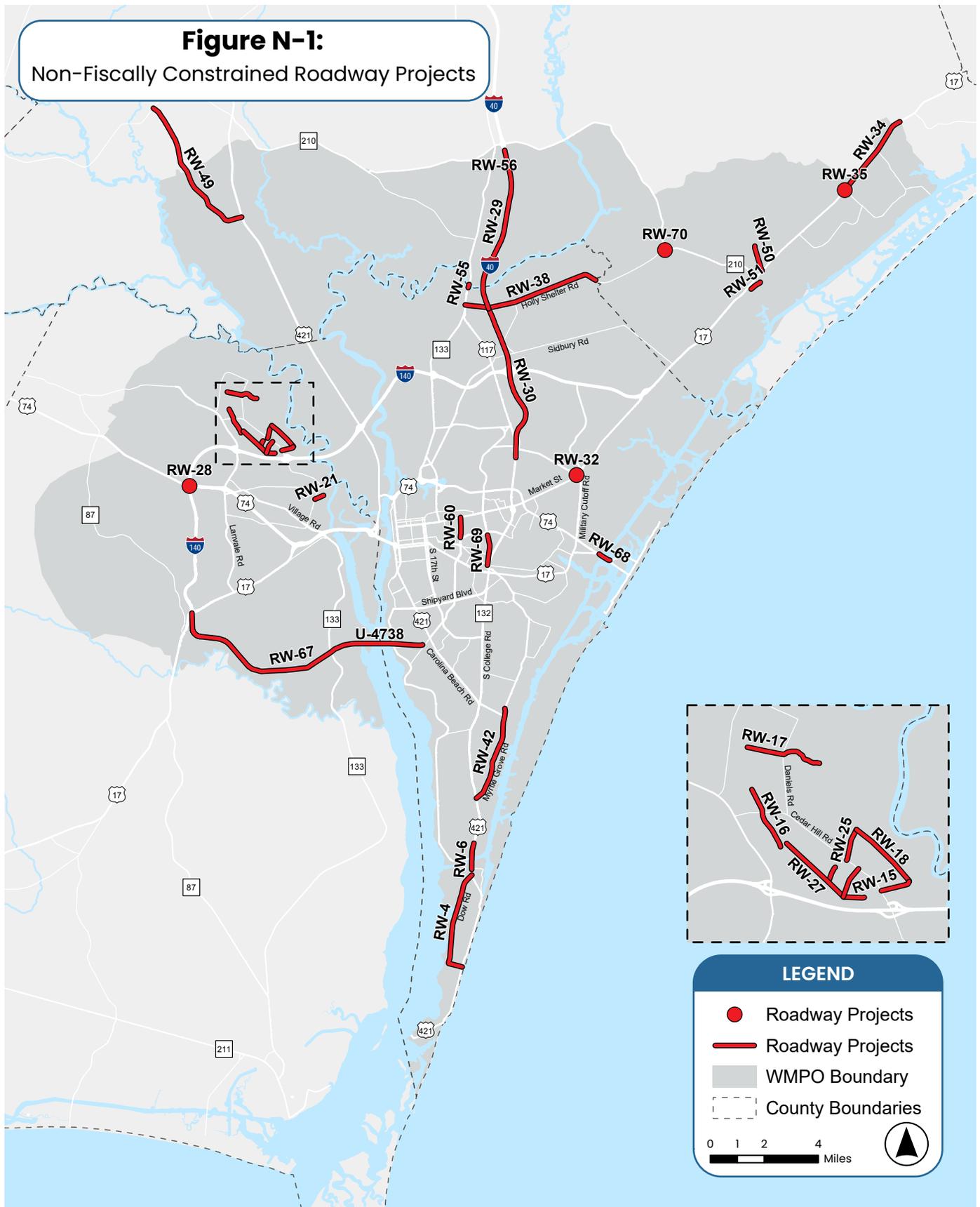
Table N.1 - Non-Fiscally Constrained Roadway Project List

| Project ID | Project Name | Project Type | From | To | Project Cost (2024 \$) |
|------------|---|---------------------------|---------------------------|--|------------------------|
| RW-60* | Covil Ave Widening | New Road at New Location | Market St | Randall Pkwy | \$1,125,600 |
| RW-32 | US 17 BUS at Gordon Road Interchange | New Interchange | N/A | N/A | \$43,900,000 |
| RW-21 | Park/Pine Valley/Brooklyn Connector East of N Navassa Road | New Road at New Location | SR 1435 (N Navassa Rd) | Canal Dr | \$2,680,000 |
| RW-49 | Blueberry Rd Widening | Road Widening | US 421 | NC 210 | \$38,870,000 |
| RW-70 | NC 210 at Island Creek Road Intersection Improvements | Intersection Improvements | N/A | N/A | \$14,433,148 |
| RW-4 | Dow Rd Widening | Road Widening | US 421 (N Lake Park Blvd) | US 421 (Ft. Fisher Blvd) | \$37,610,000 |
| RW-42 | Myrtle Grove Rd Widening | Road Widening | SR 1521 (Piner Rd) | US 421 (Carolina Beach Rd) | \$44,400,000 |
| RW-55 | US 117 Bridge Replacement over NE Cape Fear River at NHC/Pender County Line | Bridge Replacement | N/A | N/A | \$16,920,576 |
| RW-68 | Heide Trask Bridge Replacement | Bridge Replacement | Summer Rest Road | US 74 (Salisbury St) at US 76 (Causeway Drive) | \$112,100,000 |

*Alternative to Independence Boulevard Extension (U-4434)



Figure N-1:
 Non-Fiscally Constrained Roadway Projects



LEGEND

- Roadway Projects
- Roadway Projects
- WMPO Boundary
- County Boundaries

0 1 2 4 Miles ▲

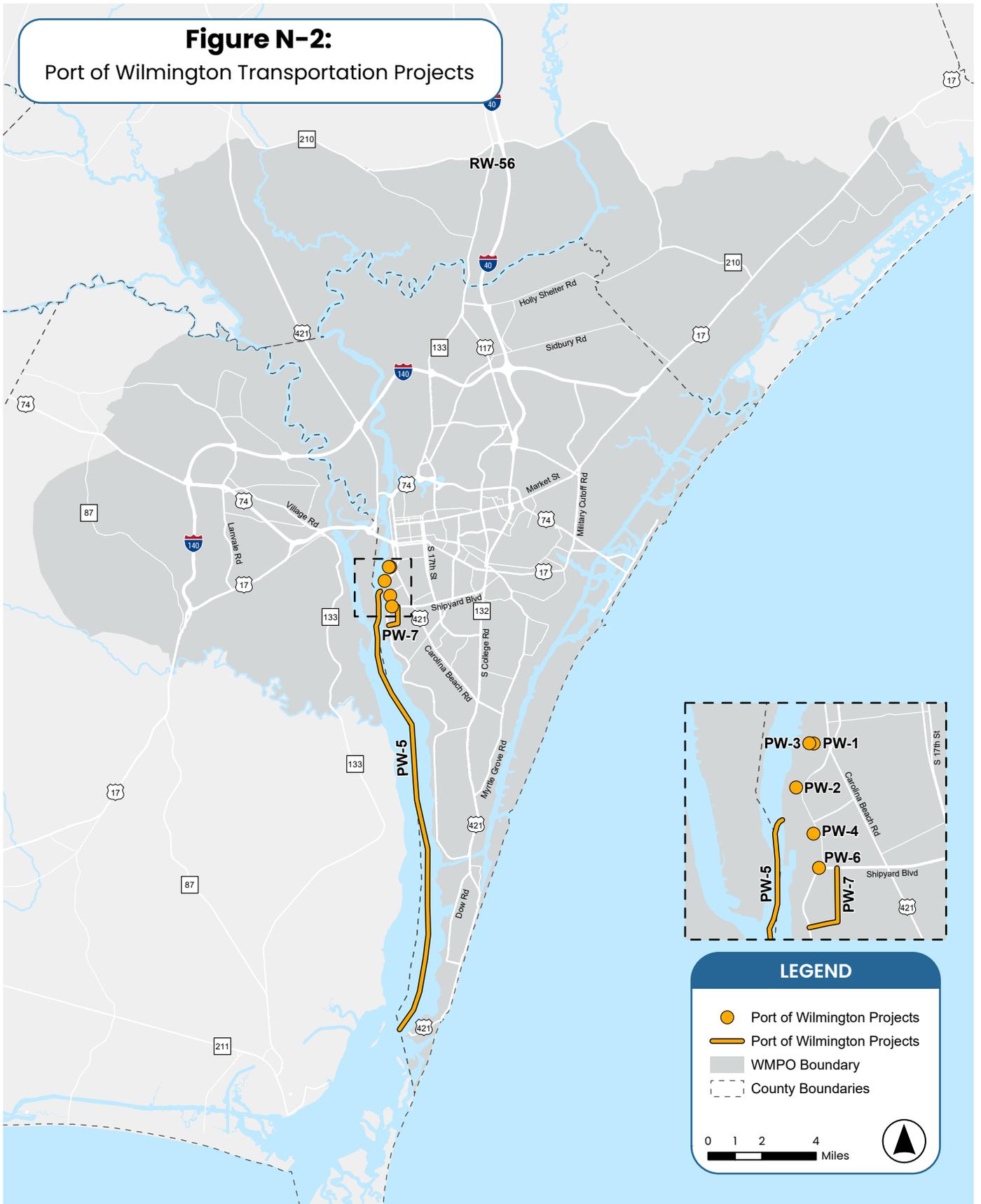
Port of Wilmington Transportation Projects

With access to capital funds, grants, and other flexible resources, the Port of Wilmington has the ability to implement transportation projects without relying solely on traditional funding sources. While these projects were submitted to contribute to the region's 25-year transportation vision, they are considered CTP projects since they are not included in the fiscally constrained plan. Key information for each project is provided in the table below.

| Table N.2 - Port of Wilmington Transportation Projects List | | | |
|---|--|--|--------------------------------|
| Project ID | Project Name | Project Description | Mode of Project |
| PW-1 | New North Gate | The North Gate Relocation and Access Optimization project will construct a new private access road and North Gate vehicle entrance to the Port of Wilmington and relocate this port entrance to the designated truck route and away from neighborhood surface streets; the project will also eliminate truck delays and congestion at a very active railroad grade crossing. | Roadway |
| PW-2 | New intermodal yard | Construct a dedicated area for loading and discharging intermodal container trains at the Port of Wilmington. | Rail |
| PW-3 | North property storage track | This project will construct new rail storage track as needed to increase the car capacity of the Port, add four tracks parallel to the existing Main on the East Side. These four tracks would provide additional classification capability and add about 6,000 feet of storage space (7,644 track feet). They would be constructed of Fit Yard CWR (continuous welded rail) which should have no more than 5/8" horizontal nor more than 1/2" vertical wear and can carry the loads based on 100-ton cars. The use of wood, steel, or concrete ties should be based on the bids submitted by qualified track contractors. | Rail |
| PW-4 | Port of Wilmington pedestrian bridge | Pedestrian Bridge for employees. Note that this project is specific to Port of Wilmington operations. | Bicycle and Pedestrian |
| PW-5 | Wilmington Harbor Navigational Improvement Project (WHNIP) | This project is to deepen the Wilmington Harbor channel from 42 feet to 47 feet. This deepening, along with other improvements like channel widening and extending the ocean entrance, aims to accommodate larger cargo vessels and enhance the port's competitiveness. | Ferry and Water Transportation |
| PW-6 | South Gate grade separation | This project would provide a grade separation at the intersection of 1 Shipyard Boulevard, the container truck entrance to the Port of Wilmington. | Roadway |
| PW-7 | Re-route River Road | The project would re-route River Road around the entrance of the south gate of the Port of Wilmington, separating freight traffic from private vehicle traffic in and around the residential neighborhoods around the port. Note that this project will require in depth collaboration with the City of Wilmington and likely NCDOT prior to proceeding in any fashion. | Roadway |



Figure N-2:
 Port of Wilmington Transportation Projects



WMPO Adopted Local Plans

Corridor Plans

- US 17 Business Corridor Study Update (2016)
- US 17/NC 210 Corridor Study (2012)
- Eastwood Road Preferred Access Plan (2011)
- Market Street Corridor Study (2011)
- Dow Road Carolina Beach, North Carolina Corridor Study (2009)
- Cape Fear Historic Byway Corridor Management Plan (2008)
- US 17 Business Corridor Study (2007)
- Dawson and Wooster Corridor Plan (2007)

Collector Street Plans

- Navassa Collector Street Plan (2022)
- Pender County Streets Plan (2021)
- Connecting Northern Brunswick County Collector Street Plan (2013)
- US 17/NC 133 Collector Street Plan (2007)

Bicycle and Pedestrian Plans

- Leland Integrated Mobility Plan (expected 2025)
- Carolina Beach Bicycle and Pedestrian Plan (2025)
- Wrightsville Beach Bicycle and Pedestrian Plan (2024)
- Walk Wilmington Pedestrian Plan Update (2023)
- Pender County Bicycle and Pedestrian Plan (2023)
- Kure Beach Bicycle and Pedestrian Plan (2022)
- Town of Navassa Comprehensive Bicycle and Pedestrian Plan (2022)
- Wilmington Rail Trail Master Plan (2022)
- River to Sea Bikeway Master Plan (2013)
- Wilmington-New Hanover County Comprehensive Greenway Plan (2013)
- Cross-City Trail Master Plan (2012)

Feasibility Studies

- Wilmington Downtown Trail Phases 2 and 3 Feasibility Study (2025)
- Gullah Geechee Heritage Trail Feasibility Study (2024)
- Island Greenway, NC Paved Trail Feasibility Study (2024)
- Cape Fear Memorial Bridge Replacement Feasibility Study (2020)
- Wilmington Rail Relocation Feasibility Study (2017)

Other Plans

- WMPO SS4A Comprehensive Safety Action Plan (expected 2026)
- WMPO ITS Plan (expected 2025)
- Leland SS4A Comprehensive Safety Action Plan (2025)
- Wilmington Traffic Separation Study (2017)
- Town of Wrightsville Beach Community Transportation Plan (2013)
- Transit Needs Study for the Wilmington Multi-Modal Transportation Center (2009)
- River Road Small Area Plan (2007)
- Wilmington Multi-Modal Transportation Center Site Evaluation Report (2005)
- Wilmington Multi-Modal Transportation Center Feasibility Study (2000)



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