# BRUNSWICK COUNTY

## DRAFT COMPREHENSIVE TRANSPORTATION PLAN

## APPENDIX









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## **CTP PROCESS**

A Comprehensive Transportation Plan (CTP) is developed to identify transportation system needs of the region for the planning period. The CTP serves as an official guide to providing a well-coordinated, efficient, and economical transportation system for the future of the region. Local officials are encouraged to reference the CTP and coordinate land development and transportation facilities so future needs of the public are met while minimizing human and natural environmental impacts.

The CTP process consists of 7 Phases and 19 process steps that outline the sequence of major activities. The basic flow of the process is shown in the figure below:

Process Guidance - 7 Phases to develop a CTP						
	CTP STEERING COMMITTEE INVOLVEMENT (PHASES 2-6)					
PHASE 1 CTP Set-Up	PHASE 2 Develop Vision	PHASE 3 System Assessment	PHASE 4 Analyze Alternatives	PHASE 5 Develop Draft Plan	PHASE 6 Adopt Plan	PHASE 7 CTP Close-Out
lnitiate Study & Gather Data	Provide CTP Overview	Perform Highway Analysis	Evaluate Constraints	Consensus on "Draft" Plan	Seek Local Adoption	Distribute Adopted Plan
Establish Study Scope	Develop Community Vision	Perform Non- Highway Analysis	Evaluate Future Year Solutions	Complete Plan	Seek BOT Adoption	Archive Project File
Establish CTP Steering Committee	Select Transportation Network	Perform Multimodal Assessment	Validate Plan Against Vision			Publish CTP

The process is structured to offer flexibility to meet an area's planning needs. It balances the need to meet multimodal transportation demands while considering the natural and human environment within a community. It forms a strong connection between an area's transportation plan, locally adopted land development plans, and community vision. It provides opportunities for public involvement.

## **INTERAGENCY COORDINATION**

During the long-range transportation planning process, it is important to coordinate with environmental resource agencies and other local, state, and federal agencies and entities. In North Carolina, this coordination can follow the Interagency Coordination Protocol, which provides a consistent methodology for completing and documenting interagency coordination and facilitating the exchange of information in comprehensive transportation planning. The purpose is to provide an efficient way to get meaningful input from interagency partners on long-range transportation plans to enhance the development of the transportation plans and the project proposals. Following this section is a summary of the coordination that was conducted as part of this CTP study.

## **Protocol Checklist**

#### ➔ Initiate Contact

A letter notifying resource agencies to the start of the Brunswick County CTP study was sent in November of 2020 to agency partners informing them of the first steering committee meeting. This letter was also used to identify the proper contacts for each agency as well as additional contacts.

#### → Coordinate with Agencies on Data & Goals

Agency members were notified of the Brunswick County Goals and Objectives Survey. In another email, they were sent environmental data that were used to create CTP environmental features maps. In addition, the members were sent the CUR, study boundary shapefile and pdf. The CTP engineers asked the agencies to provide any relevant information within the CTP study area that could inform the development of CTP goals, objectives, and measures of effectiveness. Four agency members responded with feedback and relevant information requested by the engineers.

#### → Validating Resources & Transportation Priorities

There was a meeting held with Agency members on August 5, 2021 to review materials provided during this protocol. The members were sent materials ahead of the meeting which included: highway recommendations map, volume and capacity maps, environmental maps, and highway recommendations list. During the meeting, the CTP engineers presented the materials with a PowerPoint presentation, there were discussions and feedback during the meeting. The comments were captured in the meeting minutes and distributed to all Agency members. The engineers asked the Agency members to continue and verify information shared with them and to identify critical areas that should be taken into consideration throughout the study. After the meeting, two agency members responded with additional resources to be used in consideration of the study area. In addition, the CTP engineers forwarded feedback and comments to TPD management. TPD management met with NCDOT's Environmental Policy Unit to make updates and changes based on feedback from agencies where it was feasible.

#### → Coordinate on Project Proposals & Alternative Analysis

The project proposal milestone was met during the previous stage. There is no alternative analysis in this CTP.

#### → Submit Draft Transportation Plan for Review

Draft Maps and Project Sheets were emailed to Interagency members for review. – not yet completed.

## **COMMUNITY UNDERSTANDING**

Prior to the start of the Brunswick County CTP, the Cape Fear Planning Organization (RPO)worked with NCDOT Transportation Planning Division (TPD) Project Engineer to complete a Community Understanding Report (CUR). This report was used to provide an overview of the study area and assisted in the identification of stakeholders in the area. The CTP Steering Committee provided meaningful input into the CUR as needed. The CUR information was used throughout the development of the CTP to help inform the plan and its recommendations.

#### The CUR covers multiple pieces of information used in the CTP Study, including:

- 1. Population Trends
- 2. <u>Population Diversity</u>
- 3. Community Character
- 4. Schools, Parks and Community Centers
- 5. Public Safety/Emergency Response
- 6. Economic Conditions
- 7. Development Goals
- 8. Farming Operations
- 9. Natural Resources
- 10. Transportation Choices
- 11. Seasonal Traffic and Special Events

#### **1. Population Trends and Projection**

Why important?	Population trends and projections provide the greatest overall sense of community direction. It can illuminate if an area is thriving, growing, aging, or losing population. It provides a high-level overview if it is an area where people and/or businesses want to move – or remain if already in an area. This is important information for almost all planning, and many public policies, efforts.
Potential Data Source(s)	US Census Bureau, American Community Survey, NC Office of State Budget and Management
Other Source(s)	Land use/development/comprehensive plans

Time Horizon	Brunswick County	% Growth from Previous Decade
1990 Census Population	50,985	
2000 Census Population	73,143	43.5%
2010 Census Population	107,431	46.9%
NC State Demographer Forecast Projection (2020)	130,897	
NC State Demographer Forecast Projection (2030)	136,693	27.2%
NC State Demographer Forecast Projection (Last Projected Year)	170,134	23.7%

- A. What are the two most important reasons the CTP Study Area experienced the population trends it did? (Cite the source.)
  - Recreational Opportunities
  - Inexpensive Property Taxes
- B. What are the two most important reasons the CTP Study Area is likely to experience the population trends forecast?
  - Brunswick County has high-quality outdoor recreation opportunities and natural areas
  - Brunswick County's low housing costs, low costs of living, and proximity to the beach make it a very desirable place to live.
- C. If known, how is the study area expected to grow? Which areas will have lower or higher growth?
  - Areas surrounding the existing municipalities as well as the US 17, NC 87 and NC 211 corridors are expected to see significant growth.

#### 2. Population Diversity

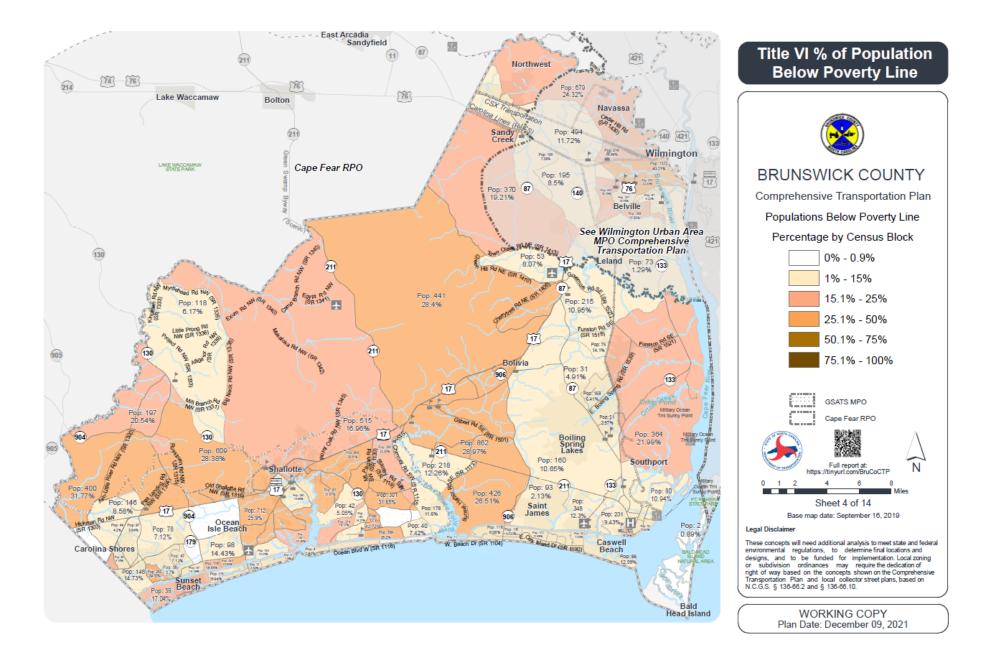
Why important?	Population Diversity data are key aspects of documenting community characteristics. This data may also inform local planning efforts if population diversity is identified as a local public policy priority. Different race, age, income, and ethnic populations may have different communication needs during the CTP process.
Potential Data Source(s)	Population demographic data are important for understanding community characteristics. Different race, age, income, and ethnic populations may have different communication needs during the CTP process.
Other Source(s)	US Census Bureau, American Community Survey

- A. Identify notable and/or underrepresented communities in the CTP Study Area that need to be considered during the CTP process (total and percentage if available)? This does not need to be limited to Limited English Proficiency (LEP) groups. American Community Survey (2017):
  - Black or African American 12,848, 9.8%
  - Two or more races 3733, 2.9%
  - Some other race 3,095, 2.4%
  - Hispanic or Latino 6,242, 4.8%
- B. Note low-income populations in the CTP Study Area (total and percentage). The map from the RPO Title VI Plan may be sufficient.

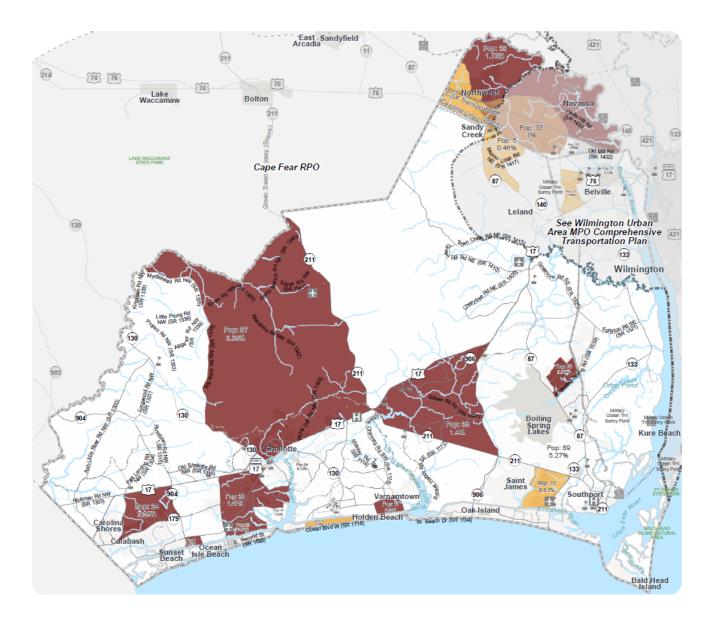
According to the American Community Survey (2017),

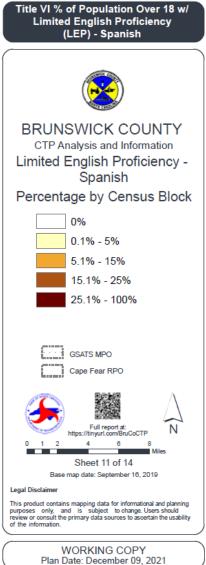
• 14,906/130,897 or 11.4% of the total Brunswick County Population is below the poverty line

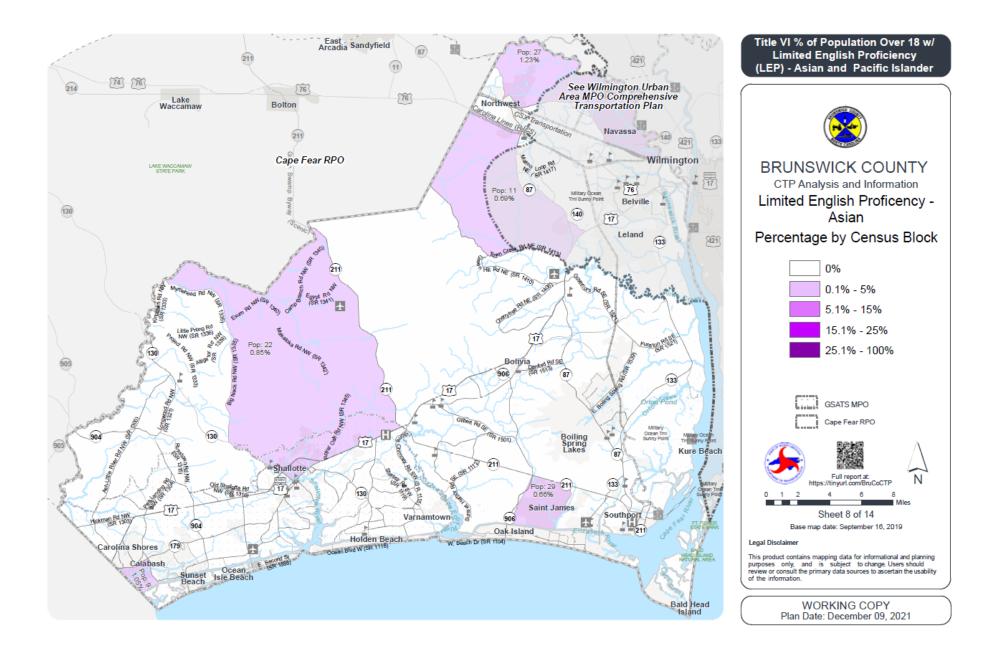
**FEBRUARY 2023** 



- C. Identify the main LEP language groups. Note which LEP language groups total at least 5% of the population, or 1000 total population, whichever is less. This may come from the RPO Title VI Plan.
- The main LEP language groups are Asian and Spanish. The Spanish LEP group totals more than 5% (See Title VI maps).



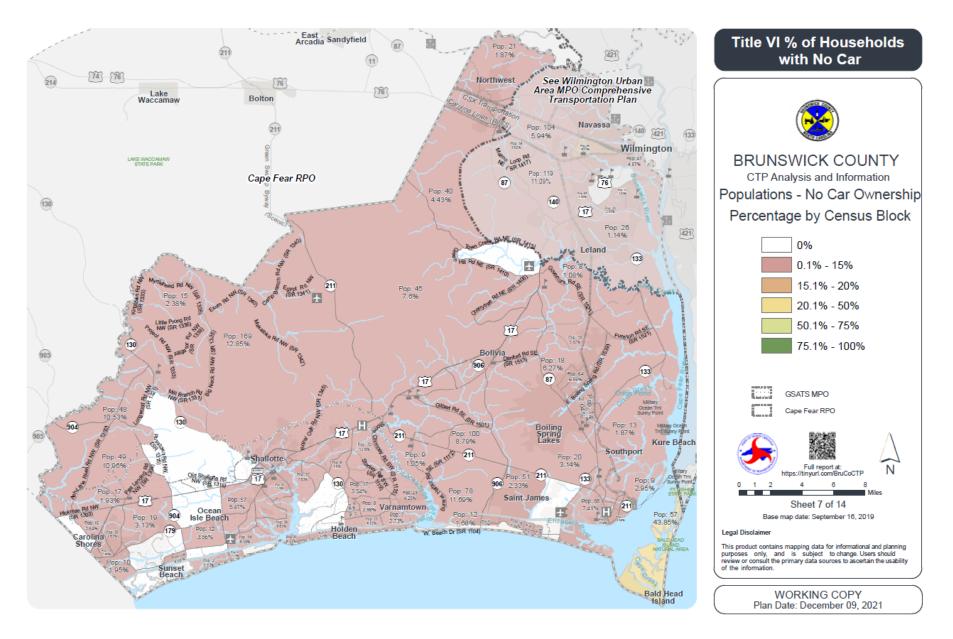


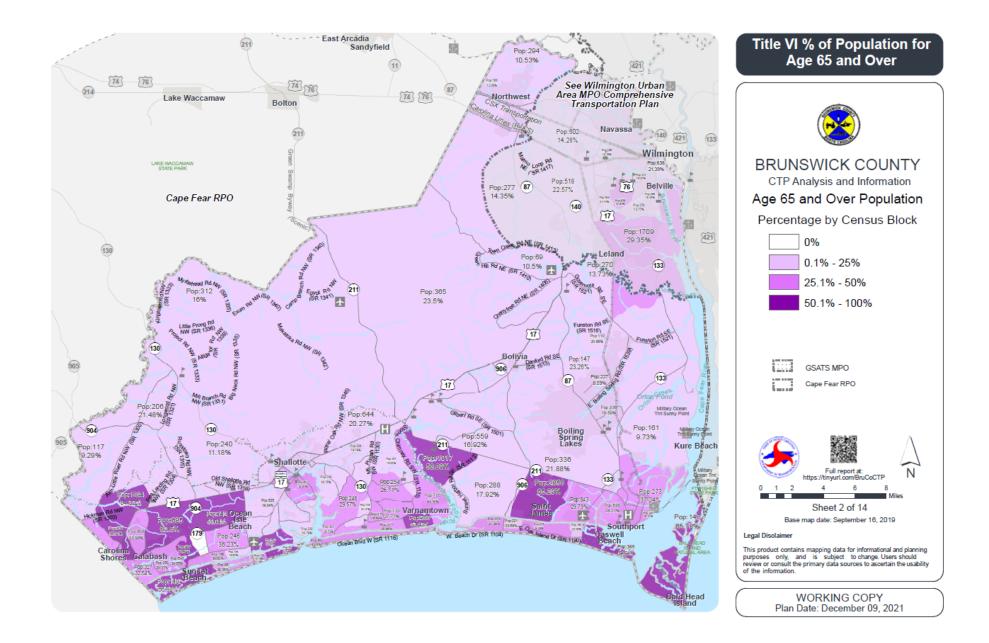


- D. Are there areas within the CTP Study Area where concerns about race, ethnicity, income have affected project outcomes? (Provide examples and location.)
- There are several locations where recommended projects in this CTP will positively impact under served populations and they include the following areas with recommended projects:
  - West of the county, above US 17, is a high density African American block group, the upgrade of NC 904 from 2 to 4 lanes, paved shoulders, sidewalks and bike lanes will be very beneficial this area.
  - In the St. James area, there is a significant population of age 65 and older, the upgrade of NC 211 project will be beneficial to that population.
  - In Ocean Isle Beach area (above and below US 17), there are multiple projects (refer to highway recommendations map) that will be beneficial to that population

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- E. Are there communities or populations within the CTP Study Area that have raised a concern about lack of voice in public opinions? (Provide examples and location.)
  - Predominantly African American towns and areas and African Americans in the County
- F. Identify the presence and locations of other potential transportation disadvantaged populations, including households with zero vehicles and seniors.
  - The following areas have a 65 and over population between 50-100%: Calabash, Carolina Shores, Sunset Beach, Ocean Isle Beach, Varnamtown, Saint James, Southport, Caswell Beach, and Bald Head Island (See the Title VI Map).
  - The highest percentage of households with no cars is located on Bald Head Island (See Title VI Map).





## **3. Community Character**

Why important?	Community character may reflect history, tenure, and intent. Community character is often what people like about where they live – characteristics that reflect a "sense of place". The goals of one community may not reflect the goals or what is important to another community – it is usually location (and sometimes neighborhood) specific.
Data Source(s)	Historic Resources – National Register & Determined Eligible polygons Brunswick County LU Plan Protected Areas Map: <u>https://www.brunswickcountync.gov/files/planning/2015/04/MAP_9_Protected_Lands.pdf</u>
Other Source(s)	Local planner(s), land use/land development plan, comprehensive plan, local historic properties office/planner, historic properties advocacy group, town/county/city manager, NC Department of Commerce Division of Community Assistance, recent project level Community Impact Assessment, and/or Indirect & Cumulative Effects reports

A. Have communities identified community character goals? Brunswick County Vision Statement:

• Brunswick County shall seek to preserve and enhance its natural and human resources. The County will plan for and accommodate future growth while simultaneously maintaining the quality of life for current and future residents. Brunswick County will pursue accomplishment of the following mission statements:

o Set high standards for responsible, well managed growth, and guide development patterns through comprehensive planning and community involvement.

o Develop a high degree of cooperation among County government and municipal governments and citizens.

o Promote quality education and lifelong learning opportunities in Brunswick County.

o Identify goals and propose strategies for the development of new businesses and industries, agribusinesses, seafood products, tourism, and recreational and retirement areas in all parts of the County.

o Provide an infrastructure system that meets the present and future needs of its citizens, supports a vibrant economy, protects the environment, and adds to the overall quality of life.

o Provide county-wide services that enhance the health, safety, and quality of life for Brunswick County citizens.

o Enable Brunswick County residents to meet their needs for food, clean water, clothing, housing, employment, health care, and life enrichment act

- From CAMA Core Land Use Plan

Municipalities:

- Bald Head Island
  - The primary goal of Vision 2025 is to ensure Bald Head Island's image as a family-oriented community developed in harmony with nature.
- Belville

- The Town of Belville is committed to maintaining its distinctive smalltown character and taking a leadership role in revitalization. We are focused on historical education, recreation and a place for our citizens and businesses to thrive.
- Caswell Beach
  - The vision of the Town of Caswell Beach is one of a viable residential community having the foresight, resources and will to meet new challenges and opportunities in accomplishing its mission. The Town is proud of its unique residential character, its natural assets and quality of life, and these will continue to be of paramount importance. Caswell Beach will provide cost-effective and timely services. Caswell Beach will endeavor to be a friendly, cohesive, community-spirited town in which the residents work together. Caswell Beach will continue to practice mutually beneficial relationships with local, state and federal governing bodies. These in combination will achieve the desired quality of life. From 2017 Strategic Plan for the Town of Caswell Beach
- Oak Island
  - Oak Island will be a community which preserves, protects, and enhances its natural and cultural environment including shoreline access, waterway, beaches, dunes, water access, residential areas, and recreational opportunities for all ages and abilities. The Town's unique scale and character will continue to provide a desirable place in which to live, work, and vacation. Multi-modal transportation options including efficient sidewalks, bikeways, and roadway systems will provide for an accessible community. Economic development will be coordinated with preservation of the Town's residential areas
- B. Have communities delineated any gateways, historic districts, view sheds, open space, and other areas to be protected or enhanced?
  - If you refer to the Brunswick County Land Use Plan (linked above), there are several protected lands:
    - BEAVER DAM CREEK
    - ADM NC-SC BOUNDARY (BIRD ISLAND)
    - CUL RES HISTORIC BRUNSWICK TOWN
    - CUL RES N C BATTLESHIP SITE 5. EAGLE ISLAND
    - o EHNR ZEKES ISLAND-ESTURINE SANCTUARY
    - ENR- MARINE FISHERIES -SUBMERGED LANDS SECTION
    - ENR ESTURINE PRESERVE
    - o ENR ROAN ISLAND
    - GREEN SWAMP PRESERVE
    - LOCKWOOD FOLLY TOWNSHIP PARK
    - NORTHWEST TOWNSHIP DISTRICT PARK
    - PLEASANT OAKS PLANTATION

- PRKS BALD HEAD ISLAND NATURAL AREA
- SHALLOTTE TOWNSHIP DISTRICT PARK
- o SMITHVILLE TOWNSHIP DISTRICT PARK
- TOWN CREEK
- UNCW- ECOLOGICAL BOTANICAL GARDENS
- WELLS TRACT
- WRC 904-BRIDGE/PIPEWAY ACCESS AREA
- WRC SOUTH PELICAN ISLAND 39-37(NHA)
- WRC SUNSET HARBOR ACCESS-LOCKWOOD FOLLY
- WRC TOWN CREEK ACCESS AREA
- WRC UNNAMED ISLAND SNOWS MARCH #1 39-33
- C. List all major historic downtowns.
  - Southport
- D. List mixed use urban centers.
  - See Brunswick County Future Land Use Map (2012): https://www.brunswickcountync.gov/files/planning/2015/04/MAP\_26\_FLU\_County\_plan \_Map\_1.pdf

- E. List major industrial parks, office parks and single use centers.
  - Progress Energy Power Plant
  - Sunny Point Military Ocean Terminal
  - Brunswick County Government Center
  - I-140 & US 74-76
- F. List large commercial strips and single use corridors (from a traffic generating perspective).
  - US 17 Corridor
  - NC 87 Corridor
  - NC 211 Corridor
- G. List major attractions or events in the study area (example: sporting events, festivals, tourism destinations/attractions).
  - NC Oyster Festival
  - North Carolina 4th of July Festival Southport
  - Battleship North Carolina
  - Oak Island Lighthouse
  - Old Baldy Lighthouse
  - Beaches

## 4.Schools, Parks, and Community Centers

Why	Schools (including private schools, charter schools, and community colleges), and
important?	parks are important community resources that reflect interest, participation, and
	investment across generations. They are often landmarks and resources

Potential	CTP GIS Data Layers.xls:
Data	(http://data.nconemap.com/geoportal/catalog/main/home.page
Source(s)	http://www.ncpublicschools.org/docs/fbs/resources/data/statisticalprofile/2005profile.pdf (2005)
Other	County school system, County and municipal parks and recreation departments
Source(s)	

High schools	2019-2020 Enrollments
Brunswick Early College High School (Bolivia)	276
South Brunswick High School (Southport)	1149
West Brunswick High School (Shallotte)	1412
Middle schools	2019-2020 Enrollments
Cedar Grove Middle School (Supply)	495
Shallotte Middle School (Shallotte)	624
South Brunswick Middle School (Southport)	730
Elementary schools	2019-2020 Enrollments
Bolivia Elementary School (Bolivia)	451
Southport Elementary School (Southport)	587
Supply Elementary School (Supply)	617
Union Elementary School (Shallotte)	591
Virginia Williamson Elementary School (Bolivia)	538
Private Schools	2019-2020 Enrollments
Southport Christian School	152
Southeastern Christian Academy	112
The Academy of Coastal Carolina	75
L&L Montessori School	49
West Christian Academy	46
Holden Beach Christian Academy	17
Charter Schools	2019-2020 Enrollments
South Brunswick Charter School	277

Community Colleges	2019-2020 Enrollments
Brunswick Community College	1425

- A. Are there particular geographic areas within the CTP Study Area where school facilities or operations have been especially affected by school age population changes? Are there schools that are expected or likely to close? Are there locations identified where new schools may be constructed?
  - There is a plan to add 8 additional classrooms at Town Creek Elementary School.
  - There is a plan to add 12 additional classrooms at North Brunswick High School.
  - Brunswick County Schools anticipates growth in the western sector of the county when the Carolina Bays Parkway Extension is built.

- B. Identify local, state, and national parks and recreational facilities.
  - Alton Lennon Park
  - Brunswick Nature Park
  - Smithville District Park
  - Alvin C. Caviness Park
  - Calabash Community Park
  - Dutchman Creek Park
  - Northwest District Park
  - Town Creek Park
  - Boiling Spring Lakes Community Center
  - Cedar Grove Park
  - Ocean isle Beach Park
  - Bridgeview Park
  - Charles Schneiders Park
  - Lockwood Folly District Park
  - Shallotte District Park
- C. Are there any new parks and recreational facility locations planned?
  - According to the Brunswick County Parks and Recreation site, nothing is planned as of now.
- D. List community centers, performing arts centers, libraries, and museums.
- Margaret & James Harper, Jr. Library Southport
- Rourk Branch Library Shallotte
- Leland Library Leland
- G.V. Barbee, Sr. Branch Library Oak Island
- Southwest Brunswick Branch Library Carolina Shores
- Fort Johnston Southport Museum and Visitors Center
- Ingram Planetarium
- Museum of Coastal Carolina
- North Carolina Maritime Museum at Southport
- Old Brunswick County Jail Museum
- Sunset Beach Swing Bridge & Museum
- Brunswick Town/ Fort Anderson Historic Site
- Smith Island Museum of History
- Old Baldy Lighthouse and Museum
- Orton Plantation

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- Leland 5th District Community Building
- Lockwood Folly Community Building
- Town Creek Park Community Building
- Waccamaw Community Building
- Odell Williamson Auditorium
- Leland Cultural Art Center

## **5. Public Safety/Emergency Response**

Why important?	Transportation infrastructure is a key component for emergency response. It also contributes to public safety impacts, including vehicular (vehicular or bicycle and pedestrian crashes) and non-vehicular (crime).
Potential	Ped Data: <u>http://www.pedbikeinfo.org/pbcat/index.cfm</u>
Data	http://www.ncdot.gov/bikeped/researchreports/;
Source(s)	http://www.pedbikeinfo.org/pbcat/_ped.cfm
	Bike Data: http://www.pedbikeinfo.org/pbcat/ bicycle.cfm
	Crime Data: <u>https://www.bestplaces.net/crime/county/north_carolina/brunswick</u>
Other Source(s)	Local engineering department, police/sheriff's office NCDOT Division of Bicycle and Pedestrian Transportation, NCDOT Transportation Mobility and Safety, local media, bicyclist organizations, pedestrian advocates, recent project level Community Impact Assessment reports

A. Identify any areas with high crime incidents that are relevant to the transportation plan.

- According to best places website (linked above), the cities/towns with the highest crime rates in Brunswick County include the following (highest at the top):
  - Boiling Spring Lakes
  - o Shallotte
  - o Holden Beach
  - Caswell Beach, NC
  - $\circ$  Southport
- B. Are the areas within the CTP Study Area with high numbers of pedestrian or bicyclist incidents or otherwise discourage pedestrian or bicyclist use?
  - Mt Misery Rd from Hooper Rd to Dogwood Rd (4 bike, 1 ped)
  - Mt Misery Rd from Industrial Blvd to Breman Ln (3 bike, 3 ped)
- C. Are there locations within the CTP Study Area with high medical response calls? (Nursing homes, retirement communities, summer camps, etc.)
  - Autumn Care of Shallotte
  - Brunswick Cove Nursing Center Winnabow
  - Ocean Trail Healthcare and Rehab Center Southport
  - Southport Nursing Center
  - Universal Health Care Bolivia
  - New Hope Clinic
- D. Are there places in the CTP Study Area with known issues (isolation, access, etc.) with emergency response or evacuation?

• NC 133 experiences flooding when it rains heavily but especially during hurricane season. Since NC 133 connects to only a few paved roads, there are recommendations being recommended on the CTP that can aid in emergency response or evacuation during flooding.

## **6. Economic Conditions**

Why important?	The local economy is the lifeblood of the community. Without access to jobs, communities may fade away. Note: In the sections below, the difference between "three major employment centers" and "which three companies" is that the first is asking about locations while the second about specific employers who may or may not have multiple locations. Using Wake CTP Study Area as an example, major employment centers would be the Cary-Morrisville area, downtown Raleigh, and Capital Blvd north of Raleigh, while the three largest employers may be the state, Wake County schools and WakeMed. Thus, two of the largest employers are not major players in any of the major employment centers while the state is concentrated in the downtown center but is otherwise scattered.				
Potential Data Source(s)	Industry Category: http://accessnc.commerce.state.nc.us/EDIS/demographics.html				
	Top three employers: <u>http://accessnc.commerce.state.nc.us/EDIS/business.html</u> (Note: employment data is reported by company by range of employees, not the specific number of employees)				
Other Source(s)	Economic development office or agency (chamber of commerce), local planner, town/county/city manager, economic development plan, recent project level Community Impact Assessment and/or Indirect & Cumulative Effects reports				

- A. What are the major employment centers in the CTP Study Area (note the number of jobs if available)?
  - Brunswick County Government Center
  - US 17 Corridor
  - NC 87 Corridor
  - NC 211 Corridor
- B. Which industry categories and companies employ the most people? (Provide available employment data for each)?
  - Trade, Transportation, and Utilities 7,778 Jobs
  - Leisure and Hospitality 6,064 Jobs
  - Government 5,206 Jobs
- C. Which industries/companies have produced the newest jobs over the last ten years?
  - Brunswick Co Board of Education 1000+
  - Progress Energy Service Co. 1000+
  - County of Brunswick 1000+
  - Wal-Mart Associates inc. 500-999
  - Food Lion 5000-999
- D. How many jobs are expected in the next 10 years? 20 years? What type of jobs?
  - Hospitality: Food & Culinary
  - Personal Services: Retail Sales

- Medical: Nurses & Aides
- E. Are these jobs expected to be in the existing major employment centers or in other areas?
  - Both, they will increase in existing major locations as well as in new locations.

## 7. Development Goals

Why rtant?	Understanding local development vision and goals is necessary to assess and plan future transportation and other infrastructure. This information is also significant for assessing cumulative human and natural environment effects during planning activities.		
Potential	Local future land use GIS layers, if available		
Data Source(s)	Brunswick County – Statistics: <u>https://www.brunswickcountync.gov/wp-</u> <u>content/uploads/2019/10/Brunswick-County-Our-County-Data-Book-2019.pdf</u>		
	Brunswick Land Use Plan: https://www.brunswickcountync.gov/files/planning/2015/04/CAMA_Core_Land_Use_Plan.pdf		
Other Source(s)	Local planner(s), land use/land development plan, comprehensive plan, town/county/city manager, economic development office, economic development plan, chamber of commerce, recent project level Community Impact Assessment, and/or Indirect & Cumulative Effects reports		

- A. Identify major target areas for residential development.
  - Carolina Shores Thomasboro Rd to US 17, West of US 17 to Hickman Rd
  - Oak Island Williamson Tract and Pine Forest Tract located along Middleton Blvd and NC

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- B. Identify major target areas for employment centers.
  - According to the Brunswick County: *Our County Book of Statistical Facts, Data, & Maps for Brunswick County* (linked above), the county has identified the top 25 employers of Brunswick County on page 8. Below are the top three:
    - Brunswick County Board of Education
    - County of Brunswick
    - Duke Energy Progress
- C. Identify major target areas for commercial development.
  - Carolina Shores Along US 17 Corridor, Industrial Park on Calabash Rd
- D. Will development density be higher, lower or about the same as existing development?
  - Considering that 2020 Census shows Brunswick County is the second highest growing county in the state of NC, density should be much higher in the future.
- E. Will the proximity of housing to jobs, shopping and services be more, less or about the same as existing development?

- It should be more, again Brunswick County is the second fasting growing county in the state. The increase in jobs and development is captured in the Brunswick County CAMA Core Land Use Plan (linked above).
- F. What plans for land use, highways, sidewalks, greenways, and bicycle routes already exist in the planning area? (Provide a link or where to find it.)
  - Oak Island Bicycle Transportation Plan
  - Southport Pedestrian Transportation Plan
  - Brunswick County Parks & Recreation Master Plan
  - Brunswick County Greenway, Bikeway, & Paddle Trail Plan
  - Great Trails State Plan

#### **8. Farming Operations**

Why important?	Agriculture remains an important industry in North Carolina. North Carolina ranks 7 <sup>th</sup> in the United States in farm profits. It is a very important contributor to the economic health of North Carolina, particularly for rural areas. The sector adds \$70 billion annually to the State's economy, accounting for 18% of the State's income and employing 17% of its workforce.				
Potential Data Source(s)	http://srsfia2.fs.fed.us/states/north_carolina.shtml				
	Farms: <u>http://www.ncagr.gov/stats/codata/index.htm</u>				
	Timber: pages 18-19 of report				
	(http://www.srs.fs.usda.gov/pubs/rb/rb_srs088.pdf)				
Other Source(s)	County Soil & Water Conservation office, NC Farm Bureau, local Farm Bureau office, NC Department of Agriculture, recent project level Community Impact reports				

- A. List roads that are known to be impacted by farming equipment or timber trucks.
  - Some secondary roads west of US 17
- B. Are any farms given special designation (Century Farms, voluntary agricultural districts VADs/EVADs, preservation agreements)?

• Chamber of Commerce Website: Greenlands Farm – The farm is enrolled in the Voluntary Agriculture District (VAD) which is a farmland conservation program. Greenlands Farm practices sustainability and low impact design (LID) on our farm, a growing 'green' trend in managing stormwater.

#### **9. Natural Resources**

Why important?	Natural resources are part of the community character and fabric, and in many cases are important components of the economy, especially in the context of recreational and tourism activities. Natural resources have socio- economic value and natural resource data is important so that it can be considered throughout the CTP process, including for indirect and cumulative effects studies.
Potential Data Source(s)	Environmental Features Map (developed as part of the CTP study), Local land use GIS layers (if available), DENR's Conservation Planning Tool: <u>http://portal.ncdenr.org/web/nhp/gis- download</u> NC Wildlife Resource Commission's NC Green Growth Toolbox: <u>http://www.ncwildlife.org/Conserving/Programs/GreenGrowthToolbox.aspx</u> ,
Other Source(s)	Land use/land development plan, comprehensive plan, local planner, town/county/city manager, North Carolina Natural Heritage Program, recent project level Community Impact Assessment and/or Indirect & Cumulative Effects reports

- A. Locate and describe any community identified natural areas, waters, and resources or other valued environmental areas or resources. Please also describe why the resource is important to the community.
  - Bald Head Island Natural Area
  - Green Swamp Black Bear Sanctuary
  - Green Swamp Game Land
  - Juniper Creek Black Bear Sanctuary
  - Green Swamp Archery Zone
  - Shallotte River
  - Lockwoods Folly River
  - Cape Fear River
  - Elizabeth River
  - Fort Fisher State Park
  - Green Swamp Archery Zone
  - Orton Creek

See Environmental Features Maps.

## **10. Transportation Choices**

Why important?	Transportation choice has been identified by increasing numbers of communities, groups, and stakeholders as important to a community's livability and quality of life. It is important to document this as part of community understanding because it is a critical component of long-range transportation planning.			
Potential Data Source(s)	Local transportation GIS layers, if available Brunswick Transit Services: <u>http://www.brunswicktransit.org/</u>			
Other Source(s)	Local transportation planner(s), local transportation plans (particularly if they include a bicycle component), local planner(s), land use/land development plan, comprehensive plan, town/county/city manager, recent project level Community Impact Assessment, and/or Indirect & Cumulative Effects reports			

- A. Identify major existing and proposed bicycle and pedestrian destinations.
  - Downtown Southport
- B. Identify major existing and proposed transit (bus and/or rail) destinations.
  - Currently, there are no transit services in Brunswick County. Brunswick Transit Services provides non-emergency transportation services to the general public through a Dial-a-Ride program. Refer to link above for further details. In the future, the CTP is proposing park-and-ride services during tourist season at specific beach locations. There are both existing and proposed rail lines on the CTP. Refer to Core Report: Public Transportation and Rail Recommendation Map.
- C. Identify major existing and proposed freight corridors and destinations.
  - Priority Highway Freight Network can be viewed on the Freight Map in this appendix. In Brunswick County, these seem to be US 17, NC 211, and NC 87.

### **11. Seasonal Traffic and Special Events**

Why important?	Estimating peak traffic volumes
Potential Data Source(s)	Tourism Development Authority, Chamber of Commerce Brunswick Events page: <u>https://www.ncbrunswick.com/events/</u>
Other Source(s)	County and municipal staff and steering committee members

- A. List major attractions or events (example: sporting events, festivals, tourism destinations/attractions).
  - In general, all the beach locations in Brunswick County and Brunswick County Islands serve as destination attractions. Other than beach locations, there are other towns that tourists like to visit. Overall, these are some of the main attractions:
    - Bald Head Island
    - o Calabash
    - o Caswell Beach
    - o Holden Beach
    - o Oak Island
    - Ocean Isle Beach
    - o Shallotte
    - o Southport
    - o Sunset Beach
  - In additional to tourist destinations, there are a variety of festivals and events for families. They include:
    - NC 4<sup>th</sup> of July Festival
    - $\circ$  NC Festival by the Sea
    - o NC Oyster Festival
    - Plus much more throughout the year (concerts, movies and farmers markets)
  - Visit the Brunswick Events page (linked above for further information)
- B. List areas and routes that experience higher seasonal Traffic
  - The roadways that lead to the tourist locations listed in part A (above) would experience more seasonal traffic during the summer months. These roadways would include, but are not limited to:
    - $\circ~$  US 17 and US 17 B
    - o NC 904
    - Sunset Blvd N and S
    - o Ocean Isle Beach Road
    - NC 130
    - Ocean Blvd
    - Holden Beach Road
    - NC 211

- o NC 906
- o Oak Island Drive
- Country Club Drive
- Caswell Beach Road

## SOCIO-ECONOMIC DATA FORECAST AND METHODOLOGY

In the development of the Brunswick County CTP, existing and anticipated deficiencies were determined through an analysis of the transportation system looking at both current and future travel patterns. The following socio-economic factors are integral in the establishment of planning assumptions for this study.

- → Population Trend and Projection
- → Employment Trend and Projection
- → Growth Rate Methodology
- → Land Use

Travel demand was projected from 2017 to 2045 using a travel demand model based on Annual Average Daily Traffic (AADT) from 2017 to 2045. In addition, local land use plans and growth expectations were used to further refine future growth rates and patterns. For this CTP, the 2011 Brunswick County CTP Land Use Plan was used and is shown in Figure X.

The CTP Steering Committee worked with NCDOT to estimate population growth, economic development potential, employment projections and land use trends to determine the needs in the future transportation system in 2045. This data was endorsed by the Brunswick County Commissioners on February 1, 2021, Cape Fear RPO on February 12, 2021, GSATS MPO on February 3, 2021 and Towns of:

Bald Head Island on February 19, 2021 Boiling Spring Lakes on March 2, 2021 Bolivia on February 9, 2021 Caswell Beach on February 8, 2021 Northwest on February 23, 2021 Oak Island on April 13, 2021 Sandy Creek on February 1, 2021 Southport on February 1, 2021 St. James on February 3, 2021

## **Population Trends and Projection**

Data from the Office of State Budget and Management (OSBM) was used to estimate population trends. According to the OSBM, Brunswick County is growing at 2.93% annually. The Brunswick County model also has used 2.93% growth as a base for the whole county and adjusted per TAZ (transportation analysis zones). Brunswick County is growing rapidly, especially considering that the State of North Carolina is growing at 0.9%. According to the US 2020 Census, Brunswick is the second fastest growing county in the state.

Year	Population Brunswick County	Population City link below	Population North Carolina	
1970	24,223	-	5,084,411	
1980	35,777	-	5,880,095	
1990	50,985	-	6,632,448	
2000	73,121	-	8,046,813	
2010	107,429	-	9,535,483	
2018	-	-	10,389,148	
2020	137,530	NA	10,630,691	
2030	170,134	NA	11,836,070	
2039	203,506	NA	12,919,921	
2045**	236,878	NA	NA	

#### Table x – Population Data

County Estimates (North Carolina Office of State Budget and Management) <u>https://www.osbm.nc.gov/facts-figures/population-demographics/state-demographer/historical-</u> <u>county-estimates</u>

Municipal Estimates (North Carolina Office of State Budget and Management) (Last updated September 16, 2019); <u>https://www.osbm.nc.gov/facts-figures/linc</u>

There are 59 population estimates for municipalities in Brunswick County (many split up) to view the numbers, see link: <u>https://demography.osbm.nc.gov/explore/dataset/2021-standard-population-estimates/table/?disjunctive.county&disjunctive.muniname2&sort=county</u>

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Growth Rates Per Year (AGR)	Growth Rates Per Year (AGR) XXXX County	Growth Rates Per Year (AGR) City XXXX
2000-2010	X.XX%	X.XX%
2000-2020	X.XX%	X.XX%
2000-2030	X.XX%	X.XX%
2000-2039	X.XX%	X.XX%
2010-2018	X.XX%	X.XX%
2010-2030	X.XX%	X.XX%
2010-2039	X.XX%	X.XX%
2018-2039	X.XX%	X.XX%

#### Table 2 - XXXX County Annual Growth Rates

\*https://d4.nccommerce.com/LausSelection.aspx accessed 3/20/2020

\*\*<u>https://www.nccommerce.com/about-us/divisions-programs/labor-economic-analysis-division</u> accessed 6/25/2020

\*\*\* https://www.census.gov/quickfacts/yanceycountynorthcarolina accessed 6/25/2020

## Land Use

G.S. §136-66.2 requires that local areas have a current (less than five years old) land development plan prior to adoption of the CTP. For this CTP, the 2022 Brunswick County CAMA Core Land Use Plan that was adopted in December of 2022 was used to meet this requirement.

Land use refers to the physical patterns of activities and functions within an area. Traffic demand in a given area is, in part, attributed to adjacent land use. For example, a large shopping center typically generates higher traffic volumes than a residential area. The travel demand between different land uses and the resulting impact on traffic conditions varies depending on the size, type, intensity, and spatial separation of development. Additionally, traffic volumes have different peaks based on the time of day and the day of the week. For transportation planning purposes, land use is divided into the following categories:

#### **Residential:**

Land devoted to the housing of people, with the exception of hotels and motels which are considered commercial.

#### Commercial:

Land devoted to retail trade including consumer and business services and their offices; this may be further stratified into retail and special retail classifications. Special retail would include high-traffic establishments, such as fast-food restaurants and service stations; all other commercial establishments would be considered retail.

#### Industrial:

Land devoted to the manufacturing, storage, warehousing, and transportation of products.

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#### **Public:**

Land devoted to social, religious, educational, cultural, and political activities; this would include the office and service employment establishments.

#### Agricultural:

Land devoted to the use of buildings or structures for the raising of non-domestic animals and/or growing of plants for food and other production.

#### Mixed Use:

Land devoted to a combination of any of the categories above.

Anticipated future land development is, in general, a logical extension of the present spatial land use distribution. Locations and types of expected growth within the planning area help determine the location and type of proposed transportation improvements.

Most population growth in Brunswick County is expected to occur in the vicinity of Shallotte and along US 17 corridor.

## **Employment**

InfoUSA data and verification by locals was used to estimate future employment conditions in the Brunswick County Travel Demand Model. The base year employment conditions matched with other sources such as the N.C. Department of Commerce County Profile and Assess NC (Brunswick County Profile for June 2017) and the Brunswick County Comprehensive Plan. The 2045 employment totals were based on the output from the Brunswick County Travel Demand Model.

Year	Brunswick County Population	Brunswick County Employed*	Employed/Population Ratio
1990	50,985		-
2000	73,121	-	-
2010	107,431	29,370	0.27
2020	137,530	58,294 (2022)	0.42
2045	169,821	71,325	0.42

Table 3 – Brunswick County Employment and Population to Employment

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E Section Contents

#### **Growth Rate Methodology**

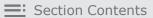
There was a Brunswick County Travel Demand Model (TDM) created to project 2045 volumes and socio-economic data. The TDM established low, medium and high growth throughout the county by Transportation Analysis Zones. This rates used for low, medium and high TAZs were then applied to the roadway base year and future year volumes (build and no build included). The TDM growth rates were approved by locals during the development of the Brunswick County TDM and then reviewed and approved by the CTP Steering Committee. The growth rates were also presented to each adopting agencies council or board, who will eventually adopt the CTP.

Estimated Traffic Volume Growth Rates Applied to 2045 Brunswick County AADTs. The model used 3.03% annually to come up with 2045 SE Data across all TAZs. For volume (highway assignment), 2.62% was applied to come up with 2045 AADTs. There was no low, medium or high growth – only one annual growth rate was. The SE data growth rate provided came from GSATS MPO and Cape Fear RPO. The Office of State Budget and Management is predicting an annual growth rate of 2.93% for Brunswick County, and our model estimates (provided by locals) for both SE Data and as well as highway assignment growth are very similar.

Source	Annual Growth Rates	CTP Estimates	2017	2045
TDM	3.03%	(not including		
SE Data		Wilmington		
TDM	2.62%	MPO area)		
Volume		Population	91,807	169,921
OSBM	2.93%	Employment	42,164	63,481

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## TRANSPORTATION PLANNING ANALYSIS DATA

The influences and impacts of other transportation planning related data & analyses below were used to help analyze the existing transportation system. In this section, -the data and maps used included:

- → Bridge Deficiency Assessment
- → Traffic Crash Analysis
- → Consideration of Natural and Environmental Features
- → Existing Freight/Truck data
- → <u>Resiliency</u>

## **Bridge Deficiency Assessment**

Bridges are a vital element of a highway system. First, they represent the highest unit investment of all elements of the system. Second, any inadequacy or deficiency in a bridge reduces the value of the total investment. Finally, a bridge presents the greatest opportunity of all potential highway failures for disruption of community welfare. For these reasons, it is imperative that bridges be constructed tothe same design standards as the system of which they are a part.

The NCDOT Structures Management Unit inspects all bridges in North Carolina at least once every two years. Bridges having the highest priority are replaced as federal and state funds become available. Seventy-five deficient bridges were identified on roads evaluated as part of the Brunswick County CTP and are illustrated in Figure 6. Of these, three are scheduled for replacement in the 2020 – 2029 TIP. The following bridges are on the STIP for replacement:

- B-4439 Bridge 090100 over Muddy Road along SR 1342 (Makatoka Road NW)
- B-5629 Bridge 090040 over Mill Creek along SR 1515 (Old Mill Creek Road SE)
- B-5996 Bridge 090126 over Cawcaw Swamp along SR 1300 (Ash-Little River Road NW)

As deficient bridges are replaced, every consideration should be given to proposed CTP recommendations and cross sections associated with the recommendations.

The Structures Management Unit analyzes bridges within the Division and shares this information with the Division Bridge Program Manager to assist in determining the prioritization of the bridge projects. The structures unit utilizes various metrics such as condition, structural adequacy, safety, serviceability, and functional capability during this analysis. Once the Division and Structures Management Unit agree upon the bridge replacement priority, the bridges with the highest priority are replaced as Federal and State funds become available.

A bridge is considered deficient if it is either structurally deficient or functionally obsolete. Structurally deficient means there are elements of the bridge that need to be monitored and/or repaired. The fact that a bridge is structurally deficient does not imply that it is likely to collapse or that it is unsafe. It means the bridge must be monitored, inspected, and repaired/replaced at an appropriate time to maintain its structural integrity. A functionally obsolete bridge is one that was built to standards that are not used today. These bridges are

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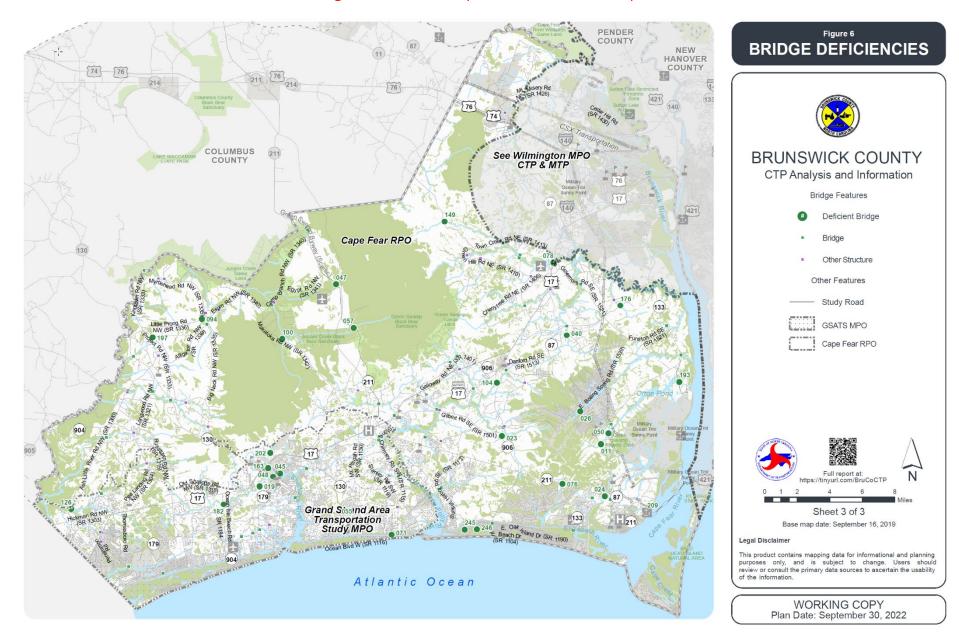
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#### **APPENDIX — TRANSPORTATION PLANNING DATA**

not automatically rated as structurally deficient, nor are they inherently unsafe. Functionally obsolete bridges are those that do not have adequate lane widths, shoulder widths, or vertical clearances to serve current traffic demand or to meet the current geometric standards. These bridges also may be occasionally flooded.

Deficient bridges on roads in the CTP are shown in the table below. For more information on deficient bridges within the planning area, contact the Structures Management Unit using the information in the Contact Information appendix.

Page Reserved for Map (Add more if more maps)



# **Planning Level Crash Analysis**

Traffic crashes are often used as an indicator for locating congestion and roadway problems. Safety is at the core of the NCDOT's mission of connecting people, products, and places; and therefore, there are several ongoing programs and initiatives within NCDOT that specifically address safety. The Traffic Safety Unit within NCDOT's Transportation Mobility and Safety Unit publishes many datasets related to traffic safety. One dataset used as a reference for the development of this CTP is planning level crash data grouped by Intersection and segments. This dataset identifies locations that have experienced 5 or more crashes within the most recent five-year period. The locations in Brunswick County CTP which occurred between January 1 2014 and December 31, 2018 are shown on map X. The CTP Steering Committee reviewed map X and commented that Brunswick County has a low crash history with most incidents along US 17 which should be alleviated with the recent improvements along this corridor. During public involvement, two additional intersections were identified during the development of this CTP and recommended for improvements:

US 19W & Whittington Rd (SR 1379) Intersection

#### NC 80 & South Toe School Rd (SR 1163) Intersection

Figure Y (Bike Routes Analyses Map) shows bicycle crash locations and Figure Z (Pedestrian Sidewalks in Downtowns Analyses Map) show pedestrian crash locations.

Since safety concerns often need more immediate addressing than long-range projects identified during a CTP, all public comments concerning safety received during the development of the Generic Area CTP were shared with NCDOT Division XX. Division XX (insert description from Division) about how the Division handles safety concerns shared with them).

The primary method for identifying locations that are likely to produce a safety project is through the Highway Safety Improvement Program (HSIP). The HSIP provides a continuous and systematic process that identifies, reviews, and addresses specific traffic safety concerns throughout the state

The table in this section depicts a summary of the crashes occurring in the planning area between Jan. 1, 2014 and Dec. 31, 2018. The data represents locations with five or more crashes. The "Number of Crashes" column indicates the number of crashes reported within 150 feet of the intersection during the study period. Intersections are described as the crossing between "Road A" and "Road B". The Average Severity listed is the average crash severity for reported crashes at that location. The NCDOT is involved with investigating and improving many of these locations.

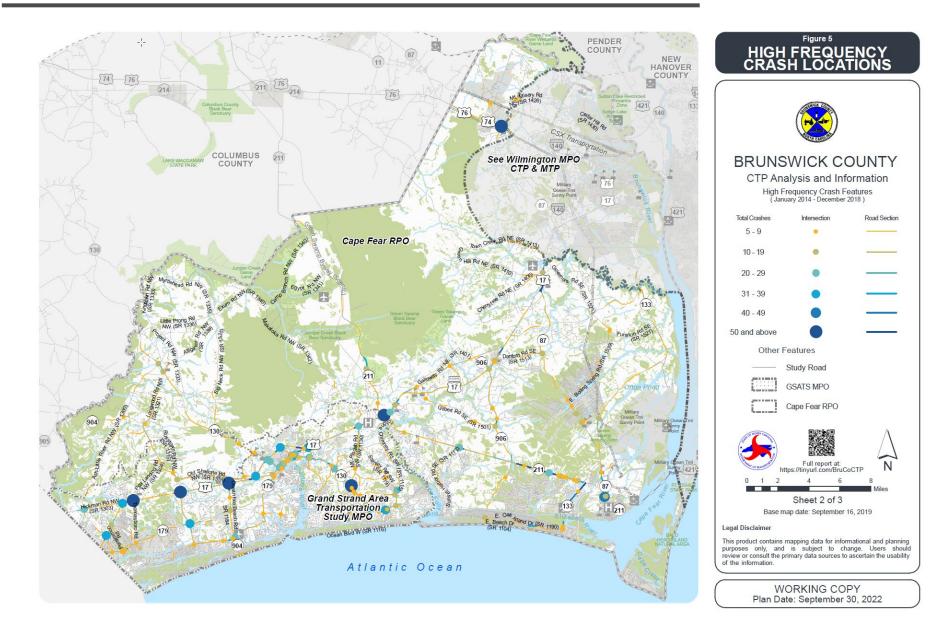
To request a more detailed analysis for any of the locations below, or other intersections of concern, contact the Division Traffic Engineer. Contact information for the Division Traffic Engineer is included in the Contact Information appendix.

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Insert Crash Frequency Table if used



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# **Consideration of Natural and Human Environment**

Environmental features are a key consideration in the transportation planning process. Section 102 of the National Environmental Policy Act (NEPA) requires consideration of impacts on wetlands, wildlife,water quality, historic properties, and public lands. While a full NEPA evaluation was not conducted as part of the CTP, every effort was made to minimize potential impacts to these features using the best available data. Any potential impacts to these resources were identified as a part of the project proposals on the project sheets. Prior to implementing transportation recommendations of the CTP, amore detailed environmental study would need to be completed in cooperation with the appropriate environmental resource agencies.

In the Interagency Coordination appendix, the long-range transportation planning process coordinates with environmental resource agencies and other local, state, and federal agencies and entities. In North Carolina, this coordination follows an Interagency Coordination Protocol described in that section.

## **Environmental Features**

A full listing of environmental features that are typically examined as a part of a CTP study is shownin the following tables. Environmental features occurring within Brunswick County are shown in **Figure x** and are shown in **bold** text in the table below.

### Table Y – Environmental Features (Bold those included)

- 24k Hydro Lines
- 303D Streams
- Airport Boundaries
- Anadromous Fish Spawning Areas
- APNEP Submerged Aquatic Vegetation
- Beach and Waterfront Access
- Benthic Habitat
- Bicycle Routes
- Boating Access
- Churches and Cemeteries
- Colleges and Universities (Points)
- Conservation Tax Credit Properties
- Critical Habitat for Threatened andEndangered Species
- Emergency Operation Centers
- Fish Nursery Areas
- Hazard Substance Disposal Sites (points &polygons)
- Hazardous Waste Facilities
- High Quality Waters and OutstandingResource Water Management
- Historic Resources National

- National Wetlands Inventory (polygons)
- Natural Heritage Element Occurrences
- NC-CREWS: N.C. Coastal Region Evaluationof Wetland Significance
- NCDOT Maintained Mitigation Sites
- Railroads (1:24,000)
- Recreation Projects -Land and Water
   Conservation Fund
- Regional Trails
- Sanitary Sewer Systems -Treatment Plants
- Schools (Public & Non-Public)
- Significant Natural Heritage Areas
- State Natural and Scenic Rivers
- State Parks
- Target Local Watersheds EEP
- Trout Streams (DWQ)
- Trout Waters WRC (arcs & polygons)
- Unique Wetlands
- Water
   Distribution
   Systems –Tanks

### **APPENDIX - TRANSPORTATION PLANNING DATA**

**Register and Determined Eligible** (points and polygons)

• Hospitals

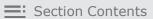
sensitivity of the data.

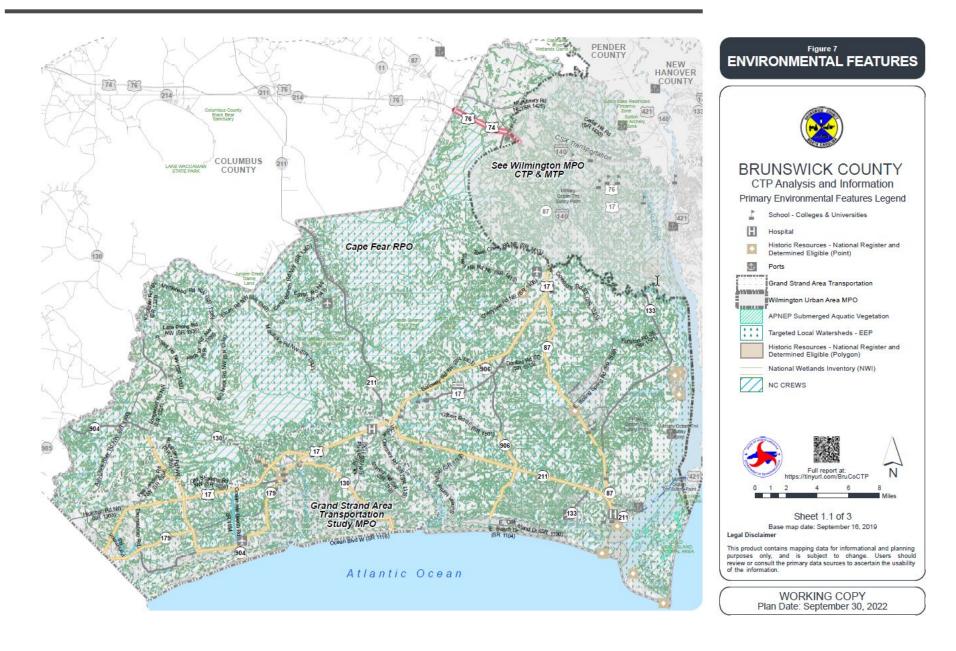
- Hydrography 1:24,000-scale (polygons)
- Landscape Habitat Indicator **Guilds (LHIGs)Managed Areas**

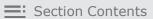
& Treatment **Plants** 

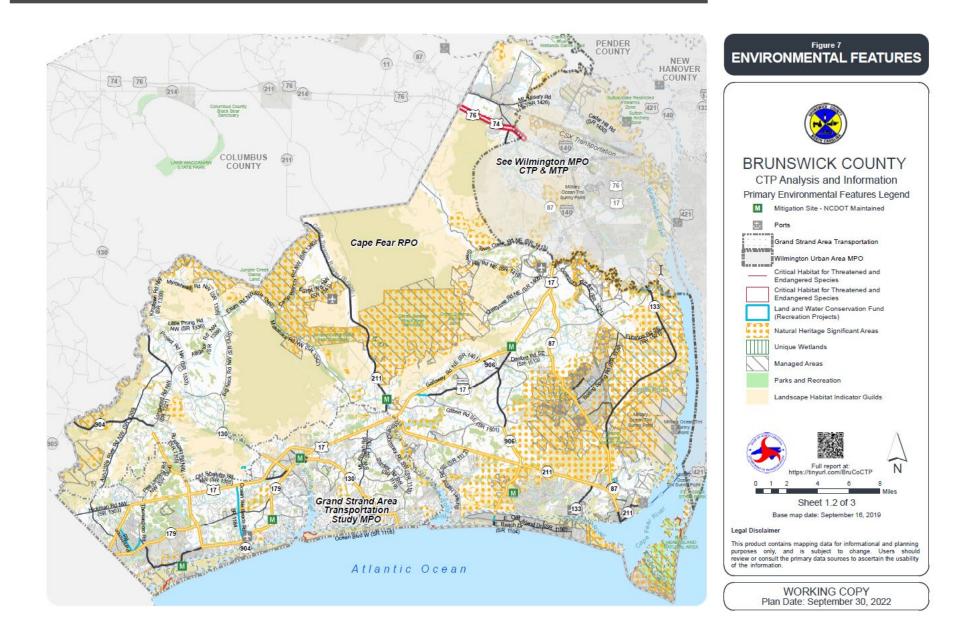
Archaeological sites were also considered but are not mapped due to restrictionsassociated with the

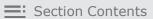
- Water Supply Watersheds

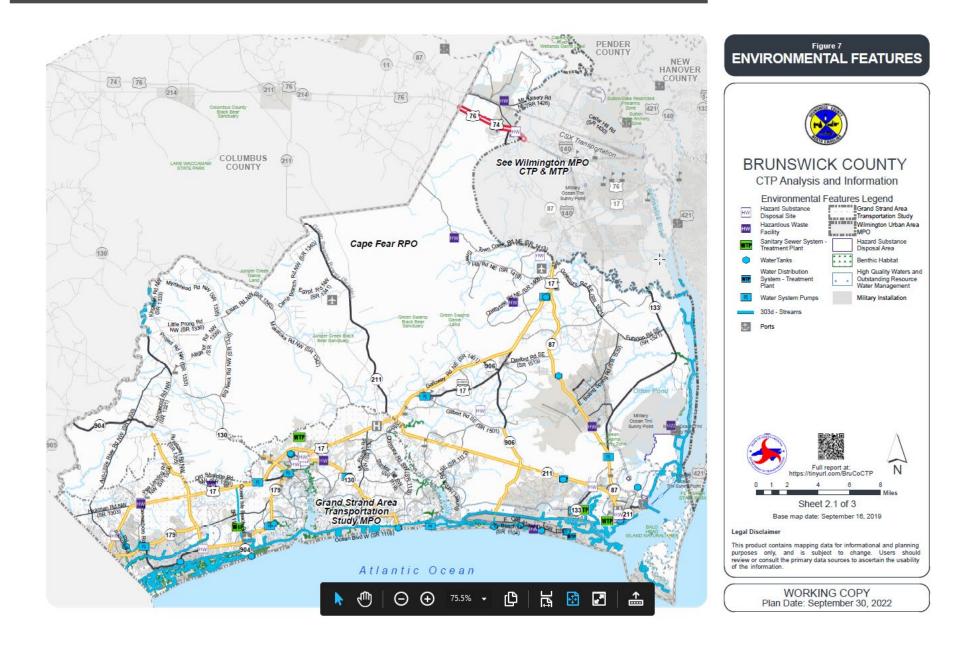


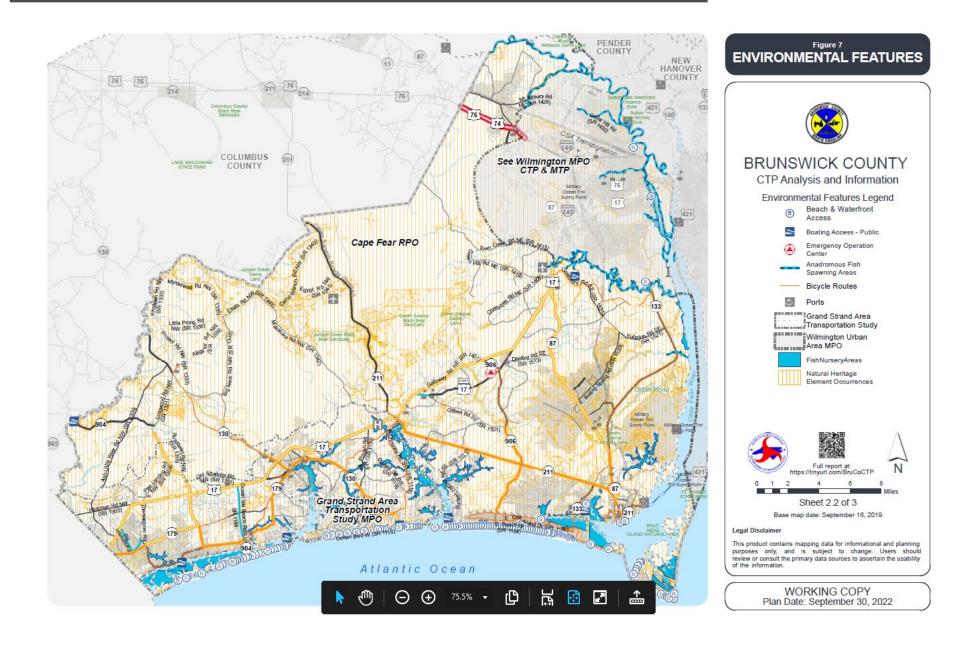












# Freight

N.C. Department of Transportation wants an effective, actionable Statewide Freight Plan within Comprehensive Transportation Plans that:

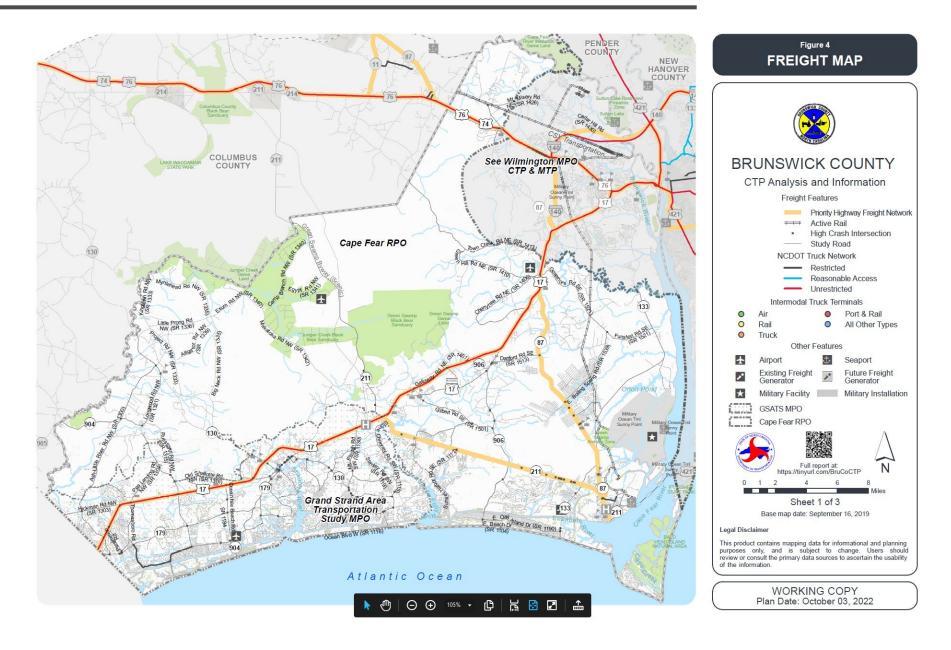
Set specific multimodal transportation goals, strategies and actions that will contribute to increased North Carolina jobs, improved economic competitiveness, and enhanced quality of life

Provide clear, compelling freight-specific recommendations that support the 25-year vision, strategic corridors and address the criteria in the Strategic Transportation Investments prioritization process

Offer strategies for helping elected officials, taxpayers and voters, and the public better understand the value of freight transportation investments

Meet FAST Act requirements and ensure that North Carolina can use its National Freight Program funds, which require states to develop comprehensive state freight plans and encourages states to establish state freight advisory committees.

- N.C. Freight Network Assessment
- Supply Chain and Logistics Profile
- Truck Parking Study



# Resiliency

NCDOT is developing a statewide Risk and Resiliency Plan, which will include a Vulnerability and Risk assessment for all the Strategic Transportation Corridors (STCs). The aim of the Risk and Resiliency Plan is to achieve the initial objectives set forth by Governor Cooper's Executive Order 80 Section 9 (EO 80) and define meaningful, action-oriented pathways to further understand, identify and manage weather and climate risk and vulnerabilities in order to plan, design, build and maintain a more resilient and sustainable transportation network.

With Brunswick County being in a coastal location, there are multiple resiliency factors that were considered during the CTP process. The roads considered for resiliency in the CTP were due to being alongside the coast with hurricane and flooding issues. All roads considered for resiliency were addressed in the CTP and there were recommendations made. Some of the following roads are directly affected by flooding during heavy rains or hurricane season, and others were created or upgraded to accommodate for cut through routes during flooding of certain roadways:

- NC 133
- SR 1521 (Funston Road SE)
- SR 1521 (Governors Road SE)
- Fifty Lakes Drive

Brunswick County's CTP Vision is in support of strengthening the community resiliency.

# **MULTIMODAL ANALYSIS**

This appendix shows documentation for the methodologies used for each mode of transportation. This section provides maps utilized in the analysis process for each mode.

The following information is provided in this section:

- → <u>Highway</u>
- → <u>Bicycle and Pedestrian</u>
- → Public Transportation
- → Rail
- → <u>Ferry</u>

## **HIGHWAY**

## Analysis of the Existing and Future Transportation System

In order to develop a CTP, the following are considered:

- Analysis of the transportation system, including any local and statewide initiatives.
- Impacts to the natural and human environment, including natural
- resources, historic resources, homes, and businesses.
- Public input, including community vision and goals and objectives.

## Analysis Methodology and Data Requirements

An analysis of the transportation system looks at both current and future travel patterns and identifies existing and anticipated deficiencies. Reliable forecasts of future travel patterns must be estimated to analyze the ability of the transportation system to meet future travel demand. These forecasts depend on careful analysis of the character and intensity of existing and future land use and travel patterns. This information, along with population growth, economic development potential, and land use trends, is used to determine the potential impacts on the future transportation system.

After forecasts are complete, deficiencies are identified through a capacity deficiency analysis, a traffic crash analysis, and a system deficiency analysis.

## Roadway System Analysis

An important stage in the development of a CTP is the analysis of the existing transportation system and its ability to serve the area's travel demand. Emphasis is placed not only on detecting the existing deficiencies, but also on understanding the causes of these deficiencies. Roadway deficiencies may result from inadequacies in pavement widths, intersection geometry, or intersection controls. System deficiencies may result from missing travel links, bypass routes, loop facilities, or improvements needed to meet statewide initiatives.

One of those statewide initiatives is the Strategic Transportation Corridors (STC) adopted by the Board of Transportation on March 4, 2015.

The STC identified a network of critical multimodal transportation corridors considered the backbone of the state's transportation system. These 25 corridors move most of our freight and people, link critical centers of economic activity to international air and seaports, and support interstate commerce. They must operate well to help North Carolina attract new businesses, grow jobs, and catalyze economic development.

The primary purpose of the STC is to provide North Carolina with a network of high-priority, multimodal transportation corridors and facilities. They connect statewide and regional activity centers to enhance economic development, promote highly reliable, efficient mobility and connectivity, and support good decision-making. The primary goal to support this purpose is to create a greater consensus towards the development of a genuine vision for each corridor that establishes the statewide or regional importance of facilities and the need for maintaining high capacity and travel speed. During the development of CTPs, the STC network has been cross-referenced to ensure plan consistency. Incorporating the statewide and regional mobility goals set forth in the STC network has been done in a manner that fits with the character and vision for the community or county. If this cannot be achieved through the use of existing facilities, an alternative solution has been sought.

In the development of this plan, travel demand was projected from 2017 to 2045 using a trend line analysis based on Annual Average Daily Traffic (AADT) from 2017 to 2045. In addition, local land use plans and growth expectations were used to further refine future growth rates and patterns. The established future growth rates were endorsed by the Brunswick County Commissioners (02 01 2021), Town of Bald Head Island Council (02 19 2021), Town of Boiling Spring Lakes Council (03 02 2021), Town of Bolivia Council (03 09 2021), Town of Caswell Beach Council (02 08 2021), Town of Northwest Council (02 23 2021), Town of Oak Island Council (03 13 2021), Town of Sandy Creek Council (03 01 2021), Town of

#### APPENDIX — MULTIMODAL ANALYSIS

Southport Council (04 08 2021), Town of St. James Council (02 03 2021), GSATS MPO TAC (02 03 2021), and presented at the Cape Fear RPO TAC (02 12 2021). Refer to the Socio-economic Data forecasting methodology Appendix for more information.

Existing and future travel demand is compared to existing roadway capacities. Capacity deficiencies occur when the traffic volume of a roadway exceeds the roadway's capacity. Roadways are considered near capacity when the traffic volume is at least 80 percent of the capacity. Refer to maps labeled Figure 2 for existing and future capacity deficiencies. The XXXX traffic volumes in Figure 2 are an estimate of the traffic volume in XXXX with only existing plus committed projects assumed to be in place, where committed is defined as projects programmed for construction in the XXXX – XXXX Transportation Improvement Program (TIP).

Capacity is the maximum number of vehicles with a "reasonable expectation" of passing over a given section of roadway, during a given time period under prevailing roadway and traffic conditions. Many factors contribute to the capacity of a roadway including the:

- Geometry of the road (including number of lanes), horizontal and vertical alignment, and proximity of perceived obstructions to safe travel along the road;
- Typical users of the road, such as commuters, recreational travelers, and truck traffic;
- Access control, including streets and driveways, or lack thereof, along the roadway;
- Development along the road, including residential, commercial, agricultural, and industrial developments;
- Number of traffic signals along the route;
- Peaking characteristics of the traffic on the road;
- · Characteristics of side-roads feeding into the road; and
- Directional split of traffic or the percentages of vehicles traveling in each direction along a road at any given time.

The relationship of travel demand compared to the roadway capacity determines the level of service (LOS) of a roadway. Six levels of service identify the range of possible conditions. Designations range from LOS A, which represents the best operating conditions, to LOS F, which represents the worst operating conditions.

LOS D indicates "practical capacity" of a roadway, or the capacity at which the public begins to experience delay. The practical capacity for each roadway was developed based on the 2021 Highway Capacity Manual using the Transportation Planning Division's LOS D Standards for Systems Level Planning. Recommended improvements and overall design of the transportation plan were based upon achieving a minimum LOS D on existing facilities and a LOS C for new facilities. Refer to the Definition and References appendix for detailed information on LOS.

### Implementation

The CTP is based on the projected growth for the planning area. It is possible that actual growth patterns will differ from those logically anticipated. As a result, it may be necessary to accelerate or delay the implementation of some recommendations found in this plan. Some portions of the plan may require revisions to accommodate unexpected changes in development. Therefore, any changes made to one element of the CTP should be consistent with the other elements.

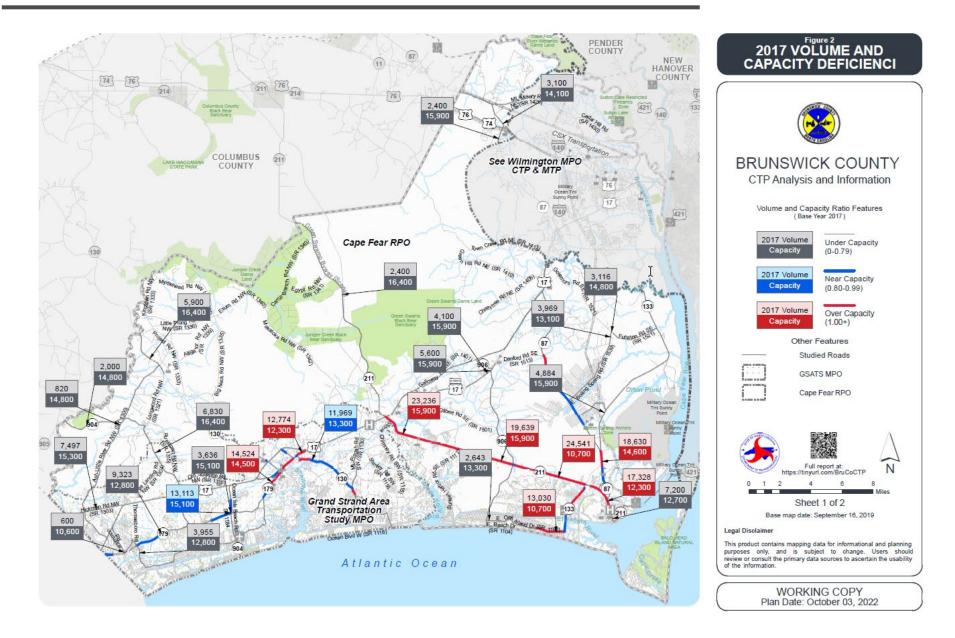
Initiative for implementing the CTP rests mostly with the policy boards and residents in Brunswick County. Projects should be prioritized locally and submitted to the Cape Fear RPO and GSATs MPO for regional prioritization and submittal to NCDOT. Refer to the Contact Information Appendix for contact information on regional prioritization and funding. Local governments may use the CTP to guide development and protect corridors for the recommended projects. It is critical that NCDOT and local governments coordinate on relevant land development reviews and all transportation projects to ensure proper implementation of the CTP. Local governments and NCDOT share the responsibility for access management and the planning, design, and construction of the recommended projects.

NCDOT - BRUNSWICK COUNTY COMPREHENSIVE TRANSPORTATION

#### **APPENDIX – MULTIMODAL ANALYSIS**

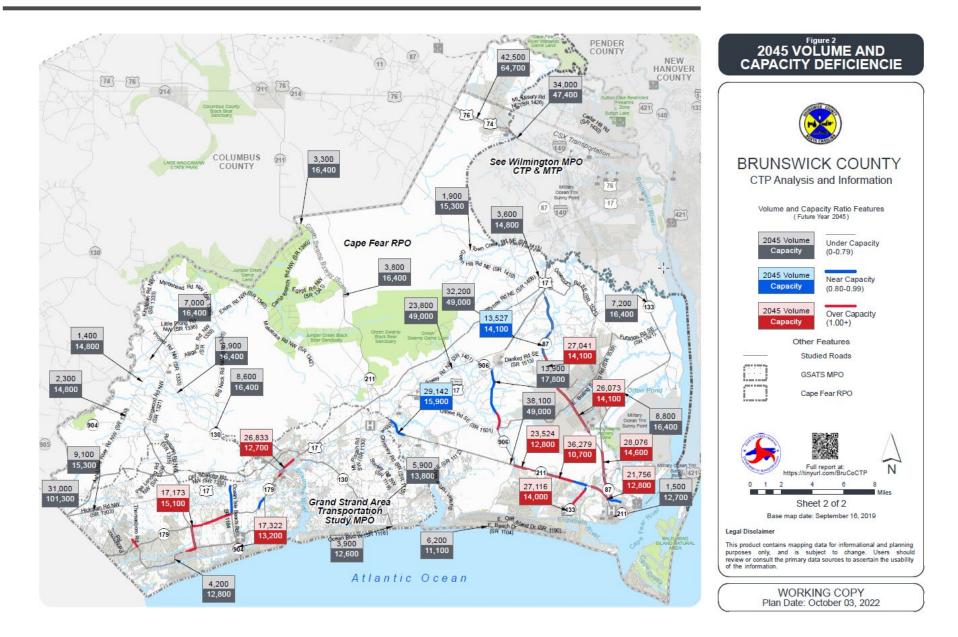
Recommended improvements shown on the CTP map represent an agreement of identified transportation deficiencies and potential solutions to address the deficiencies. While the CTP does propose recommended solutions, it may not represent the final location or cross section associated with the improvement. All CTP recommendations are based on high level systems analyses that seek to minimize impacts to the natural and human environment. Prior to implementing projects from the CTP, additional analysis will be necessary to meet the National Environmental Policy Act (NEPA) or the North Carolina (or state) Environmental Policy Act (SEPA), as applicable. During the NEPA/SEPA process, the specific project location and cross section will be determined based on environmental analysis and public input. This CTP may be used to support transportation decision making and provide transportation planning data to the NEPA/SEPA process

PLAN57





PLAN59



## **BICYCLE AND PEDESTRIAN**

Bicyclists, pedestrians, and transit users are an integral part of the transportation system in North Carolina. Many communities are working to improve mobility for cyclists and pedestrians and incorporate first-mile and last-mile connections for transit users. NCDOT's Complete Streets Policy, updated in 2019, clarifies responsibilities regarding the provision of bicycle, pedestrian, and transit facilities along the 77,000-mile state-maintained highway system. The policy details guidelines for planning, design, construction, and maintenance. All bicycle, pedestrian, and transit improvements undertaken by NCDOT are based upon this policy. An Action Plan and Implementation Guide were developed to support the policy. The 2019 Complete Streets Policy some now covers guidelines from the

other, replaced policies.

### Reference

Inventories of planned bicycle and pedestrian facilities for the planning area are presented in the Inventory Table. The City of Boiling Spring Lakes Pedestrian Plan, East Coast Greenway Plan, Sunset Beach Bicycle and Pedestrian Plan, 2040 Metropolitan Transportation Plan Update, Ocean Isle Beach Bicycle and Pedestrian Plan, Oak Island: North Carolina Bicycle Transportation Plan, City of Southport Comprehensive Pedestrian Transportation Plan and the Cape Fear Regional Bicycle Plan were used in the development of these elements of the CTP. NCDOT's Pedestrian and Bicycle Infrastructure Network (PBIN)<sup>1</sup> was also integrated into the Brunswick County CTP. The PBIN is a geodatabase that includes data on existing and proposed bicycle and pedestrian facilities throughout North Carolina. All recommendations for bicycle and pedestrian facilities were coordinated with the local governments, NCDOT Division 3 and the NCDOT Integrated Mobility Division (IMD). Refer to the Contact Information appendix for contact information for the Integrated Mobility Division and Division 3. The Steering Committee also identified locations throughout the county where bicycle lanes and sidewalks are needed due to safety, access, mobility, and various other reasons listed in each bicycle and pedestrian project sheet, list, and inventory table.

## **Bicycle and Pedestrian Analysis**

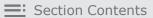
There are three Bicycle and Pedestrian Analysis Maps in this CTP. Since the CTP no longer shows Bicycle Routes, it was important to the steering committee to include a map showcasing the routes that are heavily used by cyclists. One of our steering committee members represented the Brunswick Cycling Club, and it was very important to the avid cyclists in the county for the bicycle routes to be shown so that safety standards can improve along the roadways for cyclists. The Brunswick County Bicycle Routes Analysis Map also helped with making recommendations for bicycle lanes and multi-use paths in the Bicycle and Pedestrian Recommendations Map. Both the PBIN and Steering Committee feedback were incorporated into creating the Bicycle Routes Analysis Map.

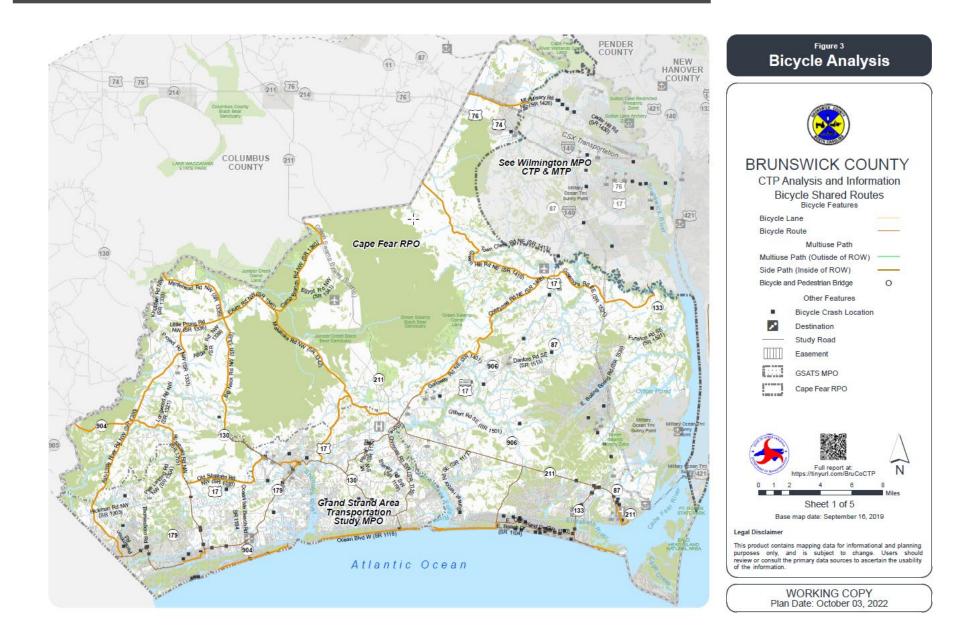
The second analysis map is The Brunswick County Proposed Sidewalks in Downtowns Analysis Map. The map also displays pedestrian crash locations. This map was created because it is the goal of the Cape Fear RPO to create safe walking in downtowns across the entire RPO. In this map you see the municipalities outlines and reflect that sidewalks are recommended in their downtowns and CBDs.

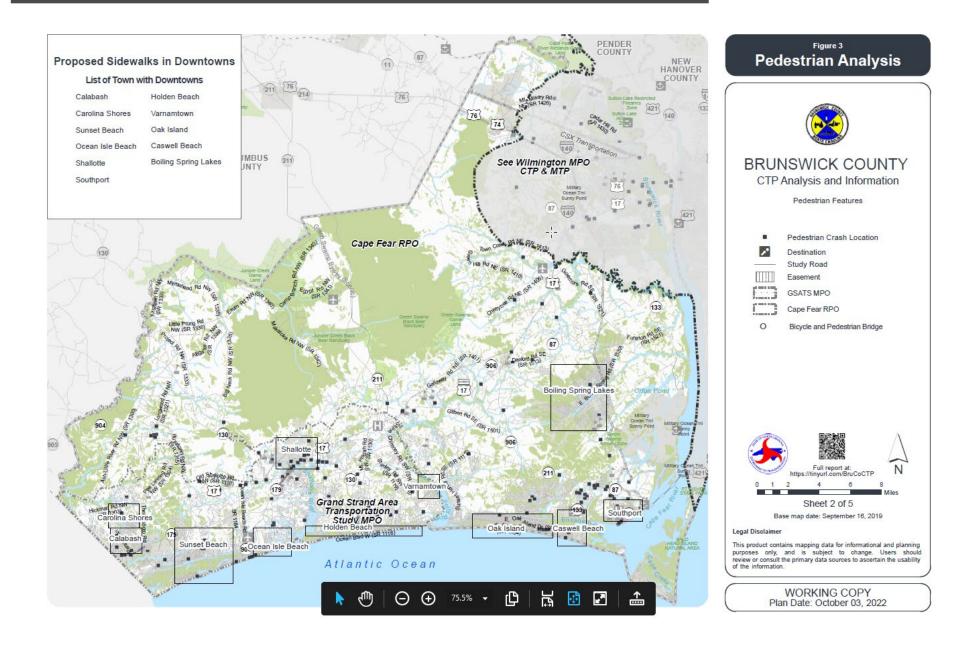
The final analysis map is The Brunswick County Existing Bicycle and Pedestrian Analysis Map. The steering committee pointed out it is hard seeing any existing features on the Bicycle and Pedestrian Recommendations Map, and it is not encouraged to show existing lines on that map as it is confusing to distinguish the existing vs proposed paths. Therefore, it was decided by the committee to create a map to display all existing bicycle lanes and sidewalks.

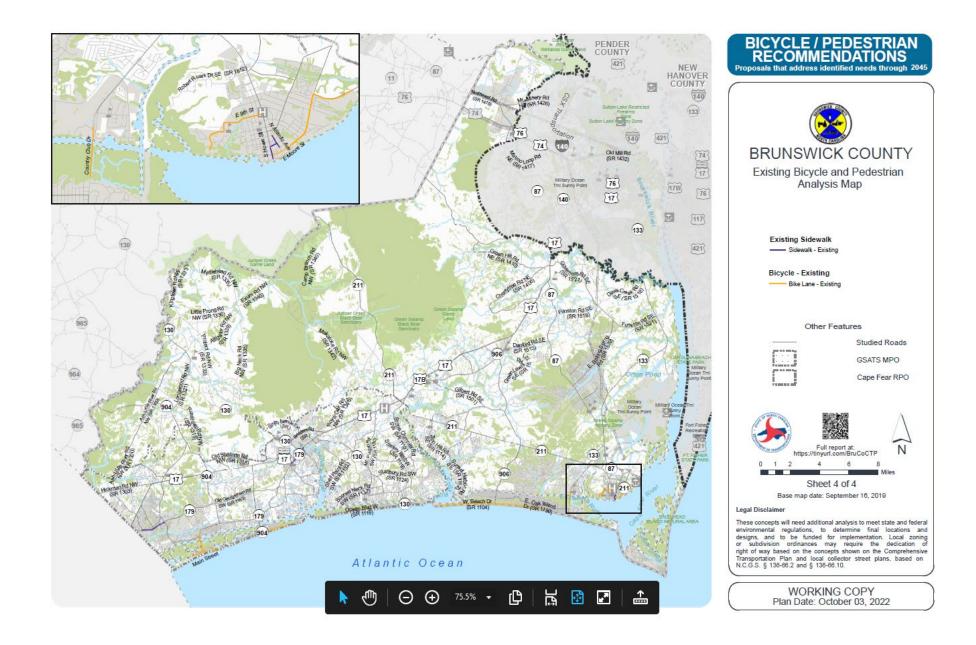
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<sup>&</sup>lt;sup>1</sup> PBIN: https://connect.ncdot.gov/projects/BikePed/pages/pbin.aspx









# **PUBLIC TRANSPORTATION**

Public transportation and rail are vital modes of transportation that give alternatives for transporting people and goods from one place to another. North Carolina's public transportation systems serve more than 50 million passengers each year. Five categories define North Carolina's public transportation system: community, regional community, urban, regional urban and intercity.

## Urban Transportation Fixed Corridors

There are currently nineteen urban transit systems operating in North Carolina, from locations such as Asheville and Hendersonville in the west to Jacksonville and Wilmington in the east. In addition, small urban systems provide service in three areas of the state. Consolidated urban-community transportation exists in five areas of the state. In those systems, one transportation system provides urban and rural transportation within the county.

- Fixed Routes Local: Provides service to every stop along the route
- Fixed Route Express: Does not provide service every stop along the route
- Bus on Shoulder (BOSS): Specific routes designated to bypass congested traffic areas
- Bus Rapid Transit Busways that operate in rapid transit highway corridors

### **Rural Fixed Corridors**

Local transportation efforts formerly centered on assisting clients of human service agencies. Today, most rural systems serve the public and those clients.

• **Deviated Fixed Route** – Transit service provided that uses a hybrid of fixed-route and demand response services. With this type of service, buses stop at fixed points and maintain a timetable but can deviate from the route to go to a specific location for a scheduled request.

## **Regional Fixed Corridors**

Regional Transit Service that connects local and regional providers, and transportation authorities. Regional community transportation systems are composed of two or more contiguous counties providing coordinated/consolidated service. Although such systems are not new, single-county systems are encouraged to consider mergers to form more regional systems.

### Park and Ride Lots

Vehicle lots designed for transit commuters.

An inventory of existing and planned fixed public transportation routes for the planning area is presented on the inventory table. All recommendations for public transportation were coordinated with the local governments and the Public Transportation Division of NCDOT. Refer to the contact information appendix to contact the Public Transportation Division.

# **Existing Public Transportation**

Brunswick Transit System (BTS) is a non-profit community transportation system that provides transit services for residents of Brunswick County. The BTS was incorporated in 1989, they operate with 17 vehicles, including ADA vehicles to assist those with special needs.

### **Deviated Fixed Route:**

There is no fixed transit route in Brunswick County and there is no need or desire for a future fixed route by locals.

### Demand Response:

Brunswick Transit System (BTS) provides non-emergency transportation services to the general public through a Dial-a-Rude program and to human service agency clients through contact services. The policy of BTS is to provide equal opportunity to all people who are admitted to, participate in, or are recipients of BTS services.

### Park and Ride Lots:

There are no existing park and ride lots in the county now.

### Community Feedback

The Brunswick County CTP Survey showed that Brunswick County Transit services is an important service especially for bus stops and on-demand transit. Comments on the survey included:

- Provide Park and Ride Services and provide Park and Ride Lots
- Provide Additional and accessible transit options
- Accommodate for tourist season

# **Future of Transit**

Brunswick County and the CTP Steering Committee have requested the CTP show proposed park and ride lots on the Public Transportation and Rail Recommendations Map. There are two park and ride lots being proposed in Holden Beach, one in Ocean Isle Beach, one in Sunset Beach, one in Oak Island, and one in Caswell Beach. Refer to the Public Transportation and Rail Recommendations Map and Recommendations list for more details. The vision for the county is to provide park and ride services during summer and tourist season when there is a need for the service.

## Methodology

To create the park and ride lots locations, the county provided NCDOT with the Brunswick Transit System (BTS) Community Connectivity Plan for review. There is data and mapping on the plan that shows the number of origin and destinations for BTS pickups and drop offs. TPD engineers determined the highest origin and destination locations and shared the information with the steering committee to create a fixed transit network. The committee decided that there is not a need for a fixed transit network in the county, BTS serves those who need daily free rides, and the biggest demand is during tourist/summer seasons when visitors and locals cannot find parking along beach locations. Therefore, the suggestion was to provide park and ride pick lots along the beach access. However, we created a high on-demand origin destination locations map based on the BTS Community Connectivity Plan.

# RAIL

Today North Carolina has 3,245 miles of railroad tracks throughout the state. There are two types of trains that operate in the state, passenger trains and freight trains.

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#### APPENDIX — MULTIMODAL ANALYSIS

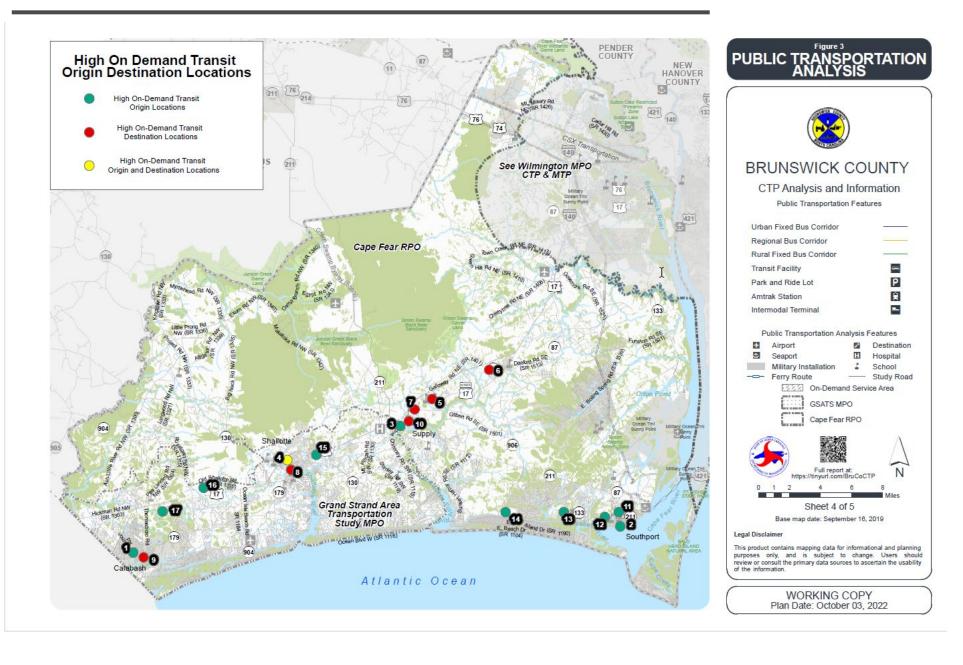
Intercity passenger service is provided by Amtrak which currently operates six passenger services daily in or through North Carolina serving 16 cities across the state. Five of the services are interstate (Crescent, Palmetto, Silver Meteor, Silver Star, and Carolinian passenger trains) and one service Piedmont passenger train) operates exclusively within North Carolina. In addition to the six passenger services mentioned, Amtrak also operates its Auto Train service which passes through North Carolina but does not make any stops. Amtrak ridership demand has been on a rise in the state. In 2010 ridership was 840,000 and increased to 975,645 passengers in 2013.

The North Carolina Department of Transportation sponsors two passenger trains, the Carolinian and Piedmont. The Carolinian runs between Charlotte and New York City, while the Piedmont train carries passengers from Raleigh to Charlotte and back every day. However, no passenger trains operate over the rail line from High Point that dead ends at Asheboro or over the rail line that runs from Gulf, NC to Greensboro. Combined, the Carolinian and Piedmont carry more than 300,000 passengers each year.

There are two major freight railroad companies that operate in North Carolina, CSX Transportation and Norfolk Southern Corporation. Also, there are more than 17 smaller freight railroads, known as shortlines.



PLAN70





PLAN72

# MODEL RESULTS AND METHODOLOGY

In the development of this plan, travel demand was projected from 2017 to 2045 using a travel demand model. Travel demand models are developed to replicate travel patterns on the existing transportation system and estimate travel patterns for 2045. In addition, local land use plans and growth expectations were used to develop future growth rates and patterns. The established future growth rates were endorsed by the Brunswick County Commissioners (02 01 2021), Town of Bald Head Island Council (02 19 2021), Town of Boiling Spring Lakes Council (03 02 2021), Town of Bolivia Council (03 09 2021), Town of Caswell Beach Council (02 08 2021), Town of Northwest Council (02 23 2021), Town of Oak Island Council (03 13 2021), Town of Sandy Creek Council (03 01 2021), Town of Southport Council (04 08 2021), Town of St. James Council (02 03 2021), GSATS MPO TAC (02 03 2021), and presented at the Cape Fear RPO TAC (02 12 2021).

[Insert specifics of model results. Remove if not applicable]

# **Travel Demand Model Documentation**

- 1. **CTP study area:** Brunswick County in the Cape Fear RPO area, includes a portion of Wilmington MPO and a portion of Grand Strand MPO
- 2. Area modeled: Lockwoods, Folly Shallotte, Smithville, Waccamaw, and Town Creek Townships (excluding Leland and Belville)
- 3. Attach figure(s) showing following:
  - Model area boundary
  - TAZ system
  - Modeled highway network
- 4. TransCAD version and build number: Version 5.0 r4 Build 2110
- 5. Model base, interim, and horizon years: 2017 BY, 2045 FY
- 6. New model structure (or improvement to previous model) ie: toll, transit, HOV, etc.: None
- 7. Data used and source (collection method, synthesized, usage of prior model data, etc.):

Data	Source Collection Methodology		Notes
Vehicles Available	ACS 2010-2017	Internet	Block Group
K-12 Student Enrollment	Brunswick County Schools Board	Internet, Cape Fear RPO Verification	
Population	2017 Census SF1 and ACS / Cape Fear Rural Planning Organization / Brunswick County	Internet / Emails/ RPO Verification	Census Block
Household	2017 Census SF1 and ACS	Internet/ RPO Verification	Census Block
Employment Data	Dunn and Bradstreet and 2017 InfoGroup	GIS/ RPO Verification	
Highway Line Layer	Road Characteristics File/ Cape Fear Rural Planning Organization / Brunswick County	GIS / Emails	NAVTEQ
Vehicle Operation Cost	Your Driving Cost – 2017 Edition by AAA	Internet	

#### APPENDIX — MODEL RESULTS AND METHODOLOGY

Wage Rate	U.S. Bureau of Labor Statistics	Internet	
Traffic Counts	2010 – 2017 NCDOT/ TSG 48 Hour and Class Counts from Traffic Survey Group	GIS /Counts ordered from TSG	

#### 8. Model components:

- Methodologies (include trip assignment type, modal types and special trip types/generators)
  - Trip Generation: Trip Production (Cross Classification by Household Size and Vehicle Ownership) and Trip Attraction (Linear Regression)
  - Trip Distribution: Gravity Model
  - Mode Choice: N/A
  - Trip Assignment: Volume Delay Function (Conical Congestion), Assignment Type (User Equilibrium)
  - Modal Type: Highway only (No Transits)
- 9. Validation and reasonableness checks throughout model development: Does the model meet the required validation and reasonableness checks. Y/N. If not, document any deviations. Check all that apply from the list below.

Category	Required Validation and Reasonableness Check	Optional Check
TAZ	Modeled major roadways do not bisect the TAZ	
SE Data	<ul> <li>Verification of control totals for the study area:</li> <li> <ul> <li>Population: 91,807</li> <li>Households: 34,293</li> <li>Employment: 42,164</li> </ul> </li> <li>Basic Check if there are TAZs that meet any of the following criteria: <ul> <li>Positive population with zero households</li> <li>Positive households with zero mean (median) income</li> <li>Positive households with zero mean (median) income</li> <li>Positive household with zero mean (median) income</li> <li>Positive mean (median) income with zero population and zero households</li> <li>Households greater than dwelling units</li> <li>Households greater than populations</li> <li>Mean (median) income greater than \$2,500</li> <li>Mean (median) income greater than \$200,000</li> </ul> </li> </ul>	Comparison of SE data and employment data by employment type with those in the previous version of the model, if applicable

#### **APPENDIX – MODEL RESULTS AND METHODOLOGY**

	Population	
	☑ Number of households	
	Persons per household: 0.43-7.21	
	Workers per household	
	Vehicles per household: 0.00-6.13	
	Vehicles per worker	
	Vehicle per person: 0.00-6.06	
	Average Income	
	Employment by employment type	
	Reasonableness check of SE data and employment data with Census (2010 Census) and CTPP (2010-2017 ACS)	
	Connectivity Check	
	Logical and Consistent Network Attribute Coding:	
	🗹 One-way or Two-way Roads	
	🗹 Facility Type	
	🗹 Агеа Туре	
	Posted Speed	
	Capacity	
Highway	☑ Number of Lanes	
Network	Direction of Flow	
	Functional Class	
	Alpha (Parameter used in the Volume Delay Function)	
	☑ Verification that differences between the forecast year and	
	base year networks correspond to the actual highway construction projects or other anticipated	
	$\checkmark$ Check if location of centroids and centroid connectors is	
	reasonable	
	🗹 Random Shortest Path Check	
	Trip rates by per capita, per household, and by purpose	
	Trip rate per employee	
Trip	Distribution of trips by trip purposes	
Generation	🗹 External trips	
	Truck trips	
	Special Generators	
	Comparison of trip rate with survey data available	
	Average trip length by purpose	
Trip	Comparison of trip length frequency distribution by purpose, area type, and district with available data (Graphics and	
Trip Distribution	Coincidence Ratio)	
	District-to-district trip interchange	
	Percent of Intrazonal trips by purpose	
L		

#### **APPENDIX — MODEL RESULTS AND METHODOLOGY**

Time of Day	Percent of trips by time-of-day by purpose	
	Percent of trips by time-of-day by direction	
Mode Choice	N/A	
Highway Assignment	<ul> <li>No zero-traffic volume on major links</li> <li>VMT Comparison</li> <li>Regional total VMT (within 5%)</li> <li>VMT per capita</li> <li>VMT per household</li> <li>Distribution of VMT among facility types</li> <li>Comparison of observed and estimated speeds by facility type and area type, if applicable</li> </ul>	Average speed (VMT/VHT) by area type and/or facility type for each of time of day
Transit Assignment (if applicable)	<ul> <li>Comparison of observed versus estimated boardings for region, by mode and time of day</li> <li>Comparison of observed versus estimated boardings by screenline</li> <li>Comparison of observed versus estimated transfers per trip</li> <li>Comparison of observed versus estimated boardings by route or corridor</li> <li>Comparison of observed versus estimated district-to-district transit trips</li> </ul>	Comparison of observed versus estimated boardings by mode, by time of day, and by route or group of routes.

Note: Items in Grey were determined to be not relevant for this model.

# 10. **Validation results:** Does the model meet the required performance targets Y/N. If not, document any deviations.

(Overall Model Performance Targets):			
Measure	Target	Actual Result(s)	
Regional Total VMT	Within 5% compared to observed VMT (such as HPMS VMT)	6%	
Comparison of Observed	Screenline – Less than 5%	Screenline 1: 4%	
Versus Estimated Volumes	Cutline – Less than 10%	Screenline 2: 3%	
		Screenline 3: 0%	
		Screenline 4: -4%	
% RMSE	30-40% or Less	18%	
% RMSE by Facility Type	Interstate – 25%	N/A	
Should show a decreasing	Freeway/Expressway – 40%	N/A	
%RMSE with a higher level	Major Arterials – 50%	16%	
of facility type	Minor Arterials – 50%	16%	
	Collector – 65%	18%	
	Local – 65%	N/A	

% RMSE by Volume Group	Less than 5,000 – 120%	26%
Should show a decreasing	5,000 to 9,999 – 45%	18%
%RMSE with increasing	10,000 to 19,999 – 40%	14%
volume group	20,000 to 39,999 – 35%	14%
	40,000 to 59,999 – 30%	N/A
	60,000 or more – 20%	-
		N/A
Percent of Links Within a	• freeway links within +/- 20% of traffic counts-75%	N/A
Specified Percent of Count by Facility Type	<ul> <li>freeway links within +/- 10% of traffic counts-50%</li> <li>major arterial links with 10,000 vehicles per day within +/- 30% of traffic counts-75%</li> <li>major arterial links with 10,000 vehicles per day</li> </ul>	N/A
	within +/- 15% of traffic counts-50%	90%
		66%
R-square (Coefficient of Determination)	Greater than 0.88	0.92

# 11. Calibration process and results (including recommended changes in parameter values and discussion).

- Default capacity table was updated for reflecting new network link attributes that were necessary for coding in the study area
- Gamma coefficients by trip purposes in Gravity Distribution Model were updated slightly for reducing internal trip percentages
- Numbers and locations of Centroid Connectors were modified in several TAZs for reflecting accurate access points and traffic loading amounts compared to traffic counts, geographical features, and future SE data developments or new road constructions, etc.

# 12. Sensitivity Analysis (if applicable):

There were no sensitivity tests.

# 13. Future-year forecast (including input data) and its reasonableness check:

• SE data and traffic assignment growths were checked and confirmed reasonableness such as:

## A. SE Data Growths

SE Data	2016 Base	2045 Future	Total Growths	Annual Growth Rates
Population	91807	169821	84.98%	2.93%
Households	34293	62774	83.05%	2.86%
Vehicles	54643	97987	79.32%	2.74%
Industry	9039	13497	49.32%	1.70%

#### APPENDIX — MODEL RESULTS AND METHODOLOGY

Retail	4349	7056	62.24%	2.15%
HwyRet	5320	8420	58.27%	2.01%
Service	12603	18762	48.87%	1.69%
Office	10853	15746	45.08%	1.55%
TotEmp	42164	63481	50.56%	1.74%
Students	7385	13541	83.36%	2.87%

#### B. Traffic Assignment Growths

Daily Traffic Assignments	2016 Base	2045 Future	Total Growths	Annual Growth Rates
AB_DailyFlow	3917051	6764107.2	72.68%	2.51%
BA_DailyFlow	1968214	3368618.1	71.15%	2.45%
DailyFlow	5885266	10132725	72.17%	2.49%

Daily traffic show 2.49% of annual growths roughly that seems reasonable compared to SE data growths.

#### 14. Suggestions for further improvement (if applicable):

It is recommended that the model study area needs to be expanded to the whole Brunswick County, coordinating with GSATS and Willington MPO Models.

- 15. **NCDOT Modeling Guidelines and Procedures:** Any deviations from NCDOT Small Area Travel Demand Model Guidelines and Procedures (September 2008) should be documented in detail.
  - User's Guide and Procedural Manual of the first version of Small Area Model were applied.

# **ALTERNATIVE ANALYSIS**

A component of the long-range transportation planning process is the development and evaluation of options for transportation solutions to meet the identified needs or deficiencies in an area. Alternative analysis studies options for the scope, concept, and location of a transportation proposal to serve the deficiency or need. This analysis is less detailed than what is done later in the project development process and is used as a preliminary resource to identify potential alternatives. There were no alternatives that were recommended for this study.

#### Alternatives are evaluated and separated into three categories.

- **Unreasonable alternatives** are alternatives considered but recommended for elimination from further study based on planning level analysis. An alternative is unreasonable if it fails to meet the community's vision, address the transportation deficiency, and/ or has unacceptable impacts to the natural or human environment.
- The **CTP project proposal** is the alternative selected to be shown on the adopted CTP map. The CTP project proposal is selected based on a planning level analysis as the one that best meets the community's vision, addresses the transportation deficiency, and avoids and/ or minimizes impacts to the natural and human environment.
- **Other Alternatives studied** are alternatives that were considered and, though they were not selected as the CTP project proposal, they were not found to be 'unreasonable'. These alternatives may be considered for future studies, though this decision is to be made a later time.

# **PUBLIC INVOLVEMENT**

Public involvement is a key element in the transportation planning process. Adequate documentation of this process is essential for a seamless transfer of information from systems planning to project planning and design.

Throughout the course of the study, the NCDOT Transportation Planning Division worked with the Brunswick County CTP Steering Committee, which included a representative from each municipality, county staff, the transit agency, the RPO, the MPO and others. The committee provided information on local plans, developed transportation vision and goals, discussed population and employment projections, and developed proposed CTP recommendations.

#### **CTP Coordinating Committee Members**

At the start of the CTP, a steering committee was formed to guide development of the plan. The committee had representatives from various interest groups responsible for capturing the transportation needs of the community.

# **CTP Vision, Goals, and Objectives**

The CTP vision, goals and objectives were developed as part of the public involvement process to help identify the community's outlook on the future of transportation for all modes. The CTP Steering Committee develops the draft vision, goals, and objectives, which are refined with input from residents through the CTP Goals & Objectives Survey. These products are used as guides while the CTP is being developed.

The vision statement, goals and objectives reflect what is important for the area and define any local preferences concerning the transportation system and community assets. The vision statement is the framework for the area's strategic planning. Goals and objectives document how the area plans to fulfill its vision. The goals break down the vision statement into themes, while the objectives document how the area plans to achieve each goal.

#### **Brunswick County CTP Vision:**

"Brunswick County is aiming to have an integrated multi-modal transportation system that is safe, environmentally sensitive, aesthetically pleasing, and user friendly. For the community to optimize local transportation networks while maintaining regional connectivity that makes access to the area and its attractions, easy; and aids in economic growth. To improve access for emergency services, provide equitable opportunities to all socioeconomic groups, minimize congestion, and strengthen the community's resiliency; while maintaining and protecting the area's natural, cultural, and recreational resources over the next 25-30 years."

Vision statement from Brunswick County Steering Committee

### **Goals & Objectives:**

Goal: Create a more efficient transportation system through improved connectivity, capacity and operations.

*Objectives:* Promote reductions in recurring congestion through transportation capacity, access management, and policy improvements.

*Objectives:* Recognize savings (e.g. time and fuel consumption) by minimizing vehicle miles traveled through enhanced integration and connectivity of the transportation system, across and between modes, for people and freight.

*Objectives:* Consider future projects and locations based on policies of Environmental Justice (EJ) Communities.

Goal: Support growth through a transportation network that serves local, inter- and intra- regional accessibility and mobility needs for both people and goods.

*Objectives:* Identify transportation recommendations that enable global competitiveness, productivity, and efficiency.

*Objectives:* Increase the accessibility and mobility of people and freight within the region and to other areas.

*Objectives:* Leverage gateways and aesthetics to create an atmosphere that fosters economic investment.

*Objectives:* Support growth and reduce traffic in and around new residential and commercial developments by constructing state-maintained collector streets in those vicinities.

Goal: Preserve the social and environmentally sensitive character of the county through an integrated transportation and land use strategy that addresses transportation solutions.

*Objectives:* Protect and enhance the natural and social environment using context-sensitive transportation strategies that minimize wildlife habitat fragmentation.

*Objectives:* Minimize direct and indirect environmental impacts of the transportation system while planning and prioritizing transportation recommendations.

*Objectives:* Promote consistency between transportation improvements, land use decisions, and economic development patterns.

*Objectives:* Consider future projects and locations based on polices of Environmental Justice (EJ) Communities.

Goal: Provide an integrated transportation network that encourages use of all modes by offering travel choices that are accessible to all segments of the region's population.

*Objective:* Provide desirable and user-friendly transportation options for all user groups regardless of socioeconomic status or physical ability.

*Objective:* Support a fully integrated multimodal network that advances the concept of complete streets.

*Objectives:* Expand and maintain a network of bicycle, pedestrian, and transit facilities that connects homes, activity centers, and complementary amenities.

Goal: Promote a safer and more secure transportation network through crash reduction, enhanced reliability and predictability, and improved emergency coordination.

*Objectives:* Improve the safety of the transportation system for all user groups regardless of socioeconomic status or physical ability.

*Objectives:* Increase the reliability, predictability, and efficiency of the transportation experience through system improvements and enhanced communication.

*Objectives:* Improve safety and security by enhancing the evacuation route network for natural events.

Goal: Extend the life of the transportation system by fostering a sustainable and maintainable system that addresses the long-term needs of the region.

*Objective:* Limit expansion of the roadway network to the most necessary projects that best address identified issues.

*Objective:* Increase the lifespan of existing infrastructure and ensure transportation facilities are used optimally.

*Objective:* Maintain the transportation network by identifying and prioritizing infrastructure preservation and rehabilitation projects such as pavement management and signal system upgrades.

*Objective:* Study emerging transportation management and operations technology, including electric vehicle charging locations, connected/autonomous vehicle infrastructure and broadband infrastructure.

A discussion of the ways Vision, Goals, and Objectives affected outcomes of individual projects were discussed in the Project Sheets.

NCDOT - BRUNSWICK COUNTY COMPREHENSIVE TRANSPORTATION

# **Goals, and Objectives Survey**

The Brunswick County CTP Goals and Objectives (G&O) Survey was composed by the Brunswick County CTP Steering Committee that are comprised of the Cape Fear RPO, the County, the GSATS MPO, Brunswick County Municipalities, local residents, subject matter experts, public officials and NCDOT. The survey is used to help identify an area's perceptions or concerns of transportation-related issues. The survey included questions that involved ranking important areas of focus, sets of agree/disagree questions by mode of transportation, and a mapping question to identify the location of concerns in Brunswick County. The survey primarily advertised electronically with a paper option being available. Both the paper version and electronic version on MetroQuest was also available in Spanish. The committee also created various flyers to advertise for the survey. The committee used Title VI maps to personally call underserved churches for outreach. Various means were used to make the public aware of the survey and direct them to a means of completing the survey. These methods included e-mail announcements, posted on local newspapers, flyers posted by each steering committee member at their place of work. flyers posted in public government buildings in the county, social media, presented at all CTP adopting agency's board/council meetings, presented at MPO and RPO TCC/TAC meetings, and the CTP steering committee went to vaccine locations and personally passed out flyers and paper surveys to local residents. The survey was also posted on NCDOT's Brunswick County CTP Planning Page on NCDOT Connect. A total of 6,969 responses were received between March 11<sup>th</sup> and June 9<sup>th</sup> of 2021.

As mentioned above, all steering committee members posted on their own organizations websites and social media and then made extra efforts for additional outreach to promote the survey. Specifically, these are the churches (using Title VI maps) and other organizations the CTP steering committee contacted to for survey outreach:

- St. Brendan Catholic Church (Shallotte)
- Coastal Church (Supply)
- Brunswick Island Baptist Church (Supply)
- Camp United Methodist Church (South Brunswick)
- New Beginnings Community Church (Shallotte)
- Sacred Hearth Catholic Church (Southport)
- River of Life Baptist Church (Sunset Beach)
- Brunswick Senior Resources Inc. (BSRI)
- Brunswick County Assistance
- Brunswick Chamber of Commerce
- Brunswick County NCAAP
- Brunswick County Schools

Here are the paper surveys in both English and Spanish:

# **BRUNSWICK COUNTY CTP SURVEY**

The Transportation Planning Division of the North Carolina Department of Transportation (NCDOT), in cooperation with Brunswick County and its municipalities, the Grand Strand Metropolitan Planning Organization and the Cape Fear Rural Planning Organization, is developing a Comprehensive Transportation Plan (CTP) for Brunswick County. The Brunswick County CTP will be a multi-modal plan that identifies the existing and future transportation system, including highways, public transportation, rail, bicycle, and pedestrian facilities and the ferry system that serve the current and anticipated travel demand. This will be a long-range plan that identifies major transportation improvements that will be needed over the next 30 years. This survey is a means of identifying transportation issues that are important to the citizens, officials, and businesses in and around Brunswick County. Your input is vital in developing a plan that meets the future needs of the people who live, work, or visit in Brunswick County.

Please complete this survey before June 9<sup>th</sup>, 2021.

The online survey can be completed at: <u>https://BrunswickCountyCTP.metroquest.com</u>

Additional paper copies can be picked up at:

• Brunswick County Planning Department

75 Courthouse Drive

Bolivia, NC 28422

• "Please list additional locations"

You can return this survey to one of the places listed above or mail to:

Chris Palsgrove North Carolina Department of Transportation (NCDOT) 1554 Mail Service Center Raleigh, NC 27699 <u>cdpalsgrove@ncdot.gov</u>



PLAN85

# **ENCUESTA CTP DEL CONDADO DE BRUNSWICK**

La División de Planificación del Transporte del Departamento de Transporte de Carolina del Norte (NCDOT), en cooperación con el condado de Brunswick y sus municipios, la Organización de Planificación Metropolitana de Grand Strand y la Organización de Planificación Rural de Cape Fear, está desarrollando un Plan Integral de Transporte (CTP) para el Condado de Brunswick. El CTP del condado de Brunswick será un plan de usos multiples que identifica el sistema de transporte actual y futuro, incluyendo carreteras, el transporte público, el ferrocarril, las instalaciones para peatones y bicicletas, y el sistema de transbordadores que atiende la demanda de viajes actual y anticipada. Este será un plan a largo plazo que identifica las principales mejoras de transporte que serán necesarias durante los próximos 30 años. Esta encuesta es un medio para identificar problemas de transporte que son importantes para los ciudadanos, funcionarios y empresas en el condado de Brunswick y sus alrededores. Su opinión es vital para desarrollar un plan que satisfaga las necesidades futuras de las personas que viven, trabajan o visitan el condado de Brunswick.

Complete esta encuesta antes del 9 de junio de 2021.

La encuesta se puede completar visitando: https://brunswickcountyctp-sp.metroquest.com/

Se pueden recoger copias impresas adicionales en:

• Brunswick County Planning Department

75 Courthouse Drive

Bolivia, NC 28422

"Please list additional locations"

Puede devolver esta encuesta a uno de los lugares enumerados anteriormente o enviarla por correo a:

Chris Palsgrove North Carolina Department of Transportation (NCDOT) 1554 Mail Service Center Raleigh, NC 27699 cdpalsgrove@ncdot.gov

We created a total of seven flyers. Below are few flyers that were created to advertise for the survey:



# **BRUNSWICK COUNTY TRANSPORTATION SURVEY**

Brunswick County invites you to help develop the Brunswick County Comprehensive Transportation Plan (CTP)

Survey Available: March 11 – June 9, 2021

English Survey Link: <u>https://brunswickcountyctp.metroquest.com/</u> Spanish Survey Link: <u>https://brunswickcountyctp-sp.metroquest.com/</u>

> Mail or Email Paper Surveys to: Nazia Sarder North Carolina Department of Transportation (NCDOT) 1554 Mail Service Center Raleigh, NC 27699 cdpalsgrove@ncdot.gov



NCDOT - BRUNSWICK COUNTY COMPREHENSIVE TRANSPORTATION



# BRUNSWICK COUNTY TRANSPORTATION SURVEY

Brunswick County invites you to help develop the Brunswick County Comprehensive Transportation Plan (CTP)

Survey Available: March 11 – June 9, 2021 English Survey Link: <u>https://brunswickcountyctp.metroquest.com/</u> Spanish Survey Link: <u>https://brunswickcountyctp.sp.metroquest.com/</u>

> Mail or Email Paper Surveys to: Nazia Sarder North Carolina Department of Transportation (NCDOT) 1554 Mail Service Center Raleigh, NC 27699 cdpalsgrove@ncdot.gov



NCDOT - BRUNSWICK COUNTY COMPREHENSIVE TRANSPORTATION



# BRUNSWICK COUNTY

Brunswick County invites you to help develop the Brunswick County Comprehensive Transportation Plan (CTP)

# Survey Available: March 11 – June 9, 2021

English\_Survey Link: <u>https://brunswickcountyctp.metroquest.com/</u> Spanish Survey Link: <u>https://brunswickcountyctp-sp.metroquest.com/</u>

> Mail or Email Paper Surveys to: Nazia Sarder North Carolina Department of Transportation (NCDOT) 1554 Mail Service Center Raleigh, NC 27699 cdpalsgrove@ncdot.gov

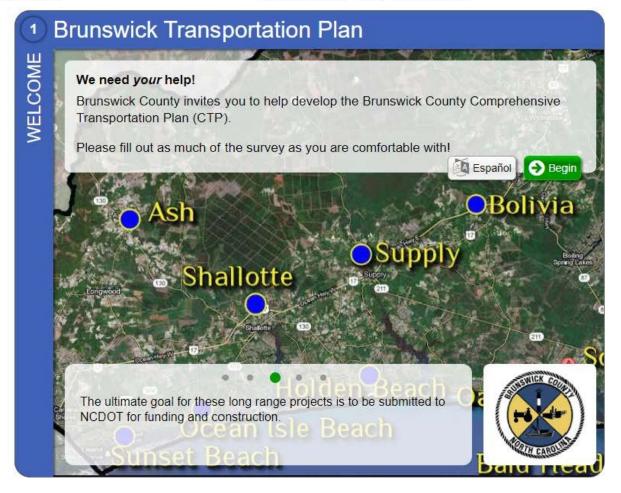


NCDOT - BRUNSWICK COUNTY COMPREHENSIVE TRANSPORTATION

Here are the survey slides from MetroQuest:

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Brunswick County CTP Survey - MetroQuest Studio



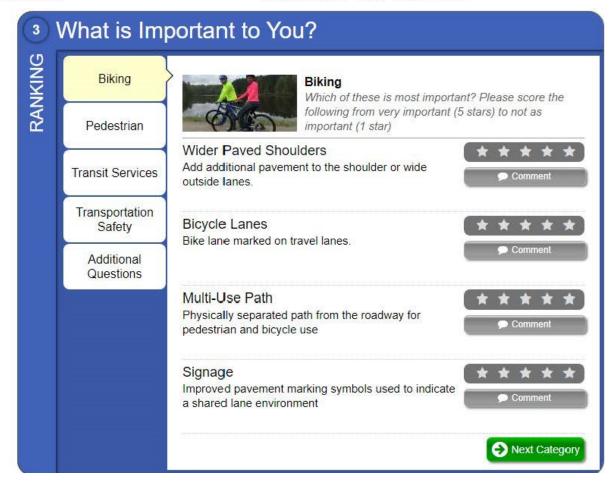
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Brunswick County CTP Survey - MetroQuest Studio

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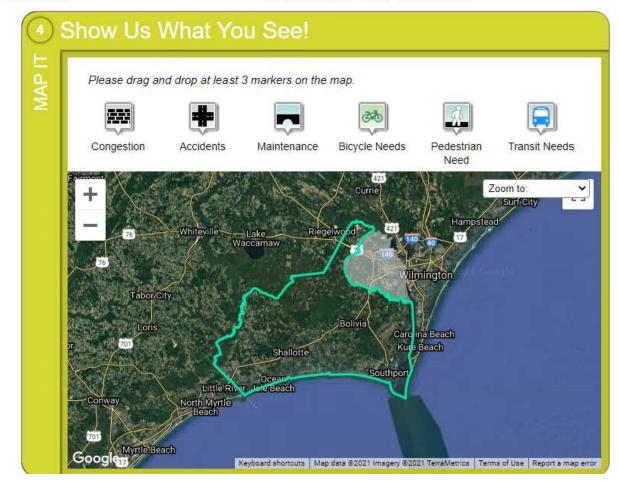
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Brunswick County CTP Survey - MetroQuest Studio



11/29/22, 3:26 PM

Brunswick County CTP Survey - MetroQuest Studio



#### **APPENDIX — STIP AND UNADDRESSED DEFICIENCIES**

11/29/22, 3:26	PM
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Brunswick County CTP Survey - MetroQuest Studio

ЪО	Final Questions (Optional)	Thank you!
WRAP UP	Age Select: ~ Race/Ethnicity	The information you provide will not be shared, however, it will help us know who we are reaching with this survey. Thank you for your input!
	Do you live in Brunswick County full time? Select: •	Click on the logo below to view maps and other information.
	Home Zip Code Type	
	Household Size Select: Number of Vehicles in Household Select: Submit Final Questions	DEPARTMENT OF TRANSPORT

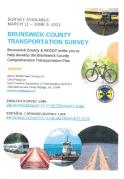
Survey outreach examples of all the website accouchements, social media outreach and newspaper articles along with references to the sites are below. There was much more outreach, here are just a few examples:

#### COMPREHENSIVE TRANSPORTATION PLAN

**CTP SURVEY** 

BRUNSWICK COUNTY COMPREHENSIVE TRANSPORTATION SURVEY NOW OPEN Through June 9

How do you travel across Brunswick County? What transportation priorities and improvements are most important to you? Tell us on the Brunswick County Comprehensive Transportation Survey.



Brunswick County and the North Carolina Department of Transportation (NCDOT) are inviting residents, business-owners, visitors, and other commuters who frequently travel across the county to share their input through the interactive survey. The survey focuses on all modes of transportation, including: traditional car travel; public transportation options (i.e., buses, shuttles, ferries, etc.); walking and biking; rail service; air service; and other multimodal transportation means. The survey takes about 20 minutes to complete. Participants are asked to rank their top five goals for the county's transportation network, gauge how important different modes of travel are to them, and map out areas in the county in need of review for concerns like congestion, maintenance, or other transportation needs.

English Survey Link: https://brunswickcountyctp.metroquest.com/

Spanish Survey Link: https://brunswickcountyctp-sp.metroquest.com/

Individuals can also request a paper copy of the survey by contacting the Brunswick County Planning Department at 910.253.2025.

Mail your paper survey or email a copy to:

Chris Palsgrove

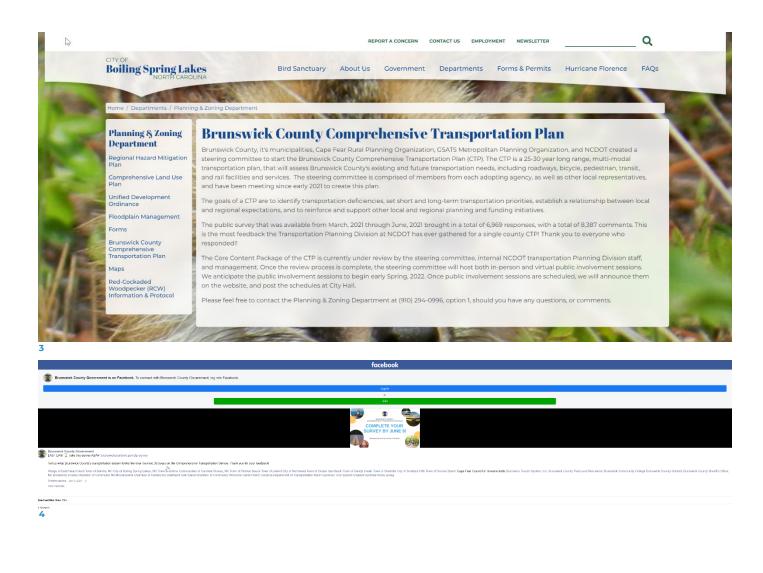
North Carolina Department of Transportation (NCDOT)

1554 Mail Service Center Raleigh, NC 27699 cdpalsgrove@ncdot.gov

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NCDOT - BRUNSWICK COUNTY COMPREHENSIVE TRANSPORTATION

<sup>&</sup>lt;sup>2</sup> Brunswick County Website: <u>https://www.brunswickcountync.gov/planning/transportation/comprehensive-transportation-plan/ctp-survey/</u>



<sup>4</sup> Brunswick County Facebook page:

https://p.facebook.com/BrunswickCounty/photos/a.10151404644791296/10157743074011296/?type=3&source=48

NCDOT - BRUNSWICK COUNTY COMPREHENSIVE TRANSPORTATION

<sup>&</sup>lt;sup>3</sup> City of Boiling Spring Lakes Website: <u>https://www.cityofbsl.org/planning-zoning-department/brunswick-county-comprehensive-transportation-plan</u>



You are here: Home / Arch



#### BRUNSWICK COUNTY TRANSPORTATION SURVEY

Brunswick County and the North Carolina Department of Transportation (NCDOT) are inviting residents, businessowners, visitors, and other commuters who frequently travel across the county to share their input through the interactive survey.

Input will help shape the formation of the Brunswick County Transportation Plan, which will serve as a blueprint for the county's transportation network for the next 30 years.

The survey focuses on all modes of transportation, including: traditional car travel; public transportation options (i.e., buses, shuttles, ferries, etc.); walking and biking: rail service; air service; and other multimodal transportation means. Since launching late last week, the survey has already surpassed 1,400 responses. The survey mean open through Sunday, June 9, 2021. The survey takes about 20 minutes to complete. Participants are asked to rank their top five goals for the county's transportation network, gauge how important different modes of travel are to them, and map out areas in the county in need of review for concerns like congestion, maintenance, or other transportation needs.

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The survey is accessible online in English and Spanish here:

- English Survey Link: <u>brunswickcountyctp.metroquest.com</u>
- Español / Spanish Survey Link: brunswickcountyctp-sp.metroquest.com

Thank you for your participation!



GSATS Home	TIP	2040 MTP	CMP	Title VI	Committees	Resources	NC	Photo Gallery	Q

NC

5

#### North Carolina

The 2010 Census reported continued growth for the area and, for the first time, the Myrtle Beach UZA (renamed the Myrtle Beach-Socastee SC/NC Urbanized Area) extended into the southern portions of Brunswick County, North Carolina. As a result, in 2012 GSATS entered into a memorandum of understanding with the North Carolina Department of Transportation (NCDOT), South Carolina Department of Transportation (SCDOT), Brunswick County, and the towns of Calabash, Carolina Shores, Holden Beach, Ocean Isle Beach, Shallotte, Sunset Beach, and Varnamtown. The effect of this memorandum was to create a bi-state MPO with expanded representation on the GSATS Policy Committee.

FY 2019 NC Annual List of Obligated Projects

FY 2020 NC Annual List of Obligated Projects

#### **Brunswick County CTP**

The NCDOT Transportation Planning Division in partnership with the Cape Fear Regional COG, GSATS MPO, and Brunswick County is in the process of updating the Comprehensive Transportation Plan (CTP) for Brunswick County. For more information on the progress of the CTP update visit the following website:

https://connect.ncdot.gov/projects/planning/Pages/CTP-Details.aspx?study\_id=Brunswick+County

As part of this planning initiative NCDOT is seeking public input on local transportation issues within Brunswick County by launching a survey. The survey can be completed on the following links in both English and Spanish.

English: https://brunswickcountyctp.metroquest.com/

Spanish: https://brunswickcountyctp-sp.metroquest.com/

The survey will remain open until June 9, 2021. Your participation and feedback is much appreciated.

<sup>5</sup> City of Southport Website: <u>https://cityofsouthport.com/brunswick-county-transportation-survey/</u>

<sup>6</sup> GSATS MPO Website: <u>https://gsats.org/nc/</u>

NCDOT - BRUNSWICK COUNTY COMPREHENSIVE TRANSPORTATION



# **Brunswick County opens transportation survey**



Brunswick County opens transportation survey

By WECT Staff Updated: Mar. 16, 2021 at 11:09 AM EDT  $() \boxtimes \forall 0 \square$ 

BOLIVIA, N.C. (WECT) - Brunswick County is encouraging residents, business owners, and visitors to participate in its Comprehensive Transportation Survey to aid county leaders in securing future transportation-related funding from the state.

County leaders say input from the survey will help shape the formation of the Brunswick County Transportation Plan, which will serve as a blueprint for the county's transportation network for the next 30 years.

The survey (linked below) focuses on all modes of transportation, including: traditional car travel; public transportation options (i.e., buses, shuttles, ferries, etc.); walking and biking; rail service; air service; and other multimodal transportation means.

"The more input we receive, the better we can communicate to the State about what Brunswick County's transportation needs are for future funding allocations," Planning Director Kirstie Dixon said. "Transportation is an integral factor in our communities' quality of life, so we are hopeful this survey will resonate and engage with several people in the months to come."

County officials say since launching late last week, the survey has already surpassed 1,400 responses. The survey will remain open through Sunday, June 9.

<sup>7</sup> WECT Newspaper Article: https://www.wect.com/2021/03/16/brunswick-county-opens-transportation-survey/

NCDOT - BRUNSWICK COUNTY COMPREHENSIVE TRANSPORTATION

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What does Brunswick County's transportation system look like in 30 years? You tell us! 🚗 🚲 🥽 🚈 🚶 🏹 🚊

Take 20 minutes to fill out the **#Brunsco** Comprehensive Transportation Survey. Find survey here (English / Español): brunswickcountync.gov/ctp-survey

# @NCDOT @NCDOT\_Ferry @NCDOT\_Scoast



<sup>8</sup> Brunswick County Twitter: <u>https://mobile.twitter.com/brunswickgovt/status/1389969437869101068?lang=ar-x-fm</u>

NCDOT - BRUNSWICK COUNTY COMPREHENSIVE TRANSPORTATION

THIS information sheet.

 CTP Survey – Brunswick County, its municipalities (including Bald Head Island), Cape Fear Rural Planning Organization, Grand Strand Area Transportation Study
 Metropolitan Planning Organization, and NCDOT have created a steering committee to start the Brunswick County Comprehensive Transportation Plan (CTP). The CTP steering committee wants feedback from residents and visitors of the county to help create the Vision, Goals, and Objectives as well as to guide the entire CTP process. Your input will help guide this plan. Please participate in THIS SURVEY or pick up a paper copy in the IPC/PO. The survey will be open until June 9, 2021.

A big THANK YOU to all who have participated thus far, the survey has received a significant number of responses (over 3,700!) which is unique for a survey of this type!



<sup>10</sup> Brunswick County Facebook: https://ne-np.facebook.com/202872636295/photos/a.10151404644791296/10157743074011296/

NCDOT - BRUNSWICK COUNTY COMPREHENSIVE TRANSPORTATION

PLAN101

<sup>&</sup>lt;sup>9</sup> Village of Bald Head Island: <u>https://villagebhi.org/villages\_voice/villages-voice-11/</u>



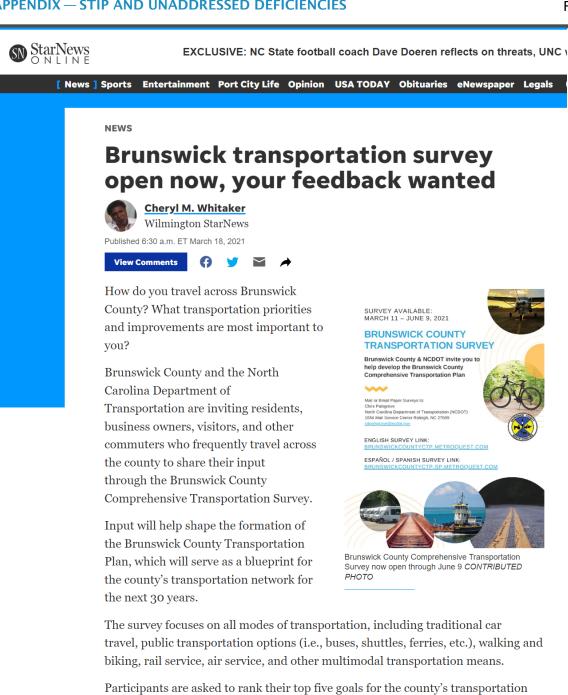
NCDOT - BRUNSWICK COUNTY COMPREHENSIVE TRANSPORTATION

<sup>&</sup>lt;sup>11</sup> Brunswick County Schools Facebook: <u>https://sw-ke.facebook.com/bcs.nc/posts/on-the-roads-brunswick-county-government-wants-your-feedback-on-how-to-make-our-/4025777437541873/</u>



<sup>12</sup> Brunswick County Emergency Services:

NCDOT - BRUNSWICK COUNTY COMPREHENSIVE TRANSPORTATION



network, gauge how important different modes of travel are to them and map out areas in the county in need of review for concerns like congestion, maintenance, or other transportation needs.

The survey is accessible online in English and Spanish:

English survey link: brunswickcountyctp.metroquest.com.

Español/Spanish survey link: brunswickcountyctp-sp.metroquest.com.

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<sup>13</sup> StarNews Online: <u>https://www.starnewsonline.com/story/news/2021/03/18/brunswick-transportation-survey-open-plan-future-</u> county-needs/4716512001/

NCDOT - BRUNSWICK COUNTY COMPREHENSIVE TRANSPORTATION

**PLAN104** 

# **Brunswick transportation survey** open now, your feedback wanted





Brunswick County Comprehensive Transportation Survey now open through June 9 CONTRIBUTED

Appendix Contents

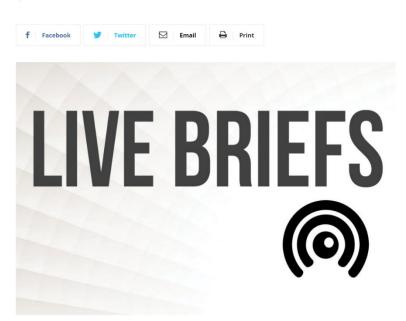


Home News & Politics 🗸 Arts & Culture 🖌 Brews & Bites 🖌 Community & Event

Home > Live Briefs

# Brunswick County seeks feedback from travelers, residents on transportation

By PCD Live Brief March 16, 2021



BRUNSWICK COUNTY – A new survey put out by Brunswick County and the N.C. Department of Transportation is asking residents what improvements they'd like to see in local transportation in the coming decades.

The Brunswick County Comprehensive Transportation **Survey** will help the county pen a 30-year plan for its transportation network.

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NCDOT - BRUNSWICK COUNTY COMPREHENSIVE TRANSPORTATION

E Appendix Contents

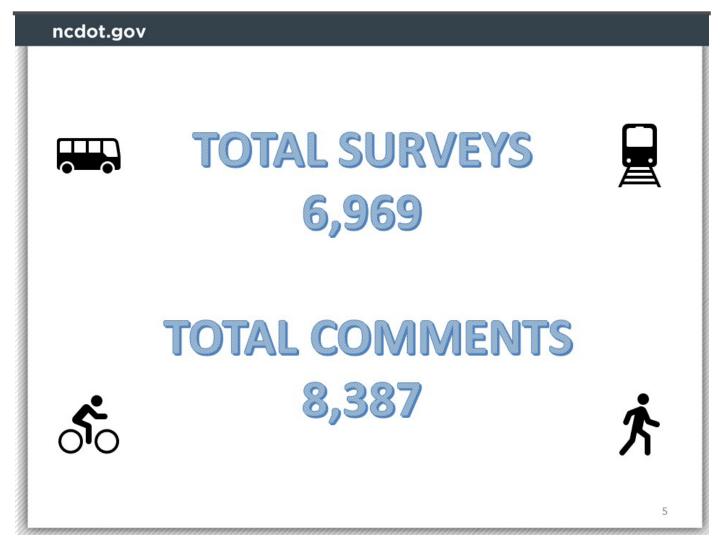
**PLAN**105

<sup>&</sup>lt;sup>14</sup> Port City Daily Newspaper: <u>https://portcitydaily.com/live-briefs/2021/03/16/brunswick-county-seeks-feedback-from-travelers-residents-on-transportation/</u>

# **Goals, and Objectives Survey Results**

There was a lot of data received from the survey: 6,969 total surveys, 185002 data points and 8,387 total comments. Therefore, it is impossible to include all results. Therefore, the CTP engineers created a PPT to summarize the results to the steering committee, and this is what was presented:

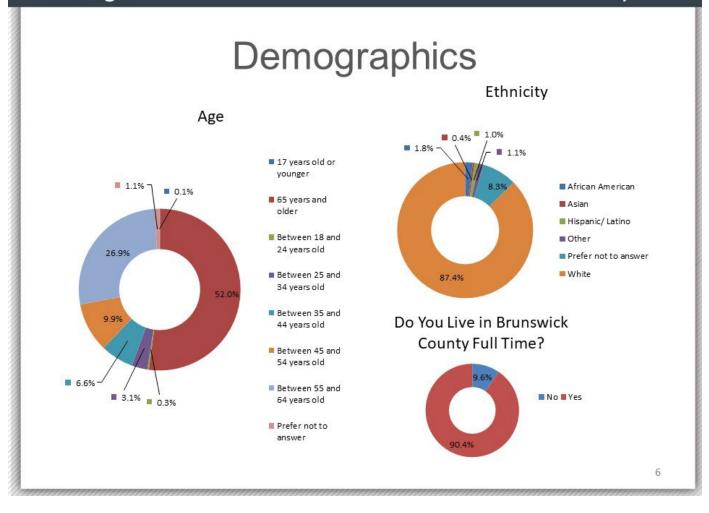






### ncdot.gov







PLAN108

### ncdot.gov **Brunswick County CTP** Demographics Vehicles in Household Household Size 2.4% 1.2% 9.5% 7.1% 14.7% 22.3% 1 1 10.2% 2 2 3 4 **3**+ 5 6+ 69.6% 63.0% 7

NCDOT - BRUNSWICK COUNTY COMPREHENSIVE TRANSPORTATION

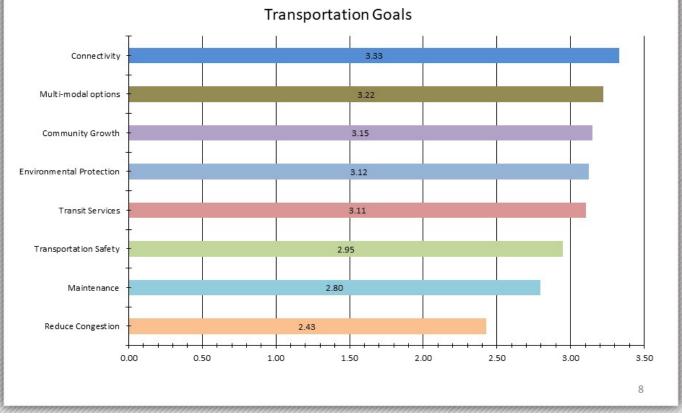


PLAN109

### ncdot.gov



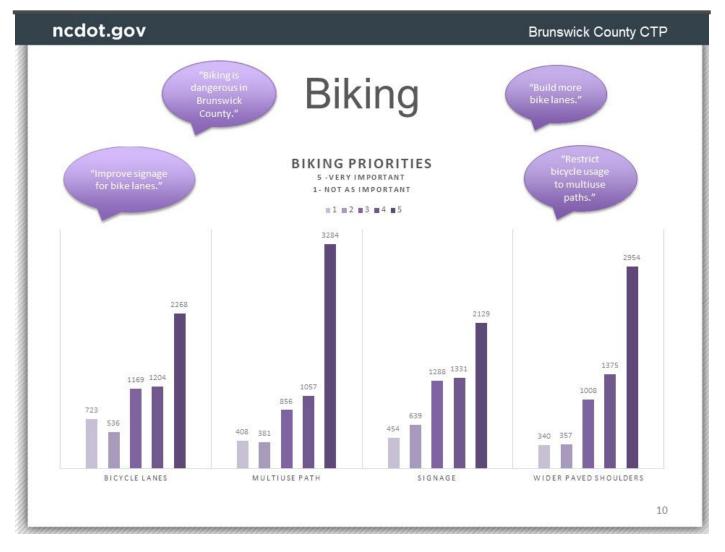
# Rank Your Transportation Goals



NCDOT - BRUNSWICK COUNTY COMPREHENSIVE TRANSPORTATION



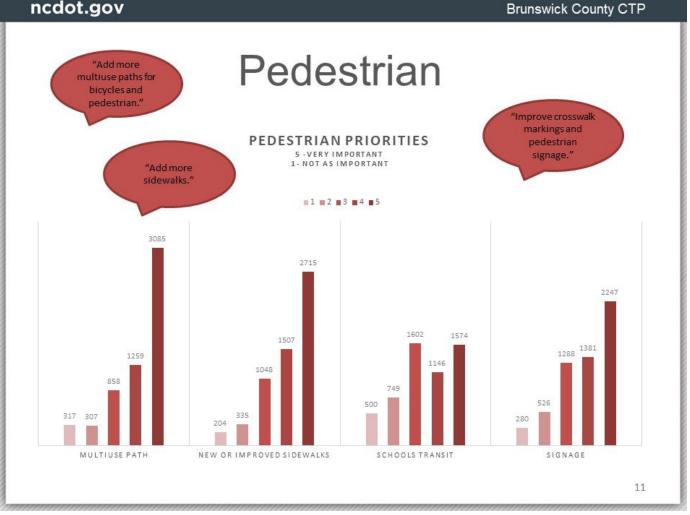
### FEBRUARY 2023





PLAN112

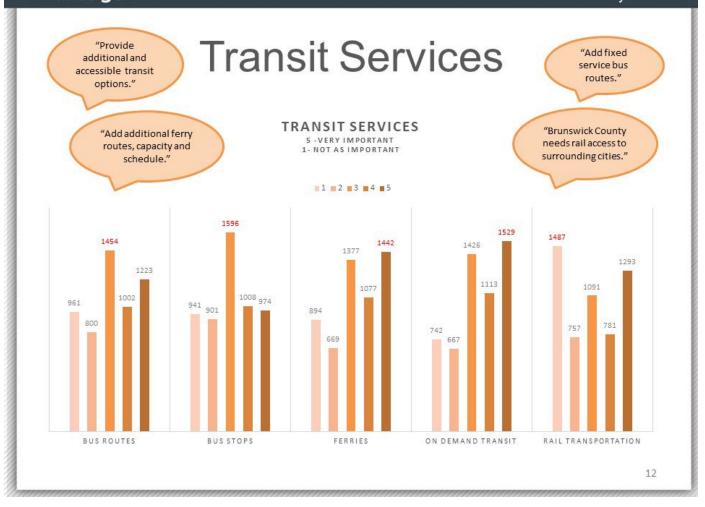
### ncdot.gov



**PLAN**113

### ncdot.gov

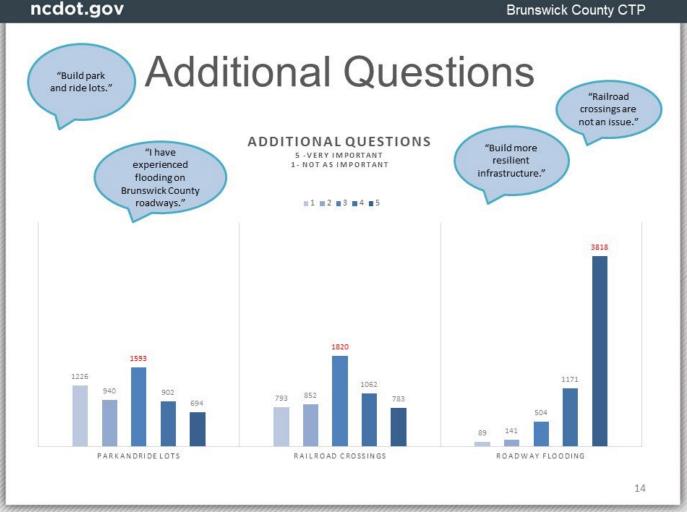




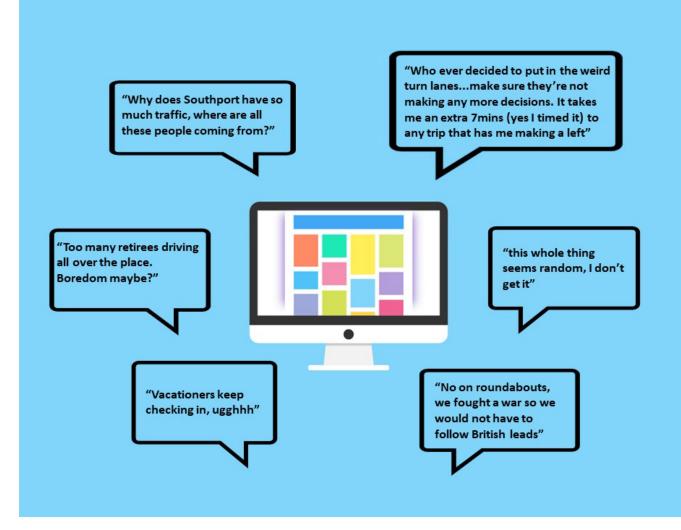
PLAN114

#### ncdot.gov Brunswick County CTP **Transportation Safety** "Build more roundabouts." "Add turn lanes on existing facilities." "Improve signal "No more TRANSPORTATION SAFETY timing and roundabouts or "Drivers go 5 - VERY IMPORTANT coordination." traffic circles, 1-NOTASIMPORTANT too fast." they cause congestion." 1 2 3 4 5 2968 2685 2433 1642 1614 1477 1438 1191 1286 1308 944 791 597 355 306 271 317 233 215 119 INTERSECTION MULTIMODAL SAFETY OTHER TURNING LANES 13

NCDOT - BRUNSWICK COUNTY COMPREHENSIVE TRANSPORTATION

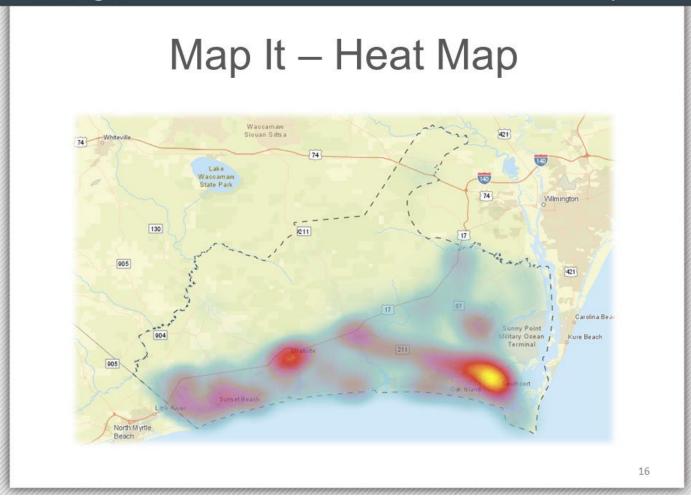


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### ncdot.gov

**Brunswick County CTP** 



PLAN118

### ncdot.gov

### Brunswick County CTP

# Map It Summary

### Congestion

5,193 Markers, *1,737 Comments* Morning – 211 Lunch – 148 Afternoon – 304 Evening – 80 All Day – **1853** 

### **Pedestrian Needs**

1,705 Markers, *540 Comments* Ped Signal Needed – 51 New Sidewalk – <del>402</del> Improve Existing Sidewalk – 84 Multiuse Trail – 235 Crosswalk Needed – 132 Other – 28

### Maintenance

Transit Needs

Bus Stop - 52

Other-40

3,161 Markers, *1,349 Comments* Guard Rail – 17 Paint Striping – 65 Rutting – 107 Shoulder Drop Off – 135 Potholes – 697 Other – 308

1,487 Markers, 488 Comments

Ferries including passenger only - 62

New Buse Routes - 315

On Demand Transit - 94

Bus Route Modification - 23

Rail Transportation - 105

Park and Ride Lot – 70

#### **Bicycle Needs**

3,050 Markers, *889 Comments* Bike Lane – 994 Bike Parking – 20 Multiuse Trail – 392 Wide Outside Lane – 52 Wider Paved Shoulder – 166 Other – 28

### Accidents

1,750 Markers, 876 Comments

17

NCDOT - BRUNSWICK COUNTY COMPREHENSIVE TRANSPORTATION

### ncdot.gov Brunswick County CTP Major Themes from the Map It Section Almost a 1,000 comments naming locations of congestion NC 211, Main St in Shallotte, US 17, NC 87, NC 904, NC 133, NC 130, US 74, school entrances, downtowns 597 comments naming accident locations or near misses · US 17, Village Point Rd, Stone Chimney Rd, NC 211, NC 87, NC 904, Hickman Rd Over 1,200 comments related to bike lanes, multiuse paths or sidewalks 50 At the beaches and to/from beaches, Southport, along NC 211, NC 133, to shopping, schools and other points of interest 996 comments on specific road maintenance or repaving needs · NC 130, NC 133, NC 179, NC 211, US 17, Oak Island, Supply, Southport 175 comments requesting public transit in Brunswick County • To Wilmington, the airport, government facilities, the community college, beaches, along US 17 18

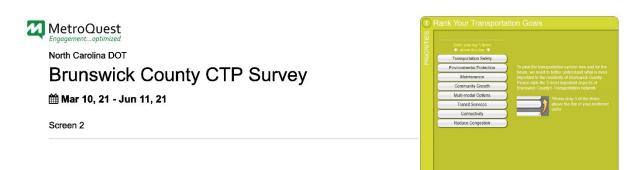
Results printed straight from MetroQuest:

APPENDIX — STIP AND UNADDRESSED DEFICIENCIES

**FEBRUARY 2023** 

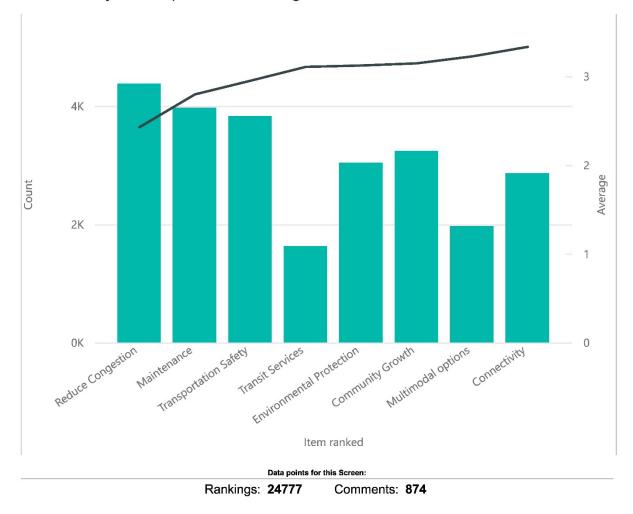
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Brunswick County CTP Survey - Data Center - MetroQuest Studio



→ DISTRIBUTIONS → AVERAGE RANK → POPULARITY → ALL

Priorities by both responses and average rank.



C MetroQuest Studio

https://studio.metroquest.com/#/Data?customer=103&project=4720

1/2

NCDOT - BRUNSWICK COUNTY COMPREHENSIVE TRANSPORTATION

E Appendix Contents

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North Carolina DOT Brunswick County CTP Survey

🛗 Mar 10, 21 - Jun 11, 21 | Screen 2

+ Below: Each ranking item, showing how often each item was ranked in each position, ordered by average. Note that 1 is the highest rank.

Brunswick County CTP Survey - Data Center - MetroQuest Studio

Reduce Con	gestion	Maintena	nce	Transportatio	on Safety	Transit Se	rvices
1490 (34%)	1	870 (22%)	1	742 (20%)	1	304 (19%)	1
1053(24%)	2	943 (24%)	2	819 (22%)	2	289 (18%)	2
759 (17%)	3	823 (21%)	3	807 (21%)	3	325 (20%)	3
569 (13%)	4	737 (19%)	4	771 (20%)	4	338 (21%)	4
480 (11%)	5	571 (14%)	5	665 (17%)	5	368 (23%)	5
Times ranked: 4351		Times ranked: 3944		Times ranked: 3804		Times ranked: 1624	1
Average rank: 2.425	i	Average rank: 2.796		Average rank: 2.94	7	Average rank: 3.109	•
Environmental	Protect	Community	Growth	Multimodal	options	Connect	ivity
597 (20%)	1	488 (15%)	1	322 (16%)	1	350 (12%)	1
523 (17%)	2	618 (19%)	2	328 (17%)	2	488 (17%)	2
555 (18%)	3	706 (22%)	3	401 (20%)	3	612 (21%)	3
606 (20%)	4	752 (23%)	4	403 (21%)	4	671 (24%)	4
742 (25%)	5	656 (20%)	5	503 (26%)	5	727 (26%)	5
				Times ranked: 1957	•	Times ranked: 2848	
Times ranked: 3023		Times ranked: 3220		Times fanked. 1957		Times ranked, 2040	

C MetroQuest Studio

https://studio.metroquest.com/#/Data?customer=103&project=4720

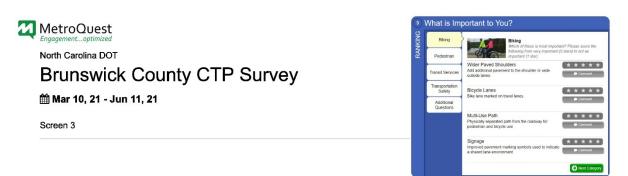
2/2

NCDOT - BRUNSWICK COUNTY COMPREHENSIVE TRANSPORTATION

E Appendix Contents

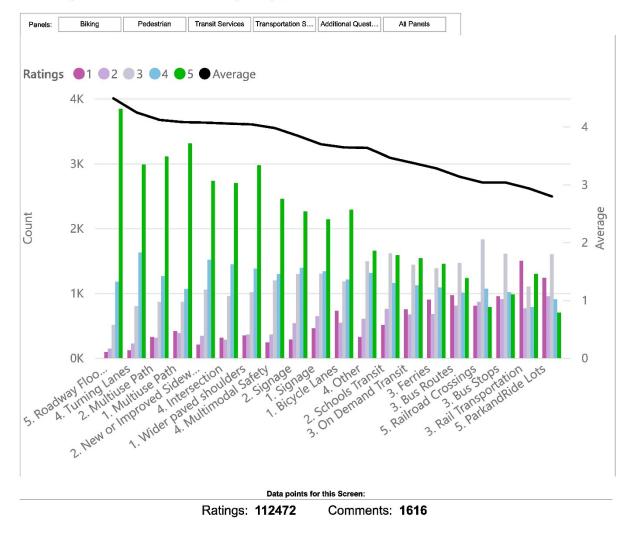
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Brunswick County CTP Survey - Data Center - MetroQuest Studio



→ DISTRIBUTIONS → AVERAGE RATINGS → POPULARITY → TABLE

Rating distributions and averages by panel.



C MetroQuest Studio

https://studio.metroquest.com/#/Data?customer=103&project=4720

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NCDOT - BRUNSWICK COUNTY COMPREHENSIVE TRANSPORTATION

Appendix Contents

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Brunswick County CTP Survey - Data Center - MetroQuest Studio

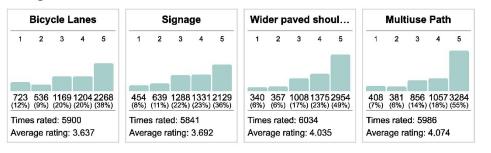


North Carolina DOT Brunswick County CTP Survey

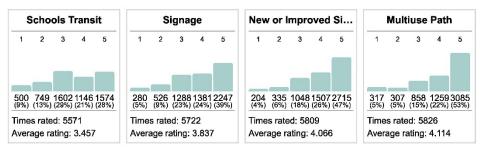
🛗 Mar 10, 21 - Jun 11, 21 Screen 3

+ Below: Each rating item, showing how many times each item was given each rating, sorted by average rating.

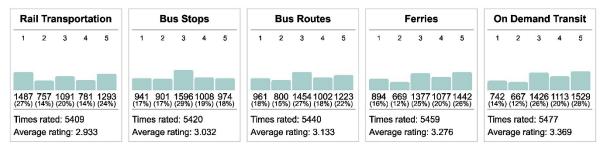
#### Biking



#### Pedestrian



#### Transit Services



#### Transportation Safety

C MetroQuest Studio

https://studio.metroquest.com/#/Data?customer=103&project=4720

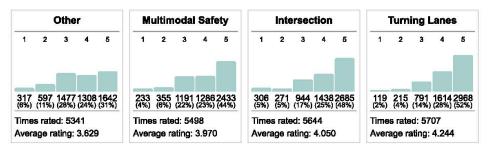
2/3

NCDOT - BRUNSWICK COUNTY COMPREHENSIVE TRANSPORTATION

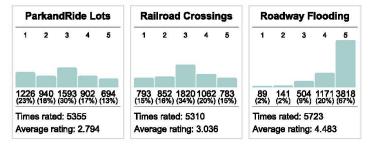
E Appendix Contents

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Brunswick County CTP Survey - Data Center - MetroQuest Studio



#### **Additional Questions**



C MetroQuest Studio

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NCDOT - BRUNSWICK COUNTY COMPREHENSIVE TRANSPORTATION

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Brunswick County CTP Survey - Data Center - MetroQuest Studio





#### → MAP MARKERS

A map showing the distribution of map markers by type.

Data points for this Screen: Marker attributes: 61943

Comments: 5879

C MetroQuest Studio

https://studio.metroquest.com/#/Data?customer=103&project=4720

Markers: 16346

1/2

NCDOT - BRUNSWICK COUNTY COMPREHENSIVE TRANSPORTATION

Appendix Contents

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North Carolina DOT Brunswick County CTP Survey

🛗 Mar 10, 21 - Jun 11, 21 Screen 4

◆ Below: Each marker type, showing how many markers have been dropped, plus any additional input through dropdowns.

Transit_Needs	Pedestrian_N	Accidents	Bicycle_Needs	Maintenance	Congestion
Markers: 1487	Markers: 1705	Markers: 1750	Markers: 3050	Markers: 3161	Markers: 5193
Question 1:	Question 1:		Question 1:	Question 1:	Question 1:
105 Rail Transport	51 Pedestrian Si		166 Wider Paved	135 Shoulder Dro	5 Time of Day
70 Park and Ride	28 Other		52 Wide Outside	107 Rutting	211 Morning
40 Other	402 New Sidewalk		28 Other	697 Pothole	148 Lunch
94 On Demand T	235 Multiuse Trail		392 Multiuse Trail	65 PaintStriping	80 Evening
315 New Bus Route	1 Improvement		1 Improvement	308 Other	1853 All Day
62 Ferries includi	84 Improve Existi		20 Bike Parking	17 Guard Rail	304 Afternoon
52 Bus Stop	132 Crosswalk Ne		994 Bike Lane		Question 2:
23 Bus Route Mo	Question 2:		Question 2:		1984 Year Round
Question 2:	236 Medium Priority		428 Medium Priority		7 Winter
299 Medium Priority	9 Lowest Priority		19 Lowest Priority		4 Time of Year
18 Lowest Priority	599 Highest Priority		2 Importance		513 Summer
1 Importance			1115 Highest Priority		20 Spring
372 Highest Priority					2 Fall

Brunswick County CTP Survey - Data Center - MetroQuest Studio

© MetroQuest Studio

https://studio.metroquest.com/#/Data?customer=103&project=4720

2/2

NCDOT - BRUNSWICK COUNTY COMPREHENSIVE TRANSPORTATION

E Appendix Contents

### **Public Involvement of Draft CTP**

In addition to the G&O Survey, another survey was released near the end of the CTP process. While normally multiple workshops would be held at this time, it seemed more feasible to pursue the option of a survey due to complications with COVID-19 near the public involvement phase. Email lists from the goals and objectives survey, social media, and the steering committee all played a big part in outreach for this survey. The survey displayed the recommendations developed by the CTP process for open comments. During this survey, there were 202 participants that provided feedback.

### Draft CTP Public Involvement Results

[Insert or describe resources used for the Draft CTP Public Involvement- can be images if needed]

[Insert or summarize feedback from the Draft CTP Public Involvement- can be images if needed]



### STIP PROJECTS AND UNADDRESSED DEFICIENCIES

This section presents project proposals for each mode of transportation in the Brunswick County CTP. NCDOT adopted a "Complete Streets" policy in July 2009, and it was updated in 2019. The policy directs the department to consider and incorporate several modes of transportation when building new projects or making improvements to existing infrastructure. Under this policy, the department will collaborate with municipalities and communities during the planning and design phases of projects. Together, they will decide how to provide the transportation options needed to serve the community and complement the context of the area. The benefits of this approach include:

- Making it easier for travelers to get to their destinations;
- Encouraging the use of alternative forms of transportation;
- Building more sustainable communities;
- Increasing connectivity between neighborhoods, streets, and transit systems;
- Improving safety for pedestrians, cyclists, and motorists.

Complete streets are streets designed to be safe and comfortable for all users, including pedestrians, bicyclists, transit riders, motorists and individuals of all ages and capabilities. These streets generally include sidewalks, appropriate bicycle facilities, transit stops, right-sized street widths and context-based traffic speeds. These streets are well-integrated with surrounding land uses. The complete street policy and concepts were used in the development of the CTP. The CTP proposes projects that include multi-modal project proposals as documented in the project sheets within this section. Refer to the project sheets for recommended cross sections for all project proposals and refer to the NCDOT Cross sections for more detailed information on the typical sections.

### **STIP Projects**

As discussed in the Highway Analysis section, the capacity deficiency analysis of the highway element of the CTP, the annual average daily traffic (AADT) in 2017 and the projected vehicles per day (vpd) in 2045 were compared to the 2017 Level of Service (LOS) D capacity for each facility. The future year analysis assumed that projects listed in the 2020–2029 State Transportation Improvement Program (STIP) were built. Refer to project sheets, list and inventory table for further information. These projects include:

- NC 211; <u>H090806-C</u>, TIP R-5947: Widen roadway from SR 1112 (Sunset Harbor Road) to NC 906 (Midway Road). Cost to NCDOT \$34,000,000.
- Carolina Bays Parkway Extension; <u>H090237-A</u>, R-5876. New location project from South Carolina State line to US 17 at NC 130. Recommendation is to construct a freeway on new location.

### **SPOT Projects**

There were projects submitted into SPOT throughout the years that did not score high enough to be placed in the STIP and are not funded. However, they do have cost associations. These projects were entered into the CTP because they were of importance to the locals and serve a purpose in enhancing the transportation network in the county. Refer to project sheets, list and inventory table to further information.

- NC 906 (Midway Rd); <u>H090236-A</u>, TIP 3434: Widen to 3 lanes from NC 211 to Gilbert Rd. Cost to NCDOT \$26,800,000.
- NC 211; <u>BRUN30014-H</u> (similar to former SPOT ID H090310), TIP 5021: Widen to multi-lanes from SR 1500 (Midway Road) to NC 87.
- NC 906 (Midway Road/Galloway Road); <u>H090236-B</u>: Widen roadway from SR 1501 (Gilbert Road) to US 17.
- US 74-76; <u>H090287-AF</u>: Upgrade roadway to interstate standards from Brunswick County line to NC 87 (Maco Road).

NCDOT - BRUNSWICK COUNTY COMPREHENSIVE TRANSPORTATION

- US 74-76; <u>H090287-AG</u>: Upgrade to interstate standards from NC 87 (Maco Road) to WMPO Boundary line.
- NC 904 (Seaside Road); <u>H090804</u>: Widen from US 17 to NC 179.
- NC 211; <u>H090806-A</u>, Widen from US 17 to SR 1112 (Sunset Harbor Road).
- NC 211; H090806-C, Widen from SR 1112 (Sunset Harbor Road) to NC 906 (Midway Road).
- NC 179 (Beach Drive SW); <u>H140870</u>, Widen from South Carolina State line to SR 1163 (Old Georgetown).
- NC 179 Bus; <u>H140888</u>, Widen from US 17 Bus to SR 1184 (Ocean Isle Beach Road).
- NC 130 (Holden Beach Road); <u>H141126</u>, Widen from SR 1357 (Smith Ave) to the end of State Maintenance.
- NC 130 (Whiteville Road); <u>H141142</u>, Widen from SR 1320 (McMilly road)to NC 179 (Village Road).
- NC 179 (Beach Drive SW); <u>H141146</u>, Widen from NC 904 (Seaside Road) to SR 1184 (Ocean Isle Beach Road).
- NC 179 (Old Georgetown Road); <u>H141156</u>, Widen from NC 904 (Seaside Road) to NC 179 Bus (Beach Drive).
- Bridge Road Extension; <u>H141158</u>, New location project from SR 1349 (Bridgers Road) to US 17 Bus (Main Street).
- Antenna Farm Road; <u>H150504</u>, New location project from NC 87 to NC 906 (Midway Road).
- NC 904 (Longwood Road NW); <u>H171352</u>, Widen from US 17 to Etheridge Road (SR 1308).
- Smith Ave Extension; <u>H185138</u>, New location from Smith Avenue to NC 130.
- NC 133 (Long Beach road); <u>H193078</u>, Widen from SR 1969 (Old Long Beach Road SE) to SR 1210 (Vanessa Drive).

### **Unaddressed Deficiencies**

During the process of the CTP, the roads were studied to identify deficiencies. Some of these deficiencies have physical or environmental restrictions that make them unfeasible to propose a project. There were no unaddressed deficiencies identified in this CTP.

PLAN130

### **CTP PROJECTS**

The following pages contain project sheets for each recommendation, organized by CTP modal element. The information provided in the problem statement is intended to help support decisions made in the NEPA/SEPA process.

[Create a list of Projects that have project sheets and create placeholder pages for those project sheets to be included when turned into a pdf]

Highway Project Sheets location: S:\Planning\_Coastal\CTPs\BrunswickCounty\_CTP\Plan Documentation\Working \_Recommend Sheets\RecommendationSheets\_10.31.22

Bike and Pedestrian Project Sheet location: S:\Planning\_Coastal\CTPs\BrunswickCounty\_CTP\Plan Documentation\Working \_Recommend Sheets\BikePedProjectSheet\_11.3.22

Bridge/Intersection/Interchange Project Sheets location: S:\Planning\_Coastal\CTPs\BrunswickCounty\_CTP\Plan Documentation\Working \_Recommend Sheets\Bridge Intersection Interchange Template

[Insert Project Sheets]

NCDOT - BRUNSWICK COUNTY COMPREHENSIVE TRANSPORTATION



PLAN132

### I -140 Connector

From U.S. 17 at US 17 BUS to US 17 North of N.C. 87

Local ID: BRUN20002-H

Purpose: Congestion

Improvement: New Location

### **Identified Need**

With segments of US 17 exceeding capacity in the FY, the Carolina Bays Prky Ext proposal in south of the county, this new roadway was recommended.

### Recommendation

**Proposal At A Glance** 

**Highway Class** 

Facility Type

**Typical Section** Section Options

Length (miles)

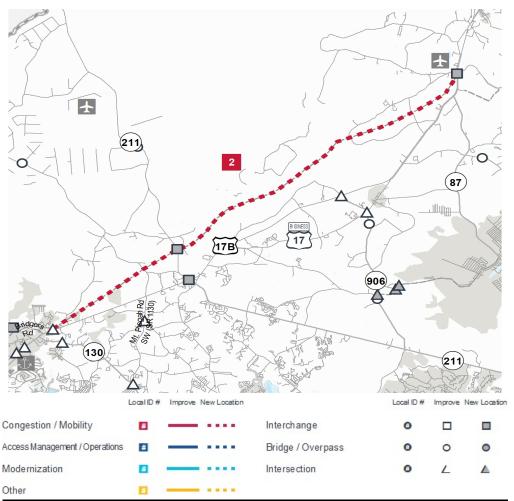
Existing ROW

Safety Risk Score

(feet)

New location road identified as a congestion/mobility project. Roadway upgrade proposed on the Wilmington MTP on p67 & p95 (RW-20). The roadway will connect at the intersection of CBPE/US 17 and continue north, tying back into US 17 at or near NC 87, with a cross section 4A.

19.39



nce	Proposal Data:	2017 Base Year	2045 Futi	ure Year
Congestion & Mobility	New Location	Existing	Without Proposal	With Proposal
, Freeway	Facility Type	-	-	Freeway
	Travel Lanes	-	-	4
04 A	Volume (vpd)	-	-	19000
06 A	Capacity (vpd)	-	-	63500
19 39				

Capacity Data:

Facility will be Approaching Capacity (>80%)

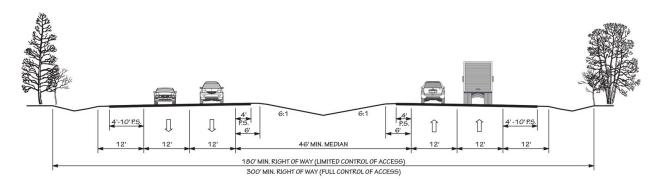
Facility will be Over Capacity (>=100%)



## **Typical Section Options:** 06 A

### **TYPICAL SECTION No. 4A**

4 LANE DIVIDED (46' DEPRESSED MEDIAN) WITH PAVED SHOULDERS



POSTED SPEED 45-70 MPH

### Project History/Linkage to Other Projects

There are no multimodal recommendations being made along this roadway since it is being proposed as a freeway project.

If I-140 Connector is built in the future, it will alleviate congestion on many segments of US 17 Bus. For example, congestion on US 17 Bus from Forest Drive to US 17 shown on the BY V/C is no longer a congestion issue on FY V/C map when I-140 Connector is incorporated into the network. For additional segment examples, refer to V/C maps.

US 17 and NC I-140 merge into the jurisdiction of this CTP from Wilmington MPO area. There is a roadway upgrade being proposed on the MTP on page 67 and page 95 (RW-20).

### **CTP Goal Analysis**

This project supports the following goals and objectives:

Goal: Create a more efficient transportation system through improved connectivity, capacity and operations.

Objectives: Consider future projects and locations based on policies of Environmental Justice (EJ) Communities.

Goal: Support growth through a transportation network that serves local, inter- and intra- regional accessibility and mobility needs for both people and goods.

Objectives: Promote reductions in recurring congestion through transportation capacity, access management, and policy improvements.

Objectives: Increase the accessibility and mobility of people and freight within the region and to other areas.

Goal: Promote a safer and more secure transportation network through crash reduction, enhanced reliability

and predictability, and improved emergency coordination.

Goal: Extend the life of the transportation system by fostering a sustainable and maintainable system that addresses the long-term needs of the region.

Objective: Study emerging transportation management and operations technology, including electric vehicle charging locations, connected/autonomous vehicle infrastructure and broadband infrastructure.

### Vision Goals & Objectives Survey

There were no comments for this particular project in the Brunswick County CTP survey since it is a new recommendation. However, since this new project will help alleviate congestion on US 17 - the US 17 project had 798 comments in support of upgrades to the roadway. The survey was launched on March 10, 2021 and closed on June 11, 2021. There was an English and Spanish version of the survey. A total of 6,969 total participants created a total of 8,387 comments.

### Potential Impact

Land Use/CUR: The land use along the proposed roadway is mostly rural in nature, therefore the proejct will limit impacts with very little development. Future housing development is expected to come into

the area, specifically total of 348 housing units south of this road.

### Additional Information - Environmental

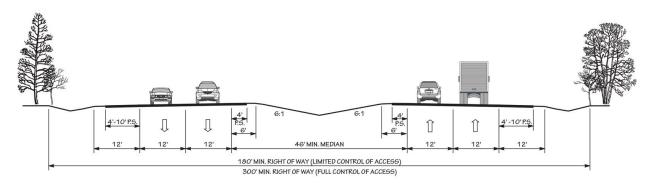
All environmental data in the database was considered. This Project is within 150 feet of:

- 66 Coastal Region Evaluation Of Wetland Significance Feature(s)
- 19 Flood Hazard Area Feature(s)
- 5 Landscape Habitat Indicator Guild Feature(s)

## **Typical Section Options:** 06 A

### **TYPICAL SECTION No. 4A**

4 LANE DIVIDED (46' DEPRESSED MEDIAN) WITH PAVED SHOULDERS



### POSTED SPEED 45-70 MPH

- 1 Major River Feature(s)
- 6 Managed Area Feature(s)
- 14 Natural Heritage Element Occurrence Feature(s)
- 2 Natural Heritage Natural Area Feature(s)
- 81 Wetland Feature(s)
- 30 River And Stream Feature(s)
- 23 Lake And Pond Feature(s)
- 1 Protected Area Feature(s)
- 1 Quality Monitored River And Stream Feature(s)
- 4 Target Local Watershed Feature(s)

### Additional Information - Title VI

- Between 25% and 50% identify as 65+
- Between 25% and 50% identify as African American
- Between 0% and 5% identify as Asian
- Between 5% and 15% identify as Hispanic and Latino
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Asian and Pacific Islander
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Indo-European
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Other
- Between 0% and 5% identify as Over 18 with Limited English Proficiency (LEP) - Spanish
- 0% identify as Native American
- Between 5% and 10% identify as Some Other Race
- Between 5% and 10% identify as Two of More Races

- Between 15% and 25% identify as Below Poverty Line
- Between 0% and 15% identify as Households with No Car

### U.S. 17 BUS

From N.C. 130 (Whiteville Road) to U.S. 17

Local ID: BRUN20003-H

Purpose: Congestion

Improvement: Improve Existing

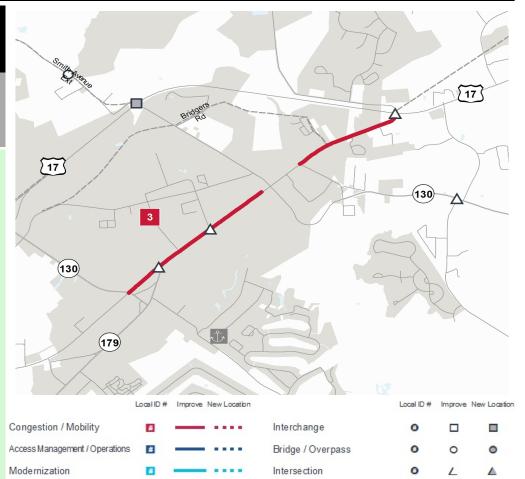
### Identified Need

The main identified need is the roadway is overcapacity in both base year (BY) and future year (FY).

#### Recommendation

This is a congestion and mobility project. Currently the roadway is a 3 lane road with turning lane. Road has 11 ft lanes and some portions are 12 ft lanes. There are no shoulders on this road. The recommendation is to bring the road to cross section 4D.

\_



Proposal At A Glance			
Highway Class	Congestion & Mobility		
Facility Type	Boulevard		
Typical Section	04 D		
Section Options	4A		
Length (miles)	1.7		
Existing ROW (feet)	80-100		
Safety Risk Score	89		

Other	#		
Proposal Data:	2017 Base Year	2045 Futu	ire Year
Improved Route	<u>Existing</u>	Without Proposal	<u>With Proposal</u>
Facility Type	Major Thoroughfare 2-lane	Major Thoroughfare 2-lane	Boulevard
Travel Lanes	2	2	4
Volume (vpd)	4828-19587	5900-26800	2700-27600
Capacity (vpd)	12300-12700	12300-12700	27200

Capacity Data:	<u>Year</u>
Facility will be Approaching Capacity (>80%)	2017
Facility will be Over Capacity (>=100%)	2017

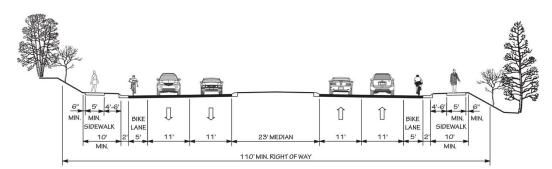


### **Typical Section Options:**

### 4A

### **TYPICAL SECTION No. 4D**

4 LANE DIVIDED (23' RAISED MEDIAN) WITH CURB & GUTTER, BIKE LANES, AND SIDEWALKS



POSTED SPEED 35-45 MPH

### Project History/Linkage to Other Plans

Bike facilites are recommended along US 17 Bus from NC 130 to Holden Beach Road. This road is along the East Coast Greenway that connects 15 states and 450 cities and towns for 3,000 miles from Maine to Florida to foster safe walking and biking route. Refer to the plan for further information

There are many segments along US 17 Bus where there was congestion issues in BY. With upgrade recommendations being made along US 17 Bus and surrounding roadways, many of the congestion issues are alleviated from the roadway. Refer to BY and FY V/C maps to view the segments where congestion has been alleviated.

### CTP Goal Analysis

This project supports the following goals and objectives:

Objectives: Promote reductions in recurring congestion through transportation capacity, access management, and policy improvements.

Objective: Limit expansion of the roadway network to the most necessary projects that best address identified issues.

Objective: Support a fully integrated multimodal network that advances the concept of complete streets.

Objectives: Expand and maintain a network of bicycle, pedestrian, and transit facilities that connects homes, activity centers, and complementary amenities.

### Vision Goals & Objectives Survey

There were 157 comments on US 17 in the Brunswick County CTP survey. Comments mentioned controlling access, congestion, maintenance issues and the desire for bicycle lanes and sidewalks or a multiuse path.The survey was launched on March 10, 2021 and closed on June 11, 2021. There was an English and Spanish version of the survey. A total of 6,969 total participants created a total of 8,387 comments.

### Potential Impact

Land Use/CUR: This is a roadway mostly surrounded by commercial development.

### Additional Information - Environmental

All environmental data in the database was considered. This Project is within 150 feet of:

- 1 Ambient Water Quality Monitoring Site(s)
- 6 Benthic Habitat Feature(s)
- 2 Coastal Region Evaluation Of Wetland Significance Feature(s)
- 2 Fish Nursery Area Feature(s)
- 3 Flood Hazard Area Feature(s)
- 2 Hazard Substance Disposal Site(s)
- 1 Landscape Habitat Indicator Guild Feature(s)
- 1 Managed Area Feature(s)
- 5 Natural Heritage Element Occurrence Feature(s)
- 6 Wetland Feature(s)
- 2 River And Stream Feature(s)
- 1 Lake And Pond Feature(s)
- 1 Quality Monitored River And Stream Feature(s)
- 1 Target Local Watershed Feature(s)

### Additional Information - Title VI

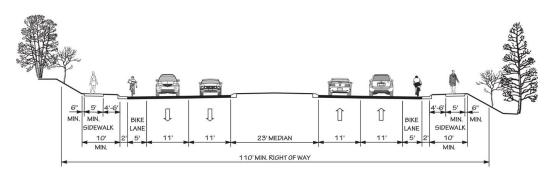
- Between 25% and 50% identify as 65+
- Between 25% and 50% identify as African American
- Between 0% and 5% identify as Asian

### **Typical Section Options:**

#### 4A

### **TYPICAL SECTION No. 4D**

4 LANE DIVIDED (23' RAISED MEDIAN) WITH CURB & GUTTER, BIKE LANES, AND SIDEWALKS



POSTED SPEED 35-45 MPH

- Between 5% and 15% identify as Hispanic and Latino
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Asian and Pacific Islander
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Indo-European
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Other
- Between 0% and 5% identify as Over 18 with Limited English Proficiency (LEP) - Spanish
- Between 5% and 15% identify as Native American
- Between 5% and 10% identify as Some Other Race
- Between 5% and 10% identify as Two of More Races
- Between 25% and 50% identify as Below Poverty Line
- Between 0% and 15% identify as Households with No Car

#### U.S. 17 BUS (Old Ocean Hwy) From U.S. 17 to SR 1501 (Gilbert Road) Local ID: BRUN20039-H Purpose: Congestion Improvement: Improve Existing 17 **Identified Need** 39 The main identified need of the roadway is congestion. The roadway 17B is approaching capacity in future year (FY). Recommendation The recommendation is to widen US 17 Old Ocean Hwy to 4 lanes from US 17 to SR 1501 (Gilbert Rd). The road is currently 2 lanes. This route includes school/daycare, church and health care facilities. A sidewalk is also being recommended to increase connectivity between these facilities. Local ID # Local ID # Improve New Location Improve New Location Congestion / Mobility Interchange # 0 Access Management / Operations Bridge / Overpass # 0 0 0 Modernization Intersection 0 L # \_ . Proposal At A Glance Highway Class Congestion &

Highway Class	Congestion & Mobility
Facility Type	Major Thoroughfare Multi-lane
Typical Section	04 B
Section Options	-
Length (miles)	0.85
Existing ROW (feet)	60-180
Safety Risk Score	-

Other	*		
Proposal Data: 2017 Base Year 2045 Future Yea		cure Year	
Improved Route	Existing	<u>Without Proposal</u>	With Proposal
Facility Type	Major Thoroughfare 2-lane	Major Thoroughfare 2-lane	Major Thoroughfare Multi-lane
Travel Lanes	2	2	4
Volume (vpd)	7549	20500	23000
Capacity (vpd)	15900	32800	32800

Capacity Data:	<u>Year</u>
Facility will be Approaching Capacity (>80%)	2045
Facility will be Over Capacity (>=100%)	2045

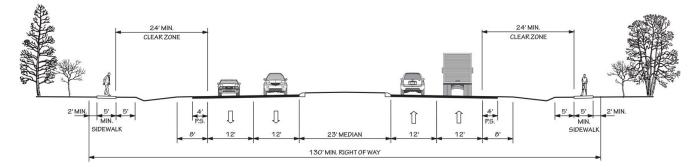


### **Typical Section Options:**

None

### **TYPICAL SECTION No. 4B**

4 LANE DIVIDED (23' RAISED MEDIAN) WITH PAVED SHOULDERS AND SIDEWALKS



POSTED SPEED 35-55 MPH

### Project History/Linkage to Other Projects

Sidewalk proposal along US 17 Business from US 17 to Gilbert Road. This route includes school/day care, church and healthcare facilities. A sidewalk is being recommended to increase connectivity between these facilities.

### **CTP Goal Analysis**

This project supports the following goals and objectives:

Objectives: Promote reductions in recurring congestion through transportation capacity, access management, and policy improvements.

Objective: Limit expansion of the roadway network to the most necessary projects that best address identified issues.

### Vision Goals & Objectives Survey

There were no comments for this particular project in the Brunswick County CTP survey. The survey was launched on March 10, 2021 and closed on June 11, 2021. There was an English and Spanish version of the survey. A total of 6,969 total participants created a total of 8,387 comments.

### Potential Impact

Land Use/CUR: This is a roadway mostly used by students attending the Center of Applied Sciences and Technology. There are other businesses and churches on this route as well.

### Additional Information - Environmental

All environmental data in the database was considered. This Project is within 150 feet of:

- 2 Coastal Region Evaluation Of Wetland Significance Feature(s)
- 2 Wetland Feature(s)

- 1 River And Stream Feature(s)
- 2 Target Local Watershed Feature(s)

### Additional Information - Title VI

- Between 0% and 25% identify as 65+
- Between 0% and 25% identify as African American
- Between 0% and 5% identify as Asian
- Between 5% and 15% identify as Hispanic and Latino
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Asian and Pacific Islander
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Indo-European
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Other
- Between 0% and 5% identify as Over 18 with Limited English Proficiency (LEP) Spanish
- Between 5% and 15% identify as Native American
- Between 5% and 10% identify as Some Other Race
- Between 1% and 5% identify as Two of More Races
- Between 15% and 25% identify as Below Poverty Line
- Between 0% and 15% identify as Households with No Car

### U.S. 17

From Old Ocean Highway to Wilmington MPO Boundary

Local ID: BRUN20040-H

Purpose: Access

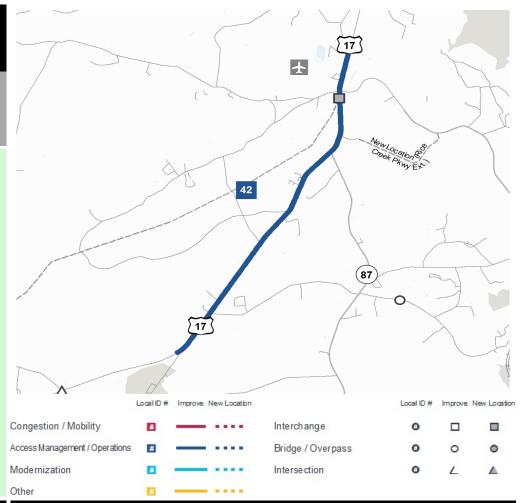
### Improvement: Improve Existing

### Identified Need

The road needs bike lanes as well as access improvement. Currently locals use the road for bicycling but it is not safe with oncoming traffic.

### Recommendation

Upgrade this road to bvld standards. Bike lane is being proposed from US 17 BUS to Mill Creek Rd SE to increase safety. Rumble strips need to be removed. US 17 is on the Wilmington MTP on pg 67 & pg 95 (RW-20).



Proposal At A Glance			
Highway Class	Access Management & Operation		
Facility Type	Boulevard		
Typical Section	04 A		
Section Options	4C		
Length (miles)	12.69		
Existing ROW (feet)	100-140		
Safety Risk Score	-		

Proposal Data:	2017 Base Year	2045 Fut	ure Year
Improved Route	Existing	Without Proposal	<u>With Proposal</u>
Facility Type	Boulevard	Boulevard	Boulevard
Travel Lanes	4	4	4
Volume (vpd)	12087-16129	14200-20100	8700-18400
Capacity (vpd)	49000	49000	49000

Capacity Data:	<u>Year</u>
Facility will be Approaching Capacity (>80%)	2045
Facility will be Over Capacity (>=100%)	2045

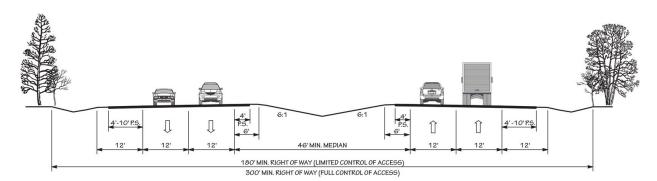


### **Typical Section Options:**

4C

### **TYPICAL SECTION No. 4A**

4 LANE DIVIDED (46' DEPRESSED MEDIAN) WITH PAVED SHOULDERS



POSTED SPEED 45-70 MPH

### *Project History/Linkage to Other Plans*

A small portion of this road has a multimodal recommendation. Bike recommendation along US 17 from US 17 Bus to Mill Creek Road SE. This road is heavily used by bicyclists at the moment so this recommendation is being made for safety purposes along a very busy vehicular route.

\*A cross section with paved shoulders is recommended to accommodate for bike lanes.

US 17 and NC I-140 merge into the jurisdiction of this CTP from Wilmington MPO area. There is a roadway upgrade being proposed on the Wilmington MTP on page 67 and page 95 (RW-20).

### CTP Goal Analysis

Objectives: Promote reductions in recurring congestion through transportation capacity, access management, and policy improvements.

Goal: Provide an integrated transportation network that encourages use of all modes by offering travel choices that are accessible to all segments of the region's population. Objective: Support a fully integrated multimodal network that advances the concept of complete streets.

Objectives: Expand and maintain a network of bicycle, pedestrian, and transit facilities that connects homes, activity centers, and complementary amenities.

### Vision Goals & Objectives Survey

There were 798 comments for this particular project in the Brunswick County CTP survey. Survey respondents commented on congestion, roadway widening, needs for Additional Information - Title VI maintenance and increased safety. The survey was launched on March 10, 2021 and closed on June 11, 2021. There was an English and Spanish version of the survey. A total of 6,969 total participants created a total

### of 8,387 comments.

### Potential Impact

Land Use/CUR: The area around this roadway is rural in nature but there are sprawls of residential and commercial development along the stretch of the roadway.

Future housing development is expected to come into the area, specifically total of 321 housing units west of this road and total of 479 housing units east of the road.

### Additional Information - Environmental

All environmental data in the database was considered. This Project is within 150 feet of:

- 1 Anadromous Fish Spawning Area Feature(s)
- 16 Coastal Region Evaluation Of Wetland Significance Feature(s)
- 8 Flood Hazard Area Feature(s)
- 2 Landscape Habitat Indicator Guild Feature(s)
- 1 Major River Feature(s) 0
- 4 Managed Area Feature(s)
- **12 Natural Heritage Element Occurrence** Feature(s)
- 2 Natural Heritage Natural Area Feature(s)
- 26 Wetland Feature(s)
- 11 River And Stream Feature(s)
- 6 Lake And Pond Feature(s)
- 1 Protected Area Feature(s)
- 2 Target Local Watershed Feature(s)

- Between 25% and 50% identify as 65+
- Between 25% and 50% identify as African American

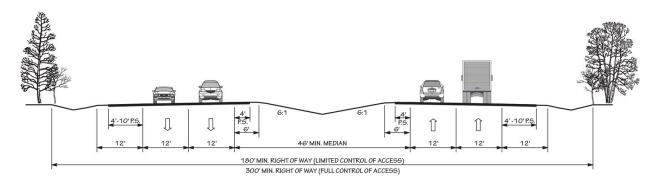
### **Typical Section Options:**

4C

U.S. 17

### **TYPICAL SECTION No. 4A**

4 LANE DIVIDED (46' DEPRESSED MEDIAN) WITH PAVED SHOULDERS



#### POSTED SPEED 45-70 MPH

- Between 0% and 5% identify as Asian
- Between 0% and 1% identify as Hawaiian or Pacific Islander
- Between 15% and 25% identify as Hispanic and Latino
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Asian and Pacific Islander
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Indo-European
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Other
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Spanish
- Between 5% and 15% identify as Native American
- Between 15% and 20% identify as Some Other Race
- Between 5% and 10% identify as Two of More Races
- Between 25% and 50% identify as Below Poverty Line
- Between 0% and 15% identify as Households with No Car

#### N.C. 904

From N.C. 179 (Beach Drive SW) to SR 1144 (W First Street)

Local ID: BRUN30009-H

Purpose: Congestion

Improvement: Widening

#### **Identified Need**

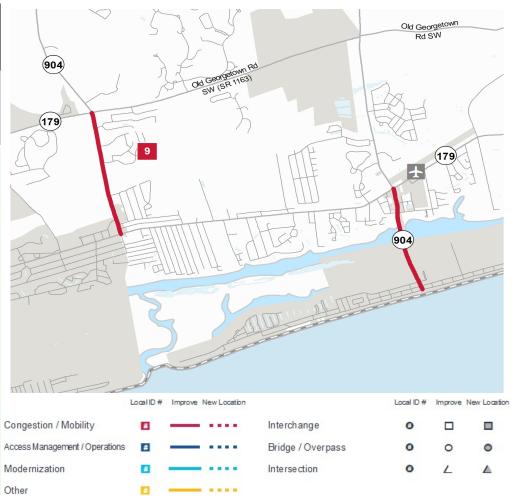
This roadway is currently near capacity and the project volumes almost double in the FY without the proposal. The primary purpose for this project is to relieve congestion; the secondary purpose is to improve mobility.

#### Recommendation

(feet)

Safety Risk Score

The proposal is to widen NC 904 to 4-lanes. The current roadway is 2 & 3 lanes. A bicycle lane and sidewalk is recommended from Beach Dr SW to W First St. and a multi-use path from Old Georgetown Rd to Beach Dr SW. Refer to East Coast Greenway Plan and Ocean Isle Beach Bicycle and Pedestrian Plan.



Proposal At A Glance		Proposal Data:	2017 Base Year	2045 Futu	ire Year
Highway Class Congestion & Mobility	Improved Route	Existing	Without Proposal	With Proposal	
Facility Type	Boulevard	Facility Type	Major Thoroughfare 2-lane	Major Thoroughfare 2-lane	Boulevard
Typical Section	04 K	Travel Lanes	2	2	4
Section Options	04 G, 04 D, 04 I	Volume (vpd)	3332-12023	4800-18400	4900-21500
Length (miles)	2.57	Capacity (vpd)	12800-14000	12800-14000	36800-43300
Existing ROW	60				

Capacity Data:	<u>Year</u>
Facility will be Approaching Capacity (>80%)	2017-2045
Facility will be Over Capacity (>=100%)	2045

67

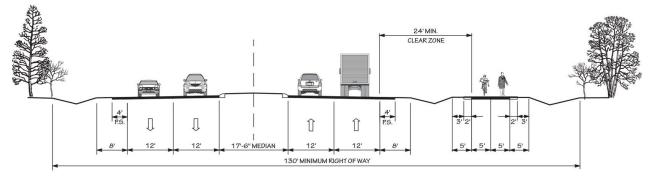


## Typical Section Options:

04 G, 04 D, 04 I

## TYPICAL SECTION No. 4K

4 LANE DIVIDED (17'-6" RAISED MEDIAN) WITH PAVED SHOULDERS AND SIDEPATH



POSTED SPEED 35-55 MPH

## Project History/ Linkage to Other Plans

A portion of this project proposal (NC 179 Old Georgetown Rd to Beach Dr SW) was included in the 2010 Brunswick County CTP as part of the recommendation to widen NC 904 to a multi-lane major thoroughfare from Ash-Little River Road (SR 1300) to Ocean Isle Beach Road (SR 1184).

Since congestion without the proposal is significant in FY while capacity remains the same, by making this recommendation, the capacity increases significantly. This increase allows for the roadway to handle the volume in the future, reducing congestion issues.

Multi-use path along NC 179 from the South Carolina border to US 17 Business. This route is along the East Coast Greenway Plan and therefore is being recommended as an on-road multi-use lane on south side of the road. Refer to the East Coast Greenway Plan for further information.

Bike and Sidewalk along NC 904 from NC 179 (Beach Dr SW) to SR 1144 (W First St.) From the adopted 2014 Ocean Isle Beach Bicycle and Pedestrian Plan and is being recommended for lack of connectivity to the beach access paths, alleviate high traffic seasonal volumes, and to promote a mix of traffic types.

GSATS is coordinating with Town of Sunset Beack on Corridor Study for NC 904.

### CTP Goal Analysis

This project supports the following goals and objectives:

*Goal:* Create a more efficient transportation system through improved connectivity, capacity and operations.

*Goal:* Support growth through a transportation network that serves local, inter- and intra- regional accessibility and mobility needs for both people and goods.

*Objectives:* Promote reductions in recurring congestion through transportation capacity, access management, and policy improvements.

#### Vision Goals & Objectives Survey

There were 61 comments received regarding NC 904 from NC 179 Old Georgetown Rd to Beach Dr SW. Additionally, there were 96 comments received regarding NC 904/Causeway Dr. The comments indicated congestion issues as well as safety concerns regarding speeding. Comments also expressed desire for wider roadways and the addition of bicycle lanes and sidewalks. The survey was launched on March 10, 2021, and closed on June 11, 2021. There was an English and Spanish version of the survey. A total of 6,969 survey participants created a total of 8,387 comments.

## Potential Impacts

Land Use: Land use around NC 904/Seaside Rd includes the Jaguars Lair Golf Course, a United States Postal Service Office, and other non-residential properties. A commercial area exists near the intersection with NC 179.

NC 904/Causeway Dr crosses the intracoastal waterway and also is surrounded by several non-residential properties.

### Additional Information - Environmental

All environmental data in the database was considered. This Project is within 150 feet of:

- 22 Benthic Habitat Feature(s)
- 10 Coastal Region Evaluation Of Wetland Significance Feature(s)
- 3 Fish Nursery Area Feature(s)
- 9 Flood Hazard Area Feature(s)

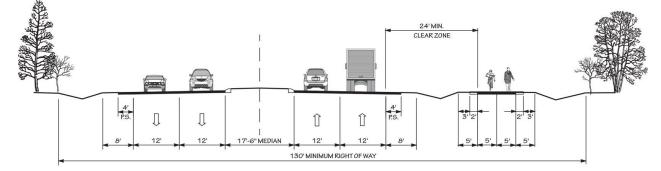
## **Typical Section Options:**

04 G, 04 D, 04 I

N.C. 904

# TYPICAL SECTION No. 4K

4 LANE DIVIDED (17'-6" RAISED MEDIAN) WITH PAVED SHOULDERS AND SIDEPATH





- 1 High Quality And Outstanding Resource Water Feature(s)
- 4 Impaired Waters Line Feature(s)
- 3 Impaired Waters Polygon Feature(s)
- 1 Landscape Habitat Indicator Guild Feature(s)
- 3 Major River Feature(s)
- 7 Natural Heritage Element Occurrence Feature(s)
- 14 Wetland Feature(s)
- 4 River And Stream Feature(s)
- 3 Lake And Pond Feature(s)
- 4 Quality Monitored River And Stream Feature(s)
- 1 Target Local Watershed Feature(s)

- Between 50% and 100% identify as 65+
- Between 0% and 25% identify as African American
- Between 0% and 5% identify as Asian
- Between 5% and 15% identify as Hispanic and Latino
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Asian and Pacific Islander
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Indo-European
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Other
- Between 0% and 5% identify as Over 18 with Limited English Proficiency (LEP) - Spanish
- 0% identify as Native American
- Between 1% and 5% identify as Some Other Race
- Between 1% and 5% identify as Two of More Races

- Between 15% and 25% identify as Below Poverty Line
- Between 0% and 15% identify as Households with No Car

#### N.C. 211

From Midway Road (SR 1500) to N.C. 87

Local ID: BRUN30014-H

Purpose: Congestion

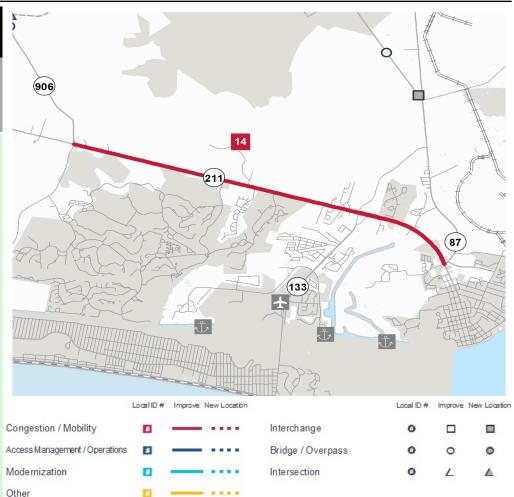
Improvement: Widening

#### **Identified Need**

This road currently exceeds capacity in BY and FY (build and no build). However, in build scenario, there is lesser capacity issues. The primary purpose for this project is to relieve congestion; the secondary purpose is to improve mobility.

#### Recommendation

The proposal is to widen NC 211 from Midway Rd to NC 87 to 4 lanes with 12-foot lanes. The current roadway is a 2-lane facility. NC 211 is on the East Coast Greenway Plan and a multi-use path is being recommended along this route.



Proposal At A Glance			
Highway Class	Congestion Mobility		
Facility Type	Boulevard		
Typical Section	04 K		
Section Options	04 I		
Length (miles)	7.14		
Existing ROW (feet)	60-150		
Safety Risk Score	100		

		2 10110	2 10110	
	Travel Lanes	2	2	4
	Volume (vpd)	6180-24541	8700-36200	14100-44500
	Capacity (vpd)	10700-15100	10700-15100	43300
50				

2017 Base Year

Major Thoroughfare

2-lane

**Proposal Data:** 

**Improved Route** 

Facility Type

&

Capacity Data:	<u>Year</u>
Facility will be Approaching Capacity (>80%)	2017
Facility will be Over Capacity (>=100%)	2017



2045 Future Year

Boulevard

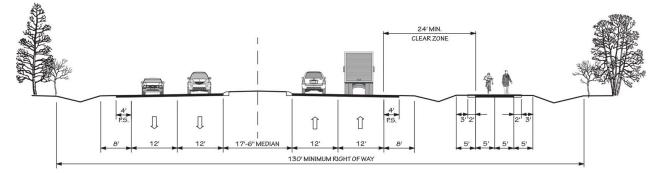
Major Thoroughfare

2-lane

**Typical Section Options:** 04 I

## TYPICAL SECTION No. 4K

4 LANE DIVIDED (17'-6" RAISED MEDIAN) WITH PAVED SHOULDERS AND SIDEPATH



POSTED SPEED 35-55 MPH

## Project History/ Linkage to Other Plans

NC 211 (North Howe Street) - NC 211 is on the East Coast Greenway Plan as a multi-use facility (from West Bay Street to US 17). Recommendation is to construct a Multi-Use Path.

The multimodal project proposal is part of the 2020-2029 STIP:

• R-5021 - SR 1500 (Midway Road) to NC 87. Widen to Multi-lanes.

This project proposal is also listed in the in the 2010 Brunswick County CTP as part of a larger recommendation to widen NC 211 from US 17 to E Moore St in Southport.

The section between Dosher Cuttoff and J Swaine Blvd gets backed up with traffic at stop lights. This causes unsafe conditions for bicyclists using the roadway. Due to the unsafe conditions, highway and multi-modal proposals are being made along the roadway.

With this recommendation, capacity of the roadway has been increased singificantly to accomodate for the increase in volume. Refer to V/C maps.

## CTP Goal Analysis

This project supports the following goals and objectives:

*Goal:* Create a more efficient transportation system through improved connectivity, capacity and operations.

*Goal:* Support growth through a transportation network that serves local, inter- and intra- regional accessibility and mobility needs for both people and goods.

Objectives: Promote reductions in recurring congestion

through transportation capacity, access management, and policy improvements.

#### Vision Goals & Objectives Survey

This project proposal received 622 comments during the survey period. The major comments included the desire for multimodal options, widening of the roadway and wider paved shoulders. The survey was launched on March 10, 2021, and closed on June 11, 2021. There was an English and Spanish version of the survey. A total of 6,969 survey participants created a total of 8,387 comments.

## Potential Impacts

Land Use: Between Midway Rd and NC 133, NC 211 is surrounded by residential developments, hotels, and some non-residential properties. There is a commercial area right where NC 133 meets NC 211.

N Howe St is a major roadway through Southport, so there is a mix of establishments along the facility. There are several non-residential properties, commercial businesses, and some residences. Dosher Memorial Hospital, Southport Fire Department, and the Southport City Police Department are also located along this facility.

Future housing development is expected to come into the area, specifically total of 2564 housing units north of this road and total of 53 housing units south of this road.

## Additional Information - Environmental

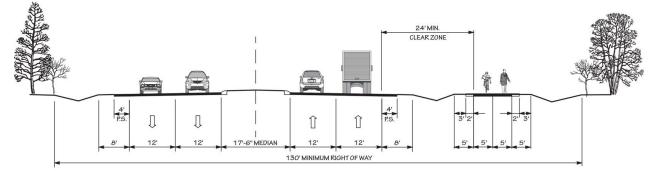
All environmental data in the database was considered. This Project is within 150 feet of:

- 61 Coastal Region Evaluation Of Wetland Significance Feature(s)
- 11 Flood Hazard Area Feature(s)
- 1 High Quality And Outstanding Resource Water Feature(s)

**Typical Section Options:** 04 I

## TYPICAL SECTION No. 4K

4 LANE DIVIDED (17'-6" RAISED MEDIAN) WITH PAVED SHOULDERS AND SIDEPATH



POSTED SPEED 35-55 MPH

- 1 Landscape Habitat Indicator Guild Feature(s)
- 23 Natural Heritage Element Occurrence Feature(s)
- 1 Natural Heritage Natural Area Feature(s)
- 34 Wetland Feature(s)
- 9 River And Stream Feature(s)
- 11 Lake And Pond Feature(s)
- 3 Target Local Watershed Feature(s)

- Between 50% and 100% identify as 65+
- Between 0% and 25% identify as African American
- Between 0% and 5% identify as Asian
- Between 5% and 15% identify as Hispanic and Latino
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Asian and Pacific Islander
- Between 0% and 5% identify as Over 18 with Limited English Proficiency (LEP) - Indo-European
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Other
- Between 5% and 15% identify as Over 18 with Limited English Proficiency (LEP) - Spanish
- Between 5% and 15% identify as Native American
- Between 5% and 10% identify as Some Other Race
- Between 1% and 5% identify as Two of More Races
- Between 15% and 25% identify as Below Poverty Line
- Between 0% and 15% identify as Households with No Car

#### N.C. 87

From N.C. 211 to U.S. 17

Local ID: BRUN30016-H

Purpose: Congestion

Improvement: Widening

#### **Identified Need**

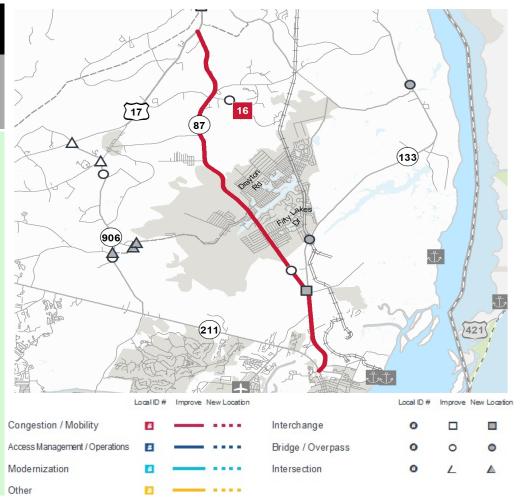
This road exceeds capacity in both BY and FY (no build). The primary purpose for this project is to relieve congestion; the secondary purpose is to improve mobility. Access is also important along this roadway (center turning left lanes).

#### Recommendation

Safety Risk Score

(feet)

The proposal is to widen NC 87 to 5 lanes with 12-foot lanes. The existing facility is 2 and 3 lanes. A multi-use path is being recommended from north town limits to south town limits; this comes from the City of Boiling Springs Lakes Pedestrian Plan.



Proposal At A Glance		Proposal Data:	2017 Base Year	2045 Futi	ure Year
Highway Class	Congestion & Mobility	Improved Route	<u>Existing</u>	Without Proposal	With Proposal
Facility Type	Boulevard	Facility Type	Major Thoroughfare 2-lane	Major Thoroughfare 2-lane	Boulevard
Typical Section	05 B	Travel Lanes	2	2	4
Section Options	05 A	Volume (vpd)	3996-18630	6000-28000	2200-16200
Length (miles)	15.1	Capacity (vpd)	12800-15500	12800-15500	38100-47200
Existing ROW	100-150				

Capacity Data:	<u>Year</u>
Facility will be Approaching Capacity (>80%)	2017-2045
Facility will be Over Capacity (>=100%)	2017-2045

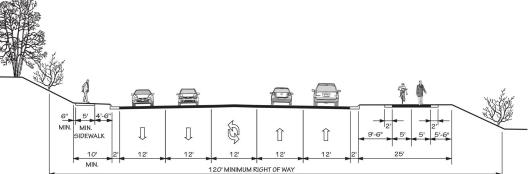
100



**Typical Section Options:** 05 A

## **TYPICAL SECTION No. 5B**

4 LANE WITH TWO WAY LEFT TURN LANE, CURB & GUTTER, SIDEWALKS AND SIDEPATH



POSTED SPEED 35-45 MPH

## Project History/Linkage to Other Plans

The 2010 Brunswick County CTP recommended widening NC 87 to a multi-lane facility from US 17 to NC 211.

Multi-use recommendation along NC 87 from north town limits to south town limits. This project comes from the final draft plan of the City of Boiling Springs Lakes Pedestrian Plan as a shared-use proposal, refer to the plan for further information.

The intersection of NC 87 and Fifty Lakes Drive experiences heavy congestion during school rush hour times. The traffic mostly gets backed up when vehicles turn left from NC 87 onto Fifty Lakes Drive. This location is just one block from Cougar Drive where both South Brunswick Middle School and South Brunswick High School are located. There is also commercial traffic off of NC 87, particularly from S Shore Drive to slightly north of Miller Road. The CTP suggests a short term (10 year) solution by adding a cross section of 3A on NC 87 from Cougar Drive to north of Boiling Spring Road to relieve the congestion until the roadway is built out to cross section of 5B in the next 25 years.

There is a need to accomodate for a safe multi-use path along Mitchell Prince Bridge which falls along the segment of this project. There are limited shoulders on the bridge and presented ROW challenges in proximity to Patricia Lake.

## **CTP Goal Analysis**

This project supports the following goals and objectives:

*Goal:* Create a more efficient transportation system through improved connectivity, capacity and operations.

*Objectives:* Promote reductions in recurring congestion through transportation capacity, access management, and policy improvements.

#### Vision Goals & Objectives Survey

This project proposal received 68 comments during the survey period. Comments mentioned congestion and expressed need for wider roadways and wider paved shoulders, and safe bike and pedestrian facilities. The survey was launched on March 10, 2021, and closed on June 11, 2021. There was an English and Spanish version of the survey. A total of 6,969 survey participants created a total of 8,387 comments.

### Potential Impacts

*Land Use:* Most of the land use around NC 87 is vacant land though there are several non-commercial properties located along NC 87.

NC 87 runs through Boiling Spring Lakes. According to the 2017 Boiling Spring Lakes Land Use Plan, the existing land use in the area includes, single-family residential, recreation, office and institutional, and vacant land. Future housing development is expected to come into the area, specifically total of 319 housing units east of this road.

## Additional Information - Environmental

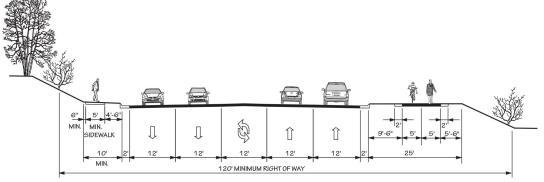
All environmental data in the database was considered. This Project is within 150 feet of:

- 80 Coastal Region Evaluation Of Wetland Significance Feature(s)
- 11 Flood Hazard Area Feature(s)
- 5 Landscape Habitat Indicator Guild Feature(s)
- 1 Land Water Conservation Fund Property Feature(s)
- 6 Managed Area Feature(s)
- 34 Natural Heritage Element Occurrence Feature(s)
- 1 Natural Heritage Natural Area Feature(s)

**Typical Section Options:** 05 A

## **TYPICAL SECTION No. 5B**

4 LANE WITH TWO WAY LEFT TURN LANE, CURB & GUTTER, SIDEWALKS AND SIDEPATH



POSTED SPEED 35-45 MPH

- 80 Wetland Feature(s)
- 27 River And Stream Feature(s)
- 19 Lake And Pond Feature(s)
- 2 Protected Area Feature(s)
- 1 Quality Monitored River And Stream Feature(s)
- 2 Target Local Watershed Feature(s)

- Between 25% and 50% identify as 65+
- Between 0% and 25% identify as African American
- Between 0% and 5% identify as Asian
- Between 0% and 1% identify as Hawaiian or Pacific Islander
- Between 15% and 25% identify as Hispanic and Latino
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Asian and Pacific Islander
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Indo-European
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Other
- Between 5% and 15% identify as Over 18 with Limited English Proficiency (LEP) - Spanish
- Between 5% and 15% identify as Native American
- Between 15% and 20% identify as Some Other Race
- Between 5% and 10% identify as Two of More Races
- Between 25% and 50% identify as Below Poverty Line
- Between 0% and 15% identify as Households with No Car

#### N.C. 179 BUS

From N.C. 179 to N.C. 904 (Seaside Road)

Local ID: BRUN30020-H

Purpose: Access

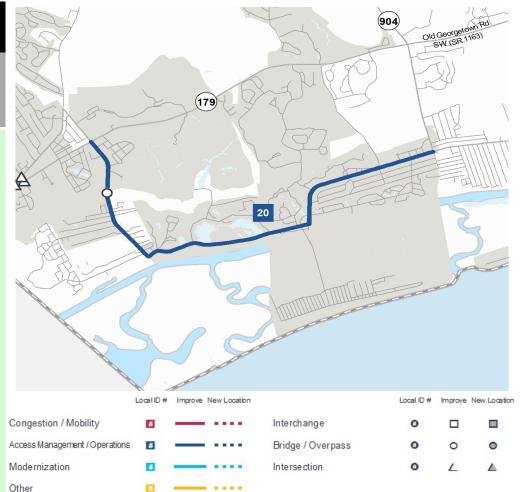
Improvement: Improve Existing

#### **Identified Need**

FY projections show that portions of this road will exceed capacity. However, access for cyclists on this road is the primary goal and is in support of ECG Plan.

#### Recommendation

The proposal is to make access management improvements along NC 179 BUS. This route is on the East Coast Greenway Plan and a multi-use path is being recommended from NC 179 to SR 1112 (Sunset Blvd S).



		enores.	_		
Proposal At A Glance		Proposal Data:	2017 Base Year	2045 Fut	ture Year
Highway Class	y Class Access Management &	Improved Route	<u>Existing</u>	Without Proposal	With Proposal
	Operation	Facility Type	Major Thoroughfare	Major Thoroughfare	Major Thoroughfare
Facility Type	Major		2-lane	2-lane	2-lane
	Thoroughfare	Travel Lanes	2	2	2
	2-lane	Volume (vpd)	520-8070	1100-13200	3300-13200
Typical Section	02 N	Capacity (vpd)	10700-14000	10700-14000	10700-12800
Section Options	2M				

Capacity Data:	<u>Year</u>
Facility will be Approaching Capacity (>80%)	2045
Facility will be Over Capacity (>=100%)	2045

5.42

56

60-120



Length (miles)

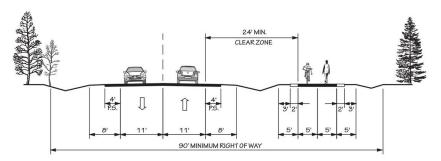
**Existing ROW** 

Safety Risk Score

(feet)

## TYPICAL SECTION No. 2N

2 LANE UNDIVIDED WITH PAVED SHOULDERS AND SIDEPATH



POSTED SPEED 25-45 MPH

## Project History/ Linkage to Other Plans

This project proposal is not listed in any previous CTP or MTP.

Multi-use path along NC 179 Business/Shoreline Drive W from NC 179 to SR 1112 (Sunset Blvd S). This route is along the East Coast Greenway Plan and therefore is being recommended as an on-road multi-use lane on east side of NC 179 Bus and north side of Shoreline Drive W. Refer to the adopted 2009 Sunset Beach Bicycle Plan and East Coast Greenway Plan for further information.

## **CTP Goal Analysis**

This project supports the following goals and objectives:

*Goal:* Create a more efficient transportation system through improved connectivity, capacity and operations.

*Objectives:* Promote reductions in recurring congestion through transportation capacity, access management, and policy improvements.

#### Vision Goals & Objectives Survey

There were 3 comments for this roadway in the Brunswick County CTP survey. One comment indicated that this roadway is heavily used by bicyclists and requested a bike lane or extra shoulder. The other two comments were in favor of adding a multi-use path. The survey was launched on March 10, 2021, and closed on June 11, 2021. There was an English and Spanish version of the survey. A total of 6,969 survey participants created a total of 8,387 comments.

## Potential Impacts

*Land Use:* Based on the Town of Sunset Beach 2017 land use plan, there is a mix of single family residential, recreational, vacant land along the existing facility.

Additional Information - Environmental

All environmental data in the database was considered. This Project is within 150 feet of:

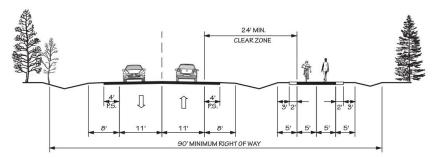
- 1 Ambient Water Quality Monitoring Site(s)
- 14 Benthic Habitat Feature(s)
- 6 Coastal Region Evaluation Of Wetland Significance Feature(s)
- 4 Fish Nursery Area Feature(s)
- 24 Flood Hazard Area Feature(s)
- 1 High Quality And Outstanding Resource Water Feature(s)
- 2 Impaired Waters Line Feature(s)
- 2 Impaired Waters Polygon Feature(s)
- 1 Landscape Habitat Indicator Guild Feature(s)
- 3 Managed Area Feature(s)
- 24 Natural Heritage Element Occurrence Feature(s)
- 2 Natural Heritage Natural Area Feature(s)
- 20 Wetland Feature(s)
- 8 River And Stream Feature(s)
- 9 Lake And Pond Feature(s)
- 1 Protected Area Feature(s)
- 2 Quality Monitored River And Stream Feature(s)
- 1 Target Local Watershed Feature(s)

- Between 50% and 100% identify as 65+
- Between 0% and 25% identify as African American
- Between 0% and 5% identify as Asian
- Between 5% and 15% identify as Hispanic and Latino

# **Typical Section Options:** 2M

## **TYPICAL SECTION No. 2N**

2 LANE UNDIVIDED WITH PAVED SHOULDERS AND SIDEPATH



POSTED SPEED 25-45 MPH

- Between 0% and 5% identify as Over 18 with Limited English Proficiency (LEP) - Asian and Pacific Islander
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Indo-European
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Other
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Spanish
- Between 5% and 15% identify as Native American
- Between 5% and 10% identify as Some Other Race
- Between 10% and 15% identify as Two of More Races
- Between 25% and 50% identify as Below Poverty Line
- Between 0% and 15% identify as Households with No Car

#### N.C. 133

From WMPO Boundary to N.C. 87

Local ID: BRUN30030-H

Purpose: Safety

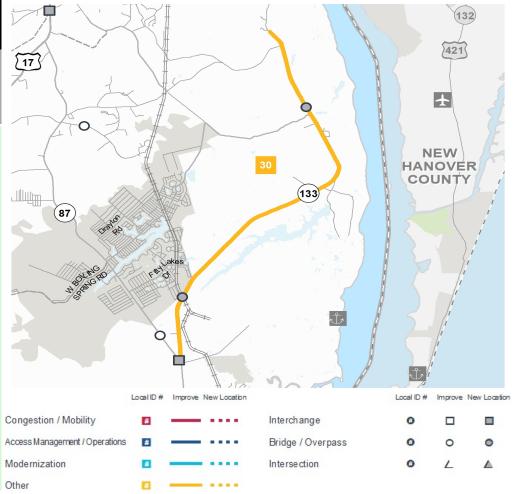
#### Improvement: Improve Existing

#### **Identified Need**

This project is needed to assist with improving safety due to crashes in northern portion of the road and supporting emergency evacuations due to flooding during natural disasters.

#### Recommendation

The proposal is to improve resiliency of NC 133. Improvements could include upgrading lane widths, raising the roadway or bridge scour-prevention. NC 133 is on the Wilmington MTP on pg 67. A multi-use path is recommended along NC 133 from the Wilmington MPO boundary to Dosher Cutoff SE for safety.



	Proposal Data:	2017 Base Year	2045 Fut	ure Year
	Improved Route	Existing	Without Proposal	With Proposal
re	Facility Type	Major Thoroughfare 2-lane	Major Thoroughfare 2-lane	Major Thoroughfare 2-lane
	Travel Lanes	2	2	2
	Volume (vpd)	4521-7000	4900-7100	3700-7100
	Capacity (vpd)	15900	15900	12800-16400

Proposal At A Glance

Highway Class	Other
Facility Type	Major Thoroughfar 2-lane
Typical Section	02 M
Section Options	02 A
Length (miles)	13.06
Existing ROW (feet)	60-100
Safety Risk Score	100

Capacity Data:

Facility will be Approaching Capacity (>80%)

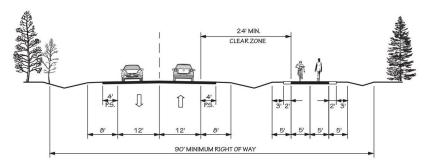
Facility will be Over Capacity (>=100%)



# **Typical Section Options:** 02 A

## TYPICAL SECTION No. 2M

2 LANE UNDIVIDED WITH PAVED SHOULDERS AND SIDEPATH



POSTED SPEED 55 MPH

## Project History/Linkage to Other Plans

This project proposal is not listed in any previous CTP or MTP.

Multi-use path along NC 133 from Wilmington MPO boundary to Dosher Cutoff SE. This route is heavily used by locals for every mode (driving, walking, and bicycling). Providing a safe multi-use route is recommended for safety. Multiple modes of transportation would be beneficial when the road floods.

NC 133 is identified as a major road in the Wilmington MTP on page 67. In the CTP we identified this as a resiliency project based on the guidance from NCDOT's resilience policy adopted in 2021.

## CTP Goal Analysis

This project supports the following goals and objectives:

*Goal:* Promote a safer and more secure transportation network through crash reduction, enhanced reliability and predictability, and improved emergency coordination.

*Goal:* Extend the life of the transportation system by fostering a sustainable and maintainable system that addresses the long-term needs of the region.

*Objectives:* Improve the safety of the transportation system for all user groups regardless of socioeconomic status or physical ability.

*Objectives:* Improve safety and security by enhancing the evacuation route network for natural events.

#### Vision Goals & Objectives Survey

This project proposal received 123 comments during the survey period. Comments included concerns about flooding, multimodal safety, and the need for sidewalks, bike lanes and general roadway maintenance.The survey

was launched on March 10, 2021, and closed on June 11, 2021. There was an English and Spanish version of the survey. A total of 6,969 survey participants created a total of 8,387 comments.

## Potential Impacts

*Land Use:* Along this facility is mostly vacant land. There are some residential areas, but very little non-residential use. Also, located along this facility is Brunswick Nature Park and the Old Fort Golf Course.

## Additional Information - Environmental

All environmental data in the database was considered. This Project is within 150 feet of:

- 2 Anadromous Fish Spawning Area Feature(s)
- 3 Benthic Habitat Feature(s)
- 66 Coastal Region Evaluation Of Wetland Significance Feature(s)
- 16 Flood Hazard Area Feature(s)
- 2 Landscape Habitat Indicator Guild Feature(s)
- 1 Major River Feature(s)
- 11 Managed Area Feature(s)
- 48 Natural Heritage Element Occurrence Feature(s)
- 7 Natural Heritage Natural Area Feature(s)
- 68 Wetland Feature(s)
- 20 River And Stream Feature(s)
- 23 Lake And Pond Feature(s)
- 1 Protected Area Feature(s)
- 2 Target Local Watershed Feature(s)

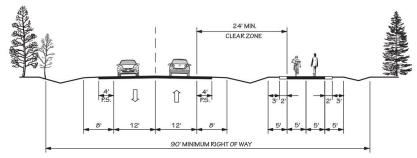
### Additional Information - Title VI

Between 25% and 50% identify as 65+

# **Typical Section Options:** 02 A

# TYPICAL SECTION No. 2M

2 LANE UNDIVIDED WITH PAVED SHOULDERS AND SIDEPATH



POSTED SPEED 55 MPH

- Between 0% and 25% identify as African American
- Between 0% and 5% identify as Asian
- Between 0% and 1% identify as Hispanic and Latino
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Asian and Pacific Islander
- Between 0% and 5% identify as Over 18 with Limited English Proficiency (LEP) - Indo-European
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Other
- Between 0% and 5% identify as Over 18 with Limited English Proficiency (LEP) - Spanish
- 0% identify as Native American
- Between 1% and 5% identify as Some Other Race
- Between 20% and 100% identify as Two of More Races
- Between 5% and 15% identify as Below Poverty Line
- Between 0% and 15% identify as Households with No Car

#### N.C. 211 (North Howe Street) From N.C. 87 to W 9th St (SR 1209) Local ID: BRUN30035-H (87 Purpose: Congestion Improvement: Widening **Identified Need** This is a major road leading in and out of Southport and serves as an 35 evacuation route. The road is currently exceeding capacity, and future year no build projections show the road continuing to exceed (211) capacity. Recommendation The proposal is to widen NC 211 N Howe St to a 4-lane divided roadway. Currently, part of the road is 3 lanes with paved shoulders and part of the road is 3 lanes with curb and gutter. NC 211 is on the East Coast Greenway Plan and a multi-use path Local ID # Local ID # Improve New Location Improve New Location is being recommended along this Congestion / Mobility Interchange # .... 0 route. Access Management / Operations Bridge / Overpass # 0 0 0 Modernization Intersection 0 L # Other -Proposal At A Glance

Highway Class	Congestion & Mobility
Facility Type	Boulevard
Typical Section	04 I
Section Options	04 K
Length (miles)	0.76
Existing ROW (feet)	60
Safety Risk Score	-

Proposal Data:	2017 Base Year	2045 Futu	ire Year
Improved Route	Existing	Without Proposal	<u>With Proposal</u>
Facility Type	Major Thoroughfare 2-lane	Major Thoroughfare 2-lane	Boulevard
Travel Lanes	2	2	4
Volume (vpd)	13655-17328	16600-21400	13000-17800
Capacity (vpd)	12300	12300	38100

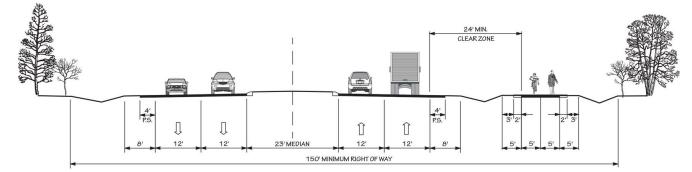
Capacity Data:	<u>Year</u>
Facility will be Approaching Capacity (>80%)	2017-2045
Facility will be Over Capacity (>=100%)	2017-2045



#### **Typical Section Options:** 04 K

## **TYPICAL SECTION No. 4I**

4 LANE DIVIDED (23' RAISED MEDIAN) WITH PAVED SHOULDERS AND SIDEPATH



POSTED SPEED 35-55 MPH

## Project History/ Linkage to Other Plans

This project proposal is listed in the in the 2010 Brunswick County CTP as part of a larger recommendation to widen NC 211 from US 17 to E Moore St in Southport.

NC 211 (North Howe Street) -NC 211 is on the East Coast Greenway Plan as a multi-use facility (from West Bay Street to US 17). Recommendation is to construct a Multi-Use Path.

With this recommendation, the capacity increased by three times. The increase alleviates the traffic congestion issues from BY and FY no build.

## CTP Goal Analysis

This project supports the following goals and objectives:

*Goal:* Create a more efficient transportation system through improved connectivity, capacity and operations.

*Goal:* Support growth through a transportation network that serves local, inter- and intra- regional accessibility and mobility needs for both people and goods.

*Objectives:* Promote reductions in recurring congestion through transportation capacity, access management, and policy improvements.

#### Vision Goals & Objectives Survey

The project proposal area received 622 comments during the survey period. Comments mentioned congestion and requests for multimodal options, roadway widening and to protect natural areas. The survey was launched on March 10, 2021, and closed on June 11, 2021. There was an English and Spanish version of the survey. A total of 6,969 survey participants created a total of 8,387 comments.

## Potential Impacts

Land Use: As a major roadway through Southport, there is a mix of establishments along the facility. There are several non-residential properties, commercial businesses, and some residences. Dosher Memorial Hospital, Southport Fire Department, and the Southport City Police Department are also located along this facility.

### Additional Information - Environmental

All environmental data in the database was considered. This Project is within 150 feet of:

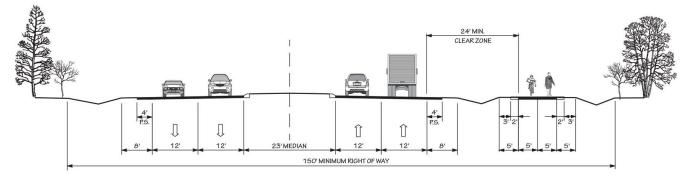
- 1 Coastal Region Evaluation Of Wetland Significance Feature(s)
- 5 Natural Heritage Element Occurrence Feature(s)
- 1 Wetland Feature(s)
- 1 River And Stream Feature(s)
- 1 Target Local Watershed Feature(s)

- Between 25% and 50% identify as 65+
- Between 0% and 25% identify as African American
- Between 0% and 5% identify as Asian
- Between 5% and 15% identify as Hispanic and Latino
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Asian and Pacific Islander
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Indo-European
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Other
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Spanish
- Between 5% and 15% identify as Native American
- Between 1% and 5% identify as Some Other Race

#### **Typical Section Options:** 04 K

# **TYPICAL SECTION No. 4I**

4 LANE DIVIDED (23' RAISED MEDIAN) WITH PAVED SHOULDERS AND SIDEPATH



POSTED SPEED 35-55 MPH

- Between 1% and 5% identify as Two of More Races
- Between 15% and 25% identify as Below Poverty Line
- Between 0% and 15% identify as Households with No Car

#### SR 1163 (Old Georgetown Road SW)

From N.C. 904 (Seaside Road SW) to N.C. 179 (Bricklanding Road SW)

Local ID: BRUN40024-H

Purpose: Congestion

Improvement: Improve Existing

#### Identified Need

This road is near capacity in BY and over capacity in FY. The volume in 2045 is up to 18,600 and capacity is 15,100. The surrounding roads are also over capacity/near capacity in FY. However, the other reason for the upgrade is due to safety and upgrade the roadway to minimum safety standards.

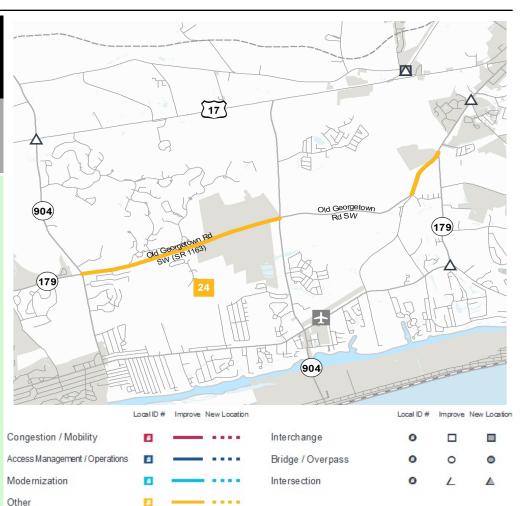
#### Recommendation

Safety project contains the same attributes as BRUN50034-H (located right in the middle of this project). There are no shoulders on this road and it is a 2 lane - 12 foot per lane road. The recommendation for the future is to add shoulders.

#### Proposal At A Glance

Highway Class	Other
Facility Type	Minor Thoroughfare
Typical Section	02 A
Section Options	-
Length (miles)	3.48
Existing ROW (feet)	60
Safety Risk Score	100

Capacity Data:	<u>Year</u>
Facility will be Approaching Capacity (>80%)	2017
Facility will be Over Capacity (>=100%)	2045



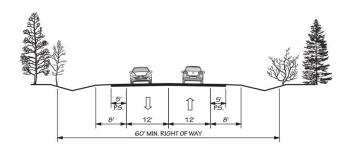
Proposal	Data:	2017 Base Year	2045 Future Year			
Improved	Route	<u>Existing</u>	Without Prope	<u>osal</u>	With Proposal	
Facility	Type N	1inor Thoroughfare	Minor Thorough	nfare N	Ainor Thoroughf	are
Travel L	anes	2	2		2	
Volume	(vpd)	7925-10359	13000-1710	0	13200-18600	
Capacity	(vpd)	10500-15100	10500-15100	0	15100	



#### **Typical Section Options:** None

# TYPICAL SECTION No. 2A

2 LANE UNDIVIDED WITH PAVED SHOULDERS



POSTED SPEED 55 MPH

## Project History/Linkage to Other Projects

There are no multimodal projects being recommended along this route.

## CTP Goal Analysis

This project supports the following goals and objectives:

Goal: Create a more efficient transportation system through improved connectivity, capacity and operations.

Objective: Increase the lifespan of existing infrastructure and ensure transportation facilities are used optimally.

Goal: Promote a safer and more secure transportation network through crash reduction, enhanced reliability and predictability, and improved emergency coordination. Objectives: Improve safety and security by enhancing the evacuation route network for natural events.

Objective: Maintain the transportation network by identifying and prioritizing infrastructure preservation and rehabilitation projects such as pavement management and signal system upgrades.

#### Vision Goals & Objectives Survey

There were 20 comments for this roadway in the Brunswick County CTP survey. The comments included concerns over safety, roadway maintenance issues, and speed limits. The survey was launched on March 10, 2021 and closed on June 11, 2021. There was an English and Spanish version of the survey. A total of 6,969 total participants created a total of 8,387 comments.

## Potential Impact

Land Use/CUR: The area around this roadway is rural in nature without any residential or commercial development along this road. However, major roadways with significant volume connect to this roadway. There is

a roundabout at the western intersection of Old Georgetown Road and Ocean Isle Beach Rd SW. Future housing development is expected to come into the area, specifically total of 685 housing units north of this road and 751 housing units south of this road.

## Additional Information - Environmental

All environmental data in the database was considered. This Project is within 150 feet of:

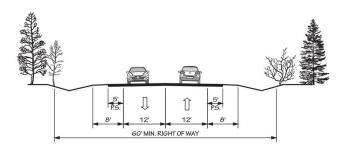
- 20 Coastal Region Evaluation Of Wetland Significance Feature(s)
- 1 High Quality And Outstanding Resource Water Feature(s)
- 1 Managed Area Feature(s)
- 1 Natural Heritage Element Occurrence Feature(s)
- 1 Natural Heritage Natural Area Feature(s)
- 14 Wetland Feature(s)
- 3 River And Stream Feature(s)
- 2 Lake And Pond Feature(s)
- 1 Protected Area Feature(s)
- 3 Target Local Watershed Feature(s)

- Between 50% and 100% identify as 65+
- Between 0% and 25% identify as African American
- Between 0% and 5% identify as Asian
- Between 5% and 15% identify as Hispanic and Latino
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Asian and Pacific Islander
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Indo-European

#### **Typical Section Options:** None

# TYPICAL SECTION No. 2A

2 LANE UNDIVIDED WITH PAVED SHOULDERS



POSTED SPEED 55 MPH

- 0% identify as Over 18 with Limited English Proficiency (LEP) - Other
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Spanish
- 0% identify as Native American
- Between 5% and 10% identify as Two of More Races
- Between 25% and 50% identify as Below Poverty Line
- Between 0% and 15% identify as Households with No Car

133

#### SR 1190 (E. Oak Island Drive) From N.C. 906 (N Middleton Avenue) to (906) N.C. 133 (Long Beach Road) Local ID: BRUN40025-H Purpose: Access Improvement: Improve Existing **Identified Need** 25 This road is important for residents and visitors in Oak Island. The Oak Island Bicycle Plan calls for bike lanes and sidewalks along this route, & it is important to upgrade the road to 12 ft lanes. Road is also over capacity in BY and FY no build. Recommendation Upgrade road to 12 ft lanes with a bike lane and sidewalks. Currently the road is 2 lanes with a center turn lane and no shoulders. A bike lane is recommended from Country Club Dr to 58th St. Refer to Oak Island Bicycle Local ID # Improve New Location Local ID # Improve New Location Congestion / Mobility Interchange # Access Management / Operations Bridge / Overpass # Modernization Intersection #

2017 Base Year

**Minor Thoroughfare** 

2

2643-13030

10700-13300

Other

Proposal Data:

**Improved Route** 

Facility Type

Travel Lanes

Volume (vpd)

Capacity (vpd)

0		
0	0	0
0	1	^

Minor Thoroughfare

2

3700-7000

13700

2045 Future Year

**Minor Thoroughfare** 

2

3700-16900

10700-13300

Proposal At A Glance				
Highway Class	Access Management & Operation			
Facility Type	Minor Thoroughfare			
Typical Section	03 C			
Section Options	3B			
Length (miles)	5.26			
Existing ROW (feet)	60-100			
Safety Risk Score	33			

Capacity Data:	<u>Year</u>
Facility will be Approaching Capacity (>80%)	2017
Facility will be Over Capacity (>=100%)	2017

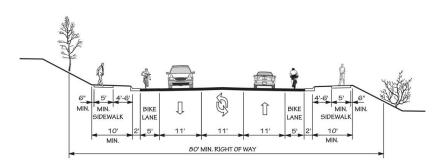


Plan.

## Typical Section Options:

## TYPICAL SECTION No. 3C

2 LANE WITH TWO WAY LEFT TURN LANE, CURB & GUTTER, BIKE LANES, AND SIDEWALKS



POSTED SPEED 25-45 MPH

## Project History/Linkage to Other Plans

Bike and Sidewalks recommendations are being recommended along E Oak Island Drive from E Yacht Dr to NE 58th St. Refer to the adopted Oak Island Bicycle Plan for further information.

Refer to the Oak Island Bicycle Plan for further information on the multi-modal components along this corridor.

This road is an important road for beach access.

## CTP Goal Analysis

This project supports the following goals and objectives:

Objectives: Promote consistency between transportation improvements, land use decisions, and economic development patterns.

Objectives: Recognize savings (e.g. time and fuel consumption) by minimizing vehicle miles traveled through enhanced integration and connectivity of the transportation system, across and between modes, for people and freight.

Objective: Support a fully integrated multimodal network that advances the concept of complete streets.

Objectives: Expand and maintain a network of bicycle, pedestrian, and transit facilities that connects homes, activity centers, and complementary amenities.

#### Vision Goals & Objectives Survey

There were 40 comments for this particular project area in the Brunswick County CTP survey. The comments included concerns for bicyclist and pedestrian safety and requests for wider shoulders. The survey was launched on March 10, 2021 and closed on June 11, 2021. There was an English and Spanish version of the survey. A total of 6,969 total participants created a total of 8,387

#### comments.

## Potential Impact

Land Use/CUR: This is a beach community and tourist community. There are both residential units along this roadway as well as rental units for visitors. The road is walking distance to the beach.

### Additional Information - Environmental

All environmental data in the database was considered. This Project is within 150 feet of:

- 3 Coastal Region Evaluation Of Wetland Significance Feature(s)
- 16 Flood Hazard Area Feature(s)
- 1 High Quality And Outstanding Resource Water Feature(s)
- 1 Managed Area Feature(s)
- 12 Natural Heritage Element Occurrence Feature(s)
- 1 Wetland Feature(s)
- 2 Protected Area Feature(s)
- 2 Target Local Watershed Feature(s)

- Between 25% and 50% identify as 65+
- Between 0% and 25% identify as African American
- Between 0% and 5% identify as Asian
- Between 0% and 1% identify as Hispanic and Latino
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Asian and Pacific Islander
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Indo-European

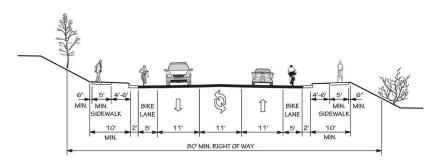
<sup>3</sup>B

## Typical Section Options:



## TYPICAL SECTION No. 3C

2 LANE WITH TWO WAY LEFT TURN LANE, CURB & GUTTER, BIKE LANES, AND SIDEWALKS



POSTED SPEED 25-45 MPH

- 0% identify as Over 18 with Limited English Proficiency (LEP) - Other
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Spanish
- Between 5% and 15% identify as Native American
- Between 1% and 5% identify as Some Other Race
- Between 1% and 5% identify as Two of More Races
- Between 5% and 15% identify as Below Poverty Line
- Between 0% and 15% identify as Households with No Car

#### SR 1521 (Governors Road SE)

From end of pavement to SR 1518 (Dawsons Creek Road)

Local ID: BRUN40026-H

Purpose: Mobility

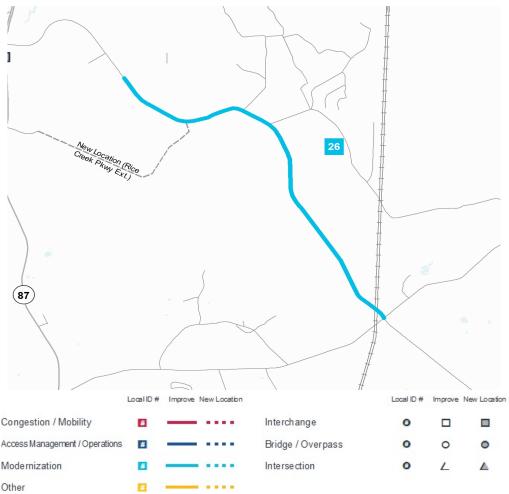
#### Improvement: Improve Existing

#### Identified Need

This roadway serves as an evacuation route and is an alternative road to use when NC 133 floods - as it often does and is a resiliency project in the CTP. It is also the only major roadway that connects NC 133 to US 17.

#### Recommendation

This is a safety project. Currently the roadway is unpaved but the rest of the roadway to the north and south is paved. The recommendation is to pave the roadway to 2 lanes, 12 foot per lane with paved shoulders and bike lane (cross section 20).



Proposal At A Glance				
Highway Class	Modernization			
Facility Type	Minor Thoroughfare			
Typical Section	02 O			
Section Options	2A			
Length (miles)	3.7			
Existing ROW (feet)	60			
Safety Risk Score	66			

	_		
Proposal Data:	2017 Base Year	2045 Future Year	
 Improved Route	Existing	Without Proposal	<u>With Proposal</u>
Facility Type	-	-	Minor Thoroughfare
Travel Lanes	-	-	2
Volume (vpd)	1200	1800	1800
Capacity (vpd)	-	-	16400

Capacity Data:

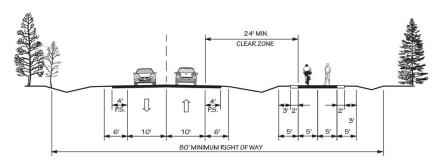
Facility will be Approaching Capacity (>80%)

Facility will be Over Capacity (>=100%)



## TYPICAL SECTION No. 20

2 LANE UNDIVIDED WITH PAVED SHOULDERS AND SIDEPATH



POSTED SPEED 25-35 MPH

## Project History/Linkage to Other Plans

As mentioned in the needs description section, the roadway is a major connection from NC 133 to US 17.

Bike lane along Daws Creek Rd from NC 133 to US 17. On the Cape Fear Regional Bicycle Plan, this route is being shown as a heavily used on road bicycle route, to provide safety accommodations the CTP is recommending a separated bicycle lane for this route in the future.

The mobility portion are for the multi-modal recommendations.

## CTP Goal Analysis

This project supports the following goals and objectives:

Goal: Create a more efficient transportation system through improved connectivity, capacity and operations.

Objectives: Recognize savings (e.g. time and fuel consumption) by minimizing vehicle miles traveled through enhanced integration and connectivity of the transportation system, across and between modes, for people and freight.

Goal: Preserve the social and environmentally sensitive character of the county through an integrated transportation and land use strategy that addresses transportation solutions.

Objectives: Protect and enhance the natural and social environment using context-sensitive transportation strategies that minimize wildlife habitat fragmentation.

#### Vision Goals & Objectives Survey

There were 3 comments on this roadway in the Brunswick County CTP survey. Comments mentioned that intersection improvements and roadway paving are needed.The survey was launched on March 10, 2021 and closed on June 11, 2021. There was an English and

Spanish version of the survey. A total of 6,969 total participants created a total of 8,387 comments.

## Potential Impact

Land Use/CUR: The land use along this portion of the roadway is rural in nature. By upgrading this roadway to the minimum safety standards, there will be minimal impact to the environment.

### Additional Information - Environmental

All environmental data in the database was considered. This Project is within 150 feet of:

- 11 Coastal Region Evaluation Of Wetland Significance Feature(s)
- 4 Flood Hazard Area Feature(s)
- 2 Landscape Habitat Indicator Guild Feature(s)
- 4 Managed Area Feature(s)
- 9 Natural Heritage Element Occurrence Feature(s)
- 2 Natural Heritage Natural Area Feature(s)
- 12 Wetland Feature(s)
- 8 River And Stream Feature(s)
- 4 Lake And Pond Feature(s)
- 1 Target Local Watershed Feature(s)

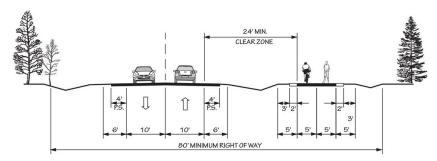
- Between 25% and 50% identify as 65+
- Between 0% and 25% identify as African American
- Between 0% and 5% identify as Asian
- Between 0% and 1% identify as Hawaiian or Pacific Islander
- Between 5% and 15% identify as Hispanic and Latino

## Typical Section Options:

#### 2A

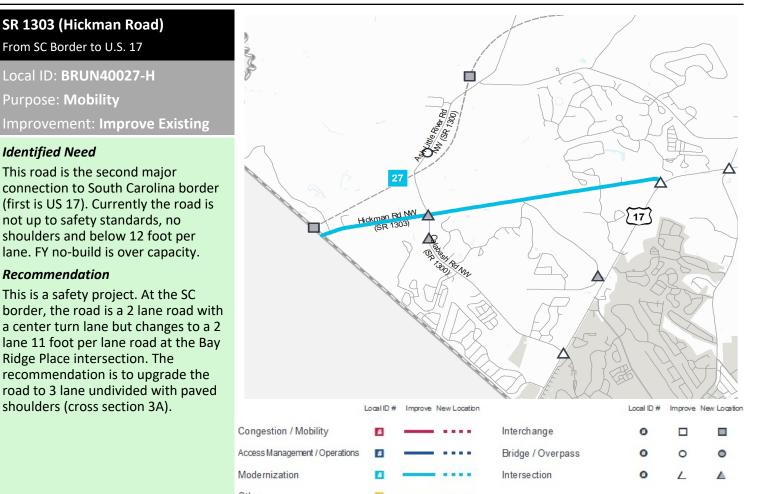
## TYPICAL SECTION No. 20

2 LANE UNDIVIDED WITH PAVED SHOULDERS AND SIDEPATH



POSTED SPEED 25-35 MPH

- 0% identify as Over 18 with Limited English Proficiency (LEP) - Asian and Pacific Islander
- Between 0% and 5% identify as Over 18 with Limited English Proficiency (LEP) - Indo-European
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Other
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Spanish
- Between 5% and 15% identify as Native American
- Between 1% and 5% identify as Some Other Race
- Between 1% and 5% identify as Two of More Races
- Between 5% and 15% identify as Below Poverty Line
- Between 0% and 15% identify as Households with No Car



Proposal At A Glance				
Highway Class	Modernization			
Facility Type	Minor Thoroughfare			
Typical Section	03 A			
Section Options	02 B			
Length (miles)	3.63			
Existing ROW (feet)	60			
Safety Risk Score	78			

	Other	#		
	Proposal Data:	2017 Base Year	2045 Future Year	
on	Improved Route	Existing	<u>Without Proposal</u>	With Proposal
e	Facility Type	Minor Thoroughfare	Minor Thoroughfare	Minor Thoroughfare
•	Travel Lanes	2	2	2
	Volume (vpd)	7497-10828	11600-16000	1100-6800
	Capacity (vpd)	14600-15300	14600-15300	16000-16600

Capacity Data:

Facility will be Approaching Capacity (>80%)

Facility will be Over Capacity (>=100%)

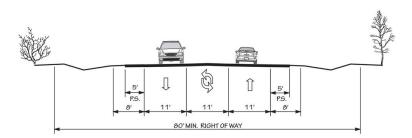


# **Typical Section Options:** 02 B

#### UZ B

## **TYPICAL SECTION No. 3A**

2 LANE WITH TWO WAY LEFT TURN LANE, AND PAVED SHOULDERS



POSTED SPEED 25-55 MPH

## Project History/Linkage to Other Projects

This recommendation comes from the Grand Strand Area Transportation Study Metropolitan Transportation Plan which calls for widening of lanes from US 17 to South Carolina border.

There are no multimodal projects being recommended along this route.

### **CTP Goal Analysis**

This project supports the following goals and objectives:

Goal: Create a more efficient transportation system through improved connectivity, capacity and operations.

Goal: Promote a safer and more secure transportation network through crash reduction, enhanced reliability and predictability, and improved emergency coordination.

Objectives: Improve the safety of the transportation system for all user groups regardless of socioeconomic status or physical ability.

Objectives: Improve safety and security by enhancing the evacuation route network for natural events.

#### Vision Goals & Objectives Survey

There were 73 comments for this particular project in the Brunswick County CTP survey. Comments mentioned roadway widening, high levels of traffic and safety concerns due to accidents. The survey was launched on March 10, 2021 and closed on June 11, 2021. There was an English and Spanish version of the survey. A total of 6,969 total participants created a total of 8,387 comments.

### Potential Impact

Land Use/CUR: The roadway connects to the South Carolina border. The land use is mixed along this roadway (residential, commercial and rural). Future housing development is expected to come into the area, specifically total of 336 housing units north of this road and 974 housing units south of this road.

### Additional Information - Environmental

All environmental data in the database was considered. This Project is within 150 feet of:

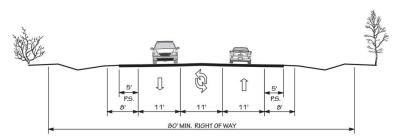
- 7 Coastal Region Evaluation Of Wetland Significance Feature(s)
- 6 Flood Hazard Area Feature(s)
- 1 Natural Heritage Element Occurrence Feature(s)
- 19 Wetland Feature(s)
- 2 River And Stream Feature(s)
- 3 Lake And Pond Feature(s)

- Between 50% and 100% identify as 65+
- Between 25% and 50% identify as African American
- Between 0% and 5% identify as Asian
- Between 5% and 15% identify as Hispanic and Latino
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Asian and Pacific Islander
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Indo-European
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Other
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Spanish
- 0% identify as Native American

# **Typical Section Options:** 02 B

# **TYPICAL SECTION No. 3A**

2 LANE WITH TWO WAY LEFT TURN LANE, AND PAVED SHOULDERS



POSTED SPEED 25-55 MPH

- Between 1% and 5% identify as Some Other Race
- Between 1% and 5% identify as Two of More Races
- Between 25% and 50% identify as Below Poverty Line
- Between 0% and 15% identify as Households with No Car

#### SR 1521 (Funston Road)

From N.C. 133 to SR 1539 (E Boiling Spring Road)

Local ID: BRUN40028-H

Purpose: Emergency Evacuation

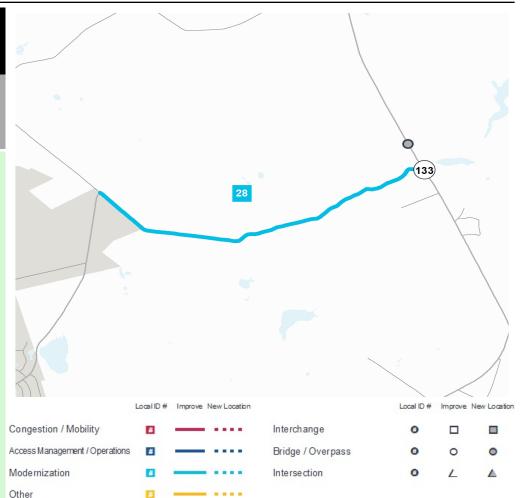
Improvement: Improve Existing

#### Identified Need

There is a small central portion of Funston Road that is paved, the rest of the roadway is unpaved. The roadway is the main connection from NC 133 and US 17 and serves as an evacuation route. The main purpose to upgrade the roadway to safety standards and 2nd is connection.

#### Recommendation

This is a modernization project. This is an unpaved road currently. The recommendation is to upgrade the roadway to 2 lane undivided with paved shoulders.



Proposal At A Glance				
Highway Class	Modernization			
Facility Type	Minor Thoroughfare			
Typical Section	02 A			
Section Options	-			
Length (miles)	3.32			
Existing ROW (feet)	60			
Safety Risk Score	-			

Proposal Data:	2017 Base Year	2045 Future Year	
Improved Route	<u>Existing</u>	Without Proposal	With Proposal
Facility Type	Minor Thoroughfare	Minor Thoroughfare	Minor Thoroughfare
Travel Lanes	2	2	2
Volume (vpd)	3116	4500	4000
Capacity (vpd)	14800	14800	16400

Capacity Data:

Facility will be Approaching Capacity (>80%)

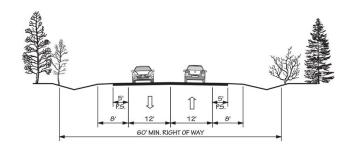
Facility will be Over Capacity (>=100%)



#### **Typical Section Options:** None

## TYPICAL SECTION No. 2A

2 LANE UNDIVIDED WITH PAVED SHOULDERS



POSTED SPEED 55 MPH

## Project History/Linkage to Other Projects

NC 133 that connects to this roadway has been identified as a roadway that continuously floods and is being considered as a resiliency project in the CTP. Upgrading this roadway will help as an evacuation route when NC 133 floods.

There are no multimodal projects being recommended along this route.

### CTP Goal Analysis

This project supports the following goals and objectives:

Goal: Create a more efficient transportation system through improved connectivity, capacity and operations.

Goal: Promote a safer and more secure transportation network through crash reduction, enhanced reliability and predictability, and improved emergency coordination.

Objectives: Improve the safety of the transportation system for all user groups regardless of socioeconomic status or physical ability.

Objectives: Improve safety and security by enhancing the evacuation route network for natural events.

#### Vision Goals & Objectives Survey

There were 7 comments for this particular project in the Brunswick County CTP survey. Comments mentioned that roadway paving and maintenance is needed since this road is used as a detour when NC 133 floods. Also, there were comments for adding sidewalks and bike lanes. The survey was launched on March 10, 2021 and closed on June 11, 2021. There was an English and Spanish version of the survey. A total of 6,969 total participants created a total of 8,387 comments.

## Potential Impact

Land Use/CUR: The roadway is very rural in nature

### ied Additional Information - Environmental

All environmental data in the database was considered. This Project is within 150 feet of:

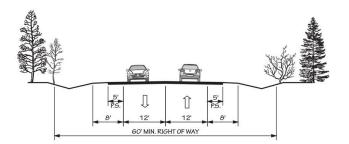
- 17 Coastal Region Evaluation Of Wetland Significance Feature(s)
- 2 Flood Hazard Area Feature(s)
- 1 Landscape Habitat Indicator Guild Feature(s)
- 2 Managed Area Feature(s)
- 8 Natural Heritage Element Occurrence Feature(s)
- 3 Natural Heritage Natural Area Feature(s)
- 14 Wetland Feature(s)
- 3 River And Stream Feature(s)
- 6 Lake And Pond Feature(s)
- 2 Target Local Watershed Feature(s)

- Between 0% and 25% identify as 65+
- Between 0% and 25% identify as African American
- Between 0% and 5% identify as Asian
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Asian and Pacific Islander
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Indo-European
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Other
- Between 0% and 5% identify as Over 18 with Limited English Proficiency (LEP) - Spanish
- 0% identify as Native American
- Between 1% and 5% identify as Some Other Race

**Typical Section Options:** None

# TYPICAL SECTION No. 2A

2 LANE UNDIVIDED WITH PAVED SHOULDERS



POSTED SPEED 55 MPH

- Between 20% and 100% identify as Two of More Races
- Between 5% and 15% identify as Below Poverty Line
- Between 0% and 15% identify as Households with No Car

#### SR 1184 Ocean Isle Beach Road SW

From U.S. 17 to N.C. 179

Local ID: BRUN40034-H

Purpose: Congestion

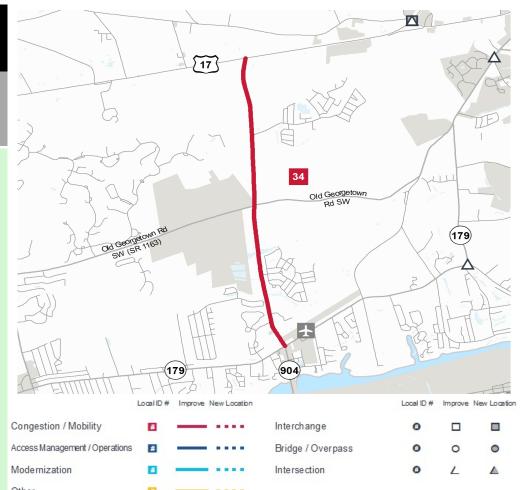
#### Improvement: Improve Existing

#### **Identified Need**

A small portion of the road is near capacity in BY (above SR 1163) and over capacity in FY no-build. Due to the capacity issue, it is highly recommended the roadway be upgraded.

#### Recommendation

This is a congestion and mobility project. Currently there are no shoulders on this road and it is a 2 lane - 12 ft per lane roadway. The recommendation is to upgrade the roadway to 4 lane divided with a median and paved shoulders.



Proposal At A Glance				
Highway Class	Congestion & Mobility			
Facility Type	Major Thoroughfare Multi-lane			
Typical Section	04 I			
Section Options	04 K			
Length (miles)	3.54			
Existing ROW (feet)	60			
Safety Risk Score	78			

Other	#		
Proposal Data:	2017 Base Year	2045 Future Year	
Improved Route	Existing	Without Proposal	With Proposal
Facility Type	Minor Thoroughfare	Minor Thoroughfare	Major Thoroughfare Multi-lane
Travel Lanes	2	2	4
Volume (vpd)	9469-13113	20500-23700	19500-29900
Capacity (vpd)	15100	15100	30400

Capacity Data:YeaFacility will be Approaching<br/>Capacity (>80%)-

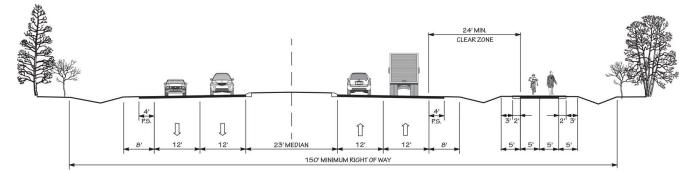
Facility will be Over Capacity 2045 (>=100%)



#### **Typical Section Options:** 04 K

## **TYPICAL SECTION No. 4I**

4 LANE DIVIDED (23' RAISED MEDIAN) WITH PAVED SHOULDERS AND SIDEPATH



POSTED SPEED 35-55 MPH

## *Project History/Linkage to Other Projects*

There is a multi-use path being recommended along this roadway, the path is being proposed on the east side of the road.

The capacity with proposal doubles in capacity in FY, this helps in alleviating congestion. Refer to V/C maps.

## **CTP Goal Analysis**

This project supports the following goals and objectives:

Goal: Create a more efficient transportation system through improved connectivity, capacity and operations.

Objectives: Promote reductions in recurring congestion through transportation capacity, access management, and policy improvements.

Objectives: Support growth and reduce traffic in and around new residential and commercial developments by constructing state-maintained collector streets in those vicinities.

Goal: Promote a safer and more secure transportation network through crash reduction, enhanced reliability and predictability, and improved emergency coordination.

Objectives: Improve the safety of the transportation system for all user groups regardless of socioeconomic status or physical ability.

#### Vision Goals & Objectives Survey

There were 2 comments for this particular project in the Brunswick County CTP survey. These comments were requests for reducing congestion and adding lanes. The survey was launched on March 10, 2021 and closed on June 11, 2021. There was an English and Spanish version of the survey. A total of 6,969 total participants created a total of 8,387 comments.

## Potential Impact

Land Use/CUR: The span of this roadway project is lengthy, therefore there is a mix of rural, commercial and residential.

Future housing development is expected to come into the area, specifically total of 3080 housing units east of this road.

## Additional Information - Environmental

All environmental data in the database was considered. This Project is within 150 feet of:

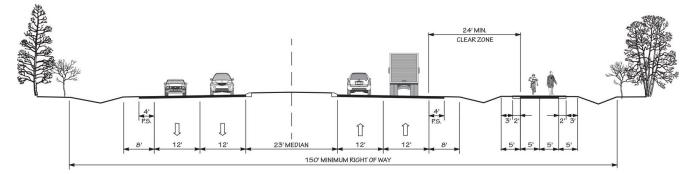
- 18 Coastal Region Evaluation Of Wetland Significance Feature(s)
- 1 Fish Nursery Area Feature(s)
- 18 Flood Hazard Area Feature(s)
- 1 High Quality And Outstanding Resource Water Feature(s)
- 1 Managed Area Feature(s)
- 5 Natural Heritage Element Occurrence Feature(s)
- 1 Natural Heritage Natural Area Feature(s)
- 27 Wetland Feature(s)
- 9 River And Stream Feature(s)
- 8 Lake And Pond Feature(s)
- 1 Quality Monitored River And Stream Feature(s)
- 2 Target Local Watershed Feature(s)

- Between 50% and 100% identify as 65+
- Between 0% and 25% identify as African American
- Between 0% and 5% identify as Asian
- Between 5% and 15% identify as Hispanic and Latino

#### **Typical Section Options:** 04 K

# **TYPICAL SECTION No. 4I**

4 LANE DIVIDED (23' RAISED MEDIAN) WITH PAVED SHOULDERS AND SIDEPATH



POSTED SPEED 35-55 MPH

- 0% identify as Over 18 with Limited English Proficiency (LEP) - Asian and Pacific Islander
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Indo-European
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Other
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Spanish
- 0% identify as Native American
- Between 5% and 10% identify as Two of More Races
- Between 25% and 50% identify as Below Poverty Line
- Between 0% and 15% identify as Households with No Car

#### **E Boiling Spring Road**

From N.C. 87 to Funston Road

Local ID: BRUN40071-H

Purpose: Safety

Improvement: Improve Existing

#### **Identified Need**

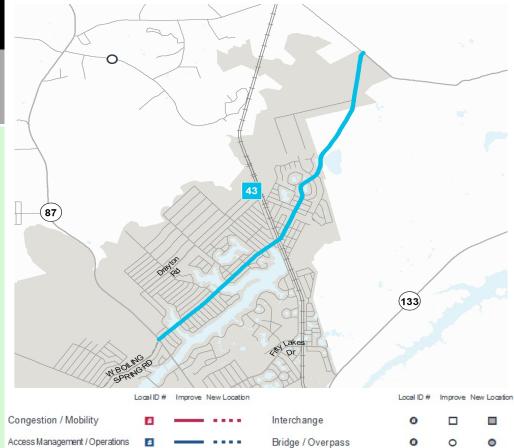
Bring road up to minor thoroughfare standards due to safety.

#### Recommendation

This is a modernization project. Currently the road is a 2-lane road with 9- ft lanes. The recommendation is to widen to 12 ft lanes with shoulders on both sides. There is a multi-use recommendation along this road from NC 87 to Eden Dr. See local Pedestrian Plan.

Modernization

Othor



Proposal At A Glance			
Highway Class	Modernization		
Facility Type	Minor Thoroughfare		
Typical Section	02 M		
Section Options	02 A		
Length (miles)	5.45		
Existing ROW (feet)	60		
Safety Risk Score	66		

Other				
Proposal Data:	2017 Base Year	2045 Future Year		
Improved Route	Existing	Without Proposal	With Proposal	
Facility Type	Minor Thoroughfare	Minor Thoroughfare	Minor Thoroughfare	
Travel Lanes	2	2	2	
Volume (vpd)	3969-5712	5300-10500	6100-12900	
Capacity (vpd)	13100	13100	16400	

Intersection

0

L

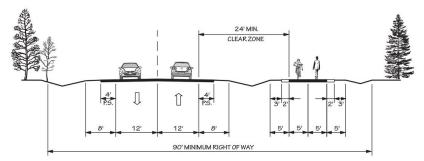
Capacity Data:

Facility will be Approaching Capacity (>80%)



# TYPICAL SECTION No. 2M

2 LANE UNDIVIDED WITH PAVED SHOULDERS AND SIDEPATH



POSTED SPEED 55 MPH

## Project History/Linkage to Other Plans

At one time, E Boiling Spring Lakes Rd was a city road but eventually switched to a state road. The ROW is currently 60' and it is important to the locals the road be widened for safety concerns.

There is a multi-modal recommendation along this roadway. This project comes from the final draft plan of the City of Boiling Springs Lakes Pedestrian Plan as a shared-use proposal, refer to the plan for further information.

## **CTP Goal Analysis**

This project supports the following goals and objectives:

Objectives: Improve the safety of the transportation system for all user groups regardless of socioeconomic status or physical ability.

Objectives: Increase the reliability, predictability, and efficiency of the transportation experience through system improvements and enhanced communication.

Objective: Increase the lifespan of existing infrastructure and ensure transportation facilities are used optimally.

## Potential Impacts

Land Use/CUR: The area around this roadway is rural in nature with some residential units. The schools south of this road are major factors in this recommendation.

## Additional Information - Environmental

All environmental data in the database was considered. This Project is within 150 feet of:

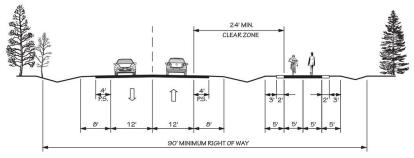
- 16 Coastal Region Evaluation Of Wetland Significance Feature(s)
- 15 Flood Hazard Area Feature(s)

- 5 Landscape Habitat Indicator Guild Feature(s)
- 11 Managed Area Feature(s)
- 31 Natural Heritage Element Occurrence Feature(s)
- 3 Natural Heritage Natural Area Feature(s)
- 38 Wetland Feature(s)
- 19 River And Stream Feature(s)
- 15 Lake And Pond Feature(s)
- 5 Protected Area Feature(s)
- 1 Quality Monitored River And Stream Feature(s)
- 2 Target Local Watershed Feature(s)

- Between 25% and 50% identify as 65+
- Between 0% and 25% identify as African American
- Between 0% and 5% identify as Asian
- Between 15% and 25% identify as Hispanic and Latino
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Asian and Pacific Islander
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Indo-European
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Other
- Between 0% and 5% identify as Over 18 with Limited English Proficiency (LEP) - Spanish
- Between 5% and 15% identify as Native American
- Between 15% and 20% identify as Some Other Race
- Between 20% and 100% identify as Two of More Races

# TYPICAL SECTION No. 2M

2 LANE UNDIVIDED WITH PAVED SHOULDERS AND SIDEPATH



POSTED SPEED 55 MPH

- Between 5% and 15% identify as Below Poverty Line
- Between 0% and 15% identify as Households with No Car

#### **Old Georgetown Road SW**

From N.C. 904 (Seaside Road SW) to NC 179 (Bricklanding Road SW)

Local ID: BRUN50024-H

Purpose: Mobility

Improvement: Improve Existing

#### **Identified Need**

Surrounding roadways are either over capacity or near capacity and have project recommendations. This roadway is being recommended as well for network continuity and connectivity. Safety is also a concern as this roadway is below minimum safety standards.

#### Recommendation

This is a safety project. Currently there are not shoulders on this road and it is a 2 lane - 12 foot per lane roadway. The recommendation for the future is to add shoulders to the roadway for safety.

50



nce	Proposal Data:	2017 Base Year	2045 Fut	ure Year
Other	Improved Route	Existing	<u>Without Proposal</u>	With Proposal
Minor Thoroughfare	Facility Type	Minor Thoroughfare	Minor Thoroughfare	Minor Thoroughfare
2	Travel Lanes	2	2	2
02 A	Volume (vpd)	3636	5700	6700
-	Capacity (vpd)	15100	15100	15100
1.85				

Safety Risk Score

Proposal At A Glance

**Highway Class** 

**Typical Section** 

Section Options

Length (miles)

**Existing ROW** 

(feet)

Facility Type

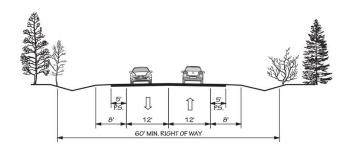
Facility will be Approaching Capacity (>80%)

Capacity Data:



# TYPICAL SECTION No. 2A

2 LANE UNDIVIDED WITH PAVED SHOULDERS



POSTED SPEED 55 MPH

## Project History/Linkage to Other Projects

There are no multimodal projects being recommended along this route.

## CTP Goal Analysis

This project supports the following goals and objectives:

Goal: Create a more efficient transportation system through improved connectivity, capacity and operations.

Objective: Increase the lifespan of existing infrastructure and ensure transportation facilities are used optimally.

Goal: Promote a safer and more secure transportation network through crash reduction, enhanced reliability and predictability, and improved emergency coordination.

Objectives: Improve safety and security by enhancing the evacuation route network for natural events.

Objective: Maintain the transportation network by identifying and prioritizing infrastructure preservation and rehabilitation projects such as pavement management and signal system upgrades.

#### Vision Goals & Objectives Survey

There were 13 comments for this particular project in the Brunswick County CTP survey. These comments mentioned maintenance issues and safety concerns. The survey was launched on March 10, 2021 and closed on June 11, 2021. There was an English and Spanish version of the survey. A total of 6,969 total participants created a total of 8,387 comments.

## Potential Impact

Land Use/CUR: The area around this roadway is rural in nature without any residential or commercial development along this road. However, major roadways with significant volume connect to this roadway. There is a roundabout at the western intersection of Old Georgetown Road and Ocean Isle Beach Rd SW. Future housing development is expected to come into the area, specifically total of 479 housing units north of this road and total of 3080 housing units south of this road.

## Additional Information - Environmental

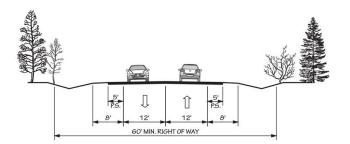
All environmental data in the database was considered. This Project is within 150 feet of:

- 7 Coastal Region Evaluation Of Wetland Significance Feature(s)
- 1 Managed Area Feature(s)
- 2 Natural Heritage Element Occurrence Feature(s)
- 1 Natural Heritage Natural Area Feature(s)
- 2 Wetland Feature(s)
- 1 Lake And Pond Feature(s)
- 2 Target Local Watershed Feature(s)

- Between 0% and 25% identify as 65+
- Between 0% and 25% identify as African American
- Between 0% and 5% identify as Asian
- Between 5% and 15% identify as Hispanic and Latino
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Asian and Pacific Islander
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Indo-European
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Other
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Spanish

# TYPICAL SECTION No. 2A

2 LANE UNDIVIDED WITH PAVED SHOULDERS



POSTED SPEED 55 MPH

- 0% identify as Native American
- Between 5% and 10% identify as Two of More Races
- Between 25% and 50% identify as Below Poverty Line
- Between 0% and 15% identify as Households with No Car

#### **Drayton Road**

From Pine Lake Road to Pine Road

Local ID: BRUN50031-H

Purpose: Safety

#### Improvement: Improve Existing

#### Identified Need

Drayton Road is a rural road in BSL north of Boiling Spring Lakes Community Garden. The road is an important road used by residents/ visitors in the area connecting to residential neighborhoods and a park. The road is unpaved, making it unsafe to drive, walk and bike on.

#### Recommendation

This is a modernization project. Currently the road is a dirt road. The recommendation for the future is the roadway be paved to a 2 lane - 12 foot per lane with shoulders on both sides of road.

Other



Proposal At A Glance			
Highway Class	Modernization		
Facility Type	Major Thoroughfare 2-lane		
Typical Section	02 M		
Section Options	-		
Length (miles)	0.98		
Existing ROW			

Proposal Data:	2017 Base Year	2045 Fu	ture Year
Improved Route	Existing	<u>Without Proposal</u>	With Proposal
Facility Type	-	-	Major Thoroughfare 2-lane
Travel Lanes	-	-	2
Volume (vpd)	-	-	8200
Capacity (vpd)	-	-	16400

Capacity Data:

Facility will be Approaching Capacity (>80%)

Facility will be Over Capacity (>=100%)



(feet)

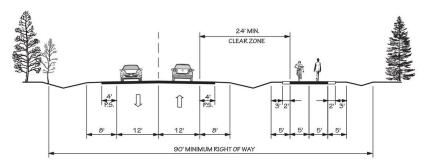
Safety Risk Score

-

None

## TYPICAL SECTION No. 2M

2 LANE UNDIVIDED WITH PAVED SHOULDERS AND SIDEPATH



POSTED SPEED 55 MPH

## Project History/Linkage to Other Projects

This road is the only detour route for Pine Lake Dam and North Lake Dam.

There is a multi-use lane being recommended along this route.

Multi-use recommendation along the Drayton Road Loop starting and ending on E Boiling Spring Rd. This project comes from the final draft plan of the City of Boiling Springs Lakes Pedestrian Plan as a shared-use proposal, refer to the plan for further information.

## CTP Goal Analysis

This project supports the following goals and objectives:

Objectives: Increase the reliability, predictability, and efficiency of the transportation experience through system improvements and enhanced communication.

Objective: Increase the lifespan of existing infrastructure and ensure transportation facilities are used optimally.

Objective: Support a fully integrated multimodal network that advances the concept of complete streets.

Goal: Promote a safer and more secure transportation network through crash reduction, enhanced reliability and predictability, and improved emergency coordination.

Objectives: Improve safety and security by enhancing the evacuation route network for natural events.

Objective: Limit expansion of the roadway network to the most necessary projects that best address identified issues.

Objective: Maintain the transportation network by identifying and prioritizing infrastructure preservation

and rehabilitation projects such as pavement management and signal system upgrades.

#### Vision Goals & Objectives Survey

There was one comment for this particular project in the Brunswick County CTP survey. A survey respondent commented that this roadway needs paving. The survey was launched on March 10, 2021, and closed on June 11, 2021. There was an English and Spanish version of the survey. A total of 6,969 total participants created a total of 8,387 comments.

## Potential Impact

Land Use/CUR: The area around this roadway is rural in nature without any residential or commercial development along this road. However, there is plenty of residential units south of this road. There is also a park and garden to the south of this road.

## Additional Information - Environmental

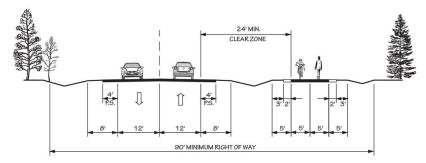
All environmental data in the database was considered. This Project is within 150 feet of:

- 7 Coastal Region Evaluation Of Wetland Significance Feature(s)
- 1 Flood Hazard Area Feature(s)
- 1 Landscape Habitat Indicator Guild Feature(s)
- 2 Managed Area Feature(s)
- 6 Natural Heritage Element Occurrence Feature(s)
- 1 Natural Heritage Natural Area Feature(s)
- 7 Wetland Feature(s)
- 8 River And Stream Feature(s)
- 5 Lake And Pond Feature(s)
- 1 Protected Area Feature(s)
- 1 Target Local Watershed Feature(s)

None

## **TYPICAL SECTION No. 2M**

2 LANE UNDIVIDED WITH PAVED SHOULDERS AND SIDEPATH



POSTED SPEED 55 MPH

- Between 25% and 50% identify as 65+
- Between 0% and 25% identify as African American
- Between 0% and 5% identify as Asian
- Between 15% and 25% identify as Hispanic and Latino
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Asian and Pacific Islander
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Indo-European
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Other
- Between 0% and 5% identify as Over 18 with Limited English Proficiency (LEP) - Spanish
- Between 5% and 15% identify as Native American
- Between 15% and 20% identify as Some Other Race
- Between 5% and 10% identify as Two of More Races
- Between 1% and 5% identify as Below Poverty Line
- Between 0% and 15% identify as Households with No Car

#### **Fifty Lakes Drive**

From N.C. 87 (George III Hwy SE) to River Road SE

#### Local ID: BRUN50032-H

Purpose: Safety

#### Improvement: Improve Existing

#### **Identified Need**

Fifty Lakes is a major connector between NC 133 and NC 87. With South Brunswick High School and South Brunswick Middle School connecting to the south of this roadway, it is vital the roadway is upgraded to meet safety standards.

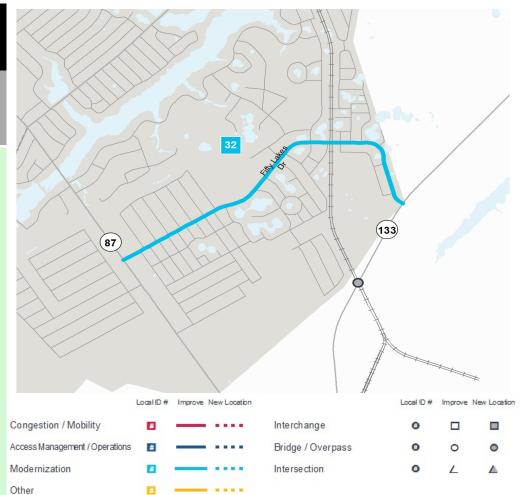
#### Recommendation

**Existing ROW** 

Safety Risk Score

(feet)

This is a modernization project. Currently the road is a two lane roadway with 10 foot lanes. The recommendation for the future is the roadway be widened from 10 foot lanes to 12 foot lanes with shoulders on both sides of road.



Proposal At A Glance		Proposal Data:	2017 Base Year	2045 Future Year	
Highway Class	Modernization	Improved Route	Existing	Without Proposal	With Proposal
Facility Type	Minor	Facility Type	Minor Thoroughfare	Minor Thoroughfare	Minor Thoroughfare
Typical Section	Thoroughfare	Travel Lanes	2	2	2
Typical Section	02 M	Volume (vpd)	1069	1700	670-1300
Section Options -		Capacity (vpd)	13400	13400	16400
Length (miles)	2.41				

Capacity Data:	<u>Year</u>
Facility will be Approaching Capacity (>80%)	2045

60

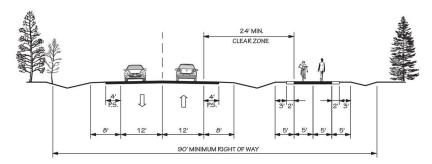
66



None

## **TYPICAL SECTION No. 2M**

2 LANE UNDIVIDED WITH PAVED SHOULDERS AND SIDEPATH



POSTED SPEED 55 MPH

## Project History/Linkage to Other Projects

There is a multi-use lane being recommended along this route.

## CTP Goal Analysis

This project supports the following goals and objectives:

Objectives: Improve the safety of the transportation system for all user groups regardless of socioeconomic status or physical ability.

Objectives: Increase the reliability, predictability, and efficiency of the transportation experience through system improvements and enhanced communication.

Objective: Increase the lifespan of existing infrastructure and ensure transportation facilities are used optimally.

#### Vision Goals & Objectives Survey

There were 3 comments for this particular project in the Brunswick County CTP survey. These comments mentioned adding turn lanes. The survey was launched on March 10, 2021, and closed on June 11, 2021. There was an English and Spanish version of the survey. A total of 6,969 total participants created a total of 8,387 comments.

## Potential Impact

Land Use/CUR: The area around this roadway is rural in nature with some residential units. The schools south of this road are major factors in this recommendation.

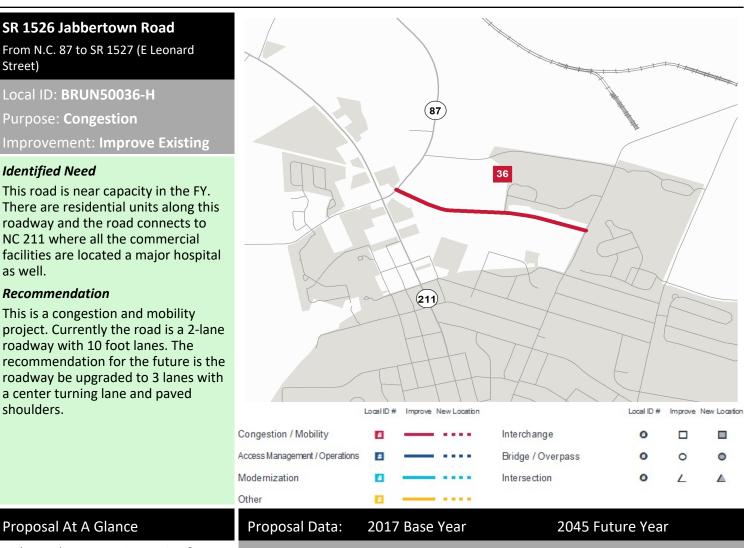
### Additional Information - Environmental

All environmental data in the database was considered. This Project is within 150 feet of:

- 8 Coastal Region Evaluation Of Wetland Significance Feature(s)
- 4 Flood Hazard Area Feature(s)

- 1 Landscape Habitat Indicator Guild Feature(s)
- 6 Managed Area Feature(s)
- 30 Natural Heritage Element Occurrence Feature(s)
- 3 Natural Heritage Natural Area Feature(s)
- 17 Wetland Feature(s)
- 7 River And Stream Feature(s)
- 6 Lake And Pond Feature(s)
- 2 Protected Area Feature(s)
- 1 Target Local Watershed Feature(s)

- Between 25% and 50% identify as 65+
- Between 0% and 25% identify as African American
- Between 0% and 5% identify as Asian
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Asian and Pacific Islander
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Indo-European
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Other
- Between 0% and 5% identify as Over 18 with Limited English Proficiency (LEP) Spanish
- 0% identify as Native American
- Between 1% and 5% identify as Some Other Race
- Between 20% and 100% identify as Two of More Races
- Between 5% and 15% identify as Below Poverty Line
- Between 0% and 15% identify as Households with No Car



0 /	ngestion & bility
Facility Type Mir Tho	nor proughfare
Typical Section 03	A
Section Options -	
Length (miles) 0.7	9
Existing ROW 60 (feet)	
Safety Risk Score 66	

Proposal Data:	2017 Base Year	2045 Future Year		
Improved Route	Existing	<u>Without Proposal</u>	With Proposal	
Facility Type	Minor Thoroughfare	Minor Thoroughfare	Minor Thoroughfare	
Travel Lanes	2	2	2	
Volume (vpd)	5001	7500	11800	
Capacity (vpd)	10600	10600	13200	

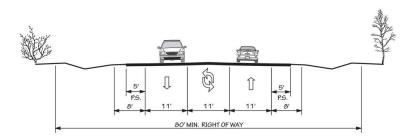
Capacity Data:	<u>Year</u>
Facility will be Approaching Capacity (>80%)	2045
Facility will be Over Capacity (>=100%)	2045



None

## TYPICAL SECTION No. 3A

2 LANE WITH TWO WAY LEFT TURN LANE, AND PAVED SHOULDERS



POSTED SPEED 25-55 MPH

## *Project History/Linkage to Other Projects*

There are no multimodal recommendations being made along this route.

Since the volume increases in FY, it was important to also increase the capacity to accomodate for the increase in volume and alleviate congestion. Therefore, this recommendation is being made.

## CTP Goal Analysis

Goal: Create a more efficient transportation system through improved connectivity, capacity and operations.

Goal: Support growth through a transportation network that serves local, inter- and intra- regional accessibility and mobility needs for both people and goods.

Objective: Increase the lifespan of existing infrastructure and ensure transportation facilities are used optimally.

#### Vision Goals & Objectives Survey

There were no comments for this particular project in the Brunswick County CTP survey. The survey was launched on March 10, 2021, and closed on June 11, 2021. There was an English and Spanish version of the survey. A total of 6,969 total participants created a total of 8,387 comments.

## Potential Impact

Land Use/CUR: The area around this roadway is heavily residential and commercial in this area. Jabbertown Road connects to NC 211 which is very commercial. There is a major hospital on NC 211 as well as Fire Department.

## Additional Information - Environmental

All environmental data in the database was considered. This Project is within 150 feet of:

- 2 Coastal Region Evaluation Of Wetland Significance Feature(s)
- 2 Flood Hazard Area Feature(s)
- 2 Natural Heritage Element Occurrence Feature(s)
- 5 Wetland Feature(s)
- 3 River And Stream Feature(s)
- 2 Lake And Pond Feature(s)
- 1 Target Local Watershed Feature(s)

- Between 25% and 50% identify as 65+
- Between 0% and 25% identify as African American
- Between 0% and 5% identify as Asian
- Between 1% and 5% identify as Hispanic and Latino
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Asian and Pacific Islander
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Indo-European
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Other
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Spanish
- Between 5% and 15% identify as Native American
- Between 1% and 5% identify as Two of More Races
- Between 1% and 5% identify as Below Poverty Line
- Between 0% and 15% identify as Households with No Car

#### SR 1165 Thomasboro Road

From SR 1164 (Clariday Road) to SR 1167 (Persimmon Road)

Local ID: BRUN50037-H

Purpose: Congestion

Improvement: Improve Existing

#### **Identified Need**

This roadway is close to near capacity in FY (over 70%). There is a significant amount of residential units up Thomasboro Road that this roadway connects to, therefore with the lanes only being 9 feet, it creates an unsafe roadway.

#### Recommendation

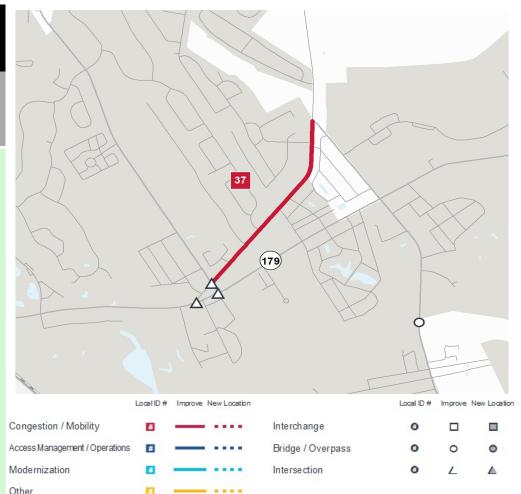
Length (miles)

**Existing ROW** 

Safety Risk Score

(feet)

This is a congestion and mobility project. Currently the road is a two lane roadway with 9 foot lanes. The recommendation for the future is the roadway be upgraded to a three lane with a center turning lane and paved shoulders.



		Other			
Proposal At A Glance		Proposal Data:	2017 Base Year	2045 Future Year	
Highway Class	Congestion & Mobility	Improved Route	<u>Existing</u>	Without Proposal	<u>With Proposal</u>
Facility Type	Major Thoroughfare Multi-lane	Facility Type	Minor Thoroughfare	Minor Thoroughfare	Major Thoroughfare Multi-lane
		Travel Lanes	2	2	2
Typical Section		Volume (vpd)	600	4700	9600
Section Options	-	Capacity (vpd)	10600	10600	13200

Capacity Data:	<u>Year</u>
Facility will be Approaching Capacity (>80%)	2045
Facility will be Over Capacity (>=100%)	2045

1.0

60

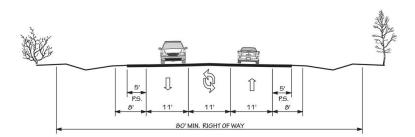
100



None

## **TYPICAL SECTION No. 3A**

2 LANE WITH TWO WAY LEFT TURN LANE, AND PAVED SHOULDERS



POSTED SPEED 25-55 MPH

## Project History/Linkage to Other Projects

On the GSATs MTP population census map change from 2000-2014, the area surrounding this project has had a significant population increase and moderate employment increase.

This project is being submitted as a SPOT project to address three intersections in the area. For more information, refer to SPOT ID: H184130

There are no multimodal recommendations being made along this route.

If this recommendation was not being made, the roadway would be over 90% capacity. Refer to V/C maps.

## CTP Goal Analysis

This project supports the following goals and objectives:

Goal: Create a more efficient transportation system through improved connectivity, capacity and operations.

Objectives: Promote reductions in recurring congestion through transportation capacity, access management, and policy improvements.

Objectives: Consider future projects and locations based on policies of Environmental Justice (EJ) Communities.

Objectives: Minimize direct and indirect environmental impacts of the transportation system while planning and prioritizing transportation recommendations.

#### Vision Goals & Objectives Survey

There were 43 comments for this project area in the Brunswick County CTP survey. The comments mentioned congestion and accidents and the need for intersection improvements. The survey was launched on March 10, 2021, and closed on June 11, 2021. There was an English and Spanish version of the survey. A total of 6,969 total

#### participants created a total of 8,387 comments.

## Potential Impact

Land Use/CUR: The area around this roadway is rural in nature and scattered with residential and some commercial. As the road turns into Thomasboro Road, there is significant residential units.

### Additional Information - Environmental

All environmental data in the database was considered. This Project is within 150 feet of:

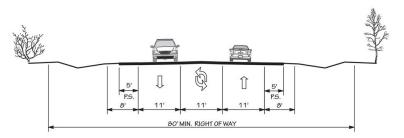
- 1 Coastal Region Evaluation Of Wetland Significance Feature(s)
- 1 High Quality And Outstanding Resource Water Feature(s)
- 1 Natural Heritage Element Occurrence Feature(s)

- Between 25% and 50% identify as 65+
- Between 0% and 25% identify as African American
- Between 0% and 5% identify as Asian
- Between 1% and 5% identify as Hispanic and Latino
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Asian and Pacific Islander
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Indo-European
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Other
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Spanish
- 0% identify as Native American
- Between 1% and 5% identify as Two of More Races

None

## **TYPICAL SECTION No. 3A**

2 LANE WITH TWO WAY LEFT TURN LANE, AND PAVED SHOULDERS



POSTED SPEED 25-55 MPH

- Between 5% and 15% identify as Below Poverty Line
- Between 0% and 15% identify as Households with No Car

#### SR 1167 Persimmon Road

From SR 1165 (Thomasboro Road) to U.S. 17

#### Local ID: BRUN50038-H

Purpose: Mobility

Improvement: Improve Existing

#### **Identified Need**

Primary goal in SPOT H184130: Multiple intersections converge close to Calabash. Aim of the project is to redesign the configuration to enhance mobility, alleviate congestion on the side streets off NC 179 and improve safety in this area.

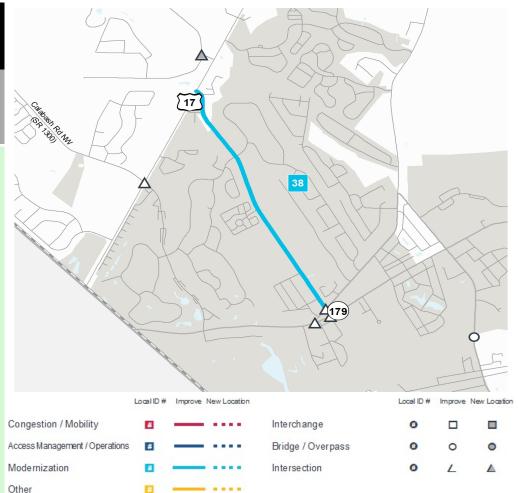
#### Recommendation

**Existing ROW** 

Safety Risk Score

(feet)

Currently the road is a two lane roadway with 10 foot lanes. The recommendation for the future is the roadway be upgraded to a four lane divided with paved shoulders.



		0.0000	_		
Proposal At A Glance		Proposal Data:	2017 Base Year	2045 Future Year	
Highway Class	Modernization	Improved Route	Existing	Without Proposal	With Proposal
Facility Type Major Thoroughfare Multi-lane		Facility Type	Minor Thoroughfare	Minor Thoroughfare	Major Thoroughfare Multi-lane
Typical Section 04 A	Travel Lanes	2	2	4	
	04 A	Volume (vpd)	755	1800	4200
Section Options -		Capacity (vpd)	12400	12400	27600
Length (miles)	1.82	. , , , , ,			

-

Capacity Data:	<u>Year</u>
Facility will be Approaching Capacity (>80%)	2045
Facility will be Over Capacity (>=100%)	2045

60

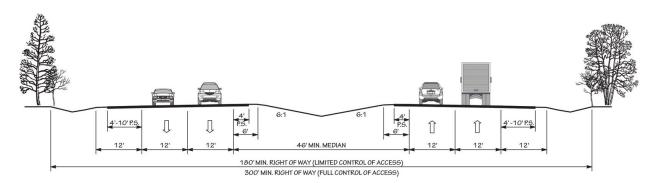
100



None

## **TYPICAL SECTION No. 4A**

4 LANE DIVIDED (46' DEPRESSED MEDIAN) WITH PAVED SHOULDERS



POSTED SPEED 45-70 MPH

## *Project History/Linkage to Other Projects*

On the GSATs MTP population census map change from 2000-2014, the area surrounding this project has had a significant population increase and moderate employment increase. Total range of crashes along this roadway from January 2014 - December 2018 is 5 - 9.

This project is being submitted as a SPOT project to address three intersections in the area. For more information, refer to SPOT ID: H184130

There are no multimodal recommendations being made along this route.

## CTP Goal Analysis

This project supports the following goals and objectives:

Goal: Create a more efficient transportation system through improved connectivity, capacity and operations.

Objectives: Promote reductions in recurring congestion through transportation capacity, access management, and policy improvements.

Objectives: Recognize savings (e.g. time and fuel consumption) by minimizing vehicle miles traveled through enhanced integration and connectivity of the transportation system, across and between modes, for people and freight.

#### Vision Goals & Objectives Survey

There were 4 comments on this particular project area in the Brunswick County CTP survey. The comments mentioned that there is no shoulder and intersection improvements are needed. The survey was launched on March 10, 2021, and closed on June 11, 2021. There was an English and Spanish version of the survey. A total of 6,969 total participants created a total of 8,387 comments.

## Potential Impact

Land Use/CUR: The area around this roadway is primarily farmland. There are some residential homes and to the south and north of the road on NC 179 and US 17, there are some businesses.

## Additional Information - Environmental

All environmental data in the database was considered. This Project is within 150 feet of:

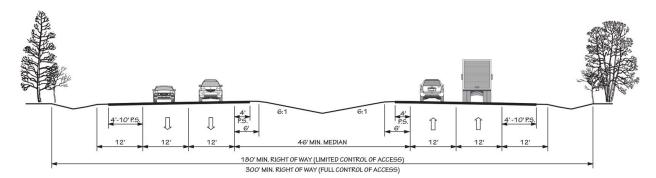
- 4 Coastal Region Evaluation Of Wetland Significance Feature(s)
- 2 Flood Hazard Area Feature(s)
- 1 High Quality And Outstanding Resource Water Feature(s)
- 1 Natural Heritage Element Occurrence Feature(s)
- 9 Wetland Feature(s)
- 1 River And Stream Feature(s)
- 1 Lake And Pond Feature(s)
- 1 Protected Area Feature(s)

- Between 50% and 100% identify as 65+
- Between 0% and 25% identify as African American
- Between 0% and 5% identify as Asian
- Between 1% and 5% identify as Hispanic and Latino
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Asian and Pacific Islander
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Indo-European
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Other

None

# **TYPICAL SECTION No. 4A**

4 LANE DIVIDED (46' DEPRESSED MEDIAN) WITH PAVED SHOULDERS



#### POSTED SPEED 45-70 MPH

- 0% identify as Over 18 with Limited English Proficiency (LEP) - Spanish
- Between 5% and 15% identify as Native American
- Between 1% and 5% identify as Two of More Races
- Between 5% and 15% identify as Below Poverty Line
- Between 0% and 15% identify as Households with No Car

#### SR 1164 (Clariday Road SW)

From SR 1165 (Thomasboro Road) to N.C. 179

#### Local ID: BRUN50040-H

Purpose: Safety

#### Improvement: Improve Existing

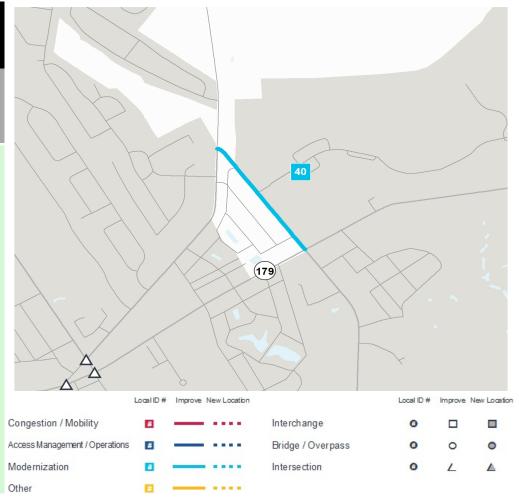
#### Identified Need

Two-lane road with a width of 9 ft on each lane. The surrounding roads are residential, and many residents use this road as a cut through road. With it only being 9 ft in width, the roadway is not safe. Over capacity in FY: 17,400 volume over 15,800 capacity.

#### Recommendation

The recommendation is modernizing the road from 9 ft to 12 ft to make the road safe to drive. The surrounding roadways are being recommended to add lanes and medians, that should help reduce the volume on this road in the future so that there no capacity issues.

Proposal At A Glance						
Highway Class	Modernization					
Facility Type	Minor Thoroughfare					
Typical Section	02 A					
Section Options	-					
Length (miles)	0.51					
Existing ROW (feet)	60					
Safety Risk Score	66					



	Proposal Data:	2017 Base Year	2045 Future Year	
n	Improved Route	Existing	<u>Without Proposal</u>	With Proposal
e	Facility Type	Minor Thoroughfare	Minor Thoroughfare	Minor Thoroughfare
	Travel Lanes	2	2	2
	Volume (vpd)	9115	16800	17400
	Capacity (vpd)	14200	14200	15800

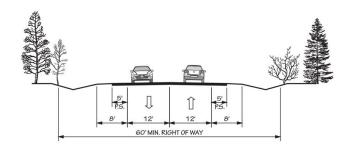
Capacity Data: Facility will be Approaching

Capacity (>80%)



# TYPICAL SECTION No. 2A

2 LANE UNDIVIDED WITH PAVED SHOULDERS



POSTED SPEED 55 MPH

## Project History/Linkage to Other Plans

The intersecting roadways (Thomasboro Road, NC 179, Olde Thristle Down Dr.) are heavily residential. Olde Thristle Downs Dr. leads to a golf course.

There are no multimodal recommendations being made along this route.

## CTP Goal Analysis

This project supports the following goals and objectives:

Goal: Create a more efficient transportation system through improved connectivity, capacity and operations.

Objectives: Promote reductions in recurring congestion through transportation capacity, access management, and policy improvements.

Objective: Increase the lifespan of existing infrastructure and ensure transportation facilities are used optimally.

There were 6 comments on this roadway in the Brunswick County CTP survey. These comments mentioned maintenance issues and the need for shoulders. The survey was launched on March 10, 2021, and closed on June 11, 2021. There was an English and Spanish version of the survey. A total of 6,969 total participants created a total of 8,387 comments.

## Potential Impacts

The area around this roadway is residential. There is a golf course off this roadway with a pond surrounding the golf course.

## Other Information

Based on a planning level environmental assessment using available GIS data, the project proposal is north of a Water System Pump.

## Additional Information - Environmental

All environmental data in the database was considered. This Project is within 150 feet of:

- 3 Coastal Region Evaluation Of Wetland Significance Feature(s)
- 1 High Quality And Outstanding Resource Water Feature(s)
- 2 Natural Heritage Element Occurrence Feature(s)
- 2 Wetland Feature(s)
- 1 Target Local Watershed Feature(s)

- Between 25% and 50% identify as 65+
- Between 0% and 25% identify as African American
- Between 0% and 5% identify as Asian
- Between 1% and 5% identify as Hispanic and Latino
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Asian and Pacific Islander
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Indo-European
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Other
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Spanish
- 0% identify as Native American
- Between 1% and 5% identify as Two of More Races
- Between 5% and 15% identify as Below Poverty Line
- Between 0% and 15% identify as Households with No Car

# New Location (Rice Creek Pkwy Ext.)

From Lake Park Drive SE to SR 1521 (Governors Road SE)

#### Local ID: BRUN50041-H

Purpose: Growth/Economic Development

#### Improvement: New Location

#### **Identified Need**

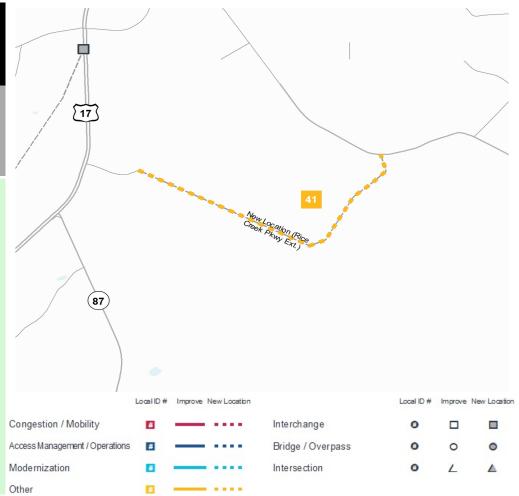
There is no easy access to Town Creek Elementary School/ Town Creek Middle School from Governors Rd SE now. A roundabout is constructed to connect the unpaved road from Governors Rd to the schools for safety and ease of access. Recommendation is to pave the road and accommodate for the new units.

#### Recommendation

(Rice Creek Pkwy Ext. from SR 1521 (Governors Rd SE) to roundabout intersecting Lake Park Drive and Rice Creek Pkwy SE. The recommendation is to pave the new location road as a minor thoroughfare for ease of access to the school.

Proposal At A Glance

Highway Class	Other
Facility Type	Minor Thoroughfare
Typical Section	02 A
Section Options	-
Length (miles)	1.74
Existing ROW (feet)	
Safety Risk Score	-



Proposal Data:	2017 Base Year	2045 Future Year	
New Location	Existing	<u>Without Proposal</u>	With Proposal
Facility Type	-	-	Minor Thoroughfare
Travel Lanes	-	-	2
Volume (vpd)	600	1100	1100
Capacity (vpd)	-	-	16400

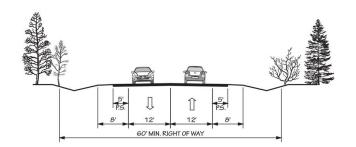
Capacity Data:

Facility will be Approaching Capacity (>80%)



# TYPICAL SECTION No. 2A

2 LANE UNDIVIDED WITH PAVED SHOULDERS



POSTED SPEED 55 MPH

## Project History/Linkage to Other Plans

In addition to access to the elementary school, there are 3,400 units as Brunswick County development moving forward. As of summer of 2021, a major Brunswick County residential development that's been on hold since 2008 is back on track and has gotten bigger at the proposed Rice Creek development off US 17 and north of NC 87 intersection in Winnabow. The Brunswick County Planning Board voted to approve the request to modify the plans. Refer to the WHQR Public Media and StarNews Online news articles for further information.

There are no multimodal recommendations being made along this route.

## **CTP Goal Analysis**

This project supports the following goals and objectives:

Objectives: Support growth and reduce traffic in and around new residential and commercial developments by constructing state-maintained collector streets in those vicinities.

There were no comments for this particular project in the Brunswick County CTP survey.

The survey was launched on March 10, 2021, and closed on June 11, 2021. There was an English and Spanish version of the survey. A total of 6,969 total participants created a total of 8,387 comments

## Potential Impacts

Land Use/CUR: There is both an elementary school as well as a middle school that this new road would connect to. There is also a mark that would connect to this road (Town Creek Park). The road falls in the Winnabow area of Brunswick County. There is a post office at Rice Creek Pkwy and US 17 that this new roadway would connect to. As mentioned in project history and linkage to other

projects section, there are 3,400 new units coming to this area.

## Other Information

Based on a planning level environmental assessment using available GIS data, the project proposal is adjacent to a natural heritage significance area. There is also a Boating Access north of SR 1512 (Governors Road).

## Additional Information - Environmental

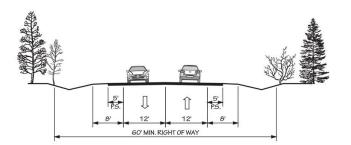
All environmental data in the database was considered. This Project is within 150 feet of:

- 4 Coastal Region Evaluation Of Wetland Significance Feature(s)
- 2 Flood Hazard Area Feature(s)
- 2 Landscape Habitat Indicator Guild Feature(s)
- 4 Natural Heritage Element Occurrence Feature(s)
- 1 Natural Heritage Natural Area Feature(s)
- 4 Wetland Feature(s)
- 2 River And Stream Feature(s)
- 1 Lake And Pond Feature(s)
- 1 Target Local Watershed Feature(s)

- Between 0% and 25% identify as 65+
- Between 0% and 25% identify as African American
- Between 0% and 5% identify as Asian
- Between 0% and 1% identify as Hawaiian or Pacific Islander
- Between 5% and 15% identify as Hispanic and Latino
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Asian and Pacific Islander

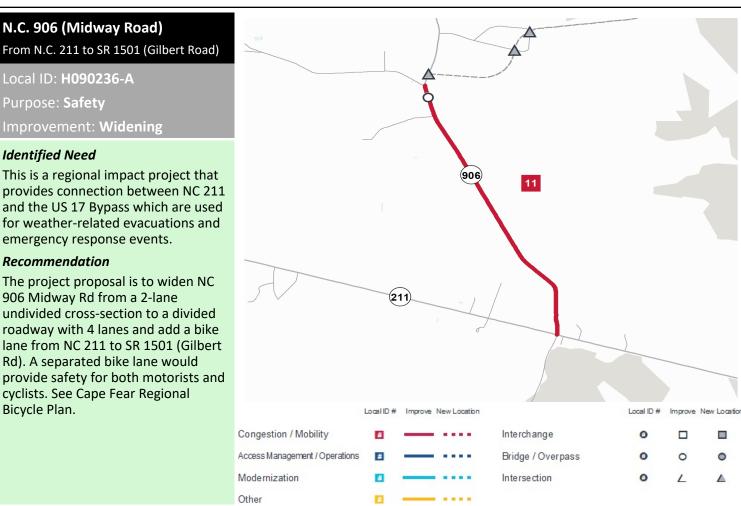
# TYPICAL SECTION No. 2A

2 LANE UNDIVIDED WITH PAVED SHOULDERS



POSTED SPEED 55 MPH

- 0% identify as Over 18 with Limited English Proficiency (LEP) - Indo-European
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Other
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Spanish
- Between 5% and 15% identify as Native American
- Between 1% and 5% identify as Some Other Race
- Between 1% and 5% identify as Two of More Races
- Between 5% and 15% identify as Below Poverty Line
- Between 0% and 15% identify as Households with No Car



Proposal At A Glance						
Highway Class	Congestion Mobility					
Facility Type	Boulevard					
Typical Section	04 A					
Section Options	-					
Length (miles)	2.74					
Existing ROW (feet)	60-84					
Safety Risk Score	100					

&

Bicycle Plan.

other				
Proposal Data:	2017 Base Year	2045 Future Year		
Improved Route	Existing	Without Proposal	<u>With Proposal</u>	
Facility Type	Major Thoroughfare 2-lane	Major Thoroughfare 2-lane	Boulevard	
Travel Lanes	4	4	4	
Volume (vpd)	4498-9006	6500-13000	9600-20900	
Capacity (vpd)	15900	15900	49000	

Capacity Data:

Facility will be Approaching Capacity (>80%)

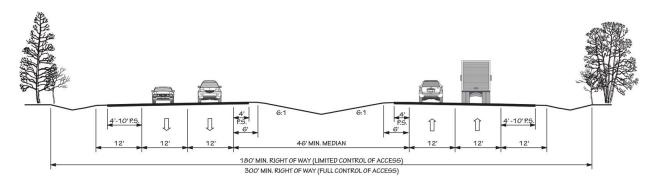
Facility will be Over Capacity (>=100%)



0

## **TYPICAL SECTION No. 4A**

4 LANE DIVIDED (46' DEPRESSED MEDIAN) WITH PAVED SHOULDERS



POSTED SPEED 45-70 MPH

## Project History/Linkage to Other Plans

This project proposal was listed in the 2010 Brunswick County CTP and was submitted to SPOT 5.0 and SPOT 6.0.

The following 2015 STIP project is linked to this project:

**R-3434:** SR 1500 (Midway Road) - SR 1401 (Galloway Road) From NC 211 To US 17 Bypass

Bike lane along NC 906 from NC 211 to US 17 Bus. This roadway is heavily used by bicyclists and would connect to the recommended NC 906 route from NC 211 to dead end in Oak Island on the adopted Cape Fear Regional Bicycle Plan. A separated bike lane would provide safety for both motorists and cyclists.

\*A cross section with paved shoulders is recommended to accommodate for bike lanes.

### **CTP Goal Analysis**

This project supports the following goals and objectives:

*Goal:* Promote a safer and more secure transportation network through crash reduction, enhanced reliability and predictability, and improved emergency coordination.

*Objectives:* Improve safety and security by enhancing the evacuation route network for natural events.

*Objectives:* Increase the reliability, predictability, and efficiency of the transportation experience through system improvements and enhanced communication.

#### Vision Goals & Objectives Survey

The project proposal received 86 comments during the survey period. These comments mentioned congestion, and the need for wider shoulders, multimodal options, and general maintenance. The survey was launched on

March 10, 2021, and closed on June 11, 2021. There was an English and Spanish version of the survey. A total of 6,969 total participants created a total of 8,387 comments.

## Potential Impacts

*Land Use:* Residential properties exist on both sides of the roadway. On Midway Rd. just before NC 211, there is a shopping center called Midway Commons.

### Additional Information - Environmental

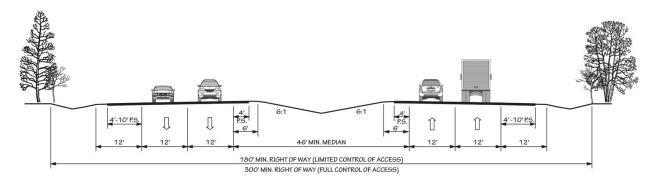
All environmental data in the database was considered. This Project is within 150 feet of:

- 6 Coastal Region Evaluation Of Wetland Significance Feature(s)
- 2 Flood Hazard Area Feature(s)
- 1 Landscape Habitat Indicator Guild Feature(s)
- 5 Natural Heritage Element Occurrence Feature(s)
- 8 Wetland Feature(s)
- 4 River And Stream Feature(s)
- 2 Lake And Pond Feature(s)
- 2 Target Local Watershed Feature(s)

- Between 25% and 50% identify as 65+
- Between 0% and 25% identify as African American
- Between 0% and 5% identify as Asian
- Between 5% and 15% identify as Hispanic and Latino
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Asian and Pacific Islander
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Indo-European

## **TYPICAL SECTION No. 4A**

4 LANE DIVIDED (46' DEPRESSED MEDIAN) WITH PAVED SHOULDERS



POSTED SPEED 45-70 MPH

- 0% identify as Over 18 with Limited English Proficiency (LEP) - Other
- Between 5% and 15% identify as Over 18 with Limited English Proficiency (LEP) - Spanish
- Between 5% and 15% identify as Native American
- Between 5% and 10% identify as Some Other Race
- Between 1% and 5% identify as Two of More Races
- Between 15% and 25% identify as Below Poverty Line
- Between 0% and 15% identify as Households with No Car

#### N.C. 906 (Midway Road/Galloway Road)

From SR 1501 (Gilbert Road) to U.S. 17

Local ID: **H090236-B** 

Purpose: Safety

Improvement: Widening

#### Identified Need

Future year projections show a part of this portion of NC 906 exceeding capacity. Improvements are needed to address high growth, aid in hurricane evacuation and support traffic diversions from other roadways.

#### Recommendation

Proposal At A G

**Highway Class** 

Facility Type

Typical Section Section Options Length (miles)

**Existing ROW** 

Safety Risk Score

(feet)

The proposal is to widen NC 906 (Midway Rd / Galloway Rd) from 2 lanes undivided to 3 lanes with a 2 way left turn lane and paved shoulders. A bike lane is being recommended from SR 1501 (Gilbert Rd) to US 17 to provide safety for both motorists and cyclists. See Cape Fear Regional Bicycle Plan.

	PIGNESS 17		Antenna Rd S	Farm	
	Local ID # Improve New Location		Local ID #	Improve Ne	ew Location
Congestion / Mobility	#	Interchange	0		
Access Management / Operations		Bridge / Overpass	0	0	0
Modernization	• ····	Intersection	0	L	
Other	#				

	ETO CO	_			
Glance	Proposal Data:	2017 Base Year	2045 Future Year		
Congestion & Mobility	Improved Route	Existing	Without Proposal	With Proposal	
Major Thoroughfare 2-lane 03 A -	Facility Type	Major Thoroughfare 2-lane	Major Thoroughfare 2-lane	Major Thoroughfare 2-lane	
	Travel Lanes	2	2	2	
	Volume (vpd)	5579-6483	7900-13400	1600-18100	
	Capacity (vpd)	15900	15900	17200	

Capacity Data:	<u>Year</u>
Facility will be Approaching Capacity (>80%)	2045
Facility will be Over Capacity (>=100%)	2045

5.16

78-100

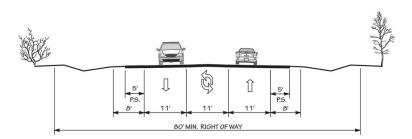
60



None

## **TYPICAL SECTION No. 3A**

2 LANE WITH TWO WAY LEFT TURN LANE, AND PAVED SHOULDERS



POSTED SPEED 25-55 MPH

## Project History/Linkage to Other Plans

This project proposal was listed in the 2010 Brunswick County CTP and was submitted to SPOT 5.0 and SPOT 6.0.

The project proposal was included in the 2015 STIP:

**R-3434:** SR 1500 (Midway Road) - SR 1401 (Galloway Road) From NC 211 To US 17 Bypass

Bike lane along NC 906 from NC 211 to US 17 Bus. This roadway is heavily used by bicyclists and would connect to the recommended NC 906 route from NC 211 to dead end in Oak Island on the adopted Cape Fear Regional Bicycle Plan. A separated lane would provide safety for motorists and cyclists.

\*A cross section with paved shoulders is recommended to accommodate for bicycle lanes.

## **CTP Goal Analysis**

This project supports the following goals and objectives:

*Goals:* Promote a safer and more secure transportation network through crash reduction, enhanced reliability and predictability, and improved emergency coordination.

*Objectives:* Increase the reliability, predictability, and efficiency of the transportation experience through system improvements and enhanced communication.

*Objectives:* Improve safety and security by enhancing the evacuation route network for natural events.

#### Vision Goals & Objectives Survey

This project proposal received 86 comments during the survey period. These comments mentioned congestion, and the need for wider shoulders, multimodal options, and general maintenance. The survey was launched on March 10, 2021, and closed on June 11, 2021. There was an English and Spanish version of the survey. A total of 6,969 survey participants created a total of 8,387 comments.

## Potential Impacts

*Land Use:* Land use along the project proposal is primarily residential. The Summerwoods housing development is located near the NC 906 and US 17 BUS intersection.

Future housing development is expected to come into the area, specifically total of 3400 housing units west of this road.

## Additional Information - Environmental

All environmental data in the database was considered. This Project is within 150 feet of:

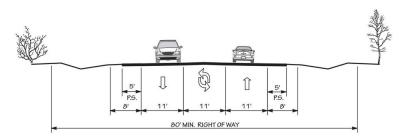
- 9 Coastal Region Evaluation Of Wetland Significance Feature(s)
- 2 Flood Hazard Area Feature(s)
- 1 Landscape Habitat Indicator Guild Feature(s)
- 7 Natural Heritage Element Occurrence Feature(s)
- 10 Wetland Feature(s)
- 16 River And Stream Feature(s)
- 8 Lake And Pond Feature(s)
- 1 Target Local Watershed Feature(s)

- Between 25% and 50% identify as 65+
- Between 0% and 25% identify as African American
- Between 0% and 5% identify as Asian
- Between 5% and 15% identify as Hispanic and Latino

None

## **TYPICAL SECTION No. 3A**

2 LANE WITH TWO WAY LEFT TURN LANE, AND PAVED SHOULDERS



POSTED SPEED 25-55 MPH

- 0% identify as Over 18 with Limited English Proficiency (LEP) - Asian and Pacific Islander
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Indo-European
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Other
- Between 5% and 15% identify as Over 18 with Limited English Proficiency (LEP) - Spanish
- Between 5% and 15% identify as Native American
- Between 5% and 10% identify as Some Other Race
- Between 1% and 5% identify as Two of More Races
- Between 15% and 25% identify as Below Poverty Line
- Between 0% and 15% identify as Households with No Car

#### **Carolina Bays Parkway Extension**

From South Carolina State Line to U.S. 17 at N.C. 130

Local ID: **H090237-A** 

Purpose: Mobility

Improvement: New Location

#### Identified Need

This project is a statewide mobility project that assists with improving the transportation network by enhancing mobility and connectivity for traffic moving in and through the project area.

#### Recommendation

The project proposal is to construct a new 4 lane freeway extending from the Carolina Bays Parkway to the US 17 Shallotte Bypass.



Congestion / Mobility	#	<u> </u>	Interchange	0			
Access Management / Operations	#		Bridge / Overpass	0	0	0	
Modernization	#		Intersection	0	L		
Other							

Proposal At A Glance		
Highway Class	Congestion & Mobility	
Facility Type	Freeway	
Typical Section	04 A	
Section Options	06 A	
Length (miles)	15.47	
Existing ROW (feet)		
Safety Risk Score	-	

Proposal Data:	2017 Base Year	2045 Future Year	
 New Location	Existing	Without Proposal	With Proposal
Facility Type	-	-	Freeway
Travel Lanes	-	-	4
Volume (vpd)	-	-	4400
Capacity (vpd)	-	-	63500

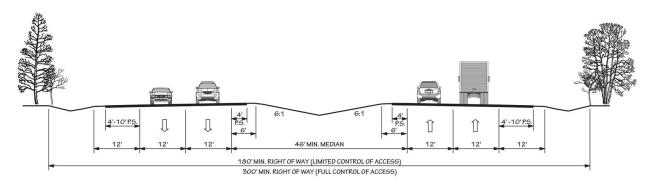
Capacity Data:

Facility will be Approaching Capacity (>80%)



## TYPICAL SECTION No. 4A

4 LANE DIVIDED (46' DEPRESSED MEDIAN) WITH PAVED SHOULDERS



POSTED SPEED 45-70 MPH

## Project History/Linkage to Other Plans

The Carolina Bays Parkway extension was listed in the 2040 GSATS MTP in 2017 as a new construction recommendation for improving mobility.

This project proposal was submitted to SPOT 5.0 and SPOT 6.0 and is a STIP project:

**R- 5876:** Carolina Bays Pky I-74 (New Route - Carolina Bays Parkway Extension). From SC State Line to US 17 At NC 130. Construct Freeway on New Location.

There is a Feasibility Study published for this project with further information.

## CTP Goal Analysis

This project supports the following goals and objectives:

*Goal:* Support growth through a transportation network that serves local, inter- and intra- regional accessibility and mobility needs for both people and goods.

*Objectives:* Increase the accessibility and mobility of people and freight within the region and to other areas.

#### Vision Goals & Objectives Survey

This project proposal received 13 comments during the survey period. The majority of comments were in favor of building Carolina Bays Parkway extension to reduce congestion and support community growth. The survey was launched on March 10, 2021 and closed on June 11, 2021. There was an English and Spanish version of the survey. A total of 6,969 survey participants created a total of 8,387 comments.

## Potential Impacts

Land Use: Land Use along the project proposal is minimal. A residential development exists near the NC 130/US 17 connection. Future housing development is expected to come into the area, specifically total of 148 housing units north of this road and total of 3,922 housing units south of this road.

## Additional Information - Environmental

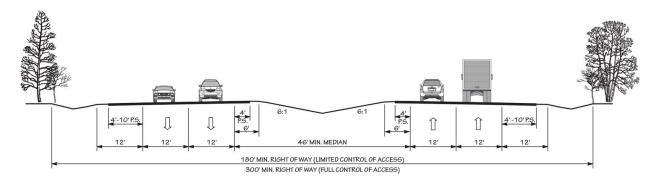
All environmental data in the database was considered. This Project is within 150 feet of:

- 61 Coastal Region Evaluation Of Wetland Significance Feature(s)
- 24 Flood Hazard Area Feature(s)
- 4 Landscape Habitat Indicator Guild Feature(s)
- 8 Natural Heritage Element Occurrence Feature(s)
- 69 Wetland Feature(s)
- 28 River And Stream Feature(s)
- 6 Lake And Pond Feature(s)
- 2 Target Local Watershed Feature(s)

- Between 50% and 100% identify as 65+
- Between 25% and 50% identify as African American
- Between 0% and 5% identify as Asian
- Between 5% and 15% identify as Hispanic and Latino
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Asian and Pacific Islander
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Indo-European
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Other

# **TYPICAL SECTION No. 4A**

4 LANE DIVIDED (46' DEPRESSED MEDIAN) WITH PAVED SHOULDERS





- Between 0% and 5% identify as Over 18 with Limited English Proficiency (LEP) - Spanish
- Between 5% and 15% identify as Native American
- Between 5% and 10% identify as Some Other Race
- Between 5% and 10% identify as Two of More Races
- Between 25% and 50% identify as Below Poverty Line
- Between 0% and 15% identify as Households with No Car

#### U.S. 74-76

From Brunswick County line to N.C. 87 (Maco Road)

Local ID: **H090287-AF** 

Purpose: Mobility

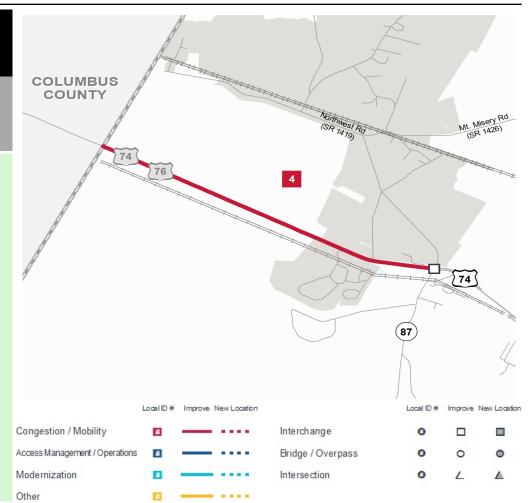
#### Improvement: Improve Existing

#### Identified Need

The current facility is projected to near capacity. A facility upgrade is needed to accommodate for the projected increased traffic volumes. This project is a statewide mobility project that assists with providing interstate access from Charlotte to Wilmington.

#### Recommendation

The project proposal is to upgrade the 4-lane divided roadway to interstate standards with 12- foot lanes and 4 feet of paved shoulder. US 74 is identified as a major road in the Wilmington MTP on page 67.



Proposal At A Glance		
Highway Class	Congestion & Mobility	
Facility Type	Freeway	
Typical Section	04 A	
Section Options	-	
Length (miles)	7.12	
Existing ROW (feet)	85-230	
Safety Risk Score	89	

Proposal Data:	2017 Base Year	2045 Future Year	
Improved Route	Existing	<u>Without Proposal</u>	With Proposal
Facility Type	Expressway	Expressway	Freeway
Travel Lanes	4	4	4
Volume (vpd)	25000	39000	39000
Capacity (vpd)	47400	47400	59700

Capacity Data:

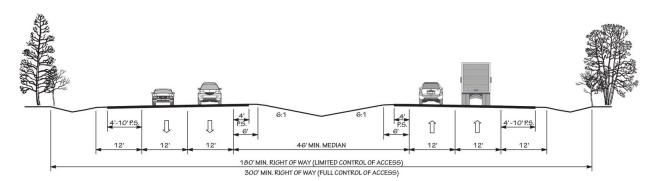
Facility will be Approaching Capacity (>80%)



None

## **TYPICAL SECTION No. 4A**

4 LANE DIVIDED (46' DEPRESSED MEDIAN) WITH PAVED SHOULDERS



POSTED SPEED 45-70 MPH

## Project History/Linkage to Other Plans

This project proposal was included as a recommendation in the 2010 Brunswick County CTP and was submitted to SPOT 6.0.

The following STIP project is linked to this project proposal:

**R-4462:** US 74-76 Brunswick County at NC 87 (Maco Road). Upgrade At-grade Intersection to an Interchange.

US 74 is identified as a major road in the Wilmington MTP on page 67. US 74-76 is a STIP project (R-4462), this CTP is making recommendations for the upgrade based on this criteria.

## CTP Goal Analysis

This project supports the following goals and objectives:

*Goal:* Support growth through a transportation network that serves local, inter- and intra- regional accessibility and mobility needs for both people and goods.

*Objectives:* Increase the accessibility and mobility of people and freight within the region and to other areas.

#### Vision Goals & Objectives Survey

This project proposal received 45 comments during the survey period. The comments mentioned general maintenance issues and the desire for wider shoulders. The survey was launched on March 10, 2021, and closed on June 11, 2021. There was an English and Spanish version of the survey. A total of 6,969 survey participants created a total of 8,387 comments.

## Potential Impacts

*Land Use:* There is primarily commercial land use and some residential land use.

## Additional Information - Environmental

All environmental data in the database was considered. This Project is within 150 feet of:

- 11 Coastal Region Evaluation Of Wetland Significance Feature(s)
- 1 Flood Hazard Area Feature(s)
- 4 Natural Heritage Element Occurrence Feature(s)
- 8 Wetland Feature(s)
- 2 River And Stream Feature(s)

- Between 25% and 50% identify as 65+
- Between 25% and 50% identify as African American
- Between 0% and 5% identify as Asian
- Between 5% and 15% identify as Hispanic and Latino
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Asian and Pacific Islander
- Between 0% and 5% identify as Over 18 with Limited English Proficiency (LEP) - Indo-European
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Other
- Between 0% and 5% identify as Over 18 with Limited English Proficiency (LEP) Spanish
- Between 5% and 15% identify as Native American
- Between 1% and 5% identify as Some Other Race
- Between 5% and 10% identify as Two of More Races
- Between 25% and 50% identify as Below Poverty Line
- Between 0% and 15% identify as Households with No Car

#### U.S. 74-76

From N.C. 87 (Maco Road) to WMPO Boundary Line

Local ID: **H090287-AG** 

Purpose: Mobility

#### Improvement: Improve Existing

#### Identified Need

This is a statewide mobility project that assists with increasing mobility, safety and traffic flow. Currently the lane width is 11 feet with limited shoulders.

#### Recommendation

The project proposal is to upgrade the 4-lane divided roadway to interstate standards with 12-foot lanes and 4 feet of paved shoulders. US 74 is identified as a major road in the Wilmington MTP on page 67.



Proposal At A G	Proposal At A Glance	
Highway Class	Congestion & Mobility	Improved Ro
Facility Type	Freeway	Facility Typ
racinty rype	TTEEway	Travel Lane
Typical Section	04 A	Volume (vp
Section Options	_	volume (vp
Section Options		Capacity (vp
Length (miles)	1.66	
Existing ROW (feet)	85	
Safety Risk Score	100	

01101			
Proposal Data:	2017 Base Year	2045 Future Year	
Improved Route	Existing	<u>Without Proposal</u>	With Proposal
Facility Type	Expressway	Expressway	Freeway
Travel Lanes	4	4	4
Volume (vpd)	25000	39000	39000
Capacity (vpd)	47400	47400	63500

Capacity Data:

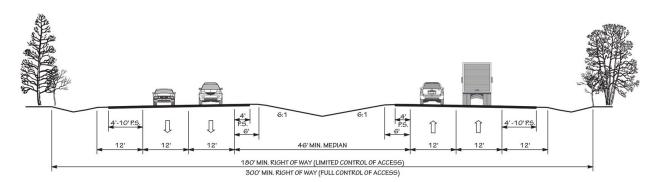
Facility will be Approaching Capacity (>80%)



None

# **TYPICAL SECTION No. 4A**

4 LANE DIVIDED (46' DEPRESSED MEDIAN) WITH PAVED SHOULDERS



POSTED SPEED 45-70 MPH

## Project History/Linkage to Other Plans

This project proposal was previously recommended in the Brunswick County 2010 CTP and in the Cape Fear Transportation 2040 Plan. This project proposal was submitted to SPOT 6.0.

The following STIP project is linked to this project proposal:

**R-4462:** US 74-76 Brunswick County at NC 87 (Maco Road). Upgrade At-grade Intersection to an Interchange.

US 74 is identified as a major road in the Wilmington MTP on page 67. US 74-76 is a STIP project (R-4462), this CTP is making recommendations for the upgrade based on this criteria.

## CTP Goal Analysis

This project supports the following goals and objectives:

*Goal:* Support growth through a transportation network that serves local, inter- and intra- regional accessibility and mobility needs for both people and goods.

*Objectives:* Increase the accessibility and mobility of people and freight within the region and to other areas.

#### Vision Goals & Objectives Survey

This project proposal received 45 comments during the survey period. The comments mentioned general maintenance issues and the desire for wider shoulders. The survey was launched on March 10, 2021, and closed on June 11, 2021. There was an English and Spanish version of the survey. A total of 6,969 survey participants created a total of 8,387 comments.

### Potential Impacts

*Land Use:* There is primarily commercial land use and some residential land use in the project proposal area.

## Additional Information - Environmental

All environmental data in the database was considered. This Project is within 150 feet of:

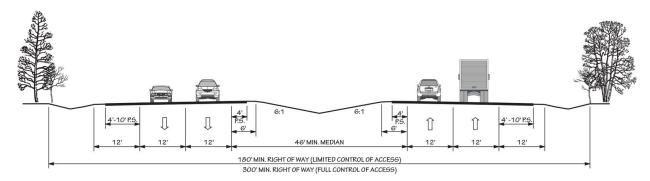
- 4 Coastal Region Evaluation Of Wetland Significance Feature(s)
- 1 Flood Hazard Area Feature(s)
- 1 Hazard Substance Disposal Site(s)
- 5 Natural Heritage Element Occurrence Feature(s)
- 3 Wetland Feature(s)
- 1 River And Stream Feature(s)
- 1 Quality Monitored River And Stream Feature(s)

- Between 25% and 50% identify as 65+
- Between 0% and 25% identify as African American
- Between 0% and 5% identify as Asian
- Between 5% and 15% identify as Hispanic and Latino
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Asian and Pacific Islander
- Between 0% and 5% identify as Over 18 with Limited English Proficiency (LEP) - Indo-European
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Other
- Between 0% and 5% identify as Over 18 with Limited English Proficiency (LEP) - Spanish
- Between 5% and 15% identify as Native American
- Between 1% and 5% identify as Some Other Race
- Between 5% and 10% identify as Two of More Races
- Between 15% and 25% identify as Below Poverty Line

None

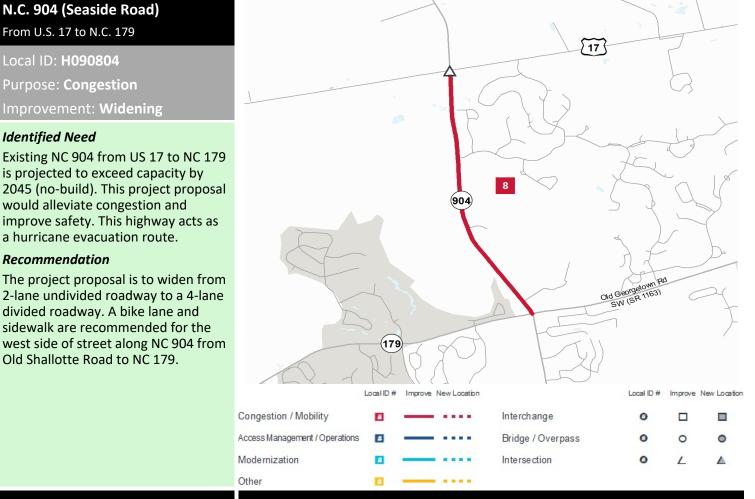
# **TYPICAL SECTION No. 4A**

4 LANE DIVIDED (46' DEPRESSED MEDIAN) WITH PAVED SHOULDERS





 Between 0% and 15% identify as Households with No Car



Proposal At A Glance		Proposal Data:	2017 Base Year	2045 Future Year	
Highway Class	Congestion & Mobility	Improved Route	<u>Existing</u>	Without Proposal	With Proposal
Facility Type	Boulevard	Facility Type	Major Thoroughfare 2-lane	Major Thoroughfare 2-lane	Boulevard
Typical Section	04 D	Travel Lanes	2	2	4
Section Options	04 G	Volume (vpd)	7556-9001	15500-17500	11600-15900
Length (miles)	2.2	Capacity (vpd)	14600	14600	38100
Existing ROW	60				

Capacity Data:	<u>Year</u>
Facility will be Approaching Capacity (>80%)	2045
Facility will be Over Capacity (>=100%)	2045

89

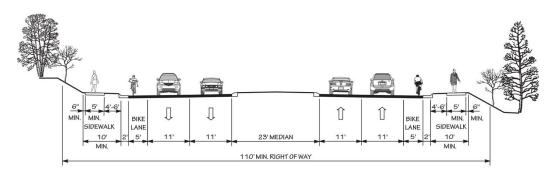


(feet)

Safety Risk Score

# **TYPICAL SECTION No. 4D**

4 LANE DIVIDED (23' RAISED MEDIAN) WITH CURB & GUTTER, BIKE LANES, AND SIDEWALKS



POSTED SPEED 35-45 MPH

## Project History/Linkage to Other Plans

This recommendation is listed in the 2040 GSATS MTP (completed in 2017) under Widening Recommendations; it was also submitted to SPOT 5.0.

Bicycle and sidewalk proposal on west side of street along NC 904 from Old Shallotte Road to NC 179.

GSATs is currently working with the Town of Sunset Beach on creating a Corridor Study for NC 904.

## CTP Goal Analysis

This project supports the following goals and objectives:

*Goal:* Promote a safer and more secure transportation network through crash reduction, enhanced reliability and predictability, and improved emergency coordination.

*Objectives:* Improve the safety of the transportation system for all user groups regardless of socioeconomic status or physical ability.

*Objectives:* Increase the reliability, predictability, and efficiency of the transportation experience through system improvements and enhanced communication.

*Objectives:* Improve safety and security by enhancing the evacuation route network for natural events.

#### Vision Goals & Objectives Survey

This project proposal received 94 comments during the survey period. Comments included general maintenance issues, reports of accidents, and requests for bike lanes and sidewalks. The survey was launched on March 10, 2021, and closed on June 11, 2021. There was an English and Spanish version of the survey. A total of 6,969 survey participants created a total of 8,387 comments.

## Potential Impacts

Land Use: This project proposal is adjacent to a large subdivision, a golf course, and a campsite. Other stores/businesses are also located along both sides of the roadway.

Future housing development is expected to come into the area, specifically total of 104 housing units west of this road.

### Additional Information - Environmental

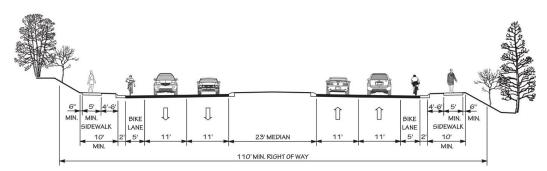
All environmental data in the database was considered. This Project is within 150 feet of:

- 10 Coastal Region Evaluation Of Wetland Significance Feature(s)
- 2 Natural Heritage Element Occurrence Feature(s)
- 6 Wetland Feature(s)
- 1 River And Stream Feature(s)
- 1 Lake And Pond Feature(s)
- 2 Target Local Watershed Feature(s)

- Between 50% and 100% identify as 65+
- Between 0% and 25% identify as African American
- Between 0% and 5% identify as Asian
- Between 1% and 5% identify as Hispanic and Latino
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Asian and Pacific Islander
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Indo-European
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Other
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Spanish
- 0% identify as Native American

# **TYPICAL SECTION No. 4D**

4 LANE DIVIDED (23' RAISED MEDIAN) WITH CURB & GUTTER, BIKE LANES, AND SIDEWALKS



POSTED SPEED 35-45 MPH

- Between 1% and 5% identify as Two of More Races
- Between 5% and 15% identify as Below Poverty Line
- Between 0% and 15% identify as Households with No Car

### N.C. 211

From U.S. 17 to SR 1112 (Sunset Harbor Road)

Local ID: H090806-A

Purpose: Congestion

Improvement: Widening

#### **Identified Need**

NC 211 is experiencing tremendous growth, in BY and FY no-build the entire span is over capacity, in FY build portion of the road is only approaching capacity.

#### Recommendation

Proposal At A Glance

**Highway Class** 

Facility Type

**Typical Section** Section Options

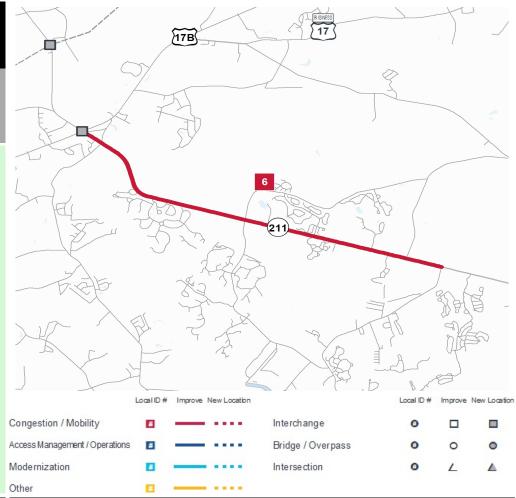
Length (miles)

**Existing ROW** 

Safety Risk Score

(feet)

The project proposal is to widen NC 211 from US 17 to SR 1112 (Sunset Harbor Rd) from 2 lanes to 4 lanes. This recommendation will improve traffic safety and operation of NC 211. NC 211 is on the East Coast Greenway Plan and a multi-use path is being recommended along this route.



nce	Proposal Data:	2017 Base Year	2045 Futu	ire Year
Congestion & Mobility	Improved Route	<u>Existing</u>	Without Proposal	<u>With Proposal</u>
Boulevard	Facility Type	Major Thoroughfare 2-lane	Major Thoroughfare 2-lane	Boulevard
04 I	Travel Lanes	2	2	4
04 К	Volume (vpd)	17146-23236	22000-29100	3200-41500
5.55	Capacity (vpd)	15900-17200	15900-17200	49000
90-150				

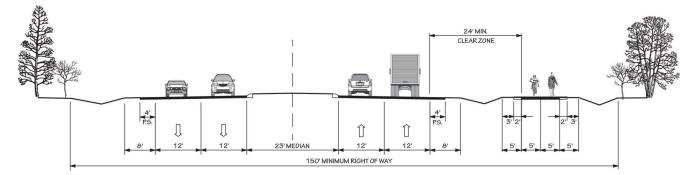
Capacity Data:	<u>Year</u>
Facility will be Approaching Capacity (>80%)	2017-2045
Facility will be Over Capacity (>=100%)	2045

78



# **TYPICAL SECTION No. 4I**

### 4 LANE DIVIDED (23' RAISED MEDIAN) WITH PAVED SHOULDERS AND SIDEPATH



POSTED SPEED 35-55 MPH

## Project History/ Linkage to Other Plans

The project proposal was included in the 2010 Brunswick County CTP and was submitted to SPOT 5.0 and SPOT 6.0.

NC 211 (North Howe Street) - Provide sidewalks/bicycle lane from East Owen Street to Dosher Hospital in Southport on east side of street. NC 211 is on the East Coast Greenway Plan as a multi-use facility (from West Bay Street to US 17). Recommendation is to construct a Multi-Use Path.

There is an interchange project at US 17 that is being submitted into the STIP as part of this project.

## CTP Goal Analysis

This project supports the following goals and objectives:

*Goal:* Create a more efficient transportation system through improved connectivity, capacity and operations.

*Goal:* Support growth through a transportation network that serves local, inter- and intra- regional accessibility and mobility needs for both people and goods.

*Objectives:* Promote reductions in recurring congestion through transportation capacity, access management, and policy improvements.

*Objectives*: Improve the safety of the transportation system for all user groups regardless of socioeconomic status or physical ability.

### Vision Goals & Objectives Survey

This project proposal received 622 comments during the survey period. Improving traffic flow and widening NC 211 were some of the requests listed in the comments. The survey was launched on March 10, 2021, and closed on June 11, 2021. There was an English and Spanish version of the survey. A total of 6,969 survey participants

### created a total of 8,387 comments.

## Potential Impacts

*Land Use:* There is a mix of residential and commercial land use along the NC 211 corridor.

Future housing development is expected to come into the area, specifically total of 565 housing units north of this road and 190 housing units south of this road.

## Additional Information - Environmental

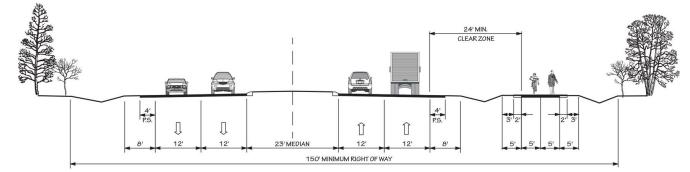
All environmental data in the database was considered. This Project is within 150 feet of:

- 1 Ambient Water Quality Monitoring Site(s)
- 4 Benthic Habitat Feature(s)
- 35 Coastal Region Evaluation Of Wetland Significance Feature(s)
- 2 Fish Nursery Area Feature(s)
- 12 Flood Hazard Area Feature(s)
- 1 Major River Feature(s)
- 1 Managed Area Feature(s)
- 15 Natural Heritage Element Occurrence Feature(s)
- 1 Natural Heritage Natural Area Feature(s)
- 24 Wetland Feature(s)
- 8 River And Stream Feature(s)
- 5 Lake And Pond Feature(s)
- 1 Protected Area Feature(s)
- 1 Quality Monitored River And Stream Feature(s)
- 2 Target Local Watershed Feature(s)

- Between 50% and 100% identify as 65+
- Between 0% and 25% identify as African American

# **TYPICAL SECTION No. 4I**

4 LANE DIVIDED (23' RAISED MEDIAN) WITH PAVED SHOULDERS AND SIDEPATH



POSTED SPEED 35-55 MPH

- Between 0% and 5% identify as Asian
- Between 0% and 1% identify as Hawaiian or Pacific Islander
- Between 5% and 15% identify as Hispanic and Latino
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Asian and Pacific Islander
- Between 0% and 5% identify as Over 18 with Limited English Proficiency (LEP) - Indo-European
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Other
- Between 0% and 5% identify as Over 18 with Limited English Proficiency (LEP) - Spanish
- Between 5% and 15% identify as Native American
- Between 5% and 10% identify as Some Other Race
- Between 1% and 5% identify as Two of More Races
- Between 15% and 25% identify as Below Poverty Line
- Between 0% and 15% identify as Households with No Car

### N.C. 211

SR 1112 (Sunset Harbor Road) to N.C. 906 (Midway Road)

Local ID: **H090806-C** 

Purpose: Congestion

Improvement: Widening

#### **Identified Need**

The surrounding area is seeing a tremendous amount of growth and highway improvements are needed to maintain congestion, safety and operation of NC 211. NC 211 is also an evacuation route.

#### Recommendation

Proposal At A Glance

**Highway Class** 

Facility Type

**Typical Section** Section Options

Length (miles)

**Existing ROW** 

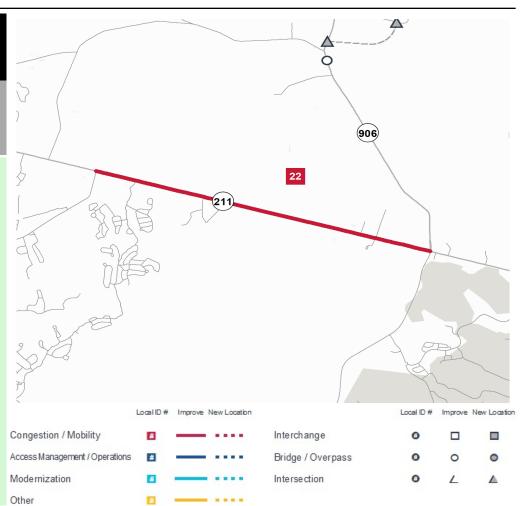
Safety Risk Score

(feet)

The proposal is to widen NC 211 from 2 lanes to 4 lanes. This project assists with reducing congestion and improving safety. NC 211 is on the East Coast Greenway Plan and a multi-use path is recommended along this route.

150

89



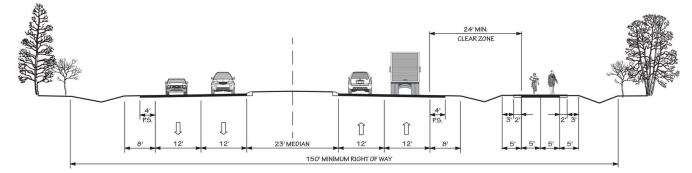
nce	Proposal Data:	2017 Base Year	2045 Futu	ire Year
Congestion & Mobility	Improved Route	<u>Existing</u>	Without Proposal	With Proposal
Boulevard	Facility Type	Major Thoroughfare 2-lane	Major Thoroughfare 2-lane	Boulevard
04 I	Travel Lanes	2	2	4
04 K	Volume (vpd)	19639	24100	35700
3.47	Capacity (vpd)	15900	15900	49000

Capacity Data:	<u>Year</u>
Facility will be Approaching Capacity (>80%)	2017
Facility will be Over Capacity (>=100%)	-



# **TYPICAL SECTION No. 4I**

4 LANE DIVIDED (23' RAISED MEDIAN) WITH PAVED SHOULDERS AND SIDEPATH



POSTED SPEED 35-55 MPH

## Project History/ Linkage to Other Plans

The project proposal was included in the 2010 Brunswick County CTP and was submitted to SPOT 5.0 and SPOT 6.0.

Since capacity increases significantly with this proposal, there is no congestion in FY along this segment of roadway.

This project is included in the 2020-2029 State Transportation Improvement Program (STIP) under TIP # R-5947.

NC 211 (North Howe Street) - Provide sidewalks/bicycle lane from East Owen Street to Dosher Hospital in Southport on east side of street. NC 211 is on the East Coast Greenway Plan as a multi-use facility (from West Bay Street to US 17). Recommendation is to construct a Multi-Use Path.

## CTP Goal Analysis

This project supports the following goals and objectives:

*Goal:* Create a more efficient transportation system through improved connectivity, capacity and operations.

*Goal:* Support growth through a transportation network that serves local, inter- and intra- regional accessibility and mobility needs for both people and goods.

*Objectives:* Promote reductions in recurring congestion through transportation capacity, access management, and policy improvements.

*Objectives:* Improve the safety of the transportation system for all user groups regardless of socioeconomic status or physical ability.

<u>Vision Goals & Objectives Survey</u> This project proposal received 622 comments during the

survey period. These comments included requests for widening, improved roadways, wider shoulders, and a multi-use path. Several survey respondents reported experiencing congestion and accidents along the project proposal. The survey was launched on March 10, 2021, and closed on June 11, 2021. There was an English and Spanish version of the survey. A total of 6,969 survey participants created a total of 8,387 comments.

## Potential Impacts

*Land Use:* There is a mix of residential and commercial land use along the project proposal area.

## Additional Information - Environmental

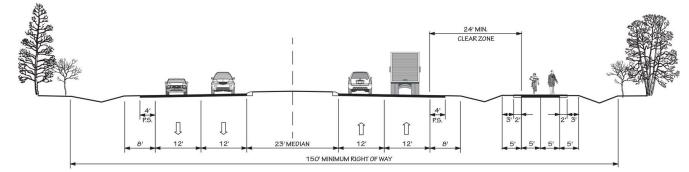
All environmental data in the database was considered. This Project is within 150 feet of:

- 16 Coastal Region Evaluation Of Wetland Significance Feature(s)
- 7 Natural Heritage Element Occurrence Feature(s)
- 1 Natural Heritage Natural Area Feature(s)
- 11 Wetland Feature(s)
- 8 River And Stream Feature(s)
- 6 Lake And Pond Feature(s)
- 2 Target Local Watershed Feature(s)

- Between 50% and 100% identify as 65+
- Between 0% and 25% identify as African American
- Between 0% and 5% identify as Asian
- Between 5% and 15% identify as Hispanic and Latino
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Asian and Pacific Islander

# **TYPICAL SECTION No. 4I**

4 LANE DIVIDED (23' RAISED MEDIAN) WITH PAVED SHOULDERS AND SIDEPATH



POSTED SPEED 35-55 MPH

- Between 0% and 5% identify as Over 18 with Limited English Proficiency (LEP) - Indo-European
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Other
- Between 5% and 15% identify as Over 18 with Limited English Proficiency (LEP) - Spanish
- Between 5% and 15% identify as Native American
- Between 5% and 10% identify as Some Other Race
- Between 1% and 5% identify as Two of More Races
- Between 15% and 25% identify as Below Poverty Line
- Between 0% and 15% identify as Households with No Car

#### N.C. 179 (Beach Drive SW) From South Carolina state line to SR 1163 (Old Georgetown) Calabash Rd Nin (SR 1300) Local ID: H140870 $\Delta$ Purpose: Congestion Improvement: Widening 17 **Identified Need** Portion of this road is near capacity 19 in BY. FY no-build projections show 179 that this road will exceed capacity. Recommendation The project proposal is to widen from 3 lanes to a 4-lane divided with curb & gutter and a side path. A multi-use path is being recommended along NC 179 from the SC border to US 17 Business and is part of the East Coast Greenway Plan. Local ID # Improve New Location Local ID # Improve New Location Congestion / Mobility Interchange # 0 Access Management / Operations Bridge / Overpass 0 0 0 # Modernization Intersection 0 L Other Proposal At A Glance

nce	Proposal Data:	2017 Base Year	2045 Futi	ure Year
Congestion & Mobility	Improved Route	Existing	<u>Without Proposal</u>	With Proposal
Boulevard	Facility Type	Major Thoroughfare 2-lane	Major Thoroughfare 2-lane	Boulevard
04 J	Travel Lanes	2	2	4
-	Volume (vpd)	7020-11000	14600-28300	13700-28300
2.15	Capacity (vpd)	12300-13500	12300-13500	38100-39700

Capacity Data:	<u>Year</u>
Facility will be Approaching Capacity (>80%)	2017-2045
Facility will be Over Capacity (>=100%)	2017

60

67



**Highway Class** 

Facility Type

**Typical Section** 

Section Options

Length (miles)

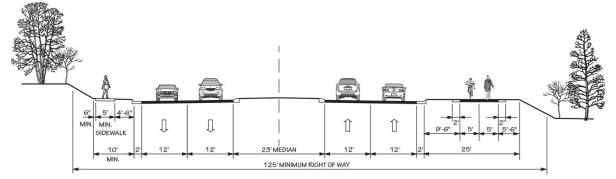
**Existing ROW** 

Safety Risk Score

(feet)

# TYPICAL SECTION No. 4J

4 LANE DIVIDED (23' RAISED MEDIAN) WITH CURB & GUTTER, SIDEWALKS AND SIDEPATH



POSTED SPEED 35-45 MPH

## Project History/ Linkage to Other Plans

This recommendation is listed in the 2040 GSATS MTP (completed in 2017) under North Carolina - Project Recommendations and was submitted to SPOT 5.0.

GSATs has indicated that since there are no significant ROW constraints (particularly from Country Club Dr to Clariday Rd), the MPO has submitted a SPOT proposal to install a raised median and provide designated turning lanes. Refer to the following for more information: SPOT ID - H191992.

Multi-use path: NC 179 from the South Carolina border to US 17 Business. This route is along the East Coast Greenway Plan and therefore is being recommended as an on-road multi-use lane on south side of the road. Refer to the East Coast Greenway Plan and the adopted Cape Fear Regional Bicycle Plan for further information.

### **CTP Goal Analysis**

This project supports the following goals and objectives:

*Goal:* Create a more efficient transportation system through improved connectivity, capacity and operations.

Goal: Support growth through a transportation network that serves local, inter- and intra- regional accessibility and mobility needs for both people and goods.

*Objectives:* Promote reductions in recurring congestion through transportation capacity, access management, and policy improvements.

*Objectives:* Improve the safety of the transportation system for all user groups regardless of socioeconomic status or physical ability.

#### Vision Goals & Objectives Survey

This project proposal received 61 comments during the survey period. Comments included reports of congestion

and the desire for intersection imrpovements and multimodal options. The survey was launched on March 10, 2021, and closed on June 11, 2021. There was an English and Spanish version of the survey. A total of 6,969 survey participants created a total of 8,387 comments.

### Potential Impacts

*Land Use:* Lodging, restaurants, other businesses, and residential communities exist along both sides of the roadway.

### Additional Information - Environmental

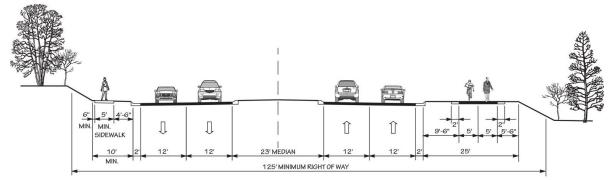
All environmental data in the database was considered. This Project is within 150 feet of:

- 1 Coastal Region Evaluation Of Wetland Significance Feature(s)
- 1 High Quality And Outstanding Resource Water Feature(s)
- 4 Natural Heritage Element Occurrence Feature(s)
- 4 Wetland Feature(s)
- 1 River And Stream Feature(s)
- 1 Lake And Pond Feature(s)
- 1 Target Local Watershed Feature(s)

- Between 50% and 100% identify as 65+
- Between 0% and 25% identify as African American
- Between 0% and 5% identify as Asian
- Between 1% and 5% identify as Hispanic and Latino
- Between 0% and 5% identify as Over 18 with Limited English Proficiency (LEP) - Asian and Pacific Islander

# TYPICAL SECTION No. 4J

4 LANE DIVIDED (23' RAISED MEDIAN) WITH CURB & GUTTER, SIDEWALKS AND SIDEPATH



POSTED SPEED 35-45 MPH

- 0% identify as Over 18 with Limited English Proficiency (LEP) - Indo-European
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Other
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Spanish
- Between 5% and 15% identify as Native American
- Between 1% and 5% identify as Some Other Race
- Between 1% and 5% identify as Two of More Races
- Between 15% and 25% identify as Below Poverty Line
- Between 0% and 15% identify as Households with No Car

### N.C. 179 BUS

From U.S. 17 BUS to SR 1184 (Ocean Isle Beach Road)

Local ID: H140888

Purpose: Congestion

Improvement: Widening

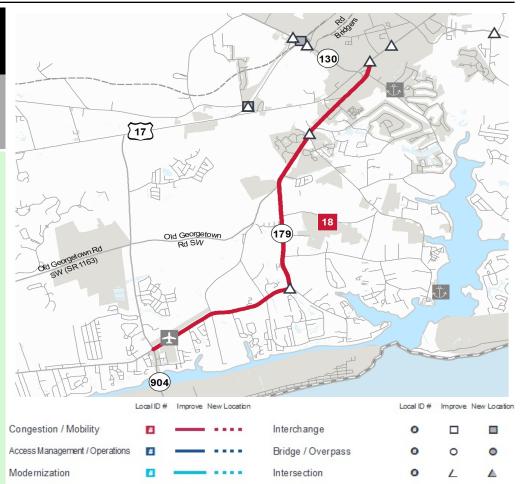
#### Identified Need

NC 179 is a fast-growing corridor. Portions of NC 179 are nearing and over capacity in BY and FY no-build.

#### Recommendation

The proposal is to widen to 4 lanes with paved shoulders and a side path. The existing roadway has 2 and 3-lane sections. A multi-use path is being recommended along NC 179 from the South Carolina border to US 17 Business and is part of the East Coast Greenway Plan.

Other



Proposal At A Glance			
Highway Class	Congestion & Mobility		
Facility Type	Boulevard		
Typical Section	04 I		
Section Options	04 K		
Length (miles)	6.31		
Existing ROW (feet)	60-220		
Safety Risk Score	89		

Proposal Data:	2017 Base Year	2045 Futu	ire Year
Improved Route	Existing	Without Proposal	<u>With Proposal</u>
Facility Type	Major Thoroughfare 2-lane	Major Thoroughfare 2-lane	Boulevard
Travel Lanes	2	2	4
Volume (vpd)	3021-14524	4900-21000	1100-29900
Capacity (vpd)	11100-16600	11100-16600	28100-38100

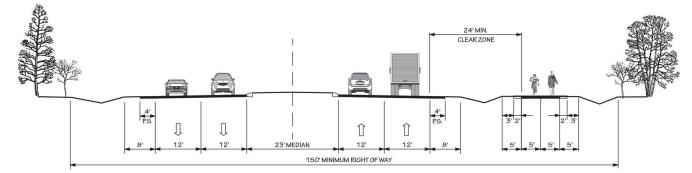
Capacity Data:	<u>Year</u>
Facility will be Approaching Capacity (>80%)	2017-2045
Facility will be Over Capacity (>=100%)	2017-2045



-

# TYPICAL SECTION No. 41

4 LANE DIVIDED (23' RAISED MEDIAN) WITH PAVED SHOULDERS AND SIDEPATH



POSTED SPEED 35-55 MPH

## Project History/ Linkage to Other Plans

This project proposal is listed in the 2040 GSATS MTP under widening recommendations for North Carolina and was submitted to SPOT 5.0.

Multi-use path along NC 179 from the South Carolina border to US 17 Business. This route is along the East Coast Greenway Plan and therefore is being recommended as an on-road multi-use lane on south side of the road. Refer to the East Coast Greenway Plan and the adopted Cape Fear Regional Bicycle Plan for further information.

## CTP Goal Analysis

This project supports the following goals and objectives:

*Goal:* Create a more efficient transportation system through improved connectivity, capacity and operations.

*Goal:* Support growth through a transportation network that serves local, inter- and intra- regional accessibility and mobility needs for both people and goods.

*Objectives:* Promote reductions in recurring congestion through transportation capacity, access management, and policy improvements.

*Objectives:* Improve the safety of the transportation system for all user groups regardless of socioeconomic status or physical ability.

### Vision Goals & Objectives Survey

The project proposal received 134 comments during the survey period. Many survey respondents pointed out locations of congestion as well as the desire for bicycle and pedestrian accommodations. The survey was launched on March 10, 2021, and closed on June 11, 2021. There was an English and Spanish version of the survey. A total of 6,969 total participants created a total of 8,387 comments.

## Potential Impacts

Land Use: There is an airport, a school, and a golf course located along the project proposal. Additionally, there are several housing developments along the project proposal.

Future housing development is expected to come into the area, specifically total of 449 housing units east of this road.

Future housing development is expected to come into the area, specifically total of 555 housing units east of this road and 330 housing units west of this road.

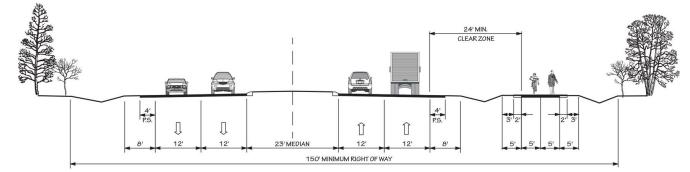
## Additional Information - Environmental

All environmental data in the database was considered. This Project is within 150 feet of:

- 8 Benthic Habitat Feature(s)
- 28 Coastal Region Evaluation Of Wetland Significance Feature(s)
- 6 Fish Nursery Area Feature(s)
- 6 Flood Hazard Area Feature(s)
- 1 High Quality And Outstanding Resource Water Feature(s)
- 1 Landscape Habitat Indicator Guild Feature(s)
- 1 Managed Area Feature(s)
- 1 Mitigation Point(s)
- 5 Natural Heritage Element Occurrence Feature(s)
- 17 Wetland Feature(s)
- 7 River And Stream Feature(s)
- 4 Lake And Pond Feature(s)
- 1 Quality Monitored River And Stream Feature(s)
- 2 Target Local Watershed Feature(s)

# **TYPICAL SECTION No. 4I**

4 LANE DIVIDED (23' RAISED MEDIAN) WITH PAVED SHOULDERS AND SIDEPATH



POSTED SPEED 35-55 MPH

- Between 50% and 100% identify as 65+
- Between 0% and 25% identify as African American
- Between 0% and 5% identify as Asian
- Between 5% and 15% identify as Hispanic and Latino
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Asian and Pacific Islander
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Indo-European
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Other
- Between 0% and 5% identify as Over 18 with Limited English Proficiency (LEP) - Spanish
- Between 5% and 15% identify as Native American
- Between 1% and 5% identify as Some Other Race
- Between 5% and 10% identify as Two of More Races
- Between 25% and 50% identify as Below Poverty Line
- Between 0% and 15% identify as Households with No Car

### N.C. 130 (Holden Beach Road)

From SR 1357 (Smith Avenue) to the end of State Maintenance

#### Local ID: H141126

Purpose: Congestion

Improvement: Widening

#### Identified Need

Currently, NC 130 is a 2-lane highway, portions of BY and FY no-build are both near and over capacity.

#### Recommendation

The project proposal is to widen NC 130 to 4 lanes. The current roadway is 2 and 3 lanes. A multi-use path is recommended from Shell Point Rd to Shallotte Crossing Parkway and bike lanes from Shell Point Rd to Sabbath Home Rd SW. Refer to Cape Fear Regional Bicycle Plan and East Coast Greenway Plan.

Out-



Proposal At A Glance			
Highway Class	Congestion & Mobility		
Facility Type	Boulevard		
Typical Section	04 I		
Section Options	04 K , 04 B, 04 E		
Length (miles)	8.47		
Existing ROW (feet)	60-180		
Safety Risk Score	100		

Other	#		
Proposal Data:	2017 Base Year	2045 Futu	ure Year
Improved Route Existing		Without Proposal	<u>With Proposal</u>
Facility Type	Major Thoroughfare 2-lane	Major Thoroughfare 2-lane	Boulevard
Travel Lanes	2	2	4
Volume (vpd)	2329-15120	3700-25900	3700-28000
Capacity (vpd)	13300-13900	13300-13900	39700

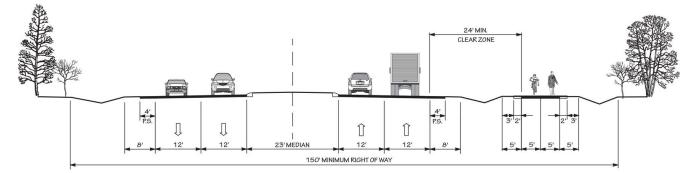
Capacity Data:	<u>Year</u>
Facility will be Approaching Capacity (>80%)	2017-2045
Facility will be Over Capacity (>=100%)	2045



04 K , 04 B, 04 E

# **TYPICAL SECTION No. 4I**

4 LANE DIVIDED (23' RAISED MEDIAN) WITH PAVED SHOULDERS AND SIDEPATH



POSTED SPEED 35-55 MPH

## Project History/ Linkage to Other Plans

This recommendation was submitted to SPOT 5.0 and was listed in the 2040 GSATS MTP under widening recommendations for North Carolina.

Multi-use proposal along NC 130 from Shell Point Road to Shallotte Crossing Parkway. This path is along the East Coast Greenway that connects 15 states and 450 cities and towns for 3,000 miles from Maine to Florida to foster safe walking and biking route. Refer to the plan for further information.

Bike recommendation along NC 130 from Longwood Road to US 17 Bus. This route is heavily used by cyclists and is recommended on the Cape Fear Regional Bicycle Plan as a proposed off-road regional bicycle network. Refer to the adopted Cape Fear Regional Bicycle Plan for more information.

\*A cross section with paved shoulders is recommended to accommodate for bike lanes.

There is a pending corridor study along the Holden Beach Causeway portion of NC 130. GSATS is in coordination with Brunswick County to develop this corridor study.

## CTP Goal Analysis

This project supports the following goals and objectives:

*Goal:* Create a more efficient transportation system through improved connectivity, capacity, and operations.

*Goal:* Provide an integrated transportation network that encourages use of all modes by offering travel choices that are accessible to all segments of the region's population.

*Objectives*:Promote reductions in recurring congestion through transportation capacity, access management, and policy improvements.

*Objectives:* Improve the safety of the transportation system for all user groups regardless of socioeconomic status or physical ability.

*Objectives:* Provide desirable and user-friendly transportation options for all user groups regardless of socioeconomic status or physical ability.

### Vision Goals & Objectives Survey

There were 92 comments concerning this project proposal during the survey period. These comments mentioned congestion, maintenance issues and pedestrian safety concerns. The survey was launched on March 10, 2021, and closed on June 11, 2021. There was an English and Spanish version of the survey. A total of 6,969 total participants created a total of 8,387 comments.

## Potential Impacts

Land Use: There is a mix of residential and commercial land use along the project proposal. Future housing development is expected to come into the area, specifically total of 449 housing units east of this road.

## Additional Information - Environmental

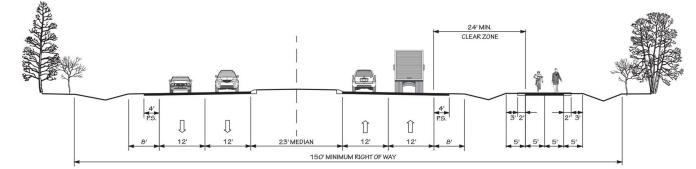
All environmental data in the database was considered. This Project is within 150 feet of:

- 1 Beach And Waterfront Access Feature(s)
- 7 Benthic Habitat Feature(s)
- 21 Coastal Region Evaluation Of Wetland Significance Feature(s)
- 4 Fish Nursery Area Feature(s)
- 33 Flood Hazard Area Feature(s)

04 K , 04 B, 04 E

# TYPICAL SECTION No. 41

4 LANE DIVIDED (23' RAISED MEDIAN) WITH PAVED SHOULDERS AND SIDEPATH





- 1 High Quality And Outstanding Resource Water Feature(s)
- 2 Impaired Waters Line Feature(s)
- 1 Landscape Habitat Indicator Guild Feature(s)
- 2 Major River Feature(s)
- 2 Managed Area Feature(s)
- 10 Natural Heritage Element Occurrence Feature(s)
- 1 Natural Heritage Natural Area Feature(s)
- 29 Wetland Feature(s)
- 9 River And Stream Feature(s)
- 7 Lake And Pond Feature(s)
- 3 Quality Monitored River And Stream Feature(s)
- 2 Target Local Watershed Feature(s)

- Between 50% and 100% identify as 65+
- Between 25% and 50% identify as African American
- Between 0% and 5% identify as Asian
- Between 5% and 15% identify as Hispanic and Latino
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Asian and Pacific Islander
- Between 0% and 5% identify as Over 18 with Limited English Proficiency (LEP) - Indo-European
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Other
- Between 0% and 5% identify as Over 18 with Limited English Proficiency (LEP) Spanish
- Between 5% and 15% identify as Native American
- Between 1% and 5% identify as Some Other Race

- Between 5% and 10% identify as Two of More Races
- Between 25% and 50% identify as Below Poverty Line
- Between 15% and 20% identify as Households with No Car

### N.C. 130 (Whiteville Road)

From SR 1320 (McMilly Road) to N.C. 179 (Village Road)

#### Local ID: H141142

Purpose: Congestion

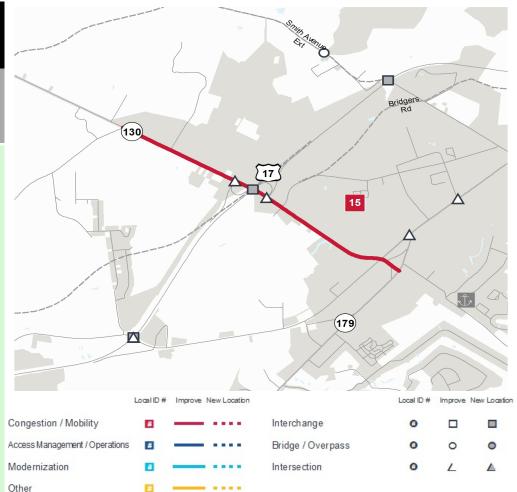
Improvement: Widening

#### **Identified Need**

The current facility is a 2-lane highway, portions of BY and FY no-build was near and over capacity.

#### Recommendation

The recommendation is to widen NC 130 to 4 lanes from McMilly Road (SR 1320) to Village Road (NC 179) to improve safety and traffic flow. A multi-use path, bicycle lanes and sidewalks are being recommended along NC 130. Refer to the Cape Fear Regional Bicycle Plan and East Coast Greenway Plan.



Proposal At A Glance				
Highway Class	Congestion & Mobility			
Facility Type	Boulevard			
Typical Section	04 B			
Section Options	04 E, 04 I, 04 K			
Length (miles)	2.02			
Existing ROW (feet)	60-100			
Safety Risk Score	89			

Guidi				
Proposal Data:	2017 Base Year	2045 Futu	e Year	
Improved Route	Existing	<u>Without Proposal</u>	<u>With Proposal</u>	
Facility Type	Major Thoroughfare 2-lane	Major Thoroughfare 2-lane	Boulevard	
Travel Lanes	2	2	4	
Volume (vpd)	3807-10906	9100-16700	7700-15000	
Capacity (vpd)	12300-14500	12300-14500	38100	

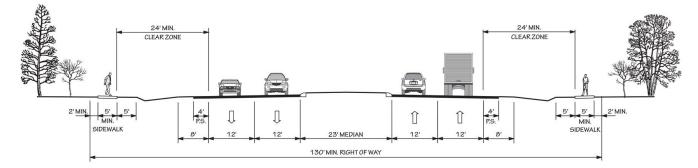
Capacity Data:	<u>Year</u>
Facility will be Approaching Capacity (>80%)	2045
Facility will be Over Capacity (>=100%)	2045



04 E, 04 I, 04 K

# **TYPICAL SECTION No. 4B**

4 LANE DIVIDED (23' RAISED MEDIAN) WITH PAVED SHOULDERS AND SIDEWALKS



POSTED SPEED 35-55 MPH

## Project History/Linkage to Other Plans

This recommendation is included in the 2040 GSATs MTP under widening recommendations for North Carolina; it was also submitted to SPOT 5.0.

Multi-use path: NC 179 from the South Carolina border to US 17 Business. This route is along the East Coast Greenway Plan and therefore is being recommended as an on-road multi-use lane on south side of the road. Refer to the East Coast Greenway Plan and the adopted Cape Fear Regional Bicycle Plan for further information.

Bike recommendation along NC 130 from Longwood Road to US 17 Bus. This route is heavily used by cyclists and is recommended on the Cape Fear Regional Bicycle Plan as a side path. The steering committee has decided that both a sidewalk and bicycle lane are needed along this road that serve the regional bicycle plan. Refer to the adopted Cape Fear Regional Bicycle Plan for more information.

\*A cross section with paved shoulders is recommended to accommodate for bike lanes.

## CTP Goal Analysis

This project supports the following goals and objectives:

*Goals:* Create a more efficient transportation system through improved connectivity, capacity and operations.

*Objectives:* Improve the safety of the transportation system for all user groups regardless of socioeconomic status or physical ability.

### Vision Goals & Objectives Survey

This recommendation received 71 comments during the survey period. Comments mentioned congestion and roadway maintenance issues. Survey respondents also made requests for widening the roadway and multimodal options. The survey was launched on March

10, 2021, and closed on June 11, 2021. There was an English and Spanish version of the survey. A total of 6,969 total participants created a total of 8,387 comments.

## Potential Impacts

*Land Use:* Land use is primarily commercial. West Brunswick High School is also located along the project proposal.

### Additional Information - Environmental

All environmental data in the database was considered. This Project is within 150 feet of:

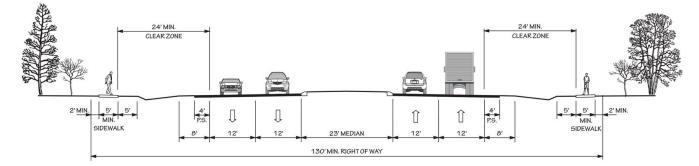
- 5 Benthic Habitat Feature(s)
- 7 Coastal Region Evaluation Of Wetland Significance Feature(s)
- 9 Flood Hazard Area Feature(s)
- 1 Landscape Habitat Indicator Guild Feature(s)
- 4 Natural Heritage Element Occurrence Feature(s)
- 21 Wetland Feature(s)
- 4 River And Stream Feature(s)
- 2 Lake And Pond Feature(s)
- 1 Quality Monitored River And Stream Feature(s)
- 1 Target Local Watershed Feature(s)

- Between 25% and 50% identify as 65+
- Between 25% and 50% identify as African American
- Between 0% and 5% identify as Asian
- Between 5% and 15% identify as Hispanic and Latino
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Asian and Pacific Islander

04 E, 04 I, 04 K

# **TYPICAL SECTION No. 4B**

4 LANE DIVIDED (23' RAISED MEDIAN) WITH PAVED SHOULDERS AND SIDEWALKS



POSTED SPEED 35-55 MPH

- 0% identify as Over 18 with Limited English Proficiency (LEP) - Indo-European
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Other
- Between 0% and 5% identify as Over 18 with Limited English Proficiency (LEP) Spanish
- Between 5% and 15% identify as Native American
- Between 5% and 10% identify as Some Other Race
- Between 5% and 10% identify as Two of More Races
- Between 15% and 25% identify as Below Poverty Line
- Between 0% and 15% identify as Households with No Car

### N.C. 179 (Beach Drive SW)

From N.C. 904 (Seaside Road) to SR 1184 (Ocean Isle Beach Road)

Local ID: H141146

Purpose: Congestion

Improvement: Widening

### Identified Need

FY no-build projections show traffic volumes nearing and over capacity by 2045.

#### Recommendation

The project proposal is to widen from 2 lanes with a two-way left turn lane to a 4-lane divided roadway with paved shoulders and a side path. A multi-use path is being recommended NC 179 from the South Carolina border to US 17 Business and is part of the East Coast Greenway Plan.



Proposal At A Glance				
Highway Class	Congestion & Mobility			
Facility Type	Boulevard			
Typical Section	04 I			
Section Options	02 L			
Length (miles)	2.74			
Existing ROW (feet)	60			
Safety Risk Score	78			

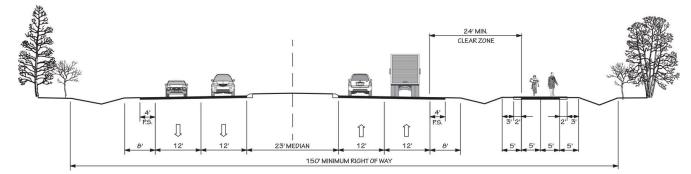
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Proposal Data:	2017 Base Year	2045 Futu	ire Year
Improved Route	Existing	Without Proposal	<u>With Proposal</u>
Facility Type	Major Thoroughfare 2-lane	Major Thoroughfare 2-lane	Boulevard
Travel Lanes	2	2	4
Volume (vpd)	7208-9358	11800-14300	11400-13600
Capacity (vpd)	14000-14500	14000-14500	38100

Capacity Data:	<u>Year</u>
Facility will be Approaching Capacity (>80%)	2017-2045
Facility will be Over Capacity (>=100%)	2017



# **TYPICAL SECTION No. 4I**

### 4 LANE DIVIDED (23' RAISED MEDIAN) WITH PAVED SHOULDERS AND SIDEPATH



POSTED SPEED 35-55 MPH

## Project History/Linkage to Other Plans

This recommendation is listed as a project in the 2040 GSATS MTP and was also submitted to SPOT 5.0.

Multi-use path: NC 179 from the South Carolina border to US 17 Business. This route is along the East Coast Greenway Plan and therefore is being recommended as an on-road multi-use lane on south side of the road. Refer to the East Coast Greenway Plan and the adopted Cape Fear Regional Bicycle Plan for further information.

## **CTP Goals Analysis**

This project supports the following goals and objectives:

*Goal:* Create a more efficient transportation system through improved connectivity, capacity and operations.

*Objectives:* Improve the safety of the transportation system for all user groups regardless of socioeconomic status or physical ability.

### Vision Goals & Objectives Survey

This project proposal received 61 comments during the survey period. The comments mentioned congestion issues, and the need for more sidewalks or a multiuse path and crosswalk markings. The survey was launched on March 10, 2021, and closed on June 11, 2021. There was an English and Spanish version of the survey. A total of 6,969 survey participants created a total of 8,387 comments.

### Potential Impacts

Land Use: There is a mix of residential and commercial land use along this facility. This road falls in the Ocean Isle Beach area of Brunswick County. Future land use will be a combination of mixed use and residential according to the Town of Ocean Isle Beach 2017 Land Use Plan. Future housing development is expected to come into the area, specifically total of 28 housing units south of

### this road.

## Additional Information - Environmental

All environmental data in the database was considered. This Project is within 150 feet of:

- 2 Coastal Region Evaluation Of Wetland Significance Feature(s)
- 1 High Quality And Outstanding Resource Water Feature(s)
- 2 Natural Heritage Element Occurrence Feature(s)
- 2 Target Local Watershed Feature(s)

- Between 50% and 100% identify as 65+
- Between 0% and 25% identify as African American
- Between 0% and 5% identify as Asian
- Between 5% and 15% identify as Hispanic and Latino
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Asian and Pacific Islander
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Indo-European
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Other
- Between 0% and 5% identify as Over 18 with Limited English Proficiency (LEP) - Spanish
- 0% identify as Native American
- Between 1% and 5% identify as Some Other Race
- Between 15% and 25% identify as Below Poverty Line
- Between 0% and 15% identify as Households with No Car

Old Georgetown SW (SR 1163

(904)



Business and is part of the East Greenway Plan.

Proposal At A Glance

no-build.

rom IS 17 t Coast			R				3
		Local ID #	Improve New Location		Local ID #	Improve 1	New Location
	Congestion / Mobility	#		Interchange	0		
	Access Management / Operations	#		Bridge / Overpass	0	0	0
	Modernization	#		Intersection	0	L	
	Other	-					
	Proposal Data:	2017	Base Year	2045 Fut	ure Yea	r	

	r toposal At A Glattee			
Highway Class	Congestion & Mobility			
Facility Type	Boulevard			
Typical Section	04 I			
Section Options	04 K			
Length (miles)	3.76			
Existing ROW (feet)	60			
Safety Risk Score	89			

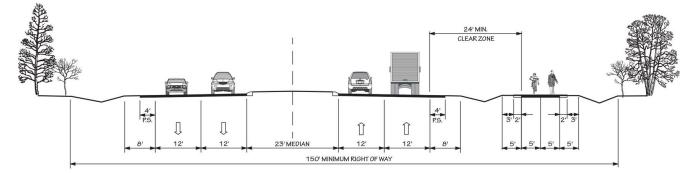
Other			
Proposal Data:	2017 Base Year	2045 Future Year	
Improved Route	Existing	Without Proposal	With Proposal
Facility Type	Major Thoroughfare 2-lane	Major Thoroughfare 2-lane	Boulevard
Travel Lanes	2	2	4
Volume (vpd)	9323-11909	17500-21400	15100-17400
Capacity (vpd)	12800-14600	12800-14600	38100

Capacity Data:	<u>Year</u>
Facility will be Approaching Capacity (>80%)	2017-2045
Facility will be Over Capacity (>=100%)	2045



# TYPICAL SECTION No. 41

4 LANE DIVIDED (23' RAISED MEDIAN) WITH PAVED SHOULDERS AND SIDEPATH



POSTED SPEED 35-55 MPH

## Project History/ Linkage to Other Plans

This project is listed as a recommendation in the 2040 GSATS MTP and was submitted to SPOT 5.0 and 6.0.

Multi-use path along NC 179 from the South Carolina border to US 17 Business. This route is along the East Coast Greenway Plan and therefore is being recommended as an on-road multi-use lane on south side of the road. Refer to the East Coast Greenway Plan and the adopted Cape Fear Regional Bicycle Plan for further information.

## **CTP Goals Analysis**

This project supports the following goals and objectives:

*Goal:* Create a more efficient transportation system through improved connectivity, capacity and operations.

*Objectives:* Promote reductions in recurring congestion through transportation capacity, access management, and policy improvements.

*Objectives:* Improve the safety of the transportation system for all user groups regardless of socioeconomic status or physical ability.

### Vision Goals & Objectives Survey

This project proposal received 61 comments during the survey period. The comments included reports of roadway maintenance issues and safety concerns. Comments requested intersection improvements and the addition of bicycle and pedestrian facilities. The survey was launched on March 10, 2021, and closed on June 11, 2021. There was an English and Spanish version of the survey. A total of 6,969 survey participants created a total of 8,387 comments.

## Potential Impacts

Land Use: There is a mix of residential, mixed, and recreational land use along the project proposal area. This facility is adjacent to Sandpiper Bay Golf & Country Club, Sea Trail Golf Resort & Convention Center and Jaguars Lair Golf Course and provides access to these areas.

### Additional Information - Environmental

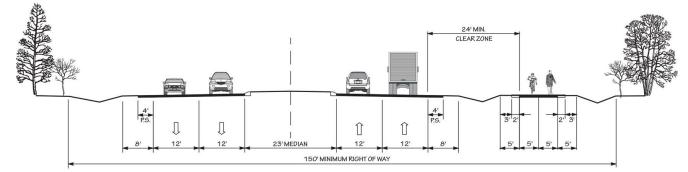
All environmental data in the database was considered. This Project is within 150 feet of:

- 15 Coastal Region Evaluation Of Wetland Significance Feature(s)
- 1 High Quality And Outstanding Resource Water Feature(s)
- 3 Natural Heritage Element Occurrence Feature(s)
- 20 Wetland Feature(s)
- 5 River And Stream Feature(s)
- 2 Lake And Pond Feature(s)
- 1 Target Local Watershed Feature(s)

- Between 50% and 100% identify as 65+
- Between 0% and 25% identify as African American
- Between 0% and 5% identify as Asian
- Between 1% and 5% identify as Hispanic and Latino
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Asian and Pacific Islander
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Indo-European
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Other
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Spanish

# **TYPICAL SECTION No. 4I**

4 LANE DIVIDED (23' RAISED MEDIAN) WITH PAVED SHOULDERS AND SIDEPATH



POSTED SPEED 35-55 MPH

- 0% identify as Native American
- Between 1% and 5% identify as Two of More Races
- Between 5% and 15% identify as Below Poverty Line
- Between 0% and 15% identify as Households with No Car

#### **Bridgers Road Extension**

From SR 1349 (Bridgers Road) to U.S. 17 BUS (Main Street)

#### Local ID: H141158

Purpose: Mobility

#### Improvement: New Location

#### **Identified Need**

This alternative route would relieve traffic from US 17 Business (Main St) and create easier access to Bridgers Road.

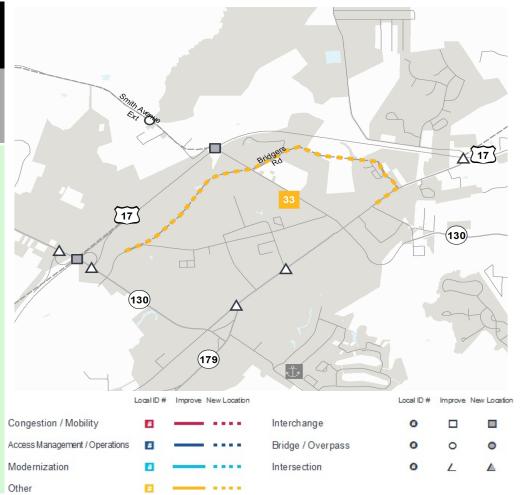
#### Recommendation

**Existing ROW** 

Safety Risk Score

(feet)

The proposal is to construct a new 2-lane roadway extending from Bridgers Rd to create a connection with US 17 Business (Main St). Bike lanes and sidewalks are recommended along Bridgers Rd extension and this is a solution to the top 5 public input priorities from the 2018 Shallotte Land Use Plan.



Proposal At A Glance		Proposal Data:	2017 Base Year	2045 Future Year	
Highway Class	Other	New Location	Existing	Without Proposal	With Proposal
Facility Type	Minor				
	Thoroughfare	Facility Type	-	-	Minor Thoroughfare
	2	Travel Lanes	-	-	2
	02 D	Volume (vpd)	-	-	1100
Section Options	-	Capacity (vpd)	-	-	14100
Length (miles)	2.23				

Capacity Data:

Facility will be Approaching Capacity (>80%)

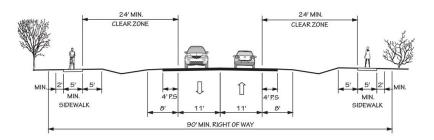
Facility will be Over Capacity (>=100%)



None

# TYPICAL SECTION No. 2D

2 LANE UNDIVIDED WITH PAVED SHOULDERS AND SIDEWALKS



POSTED SPEED 25-45 MPH

## Project History/ Linkage to Other Plans

This project was submitted to SPOT 6.0 and is not listed in any CTP or MTP.

Bicycle Lanes and Sidewalks along Main St/Bridger Rd Extension Loop from US 17 Bus to Copas Rd SW. This will alleviate traffic and boost economic growth in Shallotte, this proposal is a solution to the top 5 public input priorities from the 2018 Shallotte Land Use Plan. Here are the top 5 priorities from the Shallotte Land Use Plan:

1. Maintain Shallotte's small-town charm through preserving the Town's history and by enhancing aesthetics and focusing efforts on supporting local businesses.

2. Prioritize Riverfront development in an effort to provide an attraction for residents and visitors that embraces the area's natural beauty and provides community amenities and retail establishments.

3. Reduce traffic congestion on Main Street through any means necessary.

4. Attract additional entertainment-related and cultural establishments for all ages, while also promoting and attracting signature gathering events.

5. Enhance bicycle and pedestrian facilities in a fashion that maximizes the safety of nonmotorized users for residents and visitors.

\*A cross section with paved shoulders is recommended to accommodate for bike lanes.

## CTP Goal Analysis

This project supports the following goals and objectives:

*Objectives:* Promote reductions in recurring congestion through transportation capacity, access management, and policy improvements.

*Objectives:* Expand and maintain a network of bicycle, pedestrian, and transit facilities that connects homes,

activity centers, and complementary amenities.

### Vision Goals & Objectives Survey

This roadway received 2 comments during the survey period. These comments were requests for sidewalks. The survey was launched on March 10, 2021, and closed on June 11, 2021. There was an English and Spanish version of the survey. A total of 6,969 survey participants created a total of 8,387 comments.

### Potential Impacts

Land Use: Existing land is vacant with some public/semi-public, office and institutional and multi family residential areas. Future land use is planned to be high density residential in the project proposal area.

## Additional Information - Environmental

All environmental data in the database was considered. This Project is within 150 feet of:

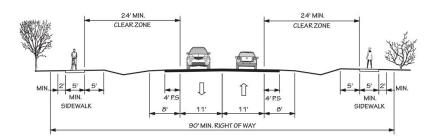
- 7 Coastal Region Evaluation Of Wetland Significance Feature(s)
- 3 Flood Hazard Area Feature(s)
- 1 Managed Area Feature(s)
- 1 Natural Heritage Element Occurrence Feature(s)
- 7 Wetland Feature(s)
- 2 River And Stream Feature(s)
- 2 Lake And Pond Feature(s)
- 1 Target Local Watershed Feature(s)

- Between 0% and 25% identify as 65+
- Between 25% and 50% identify as African American
- Between 0% and 5% identify as Asian

None

# TYPICAL SECTION No. 2D

2 LANE UNDIVIDED WITH PAVED SHOULDERS AND SIDEWALKS



POSTED SPEED 25-45 MPH

- Between 5% and 15% identify as Hispanic and Latino
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Asian and Pacific Islander
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Indo-European
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Other
- Between 0% and 5% identify as Over 18 with Limited English Proficiency (LEP) - Spanish
- Between 5% and 15% identify as Native American
- Between 5% and 10% identify as Some Other Race
- Between 5% and 10% identify as Two of More Races
- Between 5% and 15% identify as Below Poverty Line
- Between 0% and 15% identify as Households with No Car

#### Antenna Farm Road 17 From N.C. 87 to N.C. 906 (Midway Road) Local ID: H150504 Purpose: System Linkage Improvement: New Location (part 87 on existing) **Identified Need** This project assists with improving county connectivity and reducing 906 congestion on NC 211. Recommendation 29 The recommendation is to construct Ò a 2-lane undivided new location roadway with paved shoulders and side path. A multi-use path is being recommended along W Boiling Spring Road from west town limits to NC 87. This project comes from the City of Boiling Springs Lakes Pedestrian Plan. Local ID # Local ID # Improve New Location Improve New Location Congestion / Mobility Interchange # 0 Access Management / Operations Bridge / Overpass # 0 0 0 Modernization Intersection 0 L Proposal At A Glance Jighway Class Congestion 8

Highway Class	Congestion & Mobility
Facility Type	Minor Thoroughfare
Typical Section	02 M
Section Options	-
Length (miles)	5.71
Existing ROW (feet)	
Safety Risk Score	-

Other	<b>2</b>		
Proposal Data:	2017 Base Year	2045 Future Year	
New Location	Existing	<u>Without Proposal</u>	With Proposal
Facility Type	-	-	Minor Thoroughfare
Travel Lanes	-	-	2
Volume (vpd)	-	-	9700
Capacity (vpd)	-	-	16400

Capacity Data:

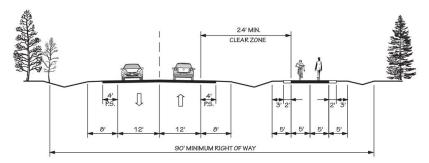
Facility will be Approaching Capacity (>80%)

Facility will be Over Capacity (>=100%)



# **TYPICAL SECTION No. 2M**

2 LANE UNDIVIDED WITH PAVED SHOULDERS AND SIDEPATH



POSTED SPEED 55 MPH

## Project History/Linkage to Other Plans

Antenna Farm Road was shown in the 2010 Brunswick County CTP as needing improvement. This project proposal was submitted into SPOT 6.0 from Division 3.

Multi-use path along SR 1539 (W Boiling Spring Road) from west town limits to NC 87. This project comes from the final draft plan of the City of Boiling Springs Lakes Pedestrian Plan as a shared-use proposal, refer to the plan for further information.

## **CTP Goals Analysis**

This project supports the following goals and objectives:

*Goal:* Create a more efficient transportation system through improved connectivity, capacity and operations.

*Objectives:* Promote reductions in recurring congestion through transportation capacity, access management, and policy improvements.

### Vision Goals & Objectives Survey

This project proposal received 1 comment during the survey period. The survey was launched on March 10, 2021, and closed on June 11, 2021. There was an English and Spanish version of the survey. A total of 6,969 total participants and a total of 8,387 comments.

## Potential Impacts

Land Use: Most of the land use around the project proposal is vacant land; the existing dirt road overlaps with a protected plant preserve. There are residential properties located around the access points to this roadway from NC 906 and NC 87. There is commercial development around NC 87. The lots on W. Boiling Spring Road from Barclay Road are zoned for commercial development.

Additional Information - Environmental

All environmental data in the database was considered. This Project is within 150 feet of:

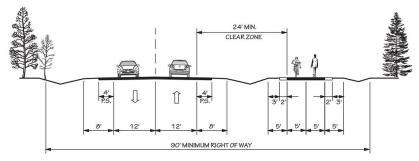
- 28 Coastal Region Evaluation Of Wetland Significance Feature(s)
- 2 Flood Hazard Area Feature(s)
- 7 Landscape Habitat Indicator Guild Feature(s)
- 3 Managed Area Feature(s)
- 19 Natural Heritage Element Occurrence Feature(s)
- 1 Natural Heritage Natural Area Feature(s)
- 18 Wetland Feature(s)
- 14 River And Stream Feature(s)
- 5 Lake And Pond Feature(s)
- 1 Protected Area Feature(s)
- 1 Quality Monitored River And Stream Feature(s)
- 2 Target Local Watershed Feature(s)

- Between 25% and 50% identify as 65+
- Between 0% and 25% identify as African American
- Between 0% and 5% identify as Asian
- Between 15% and 25% identify as Hispanic and Latino
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Asian and Pacific Islander
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Indo-European
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Other
- Between 5% and 15% identify as Over 18 with Limited English Proficiency (LEP) - Spanish

None

# TYPICAL SECTION No. 2M

2 LANE UNDIVIDED WITH PAVED SHOULDERS AND SIDEPATH



POSTED SPEED 55 MPH

- Between 5% and 15% identify as Native American
- Between 15% and 20% identify as Some Other Race
- Between 5% and 10% identify as Two of More Races
- Between 15% and 25% identify as Below Poverty Line
- Between 0% and 15% identify as Households with No Car

## N.C. 904 (Longwood Road NW)

From U.S. 17 to SR 1308 (Etheridge Road)

Local ID: H171352

Purpose: Congestion

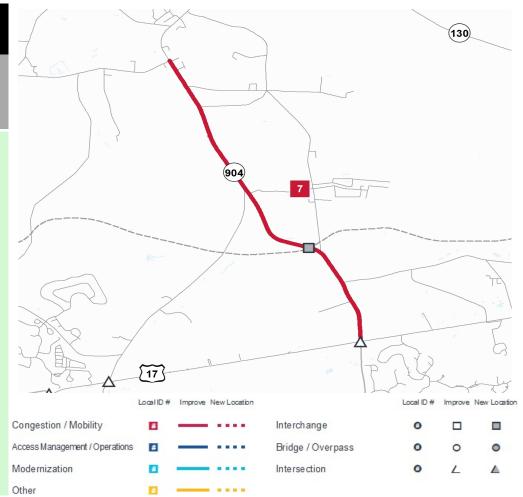
Improvement: Widening

#### **Identified Need**

This is a regional impact project that assists with reducing congestion (near capacity 80%) and improving safety. Refer to project history for more information.

#### Recommendation

The proposal is to widen from 2-lane undivided to 4- lanes divided with paved shoulders, sidewalks and bike lanes. A bike lane and sidewalk are recommended for the west side of street along NC 904 from Old Shallotte Road to NC 179.



Proposal At A Glance				
Highway Class	Congestion & Mobility			
Facility Type	Boulevard			
Typical Section	04 B			
Section Options	04 E			
Length (miles)	4.75			
Existing ROW (feet)	60			
Safety Risk Score	78			

Proposal Data:	2017 Base Year	2045 Futu	ire Year
Improved Route	Existing	Without Proposal	With Proposal
Facility Type	Major Thoroughfare 2-lane	Major Thoroughfare 2-lane	Boulevard
Travel Lanes	2	2	4
Volume (vpd)	4551-6830	7100-12600	6500-13200
Capacity (vpd)	16400	16400	49000

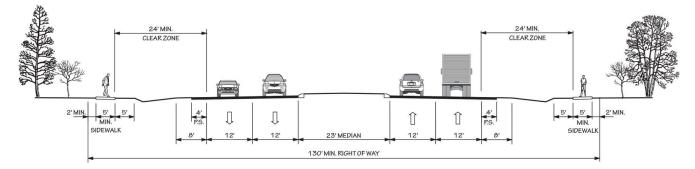
Capacity Data:	<u>Year</u>
Facility will be Approaching Capacity (>80%)	2045
Facility will be Over Capacity (>=100%)	-



### 04 E

# **TYPICAL SECTION No. 4B**

4 LANE DIVIDED (23' RAISED MEDIAN) WITH PAVED SHOULDERS AND SIDEWALKS



POSTED SPEED 35-55 MPH

## Project History/Linkage to Other Projects

This recommendation is listed in the 2040 GSATS MTP and was submitted to SPOT 5.0.

Currently the road is not safe because individuals walk along the road and there is no sidewalk along this whole segment of the road.

Bicycle and sidewalk proposal on west side of street along NC 904 from Old Shallotte Road to NC 179.

## **CTP Goal Analysis**

This project supports the following goals and objectives:

*Goal:* Create a more efficient transportation system through improved connectivity, capacity and operations.

*Objectives*:Promote reductions in recurring congestion through transportation capacity, access management, and policy improvements.

*Objectives:* Improve the safety of the transportation system for all user groups regardless of socioeconomic status or physical ability.

### Vision Goals & Objectives Survey

This proposal received 99 comments during the survey period. The main comments mentioned roadway maintenance issues, safety concerns due to multiple accidents, and the desire for bike lanes and transit options. The survey was launched on March 10, 2021, and closed on June 11, 2021. There was an English and Spanish version of the survey. A total of 6,969 survey participants created a total of 8,387 comments.

### Potential Impacts

*Land Use:* Most of the land use around the NC 904 facility from Etheridge Rd to US 17 is low density residential. Commercial development is located near

### where NC 904 meets US 17.

Newly approved and pending developments will be coming into the area, specifically there will be total of 3000 housing units west of this road and 66 housing units east of the road.

## Additional Information - Environmental

All environmental data in the database was considered. This Project is within 150 feet of:

- 8 Coastal Region Evaluation Of Wetland Significance Feature(s)
- 1 Flood Hazard Area Feature(s)
- 5 Natural Heritage Element Occurrence Feature(s)
- 16 Wetland Feature(s)
- 5 River And Stream Feature(s)
- 2 Target Local Watershed Feature(s)

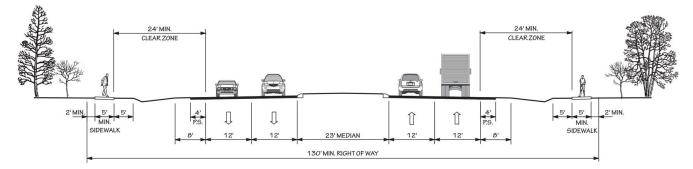
- Between 50% and 100% identify as 65+
- Between 25% and 50% identify as African American
- Between 0% and 5% identify as Asian
- Between 5% and 15% identify as Hispanic and Latino
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Asian and Pacific Islander
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Indo-European
- Between 0% and 5% identify as Over 18 with Limited English Proficiency (LEP) - Other
- Between 0% and 5% identify as Over 18 with Limited English Proficiency (LEP) - Spanish
- 0% identify as Native American

# Typical Section Options:

# 04 E

# **TYPICAL SECTION No. 4B**

4 LANE DIVIDED (23' RAISED MEDIAN) WITH PAVED SHOULDERS AND SIDEWALKS



#### POSTED SPEED 35-55 MPH

- Between 1% and 5% identify as Some Other Race
- Between 5% and 10% identify as Two of More Races
- Between 25% and 50% identify as Below Poverty Line
- Between 0% and 15% identify as Households with No Car

#### **Smith Avenue Extension** From U.S. 17 to N.C. 130 Local ID: H185138 Purpose: Emergency Evacuation Improvement: New Location **Identified Need** This project assists with providing mith A venue connectivity and access. Recommendation The proposal is to construct a new location roadway from Smith Avenue 130 at the US 17 intersection to NC 130 to provide additional east/west 17 connection as an evacuation route. (179) Local ID # Improve New Local ID # Improve New Location Congestion / Mobility Interchange # 0 Access Management / Operations Bridge / Overpass 0 0 0 # Modernization Intersection 0 L # Other Proposal At A Glance 2045 Future Year **Proposal Data:** 2017 Base Year **Highway Class** Other **New Location** Without Proposal Facility Type Minor Facility Type **Minor Thoroughfare** Thoroughfare Travel Lanes 2 \_

Volume (vpd)

Capacity (vpd)

Capacity Data:

**Typical Section** 

Section Options

Length (miles)

**Existing ROW** 

Safety Risk Score

(feet)

02 A

-

2.7

Facility will be Approaching Capacity (>80%)

Facility will be Over Capacity (>=100%)



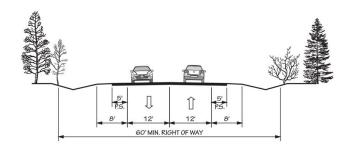
4300

14600

# **Typical Section Options:** None

# TYPICAL SECTION No. 2A

2 LANE UNDIVIDED WITH PAVED SHOULDERS



POSTED SPEED 55 MPH

# *Project History/Linkage to Other Plans*

There are no multimodal recommendations is being made along this route.

# **CTP Goals Analysis**

This project supports the following goals and objectives:

*Goal:* Create a more efficient transportation system through improved connectivity, capacity and operations.

*Goal:* Promote a safer and more secure transportation network through crash reduction, enhanced reliability and predictability, and improved emergency coordination.

*Objectives:* Improve safety and security by enhancing the evacuation route network for natural events.

# Vision Goals & Objectives Survey

This project proposal received no comments during the survey period. The survey was launched on March 10, 2021, and closed on June 11, 2021. There was an English and Spanish version of the survey. A total of 6,969 survey participants created a total of 8,387 comments.

# **Potential Impacts**

Land Use: According to the 2018 Town of Shallotte Land Use Plan, most of the project area passes through vacant land. Near the NC 130 connection and US 17 connection, there is commercial and office and institutional land use. Future land use is shown as a mix between medium density residential and commercial areas.

# Additional Information - Environmental

All environmental data in the database was considered. This Project is within 150 feet of:

• 11 Coastal Region Evaluation Of Wetland Significance Feature(s)

- 7 Flood Hazard Area Feature(s)
- 1 Landscape Habitat Indicator Guild Feature(s)
- 1 Managed Area Feature(s)
- 2 Natural Heritage Element Occurrence Feature(s)
- 6 Wetland Feature(s)
- 1 River And Stream Feature(s)
- 2 Lake And Pond Feature(s)
- 1 Target Local Watershed Feature(s)

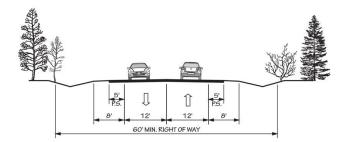
# Additional Information - Title VI

- Between 0% and 25% identify as 65+
- Between 25% and 50% identify as African American
- Between 0% and 5% identify as Asian
- Between 5% and 15% identify as Hispanic and Latino
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Asian and Pacific Islander
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Indo-European
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Other
- Between 0% and 5% identify as Over 18 with Limited English Proficiency (LEP) Spanish
- 0% identify as Native American
- Between 5% and 10% identify as Some Other Race
- Between 5% and 10% identify as Two of More Races
- Between 5% and 15% identify as Below Poverty Line

**Typical Section Options:** None

# TYPICAL SECTION No. 2A

2 LANE UNDIVIDED WITH PAVED SHOULDERS



POSTED SPEED 55 MPH

 Between 0% and 15% identify as Households with No Car

# N.C. 133 (Long Beach Road)

From SR 1969 (Old Long Beach Road SE) to SR 1210 (Vanessa Drive)

#### Local ID: H193078

Purpose: Safety

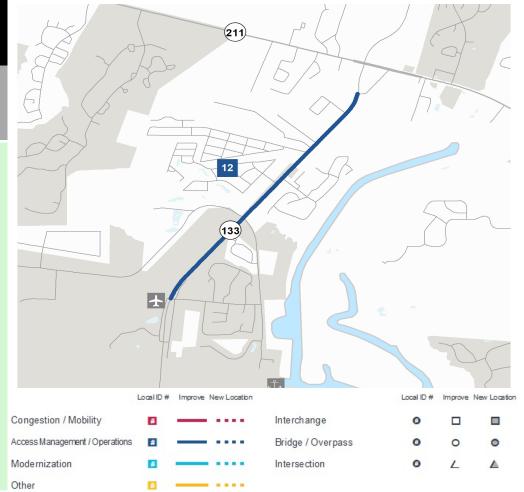
Improvement: Improve Existing

#### Identified Need

This project proposal assists with increasing safety along this corridor. Refer to the project history section for more information.

#### Recommendation

The project proposal is to modify access management by limiting turning movements, widening lanes, and adding paved shoulders. A bike lane is also recommended. This route is a proposed regional bikeway network and is included in the Cape Fear Bicycle plan. Refer to SPOT 6.0.



Proposal At A Glance		Proposal Data:	2017 Base Year	2045 Fut	ure Year
Highway Class Access Management & Operation Facility Type Major Thoroughfare 2-lane	Improved Route	Existing	Without Proposal	With Proposal	
	Operation	Facility Type	Major Thoroughfare 2-lane	Major Thoroughfare 2-lane	Major Thoroughfare 2-lane
	,	Travel Lanes	2	2	2
	•	Volume (vpd)	11756-21716	18500-28600	10500-22300
Typical Section	03 A	Capacity (vpd)	12800-14000	12800-14000	12800-14000

Capacity Data:	<u>Year</u>
Facility will be Approaching Capacity (>80%)	2017
Facility will be Over Capacity (>=100%)	2017-2045

1.85

100

60-100



Section Options Length (miles)

**Existing ROW** 

Safety Risk Score

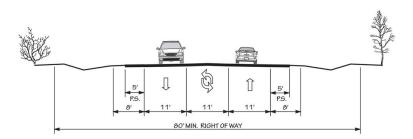
(feet)

# **Typical Section Options:**

None

# **TYPICAL SECTION No. 3A**

2 LANE WITH TWO WAY LEFT TURN LANE, AND PAVED SHOULDERS



POSTED SPEED 25-55 MPH

# Project History/Linkage to Other Plans

This recommendation is listed in the previous 2010 Brunswick County CTP.

Bike Lane along NC 133 from NC 211 to Intercoastal Waterway. In the Cape Fear Bicycle Plan, it is stated that this route is used heavily by the Cape Fear Cyclists (advocacy group) and the plan's survey results show this is a route that is heavily used for biking in general. This route is also a proposed regional bikeway network. Review the plan for further information.

\*A cross section with paved shoulders is recommended to accommodate for bike lanes.

# **CTP Goals Analysis**

This project supports the following goals and objectives:

*Goal:* Promote a safer and more secure transportation network through crash reduction, enhanced reliability and predictability, and improved emergency coordination.

*Objectives:* Improve the safety of the transportation system for all user groups regardless of socioeconomic status or physical ability.

*Objectives:* Expand and maintain a network of bicycle, pedestrian, and transit facilities that connects homes, activity centers, and complementary amenities.

#### Vision Goals & Objectives Survey

This roadway received 123 comments during the survey period. Comments indicated that multiple accidents occur on this roadway and requests were made for the addition of bike lanes and crosswalks. The survey was launched on March 10, 2021, and closed on June 11, 2021. There was an English and Spanish version of the survey. A total of 6,969 survey participants created a total of 8,387 comments.

# Potential Impacts

*Land Use:* There is a mix of commercial, residential, and office & institutional land use. The Cape Fear Regional Jetport is adjacent to this roadway.

# Additional Information - Environmental

All environmental data in the database was considered. This Project is within 150 feet of:

- 6 Coastal Region Evaluation Of Wetland Significance Feature(s)
- 7 Flood Hazard Area Feature(s)
- 1 High Quality And Outstanding Resource Water Feature(s)
- 7 Natural Heritage Element Occurrence Feature(s)
- 6 Wetland Feature(s)
- 3 River And Stream Feature(s)
- 1 Target Local Watershed Feature(s)

# Additional Information - Title VI

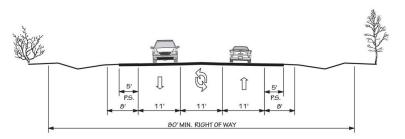
- Between 25% and 50% identify as 65+
- Between 0% and 25% identify as African American
- Between 0% and 5% identify as Asian
- Between 5% and 15% identify as Hispanic and Latino
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Asian and Pacific Islander
- Between 0% and 5% identify as Over 18 with Limited English Proficiency (LEP) - Indo-European
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Other
- 0% identify as Over 18 with Limited English Proficiency (LEP) - Spanish
- Between 5% and 15% identify as Native American

# **Typical Section Options:**

None

# **TYPICAL SECTION No. 3A**

2 LANE WITH TWO WAY LEFT TURN LANE, AND PAVED SHOULDERS



POSTED SPEED 25-55 MPH

- Between 1% and 5% identify as Some Other Race
- Between 1% and 5% identify as Two of More Races
- Between 5% and 15% identify as Below Poverty Line
- Between 0% and 15% identify as Households with No Car

# US 17 Bus

From NC 130 to Holden Beach Rd

#### Proposal Length: 0.28 miles

#### **Identified Need**

This path is along the East Coast Greenway that connects 15 states and 450 cities and towns for 3,000 miles from Maine to Florida to foster safe walking and biking route. Refer to the plan for further information.

#### Recommendation

Bike recommendation along US 17 Bus from NC 130 to Holden Beach Road.

#### Project History/Linkage to Other Plans

Refer to East Coast Greenway Plan for additional information.

#### **CTP Goal Analysis**

Goal: Promote a safer and more secure transportation network through crash reduction, enhanced reliability and predictability, and improved emergency coordination.

# Local ID: **BRUN20001-B** Classification: **Bicycle** Location: **Within Right of Way**



Facility Type:	Major Thoroughfare Multi-lane	
Travel Lanes:	2	
Speed Limit (mph):	35	
% Trucks:	4.36	
ROW (ft):	45	
2017 Volume(vpd):	24000	
2045 Volume(vpd):	12200	

Existing Road Data

# Main Street/Bridger Rd Exn Loop

From US 17 Bus to Copas Rd SW

#### Proposal Length: 4.18 miles

#### **Identified Need**

Bike lanes and sidewalks are recommended to alleviate traffic and boost economic growth in Shallotte. This is a solution to the top 5 public input priorities from the 2018 Shallotte LU Plan. This road will exceed capacity in future year 2045.

#### Recommendation

Bike lanes and sidewalks are on Main Street/Bridger Road from US 17 Bus to Copas Road SW.

#### Project History/Linkage to Other Plans

Refer to Shallotte Land Use Plan.

#### **CTP Goal Analysis**

Objectives: Promote reductions in recurring congestion through transportation capacity, access management, and policy improvements.

# Local ID: BRUN20001-P Classification: Bicycle and Pedestrian

Location: Within Right of Way



Facility Type:	Major Thoroughfare 2-lane
Travel Lanes:	2
Speed Limit (mph):	45
% Trucks:	2.60
ROW (ft):	150
2017 Volume(vpd):	8600
2045 Volume(vpd):	1700

# US-17 (Ocean Hwy W)

From Red Bug Rd (SR 1136) to Royal Oak Rd (SR 1345)

#### Proposal Length: 1.07 miles

#### **Identified Need**

This path is along the East Coast Greenway that connects 15 states and 450 cities and towns for 3,000 miles from Maine to Florida to foster safe walking and biking route. Refer to the plan for further information.

#### Recommendation

Bike recommendation along US 17 from Red Bug Road to Royal Oak Road.

#### Project History/Linkage to Other Plans

Refer to East Coast Greenway Plan for additional information.

#### **CTP Goal Analysis**

Goal: Promote a safer and more secure transportation network through crash reduction, enhanced reliability and predictability, and improved emergency coordination.

# Local ID: **BRUN20002-B** Classification: **Bicycle** Location: **Within Right of Way**



EXISTING ROAD Data		
Facility Type:	Boulevard	
Travel Lanes:	2	
Speed Limit (mph):	55	
% Trucks:	6.29	
ROW (ft):	125	
2017 Volume(vpd):	28000	
2045 Volume(vpd):	33200	

# US 17B (Main St)

From S Willing Drive to NC 130

Proposal Length: 0.74 miles

#### **Identified Need**

By providing alt modes to reduce traffic and boost economic growth in Shallotte, this is a solution to the top 5 priorities in the 2018 Shallotte LU Plan. The road is near capacity currently now and over capacity in future year in the TDM.

#### Recommendation

Sidewalk along US 17B (Main St) from Willing Dr to NC 130.

#### Project History/Linkage to Other Plans

Refer to 2018 Shallotte LU Plan.

#### **CTP Goal Analysis**

Goal: Provide an integrated transportation network that encourages use of all modes by offering travel choices that are accessible to all segments of the region's population.

Local ID: BRUN20002-P Classification: Pedestrian Location: Within Right of Way



Facility Type:	Major Thoroughfare 2-lane
Travel Lanes:	2
Speed Limit (mph):	35
% Trucks:	N/A
ROW (ft):	100-150
2017 Volume(vpd):	N/A
2045 Volume(vpd):	N/A

Main Street/Bridger Rd Exn Loop	Local ID: BRUN20004-B
	Classification: <b>Bicycle and Pedestrian</b>
From US 17 Bus to Copas Rd SW	Location: Within Right of Way
Proposal Length: 4.18 miles	
Identified Need	
This recommendation is being made to alleviate traffic and boost economic	

Existing Road Data Facility Type: Major Thoroughfare 2-lane **Travel Lanes:** 2 Speed Limit (mph): 45 % Trucks: 2.60 ROW (ft): 150 2017 Volume(vpd): 8600 2045 Volume(vpd): 1700

SR 1100 (Country Club Dr)

From SR 1190 (E. Oak Island Dr) to Throckmorton St

#### Proposal Length: 0.22 miles

#### **Identified Need**

Recommendation

**CTP Goal Analysis** 

**Project History/Linkage to Other Plans** 

Refer to Shallotte Land Use Plan.

There is a lack of sidewalks along this facility and makes it dangerous for residents.

growth in Shallotte. This is a solution to the top 5 public input priorities from the 2018 Shallotte LU Plan. This road will exceed capacity in future year 2045.

Objectives: Promote reductions in recurring congestion through transportation

Bike lanes and sidewalks are recommended along this roadyway.

capacity, access management, and policy improvements.

#### Recommendation

Sidewalk along SR 1100 (Country Club Dr) from SR 1190 (E. Oak Island Dr) to Throckmorton St. Refer to the adopted Oak Island Bicycle Plan for further information.

#### Project History/Linkage to Other Plans

People have to walk on the streets since there is no sidewalk, which makes it very dangerous for both pedestrians and drivers.

#### **CTP Goal Analysis**

Goal: Promote a safer and more secure transportation network through crash reduction, enhanced reliability and predictability, and improved emergency coordination.

# Local ID: BRUN30001-P Classification: Pedestrian Location: Within Right of Way



Facility Type:	N/A
Travel Lanes:	2
Speed Limit (mph):	35
% Trucks:	N/A
ROW (ft):	N/A
2017 Volume(vpd):	800
2045 Volume(vpd):	400

# NC 211

From West Bay Street to US 17

# Proposal Length: 0.65 miles

#### **Identified Need**

This path is along the East Coast Greenway that connects 15 states and 450 cities and towns for 3,000 miles from Maine to Florida to foster safe walking and biking route. Refer to the plan for further information.

#### Recommendation

NC 211 is on the East Coast Greenway Plan as a multi-use facility (from West Bay Street to US 17). The recommendation is to construct a Multi-Use Path.

#### Project History/Linkage to Other Plans

Refer to the East Coast Greenway Plan for more information on this recommendation.

#### **CTP Goal Analysis**

Goal: Promote a safer and more secure transportation network through crash reduction, enhanced reliability and predictability, and improved emergency coordination.

# Local ID: **BRUN30002-M** Classification: **Multiuse Path** Location: **Outside of Right of Way**



Existing Road Data		
Facility Type:	Major Thoroughfare 2-lane	
Travel Lanes:	2	
Speed Limit (mph):	35	
% Trucks:	3.57	
ROW (ft):	N/A	
2017 Volume(vpd):	7200	
2045 Volume(vpd):	13000	

# NC 130

Longwood Road NW to US 17 Business

Proposal Length: 9.04 miles

#### **Identified Need**

Currently the road is used by cyclists which creates an unsafe roadway for both motorists as well as cyclists especially with West Brunswick High School along the roadway. Refer to the Cape Fear Regional Bicycle Plan for information.

#### Recommendation

Bike lanes are recommended from Longwood Rd NW to US 17 BUS.

#### Project History/Linkage to Other Plans

Refer to Cape Fear Regional Bicycle Plan.

#### **CTP Goal Analysis**

Goal: Promote a safer and more secure transportation network through crash reduction, enhanced reliability and predictability, and improved emergency coordination.

Local ID: **BRUN30004-B** Classification: **Bicycle** Location: **Within Right of Way** 



Facility Type:	Major Thoroughfare 2-lane
Travel Lanes:	2
Speed Limit (mph):	55
% Trucks:	N/A
ROW (ft):	100
2017 Volume(vpd):	7400
2045 Volume(vpd):	10400

# NC 211 (E Moore St)

#### From E. Moore St to Ferry Rd

#### Proposal Length: 1.38 miles

#### **Identified Need**

There is a lack of sidewalks along this facility and makes it dangerous for resident.

#### Recommendation

Sidewalk along E Moore St from NC 211 (E Howe St) to NC 211 (Ferry Rd). This project is recommended in the adopted City of Southport Comprehensive Pedestrian Transportation Plan. Refer to this plan for further information.

#### Project History/Linkage to Other Plans

People have to walk on the streets since there is no sidewalk, which makes it very dangerous for both pedestrians and drivers.

#### **CTP Goal Analysis**

Goal: Promote a safer and more secure transportation network through crash reduction, enhanced reliability and predictability, and improved emergency coordination.

# Local ID: **BRUN30004-P** Classification: **Pedestrian** Location: **Within Right of Way**



Existing Road Data		
Facility Type:	Major Thoroughfare 2-lane	
Travel Lanes:	2	
Speed Limit (mph):	35	
% Trucks:	3.56	
ROW (ft):	N/A	
2017 Volume(vpd):	1700	
2045 Volume(vpd):	1000	

# NC 904 (Causeway Dr)

From NC 179 to Intercoastal Waterway

#### Proposal Length: 0.27 miles

#### **Identified Need**

From the adopted 2014 Ocean Isle Beach Bicycle and Pedestrian Plan and is being recommended for lack of connectivity to the beach access, alleviate high traffic seasonal volumes, and to promote a mix of traffic types.

#### Recommendation

Bike and Sidewalk along NC 904 (Causeway Dr) from NC 179 to Intercoastal Waterway.

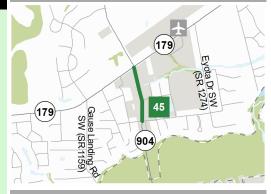
#### Project History/Linkage to Other Plans

Refer to 2014 Ocean Isle Beach Bicycle and Pedestrian Plan for more information.

#### **CTP Goal Analysis**

Goal: Provide an integrated transportation network that encourages use of all modes by offering travel choices that are accessible to all segments of the region's population.

Local ID: BRUN30006-P Classification: Bicycle and Pedestrian Location: Within Right of Way



Facility Type:	Major Thoroughfare 2-lane
Travel Lanes:	2
Speed Limit (mph):	45
% Trucks:	N/A
ROW (ft):	60
2017 Volume(vpd):	N/A
2045 Volume(vpd):	N/A

#### **Causeway Drive**

#### From Causeway Drive to W First Street

#### Proposal Length: 0.33 miles

#### **Identified Need**

According to the 2014 Ocean Isle Beach Bicycle and Pedestrian Plan this is being recommended for lack of connectivity to the beach, reduce high traffic seasonal volumes, and promote a mix of traffic types.

#### Recommendation

Sidewalk and Bike Lane proposal along Causeway Drive from Causeway Drive to W First Street.

#### **Project History/Linkage to Other Plans**

Refer to 2014 Ocean Isle Beach Bicycle and Pedestrian Plan.

#### **CTP Goal Analysis**

Goal: Provide an integrated transportation network that encourages use of all modes by offering travel choices that are accessible to all segments of the region's population.

# Local ID: **BRUN30007-P** Classification: **Bicycle and Pedestrian** Location: **Within Right of Way**



Existing Road Data	
Facility Type:	Major Thoroughfare 2-lane
Travel Lanes:	2
Speed Limit (mph):	45
% Trucks:	N/A
ROW (ft):	60
2017 Volume(vpd):	12000
2045 Volume(vpd):	N/A

# NC 211 (Ferry Rd)

From NC 211 to Dead End (Fort Fisher)

#### Proposal Length: 0.88 miles

#### **Identified Need**

Currently the route is heavily used by cyclists into Forth Fisher Ferry, this recommendation is being made to provide a safe bicycle lane along a road with plenty of ROW.

#### Recommendation

Bike lane along NC 211 (Ferry Rod) from NC 211 (E Moore St) to Dead End (Fort Fisher).

#### Project History/Linkage to Other Plans

History of safety concerns for cyclists on this route.

#### **CTP Goal Analysis**

Goal: Promote a safer and more secure transportation network through crash reduction, enhanced reliability and predictability, and improved emergency coordination.

Local ID: BRUN30008-B Classification: Bicycle Location: Within Right of Way



Facility Type:	Major Thoroughfare 2-lane
Travel Lanes:	2
Speed Limit (mph):	55
% Trucks:	3.56
ROW (ft):	N/A
2017 Volume(vpd):	1600
2045 Volume(vpd):	3600

# NC 130

Shell Point Road to Shallotte Crossing Parkway

#### Proposal Length: 0.71 miles

#### **Identified Need**

This path is along the East Coast Greenway that connects 15 states and 450 cities and towns for 3,000 miles from Maine to Florida to foster safe walking and biking route. Refer to the plan for further information.

#### Recommendation

Multi-use proposal along NC 130 from Shell Point Road to Shallotte Crossing Parkway.

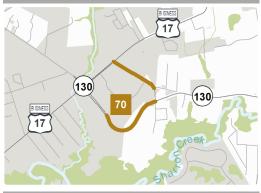
#### **Project History/Linkage to Other Plans**

Refer to the East Coast Greenway Plan for more information on this recommendation.

#### **CTP Goal Analysis**

Goal: Promote a safer and more secure transportation network through crash reduction, enhanced reliability and predictability, and improved emergency coordination.

# Local ID: **BRUN30008-M** Classification: **Multiuse Path** Location: **Within Right of Way**



Existing Road Data	
Facility Type:	Major Thoroughfare 2-lane
Travel Lanes:	2
Speed Limit (mph):	35
% Trucks:	3.20
ROW (ft):	60-156
2017 Volume(vpd):	14000
2045 Volume(vpd):	16500

# NC 904 (Causeway Dr)

From NC 179 to Intercoastal Waterway

#### Proposal Length: 0.27 miles

#### **Identified Need**

From the adopted 2014 Ocean Isle Beach Bicycle and Pedestrian Plan and is being recommended for lack of connectivity to the beach access, alleviate high traffic seasonal volumes, and to promote a mix of traffic types.

#### Recommendation

Bike and Sidewalk along NC 904 (Causeway Dr) from NC 179 to Intercoastal Waterway.

#### Project History/Linkage to Other Plans

Refer to 2014 Ocean Isle Beach Bicycle and Pedestrian Plan for more information.

#### **CTP Goal Analysis**

Goal: Provide an integrated transportation network that encourages use of all modes by offering travel choices that are accessible to all segments of the region's population.

Local ID: BRUN30010-B Classification: Bicycle and Pedestrian Location: Within Right of Way

Existing Road Data	
Facility Type:	Major Thoroughfare 2-lane
Travel Lanes:	2
Speed Limit (mph):	45
% Trucks:	N/A
ROW (ft):	60
2017 Volume(vpd):	N/A
2045 Volume(vpd):	N/A

2-lane

2 45

N/A

60

12000

N/A

Causeway Drive	Local ID: BRUN3	0011-B
From Causeway Drive to W First Street		cvcle and Pedestrian
Proposal Length: 0.33 miles	Location: Within	Right of Way
Identified Need		
According to the 2014 Ocean Isle Beach Bicycle and Pedestrian Plan this is being recommended for lack of connectivity to the beach, reduce high traffic seasonal volumes, and promote a mix of traffic types.		
Recommendation		
Sidewalk and Bike Lane proposal along Causeway Drive from Causeway Drive to W First Street.		
Project History/Linkage to Other Plans		
Refer to 2014 Ocean Isle Beach Bicycle and Pedestrian Plan.		
CTP Goal Analysis		
Goal: Provide an integrated transportation network that encourages use of all modes by offering travel choices that are accessible to all segments of the	Existin	g Road Data
region's population.	Facility Type:	Major Thoroughfare

# NC 906 (EF Middleton Blvd)

NC 211 to E Yacht Dr

#### Proposal Length: 3.68 miles

#### **Identified Need**

Due to the heavy bicycle use of this facility, this recommendation is being made due to lack of safety and access. Refer to Cape Fear Bicycle Plan for more information.

#### Recommendation

Bike Lane along NC 906 from E Yacht Drive to NC 211. In the Cape Fear Bicycle Plan, it is stated that this route is used heavily by the Cape Fear Cyclists (advocacy group). This route is also a proposed regional bikeway network in the plan. Review the plan for further information.

#### Project History/Linkage to Other Plans

Refer to Cape Fear Bicycle Plan for more information.

#### **CTP Goal Analysis**

Goal: Promote a safer and more secure transportation network through crash reduction, enhanced reliability and predictability, and improved emergency coordination.

Local ID: BRUN30013-B Classification: Bicycle Location: Within Right of Way

**Travel Lanes:** 

% Trucks: ROW (ft):

Speed Limit (mph):

2017 Volume(vpd):

2045 Volume(vpd):



Facility Type:	Boulevard
Travel Lanes:	2
Speed Limit (mph):	55
% Trucks:	N/A
ROW (ft):	70-170
2017 Volume(vpd):	12000
2045 Volume(vpd):	9000

# NC 133

#### from NC 211 to Intercoastal Waterway

#### Proposal Length: 0.67 miles

#### **Identified Need**

Due to the heavy bicycle use of this facility, this recommendation is being made due to lack of safety and access. Refer to Cape Fear Bicycle Plan for more information.

#### Recommendation

A bike lane is recommended along NC 133 from NC 211 to the Intercoastal Waterway. The Cape Fear Bicycle Plan states that this route is used heavily by Cape Fear Cyclists. This route is also a proposed regional bikeway network.

#### Project History/Linkage to Other Plans

Refer to Cape Fear Bicycle Plan for more information.

#### **CTP Goal Analysis**

Goal: Promote a safer and more secure transportation network through crash reduction, enhanced reliability and predictability, and improved emergency coordination.

# Local ID: BRUN30014-B Classification: Bicycle Location: Within Right of Way



Existing Road Data	
Facility Type:	Major Thoroughfare 2-lane
Travel Lanes:	2
Speed Limit (mph):	45
% Trucks:	3.77
ROW (ft):	100
2017 Volume(vpd):	13000
2045 Volume(vpd):	12700

# Daws Creek Road

From NC 133 to US 17

#### Proposal Length: 6.73 miles

#### Identified Need

On the Cape Fear Regional Bicycle Plan, this route is being shown as a heavily used on road bicycle route, to provide safety accommodations the CTP is recommending a separated bicycle lane for this route in the future.

#### Recommendation

Bike lane along Daws Creek Rd from NC 133 to US 17.

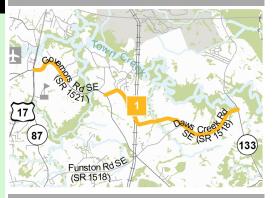
#### Project History/Linkage to Other Plans

Refer to Cape Fear Regional Bicycle Plan.

#### **CTP Goal Analysis**

Goal: Promote a safer and more secure transportation network through crash reduction, enhanced reliability and predictability, and improved emergency coordination.

Local ID: BRUN40001-B Classification: Bicycle Location: Within Right of Way



Facility Type:	N/A
Travel Lanes:	2
Speed Limit (mph):	55
% Trucks:	N/A
ROW (ft):	60
2017 Volume(vpd):	700
2045 Volume(vpd):	N/A

# SR 1132 (Civietown Road) - Turnpike Rd

SR 1115 (Stone Chimney Road) to NC 130 (Holden Beach)

#### Proposal Length: 4.05 miles

#### **Identified Need**

This path is along the East Coast Greenway that connects 15 states and 450 cities and towns for 3,000 miles from Maine to Florida to foster safe walking and biking route. Refer to the plan for further information.

#### Recommendation

Multi-use proposal on SR 1132 (Civietown Road) from Stone Chimney Rd to Holden Beach.

#### Project History/Linkage to Other Plans

Refer to the East Coast Greenway Plan and Cape Fear Regional Bicycle Plan for more information on this recommendation.

#### **CTP Goal Analysis**

Objectives: Expand and maintain a network of bicycle, pedestrian, and transit facilities that connects homes, activity centers, and complementary amenities.

# Local ID: **BRUN40001-M** Classification: **Multiuse Path** Location: **Within Right of Way**



Existing Road Data	
N/A	
2	
55	
N/A	
60-100	
4800	
10000	

# E Oak Island Drive

From E Yacht Drive to NE 58th Street

#### Proposal Length: 1.79 miles

#### **Identified Need**

There is a lack of sidewalks along this facility and makes it dangerous for residents.

#### Recommendation

Bike lanes and sidewalks are being recommended along E Oak Island Drive from E Yacht Dr to NE 58th St. Refer to the adopted Oak Island Bicycle Plan for further information.

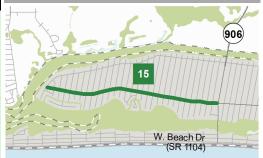
#### Project History/Linkage to Other Plans

Refer to Oak Island Bike Plan for further information.

#### **CTP Goal Analysis**

Goal: Promote a safer and more secure transportation network through crash reduction, enhanced reliability and predictability, and improved emergency coordination.

# Local ID: **BRUN40001-P** Classification: **Bicycle and Pedestrian** Location: **Within Right of Way**



Existing Road Data		
Facility Type:	N/A	
Travel Lanes:	2	
Speed Limit (mph):	45	
% Trucks:	N/A	
ROW (ft):	N/A	
2017 Volume(vpd):	N/A	
2045 Volume(vpd):	N/A	

# SR 1115 (Stone Chimney Rd SE)

From US 17 to Sabbath Home Rd (SR 1120)

#### Proposal Length: 6.99 miles

#### **Identified Need**

This recommendation is on the adopted Cape Fear Regional Bicycle Plan as well as the East Coast Greenway Plan that connects 15 states,450 cities/towns for 3,000 miles from Maine to Florida to foster safe walking/biking route.

#### Recommendation

Multi-use path along Stone Chimney Rd from Sabbath Hone Rd to US 17.

#### Project History/Linkage to Other Plans

Refer to the East Coast Greenway Plan and Cape Fear Regional Bicycle Plan for more information on this recommendation.

#### CTP Goal Analysis

Objectives: Expand and maintain a network of bicycle, pedestrian, and transit facilities that connects homes, activity centers, and complementary amenities.

# Local ID: BRUN40002-M Classification: Multiuse Path Location: Within Right of Way



Existing Road Data	
Facility Type:	N/A
Travel Lanes:	2
Speed Limit (mph):	55
% Trucks:	N/A
ROW (ft):	60
2017 Volume(vpd):	6000
2045 Volume(vpd):	13400

# 74th St - Ocean Dr - Robert L Jones St

From Oak Island Dr to NC 133

#### Proposal Length: 1.75 miles

#### **Identified Need**

There is a lack of sidewalks along this facility and makes it dangerous for residents.

#### Recommendation

Bike and Sidewalks recommendations are being recommended along 74th St/Ocean Dr/Robert L Jones St from Oak Island Dr to NC 133. Refer to the adopted Oak Island Bicycle Plan for further information.

#### Project History/Linkage to Other Plans

Refer to Oak Island Bike Plan for further information.

#### **CTP Goal Analysis**

Goal: Promote a safer and more secure transportation network through crash reduction, enhanced reliability and predictability, and improved emergency coordination.

# Local ID: **BRUN40002-P** Classification: **Bicycle and Pedestrian** Location: **Within Right of Way**



Existing Road Data		
Facility Type:	N/A	
Travel Lanes:	2	
Speed Limit (mph):	25	
% Trucks:	N/A	
ROW (ft):	N/A	
2017 Volume(vpd):	N/A	
2045 Volume(vpd):	N/A	

E Oak Island Drive	Local ID: BRUN40003-B
From Country Club Drive to NE 58th Street	Classification: No Selection
Proposal Length: 0.0 miles	Location: Within Right of Way
Identified Need	

There is a need to address bicycle safety efforts along this roadway for active cyclists. Refer to Oak Island Bike Plan for further information.

#### Recommendation

Bike recommendation along E Oak Island Drive from Country Club Drive to 58th Street. Refer to the adopted Oak Island Bicycle Plan for further information.

#### **Project History/Linkage to Other Plans**

Refer to Oak Island Bike Plan for further information.

#### **CTP Goal Analysis**

Goal: Promote a safer and more secure transportation network through crash reduction, enhanced reliability and predictability, and improved emergency coordination.

Existing Road Data		
Facility Type:	N/A	
Travel Lanes:	N/A	
Speed Limit (mph):	N/A	
% Trucks:	N/A	
ROW (ft):	N/A	
2017 Volume(vpd):	N/A	
2045 Volume(vpd):	N/A	

# **Country Club Dr**

From E Oak Island Drive to Intercoastal Waterway

#### Proposal Length: 1.68 miles

#### **Identified Need**

There is a lack of sidewalks along this facility and makes it dangerous for residents.

#### Recommendation

Bike and Sidewalk recommendations are being made along Country Club Dr from E Oak Island Dr to Intercoastal Waterway. Refer to the adopted Oak Island Bicycle Plan for further information.

#### Project History/Linkage to Other Plans

Refer to Oak Island Bike Plan for further information.

#### **CTP Goal Analysis**

Goal: Promote a safer and more secure transportation network through crash reduction, enhanced reliability and predictability, and improved emergency coordination.

Local ID: **BRUN40003-P** Classification: **Bicycle and Pedestrian** Location: **Within Right of Way** 



Facility Type:	Major Thoroughfare 2-lane
Travel Lanes:	2
Speed Limit (mph):	45
% Trucks:	3.83
ROW (ft):	60-100
2017 Volume(vpd):	12000
2045 Volume(vpd):	12700

Project Sheets

edestrian

Local ID: BRUN40004-B
Classification: Bicycle and F

Location: Within Right of Way

Existing Road Data	
Facility Type:	N/A
Travel Lanes:	2
Speed Limit (mph):	45
% Trucks:	N/A
ROW (ft):	N/A
2017 Volume(vpd):	N/A
2045 Volume(vpd):	N/A

# From E Yacht Drive to NE 58th Street

# Proposal Length: 1.79 miles

E Oak Island Drive

#### **Identified Need**

There is a need to address bicycle safety efforts along this roadway for active cyclists. Refer to Oak Island Bike Plan for further information.

#### Recommendation

Bike lanes and sidewalks are being recommended along E Oak Island Drive from E Yacht Dr to NE 58th St. Refer to the adopted Oak Island Bicycle Plan for further information.

# Project History/Linkage to Other Plans

Refer to Oak Island Bike Plan for further information.

#### **CTP Goal Analysis**

Goal: Promote a safer and more secure transportation network through crash reduction, enhanced reliability and predictability, and improved emergency coordination.

# **Robert Ruark Drive**

From NC 211 to Forest Oak Dr

Proposal Length: 0.31 miles

# **Identified Need**

There is a lack of sidewalks along this facility and makes it dangerous for residents.

# Recommendation

Sidewalk along Robert Ruark Drive from NC 211 to Forest Oak Drive. This project is recommended in the adopted City of Southport Comprehensive Pedestrian Transportation Plan. Refer to this plan for further information.

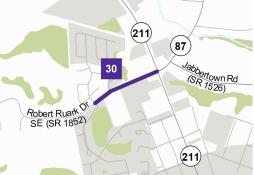
# **Project History/Linkage to Other Plans**

The lack of sidewalks poses dangerous situations for pedestrians.

# **CTP Goal Analysis**

Goal: Promote a safer and more secure transportation network through crash reduction, enhanced reliability and predictability, and improved emergency coordination.

Local ID: BRUN40004-P Classification: Pedestrian Location: Within Right of Way



Facility Type:	N/A
Travel Lanes:	N/A
Speed Limit (mph):	N/A
% Trucks:	N/A
ROW (ft):	N/A
2017 Volume(vpd):	N/A
2045 Volume(vpd):	N/A

N/A

N/A

		Brunswick County CTP
74th St - Ocean Dr - Robert L Jones St From Oak Island Dr to NC 133	Local ID: BRUN40009 Classification: Bicvcl	e and Pedestrian
Proposal Length: 1.75 miles	Location: Within Rig	nt of way
Identified Need		
There is a need to address bicycle safety efforts along this roadway for active cyclists. Refer to Oak Island Bike Plan for further information.		
Recommendation		
Bike and Sidewalks recommendations are being recommended along 74th St/Ocean Dr/Robert L Jones St from Oak Island Dr to NC 133. Refer to the adopted Oak Island Bicycle Plan for further information.		
Project History/Linkage to Other Plans		
Refer to Oak Island Bike Plan for further information.		
CTP Goal Analysis		
Goal: Promote a safer and more secure transportation network through crash	Existing Ro	ad Data
reduction, enhanced reliability and predictability, and improved emergency coordination.	Facility Type:	N/A
	Travel Lanes:	2
	Speed Limit (mph):	25
	% Trucks:	N/A
	ROW (ft):	N/A

# SR 1209 (W. 9th St)

From NC 211 to Maple Ave

Proposal Length: 0.69 miles

#### **Identified Need**

There is a lack of sidewalks along this facility and makes it dangerous for residents.

#### Recommendation

Sidewalk along W 9th Street from NC 211 to Maple Ave. This project is recommended in the adopted City of Southport Comprehensive Pedestrian Transportation Plan. Refer to this plan for further information.

#### **Project History/Linkage to Other Plans**

The lack of sidewalks poses dangerous situations for pedestrians.

#### **CTP Goal Analysis**

Goal: Promote a safer and more secure transportation network through crash reduction, enhanced reliability and predictability, and improved emergency coordination.

Local ID: BRUN40005-P Classification: Pedestrian Location: Within Right of Way

2017 Volume(vpd):

2045 Volume(vpd):



Facility Type:	N/A
Travel Lanes:	2
Speed Limit (mph):	35
% Trucks:	N/A
ROW (ft):	N/A
2017 Volume(vpd):	N/A
2045 Volume(vpd):	N/A

Brunswick County CTT
Local ID: BRUN40006-B
Classification: Bicycle and Pedestrian
Location: Within Right of Way

#### Project History/Linkage to Other Plans

Refer to Oak Island Bike Plan for further information.

#### **CTP Goal Analysis**

Goal: Promote a safer and more secure transportation network through crash reduction, enhanced reliability and predictability, and improved emergency coordination.

Existing Road Data		
Facility Type:	N/A	
Travel Lanes:	N/A	
Speed Limit (mph):	N/A	
% Trucks:	N/A	
ROW (ft):	N/A	
2017 Volume(vpd):	N/A	
2045 Volume(vpd):	N/A	

# Smith Ave

From Arnold St to Shallotte Crossing Pkwy

#### Proposal Length: 0.68 miles

#### **Identified Need**

By providing alt modes to reduce traffic and boost economic growth, this fulfills the top 5 PI priorities from the 2018 Shallotte Land Use Plan. This road is near capacity in base year and over capacity in future year in the TDM.

#### Recommendation

Sidewalk along Smith Ave from Arnold St to Shallotte Crossing Pkwy.

#### Project History/Linkage to Other Plans

Refer to 2018 Shallotte Land Use Plan.

#### **CTP Goal Analysis**

Goal: Create a more efficient transportation system through improved connectivity, capacity and operations.

Local ID: BRUN40006-P Classification: Pedestrian Location: Within Right of Way



Facility Type:	N/A
Travel Lanes:	N/A
Speed Limit (mph):	N/A
% Trucks:	N/A
ROW (ft):	N/A
2017 Volume(vpd):	6700
2045 Volume(vpd):	11300

#### Brunswick County CTP

# SR 1621 (Dosher Cut-Off)

From NC 211 to NC 87

#### Proposal Length: 0.59 miles

#### **Identified Need**

Currently the route is heavily used by cyclists as an access to and from Dosher Memorial Hospital down south.

#### Recommendation

Bike lane along Dosher Cut-Off from NC 211 to NC 87. This recommendation is being made to provide a safe bicycle lane along this route.

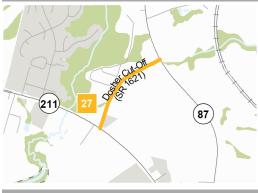
#### Project History/Linkage to Other Plans

With adjacent NC 211 being a major route, hospital in this vicinity, it is important to provide a safe bicycle lane along this route.

#### CTP Goal Analysis

Goal: Promote a safer and more secure transportation network through crash reduction, enhanced reliability and predictability, and improved emergency coordination.

# Local ID: **BRUN40007-B** Classification: **Bicycle** Location: **Within Right of Way**



EXISTING ROAD Data		
Facility Type:	Minor Thoroughfare	
Travel Lanes:	2	
Speed Limit (mph):	45	
% Trucks:	4.44	
ROW (ft):	60	
2017 Volume(vpd):	3600	
2045 Volume(vpd):	7700	

# SR 1144 (W. First St)

From Second Street to Highpoint St

#### Proposal Length: 2.12 miles

#### **Identified Need**

From the adopted 2014 Ocean Isle Beach Bicycle and Pedestrian Plan and is being recommended for lack of connectivity to the beach access, alleviate high traffic seasonal volumes, and to promote a mix of traffic types.

#### Recommendation

Bike and Sidewalk Recommendation along First St from Second St to Highpoint St.

#### Project History/Linkage to Other Plans

Refer to Ocean Isle Beach Bike and Pedestrian Plan for further details.

#### **CTP Goal Analysis**

Goal: Create a more efficient transportation system through improved connectivity, capacity and operations.

Local ID: BRUN40007-P Classification: Bicycle and Pedestrian Location: Within Right of Way



Existing Road Data	
Facility Type:	N/A
Travel Lanes:	2
Speed Limit (mph):	35
% Trucks:	N/A
ROW (ft):	60
2017 Volume(vpd):	4700
2045 Volume(vpd):	0

Project Sheets

# Local ID: **BRUN40008-B** Classification: **Bicycle and Pedestrian** Location: **Within Right of Way**

Existing Road Data	
Facility Type:	N/A
Travel Lanes:	2
Speed Limit (mph):	35
% Trucks:	N/A
ROW (ft):	60
2017 Volume(vpd):	4700
2045 Volume(vpd):	0

# Cougar Road

NC 87 to east of Dix Road

SR 1144 (W. First St)

Proposal Length: 2.12 miles

**Identified Need** 

Recommendation

**CTP Goal Analysis** 

details.

From Second Street to Highpoint St

Project History/Linkage to Other Plans

connectivity, capacity and operations.

#### Proposal Length: 0.52 miles

#### **Identified Need**

This recommendation leads to the South Brunswick High School. This project comes from the final draft plan of the City of Boiling Springs Lakes Pedestrian Plan as a shared-use proposal, refer to the plan for further information.

Beach access, safety, connectivity and recreational option due to demand of existing cyclists. Refer to Ocean Isle Beach Bike and Pedestrian Plan for further

Bike and Sidewalk Recommendation along First St from Second St to Highpoint St. From the adopted 2014 Ocean Isle Beach Bicycle and Pedestrian Plan and is being recommended for lack of connectivity to the beach access, alleviate high

traffic seasonal volumes, and to promote a mix of traffic types.

Refer to Ocean Isle Beach Bike and Pedestrian Plan for further details.

Goal: Create a more efficient transportation system through improved

#### Recommendation

Sidewalk recommendation along Cougar Road from NC 87 to dead end.

#### Project History/Linkage to Other Plans

Review City of Boiling Springs Lakes Pedestrian Plan.

#### **CTP Goal Analysis**

Goal: Provide an integrated transportation network that encourages use of all modes by offering travel choices that are accessible to all segments of the region's population.

Local ID: **BRUN40009-P** Classification: **Pedestrian** Location: **Within Right of Way** 

87



Facility Type:	N/A
Travel Lanes:	2
Speed Limit (mph):	35
% Trucks:	N/A
ROW (ft):	60
2017 Volume(vpd):	N/A
2045 Volume(vpd):	N/A



# Ocean Blvd W (SR 1116)

dead end of town limit to dead end of town limit

#### Proposal Length: 7.39 miles

#### **Identified Need**

To provide safety, access, connectivity as well as a demand with existing cyclists. Refer to Cape Fear Bicycle Plan for further details.

#### Recommendation

Bike Lane along SR 1116 (Ocean Blvd W) from dead end of road to dead end of town limit. This route is also a proposed regional bikeway network in the Cape Fear Bicycle Plan. Review the plan for further information.

#### Project History/Linkage to Other Plans

Refer to Cape Fear Bicycle Plan for further details.

#### **CTP Goal Analysis**

Goal: Create a more efficient transportation system through improved connectivity, capacity and operations.

# Local ID: **BRUN40010-B** Classification: **Bicvcle** Location: **Within Right of Way**



Existing Road Data	
Facility Type:	N/A
Travel Lanes:	2
Speed Limit (mph):	45
% Trucks:	N/A
ROW (ft):	N/A
2017 Volume(vpd):	4100
2045 Volume(vpd):	0

# W 1st Street

NC 906 to Concord Street

Proposal Length: 1.05 miles

#### **Identified Need**

Coming from the adopted 2014 Ocean Isle Beach Bicycle and Pedestrian Plan this is being recommended for lack of connectivity to the beach, alleviate high traffic seasonal volumes, and to promote a mic of traffic types.

#### Recommendation

Sidewalk proposal along W. First Street from NC 906 to Concord Street.

#### Project History/Linkage to Other Plans

Review adopted 2014 Ocean Isle Beach Bicycle and Pedestrian Plan.

#### **CTP Goal Analysis**

Goal: Create a more efficient transportation system through improved connectivity, capacity and operations.

Local ID: BRUN40010-P Classification: Pedestrian Location: Within Right of Way



Facility Type:	N/A
Travel Lanes:	N/A
Speed Limit (mph):	N/A
% Trucks:	N/A
ROW (ft):	N/A
2017 Volume(vpd):	N/A
2045 Volume(vpd):	N/A

# Caswell Beach Rd

#### NC 133 to end of Caswell Beach Rd (paved)

#### Proposal Length: 2.92 miles

#### **Identified Need**

To provide safety, access, connectivity as well as a demand with existing cyclists. Refer to Cape Fear Bicycle Plan for further details.

#### Recommendation

Bike proposal on north side of street along Caswell Beach Road from NC 133 to end of Caswell Beach Road. Refer to the Cape Fear Bicycle and Pedestrian Plan for further project details.

#### Project History/Linkage to Other Plans

Refer to Cape Fear Bicycle Plan for further details.

#### **CTP Goal Analysis**

Goal: Create a more efficient transportation system through improved connectivity, capacity and operations.

# Local ID: BRUN40011-B Classification: Bicycle Location: Within Right of Way



Existing Road Data	
N/A	
2	
35	
N/A	
N/A	
2800	
300	

# NE 58th Street

From E Yacht Dr to E Beach Dr

#### Proposal Length: 0.75 miles

#### **Identified Need**

There is a need to address bicycle safety efforts along this roadway for active cyclists. Refer to Oak Island Bike Plan for further information.

#### Recommendation

Bike recommendation along 58th Street from E Yacht Dr to E Beach Dr. Refer to the adopted Oak Island Bicycle Plan for further information.

#### Project History/Linkage to Other Plans

Refer to Oak Island Bike Plan for further information.

#### **CTP Goal Analysis**

Goal: Promote a safer and more secure transportation network through crash reduction, enhanced reliability and predictability, and improved emergency coordination.

Local ID: BRUN50001-B Classification: Bicycle Location: Within Right of Way



Facility Type:	Minor Thoroughfare
Travel Lanes:	2
Speed Limit (mph):	45
% Trucks:	N/A
ROW (ft):	N/A
2017 Volume(vpd):	N/A
2045 Volume(vpd):	N/A

# Shallotte Blvd

E 2nd Street to Ferry Landing Park

#### Proposal Length: 0.48 miles

#### **Identified Need**

This project will address the lack of safety that pedestrians face when using this facility. There is also a lack of sidewalk connectivity across the city. Additional information can be found on the plan.

#### Recommendation

Multi-use proposal along Shallotte Blvd from E 2nd Street to Ferry Landing Park. Refer to the adopted 2014 Ocean Isle Beach Bicycle and Pedestrian Plan for project information.

#### Project History/Linkage to Other Plans

Refer to the adopted 2014 Ocean Isle Beach Bicycle and Pedestrian Plan.

# CTP Goal Analysis

Goal: Create a more efficient transportation system through improved connectivity, capacity and operations.

# Local ID: BRUN50001-M Classification: Multiuse Path Location: Within Right of Way



Existing Road Data	
Facility Type:	N/A
Travel Lanes:	N/A
Speed Limit (mph):	N/A
% Trucks:	N/A
ROW (ft):	N/A
2017 Volume(vpd):	N/A
2045 Volume(vpd):	N/A

# W Yacht Drive

From Oak Island Drive to NC 133

#### Proposal Length: 7.82 miles

#### **Identified Need**

There is a lack of sidewalks along this facility and makes it dangerous for residents.

#### Recommendation

Bike and Sidewalks recommendations are being recommended along W Yacht Drive from Oak Island Drive to NC 133. Refer to the adopted Oak Island Bicycle Plan for further information.

#### Project History/Linkage to Other Plans

Lack of sidewalks makes it dangerous for pedestrians as well as drivers.

#### **CTP Goal Analysis**

Goal: Promote a safer and more secure transportation network through crash reduction, enhanced reliability and predictability, and improved emergency coordination.

Local ID: BRUN50001-P Classification: Bicycle and Pedestrian Location: Within Right of Way



Facility Type:	N/A
Travel Lanes:	2
Speed Limit (mph):	35
% Trucks:	N/A
ROW (ft):	N/A
2017 Volume(vpd):	N/A
2045 Volume(vpd):	N/A

# Local ID: **BRUN50002-B** Classification: **Bicycle and Pedestrian** Location: **Within Right of Way**

Existing Road Data	
Facility Type:	N/A
Travel Lanes:	2
Speed Limit (mph):	35
% Trucks:	N/A
ROW (ft):	N/A
2017 Volume(vpd):	N/A
2045 Volume(vpd):	N/A

# Fifty Lakes Drive

W Yacht Drive

**Identified Need** 

Recommendation

**CTP Goal Analysis** 

coordination.

From Oak Island Drive to NC 133

There is a need to address bicycle safety efforts, provide alternative

Refer to Oak Island Bike Plan for further information.

Refer to Oak Island Bike Plan for further information.

transportation, and create bicycle facilities along this roadway for active cyclists.

Bike and Sidewalks recommendations are being recommended along W Yacht Drive from Oak Island Drive to NC 133. Refer to the adopted Oak Island Bicycle

Goal: Promote a safer and more secure transportation network through crash reduction, enhanced reliability and predictability, and improved emergency

Proposal Length: 7.82 miles

Plan for further information.

Project History/Linkage to Other Plans

From NC 133 (River Road SE) to NC 87

# Proposal Length: 2.37 miles

# **Identified** Need

This project will address the lack of safety that pedestrians face when using this facility. There is also a lack of sidewalk connectivity across the city. Additional information can be found on the plan.

# Recommendation

Multi-use recommendation along Fifty Lakes Dr from Eden Drive to NC 87. This project comes from the final draft plan of the City of Boiling Springs Lakes Pedestrian Plan as a shared-use proposal, refer to the plan for further information.

# Project History/Linkage to Other Plans

Refer to draft plan of the City of Boiling Springs Lakes Pedestrian Plan.

# **CTP Goal Analysis**

Goal: Promote a safer and more secure transportation network through crash reduction, enhanced reliability and predictability, and improved emergency coordination.

Local ID: BRUN50002-M Classification: Multiuse Path Location: Within Right of Way



Facility Type:	N/A
Travel Lanes:	2
Speed Limit (mph):	35
% Trucks:	N/A
ROW (ft):	N/A
2017 Volume(vpd):	N/A
2045 Volume(vpd):	N/A

# NE 46th Street

#### From W Yacht Dr to E Beach Dr

#### Proposal Length: 0.72 miles

#### **Identified Need**

There is a lack of sidewalks along this facility and makes it dangerous for residents.

#### Recommendation

Bike and Sidewalks recommendations are being recommended along NE 46th St from W Yacht Dr to E Beach Dr. Refer to the adopted Oak Island Bicycle Plan for further information.

#### Project History/Linkage to Other Plans

Lack of sidewalks makes it dangerous for pedestrians as well as drivers.

#### **CTP Goal Analysis**

Goal: Promote a safer and more secure transportation network through crash reduction, enhanced reliability and predictability, and improved emergency coordination.

# Local ID: **BRUN50002-P** Classification: **Bicycle and Pedestrian** Location: **Within Right of Way**



Existing Road Data	
Facility Type:	N/A
Travel Lanes:	2
Speed Limit (mph):	25
% Trucks:	N/A
ROW (ft):	N/A
2017 Volume(vpd):	N/A
2045 Volume(vpd):	N/A

# NE 46th Street

From W Yacht Dr to E Beach Dr

#### Proposal Length: 0.72 miles

#### **Identified Need**

There is a need to address bicycle safety efforts along this roadway for active cyclists. Refer to Oak Island Bike Plan for further information.

#### Recommendation

Bike and Sidewalks recommendations are being recommended along NE 46th St from W Yacht Dr to E Beach Dr. Refer to the adopted Oak Island Bicycle Plan for further information.

#### Project History/Linkage to Other Plans

Refer to Oak Island Bike Plan for further information.

#### **CTP Goal Analysis**

Goal: Promote a safer and more secure transportation network through crash reduction, enhanced reliability and predictability, and improved emergency coordination.

Local ID: BRUN50003-B Classification: Bicycle and Pedestrian Location: Within Right of Way

Existing Road Data	
Facility Type:	N/A
Travel Lanes:	2
Speed Limit (mph):	25
% Trucks:	N/A
ROW (ft):	N/A
2017 Volume(vpd):	N/A
2045 Volume(vpd):	N/A

# Eden Drive/Alton Lennon Rd

#### From E Boiling Spring Rd to Fifty Lakes Dr

#### Proposal Length: 1.71 miles

#### **Identified Need**

This project will address the lack of safety that pedestrians face when using this facility. There is also a lack of sidewalk connectivity across the city. Additional information can be found on the plan.

#### Recommendation

Multi-use recommendation along Eden Drive from E Boiling Spring Rd to Fifty Lakes Dr. This project comes from the final draft plan of the City of Boiling Springs Lakes Pedestrian Plan as a shared-use proposal, refer to the plan for further information.

#### Project History/Linkage to Other Plans

Refer to draft plan of the City of Boiling Springs Lakes Pedestrian Plan.

#### **CTP Goal Analysis**

Goal: Promote a safer and more secure transportation network through crash reduction, enhanced reliability and predictability, and improved emergency coordination.

# Local ID: BRUN50003-M Classification: Multiuse Path Location: Within Right of Way



Existing Road Data	
Facility Type:	N/A
Travel Lanes:	N/A
Speed Limit (mph):	N/A
% Trucks:	N/A
ROW (ft):	N/A
2017 Volume(vpd):	N/A
2045 Volume(vpd):	N/A

# E Dolphin Drive

From dead end of 43rd St to dead end of 49th St

#### Proposal Length: 0.22 miles

#### **Identified Need**

There is a lack of sidewalks along this facility and makes it dangerous for residents.

#### Recommendation

Bike and Sidewalks recommendations are being recommended along Dolphin Drive from dead end of 43rd St to dead end of 49th St. Refer to the adopted Oak Island Bicycle Plan for further information.

### Project History/Linkage to Other Plans

Lack of sidewalks makes it dangerous for pedestrians as well as drivers.

#### **CTP Goal Analysis**

Goal: Promote a safer and more secure transportation network through crash reduction, enhanced reliability and predictability, and improved emergency coordination.

# Local ID: BRUN50003-P Classification: Bicycle and Pedestrian Location: Within Right of Way



Existing Road Data	
Facility Type:	N/A
Travel Lanes:	2
Speed Limit (mph):	35
% Trucks:	N/A
ROW (ft):	N/A
2017 Volume(vpd):	N/A
2045 Volume(vpd):	N/A

trian
5

#### Recommendation

Bike and Sidewalks recommendations are being recommended along Dolphin Drive from dead end of 43rd St to dead end of 49th St. Refer to the adopted Oak Island Bicycle Plan for further information.

#### Project History/Linkage to Other Plans

Refer to Oak Island Bike Plan for further information.

#### **CTP Goal Analysis**

Goal: Promote a safer and more secure transportation network through crash reduction, enhanced reliability and predictability, and improved emergency coordination.

# Existing Road DataFacility Type:N/ATravel Lanes:2Speed Limit (mph):35% Trucks:N/AROW (ft):N/A2017 Volume(vpd):N/A2045 Volume(vpd):N/A

# **Drayton Road Loop**

Starting and ending on E Boiling Spring Rd

#### Proposal Length: 1.51 miles

#### **Identified Need**

This project will address the lack of safety that pedestrians face when using this facility. There is also a lack of sidewalk connectivity across the city. Additional information can be found on the plan.

#### Recommendation

Multi-use recommendation along the Drayton Road Loop starting and ending on E Boiling Spring Rd. This project comes from the final draft plan of the City of Boiling Springs Lakes Pedestrian Plan as a shared-use proposal, refer to the plan for further information.

#### Project History/Linkage to Other Plans

Refer to draft plan of the City of Boiling Springs Lakes Pedestrian Plan.

#### **CTP Goal Analysis**

Goal: Promote a safer and more secure transportation network through crash reduction, enhanced reliability and predictability, and improved emergency coordination.

Local ID: BRUN50004-M Classification: Multiuse Path Location: Within Right of Way



Facility Type:	N/A
Travel Lanes:	2
Speed Limit (mph):	30
% Trucks:	N/A
ROW (ft):	N/A
2017 Volume(vpd):	N/A
2045 Volume(vpd):	N/A

# Barbee Blvd

#### From Elizabeth Dr to Ocean Dr

#### Proposal Length: 0.43 miles

#### **Identified Need**

There is a lack of sidewalks along this facility and makes it dangerous for residents.

#### Recommendation

Bike and Sidewalks recommendations are being recommended along Barbee Blvd from Elizabeth Dr to Ocean Dr. Refer to the adopted Oak Island Bicycle Plan for further information.

#### Project History/Linkage to Other Plans

Lack of sidewalks makes it dangerous for pedestrians as well as drivers.

#### **CTP Goal Analysis**

Goal: Promote a safer and more secure transportation network through crash reduction, enhanced reliability and predictability, and improved emergency coordination.

# Local ID: **BRUN50004-P** Classification: **Bicycle and Pedestrian** Location: **Within Right of Way**



Existing Road Data	
N/A	

# Barbee Blvd

From Elizabeth Dr to Ocean Dr

#### Proposal Length: 0.43 miles

#### **Identified Need**

There is a need to address bicycle safety efforts along this roadway for active cyclists. Refer to Oak Island Bike Plan for further information.

#### Recommendation

Bike and Sidewalks recommendations are being recommended along Barbee Blvd from Elizabeth Dr to Ocean Dr. Refer to the adopted Oak Island Bicycle Plan for further information.

#### Project History/Linkage to Other Plans

Refer to Oak Island Bike Plan for further information.

#### **CTP Goal Analysis**

Goal: Promote a safer and more secure transportation network through crash reduction, enhanced reliability and predictability, and improved emergency coordination.

Local ID: BRUN50005-B Classification: Bicycle and Pedestrian Location: Within Right of Way

Existing Road Data	
Facility Type:	N/A
Travel Lanes:	N/A
Speed Limit (mph):	N/A
% Trucks:	N/A
ROW (ft):	N/A
2017 Volume(vpd):	N/A
2045 Volume(vpd):	N/A

# Ash Rd/Grace Rd

#### From E Boiling Spring Rd to Pine Rd

#### Proposal Length: 1.03 miles

#### **Identified Need**

This project will address the lack of safety that pedestrians face when using this facility. Additional information can be found on the plan.

#### Recommendation

Multi-use recommendation along Ash Rd/Grace Rd from E Boiling Spring Rd to Pine Rd. This project comes from the final draft plan of the City of Boiling Springs Lakes Pedestrian Plan as a shared-use proposal, refer to the plan for further information.

#### Project History/Linkage to Other Plans

Refer to draft plan of the City of Boiling Springs Lakes Pedestrian Plan.

#### **CTP Goal Analysis**

Goal: Promote a safer and more secure transportation network through crash reduction, enhanced reliability and predictability, and improved emergency coordination.

# Local ID: **BRUN50005-M** Classification: **Multiuse Path** Location: **Within Right <u>of Way</u>**



Existing Road Data	
N/A	

# **Barnes Bluff Dr Ext**

From Fish Factory Road SE to South of Scupper Run SE

#### Proposal Length: 1.97 miles

#### **Identified Need**

There is a lack of sidewalks along this facility and makes it dangerous for residents.

#### Recommendation

Bike and Sidewalks recommendations are being recommended along Barnes Bluff Drive Ext from Fish Factory Road SE to South of Scupper Run SE. Refer to the adopted Oak Island Bicycle Plan for further information.

#### Project History/Linkage to Other Plans

Lack of sidewalks makes it dangerous for pedestrians as well as drivers.

#### **CTP Goal Analysis**

Goal: Promote a safer and more secure transportation network through crash reduction, enhanced reliability and predictability, and improved emergency coordination.

Local ID: BRUN50005-P Classification: Bicycle and Pedestrian Location: Within Right of Way



Facility Type:	N/A
Travel Lanes:	N/A
Speed Limit (mph):	N/A
% Trucks:	N/A
ROW (ft):	N/A
2017 Volume(vpd):	N/A
2045 Volume(vpd):	N/A

		Brunswick County C
Barnes Bluff Dr Ext	Local ID: BRUN50006	-B
rom Fish Factory Road SE to South of Scupper Run SE	Classification: Bicycle	and Pedestrian
roposal Length: 1.97 miles	Location: Within Righ	t of Way
dentified Need		
here is a need to address bicycle safety efforts along this roadway for active		
yclists. Refer to Oak Island Bike Plan for further information.		
ecommendation		
tike and Sidewalks recommendations are being recommended along Barnes		
Bluff Drive Ext from Fish Factory Road SE to South of Scupper Run SE. Refer to he adopted Oak Island Bicycle Plan for further information.		
Project History/Linkage to Other Plans		
lefer to Oak Island Bike Plan for further information.		
TP Goal Analysis		
ioal: Promote a safer and more secure transportation network through crash	Existing Roa	ad Data
eduction, enhanced reliability and predictability, and improved emergency ordination.	Facility Type:	N/A
	Travel Lanes:	N/A
	Speed Limit (mph):	N/A
	% Trucks:	N/A
	ROW (ft):	N/A
	2017 Volume(vpd):	N/A
	2045 Volume(vpd):	N/A
Fish Factory Road From NC 133 to Dead end South of O'Quinn Blvd Proposal Length: 1.09 miles <b>dentified Need</b> Access to Intercoastal Waterway as well as William S Bill Smith Park. <b>Recommendation</b> Add bike lane along Fish Factory Road from NC 133 to dead end south of D'Quinn Blvd. <b>Project History/Linkage to Other Plans</b> Lack of access has always been an issue, therefore this recommendation is being made. <b>CTP Goal Analysis</b> Goal: Support growth through a transportation network that serves local, inter- and intra- regional accessibility and mobility needs for both people and goods.	Classification: <b>Bicycle</b> Location: <b>Within Righ</b>	t of Way
	Facility Type:	N/A
	Travel Lanes:	N/A
	Speed Limit (mph):	N/A
	% Trucks:	N/A
	ROW (ft):	N/A
	2017 Volume(vpd):	N/A
	2045 Volume(vpd):	N/A

# W Ridge Road

W 17th Ave to end of town limits

#### Proposal Length: 3.2 miles

#### **Identified Need**

This project will address the lack of safety that pedestrians face when using this facility. Additional information can be found on the plan.

#### Recommendation

Multi-use recommendation along W Ridge Road from W 17th Ave to end of town limits. This project comes from the final draft plan of the City of Boiling Springs Lakes Pedestrian Plan as a shared-use proposal, refer to the plan for further information.

#### Project History/Linkage to Other Plans

Refer to draft plan of the City of Boiling Springs Lakes Pedestrian Plan.

#### **CTP Goal Analysis**

Goal: Promote a safer and more secure transportation network through crash reduction, enhanced reliability and predictability, and improved emergency coordination.

# Local ID: **BRUN50007-M** Classification: **Multiuse Path** Location: **Within Right of Way**



Existing Road Data	
Facility Type:	N/A
Travel Lanes:	N/A
Speed Limit (mph):	N/A
% Trucks:	N/A
ROW (ft):	N/A
2017 Volume(vpd):	N/A
2045 Volume(vpd):	N/A

# W Fourth Street

From Third Street to Driftwood Drive

#### Proposal Length: 0.53 miles

#### **Identified Need**

There is a lack of connectivity to the beach access paths, alleviate high traffic seasonal volumes, and to promote a mix of traffic types.

#### Recommendation

Bike and Sidewalk along W Fourth St from Third St to Driftwood Dr. From the adopted 2014 Ocean Isle Beach Bicycle and Pedestrian Plan and is being recommended.

#### Project History/Linkage to Other Plans

Refer 2014 Ocean Isle Beach Bicycle and Pedestrian Plan.

#### CTP Goal Analysis

Goal: Create a more efficient transportation system through improved connectivity, capacity and operations.

Local ID: **BRUN50010-B** Classification: **Bicycle and Pedestrian** Location: **Within Right of Way** 

Existing Road Data	
Facility Type:	N/A
Travel Lanes:	N/A
Speed Limit (mph):	N/A
% Trucks:	N/A
ROW (ft):	N/A
2017 Volume(vpd):	N/A
2045 Volume(vpd):	N/A

# J Swaine Blvd

#### From NC 211 to Viking Crest Lane

#### Proposal Length: 0.23 miles

#### **Identified Need**

For Southport to have a safe, convenient, accessible and pedestrian network. Refer to Southport Pedestrian Plan for further information.

#### Recommendation

Sidewalk along Robert Ruark Drive from NC 211 to Viking Crest Lane. This project is recommended in the adopted City of Southport Comprehensive Pedestrian Transportation Plan. Refer to this plan for further information.

#### **Project History/Linkage to Other Plans**

Refer to Southport Pedestrian Plan for further information.

#### **CTP Goal Analysis**

Goal: Support growth through a transportation network that serves local, interand intra- regional accessibility and mobility needs for both people and goods.

# Local ID: BRUN50010-P Classification: Pedestrian Location: Within Right of Way



Existing Road Data	
N/A	

# 2nd Street

From High Point Street to 1st Street

#### Proposal Length: 3.26 miles

#### **Identified Need**

Providing individuals with bicycle lanes along beach communities is vital to this community.

#### Recommendation

STIP EB - 6034 - Bicycle lanes and sidewalk on south side street from High Point Street to First Street in Ocean Isle Beach. Refer to the 2014 Ocean Isle Beach Bicycle + Pedestrian Plan for this project.

#### **Project History/Linkage to Other Plans**

Refer to the 2014 Ocean Isle Beach Bicycle + Pedestrian Plan for this project.

#### **CTP Goal Analysis**

Goal: Provide an integrated transportation network that encourages use of all modes by offering travel choices that are accessible to all segments of the region's population.

Local ID: BRUN50011-B Classification: Bicycle and Pedestrian Location: Within Right of Way

Existing Road Data		
Facility Type:	N/A	
Travel Lanes:	N/A	
Speed Limit (mph):	N/A	
% Trucks:	N/A	
ROW (ft):	N/A	
2017 Volume(vpd):	N/A	
2045 Volume(vpd):	N/A	

## **Owens St - Caswell Ave**

From NC 211 to W 11th St

#### Proposal Length: 0.45 miles

#### **Identified Need**

For Southport to have a safe, convenient, accessible and pedestrian network. Refer to Southport Pedestrian Plan for further information.

#### Recommendation

Sidewalk along Owens St/Caswell Ave from NC 211 to W 11th Street. This project is recommended in the adopted City of Southport Comprehensive Pedestrian Transportation Plan. Refer to this plan for further information.

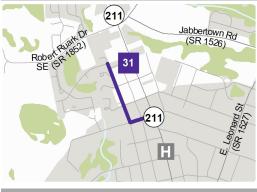
#### **Project History/Linkage to Other Plans**

Refer to Southport Pedestrian Plan for further information.

#### **CTP Goal Analysis**

Goal: Support growth through a transportation network that serves local, interand intra- regional accessibility and mobility needs for both people and goods.

## Local ID: BRUN50011-P Classification: Pedestrian Location: Within Right of Way



Existing Road Data	
N/A	

## 4th Street

From 2nd Street to Dead End

Proposal Length: 0.76 miles

#### **Identified Need**

This bike lane is being recommended for lack of connectivity to the beach access paths, alleviate high traffic seasonal volumes, and to promote a mix of traffic types.

#### Recommendation

Bike and Sidewalk Recommendation along 4th St from 2nd St to Dead End. From the adopted 2014 Ocean Isle Beach Bicycle and Pedestrian Plan.

#### Project History/Linkage to Other Plans

From the adopted 2014 Ocean Isle Beach Bicycle and Pedestrian Plan.

#### **CTP Goal Analysis**

Goal: Provide an integrated transportation network that encourages use of all modes by offering travel choices that are accessible to all segments of the region's population.

Local ID: BRUN50012-B Classification: Bicycle and Pedestrian Location: Within Right of Way

Existing Road Data	
Facility Type:	N/A
Travel Lanes:	N/A
Speed Limit (mph):	N/A
% Trucks:	N/A
ROW (ft):	N/A
2017 Volume(vpd):	N/A
2045 Volume(vpd):	N/A

## N Fodale Ave

## From NC 211 to E Moore St

## Proposal Length: 0.87 miles

### **Identified Need**

For Southport to have a safe, convenient, accessible and pedestrian network. Refer to Southport Pedestrian Plan for further information.

#### Recommendation

Sidewalk from Fodale Ave from NC 211 to E Moore St. This project is recommended in the adopted City of Southport Comprehensive Pedestrian Transportation Plan. Refer to this plan for further information.

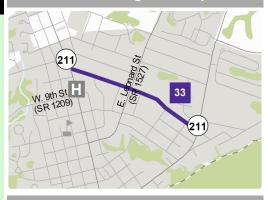
### Project History/Linkage to Other Plans

Refer to Southport Pedestrian Plan for further information.

### **CTP Goal Analysis**

Goal: Support growth through a transportation network that serves local, interand intra- regional accessibility and mobility needs for both people and goods.

## Local ID: BRUN50012-P Classification: Pedestrian Location: Within Right of Way



Existing Road Data	
N/A	
	N/A N/A N/A N/A N/A N/A

## Wall Street Extension

From US 17B to Holden Beach Road NW

#### Proposal Length: 1.11 miles

#### **Identified Need**

With all the businesses along this route, there are no sidewalks to accommodate for pedestrians.

#### Recommendation

Sidewalk along Wall Street Extension from US 17B to Holden Beach Road NW. *Project History/Linkage to Other Plans* 

Lack of sidewalks to accomodate for pedestrians in commercial area.

#### **CTP Goal Analysis**

Goal: Provide an integrated transportation network that encourages use of all modes by offering travel choices that are accessible to all segments of the region's population.

Local ID: BRUN50013-P Classification: Pedestrian Location: Within Right of Way



## **Existing Road Data**

Facility Type:	N/A
racinty type.	N/A
Travel Lanes:	N/A
Speed Limit (mph):	N/A
% Trucks:	N/A
ROW (ft):	N/A
2017 Volume(vpd):	N/A
2045 Volume(vpd):	N/A

## White St

From Smith Ave to Mulberry Park

#### Proposal Length: 0.65 miles

#### **Identified Need**

The purpose is to connect the sidewalk with commercial development at the intersection of Smith Avenue in Shallotte. Portions of the roadway have sidewalks but there is no continuous connectivity.

#### Recommendation

STIP Project EB-6035: Sidewalk extension on north side of street from Mulberry Park along White Street

#### **Project History/Linkage to Other Plans**

Lack of sidewalks to accomodate for pedestrians in commercial area.

#### **CTP Goal Analysis**

Goal: Provide an integrated transportation network that encourages use of all modes by offering travel choices that are accessible to all segments of the region's population.

## Local ID: BRUN50014-P Classification: Pedestrian Location: Within Right of Way



Existing Road Data	
Facility Type:	N/A
Travel Lanes:	2
Speed Limit (mph):	35
% Trucks:	N/A
ROW (ft):	N/A
2017 Volume(vpd):	N/A
2045 Volume(vpd):	N/A

## W Fourth Street

From Third Street to Driftwood Drive

Proposal Length: 0.53 miles

#### **Identified Need**

From the adopted 2014 Ocean Isle Beach Bicycle and Pedestrian Plan and is being recommended for lack of connectivity to the beach access paths, alleviate high traffic seasonal volumes, and to promote a mix of traffic types.

### Recommendation

Bike and Sidewalk along W Fourth St from Third St to Driftwood Dr.

### Project History/Linkage to Other Plans

Refer 2014 Ocean Isle Beach Bicycle and Pedestrian Plan.

#### **CTP Goal Analysis**

Goal: Create a more efficient transportation system through improved connectivity, capacity and operations.

Local ID: **BRUN50015-P** Classification: **Bicycle and Pedestrian** Location: **Within Right of Way** 



Existing Road Data	
Facility Type:	N/A
Travel Lanes:	N/A
Speed Limit (mph):	N/A
% Trucks:	N/A
ROW (ft):	N/A
2017 Volume(vpd):	N/A
2045 Volume(vpd):	N/A

## 2nd Street

From High Point Street to 1st Street

### Proposal Length: 3.26 miles

#### **Identified Need**

Providing individuals with bicycle lanes along beach communities is vital to this community. Refer to the 2014 Ocean Isle Beach Bicycle + Pedestrian Plan for this project.

#### Recommendation

STIP EB - 6034: Bicycle lanes and sidewalk on south side street from High Point Street to First Street in Ocean Isle Beach.

#### Project History/Linkage to Other Plans

Refer to the 2014 Ocean Isle Beach Bicycle + Pedestrian Plan for this project.

#### **CTP Goal Analysis**

Goal: Provide an integrated transportation network that encourages use of all modes by offering travel choices that are accessible to all segments of the region's population.

## Local ID: **BRUN50016-P** Classification: **Bicycle and Pedestrian** Location: **Within Right of Way**



Existing Road Data	
Facility Type:	N/A
Travel Lanes:	N/A
Speed Limit (mph):	N/A
% Trucks:	N/A
ROW (ft):	N/A
2017 Volume(vpd):	N/A
2045 Volume(vpd):	N/A

## 4th Street

From 2nd Street to Dead End

Proposal Length: 0.76 miles

#### **Identified Need**

From the adopted 2014 Ocean Isle Beach Bicycle and Pedestrian Plan and is being recommended for lack of connectivity to the beach access paths, alleviate high traffic seasonal volumes, and to promote a mic of traffic types.

#### Recommendation

Bike and Sidewalk Recommendation along 4th St from 2nd St to Dead End.

#### Project History/Linkage to Other Plans

From the adopted 2014 Ocean Isle Beach Bicycle and Pedestrian Plan.

#### **CTP Goal Analysis**

Goal: Provide an integrated transportation network that encourages use of all modes by offering travel choices that are accessible to all segments of the region's population.

Local ID: **BRUN50017-P** Classification: **Bicycle and Pedestrian** Location: **Within Right of Way** 



Existing Road Data	
Facility Type:	N/A
Travel Lanes:	N/A
Speed Limit (mph):	N/A
% Trucks:	N/A
ROW (ft):	N/A
2017 Volume(vpd):	N/A
2045 Volume(vpd):	N/A

## Virginia Dr/Dam Rd/W South Shore Dr

From Sunset Dr to NC 87

#### Proposal Length: 1.33 miles

#### **Identified Need**

This project will address the lack of safety that pedestrians face when using this facility. Additional information can be found on the plan.

#### Recommendation

Multi-use recommendation along Virginia Dr/Dam Rd/W South Shore Dr from Sunset Dr to NC 87. This project comes from the final draft plan of the City of Boiling Springs Lakes Pedestrian Plan as a shared-use proposal, refer to the plan for further information.

#### Project History/Linkage to Other Plans

Refer to draft plan of the City of Boiling Springs Lakes Pedestrian Plan.

#### CTP Goal Analysis

Goal: Promote a safer and more secure transportation network through crash reduction, enhanced reliability and predictability, and improved emergency coordination.

## Local ID: BRUN50018-M Classification: Multiuse Path Location: Within Right of Way



Existing Road Data	
N/A	

## Winston Salem Street

E 4th Street to E 1st Street

#### Proposal Length: 0.06 miles

### Identified Need

From the adopted 2014 Ocean Isle Beach Bicycle and Pedestrian Plan and is being recommended for lack of connectivity to the beach access paths, alleviate high traffic seasonal volumes, and to promote a mic of traffic types.

### Recommendation

Sidewalk proposal along Winston Salem St from E 4th Street to E 1st Street.

### Project History/Linkage to Other Plans

Sidewalks along Winston Salem Street from E 4th Street to E 1st Street. Refer to the Cape Fear Bicycle and Pedestrian Plan for further project details.

### **CTP Goal Analysis**

Goal: Create a more efficient transportation system through improved connectivity, capacity and operations.

Local ID: BRUN50023-P Classification: Pedestrian Location: Within Right of Way



Existing Road Data	
Facility Type:	N/A
Travel Lanes:	N/A
Speed Limit (mph):	N/A
% Trucks:	N/A
ROW (ft):	N/A
2017 Volume(vpd):	N/A
2045 Volume(vpd):	N/A

## W 3rd Street

NC 904 (Causeway Dr) to W Fourth St

## Proposal Length: 0.39 miles

#### **Identified Need**

From the adopted 2014 Ocean Isle Beach Bicycle and Pedestrian Plan and is being recommended for lack of connectivity to the beach access paths, alleviate high traffic seasonal volumes, and to promote a mic of traffic types.

#### Recommendation

Sidewalk proposal along W 3rd Street from NC 904 to W 4th Street.

### Project History/Linkage to Other Plans

Refer to 2014 Ocean Isle Beach Bicycle and Pedestrian Plan.

#### **CTP Goal Analysis**

Goal: Create a more efficient transportation system through improved connectivity, capacity and operations.

## Local ID: **BRUN50024-P** Classification: **Pedestrian** Location: **Within Right of Way**



Existing Road Data	
Facility Type:	N/A
Travel Lanes:	N/A
Speed Limit (mph):	N/A
% Trucks:	N/A
ROW (ft):	N/A
2017 Volume(vpd):	N/A
2045 Volume(vpd):	N/A

## Troy Street

W 3rd Street to W 1st Street

Proposal Length: 0.09 miles

### **Identified Need**

From the adopted 2014 Ocean Isle Beach Bicycle and Pedestrian Plan and is being recommended for lack of connectivity to the beach access paths, alleviate high traffic seasonal volumes, and to promote a mic of traffic types.

### Recommendation

Sidewalk proposal along Troy Street from W 3rd Street to E 1st Street.

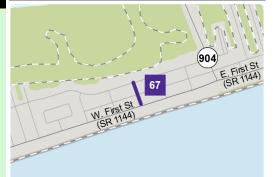
### Project History/Linkage to Other Plans

Review the 2014 Ocean Isle Beach Bicycle and Pedestrian Plan.

### **CTP Goal Analysis**

Goal: Create a more efficient transportation system through improved connectivity, capacity and operations.

Local ID: BRUN50025-P Classification: Pedestrian Location: Within Right of Way



Existing Road Data	
Facility Type:	N/A
Travel Lanes:	N/A
Speed Limit (mph):	N/A
% Trucks:	N/A
ROW (ft):	N/A
2017 Volume(vpd):	N/A
2045 Volume(vpd):	N/A

## E West St

#### From N Atlantic Ave to NC 211

### Proposal Length: 0.13 miles

### **Identified Need**

For Southport to have a safe, convenient, accessible and pedestrian network. Refer to Southport Pedestrian Plan for further information.

#### Recommendation

Sidewalk along E West St from NC 211 to N Atlantic Ave. This project is recommended in the adopted City of Southport Comprehensive Pedestrian Transportation Plan.

### Project History/Linkage to Other Plans

Refer to Southport Pedestrian Plan for further information.

#### **CTP Goal Analysis**

Goal: Promote a safer and more secure transportation network through crash reduction, enhanced reliability and predictability, and improved emergency coordination.

## Local ID: BRUN50027-P Classification: Pedestrian Location: Within Right of Way



Existing Road Data					
Facility Type:	N/A				
Travel Lanes:	N/A				
Speed Limit (mph):	N/A				
% Trucks:	N/A				
ROW (ft):	N/A				
2017 Volume(vpd):	N/A				
2045 Volume(vpd):	N/A				

## Atlantic Ave

From E George to E 8th St

Proposal Length: 0.28 miles

### **Identified Need**

For Southport to have a safe, convenient, accessible and pedestrian network. Refer to Southport Pedestiran Plan for further information.

### Recommendation

Sidewalk along Atlantic Ave from E George St toE 8th Streett. This project is recommended in the adopted City of Southport Comprehensive Pedestrian Transportation Plan.

### Project History/Linkage to Other Plans

Refer to Southport Pedestrian Plan for further information.

### **CTP Goal Analysis**

Goal: Promote a safer and more secure transportation network through crash reduction, enhanced reliability and predictability, and improved emergency coordination.

Local ID: BRUN50028-P Classification: Pedestrian Location: Within Right of Way



### **Existing Road Data**

Facility Type:	N/A
Travel Lanes:	N/A
Speed Limit (mph):	N/A
% Trucks:	N/A
ROW (ft):	N/A
2017 Volume(vpd):	N/A
2045 Volume(vpd):	N/A

## **Brunswick St**

From W West St to W Moore St

## Proposal Length: 0.29 miles

#### Identified Need

For Southport to have a safe, convenient, accessible and pedestrian network. Refer to Southport Pedestiran Plan for further information.

#### Recommendation

Sidewalk along Brunswick St from W West St to W Moore St. This project is recommended in the adopted City of Southport Comprehensive Pedestrian Transportation Plan.

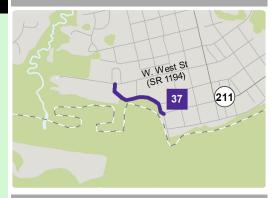
#### **Project History/Linkage to Other Plans**

Refer to Southport Pedestrian Plan for further information.

#### CTP Goal Analysis

Goal: Promote a safer and more secure transportation network through crash reduction, enhanced reliability and predictability, and improved emergency coordination.

## Local ID: **BRUN50029-P** Classification: **Pedestrian** Location: **Within Right of Way**



Existing Road Data					
N/A					

## Page Reserved for Inventory Tables

Inventory table location on S Drive location: S:\Planning\_Coastal\CTPs\BrunswickCounty\_CTP\Plan Documentation\Working\_Inventory Tables



PLAN134

# **BICYCLE AND PEDESTRIAN**

		BICYCLE						
				Existing	System	Proposed System		
			Distance		Section	· · ·	Cross-	Other
Local ID	Facility/Route	Section (From - To)	(mi)	(ft)	lanes	Туре	Section	Modes
		None - None	0 O		1	Bike Lane		
		None - None	0			Bike Route		
BRUN50001-								
В	NE 58th Street	E Yacht Dr - E Beach Dr	0.75		2	Bike Lane		
BRUN50002-								
В	W Yacht Drive	Oak Island Drive - NC 133	0.99		2	Bike Lane		
BRUN50002-								
В	W Yacht Drive	Oak Island Drive - NC 133	4.74		2	Bike Lane		
BRUN40006-								
	NC 133	Elizabeth Drive - Intercoastal Waterway	0.73			Bike Lane		
BRUN50005-								
В	Barbee Blvd	Elizabeth Dr - Ocean Dr	0.43			Bike Lane		
BRUN40005-	74th St - Ocean Dr - Rober L							
В	Jones St	Oak Island Dr - NC 133	1.31		2	Bike Lane		
BRUN50003-								
	NE 46th Street	W Yacht Dr - E Beach Dr	0.72		2	Bike Lane		
BRUN50004-								
В	E Dolphin Drive	dead end of 43rd St - dead end of 49th St	0.22		2	Bike Lane		
BRUN50002-								
В	W Yacht Drive	Oak Island Drive - NC 133	2.09		2	Bike Lane		
BRUN50007-								
В	None	NC 133 - Dead end South of O'Quinn Blvd	1.09			Bike Lane		
BRUN50006-		Fish Factory Road SE - South of Scupper						
В	Barnes Bluff Dr Ext	Run SE	1.97			Bike Lane		
BRUN20004-								
В	None	Copas Rd - NC 130	3.31			Bike Lane		
BRUN50011-								
В	2nd Street	High Point Street - NC 904	1.1			Bike Lane		
BRUN50011-								
В	None	NC 904 - Beaufort St	2.11			Bike Lane		
BRUN50010-								
В	W Fourth Street	Shelby Street - Driftwood Drive	0.44			Bike Lane		
BRUN50012-								
В	4th Street	2nd Street - Shallotte Blvd	0.76			Bike Lane		

BRUN50010-								
	W Fourth Street	Driftwood Drive - W First Street	0.09			Bike Lane		
BRUN50011-			0.00			Dire Lano		
	2nd Street	Beaufort St - 1st Street	0.05			Bike Lane		
В		None - None	0			Bike Lane		
BRUN40004-			-					
В	E. Oak Island Dr (SR 1190)	W Yacht Dr - NC 906	1.79		2	Bike Lane		
BRUN20002-								
В		Smith Ave - US 17	0.44			Bike Lane		
BRUN40005-								
В		E Yacht Dr - Oak Island Dr	0.44		2	Bike Lane		
H141158	Bridgers Rd (None)	Bridgers Rd - US 17 BUS	2.23			Bike Lane	02D	H,P
BRUN20002-								
В	US 17	US-17 BUS - Red Bug Rd (SR 1136)	0.29	48	4D	Bike Lane		
BRUN20002-		Red Bug Rd (SR 1136) - Royal Oak Rd						
В	US 17	(SR 1345)	0.34	48	4D	Bike Lane		
BRUN20040-								
Н	US 17	US 17 - Mill Creek Rd (SR 1514)	0.9	48	4D	Bike Lane	04A	н
BRUN20004-								
В	US 17 BUS	SR 1720 - NC 130	0.87	24	2	Bike Lane		
BRUN20003-								
Н	US 17 BUS	NC 179 - Village Rd (SR 1173)	0.25	36	2	Bike Lane	04D	Н
BRUN20003-								
Н	US 17 BUS	Village Rd (SR 1173) - US 17	0.78	36	2	Bike Lane	04D	Н
BRUN20001-								
В	US 17 BUS	US 17 - NC 130	0.06	92	4D	Bike Lane		
BRUN20001-								
	US 17 BUS	NC 130 - US 17	0.22	72	4D	Bike Lane		
	NC 130	US 17 - Mcmilly Rd (SR 1320)	0.11	44	2	Bike Lane	04B	H,P,M
	NC 130	US 17 - Mcmilly Rd (SR 1320)	0.1	36	2	Bike Lane	04B	H,P,M
	NC 130	US 17 - Mcmilly Rd (SR 1320)	0.04	36	2	Bike Lane	04B	H,P,M
	NC 130	US 17 - Mcmilly Rd (SR 1320)	0.61	24	2	Bike Lane	04B	H,P,M
BRUN30004-		Mcmilly Rd (SR 1320) - Industrial Dr (SR						
	NC 130	1373)	0.3	24	2	Bike Lane		
BRUN30004-		Mcmilly Rd (SR 1320) - Industrial Dr (SR						7
	NC 130	1373)	0.98	24	2	Bike Lane		
BRUN30004-		Ludlum Rd (SR 1323) - Mill Branch Rd (SR						
	NC 130	1331)	1.24	24	2	Bike Lane		
BRUN30004-		Mill Branch Rd (SR 1331) - Longwood Rd						
В	NC 130	(SR 1321)	1.54	24	2	Bike Lane		

BRUN30004-		Industrial Dr (SR 1373) - Big Neck Rd (SR						
B	NC 130	1335)	0.76	24	2	Bike Lane		
BRUN30004-		Mcmilly Rd (SR 1320) - Industrial Dr (SR	0.10		_	Dinto Edino		
B	NC 130	1373)	0.98	24	2	Bike Lane		
		Big Neck Rd (SR 1335) - Ludlum Rd (SR	0.00					
В	NC 130	1323)	2.62	24	2	Bike Lane		
		Sabbath Home Rd (SR 1120) - Shell						
H141126	NC 130	Landing Rd (SR 1208)	0.45	24	2	Bike Lane	041	H,M
		Shell Landing Rd (SR 1208) - Seashore					-	,
H141126	NC 130	Rd (SR 1139)	0.66	24	2	Bike Lane	041	H,M
		Seashore Rd (SR 1139) - Horizon Dr (SR						,
H141126	NC 130	1882)	0.17	24	2	Bike Lane	041	H,M
		Horizon Dr (SR 1882) - Pine Valley Dr (SR						-
H141126	NC 130	1248)	0.13	24	2	Bike Lane	041	H,M
		Pine Valley Dr (SR 1248) - Boones Neck						
H141126	NC 130	Rd (SR 1137)	0.19	24	2	Bike Lane	041	H,M
		Boones Neck Rd (SR 1137) - Stanbury Rd						
H141126	NC 130	(SR 1124)	0.79	24	2	Bike Lane	041	H,M
H141126	NC 130	Levie Rd (SR 1142) - Kirby Rd (SR 1141	0.17	24	2	Bike Lane	041	H,M
		Stanbury Rd (SR 1124) - Levie Rd (SR						
H141126	NC 130	1142)	0.34	24	2	Bike Lane	041	H,M
H141126	NC 130	Kirby Rd (SR 1141) - Oxpen Rd (SR 1140)	0.25	24	2	Bike Lane	041	H,M
		Oxpen Rd (SR 1140) - Mt. Pisgah Rd (SR						
H141126	NC 130	1130)	0.15	20	2	Bike Lane	041	H,M
		Mt. Pisgah Rd (SR 1130) - Civietown Rd						
H141126	NC 130	(SR 1132)	1.56	22	2	Bike Lane	041	H,M
		Red Bug Rd (SR 1136) - Gray Bridge Rd						
H141126	NC 130	(SR 1134)	0.04	22	2	Bike Lane	041	H,M
H141142	NC 130	US 17 BUS - NC 130	0.63	20	2	Bike Lane	04B	H,P,M
H141142	NC 130	US 17 - US 17	0.32	36	2	Bike Lane	04B	H,P,M
BRUN40006-								
В	NC 133	NC 133 - Old Bridge Rd (SR 1210)	0.95	32	2	Bike Lane		
BRUN30014-								
В	NC 133	NC 133 - Old Bridge Rd (SR 1210)	0.45	40	2	Bike Lane		
H193078	NC 133	Old Bridge Rd (SR 1210) - NC 133	0.27	33	2	Bike Lane	03A	Н
H193078	NC 133	NC 133 - Fish Factory Rd (SR 1101)	0.46	33	2	Bike Lane	03A	Н
		Fish Factory Rd (SR 1101) - Sea Pines Dr						
H193078	NC 133	(SR 1217)	0.6	33	2	Bike Lane	03A	Н
		Sea Pines Dr (SR 1217) - Long Beach Rd			_			
H193078	NC 133	(SR 1969)	0.39	33	2	Bike Lane	03A	Н

		Southgate Blvd (SR 1857) - Long Beach						
H193078	NC 133	Rd (SR 1969)	0.13	33	2	Bike Lane	03A	н
BRUN30014-								
	NC 133	Long Beach Rd (SR 1969) - NC 211	0.22	96	4D	Bike Lane		
BRUN30008-								
	NC 211	NC 211 - E. Moore St (SR 1528)	0.88	37	2	Bike Lane		
BRUN30011-				-				
	None	Causeway Dr - W. First St (SR 1144)	0.33		2	Bike Lane		
BRUN30010-								
	NC 904	NC 179 - Culpepper Rd SW (SR 1157)	0.27		2	Bike Lane		
H171352	NC 904	Old Shallotte Rd (SR 1316) - US 17	0.87	24	2	Bike Lane	04B	H,P
H090804	NC 904	US 17 - NC 179	1.07	22	2	Bike Lane	04D	H,P
H090804	NC 904	US 17 - NC 179	1.13	22	2	Bike Lane	04D	H,P
BRUN30009-								,
н	NC 904	NC 179 - Rick St (SR 1294)	0.17	32	2	Bike Lane	04G	H,P,M
BRUN30009-		Rick St (SR 1294) - Hale Beach Rd (SR						, ,
н	NC 904	1157)	0.1	32	2	Bike Lane	04G	H,P,M
BRUN30009-		Culpepper Rd SW (SR 1157) - Causeway						, ,
	NC 904	Dr	0.34	24	2	Bike Lane	04G	H,P,M
BRUN30009-								, ,
н	NC 904	Causeway Dr - Causeway Dr	0.23	32	2	Bike Lane	04G	H,P,M
BRUN30009-		Causeyway Dr (SR 1272) - W. First St (SR						
н	NC 904	1144)	0.33	32	2	Bike Lane	04G	H,P,M
BRUN30013-		,						
В	NC 906	NC 906 - NC 211	2.62	48	4D	Bike Lane		
BRUN30013-								
В	NC 906	NC 906 - NC 211	1.06	48	4D	Bike Lane		
H090236-A	NC 906	NC 906 - Hewett Rd (SR 1556)	2.19	22	2	Bike Lane	04A	Н
		Gilbert Rd (SR 1501) - Rutland Rd (SR						
H090236-B	NC 906	1538)	1.17	22	2	Bike Lane	03A	н
		Hewett Rd (SR 1556) - Gilbert Rd (SR						
H090236-A	NC 906	1501)	0.3	22	2	Bike Lane	04A	н
H090236-B	NC 906	Rutland Rd (SR 1538) - US 17	2.74	22	2	Bike Lane	03A	Н
BRUN40011-								
	Country Club Dr (SR 1100)	NC 133 - None	2.92	20	2	Bike Lane		
BRUN40010-	· · · · · · · · · · · · · · · · · · ·							
В	Mccray St (SR 1116)	DEAD END - Mccray St (SR 1116)	0.28	22	2	Bike Lane		
BRUN40010-	/							
	Ocean Blvd W (SR 1116)	Mccray St (SR 1116) - NC 130	0.84	22	2	Bike Lane		
BRUN40010-								
	Ocean Blvd W (SR 1116)	NC 130 - None	1.76	22	2	Bike Lane		

BRUN40010-								
В	Ocean Blvd W (SR 1116)	NC 130 - None	3.25	22	2	Bike Lane		
BRUN30004-	Sabbath Home Rd SW (SR	Stone Chimney Rd (SR 1115) - Old Ferry						
В	1120)	Rd (SR 1121)	0.62	18	2	Bike Lane		
	Sabbath Home Rd SW (SR							
	1120)	Old Ferry Rd (SR 1121) - NC 130	0.1	34	2	Bike Lane		
BRUN40008-								
В	W. First St (SR 1144)	NC 904 - Beaufort St	1.1	22	2	Bike Lane		
BRUN40008-								
В	W. First St (SR 1144)	Beaufort St - Highpoint St	1.02	22	2	Bike Lane		
BRUN40025-								
Н	E. Oak Island Dr (SR 1190)	NC 906 - E. Beach Dr (SR 1104)	3.37	20	2	Bike Lane	03C	H,P
BRUN40025-								
Н	E. Oak Island Dr (SR 1190)	E. Beach Dr (SR 1104) - NC 133	1.89	34	2	Bike Lane	03C	H,P
BRUN40001-								
В	Daws Creek Rd SE (SR 1518)	Lee Buck Rd (SR 1519) - NC 133	2.04	16	2	Bike Lane		
BRUN40001-		Daws Creek Rd (SR 1518) - Governors Rd						
В	Lee Buck Rd SE (SR 1519)	(SR 1521)	3.3	24	2	Bike Lane		
BRUN40026-		Lee Buck Rd (SR 1519) - Gordon Lewis Dr						
Н	Governors Rd SE (SR 1521)	(SR 1567)	1.48	18		Bike Lane	020	Н
BRUN40001-								
В	Governors Rd SE (SR 1521)	Gordon Lewis Dr (SR 1567) - US 17	1.39	20	2	Bike Lane		
BRUN40007-								
В	Dosher Cut-Off (SR 1621)	NC 211 - NC 87	0.59	22	2	Bike Lane		
BRUN40010-								
В	Ocean Blvd W	DEAD-END - Ocean Blvd (SR 1116)	1.26	22	2	Bike Lane		

	PEDESTRIAN								
				Existing	System	Propose	d System		
			Distance		Side of			Other	
Local ID	Facility/Route	Section (From - To)	(mi)	Туре	Street	Туре	Side of Street	Modes	
		None - None	0			Sidewalk			
		None - None	0			Sidewalk			
		None - None	0			Sidewalk			
BRUN50001-									
Р	W Yacht Drive	Oak Island Drive - NC 133	0.99			Sidewalk	North		
BRUN50001-									
Р	W Yacht Drive	Oak Island Drive - NC 133	4.74			Sidewalk	North		
BRUN40003-									
Р	NC 133	Elizabeth Drive - Intercoastal Waterway	0.73			Sidewalk	East		

BRUN50004-					
	Barbee Blvd	Elizabeth Dr - Ocean Dr	0.43	Sidewalk	West
	74th St - Ocean Dr - Rober L				
Р	Jones St	Oak Island Dr - NC 133	1.31	Sidewalk	Varies
BRUN50002-					
	NE 46th Street	W Yacht Dr - E Beach Dr	0.72	Sidewalk	East
BRUN50003-					
	E Dolphin Drive	dead end of 43rd St - dead end of 49th St	0.22	Sidewalk	Varies
BRUN50001-					
P	W Yacht Drive	Oak Island Drive - NC 133	2.09	Sidewalk	North
BRUN50007-			4.00	0.1	<b>–</b> (
P BRUN50005-	None	NC 133 - Dead end South of O'Quinn Blvd	1.09	Sidewalk	East
	Barnes Bluff Dr Ext	Fish Factory Road SE - South of Scupper Run SE	1.97	Sidewalk	South
P BRUN50027-		Ruit SE	1.97	Sidewalk	South
	E West St	N Atlantic Ave - NC 211	0.13	Sidewalk	North
BRUN50028-			0.10	Oldewalk	North
	N Atlantic Ave	E St George St - E 8th Street	0.28	Sidewalk	East
BRUN50011-			0.20	oldonum	Laot
Р	Owens St - Caswell Ave	NC 211 - W 11St	0.11	Sidewalk	West
BRUN50012-					
Р		NC 87 - E Moore St	0.38	Sidewalk	East
BRUN50012-					
Р		NC 87 - E Moore St	0.49	Sidewalk	East
BRUN50011-					
	Owens St - Caswell Ave	NC 211 - W 11St	0.34	Sidewalk	West
BRUN40004-				0.1	0 11
P BRUN50010-	Robert Ruark Drive	NC 211 - Forest Oak Dr	0.31	Sidewalk	South
P	L Sweine Blud	NC 211 Villing Creat Lana	0.23	Sidewalk	East
P BRUN50029-	J Swaine Blvd	NC 211 - Viking Crest Lane	0.23	Sidewalk	Easi
P	Brunswick St	W Bay St - W West St	0.29	Sidewalk	South
F BRUN20001-			0.20	JUGWAIK	
	None	Copas Rd -NC 130	3.31	Sidewalk	Varies
BRUN40006-				eldemain	
P	Smith Ave (None)	US 17 - US 17B	0.68	Sidewalk	East
BRUN50013-					
Р	Wall Street (None)	US 17B - US 17B	0.77	Sidewalk	Varies
BRUN50013-					
Р	Smith Ave (None)	Wall Street - NC 130	0.34	Sidewalk	Varies

BRUN20002-				г		
	US 17 BUS	Washington Rd (SR 1720) - NC 130	0.74	Sidewalk	South	
F BRUN50016-	03 17 803	Washington Ru (SR 1720) - NC 150	0.74	Sidewaik	South	
DRUNSUUIU-	2nd Street	High Point Street - NC 904	1.1	Sidewalk	South	
BRUN50016-		Thigh Fount Street - NC 904	1.1	Sidewaik	South	
Р	None	NC 904 - Beaufort St	2.11	Sidewalk	South	
BRUN50015-						
Р	W Fourth Street	Shelby Street - Driftwood Drive	0.44	Sidewalk	South	
BRUN50017-			0.70	0.1	<b>N</b> 1 (1	
P	4th Street	2nd Street - Shallotte Blvd	0.76	Sidewalk	North	
BRUN50015- P	W Fourth Street	Driftwood Drive - W First Street	0.09	Sidewalk	South	
BRUN50016-						
P	2nd Street	Beaufort St - 1st Street	0.05	Sidewalk	South	
BRUN40001-						
Р	E. Oak Island Dr (SR 1190)	W Yacht Dr - NC 906	1.79	Sidewalk	North	
BRUN50023-						
P	Winston Salem Street (None)	SR 1144 (E First Street) - E 2nd Street	0.06	Sidewalk	North	
BRUN50024-						
P		Shelby Street - NC 904 (Causeway Drive)	0.39	Sidewalk	North	
BRUN50025-		West 3rd Street - SR 1144 (West First		<u>.</u>		
P		Street)	0.09	Sidewalk	North	
BRUN40010-			4.05	0:1	N I - utile	
		Leland Street - NC 904 (Causeway Drive)	1.05	Sidewalk	North	
BRUN40002- P			0.44	0:1		
P H141158	Dridners Dd (Nerse)	E Yacht Dr - Oak Island Dr	0.44	Sidewalk Sidewalk	Varies Varies	
BRUN20001-	Bridgers Rd (None)	Bridgers Rd - US 17 BUS	2.23	Sidewalk	varies	H,B
P	US 17 BUS	SR 1720 - NC 130	0.87	Sidewalk	Varies	
F BRUN20039-	03 17 803	51(1720-100-150	0.87	Sidewaik	vanes	
	US 17 BUS	US 17 - Gilbert Rd (SR 1501)	0.85	Sidewalk	North	н
H141142	NC 130	US 17 - Mcmilly Rd (SR 1320)	0.11	Sidewalk	West	H,B,M
H141142	NC 130	US 17 - Mcmilly Rd (SR 1320)	0.1	Sidewalk	West	H,B,M
H141142	NC 130	US 17 - Mcmilly Rd (SR 1320)	0.04	Sidewalk	West	H,B,M
	NC 130	US 17 BUS - NC 130	0.63	Sidewalk	West	H,B,M
H141142	NC 130	US 17 - US 17	0.32	Sidewalk	West	H,B,M
BRUN40003-						, 2 ,
	NC 133	NC 133 - Old Bridge Rd (SR 1210)	0.95	Sidewalk	East	
BRUN30004-						
	NC 211	E. Moore St (SR 1528) - W. St (SR 1194)	0.57	Sidewalk	South	

BRUN30004-						
	NC 211	E. Moore St (SR 1528) - W. St (SR 1194)	0.81	Sidewalk	South	
BRUN30007-						
	None	Causeway Dr - W. First St (SR 1144)	0.33	Sidewalk	West	
BRUN30006-						
	NC 904	NC 179 - Culpepper Rd SW (SR 1157)	0.27	Sidewalk	West	
H171352	NC 904	Old Shallotte Rd (SR 1316) - US 17	0.87	Sidewalk	West	H,B
H090804	NC 904	US 17 - NC 179	1.07	Sidewalk	West	H,B
H090804	NC 904	US 17 - NC 179	1.13	Sidewalk	West	H,B
BRUN30009-						
Н	NC 904	NC 179 - Rick St (SR 1294)	0.17	Sidewalk	West	H,B,M
BRUN30009-		Rick St (SR 1294) - Hale Beach Rd (SR				
	NC 904	1157)	0.1	Sidewalk	West	H,B,M
BRUN30009-		Culpepper Rd SW (SR 1157) - Causeway				
	NC 904	Dr	0.34	Sidewalk	West	H,B,M
BRUN30009-						
	NC 904	Causeway Dr - Causeway Dr	0.23	Sidewalk	West	H,B,M
BRUN30009-		Causeyway Dr (SR 1272) - W. First St (SR				
	NC 904	1144)	0.33	Sidewalk	West	H,B,M
BRUN30001-						
	Country Club Dr (SR 1100)	NC 133 - NC 133	0.22	Sidewalk	Both	
BRUN40007-						
	W. First St (SR 1144)	NC 904 - Beaufort St	1.1	Sidewalk	South	
BRUN40007-						
	W. First St (SR 1144)	Beaufort St - Highpoint St	1.02	Sidewalk	South	
BRUN40025-						
	E. Oak Island Dr (SR 1190)	NC 906 - E. Beach Dr (SR 1104)	3.37	Sidewalk	North	H,B
BRUN40005-						
P	W. 9th St (SR 1209)	NC 211 - Maple Ave	0.69	Sidewalk	South	
BRUN40009-			0.50	0.1	0 "	
	Cougar Rd (SR 1541)	NC 87 - DIX RD	0.52	Sidewalk	South	
BRUN50014-		Challetta Ava Dridrana Dd	0.00	Gidayyallı	N I a utila	
P BRUN50014-	White St	Shallotte Ave - Bridgers Rd	0.29	Sidewalk	North	
	White St	Edom I. n. 50003311010	0.10	Cidowalk	North	
P BRUN50014-	White St	Edom Ln - 50093311010	0.12	Sidewalk	North	
	White St	50002211010 Shallatta Ava	0.08	Sidowalk	North	
P BRUN50014-		50093311010 - Shallotte Ave	0.00	Sidewalk	North	
	White St	Smith Ave (SR 1357) - Edom Ln	0.16	Sidewalk	North	

		MULTI-USE PA	TH					
				Existing	System	Propose	d System	
			Distance		Cross-	•	Cross-	Other
Local ID	Facility/Route	Section (From - To)	(mi)	Location	Section	Location	Section	Modes
BRUN40001-								
М		None - None	1.49			West		
BRUN50003-								
М	Eden Drive/Alton Lennon Rd	Fifty Lakes Dr - E Boiling Spring Rd	1.71			East		
BRUN50001-								
М	4th Street	Shallotte Blvd - Dead End	0.1			East		
BRUN50005-								
Μ		E Boiling Spring Rd - Baymeade Rd	1.03			Varies		
BRUN50018-								
М		NC 87 - NC 87	1.33			Varies		
BRUN50007-								
М		W 17th Ave - Dead End	3.2			West		
BRUN50001-								
М		None - None	0.38			East		
BRUN50001-								
М		None - None	0			East		
BRUN30016-								
Н	NC 87	40001621010 - Bethel Rd (SR 1525)	0.56		03A	Both	05B	Н
BRUN30016-								
Н	NC 87	Bethel Rd (SR 1525) - NC 133	0.58		02B	Both	05B	Н
BRUN30016-								
Н	NC 87	NC 133 - NC 133	0.77		03A	Both	05B	Н
BRUN30016-								
H	NC 87	NC 133 - NC 133	0.17		02B	Both	05B	Н
BRUN30016-								
H	NC 87	NC 133 - NC 133	0.05		02B	Both	05B	Н
BRUN30016-								
Н	NC 87	NC 133 - Boiling Spring Lakes Town Limit	1.44		02B	Both	05B	Н
BRUN30016-		Boiling Spring Lakes Town Limit - Cougar			<b>a a -</b>	<b>_</b>	•==	
H	NC 87	Rd (SR 1541)	0.52		02B	Both	05B	Н
BRUN30016-		Cougar Rd (SR 1541) - E. Boiling Spring					<b>•</b> • =	
H	NC 87	Rd (SR 1539)	0.76		02B	Both	05B	Н
BRUN30016-		Cougar Rd (SR 1541) - E. Boiling Spring					<b>•</b> • =	
Н	NC 87	Rd (SR 1539)	1.02		02B	Both	05B	Н
BRUN30016-		E. Boiling Spring Rd (SR 1539) - Danford					<b>•</b> • =	
Н	NC 87	Rd (SR 1513)	1.44		02B	Both	05B	Н

		Civietown Rd (SR 1132) - Blue Dogwood					
H141126	NC 130	Trail SW	1.49	02B	East	041	H,B
		Blue Dogwood Trail SW - Red Bug Rd (SR					
H141126	NC 130	1136)	0.3	02B	East	041	H,B
H141126	NC 130	Gray Bridge Rd (SR 1134) - NC 130	0.45	02B	East	041	H,B
H141126	NC 130	NC 130 - Smith Ave	0.24	02B	East	041	H,B
BRUN30008-							
М	NC 130	NC 130 - NC 130	0.04		East		
BRUN30008-							
М	NC 130	NC 130 - US 17	0.38		East		
BRUN30030-							
н	NC 133	NC 87 - NC 133	0.06	02A	East	02M	н
BRUN30030-							
н	NC 133	River Rd (SR 1626) - Orton Rd (SR 1530)	0.03	02A	East	02M	н
BRUN30030-							
н	NC 133	River Rd (SR 1626) - Orton Rd (SR 1530)	4.4	02A	East	02M	н
BRUN30030-						-	
Н	NC 133	River Rd (SR 1626) - Orton Rd (SR 1530)	2.96	02A	East	02M	н
BRUN30030-		Orton Rd (SR 1530) - Governors Rd (SR					
Н	NC 133	1521)	0.65	02A	East	02M	н
BRUN30030-		Orton Rd (SR 1530) - Governors Rd (SR	0.00	0=/1			
Н	NC 133	1521)	2	02A	East	02M	н
BRUN30030-		Governors Rd (SR 1521) - Daws Creek Rd	_	0=/1			
Н	NC 133	(SR 1518)	2.41	02A	East	02M	н
		South Carolina State Line - Country Club	2	02,1	Luot	02.00	
H140870	NC 179	Dr (SR 1168)	0.44	03B	South	04J	н
		Country Club Rd (SR 1168) - Persimmon				0.0	
H140870	NC 179	Rd (SR 1167)	0.83	03B	South	04J	н
		Persimmon Rd (SR 1167) - Clariday Rd	0.00	002	oouur	0.10	
H140870	NC 179	SW	0.88	03B	South	04J	н
H141156	NC 179	Clariday Rd SW - Sirwood Pl NW	1.82	02A	South	041	H
H141156	NC 179	Sirwood PI NW - NC 904	1.94	02R	South	041	H
BRUN30009-		Old Georgetown Rd (SR 1163) -	1.04	020	Coun	0-11	
H	NC 179	Bonaventure St (SR 1955)	0.39	03A	South	04K	H,B,P
BRUN30009-		Bonaventure St (SR 1955) - Ascension Dr	0.00	00/1	Coun		11,0,1
H	NC 179	(SR 1961)	0.19	03A	South	04K	H,B,P
BRUN30009-		Ascension Dr (SR 1961) - Dale Ave (SR	0.10	007	Codui		, u, i
H	NC 179	1822)	0.71	03A	South	04K	H,B,P
BRUN30009-		Dale Ave (SR 1822) - Westbrook Ave (SR	0.71	007	Coun		1,0,1
H	NC 179	1269)	0.05	03A	South	04K	H,B,P
11		1203)	0.00	004	Journ	041	п,0,г

BRUN30009	-						
Н	NC 179	Westbrook Ave (SR 1269) - NC 179	0.06	03A	South	04K	H,B,P
H141146	NC 179	NC 179 - Camelot Dr (SR 1278)	0.39	03A	South	041	Н
		Camelot Dr (SR 1278) - Spruce Ln (SR					
H141146	NC 179	1890)	1	03A	South	041	н
H141146	NC 179	Spruce Ln (SR 1890) - Frink St (SR 1171)	0.32	03A	South	041	Н
111111110	NC 179	Spruce Lp (SD 1900) _ Frink St (SD 1171)	0.19	03A	South	041	н
H141146	NC 179	Spruce Ln (SR 1890) - Frink St (SR 1171) Frink St (SR 1171) - Hale Beach Rd (SR	0.19	03A	South	041	
H141146	NC 179	1157)	0.64	03A	South	041	н
П 14 I 140	NC 179	Hale Beach Rd (SR 1157) - Ocean Isle	0.04	03A	South	041	
H141146	NC 179	Beach Rd (SR 1137) - Ocean Isle	0.2	03A	South	041	н
H140888	NC 179 NC 179	NC 904 - Eyota Dr (SR 1274)	0.2	03A 02A	South	041	H
H140888	NC 179	Eyota Dr (SR 1274)	0.30	02A 02A	South	041	H
П 140000	NC 179	White Oak Dr - Hale Swamp Rd (SR	0.37	UZA	South	041	
11110000	NC 179	1154)	0.27	02A	South	041	н
H140888	NC 179	Hale Swamp Rd (SR 1154) - Goose Creek		UZA	South	041	
11440000	NO 470			02A	Couth	0.41	
H140888	NC 179	Rd (SR 1155) Hale Swamp Rd (SR 1154) - Goose Creek	0.79	02A	South	041	Н
114 40000	NO 470		0.00	00.4	0	0.41	
H140888	NC 179	Rd (SR 1155) Goose Creek Rd (SR 1155) - Bricklanding	0.02	02A	South	041	Н
11440000	NO 470		0.4	00.0	Couth	0.41	
H140888	NC 179	Rd (SR 1143) Bricklanding Rd (SR 1143) - Pigott Rd (SR	0.4	02A	South	041	Н
114 40000	NO 470	<b>J</b> ( ) <b>J</b> (	0.50	004		0.41	
H140888	NC 179	1152)	0.52	02A	East	041	н
H140888	NC 179	Pigott Rd (SR 1152) - Edna Way SW	0.18	02A	West	041	Н
11440000	NO 470	Pigott Rd (SR 1152) - Todd Rd SW (SR	0.47	004		0.41	
H140888	NC 179	1147)	0.47	02A	West	041	Н
11440000	NO 470	Todd Rd SW (SR 1147) - Hale Swamp Rd	0.54	004		0.41	
H140888	NC 179	(SR 1154)	0.54	02A	West	041	Н
	NO (70	Hale Swamp Rd (SR 1154) - Village Point	0.00				
H140888	NC 179	Rd (SR 1145)	0.92	02A	Varies	041	Н
	NO (70	Village Point Rd (SR 1145) - Village Rd		005			
H140888	NC 179	(SR 1173)	0.8	03B	Varies	041	Н
		Village Point Rd (SR 1145) - Village Rd				<b>a</b> (1	
H140888	NC 179	(SR 1173)	0.4	03B	Varies	041	Н
H141142	NC 130	Village Rd (SR 1173) - US 17 BUS	0.14	02B	East	04B	H,B,P
BRUN30002							
M	NC 211	E. Moore St (SR 1528) - W. St (SR 1194)	0.1		North		
BRUN30002							
М	NC 211	W. St (SR 1194) - W. 9th St (SR 1209)	0.55		North		

BRUN30035-		W. 9th St (SR 1209) - E. 13th St (SR					
	NC 211	1542)	0.09	03A		041	н
BRUN30035-		W. 9th St (SR 1209) - E. 13th St (SR					
н	NC 211	1542)	0.36	03A		041	н
BRUN30035-		· · · · · · · · · · · · · · · · · · ·					
н	NC 211	E. 13th St (SR 1542) - NC 87	0.31	03A		041	н
BRUN30014-							
н	NC 211	NC 87 - NC 211	0.82	02A	North	04K	Н
BRUN30014-							
	NC 211	NC 211 - NC 211	0.04	02B	North	04K	н
BRUN30014-							
	NC 211	NC 211 - NC 211	0.53	02A	North	04K	Н
BRUN30014-							
	NC 211	NC 211 - Long Beach Rd (SR 1969)	0.21	02A	North	04K	Н
BRUN30014-							
	NC 211	Long Beach Rd (SR 1969) - NC 133	0.16	02A	North	04K	Н
BRUN30014-		Oakview Dr (SR 1549) - Executive Park					
	NC 211	Blvd (SR 1571)	0.79	02A	North	04K	Н
BRUN30014-		Oakview Dr (SR 1549) - Executive Park					
	NC 211	Blvd (SR 1571)	1.06	02B	North	04K	Н
BRUN30014-							
	NC 211	Executive Park Blvd (SR 1571) - NC 906	2.92	02B	North	04K	Н
H090806-C	NC 211	NC 906 - Mosquito Branch Rd (SR 1111	1.06	02A	North	041	Н
		Mosquito Branch Rd (SR 1111) - Sunset					
H090806-C	NC 211	Harbor Rd (SR 1112)	2.14	02A	North	041	Н
		Mosquito Branch Rd (SR 1111) - Sunset					
H090806-C	NC 211	Harbor Rd (SR 1112)	0.27	02A	North	041	Н
		Sunset Harbor Rd (SR 1112) - Smithtown					
H090806-A	NC 211	Rd (SR 1193)	0.44	02A	North	041	Н
		Smithtown Rd (SR 1193) - Clemmons Rd					
H090806-A	NC 211	(SR 1505)	0.06	02A	North	041	Н
		Clemmons Rd (SR 1505) - Zion Hill Rd					
H090806-A	NC 211	(SR 1114)	2.27	02A	North	041	Н
		Zion Hill Rd (SR 1114) - Hewettown Rd					
H090806-A	NC 211	(SR 1178)	0.37	02A	North	041	Н
		Hewettown Rd (SR 1178) - Stone					
H090806-A	NC 211	Chimney Rd (SR 1115)	0.72	02A	North	041	Н
		Hewettown Rd (SR 1178) - Stone					
H090806-A	NC 211	Chimney Rd (SR 1115)	1.37	02A	North	041	Н
		Stone Chimney Rd (SR 1115) - Blanton Rd					
H090806-A	NC 211	(SR 1535)	0.26	03A	North	041	Н

H090806-A	NC 211	Blanton Rd (SR 1535) - US 17	0.05	03A	North	041	Н
H090806-A	NC 211	Blanton Rd (SR 1535) - US 17	0.01	03A	North	041	Н
BRUN30014-							
н	NC 211	NC 211 - NC 133	0.07	02A	North	04K	н
BRUN30008-							
М	NC 130 BUS	Old Holden Beach Rd (SR 1960) - US 17	0.29		East		
BRUN30020-							
н	NC 179 BUS	NC 179 - Shady Forest Dr (SR 1246)	0.82	02B	Varies	02N	н
BRUN30020-							
н	NC 179 BUS	NC 179 - Shady Forest Dr (SR 1246)	0.31	02B	Varies	02N	н
BRUN30020-		Shady Forest Dr (SR 1246) - Heritage Dr					
н	NC 179 BUS	(SR 1846)	0.33	02B	Varies	02N	н
BRUN30020-		Heritage Dr (SR 1846) - Forest Dr (SR					
н	NC 179 BUS	1873)	0.1	02B	Varies	02N	н
BRUN30020-							
н	NC 179 BUS	Forest Dr (SR 1873) - Beach Dr (SR 1242)	0.09	02B	Varies	02N	н
BRUN30020-		Beach Dr (SR 1242) - Sunset Blvd (SR					
	NC 179 BUS	1172)	1.75	02B	Varies	02N	н
BRUN30020-							
н	NC 179 BUS	Sunset Blvd (SR 1172) - NC 179	0.09	02B	Varies	02N	н
BRUN30020-							
	NC 179 BUS	NC 179 - NC 179	0.07	02B	Varies	02N	н
BRUN30020-							
	NC 179 BUS	NC 179 - Sunset Blvd (SR 1172)	0.05	02B	Varies	02N	н
BRUN30020-							
	NC 179 BUS	Sunset Blvd (SR 1172) - Pineview Dr	1.1	02B	South	02N	Н
BRUN30020-							
	NC 179 BUS	Pineview Dr - Seaside Rd SW	0.64	02B	South	02N	Н
BRUN30020-							
	NC 179 BUS	NC 179 - NC 179	0.07	02B		02N	н
BRUN40002-	Stone Chimney Rd SE (SR						
	1115)	US 17 - US 17	0.01		East		
BRUN40002-	Stone Chimney Rd SE (SR						
	1115)	US 17 - Blanton Rd (SR 1535)	0.16		East		
BRUN40002-	Stone Chimney Rd SE (SR						
	1115)	Blanton Rd (SR 1535) - NC 211	0.25		East		
BRUN40002-	Stone Chimney Rd SW (SR						
	1115)	NC 211 - Turnpike Rd (SR 1129)	1.17		East		
BRUN40002-	Stone Chimney Rd SW (SR	Turnpike Rd (SR 1129) - Hewett Rd (SR					
Μ	1115)	1128)	0.87		East		

BRUN40002-	Stone Chimney Rd SW (SR	Taft Rd (SR 1127) - Cedar Grove Rd (SR					I
M	1115)	1125)	2		East		
	Stone Chimney Rd SW (SR	Cedar Grove Rd (SR 1125) - Maple Creek	-		Edot		
M	1115)	Rd (SR 1245)	0.34		East		
	Stone Chimney Rd SW (SR						
M	1115)	Hewett Rd (SR 1128) - Taft Rd (SR 1127)	0.3		East		
	Stone Chimney Rd SW (SR	Maple Creek Rd (SR 1245) - Leonard Rd					
Μ	1115)	(SR 1231)	0.68		East		
BRUN40002-	Stone Chimney Rd SW (SR	Leonard Rd (SR 1231) - Stone Chimney					
	1115)	Rd (SR 1119)	0.1		East		
BRUN40002-	Old Ferry Connection SW (SR	Stone Chimney Rd (SR 1119) - Stanbury					
М	1115)	Rd (SR 1124)	0.37		East		
BRUN40002-	Old Ferry Connection SW (SR	Stanbury Rd (SR 1124) - Sabbath Home					
М	1115)	Rd (SR 1120)	0		East		
BRUN40002-	Old Ferry Connection SW (SR	Stanbury Rd (SR 1124) - Sabbath Home					
М	1115)	Rd (SR 1120)	0.74		East		
BRUN40001-		Turnpike Rd (SR 1129) - Stone Chimney					
Μ	Mt. Pisgah Rd SW (SR 1130)	Rd (SR 1119)	0.22		West		
BRUN40001-							
Μ	Civietown Rd SW (SR 1132)	Mt. Pisgah Rd (SR 1130) - NC 130	2.34		West		
BRUN40034-	Ocean Isle Beach Rd SW (SR						
Н	1184)	US 17 - Watts Rd (SR 1153)	0.95	02A		041	Н
	Ocean Isle Beach Rd SW (SR	Watts Rd (SR 1153) - Old Georgetown Rd					
Н	1184)	(SR 1163)	0.85	02A		041	Н
BRUN40034-	Ocean Isle Beach Rd SW (SR						
Н	1184)	Old Georgetown Rd (SR 1163) - NC 179	1.74	02A		041	Н
BRUN40071-							
Н	E Boiling Spring Rd (SR 1539)	Governors Rd (SR 1521) - NC 87	3.41	02B	North	02M	Н
	W BOILING SPRING RD	Elk Horn Rd - Cape Fear Rd	1.31		North	02M	Н
H150504	W BOILING SPRING RD	NC 87 - Elk Horn Rd	0.88		North	02M	Н
H150504	W BOILING SPRING RD	Cape Fear Rd - Druid Rd	1.07		North	02M	Н
BRUN50004-							
M	Pine Rd	Spruce Rd - Spring Lake Dr	0.08		Varies		
BRUN50004-							
M	Pine Rd	Spring Lake Dr - Lake Dr	0.03		Varies		
BRUN50004-		E. Boiling Spring Rd (SR 1539) - Long					
	Pine Rd	Leaf Rd	0.06		Varies		
BRUN50004-							
M	Pine Rd	Beech Rd - Drayton Rd	0.06		Varies		
BRUN50004-		Marcha Dala dan inan Dala	0.07				
М	Pine Rd	Maple Rd - Juniper Rd	0.07		Varies		

BRUN50004-							
Μ	Pine Rd	Lake Dr - Hills Dr	0.1		Varies		
BRUN50004-							
М	Pine Rd	Hills Dr - Grace Rd	0.05		Varies		
BRUN50004-							
	Pine Rd	Long Leaf Rd - Spruce Rd	0.07		Varies		
BRUN50004-							
	Pine Rd	Grace Rd - Maple Rd	0.11		Varies		
BRUN50004-							
	Pine Rd	Juniper Rd - Beech Rd	0.08		Varies		
BRUN50004-							
М	Pine Lake Rd	Bordeaux Ln - Floral Ln	0.02		Varies		
BRUN50004-							
М	Pine Lake Rd	Queens Rd - Crescent Rd	0.07		Varies		
BRUN50004-							
М	Pine Lake Rd	Miller Rd - Bordeaux Ln	0.16		Varies		
BRUN50004-							
М	Pine Lake Rd	Crescent Rd - Drayton Rd	0.07		Varies		
BRUN50004-							
Μ	Pine Lake Rd	Floral Ln - Queens Rd	0.37		Varies		
BRUN50004-							
M	Pine Lake Rd	E. Boiling Spring Rd (SR 1539) - Miller Rd	0.08		Varies		
BRUN50004-							
M	Pine Lake Rd	Miller Rd - Miller Rd	0.03		Varies		
BRUN50032-							
	Fifty Lakes Dr	Pinedale Rd - NC 133	0.1	02C	North	02M	Н
BRUN50002-		NO 07 NO 400	0.07				
M BRUN50032-	NS 97752	NC 87 - NC 133	2.37				
	Fifty Lakas Dr	NC 97 Dinadala Rd	0.01	02C	North	0214	
H BRUN50031-	Fifty Lakes Dr	NC 87 - Pinedale Rd	2.31	020	North	02M	Н
		Crystal Rd Royera Rd	0.09		Varies	02M	н
п BRUN50031-	Drayton Rd	Crystal Rd - Revere Rd	0.09		vanes	UZIVI	П
		Revere Rd - Pine Rd	0.46		Varies	02M	н
п BRUN50031-	Drayton Rd		0.40		valles	UZIVI	п
	Drayton Rd	Pine Lake Rd - Crystal Rd	0.43		Varies	02M	н
L1		FINE LAKE NU - CIYSIAI NU	0.40		vailes	UZIVI	П

## **CTP INVENTORY AND RECOMMENDATIONS**

						H	IIGHW	VAY											
		Sec	ction					201	7 Exis	sting Sy	/stem			2045 P	roposed S	ystem			su
Local ID	Facility	From	То	Jurisdiction	Dist. (mi)	Total Width (ft)	Lanes	Lane Width (ft)	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2017 Volume	2045 Volume E + C	2045 Volume with CTP	Proposed Capacity (vpd)		-	CTP Classifi- cation	Recommendations for Other Modes
	US 17	SC State Line	Country Club Rd (SR 1168)		0.85	48	4D	12	210	55	43300	14000	6855.3	6855.3				В	
	US 17	Country Club Rd (SR 1168)	Shingletree Rd (SR 1302)	Brunswick	1	48	4D	12	210	55	43300	15000	12758	12758				В	
	US 17	Shingletree Rd (SR 1302)	Hickman Rd (SR 1303)	Brunswick	1.3	48	4D	12	210	55	43300	15000	18647	18647				В	
	US 17	Hickman Rd (SR 1303)	Thomasboro Rd (SR 1165)	Brunswick	0.73	48	4D	12	210	55	43300	23000	21717	21717				В	
	US 17	Thomasboro Rd (SR 1165)	US 17	Brunswick	2.24	48	4D	12		55	43300	23000	23489	23489				В	
	US 17	US 17	NC 904	Brunswick	0.86	48	4	12	210	55	43300	23000	23489	23489				В	
	US 17	NC 904	US 17	Brunswick	1.1	48	4	12	210	55	43300	24000	21267	21267			ļ	В	
	US 17	US 17	Green Bay Rd (SR 1317)	Brunswick	0.46	48	4	12	210	55	43300	23000	21267	21267				В	
	US 17	1317)	Ocean Isle Beach Rd (SR 1184)	Brunswick	1.61	48	4	12	210	55	43300	23000	21267	21267				В	
	US 17	Ocean Isle Beach Rd (SR 1184)	US 17	Brunswick	1.59	48	4	12	150	55	43300	26000	31500	31500				В	
	US 17	US 17	US 17	Brunswick	0.24	48	4D	12	150- 250	55	43300	26000	31500	31500				В	
	US 17	US 17	NC 130	Brunswick	1.3	48	4D	12	250	60	43300	24000	32487	32487				В	
	US 17	NC 130	Smith Ave (SR 1357)	Shallotte	1.15	56	4D	12	250	60	43300	25000	39416	39416				В	
	US 17	Smith Ave (SR 1357)	US-17 BUS	Shallotte	1.56	48	4D	12	250	60	43300	24000	32046	32046				В	
	US 17	US-17 BUS	Red Bug Rd (SR 1136) Bauel Oak Bd (SB	Brunswick	0.29	48	4D	12	250	55	43900	28000	33272	33272				В	
	US 17	Red Bug Rd (SR 1136) Boyal Oak Bd (SB	Royal Oak Rd (SR 1345) Sherrow Estate St	Brunswick	0.34	48	4D	12	250	55	43900	28000	33272	33272				В	
	US 17	1345) Sherrow Estate St	(SR 1270)	Brunswick	0.58	48	4D	12	250	55	43900	28000	29729	29729				В	
	US 17	(SR 1270) Sherrow Estate St	1131)	Brunswick	0.68	48	4D	12	250	55	43900	28000	29337	29337				В	
	US 17	(SR 1270) Cumbee Rd (SR	1131) Mt. Pisgah Rd (SR	Brunswick	0.49	48	4D	12	250 180-	55	43900	28000	29011	29011				В	
	US 17	1131) Mt. Pisgah Rd (SR	1130)	Brunswick	1.45	48	4D	12	250	55	43900	28000	28459	28459				В	
	US 17	1130) Quilt Rd (SR	1203)	Brunswick	1.28	48	4D	12	180	55	43900	30000	31259	31259				В	
	US 17	1203)	NC 211	Brunswick	0.51	48	4D	12	180	55	43900	30000	13622	13622				В	

	[	T	Change Chings av Dd		<u> </u>				r				1	I					,
	US 17	NC 211	Stone Chimney Rd (SR 1115)	Brunswick	0.38	48	4D	12	150	55	49000	22000	13622	13622				В	
	US 17	NC 211	Stone Chimney Rd (SR 1115)	Brunswick	0.06	48	4D	12	150	55	49000	25000	14171	14171				В	
	US 17	Stone Chimney Rd (SR 1115)	US 17	Brunswick	1.63	48	4D	12	150	55	49000	25000	16883	16883				В	
	US 17	Benton Rd (SR 1502)	US 17	Brunswick	0.07	48	4D	12	270	55	49000	21000	15670	15670				В	
	US 17	US 17	College Rd (SR 1569)	Brunswick	0.75	48	4D	12	300	60	49000	21000	3839.7	3839.7				В	
	US 17	College Rd (SR 1569)	NC 906	Brunswick	4.19	48	4D	12	300	60	49000	21000	3927.7	3927.7				В	
	US 17	NC 906	US 17	Brunswick	0.01	48	4D	12	270	60	49000	21000	3301.9	3301.9				В	
	US 17	NC 906	US 17	Brunswick	1.94	48	4D	12	270	60	49000	17000	3301.9	3301.9				В	
	US 17	NC 906	US 17	Brunswick	0.01	48	4D	12	270	60	49000	26000						В	
BRUN20040-			Mill Creek Rd (SR						200-		l							ł	
Н	US 17	US 17	1514)	Brunswick	0.9	48	4D	12	270	55	49000	12680	14921	9665.1	49000	04A	110	В	В
BRUN20040-		Mill Creek Rd (SR	Green Hill Rd (SR																
Н	US 17	1514)	1406)	Brunswick	2.22	48	4D	12	200	55	49000	12087	14201	8729.7	49000	04A	110	В	В
BRUN20040-		Green Hill Rd (SR	,			r – †					 							ł	
H	US 17	1406)	NC 87	Brunswick	1.32	48	4D	12	200	55	49000	16018	19819	10181	49000	04A	110	В	В
BRUN20040- H	US 17	NC 87	Green Hill Rd (SR 1406)	Brunswick	1.16	48	4D	12	200- 280	55	49000	16129	20159	11061	49000	04A	110	В	В
BRUN20040-		Green Hill Rd (SR	Zion Church Rd																
Н	US 17	1406) Brunswick County	(SR 1701)	Brunswick	0.75	48	4D	12	280	55	49000	15000	18500	18500	49000	04A	110	В	В
H090287-AF	US 74	Line	US 74	Brunswick	1.47	44	4D	11	180	55	47400	25000	39000	39000	59700	04A	300	F	
H090287-AF	US 74	US 74	Saw Mill Rd (SR 1425)	Sandy Creek	1.48	44	4D	11	180- 460	55	47400	25000	39000	39000	59700	04A	300	F	
H090287-AF	US 74	Saw Mill Rd (SR 1425)	NC 87	Brunswick	0.61	44	4D	11	220- 460	55	47400	25000	39000	39000	59700	04A	300	F	
H090287-AG	US 74	NC 87	Stella Dr (SR 1726)	Brunswick	1.13	44	4D	11	170	55	47400	25000	39000	39000	63500	04A	300	F	
BRUN20040- H	US 17	Zion Church Rd (SR 1701)	Green Hill Rd (SR 1406)	Brunswick	0.75	48	4D	12	280	55	49000	15000	18500	18500	49000	04A	110	в	в
BRUN20040-		Green Hill Rd (SR						$\vdash$	200-										
н	US 17	1406)	NC 87	Brunswick	1.15	48	4D	12	280	55	49000	16129	20159	10781	49000	04A	110	В	В
BRUN20040-	110.47	NO 07	110.17	<b>.</b>			45				10000	10100	44540	0000 0	10000		440		
н	US 17	NC 87	US 17	Brunswick	4.44	48	4D	12	200	55	49000	12198	14540	9333.2	49000	04A	110	В	В
	US 17 BUS	US 17	US 17	Brunswick	0.02	24	2	12	150	55	15100	8600	6101.2	6101.2				MJ2	
	US 17 BUS	US 17	Washington Rd (SR 1720)	Brunswick	0.15	24	2	12	150	45	13200	8600	1764.7	1764.7				MJ2	
	US 17 BUS	SR 1720	NC 130	Brunswick	0.87	24	2	12	150	45	13200	8600	1764.7	1764.7			<u>├</u> ──┤	MJ2	$\vdash$
		Washington Rd			0.07	<u> </u>		<u> </u>	100-								┢───┤		┝───┦
	US 17 BUS	(SR 1720)	NC 130	Shallotte	0.74	24	2	12	150	35	12700	11000	4040.8	4040.8				MJ2	
BRUN20003-		(0.11.120)	Village Rd (SR	endirette	•	<u> </u>		<u> </u>											
Н	US 17 BUS	NC 179	1173)	Shallotte	0.25	36	2	12	100	35	12700	4828.4	5985.2	2704.4	27200	04D	110	В	В
BRUN20003-		Village Rd (SR	- ,				· · · ·	$\vdash$	90-									· · · · · · · · · · · · · · · · · · ·	$\vdash$
Н	US 17 BUS	1173)	US 17	Shallotte	0.78	36	2	12	100	35	12700	19587	26833	27613	27200	04D	110	В	В
	US 17 BUS	US 17	NC 130	Shallotte	0.06	92	4D	12	90	35	22200	24000	12253	12253				MJM	
	US 17 BUS	NC 130	NC 130	Shallotte	0.01	72	4D	12		35	 	24000	11193	11193				MJ2	
		NC 130	US 17	Shallotte	0.22	72	4D	12	90	35	22200	11000	9717	9717				MJM	-

	US 17 BUS	US 17	NC 130	Shallotte	0.01	36	2	12	100	35	11100	11000						MJ2	
BRUN20003-		10.400	110.47		0.07		0		80-	05	40000	10771	17005	40070	07000	0.45	4.4.0	1	
H BRUN20039-	US 17 BUS	NC 130	US 17 Gilbert Rd (SR	Shallotte	0.67	44	2	11	100 60-	35	12300	12774	17925	19978	27200	04D	110	В	В
	US 17 BUS	US 17	1501)	Brunswick	0.85	36	2	11	180	55	15900	7548.8	20569	23028	32800	04B	180	MJM	Р
		Gilbert Rd (SR	Benton Rd (SR																-
	US 17 BUS	1501)	1502)	Brunswick	0.59	24	2	12		55	16400	4400	6652.1	6652.1				MJ2	
		Benton Rd (SR	Robinson Rd (SR																
	US 17 BUS	1502)	1403)	Brunswick	0.62	24	2	12		55	16400	4400						MJ2	
	US 17 BUS	Benton Rd (SR 1502)	Robinson Rd (SR 1403)	Brunswick	1.04	24	2	12		55	16400	4100	5620.4	5620.4				MJ2	
	03 17 003	Robinson Rd (SR	Old Johnson Rd	DIGIISWICK	1.04	24	2	12		55	10400	4100	5020.4	3020.4				IVIJZ	
	US 17 BUS	1403)	(SR 1490)	Brunswick	0.29	24	2	12		55	16400	4100	5620.4	5620.4				MJ2	
		Old Johnson Rd	Randolphville Rd																
	US 17 BUS	(SR 1490)	(SR 1402)	Brunswick	0.32	22	2	11		55	15900	4100	5620.4	5620.4				MJ2	
		Randolphville Rd	N. Piney Grove Rd	<b>.</b>	0.00		•				45000	4400	4407.0	4407.0					
	US 17 BUS	(SR 1402)	(SR 1445)	Brunswick	0.69	22	2	11		55	15900	4100	4487.2	4487.2				MJ2	
	US 17 BUS	(SR 1445)	Bryant- Hankins Dr (SR 1705)	Brunswick	0.41	22	2	11		55	15900	4100	4704.2	4704.2				MJ2	
<b>├</b> ──── <del> </del>	00 11 000	Bryant- Hankins Dr		Diditowick	J. T	~~	2			00	10000	100	1104.2	1104.2				1010Z	
	US 17 BUS	(SR 1705)	NC 906	Brunswick	1.02	22	2	11		55	15900	4100	4704.2	4704.2				MJ2	
	US 17 BUS	NC 906	NC 906	Brunswick	0.13	24	2	12		55	16400	8200	14803	14803				MJ2	
			Green Lewis Rd																
	US 17 BUS	NC 906	(SR 1512)	Bolivia	0.37	24	2	12		55	16400	8200	15342	15342				MJ2	
	US 17 BUS	NC 906	Green Lewis Rd (SR 1512)	Bolivia	0.06	24	2	12		35		5500	15342	15342				MJ2	
	03 17 803	Green Lewis Rd	Danford Rd (SR	DOIIVIA	0.00	24	2	12		35		5500	10042	15542				IVIJZ	
	US 17 BUS	(SR 1512)	1513)	Bolivia	0.1	29	2	12		35		5500	14600	14600				MJ2	
		Danford Rd (SR	Reynolds Ln (SR																
	US 17 BUS	1513)	1866)	Bolivia	0.96	24	2	12		35		5500	14708	14708				MJ2	
		Reynolds Ln (SR	110.47				0	4.5		45	1 1 0 0 0	5500	11700	4.4700					
BRUN30016-	US 17 BUS	1866)	US 17 Rob Gandy Blvd	Brunswick	0.06	30	2	15		45	14600	5500	14708	14708				MJ2	
	NC 87	NC 211	(SR 1620)	Brunswick	0.27	36	2	11	100	45	12800	7191.4	12964	2200.5	38100	05B	130	В	м
BRUN30016-		Rob Gandy Blvd		Dianowiok	0.21	00	2		100	-10	12000	7101.4	12004	2200.0	00100	008	100		101
н	NC 87	(SR 1620)	40001621010	Brunswick	0.98	22	2	11	100	45	12800	7456.3	13803	2557.4	38100	05B	130	В	М
BRUN30016-			Bethel Rd (SR																
	NC 87	40001621010	1525)	Brunswick	0.56	36	2	11	100	45	14000	12626	20316	12930	38100	05B	130	В	М
BRUN30016-	NC 87	Bethel Rd (SR 1525)	NC 133	Brunswick	0.58	22	2	11	100	45	14100	13724	20801	12223	47200	05B	130	в	м
BRUN30016-		1525)	NC 133	BIUIISWICK	0.56	22	2	11	100	45	14100	13724	20001	12225	47200	056	130	D	IVI
	NC 87	NC 133	NC 133	Brunswick	0.77	36	2	12	100	45	14600	18630	28076	16261	47200	05B	130	В	м
BRUN30016-																			
	NC 87	NC 133	NC 133	Brunswick	0.17	36	2	12	150	45	14600	18630	28076	6657.9	47200	05B	130	В	М
BRUN30016-	NO 07	10.400	10.400	<b>D</b>	0.07		<u> </u>		450	1-		0.570.0	0500	0057.0	17000	055	100	-	
	NC 87	NC 133	NC 133	Brunswick	0.05	22	2	11	150	45	14100	8572.3	9522	6657.9	47200	05B	130	В	М
BRUN30016- H	NC 87	NC 133	Boiling Spring Lakes Town Limit	Boiling Spring Lakes	1.44	22	2	11	150	45	14100	8572.3	9522	6657.9	47200	05B	130	в	м
BRUN30016-		Boiling Spring	Cougar Rd (SR	Boiling Spring	1.44	22	2	11	150	40	14100	0312.3	3522	0001.9	+1200	030	150	U	111
	NC 87	Lakes Town Limit	1541)	Lakes	0.52	22	2	11	150	45	14100	10058	18554	6657.9	47200	05B	130	В	М
BRUN30016-		Cougar Rd (SR	E. Boiling Spring	Boiling Spring															
1	NC 87	1541)	Rd (SR 1539)	Lakes	0.76	22	2	11	150	45	14100	12491	24280	12020	47200	05B	130	В	М

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BRUN30016-	1	Cougar Rd (SR	E. Boiling Spring	Boiling Spring															1
Н	NC 87	1541)	Rd (SR 1539)	Lakes	1.02	22	2	11	150	45	14100	13560	26073	12695	47200	05B	130	В	М
BRUN30016-		E. Boiling Spring	Danford Rd (SR	Boiling Spring					100-										
Н	NC 87	Rd (SR 1539)	1513)	Lakes	1.44	22	2	11	150	45	14100	13081	23725	4767	47200	05B	130	В	М
BRUN30016-		E. Boiling Spring	Danford Rd (SR	Boiling Spring					100-										
Н	NC 87	Rd (SR 1539)	1513)	Lakes	1.14	22	2	11	150	45	14100	13081	23725	4767	47200	05B	130	В	М
BRUN30016-		E. Boiling Spring	Danford Rd (SR	Boiling Spring															
Н	NC 87	Rd (SR 1539)	1513)	Lakes	1	22	2	11	100	45	14100	15361	27041	4767	47200	05B	130	В	М
BRUN30016-		Danford Rd (SR	Old Mill Creek Rd																
Н	NC 87	1513)	(SR 1515)	Brunswick	1.64	22	2	11	100	45	14100	9584.6	13527	4666.2	47200	05B	130	В	М
BRUN30016-		Old Mill Creek Rd	Daws Creek Rd																
Н	NC 87	(SR 1515)	(SR 1518)	Brunswick	0.27	22	2	11	100	45	15500	7880	11817	4155	47200	05B	130	В	М
BRUN30016-		Daws Creek Rd	Van Galloway Trl																
Н	NC 87	(SR 1518)	(SR 1729)	Brunswick	2.13	22	2	11	100	45	14100	7880.6	11817	4155.3	47200	05B	130	В	М
BRUN30016-		Van Galloway Trl																	
Н	NC 87	(SR 1729)	US 17	Brunswick	0.36	22	2	11	100	45	14100	3995.7	6078.4	2517.7	47200	05B	130	В	М
		Wilmington MPO	Old Maco Rd (SR								15000								1
	NC 87	Boundary	1418)	Brunswick	0.92	22	2	11	60	55	15900	2400						MJ2	L
	NO 07	Old Maco Rd (SR	10.74		0.45		•				45000	0.400							1
	NC 87	1418)	US 74	Brunswick	0.15	22	2	11	60	55	15900	2400						MJ2	
	NC 87	US 74	US 74	Brunswick	0	22	2	11	60	55	15900	2400						MJ2	
	NC 87	US 74	US 74	Brunswick	0.01	22	2	11	60	55	15900	3100						MJ2	
			Mcmilly Rd (SR				_											_	
H141142	NC 130	US 17	1320)	Shallotte	0.11	44	2	11	100	45	12800	8115	16081	13186	38100	04B	130	В	B,P,M
			Mcmilly Rd (SR				_											_	
H141142	NC 130	US 17	1320)	Shallotte	0.1	36	2	12	100	45	14500	7639	10727	13186	38100	04B	130	В	B,P,M
	NO 400	110.47	Mcmilly Rd (SR	o	0.04	~~	•	10	400	45	40000	10000	40700	40400	00400	0.45	100	-	
H141142	NC 130	US 17	1320)	Shallotte	0.04	36	2	12	100	45	13200	10906	16706	13186	38100	04B	130	В	B,P,M
	NO 400	110.47	Mcmilly Rd (SR	o	0.04	~~	•	10	400	45	40000	10000	40700	40400	00400	0.45	100	-	
H141142	NC 130	US 17	1320)	Shallotte	0.04	36	2	12	100	45	13200	10906	16706	13186	38100	04B	130	В	B,P,M
114 44 4 4 0	NO 120	110.47	Mcmilly Rd (SR	Challatta	0.01	24	~	10	100	45	12200	7000	10707	10100	20100	040	100		р р м
H141142	NC 130	US 17	1320) Coder Londing Dd	Shallotte	0.61	24	2	12	100	45	13200	7639	10727	13186	38100	04B	130	В	B,P,M
L111106	NC 120	Ocean Blvd	Cedar Landing Rd (SR 1199)	Holdon Booch	0.00	26	2	13	150	45	13800	2329.3	3726.5	2711 1	39700	041	150	в	ВM
H141126	NC 130	Ocean bivu	(SR 1199) Sabbath Home Rd	Holden Beach	0.23	20	Z	13	150	45	13000	2329.3	3720.5	3711.1	39700	041	150	D	B,M
H141126	NC 130	NC 130	(SR 1120)	Holden Beach	0.96	33	2	11	150	45	13300	5380.7	8927.8	6926.7	39700	041	150	В	B,M
H141120	NC 130	Sabbath Home Rd	· · · ·	Holden Beach	0.00	33	Z		150	45	13300	5560.7	0927.0	0920.7	39700	041	150	В	D,1VI
H141126	NC 130	(SR 1120)	(SR 1208)	Brunswick	0.45	24	2	12	60	45	13800	4864.8	9273.3	9226.7	39700	041	150	В	B.M
11141120	100 150	Shell Landing Rd	Seashore Rd (SR	DIGIISWICK	0.45	24	2	12	00	45	13000	4004.0	9215.5	9220.1	39700	041	150	D	D,1VI
H141126	NC 130	(SR 1208)	1139)	Brunswick	0.66	24	2	12	60	45	13800	2399.5	4408.6	4360.4	39700	041	150	В	B.M
11141120	100 100	Seashore Rd (SR	Horizon Dr (SR	Dianswick	0.00	27	2	12	00	40	10000	2000.0	4400.0	4000.4	00100	041	100		0,111
H141126	NC 130	1139)	1882)	Brunswick	0.17	24	2	12	60	45	13800	4150.6	8069.2	5134.3	39700	041	150	В	B,M
		Horizon Dr (SR	Pine Valley Dr (SR		5.17		-	.2		.0	10000	1100.0	5000.2	5104.0	00700			5	2,111
H141126	NC 130	1882)	1248)	Brunswick	0.13	24	2	12	60	45	13800	4057.8	7915.4	4979.4	39700	041	150	В	B,M
		Pine Valley Dr (SR	,	2.4.000000	0.10		-											2	,
H141126	NC 130	1248)	(SR 1137)	Brunswick	0.19	24	2	12	60	45	13800	8448.5	14567	10189	39700	041	150	В	B.M
		Boones Neck Rd	Stanbury Rd (SR				_											_	,
H141126	NC 130	(SR 1137)	1124)	Brunswick	0.79	24	2	12	60	45	13800	7723.9	13628	8770.8	39700	041	150	В	B.M
		Levie Rd (SR	Kirby Rd (SR				_											_	,
H141126	NC 130	1142)	1141)	Brunswick	0.17	24	2	12	60	45	13800	9978.5	17510	13416	39700	041	150	В	B,M
-	+	Stanbury Rd (SR	Levie Rd (SR						-	-				-					, ,

H141126	NC 130	Kirby Rd (SR 1141)	Oxpen Rd (SR 1140)	Brunswick	0.25	24	2	12	60	45	13800	15120	25465	26797	39700	041	150	В	B,M
11141120	110 130	Oxpen Rd (SR	Mt. Pisgah Rd (SR	DIULISWICK	0.25	24	2	12	00	40	13000	13120	20400	20191	39700	041	130	Б	D,1VI
H141126	NC 130	1140)	1130)	Brunswick	0.15	20	2	10	60	45	13900	15120	25465	26797	39700	041	150	В	B,M
H141126	NC 130	Mt. Pisgah Rd (SR 1130)	Civietown Rd (SR 1132)	Brunswick	1.56	22	2	11	60	45	13300	12450	21223	22647	39700	041	150	в	B.M
		,	Blue Dogwood	Branomon			_						2.220			0.11			2,
H141126	NC 130	1132) Dhua Damara d	Trail SW	Brunswick	1.49	24	2	12	60	45	13800	12075	20063	23096	39700	041	150	В	B,M
H141126	NC 130	Blue Dogwood Trail SW	Red Bug Rd (SR 1136)	Brunswick	0.3	22	2	11	60	45	13300	11969	19576	23092	39700	041	150	В	B.M
		Gray Bridge Rd	,													-			,
H141126	NC 130	(SR 1134)	NC 130	Brunswick	0.45	22	2	11	60	45	13300	14740	25986	28080	39700	041	150	В	B,M
H141126	NC 130	Red Bug Rd (SR 1136)	Gray Bridge Rd (SR 1134)	Brunswick	0.04	22	2	11	60	45	13300	11968	19575	23092	39700	041	150	В	B,M
H141126	NC 130	NC 130	Smith Ave	Brunswick	0.04	22	2	11	180	45	13300	14400	25275	27791	39700	041	150	B	B.M
11141120	NC 130	NC 130	NC 130	Shallotte	0.04	68	2	12	156	35	11100	14000	11580	11580	00700	041	100	MJ2	0,101
				Ghallotte	0.04	00	L	12	64-	00	11100	14000	11000	11000				10102	
	NC 130	NC 130	US 17	Shallotte	0.38	24	2	12	115	35		14000	5199.4	5199.4				MJ2	
									64-										
	NC 130	NC 130	US 17	Shallotte	0.22	24	2	12	115	35		14000	8490.5	8490.5				MJ2	
	NC 130	US 17	US 17	Shallotte	0.01	48	4D	12	230	35		14000	9966.2	9966.2				MJ2	
H141142	NC 130	US 17 BUS	NC 130	Shallotte	0.63	20	2	10	100	45	12300	3807	9197	9770.3	38100	04B	130	В	B,P,N
H141142	NC 130	US 17	US 17	Shallotte	0.32		2	12	100	45	14500	6005	13412	13221	38100	04B	130	В	B,P,N
H141142	NC 130	US 17	US 17	Shallotte	0.01	44	2	11	100	45	12800	8115	16081	13221	38100	04B	130	В	B,P,N
H141142	NC 130	US 17	US 17	Shallotte	0.02	44	2	11	100	45	12800	8115	16081	15070	38100	04B	130	В	B,P,M
	NC 130	1321)	Ash-Little River Rd (SR 1300)	Brupowiek	0.02	28	2	12	100	55	16400	5800						MJ2	
	NC 130	,	Ash-Little River Rd	Brunswick	0.02	20	Z	12	100	55	16400	5600						IVIJZ	
	NC 130	1321)	(SR 1300)	Brunswick	0.58	28	2	12	100	55	16400	6100	9063.3	9063.3				MJ2	
	100 100	Ash-Little River Rd	` '	Branswick	0.00	20	2	12	100	00	10400	0100	5000.0	5000.0				10102	
	NC 130	(SR 1300)	1359)	Brunswick	0.95	28	2	12	100	55	16400	5900	7037.6	7037.6				MJ2	
		Little Rd (SR	Old King Rd (SR			-			68-									-	
	NC 130	1359)	1326)	Brunswick	0.51	28	2	12	115	55	16400	5900	6639.2	6639.2				MJ2	
		Little Rd (SR	Old King Rd (SR																
	NC 130	1359)	1326)	Brunswick	0.97	28	2	12	75	55	16400	4300						MJ2	
		Old King Rd (SR	<b>_</b>																
	NC 130	1326)	Brunswick	Brunswick	0.14	28	2	12	100	55	16400	4300	6639.2	6639.2				MJ2	
	NC 130	Brunswick	NC 130	Columbus	0	24	2	12	100	55	16400	4300						MJ2	
H193078	NC 133	Old Bridge Rd (SR 1210)	NC 133	Oak Island	0.27	33	2	11	100	45	14000	20236	27116	20777	14000	03A	80	MJ2	В
			Fish Factory Rd																
H193078	NC 133	NC 133	(SR 1101)	Oak Island	0.46	33	2	11	60	45	14000	20236	27116	20777	14000	03A	80	MJ2	В
		Fish Factory Rd	Sea Pines Dr (SR																_
H193078	NC 133	(SR 1101)	1217)	Oak Island	0.6	33	2	11	60	45	14000	21716	28635	22301	14000	03A	80	MJ2	В
H193078	NC 133	Sea Pines Dr (SR 1217)	Long Beach Rd (SR 1969)	Brunswick	0.39	33	2	11	60	45	14000	21716	28635	22301	14000	03A	80	MJ2	в
11100070		Southgate Blvd	Long Beach Rd	Dranowick	0.03	00	4	· ·	00	-0	14000	21/10	20000	22001	14000	007	50	10102	
H193078	NC 133	(SR 1857)	(SR 1969)	Brunswick	0.13	33	2	11	100	45	12800	11756	18581	10550	12800	03A	80	MJ2	В
		Long Beach Rd			1			1			İ	1				İ			1
	NC 133	(SR 1969)	NC 211	Brunswick	0.22	96	4D	12		45			10550	10550				MJ2	
	NC 133	NC 211	NC 133	Brunswick	1.68	24	2	12		45			4038.1	4038.1					
	NC 133	NC 133	NC 87	Brunswick	0.05	48	4D	12		45									

BRUN30030-		-						r									<b></b>		
H	NC 133	NC 87	NC 133	Brunswick	0.06	12	2	12	100	35	15900	4884.2	5191.9	4133.3	12800	02M	90	MJ2	м
BRUN30030-			River Rd (SR													-		-	
н	NC 133	NC 133	1626)	Brunswick	0	22	2	11	100	55	15900	4884.2	5191.9	4133.3	16400	02A	90	MJ2	М
BRUN30030-		River Rd (SR	Orton Rd (SR																
Н	NC 133	1626)	1530)	Brunswick	0.03	22	2	11	100	55	15900	4884.2	5191.9	4133.3	16400	02M	90	MJ2	М
BRUN30030-		River Rd (SR	Orton Rd (SR				_												
H	NC 133	1626)	1530)	Brunswick	4.4	22	2	11	100	55	15900	4884.2	5191.9	4133.3	16400	02M	90	MJ2	М
BRUN30030-	NO 400	River Rd (SR	Orton Rd (SR	Boiling Spring	0.00	~~	0		100		45000	4004.0	5404.0	4400.0	40400	0014	00	110	
H BRUN30030-	NC 133	1626) Orton Rd (SR	1530) Governors Rd (SR	Lakes	2.96	22	2	11	100	55	15900	4884.2	5191.9	4133.3	16400	02M	90	MJ2	М
H	NC 133	1530)	1521)	Brunswick	0.65	22	2	11	100	55	15900	4884.2	5191.9	4133.3	16400	02M	90	MJ2	м
BRUN30030-	NC 133	Orton Rd (SR	Governors Rd (SR	DIGIISWICK	0.05	22	2		100	55	13900	4004.2	5191.9	4155.5	10400	UZIVI	30	IVIJZ	IVI
H	NC 133	1530)	1521)	Brunswick	2	22	2	11	100	55	15900	4520.5	4921.5	3757.9	16400	02M	90	MJ2	м
BRUN30030-		Governors Rd (SR	- ,	Branowiok	-				60-	00	10000	1020.0	102110	0101.0	10100	02111	00	11102	
Н	NC 133	1521)	(SR 1518)	Brunswick	2.41	22	2	11	100	55	15900	6977.8	7177	7176.9	16400	02M	90	MJ2	М
BRUN30030-		Daws Creek Rd	Southern Blvd (SR													-		-	
н	NC 133	(SR 1518)	1564)	Brunswick	0.01	22	2	11	60	55	15900	7000	7195.6	7195.6	16400	02A	90	MJ2	М
BRUN30030-		Daws Creek Rd	Wilmington MPO																
н	NC 133	(SR 1518)	Boundary	Brunswick	0.54	22	2	11	60	55	15900	7000	7195	7195	16400	02A	90	MJ2	М
		South Carolina	Country Club Dr																
H140870	NC 179	State Line	(SR 1168)	Calabash	0.44	37	2	11	60	35	13500	11000	28326	28326	39700	04J	125	В	М
		Country Club Rd	Persimmon Rd															_	
H140870	NC 179	(SR 1168)	(SR 1167)	Calabash	0.83	37	2	11	60	35	12300	7020.5	17142	15117	38100	04J	125	В	М
114 400 70	NO 170	Persimmon Rd			0.00	07	•			05	40000	7007 4	4 4 9 5 4	40770	00400		105	-	
H140870	NC 179	(SR 1167)	Clariday Rd SW	Calabash	0.88	37	2	11	60	35	12300	7627.4	14654	13778	38100	04J	125	B	M
H141156	NC 179	Clariday Rd SW	Sirwood PI NW	Calabash	1.82	22	2	11	60	55	14600	11909	21412	17499	38100	041	150	B	M
H141156	NC 179	Sirwood PI NW	NC 904	Sunset Beach	1.94	22	2	11	60	45	12800	9322.7	17509	15146	38100	041	150	В	М
BRUN30009-	NC 179	Old Georgetown	Bonaventure St	Durum availate	0.20	20	2	12	60	45	12200	10000	10470	04500	40000	0.416	100	Б	
н BRUN30009-	NC 179	Rd (SR 1163) Bonaventure St	(SR 1955) Ascension Dr (SR	Brunswick	0.39	36	2	12	60	45	13200	12023	18478	21566	43300	04K	130	В	B,P,M
ВКОМ30009-	NC 179	(SR 1955)	1961)	Brunswick	0.19	36	2	12	60	45	13200	11558	17439	20558	43300	04K	130	В	B,P,M
BRUN30009-		Ascension Dr (SR	Dale Ave (SR	DIGIISWICK	0.13	50	2	12	00	40	10200	11550	17433	20000	40000	041	150	D	D,1 ,1VI
Н	NC 179	1961)	1822)	Brunswick	0.71	36	2	12	60	45	13200	11558	17439	20558	43300	04K	130	В	B,P,M
BRUN30009-		Dale Ave (SR	Westbrook Ave	Branomon	•						.0200			20000		•			2,. ,
Н	NC 179	1822)	(SR 1269)	Sunset Beach	0.05	48	2	12	60	45	13200	11558	17439	20558	43300	04K	130	В	B,P,M
BRUN30009-		Westbrook Ave	, ,																
н	NC 179	(SR 1269)	NC 179	Sunset Beach	0.06	48	2	12	60	45	13200	11558	17439	20558	43300	04K	130	В	B,P,M
			Camelot Dr (SR																
H141146	NC 179	NC 179	1278)	Brunswick	0.39	33	2	11	60	45	14000	9358	14380	13665	38100	041	150	В	М
		Camelot Dr (SR	Spruce Ln (SR																
H141146	NC 179	1278)	1890)	Brunswick	1	36	2	12	60	45	14500	9358	14380	13665	38100	041	150	В	М
		Spruce Ln (SR																_	
H141146	NC 179	1890)	Frink St (SR 1171)	Brunswick	0.32	33	2	11	60	45	14000	7208.4	11856	11483	38100	041	150	В	М
11111111	NO 170	Spruce Ln (SR		Dan un es súe la	0.40	22	0	44	60	45	14000	7000	11055	11400	20400	0.41	150	P	
H141146	NC 179	1890)	Frink St (SR 1171) Hale Beach Rd	Brunswick	0.19	33	2	11	60	45	14000	7208	11855	11483	38100	041	150	В	М
H141146	NC 179	Frink St (SR 1171)		Brunswick	0.64	33	2	11	60	45	14000	7208.4	11856	11483	38100	041	150	в	м
11141140	110 179	Hale Beach Rd	Ocean Isle Beach	DITILISMICK	0.04	55	2	11	00	40	14000	1200.4	11000	11403	30100	041	100	G	IVI
H141146	NC 179	(SR 1157)	Rd (SR 1184)	Brunswick	0.2	44	2	11	60	45	14000	7208.4	11856	11483	38100	041	150	В	м
			Evota Dr (SR	Diditowick	0.2		~		00	40	14000	7200.4	11000	1400	50100		100	D	
H140888	NC 179	NC 904	1274)	Brunswick	0.36	48	2	12	60	55	16600	7651.1	12895	11838	38100	041	150	В	м
			,	2	0.00		-	· - ·							00100			-	

	1	Eyota Dr (SR																	1
H140888	NC 179	1274)	White Oak Dr	Brunswick	0.37	24	2	12	60	55	15100	7546.3	12582	11430	38100	041	150	В	М
H140888	NC 179	White Oak Dr	Hale Swamp Rd (SR 1154)	Brunswick	0.27	22	2	11	60	55	14600	7324.2	12108	10623	38100	041	150	В	М
H140888	NC 179	Hale Swamp Rd (SR 1154)	Goose Creek Rd (SR 1155)	Brunswick	0.79	22	2	11	60	55	14600	3085.6	4974.6	1139.1	38100	041	150	В	М
H140888	NC 179	Hale Swamp Rd (SR 1154)	Goose Creek Rd (SR 1155)	Brunswick	0.02	32	2	11	60	55	14600	3085	4974	1139	38100	041	150	В	М
H140888	NC 179	Goose Creek Rd (SR 1155)	Bricklanding Rd (SR 1143)	Brunswick	0.4	22	2	11	60	55	14600	3021.2	5174.5	1213.4	36800	041	150	В	м
H140888	NC 179	Bricklanding Rd (SR 1143)	Pigott Rd (SR 1152)	Brunswick	0.52	24	2	12	60- 220	55	15100	3021.2	5174.5	5272.8	38100	041	150	В	М
H140888	NC 179	Pigott Rd (SR 1152)	Edna Way SW	Brunswick	0.18	24	2	12	60	55	15100	3040	5317	5163	38100	041	150	В	М
H140888	NC 179	Pigott Rd (SR 1152)	Todd Rd SW (SR 1147)	Brunswick	0.47	24	2	12	60	55	15100	3040.1	5317.3	5164	38100	041	150	В	м
H140888	NC 179	Todd Rd SW (SR 1147)	, Hale Swamp Rd (SR 1154)	Brunswick	0.54	22	2	11	60	55	14600	3248.1	5669.8	5164	38100	041	150	В	М
H140888	NC 179	Hale Swamp Rd (SR 1154)	Village Point Rd (SR 1145)	Brunswick	0.92	22	2	11	60	55	14600	11718	20979	21948	38100	041	150	В	м
H140888	NC 179	Village Point Rd (SR 1145)	Village Rd (SR 1173)	Shallotte	0.8	36	2	12	60	45	14500	14524	21067	29934	38100	041	150	В	м
H140888	NC 179	Village Point Rd (SR 1145)	Village Rd (SR 1173)	Shallotte	0.4	38	2	12	60	35	12700	14524	21067	29934	28100	041	150	В	М
H141142	NC 130	Village Rd (SR 1173)	US 17 BUS	Shallotte	0.14	39	2	13	60	35	12700	4687	10988	7733.3	38100	04B	130	В	B,P,M
	NC 211	NC 211	E. Moore St (SR 1528)	Brunswick	0.88	37	2	11		55	15900	1600	3691.9	3691.9				MJ2	
	NC 211	E. Moore St (SR 1528)	W. St (SR 1194)	Southport	0.57	37	2	12		35	11100	1600	972.64	972.64				MJ2	
	NC 211	E. Moore St (SR 1528)	W. St (SR 1194)	Southport	0.81	37	2	12		35	11100	1700	532.16	532.16				MJ2	
	NC 211	E. Moore St (SR 1528)	W. St (SR 1194)	Southport	0.1	37	2	12		35	12700	1700	532.16	532.16				MJ2	
	NC 211	E. Moore St (SR 1528)	W. St (SR 1194)	Southport	0.04	37	2	12		35	12700	7200	532.16	532.16				MJ2	
	NC 211	W. St (SR 1194)	W. 9th St (SR 1209)	Southport	0.55	37	2	12		35	12700	7200	1387.3	1387.3				MJ2	
BRUN30035- H	NC 211	W. 9th St (SR 1209)	E. 13th St (SR 1542)	Southport	0.09	36	2	11	60	35	12300	13655	16676	13008	38100	041	150	В	М
BRUN30035- H	NC 211	W. 9th St (SR 1209)	E. 13th St (SR 1542)	Southport	0.36	36	2	11	60	35	12300	17328	21436	13008	38100	041	150	В	М
BRUN30035- H	NC 211	E. 13th St (SR 1542)	NC 87	Brunswick	0.31	36	2	11	60	35	12300	17328	21436	17836	38100	041	150	В	м
BRUN30014- H	NC 211	NC 87	NC 211	Brunswick	0.82	36	2	11	60	45	12800	19451	21756	33721	43300	04K	130	В	м
BRUN30014- H	NC 211	NC 211	NC 211	Brunswick	0	34	2	12	150	45	13200	19264	20929	31534	43300	04K	130	В	м
BRUN30014- H	NC 211	NC 211	NC 211	Brunswick	0	34	2	12	150	45	13200	19264	20929	31534	43300	04K	130	В	м
BRUN30014- H	NC 211	NC 211	NC 211	Brunswick	0.04	34	2	12	150	45	13200	19265	20930	31534	43300	04K	130	В	м

BRUN30014-	T			[				T											
Н	NC 211	NC 211	NC 211	Brunswick	0.01	46	2	11	150	45	12800	19265	20930	31534	43300	04K	130	В	М
BRUN30014-																			
Н	NC 211	NC 211	NC 211	Brunswick	0.53	46	2	11	150	55	14600	19265	20930	31534	43300	04K	130	В	М
BRUN30014-																			
H	NC 211	NC 211	NC 211	Brunswick	0.09	24	2	12	150	55	15100	19264	20929	31534	43300	04K	130	В	М
BRUN30014-		NO 014	Long Beach Rd	Danaratak	0.04		40		120-		45400	0005.0	40007	40000	40000	0.414	400	-	
н BRUN30014-	NC 211	NC 211	(SR 1969)	Brunswick	0.21	114	4D	11	300	55	15100	8285.2	10207	16296	43300	04K	130	В	М
BRUN30014-	NC 211	Long Beach Rd (SR 1969)	NC 133	Brunswick	0.16	76	4D	11	120	55	15100	6180.2	8778.8	14108	43300	04K	130	В	м
п BRUN30014-		(3K 1909)	NC 155	DIULISWICK	0.10	70	4D		120	55	13100	0100.2	0110.0	14100	43300	041	130	В	IVI
Н	NC 211	NC 133	NC 211	Brunswick	0.07	48	4D	12	120	55	15100	21890	30674	39390	43300	04K	130	В	м
BRUN30014-	-	Oakview Dr (SR	Executive Park	Dranomon	0.01				60-			2.000				•		-	
Н	NC 211	1549)	Blvd (SR 1571)	Saint James	0.79	52	2	11	100	55	14600	22584	32138	40016	43300	04K	130	В	М
BRUN30014-		Oakview Dr (SR	Executive Park																
н	NC 211	1549)	Blvd (SR 1571)	Saint James	1.06	22	2	11	60	35	10700	24541	36279	44589	43300	04K	130	В	М
BRUN30014-		Executive Park			1			1	60-										
Н	NC 211	Blvd (SR 1571)	NC 906	Saint James	2.92	22	2	11	100	45	12800	18074	23524	33314	43300	04K	130	В	М
	NC 211	NC 906	NC 906	Brunswick	0	60	2	12	150	55	15100	22000	34317	34317				MJ2	
	NC 211	NC 906	NC 906	Brunswick	0	60	2	12	150	55	15100	13000	34317	34317				MJ2	
			Mosquito Branch																
H090806-C	NC 211	NC 906	Rd (SR 1111)	Brunswick	1.06	22	2	11	150	55	15900	19639	24192	35770	49000	041	150	В	М
	10.044	Mosquito Branch	Sunset Harbor Rd	<b>.</b>			•		450		45000	10000	0.4.4.0.0	05770	40000		450	-	
H090806-C	NC 211	Rd (SR 1111)	(SR 1112)	Brunswick	2.14	22	2	11	150	55	15900	19639	24192	35770	49000	041	150	В	М
H090806-C	NC 211	Mosquito Branch Rd (SR 1111)	Sunset Harbor Rd (SR 1112)	Brunswick	0.27	22	2	11	150	55	15900	19639	24192	35770	49000	041	150	В	м
H090800-C	NC 211	Sunset Harbor Rd	、 ,	DIUIISWICK	0.27	22	Z		140-	55	10900	19039	24192	33770	49000	041	150	В	IVI
H090806-A	NC 211	(SR 1112)	1193)	Brunswick	0.44	22	2	11	150	55	15900	17146	22463	34707	49000	041	150	В	м
1100000071	110 211		Clemmons Rd (SR	Branowiok	0.11		-	+ • •	100	00	10000		22100	01101	10000	011	100	5	
H090806-A	NC 211	1193)	1505)	Brunswick	0.06	22	2	11	150	55	15900	17146	22463	34707	49000	041	150	В	М
		Clemmons Rd (SR	Zion Hill Rd (SR						90-										
H090806-A	NC 211	1505)	1114)	Brunswick	2.27	22	2	11	150	55	15900	17862	22007	37341	49000	041	150	В	М
		Zion Hill Rd (SR	Hewettown Rd																
H090806-A	NC 211	1114)	(SR 1178)	Brunswick	0.37	22	2	11	90	55	15900	19845	24879	39119	49000	041	150	В	М
		Hewettown Rd	Stone Chimney Rd															-	
H090806-A	NC 211	(SR 1178)	(SR 1115)	Brunswick	0.72	22	2	11	90	55	15900	19845	24879	39192	49000	041	150	В	М
	NO 014	Hewettown Rd	Stone Chimney Rd	Durun av viale	4 07	22	2	4.4	00		15000	00000	20142	44544	40000	0.41	150	в	
H090806-A	NC 211	(SR 1178) Stone Chimney Ro	(SR 1115)	Brunswick	1.37	22	2	11	90	55	15900	23236	29142	41541	49000	041	150	В	М
H090806-A	NC 211	(SR 1115)	1535)	Brunswick	0.26	22	2	11	90	55	17200	18384	24539	16742	49000	041	150	В	м
1100000071	110 211	Blanton Rd (SR	1000)	Branswick	0.20	~~	2		00	00	17200	10004	24000	10142	40000	041	100		101
H090806-A	NC 211	1535)	US 17	Brunswick	0.05	22	2	11	90	55	15900	18547	24787	3204.5	49000	041	150	В	м
		Blanton Rd (SR					-	+										_	
H090806-A	NC 211	1535)	US 17	Brunswick	0.01	22	2	11	90	55	15900	18547	24787	15648	49000	041	150	В	М
	NC 211	US 17	US 17	Brunswick	0.01	24	2	12	90	55	15800	5000	15648	15648			1	MJ2	1
			Makatoka Rd (SR		1														
	NC 211	US 17	1342)	Brunswick	0.48	24	2	12	90	55	16400	5000	5770.9	5770.9				MJ2	
			Makatoka Rd (SR																
	NC 211	US 17	1342)	Brunswick	0.01	24	2	12	90	55	15800	4200						MJ2	
		Makatoka Rd (SR	Little Macedonia	Davis i i	4.05		<u> </u>	40			40.400	4000	F770 0	F770 0				MIG	
	NC 211	1342)	Rd (SR 1343)	Brunswick	1.65	24	2	12	90	55	16400	4200	5770.9	5770.9				MJ2	

	1	Little Macedonia	Egypt Rd (SR					-				1					-		
	NC 211	Rd (SR 1343)	1341)	Brunswick	8.57	24	2	12	90	55	16400	2400	3785.3	3785.3				MJ2	
	NC 211	Egypt Rd (SR 1341)	Exum Rd (SR 1340)	Brunswick	2.31	24	2	12	150	55	16400	2400	3785.3	3785.3				MJ2	
	110 211	Exum Rd (SR	1010)	Branowiok	2.01	2.	-		100	00	10100	2100	0100.0	0100.0				11102	
	NC 211	1340)	NC 211	Brunswick	1.83	24	2	12	150	55	16400	2400	3300	3300				MJ2	
	NC 211	Exum Rd (SR 1340)	NC 211	Brunswick	0	24	2	12		55	16400							MJ2	
	NC 904	Brunswick	Horseshoe Rd (SR 1309)	Brunswick	1.7	18	2	9	60- 100	55	14800	2000	2117.3	2117.3				MJ2	
	NC 904	Brunswick	Horseshoe Rd (SR 1309)	Brunswick	1.63	18	2	9	60	55	14800	2000						MJ2	
		Horseshoe Rd (SR	Ash-Little River Rd																
	NC 904	1309)	(SR 1300)	Brunswick	0.78	18	2	9	60	55	14800	2000	2117.3	2117.3				MJ2	
	NC 904	Ash-Little River Rd (SR 1300)	Longwood Rd (SR 1321)	Brunswick	1.29	18	2	9	60	55	14800	2000	2089.7	2089.7				MJ2	
	NC 904	(,	Longwood Rd (SR	DITINISMICK	1.29	10	2	9	00	55	14000	2000	2069.7	2009.7				IVIJZ	
	NC 904	(SR 1300)	1321)	Brunswick	0.2	18	2	9	60	55	14800	6000	2368.5	2368.5				MJ2	
		Etheridge Rd (SR	Pea Landing Rd																
H171352	NC 904	1308)	(SR 1304)	Brunswick	2	24	2	12	60	55	16400	6830.2	12616	13209	49000	04B	130	В	B,P
H171352	NC 904	Pea Landing Rd (SR 1304)	Russtown Rd (SR 1315)	Brunswick	0.5	24	2	12	60	55	16400	4653.1	8848.4	9540	49000	04B	130	В	B,P
H171352	NC 904	Pea Landing Rd (SR 1304)	Russtown Rd (SR 1315)	Brunswick	0.89	24	2	12	60	55	16400	4653.1	8848.4	9540.2	49000	04B	130	В	B,P
H171352	NC 904	Russtown Rd (SR 1315)	Old Shallotte Rd (SR 1316)	Brunswick	0.49	24	2	12	60	55	16400	4551.1	8649.5	6501.4	49000	04B	130	В	B,P
H171352	NC 904	Old Shallotte Rd (SR 1316)	US 17	Brunswick	0.87	24	2	12	60	55	16400	5273.7	7163.7	7846.8	49000	04B	130	В	B,P
H090804	NC 904	US 17	NC 179	Brunswick	1.07	22	2	11	60	55	14600	9001	17565	15991	38100	04D	110	B	B,P
H090804	NC 904	US 17	NC 179	Brunswick	1.13	22	2	11	60	55	14600	7556.2	15511	11662	38100	04D	110	B	B,P
BRUN30009-				Ocean Isle			_								00.00	0.5			2,.
Н	NC 904	NC 179	Rick St (SR 1294)	Beach	0.17	32	2	11	60	45	14000	6644	17104	16983	36800	04G	110	В	B,P,M
BRUN30009-			Hale Beach Rd	Ocean Isle															
н	NC 904	Rick St (SR 1294)	(SR 1157)	Beach	0.1	32	2	11	60	45	14000	6644	17104	16983	36800	04G	110	В	B,P,M
BRUN30009-		Culpepper Rd SW		Ocean Isle														_	
H	NC 904	(SR 1157)	Causeway Dr	Beach	0.34	24	2	12	60	45	13200	6752.8	17322	17211	36800	04G	110	В	B,P,M
BRUN30009- н	NC 904	Causeway Dr	Causeway Dr	Ocean Isle Beach	0.23	32	2	11	60	45	12800	6752	17322	17210	36800	04G	110	В	B,P,M
BRUN30009-	110 001	Causeyway Dr	W. First St (SR	Ocean Isle	0.20	02	-		00	10	12000	0102	TTOLL	11210	00000	010	110	5	D,1 ,141
Н	NC 904	(SR 1272)	1144)	Beach	0.33	32	2	11	60	45	14000	3331.6	4873.2	4950.3	36800	04G	110	В	B,P,M
	NC 906	NC 906	E. Oak Island Dr (SR 1190)	Oak Island	0.41	32	2	12	100	35	11100	4000	5028.3	5028.3				MJ2	
	NC 906	E. Oak Island Dr (SR 1190)	NC 906	Oak Island	0.39	64	4	12	100	45	29000	4000	5028.3	5028.3				MJM	
	NC 906	NC 906	NC 211	Brunswick	2.62	48	4D	12	140- 340	55	43300	4000	9022.4	9022.4				В	
	NC 906	NC 906	NC 211	Brunswick	0.04	48	4D	12	140- 340	55	43300	4000	5461.5	5461.5				В	
	NC 906	NC 906	NC 211	Saint James	1.06	48	4D	12	150	55	43300	12000	8115.5	8115.5				B	
H090236-A	NC 906	NC 211	NC 906	Brunswick	0.13	44	4D	11	168	45	15900	4498.3	6507.3	9613.3	49000	04A	300	B	В
H090236-A	NC 906	NC 906	Hewett Rd (SR 1556)	Brunswick	2.19	22	2	11	60	55	15900	9005.9	13096	20963	49000	04A	300	В	В

		Gilbert Rd (SR	Rutland Rd (SR									1				1			
H090236-B	NC 906	1501)	1538)	Brunswick	1.17	22	2	11	60	55	15900	6483.4	9657.9	18165	17200	03A	80	MJ2	В
H090236-A	NC 906	Hewett Rd (SR 1556)	Gilbert Rd (SR 1501)	Brunswick	0.3	22	2	11	60	55	15900	9005.9	13096	20963	49000	04A	300	в	в
		Rutland Rd (SR																	
H090236-B	NC 906	1538)	US 17	Brunswick	2.74	22	2	11	60	55	15900	5600	7905.3	15767	17200	03A	80	MJ2	В
H090236-B	NC 906	US 17 BUS	US 17	Brunswick	1.25	22	2	11	60	55	15900	5578.7	13407	1668	17200	03A	80	MJ2	В
	NC 906	US 17	US 17	Brunswick	0.02	20	2	10	60	55	15300		953.7	953.7				MJ2	
BRUN30014-																			
Н	NC 211	NC 211	NC 133	Brunswick	0.07	120	4D	11	120	55	15100	21890	30674	39390	43300	04K	130	В	М
BRUN30014-			Long Beach Rd																
Н	NC 211	NC 133	(SR 1969)	Brunswick	0.16	48	4D	12	120	55	15100	6507.1	8711.7	14821	43300	04K	130	В	М
BRUN30014-		Long Beach Rd																	
Н	NC 211	(SR 1969)	NC 211	Brunswick	0.21	48	4D	12	120	55	15100	8079.1	9902.9	17060	43300	04K	130	В	М
			Old Holden Beach																
	NC 130 BUS	NC 130	Rd (SR 1960)	Shallotte	0.08	36	2	11	86	35	12300	5400	16237	16237				MJ2	
		Old Holden Beach							60-										
	NC 130 BUS	Rd (SR 1960)	US 17	Shallotte	0.29	22	2	11	86	35	12300	5400	16531	16531				MJ2	
BRUN30020-			Shady Forest Dr																
Н	NC 179 BUS	NC 179	(SR 1246)	Calabash	0.82	28	2	11	60	45	12800	3955.1	6073.1	6091.4	12800	02N	90	MJ2	М
BRUN30020-			Shady Forest Dr																
Н	NC 179 BUS	NC 179	(SR 1246)	Calabash	0.31	32	2	11	60	45	12800	3896.8	6013.6	6075.2	12800	02N	90	MJ2	М
BRUN30020-		Shady Forest Dr	Heritage Dr (SR																
Н	NC 179 BUS	(SR 1246)	1846)	Brunswick	0.33	32	2	11	60	45	12800	3896.8	6013.6	6075.2	12800	02N	90	MJ2	М
BRUN30020-		Heritage Dr (SR	Forest Dr (SR																
Н	NC 179 BUS	1846)	1873)	Brunswick	0.1	32	2	11	60	45	12800	3896.8	6013.6	6075.2	12800	02N	90	MJ2	М
BRUN30020-		Forest Dr (SR	Beach Dr (SR																
Н	NC 179 BUS	1873)	1242)	Brunswick	0.09	32	2	11	60	45	14000	3896.8	6013.6	6075.2	12800	02N	90	MJ2	М
		Forest Dr (SR	Beach Dr (SR																
	NC 179 BUS	1873)	1242)	Brunswick	0.01	32	2	11	60	45	12800	6000	3395.1	3395.1				MJ2	
BRUN30020-		Beach Dr (SR	Sunset Blvd (SR																
Н	NC 179 BUS	1242)	1172)	Sunset Beach	1.75	32	2	11	60	45	12800	1564.4	2841.6	3395.1	12800	02N	90	MJ2	M
BRUN30020-		Sunset Blvd (SR																	
H	NC 179 BUS	1172)	NC 179	Sunset Beach	0.09	32	2	11	60	35	10700	1564.4	2841.6	3395	10700	02N	90	MJ2	M
BRUN30020-									100	~-					40-00				
H	NC 179 BUS	NC 179	NC 179	Sunset Beach	0.07	30	2D	15	120	35	11100	1044.8	1665.2	3395.1	10700	02N	90	MJ2	М
BRUN30020-		NO 470	Sunset Blvd (SR		0.05		•			05	40700	4504.4	0044.0	0005 4	40700	0011			
H	NC 179 BUS	NC 179	1172)	Sunset Beach	0.05	38	2	11	60	35	10700	1564.4	2841.6	3395.1	10700	02N	90	MJ2	М
BRUN30020-		Sunset Blvd (SR	Dia inv. Da	Ownerst Darash		20	0		60-	45	40000	0040.0	4070.0	4700.0	10000	001	00	110	
H	NC 179 BUS	1172)	Pineview Dr	Sunset Beach	1.1	32	2	11	120	45	12800	2819.2	4872.9	4792.3	12800	02N	90	MJ2	М
BRUN30020-		Dia su issu Da	On a state Dat OW	Our set Deset	0.04	20	0		60-	45	40000	0070 0	40000	10010	10000	001	00	1110	
H	NC 179 BUS	Pineview Dr	Seaside Rd SW	Sunset Beach	0.64	32	2	11	120	45	12800	8070.3	13293	13246	12800	02N	90	MJ2	М
BRUN30020-		NO 470	NO 470	Our set Deset	0.07	50	00	4.4	400	05	40700	540.0	4470 5	0005	40700	001	00	110	
п	NC 179 BUS	NC 179	NC 179	Sunset Beach	0.07	56	2D	11	120	35	10700	519.6	1176.5	3395	10700	02N	90	MJ2	М
411150	Bridgers Rd	Pridaoro Dd	US 17 BUS	Challette	2.00									1133.2	11100	02D	90	N / N I	B.P
H141158	(None)	Bridgers Rd	03 17 803	Shallotte	2.23									1133.2	14100	020	90	MN	В,Р
L105120	Smith Avenue	US 17	NC 120	Shallotte	2.7									1246.0	14600	02A	60	MN	
H185138	Ext (None)	03 17	NC 130	Snallotte	2.1									4346.8	14000	UZA	00	IVIIN	
	Country Club Dr (SR 1100)	NC 122		Oak Island	2 02	20	2	10		35		2800	200.02	200.02					
	· /	NC 133			2.92	20	2	10		30		2000	300.03	300.03					
	Country Club Dr (SR 1100)	NC 133	NC 133	Oak Island	0.22	20	2	10		35		2800	428.64	428.64					
		100 100	10 133	Oak island	0.22	20	2	ιU		55		2000	+20.04	420.04					

F 1	1112)	Beachview Dr (SR 1892)	Coxs Landing Rd (SR 1182)	Brunswick	0.1	18	2	9		35		0	0			
F 1	Sunset Harbor Rd SE (SR I112)	Beachview Dr (SR 1892)	Coxs Landing Rd (SR 1182)	Brunswick	1.67	18	2	9		55	1900	3458.4	3458.4			
F	Sunset Harbor Rd SE (SR I112)	Coxs Landing Rd (SR 1182)	Zion Hill Rd (SR 1114)	Brunswick	0.1	18	2	9		55	1900	3399.2	3399.2			
F	Sunset Harbor Rd SE (SR I112)	Coxs Landing Rd (SR 1182)	Zion Hill Rd (SR 1114)	Brunswick	0.51	18	2	9		55	2200	3399.2	3399.2			
S F	Sunset Harbor Rd SE (SR I112)	Zion Hill Rd (SR 1114)	, Adelaide Dr (SR 1913)	Brunswick	1.07		2	9		55	2200	1714.5				
F	Sunset Harbor Rd SE (SR I112)	Adelaide Dr (SR 1913)	Harbor Ridge Dr (SR 1930)	Brunswick	0.27	18	2	9		55		1692.3	1692.3			
F 1	Sunset Harbor Rd SE (SR I 112)	Harbor Ridge Dr (SR 1930)	NC 211	Brunswick	1.11	18	2	9		55	2000	1556	1556			
	Zion Hill Rd SE SR 1114)	Sunset Harbor Rd (SR 1112)	Rourks Landing Rd (SR 1200)	Brunswick	0.28	20	2	10		55		2512.9	2512.9			
	Zion Hill Rd SE SR 1114)	Rourks Landing Rd (SR 1200)	Goley Hewett Rd (SR 1251)	Brunswick	1.39	22	2	11		55		2512.9	2512.9			
(	SR 1114)	Goley Hewett Rd (SR 1251)	NC 211	Brunswick	1.43	22	2	11		45	4900	1854.1	1854.1			
F	Stone Chimney Rd SE (SR I 115)	US 17	US 17	Brunswick	0.01	30	2	11	60	55		3623.2	3623.2			
F 1	Stone Chimney Rd SE (SR I 115)	US 17	Blanton Rd (SR 1535)	Brunswick	0.16	22	2	11	60	45		5069.6	5069.6			
F	Stone Chimney Rd SE (SR I 115)	Blanton Rd (SR 1535)	NC 211	Brunswick	0.25	22	2	11	60	45	4400	4735.3	4735.3			
F 1	Stone Chimney Rd SW (SR I115)	NC 211	Turnpike Rd (SR 1129)	Brunswick	1.17	22	2	11	60	55	6000	13427	13427			
F 1	Stone Chimney Rd SW (SR I 115)	Turnpike Rd (SR 1129)	Hewett Rd (SR 1128)	Brunswick	0.87	22	2	11	60	55		11825	11825			
F 1	Stone Chimney Rd SW (SR I115)	Taft Rd (SR 1127)	Cedar Grove Rd (SR 1125)	Brunswick	2	22	2	11	60	55		9573	9573			
F 1	Stone Chimney Rd SW (SR I115)	Cedar Grove Rd (SR 1125)	Maple Creek Rd (SR 1245)	Brunswick	0.34	22	2	11	60	55		10130	10130			
F	Stone Chimney Rd SW (SR I115)	Hewett Rd (SR 1128)	Taft Rd (SR 1127)	Brunswick	0.3	22	2	11	60	55		11825	11825			

Stone Chimney Rd SW (SR 1115)	Maple Creek Rd (SR 1245)	Leonard Rd (SR 1231)	Brunswick	0.68	22	2	11	60	55		4500	10130	10130			
Stone Chimney Rd SW (SR 1115)	Leonard Rd (SR 1231)	, Stone Chimney Rd (SR 1119)	Brunswick	0.1	22	2	11	60	55			10745	10745			
Old Ferry Connection SW (SR 1115)	Stone Chimney Rd (SR 1119)	Stanbury Rd (SR 1124)	Brunswick	0.37	22	2	11	60	55		3600	11331	11331			
(SR 1115)	Stanbury Rd (SR 1124)	Sabbath Home Rd (SR 1120)	Brunswick	0	22	2	11	60	55			10128	10128			
(SR 1115)	Stanbury Rd (SR 1124)	Sabbath Home Rd (SR 1120)	Brunswick	0.74	22	2	11	60	55			10128	10128			
,	DEAD END	Mccray St (SR 1116)	Holden Beach	0.28	22	2	11		35			0	0			
(SR 1116)	Mccray St (SR 1116)	NC 130	Holden Beach	0.84	22	2	11		35		2500	0	0			
Ocean Blvd W (SR 1116)	NC 130		Holden Beach	1.76	22	2	11		35		4100	0	0			
· /	NC 130		Holden Beach	3.25	22	2	11		45		4100	0	0			
( - )	NC 130		Holden Beach	0.02	22	2	11		35		4100	0	0			
Sabbath Home Rd SW (SR 1120)	Stone Chimney Rd (SR 1115)	Old Ferry Rd (SR 1121)	Brunswick	0.62	18	2	9		45		7400	8977.9	8977.9			
Sabbath Home Rd SW (SR 1120)	Old Ferry Rd (SR 1121)	NC 130	Brunswick	0.1	34	2	11		45		7400	9659.1	9659.1			
Stanbury Rd SW (SR 1124)	Stone Chimney Rd (SR 1115)	Apollo St (SR 1883)	Brunswick	1.37	18	2	9		55			3759.8	3759.8			
Stanbury Rd SW (SR 1124)	Apollo St (SR 1883)	Turkey Trap Rd (SR 1181)	Brunswick	0.85	18	2	9		55		1600	3759.8	3759.8			
(SR 1124)	Turkey Trap Rd (SR 1181)	NC 130	Brunswick	0.1	18	2	9		55			3759.8	3759.8			
SW (SR 1125)	(SR 1115)	Stone Chimney Rd (SR 1119)	Brunswick	0.69	20	2	10	60	55			1676.7	1676.7			
SW (SR 1125)	Stone Chimney Rd (SR 1119)	1189)	Brunswick	0.04	18	2	9	60	55		900	1144.9	1144.9			
SW (SR 1125)	Stone Chimney Rd (SR 1119)	1189)	Brunswick	0.16	18	2	9	60	55		900	1144.9	1144.9			
SW (SR 1125)	(SR 1119)	1189)	Brunswick	1	18	2	9	60	45		900	1144.9	1144.9			
SW (SR 1125)	Turkey Trap Rd (SR 1181) Crissott Rd (SR	Mt. Pisgah Rd (SR 1130) Turkov Trop Pd	Brunswick	0.38	18	2	9	60	45			2854.6	2854.6			
 SW (SR 1125) Mt. Pisgah Rd	Grissett Rd (SR 1189)	Turkey Trap Rd (SR 1181) Cumbee Rd (SR	Brunswick	0.57	18	2	9	60	45							
 SW (SR 1130)	US 17 Stone Chimney Rd	1131) <sup>`</sup>	Brunswick	0.91	20	2	10	100	55		4800	9659.6	9659.6		MN	
Mt. Pisgah Rd SW (SR 1130)	(SR 1119)	1132)	Brunswick	0.03	20	2	10	100	55	14700	4800	10032	10032		MN	

Mt. Pisgah Rd	Cumbee Rd (SR	Turnpike Rd (SR												1		
SW (SR 1130)	1131)	1129)	Brunswick	0.18	20	2	10	100	55	14700	4800	10032	10032			MN
Mt. Pisgah Rd	Turnpike Rd (SR	Stone Chimney Rd														
U U	1129)	(SR 1119)	Brunswick	0.22	20	2	10	100	55	14700	4800	10032	10032			MN
Mt. Pisgah Rd	Civietown Rd (SR	Morgan Rd (SR														
SW (SR 1130)	1132)	1126)	Brunswick	1.26	20	2	10	100	55	14700	4800	8142.5	8142.5			MN
Mt. Pisgah Rd	Morgan Rd (SR	Empire Rd (SR														
SW (SR 1130)	1126)	1133)	Brunswick	0.24	20	2	10	100	55	14700	4600	7622.2	7622.2			MN
Mt. Pisgah Rd	Cedar Grove Rd															
SW (SR 1130)	(SR 1125)	NC 130	Brunswick	0.85	20	2	10	100	55	14700	4600	7565.4	7565.4			MN
Mt. Pisgah Rd	Empire Rd (SR	Cedar Grove Rd														
SW (SR 1130)	1133)	(SR 1125)	Brunswick	0.3	20	2	10	100	55	14700	4600	7622.2	7622.2			MN
Civietown Rd	Mt. Pisgah Rd (SR		<b>_</b>													
( /	1130)	NC 130	Brunswick	2.34	18	2	9	60	45		2100	1889.4	1889.4			
Shell Point Rd	NO 400	Floyd Rd (SR		0.04	40	0	•	00	45		4500	0000 F	0000 5			
( - )	NC 130	1842) Crev Bridge Dd	Brunswick	0.21	18	2	9	60	45		1500	3003.5	3003.5			
Shell Point Rd SW (SR 1132)	Floyd Rd (SR 1842)	Gray Bridge Rd (SR 1134)	Brupowiek	1 1 2	10	2	9	60	55			2301	2301			
SW (SR 1132) Shell Point Rd	Floyd Rd (SR	(SR 1134) Gray Bridge Rd	Brunswick	1.13	18	2	Э	00	00			2301	2301			
SW (SR 1132)	1842)	(SR 1134)	Brunswick	0.29	18	2	9	60	45			2301	2301			
 Gray Bridge Rd	Civietown Rd (SR	(SR 1134) Tar Landing Rd	DIVISVICK	0.29	10	2	9	00	40			2301	2301			
SW (SR 1134)	1132)	(SR 1135)	Brunswick	1.07	20	2	10	60	55			5333.9	5333.9			
Gray Bridge Rd	Tar Landing Rd	(01(1100)	DIGIISWICK	1.07	20	2	10	00	55			0000.0	0000.0	-		
SW (SR 1134)	(SR 1135)	NC 130	Brunswick	1.32	20	2	10	60	55		3300	5910	5910			
Boones Neck Rd	· /		Branswick	1.02	20	2	10	00	00		0000	0010	0010			
	1141)	DEAD-END	Brunswick	2.67	18	2	9		55			6851.5	6851.5			
Boones Neck Rd	,	Kirby Rd (SR					-									
SW (SR 1137)	NC 130	1141)	Brunswick	0.91	18	2	9		55			1207.9	1207.9			
Seashore Rd SW		,														
(SR 1139)	1141)	NC 130	Brunswick	1.15	18	2	9		45	12000	2600	773.82	773.82			MN
Kirby Rd SW	Camelia Dr (SR	Azalea Dr (SR														
(SR 1141)	1950)	1812)	Brunswick	0.13	18	2	9		55	14200	1600	5324.4	5324.4			MN
Kirby Rd SW	Azalea Dr (SR	Boones Neck Rd														
(SR 1141)	1812)	(SR 1137)	Brunswick	0.1	18	2	9		55	14200	1600	5324.4	5324.4			MN
Kirby Rd SW		Camelia Dr (SR														
(SR 1141)	1139)	1950)	Brunswick	0.26	18	2	9		55	14200	1600	5324.4	5324.4			MN
Kirby Rd SW	Boones Neck Rd	Levie Rd (SR														
(SR 1141)	(SR 1137)	1142)	Brunswick	0.41	18	2	9		55	14200	1600	12052	12052			MN
Kirby Rd SW	Boones Neck Rd	Levie Rd (SR	David in t	0.50	40	6				44000	0500	400.17	400.17			
(SR 1141)	(SR 1137)	1142)	Brunswick	0.56	18	2	9		55	14200	2500	12017	12017			MN
Kirby Rd SW	Levie Rd (SR	NC 120	Drupeviale	0 4 4	10	2			E F	14000	2500	14400	14400			MAN
(SR 1141) Lumberton St	1142)	NC 130	Brunswick Ocean Isle	0.11	18	2	9		55	14200	2500	14486	14486			MN
	Raleigh St	NC 904	Ocean Isle Beach	1.78	22	2	11	60	35		2900	0	0			
Lumberton St	E. Second St (SR	110 304	Ocean Isle	1.70	22	2	11	00	55		2300	0	0			
(SR 1144)	1888)	Raleigh St	Beach	0.46	22	2	11	60	35		2900	0	0			
W. First St (SR	1000)		Ocean Isle	0.70	~~	~		00	55		2300	0	0			
1144)	NC 904	Beaufort St	Beach	1.1	22	2	11	60	35		4700	0	0			
W. First St (SR			Ocean Isle			-						~	~			
1144)	Beaufort St		Beach	0.23	22	2	11	60	35		4700	0	0			
Village Point Rd		Happy Valley Ln				-						-	,			
	NC 179	(SR 1879)	Brunswick	0.68	22	2	11	60	45			2978.1	2978.1			
 (		()	2.4.150000	0.00		-			.0			-0.0.1	20.0.1	1	I	

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Brunswick

Copas Rd (SR

1146)

Village Point Rd Happy Valley Ln

(SR 1879)

NC 179

US 17

US 17

NC 179

(SR 1165)

Thomasboro Rd

US 17

US 17

NC 179

NC 179

Thomasboro Rd (SR 1165)

Calabash

Calabash

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Carolina

Shores

Sunset Beach

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(SR 1145)

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(SR 1165) Persimmon Rd

(SR 1167)

(SR 1167)

(SR 1168)

Sunset Blvd S (SR 1172)

Persimmon Rd SW (SR 1167)

Country Club Rd

BRUN50038- Persimmon Rd

	(31(1143)	(51(10/3)	1140)	DIGUISWICK	0.49	22	2		00	40			2970.1	2370.1					
	Village Point Rd	Copas Rd (SR	Arcadia Dr (SR																
	SW (SR 1145)	1146)	1897)	Brunswick	0.37	22	2	11	60	45			3727.3	3727.3					
	Village Point Rd	Arcadia Dr (SR	Bill Holden Rd (SR			~~	•												
	SW (SR 1145)	1897)	1148)	Brunswick	0.81	22	2	11		45			3277.7	3277.7					
	Village Point Rd	Bill Holden Rd (SR	``	<b>D</b>	0.00	~~	0			45			0070 0	0.070.0					
	SW (SR 1145)	1148)	1187)	Brunswick	0.28	22	2	11		45			3678.8	3678.8					
	Village Point Rd	Church St (SR	Pigott Rd (SR	<b>D</b>		~~	0			45		4400	0070 0	0.070.0					
	SW (SR 1145)	1187)	1152)	Brunswick	0.2	22	2	11		45		1100	3678.8	3678.8					
	Village Point Rd	Church St (SR	Pigott Rd (SR	<b>D</b>	0.04	~~	0			05									
	SW (SR 1145)	1187)	1152)	Brunswick	0.01	22	2	11		35									
	Copas Rd SW	Village Point Rd	Copas Rd (SR				-												
	(SR 1146)	(SR 1145)	1191)	Brunswick	0.65	20	2	10	60	55		570	678.51	678.51					
	Copas Rd SW	Village Point Rd	Copas Rd (SR																
	(SR 1146)	(SR 1145)	1191)	Brunswick	0.01	22	2	11	60	55									
	Pigott Rd SW		Village Point Rd																
	(SR 1152)	NC 179	(SR 1145)	Brunswick	1.97	18	2	9		45			3055	3055					
	Hale Swamp Rd	Hale Swamp Rd	Goose Creek Rd																
	SW (SR 1154)	SW (SR 1154)	(SR 1155)	Brunswick	0.65	20	2	10	60	55		4900	6988.6	6988.6					
	Hale Swamp Rd		Goose Creek Rd																
	SW (SR 1154)	NC 179	(SR 1155)	Brunswick	0	20	2	10	60	55		1400							
	Hale Swamp Rd	Goose Creek Rd																	
	SW (SR 1154)	(SR 1155)	NC 179	Brunswick	1.07	20	2	10	60	55		1400	6516.1	6516.1					
	Hale Swamp Rd	Goose Creek Rd																	
	SW (SR 1154)	(SR 1155)	NC 179	Brunswick	0.01	18	2	9		55									
	Old Georgetown																		
BRUN40024-	``		Hale Swamp Rd																
Н	1163)	NC 179	SW (SR 1154)	Brunswick	0.74	20	2	10	60	55	14100	7925.4	13083	13255	15100	02A	60	MN	
	Old Georgetown																		
BRUN40024-			Jenrette Rd (SR	Ocean Isle															
Н	1163)	Rd (SR 1184)	1918)	Beach	1.36	24	2	12	60	35	10500	10359	17173	18674	15100	02A	60	MN	
	Old Georgetown																		
BRUN40024-	```	Jenrette Rd (SR																	
Н	1163)	1918)	NC 179	Brunswick	1.38	24	2	12	60	55	15100	10359	17173	18674	15100	02A	60	MN	
BRUN50040-	Clariday Rd SW	Thomasboro Rd																	
Н	(SR 1164)	(SR 1165)	NC 179	Brunswick	0.51	18	2	9	60	55	14200	9114.9	16889	17456	15800	02A	60	MN	
	Thomasboro Rd		Clariday Rd (SR								1			1					1
	SW (SR 1165)	US 17	1164)	Brunswick	2.41	22	2	11	60	55			9621.4	9621.4					
BRUN50037-	Thomasboro Rd	Clariday Rd (SR	Persimmon Rd								1			1					1
н	(SR 1165)	1164)	(SR 1167)	Calabash	1	22	2	11	60	35	10600	600.49	4792.9	9621	13200	03A	80	MJM	
	Thomasboro Rd	Persimmon Rd																	
	(SR 1165)	(SR 1167)	NC 179	Calabash	0.13	22	2	11		35			1924.6	1924.6					
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	Sunset Blvd S	1	ſ	1	<u> </u>												1		
	(SR 1172)	NC 179	NC 179	Sunset Beach	0.01	34	2	11		35		6500							
	(SR 11/2) Sunset Blvd S	NC 179		Sunset Beach	0.01	34	2	11	110	35		0000							
		NO 470	W. Main St (SR	Owners to Describ		~ 4	0	4.4	110-	05			4000 5	4000 5					
	(SR 1172)	NC 179	1177)	Sunset Beach	0.3	34	2	11	175	35			1629.5	1629.5					
	Sunset Blvd S		W. Main St (SR																
	(SR 1172)	NC 179	1177)	Sunset Beach	0.06	32	2	10	100	25			1629.5	1629.5					
	Sunset Blvd S		W. Main St (SR																
	(SR 1172)	NC 179	1177)	Sunset Beach	0.33	32	2	10	100	35			1629.5	1629.5					
	Sunset Blvd S		W. Main St (SR																
	(SR 1172)	NC 179	1177)	Sunset Beach	0.24	32	2	10	100	25			39.515	39.515					
	Sunset Blvd S		W. Main St (SR						110-										
	(SR 1172)	NC 179	1177)	Sunset Beach	0.01	32	2	10	175	35			1629.5	1629.5					
	Sunset Blvd S		W. Main St (SR																
	(SR 1172)	NC 179	1177)	Sunset Beach	0.12	32	2	10	100	35			1629.5	1629.5					
	Sunset Blvd S		W. Main St (SR		-	-		-											
	(SR 1172)	NC 179	1177)	Sunset Beach	0	32	2	10	100	35			1629.5	1629.5					
	Village Rd (SR		Copas Rd (SR	Cancer Dealer	Ű		-			00			.020.0	.020.0					
H140888	1173)	Whiteville Rd	1191)	Shallotte	0.05	36	2	12	60	35	11100	11231	15383	24247	38100	041	150	В	М
	Village Rd (SR		Copas Rd (SR	Onaliotto	0.00	00	-	12	00	00	11100	11201	10000	2.2.1	00100	011	100	5	
	1173)	NC 179	1191)	Shallotte	0	43	2	13		35		11000	24247	24247					
	Village Rd (SR	Copas Rd (SR	(131)	Onaliotte	0	-0	2	10		00		11000	27271	27271					
H140888	1173)	1191)	US 17	Shallotte	0.21	30	2	10	60	35	11900	13903	20007	24772	38100	041	150	В	м
11140000	W. Main St (SR	1131)	Sunset Blvd (SR	Shallotte	0.21	50	2	10	00	55	11900	13903	20007	24112	30100	041	150	D	IVI
	1177)		1172)	Sunset Beach	0.55	18	2	9	60	25			0	0					
	E. Main St (SR	Sunset Blvd (SR	1172)	Sunset Deach	0.55	10	Z	9	60	25			U	0					
	```	· · · · ·		Owners to Describ	0.00	40	0	9	60	05		2200							
	1177)	1172)		Sunset Beach	0.08	18	2	9	60	35		2200							
	E. Main St (SR	Sunset Blvd (SR			o 7	40	•	•		05		0000	00 545	00 545					
	1177)	1172)		Sunset Beach	0.7	18	2	9	60	25		2200	39.515	39.515					
	E. Main St (SR	Sunset Blvd (SR								~-									
	1177)	1172)		Sunset Beach	0.28	18	2	9	60	25		2200	0	0					
	Ocean Isle																		
BRUN40034-	Beach Rd SW		Watts Rd (SR																
Н	(SR 1184)	US 17	1153)	Brunswick	0.95	24	2	12	60	55	15100	11821	21539	29987	30400	041	180	MJM	М
	Ocean Isle																		
BRUN40034-	Beach Rd SW	Watts Rd (SR	Old Georgetown																
Н	(SR 1184)	1153)	Rd (SR 1163)	Brunswick	0.85	24	2	12	60	55	15100	13113	23798	26035	30400	041	180	MJM	М
	Ocean Isle																		
BRUN40034-	Beach Rd SW	Old Georgetown																	
н	(SR 1184)	Rd (SR 1163)	NC 179	Brunswick	1.74	24	2	12	60	55	15100	9468.9	20598	19534	30400	041	180	MJM	М
BRUN40025-	E. Oak Island Dr		E. Beach Dr (SR						60-										
н	(SR 1190)	NC 906	1104)	Oak Island	3.37	20	2	10	100	45	13300	2643	3729.4	3772	13700	03C	80	MN	B,P
BRUN40025-	E. Oak Island Dr	E. Beach Dr (SR							60-										
н	(SR 1190)	1104)	NC 133	Oak Island	1.89	34	2	10	100	35	10700	13030	16925	7063.1	13700	03C	80	MN	B,P
	Copas Rd (SR	, Village Rd (SR	Copas Rd (SR	İ															
	1191)	1173)	1146)	Shallotte	2.73	20	2	10	60	55		2600	1050.7	1050.7					
	Ash-Little River	,	,		<u> </u>														
	Rd NW (SR		Long Rd (SR																
	1300)	NC 130	1324)	Brunswick	1.01	18	2	9		55	14800	820	1269.9	1269.9				MN	
	Ash-Little River			2.0.00000			-	~											
	Rd NW (SR	Long Rd (SR	Hughes-Smith Rd																
	1300)	1324)	(SR 1322)	Brunswick	1.26	18	2	9		55	14800	820	1269.9	1269.9				MN	
	1000)	1027)	(011 1022)	DIGITSWICK	1.20	10	2	3		55	14000	020	1200.9	1200.0					

	Ash-Little River																		
	Rd NW (SR	Long Rd (SR	Hughes-Smith Rd																
	1300)	1324)	(SR 1322)	Brunswick	0.25	18	2	9		55	14800	920						MN	
	Ash-Little River	- /	· · · /																
	Rd NW (SR	Hughes-Smith Rd																	
	1300)	(SR 1322)	NC 904	Brunswick	1.72	18	2	9		55	14800	920	1395.9	1395.9				MN	
	Ash-Little River	,																	
	Rd NW (SR		Friendship Rd (SR																
	1300)	NC 904	1354)	Brunswick	1.88	18	2	9		55	14800	820	1814.3	1814.3				MN	
	Ash-Little River		,																
	Rd NW (SR	Friendship Rd (SR	No. 5 School Rd																
	1300)	1354)	(SR 1305)	Brunswick	1.51	18	2	9		55	14800	820	3133.4	3133.4				MN	
	Ash-Little River																		
	Rd NW (SR	Friendship Rd (SR	No. 5 School Rd																
	1300)	1354)	(SR 1305)	Brunswick	1.52	18	2	9		55	14800	1800	4210.8	4210.8				MN	
	Ash-Little River																		
	Rd NW (SR	No. 5 School Rd	Hickman Rd (SR																
	1300)	(SR 1305)	1303)	Brunswick	1.86	18	2	9		55	14800	1800	2492.1	2492.1				MN	
		Hickman Rd (SR	Mclamb Rd (SR																
	(SR 1300)	1303)	1301)	Brunswick	0.34	18	2	9		55	14200	2900	9271	9271				MN	
	Calabash Rd NW	· · · ·																	
	(SR 1300)	1301)	US 17	Brunswick	0.86	18	2	9		55	14200	2900	11250	11250				MN	
	Calabash Rd NW	Mclamb Rd (SR																	
	(SR 1300)	1301)	US 17	Brunswick	1.12	22	2	11		55	15300	4700	14071	14071				MN	
	Calabash Rd NW																		
	(SR 1300)	US 17	US 17	Brunswick	0.01	30	2	11		55	14600	4700	17354	17354				MN	
	Hickman Rd NW																		
	(SR 1303)	US 17	US 17	Brunswick	0.04	34	2	11	60	55	14600	7400	8953.5	8953.5				MN	
BRUN40027-	Hickman Rd NW		Shingletree Rd																
Н	(SR 1303)	US 17	(SR 1302)	Brunswick	1.5	22	2	11	60	55	14600	10828	16047	6889.5	16000	03A	80	MN	
	Hickman Rd NW																		
Н	(SR 1303)	(SR 1302)	DEAD-END	Brunswick	2.13	22	2	11	60	55	15300	7496.6	11678	1156.9	16600	03A	80	MN	
	Thomasboro Rd																		
	SW (SR 1304)	US 17	US 17	Brunswick	0.01	32	2	11	60	55									
	Pea Landing Rd						_												
	NW (SR 1304)	US 17	US 17	Brunswick	0.01	32	2	11	60	55		3100	6693	6693					
	Pea Landing Rd		No. 5 School Rd	<b>_</b>															
	NW (SR 1304)	US 17	(SR 1305)	Brunswick	0.4	22	2	11	60	55		3100	4034.7	4034.7					
	0	No. 5 School Rd	Catawba Ln (SR	Duran i t	0.00	00	~						0000 0	0000 0					
	NW (SR 1304)	(SR 1305)	1372)	Brunswick	0.02	22	2	11		55			3668.9	3668.9					
	Pea Landing Rd	Catawba Ln (SR	NG 004	Davis contails	0.00	40	~					1400	2000.0	2000.0					
	NW (SR 1304)	1372) Ash Little Diver Dd	NC 904	Brunswick	2.83	18	2	9		55		1400	3668.9	3668.9					
		Ash-Little River Rd (SR 1300)	Pea Landing Rd (SR 1304)	Drupowick	2 10	20	2	10	60	<b>E E</b>		450	700.00	700.00					
	NW (SR 1305)	(SK 1300)	` '	Brunswick	3.12	20	Z	10	60	55		450	709.92	709.92					
	Old Shallotte Rd NW (SR 1316)	NC 904	Mcmilly Rd (SR 1320)	Brunswick	4.44	20	2	10	60	55			2585	2585					
	Old Shallotte Rd	Mc 904 Mcmilly Rd (SR	1320)	DITILISMICK	4.44	20	2	10	00	55			2000	2000					
	NW (SR 1316)	1320)	US 17	Brunswick	0.76	20	2	10	60	55		2100	6228.9	6228.9					
	Green Bay Rd	1520)	OS 17 Old Shallotte Rd	DITILISMICK	0.70	20	2	10	00	55		2100	0220.9	0220.9					
	NW (SR 1317)	US 17	(SR 1316)	Brunswick	1.29	20	2	10		55			1341.4	1341.4					
	Mcmilly Rd NW	00 17	Tryon Rd (SR	DIGHSWICK	1.29	20	2	10		55			1041.4	1041.4					
	(SR 1320)	NC 130	1360)	Shallotte	0.54	20	2	10	60	45		1400	863.08	863.08					
	(01(1020)	10 100	1300)	Shallotte	0.04	20	2	10	00	40	I	1400	000.00	000.00		I			

Mcmilly Rd NW

Cherrytree Rd NE (SR 1406)

Cherrytree Rd

NE (SR 1406)

Green Hill Rd NE (SR 1406)

(SR 1406)

Bell Swamp Connection NE (SR 1407)

1482)

1407)

US 17

US 17

Green Hill Rd NE Green Hill Rd (SR 1410)

Bell Swamp

Connection (SR

1407)

1410)

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US 17

US 17

Green Hill Rd (SR

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Page 17 of 20

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Tryon Rd (SR

NICHIIIY RO NVV		Tryon Ra (SR														
(SR 1320)	NC 130	1360)	Shallotte	0.01	20	2	10	60	45							
Mcmilly Rd NW	Tryon Rd (SR	Old Shallotte Rd														
(SR 1320)	1360)	(SR 1316)	Brunswick	1.37	20	2	10	60	45			489	489			
Longwood Rd		Russtown Rd (SR														
NW (SR 1321)	NC 904	1315)	Brunswick	0.28	28	2	12		55		3300					
Longwood Rd		Russtown Rd (SR														
	NC 904	1315)	Brunswick	0.01	28	2	12		55			7437.3	7437.3			
Longwood Rd	Russtown Rd (SR	Hughes-Smith Rd														
		(SR 1322)	Brunswick	1.65	28	2	12		55			7437.3	7437.3			
Longwood Rd	Hughes-Smith Rd	Long Rd (SR														
	(SR 1322)	1324)	Brunswick	1.49	28	2	12		55		2900	3248.3	3248.3			
Longwood Rd	Long Rd (SR	,														
U U		NC 130	Brunswick	0.24	28	2	12		55			3248.3	3248.3			
Smith Ave (SR		Smith Ave (SR		-	-											
	US 17	1357)	Shallotte	0.09	48	4D	12	86	35		8300	7935.1	7935.1		MN	
 Smith Ave (SR															 	
	US 17	US 17	Brunswick	0.01	22	2	11		55	14600	8300	20431	20431		MN	
 Express Dr NW															 	
	US 17	US 17	Brunswick	0	22	2	11		55	14600					MN	
( )	-	US 17	Brunswick	0.21	18	2	9	60	55			474.02	474.02		 	
Randolphville Rd	00 11	Evans Rd (SR	Branswick	0.21	10	2	<u> </u>	00	00			474.02	474.02		 	
	US 17	1449)	Brunswick	0.22	20	2	10	60	45		1000	95.04	95.04			
Randolphville Rd		Johnsonville Rd	Branswick	0.22	20	2	10	00	-10		1000	50.04	00.04		 	
	1449)	(SR 1493)	Brunswick	0.13	20	2	10	60	45			95.04	95.04			
Randolphville Rd		Zims Trl (SR	DIGHSWICK	0.15	20	2	10	60-	70			30.04	35.04			
	(SR 1493)	1753)	Brunswick	1.16	20	2	10	320	45			95.04	95.04			
Randolphville Rd		1755)	DIGHSWICK	1.10	20	2	10	520	70			30.04	35.04			
	1753)	US 17	Brunswick	0.06	20	2	10	60	45			95.04	95.04			
Randolphville Rd		03 17	DITILISMICK	0.00	20	2	10	00	45			95.04	95.04		 	
	US 17	US 17	Brunswick	0.02	20	2	10	60	55			36.482	36.482			
Bell Swamp Rd	03 17	03 17	DIUIISWICK	0.02	20	2	10	00	55			30.402	JU.402		 	
	US 17	US 17	Brunswick	0.02	20	2	10	60	55			278.65	278.65			
NE (3R 1400)		Bell Swamp	DITILISMICK	0.02	20	2	10	00	55			270.00	278.05		 	
Bell Swamp Rd		Connection (SR														
	US 17	1407)	Brunswick	0.72	20	2	10	60	55		320	516.1	516.1			
· · · ·	Bell Swamp	1407)	DIUIISWICK	0.72	20	Z	10	00	55		320	510.1	510.1			
		Potterfield Rd (SR														
	1407)	1482)	Brunswick	5.54	20	2	10	60	55			0	0			
INE (SR 1400)	,	'	Brunswick	5.54	20	2	10	00	55			U	U	 	 	
Charnetrae Dd		Bell Swamp Connection (SR														
,		Connection (SR	Dense and als	0.50	~~	0	40	<u> </u>	45			0	0			

(	Green Hill Rd NE	Town Creek Rd	Maultsby Rd (SR														
`	(SR 1410)	(SR 1413)	1409)	Brunswick	4.3	20	2	10		55			0	0			
	Green Hill Rd NE	, ,	Rock Creek Rd														
	· /	1409)	(SR 1411)	Brunswick	0.05	20	2	10		55			1814.9	1814.9			
	Green Hill Rd NE		Green Hill Rd (SR														
	(SR 1410)	(SR 1411)	1406)	Brunswick	1.63	18	2	9		55			1814.9	1814.9			
	-	Zion Church Rd	Old Town Creek														
	( /	(SR 1701)	Rd (SR 1412)	Brunswick	0.67	18	2	9		45		1200					
	-	Old Town Creek	Rock Creek Rd														
	( /	Rd (SR 1412)	(SR 1411)	Brunswick	0.39	18	2	9		45							
		Rock Creek Rd	Sandy Ridge Way				-	-									
	NE (SR 1413)	(SR 1411)	(SR 1735)	Brunswick	1.29	18	2	9		45		1800					
		, , ,	Green Hill Rd (SR				-										
	NE (SR 1413)	(SR 1735)	1410)	Brunswick	2.89	20	2	10		55							
		Green Hill Rd (SR					-	-									
		1410)	Brunswick	Brunswick	6.26	18	2	9		55							
	Northwest Rd	110 74	Mt. Misery Rd (SR	N I - with 1	4 70	~~	~			4-	44400	0400					
```	( - )	US 74	1426)	Northwest	1.72	22	2	11		45	14100	3100				MN	
		Mt. Misery Rd (SR		N La setter de la	0.00	~~	~			45	44400	0400					
```		1426) Dive Denka Leen	Rd (SR 1422)	Northwest	0.66	22	2	11		45	14100	2100				MN	
		Blue Banks Loop	Port Royal Rd (SR	Manthuract	1 14	24	0	10		45	14000	2100				MANI	
```		Rd (SR 1422)	1420)	Northwest	1.41	24	2	12		45	14600	2100				MN	
		Port Royal Rd (SR	<b>D</b>	<b>D</b>	0.47	~ 1	•	40			40.400	0400					
`		1420)	Brunswick	Brunswick	0.17	24	2	12		55	16400	2100				MN	
	Northwest Rd NE	<b>D</b>	Fertilizer Rd (SR		•	~ 1	•	40			10100	0400					
`	( - )	Brunswick	1820)	Columbus	0	24	2	12		55	16400	2100				MN	
		Vernon Rd (SR	Goose Neck Rd							~-		1000					
	( /	1423)	(SR 1421)	Northwest	0	18	2	9	60	35		1800					
	Mt. Misery Rd	```	Vernon Rd (SR	<b>N</b> <i>U U</i>	0.00		•			45	4.4.400	4500					
`		1419)	1423)	Northwest	0.23	22	2	11	60	45	14100	1500				MN	
		Vernon Rd (SR	Blue Banks Loop	<b>D</b>		~~	•			45	44400	4500					
`	(SR 1426)	1423)	Rd (SR 1422)	Brunswick	1.5	22	2	11	60	45	14100	1500				MN	
	Gilbert Rd SE		Clemmons Rd (SR	<b>D</b>	4.00		•	40				000	04044	04044			
`		NC 906	1504) Diaglata ang Dal	Brunswick	1.39	20	2	10	60	55		660	21011	21011			
		Clemmons Rd (SR		Davasavial	2.20	20	2	10	60	66			17010	17010			
	( )	1504) Blackbauge Dd	(SR 1503)	Brunswick	2.39	20	2	10	υu	55			17818	17818			
	-	Blockhouse Rd	Benton Rd (SR	Drupoviale	10	20	0	10	60	E F		1400	17000	17000			
``	(SR 1501) Gilbert Rd SE	(SR 1503) Benton Rd (SR	1502)	Brunswick	1.2	20	2	10	υu	55		1400	17926	17926			
	-	1502)	US 17	Brunswick	0.58	20	2	10	60	55			17926	17926			
`	· /	Gilbert Rd (SR	Clemmons Rd (SR	DITILISMICK	0.00	20	2	10	00	00			17920	1/920			
		Glibert Ra (SR 1501)	Clemmons Rd (SR 1505)	Brunswick	1.28	20	2	10		55			2191	2191			
	```	Clemmons Rd (SR	1505)	DIGUISWICK	1.20	20	4	10		55			2131	2191			
		1505)	NC 211	Brunswick	2.97	20	2	10	60	55		550	0	0			
		Clemmons Rd (SR	10211	DIGIISWICK	2.31	20	4	10	00	55		550	0	0			
	SE (SR 1505)	1504)	NC 211	Brunswick	1.3	20	2	10		55		650	2191	2191			
	Danford Rd SE	(+001	10211	DIGIISWICK	1.5	20	2	10		55		000	2131	2131			
		NC 87	US 17	Brunswick	3.1	18	2	9		55			347.94	347.94			
`	Mill Creek Rd SE		00 17	DIGIISWICK	0.1	10	4	3		55			577.34	571.34			
	-	US 17	US 17	Brunswick	0.02	18	2	9		55			932.14	932.14			
1		00 17	00 17	DIGUISWICK	0.02	10	4	э		55			JJZ. 14	552.14			
`	Funston Rd SE		E. Boiling Spring														

	Funston Rd SE	E. Boiling Spring	Jack And Jill Way									1							
	(SR 1521)	Rd (SR 1539)	(SR 1570)	Brunswick	0.51	20	2	10		55			2179.3	2179.3					
	Funston Rd SE (SR 1521)	Jack And Jill Way (SR 1570)	Daws Creek Rd (SR 1518)	Brunswick	0.98	20	2	10		55		940	2179.3	2179.3					
BRUN40026- H	Governors Rd SE (SR 1521)	Daws Creek Rd (SR 1518)	Lee Buck Rd (SR 1519)	Brunswick	2.22	18		9	60	55		1200	1807.8	1807.8	16400	020	80	MN	В
BRUN40026- H	Governors Rd SE (SR 1521)	Lee Buck Rd (SR 1519)	Gordon Lewis Dr (SR 1567)	Brunswick	1.48	18		9	60	55				1807.8	16400	020	80	MN	в
	· ,	Gordon Lewis Dr (SR 1567)	US 17	Brunswick	1.39	20	2	10	60	55		690							
	Governors Rd SE	Gordon Lewis Dr	US 17			20	2	10	60	55		030							
BRUN50036	(SR 1521) Jabbertown Rd	(SR 1567)	E. Leonard St (SR	Brunswick	0.02	20	Z	10	60	55									
H	(SR 1526)	NC 87	1527)	Southport	0.79	22	2	11	60	35	10600	5001.4	7587.3	11806	13200	03A	80	MN	
	E. Leonard St	E. Moore St (SR	Rob Gandy Blvd	oounport	0.13	22	2		00	55	10000	5001.4	1301.5	11000	10200	004	00	IVIIN	
	(SR 1527)	1528)	(SR 1620)	Southport	0.62	22	2	11		55		1100	6643.5	6643.5					
	E. Leonard St	Rob Gandy Blvd	Jabbertown Rd	ooumport	0.02	~~	2			00		1100	0040.0	0040.0					
	(SR 1527)	(SR 1620)	(SR 1526)	Southport	0.31	22	2	11		35		1100	6643.5	6643.5					
	E. Leonard St	Jabbertown Rd	( /	•															
	(SR 1527) E. Moore St (SR	(SR 1526)	NC 211 E. Leonard St (SR	Southport	1.05	18	2	9		35		1300	855.13	855.13					
	1528)	NC 211	1527)	Brunswick	0.87	22	2	11		55		290	5388.7	5388.7					
н	E Boiling Spring Rd (SR 1539)	Governors Rd (SR 1521)	NC 87	Boiling Spring Lakes	3.41	18	2	9	60	45	13100	5711.7	10522	12921	16400	02M		MN	м
	E Boiling Spring Rd (SR 1539)	Governors Rd (SR 1521)	NC 87	Boiling Spring Lakes	2.04	18	2	9	60	45	13100	3968.7	5363	6137.5	16400	02A		MN	М
	Antenna Farm																		
H150504	Rd SE (SR 1572)	Lewis Loop Rd (SR 1506)	Antenna Farm Rd (SR 1572)	Boiling Spring Lakes	0.22									9749.8	16400	02M	90	MN	м
	Dosher Cut-Off (SR 1621)	NC 211	NC 87	Brunswick	0.59	22	2	11	60	45	12300	3600	7736.4	7736.4				MN	
	None (SR 1621)	NC 211	NC 87	Brunswick	0	22	2	11		45	12300	3600	7736.4	7736.4				MN	
	Zion Church Rd			Dianomon	•		-												
	NE (SR 1701)	US 17	US 17 Town Crook Dd	Brunswick	0.02	20	2	10	100	55									
	Zion Church Rd NE (SR 1701)	US 17	Town Creek Rd (SR 1413)	Brunswick	0.01	20	2	10	100	55									
	Long Beach Rd SE (SR 1969)	NC 133	NC 211	Brunswick	0.05	48	2	12		35	10500							MN	
	Long Beach Rd SE (SR 1969)	NC 133	NC 211	Brunswick	0.22	70	4	11	50- 60	35			4984.4	4984.4					
	New Location	SR 1521																	
BRUN50041-	(Rice Creek	(Governors Road																	
н	Pkwy Ext.)	SE)	Lake Park Dr SE	Brunswick	1.74							600	1100	1100	16400	02A	60	MN	
		Antenna Farm Rd	NC 906 (Midway	Boiling Spring															
H150504	None	(SR 1572)	Rd)	Lakes	1.08									9749.8	16400	02M	90	MN	М
	Antenna Farm	Antenna Farm Rd	W. Boiling Spring	Boiling Spring										0740.0	40.400				
H150504	Rd SE	(SR 1572)	Rd	Lakes	1.15									9749.8	16400	02M	90	MN	М
BRUN50031- H	Drouton Dd	Crucial D-	Boyara Dd	Boiling Spring	0.00	10		9		20				0000 4	16400	0014	00	MIO	N 4
H BRUN50031-	Drayton Rd	Crystal Rd	Revere Rd	Lakes Boiling Spring	0.09	18		Э		30				8296.1	16400	02M	90	MJ2	М
н	Drayton Rd	Revere Rd	Pine Rd	Lakes	0.46	18		9		30				8296.1	16400	02M	90	MJ2	М
BRUN50031-				Boiling Spring															1

BRUN50032-				Boiling Spring															
н	Fifty Lakes Dr	Pinedale Rd	NC 133	Lakes	0.1	20	2	10	60	35	13400	1069.3	1793.2	1389.6	16400	02M	90	MN	М
BRUN50032-				Boiling Spring															
н	Fifty Lakes Dr	NC 87	Pinedale Rd	Lakes	2.31	20	2	10	60	35	13400	1069.3	1793.2	675.56	16400	02M	90	MN	М
			Ocean Blvd (SR																
	Ocean Blvd W	DEAD-END	1116)	Holden Beach	1.26	22	2	11		25			0	0					1
BRUN50024-	Old Georgetown	Hale Swamp Rd	Ocean Isle Beach						50-										
н	Rd SW	(SR 1154)	Rd (SR 1184)	Brunswick	1.85	24	2	12	60	55	15100	3635.6	5752	6710.1	15100	02A	60	MN	1
	W BOILING			Boiling Spring															
H150504	SPRING RD	Elk Horn Rd	Cape Fear Rd	Lakes	1.31									9749.8	16400	02M	90	MN	М
	W BOILING			Boiling Spring															
H150504	SPRING RD	NC 87	Elk Horn Rd	Lakes	0.88									9749.8	16400	02M	90	MN	М
	W BOILING			Boiling Spring															
H150504	SPRING RD	Cape Fear Rd	Druid Rd	Lakes	1.07									9749.8	16400	02M	90	MN	М
BRUN20002-																			
н		US 17/ US 17 Bus	US 17/ NC 87	Brunswick	19.4									19094	63500	04A	300	F	1
		South Carolina																	
H090237-A		State Line	US 17	Brunswick	15.5									4465.1	63500	04A	300	F	i '

An asterisk (\*) in the Proposed System Cross-Section column indicates that a capacity deficiency has been identified, but no future proposal or improvement to the cross-section has been recommended for the roadway segment.

Interchanges

### INTERSECTIONS

			INTERSECT	IONS			
				Exis	sting	Prop	osed
Local ID	Facility	Intersecting Facility	Jurisdiction	Туре	Number	Structure Status	Facility Type
BRUN20089-H	R-5876	BISHOP ROAD	BRUNSWICK	INTERCHA NGE		New Location	Interchange
BRUN20090-H	R-5876	UNNAMED ROAD	BRUNSWICK	INTERCHA NGE		New Location	Interchange
BRUN20091-H	R-5876	NC904	BRUNSWICK	INTERCHA NGE		New Location	Interchange
BRUN20092-H	R-5876	US17	SHALLOTTE	INTERCHA NGE		New Location	Interchange
H184129	NC130	SR1134	BRUNSWICK	INTERSECT ION		Improve	Intersection
BRUN40047-H	SR1130	SR1129	BRUNSWICK	INTERSECT ION		Improve	Intersection
BRUN40048-H	SR1506	FARMER WARDS LANE	BRUNSWICK	INTERSECT ION		New Location	Intersection
BRUN40049-H	SR1572	SR1506	BRUNSWICK	INTERSECT ION		New Location	Intersection
BRUN30050-H	NC906	SR1501	BRUNSWICK	INTERSECT ION		New Location	Intersection
BRUN20051-H	US17	SR1357	SHALLOTTE	INTERCHA NGE		New Location	Interchange
H141790	US17	US17B	BRUNSWICK	INTERCHA NGE		New Location	Interchange
H090293-J	US17	US17B	BRUNSWICK	INTERSECT ION		Improve	Intersection
BRUN20054-H	US17B	WALL STREET	SHALLOTTE	INTERSECT ION		Improve	Intersection
H090293-C	US17	NC904	BRUNSWICK	INTERSECT ION		Improve	Intersection
BRUN20057-H	US17	NC211	BRUNSWICK	INTERCHA NGE		New Location	Interchange
H184088	NC130	SR1130	BRUNSWICK	INTERSECT ION		Improve	Intersection

			CAROLINA	INTERSECT		
BRUN30072-H	NC179	SR1165	SHORES	ION	Improve	Intersection
				INTERSECT		
BRUN20063-H	US17	SR1303	BRUNSWICK		Improve	Intersection
BRUN20064-H	US17	PEA LANDING ROAD	BRUNSWICK	INTERSECT ION	Improve	Intersection
	0017	FEA EANDING ROAD	DIVOINGWICK	INTERSECT	Improve	Intersection
BRUN30069-H	NC130	SR1321	BRUNSWICK	ION	Improve	Intersection
BRUN30070-H	NC133	SAND HILL CREEK	BRUNSWICK	BRIDGE	New Location	Bridge/Overpass
				INTERSECT		2
BRUN20073-H	US17	US17B	SHALLOTTE	ION	Improve	Intersection
				INTERCHA		
H184039	NC87	NC133	BRUNSWICK	NGE	New Location	Interchange
				INTERSECT		
H184089	NC179	SR1145	BRUNSWICK	ION	Improve	Intersection
				INTERSECT		
H184091	NC130	SR1139	BRUNSWICK	ION	Improve	Intersection
				INTERSECT		
H184092	NC179	NC179	BRUNSWICK	ION	Improve	Intersection
1404000	004445	001101		INTERSECT		lutene estien
H184093	SR1115	SR1121	BRUNSWICK	ION INTERSECT	Improve	Intersection
H184094	US17B	SR1173	SHALLOTTE	ION	Improve	Intersection
H 104094	03176	381173	SHALLOTTE	INTERCHA	Improve	Intersection
H090287-G	US74-76	NC 87	BRUNSWICK	NGE	Improve	Interchange
11030207-0	0074-70		BRONOWIOR	INTERSECT	improve	Interentinge
BRUN30081-H	NC130	NC130	SHALLOTTE	ION	Improve	Intersection
				INTERSECT		
BRUN30082-H	NC130	US17	SHALLOTTE	ION	Improve	Intersection
				INTERCHA		
BRUN20083-H	I-140	US17	BRUNSWICK	NGE	New Location	Interchange
				INTERCHA		_
BRUN20084-H	NC211	I-140	BRUNSWICK	NGE	New Location	Interchange
BRUN30085-H	NC133	MOORE CREEK	BRUNSWICK	BRIDGE	New Location	Bridge/Overpass
			CAROLINA	INTERSECT		
H090293-A	US17	SR1168	SHORES	ION	Improve	Intersection
				INTERSECT		
H090293-H	US17	NC906	BRUNSWICK	ION	Improve	Intersection

				INTERSECT			
BRUN40068-H	SR1303	SR1300	BRUNSWICK	ION		New Location	Intersection
				INTERSECT			
BRUN40069-H	SR1300	SR1301	BRUNSWICK	ION		New Location	Intersection
				INTERSECT			
BRUN40070-H	SR1356	SR1302	BRUNSWICK	ION		New Location	Intersection
			CAROLINA	INTERSECT			
H171334	NC179	SR1167	SHORES	ION		Improve	Intersection
			CAROLINA	INTERSECT			
BRUN40072-H	SR1167	SR1165	SHORES	ION		Improve	Intersection
			BOILING SPRING				
BRUN30086-H	SR1539	NC 87	LAKES	ION		Existing	Intersection
BRUN30068-H	NC87	ORTON CREEK	BRUNSWICK	BRIDGE	090011	Improve	Bridge/Overpass
BRUN30065-H	NC211	DRIVING CREEK	BRUNSWICK	BRIDGE	090057	Improve	Bridge/Overpass
BRUN30071-H	NC906	SARAH HOLE	BRUNSWICK	BRIDGE	090023	Improve	Bridge/Overpass
BRUN30067-H	NC906	MIDDLE SWAMP	BRUNSWICK	BRIDGE	090104	Improve	Bridge/Overpass
				INTERSECT			
H170246	US17B	NC906	BRUNSWICK	ION		Improve	Intersection
			CAROLINA				
BRUN30062-H	NC179 BUS	CALABASH RIVER	SHORES	BRIDGE	090015	Improve	Bridge/Overpass
BRUN40056-H	SR1300	CAWCAW SWAMP	BRUNSWICK	BRIDGE	090126	Improve	Bridge/Overpass
BRUN40059-H	SR1342	MUDDY BRANCH	BRUNSWICK	BRIDGE	090100	Improve	Bridge/Overpass
BRUN40066-H	SR1357	MULBERRY BRANCH	SHALLOTTE	BRIDGE	090202	Improve	Bridge/Overpass
BRUN50058-H	SR1515	MILLS CREEK	BRUNSWICK	BRIDGE	090040	Improve	Bridge/Overpass

#### PUBLIC TRANSPORTATION AND RAIL

		PUBLIC TRANSPOR	TATION				
			Speed		Existing	Proposed	
			Limit	Distance			Other
Local ID	Facility/Corridor	Section (From - To)/Location	(mph)	(mi)	Туре	Туре	Modes
BRUN0001-T		McCray Holden Beach				Park and Ride	
BRUN0002-T		Holden Beach Public Access				Park and Ride	
BRUN0003-T		Museum of Coastal Carolina				Park and Ride	
BRUN0004-T		Sunset Beach Free Parkinç				Park and Ride	
BRUN0005-T		Oak Island Public Beach Access				Park and Ride	
BRUN0006-T		Caswell Beach Public Beach Access				Park and Ride	

	RAIL											
				Train		Existing System Propo		osed System				
				Speed	Distance		ROW	Trains		ROW	Trains	Other
Local ID	Facility/Route	Section (From - To)	Class	(mph)	(mi)	Туре	(ft)	per day	Туре	(ft)	per day	Modes
	Military Ocean Terminal Sunny											
	Point	Wilmington MPO line - MOTSU border			11.85	Current						
	Military Ocean Terminal Sunny											
	Point	MOTSU border - Bald Head Island Ferry			10.89	Current						
	CSX Transportatior	Columbus County line - Wilmington MPO line			3.45	Current						
BRUN0001-R	Carolina Lines (RJCS	Columbus County line - Wilmington MPO line			4.35				Current			
BRUN0001-R	Carolina Lines (RJCS	Wilmington MPO line - Malmc			1.86				Current			
						Other						
						Intermoda						
						I Terminal						

## **INVENTORY TABLE**

The inventory table provides information on the segments studied roads and recommendations.

#### **Assumptions/ Notes:**

- Local ID: If a TIP project number exists, it is listed as the ID. Otherwise, the following system is used to create a code for each recommended improvement: the first four letters of the county name is combined with a four-digit unique numerical code followed by '-H' for highway, '-T' for public transportation, '-R' for rail, '-B' for bicycle, '-M' for multi-use paths, or '-P' for pedestrian modes. If a different code is used along a route, it indicates separate projects will probably be requested. Also, upper case alphabetic characters (i.e. 'A', 'B', or 'C') are included after the numeric portion of the code if it is anticipated that project segmentation or phasing will be recommended.
- Jurisdiction: Jurisdictions listed are based on municipal limits, county boundaries, and MPO Metropolitan Planning Area Boundaries (MAB), as applicable.
- Existing Cross-Section: Listed under 'Total Width (ft)' is the approximate width of the roadway from edge of pavement to edge of pavement and under 'Lane Width (ft)' is the approximate width of a single lane based on centerline/ edge line markings. Listed under 'Lanes' is the total number of lanes, with 'D' if the facility is divided, and 'OW' if it is a one-way facility.
- Existing ROW: The estimated existing right-of-way is based on GIS estimates. These right-of-way amounts are approximate and may vary.
- Existing and Proposed Capacity: The estimated capacities are given in vehicles per day (vpd) based on LOS D for existing facilities and LOS C for new facilities. These capacity estimates were developed based on the 2000 Highway Capacity Manual using the Transportation Planning Division's LOS D Standards for Systems Level Planning.
- Existing and Proposed Volumes, given in vehicles per day (vpd), are estimates only based on a systems level analysis. The '2045 Volume E+C' is an estimate of the volume in 2045 with only existing plus committed projects assumed to be in place, where committed is defined as projects programmed for construction in the 2020 2029 Transportation Improvement Program (TIP). The '2045 Volume with CTP' is an estimate of the volume in 2045 with all proposed CTP improvements assumed to be in place. The '2045 Volume with CTP' is shown in bold if it exceeds the proposed capacity, indicating an unmet need. For more information about the assumptions and techniques used to develop the AADT volume estimates, refer to the Multimodal Analysis Appendix.
- **Proposed Cross-section:** The CTP recommended cross-sections are listed by code; for depiction of the cross-section. An entry of 'ADQ' indicates the existing facility is adequate and there are no improvements recommended for the given mode as part of the CTP.
- \*Proposed System Cross-Section column indicates that a capacity deficiency has been identified, but no future proposal or improvement to the cross-section has been recommended for the roadway segment. See the Unaddressed Deficiencies for more information.
- **CTP Classification:** The CTP classification is listed, as shown on the adopted CTP Maps. Abbreviations are F= freeway, E= expressway, B=boulevard, MJM= multi-lane major thoroughfare, MJ2= Two-lane major thoroughfare, MN=minor thoroughfare.
- **Proposals for Other Modes:** If there is an improvement recommended for another mode of transportation that relates to the given recommendation, it is indicated by an alphabetic code (H= highway, T= public transportation, R= rail, B= bicycle, P= pedestrian, and M= multi-use path).

## **FISCAL REALISM**

Fiscal Realism is an optional local dialogue initiated by the Rural Planning Organization to identify unrealistic CTP Proposals that might have adverse financial effects on future local planning decisions, activities, or needs. RPOs are responsible for conducting this process, which is optional.

[Insert discussion on recommendations that Fiscal Realism was considered. Remove Section if not used] Sent this to Patrick – waiting to hear back

## **APPROVALS/RESOLUTIONS**

The following pages contain copies of adoption resolutions of the Brunswick County CTP.

NC State Statute 136-66.2 requires that "After completion and analysis of the plan, the plan shall be adopted by both the governing body of the municipality or MPO and the Department of Transportation as the basis for future transportation improvements in and around the municipality or within the MPO"

[Insert Resolutions have not been received yet]



## **CONTACT INFORMATION**

North Carolina Department of Transportation

#### **Customer Service Office**

Contact information for other units within the NCDOT that are not listed in this appendix is available by calling the Customer Service Office or by visiting the NCDOT homepage:

1-877-DOT-4YOU (1-877-368-4968)

https://apps.dot.state.nc.us/dot/directory/authenticated/ToC.aspx

#### **Secretary of Transportation**

(919) 707-2800 Raleigh, NC 27699-1501

#### **Board of Transportation Member**

1578 Mail Service Center (910) 675-9510 Raleigh, NC 27699-1578 Bot-lgzimmer@ncdot.gov

#### **Highway Division Engineer**

Contact the Division Engineer with general questions concerning NCDOT activities within each Division and for information on Small Urban Funds.

(910) 341-2001 5501 Barbados Blvd Castle Hayne, NC 28249

#### **Division Construction Engineer**

Contact the Division Construction Engineer for information concerning major roadway improvements under construction.

(910) 341-2000 5501 Barbados Blvd Castle Hayne, NC 28249

#### **Division Traffic Engineer**

Contact the Division Traffic Engineer for information concerning traffic signals, highway signs, pavement markings and crash history.

5504 Barbados Blvd

(910) 341-2000 Castle Hayne, NC 28429

NCDOT - BRUNSWICK COUNTY COMPREHENSIVE TRANSPORTATION

#### **Division Maintenance Engineer**

Contact the Division Maintenance Engineer information regarding maintenance of all state roadways, improvement of secondary roads and other small improvement projects. The Division Maintenance Engineer also oversees the District Offices, the Bridge Maintenance Unit, and the Equipment Unit.

(910) 341-2000 5501 Barbados Blvd. Castle Hayne, NC 28429

#### **District Engineer**

Contact the District Engineer for information on outdoor advertising, junkyard control, driveway permits, road additions, subdivision review and approval, Adopt-A-Highway program, encroachments on highway right of way, issuance of oversize/over width permits, paving priorities, secondary road construction program and road maintenance.

(910) 398-9100 5501 Barbados Blvd Castle Hayne, 28429

#### **Transportation Planning Division (TPD)**

Contact the Transportation Planning Division for information on long-range multi- modal planning services.

1554 Mail Service Center(919) 733-4705Raleigh, NC 27699-1554<a href="http://www.ncdot.gov/doh/preconstruct/tpb/">http://www.ncdot.gov/doh/preconstruct/tpb/</a>

#### **Cape Fear Rural Planning Organization (RPO)**

Contact the RPO for information on long-range multi-modal planning services.

1480 Harbour Dr (910) 395-4553 Wilmington, NC 28401 https://capefearcoq.org/rpo/

#### **Strategic Prioritization Office**

Contact the Strategic Planning Office for information concerning prioritization of transportation projects. 1501 Mail Service Center (919) 7107-2858 Raleigh, NC 27699-1501 <u>https://apps.dot.state.nc.us/dot/directory/authenticated/UnitPage.aspx?id=11054</u>

#### **Environmental Policy Unit (EPU)**

Contact PDEA for information on environmental studies for projects that are included in the TIP. 1548 Mail Service Center Raleigh, NC 27699-1548 https://connect.ncdot.gov/resources/Environmental/EPU/Pages/default.aspx

NCDOT - BRUNSWICK COUNTY COMPREHENSIVE TRANSPORTATION

#### **Division of Planning and Programming**

Contact the Program Development Branch for information concerning Roadway Official Corridor Maps, Feasibility Studies, and the Transportation Improvement Program (TIP). 1534 Mail Service Center Raleigh, NC 27699-1534 (919) 733-2039

http://www.ncdot.org/planning/development/

#### Integrated Mobility Division (IMD)

Contact this Division for information public transit systems. 1550 Mail Service Center Raleigh, NC 27699-1550 (919) 707-2600 <u>https://www.ncdot.gov/divisions/integrated-mobility/Pages/default.aspx</u>

#### **Rail Division**

Contact the Rail Division for rail information throughout the state. 1553 Mail Service Center Raleigh, NC 27699-1553 (919) 733-7245 <u>https://www.ncdot.gov/divisions/rail/Pages/default.aspx</u>

#### Integrated Mobility Division (IMD)

Contact this Division for bicycle and pedestrian transportation information throughout the state. 1550 Mail Service Center Raleigh, NC 27699-1552 (919) 707-2600 <u>https://www.ncdot.gov/divisions/integrated-mobility/Pages/default.aspx</u>

#### **Bridge Maintenance Unit**

Contact the Bridge Maintenance Unit for information on bridge management throughout the state. 1565 Mail Service Center Raleigh, NC 27699-1565 (919) 733-4362 <u>http://www.ncdot.gov/doh/operations/dp\_chief\_eng/maintenance/bridge/</u>

#### **Division of Highways**

The Division of Highways consists of the Roadway Design, Structure Design, Photogrammetry, Location & Surveys, Geotechnical, and Hydraulics Units. Contact the Highway Design Branch for information regarding design plans and proposals for road and bridge projects throughout the state.

1536 Mail Service Center Raleigh, NC 27699-1536

(919) 733-9428

http://www.ncdot.gov/doh/preconstruct/highway/

NCDOT - BRUNSWICK COUNTY COMPREHENSIVE TRANSPORTATION

#### **Other State Government Offices**

Department of Commerce – Division of Community Assistance

Contact the Department of Commerce for resources and services to help realize economic prosperity, plan for new growth and address community needs.

http://www.nccommerce.com/en/CommunityServices/

## **DEFINITIONS AND RESOURCES**

This appendix provides definitions and resources used in the Comprehensive Transportation Plan and other parts of its appendix.

## **Resources covered in this section include:**

- → <u>Acronyms and Definitions</u>
- → Additional Plans and Studies
- → Facility Type and Level of Service
- → Typical Sections

### ACRONYMS

AADT - Average Annual Daily Traffic AADTT - Average Annual Daily Truck Traffic ACS - American Community Survey ADT - Average Daily Traffic AGR - Annual Growth Rate **BLS** - Bureau of Labor Statistics **BOT** - Board of Transportation **CIA** - Community Impact Assessment **CMAQ** - Congestion Mitigation and Air Quality **COE** -Army Corps of Engineers COG - Council of Government **CUR** - Community Understanding Report DAQ - Division of Air Quality **DOT** - Department of Transportation DWQ - Division of Water Quality **EPU** – Environmental Policy Unit FHWA - Federal Highway Administration FY - Fiscal Year begins July 1st **GIS** - Global Positioning System G&O - Goals and Objectives HOV - High Occupancy Vehicle **IAG** - Interagency Agreement **IMD** - Integrated Mobility Division **IPD** - Integrated Project Delivery **LEP** - Limited English Proficiency LOS - Level of Service LPA - Lead Planning Agency LPO - Local Planning Organization **LEDPA** - Least Environmentally Damaging **Practical Alternative** 

LRTP - Long-Range Transportation Plan **MPO** - Metropolitan Planning Organization **MSTA** - Municipal School Transportation Assistance MTP – Metropolitan Transportation Plan NCDOT - North Carolina Department of Transportation **NEPA** - National Environmental Policy Act **OSBM** - Office of State Budget and Management **PAB** - Planning Area Boundary **PDE** - Project Development Engineer PDEA - Project Development and **Environmental Analysis** PE - Project Engineer **PHFS** - Primary Highway Freight System PI - Public Involvement **PIP** - Public Involvement Plan **RPO** - Rural Planning Organization ROW - Right of Way SEPA - State Environmental Policy Act for North Carolina STC - Strategic Transportation Corridors **STIP** - Statewide Transportation Improvement Program TAZ - Transportation Analysis Zone **TDM** - Travel Demand Model **TIP** - Transportation Improvement Program **TPD** - Transportation Planning Division VPD - Vehicles Per Day

For additional Acronyms please refer to the links section of the CTP planning website:

https://connect.ncdot.gov/projects/planning/Pages/TransPlanManualCTP.aspx

NCDOT - BRUNSWICK COUNTY COMPREHENSIVE TRANSPORTATION

PLAN142

**E** Section Contents

## **GENERAL DEFINITIONS**

CTP Recommendation Maps				
Existing	Facilities that are not recommended to be improved.			
Improve	Facilities that need to be improved for capacity, safety, operations, or system continuity. These facilities have a project recommendation in the CTP.			
New Location	Facilities on new locations that are needed in the future. These facilities have project recommendations in the CTP.			
Highway Incidentals	Highway Incidentals are highway proposals that include a bicycle, pedestrian, or public transit recommendations within its project proposalscope. It is denoted on non-highway recommendation maps with a "star" ★ icon.			

CTP Project She	et	
Local ID	A project ID to help identify each proposal. If a TIP project number exists, it is listed as the ID. If a different code is used along a route, it indicates separate projects will probably be requested. Also, upper case alphabetic characters (i.e. 'A', 'B', or 'C') are included after the numeric portion of the code if it is anticipated that project segmentation or phasing will be recommended.	
Identified Need	Need describes the key problem(s) to be addressed and explains the underlying causes of those problems.	
Purpose	Purpose states why the project is being proposed and articulates thepositive outcomes that are intended.	
Typical Section Options	Typical Sections are the selected "cross-sections" in long range planning that satisfy the purpose and "Identified need" for the project.	
ROW	The real property (land and improvements) and rights therein acquired for public use to construct highways for the betterment and safety of the public.	
Estimated Cost	A planning level estimate of the cost of the given project.	
Safety Risk Score	Planning level safety value based on three components: 1) Class Density Ratio – The crash density of the study area versus the average crash density of similar facilities; 2) Severity Index; and 3) Critical Crash Rate Ratio – The actual crash rate for the study area versus the critical crash rate. Areas with the higher scores are considered to have the poorer highway safety performance.	
Travel Lanes	Lanes that facilitate through movements.	
Volume (AADT)	Annual Average Daily Traffic is an estimate of the average daily volume for all days of the year for all lanes of travel at a location.	

Capacity	The number of vehicles that can pass a given point per day during ideal
	traffic conditions that can be attained. These are dependent on the target
	level of service.

Highway			
Facility Types	Facility types are a way to categorize the roadway. The definitions are primarily based on the function of the roadway, level of mobility and access, and whether the facility has traffic signals, driveways, and/or medians. For a more detailed explanation of each facility type, see the Facility Types & Control Access Definitions section.		
Freeways	A facility with high mobility and low access. It is designated as either an Interstate or a Freeway. Freeways typically has a minimum of four lanes witha continuous median and no driveway connections.		
Expressways	A facility with high mobility and low to moderate access. It is designated as an arterial and typically has a minimum of four lanes with a median.		
Boulevards (Multilane Divided)	A facility with moderate mobility and low to moderate access. It is designated as either an arterial or a collector. Boulevards typically have a minimum of four lanes with a median.		
Multilane Major (Undivided)	A facility with moderate to low mobility and high access. It is designated as either an arterial or a collector. Multilane Major Thoroughfares typically have a minimum of four lanes with no median. Some of them have two way left turn lanes.		
Two Lane Major Thoroughfares	A facility with moderate to low mobility and high access. It is designated as a collector or a local road. Two Lane Major Thoroughfares typically have twoto three lanes, with or without a median. Some of them have two way left turn lanes.		
Minor Thoroughfare	A facility with moderate to low mobility and high access. It is designated as a collector or a local road. Minor Thoroughfares typically have a minimum of two lanes without a median. Some of them have two way left turn lanes.		
Interchange	Through movement on intersecting roads is separated by a structure. Turning movement area accommodated by on/off ramps and loops.		
Bridge/Overpass	A grade separation between two facilities. Through movement on intersecting roads is separated by a structure. There is no direct access between the facilities.		
Intersection	A point of where two roads intersect. Intersection improvements improve traffic flow by modifying the existing intersection.		
Congestion & Mobility	Congestion relates to an excess of vehicles on a portion of roadway at a particular time resulting in speeds that are slower than normal or "free flow" speeds; defined as the existing annual average daily traffic (AADT) divided by the capacity of the roadway. Mobility is the ability of people and goods to move freely and easily. Improvements include but are not limited to adding lanes, convert roadway to superstreet or identifying an alternative roadway on an existing or new location route.		

Access Management & Operations Enhancing capacity and safety through the regulation of interchang intersections, driveways, and median openings in a roadway. Opera include management of systems (roadways, transit, rail, etc.), daily safety, and maintenance.	
Modernization	Improving a roadway to current design standards considered up to 12' wide lanes and 2' shoulders. Wider pay shoulders may be utilized for bicycle improvements.
Other Highway Improvements	Improving a roadway to provide a benefit not limited to, safety and/or economic development, etc.

Public Transport	tation and Rail		
Urban Fixed Bus	Transit services in urban areas that can provide local service.		
Corridors	<ul> <li>Fixed Routes – Local: provides service to every stop along the route.</li> <li>Fixed Routes – Express: Does not provide service every stop along the route.</li> <li>Bus on Shoulder (BOSS): Specific routes designated to bypass</li> </ul>		
	<ul> <li>congested traffic areas.</li> <li>Bus Rapid Transit Busways that operate in rapid transit highway corridors</li> </ul>		
Rural Fixed Bus	Transit services in rural areas that can provide local service.		
Corridors	<ul> <li>Deviated Fixed Routes – A hybrid between a fixed route and demand response. Bus stops at fixed points on a schedule but can deviate between spots to go to specific locations on request.</li> </ul>		
Regional Fixed       Regional services between Local and regional providers and transportation authorities.			
Fixed Guideway			
Amtrak/Freight Route	A combined route that is used by passenger train traffic and freight train traffic.		
Current railroad	<ul> <li>Locations of railroad tracks that are either active or inactive tracks. These tracks were used for either freight or passenger service.</li> <li>Active – rail service is currently provided in the corridor; may include freight and/or passenger service.</li> <li>Inactive – right of way exists; however, there is no service currently provided; tracks may or may not exist.</li> </ul>		
	<ul> <li>Recommended – It is desirable for future rail to be considered to serve an area.</li> </ul>		
Transit Facility	A facility that denotes a junction utilized for transit services. This covers multi-modal passenger facilities as well as administrative/maintenance facilities.		

Amtrak Station	A station for Amtrack passenger rail service.		
Park and Ride A strategically located parking lot that provides commuters conne			
Lot	transit or carpools.		
Intermodal Terminal	A facility that allows more than one mode of transportation meet such as where light rail and a bus route come together in one location. (NOTE- intermodal refers to two or more modes that transfer the same cargo unit- like 40' shipping container from ship to train or truck); multimodal is the transfer of people/cargo between two or more modes and in NC is used in public transit settings i.e. Charlotte Multimodal Station).		

Bicycle and Pede	estrian
Bicycle Lane or Buffered Lane Facility (On- road)	A Bicycle Lane or Buffered Lane is the portion of the roadway designated for preferential or exclusive use by bicyclists. Bicycle lanes are one-way facilities that typically carry bicycle traffic in the same direction as adjacent motor vehicle travel. Bicycle lanes may be enhanced with a longitudinal marked buffer area for more separation distance and are typically located in lower speed areas and/or within municipalities.
Separated Bicycle Facility (Off- road)	A facility for exclusive use by bicyclists that is located within or directly adjacent to the roadway and is physically separated from motor vehicle traffic with a vertical element. Separated bicycle facilities are typically in higher speed or rural areas both inside and outside of city and town municipal limits).
Shared Lane Marking (On- road)	Pavement marking symbol used to provide a higher level of guidance to bicyclists and alert motorists of the presence of bicyclists in the roadway. A shared lane marking is a bicycle accommodation and not a dedicated bicycle facility, typically within city and town municipal limits).
Paved Shoulders - for bicycles use (On-road)	Extension of pavement adjacent to the roadway. Paved shoulders are most often used on rural roadways. In addition to being used by bicyclists, paved shoulders provide temporary space for disabled vehicles. A paved shoulderis a bicycle accommodation and not a dedicated bicycle facility.
Multi-Use Path	A multi-use path is a multi-modal facility that can be used by bicyclists and pedestrians, located anywhere, functions independent of a roadway improvement, and physically separated from motorized vehicular traffic byan open space or barrier outside the roadway Right-of-way, but inside independent Rights-of-Way.
Side-Path	A side path is-modal facility that can be used by bicyclists and pedestrians constructed along a roadway, within the roadway right of way.
Sidewalk	A Sidewalk is a paved portion of the street between the curb lines or lateral lines of a roadway, and the adjacent property lines, intended for use by pedestrians.

## **ADDITIONAL PLANS AND STUDIES**

#### **Existing Transportation Plans**

The following plans for areas within the county that were incorporated as a part of this plan is listed below and may be viewed on the web. Refer to them for detailed descriptions of recommendations that were not documented as a part of this report.

#### 2040 Brunswick County Comprehensive Transportation Plan

The previous Brunswick County CTP was used to help inform projects and how conditions have changed.

Recommendations made in the previous CTP were revisited as a part of the current one. (https://connect.ncdot.gov/projects/planning/Pages/CTP-

Details.aspx?study\_id=Brunswick%20County BrunswickCTP\_Report.pdf)

#### Cape Fear Moving Forward 2045 Metropolitan Transportation Plan

Cape Fear Moving Forward 2045 will be the plan used by federal, state, and local governments to guide transportation projects in our region over the next 25 years. <u>https://www.wmpo.org/mtp/</u>

#### The East Coast Greenway Plan

The East Coast Greenway is a walking and biking route stretching 3,000 miles from Maine to Florida, connecting our nation's most populated corridor. The East Coast Greenway is designed to transform the 15 states and 450 communities it connects through active and healthy lifestyles, sustainable transportation, community engagement, climate resilience, tourism, and more. The Greenway offers a safe place for bicyclists, walkers, runners, and more — of all ages and abilities — to commute, exercise, and visit new destinations. <u>https://www.greenway.org/states/north-carolina</u>

#### Vision 2025 Framework for the Future Bald Heath Island, NC

This plan was created to guide infrastructure and community investments. To provide a framework for island-wise strategic planning. <u>https://villagebhi.org/wp-content/uploads/2020/07/vision2025.pdf</u>

#### **Boiling Spring Lakes Comprehensive Land Use Plan**

The plan includes demographics based on census data, future population projections, and polices and priorities based on current conditions. <u>https://www.cityofbsl.org/planning-zoning-department/comprehensive-land-use-plan</u>

## "2018 – 2023 Parks, Recreation and Open Space Master Plan" for the City of Boiling Spring Lakes, NC

https://www.cityofbsl.org/sites/default/files/uploads/departments/parks-rec/2018/2018plan/master\_plan\_adopted\_2018.8.14.pdf

#### Military Ocean Terminal Sunny Point, Joint Land Use Study (MOTSU)

Military Ocean Terminal Sunny Point (MOTSU) is the largest military terminal in the world, the key ammunition shipping point on the Atlantic Coast, the Army's primary east coast deep-water port, and one of a handful of Department of Defense terminals equipped to handle containerized ammunition. It serves as a transfer point between rail, trucks, and ships for the import and export of weapons, ammunition, explosives and military equipment for United States Army and is operated by the 596th Transportation Brigade.

https://capefearcog.org/sunnypoint/

#### **Brunswick County Agriculture Development Plan**

Brunswick County's economy and culture have been historically centered on agriculture. Even after decades of rapid residential and commercial growth, agriculture continues to have a strong positive influence on the local economy and culture in Brunswick County and the Cape Fear Region.

http://www.brunswickcountync.gov/wp-content/uploads/2021/01/Ag-Plan-Final-to-Printer.pdf

#### **Brunswick Transit System Community Connectivity Plan**

The purpose of this Community Connectivity Plan (CCP) is to describe the current performance and service area trends of the Brunswick Transit System (BTS), evaluate needs and opportunities to enhance mobility in Brunswick County, investigate opportunities for additional regional coordination, and recommend strategies for enhancing mobility over a 5-year planning horizon.

#### Brunswick CAMA CORE Land Use Plan

The Brunswick County CAMA CORE Land Use Plan is a local land use planning document that provides a collection of policies and maps that serves as a community's blueprint for future growth.

<u>https://www.brunswickcountync.gov/planning/ordinances-</u> plans/lup/#:~:text=The%20Brunswick%20County%20CAMA%20CORE,by%20the%20Coastal%20 <u>Resources%20Commission</u>.

#### **Cape Fear Regional Bicycle Plan**

The purpose of the plan is to identify opportunities and constraints for bicycling in the Cape Fear region, and to establish recommendations for improvement. <u>https://capefearcog.org/regionalbikeplan/</u>

#### Strategic Plan for Town of Caswell Beach

https://caswellbeach.org/wp-content/uploads/2016/09/Strategic-Plan-2015.pdf

#### Sunset Beach Bicycle Pedestrian Plan

For many years the Town Council has been discussing and planning for a bicycle and pedestrian path within Town limits.

https://www.sunsetbeachnc.gov/index.asp?SEC=332BBF80-9E4A-4DE5-BD31-66AAEC76A3F8&Type=B\_BASIC

#### Sunset Beach Land Use Plan

The CAMA Land Use Plan is the future growth plan for the Town of Sunset Beach. <u>https://www.sunsetbeachnc.gov/index.asp?SEC=4DA9C87A-38F3-4529-BF14-</u> <u>FE897C4FF175&Type=B\_BASIC</u>

#### Town of Shallotte 2018 Land Use Plan

In August 2016, the Town of Shallotte Planning Board began the process of updating their Land Use Plan. The resulting plan includes demographics based on census data, future population projections, and policies and priorities based on current conditions. The Town's primary concerns are enhancing economic opportunities, preserving its family-friendly character, and maintaining its existing natural resources as a means of attraction. The Town recognizes the importance of its environmental resources and the balance required to promote both enjoyment and protection. The goals and policies presented in this document are consistent with the Town's desire to protect the natural systems of Shallotte for enjoyment today and in the future.

https://www.sunsetbeachnc.gov/index.asp?SEC=4DA9C87A-38F3-4529-BF14-FE897C4FF175&Type=B\_BASIC

#### Town of Ocean Isle Beach Land Use Plan

Land use planning can play an integral part in

avoiding or mitigating some of the negative side effects of rapid development by anticipating potential problems and establishing management goals and policies to support growth.

https://www.oibgov.com/pview.aspx?id=20760&catid=0

#### **GSATS 2040 MTP Plan Update**

The purpose of this Metropolitan Transportation Plan (MTP) is to provide systematic, long-range planning for transportation projects and programs in the Grand Strand Area Transportation Study (GSATS).

https://gsats.org/2040-mtp/

#### Town of Holden Beach Land Use Plan

Land use planning can play an integral part in avoiding or mitigating some of the negative side effects of rapid development by anticipating potential problems and establishing management goals and policies to support growth.

https://files.nc.gov/ncdeq/Coastal%20Management/documents/PDF/Land%20Use%20Plans/loc ally-adopted-plans/Holden-Beach-2-16-21.pdf

#### Ocean Isle Beach Bicycle + Pedestrian Plan

In 2013, Ocean Isle Beach was awarded a matching grant from the North Carolina Department of Transportation (NCDOT) Bicycle and Pedestrian Planning Grant Initiative. The purpose of the grant is to encourage municipalities to develop comprehensive bicycle plans and pedestrian plans.

https://walkbikeoceanisle.weebly.com/

#### Sunset Beach Streetscape Committee Report

The Town of Sunset Beach established the Streetscape Committee to develop a proposal for upgrading the look of our Island's gateway within existing zoning regulations (see Attachment 1 for Mission Statement).

<u>https://www.sunsetbeachnc.gov/index.asp?SEC=E72601BE-17A9-4A87-93A4-</u> <u>95845DDB4E04&Type=B\_BASIC</u>

#### **Town of Shallotte Transportation Plan**

https://www.townofshallotte.org/index.asp?SEC=1DE724AB-A168-4B56-9CA6-FCBF9A41B195

#### Town of Varnamtown Land Use plan

https://deq.nc.gov/media/313/download

#### Northwest Zoning Map

<u>https://www.brunswickcountync.gov/wp-content/uploads/2019/07/Northwest-Final-</u> <u>Map\_Adopted\_Zoning\_Map.pdf</u>

#### Oak Island Comprehensive Land Use Plan

The Town of Oak Island Comprehensive Land Use Plan is a to guide the long-term physical development in Oak Island's town boundary.

<u>https://www.oakislandnc.gov/government/development-services/planning-</u> <u>department/comprehensive-land-use-plan</u>

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#### Oak Island Bike Plan

In January 2005, the Town of Oak Island contracted with Greenways Incorporated (GWI) to create a Bicycle Transportation Plan for the Oak Island area that addresses all aspects of bicycling and provides recommendations for improvements.

<u>https://connect.ncdot.gov/municipalities/PlanningGrants/Documents/Oak%20Island%20Bike%</u> <u>20Plan.pdf</u>

#### Oak Island Parks Master Plan

The purpose of the master plan is to: 1) Assess, analyze and evaluate the status of the provision of local community facilities, parks and areas and recreation programs, services, events and activities. 2) Stimulate an open public discussion of present and future needs for community parks, recreation and open space programs, services, events, activities, facilities, areas and parks. 3) Establish a plan of action for the future growth, development and implementation of community facilities, areas and parks and recreation programs, services, events and activities. <u>https://www.oakislandnc.gov/home/showpublisheddocument/682/637214705438670000</u>

#### **City of Southport Comprehensive Pedestrian Transportation Plan**

The City of Southport received a grant from NCDOT to develop a comprehensive pedestrian transportation plan. Participants in the process included local planners, project advisory committee members, and the general public. Through a series of activities a vision statement for the plan emerged.

<u>https://connect.ncdot.gov/municipalities/PlanningGrants/Documents/Southport%20Ped%20Pl</u> <u>an.pdf</u>

#### St James Zoning Map with Development Agreement Districts

https://www.townofstjamesnc.org/index.asp?SEC=58AEC836-D1EA-4C7A-B1D5-9748B0969D7E

#### Impacts of Autonomous Vehicle Technology on Transportation Systems

This research estimates the impacts of connected and autonomous vehicles on transportation systems using analytical and simulation methods.

https://connect.ncdot.gov/projects/research/RNAProjDocs/RP2019-11%20Final%20Report%20Main.pdf

#### Preparing Local Agencies for the Future of Connected and Autonomous Vehicles

This report summarizes current information and research on the infrastructure and technologies that local agencies should be aware of to prepare for CAVs and to support research, development, and implementation efforts on their systems. <u>http://www.dot.state.mn.us/research/reports/2019/201918.pdf</u>

### FACILITY TYPE AND LEVEL OF SERVICE

The NCDOT Facility Types, Control of Access, and Level of Service definitions provide descriptions for

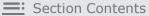
different types of roadways and how they can be categorized for ease of understanding. Facility types and control of access definitions are primarily based on the function of the roadway,

level of mobility and access, and whether the facility has traffic signals, driveways, and/or medians.

Level of Service represents operating conditions and identifies desired design requirements for roadways to obtain practical capacity.

The following resources are available in this section:

- Facility Types
- Control of Access
- Level of Service



### **TYPICAL SECTIONS**

Each typical section includes several data elements, such as the number of lanes, median type, and amount of right-of-way needed. The typical sections were developed by a team from the Strategic Prioritization Office (SPOT), Roadway Design Unit, Preliminary Estimates Section, Transportation Planning Branch, Program Development Branch, and the Enterprise Visualization Section. Please contact the Strategic Prioritization Office with any questions

For a full list of typical sections, go to the link below: https://connect.ncdot.gov/projects/Roadway/RoadwayDesignAdministrativeDocuments/Highw ay%20Typical%20Sections%20for%20SPOT%20On!ine.pdf

### **Brunswick County CTP Autonomous Vehicles Plan**

#### Vision for Autonomous Vehicles in the Brunswick County CTP

Below is one of the objectives from the Brunswick County CTP Vision, Goals and Objectives -*Objective:* Study emerging transportation management and operations technology, including electric vehicle charging locations, connected/autonomous vehicle infrastructure and broadband infrastructure.

Keeping this objective in mind, the county's goal is to incorporate a long-range vision for autonomous vehicle (AV) infrastructure on roads in the comprehensive transportation plan for future year 2045.

This document will capture the need of the county and plans for the future of the transportation network.

#### **Future of Autonomous Vehicles**

Some studies suggest that autonomous vehicles will become mainstream in the US by 2031. However, we are already two years behind on this plan.

According to an NC State University Study<sup>15</sup>, 75% of residents in the USA will drive autonomous vehicles by year 2045.

As Autonomous Vehicles advance more into the market, transportation infrastructure will need to improve to accommodate their arrival. According to a research report from Minnesota Department of Transportation<sup>4</sup>, in the short-term future, maintenance of the roadway should be a priority to prepare and support the arrival of Autonomous Vehicles. Poor roadway surface conditions can make it hard for Autonomous Vehicles to function properly and be able to anticipate the behavior of other vehicles. As technology continues to advance, this could become less of an issue for the operation of Autonomous Vehicles.

The report mentioned that the addition of dedicated lanes for fully Autonomous Vehicles may be needed as they grow in numbers on the roadways. Separating Autonomous Vehicles from vehicles driven by humans would enhance safety and ensure the optimized performance of Autonomous Vehicles. Further into the future, it may be that these lanes become dedicated human driver lanes as more fully Autonomous Vehicles flood the transportation network. Human drivers will continue to be present as fully Automated Vehicles dominate the roadways.

Brunswick County plans to prepare for the emergence of AVs by planning for the roadway network's infrastructure in this CTP. This CTP recommends incorporating vehicle-to-infrastructure

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<sup>&</sup>lt;sup>15</sup> Eleni Bardaka, Chris Frey, Ali Hajbabaie, George List, Nagui Rouphail, and Billy Williams, NC State University: Impacts of Autonomous Vehicles Technology and Transportation Systems, <u>https://hal.pratt.duke.edu/sites/hal.pratt.duke.edu/files/u43/RP2019-11%20Final%20Report%20Main-compressed.pdf</u>

(V2I) systems throughout the roadways in Brunswick County by 2045. According to the McKinsey and Company article<sup>16</sup>, V2I systems will be recommended to be put in place such as sensors in roads or street signs that send the signal to AVs, helping them navigate the city streets. The CTP recommends either short-range communications (DSRC) or cellular vehicle-to-everything (C-V2X) systems throughout the county. After more research is done later down the line, a proper system will be chosen that fits the needs of the county.

#### **Ride-Share with AVs**

Brunswick County System that is currently in place is a non-profit community transportation system that offers the public non-emergency transportation services through the Dial-a-Ride program. Keeping this program in mind, the county believes in ride-share programs. The McKinsey and Company article<sup>17</sup> promotes ride share AVs as well as Robo Taxi AVs to save money on personal vehicles for those who choose not to have a personal AV.

The article predicts that by 2030, 9% (500 billion miles) of US roads will be used by ride-share AVs. It is important for an area like Brunswick County with its high senior citizen population to have ride-shares whether it's AVs or transit.

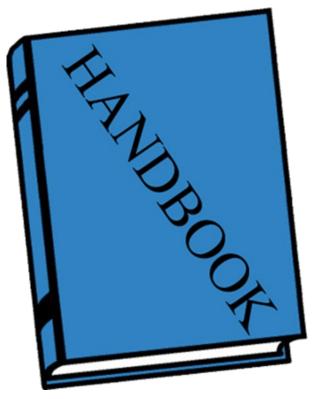
<sup>&</sup>lt;sup>16</sup> Tyler Duvall, Eric Hannon, Jared Katseff, Ben Safran and Tyler Wallace, *A new look at autonomous-vehicle infrastructure*, <u>https://www.mckinsey.com/industries/travel-logistics-and-infrastructure/our-insights/a-new-look-at-autonomous-vehicle-infrastructure</u>

<sup>&</sup>lt;sup>17</sup> Tyler Duvall, Eric Hannon, Jared Katseff, Ben Safran and Tyler Wallace, *A new look at autonomous-vehicle infrastructure*, <u>https://www.mckinsey.com/industries/travel-logistics-and-infrastructure/our-insights/a-new-look-at-autonomous-vehicle-infrastructure</u>

<sup>&</sup>lt;sup>4</sup>Shauna Hallmark, Minnesota Department of Transportation, *Preparing Local Agencies for the Future of Connected* and Autonomous Vehicles, <u>\*Preparing Local Agencies for the Future of Connected and Autonomous Vehicles</u> (<u>state.mn.us</u>)

### **Brunswick CTP Steering Committee Handbook**

## **STEERING + CORE COMMITTEE HANDBOOK**



## BRUNSWICK COUNTY, NORTH CAROLINA COMPREHENSIVE TRANSPORTATION PLAN (CTP) 2020

#### Introduction

A Comprehensive Transportation Plan (CTP) is a long-range multimodal transportation plan that will assess Brunswick County's existing and future transportation needs including roadways,

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bicycle and pedestrian facilities, transit services, and rail. The goals of a CTP are to assist with identifying short - and long-term transportation priorities, to establish a relationship between local and regional expectations, and to reinforce and support other local and regional planning and funding initiatives. The CTP typically focuses 25 to 30 years into the future. The CTP provides a framework for local governments, regional planning organizations, and the North Carolina Department of Transportation to work together toward a common long-range vision for transportation facilities. The CTP is used to identify priority projects for funding and construction that will eventually connect to achieve the larger vision for the transportation system. When a new project is funded, the CTP is referenced throughout the project development process to inform the identified purpose and need for the project, and how it relates to the larger vision. The CTP also addresses and identifies non-fiscally constrained projects to help a region identify local transportation needs. Brunswick County's existing CTP was completed in 2010 and was developed for the future year 2035. The CTP is updated periodically to reevaluate the transportation needs and analyze alternatives with the latest available data and growth trends. The current update to Brunswick County's CTP will be completed in 2022 and will be developed for the future year 2045. The Brunswick County CTP will be a joint effort with Brunswick County, Brunswick County Municipalities, the North Carolina Department of Transportation – Transportation Planning Division (NCDOT TPD), the North Carolina Department of Transportation Division 3 (NCDOT Division 3), Grand Strand Area Transportation Study Metropolitan Planning Organization (GSATS MPO) and the Cape Fear Rural Planning Organization (CFRPO).

#### Role and Responsibility of CTP Steering Committee Member

Your input is crucial to developing a plan that works for the people of Brunswick County. The role of the Steering Committee is to provide local expertise that will guide NCDOT and local governments throughout the development of the CTP. Steering Committee members are key conduits of information, informing their respective boards, departments, and staff about the CTP, and helping to engage the public in the planning process. Roles and responsibilities of the steering committee members include:

Local Perspective:

- Vision for Brunswick County's future transportation system;
- Knowledge of Brunswick County's existing transportation system and identification of problem areas and needs;
- Perspective on potential solutions to improve the transportation system. Which solutions are likely to work best for your community?
- Represent the views and perspectives of other members of your community.

Ground-Truthing:

- Review maps and data and provide local validation;
- Question any data that do not align with your local experiences;
- Provide confirmation for data that do align with your local experiences.

#### Public Outreach:

• Assist with development of public input survey questions;

- Assist with distribution of public input survey;
- Assist with promotion of public engagement meetings;
- Assist with hosting public engagement meetings;
- Attend public meetings and adoption meetings.

Internal Communications:

- Provide updates on the CTP to your staff/agency/department/board/team throughout the planning process;
- Share input from your staff/agency/department/board/team with the Steering Committee and Core Team.

Steering Committee List

Agency Name	Representing	Address	Contact
Brunswick County Emergency Management	Brunswick County	3325 Old Ocean Hwy (Building C), Bolivia, NC 28422	Edward Conrow, Emergency Services Director
			Scott Garner, Deputy Director
Brunswick County Schools	Brunswick County	35 Referendum Drive NE, Bolivia, NC 28422	Jerry Oates, Superintendent
			Craig Eckert, Director of Capital Projects & Planning
Brunswick Community College	Region	50 College Road, Bolivia, NC 28422	Gene Smith, President
Public Utilities	Brunswick County	75 Courthouse Dr (Building 1), Bolivia, NC 28422	John Nichols, Director of Public Utilities
Brunswick County Planning	Brunswick County	75 Courthouse Drive (BUILDING I) Bolivia,	Kirstie Dixon, Planning Director
		NC 28422	Helen Bunch, Zoning Administrator
Sheriff	Brunswick County	70 Stamp Act Drive, Bolivia, NC 28422	Sheriff John W. Ingram, V
			Chief Deputy Charles Miller
Brunswick County Health and Human	Brunswick County	25 Courthouse Drive Building A, Bolivia, NC	David Stanley, Director H&HS
Services		28422	Cris Harrelson, Health

			Director
Brunswick County Social Services	Brunswick County	60 Government Center Dr NE, Bolivia, NC 28422	Beverly Heine
Brunswick County Environmental Health	Brunswick County	25 Courthouse Dr NE, Bolivia, NC 28422	N/A
Dosher Memorial Hospital		924 N Howe St, Southport, NC 28461	N/A
Novant Health Brunswick Medical Center		240 Hospital Drive NE, Bolivia, NC 28422	Shelbourne Stevens
Brunswick Transit System	Brunswick County	5040 Main Street, Shallotte, NC 28470	Yvonne Hatcher, Executive Director
MOTSU	Military	6280 Sunny Point Rd SE, Southport, NC 28461	Malcolm Charles, Community Liason
Duke Energy	Region	8520 River Rd SE, Southport, NC 28461	Brunswick Plant Corporate Communications
ATMC	Brunswick County	640 Whiteville Rd NW, Shallotte, NC 28470	Keith Holden, CEO
BEMC	Brunswick County	785 Ocean Hwy W (Hwy 17), Supply, NC 28462	Joshua L. Winslow, CEO
Wilmington MPO	Wilmington Metro	305 Chestnut Street, Wilmington, NC 28401	Mike Kozlosky, Executive Director; Abby Lorenzo, Deputy Director
GSATS MPO	Myrtle Beach Metro	1230 Highmarket Street, Georgetown, SC 29440	Mark Hoeweler, Assistant Executive Director; Dan Newquist, Transportation Programs Manager
Brunswick Business & Industry Development	Brunswick County	75 Courthouse Drive (BUILDING I) Bolivia, NC 28422	William S. "Bill" Early, Executive Director
Brunswick County Chamber of Commerce	Brunswick County	114 Wall Street, Shallotte, NC 28470	Shannon Viera, President/CEO Heather Buell, Member Relations Director

North Brunswick Chamber of Commerce	North Brunswick Area	120 Division Drive, Leland, NC 28451	N/A
NC State Highway Patrol	NHC & Bruns.	Substation US17, County Government Complex, Bolivia, NC 28422	Matthew King
Cape Fear Cyclists	Region	4408 Wrightsville Ave, Wilmington, NC 28403	Larry Cheng, President
Brunswick Cyclists	Brunswick County		Webmaster
Cape Fear Regional Jet Port	Region	4019 Long Beach Rd, Oak Island, NC 28465	Howie Franklin, Director
Ocean Isle Beach Airport	Region	6070 Beach Dr SW, Ocean Isle Beach, NC 28469	Justin Whiteside, Asst. Town Administrator
Cape Fear RPO	Region	1480 Harbour Dr, Wilmington, NC 28401	Patrick Flanagan, Director
Cape Fear Council of Governments	Region	1480 Harbour Dr, Wilmington, NC 28401	Allen Serkin, Executive Director
NCDOT Div. 3	Region	5501 Barbados Blvd, Castle Hayne, NC 28429	Caitlin Marks
NCDOT TPD	State	1554 Mail Service Center, Raleigh, NC 27699-1554	Nazia Sarder, Transportation Engineer; Chris Palsgrove, Transportation Engineer
State Ports Authority	State	2202 Burnett Blvd, Wilmington, NC 28402	Stephanie Ayers, Director of Plan. & Dev.
Brunswick Cooperative Extension	County	25 Referendum Dr, Bolivia, NC 28422	Mark Blevins, Director
Brunswick Senior Resources	Brunswick County	3620 Express Dr, Shallotte, NC 28470	Jim Fish
Municipalities			
Bald Head Island	Town	N/A	Chris McCall
Boiling Spring Lakes	Town	9 East Boiling Spring Rd, Boiling Spring Lakes, NC 28461	Jeff Repp, City Manager

Bolivia	Town	4050 U.S. 17 Business, Bolivia, North Carolina, 28422	Ella Jane Marston
Calabash	Town	882 Persimmon Rd, Calabash, NC 28467	Chuck Nance, Town Administrator
Carolina Shores	Town	200 Persimmon Road, Carolina Shores, NC 28467	Jon Mendenhall, Town Administrator
Caswell Beach	Town	1100 Caswell Beach Road, Caswell Beach, NC 28465	Chad Hicks, Administrator
Holden Beach	Town	110 Rothschild Street, Holden Beach, NC 28462	David Hewett, Town Manager
Northwest	Town	4889 Vernon Road, Northwest, NC 28451	James Knox
Oak Island	Town	4601 E. Oak Island Drive, Oak Island, NC 28465	Jake Vares, Plan. & Zon. Admin.
Ocean Isle Beach	Town	3 West Third Street, Ocean Isle Beach, NC 28469	Justin Whiteside
Sandy Creek	Town	114 Sandy Creek Drive, Leland, NC 28451	J'Manda Dunston, Town Clerk
Shallotte	Town	106 Cheers St, Shallotte, NC 28470-4509	Robert Waring, Planning Director
Southport	Town	1029 N. Howe Street, Southport, NC 28461	Thomas Lloyd, Planner
St. James	Town	4140A Southport-Supply Road St. James, NC 28461	Ed Dickie, Town Manager
Sunset Beach	Town	700 Sunset Blvd. N, Sunset Beach, NC 28468	Todd Rademacher
Varnamtown	Town	100 Varnamtown Rd, Supply, NC	William Kirby

#### Core Steering Committee

The Core Steering Committee is responsible for developing the work products for the CTP and leading the Steering Committee through the planning process. The Core Steering Committee is comprised of staff from Brunswick County, the Cape Fear Rural Planning Organization (CFRPO), NCDOT Transportation Planning Division (TPD), NCDOT Division 3, and Grand Strand Area

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Transportation Study Metropolitan Planning Organization (GSATS MPO). The Wilmington Metropolitan Planning Organization (WMPO) will serve on the Core Steering Committee on a needs basis to provide guidance and input for projects at the border of the MPO. Core Steering Committee roles and contact information are outlined below:

#### CAPE FEAR RURAL PLANNING ORGANIZATION (CFRPO)

The CFRPO provides transportation planning services for three eastern counties of North Carolina – Columbus, Brunswick, and Pender. Patrick Flanagan is the RPO Director of the CFRPO. His responsibilities for this study will include:

- Providing regional planning perspective (including opportunities for improving regional connectivity, mobility, and resiliency)
- Reviewing data and documents as well as providing input and guidance.
- Coordinating communications with NCDOT, Core Committee, Steering Committee, and other partners
- Facilitating Steering Committee Meetings (including agendas and summaries)
- Assisting NCDOT's TPD in creating the Community Understanding Report (CUR) for the CTP.

#### NCDOT TRANSPORTATION PLANNING DIVISION (TPD)

The Transportation Planning Division of NCDOT provides long-range transportation planning services for the state. Nazia Sarder and Chris Palsgrove are the Transportation Engineers responsible for the overall execution and production of the Brunswick County CTP. Their responsibilities include but are not limited to:

- Data collection (socioeconomic data, traffic data, crash data, etc.)
- Dissemination of data to Steering Committee for review
- Technical analyses (deficiency analysis and Alternatives analysis)
- Map production
- Draft and final report production
- CTP presentation at public workshops
- CTP presentation for local adoption

#### **NCDOT DIVISION 3**

NCDOT is divided into 14 divisions across North Carolina. Brunswick County is within Division 3. Caitlin Marks is the Division Planning Engineer, and she is responsible for long-range planning within Division 3. Her responsibilities include:

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- Representing Division 3 perspective on transportation needs and solutions;
- Providing input on the feasibility and constructability of proposed solutions;
- Reporting CTP progress to the Division Engineer and Board Member.
- Hosting internal division meetings when need be for feedback to our CTP Steering Committee.
- Reviewing data and documents. Proving input and updates.

Michael Madsen and Alan Pytcher will be assisting Caitlin during the development of the CTP and will also be part of the Core Committee. Michael is the Division 3 GIS Manager and Analyst. Alan Pytcher is the Division 3 Corridor Development Engineer.

#### **BRUNSWICK COUNTY**

Helen Bunch will be the representative from the county in our Core Steering Committee. Helen is the Transportation Planner at the county and her responsibilities include:

- Representing Brunswick County perspective on transportation needs and solutions.
- Providing a planning perspective from the county's point of view.
- Representing and coordinating with all municipalities in her county.
- Reporting CTP progress to Brunswick County Officials, Director of the County, and technical staff aiding her in the development of the CTP.
- Communicating with all municipalities on a quarterly basis or semi-monthly basis. Ensuring they are keeping their board/council members up to date on the CTP. All municipalities within the study area will be part of the steering committee as well.
- Reviewing data and documents. Proving input and updates.

# GRAND STRAND AREA TRANSPORTATION STUDY METROPOLITAN PLANNING ORGANIZATION (GSATS MPO)

Mark Hoewler and Dan Newquist will be the representatives from Grand Strand Area Transportation Study Metropolitan Planning Organization in our Core Steering Committee. Mark is the Assistant Executive Director at GSATS MPO and Dan is the Transportation and Environmental Programs Manager at GSATS MPO. Mark and Dan's responsibilities will include:

- Representing GSATs MPO's perspective on planning, transportation needs and solutions.
- Representing and coordinating with municipalities in the MPO that are within Brunswick County.
- Reporting CTP progress to the MPO TCC and TAC. This includes keeping the MPO informed and bringing back their input to us at the Core and Steering Committee.
- Reviewing data and documents. Proving input and updates.

#### WILMINGTON METROPOLITAN PLANNING ORGANIZATION (WMPO)

Abby Lorenzo will serve on the Brunswick County CTP Core Steering Committee on a needs basis. Abby is the Deputy Director at the Wilmington MPO. The WMPO will not be adopting this CTP, but Abby will provide her knowledge of the area, as well as communicate the MPOs network roadways and multi-modal facilities so that we can ensure continuity and connectivity at the border of the Wilmington MPO planning boundary.





## **INTERNAL DIVISION STEERING COMMITTEE**

The Brunswick County CTP Steering Committee created an additional called the Internal Division Steering Committee. The committee was created to engage with local division engineers in Division 3 for a deeper dive into the CTP project proposals. This committee met separately for four months to review the following materials:

- Volume and Capacity Maps
- Supporting Maps (Environmental, Bridge, Crash, Freight, etc.)
- Core Document Maps to be adopted by NCDOT Board of Transportation
- Project List, Sheets and Inventory

With the engineering and local knowledge, this allowed for a thorough analysis to determining which projects are feasible, the needs of the county, resiliency projects, and additional roadways and multi-modal deficiencies in the CTP study area.

Below is a list of the Internal Division Steering Committee members, within Division 3, who helped create this CTP:

- 1. David Leonard, Project Team Lead
- 2. Katie Hite, Division Project Development Engineer
- 3. Jessi Leonard, Division Traffic Engineer
- 4. Ben Hughes, District Engineer
- 5. Caitlin Marks, former Division 3 Planning Engineer
- 6. Adrienne Cox, Division 3 Planning Engineer
- 7. Alan Pytcher, Division 3 Corridor Development Engineer
- 8. Michael Madsen, Division 3 GIS Manager/Specialist

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## **CORE STEERING COMMITTEE**

There was a Core Steering Committee that was created to make high level decisions before a steering committee was created. This committee meets on a needs basis to make high level decisions, updates on CTP progress and schedules, as well as to discuss conflict resolutions.

Below is a list of the Core Steering Committee:

- 1. Nazia Sarder, NCDOT Transportation Planning Division
- 2. Patrick Flanagan, Cape Fear Rural Planning Organization
- 3. Adrienne Cox, NCDOT Division 3
- 4. Chad Kimes, NCDOT Division 3
- 5. Helen Brunch, Brunswick County
- 6. Kirstie Dixon, Brunswick County
- 7. Behshad Norowzi, NCDOT Transportation Planning Division
- 8. Abby Lorenzo, Wilmington Metropolitan Planning Organization
- 9. Mike Kozlosky, Wilmington Metropolitan Planning Organization
- 10. Mark Hoeweler, GSATS Metropolitan Planning Organization

The full steering committee list is located in the Core CTP Report.

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## **BEFORE SUBMITTING FOR COMMENT**

### BEFORE SUBMITTAL CHECKLIST TO PEER REVIEW OR SUPERVISOR (CONTENT DOCUMENT – SUMMARY)

### (Check when complete)

□ All sections are: filled out or marked N/A

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□ All red text has been reviewed, edited, and converted to black.

□ Document has been proofread for accuracy.

□ Hyperlinks have been added where feasible.

□ All figures are included.

□ Template has been saved as a \*.docx

### DO NOT SUBMIT TO COMMUNICATIONS OFFICE WITHOUT SUPERVISOR REVIEW

