

FS-1501A

US 13/17 from US 64 in Williamston to Virginia State Line

Prepared for North Carolina Department of Transportation,
Feasibility Studies Unit

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1. Introduction

This feasibility study describes the upgrade of US 13/US 17 to interstate standards from US 64 in Williamston, NC to the Virginia state line, a distance of approximately 79 miles.

US 17 runs more than 280 miles from South Carolina to Virginia through the coastal plain of North Carolina. The corridor connects North Carolina to major economic development sites outside of the state including employment centers in Virginia’s Tidewater region and Myrtle Beach, South Carolina, deep sea ports in Charleston and Hampton Roads, and the Norfolk International Airport. US 17 is part of the STRAHNET system connecting multiple major military bases including Camp Lejeune Marine Base, the Coast Guard Air Station in Elizabeth City, and the Sunny Point Military Ocean Terminal. Within North Carolina, US 17 serves the coastal counties as a regional connector to multiple regional airports and top tourism destinations.

The US 17 corridor is identified as a Strategic Transportation Corridor (STC) within the North Carolina Transportation Network (NCTN). The STC Policy and Map were adopted by the NCDOT on March 4, 2015. The purpose of the North Carolina Transportation Network (NCTN) is to preserve and maximize mobility and connectivity on a core network of multimodal transportation corridors, promoting environmental stewardship and economic prosperity.

This study focuses on the section of US 17 from US 64 in Williamston in Martin County to the Virginia state line in northern Camden County in northeastern North Carolina. This segment of US 17 crosses Martin, Bertie, Chowan, Perquimans, Pasquotank, and Camden Counties. The feasibility study area is shown on Figure 1.

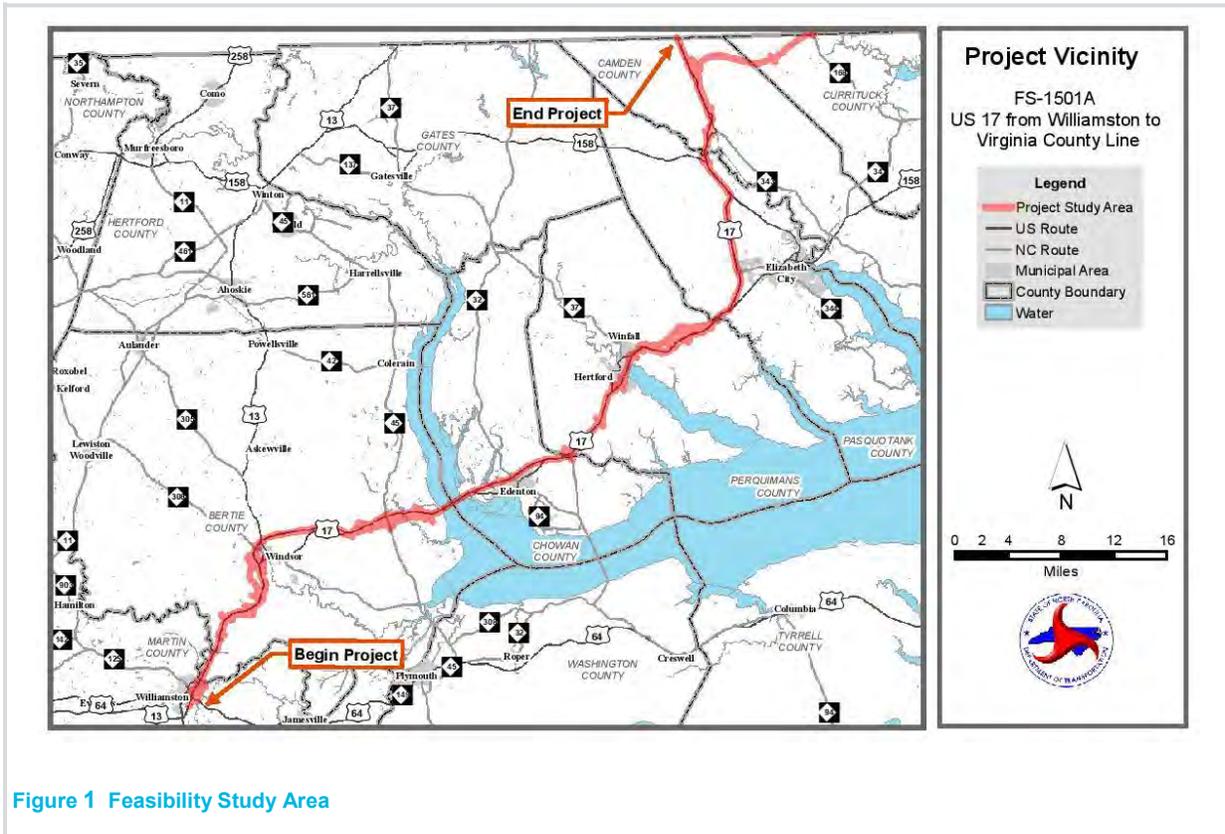


Figure 1 Feasibility Study Area

The purpose of this feasibility study is to describe the proposed project, including preliminary costs, and identify any potential problems that may require consideration in the planning and design phases. This study is a preliminary document that is the initial step of the planning and design process for a candidate project and not the product of exhaustive environmental or design investigations.

2. Purpose and Need

The purpose of the proposed project is to upgrade US 13/17 from US 64 in Williamston to Virginia to interstate standards to improve mobility, connectivity, and safety.

Congress approved a Future Interstate designation from Raleigh to Hampton Roads via Rocky Mount and Elizabeth City on December 3, 2015, as part of their five-year transportation bill, and on May 25, 2016, the American Society of State Highway and Transportation Officials (ASHTO) approved the interstate designation of I-87 for the US 64/17 corridor. The corridor would follow the I-495 and Future I-495 freeway corridor from I-40/I-440 in Raleigh and east to I-95 at Rocky Mount. It would continue east along the US 64 freeway towards Tarboro and Williamston, North Carolina and then travel the US 17 corridor via Elizabeth City, North Carolina, and then connect to the cities of Chesapeake and Norfolk, Virginia in the Hampton Roads region. While all of I-495/US 64 between Raleigh and Williamston is freeway, many segments of US 17 from Williamston to I-64 in Hampton Roads are not freeway and would need widening, upgrade, or new location.

US 17 is critical to economic development in the northeastern region of North Carolina. It speeds delivery of agricultural products to the Port of Virginia and local markets and serves the logistical needs of our military. In August 2013, an economic impact study was completed for the Highway 17 Association, and according to the study, bringing US 17 up to Interstate standards would generate an economic impact of \$3 billion and create over 4,000 jobs along the corridor in all sectors of the region's economy: agribusiness, military, and tourism.

2.1 Related Studies

Several studies have been conducted that include goals for the US 17 corridor and support the purpose and need for the proposed project.

North Carolina Strategic Transportation Corridor Policy

US 17 is identified at Strategic Transportation Corridor O as a part of the Strategic Transportation Corridor Policy. The policy identifies high-priority transportation corridors that connect statewide and regional transportation dependent activity centers. The goals of the policy are to promote system connectivity, mobility, and economic prosperity. The functions of the US 17 corridor in the context of these goals are as follows:

- **Connectivity:** US 17 is a part of the STRAHNET network connecting multiple major military bases. The corridor also connects North Carolina to the South Carolina and Virginia state borders, providing the only continuous north-south route east of I-95. It provides primary access to international air service from Norfolk airports.
- **Economic Prosperity:** US 17 connects northeast North Carolina markets to the ports in Norfolk and workers to major employment opportunities in southeast Virginia. It serves as a major route from eastern North Carolina agricultural activities to international markets through North Carolina, Virginia, and South Carolina ports and provides primary access to critical military installations in the region, for both employment and mission-critical military activities.
- **Expectation:** As a critical transportation corridor for the economically sensitive eastern North Carolina region, Corridor O should continue to be improved to ensure safe, reliable, high speed access to Virginia ports and reliable levels of service throughout the southern portion of the corridor.

NC Maritime Strategy

The *NC Maritime Strategy* notes that goods originating from or destined for North Carolina are primarily transported by truck. Therefore, the proposed transportation system investments identified in the *Maritime Strategy* focus largely on highway projects. US 17 is identified as a key route for waterborne truck freight within North Carolina. The study states that the prioritization or acceleration of STIP projects along these identified corridors would benefit industries that rely on the state's maritime infrastructure.

Governor's 25-Year Vision for NC

The Governor's 25 Year Vision for North Carolina involved developing infrastructure solutions for the state's regions: Western, Central, Eastern, and Coastal. The eastern regional focus includes: improving highway to Hampton Roads, strengthening military connections, improving I-95 connections, and enhancing freight movement.

US 17 Economic Impact Study

The US 17 Economic Impact Study was prepared for the Highway 17 Association in August of 2013. The Highway 17 Association is a non-profit organization whose mission is to promote US 17 development as an economic stimulant for the entire coastal region of North Carolina. The purpose of the study was to assist the Highway 17 Association and NCDOT in determining the impacts of further highway investment, particularly on tourism, the military and its future requirements, farm and forest land utilization, and industrial access and development within the eastern North Carolina region.

The study finds that not only would improvements to the highway increase economic opportunities for the military, agri-business, and tourism sectors, NC's three largest economic sectors, but the future improvements identified in this study would improve traveller safety, reduce travel time, increase retail activity, enhance industrial development activity, and provide opportunities to divert traffic off of Interstate 95. Overall, the conclusion of this study reinforces the long-recognized tenet that improving US 17 will contribute to overall economic improvements in the coastal region of North Carolina.

Camden County US 17 Corridor Study

According to the Camden County US 17 Corridor Master Plan (2010), the vision for the US 17 corridor is "to create a thriving business community which will benefit the citizens of Camden County through local jobs, business opportunities, public revenue, and quality of life for its citizens." Camden County has recognized the impact that growth within the US 17 Corridor would have on the local economy. With that in mind, it is their goal to create a mixed-use corridor, which will function as a place for gathering, working, playing, shopping, and experiencing all that Camden County has to offer.

Currituck County Moyock Mega-Site Market Feasibility Study

In 2016, Currituck County conducted a market feasibility study to evaluate the potential economic development opportunity of a large-scale mixed-use development on approximately 3,000 acres in Moyock. The report recommended that Currituck County work collaboratively with NCDOT and Camden County on the development and ultimate construction of a connector road to US 17 (Future Interstate I-87). The proposed connector between NC 168 and the proposed new interstate corridor could prove extremely valuable in the future development of the Mega-Site.

Seven Portals Study

The Seven Portals Study, prepared for NCDOT in 2011, investigated potential logistics villages within one of the seven economic development regions across the state, specifically the Northeast Region. The initial focus was proximity for air, rail, and highway connectivity at potential sites, but the study discovered other possibilities for successful villages. Each village is evaluated for strengths, weaknesses, and needs, with emphasis on identifying what infrastructure improvements are needed to support such a village at that location. The study evaluated five sites in the Northeast Region: Ahoskie, Edenton, Elizabeth City, Williamston, and a future potential mega-site. Access to the US 17 corridor and Hampton Roads were noted as strengths for the Edenton, Elizabeth City, and Williamston sites.

2.2 Foreign-Trade Zones

The Port of Virginia, as Grantee of Foreign-Trade Zone (FTZ) #20, submitted an Application for Expansion of the FTZ #20 Alternative Site Framework Service Area to the Foreign-Trade Zones Board. The expansion would include multiple counties in the project study area, including Currituck, Camden, Chowan, Pasquotank, and Perquimans, as well as one independent city, Elizabeth City. The expansion was requested by counties in North Carolina as it would grant them access to a Foreign-Trade Zone. The counties approached the Virginia Port Authority because the Port of Virginia is a global gateway for international trade and Norfolk is the closest Port of Entry. The expansion would allow industries in this area to receive the benefits of operating in an FTZ as there is no FTZ in North Carolina close enough to encompass the counties. FTZ designation can provide companies with customs duty savings and logistical

benefits that can encourage them to establish or maintain operations in the US; thus, access to FTZ benefits can be an important tool in economic development efforts. The FTZ application notes the Hampton Roads Region will soon be even more connected with the northeastern North Carolina counties with a future interstate corridor (US 17 and NC 64 from Norfolk to Raleigh). North Carolina is currently the top destination for imports handled by the Port of Norfolk, and North Carolina is projected to continue to be a strong destination market for imports as part of the emerging Piedmont Atlantic Mega-region.

2.3 Hurricane Evacuation

The entire portion of US 17 within the project study area is designated as a hurricane evacuation route. NC 168 is also listed as a hurricane evacuation route. A proposed connector (see discussion of Segment 10A in section 5.2.10) between US 17 and NC 168 would connect these two routes in the northeastern part of North Carolina. Many evacuation routes in North Carolina are interstates and major highways that accommodate heavy traffic and faster speeds to allow motorists to leave threatened areas more quickly and efficiently. Most evacuation routes are marked with circular blue signs that read “Evacuation Routes.”

2.4 Other Planned Projects

2.4.1 STIP Projects along US 17

As shown in Table 1, there are several planned STIP projects along the US 17 corridor in this area. All of these projects support the conversion of US 17 to an interstate facility.

Table 1 STIP Projects along US 17

County	STIP Project	Description	Schedule (ROW/Construction)
Chowan	R-5731	US 17 from south end of Chowan River bridge to US 17 Business in Edenton –upgrade freeway to interstate standards	2023/2025
Perquimans	R-4459	US 17 at SR 1336 (Harvey Point Road) and SR 1338 (Wayne Fork Road) – convert at-grade intersection to an interchange	2024/2026
Perquimans	R-4458	US 17 at SR 1300 (New Hope Road) – convert at-grade intersection to interchange	2023/2025
Pasquotank	R-5856	US 17 (Future I-87) from US 17/US 158 north of Elizabeth City to Virginia state line – upgrade roadway to interstate standards	2025/2027
Multiple	TI-6104	Greyhound Lines Bus – intercity bus from Raleigh to Norfolk, VA via Elizabeth City along US 64, US301, US 264, and US 17 with stops at Raleigh, Rocky Mount, Wilson, Greenville, Washington, Williamston, Edenton, and Elizabeth City	2016-2026 (operations funding)

2.4.2 Comprehensive Transportation Plans

Several of the counties along US 17 in the study area have recently updated Comprehensive Transportation Plans (CTP). Each includes projects along US 17 to improve portions of the corridor to interstate standards to improve regional mobility and connectivity.

Martin County Comprehensive Transportation Plan

The draft Martin County CTP shows US 13/17 near Williamston as a “Freeway-Needs Improvement” from US 64 to Bertie County, and includes a project to upgrade the corridor to interstate standards (MART07-H). Upgrading to interstate will involve widening the paved shoulders to 10 feet, full control of access, and increasing the right of way to 300 feet.

Bertie County Comprehensive Transportation Plan

The Bertie County CTP shows US 13/17 and US 17 in Bertie County as a “Freeway-Needs Improvement,” with the exception of the existing freeway section around Windsor. Several new interchanges are also shown to provide access to US 17. The CTP includes the following proposed projects on US 17:

- US 13/17 (BERT0001-H): upgrade existing 4-lane major thoroughfare to a 4-lane divided freeway with a median from the Martin County Line to the town limits of Windsor.
- US 17 (BERT0002-H): upgrade the existing 4-lane major thoroughfare to a 4-lane divided freeway with a median from US 17A east of Windsor to the Chowan River

The CTP notes that the community’s vision for the US 17 corridor is to improve the area within the town of Windsor and Bertie County by encouraging residential, commercial, and industrial development. The US 13/17 is considered an important regional corridor and upgrading it to a freeway would provide better mobility throughout Bertie County to neighboring counties and regions.

Chowan County Comprehensive Transportation Plan

According to the Chowan County CTP, US 17 is a major east-west corridor through Chowan County along the northern Edenton town limits. This facility is currently a four lane freeway with 12 foot lanes from Bertie County to US 17 Business and a four lane expressway with 12 foot lanes from US 17 Business to Perquimans County. Access along the freeway section is fully controlled and limited access along the expressway section. The CTP also notes that improvements are needed to maintain mobility along the corridor and includes the following project that would upgrade the existing facility to interstate standards:

- CHOW0001-H: upgrade US 17 from US 17 Business to Perquimans County to interstate standards

Pasquotank County Comprehensive Transportation Plan

The Pasquotank County CTP shows US 17 as a Freeway-Existing from Perquimans County to US 17 Bypass/US 17 and as a “Freeway-Needs Improvement” from US 17 Bypass/US 17 to Camden County. It also shows a proposed interchange at US 158 near the Camden County line (STIP Project R-4719). The plan also includes:

- PASQ0001-H: improve US 17 by upgrading it to a freeway from US 17 Bypass/US 17 to Camden County
- Northern Connector (PASQ0006-H): Proposed expressway between US 17 Bypass and US 17 (Future I-87) to serve residential and commercial development in the northern portion of Pasquotank County, with new interchange on US 17 (Future I-87).

The CTP notes that US 17 is the only major north-south route that passes through Elizabeth City and that upgrading it would provide a safer facility for commuters along US 17, particularly with regard to trucks.

Camden County Comprehensive Transportation Plan

The Camden County CTP shows US 17 as an “Expressway-Existing.” The 2014 CTP included a project (CAMD0003-H), the Northern Connector (Ponderosa Road upgrade) to improve and extend the unpaved Ponderosa Road into Currituck County to provide a connection between planned residential and industrial development in northern Camden County and the Town of Moyock in Currituck County and provide a more direct connection between US 17 and NC 168.

The Camden County CTP was amended in 2015 to include the proposed East-West Connector (CAMD0006-H), a 4-lane divided boulevard on a new location in Moyock from NC 168 near the Virginia line to US 17 in northern Camden County. The CTP notes that the proposed connector road would alleviate traffic congestion and potentially unsafe conditions on South Mills (SR 1227) Road and provide excellent regional commercial traffic access to points west from the NC 168 corridor.

3. Existing Conditions

3.1 Roadway Characteristics

Within the project study area US 17 operates as a four lane facility (two travel lanes in each direction) divided predominantly by a median but divided by a two-way left turn lane between US 17A east of Windsor and the south end of Chowan River Bridge. Sections of US 17 in the project study are classified as arterial roadways while others are classified as freeways. The posted speed limits along US 17 vary from 55 to 70 miles per hour.

Roughly 55 miles of US 17 in North Carolina is currently categorized as freeway, and 155 miles as expressway/multilane. The remaining 72 miles (approximately), which is nearly 25 percent of the total distance, is still two-lane highway.

3.2 Land Use

Land uses along US 17 between Williamston and the Virginia state line are predominantly rural and agricultural. The corridor also passes through multiple municipalities that contain residential and commercial land uses. Also included in the project study area also includes a proposed portion of new roadway that will extend from US 17 eastward to US 168 just north of the North Carolina/Virginia state line. The following section provides a more detailed summary of general land uses along the corridor, starting from the southern terminus of the project.

- The project study area begins in Williamston, NC where the existing land use is predominantly commercial and residential. As US 17 approached the Roanoke River, the land use becomes more forested and agricultural.
- Entering Bertie County, US 17 passes through the Roanoke River National Wildlife Refuge which is owned by the US Fish and Wildlife Service. The refuge spans approximately 20,960 acres.
- For the remainder of Bertie County, the land use along the project study area is predominantly rural with residential and agricultural developments. US 17 passes through Windsor, NC through a mainly residential zone.
- The Bertie County Future Land Use Map designates a portion of land, approximately 920 acres, south of Windsor, along US 17 as an Agriculture-Forestry-Rural Housing (AFRH) Renewal Corridor. This type of corridor includes a mixture of businesses and residences in an agricultural area. This involves low intensity in-fill development targeted at the currently vacant land parcels in the corridor.
- In Chowan County, the land use is predominantly agricultural and forest land with some residential zones. US 17 passes adjacent to Edenton where the land is classified as commercial land use and contains retail, business, and services, and some office uses. US 17 also passes adjacent to the Chowan Game Land which is owned by the NC Wildlife Resources Commission and a NC Clean Water Management Trust Fund Easement owned by the state of North Carolina.
- In Perquimans County, US 17 passes through largely rural agricultural land uses. US 17 also passes through the towns of Hertford and Winfall. Land surrounding US 17 outside of the town limits are zoned as highway commercial districts.
- In Pasquotank County, US 17 passes through predominantly agricultural land uses. US 17 also passes by a general business district in Elizabeth City that includes a Walmart Supercenter.
- In Camden County, the existing land use along US 17 is predominantly agricultural but passes near some residential developments. US 17 also passes adjacent to the Great Dismal Swamp, which is categorized as environmental preservation.
- In Currituck County, much of the county is classified as undeveloped or agricultural. The proposed roadway would extend through a largely agricultural portion of the county. The roadway would also pass adjacent to multiple residentially zoned areas.

- The Moyock Mega-Site is a mixed-use space being planned along NC 168 in Moyock, Currituck County. The site is described as a long-term economic development plan that will bring employment and commercial opportunities to Currituck County. The site would include residential, retail, office, and industrial developments.

3.3 Agriculture and Farm Equipment

Agriculture plays an important role in the economies of the counties included in the project study area. An important component of the farming industry is the ability to legally and safely move farm equipment from one property to another. Farm equipment is allowed to travel on any state system road except interstates and fully controlled access roads. However, according to North Carolina General Statute 20-116, applications can be submitted to NCDOT to receive authorization to travel on interstates and fully-controlled access routes. Farm equipment is also permitted to travel on interstates and fully-controlled access routes that have been evaluated and preapproved by NCDOT. Multiple sections of US 17 within the study area are preapproved routes for the movement of farm equipment.

US 17 is included on the list of Controlled Access and Freeways and Interstates Authorized for use by Self-Propelled Farm Equipment in Bertie, Chowan, and Pasquotank Counties. In Bertie County, 0.89 miles of US 17 between SR 1391 (Governor Eden House Road) and the Chowan County Line allow the movement of farm equipment. In Chowan County, 8.38 miles of US 17 between the Bertie County line and SR 1330 (Shannonhouse Road) allow the movement of farm equipment. The crossing of equipment larger than 16 feet wide over the Chowan River Bridge requires closure of the bridge to other traffic in that direction and must be coordinated with North Carolina State Highway Patrol and the Sheriff’s Departments in Bertie and Chowan Counties. In Pasquotank County, 0.39 miles of US 17 between SR 1140 (Okisko Road) and US 17 Bypass south of Elizabeth City allow the movement of farm equipment. All segments require farm equipment to be moved during daylight hours and with an accompanying trailing pilot vehicle with emergency flashers operating.

The movement of farm equipment should be considered throughout the planning and design phases of the proposed project, as impeding the movement of farm equipment would negatively impact economic opportunity for the agricultural sector in these counties.

3.4 Adjacent Projects

Other proposed NCDOT Statewide Transportation Improvement Program (STIP) projects included in the 2018-2027 STIP adjacent or within the project vicinity are included in Table 2.

Table 2. STIP Projects in the Vicinity of US 17

County	STIP Project	Description	Schedule (ROW/Construction)
Martin	R-5810	US 17 from SR 1119 (Ralph Taylor Road) to SR 1205 (Holly Creek Road) – access management	2022/2024
Martin	R-4705	SR 1142 (Prison Camp Road) from NC 903 to SR 1182 (East College Road) - upgrade facility	2019/2021
Martin	R-3826	NC 125 from SR 1182 (East College Road) to NC 125 northwest of Williamston - two lanes, part on new location	-/2017
Bertie	R-5809	NC 45 from Hertford County Line to Washington County Line – modernize roadway	2021/2023
Perquimans	B-5606	SR 1338 (Wynne Fork Road) – replace bridge over Castleton Creek	2018/2019
Perquimans	R-4467	US 17 Business/NC 37 from east of Perquimans River Bridge to NC 37 in Hertford - replace bridge	2018/2018
Perquimans	R-5716	SR 1300 (New Hope Road) from SR 1302 (Union Hall Road) to SR 1303 (Woodland Church Road) - widen and resurface	2017/2018

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County	STIP Project	Description	Schedule (ROW/Construction)
Perquimans	R-5740	SR 1329 (Woodville Road) from SR 1331 (Red Bank Road) to SR 1300 (New Hope Road) - upgrade roadway	2018/2019
Perquimans	R-5806	SR 1336 (Harvey Point Road) from US 17 to Churches Lane – modernize roadway	2022/2023
Camden	R-5717	SR 1227/SR 1208 (South Mills Road)-SR 1224/SR 1223 (Old Swamp Road) from NC 343 in Camden County to NC 168 in Currituck County - widen and intersection improvements	2019/2021

4. Traffic and Safety

4.1 Crash Analysis

A crash analysis of the existing US 17 corridor within the project study area was conducted utilizing NCDOT Traffic Engineering Accident Analysis System (TEAAS) crash data for a five-year period from December 1, 2010, to November 30, 2015. The Total Crash Rates along the highway analyzed were compared to the Statewide Average Rates for similar routes to determine if the segment exceeded the statewide average. In addition, the Critical Crash Rate for each county was compared. The Critical Crash Rate is a statistically-derived number that can be used to identify locations where crash occurrence is higher than expected for a given facility type. The Critical Crash Rate is beneficial as it accounts for exposure (traffic volumes) and varying segment lengths. If a segment has a Crash Rate higher than the Critical Crash Rate, the location may have a potential highway safety deficiency and should receive additional analysis. Table 3 shows a comparison of the Total Crash Rates versus the Statewide Average (for similar routes) and the calculated Critical Crash Rate for each roadway segment.

Table 3. US 17 Crash Rate Comparison

County	Total Crashes per 100 MVM	Statewide Average Rate	Critical Rate ¹	Exceeds Statewide Rate	Exceeds Critical Rate
Martin	218.62	104.75 ²	137.59	Yes	Yes
Bertie	105.47	104.75 ²	112.59	Yes	No
Chowan	118.32	64.28 ³	75.06	Yes	Yes
Perquimans	76.16	83.33 ³	90.34	No	No
Pasquotank	63.34	64.28 ³	71.90	No	No
Camden	62.45	83.33 ³	93.40	No	No

¹ Based on Statewide Crash Rate (95% Level of Confidence)

² 2012-2014 – Statewide Rural Total Crash Rate for US Routes due to variance in road type throughout the county

³ 2012-2014 – Statewide Average Crash Rate, Rural US Route, 4 or more lanes by access control type

The crash rate for Martin County exceeds the Statewide and Critical Crash Rates and further study with collision diagrams may be necessary to determine specific crash patterns; however, only 1.5 miles of the study area along US 17 was analyzed in Martin County. It should be noted that 52 percent of the crashes resulted in injury and 35 percent were angle crashes. Additionally, 32 percent of the crashes occurred during the night.

The crash rate for Bertie County only slightly exceeds the Statewide crash rate; however, it does not exceed the critical crash rate. The crash rate for Chowan County exceeds the Statewide and Critical Crash Rates and 53 percent of these crashes occurred at night. Additionally, 39 percent of the crashes were fixed object, and 34 percent were animal crashes.

Table 4 US 17 Fatal Crash Rate Comparison

County	Fatal Crashes	Fatal Crashes per 100 MVM
Martin	1	3.47
Bertie	8	1.69
Chowan	3	1.89
Perquimans	2	0.42
Pasquotank	5	1.60
Camden	2	0.86

4.2 Traffic Forecast

Traffic volumes for the following scenarios were obtained from the NCDOT Transportation Planning Branch in a traffic forecast dated February 2016:

- 2015 No Build
- 2040 No Build
- 2040 Build – Upgrade Existing
- 2040 Build – Williamston Bypass
- 2040 Build – Windsor Bypass A, B, and AB

For the scenarios, STIP Projects R-3826, R-5717, B-5604, R-4467, B-5606, and R-5731 were assumed to be completed by the future year 2040 (see Table 2).

Traffic volumes within the project area range from 6,200 to 18,400 vehicles per day in the 2015 No-Build scenario and increase to between 13,600 and 33,200 vehicles per day in the 2040 Build scenario. Table 5 shows existing and forecast traffic volumes for the US 17 corridor.

Table 5. US 17 AADT

County	2015 No Build	2040 No Build	2040 Build Upgrade Existing	2040 Build Williamston Bypass	2040 Build Windsor Bypass
Martin	9,800-17,500	13,000-22,700	22,300-23,500	11,600	
Bertie	6,200-15,000	8,800-20,600	13,600-24,600		12,900-20,700
Chowan	7,700-9,900	11,500-12,300	16,300-20,900		
Perquimans	11,200-17,200	16,800-24,900	22,800-31,400		
Pasquotank	7,900-18,400	11,500-26,700	15,800-33,200		
Camden	12,600-16,100	18,400-23,400	23,700-30,900		

Source: NCDOT Transportation Planning Branch, Traffic Forecast for TIP Project FS-1501A, February 2016.

4.3 Traffic Operations

A review of traffic operations on US 17 in the 2015 and 2040 No Build scenarios, as well as 2040 Build scenario was conducted based on volume to capacity ratios (V/C) for peak hour traffic volumes. Under 2015 No Build conditions, V/C ratios are less than 0.3 on all sections of US 17. In the 2040 No Build scenario, V/C ratios would increase but remain less than 0.5 on all sections of US 17. In the 2040 Build scenario, traffic volumes are anticipated to be substantially higher on some segments of US 17; however, with proposed capacity improvements, V/C ratios would still generally be less than 0.5, with only one section near US 158 in Pasquotank County slightly higher, with a V/C ratio of 0.54. The purpose of this project is not based on the need to increase capacity due to currently unmanageable traffic but rather to address issues of regional connectivity and mobility.

5. Description of Alternatives

5.1 Design Criteria

Table 6 summarizes design criteria used in the development of alternatives for upgrading US 17 to interstate standards, which includes obtaining full control of access for a 300-foot minimum right of way, converting at-grade intersections to interchanges, design speeds of 75 miles per hour, a minimum of two travel lanes in each direction, 12-foot lane widths, a median width of 46 feet to 70 feet, 10-foot outside paved shoulders and 4-foot inside paved shoulders. A narrower median may be utilized with barrier where necessary to maintain existing roadway or structural elements. Additionally, some existing bridges with narrower shoulders may be retained and used with a design exception. A table of bridge recommendations is included in Appendix B. The proposed typical section for US 17 is shown on Figure 2.

Table 6. US 17 Design Criteria

Element	Value
Functional Classification	Interstate
Terrain	Level
Design Speed	75 mph
Posted Speed	70 mph
Right-of-Way Width	300 feet
Access Control	Full
Typical Section Type	Shoulder
Lane Widths	12 feet
Median Width	70 feet (desired); 46 feet (minimum)
Outside Shoulder Width	10-13 feet
Inside Shoulder Width	10 feet (desired); 4 feet (minimum)
Median Type	Grass



Figure 2 US 17 Proposed Typical Section

5.2 Alternatives Evaluated

The project study area was broken down into ten segments with one to three alternatives being offered for each. For segments with multiple alternatives, one alternative includes upgrading existing US 17 to interstate standards, and additional alternatives includes new location options to minimize impacts to properties along existing US 17. Table 7 includes a summary of the ten segments. As noted in Section 5.1 above, upgrading to interstate standards would involve obtaining full access control along the route, with access to the interstate provided at interchanges only; adjacent properties would be provided service roads (generally, 2-lane minor arterials) for property access and connectivity to other local roads.

Note, these segments are only used for purposes of developing conceptual alternatives; they do not relate to funding segments, which will be determined at a later time. Conceptual alternatives design maps are included in Appendix A.

Table 7. US 17 Segments

Segment	From	To	Distance (miles)	Alternatives
1	US 64	Roanoke River	1.6	1, 1A, 1B
2	Roanoke River	Pleasant Oak Road	8.5	2
3	Pleasant Oak Road	Beginning of Windsor Bypass	4.5	3, 3A
4	Beginning of Windsor Bypass	End of Windsor Bypass	6.75	4
5	End of Windsor Bypass	Chowan River	4.75	5, 5A
6	Chowan River	End of Edenton Bypass	11.6	6
7	End of Edenton Bypass	Halls Creek Road	19	7, 7A
8	Halls Creek Road	End of Elizabeth City Bypass	10.2	8
9	End of Elizabeth City Bypass	Dismal Swamp State Park	8.1	9
10	Dismal Swamp State Park	NC/VA State Line	4.6	10
10A	US 17	NC 168	14.6	10A

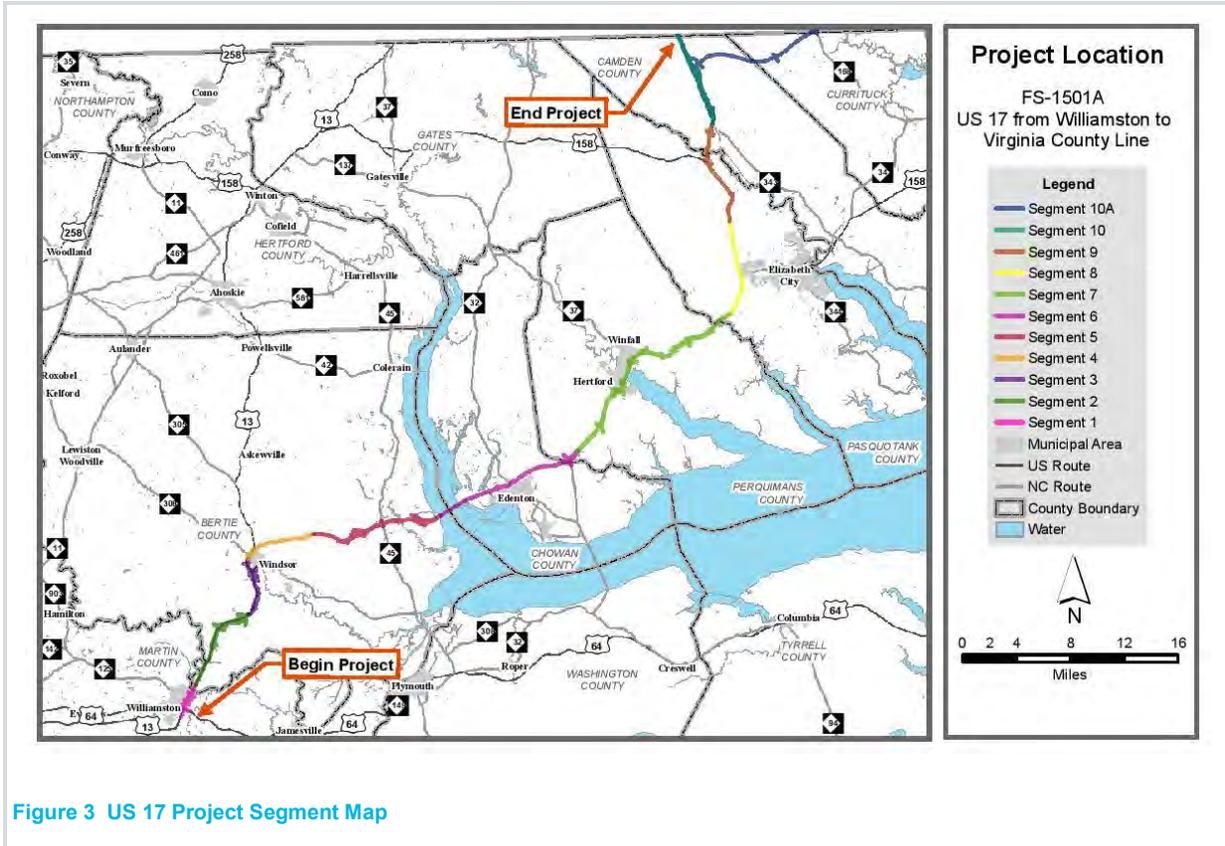


Figure 3 US 17 Project Segment Map

5.2.1 Segment 1: US 64 to Roanoke River

Three alternatives were considered in Segment 1: Alternatives 1, 1A, 1B. In addition, a northern bypass of Williamston was briefly discussed but eliminated from consideration due to impacts to community and natural resources.

Alternative 1

Alternative 1 involves upgrading the existing alignment of US 17 to interstate standards. The current junction of US 64 and US 17 would be upgraded to a partial cloverleaf interchange. As US 17 travels through Williamston, the proposed alternative would require control of access and right-of-way (ROW) acquisition that would impact businesses along US 17 through Williamston. East Boulevard would be converted to a grade separation at its current intersection with US 17 and extended along the eastern side of US 17. The extension would pass adjacent to the Roanoke River water treatment plant and would pass over wetlands prior to connecting with Willow Drive. Park Street and Willow Drive would both connect to the extension of East Boulevard and be converted to grade separations at US 17 to connect the eastern and western sides of Williamston. The existing bridges over the Roanoke River and along existing US 17 through the Roanoke River NWR would be retained and used. Design exceptions would be required due to insufficient shoulder widths to meet interstate standards.

Alternative 1A

In order to avoid impacts to businesses along US 17 through Williamston, Alternative 1A proposes a new alignment for US 17 east of its existing alignment. The US 17/US 64 interchange would be modified to accommodate the new alignment. East Boulevard would be extended to provide access to the proposed US 17 alignment. Park Street would be extended to the eastern side of the proposed US 17 alignment with a grade separation; Willow Drive would also be converted to a grade separation at the proposed US 17 alignment to provide an east/west connection. The proposed alignment would pass to the east of the Roanoke River water treatment plant and would tie in to the existing US 17 just west of the Roanoke River. The existing bridges over the Roanoke River and along existing US 17

through the Roanoke River NWR would be retained and used. Design exceptions would be required for these bridges due to insufficient shoulder widths to meet interstate standards.

Alternative 1B

Alternative 1B also proposes an alignment east of the current US 17 alignment. This alternative would involve the same US 17/US 64 interchange design as Alternative 1A, but the alignment would extend farther east than Alternative 1A in order to minimize impacts to the Roanoke River water treatment plant. The proposed alignment would pass under Willow Drive at a more eastern location. A new river crossing over the Roanoke River would be constructed for the proposed US 17 alignment. It was assumed that the bridge would be longer than hydraulically required in order to provide for animal crossing below the bridge. East of the river, the alignment would tie back to existing US 17.

Williamston Bypass

A Williamston bypass was proposed that would diverge from the existing US 17 alignment prior to the town limits, travel to the west of Williamston, and reconnect with the existing US 17 alignment near the Roanoke River. STIP R-3826, which involves the development of new roadway on the west side of Williamston, was involved in the consideration of this alternative as it would provide a possible alignment for the Williamston bypass. STIP R-3826 extends from Prison Camp Road to NC 125; a Williamston bypass would require an extension of this roadway to connect back to US 17 north of Williamston. This alternative was dismissed due to the impact it would have on environmental resources along the proposed alignment. In order to not infringe excessively on the Town of Williamston, the proposed alignment would have to pass through the Roanoke River Wetlands Game Lands and the Roanoke River National Wildlife Refuge.

A connector in a more northern location was also requested; the proposed alignment would extend beyond the northern bounds of the currently defined project study area. While this alternative was not studied in depth during this phase, it may be further evaluated in a later stage of design.

5.2.2 Segment 2: Roanoke River to Pleasant Oak Road

One alternative was proposed for Segment 2. The proposed design would upgrade the existing US 17 alignment to interstate standards. This segment passes through the Lower Roanoke River NWR. On the northern side of the NWR, Willoughby Lane would be extended to a grade separation over US 17 that would tie into Cedar Landing Road to connect the eastern and western sides of US 17. A service road would extend from Cedar Landing Road to connect existing properties on the eastern side of US 17. A diamond interchange is proposed at Outlaw Farm Road that would provide access onto US 17 for Outlaw Farm Road and St Francis Road. A service road would also be developed, starting near Mill Swamp, to provide access to the back side of properties along US 17. The service road would tie into George Leggett Road. A diamond interchange is proposed at George Leggett Road to provide these properties access to US 17.

5.2.3 Segment 3: Pleasant Oak Road to Beginning of Windsor Bypass

Two alternatives were evaluated for Segment 3: Alternatives 3 and 3A.

Alternative 3

Alternative 3 would upgrade the existing US 17 alignment. The alignment would be widened to the east, impacting the properties directly along US 17. The existing US 17 lanes on the western side would be converted to a service road to provide access to existing properties. A service road would be provided further off of US 17 on the eastern side to provide access for properties. A diamond interchange is proposed to bring the Windsor bypass to interstate standards. Grade separations are proposed for Grabtown Road and Sterlingworth Street to connect properties on the western side of the bypass to the town of Windsor.

Alternative 3A

Alternative 3A would follow a new alignment west of the existing US 17 alignment with an interchange north of Roquist Creek to provide access to the existing US 17 and Pleasant Oak Road. The new alignment for US 17 would pass through wetlands and agricultural lands and would tie back into the existing US 17/Windsor Bypass near Grabtown Road with a diamond interchange.

5.2.4 Segment 4: Windsor Bypass

One alternative is proposed for Segment 4. The proposed design would follow along the existing US 17 alignment. This segment already has full control of access and interchanges so only minimal upgrades, such as widening paved shoulders, would be required. The existing partial cloverleaf interchange at King Street would be utilized with improvements to the ramps to connect the eastern side of Windsor and US 17. The existing interchange at Wakelon Road would also be utilized with minor improvements to the ramps.

5.2.5 Segment 5: End of Windsor Bypass to Chowan River

Two alternatives were evaluated for Segment 5: Alternatives 5 and 5A.

Alternative 5

Alternative 5 would follow the existing alignment for the US 17/Windsor Bypass. Rather than US 17 and the Windsor Bypass tying back together in the current location, a service road would be developed to travel along the southern side of the Windsor Bypass until a proposed diamond interchange at Jamestown Road. Davis Road would be extended to connect with Ledrew Perry Road in order to connect the northern and southern sides of US 17. On the eastern side of the interchange, service roads would be provided on both sides of US 17. ROW acquisition for this alternative would impact properties adjacent to US 17. Service roads along US 17 would connect to NC 45, which would pass over US 17 with a grade separation. A diamond interchange is proposed at Bal Gra Road with extensive service roads traveling along both sides of US 17. The service roads would end prior to the Chowan River.

Alternative 5A

Alternative 5A proposes an alignment on new location that is located to the south of the current US 17 alignment. Davis Road would be converted to a grade separation at the proposed US 17 alignment to connect the northern and southern sides of US 17. A grade separation would also be provided at Jamestown Road. A diamond interchange is proposed at NC 45, south of its existing intersection with US 17, where people could access or exit off of US 17. A diamond interchange is also proposed at Bal Gra Road to tie the proposed new alignment back into the existing US 17 alignment. Service roads would be provided on both sides of US 17 from the eastern side of the interchange until the Chowan River.

5.2.6 Segment 6: Chowan River to End of Edenton Bypass

One alternative is proposed for Segment 6, and it would upgrade existing US 17. A large portion of segment 6 already has full control of access and interchanges. Minor upgrades, such as widening the shoulder, would be necessary to bring this section to interstate standards. The existing bridge over the Chowan River would be retained and used. Just west of Thick Neck Road the current facility no longer maintains full control of access, so the existing roadway would be converted to full control of access. A service road is proposed to provide access to the properties in this portion of the segment. Near Thick Neck Road the proposed alignment would be shifted slightly south and the existing US 17 westbound lanes would be converted to a service road. A diamond interchange is proposed at Davenport Lane with service roads continuing on both sides of US 17 east of the interchange. The service roads would require ROW acquisition that would impact properties adjacent to US 17.

5.2.7 Segment 7: End of Edenton Bypass to Halls Creek Road

Two alternatives were evaluated for Segment 7: Alternatives 7 and 7A.

Alternative 7

Alternative 7 involves upgrading existing US 17 to interstate standards. Service roads would be provided on both sides of US 17 east of the Davenport Lane interchange. The service road on the western side of US 17 would stop prior the proposed diamond interchange at Bear Swamp Road, but the service road on the eastern side of US 17 would continue past the interchange. Service roads would be provided on the western side again following the interchange. At Edenton Road Street a partial interchange would be provided to allow southbound traffic on the service road to merge onto US 17 and northbound traffic on US 17 to exit onto the service road. Wynne Fork Road would be converted to a grade separation and connect to service roads adjacent to US 17. A half cloverleaf interchange is proposed at Church Street. The existing bridge would be used to cross the Perquimans River. North of

the river, a partial cloverleaf interchange is proposed at Creek Drive. Old Neck Road would be converted to a grade separation and Melton Grove Road would be extended to provide a service road on the northern side of US 17. A partial cloverleaf interchange is proposed at Woodland Church Road with service roads continuing on east the interchange. The current junction with Old Highway 17 would be converted to a grade separation that connects the service roads and Old Highway 17. The existing interchange at Okisko Road would be utilized with minor improvements to the ramps.

Alternative 7A

Alternative 7A would be the same as Alternative 7 from the beginning of the segment until Wiggins Road. A half cloverleaf interchange is proposed at Wiggins Road. Following the interchange, the proposed alignment would diverge to a more northern location than the existing alignment. A service road would be on the western side of the proposed alignment. A diamond interchange is proposed at Chapanoke Road with the service road traveling around the interchange and continuing along the proposed alignment. The proposed alignment would tie back into the existing alignment east of the junction of the existing US 17 and Old US 17 Road. The existing interchange at Okisko Road would be utilized with minor improvements to the ramps.

5.2.8 Segment 8: Elizabeth City Bypass

There is one alternative proposed for Segment 8. The proposed alignment would follow along the existing US 17 Bypass of Elizabeth City for the entirety of the segment. The existing roadway would be upgraded to interstate standards. This segment would require no new service roads and minimal acquisition of right of way.

5.2.9 Segment 9: End of Elizabeth City Bypass to Dismal Swamp State Park

There is one alternative proposed for Segment 9. The proposed alignment would follow along the existing US 17 Elizabeth City Bypass and tie back into US 17 along the existing alignment. A new half cloverleaf interchange is proposed at US 158 that would provide access for North Side Road, which would lose direct access to US 17 due to control of access. A half cloverleaf interchange is also proposed at Horseshoe Road to provide access for development on the eastern and western sides of US 17.

5.2.10 Segment 10: Dismal Swamp State Park to Virginia State Line

Two alternatives were evaluated for Segment 10: Alternatives 10 and 10A.

Alternative 10

Alternative 10 would follow along the existing US 17 alignment, using the existing bridge over the Dismal Swamp Canal. A service road would be provided on the eastern side to provide access to development along this segment. Along the current intersection of US 17 and McPherson Road, the US 17 alignment would be shifted slightly eastward and a partial cloverleaf interchange would be constructed to provide access to the Dismal Swamp Canal Welcome Center and residential development on the eastern side of the proposed interchange. The existing US 17 roadway would be utilized as the connector for the Welcome Center. The service road would continue along the eastern side of US 17 until the end of the project at the North Carolina/Virginia border.

Alternative 10A

Alternative 10A would follow along the existing US 17 alignment with a proposed service road in a more eastward location than is proposed for Alternative 10. The service road would connect with multiple streets that have residential development along them and would tie into the proposed interchange at McPherson Road. US 17 would continue along the existing alignment with a service road to the east until the North Carolina/Virginia border. This segment would also involve an eastward traveling segment that would begin at the proposed McPherson interchange, travel through Currituck County, and tie into NC 168 near the North Carolina/Virginia border. This extension would be entirely on new location and the proposed alignment would travel through forested land, agricultural land, and an extensive quantity of wetlands. A partial cloverleaf interchange is proposed to connect the extension and NC 168.

6. Alternative Cost Estimates

Cost estimates have been developed for the segment alternatives based upon the conceptual designs. Table 8 shows cost estimates for each alternative for construction, utility relocations, and right of way.

Table 8. Cost Estimates

Segment	Segment Description	Length (miles)	Construction Costs (Thousands)	Utility Relocation Costs (Thousands)	Right-of-Way Costs (Thousands)	Total Costs (Thousands)
1	Beginning of project to Roanoke River	1.6	46,200	2,800	26,300	75,300
1B	Beginning of project to Roanoke River	1.6	72,800	600	2,600	76,000
2	Roanoke River to Pleasant Oak Road	8.5	72,800	2,700	12,300	87,800
3	Pleasant Oak Road to 13 interchange split (north of Windsor)	4.5	40,700	3,400	23,400	67,500
3A	Pleasant Oak Road to 13 interchange split (north of Windsor)	4.5	53,000	400	7,300	60,700
4	Beginning of Windsor Bypass to end of Windsor Bypass	6.75	28,400	2,100	13,100	43,600
5	End of Windsor Bypass to North of Midway	4.75	84,300	5,200	43,400	132,900
5A	End of Windsor Bypass to North of Midway	4.75	100,800	600	16,900	118,300
6	North of Midway to end of Edenton Bypass	11.6	70,200	3,100	14,200	87,500
7	End of Edenton Bypass to Elizabeth City Bypass (Halls Creek Road)	19	130,400	5,200	57,900	193,500
7A	End of Edenton Bypass to Elizabeth City Bypass (Halls Creek Road)	19	154,100	5,200	58,400	217,700
8	Beginning of Elizabeth City Bypass to end of Elizabeth City Bypass	10.2	33,100	1,300	2,000	36,400
9	End of Elizabeth City Bypass to Dismal Swamp State Park Line	8.1	52,500	1,900	16,400	70,800
10	Dismal Swamp State Park line to NC/VA State line	4.6	60,100	2,600	13,100	75,800
10A	Dismal Swamp State Park line to NC/VA State line	14.6	94,700	900	29,400	125,000

The total cost of this corridor ranges from \$849,700,000 to \$945,200,000.

7. Community Resources and Natural Environment

A detailed environmental study was not conducted for this feasibility study. Geographic Information System (GIS) level research and a preliminary site review were completed. Documented community features as well as environmental resources are included on the conceptual alternatives maps in Appendix A.

7.1 Community Resources

7.1.1 Local Features

There are multiple notable local features with the project study area. These include churches, community facilities, a hospital, and land that is managed at the state and federal level.

In Martin County, Moratoc Park is an 18-acre, county owned park on the Roanoke River located approximately .3 miles west of US 17. Within the Town of Williamston, and within a half mile distance of the US 17 corridor, are Williamston Town Hall, Green Memorial Church of Christ, and Martin County Communications, which is a 24-hour communications center for all law enforcement. Holy Trinity Catholic Church is located on the US 17, near Gatlin Street. North Carolina bike route #3 extends along US 17 from Williamston to the Chowan River and crosses the river as a part of US 17. The bike path diverges from US 17 at the US 17/ Queen Street intersection and crosses US 17 with Virginia Road.

In Bertie County, the study area passes through the Roanoke River National Wildlife Refuge owned by US Fish and Wildlife Service. The study area also includes the Roanoke River Wetlands Game Land and the Bertie County Game Land owned by NC Wildlife Resources Commission, Mitigation Services Easements owned by the NC DEQ, Division of Mitigation Services, The Roanoke River Preserve owned by the Nature Conservancy, and Wading Place Creek Swamp and Uplands RHA owned by Weyerhaeuser Company. Edgewood Baptist Church is located along the US 17 corridor in Bertie County. The Cashie Golf and Country Club is located along US 17 south of County Farm Road.

In Chowan County, the study area includes a NC Clean Water Management Trust Fund Easement owned by the state of North Carolina; the Chowan Game Land owned by the NC Wildlife Resources Commission, the Edenton National Fish Hatchery owned by the US Fish and Wildlife Services, a Conservation Reserve Enhancement Program Easement owned by NC Department of Agriculture, Division of Soil and Water Conservation, and a Historic Preservation Area owned by the Historic Preservation Foundation of North Carolina. The Vidant Chowan Hospital is located near the US 17/Virginia Road interchange in Edenton.

In Perquimans County, the study area includes a Mitigation Services Easement owned by the NC DEQ, Division of Mitigation Services, a NC Clean Water Management Trust Fund Easement owned by the NC DNCR Clean Water Management Trust Fund, a Historic Preservation Area owned by the Historic Preservation Foundation of North Carolina, and the Newbold-White House State Historic Site owned by the NC DNCR, Division of State Historic Sites and Properties. Perquimans County Athletic Fields are located near US 17 along Wiggins Road.

In Pasquotank County, the study area includes a North Carolina Coastal Land Trust Easement owned by the North Carolina Coastal Land Trust. Bicycle Route # 4 crosses US 17 bypass.

In Camden County, US 17 passes to the east of the Dismal Swamp State Park owned by NC DNCR, Division of Parks and Recreation. The PSA also includes a North Carolina Coastal Land Trust Easement owned by the North Carolina Coastal Land Trust.

In Currituck County, the proposed new roadway would pass predominantly through agricultural and forested land, The roadway would connect with NC 168 north of a residential neighbourhood. The proposed roadway would also pass to the south of the Elizabeth City State University Dismal Research Facility.

7.1.2 Schools and Facilities

Multiple Schools are located along the US 17 corridor in the project study area, including:

- Serendipity Alternative School on Country Farm Road in Bertie County (approximately 0.2 miles from US 17)
- John A. Holmes High School on Woodard Street in Edenton (approximately 0.75 miles from US 17)
- Perquimans High School on Edenton Road Street in Hertford (approximately 0.8 miles from US 17)
- Victory Christian School, a private school, on Old Hertford Highway in Elizabeth City (approximately 0.3 miles from US 17 Bypass)

7.1.3 Historic Resources

Records and maps of the North Carolina State Historic Preservation Office (HPO) were reviewed at the HPO's website for historic architectural resources that had been identified in previous survey or that were listed in or had been determined eligible for listing in the National Register of Historic Places. Table 9 provides a list of previously identified historic resources found within the vicinity of the project study area. More detailed evaluations of these properties and the potential effects of the project on these resources would be conducted during the project development phase of the project.

Table 9. Historic Resources

Segment	Name	ID	Status	Location
1	Williamston Historic District	MT1031	NR-listed in 2001	800 feet northwest of existing alignment along Park Street in Williamston
1	Kerr-McGee Chemical Corporation	MT1028	study list – gone	on Roanoke River southeast of existing crossing
2	Eva Bond House	BR0481	Surveyed only	119 Eva Bond Rd (north side SR 1521, 0.75 mi east of jct w/ NC 13/17)
2	School	BR0842	Surveyed only	119 Eva Bond Rd (north side SR 1521, 0.75 mi east of jct w/ NC 13/17)
2	Speller Farm	BR0838	Surveyed only	1416 US 13/17 (west side US 13/17, 0.4 mi south of jct w/ SR 1106)
2	Service Station	BR1299	Surveyed only	west side of US 17 at Pollocks Road (SR 1105)
3,3A	Ward House	BR0843	Surveyed only	137 Ward Road (east of US 17)
3,3A	Pleasant Oak Baptist Church	BR0849	Surveyed only	532 US13/17 S, Windsor (west side of US 17 near Pleasant Oak Rd (SR 1102)
3,3A	Masonic Lodge of Windsor	BR0850	Surveyed only	534 US13/17 S, Windsor (west side of US 17 near Pleasant Oak Rd (SR 1102)
3	Swain-Ward House	BR0844	study list	east side of US 17 0.4 mi north of Pleasant Oak Road
3	Store	BR1298	Surveyed only	330 US 13/17 (west side of US 17 north of SR 1500)
3	St James Church	BR1297	Surveyed only	326 US 13/17 (west side of US 17 north of SR 1500)
3	Rosefield	BR0145	NR listed 1982	212 W. Gray Street, Windsor on US 17 Bus at Coulbourn Lumber Road
3A	Gillam House	BR1124	Surveyed only	226 Grabtown Road (north side of SR 1100)
4	Windsor Historic District	BR1227	study list	
4	The Pines Historic District	BR1283	State Listed HD 2010	blocks of Belmost, Crescent, Winwood, and Hoffer Streets in Windsor
4	Bertie Memorial Hospital	BR0344	NR 2004	on Sterlingworth Street/NC 308

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4	Bond-Haste House (Thomas Bond House)	BR0020	study list	202 Governors Road, Windsor (north side of NC 308 0.4 mile north of US 13 Bypass)
5,5A	Harden Tenant House	BR0167	surveyed only	north side US 17, 0.5 mi E of jct w/ SR 1503
5,5A	House	BR0171	surveyed only	105 Castelloe Road (east side SR 1504 .05 mi south of jct w/ US 17)
5,5A	Davis House	BR0165	Study list	149 Davis Road (east side SR 1503, 0.45 mi south of jct w/ US 17)
5,5A	Charlie Grant Harden House	BR0574	Surveyed only	203 Davis Road (east side SR 1503, 0.3 mi south of jct w/ US 17)
5	Millers Store	BR0580	Surveyed only	2044-2052 US 17N, Midway (south side US 17 west of jct w/ NC 45N)
5, 5A	Mill Landing	BR0563	Surveyed only	2302B US 17N, Midway (south side US 17, 1.0 mi east of jct w/ US 45)
5,5A	House	BR0579	Surveyed only	248 Jeff White Road (south side SR 1361, 0.3 south of jct w/ SR 1358)
5,5A	Metackwem Site	BR0408	Surveyed only	US 17 at Chowan River
6	John Edward Waff, Sr. House	CO0765	Surveyed only	323 Hickory Fork Road, Edenton
6	Robert L. Harrell House	CO0772	Surveyed only	150 Substation Road, Edenton
6	Boyce-Richardson House	CO0948	Surveyed only	1735 Ocean Highway, Edenton
6	Abram Bonner House	PQ0034	Surveyed only	north side NC 17, 01 mi southwest of jct. w/SR 1343 in Hertford
6	Levi Creecy House	PQ0050	Surveyed only	south side Levi Creecy Road (SR 1343), 0.4 mi E of jct. w/NC 17 Bethel
7	Proctor Farm Smokehouse	PQ0195	Surveyed only	E. Bear Swamp Road
7	Jesse Campen House	PQ0036	Surveyed only	314 W. Grubb Street, Hertford
7	John McNider House	PQ0134	Study list	northeast side SR 1340, 0.85 mi southeast of jct w/NC 17 in Bethel
7	Henry Harrell House	PQ0085	Surveyed only	west side NC 17, 0.9 mi southwest of jct. w/ NC 37 in Hertford
7	Anderson White House	PQ0268	Surveyed only	east side NC 17, 0.2 mi north of jct w/SR 1340 in Bethel
7	John O White House	PQ0280	Study list	northwest side US 17 at jct BUS 17/NC 37 in Hertford
7	Joseph M. Cox House	PQ0048	Surveyed only	south side NC Bypass 17, 0.25 mi southwest of jct. w/1338 in Bethel
7	Old Neck Historic District	PQ0471	NR 1996	18 th -20 th c. farming district south side of US 17
7	Newby-Nixon Cemetery	PQ0153	Part of NRHD	east side NC 17, 1.25 mi south of jct. w/ SR 1300
7	Francis Nixon House	PQ0166	Study list/part of NRHD	south side SR 1300, 0.4 mi west of jct. w/ SR 1301 in Parkville
7,7A	Thomas Nixon House	PQ0170	Study list/part of NRHD	South side NC 17, 0.35 mi east of jct. w/ SR 1301 in Parkville
7,7A	Winfall Fire Lookout Tower	PQ----	Surveyed only	south side of US 17 west of Old Neck Road
7A	Perquimans County Home	PQ0181	Study list	north side SR 1220, 0.1 mi west of jct. w/SR 1214 in Winfall
7	Henry V. Corbett House	PQ0046	Surveyed only	north side of US 17, 0.25 mi west of jct w SR 1302 in Parkville
7	House, Trailer & Willow Branch School	PQ0487	Part of NRHD	west side of SR 1302, 0.35 mi south of jct with US 17

7	Newbold School	PQ0148	Surveyed only	south side of US 17, 0.35 mi west of jct with SR 1304 in Parkville
7	Newbold Slave House	PQ0149	Surveyed only	south side of US 17, 0.35 mi west of jct with SR 1304 in Parkville
7	Newbold Tenant House	PQ0150	Surveyed only	south side of US 17, 0.35 mi west of jct with SR 1304 in Parkville
7	Albertson-Miller House	PQ0011	Study list	south side of US 17, 2 mi east of jct SR 1304 in Woodville
7	W.M. Morgan House	PQ0142	Surveyed only	north side of US 17, 0.4 mi east of jct w SR 1226 in Parkville
7	William C. Scott House	PQ0216	Surveyed only	east side of Woodland Church Road (SR 1303), 0.9 mi north of jct w SR 1306 in New Hope
9	Morgan House	PK0001	NR 1972	north side SR 1416, 0.2 mi east of jct. w/ US 17/158
9	Moses R. White House	PK0996	DOE 2010	south side US 158 0.1 mi west w/ US 17
10	Dismal Swamp Canal	CM0008	NR 1988	1790s and later 22 mile canal
10	Burnham House	CM0018	DOE	east side US 17, 0.5 mi north jct w/ SR 1243 in South Mills
10A	Samuel Wilson House (Broegler House)	CK0021	DOE	W side of NC 168, 0.5 mi N of jct w SR 1229 (192 Caratoke Highway)

7.1.4 Archaeological Resources

Mapping was reviewed at the North Carolina Office of State Archaeology (OSA) on July 25, 2017 to determine if any previously-recorded archaeological sites were located within a one-mile radius of the study area. A total of 164 archaeological sites were identified. These include 78 prehistoric sites, 46 historic sites, and 40 sites containing both prehistoric and historic components. Of these 164 sites, 29 (seven prehistoric, 11 historic, and 11 prehistoric and historic) are directly intersected by the US 17 project as currently configured (Table 10).

Table 10. Archaeological Sites Intersected by Proposed US 17 Project

Site Number	Cultural Affiliation	Status
31BR52/52**	Both	Determined Eligible
31BR178**	Historic	Not Eligible
31BR192**	Historic	Determined Eligible
31BR194/194**	Both (with Cemetery)	Not Eligible
31BR199**	Historic	Not Eligible
31BR200/200**	Historic	Not Eligible
31BR201/201**	Both	Determined Eligible
31BR202/202**	Both	Not Eligible
31BR203/203**	Both	Not Eligible
31BR204**	Historic	Not Eligible
31BR205/205**	Both	Determined Eligible
31BR209/209**	Both	Not Eligible
31BR210/210**	Both	Not Eligible
31CK71**	Historic	Not Eligible

31CM12**	Historic	Unassessed
31CM70**	Historic	Determined Eligible (Historic District)
31CO81**	Historic	Not Eligible
31CO82**	Historic	Not Eligible
31CO83/83**	Both	Not Eligible
31CO84**	Historic	Not Eligible
31MT112	Prehistoric	Not Eligible
31MT119	Prehistoric	Not Eligible
31MT120	Prehistoric	Not Eligible
31MT193	Prehistoric	Not Eligible
31PQ31	Prehistoric	Not Eligible
31PQ87	Prehistoric	Unassessed
31PQ96	Prehistoric	Unassessed
31PQ134/134**	Both	Unassessed
31PQ209/209**	Both	Not Eligible

Five of the 29 known archaeological sites within the feasibility study project area have been determined to be eligible for the National Register of Historic Places (NRHP). Site 31BR52/BR52** (the Eden House) was identified during a survey for 9.3 mile long segment of US 17 on the west side of the Chowan River. The Eden House Plantation was home to former North Carolina governors Charles Eden and Gabriel Johnston and was subjected to intensive archaeological data recovery excavations during the fall of 1996 by Coastal Carolina Research, Inc.. Sites 31BR192**, 31BR201/BR201**, and 31BR205/BR205** were identified during the survey of the Windsor Bypass (US 17) project in 2001 conducted by Environmental Services, Inc. Site 31CM70** was identified during the 2009 survey of the Dismal Swamp Canal by John Milner Associates Inc.

Some portions of the current project have variably been subjected to archaeological studies, while much of the project length has not. The need for archaeological studies during the life cycle of this project would need to be determined on a section by section basis through consultation between the NCDOT and the North Carolina State Historic Preservation Office. Sections previously surveyed for identification of archaeological resources generally would not require additional survey studies. However, these segments may require other archaeological studies if (for examples) (a) current project elements were not covered under previous efforts, and/or (b) NRHP-eligible or potentially eligible sites would be impacted that require testing or impact mitigation studies. Similarly, sections that have not been previously subjected to any archaeological field studies may or may not require studies, depending on the extent and nature of planned project elements. For example, sections not previously studied but where planned project elements fall within the existing right-of-way may not require any field studies. Conversely, areas of new location would likely require field surveys to identify archaeological sites within the area of potential effects of the project. Follow-up testing or impact mitigation studies would then be conducted as required.

7.1.5 Relocations and Displacements

The project would involve numerous residential and business relocations, as well as impacts to several churches and cemeteries.

Table 11. Relocations and Displacements

Segment	Residences	Businesses	Churches	Graves
1	16	11	2	0
1B	6	0	0	0
2	41	1	2	0
3	94	19	0	14
3A	11	3	0	0
4	6	11	0	0
5	59	12	2	120
5A	0	0	0	0
6	12	6	0	0
7	96	27	0	15
7A	79	23	2	225
8	0	0	0	0
9	4	2	0	0
10	3	0	0	0
10A	8	0	0	0

7.2 Natural Environment

7.2.1 Water Resources

US 17 comes into contact with multiple wetlands, rivers, and streams throughout the project study area. The study area includes the Roanoke, Chowan, and Pasquotank River Basins. The subbasins include the Lower Roanoke (eight digit hydrologic unit code (HUC) 03010107), Chowan (eight digit HUC 03010203), and Albermarle (eight digit HUC 03010205). The study area also includes twelve watersheds (Table 12).

Table 12. Watersheds in the Study Area

10-Digit Name	10-Digit Code
Sweetwater Creek	0301010704
Conoho Creek-Roanoke River	0301010705
Gardener Creek-Roanoke River	0301010706
Outlet Cashie River	0301010708
Chowan River	0301020307
Edenton Bay-Albermarle Sound	0301020501
Yeopim River-Albermarle Sound	0301020504
Perquimans River	0301020503
Little River	0301020505
Pasquotank River	0301020507
Northwest River	0301020511
Dismal Swamp Canal-Lake Drummond	0301020506

Section 303(d) of the Clean Water Act (CWA), requires states to develop a list of waters meeting water quality standards or which have impaired uses. Little River in the Pasquotank River Basin is the only waterway directly in contact with US 17 in the study area listed as a 303(d). However, Cricket Swamp which is located approximately one mile from US 17 and connects with Salmon Creek in Bertie County is also listed as 303(d).

As noted in Table 13, the streams within the study area have multiple classifications, which consist of:

- Class C - Waters protected for uses such as secondary recreation, fishing, wildlife, fish consumption, aquatic life including propagation, survival and maintenance of biological integrity, and agriculture. Secondary recreation includes wading, boating, and other uses involving human body contact with water where such activities take place in an infrequent, unorganized, or incidental manner.
- Class B - Waters protected for all Class C uses in addition to primary recreation. Primary recreational activities include swimming, skin diving, water skiing, and similar uses involving human body contact with water where such activities take place in an organized manner or on a frequent basis.
- Nutrient Sensitive Waters (NSW) - Supplemental classification intended for waters needing additional nutrient management due to being subject to excessive growth of microscopic or macroscopic vegetation.
- Water Supply V (WS-V) - Waters protected as water supplies which are generally upstream and draining to Class WS-IV waters or waters used by industry to supply their employees with drinking water or as waters formerly used as water supply. These waters are also protected for Class C uses.
- Swamp Waters (SW) - Supplemental classification intended to recognize those waters which have low velocities and other natural characteristics which are different from adjacent streams.

Table 13. Surface Water Classifications

Surface Water Name	Classification
Roanoke River	C
Conine Creek	C
Mill Swamp	C,SW
Roquist Creek	C,SW
Cashie River	C,SW
Salmon Creek	C,NSW
Chowan River	B,NSW
Pembroke Creek	B,NSW
Queen Anne Creek	C,NSW
Burnt Mill Creek	C,Sw
Bethel Creek	C,Sw
Raccoon Creek	C,Sw
Perquimans River	SC
Sutton Creek	C,Sw
Little River	C,Sw
Pasquotank River	WS-V,Sw
Dismal Swamp Canal	C,Sw
Hamburg Ditch (Cross Canal)	C,Sw

7.2.2 Protected Species

Species with the federal status of endangered (E), threatened (T) are protected under provisions of the Endangered Species Act (ESA) of 1973 as amended (16 USC 1531 et. seq.). Any action likely to adversely affect a species classified as federally protected will be subject to review by the United States Fish and Wildlife Service (USFWS). The USFWS online database was reviewed for federally listed species potentially occurring in counties within the study area. The federally protected species listed for the project study area as of February 7, 2017, are listed in Table 14.

Table 14. Federally Protected Species in the Study Area

Common Name	Scientific Name	Federal Status	Counties
American alligator	<i>Alligator mississippiensis</i>	T(S/A)	Camden
American Eel	<i>Anguilla rostrata</i>	FSC	Martin, Bertie, Chowan, Perquimans, Pasquotank, Camden, Currituck
Bald Eagle	<i>Haliaeetus leucocephalus</i>	BGPA	Martin, Bertie, Chowan, Perquimans, Pasquotank, Camden, Currituck
Black-throated green warbler	<i>Dendroica virens waynei</i>	FSC	Camden
Black Rail	<i>Laterallus jamaicensis</i>	FSC	Currituck
Cerulean warbler	<i>Dendroica cerulea</i>	FSC	Bertie
Eastern Henslow's sparrow	<i>Ammodramus henslowii susurrans</i>	FSC	Martin, Bertie
Green sea turtle	<i>Chelonia mydas</i>	T	Currituck
Hawksbill sea turtle	<i>Eretmochelys imbricate</i>	E	Currituck
Kemp's ridley sea turtle	<i>Lepidochelys kempii</i>	E	Currituck
Leatherback sea turtle	<i>Dermochelys coriacea</i>	E	Currituck

Loggerhead sea turtle	<i>Caretta caretta</i>	T	Currituck
Northern long-eared bat	<i>Myotis septentrionalis</i>	T	Martin, Bertie, Camden
Piping plover	<i>Charadrius melodus</i>	T	Currituck
Rafinesque's big-eared bat	<i>Corynorhinus rafinesquii</i>	FSC	Martin, Bertie, Chowan, Perquimans
Red-cockaded woodpecker	<i>Picoides borealis</i>	E	Bertie, Camden, Currituck
Red knot	<i>Calidris canutus rufa</i>	T	Bertie, Chowan, Perquimans, Pasquotank, Camden, Currituck
Southeastern myotis	<i>Myotis austroriparius</i>	FSC	Martin, Bertie, Chowan
West Indian manatee	<i>Trichechus manatus</i>	E	Bertie, Chowan, Perquimans, Pasquotank, Camden, Currituck
Chowanoke crayfish	<i>Orconectes virginianus</i>	FSC	Martin, Bertie
Grassleaf arrowhead	<i>Sagittaria weatherbiana</i>	FSC	Pasquotank, Currituck
Raven's boxseed	<i>Ludwigia ravenii</i>	FSC	Chowan, Perquimans
Seabeach amaranth	<i>Amaranthus pumilus</i>	T	Currituck
Virginia least trillium	<i>Trillium pusillum var. virginianum</i>	FSC	Camden, Currituck

Source: *Endangered and Threatened Species and Species of Concern by County for North Carolina (USFWS 2017)*

T(S/A)=threatened due to similarity in appearance; E=endangered; T=threatened; FSC=federal species of concern
 BGPA=Bald and Golden Eagle Protection Act

7.3 Permits

The following permits will likely be required for implementing this project:

- United States Army Corps of Engineers, Section 404 Permit: any action that proposes to place fill into “Waters of the United States” falls under the jurisdiction of the United States Army Corps of Engineers (USACE) under Section 404 of the CWA (33 U.S.C 1344). The CWA provides for public notice and review of pending Section 404 permit applications. Encroachments into areas determined as subject under CWA must be reviewed and approved by the USACE through the Section 404 program.
- NCDEQ, Division of Water Resources, Section 401 Water Quality Certification: any activity which may result in discharge to navigable waters and requires a federal permit must obtain a certification through the NCDWR that such discharge would be in compliance with applicable state water quality standards. Usually this permit is required in association with the Section 404 permitting process and is required prior to Section 404 authorization.
- NCDEQ, Division of Land Resources, Erosion and Sedimentation Control Plan: in accordance with the North Carolina Sedimentation Pollution Control Act of 1973, projects disturbing more than one acre of land must submit an Erosion and Sedimentation Control Plan to the NCDENR Division of Land Resources (NCDLR). The plan must include erosion control measures and be approved by the DLR prior to construction.
- NCDEQ, Division of Forest Resources, Open Burning Permit: a permit is required to start a fire in woodlands or within 500 feet of woodlands under the protection of the Division of Forest Resources. Thirty day permits can be issued for highway construction.

8. Conclusion

8.1 Conclusion

The purpose of the proposed project is to upgrade US 13/17 from US 64 in Williamston to Virginia to interstate standards (Future I-87 Corridor) to improve mobility, connectivity, and safety. US 17 is critical to economic development in the northeastern region of North Carolina. It speeds delivery of agricultural products to the Port of Virginia and local markets and serves the logistical needs of our military, and an economic impact study conducted for the Highway 17 Association found that upgrading US 17 to interstate standards would promote economic development, job growth, and increased connectivity throughout the northeastern North Carolina region as well as into Virginia.

The proposed project would require the acquisition of right-of-way along the existing roadway as well as in new locations where the proposed alignment may diverge from the existing US 17 alignment. The proposed project would also require full control of access along the US 17. While this would promote traffic flow, it would also impact residential, agricultural, and commercial establishments that currently directly connect to US 17. The proposed project would also come into contact with wetlands at multiple points throughout the PSA.

Costs for improving the corridor would be approximately \$870-875 million, but could vary somewhat depending on which alternative was selected for each segment. Generally, alternatives along existing US 17 would have lower construction costs than alternatives on new location. Conversely, alternatives along US 17 would have substantially higher right of way costs than the new location options.

Segments 1 and 5 would be the most expensive, with Segment 1 having a cost of approximately \$47 million per mile and Segment 5 costing about \$25 million per mile. These segments have more proposed interchanges and/or additional bridges. Other Segments average approximately \$10 million per mile. Alternative 10A, which would add about 10 miles to the project length through Currituck County and tying into NC 168 near the North Carolina/Virginia border, would add an additional \$125 million to the project cost. The total cost of the corridor ranges from \$849,700,000 to \$945,200,000. Please refer to Section 6, Table 8 for a breakdown of cost for each segment.

8.2 Stakeholder Coordination

This feasibility study was prepared with the input, direction, and feedback of representatives from NCDOT as well as local officials from involved areas. Two sets of meetings were held, the first in July 2016 and the second in September 2017, to present the project to local elected officials in the project study area. Additionally, stakeholders have reviewed the draft version of this feasibility study and provided comments to be addressed within this document as well as comments which should be considered during future phases of this project. Copies of the project's scoping minutes, stakeholders' comments, as well as responses to the stakeholders' comments, are included in Appendix C.

9. Reference Materials

- ATKINS North America. (2013). *US 17 Economic Impact Study*. Prepared for the Highway 17 Association
- Currituck County. (2006). *Currituck County Moyock Mega-Site Market Feasibility Study*.
- Governor's Logistics Task Force and NCDOT. (2011). *Seven Portals Study - Northeast Region*.
- Holland Consulting Planners. (2013). *Martin County, NC: Comprehensive Plan with a Health & Wellness Component*.
- McGill Associates. (2006). *Camden County/US 17 Corridor Master Plan* .
- NC Natural Heritage Program. (2017). *Natural and Cultural Resources*. Retrieved from <http://ncnhde.natureserve.org/content/map>
- NCDENR. (2016). *Draft 2016 Integrated Report 303(d) List Review*. Retrieved from <https://ncdenr.maps.arcgis.com/apps/webappviewer/index.html?id=87870e4480c54b8abf6bd7ee97ebc26b>
- NCDENR. (2017). *Find Your HUC*. Retrieved from <https://ncdenr.maps.arcgis.com/apps/PublicInformation/index.html?appid=ad3a85a0c6d644a0b97cd069db238ac3>
- NCDENR. (2017). *NC Surface Water Classifications*. Retrieved from <https://ncdenr.maps.arcgis.com/apps/webappviewer/index.html?id=6e125ad7628f494694e259c80dd64265>
- NCDOT. (2013). *North Carolina Hurricane Evacuation Routes*. Retrieved from https://www.ncdot.gov/download/travel/travel_evac_hurricaneroutes.pdf
- NCDOT. (2017). *NCDOT Current STIP*. Retrieved from <http://ncnhde.natureserve.org/content/map>
- NCDOT. (2017). *NCDOT Mitigation Site Map*. Retrieved from <http://ncdot.maps.arcgis.com/home/webmap/viewer.html?webmap=d560dfb1ea443b299ca7fc68b250Nb4>
- NCDOT Transportation Planning Branch. (2012). *Bertie County Comprehensive Transportation Plan*.
- NCDOT Transportation Planning Branch. (2014). *Camden County Comprehensive Transportation Plan*.
- NCDOT Transportation Planning Branch. (2015). *Chowan County Comprehensive Plan* .
- NCDOT Transportation Planning Branch. (2017). *Draft Martin County Comprehensive Plan*.
- NCDOT Transportation Planning Branch. (2016). *Pasquotank County Comprehensive Plan* .
- NCDOT Transportation Planning Branch. (2016). *Traffic Forecast for TIP Project FS-1501A*.
- U.S. Fish and Wildlife Service. (n.d.). *Endangered and Threatened Species and Species of Concern by County for North Carolina*. Retrieved from https://www.fws.gov/raleigh/species/cntylist/nc_counties.html
- USDOT Federal Highway Association. (2017). *Interstate System Design*. Retrieved July 2017, from Federal Highway Association: <https://www.fhwa.dot.gov/programadmin/interstate.cfm>

Appendices

Appendix A Conceptual Alternative Designs

Appendix B Bridge Recommendations

Existing bridges in the study area were evaluated to determine if they could be retained or if they would need to be replaced as part of this project.

Segment	County	Bridge No.	Year Built	Recommendation
1	Bertie	70158	1992	Retain*
1	Bertie	70155	1990	Retain*
1	Bertie	70159	1992	Retain*
1	Bertie	70156	1990	Retain*
2	Bertie	70013	1940	Replace
2	Bertie	70012	1968	Replace
2	Bertie	70026		Retain*
2	Bertie	70025	1968	Replace
2	Bertie	70037		Replace
2	Bertie	70035		Replace
2	Bertie	70048		Retain*
2	Bertie	70047		Replace
3	Bertie	70049	1968	Replace
3	Bertie	70050	1952	Replace
4				
4				
5	Bertie	70027 (LT)		Retain*
5	Bertie	70027 (RT)		Retain*
5	Bertie	70161		Retain
5	Bertie	70160		Retain
6	Chowan	200036	1998	Retain
6	Chowan	200022	1976	Replace
6	Chowan	200040	1999	Retain
6	Chowan	200026	1976	Replace
6	Chowan	200027	1976	Replace
6	Chowan	200038	1999	Retain
6	Chowan	200028	1976	Retain*
6	Chowan	200039 (LT)	1999	Retain*
6	Chowan	200039 (RT)	1999	
6	Chowan	200037	1999	Retain
7	Perquimans	710018	1969	Replace
7	Perquimans	710016	1969	Replace
7	Pasquotank	690103	2006	Retain
8	Pasquotank	690105	2003	Retain
8	Pasquotank	690106	2003	Retain
8	Pasquotank	690107	2003	Retain
8	Pasquotank	690100	2004	Retain

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9	Pasquotank	690112	2003	Retain*
9	Pasquotank	690111	2003	Retain*
9	Pasquotank	690110	2003	Retain
9	Pasquotank	690109	2003	Retain*
9	Pasquotank	690108	2003	Retain
9	Pasquotank	690089	1983	Replace
9	Pasquotank	690090		

*Design exception may be required

Appendix C Stakeholder Coordination

C.1 Project Internal Scoping Meeting (April 11, 2016)

A project internal scoping meeting was held at 1:00 PM on Monday, April 11, 2016, at the NCDOT Century Center in Raleigh, NC.

Meeting Objective

The purpose of the meeting was to discuss the scope of work and various key issues, as well as obtain additional input regarding the FS-1501A project, which includes upgrading US 17 to an Interstate from US 64 in Williamston to the Virginia State Line.

Attendees included:

Jerry Jennings	NCDOT Division 1
Gretchen Byrum	NCDOT Division 1
Bill Marley	FHWA
James Speer	NCDOT Roadway Design
Jim Dunlop	NCDOT Congestion Management
Rob Hanson	NCDOT PDEA
Carlos Moya-Astudillo	NCDOT Transportation Planning Branch
Dock Rosenthal	NCDOT Transportation Planning Branch
Derrick Lewis	NCDOT Feasibility Studies Unit
Shane York	NCDOT Feasibility Studies Unit
Angela Welsh	Albemarle RPO
Justin Oakes	Peanut Belt RPO
Christopher Werner	AECOM
Ivo Dernev	AECOM

Major Discussion Items

- The US 17 Corridor has been designated as Future I-89.
- Several suggestions were provided regarding modifications to the Need for and Purpose of the project:
 - adding the Congressional Designation of the corridor as an Interstate as a Need for the project
 - adding Hurricane Evacuation Route as a Need for the project
 - removing “divert traffic from Interstate 95” as a Need for the project
 - Revising the Purpose of the project to “Upgrade existing US 17 to interstate standards from US 64/US17 split in Williamston, NC to VA border”
 - Travel reliability may be a metric during the NEPA phase or at least could be a goal for major corridor improvements
- Discussion regarding the type of NEPA documentation ensued during which it was determined that additional conversation with FHWA would be needed prior to initiating the NEPA phase. It was noted this coordination would determine if only one document be required or would the improvements be under multiple documents based upon logical termini. It was agreed the designs developed during this feasibility study, could be helpful in identifying logical termini. A tiered document was briefly discussed, with a note that such a document is not preferred as they are perceived as “never being finished”. It was noted that this project has previously been sectioned for inclusion in the SPOT evaluation; however, this may need to be updated in the future.
- It was questioned if the State of Virginia would be included in the evaluation at this time. The response provided was that they are not interested in participating at this time, but would be interested in continued coordination as the project progresses. Additionally, it was noted that the Albemarle RPO routinely coordinates with the Hampton Roads Transportation Planning Organization.

- It was noted that Kimley-Horn is currently in the process of performing the Currituck County, Moyock Mega-Site Market Feasibility Study, which should be referenced in this project's feasibility study. Their study includes initial concepts for the US 17 connector to NC 168, near Moyock, which this project will further develop.
- Suggestions for consideration included:
 - Reviewing Windsor Bypass Project information worked on by Jay McInnis of NCDOT PDEA
 - Reviewing the wildlife refuges, which are protected from multiple aspects. If federal funding for the project will be used, avoidance alternatives will need to be considered. If only state funded will be used, a compatibility determination will be required confirming project improvements are consistent with their plans.
 - Given the wildlife refuge areas have multiple existing access points, slips ramps may need to be considered in order to maintain this connectivity. It was suggested to review existing examples of access (maybe even partial) to state parks/refuges out west and possibly the concepts included in the US 64 environmental document through the Alligator River National Wildlife Refuge.
 - Should easement be required from refuges, it is expected to be very expensive and will require extensive coordination.
 - Determine if individual coordination with Conine Island is needed.
- It was suggested the Highway 17 Association should be included as a stakeholder for this feasibility study and future studies.
- It was suggested consideration be given from a drainage perspective to using double-faced guardrail versus barrier in more sensitive areas.
- It was suggested all new location bypass sections be developed to provide a 70 foot wide median.
- It was suggested cultural resources could be prevalent throughout this project, which the project team may want to consider documenting.
- It was suggested, regarding the project schedule, that consideration be given to SPOT 5.0. Project submittals are expected to be due in the Fall of 2017. Efforts should be made to complete this feasibility study, or at a minimum, cost estimates for the various sections prior to this deadline.
- It was noted, the need for additional coordination regarding farm vehicles use on interstate facilities will need to be documented within this feasibility study for future studies.

Action Items

- NCDOT will hold two additional scoping meetings with local officials in order to initiate the project and to obtain input prior to developing project alternatives.
- This project will include initial concepts for the US 17 connector to NC 168; NCDOT FSU will provide AECOM with additional information.
- Coordinate with NCDOT PDEA to identify previous studies completed along the corridor.
- Coordinate with NCDOT PDEA to identify challenges, issues, and methods for traversing through wildlife refuges.
- The Highway 17 Association will be invited to attend upcoming stakeholder scoping meetings.
- Determine if individual coordination is needed with resource agencies associated with Conine Island (located adjacent to US 17, north of the Roanoke River).
- Determine what level of cultural resources screening is required for this project.
- NCDOT Division 1 will provide the previously used SPOT sections.
- The Environmental Features Map will be distributed to all meeting attendees.

C.2 Project Scoping Meetings (August 23 and 25, 2016)

Project scoping meetings were held at 2:00 PM on Tuesday, August 23, 2016, at Moratoc Park, 102 River Road, in Williamston, NC and at 2:00 PM at the Town Council Chambers, 306 E. Colonial Avenue in Elizabeth City, NC.

Meeting Objective

The purpose of the meetings was to initiate the project, discuss the scope of work and various key issues, and obtain additional input regarding the FS-1501A project, which includes upgrading US 17 to an Interstate from US 64 in Williamston, North Carolina to the Virginia State Line. Attendees of each meeting are attached.

Major Discussion Items

Upon completion of introductions, Chris Werner provided a brief presentation including:

- The purpose of a feasibility study,
- a review of the known information regarding the project corridor,
- project background, and
- a review of the Draft Purpose and Need.

A summary of the discussion from the August 23rd meeting is provided below.

- It was questioned what potential impacts the new Carolina Connector Intermodal Rail Terminal (in Rocky Mount) would have on the project.
It was explained that coordination with the NCDOT Transportation Planning Branch will be required to determine if traffic forecasts for the subject project may be impacted. It was noted as the subject project transitions to the NEPA phase, additional information will be available and considered at that time. It was also explained the terminal may have an effect on projects proposed in the STIP process in coming years.
- It was questioned what options there are near Williamston.
It was explained that multiple options would be considered including upgrading the existing roadway with symmetrical and asymmetrical options. Attendees of the meeting suggested a bypass around the western side of Williamston should be considered.
- It was questioned what the options are near Windsor.
It was explained that explained that multiple options would be considered including upgrading the existing roadway (with symmetrical and asymmetrical options) as well as a new location bypass.
- It was questioned what type of wildlife crossings would be provided.
It was explained that wildlife crossings could be similar to what has been constructed on US 64 east of Williamston; however, various types may be considered through agency coordination during the NEPA phase.
- It was questioned how municipalities can express their preferences on where a bypass should be built and whether they should be bypassed or not?
It was explained the goal of this study is to develop initial alternatives to meet the project Purpose and Need, with the result identifying the types of impacts the project may have and the expected cost the project may result in. Additionally, it was explained that a full range of alternatives will be developed and studied during the NEPA phase at which point the public will have many opportunities for comment, review and input.
- It was questioned how many bridges would need to be replaced, given there are some very large bridges along the corridor.
It was explained that all bridges will be reviewed to determine if they are either functionally or structurally obsolete. Additionally, all bridges will be reviewed to determine if they meet interstate standards.
- It was questioned what the general width of the project would consist of from a property take perspective.
It was explained that generally the project right-of-way width would be 300 feet wide, except in natural resource areas or high development areas where the footprint of the project might be compressed to reduce impacts. Similarly, some areas might be larger than 300 feet due to the need for service roads or interchanges.
- It was explained that municipalities will need to review their current bicycle and pedestrian plans as once US 17 is an interstate facility, no pedestrian or bicycle traffic will be permitted.
- It was explained additional coordination regarding farm vehicles use on interstate facilities will need to be documented within this feasibility study for future studies; therefore local input will be required to identify locations for farm equipment crossings.

A summary of the discussion from the August 25th meeting is provided below.

- It was questioned if this project is being coordinated with the State of Virginia.

It was explained that the Albemarle Rural Planning Organization routinely coordinates with the Hampton Roads Metropolitan Planning Organization; however, once the NEPA process is initiated, greater coordination will occur.

- It was explained to NCDOT that US 17 is the gateway to the Albemarle area and this project will involve more than an increase in freight movement. It will enhance northeastern NC for development and therefore construction of the project was suggested to start at the VA state line and work southward to capture Norfolk port traffic. It was requested that the "Future Interstate" signs be installed as soon as possible.

It was explained the Division has received the signs but has yet been authorized to install them; however, it is expected in the near future.

- It was questioned if NCDOT is solely relying on the US 17 Economic Impact Study (2013) and the *North Carolina Maritime Strategy (2012)* as the basis for the subject project studies as there were some concerns that these studies may be dated and could need to be updated. It was questioned what potential impacts the new Carolina Connector Intermodal Rail Terminal (in Rocky Mount) would have on the project.

It was explained that the referenced studies are stand-alone projects with individual purposes; however, they were used to assist NCDOT in determining that a feasibility study should be prepared for the subject project. It was explained that coordination with the NCDOT Transportation Planning Branch will be required to determine if traffic forecasts for the subject project may be impacted due to the Carolina Connector Intermodal Rail Terminal. It was noted as the subject project transitions to the NEPA phase, additional information will be available and considered at that time. It was also explained the terminal may have an effect on projects proposed in the STIP process in coming years. It was further suggested that as economic futures and major transportation projects are implemented, the reference studies may need to be updated in the future, which could be used as support information for the subject project during the NEPA phase.

- It was explained to NCDOT that there is a strong desire to move the subject project and subsequent phases as swiftly as possible. It was therefore suggested that NCDOT determine what additional studies may need to be initiated now, rather than wait for the NEPA phase to begin.
- It was explained by NCDOT that additional coordination regarding farm vehicles use on interstate facilities will need to be documented within this feasibility study for future studies; therefore local input will be required to identify locations for farm equipment crossings.
- It was questioned how the project will be sectioned, for planning purposes and for construction phasing. It was suggested NCDOT should begin construction from the VA state line and work southward.

It was explained for the feasibility study, the project will be divided into multiple sections. Efforts will be made to utilize section breaks previously identified for the project, which were used for programming into NCDOT SPOT analysis for funding prioritization; however, if more logical breaks are identified during the alternative development phase, those will be used and presented within the feasibility study, which will be made available for review by local officials. Additionally, regarding the order of phased construction, that too will be based upon the outcome of future SPOT analysis, which will include an opportunity for local officials' input.

- It was questioned if the subject project will be coordinated with the similar feasibility study being prepared for US 64 (NCDOT project FS-1504A).

It was explained NCDOT has one project managing both feasibility studies.

- It was questioned if NCDOT will factor in the economic benefit of the regions free trade zone.

It was explained for the feasibility study, any expansion of foreign trade zones along the US 17 corridor would be documented; however, detailed analysis regarding the relationship of the benefits of foreign trade zones and the benefits of upgrading US 17 to an interstate, would be beyond the scope of a feasibility study. It was explained that analysis such as this would be performed during the NEPA phase once the project has been funded for further study.

- It was questioned if local officials' input will be considered prior to finalization of the feasibility study.

It was explained that NCDOT will provide the Draft Feasibility Study for local officials' review.

- It was questioned if any sections of upgraded US 17 would be six lanes (3 lanes in each direction).

It was explained, based upon current traffic projections, the entire length of US 17 being evaluated as a part of the subject project will be four lanes (2 lanes in each direction); however, updated traffic projections will be prepared for more detailed evaluation during the NEPA phase.

Action Items

- NCDOT will coordinate with the Transportation Planning Branch to determine what effect the Carolina Connector Intermodal Rail Terminal will have on the subject project.
- NCDOT will consider the option of a bypass around the western side of Williamston.
- NCDOT will coordinate to determine if there are any additional studies that may need to be initiated now, rather than wait for the NEPA phase to begin.
- NCDOT will hold follow-up meetings with the local officials to provide project updates and to receive input on the results of the Draft Feasibility Study.

C.3 Local Officials Meetings (September 7 and 19, 2017)

Local officials meetings were held at 1:00 PM on Thursday, September 7, 2017, at Edenton Town Hall in Edenton and at 2:00 PM on Tuesday, September 19, 2017, at the Museum of the Albemarle in Elizabeth City.

Meeting Objective

The purpose of the meetings was to provide an update on the project, present conceptual alternative designs, and obtain input regarding the FS-1501A project.

Major Discussion Items

Upon completion of introductions, Christy Shumate and Laura Fisher provided a brief presentation including:

- the purpose of a feasibility study,
- project background, including related studies, and draft purpose and need, and
- a review of the conceptual alternative designs.

A summary of the discussion from the September 7th meeting is provided below.

- Concerns were voiced regarding the access of northern downtown Williamston to US 17. In addition to the US 17/US 64 interchange, an interchange was requested for the northern portion of Williamston, close to the Roanoke River Wetlands Wildlife Refuge.
- It was also noted that Williamston has purchased additional property on the eastern side of the wastewater treatment plant and roadway design should not infringe on future expansion opportunities.
- A resolution concerning the ability of over-width farm equipment to be safely driven on controlled access highways, including US 17 was presented by the Chowan County Board of Commissioners. AECOM stated that an agriculture and farmland section would be added to the feasibility study to address this issue.

A summary of the discussion from the September 19th meeting is provided below.

- It was suggested that NCDOT provide the conceptual alternative design maps on a project website.

C.4 Stakeholder Comments

Local Government Comments and Resolutions

Commenter	Date	Subject
Chowan County Board of Commissioners	7/17/2017	The Chowan County Board of Commissioners presented NCDOT with a resolution that highlights the importance of agriculture and the movement of farm equipment to the County's economy. The resolution encourages the North Carolina Congressional Delegation to allow over width farm equipment to be safely driven on fully controlled access highways.
Town of Williamston	9/12/2017	The Town of Williamston Board of Commissioners presented NCDOT with a letter in which they voice their support for the design of Segment 1A. However, they also request that certain changes be made to accommodate the current and future growth in the community. These changes include: <ul style="list-style-type: none"> • Adding an interchange near East Main Street and Willow Drive • Eliminating the ramps near the Food Lion and making the point of ingress and egress at the 515 exit of US 64/13/17 • Altering the route to either pass between the Roanoke Shopping Center Property and north of the Martin County Regional Water Treatment Plant or move slightly further south of the water treatment plant to allow for future expansion The letter also states that the Town Board does not believe their requests would add additional costs to the overall conceptual project.
Camden County	10/9/2017	Camden County Stakeholder meeting minutes which include their concerns with the Interchange at Horseshoe Road, a conflict with an electrical substation, the roadway design near the Welcome Center, their support of Segment 10 over 10A, and concern about the location of the frontage road to minimize impacts to proposed residential and commercial development.
Town of Bear Grass	10/15/2017	Mayor Charlotte B Griffin presented NCDOT with an alternate to Segment 1 and Segment 2 in Martin and Bertie Counties.
Currituck County	10/23/2017	Currituck County presented NCDOT with an alternate proposed location to Segment 10A to minimize impacts.
Elizabeth City Economic Development Commission	10/30/2017	Elizabeth City Economic Development Commission presented NCDOT with a resolution supporting the Routing of Future Interstate Highway 87 Along US Highway 17 as Originally Authorized by Congress.
Elizabeth City Committee of 100	10/30/2017	Elizabeth City Committee of 100 presented NCDOT with a resolution supporting the Routing of Future Interstate Highway 87 Along US Highway 17 as Originally Authorized by Congress.
County of Pasquotank	11/7/17	The County of Pasquotank presented NCDOT with a resolution supporting the Routing of Future Interstate Highway 87 along US 17 as Originally Authorized by Congress.

Public Comments

Commenter	Date	Subject
Annette Corpew	9/17/17	Like the US 17 Bypass shown on Segment 7A, sheet 23A, She has lived at the intersection of US 17/Chapanoke Drive/Woodland Church Road for over 40 years (SE Quadrant). She said the bypass would allow all the people with homes on US 17 to remain in place.
Mike Hindenach	10/26/17	Regarding section 10A, I have many concerns. Moving I-87 through Moyock makes little sense to me. It is my understanding that I-87 is intended to be a commercial link between the ports and Raliegh. If so, why would you want to move I-87 into a far more traffic congested area by the beach? Additionally, deviating from its original route will require and act of congress adding months, or more likely, years to the project. It will reduce the effectiveness of I-87 being an evacuation route for the military. I can only imagine the

additional costs to the taxpayers as well. If I have something wrong, please let me know. But right now I just don't believe there is justification for making a change from the original route and I oppose anything that is going to create delays to this much needed project. Please note that I am not against a connector to Moyock. I just believe that is a project that needs to be separated from this project and that it should stand on its own merits.

Wayne Harris	10/26/17	<p>I am the Director of the Elizabeth City Pasquotank County Economic Development Commission, which unanimously opposes inclusion of Segment 10 A as an alternative route for future I-87. Our RPO was unaware this proposed segment would be considered as anything but a connector until NCDOT's feasibility study update appeared online yesterday. Notably, as a connector, Segment 10 A was deemed eligible only for District Needs funding and received the lowest score of any segment in that funding category by a wide margin. This astonishing 11th-hour inclusion of the segment as an I-87 alternative route circumvents the STIP evaluation process; veers from the route authorized by the enabling legislation, adding years to the project timeline; puts a circuitous loop in a highway ostensibly designed to connect Norfolk to Raleigh; compromises I-87's value as an evacuation route from the Naval bases in Portsmouth and Norfolk; routes the Virginia leg through much worse local traffic congestion than the authorized route; and routes the North Carolina leg through a swamp instead of along an existing 4-lane highway. Drivers in transit from Norfolk to Raleigh would be subjected to worse congestion, longer distances and longer travel times. Taxpayers would be subject to astronomically higher costs for construction and acquisition of right-of-way.</p>
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Robert Brown	10/9/2018	<p>Via telephone – suggested a new location route between Winfall and Woodville in Perquimans County. This bypass would save all the residences and businesses on existing US 17. He sent a map of the proposed bypass, which is shown in the Appendix.</p>
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STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

JAMES H. TROGDON, III
SECRETARY

DATE: October 9, 2017

TO: Stephanie Humphries
Interim Camden County Manager

FROM: Shane D York, PE
Feasibility Studies Unit Engineer

SUBJECT: Camden County Stakeholder Meeting Minutes for FS-1501A, Upgrade of US 17 to interstate standards (Future I-87). Camden County, Division 1.

A meeting was held on October 4, 2017 from 1:00 to 2:00 PM at the Camden County Library. The following people were in attendance:

Shane York	NCDOT
Angela Welsh	Albemarle RPO Transportation Planner
Donna Stewart	Dismal Swamp Welcome Center
Clayton Riggs	Chairman Camden Board of Commissioners
Stephanie Humphries	Interim Camden County Manager
David Rudiger	Boyd Homes / Camden Plantation
David Parks	Planning
Charles Bauman	Camden County Economic Development
Garry Meiggs	Camden County Commissioner
Bill West	Daily Advance

Shane York started the meeting with introductions gave a brief overview of the project.

Comments

- Segment 9, Sheet 31, Camden County is concerned about the proposed interchange with Horseshoe Road. They would prefer an alternate design that minimizes the impacts to the homes on the east side of US 17 near McBride Street. The current Horseshoe Road location would be the preferable alternative. See Figure 1.
- Segment 10, Sheet 31, Camden County noticed that the proposed grade separation over US 17 on the right side of the sheet comes back down to grade and ties into NC 343 by going through an electrical substation. See Figure 2. The DOT will need to relocate that proposed road. Note that Segment 10A, Sheet 31A ties into NC 343 without impacting the substation.

- Segment 10 and 10A, Sheets 33 and 33A. Camden County expressed concern over the proposed design near the Dismal Swamp Welcome Center. The shift of US 17 (Future I-87) will impact some proposed residential developments at McPherson Road east of existing US 17. See Figure 3. Boyd Homes has a 1700 unit plan that has been approved by Camden County. Water and Sewer utilities have already been installed. They asked if the DOT could move the alignment back to the existing location and move the ramps either farther north or farther south to minimize impacts. Another possibility would be to elevate US 17 in the area of the Welcome Center and put the access road to the Welcome Center underneath the proposed interstate and tie into McPherson road on the east side.
- Camden County supports Segment 10 over Segment 10A.
- Segment 10A Sheet (?) will negatively impact prime commercial property currently being marketed to prospective buyers. The connector road with the intent to extend the interstate to connect with 158 in Currituck County currently wipes out this highly valuable property. Alternative connector road location is preferred.
- Dismal Swamp Welcome Center supports maintaining their current access from both directions on Future I-87. They don't want to be converted to one-side access.
- Camden County supports aligning the future access road physically closer in parallel to future I87 (current Hwy17) to reduce residential and commercial impacts.

Figure 1

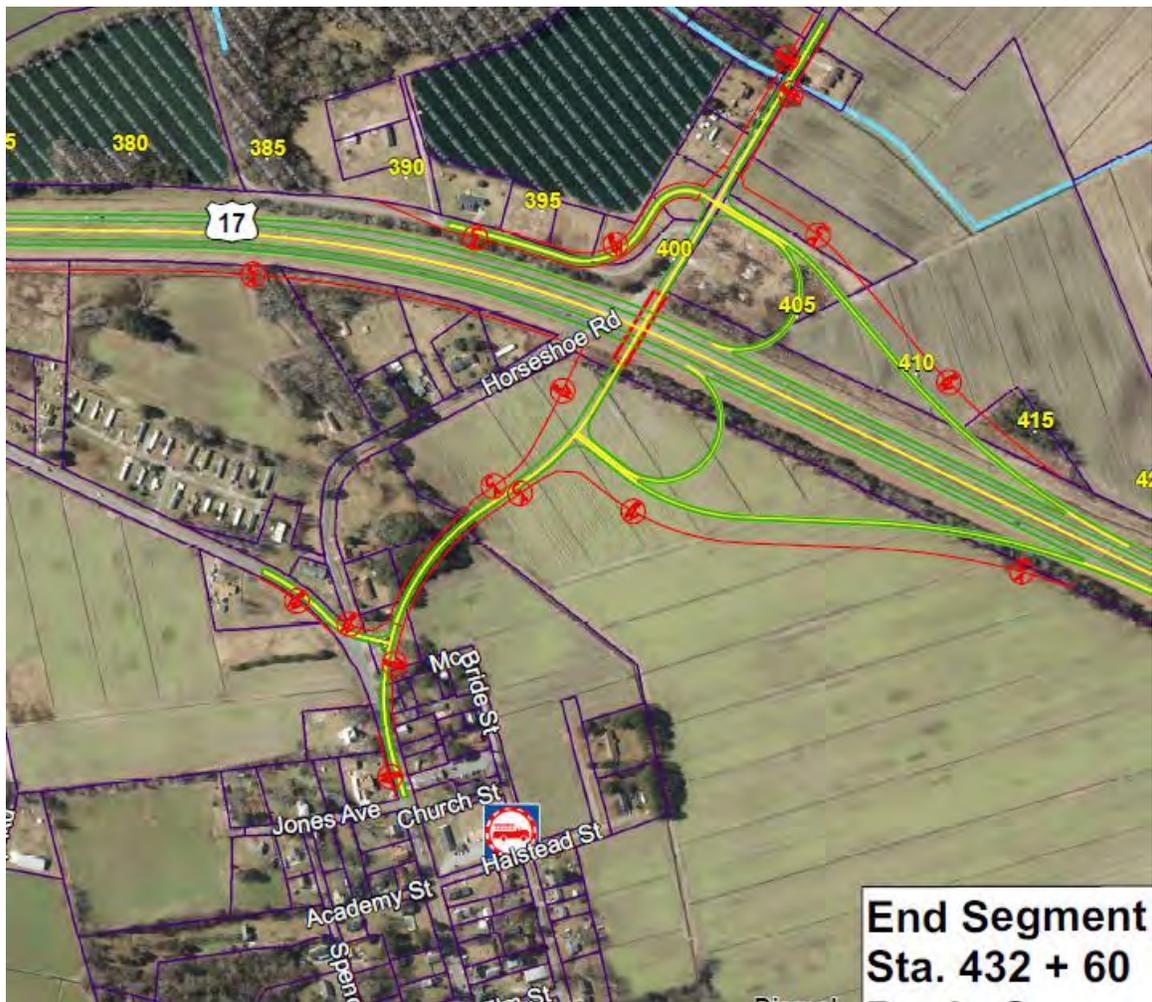


Figure 2

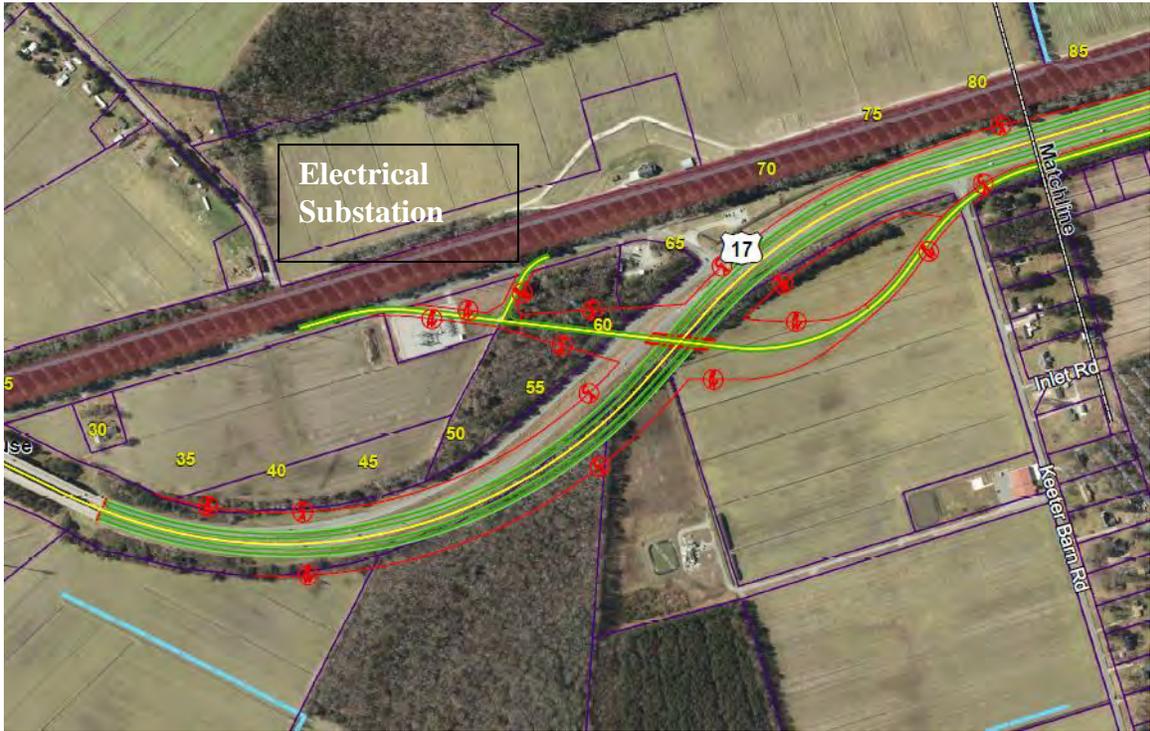
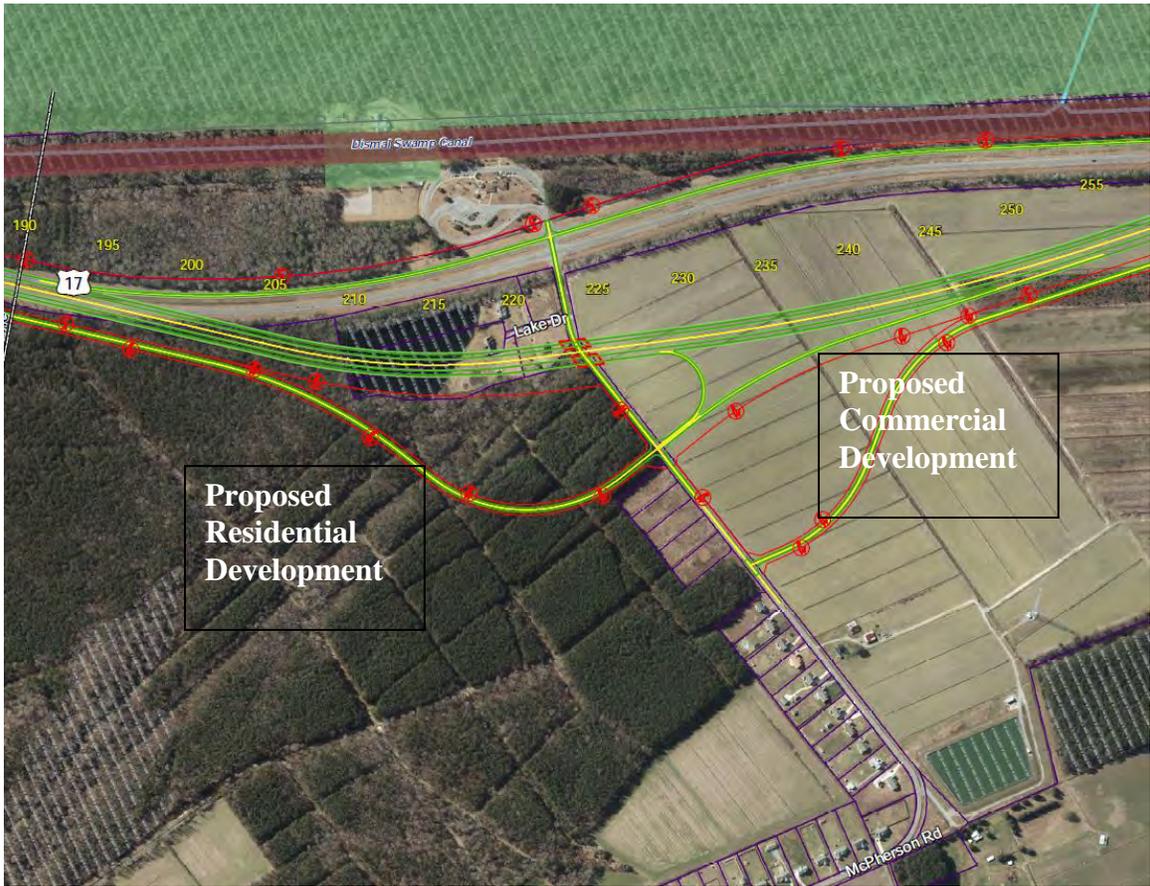


Figure 3



Sign In Sheet

Wed Oct 4th 100 -
Camden County Meeting

Name Organization

Shane York

NC DOT

Angela Welsh

NC DOT

Donna Stewart

DS Welcome Center / Camden TID.

Clayton D. Riggs

Chairman Camden Board of Commissioner

Stephanie Humphries

Interim County Manager

David Rudiger

Boyd Homes / Camden Plantation

David Parks

Planning

Charles Bauman

Camden Co. Econ. Dev.

Garry Meigs

Commerce / Camden Co.

Bill West

Daily Release



Resolution

A resolution to allow over-width farm equipment to be safely driven on controlled access highways including US 17 (future I-87)

Whereas, the American Association of State and Transportation Officials has approved designing the corridor in northeastern North Carolina as I-87 once completed to interstate standards, and

Whereas, the future I-87 will run along the current US 17/64 Corridor through Northeast North Carolina and part of Chowan County, and;

Whereas, the impact of agriculture in North East North Carolina totals over \$1,786,000,000 in the counties of Bertie, Camden, Chowan, Currituck, Dare, Gates, Hertford, Martin, Northampton, Pasquotank, Perquimans, Tyrrell and Washington Counties, and;

Whereas, the economic impact of agriculture in the Counties that border US 17 (future I-87) totals \$968,000,000 for Bertie, Chowan, Martin, Pasquotank and Perquimans Counties, and;

Whereas, in 2012, the General Assembly of North Carolina passed Senate Bill 749 (Session Law 2012-78) this bill allowed farm equipment to be on limited access highways with NC DOT authorization, and;

Whereas, prohibition of farm equipment on controlled access highways would place an unforeseen hardship on farmers who need to move equipment from one farm to another, and;

Whereas, farmers are running out of viable options to move equipment, and;

Whereas, restrictions would will lead to increased over width traffic on US 17 Business traffic through the Town of Edenton, and;

Whereas, restricted use of the US 17 (Future I-87) bridge for oversized farm equipment eliminates the only viable option for crossing the Chowan River, and;

Whereas, US 17 (Future I-87) allows such equipment to be safely moved through our county in the safest manner possible without increased safety concerns to county citizens, and;

Whereas, farm organizations in the state have worked with the N. C. Department of Agriculture to develop language that allows farmers to drive their equipment on controlled access highways in the safest manner possible, and;

Now, therefore be it resolved, that the Chowan County Board of Commissioners hereby encourages our North Carolina Congressional Delegation to allow over width farm equipment to be safely driven on fully controlled access highways.

Approved this 17th day of July, 2017.



Jeffery Smith, Chairman
Chowan County Board of Commissioners

ATTEST:



Susanne Stallings, Clerk to the Board

**Resolution Supporting the Routing of Future Interstate Highway 87
Along US Highway 17 As Originally Authorized By Congress**

WHEREAS, the mission of the Elizabeth City Pasquotank County Economic Development Commission is to improve the economic well-being of the citizens of Elizabeth City and Pasquotank County by marketing business opportunities in our area to high-wage employers nationally and by helping interested companies, local as well as national, realize those opportunities; and

WHEREAS, the Elizabeth City Pasquotank County Economic Development Commission recognizes the significant role that transportation plays in the economic well-being of a community; and

WHEREAS, proximity to an Interstate Highway in particular plays a major role in the relocation and expansion decisions of manufacturers, distributors and other high wage employers; and

WHEREAS, Congress' recent designation of US Highway 17 as the future Interstate Highway 87 may well be Pasquotank County's most economically significant transportation project since the construction of the Dismal Swamp Canal; and

WHEREAS, the Interstate Highway 87 route authorized by Congress is further enhanced by the economic opportunities created by Pasquotank County's recent inclusion in the Port of Virginia's Foreign Trade Zone; and

WHEREAS, the primary transportation objective of constructing Interstate Highway 87 is to provide the most efficient transportation corridor possible between the metropolitan areas of Norfolk and Raleigh; and

WHEREAS, Segment 10 A, described as an alternative route to Segment 10, appeared October 26 on the North Carolina Department of Transportation's Interstate Highway 87 project update on the Department Web site; and

WHEREAS Segment 10 A appeared on this project update without the proper review by the District 1 Rural Planning Organization, and

WHEREAS, adoption of this alternative route would require Congressional action, delaying the project by at least a year and possibly longer, and

WHEREAS, Segment 10 A would add six miles to the more direct route down US 17 as authorized by Congress; and

WHEREAS, Segment 10 A would further route motorists through significantly more local traffic congestion than the route authorized by Congress; and

WHEREAS, the cost of right-of-way along this more congested route would significantly raise the project's cost; and

WHEREAS, substituting seven additional miles of new construction through swampy terrain rather than simply upgrading an existing four-lane highway as authorized by Congress would also significantly raise the project's construction costs;

NOW, THEREFORE BE IT RESOLVED that the Elizabeth City Pasquotank County Economic Development Commission strongly objects to the inclusion of Segment 10 A in the North Carolina Department of Transportation feasibility study for Interstate Highway 87 and supports moving ahead with the route along US Highway 17 as authorized by Congress.

Adopted this 30th day Of October 2017:

A handwritten signature in black ink, appearing to read "Jeff Dixon". The signature is fluid and cursive, with a large initial "J" and "D".

Jeff Dixon, Chairman
Elizabeth City-Pasquotank County Economic Development Commission

COMMISSIONERS

Cecil Perry, Chairman
Dr. William R. Sternitt, Vice Chairman
Jeff Dixon
Lloyd E. Griffin, III
Joseph S. Winslow, Jr.
Frankie Meads
Betnie J. Parker



COUNTY MANAGER
Rodney Bunch

COUNTY ATTORNEY
R. Michael Cox

CLERK TO THE BOARD
Lynn Scott

COUNTY OF PASQUOTANK

Post Office Box 39
Elizabeth City, North Carolina 27907-0039
(252)335-0865
Fax (252)335-0866

November 7, 2017

Shane York, Feasibility Study Engineer
1634 Mail Service Center
Raleigh, NC 27699-1534

Dear Mr. York:

Enclosed please find a resolution adopted by the Pasquotank County Board of Commissioners on November 6, 2017 strongly objecting to the inclusion of Segment 10 A in the North Carolina Department of Transportation Feasibility Study for Interstate Highway 87 and supporting moving ahead with the route along US Highway 17 as authorized by Congress.

Sincerely yours,

Lynn B. Scott
Clerk to the Board

Enclosure

COMMISSIONERS

Cecil Perry, Chairman
Dr. William R. Sternitt, Vice-Chairman
Jeff Dixon
Lloyd E. Griffin, III
Joseph S. Winslow, Jr.
Frankie Meads
Bettie J. Parker



COUNTY MANAGER
Rodney Bunch

COUNTY ATTORNEY
R. Michael Cox

CLERK TO THE BOARD
Lynn Scott

COUNTY OF PASQUOTANK

Resolution Supporting the Routing of Future Interstate Highway 87 Along US Highway 17 As Originally Authorized By Congress

WHEREAS, Pasquotank County recognizes the significant role that transportation plays in the economic well-being of a community; and

WHEREAS, proximity to an Interstate Highway in particular plays a major role in the relocation and expansion decisions of manufacturers, distributors and other high wage employers; and

WHEREAS, Congress' recent designation of US Highway 17 as the future Interstate Highway 87 may well be Pasquotank County's most economically significant transportation project since the construction of the Dismal Swamp Canal; and

WHEREAS, the Interstate Highway 87 route authorized by Congress is further enhanced by the economic opportunities created by Pasquotank County's recent inclusion in the Port of Virginia's Foreign Trade Zone; and

WHEREAS, the primary transportation objective of constructing Interstate Highway 87 is to provide the most efficient transportation corridor possible between the metropolitan areas of Norfolk and Raleigh; and

WHEREAS, Segment 10 A, described as an alternative route to Segment 10, was first presented, to local government officials, at the US 17 feasibility study meetings in Edenton and Elizabeth City in September of 2017 without prior notification an alternate route was being considered.

WHEREAS, adoption of this alternative route would require Congressional action, delaying the project by at least a year and possibly longer, and

WHEREAS, Segment 10 A would add six miles to the more direct route down US 17 as authorized by Congress; and

WHEREAS, Segment 10 A would further route motorists through significantly more local traffic congestion than the route authorized by Congress; and

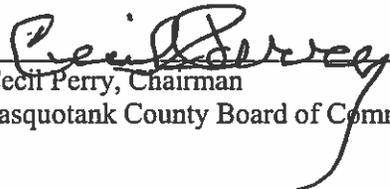
WHEREAS, the cost of right-of-way along this more congested route would significantly raise the project's cost; and

WHEREAS, substituting six additional miles of new construction through swampy terrain rather than simply upgrading an existing four-lane highway as authorized by Congress would also significantly raise the project's construction costs;

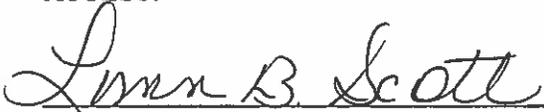
NOW, THEREFORE BE IT RESOLVED that the Pasquotank County Board of Commissioners strongly objects to the inclusion of Segment 10 A in the North Carolina Department of Transportation feasibility study for Interstate Highway 87 and supports moving ahead with the route along US Highway 17 as authorized by Congress.

Dated this 6th day of November, 2017.

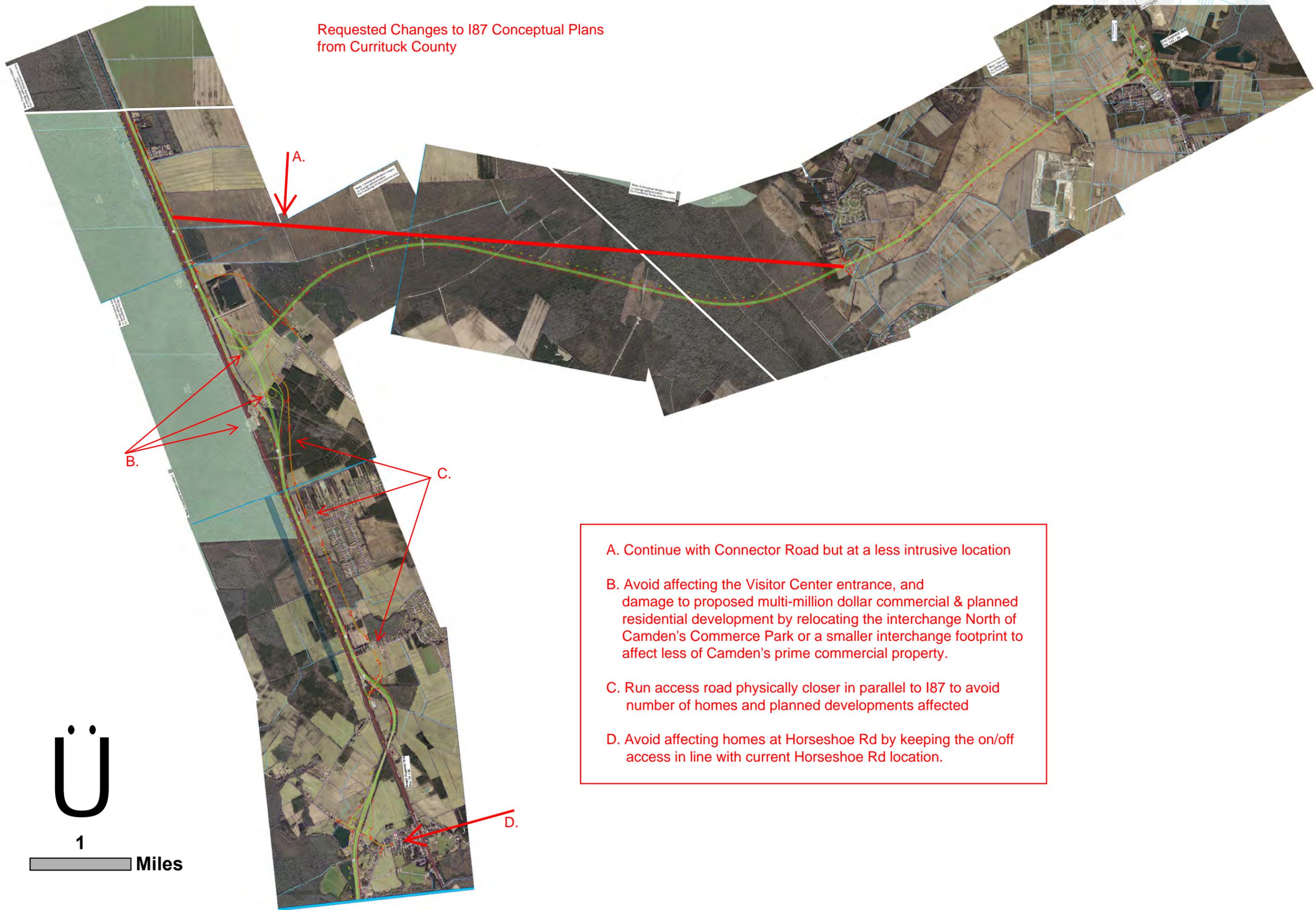
[SEAL]


Cecil Perry, Chairman
Pasquotank County Board of Commissioners

ATTEST:


Clerk to the Board

Requested Changes to I87 Conceptual Plans
from Currituck County



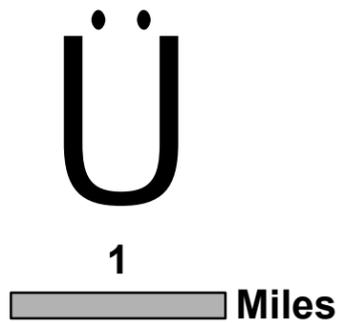
A.

B.

C.

D.

- A. Continue with Connector Road but at a less intrusive location
- B. Avoid affecting the Visitor Center entrance, and damage to proposed multi-million dollar commercial & planned residential development by relocating the interchange North of Camden's Commerce Park or a smaller interchange footprint to affect less of Camden's prime commercial property.
- C. Run access road physically closer in parallel to I87 to avoid number of homes and planned developments affected
- D. Avoid affecting homes at Horseshoe Rd by keeping the on/off access in line with current Horseshoe Rd location.



**Resolution Supporting the Routing of Future Interstate Highway 87
Along US Highway 17 As Originally Authorized By Congress**

WHEREAS, the Elizabeth City Area Committee of 100 is a private, non-profit organization that works in concert with Elizabeth City and Pasquotank County government leaders to enhance and help fund growth; and

WHEREAS, the Elizabeth City Area Committee of 100 recognizes the significant role that transportation plays in the economic well-being of a community; and

WHEREAS, proximity to an Interstate Highway in particular plays a major role in the relocation and expansion decisions of manufacturers, distributors and other high wage employers; and

WHEREAS, Congress' recent designation of US Highway 17 as the future Interstate Highway 87 may well be Pasquotank County's most economically significant transportation project since the construction of the Dismal Swamp Canal; and

WHEREAS, the Interstate Highway 87 route authorized by Congress is further enhanced by the economic opportunities created by Pasquotank County's recent inclusion in the Port of Virginia's Foreign Trade Zone; and

WHEREAS, the primary transportation objective of constructing Interstate Highway 87 is to provide the most efficient transportation corridor possible between the metropolitan areas of Norfolk and Raleigh; and

WHEREAS, Segment 10 A, described as an alternative route to Segment 10, appeared October 26 on the North Carolina Department of Transportation's Interstate Highway 87 project update on the Department Web site; and

WHEREAS Segment 10 A appeared on this project update without the proper review by the District 1 Rural Planning Organization, and

WHEREAS, adoption of this alternative route would require Congressional action, delaying the project by at least a year and possibly longer, and

WHEREAS, Segment 10 A would add six miles to the more direct route down US 17 as authorized by Congress; and

RECEIVED

NOV 03 2017

DIVISION 1
OFFICE

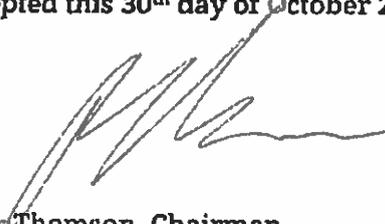
WHEREAS, Segment 10 would further route motorists through significantly more local traffic congestion than the route authorized by Congress; and

WHEREAS, the cost of right-of-way along this more congested route would significantly raise the project's cost; and

WHEREAS, substituting seven additional miles of new construction through swampy terrain rather than simply upgrading an existing four-lane highway as authorized by Congress would also significantly raise the project's construction costs;

NOW, THEREFORE BE IT RESOLVED that the Elizabeth City Area Committee of 100 strongly objects to the inclusion of Segment 10 A in the North Carolina Department of Transportation feasibility study for Interstate Highway 87 and supports moving ahead with the route along US Highway 17 as authorized by Congress.

Accepted this 30th day of October 2017

A handwritten signature in black ink, appearing to read 'Peter Thomson', written over a horizontal line.

**Peter Thomson, Chairman
Elizabeth City Area Committee of 100**



PROPOSED ADDITIONS TO I-87 FEASIBILITY STUDY

10/15/2017

After review of the proposed feasibility study maps/documents related to the future I-87 corridor outlined by NCDOT, it is suggested that two additional alternatives be explored and considered in the preliminary planning and design process for this candidate project. As noted, the purpose of this feasibility study is to describe the proposed project including cost, and identify potential problems that may require consideration in the planning and design phases.

It should be noted that proposed addition 1 to this study should examine the route following the currently planned and funded NC-125 bypass on its new location between College Rd and current NC-125 on the west side of Williamston. The proposed added route would begin off US-64, following planned NC-125 bypass and connecting with proposed segment 3A of the current I-87 feasibility study.

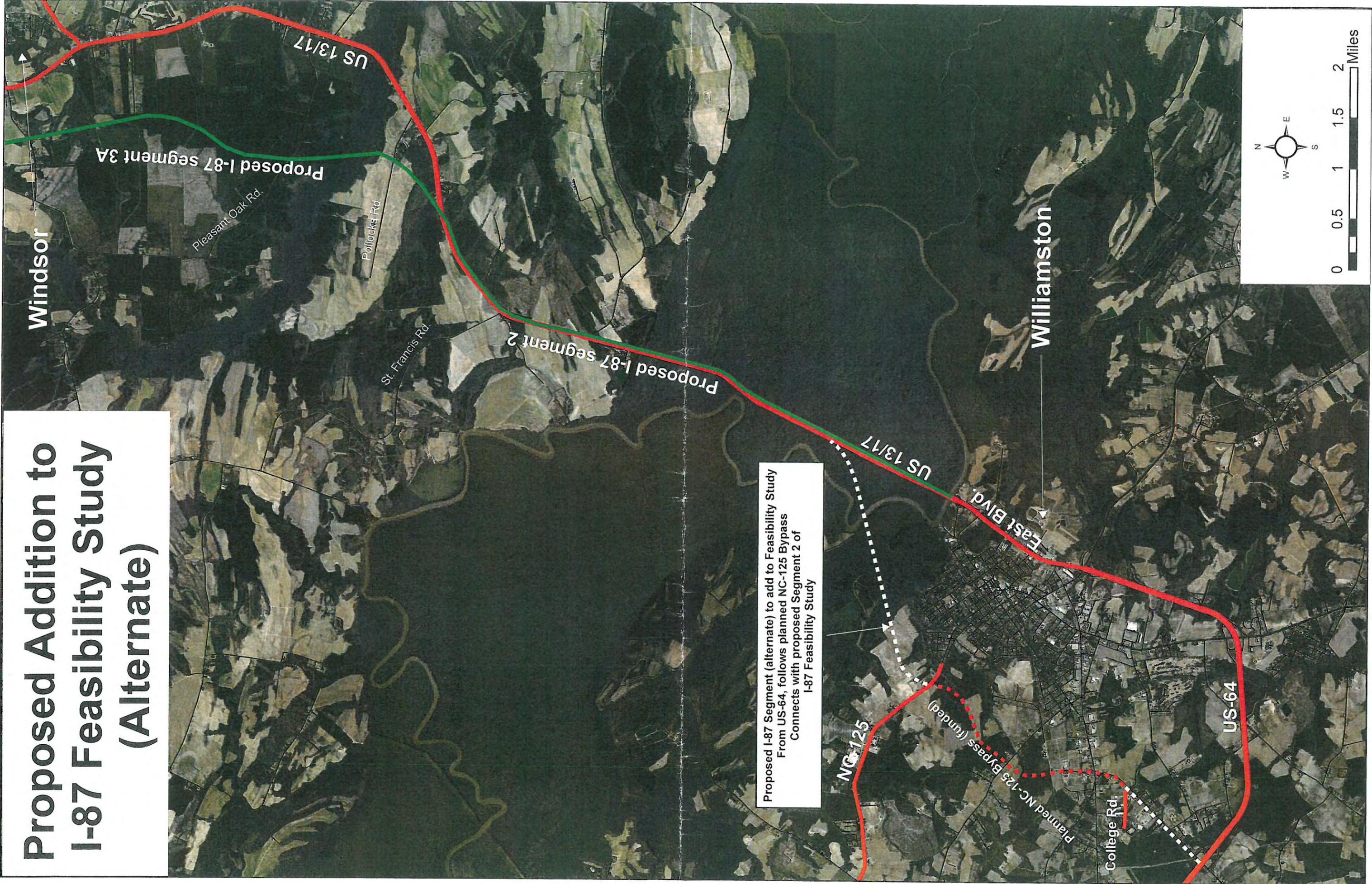
Proposed addition 1 (alternate) for study would begin off US-64, following planned NC-125 bypass West of Williamston connecting with proposed segment 2 of current I-87 feasibility study.

These two proposed additional study routes should be examined and considered due to several contributing factors related to the success of this project. Both proposed study routes would provide lower overall cost and benefit by eliminating proposed service roads, and reducing the number of properties that would have to be bought out. The current feasibility study routes present 3 options each on portions of the existing HWY 17 and depict extensive alterations and additions to the present infrastructure. This segment of roadway has been problematic and historically floods during rain/storm events documented by FEMA and other notable agencies. This segment currently serves as an evacuation route, and the noted flooding has previously rendered the area impassable causing safety concerns. The proposed additional study routes are not as vulnerable to flood and other natural occurrences and would provide for better disaster coordination as well as enhanced safety and opportunity to the community and citizens in this region.

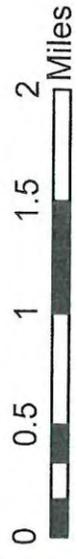
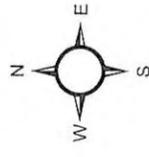
Additional benefits to a Tier 1 Economically Distressed Region will include accessibility for trade/commerce by being strategically located to US Hwy 17, US Hwy 64, US Hwy 264, and NC 125. Coordination of these corridors provides for ease and accessibility thus attracting Business and Industry benefitting this region of eastern North Carolina as a whole. With the proposed CSX Rail Hub and creation of 1500 plus jobs located south of Williamston just off US Hwy 64, providing such strategic coordination is crucial to the roadway network and would allow direct access to a major employment opportunity enhancing the regional economic impact. Furthermore, moving the proposed I-87 route to the west side of Williamston would greatly reduce impacts to farms and associated movement of farm equipment allowing agribusiness to continue in an uninterrupted fashion as farming is core to the viability of this area. Additionally the Bob Martin Eastern Agricultural Center, the Regional E-911 Center, Martin Community College and the Martin County Industrial Park would be positively impacted by increased accessibility and visibility. Potential also exists for additional interstate access for Pitt County especially upon completion of the Northwest Bypass around Greenville.

Thank you for your consideration and willingness to review these additional alternatives and explore all feasible options in the development of this upgrade and future Interstate 87.

Proposed Addition to I-87 Feasibility Study (Alternate)

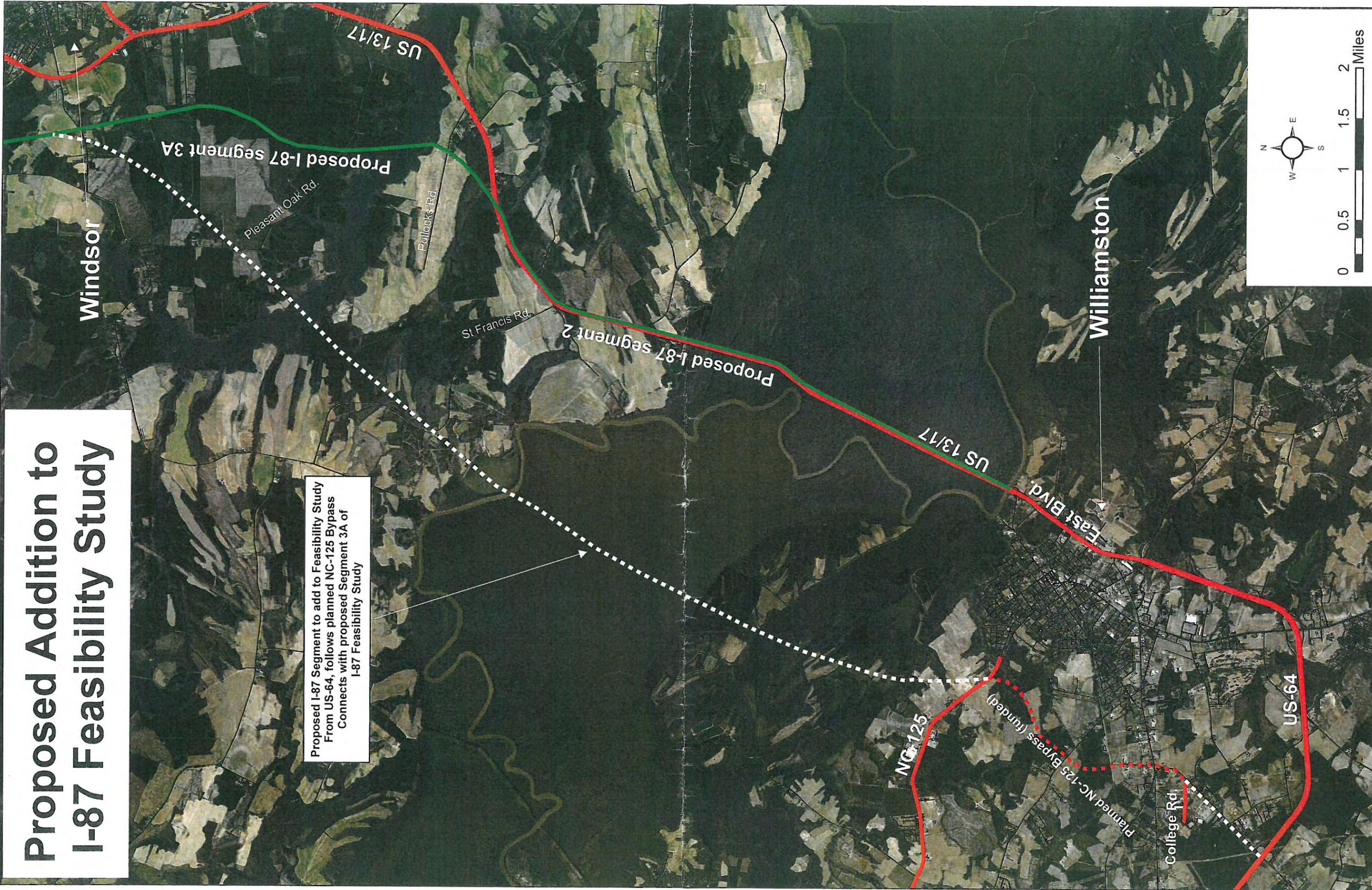


Proposed I-87 Segment (alternate) to add to Feasibility Study
From US-64, follows planned NC-125 Bypass
Connects with proposed Segment 2 of
I-87 Feasibility Study



Proposed Addition to I-87 Feasibility Study

Proposed I-87 Segment to add to Feasibility Study
From US-64, follows planned NC-125 Bypass
Connects with proposed Segment 3A of I-87 Feasibility Study



Windsor

Proposed I-87 segment 3A

Pleasant Oak Rd.

Pollocks Rd.

St Francis Rd.

Proposed I-87 segment 2

US 13/17

East Blvd.

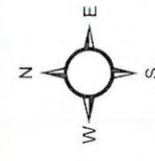
Williamston

NC-125

Planned NC-125 Bypass (funded)

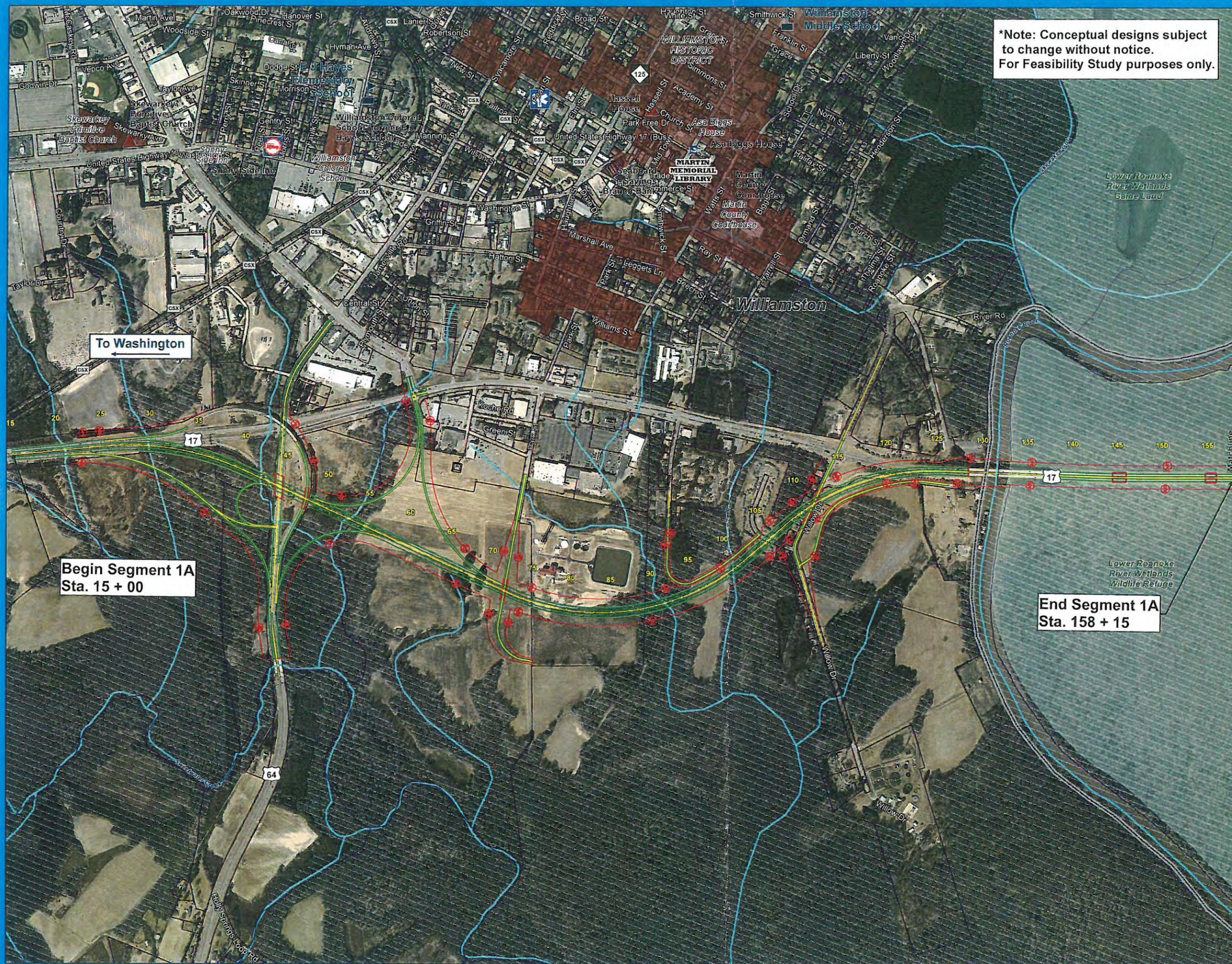
College Rd.

US-64



Feasibility Study US-13/17 Upgrade to Interstate Williamston to NC/VA line Segment 1A

*Note: Conceptual designs subject to change without notice.
For Feasibility Study purposes only.

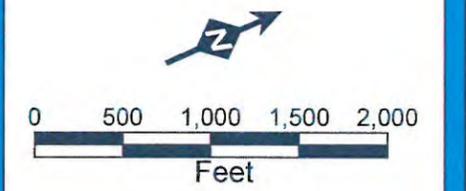


Legend

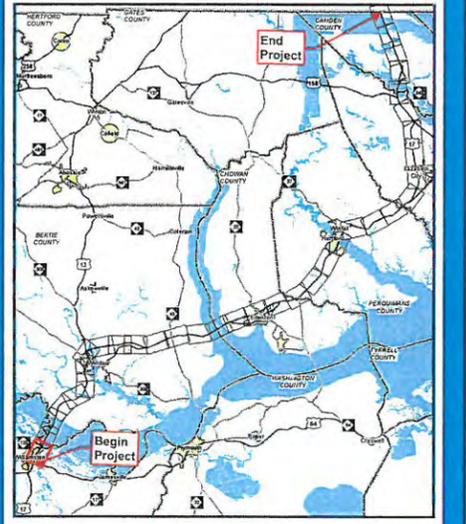
- Segment_1A_Anno
- Matchlines
- Proposed Bridges
- Proposed Edge of Travel
- Proposed Horizontal Alignment
- Proposed Lane Lines
- Railroad
- Streams
- Libraries
- Fire Stations
- EMS
- Schools
- Historic Place (State and National Register)
- County Boundary
- Historic Property Boundary
- Parcels
- National Wetlands Inventory

Begin Segment 1A
Sta. 15 + 00

End Segment 1A
Sta. 158 + 15

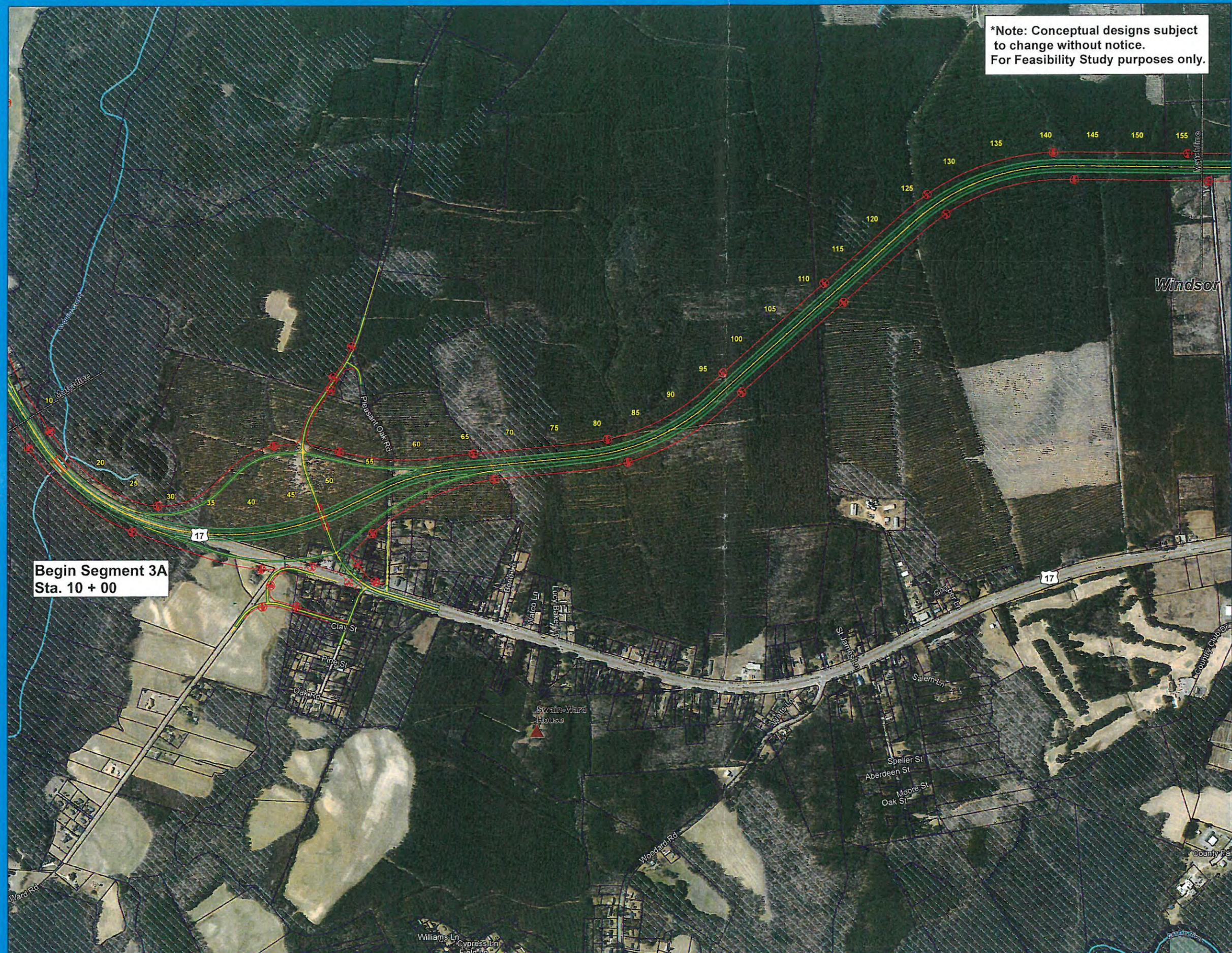


Page Number: 1A



**Feasibility Study
US-13/17
Upgrade to
Interstate
Williamston to NC/VA line
Segment 3A**

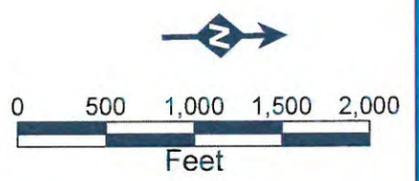
*Note: Conceptual designs subject to change without notice.
For Feasibility Study purposes only.



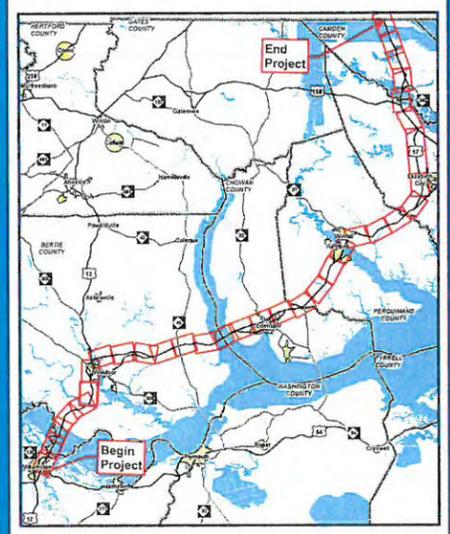
**Begin Segment 3A
Sta. 10 + 00**

Legend

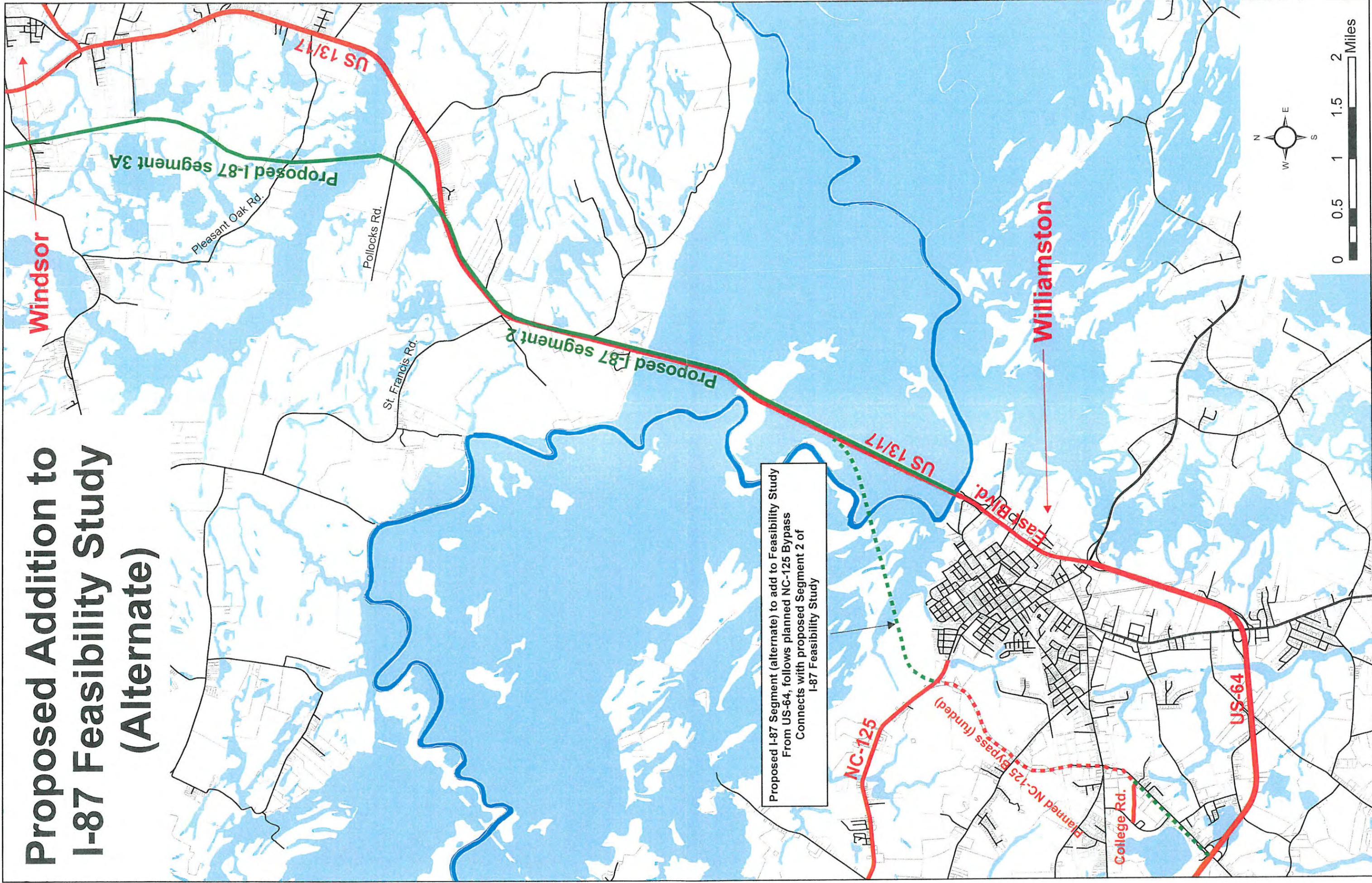
- Matchlines
- Proposed Bridges
- Proposed Edge of Travel
- Proposed Horizontal Alignment
- Historic Place (State and National Register)
- County Boundary
- Parcels
- National Wetlands Inventory
- Streams



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Proposed Addition to I-87 Feasibility Study (Alternate)



Proposed I-87 Segment (alternate) to add to Feasibility Study
From US-64, follows planned NC-125 Bypass
Connects with proposed Segment 2 of
I-87 Feasibility Study

Windsor

Williamston

Proposed I-87 segment 3A

Proposed I-87 segment 2

NC-125

Planned NC-125 Bypass (funded)

College Rd.

US-64

US 13/17

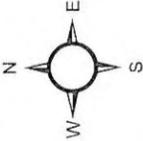
East Blvd.

US 13/17

Pleasant Oak Rd.

Pollocks Rd.

St. Francis Rd.



742

THURSDAY - SEPTEMBER 7, 2017
EDENTON

THURSDAY - SEPTEMBER 7, 2017		THURSDAY - SEPTEMBER 7, 2017	
Ayers	Joe R Ayers	Martin Co	252-809-2589
Bazemore	Ernestine Byrd Bazemore	Bertie Co	252-794-5300
Bond	Dampsey Bond Jr	Martin Co	252-789-4300
Bone	David Bone	Martin Co	252-789-4300
Bonner	Greg Bonner	Perquimans Co	252-331-5212
Bowen	Tommy Bowen	Martin Co	252-789-4300
Bryant	Elizabeth Bryant	Chowan Co	252-482-5618
Buck	Bryant Buck <i>Jamie Heath</i>	Mid East RPO	252-974-1844
Byrum	Gretchen Byrum	NCDOT	252-482-1879
Castelloe	Allen Castelloe	Windsor	252-794-3121 x 302
Chaffee	John D. Chaffee	NC East Alliance	252-689-6496
Cummings	Ron Cummings	Chowan Co	252-331-5259
Earle-Young	Nastasha Earle-Young	NCDOT	919-707-0931
Eatman	Mark Eatman	NCDOT	919-707-0923
Emory	Scott Emory	NCDOT	252-332-4514
Finlayson	Mark Finlayson	Highway 17 Commission	252-514-2748
Fisher	Laura Fisher	AECOM	919-854-6253
Hoggard	James Hoggard	Windsor	252-522-8481

THURSDAY - SEPTEMBER 7, 2017
EDENTON

K/H	Howard	Kevin Howard	Chowan Co	252-482-8431
	Hunter	Representative Howard J. Hunter, III	Legislature	252-332-3189
✓	Jaynes	David Jaynes	Williamson	
	Jennings	Jerry Jennings	NCDOT	252-482-1850
✓	Kanipe	Brent Kanipe	Williamson	252-792-5142 x 242
	Kersey	Patti Kersey	Chowan Co	252-209-4731
	Knighton	Anne-Marie Knighton	Edenton	252-482-7352
	Koivuniemi	Kimberly Koivuniemi, PE	AECOM	919-256-6318
	Lawrence	Dr. Ellis Lawrence	Perquimans Co	252-482-8431 x 1
	Lewis - Derrick	Derrick Lewis	NCDOT	252-789-6150
	Lee - Tammy	Tammy A Lee	Bertie Co	252-794-5300
	Lilley	Elmo "Butch" Lilley	Martin Co	252-789-4300
	Milazzo	Joe Milazzo II, PE	RTA	919-664-7065
	Mitchener	John Mitchener	Perquimans Co	252-482-4802
	Morales	Suzette Morales	NCDOT	919-707-0947
	Moran	Board Member Allen Moran	NCDOT	252-423-1309
	Reid	Horace Reid	Hertford	252-426-5311
	Rountree	Chris Rountree	Peanut Belt RPO	
	Sauer	Scott Sauer	Bertie Co	252-794-5300

THURSDAY - SEPTEMBER 7, 2017
EDENTON

BSS	Shoaf	Brandon Shoaf	Hertford	252-426-1969 x 9
JES	Smith	Jeff Smith	Perquimans Co	252-221-8727
	Smith-Ingram	Senator Erica Smith-Ingram	Legislature	919-715-3040
	Trent	John Trent	Bertie Co	252-794-5300
	Vaughan	Roland Vaughan	Edenton	
AW	Welsh	Angela Welsh	Albemarle Commission	252-426-5775
	Wesson	Ronald "Ron" Wesson	Bertie Co	252-794-5300
	Whichard-Brown	Joyce Whichard-Brown	Williamson	
	White	Traci White	Bertie Co	252-794-5336
	White	Stewart White	Bertie Co	252-794-5300
	Willingham	Representative Shelly Willingham	Legislature	252-442-8659
	York	Shane York	NCDOT	
	Hofler	Linda Hofler	Gates Co. Commissioner	252-465-8401
JK	Lee	Darick Lee	NC DOT - District Engineer	252-789-6150
	Holman	William Holman	Town Council Hertford	252-333-5056

252-340-9860
 Maxine
 Martin Mayor Beaufort
 Bertie Co
 252-794-5301

Edwards
 Charlotte
 Steve

Morrison
 Griffin
 81945

TUESDAY, SEPTEMBER 19, 2017

ELIZABETH CITY

E.C. Day

TUESDAY, SEPTEMBER 19, 2017		TUESDAY, SEPTEMBER 19, 2017	
	Barrow	Sam Barrow	Perquimans Co 252-426-2027
✓	Bunch	Rodney Bunch	Pasquotank Co 252-335-0865
✓	Byrum	Gretchen Byrum	NCDOT 252-482-1879
✓	Chaffee	John D. Chaffee	NCDOT 252-689-6496
	Cook	Senator Bill Cook	NC East Alliance 919-715-8293
✓	Cox	Shelley Cox	Legislature 252-335-1891
	Dixon	Jeff Dixon	Pasquotank Co 252-330-5539
✓	Eatman	Mark Eatman	NCDOT 919-707-0923
	Finlayson	Mark Finlayson	HWY 17 Corridor 252-514-2748
✓	Fisher	Laura Fisher	AECOM 919-854-6253
	Griffin	Lloyd E. Griffin, III	Pasquotank Co
✓	Heath	Frank Heath	Perquimans Co 252-426-8484
✓	Hoffler	Joseph W. Hoffler	Perquimans Co (252) 426-7193
	Humphries	Stephanie Humphries	Camden Co
	Hunter	Representative Howard J. Hunter, III	Legislature 252-332-3189
✓	Jennings	Jerry Jennings	NCDOT 252-482-1850
	Jones	Kyle Jones	Perquimans Co
✓	Koivuniemi	Kimberly Koivuniemi	AECOM 919-256-6318

Perquimans Co Planner 252-426-2027

MORLEY, Rhonda Morley

TUESDAY, SEPTEMBER 19, 2017
ELIZABETH CITY

	Krainiak	Randy Krainiak	Camden Co	252-338-3326
	Leigh	Fondella Leigh	Perquimans Co	(252) 264-3916
✓	Lewis	Derrick Lewis	NCDOT	
	Meads	Frankie Meads	Pasquotank Co	252-335-4343
	Meiggs	Gary Meiggs	Camden Co	252-771-5634
	Midgett	Randy Midgett	NCDOT	252-331-4737
	Milazzo	Joe Milazzo II, PE	RTA	919-664-7065
	Monro	Ross Monro	Camden Co	252-619-3134
	Moran	Allen Moran	NCDOT Board	252-423-1309
	Muzzulin	Edward Muzzulin	Perquimans Co	(252) 340-9860
✓	Nelson	Wallace Nelson	Perquimans Co	252-426-7118
<i>OL</i>	Olson	Richard Olson	Elizabeth City	252-337-6864
<i>BP</i>	Parker	Bettie J Parker	Pasquotank Co	
✓	Peel	Joseph Peel	Elizabeth City	252-337-6955
<i>EP</i>	Perry	Cecil Perry	Pasquotank Co	
✓	Porter	Dan Porter	Camden Co	252-338-1919 x 263
<i>OK</i>	Riggs	Clayton Riggs	Camden Co	252-336-4303
<i>JS</i>	Scanlon	Dan Scanlon	Currituck Co	(252) 232-2075
	Smith-Ingram	Senator Erica Smith-Ingram	Legislature	919-715-3040

L2 LOMBARDI LARRY LOMBARDI Currituck County 252-232-6015

TUESDAY, SEPTEMBER 19, 2017
ELIZABETH CITY

Source List
House Members
Del. Spk

Steinburg	Representative Bob Steinburg	Legislature	919-715-3040
Sterritt	Dr William R. Sterritt	Pasquotank Co	252-334-9625
Stewart	Donna Stewart - Dismal Swamp	Dismal Swamp	252-771-8333
Welsh	Angela Welsh	Albemarle Commission	252-426-5775
White	Tom White	Camden Co	252-336-4744
Winslow	Joseph S. Winslow, Jr.	Pasquotank Co	252-335-1619
Woodard	Charles Woodard	Perquimans Co	(252) 426-5405
Woody	Ben Woody	Currituck Co	(252) 232-6029
Yates	Frederick Yates	Winfall	252-426-5015
York	Shane York	NCDOT	

✓ Cole
 ✓ STAMETZ
 ✓ STIMETZ
 ✓ TONY STIMETZ
 ✓ ANGELA COLE
 ✓ E. CITY
 ✓ CURRITUCK CO
 ✓ WINFALL
 ✓ HARRIS
 ✓ ROUDGER



Bols at P3E @ Hotmail.com

Robert Brown 757-642-4939