I -140 Connector

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

Local ID: BRUN20002-H

Purpose: Congestion

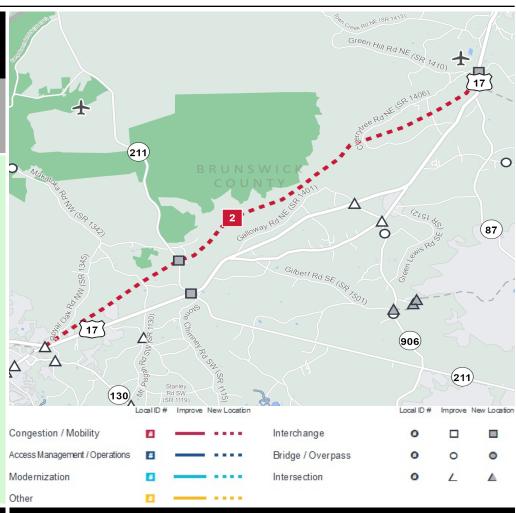
Improvement: New Location

Identified Need

Portion of US 17 is exceeding capacity in 2045 in the Shallotte area: volume is 26,800 and capacity is 12,700. There is also a need to continue extension to support Carolina Bays Parkway Extension.

Recommendation

New location road identified as a congestion/mobility project.
Roadway upgrade proposed on the Cape Fear Moving Forward 2045. The roadway will connect at the intersection of CBPE/US 17 and continue north, tying back into US 17 at or near NC 87, with a cross section 4A.



Proposal At A Glance			
Highway Class	Congestion & Mobility		
Facility Type	Freeway		
Typical Section	04 A		
Section Options	06 A		
Length (miles)	19.00		
Existing ROW (feet)			
Safety Risk Score	-		

Proposal Data:	2017 Base Year	2045 Future Year	
New Location	Existing	Without Proposal	With Proposal
Facility Type	-	-	Freeway
Travel Lanes	-	-	4
Volume (vpd)	-	-	19100
Capacity (vpd)	-	-	63500

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



Project Sheets 11/08/2023

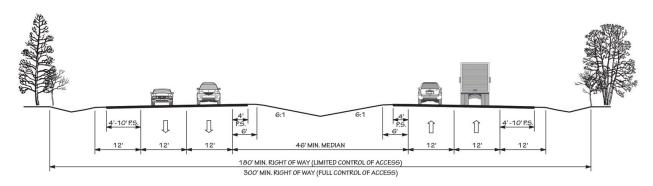
I -140 Connector Brunswick County CTP

Typical Section Options:

TYPICAL SECTION No. 4A

06 A

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



POSTED SPEED 45-70 MPH

Project History/Linkage to Other Projects

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

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

US 17 and NC I-140 merge into the jurisdiction of this CTP from Wilmington MPO area. There is a roadway upgrade being proposed on the Cape Fear Moving Forward 2045 on Figure 7-1 and the Fiscally-Constrained Roadway Project List.

CTP Goal Analysis

This project supports the following goals and objectives:

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

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

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

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

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

Goal: Promote a safer and more secure transportation

network through crash reduction, enhanced reliability and predictability, and improved emergency coordination.

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

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

Vision Goals & Objectives Survey

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

Potential Impact

Land Use/CUR: The land use along the proposed roadway is mostly rural in nature, therefore the project will limit impacts with very little development.

Future housing development is expected to come into the area, specifically total of 348 housing units south of this road.

Additional Information - Environmental

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

- 66 Coastal Region Evaluation Of Wetland Significance Feature(s)
- 19 Flood Hazard Area Feature(s)

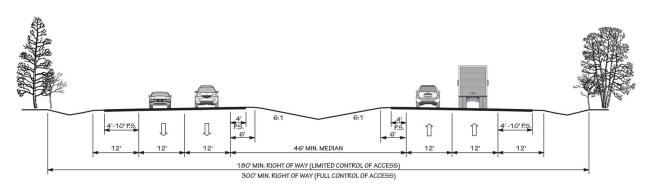
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Typical Section Options:

TYPICAL SECTION No. 4A

06 A

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

Additional Information - Title VI

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

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