



NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

Topsail Island Bridge Replacement Bridge Number 16 over the Intracoastal Waterway

WBS Number 40233.1.1
Federal Aid No. BRSTP-50(10)

TIP PROJECT NUMBER B-4929
Pender County

**Design Public Hearing
Topsail Island Moose Lodge
13175 N.C. 50
Holly Ridge**

**Pre-Hearing Open House – 3:30 PM – 6:30 PM
Formal Presentation – 7:00 PM**

PURPOSE OF PROJECT

The purpose of the project is to improve bridge safety and functionality.

NEED FOR THE PROJECT

The need for the project is to replace the structurally deficient, functionally obsolete bridge.

Structurally deficient means the bridge is in relatively poor condition or has insufficient load-carrying capacity. It does not mean that the bridge is unsafe, but the bridge must be monitored, inspected and either repaired or replaced at an appropriate time to maintain its structural integrity.

A bridge is functionally obsolete when its layout no longer meets current design standards.

PURPOSE OF PUBLIC HEARING

Today's hearing is an important step in the North Carolina Department of Transportation's (NCDOT) procedure for making you, the public, a part of the project development process. The purpose of the hearing is to obtain public input on the preferred alternative design for replacement of the bridge.

Planning and environmental studies on the highway project are provided in the environmental report – Environmental Assessment (EA). Copies of this report and today's hearing map displaying the location of the selected alternative have been available for public review at the following locations:

- **NCDOT Division Engineer's Office**
5501 Barbados Boulevard, Castle Hayne
- **Town of Surf City**
214 N. New River Drive
- **Town of North Topsail Beach**
2008 Loggerhead Court
- **Town of Topsail Beach**
820 S. Anderson Boulevard

Location Map



Copies of the EA document and maps also can be found on the project's website:

www.ncdot.org/projects/TopsailIslandBridge

or on the NCDOT project meetings website:

www.ncdot.gov/projects/publicmeetings/.

YOUR PARTICIPATION

You are encouraged to participate by making your comments and/or questions a part of the public record. This may be done by having them recorded at the Formal Public Hearing, writing them on the attached comment sheet, by mail, e-mail or fax.

Several representatives of the North Carolina Department of Transportation are present. They will be happy to talk with you, explain the design and answer your questions. You may write your comments or questions on the comment form and leave it at the comment form table or mail them by August 26, 2014 to the following address:

Ms. Diane Wilson
NCDOT - Human Environment Section
1598 Mail Service Center
Raleigh, NC 27699-1598
Phone: 919-707-6073
Fax: 919-212-5785
Email: pdwilson1@ncdot.gov

WHAT IS DONE WITH THE INPUT

A post-hearing meeting will be conducted after the comment period has ended. NCDOT staff and others who play a role in the design of the project will attend this meeting. The project will also be reviewed with federal agencies such as the Federal Highway Administration (FHWA) and the US Army Corps of Engineers (USACE) as well as state agencies such as the NC Department of Environment and Natural Resources. When appropriate, local government staff will attend.

All spoken and written issues are discussed at the post-hearing meeting. Most issues are resolved at this meeting. NCDOT considers safety, costs, traffic service, social impacts and public comments in making higher

management, Board of Transportation decisions. Complex issues may require additional study and may be reviewed by Members and/or the Secretary of Transportation.

Minutes of the post-hearing meeting are prepared and a summary is available to the public. You may request this document on the attached comment sheet.

WHAT HAPPENS NEXT



The preferred alternative design will be refined and will include efforts to further reduce any environmental impacts.

The Final environmental document, the Finding of No Significant Impact (FONSI), is being prepared. Upon completion, the FONSI will be circulated for public and agency information. The project will then proceed to the right-of-way acquisition phase of the process.

STATE-FEDERAL RELATIONSHIP



The proposed project is a Federal-Aid Highway Project and thus will be constructed under the State-Federal Aid Highway Bridge Program. Financing of this project will be 80% Federal funds and 20% State funds using "Bridge Replacement On-Federal Aid System" funds.

Everyone present is urged to participate in the proceedings. It is important, however, that **THE OPINIONS OF ALL INDIVIDUALS BE RESPECTED REGARDLESS OF HOW DIVERGENT THEY MAY BE FROM YOUR OWN.** Accordingly, debates, as such, are out of place at public hearings. Also, the public hearing is not to be used as a POPULAR REFERENDUM to determine the location and/or design by a majority vote of those present.

The Board of Transportation is responsible for the selection and scheduling of projects on the Federal Aid System, their location, design and maintenance cost after construction.

The Federal Highway Administration is responsible for the review and approval of the location, design, and maintenance cost after construction, to ensure that each Federal Aid Project is designed, constructed and maintained to Federal Aid Standards.

PROJECT DESCRIPTION

NCDOT proposes to replace the existing Topsail Island Bridge (Bridge No. 16) along NC 50/210 over the Intracoastal Waterway (Topsail Sound) in Pender County, North Carolina.

The proposed replacement of Bridge No. 16 over the Intracoastal Waterway involves the removal and replacement of an existing swing span bridge currently providing access to Topsail Island.

HISTORY OF THE PROJECT

Bridge No. 16 along N.C. 50/210 crosses the Intracoastal Waterway in Pender County. The bridge is located within the town limits of Surf City and connects the mainland with Topsail Island.

The bridge is one of only two access points to Topsail Island, the other bridge being located about seven miles north, in the Town of North Topsail Beach.

NCDOT initiated studies for this replacement project in accordance with the requirements set forth in the National Environmental Policy Act (NEPA) of 1969, as amended.

More than 20 alternatives were initially developed for study. This number was reduced to seven for further study in part due to public input received at citizen informational workshops held on June 25, 2009 and October 21, 2010.

DESCRIPTION OF ALTERNATIVES

As a part of the study of the seven alternatives, three height options were studied as well: a high-level fixed bridge, a low-level moveable bridge, and a mid-level moveable bridge.

The alternatives carried forward were:

Northern Alternatives Group:

(Figure 1)

Alternatives 4, 5, and 5R
high-level fixed bridges

Central Alternatives Group:

(Figure 2)

Alternative 6
low-level moveable bridge

and

Alternative 7

mid-level moveable bridge

Southern Alternatives Group:

(Figure 3)

Alternatives 11 and 17
high-level fixed bridges

Alternative 17 was selected as the Preferred Alternative.

A No-Build Alternative, Repair and Rehabilitate Existing Bridge Alternative, and Alternative Modes of Transportation were also evaluated as part of the study, but these alternatives did not meet the purpose of and the need for the project.

Figure 1: Northern Alternative Group

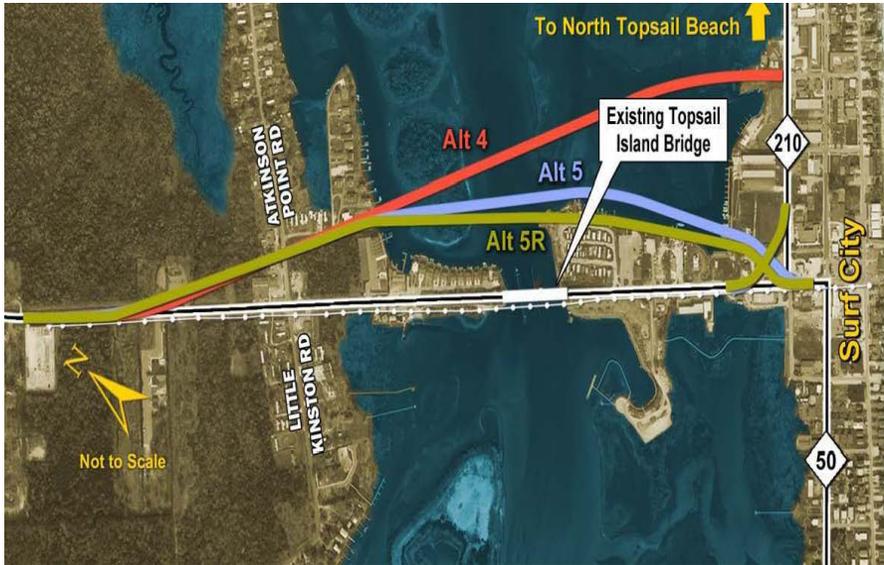


Figure 2: Central Alternatives Group



Figure 3: Southern Alternatives Group



Alternative 17 was selected as the Preferred Alternative because it:

- Results in the least number of residential and business relocations.
- Replaces the existing swing bridge with a 65-foot high-level fixed bridge, eliminating vehicular/vessel delays from bridge openings and closings.
- Has no impacts to ponds or streams and minimal wetland impacts.
- Was the most preferred from the citizen comments.
- Maintains a connection to the existing central business district.
- Has the lowest total cost. The other alternatives are approximately 10% to 75% higher in cost.
- Minimizes impacts to Soundside Park when compared to Alternatives 6 and 7.
- Can be constructed without requiring a detour bridge and without closing the existing bridge during construction.

ALTERNATIVE 17 DESCRIPTION

Bridge No. 16 will be replaced with a new fixed bridge approximately 900 feet south of the existing bridge. The new bridge typical section (shown in Figure 4) will accommodate two-way traffic using two 12-foot travel lanes, two 7.5-foot bicycle lanes, and a 10-foot multi-use path. A concrete barrier will provide separation between the bicycle lane and the multi-use path.

During emergency events, the bridge could be converted to a three lane travel way with two lanes exiting the island and one emergency vehicle lane entering the island.

The approach roadway section will match the new bridge section, with a 4.5-foot buffer between the curb and gutter and the multi-use path.

In addition, to the construction of the new Bridge, a Roundabout will be constructed on both ends of the bridge (shown in Figures 5 and 6).

A roundabout is an intersection type that allows traffic to yield prior to entering into a circular loop, which then connects to other cross streets. This circular flow allows for improved traffic operations given that the traffic is not delayed by a mandated stop condition prior to entering the intersection.

In addition to the intersection traffic flow condition improvements, roundabouts also offer the unique opportunity to add landscaping and aesthetic features as well as other improvements that encourage economic and social activity.

Alternative 17 will include 2 single-lane roundabouts on new location:

- At the Little Kinston Road/ Atkinson Point Road intersection on the mainland.
- At the intersection of the new replacement bridge alignment and the existing N.C. 50/210 roadways on the island (shown in Figure 5)

Figure 4: Bridge Typical Section

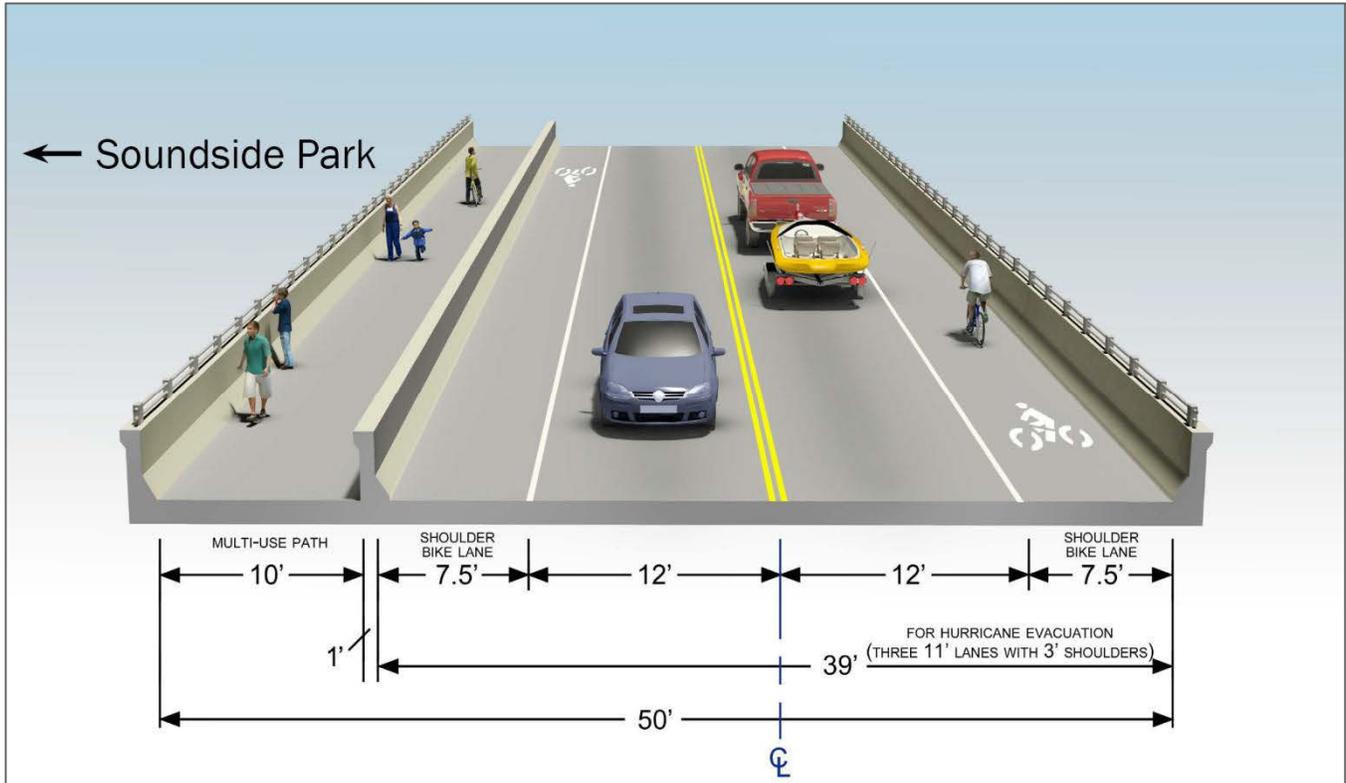


Figure 5: Roundabout on Island



Figure 6: Roundabout on Mainland



ROLAND AVENUE

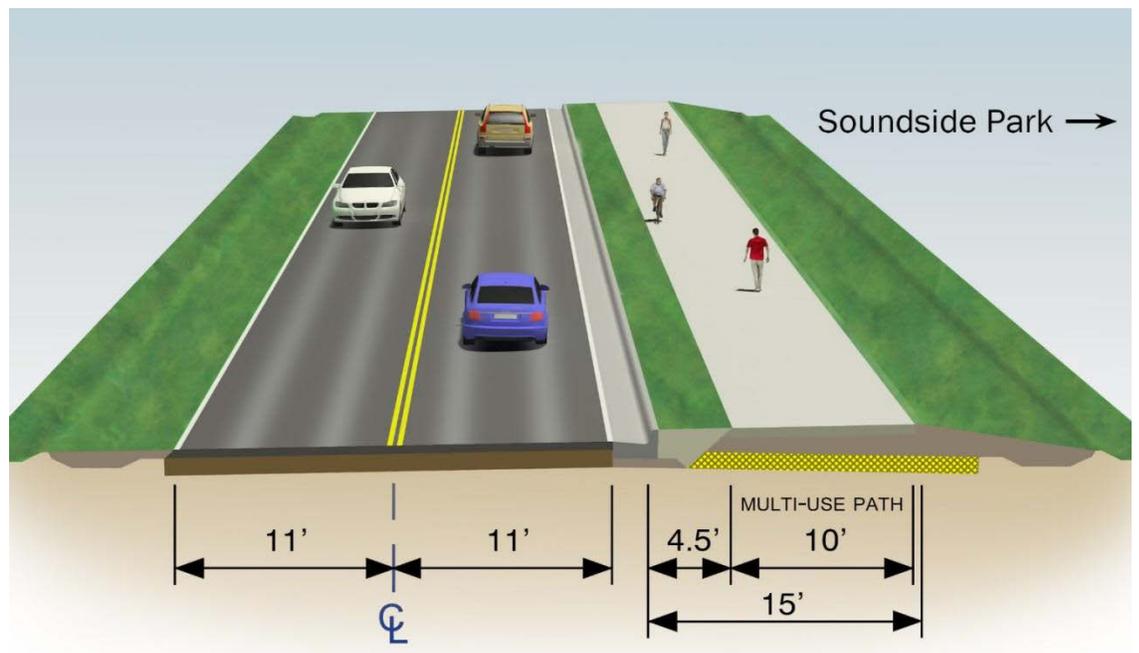
With the relocation of the bridge to the south of Roland Avenue, access to the Central Business District will be changed. Accessibility to the businesses and Soundside Park will be maintained through repaving and striping of Roland Avenue as well as installation of a 10-foot wide multi-use path (see Figure 6). The Federal Highway Administration has agreed to provide the funding necessary for these enhancements.

SPEED LIMIT

The new bridge, roadway approaches, and most of the connecting cross-streets will be designed using a 40 mph design speed and each facility is anticipated to be posted at a 35 mph speed limit.

Kinston Avenue, Charlotte Avenue, and Goldsboro Avenue will be designed using a 30 mph design speed and are anticipated to be posted at a 25 mph speed limit, which is consistent with the existing conditions.

**Figure 6:
Typical Section
Roland Avenue**



PROJECT INFORMATION:

ALTERNATIVE 17

Length: 0.9 Mile

Right of Way:

Bridge: 120 feet
Roundabout approaches: 10 feet behind face of curb or back of berm
Cross Streets: 70-100 feet

Project Costs:

Current Project Cost Estimate:

Construction Cost	\$ 44,600,000
R.O.W Cost	\$ 8,125,000
Utility Relocation Cost	\$ 2,500,000
Wetland/Stream Mitigation	\$ 187,000
Total Cost	\$ 55,412,000

PROJECT SCHEDULE

The *tentative* schedule is shown below.
A number of factors can affect a project schedule,
so schedules are subject to change

Complete FONSI Fall 2014
Begin Right-of-Way Acquisition 2015
Begin Construction* 2017

* Based on the draft 2013-2023 NCDOT Program and Resource Plan.

PROJECT IMPACTS: COMPARISON OF IMPACTS / COSTS

Category	Alt 4	Alt 5	Alt 5R	Alt 6	Alt 7	Alt 11	Alt 17
Project Length (miles) including permanent bridge length	1.1	1.0	1.0	0.5	0.5	1.1	0.9
Community Facilities Impacted (number)	-	-	-	-	-	-	-
Soundside Park impacts permanent / temporary (acres)	0	0	0	0.03/0.40	0.01/0.40	0	0.20/0.00
Churches Impacted (number)	1	1	1	0	0	1	0
Residential Relocations (number)	4	2	13	0	0	4	1
Business Relocations (number)	5	4	7	1	3	1	3
Wetlands: CAMA/Non-Riparian (acres)	0/2.0	0/2.0	0/2.0	0.3/0	0.1/0	0.4/0.8	0.07/0.8
Stream Crossings (number)	2	2	2	1	1	1	1
Known or Potential Hazardous Material Sites (number)	0	1	2	1	1	0	3
Initial Construction Cost	\$51.1 M	\$48.8 M	\$48.5 M	\$50.2 M	\$55.9 M	\$50.2 M	\$44.6 M
Operations & Maintenance Costs (75 years)	\$3.62 M	\$3.62 M	\$3.62 M	\$25.96 M	\$25.96 M	\$3.62 M	\$3.62 M

TITLE VI PUBLIC INVOLVEMENT FORM

Completing this form is **completely** voluntary. You are not required to provide the information requested in order to participate in this meeting.

Meeting Type: Public Hearing	Date: July 29, 2014
Location: Topsail Island Moose Lodge, 13175 N.C. 50, Holly Ridge	
STIP No.: B-4929	
Project Description Topsail Island Bridge Replacement Bridge Number 16 over the Intracoastal Waterway	

In accordance with Title VI of the Civil Rights Act of 1964 and related authorities, the North Carolina Department of Transportation (NCDOT) assures that no person(s) shall be excluded from participation in, denied the benefits of, or subjected to discrimination under any of the Department's programs, policies, or activities, based on their race, color, national origin, disability, age, income, or gender.

Completing this form helps meet our data collection and public involvement obligations under Title VI and NEPA, and will improve how we serve the public. Please place the completed form in the designated box on the sign-in table, hand it to an NCDOT official or mail it to the PDEA-Human Environment Section, 1598 Mail Service Center, Raleigh, NC 27699-1598.

All forms will remain on file at the NCDOT as part of the public record.

Zip Code: _____	Gender: <input type="checkbox"/> Male <input type="checkbox"/> Female
Street Name: (i.e. Main Street) _____	Age: <input type="checkbox"/> Less than 18 <input type="checkbox"/> 45-64 <input type="checkbox"/> 18-29 <input type="checkbox"/> 65 and older <input type="checkbox"/> 30-44
Total Household Income: <input type="checkbox"/> Less than \$12,000 <input type="checkbox"/> \$47,000 – \$69,999 <input type="checkbox"/> \$12,000 – \$19,999 <input type="checkbox"/> \$70,000 – \$93,999 <input type="checkbox"/> \$20,000 – \$30,999 <input type="checkbox"/> \$94,000 – \$117,999 <input type="checkbox"/> \$31,000 – \$46,999 <input type="checkbox"/> \$118,000 or greater	Have a Disability: <input type="checkbox"/> Yes <input type="checkbox"/> No
Race/Ethnicity: <input type="checkbox"/> White <input type="checkbox"/> Black/African American <input type="checkbox"/> Asian <input type="checkbox"/> American Indian/Alaskan Native <input type="checkbox"/> Native Hawaiian/Pacific Islander <input type="checkbox"/> Hispanic/Latino <input type="checkbox"/> Other (please specify): _____	National Origin: (if born outside the U.S.) <input type="checkbox"/> Mexican <input type="checkbox"/> Central American: _____ <input type="checkbox"/> South American: _____ <input type="checkbox"/> Puerto Rican <input type="checkbox"/> Chinese <input type="checkbox"/> Vietnamese <input type="checkbox"/> Korean <input type="checkbox"/> Other (please specify): _____

How did you hear about this meeting? (newspaper advertisement, flyer, and/or mailing) _____

For more information regarding Title VI or this request, please contact the NCDOT Title VI Section at (919) 508-1830 or toll free at 1-800-522-0453, or by email at slipscomb@ncdot.gov.

Thank you for your participation!

B-4929
Topsail Island



Attn: Diane Wilson
NCDOT - PDEA
Human Environment Section
1598 Mail Service Center
Raleigh, NC 27699-1598





COMMENT FORM

Design Public Hearing
July 29, 2014



If possible, please return this "Comment Form" before leaving tonight.

Your answers to the following questions will help the NCDOT team as they move forward with project development. Please provide your comments in the space below and return this form to a Project Team Member or place it in the "COMMENT BOX". Thank You!

1) Where do you live?

Topsail Beach Surf City Mainland Surf City Island North Topsail Beach Other: _____

2) Your relationship with the Island:

Permanent Resident Seasonal Resident Other: _____

3) Do you have property that will be directly impacted by the preferred alternative?

Yes No

4) What is the address of your property and what is your property's use (residential, business, vacation)?

5) Are there any other concerns you have with the preferred alternative design? If so, please describe below?

6) Based on the information available, were all your substantial questions answered?

Yes No

7) Were display maps and handouts easy to read and understand?

Yes No

8) Were NCDOT representatives understandable, helpful and clear in their explanations?

Yes No

9) Do you have any additional issues or specific ideas that you would like to share concerning the replacement of the Topsail Island bridge?

Name (Optional): _____

Address (Optional): _____

If you are not able to fill this form before you leave tonight, please mail it before August 26, 2014.

B-4929
Topsail Island



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