

Cape Fear Skyway

STIP Project No. U-4738

Federal Aid Project No. STP-0017(53)

WBS No. 40114

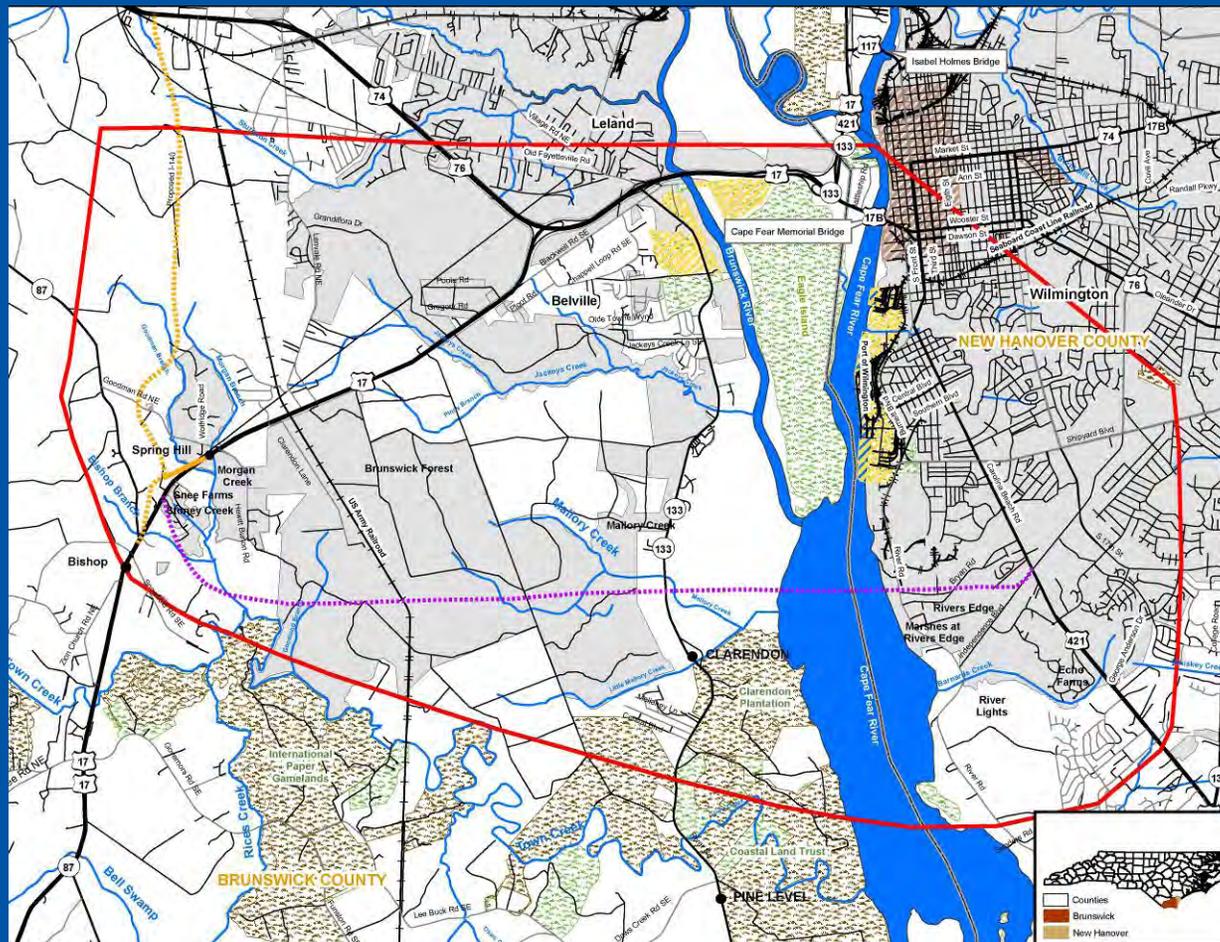
**New Hanover and Brunswick Counties,
North Carolina**

January 22, 2010





About Cape Fear Skyway





Project History

- “Southern Outer Loop”
 - Project from 1993 Thoroughfare Plan
 - Described part of this loop as the “Southern Bridge” – an extension from Independence Blvd. northward to Eagle Island to interchange with US 74/76



Project History

- Project described as “Southern Bridge” in *Greater Wilmington Urban Area Transportation Plan 1999-2025*
 - Revised description to have western terminus at existing US 17 and proposed Wilmington Bypass (I-140) interchange
 - 2025 Plan removed “Southern Outer Loop” project completely



Project History

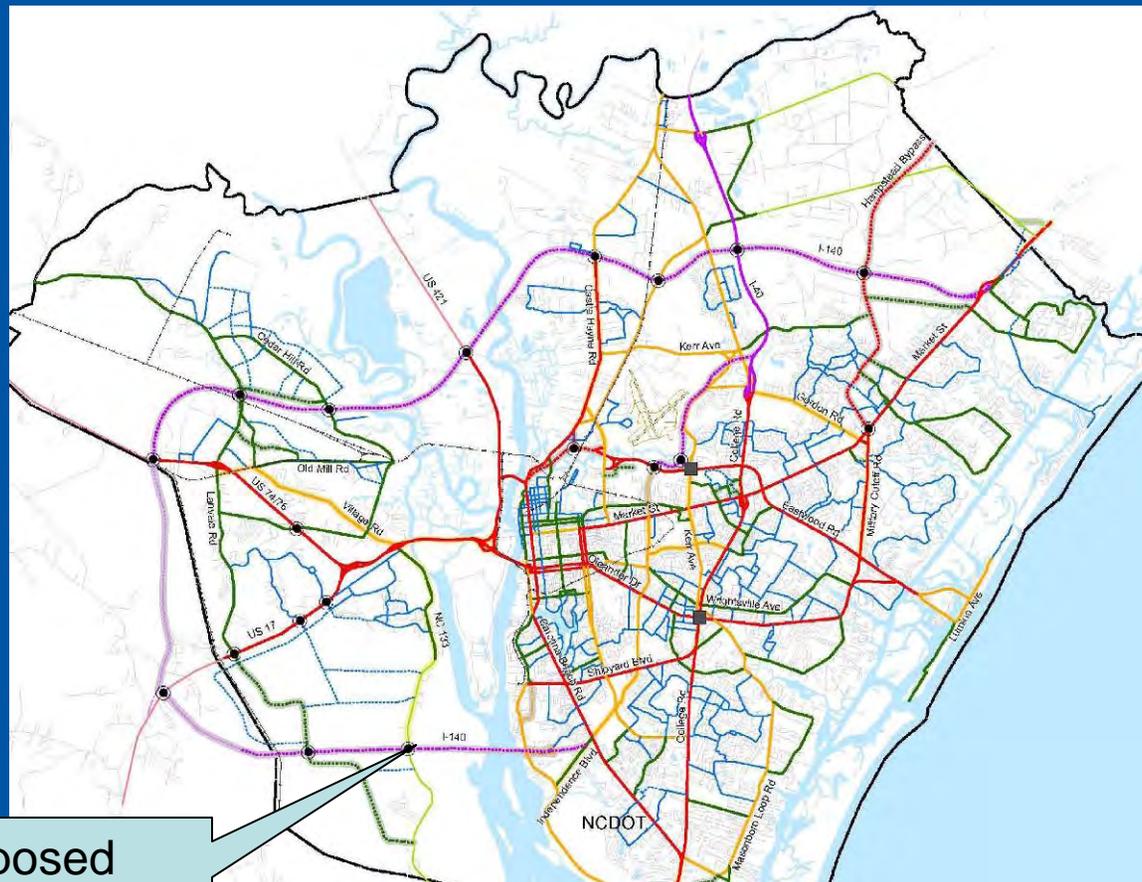
- Included in current WMPO Long Range Transportation Plan (2030) as “Cape Fear Skyway”

Described as a project that extends east from US 17 at the proposed I-140 (Wilmington Bypass) interchange, across the Cape Fear River, to Independence Boulevard at US 421.

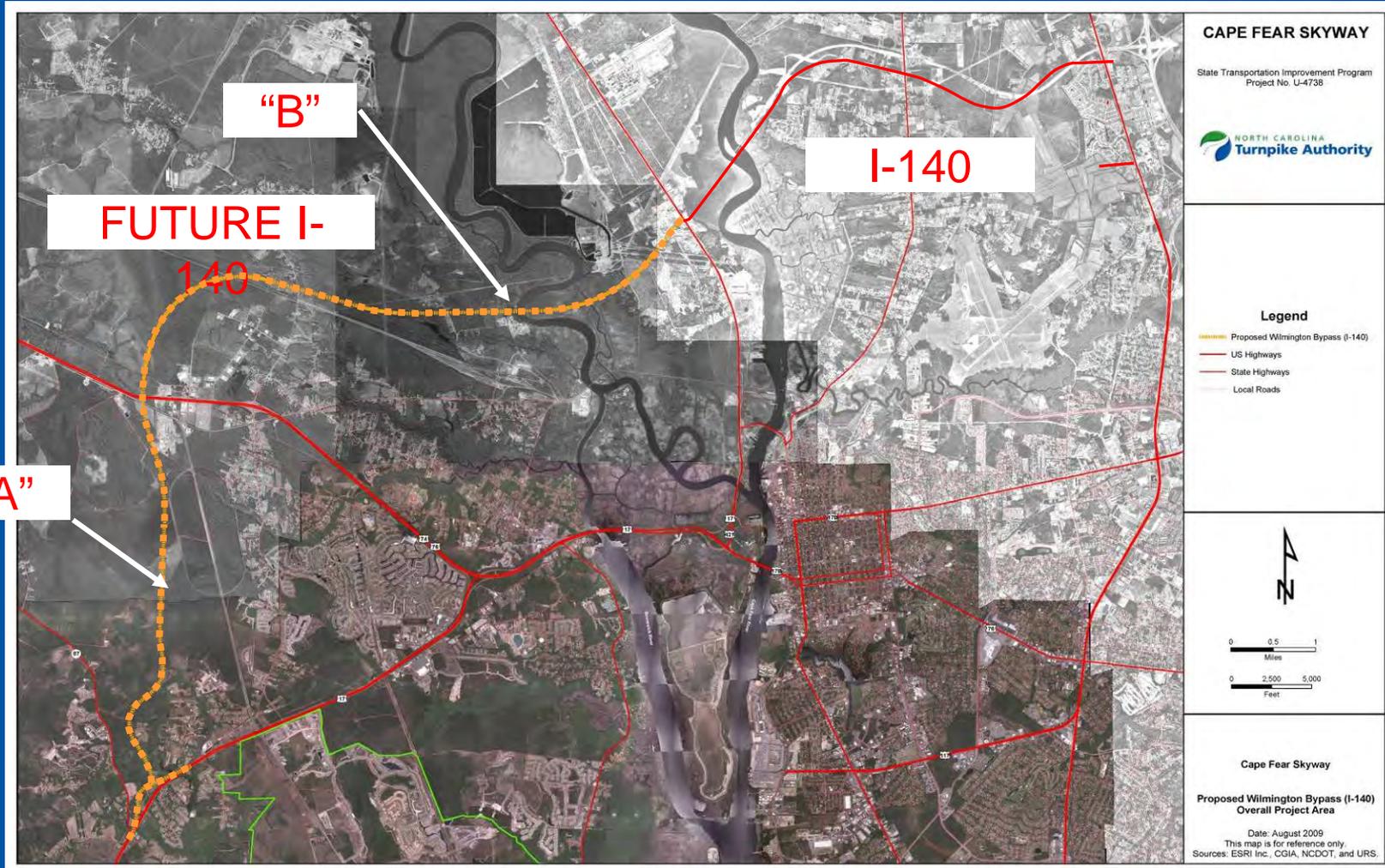
- Included in the Strategic Highway Corridor Initiative and the NC Intrastate System



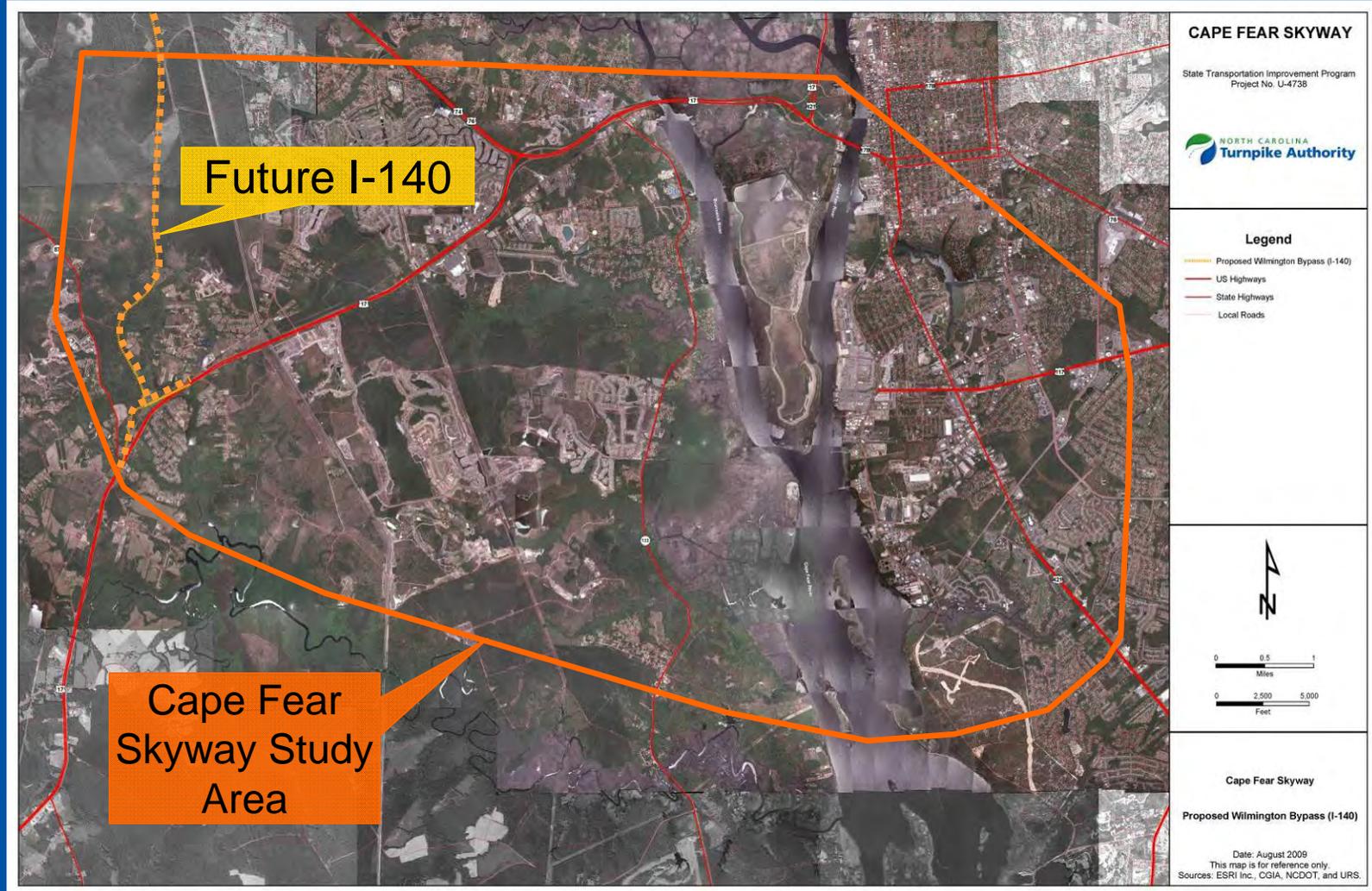
2005 Thoroughfare Plan



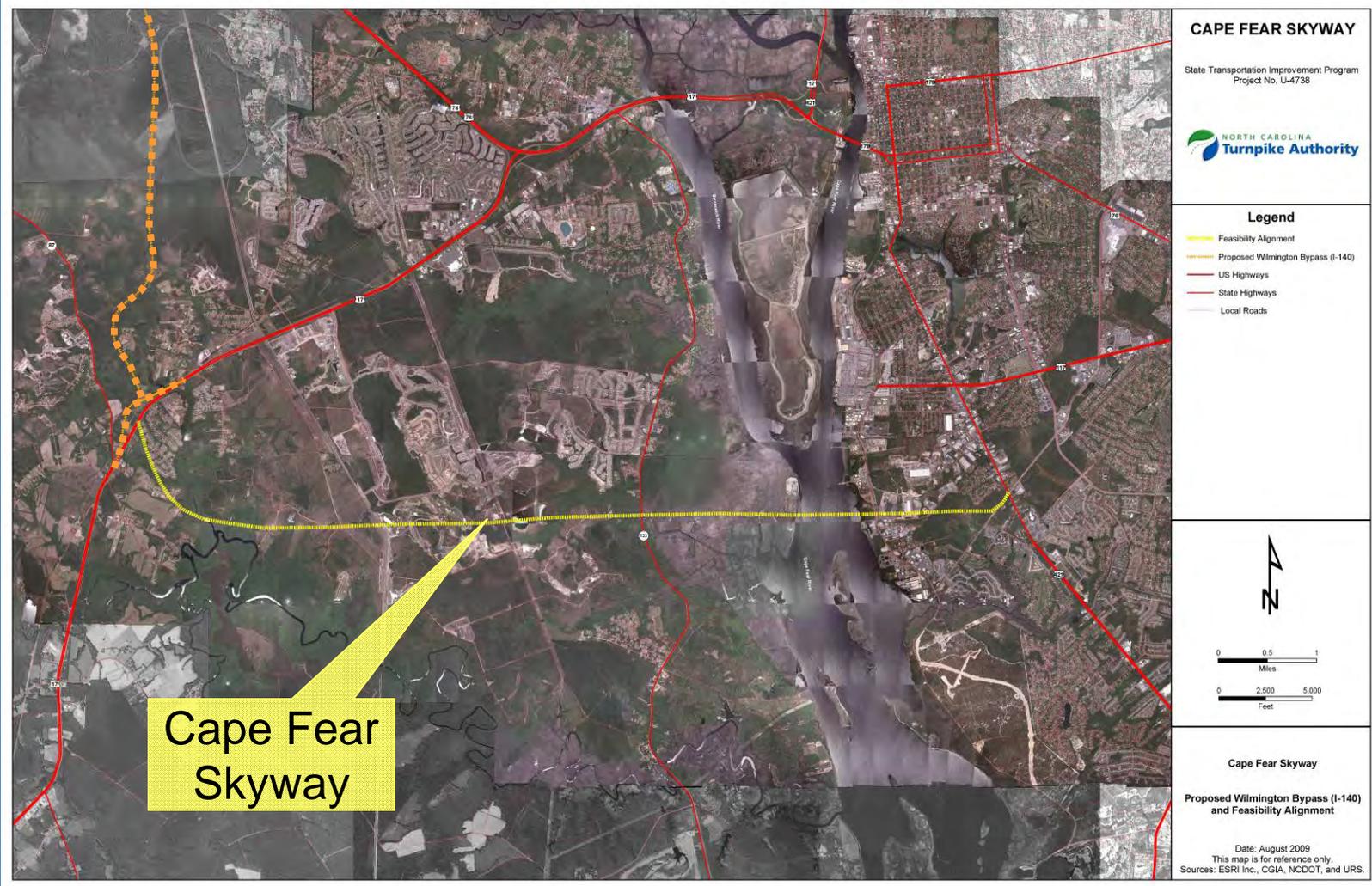
Proposed
Southern Bridge



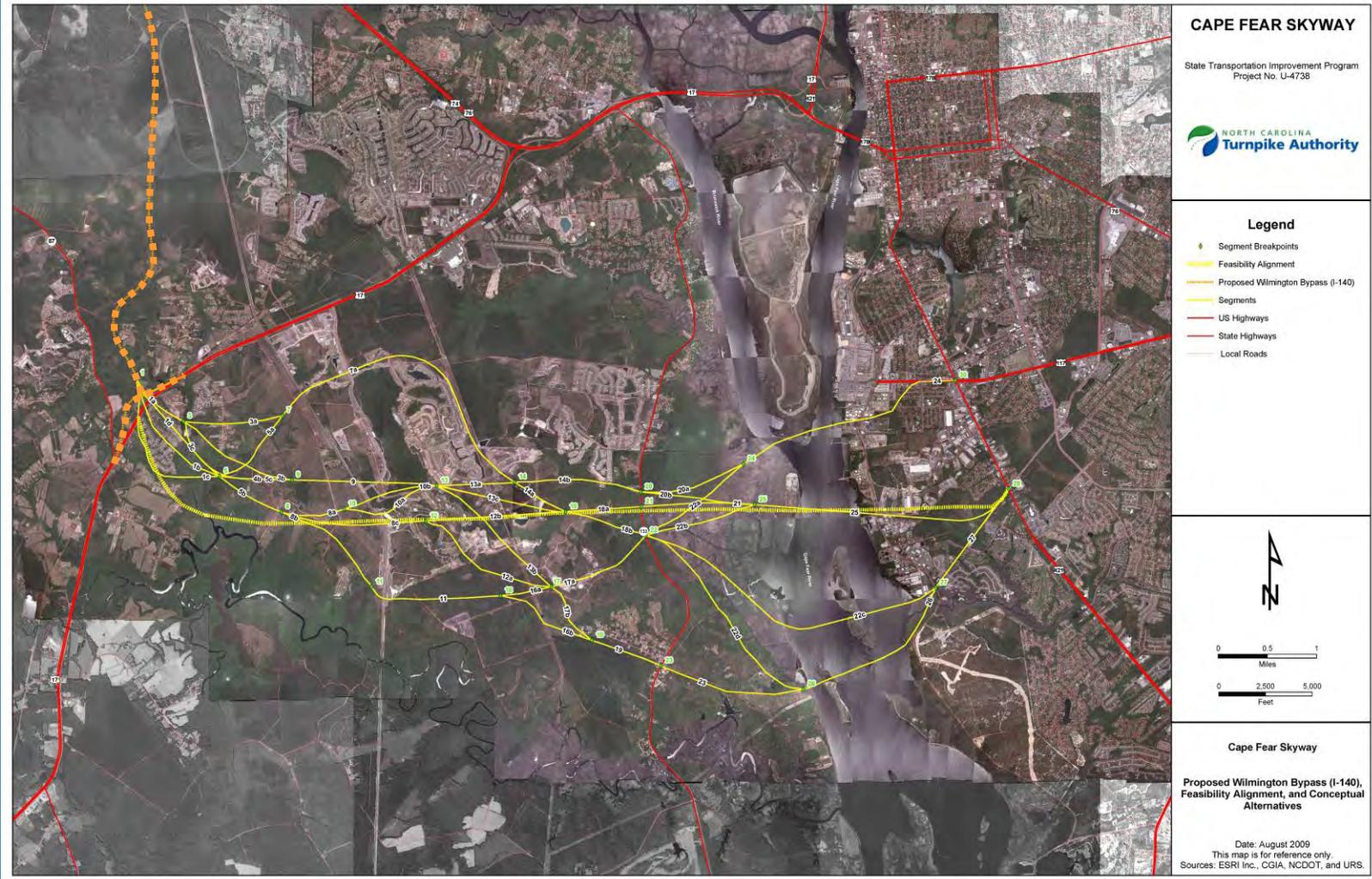
The I-140 Loop



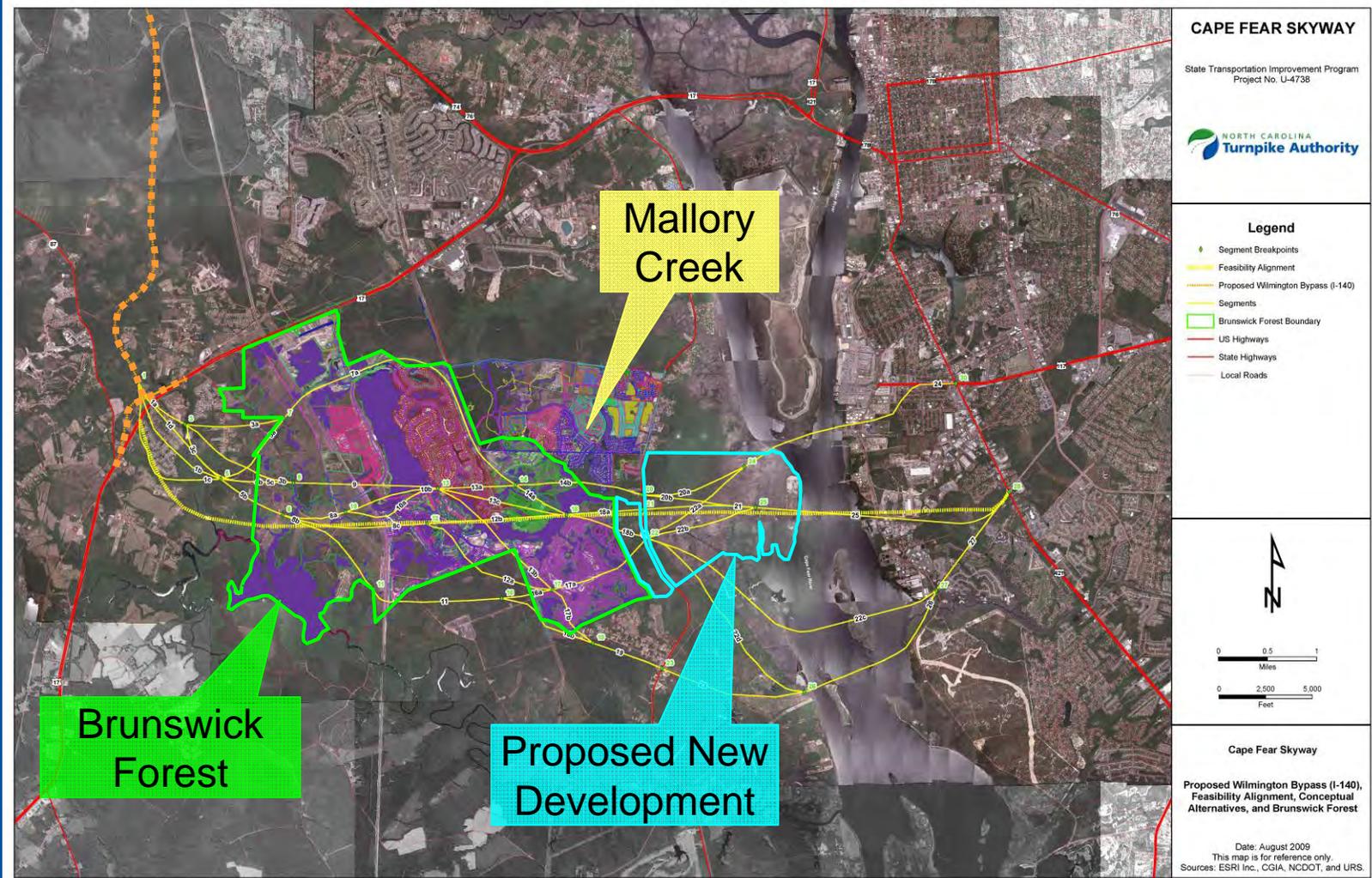
I-140 and the Cape Fear Skyway Study Area



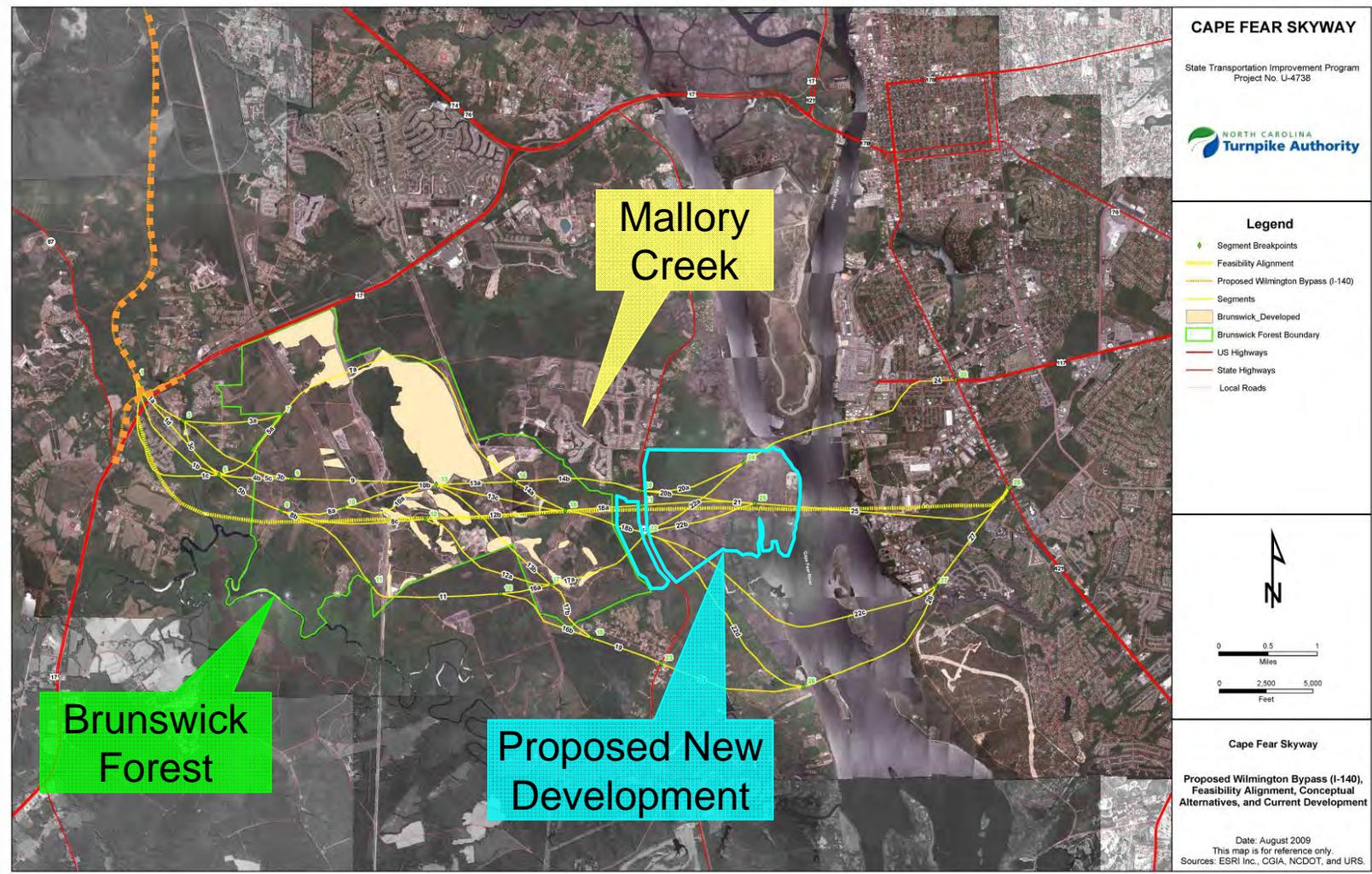
Feasibility Study Alignment - 2003



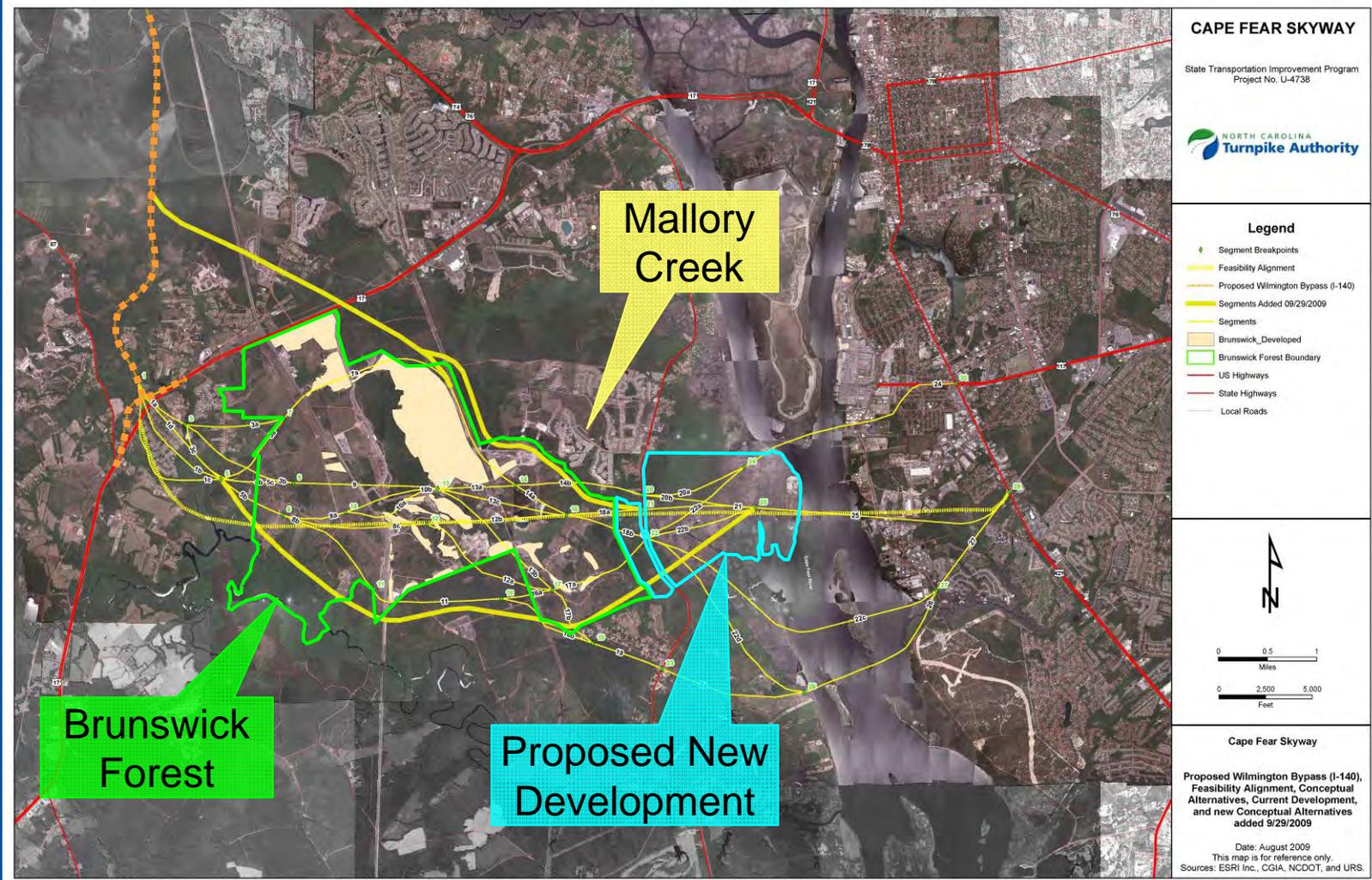
Preliminary Alternatives



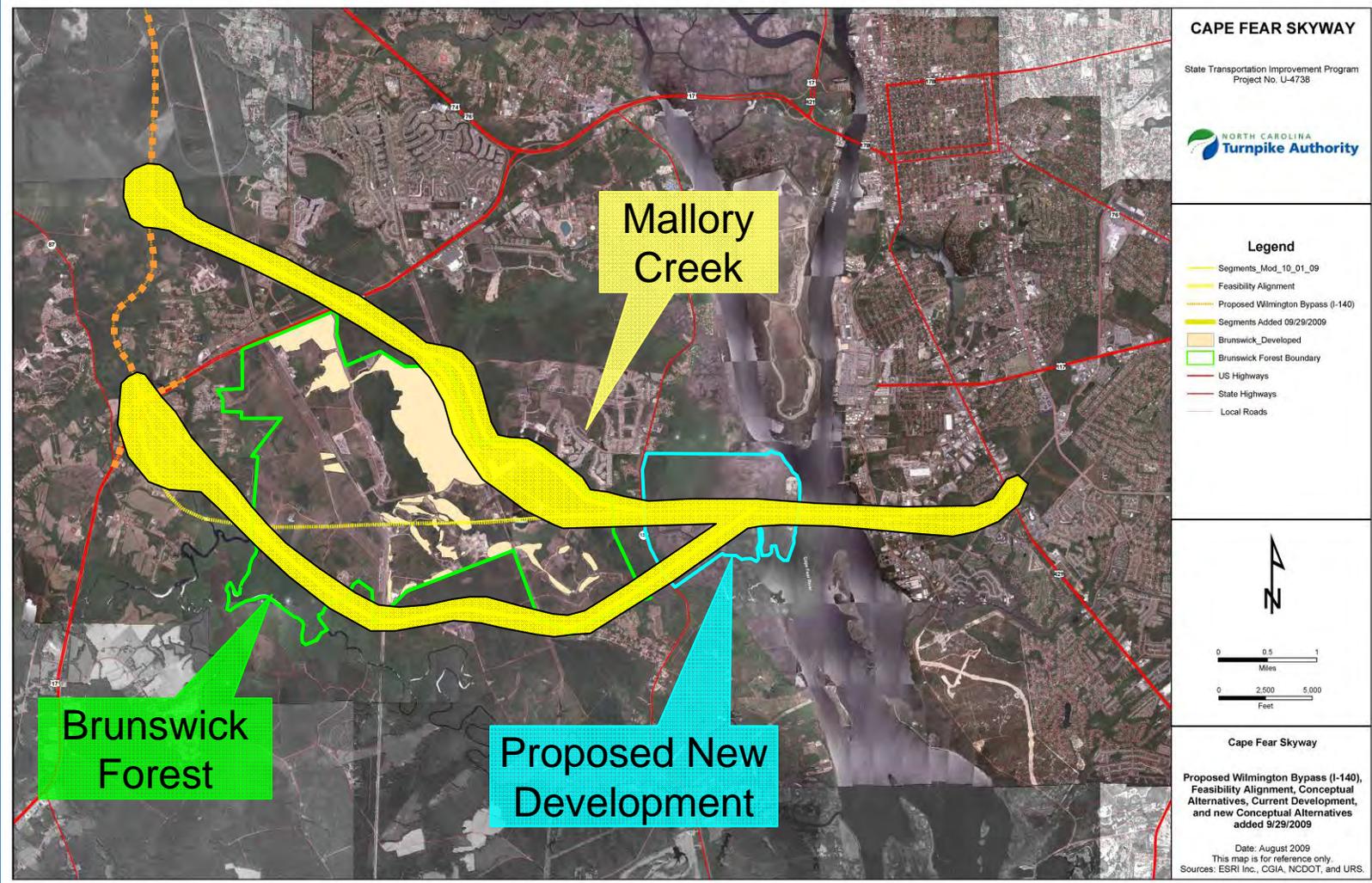
Brunswick Forest Development Plan



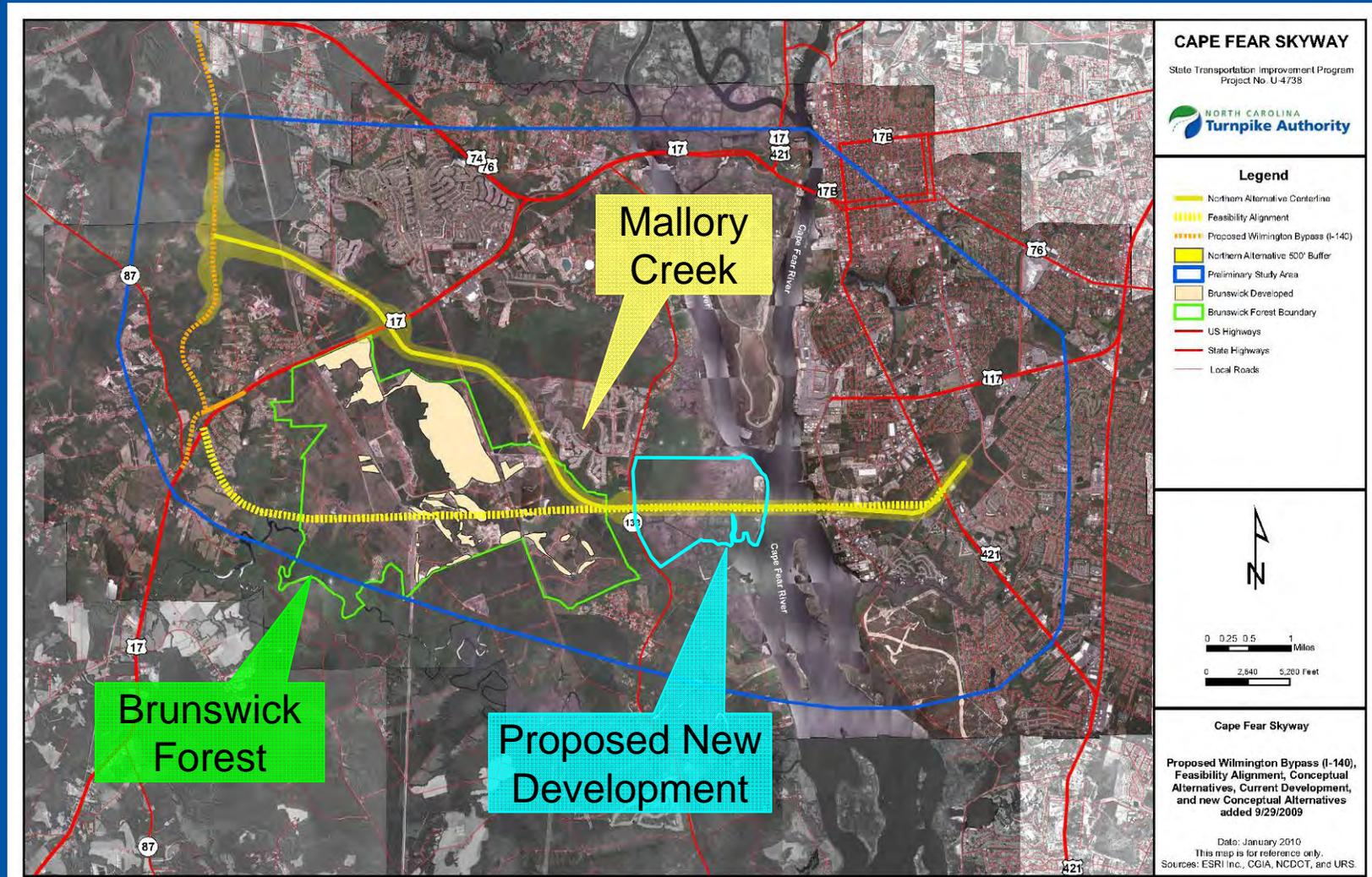
Brunswick Forest – Current Development



Additional Preliminary Alignment Segments



Potential New Corridors



Northern Alignment – Corridor Preservation



Project History

- Feasibility Study in 2003 by NCDOT
- Current WMPO LRTP adopted in 2005
- Agency Scoping Meeting – January 13, 2006
- Citizen's Informational Workshops – April 10, 2006 and April 11, 2006
- Notice of Intent – May 11, 2006
- Project included in NCDOT's 2009-2015 STIP



Project Status – Milestones Achieved

- Prepared Draft Purpose & Need Report
- Prepared Draft Alternatives Screening Analysis
- Prepared Draft Bridge Study Report
- Conducted Preliminary Field Studies
- Prepared functional design plans for bridge crossing area

Currently - Preliminary design and planning studies are continuing ...



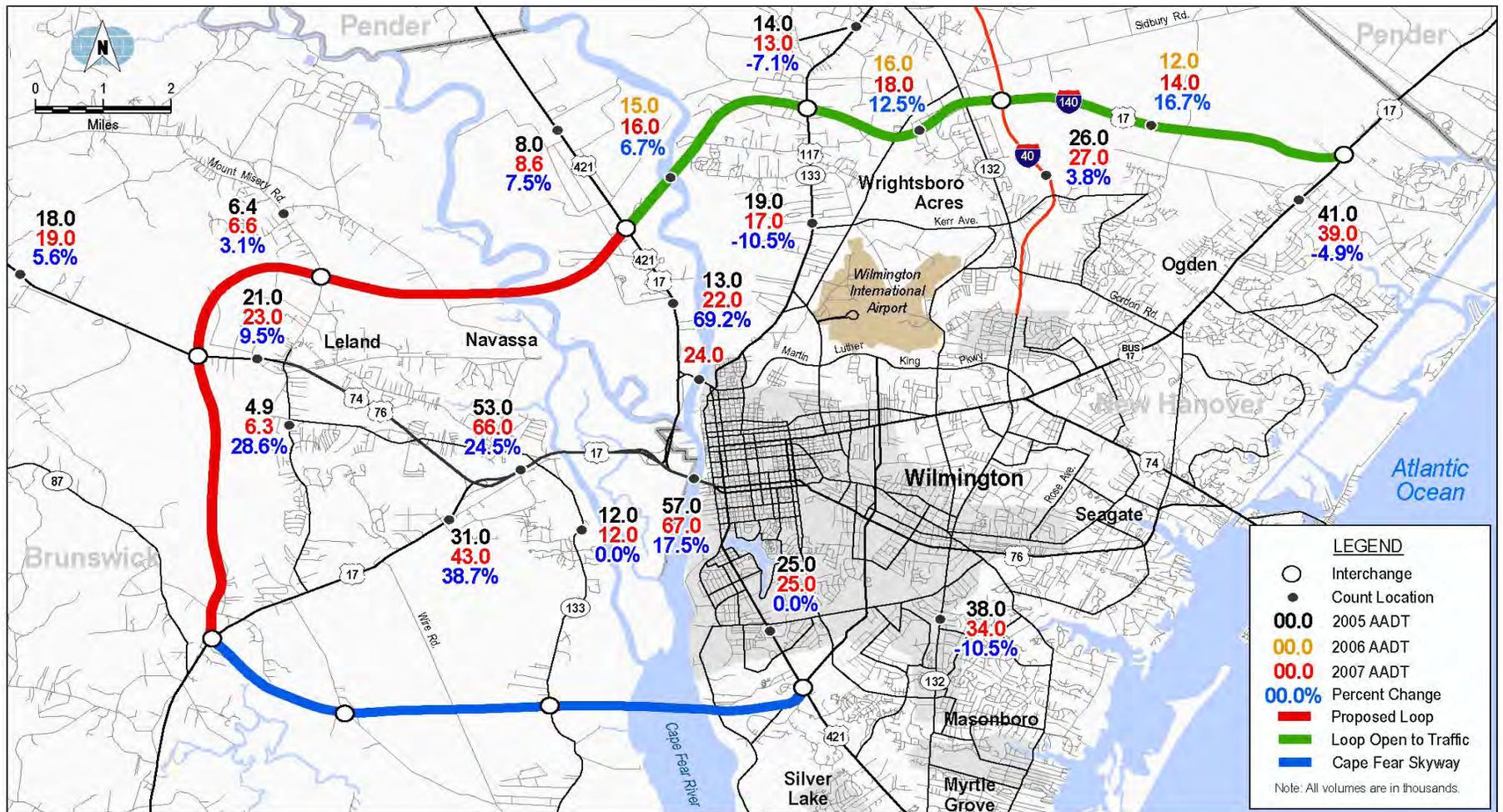
Project Status – Anticipated Milestones

- Draft Environmental Impact Statement March 2011
- Final Environmental Impact Statement March 2012
- Record of Decision September 2012



Financial Feasibility

*What is the financial feasibility
and financing “GAP” needed
to build the Cape Fear Skyway?*





Our Approach

- Develop sketch-level Traffic and Revenue estimates for all identified project sections
- Estimate Capital and O&M costs
- Estimate borrowing/bonding capacity
- Estimate the GAP funds that would be needed to make up the financial shortfall



Capital and O&M

General Assumptions:

- Capital & R/W costs escalated to mid-year of construction
 - Based on “normal” NCDOT estimates but adjusted, for tolling considerations, inflation, and R/W cost
- All electronic tolling
- O&M costs similar to Triangle Expressway



Skyway Capital Cost

Project Element	Cost (\$Millions)
Construction	\$863.2
Tolling	Included above
Right of Way	222.7
Environmental Mitigation	18.0
Total	\$ 1,103.9

NCTA Estimates, Construction period 2013 thru 2017



Financial

General Assumptions:

- Interest rates, financing structure and coverage ratios based on Triangle Expressway experience
- Bond Rating - BBB
- No TIFIA loan
- Assume NCDOT guarantees for O&M, R&R, overruns
- Bond Insurance on CABS



Difference vs. Prior Analysis

- T & R updated to reflect all electronic tolling
- O&M updated to reflect a more complete analysis of cost
- Capital costs updated to reflect current materials estimates, materials cost and inflation estimates

Financial:

- Improved model – previously a simple NPV spreadsheet
- More refined capital structure
- Interest rates and coverage ratio for current market

Recent improvements to Wilmington Regional Transportation Model indicate traffic volumes higher than used in financial modeling to date...



Projected Revenue (in millions)

Selected Years	CFS	Loop (A thru D)	Total
2020	\$23.1	\$33.5	\$56.6
2030	\$40.7	\$67.2	\$107.9
2040	\$49.6	\$81.9	\$131.5
Total 40 Years	\$1,526.7	\$2,396.0	\$3,922.7



Projected Financing GAP

Toll Scenarios	Annual Gap
Cape Fear Skyway Only	\$ 49.2 million
NCDOT builds A & B Toll sections A, B, C & D (Bypass)	<ul style="list-style-type: none"> ▪ Capital contribution to Skyway = \$197 Million ▪ Gap Impact \$11 Million
Cape Fear Skyway – after capital contribution from tolling Bypass	\$ 38.2 million

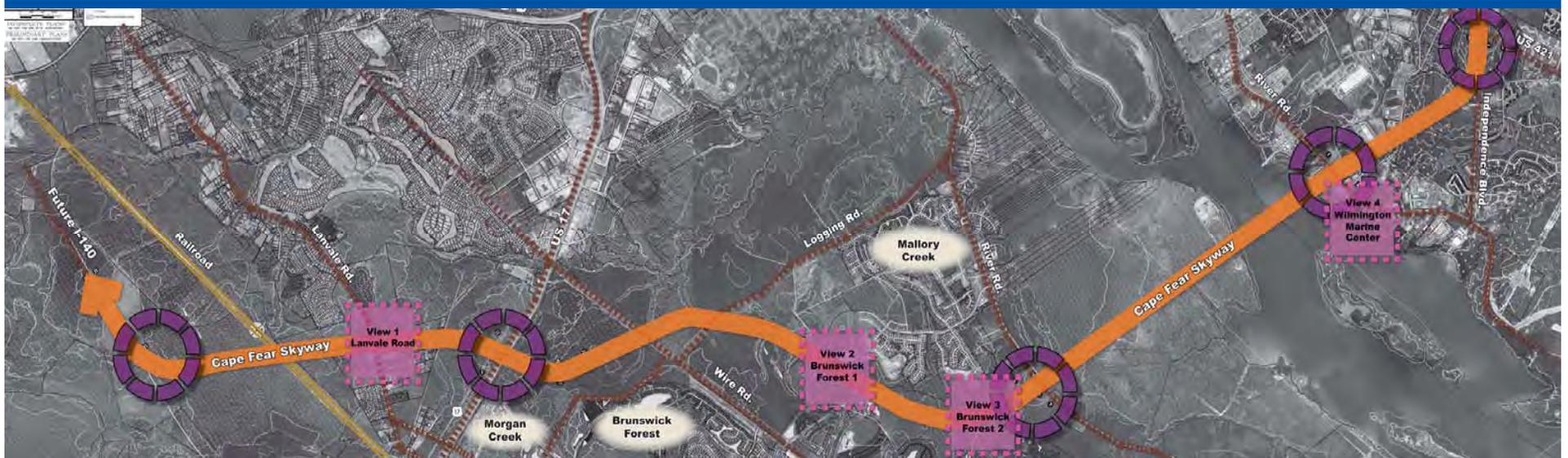
Analysis as of 2007 – Capital \$971M – GAP \$39M/year



Issues

- Willingness to protect & purchase project R/W
- When can CFS be built (Bypass dependent)?
- Inflation impact on \$1.1B is significant
- Willingness to toll additional sections of Bypass?
- Willingness of legislature to provide \$40M +/- annual GAP funds for 40 years?





Note: The visualizations are illustrative only and are not representative of final alignment or design decisions. The alignment and interchange layouts are conceptual and subject to change as the Transportation Corridor Official Map process advances.



Proposed Alignment for Transportation Corridor Official Map

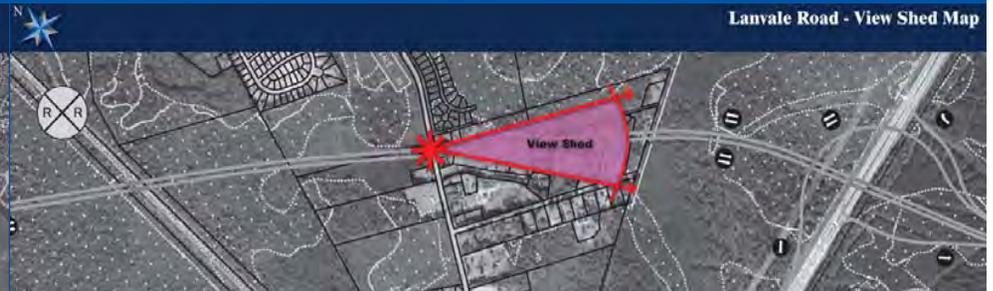


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Typical Section



Lanvale Road - Before

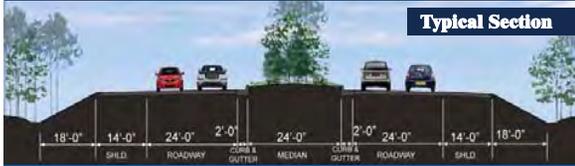


Lanvale Road - After

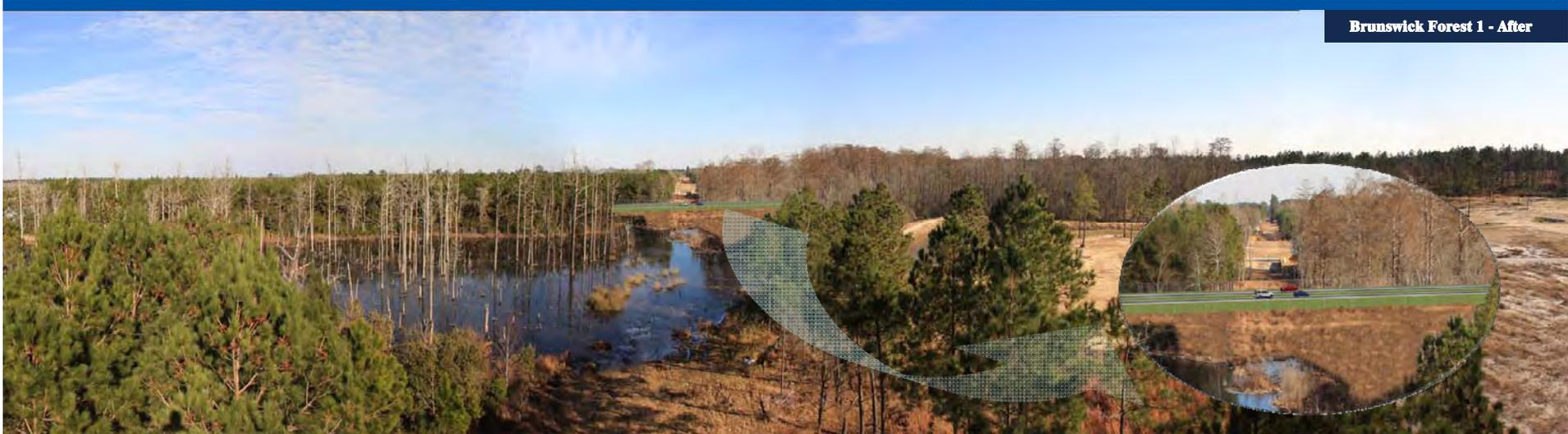


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Brunswick Forest 1 - Before



Brunswick Forest 1 - After





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Brunswick Forest 2 - Before



Typical Section



Brunswick Forest 2 - Key Map



Brunswick Forest 2 - View Shed Map



Brunswick Forest 2 - After





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Wilmington Marine Center - Before



Wilmington Marine Center - Key Map

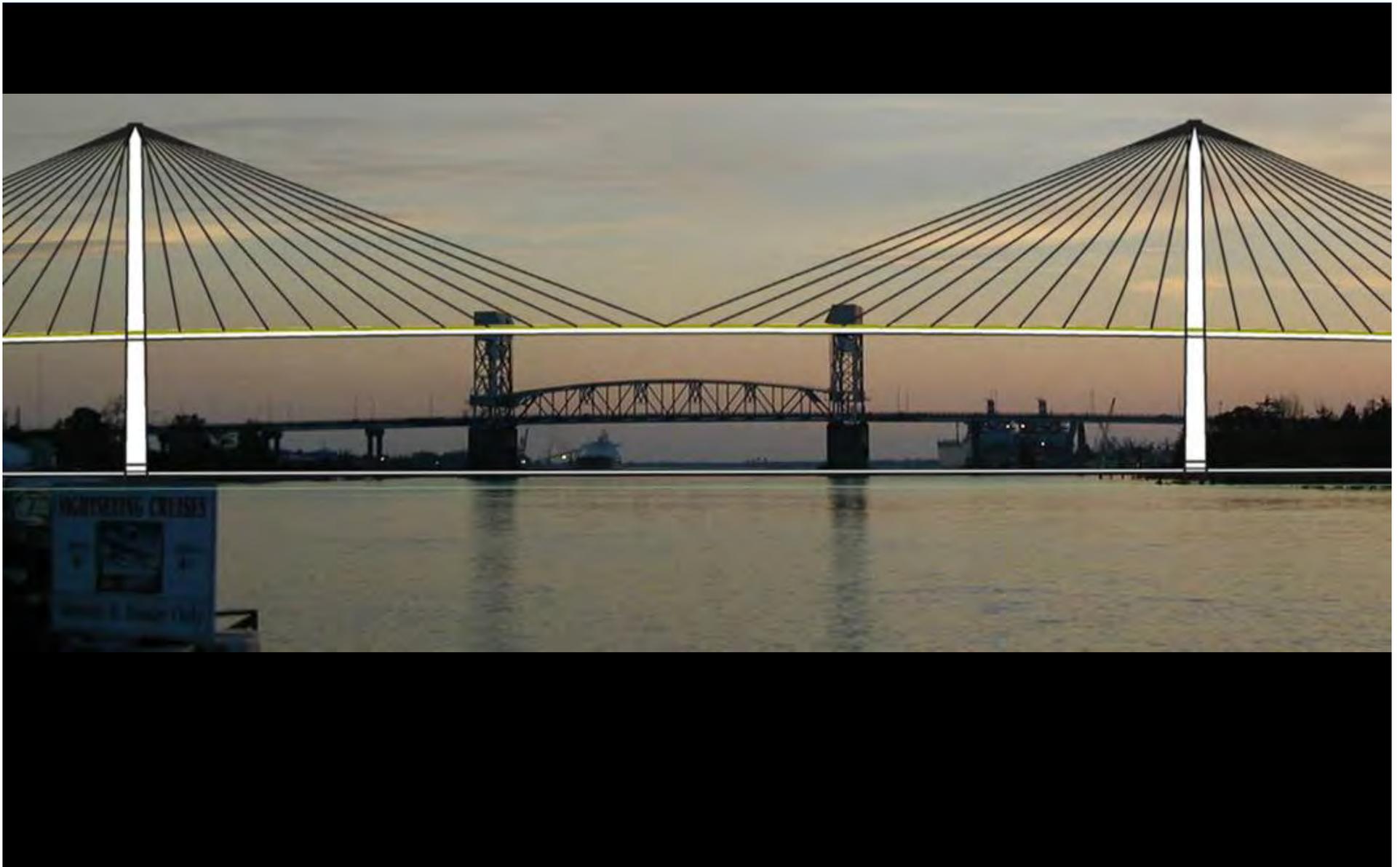


Wilmington Marine Center - View Shed Map



Wilmington Marine Center - After







Questions?