Widen Existing Roads Only Alternatives (ER1 & ER2)
US 158 Interchange Concepts

Trumpet Interchange Design

Compressed Y Interchange Design

Partial Interchange/Intersection Design

NCTA Selected Concept

LEGEND
- Roadway (Edge of Pavement)
- Bridges
- Not to Scale
Range Of Alternatives

- No-Build ("Do-Nothing")

- Improve Efficiency of Existing Roads
  - Shifting Rental Times
    (spread out over more days of the week)
  - Transportation Systems Management
    (traffic signal and intersection improvements)
  - Bus Transit

- Ferry

- Widen Existing Roads Only (NC 12 and US 158)
  - ER1
  - ER2

- Mid-Currituck Bridge (with various combinations of existing road widening on NC 12 and US 158)
  - MCB1
  - MCB2
  - MCB3
  - MCB4

NCTA RECOMMENDATION:

- Select MCB3 and MCB4 for detailed evaluation in a Draft Environmental Impact Statement.
- Eliminate all other alternatives from further consideration.
Purpose & Need

- Improve Traffic Flow on NC 12 and US 158
- Reduce Travel Time Between Currituck County Mainland and Currituck County Outer Banks
- Reduce Hurricane Evacuation Time via US 158 and NC 168
- Improve System Efficiency

Schedule

- Financial Feasibility Study: January 2007
- Draft Environmental Impact Statement: Summer 2008
- Final Environmental Impact Statement: May 2009
- Record of Decision: August 2009
- Begin Construction: October 2009
- Open Project to Traffic: Fall 2013
## Widening & Bridge Alternatives Comparison

<table>
<thead>
<tr>
<th></th>
<th>ER1</th>
<th>ER2</th>
<th>MCB1</th>
<th>MCB2</th>
<th>MCB3</th>
<th>MCB4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reduction in Annual Million Vehicle-Miles (VMT) Traveled on NC 12 and US 158 in 2035</strong></td>
<td>-0%</td>
<td>-0%</td>
<td>-13%</td>
<td>-13%</td>
<td>-13%</td>
<td>-13%</td>
</tr>
<tr>
<td><strong>Reduction in Annual Congested VMT in 2035</strong></td>
<td>-59%</td>
<td>-23%</td>
<td>-64%</td>
<td>-50%</td>
<td>-43%</td>
<td>-43%</td>
</tr>
<tr>
<td><strong>Reduction in Average Summer Travel Time Via Wright Memorial Bridge in 2035</strong></td>
<td>-48%</td>
<td>-19%</td>
<td>-53%</td>
<td>-44%</td>
<td>-31%</td>
<td>-31%</td>
</tr>
<tr>
<td><strong>Hurricane Evacuation Clearance Time</strong></td>
<td>21.4 to 27 hrs</td>
<td>21.4 to 27 hrs</td>
<td>21.4 to 27 hrs</td>
<td>21.4 to 27 hrs</td>
<td>26.2 to 27 hrs</td>
<td>21.4 to 27 hrs</td>
</tr>
<tr>
<td><strong>Relocations</strong></td>
<td>227</td>
<td>47</td>
<td>201</td>
<td>21</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td><strong>Wetlands Filled/Bridged in acres</strong></td>
<td>27.5/ 0.0</td>
<td>27.0/ 0.0</td>
<td>38.8/ 7.2</td>
<td>38.8/ 7.2</td>
<td>30.8/ 7.2</td>
<td>30.8/ 7.2</td>
</tr>
<tr>
<td><strong>Cost (millions)</strong></td>
<td>$656</td>
<td>$313</td>
<td>$938</td>
<td>$631</td>
<td>$469</td>
<td>$476</td>
</tr>
<tr>
<td><strong>Toll Financing of Cost</strong></td>
<td>No</td>
<td>No</td>
<td>Bridge</td>
<td>Bridge</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>NCTA Recommendation</strong></td>
<td>DROP</td>
<td>SELECT</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

- **Reduction in Annual Million Vehicle-Miles (VMT) Traveled on NC 12 and US 158 in 2035**
- **Reduction in Annual Congested VMT in 2035**
- **Reduction in Average Summer Travel Time Via Wright Memorial Bridge in 2035**
- **Hurricane Evacuation Clearance Time**
- **Relocations**
- **Wetlands Filled/Bridged in acres**
- **Cost (millions)**
- **Toll Financing of Cost**
- **NCTA Recommendation**
2035 Level of Service Corridor Analysis

No-Build Alternative

Alternative ER1

Alternative ER2

Alternative MCB1

Alternative MCB2

Alternatives MCB3 & MCB4