



Public comments were received regarding the use of existing S.C. Route 38, including intersecting with I-95 at the existing S.C. Route 38 interchange. The existing interchange at S.C. Route 38 and I-95 would have required expansion to accommodate a larger design of an interstate to interstate connection, I-73 to I-95. Four commercial establishments that provide approximately \$7 million annually for Dillon County would have been impacted. The businesses could not be relocated at the same interchange, potentially losing this annual revenue for Dillon County, since both I-73 and I-95 would have fully controlled access. In addition, utilizing the existing S.C. Route 38 north of I-95 would have impacted the communities of Oak Grove, Brownsville, Bristow, Blenheim, and Monroe Crossroads before entering downtown Bennettsville. The potential impacts to the residences, churches, and cemeteries in these communities would have been much higher than those associated with the six preliminary Build Alternatives. Maximum use of existing S.C. Route 38 was attempted north of Bennettsville, but existing communities such as Brightsville, Aarons Temple, and Prevatts Chapel would have been severely impacted.

#### 2.5.2 How were the Reasonable Alternatives designated?

The design of the six preliminary Build Alternatives was refined and the alternatives were then given greater scrutiny in the environmental evaluation. The evaluation categories were expanded. More specific data was reviewed for each alternative, including preliminary interchange locations along I-95, to provide a more accurate representation of potential impacts. The categories discussed previously were utilized, as well as the following resources to evaluate the six preliminary Build Alternatives in further detail:

- Streams (total crossings, perennial crossings, and intermittent crossings);
- Water Quality (Protected/Special Designation and 303(d) impaired waters);
- Floodplain Acreage;
- Parks and Wildlife Refuges;
- Historical Structures;
- Community Impacts;
- Relocations;
- Uplands;
- Farmland (Prime, Unique, and Statewide Important); and,
- Infrastructure.

Recent aerial photography (2004 and 2006 for South Carolina and 2005 for North Carolina) was used to update the NWI mapping for a more accurate representation of potential wetland boundaries. In areas where wetland boundaries could not be readily distinguished on the aerial photography, ground-truthing was performed. Due to the wetland value being dependent on the type and size of the wetland being impacted, these categories were also updated with the modified wetland information for each alternative.



The six preliminary Build Alternatives were presented to the ACT with details of potential impacts for a 500-foot wide corridor with interchanges at I-95 (refer to Table 2.4). The six preliminary Build Alternatives connected to I-95 at three different locations, which required three distinct interchange designs. Alternatives 1, 2, and 6 did not tie directly into the I-73 South Preferred Alternative. Each of these would require two interchanges with I-95, both of which would allow for traffic moving between the two interstates to travel at 70 miles per hour. This would require larger, more expensive interchanges than would be needed for Alternative 3, 4, and 5. The distance between where Alternatives 1 and 2 and where I-73 South would connect to I-95 was approximately 4,300 feet, which was not long enough to combine I-73 and I-95 into one facility. Attempting to drop a lane and introduce additional lanes would create a dangerous situation for drivers. Instead, Alternatives 1 and 2 were designed to be parallel facilities, with I-95 on the inside and I-73 on the outside, which would require more right-of-way (refer to Figure 2-4 on page 2-19).

Alternative 6 had a distance of approximately 12,800 feet between where it would intersect with I-95 and where the I-73 South Preferred Alternative would connect to I-95. This allowed for two interchanges with four lanes in each direction on I-95 to function and meet level of service demands (refer to Figure 2-5 on page 2-20). Alternatives 3, 4, and 5 tied directly into the I-73 Southern Preferred Alternative, which was the least complex and least costly interchange to construct (refer to Figure 2-6 on page 2-21). Alternatives 3, 4, and 5 did not require a second interchange along I-95 or additional lanes to be constructed along I-95, which resulted in lower costs and impacts to resources. In addition, Alternative 1 was very similar to Alternative 3, while Alternatives 2 and 6 were similar to Alternative 4. The major differences between Alternatives 1 and 3, as compared to Alternatives 2, 4, and 6, were where they connected to I-95.

After extensive discussion and evaluation, the ACT reached consensus on designating three of the six preliminary Build Alternatives, Alternatives 3, 4, and 5, as reasonable Build Alternatives for further study. Table 2.5 (refer to page 2-22) presents the six preliminary Build Alternatives and the reason for the elimination of three. Three of the six preliminary Build Alternatives, referred to as reasonable Build Alternatives, remain to be evaluated further in the Environmental Impact Statement.

As a result of the designation of Alternatives 3, 4, and 5 as reasonable Build Alternatives, the alternatives were renumbered as follows:

<u>NAME</u>	<u>REVISED NAME</u>
Alternative 3 (central alternative)	Alternative 2
Alternative 4 (eastern alternative)	Alternative 3
Alternative 5 (western alternative)	Alternative 1



Table 2.4  
Six Preliminary Alternatives Matrix  
Interstate 73 EIS: North Carolina to I-95

Category	Unit of Measure	Alternative					
		1	2	3	4	5	6
System Linkage		Yes	Yes	Yes	Yes	Yes	Yes
Improved Access for Tourism		Yes	Yes	Yes	Yes	Yes	Yes
Increased Safety on Existing Roads		Yes	Yes	Yes	Yes	Yes	Yes
Multimodal Planning		Yes	Yes	Yes	Yes	Yes	Yes
Length	Miles	38.8	39.0	37.6	37.8	41.3	41.0
Constructability	Ranking	3	3	1	1	1	6
Construction Cost	\$ Millions	746	796	647	685	704	825
Threatened and Endangered Species	Yes (#) / No	No	No	No	No	No	No
Wetlands	Acreage	294.4	291.7	229.0	256.5	280.7	289.2
Wetland Quality	Value	1,858.7	1,933.8	1,330.9	1,675.9	1,651.9	1,674.2
Streams							
Total Crossings	# of Crossings (Linear Feet)	22(11,851)	38(23,743)	17(7,721)	39(22,467)	16(9,623)	52(27,058)
Perennial	# (Linear Feet)	16(9,357)	16(10,135)	10(4,665)	17(8,859)	8(4,438)	24(10,364)
Intermittent	# (Linear Feet)	6(2,494)	22(13,608)	7(3,056)	22(13,608)	8(5,185)	28(16,694)
Water Quality							
Outstanding Resource Water	# of Crossings	0	0	0	0	0	0
303(d) Impaired (2006 Draft List)	# of Crossings	0	0	0	0	0	0
Habitat	Unique	No	No	No	No	No	No
Uplands	Acreage	2,604	2,621	2,336	2,311	2,519	2,646
Floodplains	Acreage	78	59	67	58	112	52
Hazardous Material Sites	#	INA	INA	INA	INA	INA	INA
Parks and Wildlife Refuges	Yes (#) / No	No	No	No	No	No	No
Historical Structures	Yes (#) / No	2 & IV	4	2 & IV	4	4	3 & IV
High Potential Area for Archaeological Sites	Acreage	INA	INA	INA	INA	INA	INA
Noise (R= Residential, C= Church)	#	INA	INA	INA	INA	INA	INA
Farmland	Acreage	2,432	2,455	2,128	2,133	2,374	2,488
Prime	Acreage	1,357	1,497	1,125	1,261	1,102	1,486
Unique	Acreage	0	0	0	0	0	0
Statewide Important	Acreage	1,075	958	1,003	872	1,272	1,002
Chicken Farm	#	0	2	0	2	0	2
Hog Farm	#	0	0	0	0	0	1
Community Impacts	#	1	2	1	2	3	1
Total Relocations	#	49	45	49	42	52	40
Residential Relocations	#	45	41	47	39	52	36
Commercial Relocations	#	4	4	2	3	0	4
Environmental Justice	Yes / No	INA	INA	INA	INA	INA	INA
Airports	#	0	0	0	0	0	0
Fire Stations	#	0	0	0	0	0	0
Schools	#	0	0	0	0	0	0
Churches	#	2	1	1	0	1	0
Cemeteries	#	0	0	0	0	0	0
Railroad Crossings	#	1	3	1	3	1	3
Gas Line Crossings	#	1	1	1	1	2	1

Notes:  
INA - Information Not Available at this time  
V - potential Visual impact

