



the fact that the project is a linear transportation project that would traverse a relatively long distance (approximately 45 miles) across a landscape in which wetlands and streams are abundant and are in some cases present as unavoidable linear features that cross the entire study area in an orientation that is perpendicular to the path of the proposed Build Alternatives (i.e. the Little Pee Dee/Lumber River System). The methodology that was utilized to develop the Build Alternatives placed greater importance on avoidance of wetland impacts than on avoidance of any other single impact category. The project has been designed and would be constructed in such a way that it would be in conformance with applicable State and Federal laws and regulations. A plan for mitigating unavoidable wetland impacts has been developed that will replace impacted wetlands so that there will be no net loss in wetland function or value as a result of the project. This mitigation plan has been developed in close coordination with interested State and Federal resource and regulatory agencies.

How have the USACE Public Interest Review Factors been addressed?

As discussed in Chapter 1, Section 1.2.2, the USACE's Public Interest Review Factors were also used to evaluate the potential impacts upon the waters of the United States and how this impact would affect the interests of the public. Many of the USACE's Public Interest Review Factors were quantified and compared during the designation of preliminary Build Alternatives and reasonable Build Alternatives, including; wetlands, historic properties, fish and wildlife, flood hazards (i.e. hurricane evacuation), floodplains, land use, recreation, water supply, water quality, food and fiber production (farmland), and considerations of property ownership (relocations,) refer to Appendix C and Table 2.16 on page 2-59. For more details regarding any of the Public Interest Review Factors for the Preferred Alternative, refer to the sections detailed in Table 2.16.

The guidance provided by the USACE entitled *Environmental Assessment, 404(B)(1) Analysis, Finding of No Significant Impact (FONSI), and Statement of Findings* explains aesthetics as to whether the project "generally fit(s) the current state of the area," whether the "project is a 'first', (as it could cause disharmony from aerial or adjacent property view," and in terms of landscaping. The land use of the project study area is primarily rural in character, dotted with small towns and cities such as Marion, Mullins, and Aynor. The construction of any alternative would alter the current state of the project study area as it would be the first multi-lane controlled access facility in the area. It is anticipated that the adjacent property would have an altered view, as the proposed facility may be in view.

The remaining factor of shore erosion and accretion would not be impacted by the project. The project would not be located in the vicinity of the ocean shore.

2.7.4 How would the Build Alternatives compare in terms of human and environmental impacts?

All of the Build Alternatives satisfied the Purpose and Need for the project. System linkage and multimodal planning would be provided by any of the Build Alternatives. Hurricane evacuation was essentially the same for all Build Alternatives. There was some variability between the alternatives in terms of different measures of the economic benefits and traffic benefits. For example, Alternatives 3, 6, and 7 showed the



Table 2.16
Public Interest Review Factors
Interstate 73 FEIS: I-95 to the Myrtle Beach Region

Public Interest Review Factor	Reference
Conservation	Section 3.4.3, Section 3.12.12, Section 3.12.13, & Section 3.12.14
Economics	Section 1.6, Section 2.7.1, & Section 3.1.6
Aesthetics	Refer to explanation below
General Environmental Concerns	Section 3.4
Wetlands	Section 3.12
Historic Properties	Section 3.6
Fish and Wildlife	Section 3.13, Section 3.14 & Section 3.15
Flood Hazards	Section 1.7
Floodplains	Section 3.18
Land Use	Section 3.1
Navigation	Section 3.21.5
Shore Erosion and Accretion	Not Impacted by Proposed Project
Recreation	Section 3.4
Water Supply	Section 3.16 & Section 3.17
Water Quality	Section 3.17
Energy Needs	Section 3.20.2
Safety	Section 1.8
Food and Fiber Production	Section 3.10
Mineral Needs	Section 3.12.8
Considerations of Property Ownership	Section 3.2

biggest increase to Gross Regional Product, while Alternatives 2 and 8 showed the biggest increase in income and employment. However, this variability was not enough to set any one above the other alternatives.

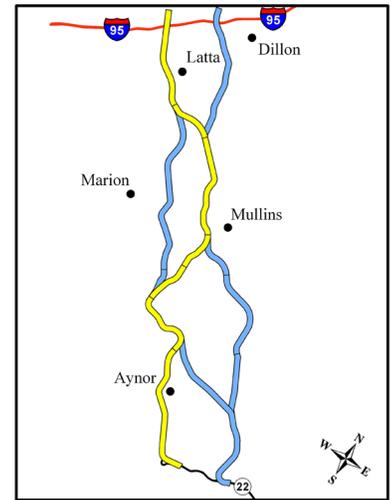
Induced impacts for several categories were also looked at between the Build Alternatives. Potential land use, wildlife habitat, wetland, stream, and water quality impacts were all areas that showed very little differentiation between the alternatives. In fact based upon past and current growth trends, the No-Build Alternative, which served as a baseline for future impacts, showed substantially more land use impacts than did any of the Build Alternatives by themselves. The categories that served to distinguish the alternatives from one another were natural resource related (wetlands, streams, and farmland) and human resource related (communities, public input, traffic maintenance, and cost).

2.7.4.1 Alternative 1

Alternative 1 starts at the southernmost interchange with I-95, and from there extends southeast on the western side of Latta where it would have an interchange with U.S. Route 501, crosses to the east immediately north of Temperance Hill, then extends southeast where it would interchange with S.C. Route 41A. It continues southeast and would have an interchange with U.S. Route 76 on the western



side of Mullins. Once south of Mullins it angles back to the south towards U.S. Route 501. It would have an interchange with S-91 (which would provide access to S.C. Route 41) and then cross the Little Pee Dee River at the existing U.S. Route 501 crossing. It passes on the east side of the Galivants Ferry Historic District and then extends southeast along U.S. Route 501 to an interchange with S.C. Route 22. The interchange with S.C. Route 22 would be designed so that the traffic movement from I-73 to S.C. Route 22 would be the predominant movement through the interchange. There would be access ramps providing access between U.S. Route 501 and I-73 along U.S. Route 501 at the Little Pee Dee River crossing and along 501 just south of Aynor. Like all of the Build Alternatives, it would follow S.C. Route 22 to its terminus with U.S. Route 17 near Briarcliff Acres.



Alternative 1

It would have 418 acres of wetland impacts, over 30 acres more than the Preferred Alternative, and the wetlands potentially impacted have a high value rating (2,919). This alternative would avoid crossing the Buck Swamp and Lake Swamp systems. It would provide better access to the 17,000-acre development proposed by Marion County (refer to letter dated March 27, 2006, in Appendix D) than alternatives located farther from the proposed facility.

This alternative would have the most relocation of residents and businesses (121). It would have one of the highest costs (\$1.492 billion, 2011 dollars), over \$200 million more than the Preferred Alternative. Alternative 1 would impact 1,993 acres of farmland, which is 285 acres more than the Preferred Alternative. It would have 60 stream crossings, 10 of which are designated as outstanding resource waters (ORW). It would impact 20,054 linear feet of stream channel and cross three impaired water bodies. It would impact more 79 acres more floodplains (173 acres total) than the Preferred Alternative. It would also impact approximately 950 acres of wildlife habitat, about 120 acres more than the Preferred Alternative.

Outstanding Resource Waters

Outstanding resource waters are freshwaters or saltwaters which constitute an outstanding recreational or ecological resource, or those freshwaters suitable as a source for drinking water supply purposed, with treatment levels specified by SCDHEC.

The Citizens of the Southern Route, comprised of residents of the Latta area, submitted a petition dated March 20, 2006, with 20 signatures (refer to *Public Involvement Technical Memorandum*) requesting that this route, the southern route, not be used and that a northern route for I-73 be chosen. Alternative 1 would cross from west to east in close proximity to the Temperance Hill community. This community has objected to the alternatives that would come in close proximity to their community



(refer to two petitions from Temperance Hill community; one, from Ebenezer Southern Methodist Church, dated March 28, 2005, signed by 43 people and a second, signed by 161 people dated February 27, 2006, in the *Public Involvement Technical Memorandum*). Marion County Council, in a resolution dated March 14, 2006, specifically requested “that the I-73 Committee review any and all possible plans for construction of I-73 which would reduce the impact to the Temperance Hill Community of Marion County,” (refer to resolution in Appendix D). Alternative 1 would impact the Zion community, located along S.C. Route 41A, north of Mullins.

Other comments also were received from local governments with jurisdiction over this area. Dillon County prefers the northwestern segment of the alignment to be the other, most northern alignment shared by Alternative 2 and Alternative 6 (refer to letters from Dillon County Council, dated February 28, 2006, Dillon County Development Board, dated March 1, 2006, and the I-95 Gateway Industrial Park Board, dated March 1, 2006). The South Carolina Department of Commerce equally favored this alternative, along with Alternatives 3, 4, 5, and 7, since they would not impact the Gateway Industrial Park (April 19, 2006 ACT meeting, refer to Section 4.3).

The Marion County Administrator, in two letters dated March 6, 2006, and March 27, 2006, (refer to Appendix D) requested consideration for the County’s proposed “inland port” when considering the routing of I-73. The routes that start farther south on I-95, such as Alternatives 1, 3, 4, 5, and 7, are in closer proximity to this proposed project.

Horry County, in a letter dated March 13, 2006, (refer to letter in Appendix D), reported a unanimous vote against the route that crossed at Galivants Ferry and extended southeast along U.S. Route 501 through Aynor. The Town of Aynor voted unanimously (refer to letter dated March 21, 2006, in Appendix D) to oppose the route that would be constructed along existing U.S. Route 501 at Galivants Ferry and through Aynor. In a letter dated July 12, 2006, from the Town of Aynor, the Aynor Town Council supported a northerly course for I-73 through Horry County and supported access for areas affected. The Aynor Area Chamber of Commerce supported construction of overpasses to minimize the disruption of traffic to and from Aynor (refer to June 28, 2006 resolution in Appendix D). Letters were also received from the Horry County School administration (refer to letters dated April 6, 2005, April 12, 2005, and January 27, 2006, Appendix D) that expressed opposition to the segment that would go through Aynor along U.S. Route 501. Comments received at the Public Information Meetings included those from a large number of people opposing this route. The SCDNR and USFWS also expressed opposition to this segment (April 19, 2006 ACT meeting, refer to Section 4.3).

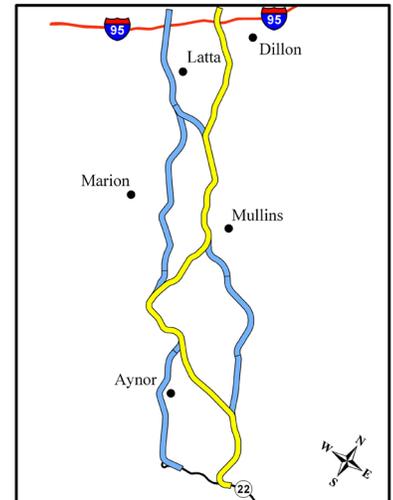
Alternative 1 would have one-way frontage roads along U.S. Route 501 in Aynor, which, although they would maintain access to properties on both sides of I-73, would be inconvenient for local residents to access each side of U.S. Route 501. It would pass between the incorporated limits of Aynor and the Aynor Elementary and Middle Schools. Construction of this alternative would also impact the athletic facility associated with Aynor High School, which, because it is also available for public use, would be considered a Section 4(f) impact (refer to Chapter 3 and Appendix E, *Final Section 4(f) Evaluation*, for information on Section 4(f)).



Based upon coordination with the State Historic Preservation Office (SHPO), this alternative would also be expected to have the potential for negative visual impacts to the Galivants Ferry Historic District (refer to Chapter 3, Section 3.7).

2.7.4.2 Alternative 2

Alternative 2 starts at the northernmost interchange with I-95, and from there passes southeast on the western side of Dillon, east of Latta, to an interchange with U.S. Route 501. It continues southeast to an interchange with S.C. Route 41A, then southeast to an interchange with U.S. Route 76 on the western side of Mullins. Once south of Mullins it angles back to the south to U.S. Route 501. It would have an interchange with S-91 (which would provide access to S.C. Route 41) and then cross the Little Pee Dee River at the existing U.S. Route 501 crossing. It passes on the east side of the Galivants Ferry Historic District and then extends east along Winburn Road. There would be an interchange with S-23, then it turns to the southeast to an interchange with S.C. Route 22 near Bakers Chapel, about two miles west of the U.S. Route 701/S.C. Route 22 interchange. The interchange with S.C. Route 22 would be designed so that traffic movement from I-73 to S.C. Route 22 would be the predominant movement through the interchange. Like all of the Build Alternatives, it would follow S.C. Route 22 to its terminus with U.S. Route 17 near Briarcliff Acres.



Alternative 2

Alternative 2 would be east of the Temperance Hill community and thus would minimize the impacts to that community. It would also avoid the impacts to Aynor resulting from Alternative 1. There are no Section 4(f) impacts associated with this alternative. This alignment is supported by the letters received from Dillon County Council, Dillon County Development Board, and the Gateway Industrial Park Board, as detailed in the discussion of Alternative 1. The petition from the Citizens of the Southern Route, as discussed in Alternative 1, supported a northern route for I-73.

Alternative 2 has one of the highest costs of all the alternatives (\$1.547 billion), more than \$250 million higher than the Preferred Alternative. It would have approximately 444 acres of wetland impacts, 60 acres more than the Preferred Alternative. These impacts would include a crossing of Buck Swamp. Farmland impacts (2,009 acres) would be higher than most of the other alternatives. It would impact 62 stream channels, with a total of 21,122 linear feet of impact. Ten of the channels are classified as ORW waters and six are impaired. It would impact 193 acres of floodplain, and would impact approximately 960 acres of wildlife habitat.

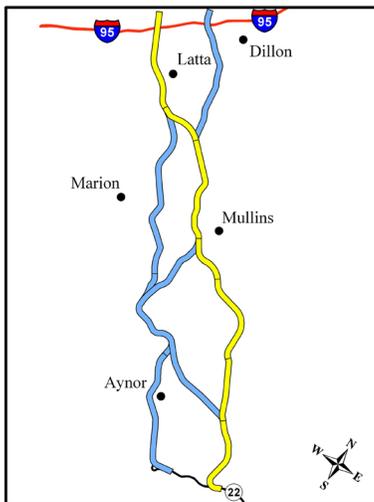
It would impact the Zion community, located along S.C. Route 41A, north of Mullins. It would potentially have visual impacts to two historic districts, one at Galivants Ferry and the other at the Bethea Property. This alternative would relocate three churches, the Dothan Baptist Church, north of



I-95 (this was impacted due to changes in design to avoid the new Bethea Historic District), the New Memorial Temple of Christ, at the interchange of I-73 and U.S. Route 501, and the Spring Grove Baptist Church, just south of where this alignment crosses S.C. Route 917.

A petition signed by 258 people was received from the “residents living in the Northern Potential Corridor of the Southern Project” requesting that I-73 not be routed through the northern corridor from I-95. Despite impacting the Gateway Industrial Park, located just south of I-95, Alternative 2 is supported by the Gateway Industrial Park Board. Alternative 2 would also impact residents along Winburn Road. Several letters were received from people along Winburn Road objecting to the road being routed through their neighborhood.

2.7.4.3 Alternative 3 (Preferred)



Alternative 3

Alternative 3 starts at the southernmost interchange with I-95, and from there extends southeast on the western side of Latta where it would have an interchange with U.S. Route 501, crosses to the east immediately north of Temperance Hill, then extends southeast where it would interchange with S.C. Route 41A. It continues southeast and would have an interchange with U.S. Route 76 on the western side of Mullins. Once south of Mullins it angles slightly east and crosses the Little Pee Dee River immediately adjacent to the existing S.C. Route 917 crossing on the south side. It would have an interchange with S-308, then continues southeast on new alignment to an interchange with S.C. Route 22 near Bakers Chapel, about two miles west of the U.S. Route 701/S.C. Route 22 interchange. The interchange with S.C. Route 22 would be designed so that the traffic movement from I-73 to S.C. Route 22 would be the predominant movement through the interchange. Like all of the Build Alternatives, it would follow S.C. Route 22 to its terminus with U.S. Route 17 near Briarcliff Acres.

This alternative would have the lowest total wetland impacts (384 acres) and would avoid crossing Buck Swamp. It would have a crossing of Lake Swamp, which is located southeast of the Little Pee Dee River and is a tributary to that river. It is the alternative with the lowest cost (\$1.290 billion). It would have the lowest farmland impacts (1,708 acres) as well. Alternative 3 would impact 58 stream crossings, with a total of 20,013 linear feet of channel. Four of the streams are classified as ORW and three are impaired. It would impact the least acreage of wildlife habitat (831 acres). The proposed floodplain impacts are also the lowest (94 acres) for this alternative. It is one of three alternatives, with the other two being Alternatives 5 and 7, indicated as potentially preferred by the SCDNR and USFWS. The SHPO has indicated this route is their preferred because of the lack of impacts to cultural resources.

Alternative 3 is in close proximity to the proposed “inland port” designated by Marion County per their letters of March 2006 (refer to Appendix D). It would not impact the Gateway Industrial Park, but it is not the alignment requested by Dillon County. Dillon County Council in a resolution dated June 20, 2006, and a letter dated November 17, 2006 (refer to resolution and letter in Appendix D), opposed



the alternative stating that it would have a negative impact on the community. In a June 27, 2006 resolution and a petition dated July 7, 2006, with 625 signatures, the Town of Latta supported the alternative near Latta (refer to resolution in Appendix D). While a petition was received from the citizens of Pecan Pointe with 183 signatures opposing Alternative 3 (refer to petition in Appendix D). On July 7, 2006 a petition was received from the members and friends of the Nazarene Missionary Baptist Church with 108 signatures opposing the obstruction of the church’s entrance (refer to petition in Appendix D). It follows the route preferred by Horry County (refer to letter dated March 13, 2006, in Appendix D).

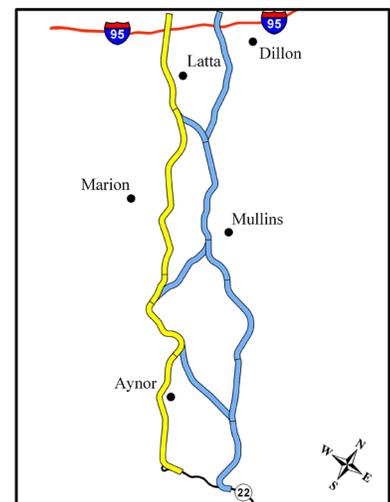
Alternative 3, as well as Alternative 6, would most closely approximate the school attendance boundary for the Aynor area schools. Consideration of this boundary when designating a corridor for I-73 was requested by the Horry County School District and in a petition signed by over 900 citizens of Horry County (refer to letter dated April 12, 2005, and letter dated January 16, 2006, that came with an attached petition, Appendix D and *Public Involvement Technical Memorandum*).

This alternative, like Alternative 1, would also cross from west to east in proximity to the Temperance Hill community. This community has objected to the alternatives that come in close proximity to their community (refer to petitions from Temperance Hill community in the *Public Involvement Technical Memorandum*). It would also impact the Zion community, located along S.C. Route 41 Alternate, north of Mullins.

This alternative would impact a Section 4(f) resource, the Vaughn tract, which is part of the Little Pee Dee River Heritage Preserve located around the S.C. Route 917 crossing of the Little Pee Dee River. The project would be built parallel, and to the south of existing S.C. Route 917 where it crosses the Little Pee Dee River. The alignment was moved to this location, in consultation with the ACT, to avoid creating a new crossing of the Little Pee Dee River, which could lead to fragmentation of wildlife habitat (refer to Appendix E, *Final Section 4(f) Evaluation*). This alternative would cross the fewest ORW waters and the second fewest Section 303(d) waters of the Build Alternatives (impaired water quality, refer to Chapter 3, Section 3.19).

2.7.4.4 Alternative 4

Alternative 4 starts at the southernmost interchange with I-95, and from there extends southeast on the western side of Latta where it would have an interchange with U.S. Route 501, extends southeast on the eastern side of Marion, where it would have an interchange with the U.S. Route 501 Bypass (this would be the access to S.C. Route 41A also). It continues southeast from Marion to the U.S. Route 501 crossing of the Little Pee Dee River. It then passes on the east side of the Galivants Ferry Historic District and then extends southeast along U.S. Route 501 to an interchange with S.C. Route 22. There would be access ramps providing access between U.S. Route 501 and I-73



Alternative 4



along U.S. Route 501 at the Little Pee Dee River crossing and along U.S. Route 501 just south of Aynor. The interchange with S.C. Route 22 would be designed so that the traffic movement from I-73 to S.C. Route 22 would be the predominant movement through the interchange. Like all of the Build Alternatives, it would follow S.C. Route 22 to its terminus with U.S. Route 17 near Briarcliff Acres.

This alternative is the shortest alternative at 42.6 miles long. It would avoid the Temperance Hill community. It also would be in close proximity to the proposed Marion County “inland port” (refer to the letters from Marion County Administrator, Appendix D). An undated petition signed by 229 residents was received from the Bluff Road/Penderboro Community opposing Alternatives 4 and 7 (refer to *Public Involvement Technical Memorandum*).

This alternative also would have low farmland impacts (1,717), virtually the same as Alternative 3. The estimated cost for this alternative would be \$1.392 billion, more than \$200 million more than the Preferred Alternative. This alternative would have the highest wetland impacts at 497 acres, about 113 acres higher than the Preferred Alternative. The only other alternative that would have comparable impacts is Alternative 7. They both share a similar configuration. However, Alternative 4 continues down U.S. Route 501 through Aynor to S.C. Route 22, while Alternative 7 moves east and intersects with S.C. Route 22 near Bakers Chapel.

Much of the wetland impacts for these two alternatives would come from impacted wetlands along the existing U.S. Route 501 Bypass east of Marion. It would impact 45 streams, with an estimated 17,768 linear feet of channel. Nine ORW waters would be crossed, as would six impaired waters. It would impact the greatest acreage of floodplain at 321 acres. The Datwyler Rubber facility, located at U.S. Route 76 and U.S. Route 501 Bypass, could be impacted by this alignment.

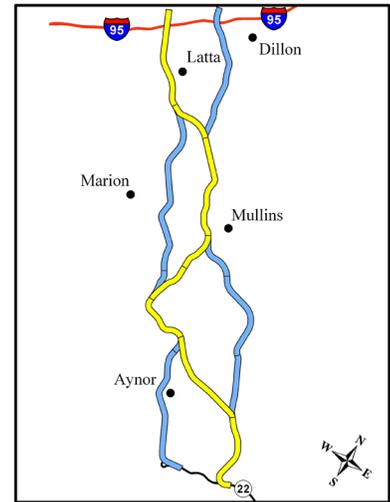
As mentioned above, this alternative would go through Aynor, similar to Alternative 1. All the concerns raised by Horry County officials, the Town of Aynor, the Aynor Town Council, the Aynor Chamber of Commerce, and all of the other impacts that would result from the segment that follows U.S. Route 501 through Aynor (one-way frontage roads, school access, Section 4(f) impacts) would apply to this alternative as well. The SCDNR and USFWS also expressed opposition to this segment. In addition to the Section 4(f) impact associated with the Aynor High School athletic facilities, there would be another impact to an archaeological site near Marion. There would also be a visual impact to the Galivants Ferry Historic District.

2.7.4.5 Alternative 5

Alternative 5 starts at the southernmost interchange with I-95, and from there extends southeast on the western side of Latta where it would have an interchange with U.S. Route 501, crosses to the east immediately north of Temperance Hill, then extends southeast where it would interchange with S.C. Route 41A. It continues southeast and would have an interchange with U.S. Route 76 on the western side of Mullins. Once south of Mullins it angles back to the south towards U.S. Route 501. It would have an interchange with S-91 (which would provide access to S.C. Route 41) and then cross the



Little Pee Dee River at the existing U.S. Route 501 crossing. It passes on the east side of the Galivants Ferry Historic District and then extends east along Winburn Road. There would be an interchange with S-23, then it turns to the southeast to an interchange with S.C. Route 22 near Bakers Chapel, about two miles west of the U.S. Route 701/S.C. Route 22 interchange. The interchange with S.C. Route 22 would be designed so that the traffic movement from I-73 to S.C. Route 22 would be the predominant movement through the interchange. Like all of the Build Alternatives, it would follow S.C. Route 22 to its terminus with U.S. Route 17 near Briarcliff Acres.



Alternative 5

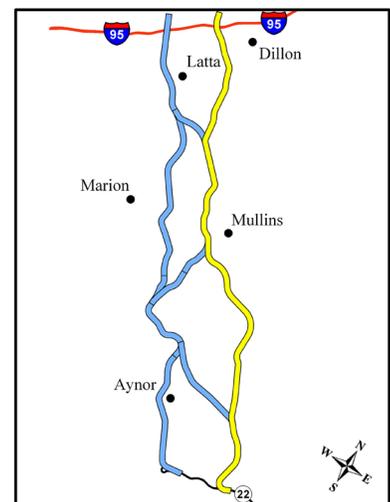
This alternative would have 413 acres of wetland impacts, 29 acres more than the Preferred Alternative. It would not cross either Buck Swamp or Lake Swamp. It is one of the three alternatives indicated as potentially preferred by the SCDNR and USFWS (April 19, 2006 ACT meeting, refer to Section 4.3). It would impact 56 streams, with 18,938 linear feet of channel. Ten ORW and two impaired waters would be crossed. It would have about 176 acres of floodplain impacts. It would have 898 acres of wildlife habitat impacts. It is the longest alternative (48.3 miles) and would impact the most farmland (2,136 acres).

Alternative 5 would have no Section 4(f) impacts. The cost for this alternative is \$1.430 billion, \$140 million more than the Preferred Alternative. It would also be in close proximity to the Marion County proposed “inland port” (refer to letters from Marion County Administrator in Appendix D).

It would be in close proximity to the Temperance Hill community, which had drawn opposition from several residents (refer to petitions in the *Public Involvement Technical Memorandum*). It would impact the Zion community as well as the Winburn community. Alternative 5 has the potential to have visual impacts to the Galivants Ferry Historic District. It would also result in a relatively high number of relocations (98).

2.7.4.6 Alternative 6

Alternative 6 starts at the northernmost interchange with I-95, and from there extends southeast on the western side of Dillon, east of Latta, to an interchange with U.S. Route 501. It continues southeast to an interchange with S.C. Route 41A, then southeast to an interchange with U.S. Route 76 on the western side of Mullins. Once south of Mullins, it angles slightly east and crosses the Little Pee Dee River immediately adjacent to the existing S.C. Route 917 crossing on the southern side. It would have an interchange with S-308, then continues southeast on new alignment to an interchange with S.C. Route 22 near Bakers Chapel, about two miles west of the U.S. Route 701/S.C.



Alternative 6



Route 22 interchange. The interchange with S.C. Route 22 would be designed so that the traffic movement from I-73 to S.C. Route 22 would be the predominant movement through the interchange. Like all of the Build Alternatives, it would follow S.C. Route 22 to its terminus with U.S. Route 17 near Briarcliff Acres.

This alignment is supported by Dillon County Council, Dillon County Development Board, and the Gateway Industrial Park Board, as detailed in the discussion of Alternative 1 (refer to letters in Appendix D). Alternative 6 would avoid the southern Latta area. It would avoid the Temperance Hill community, which is the desire of Marion County and the local residents (refer to resolution and petitions in the *Public Involvement Technical Memorandum*). As detailed in the discussion of Alternative 3 a petition was received from the members and friends of the Nazarene Missionary Baptist Church opposing the obstruction of the church's entrance (refer to petition in Appendix D). Alternative 6 would also avoid Aynor, which is consistent with the Horry County Council and Town of Aynor requests (refer to letters in Appendix D).

Alternative 6, along with Alternative 3, would most closely approximate the school attendance boundary for the Aynor area schools. Consideration of this boundary when designating a corridor for I-73 was requested by the Horry County School District and in a petition signed by over 900 citizens of Horry County (refer to letters in Appendix D and the *Public Involvement Technical Memorandum*).

This alternative would cost \$1.406 billion, \$116 million more than the Preferred Alternative. Alternative 6 would also have 1,835 acres of farmland impacts. This alternative would also have 413 acres of wetland impacts, and would cross Buck Swamp and Lake Swamp. Alternative 6 would cross 64 streams with 22,000 linear feet of channel. There are five ORW waters and seven impaired waters crossed by this alternative. It would have 111 acres of floodplain impacts. This alternative would also have 889 acres of wildlife habitat impacts.

Because of the close proximity of this alternative's I-95 interchange with that of the S.C. Route 34/I-95 interchange that has resulted from moving the interchange to avoid the Bethea Historic District, this interchange would be complex. These roads would increase the cost and impact associated with this interchange. It would be close to the proposed Bethea Historic District, which might result in visual impacts to this district. Although Alternative 6 is supported by the Gateway Industrial Park Board, it would impact a portion of the Gateway Industrial Park located immediately south of I-95.

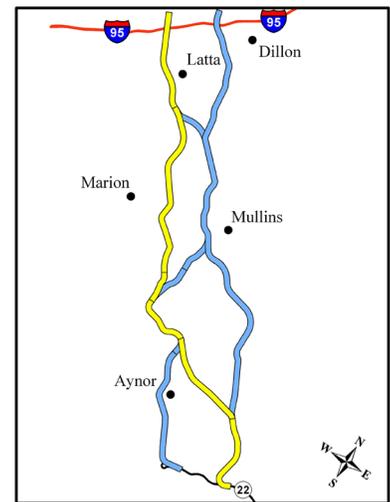
It would impact the Zion community, and would result in the relocation of three churches - the Dothan Baptist Church, the New Memorial Temple of Christ, and the Spring Grove Baptist Church. It would also impact a Section 4(f) site, the Vaughn tract of the Little Pee Dee River Heritage Preserve (refer to Appendix E, *Final Section 4(f) Evaluation*).

2.7.4.7 Alternative 7

Alternative 7 starts at the southernmost interchange with I-95, and from there extends southeast on the western side of Latta where it would have an interchange with U.S. Route 501. It then extends southeast



on the eastern side of Marion, where it would have an interchange with the U.S. Route 501 Bypass (this would be the access to S.C. Route 41A also). It continues southeast from Marion to the U.S. Route 501 crossing of the Little Pee Dee River. It then passes on the east side of the Galivants Ferry Historic District and then extends east along Winburn Road. There would be an interchange with S-23, then it turns to the southeast to an interchange with S.C. Route 22 near Bakers Chapel, about two miles west of the U.S. Route 701/S.C. Route 22 interchange. The interchange with S.C. Route 22 would be designed so that the traffic movement from I-73 to S.C. Route 22 would be the predominant movement through the interchange. Like all of the Build Alternatives, it would follow S.C. Route 22 to its terminus with U.S. Route 17 near Briarcliff Acres.



Alternative 7

This alternative would not be in accord with the request of the “Citizens of the Southern Route” south of Latta, but would accommodate the concerns of the citizens living along the northern route near I-95. It would pass to the west of the Temperance Hill community. It would be closer to the proposed site of the “inland port” (refer to letters from Marion County Administrator in Appendix D), but would not be the alignment preferred by Dillon County (refer to letters from Dillon County, Appendix D). The residents of the Bluff Road/Penderboro Community is opposed to Alternative 7. This is one of the three routes recommended by SCDNR and USFWS (April 19, 2006 ACT meeting, refer to Section 4.3). The Datwyler Rubber facility, located at U.S. Route 76 and U.S. Route 501 Bypass, could be impacted by this alternative.

Alternative 7 would cost \$1.350 billion, \$60 million more than the Preferred Alternative. This alternative would have a high number of wetland impacts (492 acres), virtually the same as Alternative 4 (497 acres), and over 100 acres more than the Preferred Alternative. It would also have 1,781 acres of farmland impacts. This alternative would have the fewest stream crossings (41) of all the Build Alternatives. It would have 16,832 linear feet of channel and nine ORW waters in the corridor. Five of the streams crossed are impaired. It would have the most floodplain impacts, at 323 acres. It would impact approximately 932 acres of wildlife habitat.

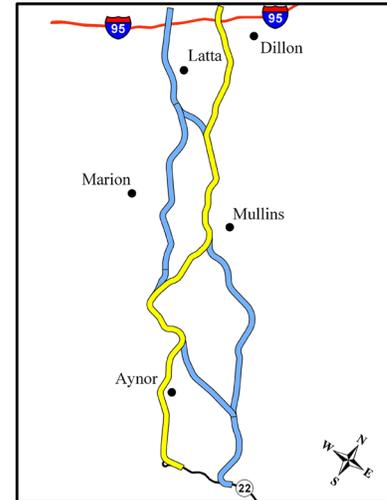
It would impact a potentially eligible (for listing on the list of National Register of Historic Places) archaeological site near Marion and might have visual impacts on the Galivants Ferry Historic District. The archaeological site would be a Section 4(f) site. It would also impact the Winburn Road community.

2.7.4.8 Alternative 8

Alternative 8 starts at the northernmost interchange with I-95, and from there extends southeast on the western side of Dillon, east of Latta, to an interchange with U.S. Route 501. It continues southeast to an interchange with S.C. Route 41A, then southeast to an interchange with U.S. Route 76 on the western side of Mullins. Once south of Mullins it angles back to the south to U.S. Route 501 and



crosses the Little Pee Dee River at the existing U.S. Route 501 crossing. It would have an interchange with S-91 (which would provide access to S.C. Route 41) and then cross the Little Pee Dee River at the existing U.S. Route 501 crossing. It passes on the east side of the Galivants Ferry Historic District and then extends southeast along U.S. Route 501 to an interchange with S.C. Route 22. There would be access ramps providing access between U.S. Route 501 and I-73 along U.S. Route 501 at the Little Pee Dee River crossing and along U.S. Route 501 just south of Aynor. The interchange with S.C. Route 22 would be designed so that moving from I-73 to S.C. Route 22 would be the predominant movement through the interchange. Like all of the Build Alternatives, it would follow S.C. Route 22 to its terminus with U.S. Route 17 near Briarcliff Acres.



Alternative 8

This alternative would follow the northern route preferred by Dillon County and the “Citizens of the Southern Route” (refer to letters in Appendix D and the *Public Involvement Technical Memorandum*), and would be east of the Temperance Hill community.

Alternative 8 would have the highest cost (\$1.595 billion), \$305 million more than the Preferred Alternative. This alternative would impact 449 acres of wetland. It would have the highest impact to farmland (2,155 acres). It has the most potential stream crossings (66). Approximately 22,238 linear feet of channel would be crossed, which would include 10 ORW streams and seven impaired streams. An estimated 191 acres of floodplains would be impacted. It would impact the most wildlife habitat with 1,011 acres. There would have to be three churches relocated, the same as Alternatives 2 and 6. It would potentially have visual impacts to the potential Bethea Historic District and the Galivants Ferry Historic District.

Although it is supported by the Gateway Industrial Park Board, Alternative 8 would impact the Gateway Industrial Park. It would extend through Aynor. Horry County and the Town of Aynor voted unanimously to oppose the route that would be constructed along existing U.S. Route 501 at Galivants Ferry and through Aynor (refer to letters in Appendix D). As detailed in the discussion of Alternative 1, letters were received from the Town of Aynor, the Aynor Town Council supporting a northerly course for I-73 through Horry County and supported access for areas affected. The Aynor Area Chamber of Commerce supported construction of overpasses to minimize the disruption of traffic to and from Aynor. Letters that expressed opposition to this segment were also received from the Horry County School District Administration (refer to letters in Appendix D). A large number of people expressed their opposition to this segment at the Public Information Meetings. The SCDNR and USFWS also expressed opposition to this segment.

Alternative 8, like Alternatives 1 and 4, would have one-way frontage roads along U.S. Route 501 in Aynor, which, as previously described, would be inconvenient for local residents using them to access each side of U.S. Route 501. Alternative 8 also would pass between the incorporated limits of Aynor



and the Aynor Elementary and Middle Schools. Construction of this alternative would also impact the athletic facility associated with Aynor High School, which, because it is also available for public use, would be considered a Section 4(f) impact as well (refer to Chapter 3 and Appendix E, *Final Section 4(f) Evaluation*, for information on Section 4(f)).

2.7.5 Which alternative was designated as the Preferred Alternative?

Alternative 3 would have the least wetland impacts (384 acres), in both acreage and wetland value, lowest cost (\$1.296 billion), least impact to farmland (1,708 acres), least impact to potential historic sites (this alternative was preferred by the SHPO as stated at an ACT meeting), was one of three preferred alignments by the SCDNR and USFWS, and, along with Alternative 6, would be the most constructible. This alternative, along with Alternative 6, would be the least likely to lead to changes in the land use, thus changes to the way of life, in western Horry County. This is in keeping with the opinion expressed by the public at meetings, in letters, and telephone calls, and by the elected officials from Horry County.

Selection of the Preferred Alternative

When comparing the input from the public and from elected officials, input from the resource and regulatory agencies, the many potential environmental and human resource impacts associated with the Build Alternatives, the constructability, and construction costs, the alternative that would best satisfy the public need while minimizing impacts would be Alternative 3.

All eight of the Build Alternatives have features that are favorable and advantageous. Many of them have one or more flaws, that when compared with the other alternatives make that alternative less suitable. Alternatives 1, 4 and 8 each have a segment that crosses the Little Pee Dee River on U.S. Route 501, and then extends around the Galivants Ferry Historic District back along U.S. Route 501 through Aynor to intersect S.C. Route 22. Horry County Council and the Town of Aynor voted unanimously to have this route eliminated. The SCDNR and USFWS voiced opposition to the Aynor segment (April 19, 2006 ACT meeting, refer to Section 4.3). At public meetings the people of western Horry County spoke overwhelmingly against this, and any other corridors that came near Aynor and Cool Spring. For these reasons alone, these three alternatives could be eliminated. Adding to this the difficulty of building along and within the U.S. Route 501 corridor, the traffic management problems associated with building there, and the change in travel patterns associated with the one-way frontage roads makes them even less attractive alternatives.

Furthermore, each of these alternatives has other negative issues associated with it. Alternative 1 would have the most relocations (121), one of the highest costs (\$1.498 Billion), potential visual impacts to Galivants Ferry Historic District, and a Section 4(f) impact to Aynor High School (athletic facilities used by the public). Alternative 4 would have the highest wetland impacts (497 acres), a cost of approximately \$1.404 Billion, and the Section 4(f) impact at Aynor High School. Alternative 8 would have the highest cost (\$1.595 Billion), a high amount of relocations (115), the highest impact to farmland (2,155 acres), impact three churches (Dothan Baptist Church, New Memorial Temple of Christ, and Spring Grove Baptist



Church), would impact the Gateway Industrial Park, cross Buck Swamp, and potentially impact two historic districts (Bethea and Galivants Ferry). Based upon all of these negative impacts and negative public input, these three alternatives were eliminated.

The five remaining Build Alternatives 2, 3, 5, 6, and 7 were all viable alignments. Alternative 7 was eliminated primarily because it had such high wetland impacts (492 acres), but also because of the constructability issues for the portions at the U.S. Route 501 Bypass and at the Little Pee Dee River crossing. Alternatives 5 and 7 would be harder to construct due to being located within the median of existing U.S. Route 501, when compared to those on new alignment. While U.S. Route 501 is a four-lane road, it would have to be modified to meet interstate standards. Major reconstruction would include widening the median, providing shoulder widths in accordance with SCDOT design standards, and adding frontage roads. Building on the existing U.S. Route 501 corridor would require an extensive frontage road system on both sides to access properties. This extensive system of frontage roads and the upgrades to U.S. Route 501 would offer additional challenges for construction and maintenance of traffic.

Because the NEPA process is being done at the same time as the Section 404 permitting process, the need to find a least impact alternative was a major consideration. Alternative 7 had higher wetland impacts, as compared to the other reasonable Build Alternatives, which eliminated it from further consideration as the Preferred Alternative. The difference between the other four Build Alternatives, Alternatives 2, 3, 5, and 6, was that Alternative 3 had less impacts in several categories and better features than these remaining Build Alternatives. For these reasons, Alternative 3 was selected as the Preferred Alternative.

2.8 WHAT HAPPENED AFTER THE DESIGNATION OF THE PREFERRED ALTERNATIVE?

Following the designation of the Preferred Alternative, the Draft EIS was approved by FHWA and SCDOT on May 30, 2006. SCDOT announced the availability of the Draft EIS for review and the dates of the Public Hearings. The approved Draft EIS was sent to each of the 15 public libraries within the project study area, the three County Administrator offices, and federal and state agencies. The project website was updated to include maps of the Preferred Alternative, a copy of the Draft EIS, a copy of the associated Technical Memoranda, and the Public Hearing information. In addition, a public notice was issued on June 16, 2006, in the Federal Register.

2.8.1 How was the public involved after the designation of the Preferred Alternative?

Three Public Hearings were held, one in each county within the project study area, to present the Preferred Alternative (refer to Chapter 4, Section 4.1.4, page 4-4, for a detailed discussion). The alignment centerline and approximate right-of-way limits of the Preferred Alternative were presented on large scale aerial mapping that included parcel boundaries. The other seven Reasonable Alternatives were also shown for comparison purposes, but without specific parcel boundaries.

The first Public Hearing was held at Aynor High School in Aynor, South Carolina, on June 15, 2006, with 440 people attending. Six hundred and thirty-six people attended the second Public Hearing that was held



in Mullins, South Carolina, at the Marion County Vocational Education Center on June 20, 2006. The third Public Hearing was held in Dillon, South Carolina, at Dillon High School on June 22, 2006, with 367 people attending.

Overall, 1,443 people attended the Public Hearings and 861 comments were received on the project during the Public Hearing comment period. Each written comment was reviewed by the Project Team, as were the comments heard at each of the Public Hearings. Along segments where the impacts to the public or to natural resources could be reduced, the Preferred Alternative was modified in response to these comments.

2.8.2 What modifications were made to the Preferred Alternative based on input?

Residents just south of the proposed interchange at I-95 suggested a realignment of the interchange near Catfish Church Road to minimize potential impact to the residents in the area (refer to Figure 2-33). The Preferred Alternative would impact eight residences and the proposed modification reduced the potential relocations to four, but resulted in 35 additional acres of wetland impact. It was determined that modifying the entire interchange, as originally proposed, would not be pursued due to the magnitude of additional wetland impact, but an additional modification to the ramp from I-95 to I-73 would be evaluated to minimize impacts. The ramp from I-95 to I-73 was modified and resulted in one less relocation than proposed by the original alignment.

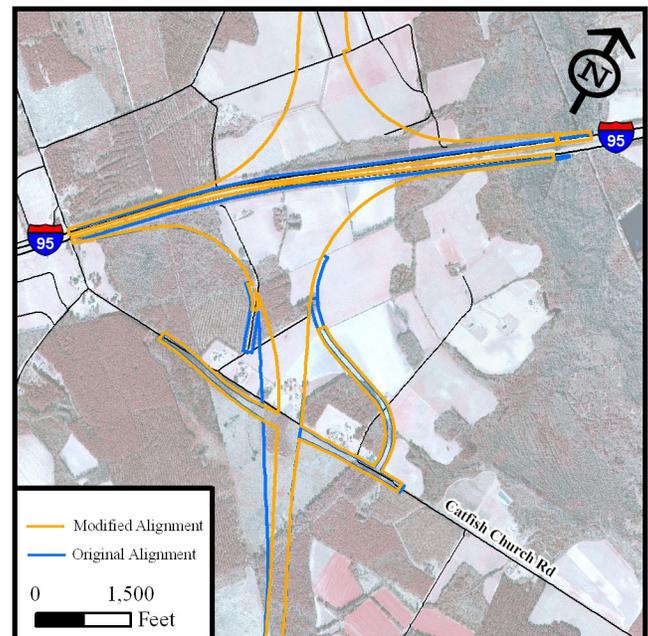


Figure 2-33 Catfish Church Road Shift

The Preferred Alternative, as presented in the Draft EIS and at the Public Hearings, impacted a major employer in Dillon County, Signode (refer to Figure 2-34, page 2-74). Two modifications were developed to avoid the Signode facility, a Northern Modification and a Southern Modification. The modifications were designed to avoid the existing residential developments, minimize impacts to wetlands, and to avoid impacting a low-income and minority neighborhood in the vicinity of Signode. The original alignment would impact 13 residences, one business (Signode), and 23.2 acres of wetlands. The Northern Modification would impact six residences, one business (Penske Truck Rental), and 23.8 acres of wetlands, while the Southern Modification would impact four residences and 38.5 acres of wetlands. It was determined to proceed with the Northern Modification because it reduced relocations by seven while only slightly increasing the amount of wetland impacts (0.6 acre) over those of the original alignment.

A request was received from Dillon County officials and the Dillon County Development Board to relocate the proposed interchange at U.S. Route 501 to U.S. Route 301. A partial cloverleaf design at U.S. Route



301 would be needed since the location was not large enough to accommodate the diamond interchange proposed at U.S. Route 501 (refer to Figure 2-35, page 2-75). The interchange at U.S. Route 501 would have approximately eight relocations and 27.8 acres of wetland impact, while the proposed U.S. Route 301 interchange would have approximately nine residential relocations, relocate a water treatment facility and water tower, and would impact 22.8 acres of wetlands. However, the U.S. Route 301 interchange would cost a minimum of \$5.5 million more than the interchange at U.S. Route 501 due to the additional bridging necessary to construct the interchange and the relocation of the water tower and water treatment facility. There also would be a limited amount of available land for development adjacent to or in the vicinity of the U.S. Route 301 interchange, which would limit economic development opportunities. In addition, access to the existing businesses of Smurfit-Stone, Signode, and Penske Truck Rental would be more restrictive with the U.S. Route 301 interchange. It was determined that although the U.S. Route 501 interchange would impact five additional acres of wetlands, it would save one residential relocation as well as the relocation of the water tower and water treatment facility, and result in a cost savings as compared to the U.S. Route 301 interchange. The Project Team proceeded with the interchange at U.S. Route 501, but modified the existing U.S. Route 501 and U.S. Route 301 intersection to create a perpendicular crossing. In addition, a frontage road was added between the U.S. Route 501 interchange with U.S. Route 301 to provide improved connectivity and access.

Comments were received from residents in the vicinity of Temperance Hill proposing to move the alignment closer to the Dillon and Marion County line. During the Draft EIS alternative development process, a segment was evaluated that passed north of the Carolina bay that is located to the west of Temperance Hill (refer to Figure 2-36, page 2-76). At that point in the alternative development process, the segment included in the Preferred Alternative (segment U-J2-B3) had an estimated 11 residential relocations and 95 acres of wetland impact. The segment that traversed north of the Carolina bay (segment J1) had an estimated 38 residential relocations and 63 acres of wetland impact. Although the segment that passed north of the Carolina bay had lower wetland impact, it was eliminated from further evaluation during the Draft EIS based on the high number of potential residential relocations.

Additional comments received were from residents of the Temperance Hill Community who were concerned about disruption to their community and way of life. In addition, other commenters raised concerns about maintaining traditional travel routes and the potential separation of families. As a result of the comments, the Project Team modified the original alignment by adding an overpass and also developed two modifications that included an overpass of I-73 on Road S-34-37 (Carroll Road) (refer to Figure 2-37, page 2-77). The original alignment proposed cul-de-sacs on Carroll Road, but an overpass would provide for community cohesion and continued access for emergency vehicles. The original alignment would impact two residences in the vicinity of Carroll Road, while modifying the original alignment to include an overpass would result in a total of six residential relocations and no additional wetland impacts. Two modified alignments, each with an overpass, were evaluated in an attempt to minimize potential residential relocations. Modified Alignment 1 would impact five residences in the vicinity of Carroll Road and additional wetlands. Modified Alignment 2 would also impact five residences and additional wetlands. Modified Alignment 1 and Modified Alignment 2 both had a combination of curves that met FHWA design criteria, but were not recommended by FHWA.

