

How would the alternatives incorporate multimodal planning?

Planning for future provision of a multimodal facility within the interstate corridor was identified as a secondary need for the project. An ultimate 400-foot typical section was developed to accommodate the number of lanes needed for the future traffic volumes, as well as, a multimodal corridor (refer to Figure 1-4, page 1-5). Overpasses, interchanges, and access ramps would require modification when installing a future multimodal facility, such as rail. Bridges and overpasses would be retrofitted to accommodate the increased height and length that would be needed to meet installation criteria for rail, while the railroad would be designed out of the existing right-of-way at the interchanges. Alignment of the rail would pose additional challenges for access ramps and frontage roads.

Alternative 4 was determined to be the most difficult to accommodate rail, due to the extensive use of existing U.S. Route 501. It would be more expensive and require a more complex design due to the frontage roads and access ramps needed to retain access to existing landowners in the vicinity of the corridor. Alternative 1 and Alternative 8 would also be difficult to accommodate a multimodal facility due to their use of existing U.S. Route 501. Alternative 3 and Alternative 6, which are primarily on new location, would provide the most flexible design for installing future multimodal facilities due to the use of conventional interchanges.

2.5.3 How did the alternatives compare in terms of human and environmental impacts?

Each of the Build Alternatives would have different types of impacts and somewhat different benefits. Chapter 3 provides the details for the potential impacts associated with each of the alternatives, including the No-build.

Indirect and cumulative impacts for the Build Alternatives were evaluated as well. They all had similar impacts for each category evaluated (refer to Chapter 3). The only difference was a slight edge for Alternative 3 in terms of less induced farmland impacts and less potential impacts to cultural resources.

No-build Alternative

The No-build Alternative would fail to satisfy the stated purpose and primary and secondary needs for the project. The purpose of the proposed project "is to provide an interstate link between I-95 and the Myrtle Beach region to serve residents, businesses, and tourists while fulfilling congressional intent in an environmentally responsible and community sensitive manner."

The primary needs for the project are to provide system linkage between the interstate system and the Myrtle Beach region and to enhance economic opportunities and tourism in South Carolina. Secondary needs are to relieve local traffic congestion, provide for multimodal planning, and improve hurricane evacuation.



The No-build Alternative would not satisfy the project's purpose and need, since it would not provide:

- A direct link between I-95 and the Myrtle Beach region to improve system linkage;
- Opportunities for economic growth and tourism;
- The facilitation of a more effective evacuation of the Myrtle Beach region during emergencies;
- A reduction in existing traffic congestion on roads accessing the Myrtle Beach region;
 or,
- A plan for future provision of a multimodal facility.

The No-build Alternative would not provide the interstate link between I-95 and the Myrtle Beach region. Failure to provide this link would lead to the loss of projected economic opportunities, the potential loss of tourism due to in-season congestion for tourists visiting Myrtle Beach, no improvement in local traffic congestion, longer travel times, the loss of the multimodal opportunities provided by the corridor, and no improvement in hurricane evacuation.

The projected economic benefits from constructing I-73 are summarized previously in Chapter 2, Section 2.5.1 (page 2-19). This analysis shows that the study area would benefit in terms of the number of jobs and money flowing into the area from any of the Build Alternatives.

Traffic congestion is currently a problem for this area primarily on "change-over day" when the tourists at the beach leave and new tourists arrive. This causes delays along U.S. Route 501 from Aynor south. By providing an interstate connection from S.C. Route 31 and U.S. Route 17 all the way to I-95, a high-speed alternative route to bypass this congestion would be available. The traffic travel savings between the No-Build and several of the Build Alternatives show savings of as much as 25 percent for the 60 mile trip, based upon the AADT volumes. This difference would be greater for peak season travel, when U.S. Route 501 is heavily congested (refer to the *Traffic Technical Memorandum*).

Hurricane evacuation times would be dramatically reduced with any of the Build Alternatives. Because I-73 is a controlled-access facility, it also would make lane reversal, switching inbound travel lanes to handle out-bound traffic, simpler. I-73 would allow people leaving the Myrtle Beach area an alternative to the bottleneck on U.S. Route 501 and provide additional capacity for evacuees. The differences in evacuation times between the No-Build Alternative and the Build Alternatives are illustrated in Table 1.9 (page 1-23).

The Build Alternatives

All of the Build Alternatives satisfied the purpose and needs 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



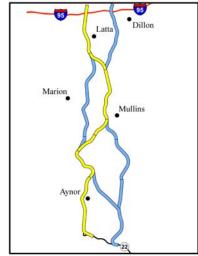
benefits. For example, Alternatives 3, 6, and 7 showed the biggest increase to Gross Regional Product, while Alternatives 2 and 8 showed the biggest increase in income and employment. However, this variability was not enough to set any one above the other alternatives.

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

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



Alternative 1

of the Build Alternatives, it would follow S.C. Route 22 to its terminus with U.S. Route 17 near Briarcliff Acres.

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 "inland port" proposed by Marion County (refer to letter dated March 27, 2006, in Appendix C).



This alternative would have the most relocation of residents and businesses (121). It would have one of the highest costs (\$1.498 billion, 2011 dollars), over \$200 million more than the Preferred Alternative. Alternative 1 would impact 1,993 acres of farmland. It would have 60 stream crossings, 10 of which are designated as 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.

(ORW). It would impact 19,137 linear feet of stream channel and cross three impaired water bodies. It would impact more floodplains (173 acres) than the Preferred Alternative. It would also impact approximately 950 acres of wildlife habitat, about 120 acres more than the Preferred Alternative.

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 C).

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 (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 C) 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.



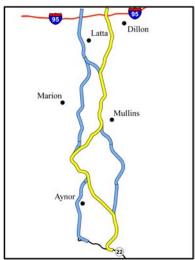
Horry County, in a letter dated March 13, 2006, (refer to letter in Appendix C), reported a unanimous vote against the route that crossed at Galivants Ferry and extended southeast along U.S. Route 501 through Aynor. The Town of Aynor voted unanimously (refer to letter dated March 21, 2006, in Appendix C) to oppose the route that would be constructed along existing U.S. Route 501 at Galivants Ferry and through Aynor. 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 C) 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 are the best way to maintain access to properties on both sides of I-73, would be inconvenient for local residents used to accessing 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 D, *Draft 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, page 3-90).

Alternative 2

Alternative 2 starts at the northernmost interchange with I-95, and from there 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



Alternative 2

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 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.

Alternative 2 has one of the highest costs of all the alternatives (\$1.548 billion), more than \$250 million higher than the Preferred Alternative. It would have approximately 444 acres of wetland impacts, 64 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 19,249 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.

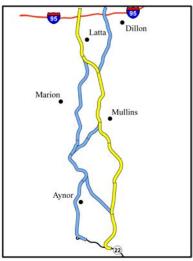
It would impact the Zion community, located along S.C. Route 41A, north of Mullins. It would potentially have visual impacts to two historic districts, one at Galivants Ferry and the other at the Bethea Property. This alternative would relocate three churches, the Dothan Baptist Church, north of I-95 (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. It would impact residents along Winburn

road. Several letters were received from people along Winburn Road objecting to the road being routed through their neighborhood.

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 at the existing S.C. Route 917 crossing. 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



Alternative 3



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 (\$1.296 billion). It would have the lowest farmland impacts (1,708 acres) as well. It would impact 58 stream crossings, with a total of 19,213 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.

It is in close proximity to the proposed "inland port" designated by Marion County per their letters of March 2006 (refer to Appendix C). It would not impact the Gateway Industrial Park, but it is not the alignment requested by Dillon County. It follows the route preferred by Horry County (refer to letter dated March 13, 2006, in Appendix C).

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 C and *Public Involvement Technical Memorandum*).

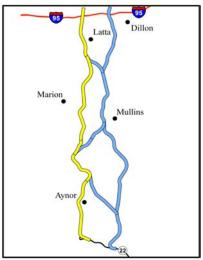
This alternative, like Alternative 1, would also cross from west to east in proximity to the Temperance Hill community. This community has objected to the alternatives that come in close proximity to their community (refer to petitions from Temperance Hill community, in the *Public Involvement Technical Memorandum*). It would also impact the Zion community, located along S.C. 41A, 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 to avoid creating a new crossing of the Little Pee Dee River, which could lead to fragmentation of wildlife habitat (refer to Appendix D, *Draft 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).



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 along U.S. Route 501 at the Little Pee Dee River crossing and along 501 just south of Aynor. The interchange with S.C. Route 22 would be designed so that the



Alternative 4

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.

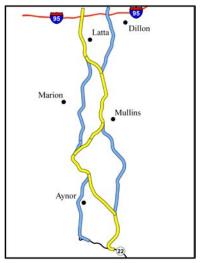
This alternative is the shortest alternative at 42.6 miles long. It would avoid the Temperance Hill community. It also would be in close proximity to the proposed Marion County "inland port" (refer to the letters from Marion County Administrator, Appendix C). An undated petition signed by 229 residents 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 \$1.404 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 17,068 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 and the Town of Aynor and all of the other impacts





Alternative 5

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.

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.

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 18,137 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 \$1.436 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 C).

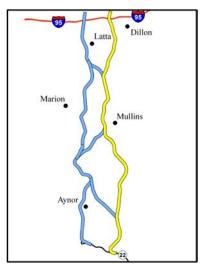
It would be in close proximity to the Temperance Hill community, which had drawn opposition from several residents (refer to petitions in the *Public Involvement Technical Memorandum*). It would impact the Zion community as well as the Winburn community. Alternative 5 has the



potential to have visual impacts to the Galivants Ferry Historic District. It would also result in a relatively high number of relocations (98).

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 at the existing S.C. Route 917 crossing. 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



Alternative 6

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 C). 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*). It also would avoid Aynor, which is consistent with the Horry County Council and Town of Aynor requests (refer to letters in Appendix C).

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 C and the *Public Involvement Technical Memorandum*).

This alternative would cost \$1.406 billion, \$112 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 20,327 linear feet of channel. There are four 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.

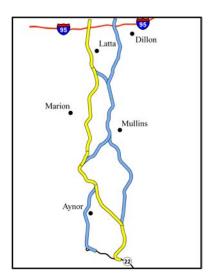


Because of the close proximity of this alternative's I-95 interchange with that of the S.C. Route 34/I-95 interchange that has resulted from moving the interchange to avoid the Bethea Historic District, this interchange would be complex. These roads would increase the cost and impact associated with 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 D, *Draft Section 4(f) Evaluation*).

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



Alternative 7

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 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 C), but would not be the alignment preferred by Dillon County (refer to letters from Dillon County, Appendix C). 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.

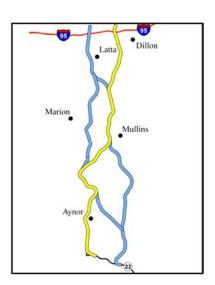


Alternative 7 would cost \$1.362 billion, \$66 million more than the Preferred Alternative. This alternative would have a high number of wetland impacts (492 acres), virtually the same as Alternative 4 (497 acres), and over 100 acres more than the Preferred Alternative. It would also have 1,781 acres of farmland impacts. This alternative would have the fewest stream crossings (41) of all the Build Alternatives. It would have 16,068 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.

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



Alternative 8

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. 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.

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

Alternative 8 would have the highest cost (\$1.596 billion), \$300 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



20,247 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 3 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 C). Letters that expressed opposition to this segment were also received from the Horry County School District Administration (refer to letters in Appendix C). 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, which 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 D, *Draft Section 4(f) Evaluation*, for information on Section 4(f)).

2.5.4 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 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.

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. 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. That this alternative had such high wetland impacts as compared to the other Reasonable Alternatives was enough to eliminate it from further consideration as the Preferred Alternative. The differentiation between the other four alternatives, Alternatives 2, 3, 5, and 6, was because Alternative 3 had less impacts or better features than these remaining alternatives.