



Zion Grocery

to businesses and services in the City of Mullins (refer to Figure C-21). Although the road configuration would change, this connection would be maintained via a frontage road. Due to the re-configuration of local roads, travel patterns may be affected temporarily during construction.

Currently, the Zion area is primarily rural and residential. Over time, development resulting from the project could cause changes to the character of the area. The proposed project could change the visual landscape of the area and create noise impacts. Emergency services from Temperance Hill or Mullins would not be affected. The alternatives would require relocation of eight residences in

Zion, including seven houses and one mobile home. Census data shows a high percentage of persons with disability in this block group; it is unknown at this time if any of the relocations in Zion would affect disabled. The evaluation of the Preferred Alternative in the Final EIS would address potential impacts.

Based on land use modeling, no new development due to the No-build Alternative would be predicted to occur in Zion, although growth would be anticipated due to normal increases in population (refer to Section C.1, Land Use, page C-1). Alternatives 1, 2, 5, and 8 are projected to bring 10 additional acres of development to the community, while Alternatives 3, 4, 6, and 7 are predicted to result in no new additional growth to Zion (refer to Table C.9, page C-32).

#### Summary of impacts

Alternatives 1, 2, 3, 5, 6, and 8 would have eight residential relocations, six impacted noise receivers, and no permanent changes in accessibility. Alternatives 4 and 7 would have no relocations, no noise impacts, and no changes in accessibility.

### **C.2.8 How would Horry County be impacted?**

Land use modeling projected that approximately 1,525 acres of new development would occur in Horry County with the No-build Alternative, regardless of this project (refer to Section C.1, Land Use, page C-1). The eight Build Alternatives are predicted to result in additional development, ranging from 285 acres to 470 acres, depending on alternative (refer to Table C.10). New development could bring in economic development such as new businesses which would create new jobs. However, it could also bring in increased traffic and noise throughout communities in the County.



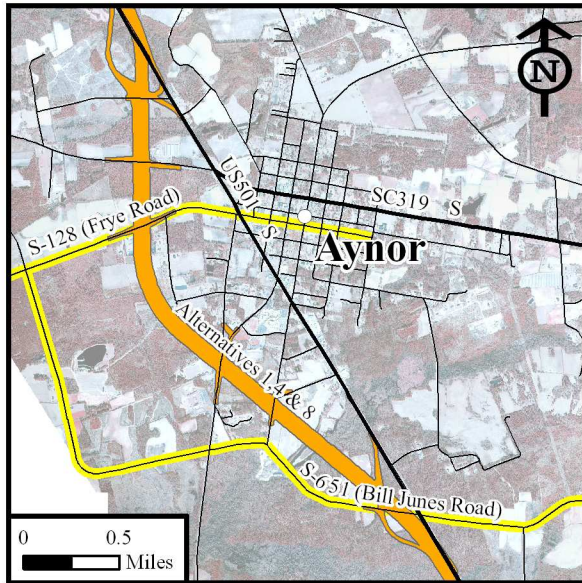
**Table C.10  
Horry County and Communities Projected 2030 Development by Acreage  
Interstate 73 EIS: I-95 to the Myrtle Beach Region**

County/Community/Neighborhood	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
<b>Horry County</b>								
Induced Development	331	470	285	312	420	334	334	376
Cumulative Development	1,856	1,995	1,810	1,837	1,945	1,859	1,859	1,901
<b>Horry County Communities</b>								
<b>Aynor</b>								
Induced Development	271	258	183	252	224	193	193	283
Cumulative Development	1,658	1,645	1,570	1,639	1,611	1,580	1,580	1,670
<b>Galivants Ferry</b>								
Induced Development	312	210	171	312	200	181	181	312
Cumulative Development	1,072	970	931	1,072	960	941	941	1,072
<b>Cool Spring</b>								
Induced Development	10	28	0	10	28	0	10	10
Cumulative Development	472	490	0	472	490	0	472	472
<b>Joiner</b>								
Induced Development	0	0	0	0	0	0	0	0
Cumulative Development	0	0	0	0	0	0	0	0
<b>Methodist Rehobeth</b>								
Induced Development	0	0	0	0	0	0	0	0
Cumulative Development	0	0	0	0	0	0	0	0
<b>Ketchuptown</b>								
Induced Development	0	0	0	0	0	0	0	0
Cumulative Development	0	0	0	0	0	0	0	0
<b>Dog Bluff</b>								
Induced Development	0	0	0	0	0	0	0	0
Cumulative Development	81	81	81	81	81	81	81	81
<b>Poplar Hill</b>								
Induced Development	0	0	0	0	0	0	0	0
Cumulative Development	16	16	16	16	16	16	16	16
<b>Bakers Chapel</b>								
Induced Development	0	107	1	0	67	1	1	1
Cumulative Development	80	187	81	80	147	81	81	81

**C.2.9 What are the characteristics of Cities and Towns located within Horry County and how would they be impacted?**

**C.2.9.1 Aynor**

The Town of Aynor would be impacted by Alternatives 1, 4, and 8, which pass the downtown area to the west. Proposed interchanges would be constructed northwest and southeast of Aynor where the alternatives depart from and reconnect to existing U.S. Route 501. The downtown and main residential areas of Aynor would remain intact and cohesion in this area would not be affected. The alternatives would separate more rural residential areas from downtown. Although access would be maintained, the interstate could be



**Figure C-22: Aynor**

perceived as a barrier between these areas. Alternatives 1, 4, and 8 would separate Aynor High School from Aynor Middle School, Aynor Elementary School and the downtown area. Connectivity between the schools would be maintained with an overpass at Road S-128 (Frye Road), (refer to Figure C-22).

Regional travel patterns, between Conway and Marion along U.S. Route 501 would be altered. Access between the project and U.S. Route 501 would be limited to two interchanges and one-way frontage roads built adjacent to the project. These one-way frontage roads would be used for local access where the project would replace existing U.S. Route 501. Road S-651 (Bill Jones Road) to the east of Aynor would be converted to a cul-de-sac at the interstate; however, S-651 would still have direct access to U.S. Route 501 Business into downtown Aynor. Through the Town of Aynor, existing U.S. Route 501 would become

a business route and travel patterns in the downtown area would remain unchanged, and accessibility for pedestrian traffic and other modes of travel would also remain intact. Emergency service routes may be altered but access to all areas of the community would be maintained. Specific elderly, handicapped, non-driving, or transit-dependant populations have not been identified in this portion of Aynor and would not be impacted by the alternatives.

Displacements and relocations that would result from Alternatives 1, 4, and 8 would include the following:

- 19 homes, including 15 houses and four mobile homes;
- Three businesses, including Woody’s Auction, Van Lott, Inc., and Lamar’s Meat Market; and
- One public facility, Horry County Recycling.

Based on the land use model, approximately 1,387 acres of development is anticipated with the No-build Alternative by the Year 2030 (refer to Section C.1, Land Use). The eight Build Alternatives were predicted to result in an additional amount of development, ranging between 183 and 283 acres, depending on alternative (refer to Table C.10, page C-40).

The volume of tourist traffic increases during the summer months in the Town of Aynor. Many tourists briefly stop for convenience services such as gas stations and restaurants. Alternatives 2, 3, 5, 6, and 7 would be located away from Aynor, and tourist-friendly businesses could be adversely impacted due to loss of revenues.





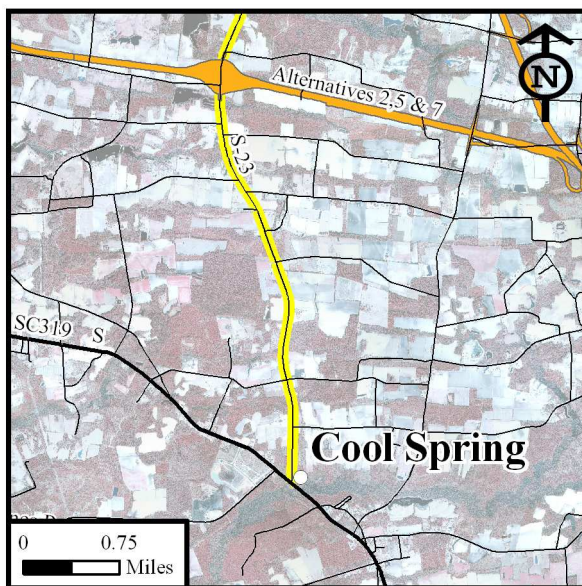
### *Summary of impacts*

Alternatives 1, 4, and 8 would have 19 residential, three business, and one community facility relocations, no noise impacts, and accessibility affected by one-way frontage roads. Alternatives 2, 5, and 7 would have no relocations, one impacted noise receiver, and no changes in accessibility. Alternatives 3 and 6 would have no relocations, no noise impacts, and no changes in accessibility.

## **C.2.10 What neighborhoods and rural communities are located within Horry County and how would they be impacted?**

### *C.2.10.1 Cool Spring*

The community of Cool Spring would be impacted by Alternatives 2, 3, 5, 6, and 7, which impact the easternmost section of the community, as defined by the survey. For Alternatives 2, 5, and 7, an interchange would be constructed at Road S-23 (Nichols Highway), (refer to Figure C-23).



**Figure C-23: Cool Spring**

The main residential areas of Cool Spring are located near the intersections of S.C. Route 319, Road S-131 (Edwards Road), Road S-75 (Valley Forge Road) and Isaac Gerald Road. The alternatives would not impact community cohesion or the interaction of residents. Connectivity of the existing roads in this area would remain intact and travel patterns would remain the same. Pedestrian access and emergency services would not be impacted. Specific elderly, handicapped, non-driving, or transit-dependant populations have not been identified in this portion of Cool Spring and would not be impacted by the alternatives.

Alternatives 2, 5, and 7 would relocate eight residences, including six houses, one mobile home, and one vacant residence. Alternatives 3 and 6 would require the relocation of three residences, two houses and one vacant residence.

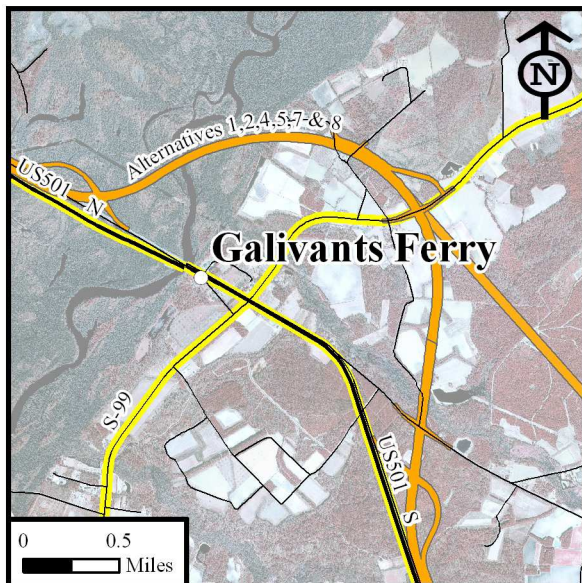
Construction of the Road S-23 interchange would provide convenient access to the Cool Spring Industrial Park located on S.C. Route 319. Improved access could potentially help the development of the industrial park and in turn, provide additional jobs for this area. The land use model predicted that 462 acres of development would occur with the No-build Alternative in the Cool Spring community (refer to Section C.1, Land Use). Alternatives 1, 4, 7, and 8 were predicted to result in an additional 10 acres of development in the community, while Alternatives 2 and 5 would result in an additional 28 acres of development. Alternatives 3 and 6 are not predicted to result in any new development in the Cool Spring community (refer to Table C.10, page C-40).

*Summary of impacts*

Alternatives 1, 4, and 8 would have no relocations, no noise impacts, and no changes in accessibility. Alternatives 3 and 6 would have two residential relocations, one impacted noise receiver, and no changes in accessibility. Alternatives 2, 5, and 7 would have seven residential relocations, one impacted noise receiver, and no changes in accessibility.

**C.2.10.2 Galivants Ferry**

Alternatives 1, 2, 4, 5, 7, and 8 enter the Galivants Ferry community north of the community center near the U.S. Route 501 crossing of the Little Pee Dee River (refer to Figure C-24). The alternatives then shift away from U.S. Route 501 at this location to avoid the Galivants Ferry Historic District. Alternatives 1, 4 and 8 rejoin U.S. Route 501 south of the junction with S.C. Route 129 and continue south toward Aynor while Alternatives 2, 5, and 7 continue eastward through the community, as defined by the survey.



**Figure C-24: Galivants Ferry**

Accessing the main roads in the area would be maintained with overpasses, which would allow travel patterns not to be impacted. However, with Alternatives 1, 4, and 8, one-way frontage roads on each side of the proposed interstate would be planned for this area. Access to both directions of travel on U.S. Route 501 would not be available at every overpass. Motorists would be required to travel in the opposite direction for a short distance in order to reach an overpass to allow them to travel in the direction they wanted. Access to U.S. Route 501 in both directions of travel would not be altered with Alternatives 2, 5, and 7, and emergency service routes are not likely to be affected. Specific elderly, handicapped, non-driving, or transit-dependant populations have not been identified in this portion of Galivants Ferry and would not be impacted by the alternatives.

Alternatives 1, 4, and 8 would result in the relocation of seven residences, and two produce stores, the Winburn Produce and PoBoy Produce. Local businesses, including the Pee Dee Farms General Store, are located on U.S. Route 501, and the alternatives could reduce the tourist traffic passing by these establishments.

Based on the land use model predictions, approximately 760 acres of new development is predicted to occur in the Galivants Ferry community boundary, due to the No-build Alternative. All the alternatives would add an additional amount of new development to the community, ranging from 171 to 312 acres, depending on alternative (refer to Table C.10, page C-40).

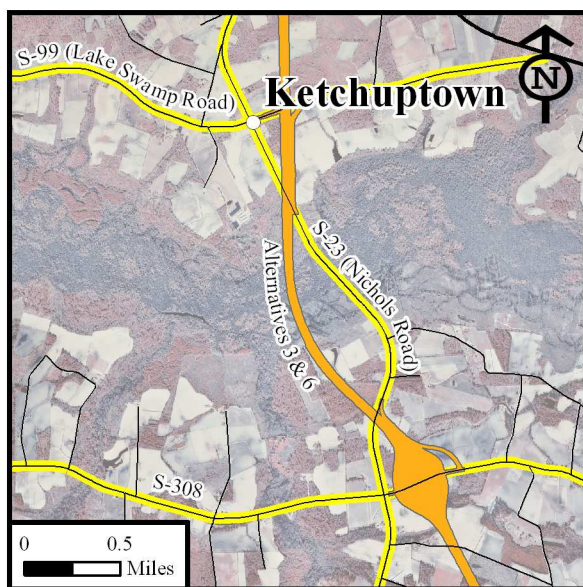


### Summary of impacts

Alternatives 1, 4, and 8 would have seven residential and two business relocations, one impacted noise receiver, and accessibility affected by one-way frontage roads. Alternatives 3 and 6 would have no relocations, one impacted noise receiver, and no changes in accessibility. Alternatives 2, 5, and 7 would have no relocations, two impacted noise receivers, and no changes in accessibility.

### **C.2.10.3 Ketchuptown**

Alternatives 3 and 6 would cross the Ketchuptown area just east of the main crossroads at the center of the community, as defined by the survey, (refer to Figure C-25). The other Build Alternatives would be over four miles to the west. The majority of Ketchuptown residents live to the south and west of Alternatives 3 and 6 and community cohesion would not be affected. The community area is primarily rural and agricultural and depending on the proximity of residences to the interstate, changes to the visual landscape and noise impacts could occur.



**Figure C-25: Ketchuptown**

Access along local roads in the area would be maintained with overpasses at Road S-99 (Lake Swamp Road) and Road S-23 (Nichols Highway), (refer to Figure C-25). Access to Mullins via Road S-23 to S.C. Route 917 would not be altered, although portions of the road would become frontage roads adjacent to the roadway. Access to the south along Road S-23 toward Aynor and Conway would require motorists to travel along frontage roads and through an interchange at Road S-308 to reach these destinations. The interchange at Road S-308 would be located approximately two miles south of Ketchuptown and induced development is expected to be limited in the area. Alternatives 3 and 6 would result in two residential relocations; however, no businesses or emergency services would be affected. Specific elderly, handicapped, non-driving, or transit-dependant populations have not been identified in Ketchuptown and would not be impacted by the alternatives.

The land use model predicted no new development in the Ketchuptown community with the No-build Alternative, although growth would be anticipated due to normal increases in population (refer to Section C.1, Land Use). In addition, no new development was predicted from any of the alternatives. Therefore, no indirect or cumulative impacts would be anticipated to Ketchuptown.

### Summary of impacts

Alternatives 1, 2, 4, 5, 7, and 8 would have no relocations, no noise impacts, and no changes in accessibility. Alternatives 3 and 6 would have two residential relocations, no noise impacts, and no changes in accessibility.





#### C.2.10.4 Poplar Hill

Alternatives 2, 3, 5, 6, and 7 would cross the extreme northeastern portion of the Poplar Hill area through wooded areas (refer to Figure C-26). Alternatives 1, 4, and 8 would be approximately seven miles to the west of Poplar Hill. Majority of residential development would be located to the south of the alternatives. Because the alternatives are located along the edge of the community, they are not likely to divide or isolate neighborhoods or residents. Community cohesion would not be affected.

The proposed alternatives pass through an area that is rural and predominantly agricultural, and most stores, public services, schools, and other facilities are located in Aynor and Conway. Access to these areas and travel patterns would remain unchanged. Overpasses at Road S-75 (Valley Forge Road) and Road S-569 (Good Luck Road) would also maintain access towards Mullins (refer to Figure C-26). No residential or business relocations are expected and emergency services should not be affected. Specific elderly, handicapped, non-driving, or transit-dependant populations have not been identified in Poplar Hill and would not be impacted by the alternatives.

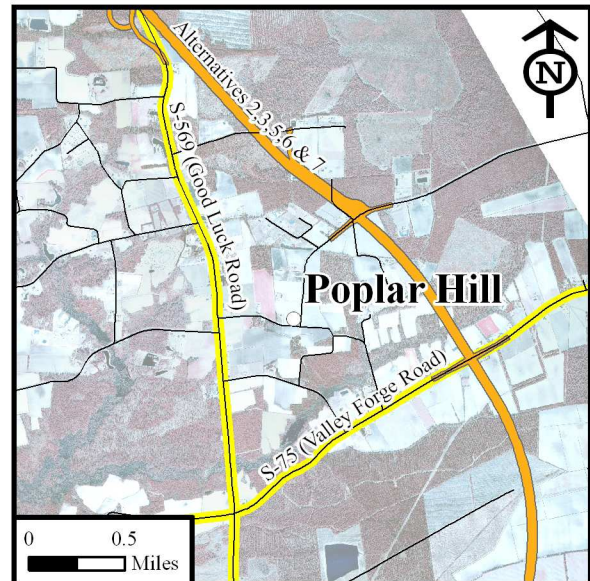


Figure C-26: Poplar Hill

The land use model predicted 16 acres of new development in the Poplar Hill community due to the No-build Alternative (refer to Section C.1, Land Use). However, no new development was predicted from any of the alternatives.

#### Summary of Impacts

Alternatives 1, 2, 3, 4, 5, 6, 7, and 8 would have no relocations, no noise impacts, and no changes in accessibility.

#### C.2.10.5 Joyner/Joiner

The community of Joyner would be impacted by Alternatives 2, 3, 5, 6, and 7. Alternatives 3 and 6 cross through the center of the community boundary, as defined by the community surveys. An interchange would be located at Road S-308 (McQueen Road), to the north of the Joyner community (refer to Figure C-27). Alternatives 2, 5, and 7 would cross through the southernmost portion of the community and an interchange would be located at Road S-23 (Nichols Highway), within the Joyner community. Alternatives 1, 4, and 8 would be over four miles to the west of Joyner.

Residential development is widely scattered throughout the community with some concentration along Road S-45. Connectivity of the existing roads in this area would remain intact and local travel patterns



would remain the same. Interaction among the residents in the community would not be hindered. Development around the interchanges at Road S-308 or Road S-23 would more than likely be limited to the immediate area since they would be in isolated areas and are not near any existing development. Infrastructure such as water, electricity, and sewer are not readily available and the cost to supply this would be considerable.

This area is primarily wooded swamp, rural and residential. Construction of an interstate in this area could affect the visual landscape and the character of the area. Noise impacts could also occur in the area.

Alternatives 3 and 6 would relocate three residences, including one house and two mobile homes. Alternatives 2, 5 and 7 would require the relocation of several residential outbuildings such as garages, barns, and sheds, but no homes would be relocated. No emergency services would be affected. Specific elderly, handicapped, non-driving, or transit-dependant populations have not been identified in Joyner and would not be impacted by the alternatives.

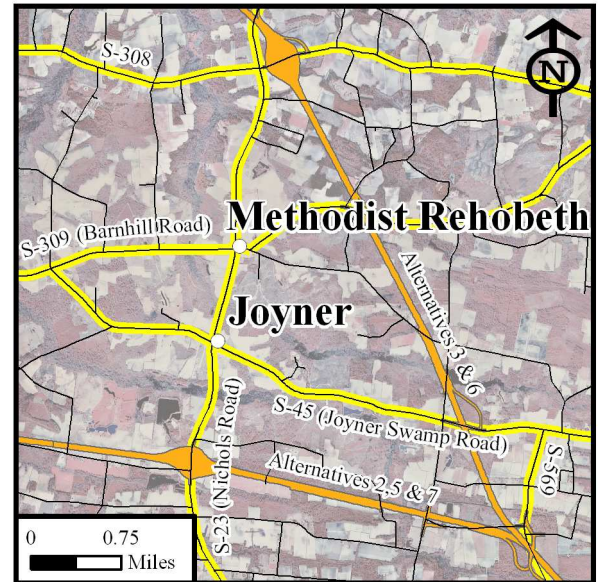


Figure C-27: Joyner

Although growth would be anticipated due to normal increases in population, the land use model predicted no new development in the Joyner community due to the No-build Alternative. In addition, no new development was predicted from any of the alternatives. Although the land use model did not predict any new development in the Cool Spring Industrial Park as a result of the project, Alternatives 2, 5, and 7 would provide convenient access to the Park with the interchange at Road S-23. This improved access could potentially encourage new development in the industrial park.

### Summary of Impacts

Alternatives 1, 4, and 8 would have no relocations, no noise impacts, and no changes in accessibility. Alternatives 3 and 6 would have three residential relocations, two impacted noise receivers, and no changes in accessibility. Alternatives 2, 5, and 7 would have two impacted noise receivers and no changes in accessibility.

### **C.2.10.6 Bakers Chapel**

Alternatives 2, 3, 5, 6, and 7 would cross through the western portion of the Bakers Chapel, as defined by the community survey (refer to Figure C-28, page C-47). A small residential area of approximately 10 to 12 houses along Road S-843 (Gasque Road) would be separated from the larger community by the interstate. This separation could potentially hinder interaction between residents, impacting the cohesion of the community. Access to other residential areas in the community would be changed. Residents would have to travel Road S-569 (Moore's Mill Road) to S.C. Route 319 to Road S-97 (Bakers Chapel Road)



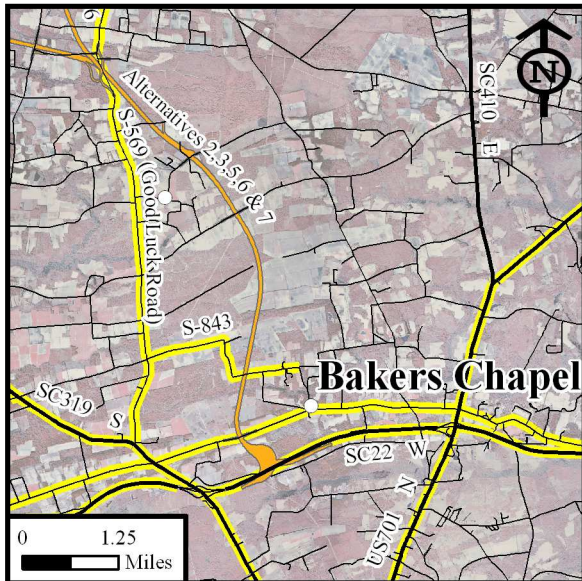


Figure C-28: Bakers Chapel

to access the eastern portion of Road S-843, which could be viewed by residents as another division of their community (refer to Figure C-28). Access to businesses and public services in Conway via Road S-97 would be maintained with an overpass and no emergency services would be affected. Since this area is primarily rural and residential, the proposed project could impact the visual landscape of the area and create noise impacts.

As proposed, the existing S.C. Route 22 (Conway Bypass) would become part of Interstate 73. A fully controlled access interchange at S.C. Route 22 would be constructed to maintain access along S.C. Route 22 to Conway. No residential or business relocations are anticipated in the Bakers Chapel community. Specific elderly, handicapped, non-driving, or transit-dependant populations have not been identified in Bakers Chapel and would not be impacted by the alternatives.

Based on the land use model, approximately 80 acres of new development is predicted to occur in the Bakers Chapel community with the No-build Alternative, regardless of this project (refer to Section C.1, Land Use). Alternatives 1 and 4 would result in no additional development to the community, while Alternatives 2, 3, 5, 6, 7, and 8 would result in additional development, ranging from one to 107 acres, depending on alternative (refer to Table C.10, page C-40).

Comments received from Bakers Chapel during the CIA process expressed that the community had been impacted previously due to the construction of S.C. Route 22, and that interactions between neighbors had been impacted due to the barrier of the road. Another controlled access facility routed through the community may further impact community interaction and cohesion in Bakers Chapel.

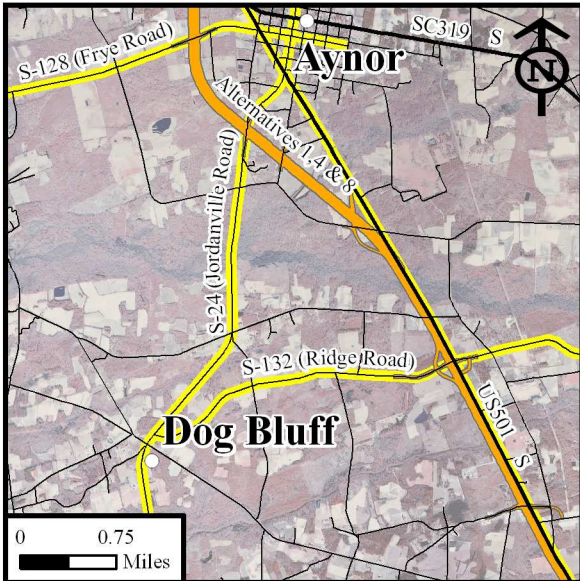
#### Summary of impacts

Alternatives 2, 3, 5, 6, and 7 would have no relocations, and no noise impacts, with one road bisected. Alternatives 1, 4, and 8 would have no relocations, no noise impacts, and no changes in accessibility.

#### **C.2.10.7 Dog Bluff**

Alternatives 1, 4, and 8 pass to the east of the Dog Bluff community boundary, as defined by the survey, along U.S. Route 501 (refer to Figure C-29). As such, Alternatives 1, 4, and 8 would not affect community cohesion.

Travel within the community would not be affected by the alternatives. Access to Aynor would be maintained with overpasses on the main roads, such as Road S-24 (Jordanville Road) and Road S-128 (Frye Road),



**Figure C-29: Dog Bluff**

(refer to Figure C-29). U.S. Route 501 would function as a frontage road in this area. However, accessing both directions of travel on U.S. Route 501 would not be available at every overpass. Motorists may have to travel in the opposite direction they want to go in order to reach an overpass with access to the direction in which they want to travel. There would be no residential relocations in the Dog Bluff area, nor would any businesses or public facilities be impacted. In addition, emergency services should not be affected. Specific elderly, handicapped, non-driving, or transit-dependant populations have not been identified in Dog Bluff and would not be impacted by the alternatives.

Potential for commercial development related to the interstate could occur at the proposed interchange at U.S. Route 501 and Road S-132 (Ridge Road), adjacent to the community. However, the land use model predicted that no new

development would occur as a result of the project (refer to Section C.1, Land Use, page C-1). General growth in the area was predicted to result in 81 new acres of development with the No-build Alternative.

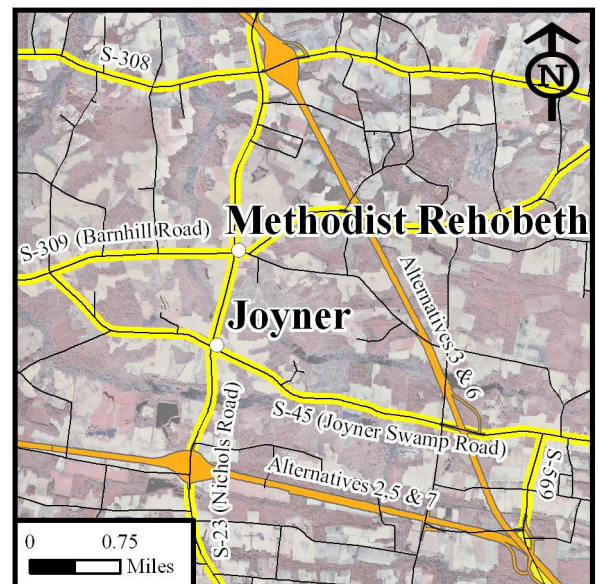
Summary of impacts

Alternatives 1, 2, 3, 4, 5, 6, 7, and 8 would have no relocations, no noise impacts, and no changes in accessibility.

**C.2.10.8 Methodist Rehobeth**

Methodist Rehobeth would be affected by Alternatives 3 and 6, which cross through the middle of the community boundary, as defined by the survey (refer to Figure C-30). The other Build Alternatives would be over four miles from Methodist Rehobeth.

Connectivity of the existing roadways in the area would remain intact and local traffic patterns would remain the same. Residential development is widely scattered throughout the area and interaction among the residents in the community should not be hindered. Overpasses at Road S-308 (McQueen Road) and Road S-309 (Barnhill Road) would maintain accessibility between Conway and Aynor, as such travel patterns would not be altered (refer to Figure C-30). Both alternatives would include an interchange at Road S-308 within the community boundary. Although there is some potential for commercial



**Figure C-30: Methodist Rehobeth**



development related to the project at the proposed interchange at Road S-308, the location is not close to any existing development, nor is infrastructure currently available. Locally-owned businesses that serve the community near the proposed interchange, like Vaught's Grocery, may have to compete with any potential development at the interchange.

Both Alternatives 3 and 6 would relocate three residences, including one house and two mobile homes within the community. No emergency services would be affected. Since the area is primarily rural and residential, construction of an interstate could affect the visual landscape and the character of the area and noise impacts could also occur. Specific elderly, handicapped, non-driving, or transit-dependant populations have not been identified in Methodist Rehobeth and would not be impacted by the alternatives (refer to Section C.1, Land Use). Although growth would be anticipated due to normal increases in population, the land use model predicted no new development in the Methodist Rehobeth community due to the No-build Alternative. In addition, no new development was predicted from any of the Build Alternatives. Therefore, no indirect or cumulative impacts are anticipated to Methodist Rehobeth.

#### Summary of impacts

Alternatives 1, 2, 4, 5, 7, and 8 would have no relocations, no noise impacts, and no changes in accessibility. Alternatives 3 and 6 would have three residential relocations, one impacted noise receiver, and no changes in accessibility.

## **C.3 ENVIRONMENTAL JUSTICE**

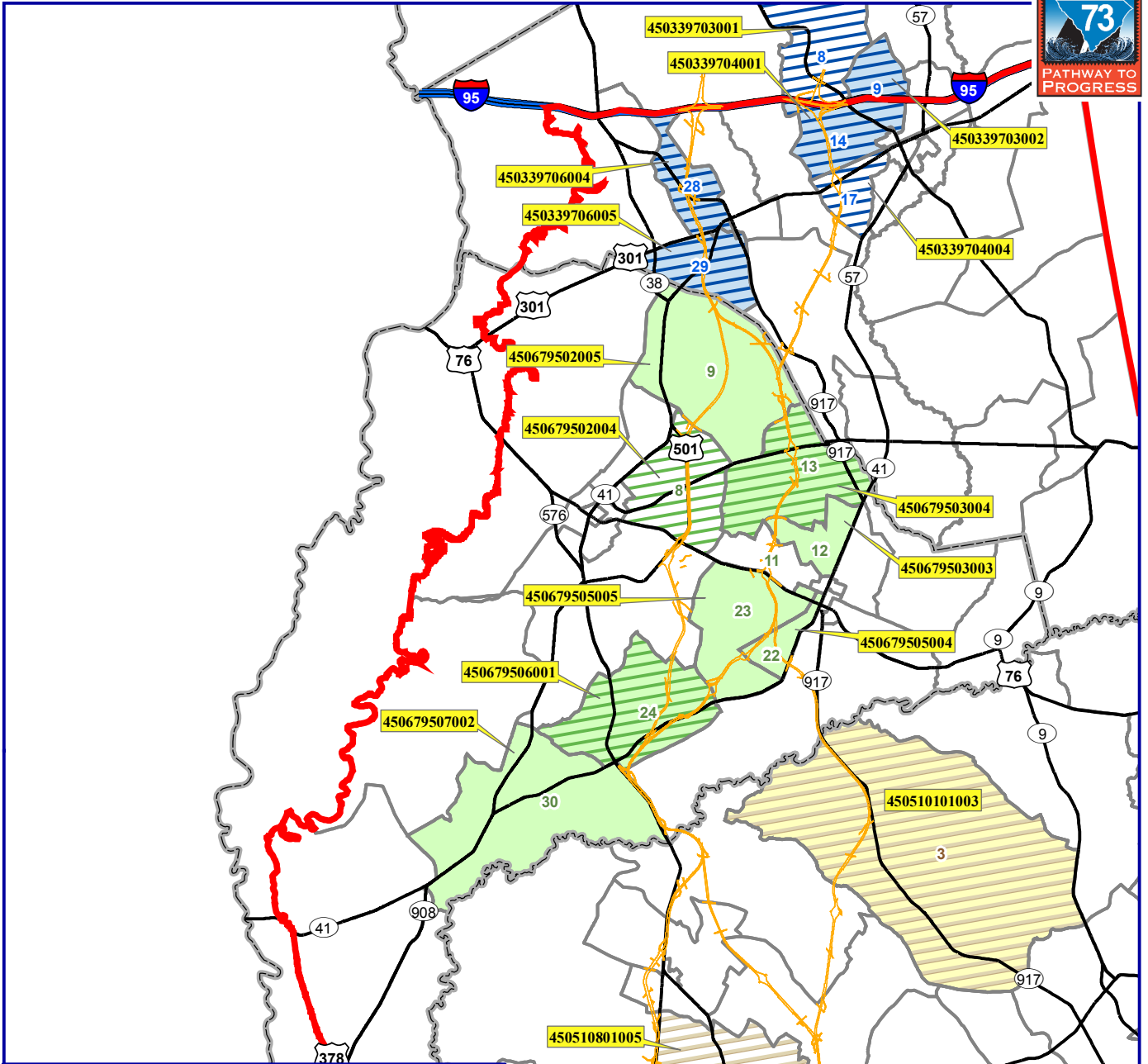
### **C.3.1 How would minority and low-income populations be impacted by the alternatives?**

The effects of the No-build Alternative on populations within the CIA study area (refer to Figure C-31) would be essentially the same for all environmental justice areas. No relocations or visual impacts would occur. However, under the no build scenario, traffic congestion on local routes would continue to increase during tourist season and local travel patterns and accessibility in environmental justice communities in the project study area could be affected. Other negative effects of the No-build Alternative could be the lack of increased development and employment opportunities for Dillon and Marion counties, along with increased traffic congestion on local roadways.

In total, there are 87 block groups in the CIA study area, of which 56 block groups meet the established thresholds for low-income and/or minority. The eight proposed alternatives pass through a total of 32 block groups (out of 87) within the CIA study area. Of these 32 block groups, 21 (66 percent) meet the established thresholds to qualify as low-income and/or minority, including six in Dillon County, ten in Marion County, and five in Horry County; this is consistent with the overall composition CIA study area (64 percent). Environmental justice populations also exist in 35 other block groups within the CIA study area that would not be affected by the proposed alternatives.

Of the 21 alternative-affected block groups that qualify as low-income and/or minority, 15 have a minority population over their respective thresholds: Dillon County has four minority population block groups, eight are in Marion County and three are in Horry County (refer to Table C.11, page C-51).





**Legend**

- Interstate
- Major Highway
- Preferred Alternative
- CIA Study Area Boundary
- County Boundary

**Minority Population:**

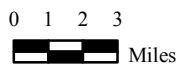
- Dillon Co.- 51%+
- Horry Co.- 26%+
- Marion Co.- 60%+

**Population Below Poverty:**

- Dillon Co.- 24%+
- Horry Co.- 18%+
- Marion Co.- 23%+

450510707033 Blockgroup ID

Note: Numbers inside the block group represent the block group's unique id relative to the county.



**FIGURE C-31**

**ENVIRONMENTAL JUSTICE BLOCK GROUPS IMPACTED BY AN ALTERNATIVE**



**Table C.11  
Block Groups Impacted by Alternative  
Interstate 73: I-95 to Myrtle Beach Region**

	<b>% minority</b>	<b>% low income</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>
<b>Dillon County</b>	<b>52%</b>	<b>24%</b>								
<b>Block Group 703001</b>	51%	<b>35%</b>		<b>X</b>				<b>X</b>		<b>X</b>
<b>Block Group 703002</b>	<b>66%</b>	<b>26%</b>		<b>X</b>				<b>X</b>		<b>X</b>
<b>Block Group 704001</b>	<b>64%</b>	<b>31%</b>		<b>X</b>				<b>X</b>		<b>X</b>
<b>Block Group 704004</b>	31%	<b>33%</b>		<b>X</b>				<b>X</b>		<b>X</b>
Block Group 706001	37%	19%	x	x	x	x	x	x	x	x
Block Group 706003	19%	16%	x		x	x	x		x	
<b>Block Group 706004</b>	<b>80%</b>	<b>33%</b>	<b>X</b>		<b>X</b>	<b>X</b>	<b>X</b>		<b>X</b>	
<b>Block Group 706005</b>	<b>65%</b>	<b>30%</b>	<b>X</b>		<b>X</b>	<b>X</b>	<b>X</b>		<b>X</b>	
Block Group 706006	19%	11%	x	x	x		x			x
<b>Marion County</b>	<b>60%</b>	<b>23%</b>								
<b>Block Group 502004</b>	48%	<b>28%</b>				<b>X</b>			<b>X</b>	
<b>Block Group 502005</b>	<b>67%</b>	22%	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>
<b>Block Group 503002</b>	56%	<b>23%</b>	<b>X</b>	<b>X</b>	<b>X</b>		<b>X</b>	<b>X</b>		<b>X</b>
<b>Block Group 503003</b>	<b>65%</b>	16%	<b>X</b>	<b>X</b>	<b>X</b>		<b>X</b>	<b>X</b>		<b>X</b>
<b>Block Group 503004</b>	<b>63%</b>	<b>27%</b>	<b>X</b>	<b>X</b>	<b>X</b>		<b>X</b>	<b>X</b>		<b>X</b>
Block Group 505002	42%	11%			x			x		
Block Group 505003	12%	14%	x	x	x	x	x	x	x	x
<b>Block Group 505004</b>	<b>63%</b>	18%	<b>X</b>	<b>X</b>	<b>X</b>		<b>X</b>	<b>X</b>		<b>X</b>
<b>Block Group 505005</b>	<b>73%</b>	21%	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>
<b>Block Group 506001</b>	<b>71%</b>	<b>24%</b>	<b>X</b>	<b>X</b>		<b>X</b>	<b>X</b>		<b>X</b>	<b>X</b>
<b>Block Group 506002</b>	<b>60%</b>	21%				<b>X</b>			<b>X</b>	
<b>Block Group 507002</b>	<b>69%</b>	17%	<b>X</b>	<b>X</b>		<b>X</b>	<b>X</b>		<b>X</b>	<b>X</b>
<b>Horry County</b>	<b>26%</b>	<b>18%</b>								
<b>Block Group 101003</b>	<b>35%</b>	<b>20%</b>			<b>X</b>			<b>X</b>		
<b>Block Group 707001</b>	11%	<b>18%</b>		<b>X</b>	<b>X</b>		<b>X</b>	<b>X</b>	<b>X</b>	
<b>Block Group 707002</b>	<b>27%</b>	6%		<b>X</b>	<b>X</b>		<b>X</b>	<b>X</b>	<b>X</b>	
<b>Block Group 707003</b>	<b>32%</b>	10%	<b>X</b>			<b>X</b>				<b>X</b>
Block Group 801001	9%	14%	x	x	x	x	x	x	x	x
Block Group 801002	11%	7%		x	x		x	x	x	
Block Group 801003	19%	14%	x	x		x	x		x	x
Block Group 801004	24%	16%	x			x			x	x
<b>Block Group 801005</b>	14%	<b>19%</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>
Block Group 802001	14%	14%	x			x			x	x
Block Group 802002	8%	6%	x			x			x	x
<b>Total number of block groups impacted per alternative</b>			21	21	19	18	20	19	20	22
<b>Total number of block groups that are minority/low-income that are impacted by alternative</b>			12	15	12	10	13	14	11	14
<b>% block groups per alternative that are EJ</b>			57%	71%	63%	56%	65%	74%	55%	64%

Bolded text signifies an area that qualifies as an EJ area.



Of the 21 block groups that were low-income and/or minority, 13 block groups were identified as low-income, including six in Dillon County, four in Marion County, and three in Horry County (refer to Table C.11, page C-51).

Of the total block groups in the CIA study area that have been characterized as low-income/minority (56), any one of the Build Alternatives would impact between 17 and 26 percent of these block groups.

Alternative 7 has the lowest percentage of minority and/or low income block groups impacted, while Alternative 6 would have the highest percentage of minority and/or low-income block groups (refer to Table C.11, page C-51). As previously stated, 64 percent of all block groups within the CIA study area qualify as environmental justice areas. The project alternatives will impact a similar percentage (within +/- 10%) of environmental justice block groups; therefore, the percentage of environmental justice census blocks impacted by the Build Alternatives would not be disproportionate when compared to the composition of the CIA study area, as a whole.

**Disproportionate impacts are defined in two ways:**

- **The impact predominately impacts a minority or low-income population group or,**
- **The impact is “more severe” than that experienced by non-minority or non-low income populations.**

### **C.3.2 What other methods were used to consider Environmental Justice populations in the CIA study area?**

#### ***C.3.2.1 Community-based Environmental Justice Study***

Due to the rural nature of the area, block groups are very large and development within the block groups can be sparse. Alternatives could pass through block groups that are considered to contain environmental justice populations, but not impact these populations or communities. It also became evident, based on field observations, community impact studies, survey data, and block level census data, that some communities that fell within low-income or minority block groups were not actually environmental justice populations. Additionally, communities were identified that have concentrations of low-income and minority populations, but did not fall within low income and/or minority block groups. For this reason, a community-based analysis of impacts was conducted to identify the location of potential adverse effects associated with the eight alternatives. Issues that were considered when evaluating the potential for environmental justice impacts included relocations, affects on community cohesion, economic impacts, access and mobility issues, noise impacts, change of visual character, and impacts to parks and community facilities.

In general, comments and surveys received from environmental justice communities within Dillon and Marion Counties, expressed support for the project being built in their communities, in hopes that it would bring economic development. Horry County respondents were consistently opposed to the project. This played an important part in establishing whether effects on the communities of concern were positive or negative, as well as determining the magnitude of the potential impacts.





**C.3.2.2 Residential Displacements**

Based on studies conducted during development of the DEIS, areas with known concentrations of environmental justice populations were identified. Concerted efforts were made to shift and modify alignments to avoid or minimize impacts to these communities, including low-income and minority areas such as Mullins, Latta, Dillon, Cool Spring, Zion and Emanuelville. Many times, alignments may be shifted from known environmental justice areas to adjacent, more diverse areas to avoid relocations and direct impacts to these communities and environmental justice populations contained within. Some impacts would still occur in these areas.

For the purpose of the community-based study, relocations that fell within both environmental justice block groups and community boundaries, as defined by the survey were included in Table C.12. Total environmental justice relocations were tallied for each of the Build Alternatives.

Relocations in Table C.12 fall within communities within block groups that have been identified as having environmental justice populations. However, it is unknown at this time if individual relocations are in fact low-income and/or minority impacts. A conceptual relocation study will be conducted for the Preferred Alternative to confirm relocation impacts on environmental justice communities. Based on field studies and observations, there appears to be either housing and/or land available for the displaced to relocate within the affected communities.

Overall, the pattern of residential displacements is evenly dispersed throughout populations along the alternatives and relocations located within minority or low-income populations did not constitute a disproportionately high and adverse effect on any single community. Other non-environmental justice

<b>Table C.12 Community and Block Group Relocations Interstate 73: I-95 to Myrtle Beach Region</b>										
	<b>Community</b>	<b>Residential Relocations</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>
<b>Dillon County</b>										
Block 704004	Dillon	1		x				x		x
Block 706004	Latta	10	x		x	x	x		x	
<b>Horry County</b>										
Block 801005	Aynor	2		x			x		x	
<b>Marion County</b>										
Block 503002	Mullins	9	x	x	x		x	x		x
Block 503003	Mullins	1	x	x	x		x	x		x
Block 505005	Mullins	8	x	x	x		x	x		x
Block 505004	Mullins	10	x	x			x			x
Block 505004	Gapway	3	x	x			x			x
Block 505005	Gapway	4	x	x			x			x
Block 503004	Zion	9	x	x	x		x	x		x
Block 506001	Rains	1	x	x			x			x
Block 506002	Marion	2				x			x	



communities would experience similar relocation effects and no particular community would bear a disproportionate portion of the relocations.

### ***C.3.2.3 Community Cohesion***

Community cohesion is reduced when neighborhoods are divided or relocations reduce the number of residences in a community. As discussed in the community impact section, loss of community cohesion could occur with the construction of the proposed project. However, only one community (Aynor) with environmental justice populations in the CIA study area may experience more than minimal impacts to cohesion, depending on which alternative is selected. Non-minority and non-low income communities could also experience similar impacts to community cohesion and therefore, environmental justice populations would not bear a disproportionate impact. For additional discussion on community cohesion, refer to the *Community Impact Analysis Technical Memorandum*.

### ***C.3.2.4 Economic Impacts***

The population of the CIA study area would be expected to benefit from economic opportunities resulting from the project. Economic benefits could be beneficial to low-income populations in terms of more jobs and business development opportunities.

Specific communities within the CIA study area have expressed support for the project and the potential economic opportunities that it could bring to their communities. These communities include Dillon (including New Town), Latta, Mullins, Marion, Spring Branch, Dog Bluff, and Rains.

Individually, no one environmental effect would cause a disproportionate high and adverse economic effect on any one environmental justice population area. Other non-environmental justice areas would experience similar beneficial and adverse effects. For additional discussion on economic impacts, refer to Chapter 2, Section 2.5 of the Draft EIS.

### ***C.3.2.5 Access and Mobility***

Each of the Build Alternatives could cause changes in local access and mobility in individual communities throughout the CIA study area. Therefore, environmental justice populations would not suffer a disproportionate impact from the changes. For additional discussion on impacts to access and mobility, refer to the *Community Impact Analysis Technical Memorandum*.

### ***C.3.2.6 Noise***

All Build Alternatives have the potential to introduce traffic noise into neighborhoods, and there are multiple neighborhoods along each alternative that would experience noise levels above the existing conditions. Noise impacts appear to be distributed throughout the CIA study area; therefore, environmental justice populations would not experience disproportionate impacts.



### ***C.3.2.7 Visual and Aesthetic Character***

As discussed in the Community Impacts section, the alternatives would have the potential to change the visual environment of environmental justice communities. The effect in view and/or character depends on the existing characteristics of the area, the distance between homes and the road, and whether the facility is at-grade, contains an elevated overpass, and/or interchange. There are several areas where the Build Alternatives may alter the visual elements of environmental justice communities, including Zion, Aynor, Latta, and Emanuelville. However, non-minority and non-low income communities would also experience similar impacts to their visual and aesthetic character and therefore, environmental justice populations would not bear a disproportionate impact. For additional discussion on anticipated changes to visual and aesthetic character, refer to the *Community Impact Analysis Technical Memorandum*.

### ***C.3.2.8 Parks and Community Facilities***

No public parks or public facilities in the environmental justice communities would be impacted by the Build Alternatives. One church in Emanuelville could be relocated depending on what alternative is chosen as the Preferred Alternative.

## **C.3.3 What efforts have been made to ensure full and fair participation of environmental justice populations in the transportation decision-making process?**

In order to engage and provide for the full and fair participation of potentially affected environmental justice communities, the following strategies were implemented:

- Public information meetings were held in each of the three counties, and advertised in the local newspapers and on television;
- Stakeholder meetings were held and included local leaders and NAACP representatives;
- Project website and toll-free hotline, which could be accessed at any time to learn the status of the project and information on times and locations of meetings;
- Outreach and coordination with community ministers and leaders to facilitate contact with locals;
- Church meetings were attended to provide project information, answer questions, hear local concerns and distribute community surveys;
- Customized public involvement techniques to local populations – visits to local convenience stores and gas stations;
- Distributed community surveys through various methods to ensure full participation of all populations, including school surveys, mail surveys, door-to-door survey distribution and/or interviews.

There will be a continual commitment to providing full and fair access to information throughout the project development process, including information of the design and construction phases, by:

- Local/county public hearings;
- Advertisement of hearings in local media (public service announcements, newspapers, etc.);
- Continuing stakeholder meetings;





- Updated information posted on websites; and,
- Project newsletters.

### C.3.4 Summary

In general, it has been determined that all areas that contain environmental justice populations would experience beneficial and adverse effects similar to those of the overall CIA study area population. No environmental justice populations would bear a disproportionate impact from the project.

Avoidance and minimization of impacts to environmental justice and other communities has occurred throughout the development of the Build Alternatives. Project engineers adjusted the alignments of the eight alternatives to avoid municipal boundaries or dense residential areas. Beyond these initial efforts of impact avoidance, the proposed alignments were further shifted and “tweaked” to minimize relocations, community disruptions, and impacts to accessibility. Efforts to avoid any disproportionate impacts to environmental justice communities will continue through the refinement of the Preferred Alternative.

Mitigation opportunities may exist for impacts to low-income and/or minority communities in the project study area. Specific options for mitigating impacts of the Preferred Alternative on environmental justice communities will be explored further during public involvement and studied for the Final EIS.

## C.4 SECTION 4(f) RESOURCES

### C.4.1 Would the alternatives impact parks and recreational facilities under Section 4(f)?

Under the No-build Alternative, no parks or recreational areas would be impacted by the project. In addition, Alternatives 2, 5, and 7 would have no impacts to parks or recreational areas in the project study area (refer to Table C.13).

Alternatives 1, 4, and 8 would impact property with the ball fields at Aynor High School. Aynor High School’s fields are open to the public after school and are sometimes used by the

public during school for special events, which qualifies them for consideration under Section 4(f).

Alternatives 3 and 6 would impact the Vaughn Tract of the Little Pee Dee Heritage Preserve. Approximately 30 acres of the preserve would be taken to construct a crossing of the Little Pee Dee River that would be parallel to the existing S.C. Route 917 crossing. Access to the preserve would be maintained; however, recreational activities may be temporarily disrupted due to construction. Mitigation would occur for the impacted

<b>Alternative</b>	<b>Resource Name</b>	<b>Type of Use</b>
1	Aynor Ball Fields	Use
2	None	None
3	Little Pee Dee Heritage Preserve	Direct Use
4	Aynor Ball Fields	Use
5	None	None
6	Little Pee Dee Heritage Preserve	Direct Use
7	None	None
8	Aynor Ball Fields	Direct Use



property. This would include locating and purchasing compensatory acreage, which would be done in coordination with SCDNR through a Memorandum of Agreement prior to issuance of the Record of Decision.

There is not anticipated to be indirect or cumulative impacts to parks and recreational spaces as there would be no additional or reduced access to the facilities within the project study area.

**C.4.2 What are the potential impacts to historic resources under Section 4(f)?**

Table C.14 lists the historic resources that may be impacted under Section 4(f). Alternatives 1, 2, 3, 5, 6, and 8 would have no impacts to historic properties under Section 4(f) while Alternatives 4 and 7 would potentially have a direct use impact to Archaeological Site 38MA0126 since the alternatives traverse a portion of the site.

<b>Alternative</b>	<b>Site Number/Resource Name</b>	<b>Type of Use</b>
1	None	None
2	None	None
3	None	None
4	38MA0126	Direct Use
5	None	None
6	None	None
7	38MA0126	Direct Use
8	None	None

**C.5 SECTION 6(f) RESOURCES**

All the alternatives avoid Section 6(f) resources, therefore no impacts are anticipated.

**C.6 HISTORIC RESOURCES**

**C.6.1 What would be the potential impacts to historic resources?**

A historic resource was considered directly impacted if it was partially or completely located within an alternative’s right-of-way. A visual impact occurs when the project can be seen from the historic resource. Each alternative’s 400-foot right-of-way was buffered by 300 feet on both sides and examined to determine other potential impacts on historic resources. Other impacts may occur to resources located outside of the right-of-way, including lack of access to the resource, a change in the resource’s setting, or indirect and cumulative impacts.

The No-build Alternative would not affect any known historic resources. Table C.15 (refer to page C-58) shows what sites would potentially be impacted by each alternative and what type of impact would be anticipated. Figure C-32 (refer to page C-59) shows where the historic resources are located, with the exception of the archaeological resources. (Archaeological resources are not shown for their protection.)

Alternatives 1, 2, 5, 7, and 8 have the potential to cause a visual impact to the James Thomas and Fanny Edwards Gaskin Homestead Complex. The Gaskin Homestead Complex is a part of the Galivants Ferry Historic District, and is a circa 1907 farmstead containing a farmhouse and associated outbuildings plus surrounding agricultural land. Galivants Ferry Historic District is historically significant to local and state history



**Table C.15**  
**Potential Impacts to Historic Resources under Section 106**  
**Interstate 73: I-95 to the Myrtle Beach Region**

Impacted Site	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Gaskin Complex/ Galivants Ferry Historic District	Visual	Visual			Visual		Visual	Visual
Bethea Historic District		Visual				Visual		Visual
Ketchuptown Store			Visual			Visual		
Archaeological Site 38MA0126				Direct			Direct	
<b>Total Impacted Sites</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>2</b>

and is representative of the agricultural history of the area. In addition, for over 100 years, candidates of the State’s Democratic Party have spoken in an area near the general store in what is known as “The Stump” gathering, which is now the beginning of the local Democratic campaign season.

Alternatives 2, 6, and 8 would potentially have a visual impact to the agricultural lands of the Bethea Historic District. The Bethea Historic District is a collection of plantations belonging to the Bethea family, and includes three historic homes, tenant houses, farm outbuildings, and surrounding agricultural lands. Alfred W. Bethea was an important person in state and regional history as a signatory of South Carolina’s Ordinance of Secession, in which South Carolina repealed the U.S. Constitution and removed itself from the Union prior to the start of the Civil War.

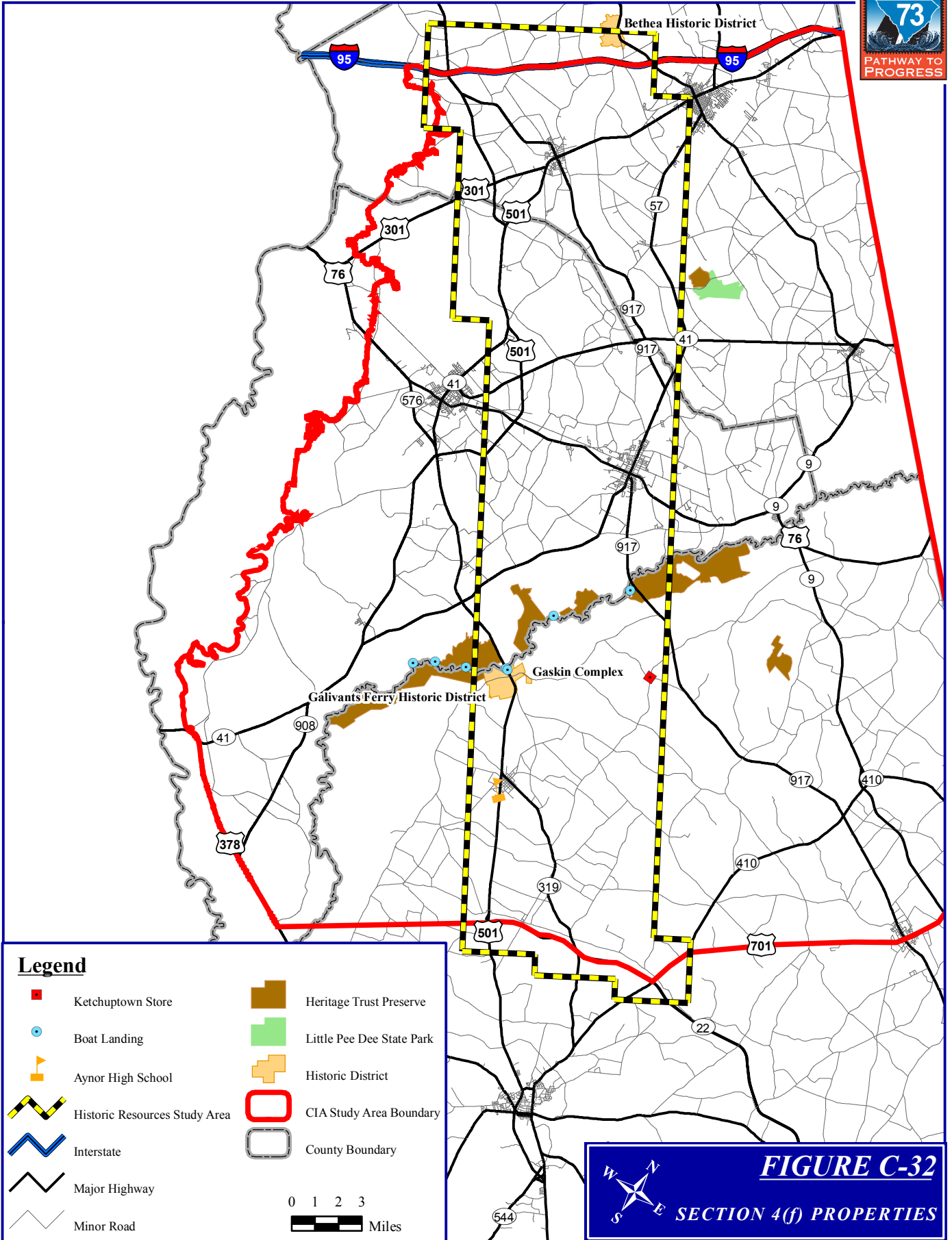
Alternatives 3 and 6 would have a potential visual impact to the Ketchuptown store. It was constructed in 1927 and became the gathering point for local farmers in the area west of Lake Swamp in Horry County and now is the community center and a museum.

Alternatives 4 and 7 would potentially have a direct impact to a portion of an archaeological site containing artifacts of the Woodland and 19<sup>th</sup> century periods located in the Marion area. This site is potentially eligible and is currently pending further evaluation by SHPO.

There may be potentially eligible archeological resources currently unknown in the historic resources study area, which could be affected by future development. Negative indirect and cumulative effects may occur in the vicinity of an alternative, particularly in the area of interchanges, due to future development that may be of a commercial, residential, or industrial nature. This is due to the lack of historic resource investigations required when a private company or individual develops a tract of land.

Induced development near aboveground historical resources could diminish the rural setting that contributes to the historical significance and may lead to physical destruction of sites. Based on predicted land use modeling, the potential for development in relation to Alternatives 1, 2, 4, 5, 7, and 8 exists in the vicinity of Galivants Ferry Historic District, primarily along U.S. Route 501 in that area (refer to Figure C-32). Potential for development also exists in the vicinity of the Bethea Historic District in relation to Alternatives 2, 6, and 8. However, development is limited at the interchange of I-95 and I-73 due to controlled access. Limited development is predicted to occur at the interchange of S.C. Route 9 and I-95 for all the Build Alternatives.





**FIGURE C-32**  
SECTION 4(f) PROPERTIES