



## CHAPTER 3. EXISTING CONDITIONS AND ENVIRONMENTAL CONSEQUENCES

This chapter provides a description of the current conditions in the project study area, an estimation of reasonably foreseeable future changes, an evaluation of past effects, and a description of impacts and benefits that could be expected for the human and natural environment, with and without the proposed project.

### Human Environment

The human environment can be defined as a set of natural, social, and cultural values that exist in a given place. The human environment for the proposed project includes at least 23 separate communities that have been identified between I-95 and S.C. Route 22 where new location construction could occur. Evaluation of the human environment includes features such as land use, socioeconomics, and community impacts.

#### **What is the Human Environment?**

**The CEQ states that “human environment shall be interpreted comprehensively to include the natural and physical environment and the relationship of people with that environment.” – 40 CFR §1508.14**

### **3.1 What is the existing land use in the project study area?**

The project study area is comprised of roughly 942,000 acres. The land use study area (refer to Figure 3-1) was evaluated, most of which is rural in character, and is dotted with small towns and cities such as Marion, Mullins, and Aynor, as well as small communities such as Zion and Floydale. Agriculture comprises 31.8 percent of the land use, with natural areas comprising 62.0 percent.<sup>40</sup> Uses typically associated with urban or suburban development including residential, commercial, and industrial activity comprise only 5.3 percent of the project study area.

Development activity in the project study area is primarily new construction on single, small lots, mainly taking place near small cities and towns. As the value of land continues to increase, it is expected that additional property owners would take advantage of the opportunity to split parcels and sell land for development, particularly those who are in closer proximity to Myrtle Beach.

Planning and development regulations are limited in the project study area, which is typical for rural municipalities and counties. All three counties completed comprehensive plans between 1999 and 2002. Horry County is in the process of preparing Envision 2025, which will update its comprehensive plan. Marion County is preparing for a series of updates to its plan, while Dillon County has not yet started updating its plan. Marion and Horry Counties have developed zoning, while Dillon County is in the process of establishing zoning.

<sup>40</sup> USFWS. National Wetlands Inventory. <http://www.fws.gov/nwi> Last accessed April 27, 2006.



### 3.1.1 What is the agricultural land use in the project study area?

Agricultural land uses, which include farms, ranches, and croplands, comprise a large portion of the project study area. The three-county area has a rich history of agricultural use and is still a vital part to the rural area. More information about farmlands can be found in Section 3.14, page 3-17.



Land use categories used in analysis of existing conditions were extracted from NWI mapping. Natural land areas include:

Deciduous Upland Forest,  
Evergreen Upland Forest,  
Forested Wetland,  
Herbaceous Rangeland,  
Mixed Barren Land,  
Mixed Upland Forest,  
Non-forested Wetland,  
Sandy Area,  
Shrub/Brush Rangeland,  
Transitional Areas,  
Upland, and  
Upland Planted Pine.

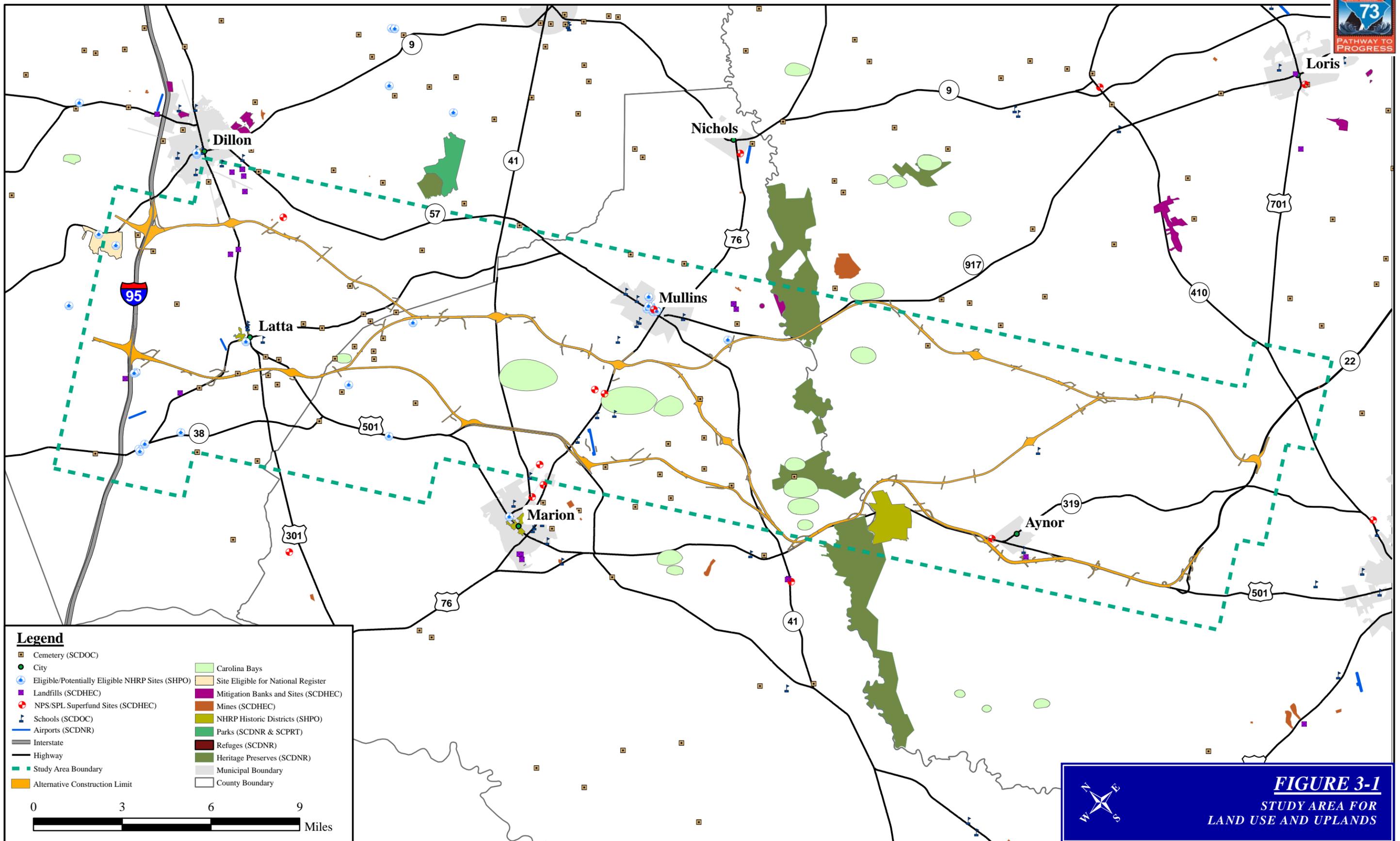
### 3.1.2 How many natural land areas are in the project study area?

Natural land areas comprise roughly 62 percent of the project study area, 63 percent including open water. In total, approximately 584,000 acres in the project study area are made up of upland forests, wetlands, rangelands, and other natural areas. These areas comprise the majority of the project study area in all three counties, with Horry County having 65.2 percent, Marion County having 61.3 percent, and Dillon County having 55.2 percent as natural areas. Dillon County has a lower percent of natural areas as more land is being used for agricultural and mining activities.

### 3.1.3 What is the residential land use like in the project study area?

According to the 2000 U.S. Census, 54,850 housing units were located in the project study area. While 9,096 housing units are located in town limits, the majority are located in the surrounding areas or spread throughout the countryside, particularly in Horry County. More than one-third of all units in the Dillon and Marion County portions of the project study area (32.5 and 42.7 percent, respectively) are located in the municipalities of Latta, Dillon, Marion, and Mullins. In the rural, unincorporated portions of the project study area, there are relatively few homes located in subdivisions or neighborhoods. Rather, rural housing appears to be mostly linear development along county or state roadways as farmers choose to sell “strip lots” for development, particularly as the value of property continues to increase.

Of the housing units in the project study area, approximately 59.0 percent are single family homes. Mobile homes or manufactured housing makes up 31.4 percent of housing units, while less than 10





percent of all housing is multi-family structures such as duplexes or apartments. The breakdown of housing types is fairly similar throughout the project study area. The highest percentage of single family homes and lowest percentage of mobile homes are located in Marion County (63.8 and 28.3 percent, respectively) while the highest percentage of multi-family housing is located in Horry County (10.7 percent).

Approximately 34,783 acres of existing land uses are categorized as residential, which makes up only 3.4 percent of the total land area. Residential activity represents roughly 3.6 percent of the acreage within Horry County, while housing represents 3.4 percent of land use in Marion County. In comparison, only 2.7 percent of the portion of the project study area within Dillon County is comprised of residential development. In all cases, the extremely small percentage of land used for housing is reflective of the rural character of the area.

### *3.1.4 What is commercial land use like in the project study area?*

Approximately 7,638 acres within the project study area are used for commercial activity, including hotel/motel space, industrial, institutional, public, and semi-public uses. Substantial commercial activity occurs within or near the municipalities of Aynor, Dillon, Latta, Marion, and Mullins. Each includes a downtown that accommodates commercial retail, service, and office uses. At the same time, commercial nodes and “strip development” have gradually developed, most noticeably along S.C. Route 9 between downtown Dillon and the interchange with Interstate 95. National hotel and restaurant chains have located along the interchange with the intent to capture clientele from interstate, as well as local traffic. Additional development appears to be gradually occurring along U.S. Route 501, particularly as it passes through Aynor, Latta, Marion, and Dillon. In addition, U.S. Route 76 has become a commercial corridor between Marion and Mullins due to the availability of public water and sewer infrastructure.

Approximately 1,660 commercial establishments occur in the project study area.<sup>41</sup> A majority of uses are “daily service” activities that provide services for area residents and employees rather than tourists or commuters. Among the uses considered commercial, approximately 36 percent would be considered retail activities such as restaurants, department stores, and landscaping nurseries. An additional 20 percent serves as offices for professionals such as dentists, doctors, lawyers, and engineers. The remaining 44 percent is considered to be “general” commercial activity such as an automobile repair shop or a beauty salon.

#### *Hotel/Motel*

The land use study area includes 22 establishments dedicated to lodging. Uses range from nationally recognized hotels to parks set aside for recreational vehicles. Of the eight national chain hotels found in the land use study area, seven are located in Dillon along S.C. Route 9 (Radford Boulevard) near the interchange with Interstate 95. The majority of remaining accommodations are located in Mullins and Marion. Two bed and breakfasts are located in the land use study area, one in Latta and the other in Marion.

<sup>41</sup> Claritas Research. <http://www.claritas.com/claritas/Default.jsp> Last accessed April 27, 2006.



### ***Industrial***

Activities in the land use study area related to industry comprise only 1,204 acres, roughly 0.12 percent of the total land area. Of the total industrial area available, approximately 46 percent is located within Marion County. Although Horry County accounts for more than half of the total land within the land use study area, the county accounts for only 273 industrial acres.

As stated on their website, the South Carolina Power Team includes the state's electric cooperatives and Santee Cooper, the state-owned electric & water utility. The Power Team is the only statewide electric utility and the largest electric power system in the state. Information available from the South Carolina Power Team indicates that industrial parks in the area include the I-95 Gateway Industrial Park, a 400-acre park located adjacent to Interstate 95, and Marion County Industrial Park, which is a 276-acre park along U.S. Route 501 outside of Marion.<sup>42</sup> Other parks and sites are sporadically located throughout the land use study area, such as Cool Spring Business Park, a site located near U.S. Route 501 and S.C. Route 319.

The I-95 Gateway Industrial Park is home to Harbor Freight Tools. Four businesses are currently located in the Marion County Industrial Park. Several additional industries are located throughout the land use study area, although the majority are located in proximity of towns such as Mullins and Marion. Industrial development in the Marion area could increase dramatically if plans to complete an inland port in Marion County become a reality. Specifically, the county is seeking to develop an inland port in proximity to an interstate, railroad, and U.S. Route 301 that would offer a staging area for incoming goods. In addition to the industrial facilities, the port is proposed to include an airport that could further enhance the viability of the project. In total, the inland port and airport would be expected to occupy over 17,000 acres.

### ***Institutional***

Numerous churches, nonprofit organizations, fraternal organizations, child care services, nursing homes and other institutional organizations, roughly 320 in all, are scattered throughout the land use study area. The majority of institutional establishments, as expected, are located in or near the municipalities, specifically Dillon, Marion, and Mullins. A total of 225 churches and other religious organizations are located throughout the land use study area, as well as 34 child care centers and nine nursing homes and other facilities serving the elderly. Health care facilities include Marion County Medical Center in Mullins and St. Eugene Medical Center in Dillon.

### ***Public & Semi-Public***

Land use information indicates 288 establishments in the land use study area that are considered public or semi-public such as schools, government offices, utilities, post offices, libraries, courts, and police stations. The cities of Dillon, Conway, and Marion serve as the county seats of Dillon, Horry, and Marion Counties, respectively, thus each includes numerous county offices and activities.

<sup>42</sup> South Carolina Power Team. "Northeast South Carolina Region Industrial Parks & Buildings" [http://www.scpowerteam.com/Region\\_95\\_North.asp](http://www.scpowerteam.com/Region_95_North.asp) Last accessed April 27, 2006.



Dillon County is served by three public school districts. District 1 encompasses the Lake View area of Dillon County, while District 2 primarily serves the city of Dillon with District 3 serving Latta and its surrounding communities. A unique public school offering is District 3's Latta Early Childhood Center. In addition, Dillon County has two private schools.

Marion County has three school districts (Districts 1, 2, and 7). District 1 serves the city of Marion, while Districts 2 and 7 encompass the city of Mullins and town of Rains and their surrounding communities, respectively. Marion County also has two private schools.

Horry County has one school district consisting of nine attendance areas that serves Aynor, Conway, Myrtle Beach, North Myrtle Beach and its surrounding communities. Unique public school offerings include the following: The Academy for Technology and Academics, Aynor-Conway Career Center, and the Academy for Arts/Science/Technology. Horry County also has 15 private schools. The project study area has one 4-year college, Coastal Carolina University located in Horry County. This institution offers undergraduate and some graduate-level programs.

### ***3.1.5 Do the affected counties have plans for development and future growth?***

As previously mentioned, all three counties in the project study area have comprehensive plans, which were last completed or updated between 1999 and 2002. Although the date of completion, level of detail, and composition differs, each of the plans does the following:

- examines trends and issues;
- recommends goals, objectives or other policies to guide growth; and,
- estimates the population growth and resulting expansion of land uses.

Each discussion below covers the entire county, including areas of the county beyond the project study area.

#### ***Dillon County Comprehensive Plan***

The Dillon County Comprehensive Plan estimates the historic decline in population will eventually be replaced with limited growth, so that by 2020 the total population of the county will have grown by 2,400 persons. Using an adjusted standard (which can be found in the plan), the plan estimated that 28 acres of new land would be developed for every 100 new residents. Based on population forecasts, this would total 672 acres of new development by 2020. Specifically, the 672 acres would consist of 360 acres of new residential development, 72 acres each of commercial and industrial space, and 168 acres of public and semi-public space.



The Future Land Use Plan for Dillon County forecasts new residential development to occur along major corridors surrounding Latta and Dillon with limited additional “leapfrog” activity. “Leapfrog” development is the process of new development moving away from existing development and into natural or agricultural areas. Commercial and industrial development is expected along U.S. Route 501 and Interstate 95.<sup>43</sup>

#### *Horry County Comprehensive Plan*

An update of the comprehensive plan, known as Envision 2025, is currently underway. The current plan proposes an urban service area where the vast majority of new development activity is expected. The urban service area was proposed to surround the City of Conway and extend as a band roughly eight to ten miles inland from the coast. The urban service area encompasses a land area at least five times as large as the land area now included in developed urban areas. All of the land area included in the project study area was designated as a rural service area where no development of substantial size is expected.

In the unincorporated areas of Horry County, the comprehensive plan anticipates an additional 60,304 acres of new development needed to meet 2020 population projections.<sup>44</sup>

#### *Marion County Comprehensive Plan*

The Marion County Comprehensive Plan projects an increase of 3,901 persons in the county by 2015. The plan forecasts the need for 34 acres of development for each 100 new residents, which results in the need for 1,330 acres of new development. This new development would consist of 825 acres of residential activity, 40 acres of commercial, 319 acres for industrial or business use, and 146 acres of public space.<sup>45</sup>

The Marion County Comprehensive Plan does not include a Future Land Use Plan, but the county is preparing series of sector plans designed to address land use and update planning issues on a smaller scale. Sector plans are expected to be completed by priority beginning with the section of U.S. Route 501 that bypasses Marion.

#### *Zoning*

Dillon County currently has no zoning according to a 2004 survey conducted by the South Carolina Association of Counties, but the county is coordinating with the Pee Dee Regional Council of Governments to create new zoning regulations. A draft ordinance is currently available for review; however, no map has been developed that would locate districts within the project study area. The draft ordinance proposes establishment of 13 districts, four of which function as overlay districts to address special situations such as flood protection, agricultural conservation, and the airport. It is likely that each of the base districts and most of the overlays will be applied within the project study area to some extent.

<sup>43</sup> Dillon County, South Carolina. Dillon County Comprehensive Plan: 2001. p. 41.

<sup>44</sup> Horry County, South Carolina. Horry County Comprehensive Plan: 1999. pp. VII-16.

<sup>45</sup> Marion County, South Carolina. Marion County Comprehensive Plan: 1999. p. 7-6.



In 2001, Horry County applied new zoning districts to rural sites within its jurisdiction, including the rural portions of the county that are located within the project study area. The revised districts for the project study area include Limited Forest Agriculture, Forest Agriculture, and Commercial Forest Agriculture. Of the three, Commercial Forest Agriculture provides the most intense and diverse use, including the incorporation of commercial activities outside of agriculture. In the process of establishing new districts, residents along the U.S. Route 501 corridor requested Commercial Forest Agriculture zoning to reflect the possibility that the area could develop commercially over time.<sup>46</sup>

Since the 2004 Association of Counties' survey, Marion County has established a zoning ordinance that divides the county into five districts: General Development, Industrial Development, Residential Conservation, Residential Multi-use, and Rural Resource. Currently, all land within the county is zoned General Development; however, an effort is expected to begin in the near future to update plans for development in the county that will result in recommendations for potential changes to zoning. The General Development District permits all uses, but utilizes a "performance-based" system designed to alleviate impacts between adjacent uses that may create incompatibility.

#### *What are trends and key indicators?*

The following are general trends or other important indicators of future land use within the land use study area. Trends and indicators were compiled from a variety of sources including the comprehensive plans for the three counties within the project study area and examination of historic aerial imagery. Some trends have evolved that were not expected in the comprehensive plans. For example, the plan for Dillon County anticipated a continuing trend of population loss that would only be overcome in the year 2020; however, the most recent projections by the South Carolina Office of Research and Statistics indicate that the county's population has already assumed positive growth.<sup>47</sup> Other information includes:

- Historic aerial photography supports the trend that growth in the project study area occurs in the existing communities, supplemented with slow encroachment of development activity into the natural areas and farmland.
- Examination of aerial photography and site visits indicate a series of locations exhibiting growth and that are most likely to receive additional residential and commercial development including U.S. Route 501, particularly in proximity of Aynor, Marion, Latta, and Dillon; U.S. Route 76 between Marion and Mullins; and the Interstate 95 corridor in proximity to Dillon.

<sup>46</sup> Pers. Comm. James Bischof, Principal Planner, Horry County Planning Department. February 27, 2006.

<sup>47</sup> State of South Carolina, Budget and Control Board, Office of Research & Statistics. South Carolina Populations Reports: "County Population Projections: 2005-2030." <http://www.ors2.state.sc.us/population/projections.asp> Last accessed April 27, 2006.



- Dillon and Marion counties are not expecting exponential growth through the year 2030. However, Horry County as a whole is expected to grow substantially. The Office of Research and Statistics indicates that the Dillon County population will increase by less than 430 people while Marion County will grow by nearly 1,880. In comparison, Horry County is expected to grow by more than 138,690 (an increase of more than 70 percent).
- “Leapfrog” development is anticipated throughout the project study area according to the various county comprehensive plans. This trend was validated during site visits.
- As noted in the Dillon Comprehensive Plan, the land most attractive to development will be sites that “(1) ha[ve] soils that can easily support development; (2) [are] not subject to flooding; (3) [are] near major transportation routes; (4) [are] served by water and perhaps sewer, or [are] capable of being served; and (5) [are] cleared.” As further noted, “this description of prime development land often also describes prime agricultural land and/or existing farmland adjacent to municipalities.”
- According to the Dillon Comprehensive Plan, growth in Dillon County has, to a limited degree, shifted toward I-95 to capture interstate traffic in addition to local traffic. This is most notable around Dillon where national chain hotels and restaurants have located near the intersection between S.C. Route 9 and the interstate. The I-95 Gateway Industrial Park is an additional example of the increased intent to take economic advantage of access to a major roadway.
- The Horry County Comprehensive Plan states that the “availability of community facilities and services such as roads, water and sewer, schools, social and cultural institutions, libraries, and fire and police” make a site more attractive for development.

### ***3.1.6 How is land use expected to change in the project study area?***

In regards to land development, change is anticipated. Even in areas where no population growth is anticipated, new homes and businesses appear as part of the continuing evolution of communities. Growth is expected in Dillon, Horry, and Marion Counties, so it is certain that land in the three counties will develop, regardless of a new interstate. The population in the three counties is projected to grow by nearly 54 percent between 2000 and 2030<sup>48</sup> (Table 3.1, page 3-10), with the vast majority of population growth (138,700 of 141,000 persons) expected to occur in Horry County. The addition of a new interstate is very likely to increase and alter the growth patterns expected in the three-county area.

### ***3.1.7 How would the No-build Alternative affect land development?***

The No-build Alternative considers the amount of land to be developed as well as the location of development if existing conditions prevail and population increases to the extent projected by the Office of Research and Statistics for the State of South Carolina. Both the amount of new development and its location are important in establishing a baseline upon which to consider the impact of the proposed project. The affect of the No-build Alternative on land development was established by:

<sup>48</sup> State of South Carolina, Budget and Control Board, Office of Research & Statistics, “County Population Projections: 2005-2030”, South Carolina Population Reports <http://www.ors2.state.sc.us/population/proj2030.asp>.



**Table 3.1**  
**Projected Population Growth by County, 2000 to 2030**  
**Interstate 73: I-95 to the Myrtle Beach Region**

County	Population		Change, 2000 to 2030	
	2000	2030	Number	Percentage
Dillon	30,722	31,150	428	1.39%
Marion	35,466	37,340	1,874	5.28%
Horry	196,629	335,320	138,691	70.53%
<b>Total</b>	<b>262,817</b>	<b>403,810</b>	<b>140,993</b>	<b>53.65%</b>
State	4,012,012	5,371,150	1,359,138	33.88%

1. Dividing the projected population for each county into smaller Traffic Analysis Zones (TAZs);
2. Projecting population growth to 2030 by TAZ;
3. Projecting housing and employment growth by TAZ at a rate similar to population growth; and,
4. Projecting land use requirements based upon anticipated population, housing, and employment growth.

**Traffic Analysis Zones (TAZ)** define geographic areas (similar to Census block group) which are used to relate travel demand to socioeconomic characteristics.

Population growth in the three-county area of approximately 140,993 persons is projected to result in approximately 30,800 acres of new development including new homes, businesses, industries, and civic facilities such as schools and government buildings (Table 3.2). As expected, the majority of new development will likely occur in Horry County where the majority of population is expected to reside.

**Table 3.2**  
**No-build Alternative, Summary of Land Use Requirements, by Acres**  
**Interstate 73: I-95 to the Myrtle Beach Region**

County	Residential			Commercial				Public & Semi Public	Total in acres
	Single Family	Multi-family	Mobile Home	Industrial/ Manufacturing	Hotel and Entertainment	Retail	Office		
Dillon	51	1	17	10	1	1	1	1	82
Marion	245	5	68	43	2	4	3	5	374
Horry	19,369	1,998	4,971	2,182	546	505	431	347	30,349
<b>Total</b>	<b>19,664</b>	<b>2,004</b>	<b>5,056</b>	<b>2,235</b>	<b>548</b>	<b>510</b>	<b>435</b>	<b>353</b>	<b>30,805</b>



### *Dillon County*

As the county farthest from the Grand Strand, Dillon County is expected to grow the least of the three counties despite the fact that it is the only county with immediate access to an interstate (I-95). Between 2000 and 2030, new non-agricultural land development in Dillon County is expected to grow by almost 82 acres. While the limited growth is expected to occur throughout the county, most of it is likely to occur near the communities of Dillon and Latta (Table 3.3, page 3-12).

Characteristics of growth in Dillon County will likely include growth occurring closer to communities, but not necessarily within municipal boundaries. There will be a limited and continued drift of growth towards I-95 and other roadways that offer quick access to I-95. In addition, strip lot residential development of agricultural and forested lands is expected to continue to be more prominent than residential development of subdivisions in the county.

### *Marion County*

Marion County is expected to have more development than Dillon County. Of the 374 acres of anticipated growth in the county, roughly 88 percent is expected to occur in areas surrounding the communities of Marion and Mullins. Both communities benefit from the ability to provide greater resources and services. While both enjoy relatively strong accessibility, Marion particularly benefits from the presence of U.S. Route 501.

Characteristics of growth in Marion County will likely include more growth near and within communities, especially Marion and Mullins. Commercial development in Marion County is likely to occur along major roadways such as U.S. Route 501 and U.S. Route 76, due to better accessibility along these corridors. Strip lot residential development is likely to continue for rural housing, with former agricultural and forested areas being converted to residential use.

### *Horry County*

The substantial growth historically seen in Horry County will continue through 2030 with a projected additional 30,349 acres being developed (refer to Table 3.2, page 3-10). The majority of development will occur in the eastern portion of the county to the extent that rising property costs and increased demand will allow. However, western sections of the county are also expected to grow at a rate that far exceeds that of Marion or Dillon Counties. The area in and around Aynor is expected to expand by 1,375 acres, which is small in comparison to the area near Conway that is projected to have 5,182 acres of development.

Characteristics of growth in western Horry County will likely include increased growth closer to or within communities, especially Aynor and Conway. Commercial development is more likely along major roadways since these corridors are more accessible. In addition, extended



**Table 3.3**  
**No-build Alternative, Detailed Land Use Requirements, in Acres**  
**Interstate 73: I-95 to the Myrtle Beach Region**

TAZ Name (Number)	Residential			Commercial					Total
	Single Family	Multi-family	Mobile Home	Industrial/ Manufacturing	Hotel and Entertainment	Retail	Office	Public & Semi Public	
<b>Dillon County</b>	<b>51</b>	<b>1</b>	<b>17</b>	<b>10</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>82</b>
Latta (223)	11	0	4	2	0	0	0	0	18
Dillon (224)	17	0	6	3	0	0	0	0	28
Little Rock (225)	6	0	2	1	0	0	0	0	9
Hamer (226)	9	0	3	2	0	0	0	0	14
Lake View (227)	8	0	2	2	0	0	0	0	12
<b>Marion County</b>	<b>245</b>	<b>5</b>	<b>68</b>	<b>43</b>	<b>2</b>	<b>4</b>	<b>3</b>	<b>5</b>	<b>374</b>
Marion (228)	125	2	35	22	1	2	1	3	192
Mullins (229)	89	2	25	16	1	1	1	2	136
Centenary (230)	12	0	3	2	0	0	0	0	19
Brittons Neck (231)	18	0	5	3	0	0	0	0	27
<b>Horry County</b>	<b>19,369</b>	<b>1,998</b>	<b>4,971</b>	<b>2,182</b>	<b>546</b>	<b>505</b>	<b>431</b>	<b>347</b>	<b>30,349</b>
Aynor (281)	877	91	225	99	25	23	20	16	1,375
Floyds (282)	315	32	81	35	9	8	7	6	493
Conway (283)	3,307	341	849	373	93	86	74	59	5,182
Loris (284)	1,358	140	348	153	38	35	30	24	2,128
Conway East (285)	3,117	322	800	351	88	81	69	56	4,883
Longs (286)	554	57	142	62	16	14	12	10	868
Myrtle Beach (287)	7,249	748	1,860	817	204	189	161	130	11,358
Little River (288)	2,592	267	665	292	73	68	58	46	4,062
<b>Total</b>	<b>19,664</b>	<b>2,004</b>	<b>5,056</b>	<b>2,235</b>	<b>548</b>	<b>510</b>	<b>435</b>	<b>353</b>	<b>30,805</b>



strip lot residential development will likely begin to give way to formalized subdivisions as the housing market demand and property values increase.

### ***3.1.8 How would the project impact development in the three-county area?***

Development of an interstate between Interstate 95 and S.C. Route 22, which would become part of I-73, would have the following impacts upon the area:

#### ***Land used for right-of-way would be lost for development***

The land used for right-of-way would be lost for development. Existing development within the right-of-way for the project would be removed and relocated. Additional development, such as housing, stores, industries, or other facilities would also not have the opportunity to develop the property that is being used as the right-of-way. On the other hand, the quality and value of remaining development that takes place as a result of the project would likely offset the loss of developable land over time.

#### ***Development that was already expected to occur in the area would drift toward the project***

Development that was already expected to occur in the three-county area would now be expected to occur closer the project. A number of variables are considered in development of a parcel of land such as proximity to resources, accessibility, availability of infrastructure, and, of course, availability of land. Ability to meet zoning and planning requirements is also a consideration, although limited regulation in Marion and Dillon Counties currently makes this less of a factor. The addition of an interstate adds a new dimension to the equation, particularly in the area of proximity and accessibility. Just as commercial development in Dillon has drifted toward I-95, anticipated commercial and industrial development would also likely drift closer to I-73 assuming that all other considerations such as available infrastructure remain equally viable. Single family residential development may also drift toward the interstate.

#### ***Additional new development would occur in the three-county area***

A new interstate by itself is generally not sufficient to lure new residential, commercial or industrial development. However, the proximity and efficiency offered by location near an interstate certainly enhances the possibility for new development if demand already exists. Limited demand already exists in Dillon and Marion Counties; however, it is coupled with strong demand in Horry County. The result is that Horry County would see more new development from the presence of an interstate and Dillon and Marion Counties would also benefit as a result of existing limited demand and as a low-cost alternative to Horry County.

### ***3.1.9 How were land use impacts resulting from the project determined?***

Using the No-build Alternative as a baseline, impacts associated with each of the eight alternatives were established by first determining the shift of development already expected to occur, followed by the likely amount and location of new development. Determining the extent of shift in anticipated



development involved establishing criteria and weighing each according to its likely importance in making a decision regarding location. Factors included:

***Proximity to an I-73 interchange***

Proximity to an interstate is largely irrelevant unless it is within a short distance to an interchange. Along each proposed alternative, TAZs that included an interstate interchange were expected to draw development while those without an interstate exchange were expected to lose a portion of anticipated growth. The expected growth a TAZ with an interstate interchange could expect depended upon additional factors. As shown in Table 3.4, of the 17 TAZs in Dillon, Marion

CCD Name/Number	Interchanges by Alternative							
	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
<b>Dillon County</b>								
<b>Latta (223)</b>								
<i>interchange</i>	I-95	--	I-95	I-95	I-95	--	I-95	--
<i>interchange</i>	501	--	501	501	501	--	501	--
<b>Dillon (224)</b>								
<i>interchange</i>	--	I-95	--	--	--	I-95	--	I-95
<i>interchange</i>	--	301/501	--	--	--	301/501	--	301/501
<b>Little Rock (225)</b>	no interchanges							
<b>Hamer (226)</b>	no interchanges							
<b>Lake View (227)</b>	no interchanges							
<b>Marion County</b>								
<b>Marion (228)</b>								
<i>interchange</i>	--	--	--	501m	--	--	501m	--
<i>interchange</i>	91/41	91/41	--	--	91/41	--	--	91/41
<i>interchange</i>	--	--	--	76	--	--	76	--
<b>Mullins (229)</b>								
<i>interchange</i>	41A	41A	41A	--	41A	41A	--	41A
<i>interchange</i>	76	76	76	--	76	76	--	76
<b>Centenary (230)</b>								
<i>interchange</i>	501n	501n	--	501n	501n	--	501n	501n
<b>Brittons Neck (231)</b>	no interchanges							
<b>Horry County</b>								
<b>Aynor (281)</b>								
<i>interchange</i>	501s	--	--	501s	--	--	--	501s
<i>interchange</i>	22	--	--	22	--	--	--	22
<i>interchange</i>	--	S23	--	--	S23	--	S23	--
<i>interchange</i>	--	--	308	--	--	308	--	--
<b>Floyds (282)</b>	no interchanges							
<b>Conway (283)</b>								
<i>interchange</i>	--	22	22	--	22	22	22	--
<b>Loris (284)</b>	no interchanges							
<b>Conway East (285)</b>	no interchanges							
<b>Longs (286)</b>	no interchanges							
<b>Myrtle Beach (287)</b>	no interchanges							
<b>Little River (288)</b>	no interchanges							



and Horry Counties, only seven would have an interstate interchange, depending upon the selected alternative. For example, Alternative 1 includes interchanges in Latta (223), Marion (228), Mullins (229), Centenary (230), and Aynor (281) TAZs. It is expected that the five TAZs with interstate interchanges along Alternative 1 would receive a larger portion of anticipated development when compared to the surrounding 12 TAZs.

#### *Proximity to an Existing Urban Area*

An interstate interchange would draw development from other areas only if the site is equally desirable in terms of access to resources and infrastructure. Proximity to urban areas was considered among the most advantageous factors due to availability of jobs, labor pool, additional services and facilities, and increased likelihood of infrastructure. Existing development patterns confirmed that the majority of commercial and industrial development has located either in or with proximity to one of the communities or towns. Residential development can be farther from urban areas as some residents would rather live in more rural areas.

#### *Proximity to I-95 or the Grand Strand*

Each of the alternatives connects to both Interstate 95 and The Grand Strand. Incorporating the access to two interstates as well as the desirability to locate near the Grand Strand recognizes the potential draw that I-95 and the Grand Strand can have on development.

#### *Availability of Water, Wastewater and Land*

Availability of water, wastewater, and land were considered of equal importance in their potential to draw anticipated development away from other areas. As in most instances of development, preservation of agriculture or woodlots was not a general consideration.

#### *TAZs in Eastern Horry County held Constant*

The decision to locate in eastern Horry County must take into consideration the rising price and increasing scarcity of land. At the same time, S.C. Route 22 and U.S. Route 501 already provide access to the beach attractions for development that locates farther from the Grand Strand. Since I-73 connects to S.C. Route 22, which already provides access to the beach attractions, it is unlikely that new growth related to I-73 would be drawn to it in any significant magnitude. Therefore, the four southernmost TAZs were held constant in analysis of shift.

**Shift Factors** represent key variables that, if available, would likely impact the decision to choose one location for development over another. In the case of examining I-73, shift factors represent the draw that the presence of I-73 would likely have on growth that is already expected to occur over time based on factors, such as proximity to an intersection, that would otherwise not exist.

The amount of additional new development likely to occur as a result of I-73 was calculated based upon the amount of new jobs likely to occur in the area. In a manner similar to the determination of the No-build Alternative, employment, housing, and population growth were considered to occur at the same rate. Land use requirements were established based upon acreage needed for new homes, businesses, and public facilities. Location of new development followed



the same process as was used in determining growth patterns in the No-build Alternative, coupled with shift factors for the presence of the interstate. However, since new development would likely be drawn to the area partially due to the presence of I-73, the weight of various factors was increased. The increased weight pulled substantially more anticipated new development toward the interstate. Unlike what was expected during the analysis of shift in anticipated growth, the eastern portion of Horry County was considered in examination of new development.

Tables 3.5 and 3.6, page 3-17, show the overall impact of project upon the three-county area, including the shift of anticipated growth, as well as the amount of new growth once the shift in anticipated growth has been considered. In total, the project is expected to spur between 4,157 (Alternative 3) and 5,693 (Alternative 8) acres of new growth, depending upon the selected alternative. Table 3.7, page 3-18, shows the total growth to be expected in the three-county area by combining anticipated growth in the No-build Alternative with new growth from the project (refer to Figures 3-2 through 3-9, pages 3-20 to 3-27). Depending upon the alternative, the impact of the project ranges from 13 percent (Alternative 3) to 18 percent (Alternative 8).

TAZ Name/Number	Alternatives							
	1	2	3	4	5	6	7	8
<b>Dillon County</b>	<b>0.7</b>	<b>-0.4</b>	<b>-2.3</b>	<b>0.7</b>	<b>-2.7</b>	<b>-0.1</b>	<b>-2.6</b>	<b>2.5</b>
Latta (223)	1.6	-1.3	1.6	1.6	1.6	-1.1	1.6	-0.3
Dillon (224)	-0.4	3.3	-1.7	-0.4	-1.9	3.3	-1.9	3.3
Little Rock (225)	-0.1	-0.6	-0.6	-0.1	-0.6	-0.6	-0.6	-0.1
Hamer (226)	-0.2	-1.0	-0.9	-0.2	-1.0	-0.9	-1.0	-0.2
Lake View (227)	-0.2	-0.8	-0.7	-0.2	-0.8	-0.8	-0.8	-0.2
<b>Marion County</b>	<b>13.2</b>	<b>11.7</b>	<b>-5.1</b>	<b>16.8</b>	<b>11.8</b>	<b>-5.3</b>	<b>8.5</b>	<b>13.2</b>
Marion (228)	3.8	3.8	-11.8	19.2	3.8	-12.0	19.2	3.8
Mullins (229)	9.6	9.6	9.6	-2.1	9.6	9.6	-9.1	9.6
Centenary (230)	0.2	0.2	-1.2	0.2	0.2	-1.2	0.2	0.2
Brittons Neck (231)	-0.4	-1.8	-1.7	-0.4	-1.8	-1.7	-1.8	-0.4
<b>Horry County</b>	<b>-13.9</b>	<b>-11.3</b>	<b>7.4</b>	<b>-17.5</b>	<b>-9.1</b>	<b>5.3</b>	<b>-5.9</b>	<b>-15.7</b>
Aynor (281)	103.1	13.7	13.7	103.1	13.7	13.7	13.7	103.1
Floyds (282)	-7.4	-34.0	-30.5	-7.6	-33.5	-30.8	-32.9	-7.5
Conway (283)	-77.7	155.5	155.5	-80.1	155.5	155.5	155.5	-78.9
Loris (284)	-31.9	-146.6	-131.4	-32.9	-144.7	-133.0	-142.1	-32.4
Conway East (285)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Longs (286)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Myrtle Beach (287)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Little River (288)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Total</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>



**Table 3.6**  
**Impact of I-73 Alternatives by TAZ**  
**(in acres of new development)**  
**Interstate 73: I-95 to the Myrtle Beach Region**

CCD Name/Number	Alternatives							
	1	2	3	4	5	6	7	8
<b>Dillon County</b>	<b>211</b>	<b>204</b>	<b>158</b>	<b>193</b>	<b>185</b>	<b>176</b>	<b>168</b>	<b>230</b>
Latta (223)	56	41	43	51	50	35	46	47
Dillon (224)	68	83	50	62	59	72	53	91
Little Rock (225)	23	21	17	21	20	18	18	24
Hamer (226)	35	32	26	32	30	28	27	37
Lake View (227)	30	27	22	27	26	23	23	31
<b>Marion County</b>	<b>827</b>	<b>784</b>	<b>595</b>	<b>761</b>	<b>744</b>	<b>633</b>	<b>669</b>	<b>867</b>
Marion (228)	400	380	270	441	360	287	395	420
Mullins (229)	337	321	261	238	304	277	203	354
Centenary (230)	39	37	27	35	35	28	32	41
Brittons Neck (231)	51	46	38	47	44	40	40	53
<b>Horry County</b>	<b>4,384</b>	<b>4,163</b>	<b>3,403</b>	<b>4,016</b>	<b>3,951</b>	<b>3,618</b>	<b>3,591</b>	<b>4,596</b>
Aynor (281)	332	210	172	313	200	183	183	344
Floyds (282)	64	33	24	57	30	27	25	67
Conway (283)	668	918	771	604	878	811	811	703
Loris (284)	274	141	103	248	128	116	106	289
Conway East (285)	703	660	538	644	626	572	569	737
Longs (286)	125	117	96	115	111	102	101	131
Myrtle Beach (287)	1,634	1,534	1,251	1,499	1,456	1,331	1,323	1,713
Little River (288)	584	549	448	536	521	476	473	613
<b>Total</b>	<b>5,422</b>	<b>5,150</b>	<b>4,157</b>	<b>4,970</b>	<b>4,879</b>	<b>4,428</b>	<b>4,428</b>	<b>5,693</b>

### *Dillon County*

Similar to the No-build Alternative, Dillon County will see the smallest amount of growth among the three counties regardless of the selected alternative. Dillon County may grow between 158 acres (Alternative 3) and 230 acres (Alternative 8) by 2030 as a result of the presence of I-73 (Table 3.6). The project alternatives result in two scenarios for Dillon County based on proximity to Dillon or Latta.

Alternatives 1, 3, 4, 5, and 7 have an interchange with I-95 near Latta and a second interchange with U.S. Route 501. These alternatives result in county growth beyond the anticipated growth of the No-build Alternative ranging from 158 (Alternative 3) to 211 (Alternative 1) acres. Of the eight alternatives, Alternative 1 proposes the most substantial growth around Latta with a total of 56 acres of new growth beyond the No-build Alternative. Alternatives 1, 3, 4, 5, and 7 would result in more substantial growth along U.S. Route 501 in proximity to Latta while resulting in a lower amount of growth around Dillon.



**Table 3.7**  
**Total Growth by 2030 including Impact**  
**of I-73 Alternatives by TAZ (in acres of new development)**  
**Interstate 73: I-95 to the Myrtle Beach Region**

TAZ Name/Number	Alternatives							
	1	2	3	4	5	6	7	8
<b>Dillon County</b>	<b>292</b>	<b>286</b>	<b>240</b>	<b>275</b>	<b>267</b>	<b>258</b>	<b>250</b>	<b>312</b>
Latta (223)	74	59	61	69	69	54	64	65
Dillon (224)	95	111	78	90	87	99	81	119
Little Rock (225)	32	30	26	30	29	28	27	33
Hamer (226)	49	46	40	46	45	42	42	51
Lake View (227)	42	39	34	39	38	36	35	43
<b>Marion County</b>	<b>1,201</b>	<b>1,158</b>	<b>969</b>	<b>1,135</b>	<b>1,117</b>	<b>1,007</b>	<b>1,043</b>	<b>1,241</b>
Marion (228)	592	572	461	633	552	479	587	611
Mullins (229)	474	457	397	374	441	414	339	490
Centenary (230)	58	56	46	54	54	47	51	60
Brittons Neck (231)	78	73	64	73	71	67	66	80
<b>Horry County</b>	<b>34,733</b>	<b>34,512</b>	<b>33,752</b>	<b>34,365</b>	<b>34,300</b>	<b>33,967</b>	<b>33,940</b>	<b>34,945</b>
Aynor (281)	1,707	1,585	1,547	1,688	1,575	1,558	1,558	1,719
Floyds (282)	557	526	517	551	523	520	518	560
Conway (283)	5,850	6,101	5,953	5,786	6,061	5,994	5,994	5,885
Loris (284)	2,402	2,269	2,231	2,376	2,256	2,244	2,233	2,416
Conway East (285)	5,586	5,543	5,421	5,528	5,510	5,456	5,452	5,620
Longs (286)	993	985	964	983	980	970	969	999
Myrtle Beach (287)	12,992	12,892	12,609	12,857	12,814	12,689	12,681	13,071
Little River (288)	4,646	4,610	4,509	4,598	4,582	4,538	4,535	4,674
<b>Total</b>	<b>36,226</b>	<b>35,955</b>	<b>34,961</b>	<b>35,775</b>	<b>35,684</b>	<b>35,233</b>	<b>35,233</b>	<b>36,498</b>
<b>Percent Above No-build</b>	<b>18%</b>	<b>17%</b>	<b>13%</b>	<b>16%</b>	<b>16%</b>	<b>14%</b>	<b>14%</b>	<b>18%</b>

In comparison, Alternatives 2, 6, and 8 have an interchange with I-95 near Dillon with a second interchange at the intersection with U.S. Route 501/301. Alternative 6 projects that less than 80 acres of development would take place near Dillon while Alternative 8 anticipates 91 acres of new development would occur in and near Dillon. Growth near Dillon is most likely expected to take place in areas surrounding the community, as well as along U.S. Route 301/501.

### *Marion County*

Development in Marion County resulting from the project is expected to range from 595 (Alternative 3) to 867 (Alternative 8) acres. While each of the TAZs in Marion County is expected to grow, a substantial gap exists between the TAZs near Marion and Mullins in comparison to the remaining TAZs. In total, the TAZs including Marion and Mullins account for over 89 percent of all new growth expected in the area beyond the No-build Alternative. The eight Build Alternatives result in three different development scenarios in Marion County.



Alternatives 1, 2, 5, and 8 include a total of four interstate interchanges including a connection with S.C. Alternate Route 41 followed by an intersection with U.S. Route 76 near Mullins. A third interchange is proposed to connect with S.C. Route 41 and a fourth intersects with U.S. Route 501 just north of the Little Pee Dee River. The number of intersections coupled with proximity to Mullins results in Alternatives 1, 2, and 8 having the largest amount of new developed acreage in the county, ranging from 784 (Alternative 2) to 867 acres (Alternative 8). Alternative 5 anticipates 744 acres of new development. In each of the four alternatives, significant development is expected to occur along U.S. Route 76. The relatively short distance between Marion and Mullins allows for significant growth to occur in Marion and still be located close to the interstate. Interchanges with S.C. Route 41 and U.S. Route 501 near the Little Pee Dee River are expected to see limited growth due in part to distance before reaching urban areas.

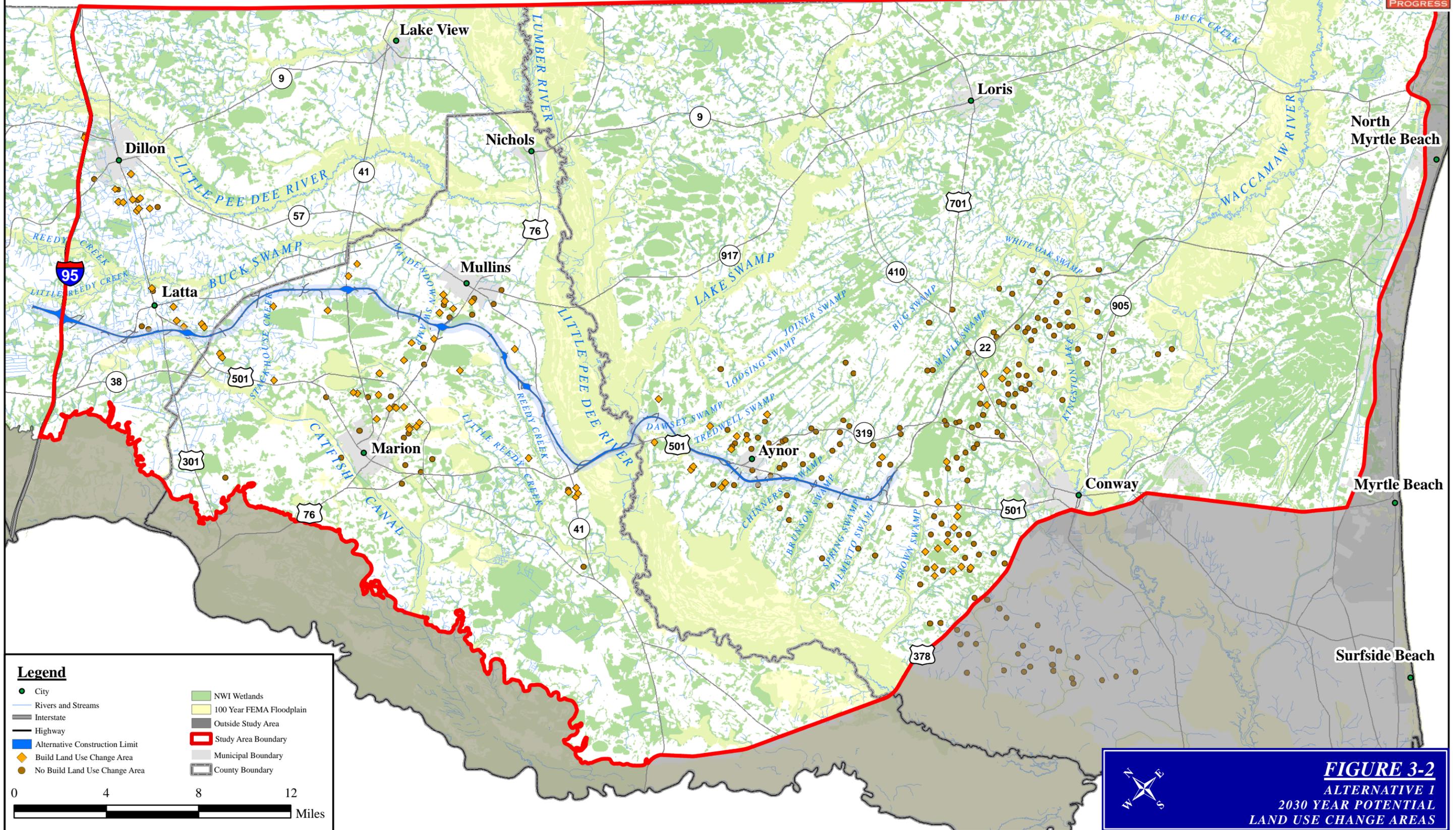
Alternatives 3 and 6 include two interchanges within Marion County, including an interchange with S.C. Route 41A and a second connecting to U.S. Route 76. These alternatives provide the most limited possibility for growth in Marion County, with Alternative 3 anticipating only 595 acres of new development while Alternative 6 would be projected to have 633 acres of new development. Like prior alternatives, the large portion of new development is expected to occur between the communities of Mullins and Marion, particularly around U.S. Route 76.

Alternatives 4 and 7 provide the closest connection of the interstate to the community of Marion including interchanges with U.S. Route 501 Bypass north of the urban area and U.S. Route 76. While Alternative 4 is expected to create approximately 761 acres in new development in Marion County, Alternative 7 is expected to result in 669 acres. This is mainly due to the lack of connectivity along other aspects of the corridor in Dillon and Horry Counties. Like the other alternatives, the majority of development from Alternatives 4 and 7 is expected to be located between Marion and Mullins. However, due to location of Alternatives 4 and 7 close to Marion, most development is expected to gravitate toward that community.

### *Horry County*

The presence of the project, regardless of location, will result in substantial growth in Horry County. Growth resulting from the Build Alternative ranges from 3,403 (Alternative 3) to 4,596 (Alternative 8) acres. While this amount is far lower than anticipated development that will occur without the project, it remains substantially higher than the projected growth in Marion and Dillon Counties combined. Since growth is much more extensive in Horry County, pinpointing locations for new development becomes more complex, especially since the No-build Alternative anticipates substantial growth in the county. The alternatives result in three separate development scenarios in Horry County.

Alternatives 1, 4, and 8 propose two interchanges with U.S. Route 501, one located north of Aynor and one at S.C. Route 22. Alternatives 1, 4, and 8 result in new growth ranging from 4,016 (Alternative 4) to 4,596 (Alternative 8) acres. In all three cases, connectivity with S.C. Route 22 occurs near the end of the existing corridor.

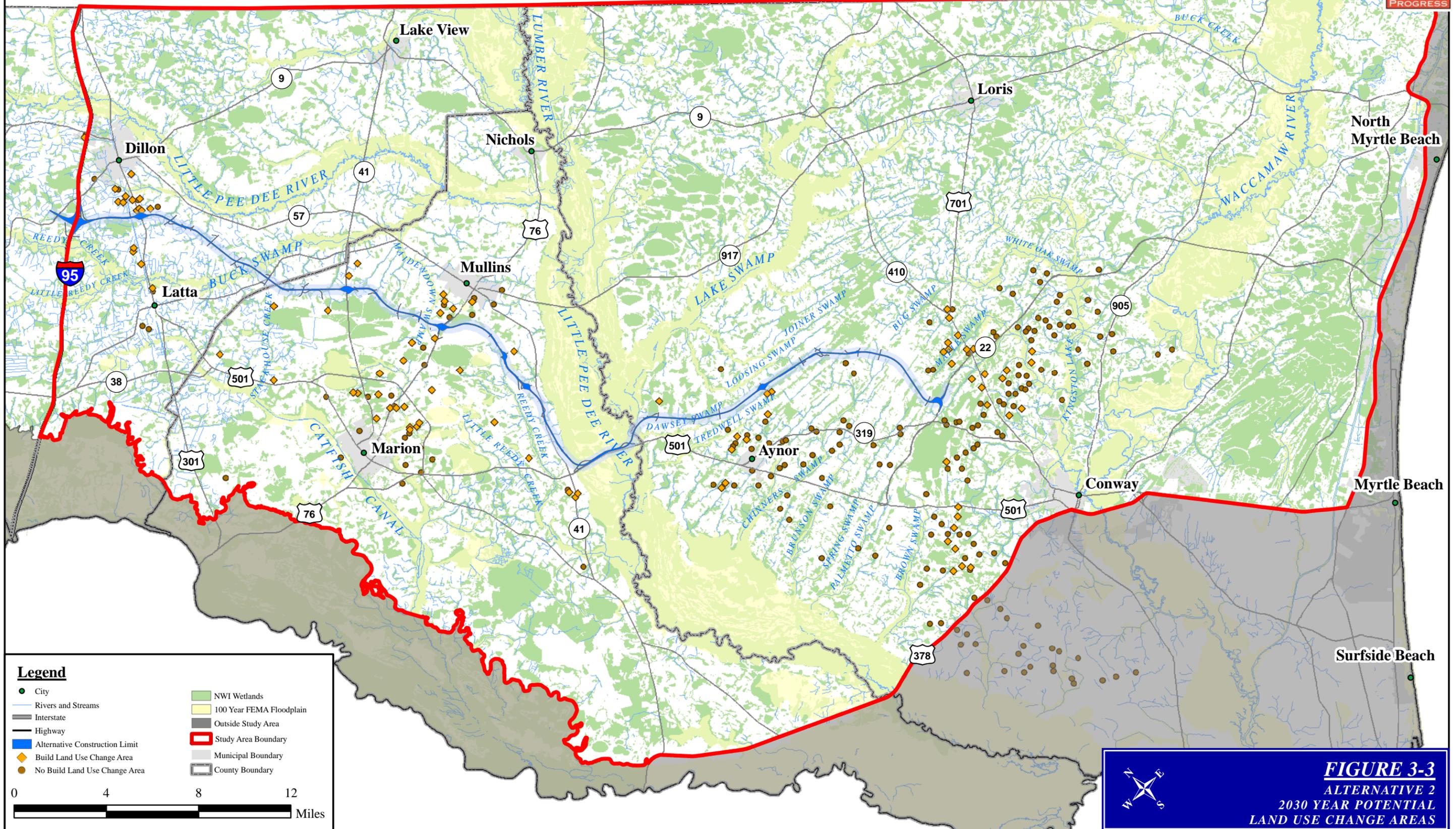


**Legend**

- City
- Rivers and Streams
- Interstate
- Highway
- Alternative Construction Limit
- ◆ Build Land Use Change Area
- No Build Land Use Change Area
- NWI Wetlands
- 100 Year FEMA Floodplain
- Outside Study Area
- Study Area Boundary
- Municipal Boundary
- County Boundary

0 4 8 12 Miles

**FIGURE 3-2**  
 ALTERNATIVE 1  
 2030 YEAR POTENTIAL  
 LAND USE CHANGE AREAS



**Legend**

● City	■ NWI Wetlands
— Rivers and Streams	■ 100 Year FEMA Floodplain
— Interstate	■ Outside Study Area
— Highway	■ Study Area Boundary
— Alternative Construction Limit	■ Municipal Boundary
◆ Build Land Use Change Area	■ County Boundary
● No Build Land Use Change Area	

0 4 8 12 Miles



**FIGURE 3-3**  
 ALTERNATIVE 2  
 2030 YEAR POTENTIAL  
 LAND USE CHANGE AREAS

