



CHAPTER 3. EXISTING CONDITIONS AND ENVIRONMENTAL CONSEQUENCES OF THE PREFERRED ALTERNATIVE

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 Preferred Alternative.

Human Environment

The human environment can be defined as a set of natural, social, and cultural values that exist in a given place. Land use, communities, environmental justice, Section 4(f), Section 6(f), historic resources, hazardous materials, noise, air quality, construction, consideration of bicyclists and pedestrians, and short-term uses versus long-term productivity are all features of the human environment that will be evaluated in this section.

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 LAND USE

3.1.1 What is the existing land use in the project study area?

The project study area, which includes Dillon, Horry, and Marion Counties, is comprised of roughly 942,000 acres. The land use study area (refer to Figure 3-1, page 3-3) which is an approximately eight-mile wide corridor running from I-95 to S.C. Route 22, is mostly rural in character, and dotted with small towns and cities such as Marion, Mullins, and Aynor, as well as small communities such as Zion and Ketchuptown. Agriculture comprises 31.8 percent of the land use, with natural areas comprising 62.0 percent.¹ Uses typically associated with urban or suburban development including residential, commercial, and industrial activity comprise only 5.3 percent of the project study area.

Land Use Study Area

The Land Use Study Area, shown in Figure 3-1 (refer to page 3-3), is an approximately eight-mile wide corridor extending from I-95 to S.C. Route 22.

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.

¹USFWS. National Wetlands Inventory, “Wetlands Digital Data,” <http://wetlandsfws.er.usgs.gov/NWI/index.html> (September 11, 2007).



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. All three counties have zoning ordinances in place.

3.1.2 What is the agricultural land use in the project study area?

As previously mentioned, agricultural land uses, which include farms, ranches, and croplands, comprise 31.8 percent of the project study area. The three-county area has a rich history of agricultural use and is still vital to the rural area. More information about farmlands can be found in Section 3.10 (refer to page 3-126).

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

Natural land areas comprise roughly 62 percent of the project study area, or 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's portion having 65.2 percent, Marion County's portion having 61.3 percent, and Dillon County's portion having 55.2 percent as natural areas. Dillon County has a lower percentage of natural areas as more land is being used for agricultural and mining activities.

Land Use Categories

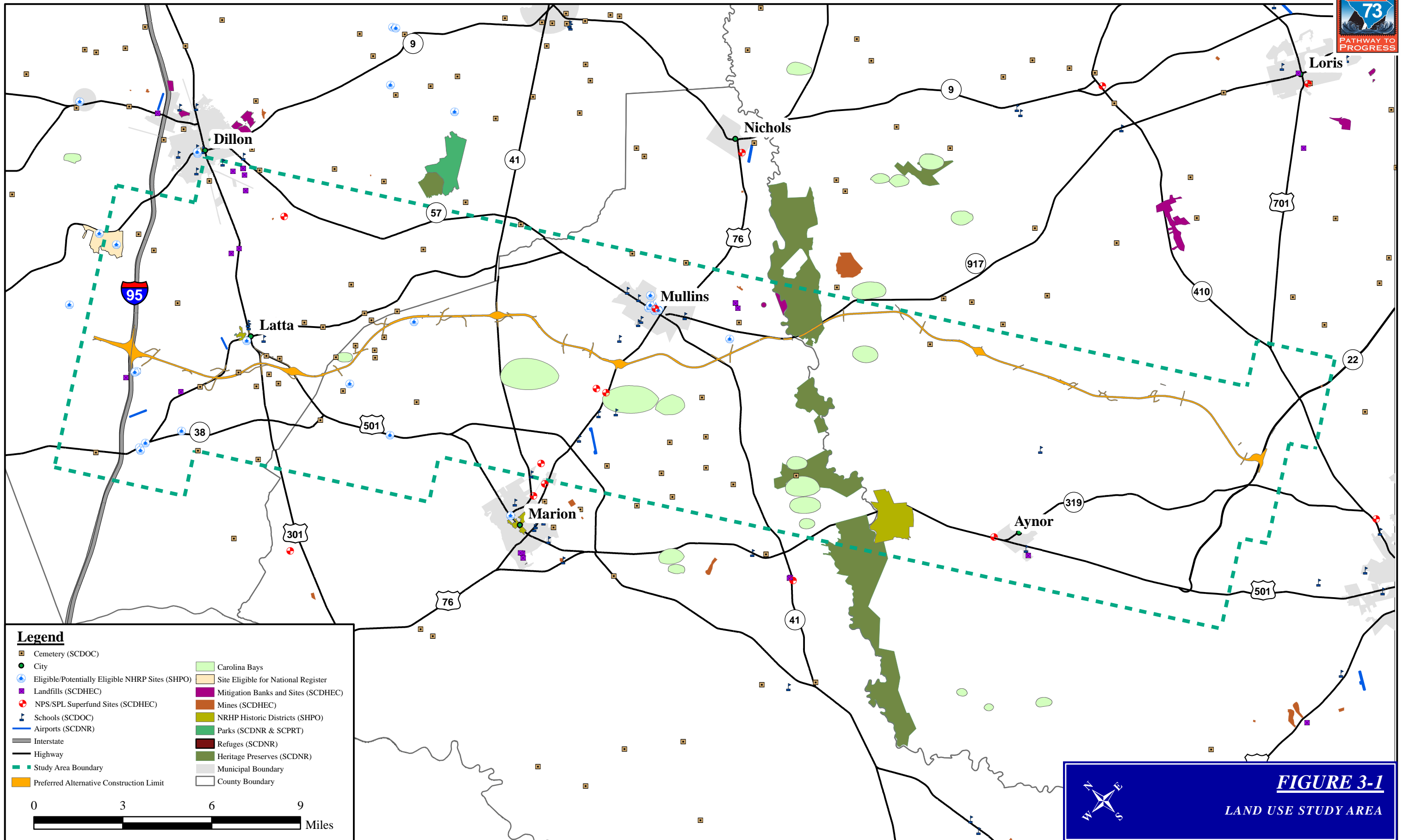
Land use categories used in analysis of existing conditions were extracted from NWI mapping. Natural land areas include:

**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.**

3.1.4 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.² 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.

² U.S. Census Bureau, 2000 U.S. Census, <http://quickfacts.census.gov/qfd/index.html> (September 19, 2007).



Legend

■ Cemetery (SCDOC)	■ Carolina Bays
● City	■ Site Eligible for National Register
⊕ Eligible/Potentially Eligible NHRP Sites (SHPO)	■ Mitigation Banks and Sites (SCDHEC)
■ Landfills (SCDHEC)	■ Mines (SCDHEC)
⊕ NPS/SPL Superfund Sites (SCDHEC)	■ NRHP Historic Districts (SHPO)
⊕ Schools (SCDOC)	■ Parks (SCDNR & SCPRT)
⊕ Airports (SCDNR)	■ Refuges (SCDNR)
— Interstate	■ Heritage Preserves (SCDNR)
— Highway	— Municipal Boundary
— Study Area Boundary	— County Boundary
— Preferred Alternative Construction Limit	

0 3 6 9 Miles

FIGURE 3-1
LAND USE STUDY AREA



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).³

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 3.7 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.

3.1.5 What is the 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 I-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 exist in the project study area.⁴ 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.

³ *Ibid.*

⁴ Claritas Research Company, <http://www.claritas.com/claritas/Default.jsp> (September 11, 2007).



3.1.5.1 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 I-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.

3.1.5.2 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.

The South Carolina Power Team (which includes the state's electric cooperatives and Santee Cooper) 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 I-95, and Marion County Industrial Park, which is a 276-acre park along U.S. Route 501 outside of Marion.⁵ Other parks and sites are sporadically located throughout the land use study area, such as Cool Spring Business Park, located near S.C. Route 319.



Cool Spring Business Park Sign

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 if plans to complete a development in Marion County become a reality. Specifically, the county is seeking to develop an expected 17,000 acres northwest of the City of Marion.

⁵ South Carolina Power Team, "Northeast South Carolina Region Industrial Parks & Buildings," http://www.scpowerteam.com/Region_95_North.asp (September 19, 2007).



Marion City Hall

3.1.5.3 Institutional

Numerous churches, nonprofit organizations, fraternal organizations, childcare 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 childcare 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.

3.1.5.4 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.

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 the 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, the Aynor-Conway Career Center, and the Academy for Arts, Science, and 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.



3.1.6 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.

3.1.6.1 Comprehensive Plans

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 I-95.⁶

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.

⁶ Dillon County, South Carolina, *Dillon County Comprehensive Plan: 2001*. p. 41.



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.⁷

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.⁸

The Marion County Comprehensive Plan does not include a Future Land Use Plan, but the county is preparing a 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.

3.1.6.2 Zoning

Dillon County

Dillon County adopted a countywide zoning ordinance and zoning map in February 2007. The new ordinance establishes 13 districts, four of which function as overlay districts to address special situations including flood protection, agricultural conservation, the airport, and a planned development district. The following zoning classifications fall within the land use study area:

- general commercial;
- highway commercial;
- light industrial;
- general industrial;
- single-family residential;
- single and two family residential; and,
- general residential.

⁷ Horry County, South Carolina, *Horry County Comprehensive Plan: 1999*. pp. VII-16.

⁸ Marion County, South Carolina, *Marion County Comprehensive Plan: 1999*. p. 7-6.



Horry County

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.⁹

Marion County

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.

3.1.6.3 Future land use 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.¹⁰ 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

⁹ James Bischof, Principal Planner, Horry County Planning Department, Personal communication, February 27, 2006.

¹⁰ 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> (September 19, 2007).



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 I-95 corridor in proximity to Dillon.

- 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) has[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.

3.1.7 How is land use expected to change in the project study area?

The current population is anticipated to grow by nearly 54 percent between 2000 and 2030 in Dillon, Horry, and Marion Counties,¹¹ with the vast majority of population growth (138,700 of 141,000 people) expected to occur in Horry County (refer to Table 3.1, page 3-11). It is certain that land in the three counties will develop as part of the continuing evolution of communities, regardless of a new interstate. The growth patterns expected in the three-county area, would be anticipated to change due to the addition of a new interstate.

3.1.8 How would the No-build Alternative affect land development?

The effect of the No-build Alternative on land development was established by evaluating the amount of land to be developed, as well as the location of the development if existing conditions prevail and

¹¹ 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> (August 20, 2007).



Table 3.1
Projected Population Growth by County, 2000 to 2030
Interstate 73 FEIS: 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%
Horry	196,629	335,320	138,691	70.53%
Marion	35,466	37,340	1,874	5.28%
Total	262,817	403,810	140,993	53.65%
State	4,012,012	5,371,150	1,359,138	33.88%

the population increases to the extent projected by the Office of Research and Statistics for the State of South Carolina. The No-build Alternative was determined by:

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.

Population growth in the three-county area is projected to result in approximately 30,800 acres of new development, which may include new homes, businesses, industries, and civic facilities such as schools and government buildings (refer to Table 3.2).

Traffic Analysis Zones

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

Table 3.2
No-build Alternative, Summary of Land Use Requirements, by Acres
Interstate 73 FEIS: 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	83
Horry	19,369	1,998	4,970	2,182	546	504	431	347	30,347
Marion	244	5	68	43	2	4	3	5	374
Total	19,664	2,004	5,055	2,235	549	509	435	353	30,804



As expected, the majority of new development would likely occur in Horry County where the majority of the population increase is expected.

3.1.8.1 Dillon County

Dillon County is expected to grow the least of the three counties in the project study area. Between 2000 and 2030, new land development is expected to increase by 83 acres, with most development anticipated near the communities of Dillon and Latta (refer to Table 3.3, page 3-13).

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

3.1.8.2 Horry County

The substantial growth historically seen in Horry County is expected to continue through 2030 with a projected addition of 30,347 developed acres (refer to Table 3.3, page 3-13). The majority of development is anticipated in the eastern portion of the county to the extent that rising property costs and increased demand would allow. However, western sections of the county are also expected to grow at a rate that far exceeds that of Dillon or Marion Counties.

Characteristics of growth in western Horry County would likely include increased growth closer to or within existing communities, especially Aynor and Conway, which are anticipated to expand by 1,376 acres and 5,182 acres, respectively. Commercial development would be more likely along major roadways. In addition, the strip lot pattern of residential development would likely begin to shift to subdivisions as the housing market demand and property values increase.

3.1.8.3 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 would be expected to occur in areas surrounding the communities of Marion and Mullins (refer to Table 3.3, page 3-13). Both communities benefit from the ability to provide greater services. While both enjoy relatively strong accessibility, Marion also particularly benefits from the presence of U.S. Route 501.

Commercial development in Marion County would likely occur along major roadways such as U.S. Route 501 and especially U.S. Route 76, due to better accessibility along these corridors.



Table 3.3
No-build Alternative, Detailed Land Use Requirements, in Acres
Interstate 73 FEIS: 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	
Dillon County	51	1	17	10	1	1	1	1	83
Latta (223)	11	<1	4	2	<1	<1	<1	<1	17
Dillon (224)	17	<1	6	3	<1	<1	<1	<1	26
Little Rock (225)	6	<1	2	1	<1	<1	<1	<1	9
Hamer (226)	9	<1	3	2	<1	<1	<1	<1	14
Lake View (227)	8	<1	2	2	<1	<1	<1	<1	12
Horry County	19,369	1,998	4,970	2,182	546	504	431	347	30,347
Aynor (281)	877	91	225	99	25	23	20	16	1,376
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	2,126
Conway East (285)	3,117	322	800	351	88	81	69	56	4,884
Longs (286)	554	57	142	62	16	14	12	10	867
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	4,061
Marion County	244	5	68	43	2	4	3	5	374
Marion (228)	125	2	35	22	1	2	1	3	191
Mullins (229)	89	2	25	16	1	1	1	2	137
Centenary (230)	12	<1	3	2	0	<1	<1	0	19
Brittons Neck (231)	18	<1	5	3	0	<1	<1	0	27
Total	19,664	2,004	5,055	2,235	549	509	435	353	30,804



Strip lot residential development is anticipated to continue for rural housing, with former agricultural and forested areas being converted to residential use.

3.1.9 How would the Preferred Alternative impact development in the three-county area?

Development of I-73 would have the following impacts to the three-county area:

3.1.9.1 Land used for right-of-way would no longer be available for development

Existing development adjacent to the right-of-way, such as housing, stores, industries, or other facilities would not be able to develop the 2,388 acres that is being used as the right-of-way nor would new development be able to occur within the right-of-way. On the other hand, the increase in the development that would take place as a result of the Preferred Alternative would likely offset the loss of developable land.

3.1.9.2 Development that was expected with the No-build Alternative would shift toward the Preferred Alternative

Development that was expected to occur in the three-county area under the No-build Alternative would potentially shift to be located closer to the Preferred Alternative. A number of variables are considered in development of a parcel of land, including proximity to resources, accessibility, availability of infrastructure, and availability of land. Ability to meet zoning and planning requirements is also a consideration, although limited regulation in Marion and Dillon Counties would make this less of a factor. The addition of an interstate adds a new dimension to the equation, particularly regarding proximity and accessibility. Just as commercial development in Dillon has occurred near I-95, anticipated residential, commercial and industrial development would also likely occur close to I-73, assuming that all other considerations such as available infrastructure remain equally viable.

3.1.9.3 Additional new development in the three-county area with the Preferred Alternative

A new interstate alone 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 potential for new development if demand already exists. Limited demand already exists in Dillon and Marion Counties; however, strong demand exists in Horry County. The result is that Horry County would see more new development from the presence of an interstate, while Dillon and Marion Counties would also benefit due to the increasing demand, partially resulting from them providing a low-cost alternative to Horry County.



3.1.10 How were land use impacts resulting from the Preferred Alternative determined?

Impacts associated with the Preferred Alternative were established by first determining the shift of development expected to occur, followed by the likely amount and location of new development regardless of the construction of the Preferred Alternative. Determining the extent that the anticipated development may shift involved establishing criteria and weighing each according to its likely importance to influence a decision regarding location. The following factors were included in the analysis.

3.1.10.1 Proximity to an I-73 Interchange

Proximity to an interstate is more influential to development when it is within a short distance to an interchange. Along the Preferred Alternative, TAZs that included an interchange were expected to draw development while those without an interchange were expected to lose a portion of anticipated growth. The expected growth within a TAZ that contained an interchange would depend upon additional factors. As shown in Table 3.4, of the 17 TAZs in Dillon, Horry, and Marion Counties, only four would have an interchange along the Preferred Alternative; including Latta (223), Mullins (229), Aynor (281), and Conway (283). It would be expected that these four TAZs that would contain an interchange with the Preferred Alternative would receive a larger portion of anticipated development when compared to the surrounding 13 TAZs.

3.1.10.2 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 infrastructure. Existing development patterns confirmed that the majority of commercial and industrial development has located either in or in close 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.

3.1.10.3 Proximity to I-95 or the Grand Strand

The Preferred Alternative connects to both I-95 and the Grand Strand. Incorporating the access to these two features recognizes the potential draw that I-95 and the Grand Strand can have on development.

3.1.10.4 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, agricultural and silvicultural lands were considered prone for development.



Table 3.4
Proposed I-73 Interchanges Along Preferred Alternative by TAZ
Interstate 73 FEIS: I-95 to the Myrtle Beach Region

CCD* Name/Number	Interchanges Along Preferred Alternative
Dillon County	
Latta (223)	
<i>interchange</i>	I-95
<i>interchange</i>	U.S. Route 501
Dillon (224)	no interchanges
Little Rock (225)	no interchanges
Hamer (226)	no interchanges
Lake View (227)	no interchanges
Horry County	
Aynor (281)	
<i>interchange</i>	S.C. Route 308
Floyds (282)	no interchanges
Conway (283)	
<i>interchange</i>	S.C. Route 22
Loris (284)	no interchanges
Conway East (285)	no interchanges
Longs (286)	no interchanges
Myrtle Beach (287)	no interchanges
Little River (288)	no interchanges
Marion County	
Marion (228)	no interchanges
Mullins (229)	
<i>interchange</i>	S.C. Route 41A
<i>interchange</i>	U.S. Route 76
Centenary (230)	no interchanges
Brittons Neck (231)	no interchanges

*CCD refers to Census County Division

3.1.10.5 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

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 interchange, 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 number of new jobs likely to occur in the area. Employment, housing, and population growth were considered to occur at the same rate as the No-build Alternative. Land use requirements were established based upon acreage needed for new homes, businesses, and public facilities resulting from increased employment and population growth. Location of new development followed the same process as was used in determining growth patterns for 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 attractiveness would pull substantially more anticipated new development toward the interstate. The eastern portion of Horry County, which was held constant during the analysis of development shift (refer to preceding paragraph), was considered during the examination of new development.

3.1.11 What land use impacts are anticipated from the Preferred Alternative?

Tables 3.5 and 3.6 show the overall impact of the Preferred Alternative 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 Preferred Alternative is expected to lead to

Table 3.5 Total Shift in Anticipated Development Resulting from the Preferred Alternative by TAZ (in acres of new development) Interstate 73 FEIS: I-95 to the Myrtle Beach Region	
TAZ Name/Number	Preferred Alternative
Dillon County	-2.3
Latta (223)	1.6
Dillon (224)	-1.7
Little Rock (225)	-0.6
Hamer (226)	-0.9
Lake View (227)	-0.7
Horry County	7.4
Aynor (281)	13.7
Floyds (282)	-30.5
Conway (283)	155.5
Loris (284)	-131.4
Conway East (285)	0.0
Longs (286)	0.0
Myrtle Beach (287)	0.0
Little River (288)	0.0
Marion County	-5.1
Marion (228)	-11.8
Mullins (229)	9.6
Centenary (230)	-1.2
Brittons Neck (231)	-1.7
Total	0.0



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

CCD Name/Number	Preferred Alternative
Dillon County	158
Latta (223)	43
Dillon (224)	50
Little Rock (225)	17
Hamer (226)	26
Lake View (227)	22
Horry County	3,403
Aynor (281)	172
Floyds (282)	24
Conway (283)	771
Loris (284)	103
Conway East (285)	538
Longs (286)	96
Myrtle Beach (287)	1,251
Little River (288)	448
Marion County	595
Marion (228)	270
Mullins (229)	261
Centenary (230)	27
Brittons Neck (231)	38
Total	4,157

4,157 acres of new growth. Figure 3-2 (refer to page 3-20) and Table 3.7 (refer to page 3-19) shows the total growth to be expected in the three-county area by combining anticipated growth for the No-build Alternative with new growth from the Preferred Alternative. The impact of the Preferred Alternative is a 13 percent growth above the No-build Alternative by the Year 2030.

3.1.11.1 Dillon County

Dillon County would see the smallest amount of growth among the three counties, an estimated 158 acres by 2030, as a result of the Preferred Alternative (refer to Table 3.6).

The Preferred Alternative would have an interchange with I-95 near Latta and a second interchange with U.S. Route 501, resulting in county growth of 158 acres beyond the anticipated growth of the No-build Alternative. More substantial growth would be expected to occur along U.S. Route 501 in proximity to Latta as a result of the Preferred Alternative, with a lower amount of growth expected around Dillon.

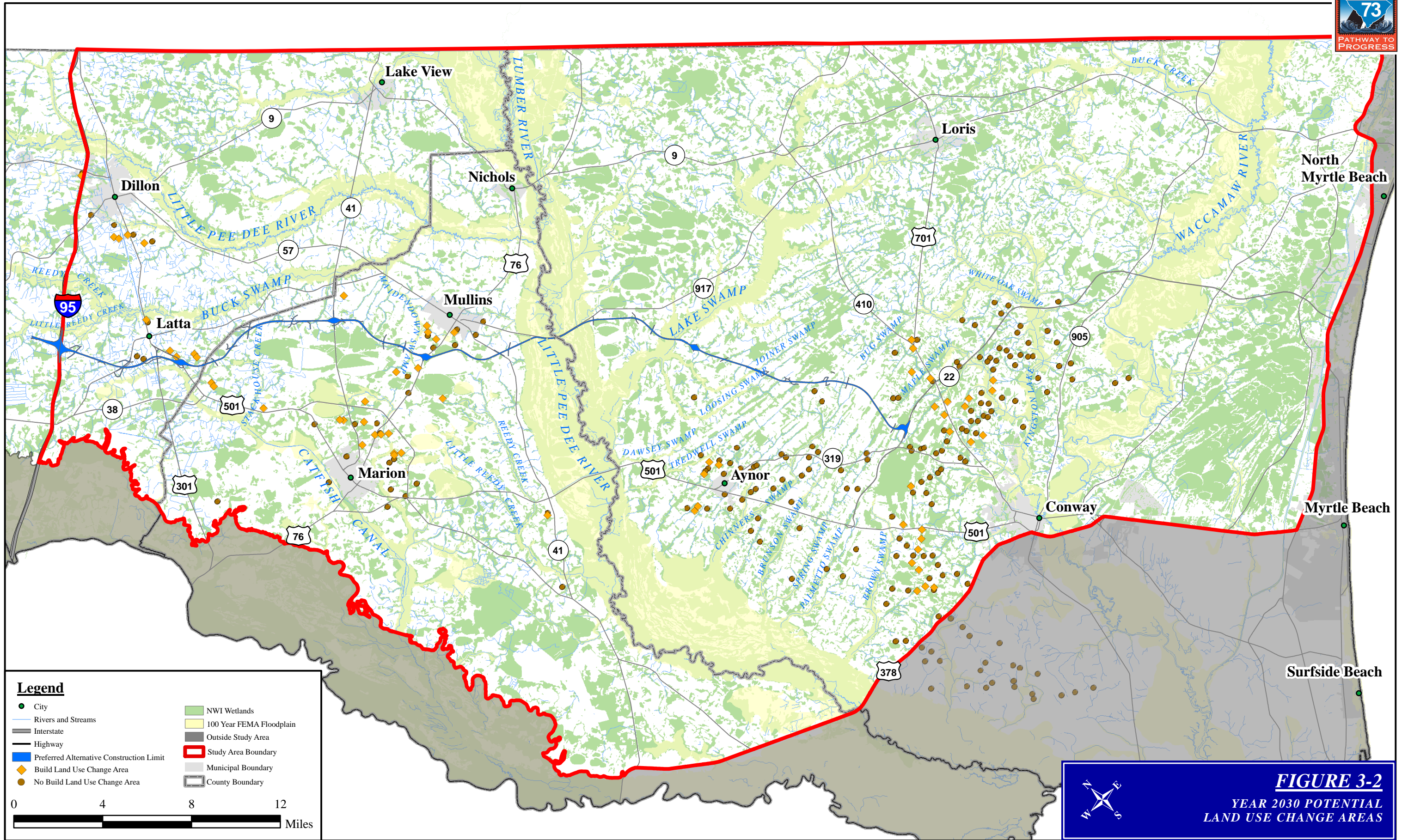


Table 3.7 Cumulative Growth by 2030 by TAZ (in acres of new development) Interstate 73 FEIS: I-95 to the Myrtle Beach Region	
TAZ Name/Number	Preferred Alternative
Dillon County	240
Latta (223)	61
Dillon (224)	78
Little Rock (225)	26
Hamer (226)	40
Lake View (227)	34
Horry County	33,752
Aynor (281)	1,547
Floyds (282)	517
Conway (283)	5,953
Loris (284)	2,231
Conway East (285)	5,421
Longs (286)	964
Myrtle Beach (287)	12,609
Little River (288)	4,509
Marion County	969
Marion (228)	461
Mullins (229)	397
Centenary (230)	46
Brittons Neck (231)	64
Total	34,961
Percent Above No-build	13%

3.1.11.2 Horry County

The Preferred Alternative would result in 3,403 acres of growth in Horry County beyond the No-build Alternative (refer to Table 3.6, page 3-18 and Table 3.7). While this amount is far lower than anticipated development that is expected to occur without the Preferred Alternative, 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 Preferred Alternative reaches into extensively rural portions of Horry County including interchanges with Road S-26-308 and S.C. Route 22. The combination of growth already anticipated in Horry County combined with the new growth from the Preferred Alternative would be significant enough to begin to alter development patterns in western Horry County (refer to Table 3.7). In areas surrounding Conway, and, to a lesser extent, Aynor, the historic pattern of strip lot residential development is likely to change into subdivision development



Legend

- City
- Rivers and Streams
- Interstate
- Highway
- Preferred 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
YEAR 2030 POTENTIAL
LAND USE CHANGE AREAS



and a growing number of multi-family units in response to market conditions, including increasing land prices and sufficient demand to make the added expense worthwhile.

3.1.11.3 Marion County

Marion County would have 595 acres of new development as a result of the Preferred Alternative (refer to Table 3.6, page 3-18). While each of the TAZs in Marion County is expected to grow, a substantial increase would occur in the TAZs near Marion and Mullins in comparison to the remaining TAZs. In total, the TAZs that include Marion and Mullins account for over 89 percent of all new growth expected in the area beyond the No-build Alternative.

The Preferred Alternative would have two interchanges within Marion County, including an interchange with S.C. Route 41A and one with U.S. Route 76. These provide the most possibility for growth in Marion County, with the Preferred Alternative anticipating 595 acres of new development. The large portion of new development is expected to occur between the communities of Mullins and Marion, particularly around U.S. Route 76.

3.1.12 What other factors influence growth and development?

The modest growth in Dillon, Horry, and Marion Counties expected by the presence of the Preferred Alternative is largely a reflection of market reality. As mentioned, while an interstate has the capability to attract development, marked growth requires substantive demand as well as a presence of other factors. In commercial or industrial development, for example, additional factors may include an appropriate and available labor pool, along with access to resources or incentives.

Externalities, existing or future features not considered in this analysis, have the ability to impact growth in the area. Given that this analysis is intended to project growth to the Year 2030, it is safe to assume that unforeseen externalities will occur and that they would impact development patterns. Two externalities that are either in place or could occur in the near future have the potential to combine with the presence of I-73 to cause significant new growth to occur in the three-county area. These two externalities are the new infrastructure financing recently approved by the South Carolina General Assembly and the proposed development of 17,000 acres in Marion County.

3.1.12.1 Infrastructure for Interstate Industrial Parks

In March 2006, the South Carolina General Assembly approved new incentives for development as part of the Fiscal Year 2006-2007 State Appropriation Bill (H. 4810). Among line items included in the budget were approximately \$1.5 million in funds available for construction of infrastructure to improve industrial parks located within five miles of an interstate. The funds are to be used only in counties with high unemployment similar to Dillon and Marion Counties. While the new funds may immediately assist communities like Dillon that are located along I-



95, it is unlikely that any of this funding would still be available once the Preferred Alternative is constructed. However, this Bill indicates an understanding that the presence of an interstate alone is not sufficient to substantially add development to an area and that state leaders are willing to take extra steps to make the industrial parks more attractive for development.

3.1.12.2 Future Development in Marion County

Marion County is currently working in conjunction with potential investors to increase development in the area. Specifically, the county is seeking to develop more than 17,000 acres in Marion County. While I-73, if constructed, would not be expected to entice development, its presence improves the likelihood that large projects could occur.

3.1.13 Summary

New development is anticipated in the three-county area through 2030, particularly in Horry County. The Preferred Alternative is conservatively estimated to result in roughly 13 percent of additional new growth beyond the growth that is already expected to occur throughout the three-county area.