TRANSPORTATION ELEMENT

ENVISION 2025
HORRY COUNTY COMPREHENSIVE PLAN UPDATE

Final Version -
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Executive Summary

In 2007, the South Carolina General Assembly passed the Priority Investment Act. Pursuant to S.C. Code Section 6-29-510, this act requires South Carolina counties and municipalities to provide more specific information regarding housing, priority investment, and transportation within mandated Comprehensive Plans.

In compliance with this new mandate, the new Transportation Element is made part of the Horry County Comprehensive Plan "Envision 2025". This Element analyzes the county's transportation facilities, including major road improvements, new road construction, transit projects, pedestrian and bicycle projects. The Transportation Element makes a connection to the current land use element, in researching how transportation and land use interact and can better interact in the future.

With 82.5% of workers commuting by car in 2006, and a negligible 0.3% of commuters utilizing public transit, it is apparent that Horry County's transportation system is still very much focused around the individual motor vehicle.

The first section of the Transportation Element primarily discusses the existing transportation network in reference to the county's public road network with its functional classifications of Principal Arterials, Minor Arterials, Collector Roads, and Local Access Roads. Moreover, this section highlights the latest traffic volume numbers, Level-of-Service (LOS) or congestion levels within detailed tables and graphics as well as a detailed description of the county's most prevalent road improvement projects, such as RIDE I and RIDE II, and the Dirt Road Paving and Resurfacing Programs. Main funding sources toward these efforts are primarily through the one-cent capital projects sales tax which was passed by referendum in 2006, and affords financing a list of fifteen (15) capital projects within the RIDE II program.

In addition to the county's public road network, this Element explores all existing public transportation as well as pedestrian and cycling choices. Whereas, public transit is offered mainly through the Waccamaw Regional Transit Authority, also known as the COAST RTA through eleven (11) fixed and one (1) demand response bus routes throughout Horry and Georgetown Counties, the Grand Strand Area Transportation Study and its municipal members are collaborating to close sidewalk gaps and bike path connections, such as the proposed East Coast Greenway trail which is planned to run along the entire Eastern Seaboard of the United States.

Horry County owns and maintains four aviation facilities, which are part of the Horry County Department of Aviation and include: Myrtle Beach International Airport (MYR), Grand Strand Airport (CRE), Conway-Horry Airport (HWY), and Loris-Twin Cities Airport (5J9). These facilities contribute significantly to the county's accessibility and transportation system, as well as Horry County's continual Economic Development efforts.

Another part of the Transportation Element analyzes the funding sources and projects that will define the county's future transportation network. Since 2000, the area's Metropolitan Planning Organization which is called Grand Strand Area Transportation Study (GSATS), has committed over $168 million for specific Transportation Improvement Projects, such as the widening of U.S. Hwy. 17 Bypass, or the construction of new roads and bridges. Furthermore, through the American Recovery and Reinvestment Act of 2009 (ARRA) an additional $26 million or more may be spent for transportation related projects, such as bridge repairs, rural & urban mass transit, road resurfacing and other road construction projects.

This Element specifically describes all major new transportation projects that will improve access and connectivity for Horry County in the coming years. Prominent examples are the proposed Interstate Highways 73 and 74 that will connect the Grand Strand to the Nation's Interstate Highway System. Major proposed road projects such as the "Southern Evacuation Life Line (S.E.L.L.)", the extension of the Carolina Bays Parkway to the south and the north, as well as major intersection, new interchange and widening projects along the U.S. 17, U.S. 501 and S.C. 707 corridors (to name only a few), will not only enhance access and connectivity, but will also improve public health and safety in the event that a mandatory evacuation should ever become necessary.

In closing, the new Transportation Element fulfills a prerequisite of the new S.C. Priority Investment Act, as it looks at premier examples from the U.S. and Canada that show how land use patterns and transportation networks interact and how the provision of more transportation choices and alternatives can positively change the way we live, work and play. Thus, as applicable to Horry County a report by the National Cooperative Highways Research Program (NCHRP) indicates that "(…) failure to consider the interaction of the transportation and land use systems has led to several of the problems faced by rural communities, such as sprawling development overrunning a once pristine landscape, wide highways carrying excessive volumes of traffic and rendering a community's Main Street unsafe for pedestrians, or limited travel choices due to the lack of multimodal infrastructure and street connectivity." It further elaborates how better integration of land use and transportation can achieve three (3) major benefits for rural communities, such as Horry County, representing "(1) set the regional framework for where and how development

should occur, (2) improving local accessibility, and (3) enhancing community design" (NCHRP Report 582, pg. 14)."

A well planned transportation network is vital for visitors and residents to safely and efficiently arrive at their travel destinations. Secondly, good traffic circulation and safe roads are both equally important in promoting Horry County's reputation as an attractive vacation destination and a high quality place to live. Also, Horry County's geographic location makes it prone to the threat of hurricanes, thus requiring a local transportation system that is able to handle evacuation procedures in a timely and safe manner.

New State legislative requirements within the Comprehensive Planning Enabling Act and the new Priority Investment Act mandate a separate Transportation Element. This provides Horry County another opportunity to acknowledge the importance of a well-planned transportation system to the local economy.

As mentioned, within new State legislative requirements, "a 'transportation element' shall consider transportation facilities, including major road improvements, new road construction, transit projects, pedestrian and bicycle projects, and other elements of a transportation network. This element must be developed in coordination with the land use element, to ensure transportation efficiency for existing and planned development" (Section 6-29-510(D), No. 8, S.C. Local Government Comprehensive Planning Enabling Act, as amended 2007).

Like the rest of the nation for at least the past fifty years, the Grand Strand's transportation network has been primarily focused on the automobile. With most visitors arriving by car, the emphasis has been placed on enhancing the local road network. Even in conjunction with the huge development boom of recent years, transportation efforts have been mainly concentrated on improving the county's public road system. Since the year 2000, both the State and the County have invested over $1 billion in major road improvement projects. The latest available commuting statistics compiled by the U.S. Census Bureau show that not only the majority of visitors, but also the majority of residents, travel by car. In 2006, 82.5% of workers in Horry County drove to and from work alone. Moreover, only 10.3% car-pooled, and a negligible 0.3% used public transportation to commute to and from work. Similar auto-oriented travel patterns connected with other activities are assumed.

The following sections within the Transportation Element will highlight the existing transportation network, including previous and current improvement projects, the functional road system and its Level of Service, as well as funding sources and alternative modes of transportation in the form of public transit, pedestrian and bicycle travel, and airports. Subsequently, this element will outline future transportation improvement

projects, discuss enhancements to alternative transportation modes, and will touch on existing plans for the Grand Strand. As a conclusion, this element will include strategic recommendations in the form of Goals and Strategies, that will guide County Council, as well as other decision-makers and investors to recognize regional trends, and to help in making the right choices and decisions for elevating the Grand Strand's and Horry County's transportation system into the 21st century.

The Existing Transportation Network

Horry County's functional Road Network

With Horry County being the largest county in South Carolina, and one of the largest counties east of the Mississippi River, its road network of Federal, State and County highways is vast. As of July 1, 2010, Horry County maintains a total of 1,425 miles of county roads, of which 677 miles are paved and 748 miles are unpaved. Additionally, the South Carolina Department of Transportation manages a total of 1,348 miles of primary and secondary state roads within the County. The Federal Government and the State maintain a total of 223 miles of U.S. Highways.

All three tiers of Federal, State, and County roads are part of an overall functional road classification system that determines a hierarchy of roads based on average trip lengths, traffic flows and volumes, as well as linkage between towns, regions, and states. Therefore, the functional classification system for Horry County's road network consists of:

- Principal Arterials,
- Minor Arterials,
- Collectors (Major and Minor), and
- Local Access Roads;

Principal Arterials are roads of first order, connecting and serving major centers of activity. These roads carry the highest volume of traffic of any given roadways, particularly making Horry County accessible to regional and out-of-state road travelers. They mainly include all main visitors' arriving and departing routes. Moreover, *Principal Arterials* absorb significant intra-county travel such as between cities, towns and between all major beach destinations/attractions and outlying residential areas. *Principal Arterials* per our classification handle traffic of over 10,000 Average Daily Trips (ADT).

Minor Arterials accommodate trips of moderate length as well as distribute traffic to smaller geographic areas than the principal arterial system. Therefore, *Minor Arterials* mostly inhabit inter- and intracounty travel services with trip lengths and traffic densities that are

greater than those predominantly served by collector or local access road systems. *Minor Arterials* are roads that will carry an average daily traffic flow of at least 5,000 trips.

Collectors serve as mid-grade road connections between residential areas, commercial and employment parks by generally steering local traffic streams to higher level roads in the urbanized areas. Furthermore, *Collectors* within the two-thirds of the rural areas of Horry County serve as intermediate corridors that link broader traffic generating areas, such as rural communities, scattered subdivisions and farms to routes of higher classification. Included within the *Collectors* classification are many secondary state routes and roads that the Horry County Engineering Department has classified as "Arterial" and "Collector" roads. Examples for latter include urban roads such as "Carolina Forest Boulevard", "Palmetto Point Boulevard" and "Garden City Connector", as well as rural highways such as "Highway 319", "Nichols Highway" or "Daisy Road".
Since there exists a huge distinction between rural and urban road systems in Horry County, the overall *Collector* roads classification is further divided into *Major* and *Minor Collectors.* Most *Major Collectors* represent roads on the urban-suburban interface around Conway, Myrtle Beach, as well as North and South Strand areas, whereas the *Minor Collectors* are mostly secondary State roads in the rural parts of Horry County. In accordance to their usual traffic volumes, *Major Collectors* on average handle between 2,000 and 5,000 daily trips, whereas *Minor Collectors* absorb traffic volumes between 500 and 2,000 ADT.

The *Local Access Road system* in Horry County can be defined as travel facilities where through traffic movement is discouraged or simply not possible. *Local Access Roads* predominantly provide direct access to specific commercial, residential, institutional and other developments. They can be classified as routes of the lowest functional order. These roads typically handle no more than 500 Average Daily Trips.

As a result, Horry County's functional road classification system as of 2008 consists of a total of 421 miles of *Principal Arterials*, approximately 44 miles of *Minor Arterials*, around 76 miles of *Major Collectors*, as well as 340 miles of *Minor Collectors* and last but not least 532 miles of *Local Access Roads* that are represented by paved and unpaved county roads.

A more detailed listing of above mentioned classifications of roads, including their Average Daily Trip (ADT) numbers (as an average of all available ADT on that particular stretch of road), as most recently assessed by the South Carolina Department of Transportation (SCDOT) as of 2008, can be found in the following table.

Table 1: List of Horry County Roads by functional classification (2008)

Official Route No.	Common Name	General Area	Length (in miles)	Traffic Volume (in ADT)*
Principal Arterials				
U.S. 17	Highway 17	Little River	5	37,300
U.S. 17 & U.S. 17 BYP	Highway 17 (Bypass)	North Myrtle Beach/ Myrtle Beach	57.3	48,529
U.S. 17 BUS	Kings Highway	Garden City/ Surfside Beach/ Myrtle Beach	33.2	30,150
U.S. 501/ U.S. 501 BUS	Highway 501	Myrtle Beach/ Conway/ Aynor/ Galivants Ferry	69	37,091
U.S. 378	Highway 378	Conway	11.5	10,350
U.S. 701N.	Highway 701	Conway/Loris	25.6	11,567
U.S. 701S.	Highway 701	Conway	14.8	10,350
S.C. 9/ S.C. 9 BYP	Highway 9	Little River/ Longs/ Loris/ Green Sea	40	14,600
S.C. 22	Veterans Highway/ Conway Bypass	North Myrtle Beach/ Conway	66.6	13,050
S.C. 31	Carolina Bays Parkway/ Highway 31	North Myrtle Beach/ Myrtle Beach	46	21,275
S.C. 90	Highway 90	Conway/ Little River	23.2	10,034
S.C. 137	Forestbrook Rd.	Myrtle Beach	4.7	10,900
S.C. 544	Highway 544/ Dick Pond Rd.	Conway/ Socastee/ Surfside Beach	11.6	31,750
S.C. 707	Highway 707	Socastee/ Murrells Inlet	9.2	21,750
S.C. 1240	Holmestown Rd./ Glenns Bay Rd.	Socastee/ Surfside Beach	3.6	15,000
(County Rd.)	Carolina Forest Blvd.	Myrtle Beach	6.6	10,190
(County Rd.)	International Dr. (between S.C. 31 and River Oaks Dr.)	Myrtle Beach	0.6	14,893
(County Rd.)	River Oaks Dr. (between Carolina Forest Blvd. and International Dr.)	Myrtle Beach	0.7	10,087
Total			**429.2**	
Minor Arterial	**Common Name**	**General Area**	**Miles**	**ADT**

S.C. 9 BUS	Highway 9 (Business)/ Main St.	Loris	12	6,200
S.C. 57	Highway 57	Little River	7.3	6,100
S.C. 905	Highway 905	Conway/ Longs	24.5	5,134
(County Rd.)	River Oaks Dr. (south of Carolina Forest Blvd.)	Myrtle Beach	4.3	9,776
Total			**48.1**	
Major Collector	**Common Name**	**General Area**	**Miles**	**ADT**
S.C. 29	Dongola Hwy.	Conway	3.9	4,134
S.C. 31 (old)	Red Bluff Rd.	Longs/ Loris	11	3,417
S.C. 50	Highway 50	Little River	2.3	2,500
S.C. 111	Highway 111	Little River	4.1	2,600
S.C. 165	Cultra Rd./ Dunn Shortcut Rd./ E. Country Club Rd.	Conway	6.3	4,800
S.C. 319	Highway 319	Conway/ Aynor	11.5	2,325
S.C. 548	Four Mile Rd.	Conway	3.1	2,325
S.C. 917	Highway 917	Nichols	14.4	2,400
(County Rd.)	Garden City Connector	Garden City	1.1	N/A
(County Rd.)	Palmetto Point Blvd.	Myrtle Beach	1.9	N/A
S.C. 1121	Singleton Ridge Rd.	Conway	1.9	N/A
(County Rd.)	Myrtle Ridge/ Gardner Lacy Rd.	Conway	4.2	3,570
(County Rd.)	Tournament Blvd.	Garden City/ Murrells Inlet	1.5	N/A
Total			**73.8**	
Minor Collector	**Common Name**	**General Area**	**Miles**	**ADT**
U.S. 76	Highway 76	Green Sea	6.7	1,700
S.C. 19	Highway 19	Conway/ Nichols	27.5	1,125
S.C. 23	Nichols Highway	Conway/ Aynor/ Galivants Ferry/ Nichols	17.5	932
S.C. 24	Jordanville Rd.	Aynor	7.4	1,667
S.C. 29/S.C. 135	Cates Bay Hwy./ 9th Ave.	Conway	7.5	950
S.C. 33	Fair Bluff Rd.	Green Sea	6.2	1,150
S.C. 44	Duford Rd.	Nichols	5.1	208
S.C. 45	Highway 45	Loris	7.9	1,256
S.C. 48	Bucksport Rd.	Conway	4.4	N/A
S.C. 59	Mt. Olive Church Rd.	Green Sea/ Nichols	6.6	550
S.C. 62	Dog Bluff Rd.	Galivants Ferry	5.7	650

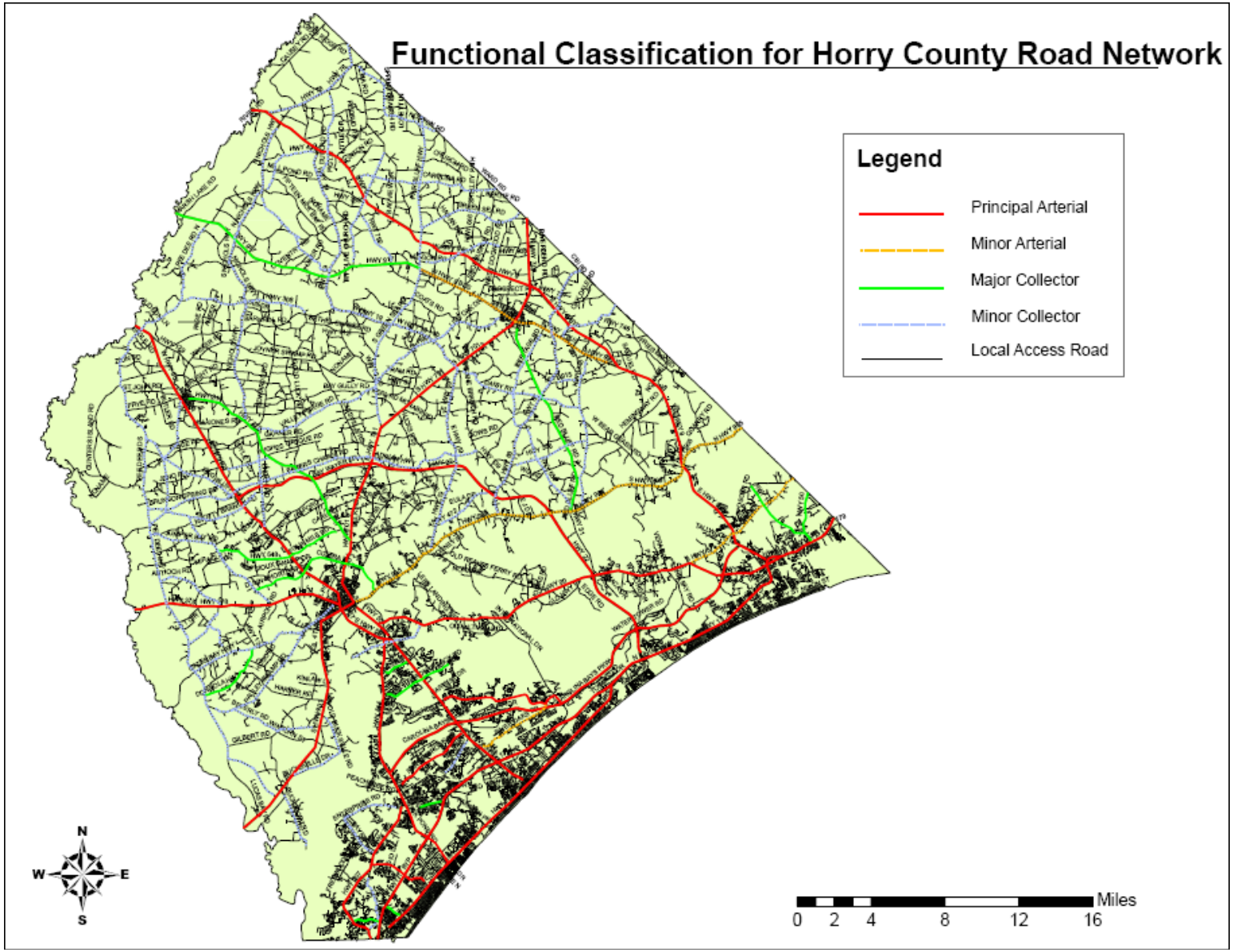
S.C. 63	Antioch Rd.	Conway	4	N/A
S.C. 66	Highway 66	Conway/ Loris	14.9	975
S.C. 72	Spring Branch Rd./ Norton Rd.	Nichols/ Galivants Ferry	4.9	550
S.C. 75	Valley Forge Rd.	Aynor	7.3	750
S.C. 78	Juniper Bay Rd.	Conway	8.1	N/A
S.C. 79	Beverly Rd./ Gilbert Rd.	Conway	6.6	N/A
S.C. 97	Brunson Spring Rd./ Adrian Hwy./ Horry Rd.	Aynor/ Conway/ Galivants Ferry	16	934
S.C. 99	Pee Dee Highway	Conway/ Galivants Ferry	36.4	600
S.C. 103	Mt. Zion Rd.	Loris	4.6	100
S.C. 109	Pauley Swamp Rd.	Conway	4	N/A
S.C. 112	Daisy Rd.	Loris	7.2	900
S.C. 134	Highway 134	Conway	2.5	N/A
S.C. 136	Old Bucksville Rd.	Conway	2.1	N/A
S.C. 266	Black Creek Rd.	Nichols	6.1	N/A
S.C. 306	Carolina Rd./ Fairview Hwy.	Green Sea	8	350
S.C. 308	Highway 308	Galivants Ferry	7.2	250
S.C. 348	Highway 348	Loris	6.7	1,200
S.C. 366	Highway 366	Conway/ Loris	4.4	600
S.C. 410	Green Sea Rd.	Green Sea	17.7	1,625
S.C. 420	Log Cabin Rd.	Loris	2.2	950
S.C. 430	Highway 430	Nichols	4.7	N/A
S.C. 472	Highway 472	Conway	4	N/A
S.C. 475	Bucksville Dr.	Conway	3.2	N/A
S.C. 554	Highway 554	Loris	5.5	N/A
S.C. 568	Cherry Hill Rd./ Heritage Rd.	Loris	6	N/A
S.C. 591	Enoch Rd.	Conway/ Aynor	5.1	N/A
S.C. 642	Lundy Shortcut Rd.	Conway/ Galivants Ferry	2.9	N/A
S.C. 792	Highway 792	Nichols/ Loris	3.4	N/A
S.C. 847	Knotty Branch Rd.	Conway	3.2	N/A
S.C. 915	Highway 915	Loris	1.7	N/A
S.C. 926	Enterprise Rd.	Socastee	3.3	N/A
S.C. 934	Hendricks Shortcut Rd.	Conway	2.2	N/A
S.C. 935	Hunting Swamp Rd.	Conway	2.1	N/A
S.C. 985	Hucks Rd.	Aynor	2.7	N/A
S.C. 992	Burcale Rd.	Myrtle Beach	2.5	N/A
(County Rd.)	Bay Rd.	Socastee	3.3	770

(County Rd.)	Cox Ferry Rd. (East/West)	Conway	4.4	657
(County Rd.)	McDowell Shortcut Rd.	Garden City	3.8	1,500
Total			**337.4**	
Local Access Roads				
All other unclassified local access roads (County Roads; paved and unpaved)			**532.3**	

*** ADT: Average Daily Trips**

In accordance to the above outlined road classification system in Horry County, the following maps graphically highlight the geographic location of the specific *Arterial, Collector* and *Local Access Roads*, as well as indicate the Volume/Capacity ratios that show of how well roads are able to handle current traffic volumes, thus determining their so-called Level of Service.

Map 1: Functional Classification for Horry County Road Network (2008)



Source: Horry County Planning & Zoning Department, 2008

Level of Service, Traffic Volumes and Trends

Based on the Highway Capacity Manual by the Transportation Research Board of the National Academies (TRB), the following analysis of the Level of Service (LOS) is a tool through which transportation planners can determine the current quality of service and need to improve the relevant transportation facilities, in our case the network of *Arterial Highways* in Horry County. Typically, the car driving public is most interested in time and speed, however, LOS takes a more holistic approach examining several other factors, such as number of travel lanes, speed limits, and traffic counts.

Generally, Level of Service (LOS) is useful in comparing alternatives with different type facilities or different sizes because each LOS is a qualitative description of how traffic flows. It is similar to the A to F grading system used in school. Each level of service describes the driver's comfort level and ability to drive at his or her desired speed:

- **LOS "A"**: Free flow operations: Vehicles are almost completely unaffected by other vehicles, and operations are constrained only by geometric features of the highway and driver preferences. Minor disruptions to flow are easily absorbed without major delays;
- **LOS "B"**: Near free flow conditions: Other vehicles become noticeable; although the driver's general level of physical and psychological comfort is still high. Minor disruptions to flow are still easily absorbed, but flow locally deteriorates to a LOS worse than A;
- **LOS "C"**: Stable flow: The ability to maneuver within the traffic stream, and to select an operating speed, is now clearly affected by the presence of other vehicles. The driver may experience a noticeable increase in tension. Minor disruptions can cause major delay and queues;
- **LOS "D"**: Unstable flow: A very small increase in traffic can cause a substantial deterioration in conditions. Freedom to maneuver is highly limited, and driver tension is high. Only the smallest disruptions can be absorbed without system breakdown;
- **LOS "F"**: Forced or breakdown flow: This stop-and-go traffic has very high density (vehicles per mile), but delay is quite high; (Wilbur Smith Associates for Waccamaw Regional Council of Governments: *GSATS Long Range Transportation Plan*, Appendix D-3, 2005).

The Volume/Capacity (V/C) ratios are based on 2008 traffic count numbers and predefined highway capacity numbers and are the two (2) main components used to calculate these LOS classifications. As highlighted in the table below, the resulting LOS categories range from the best category being LOS "A" with a V/C ratio of 0.5 or better to the worst designation of LOS "F" with a V/C ratio of 1.351 or worse. As shown in the according map below, stretches of roads that are color-coded in red, purple and blue, can be considered

congested with current traffic levels equaling or even surpassing the specific road design capacities.

The comparison between the SCDOT traffic count numbers between 2005 and 2008 show a drastic increase in traffic volume especially in areas of the county, where major road improvements have been completed, e.g. S.C. 22 (Conway Bypass) and S.C. 31 (Carolina Bays Parkway) or along corridors on the urban/suburban and rural fringes where a lot of new commercial and especially residential development has occurred within the last ten (10) years. Good examples for latter are S.C. 57 in the Little River area, as well as the U.S. 701 North/South and U.S. 378 corridors on the rapidly expanding outskirts of Conway. All exact numbers can be found in the table above.

Contributing heavily to the current and future state of Horry County's road system, is the continuing commitment of improving and expanding through several road improvement measures. These RIDE programs have resulted in several major road system upgrades since their commencement in the mid 1990's.

Table 2: Analysis of Traffic Volumes, Road Capacities and resulting Level of Service (LOS) classifications for Arterial Roads in Horry County

Principal Arterial

Route No.	Road Capacity (at LOS "C")	SCDOT Traffic Count Station Location	ADT - 2005	ADT - 2006	ADT - 2007	ADT - 2008	ADT Changes (2005 - 2008)	V/C ratio (2007)	V/C ratio (2008)
US 17 (Bypass)		Little River - #123	29,700	31,500	31,400	31,300	5.4%	0.93	0.93
	33,600 (4 lanes, div.)	Little River - #125	41,000	43,400	43,200	43,000	4.9%	1.29	1.28
	50,400 (6 ln., div.)	NMB - #109	62,500	61,100	62,000	59,400	-5.0%	1.23	1.18
	50,400 (6 ln., div.)	NMB - #111	59,400	59,900	61,100	56,400	-5.1%	1.21	1.12
	43,800 (6 ln., undiv.)	NMB - #113	52,600	52,300	52,900	48,100	-8.6%	1.21	1.10
	43,800 (6 ln., undiv.)	NMB - #115	50,000	49,700	50,300	46,100	-7.8%	1.15	1.05
	43,800 (6 ln., undiv.)	NMB - #117	49,100	48,800	49,300	45,000	-8.4%	1.13	1.03
	43,800 (6 ln., undiv.)	NMB - #119	46,600	46,400	48,900	45,500	-2.4%	1.12	1.04
	33,600 (4 ln., div.)	NMB - #120	41,400	42,500	42,900	41,500	0.2%	1.28	1.24
	36,500 (4 / 6 ln., undiv.)	NMB - #121	43,000	42,800	45,200	41,800	-2.8%	1.24	1.15
	42,000 (4 / 6 ln., div.)	MB - #105	45,200	45,800	46,000	44,800	-0.9%	1.10	1.07
	42,000 (4 / 6 ln., div.)	MB - #107	32,400	35,200	35,300	33,200	2.5%	0.84	0.79
	42,000 (4 / 6 ln., div.)	MB - #110	43,000	45,100	44,700	43,500	1.2%	1.06	1.04
	42,000 (4 / 6 ln., div.)	MB (Southend) - #100	37,100	38,200	38,500	35,900	-3.2%	0.92	0.85
	42,000 (4 / 6 ln., div.)	MB (Southend) - #103	54,200	54,800	56,500	54,800	1.1%	1.35	1.30
	42,000 (4 / 6 ln., div.)	MB (Southend) - #104	42,900	44,400	45,800	43,700	1.9%	1.09	1.04
US 17 BUS	33,600 (4 ln., div.)	Murrells Inlet - #101	10,700	9,100	10,400	9,500	-11.2%	0.31	0.28
	33,600 (4 ln., div.)	Surfside Beach - #102	38,600	34,800	35,900	33,000	-14.5%	1.07	0.98
	33,600 (4 ln., div.)	Garden City - #106	32,700	29,600	30,700	29,100	-11.0%	0.91	0.87
	33,600 (4 ln., div.)	Surfside/MB - #108	34,400	31,100	32,300	29,200	-15.1%	0.96	0.87
	33,600 (4 ln., div.)	MB - #127	32,400	29,600	29,000	28,000	-13.6%	0.86	0.83
	33,600 (4 ln., div.)	MB - #129	29,800	26,900	26,100	24,900	-16.4%	0.77	0.74

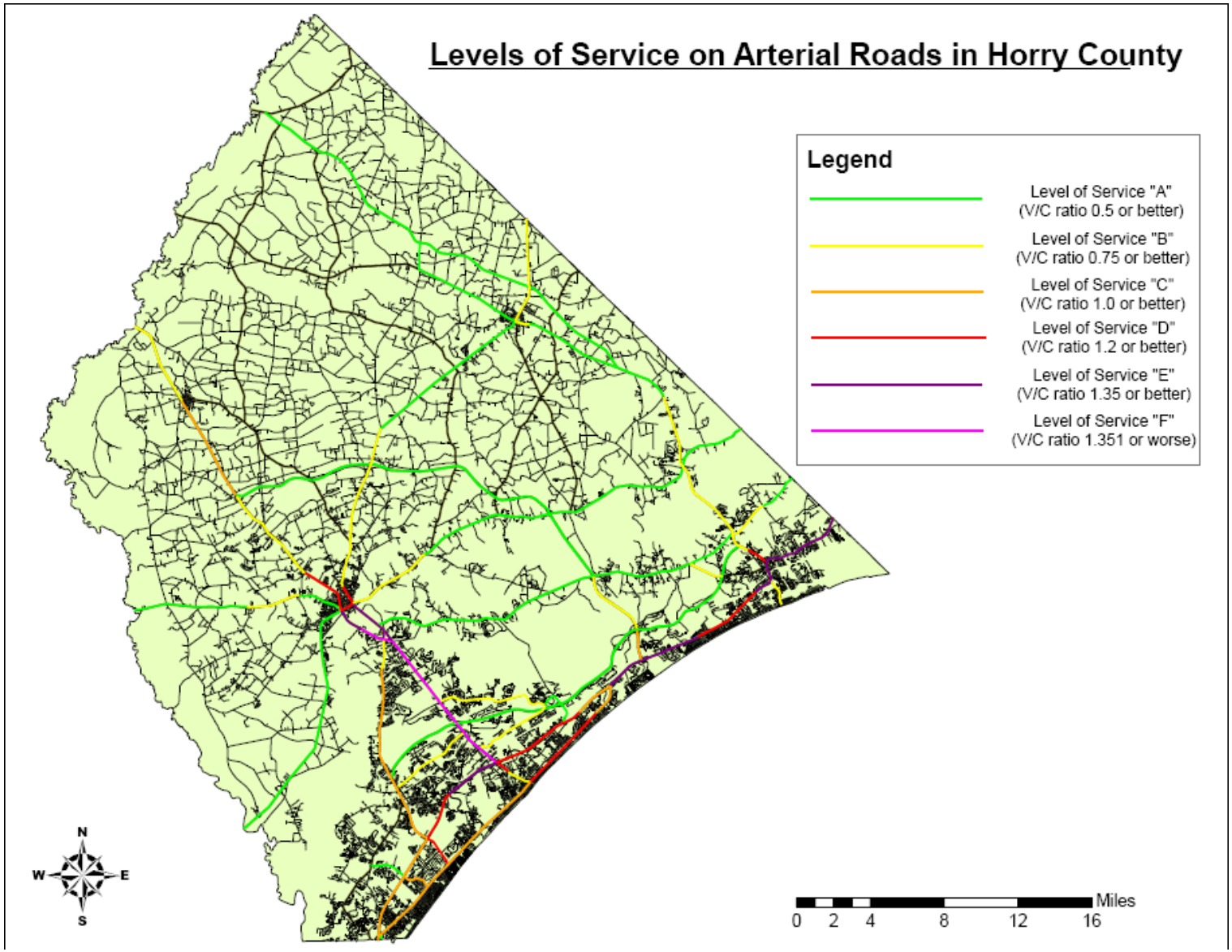
	33,600 (4 ln., div.)	MB - #131	35,200	31,300	30,900	29,600	-15.9%	0.92	0.88
	33,600 (4 ln., div.)	MB - #133	39,100	35,200	34,500	33,200	-15.1%	1.03	0.99
	33,600 (4 ln., div.)	MB - #135	39,700	38,600	38,600	37,300	-6.0%	1.15	1.11
	33,600 (4 ln., div.)	MB - #137	34,600	33,300	33,100	31,400	-9.2%	0.99	0.93
US 501	33,600 (4 ln., div.)	Aynor/G.F. - #149	22,900	22,200	21,400	18,100	-21.0%	0.64	0.54
	33,600 (4 ln., div.)	Aynor/Conway - #150	21,500	21,900	22,500	21,400	-0.5%	0.67	0.64
	33,600 (4 ln., div.)	Aynor/Conway - #151	24,400	25,000	25,400	23,600	-3.3%	0.76	0.70
	33,600 (4 ln., div.)	Conway - #153	36,500	34,500	34,800	31,500	-13.7%	1.04	0.93
	33,600 (4 ln., div.)	Conway - #155	35,800	33,800	33,900	30,500	-14.8%	1.01	0.91
	33,600 (4 ln., div.)	Conway - #157	46,800	46,400	45,500	42,200	-9.8%	1.35	1.26
	33,600 (4 ln., div.)	Conway - #159	46,400	46,500	45,700	42,300	-8.8%	1.36	1.26
	33,600 (4 ln., div.)	Conway/MB - #161	52,000	53,600	53,500	50,700	-2.5%	1.59	1.51
	33,600 (4 ln., div.)	MB - #163	65,900	68,300	67,400	67,000	1.7%	2.00	1.99
	33,600 (4 ln., div.)	MB - #165	39,900	35,900	35,000	34,500	-13.5%	1.04	1.03
	33,600 (4 ln., div.)	MB - #167	26,400	23,800	22,900	22,400	-15.2%	0.68	0.67
US 501 BUS	33,600 (4 ln., div.)	Conway - #169	14,700	14,500	13,200	13,200	-10.2%	0.39	0.39
	16,800 (3 ln., undiv.)	Conway - #171	20,200	20,800	22,200	21,000	4.0%	1.32	1.25
	16,800 (3 ln., undiv.)	Conway - #173	22,400	21,500	21,900	19,500	-12.9%	1.30	1.16
	16,800 (3 ln., undiv.)	Conway - #183	15,300	16,300	17,400	16,300	6.5%	1.04	0.97
US 378	16,800 (3 ln., undiv.)	Conway - #142	7,300	7,800	7,700	7,000	-4.1%	0.46	0.42
	16,800 (3 ln., undiv.)	Conway - #143	7,300	10,700	9,800	9,000	23.3%	0.58	0.54
	33,600 (4 ln., div.)	Conway - #145	11,200	11,500	11,000	9,800	-12.5%	0.33	0.29
	33,600 (4 ln., div.)	Conway - #147	12,700	13,100	12,900	11,600	-8.7%	0.38	0.35
US 701N.	33,600 (4 ln., div.)	Conway - #185	20,100	22,000	22,400	22,600	12.4%	0.67	0.67
	16,800 (3 ln., undiv.)	Conway - #187	10,300	10,400	10,900	10,600	2.9%	0.65	0.63
	16,800 (3 ln., undiv.)	Loris - #189	7,200	7,300	7,700	7,400	2.8%	0.46	0.44
	16,800 (3 ln., undiv.)	Loris - #191	6,700	6,800	7,200	6,800	1.5%	0.43	0.4
	16,800 (3 ln., undiv.)	Loris - #193	11,600	11,500	11,900	11,500	-0.9%	0.71	0.68
	16,800 (3 ln., undiv.)	Loris - #194	7,900	7,800	9,300	8,800	11.4%	0.55	0.52
US 701S.	16,800 (3 ln., undiv.)	Conway - #175	7,500	7,700	7,600	7,300	-2.7%	0.45	0.43
	33,600 (4 ln., div.)	Conway - #177	11,600	13,300	13,100	12,800	10.3%	0.39	0.38
SC 9 (BYP)	16,800 (3 ln., undiv.)	Green Sea - #195	4,500	4,800	4,700	4,200	-6.7%	0.28	0.25
	33,600 (4 ln., div.)	Loris - #197	6,000	6,000	6,800	7,600	26.7%	0.20	0.23

	33,600 (4 ln., div.)	Loris/Longs - #199	21,000	22,300	22,200	20,600	-1.9%	0.66	0.61
	33,600 (4 ln., div.)	Loris - #200	9,400	8,900	9,500	10,300	9.6%	0.28	0.31
	16,800 (3 ln., undiv.)	Little River - #201	19,100	20,400	20,200	19,700	3.1%	1.20	1.17
	33,600 (4 ln., div.)	NMB - #202	20,700	22,100	24,200	23,400	13.0%	0.72	0.70
SC 22	33,600 (4 ln., div.)	Conway/Longs - #112	12,400	12,100	12,900	12,000	-3.2%	0.38	0.36
	33,600 (4 ln., div.)	NMB - #114	25,300	26,000	27,100	25,100	-0.8%	0.81	0.75
	33,600 (4 ln., div.)	Conway/Loris - #116	5,400	5,700	6,000	5,500	1.9%	0.18	0.16
	33,600 (4 ln., div.)	Conway - #118	5,600	5,600	5,700	4,800	-14.3%	0.17	0.14
	33,600 (4 ln., div.)	Conway/Loris - #122	7,400	8,500	8,500	7,700	4.1%	0.25	0.23
	33,600 (4 ln., div.)	NMB/Longs - #124	N/A	17,600	18,100	18,000	2.3%	0.54	0.54
SC 31	63,000 (6 ln., div.)	MB - #208	14,300	14,600	13,800	12,500	-12.6%	0.22	0.20
	63,000 (6 ln., div.)	NMB - #210	19,000	21,000	21,800	20,100	5.8%	0.35	0.32
	63,000 (6 ln., div.)	MB - #214	17,400	19,000	21,100	17,600	1.1%	0.34	0.28
	63,000 (6 ln., div.)	MB/NMB - #216	26,000	27,200	28,400	25,600	-1.5%	0.45	0.41
SC 90	16,800 (3 ln., undiv.)	Conway - #223	7,800	8,500	8,400	7,300	-6.4%	0.50	0.43
	16,800 (3 ln., undiv.)	Conway - #224	6,800	7,400	7,300	6,300	-7.4%	0.43	0.38
	16,800 (3 ln., undiv.)	NMB/L.R. - #225	6,900	6,900	6,800	6,700	-2.9%	0.40	0.40
	16,800 (3 ln., undiv.)	NMB/L.R. - #226	8,800	9,600	9,500	8,000	-9.1%	0.57	0.48
	16,800 (3 ln., undiv.)	NMB/L.R. - #227	13,400	13,400	13,100	13,000	-3.0%	0.78	0.77
	16,800 (3 ln., undiv.)	L.R. - #229	13,900	14,900	15,100	15,700	12.9%	0.90	0.93
SC 137 (Forestbrook Rd.)	16,800 (3 ln., undiv.)	MB - #489	11,400	12,000	10,900	12,000	5.3%	0.65	0.71
SC 544	33,600 (5 ln., undiv.)	Surfside Beach - #238	34,700	37,300	38,500	35,100	1.2%	1.15	1.04
	33,600 (5 ln., undiv.)	Socastee - #239	26,100	29,200	30,300	27,300	4.6%	0.90	0.81
	33,600 (5 ln., undiv.)	Socastee/Surside - #240	34,500	37,200	38,300	34,600	0.3%	1.14	1.03
	33,600 (5 ln., undiv.)	Conway - #241	26,900	29,100	29,800	28,100	4.5%	0.89	0.84
	33,600 (5 ln., undiv.)	Conway - #242	19,300	21,500	23,100	21,000	8.8%	0.69	0.63
	33,600 (5 ln., undiv.)	Conway - #244	26,600	28,900	30,500	28,700	7.9%	0.91	0.85
SC 707	16,800 (3 ln., undiv.)	Murells Inlet/Socastee -	16,000	17,200	16,200	18,500	15.6%	0.96	1.10

	29,200 (4 ln., undiv.)	#247 Socastee - #249	25,500	28,200	27,300	26,900	5.5%	0.93	0.92
SC 1240 (Holmestown/Glenns Bay Rd.)	16,800 (3 ln., undiv.)	Surfside - #697	18,200	16,200	16,100	15,100	-17.0%	0.96	0.90
	16,800 (3 ln., undiv.)	Surfside - #699	17,900	15,900	15,800	N/A	-11.7%	0.94	
	33,600 (5 ln., undiv.)	Surfside - #700	11,600	13,900	13,100	13,800	19.0%	0.39	0.41
Carolina Forest Blvd.	33,600 (5 ln., undiv.)	from US 501 to Gateway Dr.	N/A	N/A	19,953	N/A		0.59	
Carolina Forest Blvd.	14,600 (2 ln., undiv.)	Gateway Dr. (prior construction)	N/A	N/A	18,148	N/A		1.24	
Carolina Forest Blvd.	14,600 (2 ln., undiv.)	at Seventh Day Ad. Church	N/A	N/A	11,758	N/A		0.81	
Carolina Forest Blvd.	14,600 (2 ln., undiv.)	in between "The Farm" entrances	N/A	N/A	10,194	N/A		0.7	
International Dr. (4-lanes)	33,600 (5 ln., undiv.)	SC31 and River Oaks Dr.	N/A	N/A	14,893	N/A		0.44	
International Dr. (2-lane)	14,600 (2 ln., undiv.)	past River Oaks Dr.	N/A	N/A	5,306	N/A		0.36	
River Oaks Dr. (4-lanes)	33,600 (5 ln., undiv.)	Int'l Dr. & Carolina Forest Blvd.	N/A	N/A	11,802	N/A		0.30	
Minor Arterial									
SC 9 BUS	16,800 (3 ln., undiv.)	Loris - #203	2,400	2,300	2,300	2,300	-4.2%	0.14	0.14
	16,800 (3 ln., undiv.)	Loris - #205	6,000	5,900	5,900	5,800	-3.3%	0.35	0.35
	16,800 (3 ln., undiv.)	Loris - #207	8,200	8,100	8,900	8,300	1.2%	0.52	0.49
	16,800 (3 ln., undiv.)	Loris - #209	6,900	6,900	7,700	7,000	1.4%	0.46	0.42
SC 57	16,800 (3 ln., undiv.)	NMB/Longs - #447	3,900	4,000	4,000	4,600	17.9%	0.24	0.27
	16,800 (3 ln., undiv.)	Little River # 449	8,300	8,200	9,400	8,900	7.2%	0.56	0.53
	16,800 (3 ln., undiv.)	Little River - #450	3,900	4,000	4,900	4,600	17.9%	0.29	0.27
SC 905	16,800 (3 ln., undiv.)	Conway - #251	9,300	8,800	9,200	7,800	-16.1%	0.55	0.46
	16,800 (3 ln., undiv.)	Conway/Longs - #253	4,400	4,100	4,200	3,400	-22.7%	0.25	0.20
	16,800 (3 ln., undiv.)	Longs - #254	1,900	1,950	2,000	1,700	-10.5%	0.12	0.10
River Oaks Dr. (2-lane)	14,600 (2 ln., undiv.)	at "The Bluffs"	N/A	N/A	9,776	5,435		0.67	0.37

	LOS A	V/C = 0.5 or better	
	LOS B	V/C = 0.75 or better	NOTE: LOS classification thresholds in accordance to standards provided and used by the
	LOS C	V/C = 1.0 or better	
	LOS D	V/C = 1.2 or better	South Carolina Department of Transportation (SCDOT) and
	LOS E	V/C = 1.35 or better	Grand Strand Area Transportation Study (GSATS).
	LOS F	V/C = 1.351 or worse	Sources: SCDOT/GSATS/Horry County

Map 2: Level of Service classification of Arterial Roads in Horry County (as of 2008)



Source: Horry County Planning & Zoning Department, 2008

The above shown Level-of-Service (LOS) classifications (Map 2) represent a "mid-block" approach only, meaning that the LOS analysis excludes any Level-of-Service determinations at intersections. This, for example, has led to an overall LOS "B" classification for Carolina Forest Boulevard, although this road is known to have traffic backups and long waits at intersections (U.S.501 & Carolina Forest Blvd.).

The RIDE programs

The growing popularity of the Grand Strand for visitors as well as rapid growth and development as a result of a significant gain of all-year residents, have lead to overburdening road conditions, especially along the Strand. The classic north-south routes, such as U.S. 17 (including U.S. 17 Business and Bypass), experienced major gridlock in the early to mid 1990's. This overall development forced local and state officials as well as businessmen and citizens to come together to study ways to alleviate congestion from local roads and to establish a special transportation committee.

The "Road Improvement and Development Effort" (RIDE) Committee was formed in 1996 to determine short and long term transportation infrastructure needs and to explore funding options. As a result of the original RIDE Committee's planning and engineering efforts and with the availability of funding coming from a new 1.5% hospitality fee introduced in 1997 as well as appropriations from the State Infrastructure Bank (SIB), Horry County managed to enhance its *Principal Arterial* road network by a total of twenty (20) roadway projects with an investment valued of $1.2 billion over a course of six (6) years. The most prominent transportation improvements that came out of the RIDE I program were the initial construction of S.C. 22, or Veteran's Highway (a.k.a. Conway Bypass), as well as S.C. 31, or commonly known as the Carolina Bays Parkway. The improvement program also included the widening of S.C. 544 to a total of five (5) lanes (including one continuous center lane) as well as the widening of U.S. 17 Bypass to six (6) travel lanes between U.S. 501 and 29th Avenue North in Myrtle Beach. The last two transportation improvement projects completed as part of the RIDE I program, are the North Myrtle Beach Main Street Connector, named "Robert Edge Parkway", linking Main Street in North Myrtle Beach with the Carolina Bays Parkway (S.C. 31) and S.C. 90 as well as the Fantasy Harbour Bridge, connecting George Bishop Parkway with Harrelson Boulevard and U.S. 17 Bypass in the vicinity of Fantasy Harbour and the Myrtle Beach International Airport were opened to traffic in 2009. All these latter projects were approved after the initial RIDE I program had started, and were additionally granted funding of $198 million by the State Infrastructure Bank (SIB) in December 2001.

Whereas the RIDE I program has contributed to an impressive expansion of high-capacity highways, especially benefitting the tourist population in the eastern one-third of the County, its successor, the RIDE II program, is intended to enhance transportation choices for the growing resident population of this area.

Similar to the establishment of the RIDE I Committee, Horry County Council founded the RIDE II Committee on April 17, 2001. As with its predecessor, the committee is tasked with the duties of providing advisory input to the Horry County Council and state government regarding road improvement efforts in Horry County. The committee also makes recommendations that will ensure continuation of road improvements. The RIDE II Committee consists of eleven (11) voting members as well as one (1) ex-officio and one (1) non-voting member.

Figure 1: RIDE II – "Riding on a Penny" logo

Source: Horry County Government, 2007

Major funding resources for the RIDE II efforts were approved on November 7, 2006 by Horry County voters through the "One-Cent Capital Projects Sales Tax" referendum. As a result of that referendum, all retail sales, accommodations and prepared food and beverages are being taxed with an additional penny for a period of seven (7) years, starting May 1, 2007. Prior to the referendum, Horry County Council appointed a six member Capital Projects Sales Tax Committee to identify and assess needed road projects countywide. As part of the approved so-called Penny Sales Tax, the following road improvement list had been submitted by the aforementioned committee and approved by Horry County Council. As part of this road improvement list, County Council also committed to resurfacing a total of 67 miles of roads, and paving 100 miles of dirt roads in Horry County (see more specific information below).

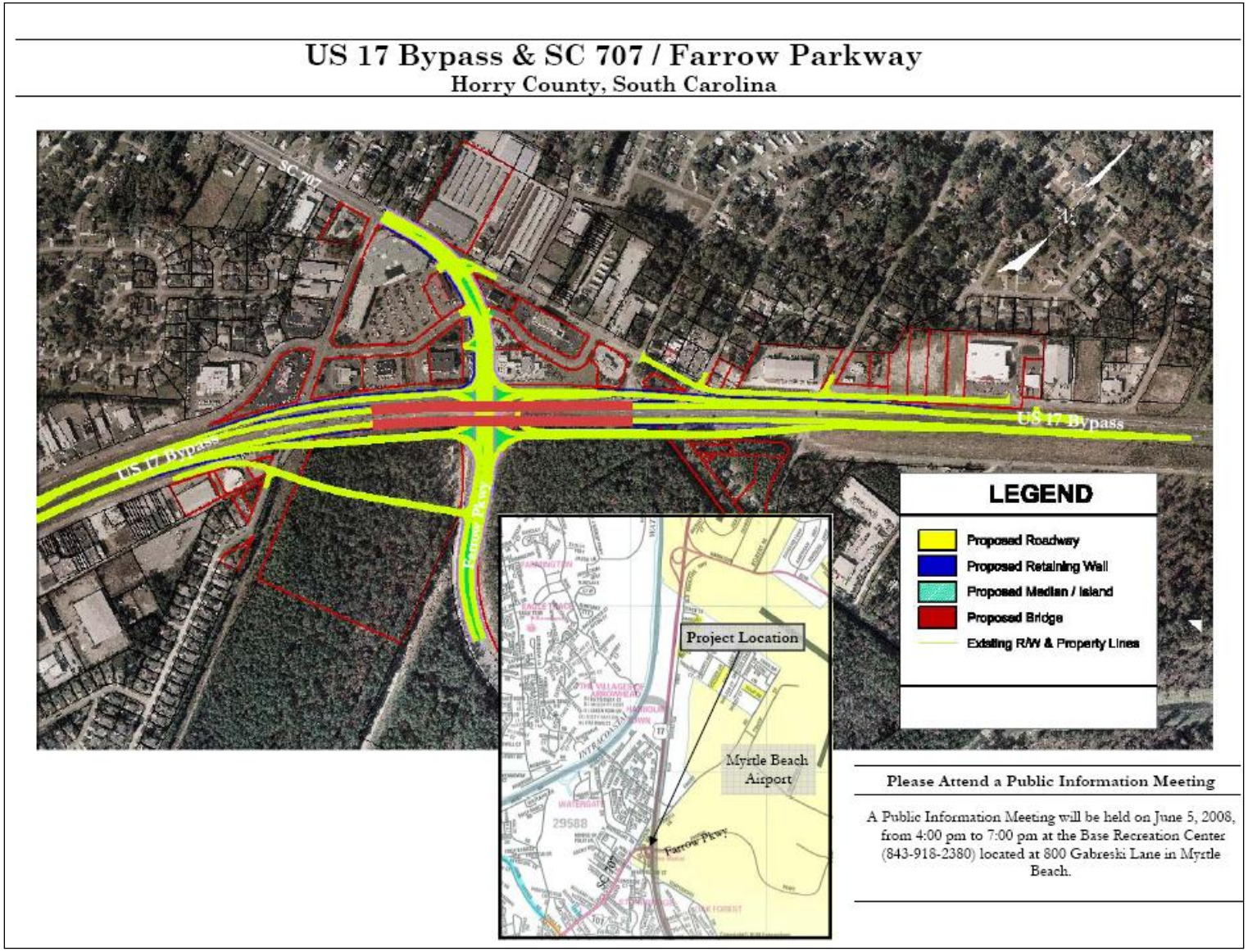
Capital Projects List:

1. **$19,600,000**: Pave 20 miles of County dirt roads;
2. **$915,000**: Resurface 12 miles of County roads;
3. **$49,500,000**: Construct grade separated interchange at the intersection of U.S. Hwy. 17 Bypass and S.C. Hwy. 707 at the backgate of the former Myrtle Beach Air Force Base;
4. **$132,250,000**: Widen S.C. Hwy. 707 from Enterprise Road to the County line including intersection improvements at S.C. Hwy. 544;
5. **$25,750,000**: Pave 25 miles of County dirt roads;
6. **$990,000**: Resurface 12 miles of County roads;
7. **$46,000,000**: Construct Aynor Overpass;
8. **$1,035,000**: Resurface 12 miles of County roads;
9. **$76,000,000**: Widen Glenns Bay Road to 3 lanes and construct a grade separated interchange at U.S. Hwy. 17 Bypass;
10. **$1,080,000**: Resurface 12 miles of County roads;
11. **$27,750,000**: Pave 25 miles of County dirt roads;
12. **$1,125,000**: Resurface 12 miles of County roads;
13. **$6,500,000**: Pave 2 lanes of International Drive from Carolina Forest to S.C. Hwy. 90;
14. **$682,500**: Resurface 7 miles of County roads;
15. **$36,100,000**: Pave 30 miles of County dirt roads.

Dirt Road Paving Program ($109,200,000), consisting of a total of 100 miles of dirt roads; paving program is divided into four (4) groups of roads. The paving of the first group consisting of 20 miles of county dirt roads was completed. The second group of 25 miles of dirt roads is being paved by RPM Engineering (Priorities #1, #5, #11, #15).

Resurfacing Program ($5,827,500), consisting of a total of 67 miles of roads that were approved through the Capital Projects Sales Tax referendum. The resurfacing job is administratively divided into six (6) groups of 12 miles each (7 miles in the last group); As of August 2009, resurfacing of roads within the first two groups has been completed. (Priorities #2, #6, #8, #10, #12, #14);

Figure 2: Rendering of proposed new interchange at the Backgate



Source: South Carolina Department of Transportation (SCDOT), 2008

If the revenue designated on the referendum is collected before the end of the anticipated seven (7) year period, or if all of the listed projects have been completed before the end of the seven (7) year planning horizon, the 1% Sales Tax increase will be rolled back earlier.

Additionally, new high-capacity roads are necessary not only for the purpose of creating better regional access and travel convenience, but are vital when it comes to mandatory hurricane evacuation measures.

Hurricane Evacuation Routes

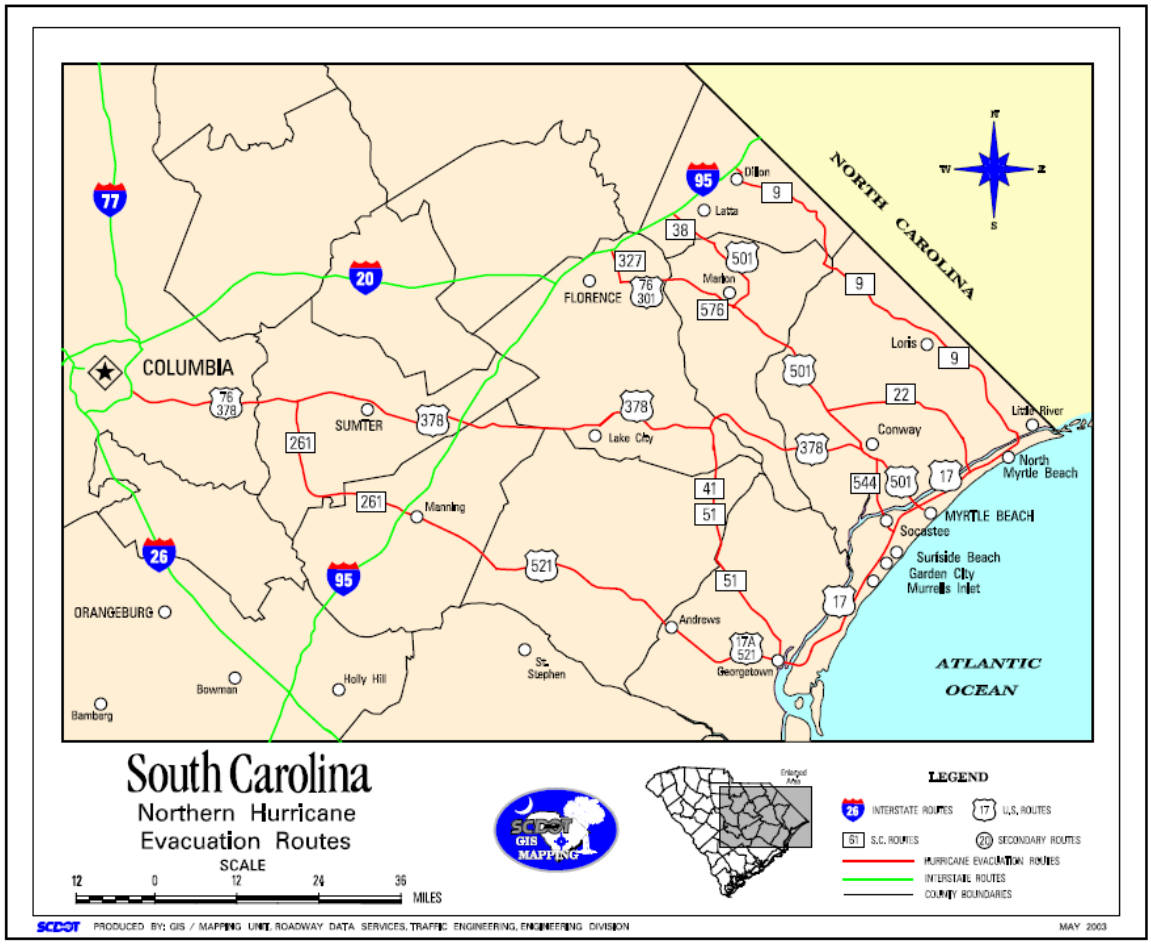
In addition to serving the daily transportation needs of residents and tourists, Horry County's road network must be adequate to support large scale evacuations during hurricanes.

Many of the aforementioned new highway projects have improved potential evacuation times substantially. Best examples are S.C. 22 (Veteran's Highway or Conway Bypass) and S.C. 31 (Carolina Bays Parkway), which represent multilane, limited access and high capacity highways and good evacuation alternatives to U.S. 501. They have improved the evacuation times especially to the benefit of the North Myrtle Beach and northern Myrtle Beach areas. Yet, as noticeable in the above map of official Hurricane Evacuation Routes along the northern coastline of South Carolina, there are missing links between S.C. 544 in Horry County and S.C. 41/51 in Georgetown County. This poses a severe risk to a growing population of permanent residents along the South Strand as existent corridors will most likely fail to evacuate in a timely and safe manner.

More high capacity roads especially on the South Strand are necessary. SCDOT and local officials from GSATS have already started environmental studies on the Southern Evacuation Lifeline (S.E.L.L.) project, which is proposed to connect the Surfside Beach and Garden City areas of Horry County with U.S. 501 and S.C. 22 to the north of Conway, eventually creating a full circular limited access road around Conway. For further information regarding this and other future road projects, please refer to the following chapter.

Next to individualized modes of transportation, the area's public transit authority "Coast RTA" will also play an essential role in evacuating residents and tourists to shelters designated by Horry County's Emergency Operation Center in an emergency situation. The Coast RTA provided evacuation shuttle trips to more than 600 passengers at the last major hurricane evacuation event during Hurricane Charley in 2004.

Map 3: Northern Hurricane Evacuation Routes in South Carolina



Source: SCDOT, 2003

Other road improvement projects financed through Horry County

Next to partnering with the State Infrastructure Bank (SIB) and co-financing many RIDE I projects, such as the S.C. 22 and S.C. 31 limited access highway projects, Horry County finds itself regularly investing both into the surfacing of rural dirt roads and the widening of "bottleneck" roads, such as with the most recent "Connector Roads Program". The latter consists of the partial widening of Carolina Forest Boulevard from two (2) to four (4) lanes from the Carolina Forest Elementary School to the Carolina Forest EMS/Fire Station. Also included is the partial widening of River Oaks Drive from two (2) to three (3) lanes from the railroad crossing near U.S. 501 to the River Oaks Country Club. This program also funded the continuation of Postal Way to connect Carolina Forest Boulevard with Gardner Lacy Road, thus creating an travel alternative for local school related traffic to Carolina Forest High School.

Typical transportation funding sources

As previously stated, Horry County's recent road improvements were financed through several different avenues, including the State Infrastructure Bank loans, add-ons to the local Sales Tax, and funding through other grants and government programs

Following is a general overview of the most important transportation funding sources on the Federal, State and local levels:

Federal funding

The *Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users* (SAFETEA-LU) authorizes the Federal surface transportation programs for highways, highway safety, and transit for the originally designated 5-year period between 2005-2009. This federal highway transportation act also grants permission to public authorities to enact tolls on motor vehicles. This is the program through which all funding from the Federal Government is given to states and counties for transportation improvements. As of the 2010 legislative year, Congress has not been able to pass a successor Federal Highway Transportation Bill, therefore still operating under reauthorizations and extensions of SAFETEA-LU.

Transportation Enhancement (TE): A State's TE funding is derived from a set-aside from its annual Surface Transportation Program (STP) apportionment. The purpose of TE is to strengthen the cultural, aesthetic, and environmental aspects of the Nation's intermodal transportation system.

Highway Trust Fund (HTF): Proceeds are derived from gasoline taxes and are used primarily for interstate roadways but have been expanded upon in more recent times.

Congestion Mitigation and Air Quality (CMAQ): Funding is available for areas that do not meet the National Ambient Air Quality Standards (nonattainment areas) as well as former nonattainment areas that are now in compliance (maintenance areas). Under SAFETEA-LU, the CMAQ program has provided just under $9 billion in authorizations to State DOTs and metropolitan planning organizations, and their project sponsors for a growing variety of transportation-environmental projects.

Community Facilities Grants: Numerous grants for community facilities are available at a Federal Level. Typically these grants are for smaller communities in rural areas, but occasionally are offered that would fit our needs.

Community Development Block Grants (CDBG): The CDBG Program was first introduced by the U.S. Department of Housing and Urban Development (HUD) in 1974 and designed to help units of local government address social and environmental problems through neighborhood revitalization, economic development and the improvement of community facilities. CDBG grants are available to local governments for a variety of projects such as downtown revitalization, water, sewer, economic development, affordable housing and housing rehabilitation.

State level funding

State Infrastructure Bank (SIB): The SIB stretches taxpayer dollars by leveraging federal seed money in partnership with local governments and private interests. The South Carolina Transportation Infrastructure Bank was created by Act Number 148 of 1997 for the purpose of providing loans and other financial assistance for major transportation projects.

The proposed project must provide public benefit in one or more of the following areas: enhancement of mobility and safety; promotion of economic development; or increase in the quality of life and general welfare of the public.

Local level funding options

Capital Projects Sales Tax: In November 2006 Horry County voters approved a 1% Sales Tax increase for the period of maximum seven (7) years to finance local road improvements, including paving of 100 miles of dirt roads and resurfacing of 67 miles of County roads.

In addition to the "Riding on a Penny" program, Horry County is involved in a "Local Road Improvement Program", which includes both construction and resurfacing projects. Established in 1998, the program currently is in Year 13 with 171.5 miles of the originally programmed 193.7 miles paved. The construction is completed by the Horry County Public Works department or private contractors. Funding is provided by the construction budgets of both the Engineering and Public Works departments with an additional funding commitment from the Horry County Transportation Committee (CTC).

As for Fiscal Year 2010, funding for the aforementioned paving projects come from following sources:

- Road Maintenance Fee: $7,075,000
- Interest: $160,000
- Subdivision Inspections: $16,185
- Hospitality Fees: $2,750,000
- Stormwater Transfer: $150,000
- Projected CTC funding: $500,000

As mentioned above, the Horry County Transportation Committee (CTC), as required by State Law, receive so-called C funds which are based on the collection of State gasoline taxes. Revenues are deposited in the County Transportation Fund, and administered by the State Treasurer until payment is requested by SCDOT. An additional allocation of $9.5 million, called Donor Funds, is transferred annually from the State Highway Fund for distribution to donor counties which have exceeded the amount of 2.66 cents collected per gallon of state user fees that the county receives in C funds. The Horry County Transportation Committee has the sole responsibility to decide how to authorize expenditures of the C funds. Historically, the committee has chosen to allocate a minimum of $500,000 per year towards the county's road plan and funds significant amounts for county road projects outside of the road plan.

Further funding sources on a local level are as follows:

Toll Road Investors Partnerships (TRIP): Potential to establish a Public-Private Partnership that derives revenues from toll roads (where existent).

$30 Road Maintenance Fee: Collected by the Tax Assessors Office on the Yearly Ad Valorem Tax on vehicles.

Hospitality Fees: Increase of Hospitality and Admission Taxes to pay for local road improvements. This option was utilized during implementation of the RIDE I program.

Special Tax Districts: Founding of special public works tax districts for the purpose of collecting fair share of fee contributions from direct beneficiaries of a specific public works project, e.g. water/sewer, road, etc.

Impact Fees on Development: Under this option a jurisdiction charges developer of a new residential, commercial or industrial development for their pro-rata share of necessary infrastructure and public works improvements. Most impact fees are passed on to the end-consumer by increase of residential sale prices, etc.

Existing Alternative Modes of Transportation in Horry County

As stated in the introduction, the majority of residents and tourists use their individual automobiles as their first choice of transportation in Horry County. Alternative modes of transportation other than the car are very sparse. Before the individual automobile dominated the area's traveling habits and its local transportation network, the county and its towns were mainly served by railroad, and people got around in all sorts of modes of transportation, including carriage, steamboats, and the train.

Beginning in the 1880's, the county's main private industrial consortium Burroughs and Collins (predecessor of now Burroughs and Chapin) had developed diverse commercial enterprises that included saw mills, turpentine distilleries, cotton gins, as well as copper shops, wheelwright shops and warehouses. In order to get their products to their main markets, the company had invested in both steamboat and train service to aid in freight and passenger transportation. Back then county transportation suffered from poor roads and deep swamps. The railroad impacted the county greatly. With the Wilmington, Chadbourn, and Conway Railroad establishing service in 1887, towns with stops along that railroad such as Loris, Bayboro and Conway benefited largely with growing population and commercial enterprise. Later Burroughs and Collins added two more railroad lines, one east from Conway to that company's new (resort) town, now Myrtle Beach, and the other line west to Aynor. Although the railroad, as well as the steamboat service across the Waccamaw River played major roles in Horry County's history of settlement and economic growth, the wide spread introduction of the automobile and the upgrading of the county's road infrastructure in the 1920's and 1930's soon succeeded in the competition with rail and water traffic.

Figure 3: Historic steamboat transportation on the Waccamaw River

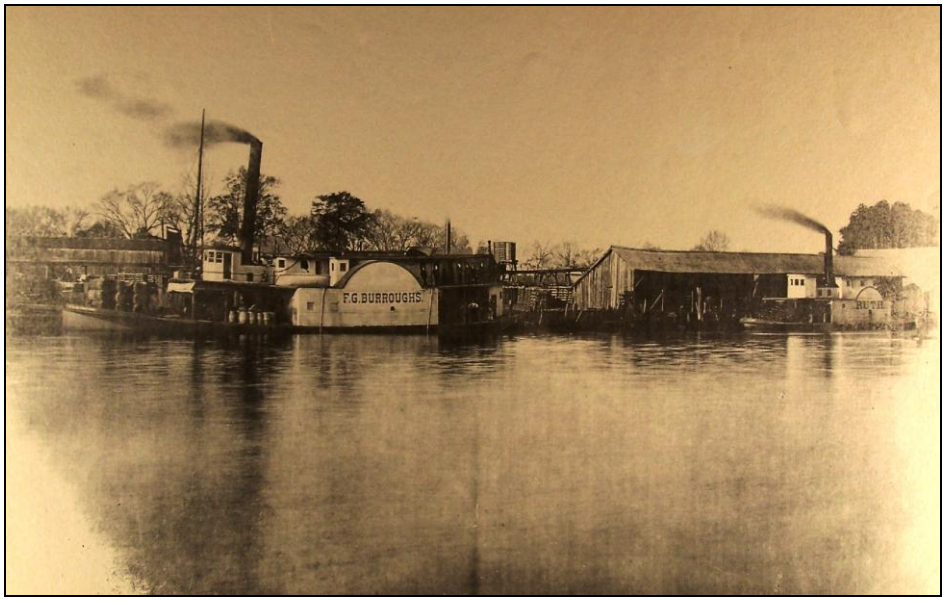


Photo courtesy of Horry County Museum

Figure 4: Historic train service in downtown Conway

Photo courtesy of Horry County Museum

Today, Horry County's alternative transportation network is not very comprehensive. Regarding public transportation choices on a national scale, Horry County and particularly Myrtle Beach are directly serviced only through regional feeder bus connections to either Amtrak or Greyhound transfer stations in Charleston (SC), Florence (SC) or Wilmington (NC).

Despite the lack of passenger rail service in Horry County, the majority of rail lines that have been built within the last century are still operational for the purpose of hauling freight.

Existing freight rail lines

As the sole freight hauler on rail, Carolina Southern Railroad Company from Chadbourn, NC, as part of Carolina Rails, transports goods consisting mainly of coal, lumber, stone, brick and fertilizer on the County's two main rail lines between Chadbourn, NC and Conway as well as between Conway and Myrtle Beach.

Figure 5: Logo of Carolina Southern Railroad Co.

Source: http://members.fortunecity.com/jch9596/carsouthrost.html - August, 2009

Carolina Southern Railroad Company operates freight service from a CSX connection in Mullins, SC to Whiteville, NC. Branching off at Chadbourn, NC another rail line, originally built by Wilmington, Chadbourn & Conway Railroad, runs 38.9 miles to Conway, SC. Today, Carolina Southern Railroad hauls some 15,000 tons of coal, lumber, stone, brick and fertilizer between these two locations.

Moreover, Carolina Southern Railroad transports goods between Conway and Myrtle Beach on the so-called Waccamaw Coast Line, which is approximately fourteen (14) miles long. As on the other line, haulage includes stone, coal, lumber and brick. The Waccamaw Coast Line branch extends from Conway, South Carolina to Myrtle Beach, 14.1 miles. Rail is 85 pound. Traffic includes stone, coal, lumber and brick. The line was part of the original Atlantic Coast Line (ACL), which was acquired from CSX by Horry County and leased to Horry County Railroad in November, 1984. On October 10, 1987, the county leased the railroad to

Waccamaw Coast Line. A branch once ran from Conway to Aynor but this was abandoned during ACL operation.

Besides freight rail operations, Horry County currently lacks any rail-based public transportation. Coast Regional Transit Authority (RTA), which is also known as the Waccamaw Regional Transit Authority, is the only provider for bus transit services in Georgetown and Horry Counties. As of Fiscal Year (FY) 2010, Coast RTA is operating eleven (11) fixed and one (1) demand response bus route.
The existing fixed bus routes as of FY 2010 are highlighted as follows:

1. Route 1 – Conway Local:
   The Conway Local route is a local shuttle service that offers the residents of Conway access to the key corridors and districts within the Conway area as well as a connection to Myrtle Beach. This service operates as a fixed route in the morning allowing residents access to employment and in the non-peak hours, it is converted into a demand response service that offers residents door-to-door transportation options. The Conway Local Service will produce an operating expense of $33,798 in FY 2010. In the last FY of 2009 the Conway Local route carried 6,553 passengers. The following map highlights this route's specific course and stops. Fares range from $1.00 for adults, to $0.75 for students, and $0.50 for senior citizens over 55.

Map 4: Coast RTA – Bus route 1

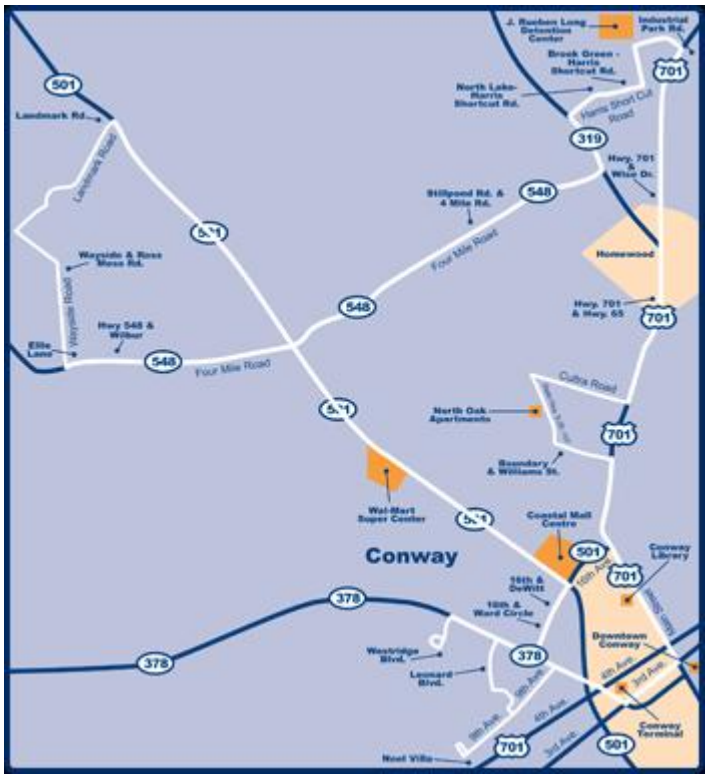


Figure 6: Coast RTA logo

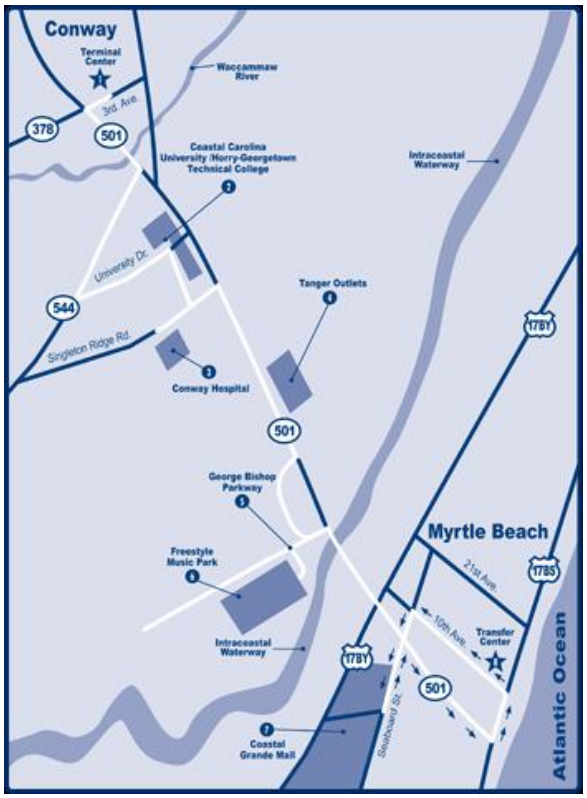
Source: The Coast RTA website; URL: http://www.ridecoastrta.com/routes/route1.aspx; 9/01/09

2. Route 7 – Conway to Myrtle Beach:

   The Conway to Myrtle Beach route offers commuter transportation services to residents of Conway and other portions of Horry County by allowing them to travel via Hwy. 501 between Conway and Myrtle Beach with several destinations in-between, e.g. Coastal Carolina University, Conway Medical Center, Tanger Outlet Mall, Coastal Grand Mall, etc.

   Bus route 7 is expected to produce approximately $114,812 in expense in FY 2010. This bus route carried 33,586 passengers in FY 2009. The following map highlights this route's specific course and stops. Fares range from $1.50 for adults, to $1.10 for students, and $0.75 for senior citizens over 55.

Map 5: Coast RTA – Bus route 7



Source: The Coast RTA website; URL: http://www.ridecoastrta.com/routes/route7.aspx; 9/1/09

3. Route 10 – Myrtle Beach Connector:

   The Myrtle Beach connector is a local shuttle that operates within the city limits of Myrtle Beach. This route provides residents and tourists with access to shopping, dining, health care, and sightseeing. Regular fare is set at $1.00, students pay $0.75 and seniors pay $0.50 per ride. Thus, the expected expense of running bus route 10 is $89,345 in FY 2010. The Myrtle Beach Connector service was used by 10,711 passengers in FY 09. The following map highlights this route's specific course and stops. Fares range from $1.00 for adults, to $0.75 for students, and $0.50 for senior citizens over 55.

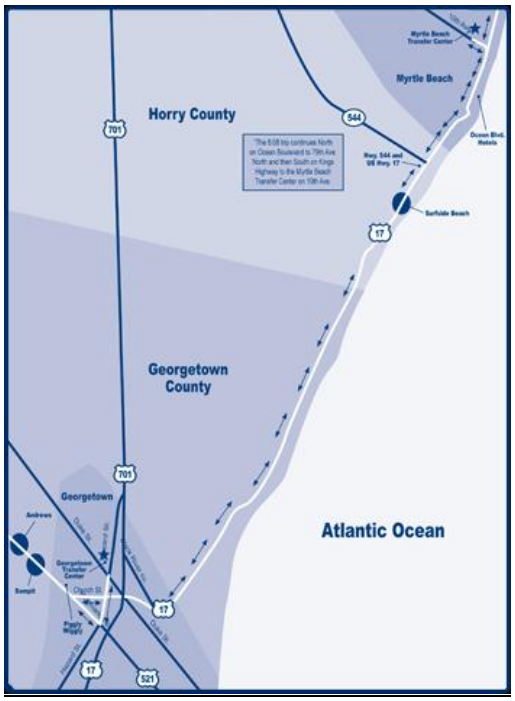
Map 6: Coast RTA – Bus route 10

Source: The Coast RTA website; URL: http://www.ridecoastrta.com/routes/route10.aspx; 9/1/09

4. Route 14E – Georgetown to Myrtle Beach Express:
   This Commuter Express service offers members of Georgetown County access to employment related activities with Myrtle Beach. The bus originates in Andrews, stops in-between in Sampit before offering non-stop service between the Georgetown Transfer Center and Myrtle Beach's Ocean Boulevard. Whereas 12,130 passengers made use of this service in FY 09, it is expected to create an expense of $116,308 in FY 2010. Map 7 highlights this route's specific course and stops. Fares range from $1.50 for adults, to $1.10 for students, and $0.75 for senior citizens over 55.

5. Route 14 – Georgetown Connector:
   The Georgetown Connector is a local shuttle that operates in Georgetown County. This route provides residents access to shopping, dining, health care, and employment. This route provides a link to a number of the outer lying communities in Georgetown County and connects them to services that branch out into Horry County. Bus route 17 (Georgetown Connector) carried 3,102 passengers in FY 09, and is expected to create an expense of $87,165 in FY 2010. Map 8 highlights this route's specific course and stops. Fares range from $1.50 for adults, to $1.10 for students, and $0.75 for senior citizens over 55.

Map 7: Coast RTA – Bus route 14E



Source: The Coast RTA website; URL: http://www.ridecoastrta.com/routes/route14e.aspx; 9/1/09

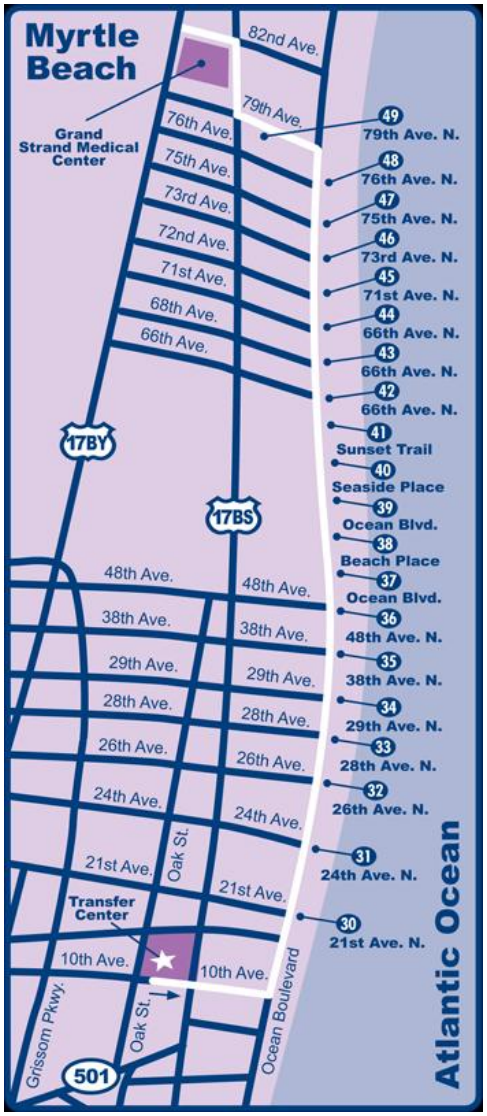
Map 8: Coast RTA – Bus route 14

Source: The Coast RTA website; URL: http://www.ridecoastrta.com/routes/route14.aspx; 9/1/09

6. Route 15N & 15S – Myrtle Beach Ocean Boulevard Service:

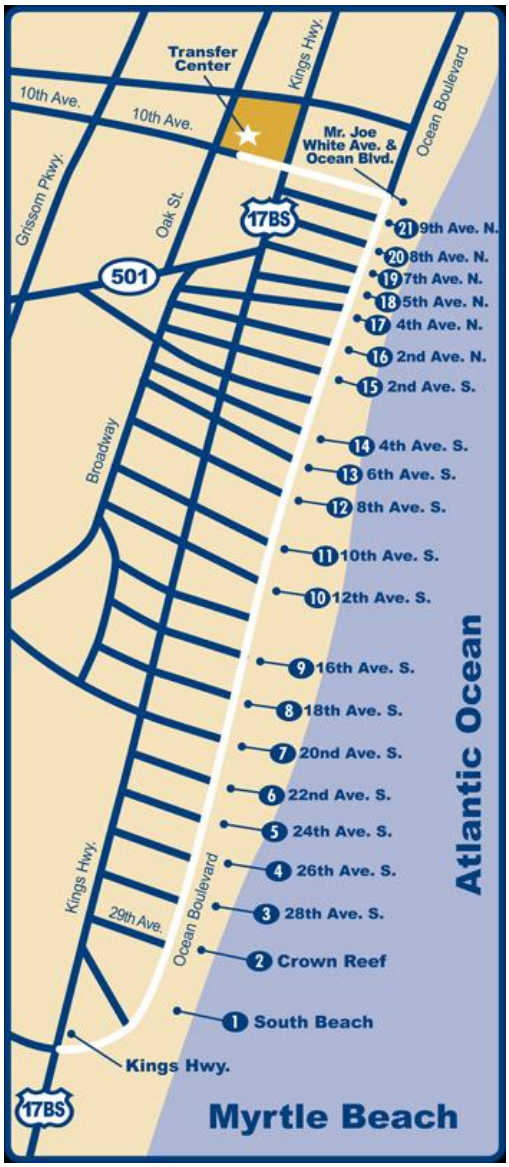
   The two Ocean Boulevard routes are two of the top performing routes in the Coast RTA system. During the peak summer tourist season, Ocean Boulevard North and South performs at its peak, however, these routes are also used by local residents to access employment along Ocean Boulevard. Both, Route 15N and 15S carried over 22,000 passengers in FY 2009. Yet, route 15N is expected to create $93,155 in expense in FY 2010, whereas route 15S expected expenditure is $97,028. Maps 9 and 10 highlight these route's specific courses and stops. Fares range from $1.00 for adults, to $0.75 for students, and $0.50 for senior citizens over 55.

Map 9: Coast RTA – Bus routes 15N



Source: The Coast RTA website; URL: http://www.ridecoastrta.com/routes/route15n.aspx; 9/1/09

Map 10: Coast RTA – Bus routes 15S

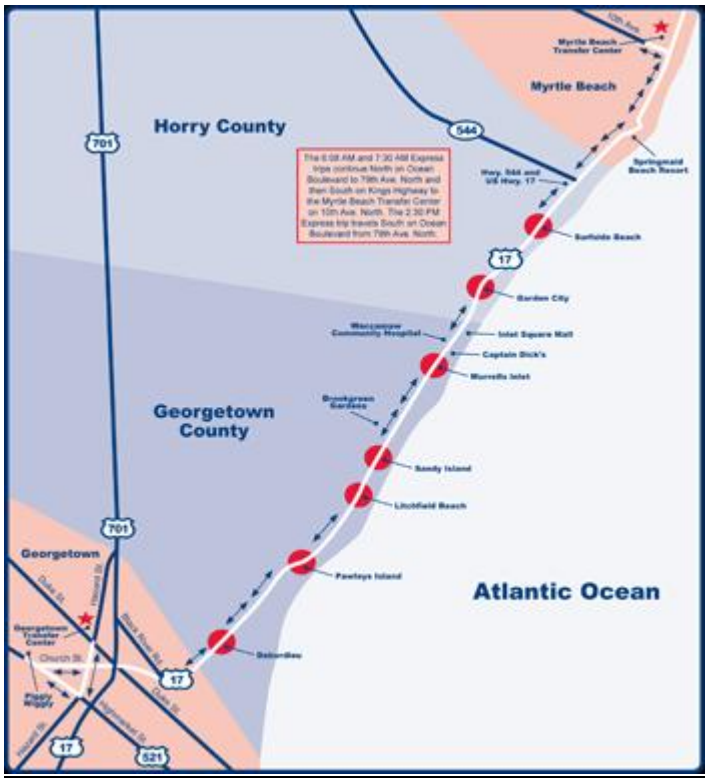


Source: The Coast RTA website; URL: http://www.ridecoastrta.com/routes/route15s.aspx; 9/01/09

7. Route 16 – Georgetown to Myrtle Beach:

   Similar to Route 14, Bus route 16 provides commuters transit service from Georgetown to Myrtle Beach, yet with many stops in-between. As it travels north, this bus route accesses Pawley's Island, Litchfield, Brookgreen Gardens, Inlet Square Mall, all campgrounds along Kings Hwy. (U.S. Hwy. 17 BUS) and many more destinations. This service had increased demand, with an overall of 17,822 passengers in FY 09. The service is expected to create a cost of $110,357 in FY 2010. Map 11 highlights this route's specific courses and stops. Fares range from $1.50 for adults, to $1.10 for students, and $0.75 for senior citizens over 55.

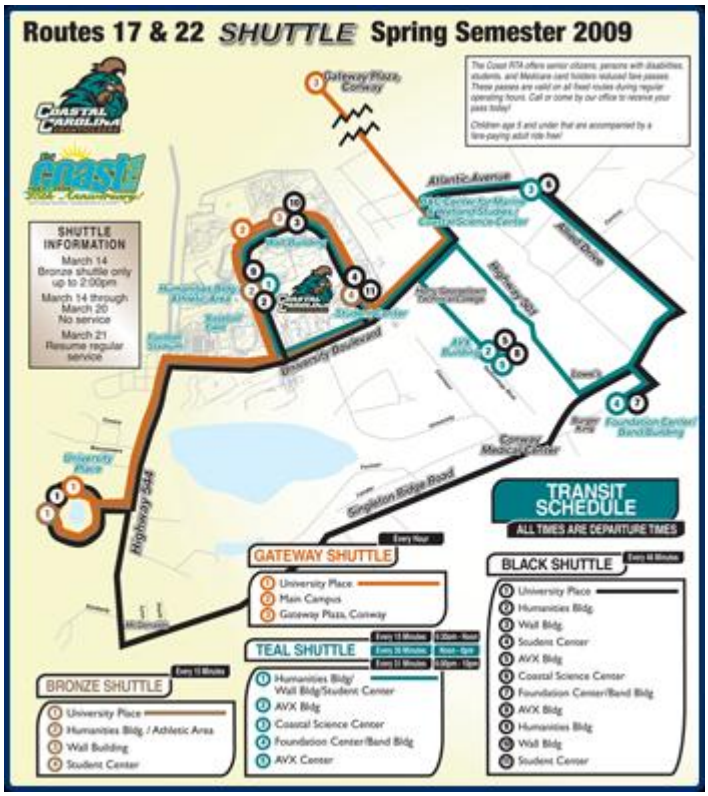
Map 11: Coast RTA – Bus route 16



Source: The Coast RTA website; URL: http://www.ridecoastrta.com/routes/route16.aspx; 9/1/09

8. Route 17 & 22 – Coastal Carolina University Shuttles:
   The Coastal Carolina University shuttles consist of three fixed routes. The primary goal of this service is to safely and reliably transport students and faculty members to and from the many destinations on and surrounding Coastal Carolina's campus. Main destinations include University Place, Main Campus, and Gateway Plaza. The expected cost of this shuttle is estimated at $266,775 in FY 2010. The service was used by a staggering 193,699 passengers in FY 09.
   Map 12 highlights the shuttle's course and stops. There is no fare charged for this service.

Map 12: Coast RTA – Bus routes 17 & 22



Source: The Coast RTA website; URL: http://www.ridecoastrta.com/routes/route22.aspx; 9/1/09

9. Route 23 – Campus Edge Shuttle:

   Next to the Coastal Carolina University Shuttles that transport students and staff to major destinations within and around Coastal Carolina University, Bus route 23 offers students a shuttle service between the college campus and the nearby Campus Edge private dormitory development.

   In FY 09, this shuttle transported 34,357 passengers, and is expected to cost $8,533 in expense in FY 2010.

   Map 13 highlights the course of Route 23. There is no fare charged for this shuttle service.

Map 13: Coast RTA – Bus route 23

Source: The Coast RTA website; URL: http://www.ridecoastrta.com/routes/route23.aspx; 9/01/09

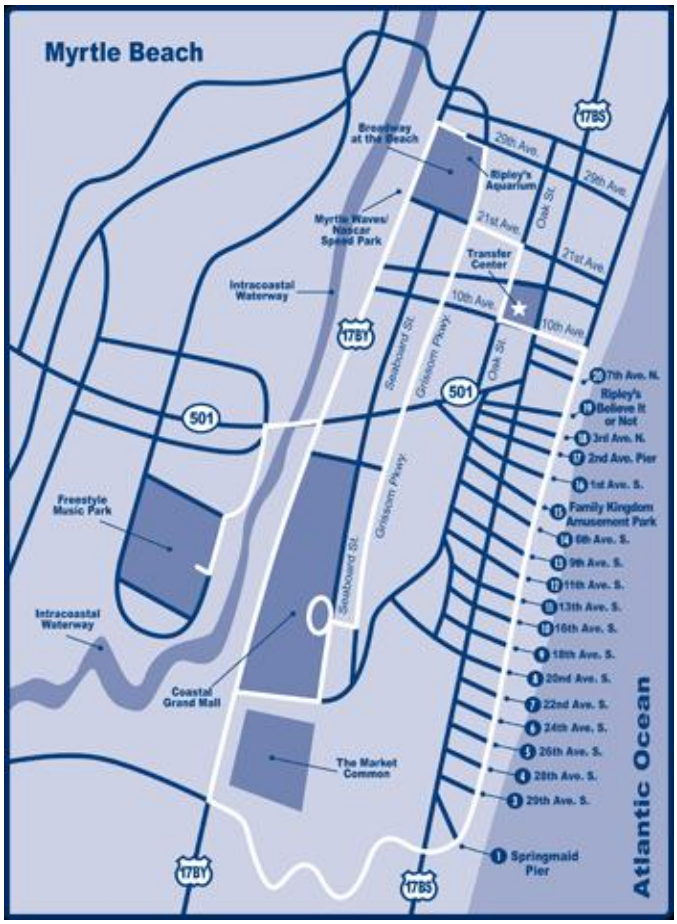
10. Route 30 – Market Common:

    This service has emerged as one of Coast RTA's fastest growing routes. This is a local shuttle that originates at the Ivory Wilson Transfer Center in downtown Myrtle Beach traveling south via Ocean Blvd. into the Market Common mixed-used district on parts of the former Myrtle Beach Air Force Base.

    Whereas, this route carried 12,664 passengers in FY 09, the expected cost for FY 2010 is estimated at $103,012.

    Map 13 shows the Market Common route's course and stops. Fares range from $1.00 for adults, to $0.75 from students, and $0.50 for senior citizens.

Map 14: Coast RTA – Bus route 30



Source: The Coast RTA website; URL: http://www.ridecoastrta.com/routes/route30.aspx; 9/1/09

Coast RTA currently operates fifty (50) vehicles ranging from 18-passenger to 40-passenger buses. Next to the Fixed Route Service, Coast RTA offers a Citizen's Accessible Transit System (CATS) that serves as a complementary paratransit service for persons with disabilities. Particularly, CATS is a curb-to-curb advanced reservation, shared ride, transportation service. It is openly available to anyone pre-qualified on the basis of having a physical or mental disability. There are no restrictions on the purpose or frequency of reservations, although service is provided on a time and space available basis.

With fixed route undiscounted fares ranging from $1.00 to $1.50 per ride, the projected operating revenue for Coast RTA in FY 2010 is projected at $1,203,086. With an overall projected operating expense in FY 2010 of $3,586,877, Coast RTA receives significant local funding from Horry County, Georgetown County, the City of Myrtle Beach, and the City of Conway. These local funds are used to match both Federal Transit Administration and S.C. Department of Transportation/Mass Transit Division allocations as well as other federal and state grants.

In addition to the local bus services provided by Coast RTA, neighboring Regional Transportation Authorities, e.g. Williamsburg RTA and Santee-Wateree RTA offer bus

connections from those counties directly to the hotels and service industries along Ocean Boulevard in downtown Myrtle Beach. These services are primarily used by employees of the local service and tourist industries who very often live in the neighboring counties.

Bikeways, Pedestrian and other trails

Next to taking the bus, alternative modes of transportation other than the automobile include such activities as walking or riding a bike either for recreational or work commuting purposes. In Horry County most available sidewalks, pedestrian and bicycle ways are located within incorporated municipalities, such as Aynor, Conway, Loris, Myrtle Beach and North Myrtle Beach. The latter two have started to upgrade their road facilities to incorporate multi-use trails for pedestrians and bikes, such as along Robert Grissom Parkway in Myrtle Beach and along Ocean Boulevard in both Myrtle Beach and North Myrtle Beach. This also is part of a inter-state initiative named "East Coast Greenway" which is an ambitious 2,600-mile long multi-use urban trail system extending from Maine to the Florida Keys. Its goal is to facilitate improved quality of life for local residents by providing transportation alternatives and to act as a boost for local economies from tourism dollars. Within Horry County there are still several missing links of the East Coast Greenway that are gradually being closed through State transportation enhancement funds.

Yet, within the unincorporated areas of Horry County, there is a lack of good biking and walking ways that connect the different urbanized, suburbanized and rural areas and towns with each other.

Map 15: Proposed East Coast Greenway Corridor in South Carolina

Source: East Coast Greenway Alliance, 2000

Existing Aviation

Compared to other counties in the State, Horry County's aviation system is the largest and considered the most comprehensive, as the county itself owns and operates four (4) of the following airports:

- Myrtle Beach International Airport (MYR) – commercial and general aviation terminals ,
- Conway-Horry County Airport (HWY),
- Grand Strand Airport (CRE), and
- Loris-Twin Cities Airport (5J9).

The Department of Airports is a department of Horry County and receives its funding for operations and maintenance of County airports through user fees and charges on aeronautical activities at the airport. No County general fund taxes are used to support the airports. Primary funding for most major capital improvements is obtained through the Federal Aviation Administration (FAA) and from South Carolina Division of Aeronautics.

As of November 2010, Myrtle Beach International Airport (MYR) is the county's sole international commercial aviation facility, with eight (8) airlines offering scheduled air service to and from the Grand Strand. The following list contains destinations that are serviced either seasonally or year-round by these air carriers:

- **Allegiant Air**: Allentown, PA; Fort Wayne, IN; Grand Rapids, MI; Huntington, WV; Knoxville, TN and Youngstown, OH;
- **American Eagle**: Dallas/Fort Worth, TX;
- **Delta Air Lines**: Atlanta, GA; Detroit, MI;
- **Direct Air**: Columbus, OH; Newark, NJ; Niagara Falls, NY; Pittsburgh, PA; Plattsburgh, NY; Springfield/Central, IL; Worchester, MA;
- **Continental Airlines**: Newark, NJ;
- **Porter Airlines**: Toronto City Airport, Ontario, Canada;
- **United Express**: Charlotte, NC (code-sharing with US Airways);
- **US Airways**: Charlotte, NC; Philadelphia, PA; Washington/National, DC;
- **Spirit Airlines**: Atlanta, GA; Atlantic City, NJ; Boston, MA; Chicago (O'Hare), IL; Detroit, MI; Fort Lauderdale, FL; New York/La Guardia, NY**.**

In October 2010, Spirit Airlines has announced to add more direct destinations from Myrtle Beach International, starting May 2011. These additional destinations include: Washington, DC (Reagan/National); Plattsburgh, NY; Niagara Falls, NY; Latrobe, PA; Charleston, WV.
As of 2008 Myrtle Beach International Airport has seen a total of 783,351 enplanements and 782,021 deplanements. The economic impact of all four (4) airports to the Grand Strand is assessed at $776,390,800 with MYR accounting for over 97% of the total (*The Economic Impact of Aviation, Final Report, May 2006, South Carolina Department of*

Commerce, Division of Aeronautics, prepared by Wilbur Smith Assoc. in association with ERD Group and Franks and Associates).

Further studies have estimated the airport's economic benefit to the area to be in the range of 12,888 jobs that are directly or indirectly related to air travel (*Economic Benefit of Air Visitors and Air Service Development Plan Prepared for Horry County Department of Airports and the Myrtle Beach International Airport, November 2006, prepared by BACK Aviation Solutions*).
According to that same study, air visitors stay longer and spend more than "drive" visitors and each air visitor currently generates $2,358 per visit as compared to $1,447 per visit for drive visitors.

Grand Strand Airport (CRE) is located within the city limits of North Myrtle Beach, and with a sophisticated Instrument Landing System (ILS) as well as Precision Approach Path Indicators (PAPI) in place, it mainly attracts unscheduled corporate and private clientele, flying in both jet and non-jet aircraft.

Conway-Horry County Airport (HWY) is located off of U.S. 378 about five (5) miles outside of Conway. This general aviation airport includes refueling, parking and maintenance facilities.

The Loris (Twin Cities) Airport (5J9), located off of U.S. 701 two miles northeast of Loris, serves as an unattended public use airport. This airport serves a few local aircraft and serves primarily as a place for Loris/Tabor City residents to land and hangar their aircraft.

The Future Transportation Network

Proposed Road Network Expansion projects in Horry County

Horry County has seen a multitude of significant road network expansions and improvements since the mid-nineties. Most major road projects, e.g. S.C. 22 (a.k.a. Veteran's Highway or Conway Bypass) and S.C. 31 (a.k.a. Carolina Bays Parkway) have added significant road infrastructure facilities to Horry County.

Yet, with the tremendous growth and development that has occurred over the past years and decades, the list of needed and proposed road infrastructure projects remains long. Dependent on the availability of funding, most of the area's road projects are part of the Grand Strand Area Transportation Study's Transportation Improvement Programs that are generally issued for two consecutive fiscal years. In addition, the **American Recovery and Reinvestment Act of 2009 (ARRA)** will provide much needed funding for both the maintenance and construction of roads as well as to the enhancement of the Grand Strand's mass transit system.

On February 17, 2009 President Barack Obama signed **The American Recovery and Reinvestment Act (ARRA)**, also known as the Stimulus Act, into law. This act is intended to provide a stimulus to the U.S. economy in wake of the economic downturn. Next to federal tax relief, social welfare provisions, and domestic spending increases in education, health care and energy, over $50 billion of the overall $787 Billion are being reserved for core infrastructure investments across the nation, such as for roads, bridges, mass transit, and other transportation related projects.

South Carolina was allocated approximately $463 million for bridges and highways, 30% of which must be sub-allocated to local areas and 3% of which must be used for enhancement projects. Furthermore, South Carolina will receive approximately $41 million for mass transit, of which approximately $25 million is directly allocated to the urban areas of the state.

Within Horry County, the following infrastructure projects have been submitted either by the Grand Strand Area Transportation Study for the urbanized areas of Horry County, or by the Waccamaw Regional Council of Governments for rural areas and positively selected by the South Carolina DOT Commission for inclusion into the State's Stimulus Spending:

ARRA - Bridge Project

Highway	Description	Estimated cost (share of stimulus funding)
U.S. 378	Restoration of bridge over the Little Pee Dee River, together with six (6) overflow bridges	$41,000,000 ($17,000,000)

Source: SCDOT; URL: http://www.scdot.org/inside/pdfs/ARRA-ApprovedProjectsList-4-17-09.pdf; 5-19-09

ARRA - Rural Mass Transit Projects

Recipient	Description	Share of stimulus funding
Coast RTA	Vehicle acquisition	$420,000
Coast RTA	Facility Rehab/Renovation	$175,000
Coast RTA	Park & Ride Facilities	$250,000

Source: SCDOT; URL: http://www.scdot.org/inside/pdfs/ARRA-ApprovedProjectsList-4-17-09.pdf; 5-19-09

ARRA - GSATS Mass Transit Projects

Recipient	Description	Estimated cost (share of stimulus funding)
Coast RTA	Admin/Maintenance Facilities Rehab/Renovation	$133,000 ($133,000)
Coast RTA	Supervisor vehicles	$40,000 ($40,000)
Coast RTA	Buses	$1,640,000 ($1,640,000)
Coast RTA	GPS Equipment	$7,000 ($7,000)

Source: SCDOT; URL: http://www.scdot.org/inside/pdfs/ARRA-ApprovedProjectsList-4-17-09.pdf; 5-19-09

ARRA – Road Resurfacing Projects

Highway	From	To	Amount of full stimulus funding)
NMB: S.C. 9	Hill St. (S-864)	Ocean Blvd. (S-65)	$4,536,000 (approved by SCDOT Commission on February 19, 2009)
NMB: Main St. (S-367)	Ocean Blvd. (S-65)	U.S. 17	
Loris: S.C. 9 Bus.	North of Harrelson St. (S-722)	Stevens St. (S-184)	
Little River: S.C. 111	Worthams Cutoff Rd. (S-1233)	Mineola Ave. (S-50)	
Aynor: Jordanville Rd. (S-24)	5th Ave. (S-224)	U.S. 501	
Garden City:	U.S. 17 Bus.	Waccamaw Dr. (S-	

Atlantic Ave. (S-51)		155)	
Conway: U.S. 501 (Church St.)	Cultra Rd. (S-165)	Medlen Pkwy. (S-1344)	
Conway: U.S. 501 (Church St.)	Medlen Pkwy. (3-1344)	10th Ave. (S-206)	$2,268,000 (approved by SCDOT Commission on March 19, 2009)
M.B.: 21st Ave. N. (S-241)	U.S. 17 Bypass	U.S. 17 Bus.	
Brooksville: S.C. 57	S.C. 111	North Carolina State Line	

Source: SCDOT; URL: http://www.scdot.org/inside/pdfs/ARRA-ApprovedProjectsList-4-17-09.pdf; 5-19-09

In addition to aforementioned bridge, road improvement and mass transit projects, available federal stimulus funding is being allocated to the following highway projects:

ARRA – Highway projects

Highway	**Description**	**Amount of full stimulus funding**
U.S. 17 Southbound (North Myrtle Beach)	Widening of U.S. 17 to six travel lanes from Sea Mountain Hwy. to 2nd Ave. North	$3,698,000
U.S. 17 / Mineola Ave. (S-50; Little River)	Widening of intersection to accommodate for separate turning lanes from Mineola Ave. to U.S. 17	$383,000
S.C. 31 (Carolina Bays Parkway) – Contract 1	New construction / Extension of existing limited-access highway (clearing, grubbing and grading) from SC 544 to Peach Tree Road	$10,000,000

Source: GSATS

Altogether, the approved stimulus funding for transportation improvement projects within Horry County, including bridge, road resurfacing and mass transit projects, accumulates to a total of $26,469,000.

GSATS/SCDOT Transportation Improvement Projects (TIP)

Next to the RIDE I and RIDE II programs, there have been other improvements to roads and intersections in Horry County that have been financed under the leadership of the regional Metropolitan Planning Organization (MPO), which is called the Grand Strand Area Transportation Study (GSATS). Since the year 2000, more than $168 million has been spent,

including such prominent projects as the widening of U.S. 17 Bypass in Myrtle Beach and the construction of a new S.C. 544 Bridge over the Waccamaw River in Socastee.

Whereas most funding for previously mentioned RIDE I and RIDE II road projects originated from an increase in local Hospitality or Sales Taxes, GSATS in partnership with SCDOT and the South Carolina Transportation Commission funds transportation improvement projects mostly through gas tax revenues that the State collects and distributes. Hereby, GSATS receives just over $4 million annually from this source. These funds are utilized for State roadway and other multimodal improvements within Horry County as directed by the Grand Strand Area Transportation Study in cooperation with the County Transportation Committee (CTC). A more detailed description of the most significant proposed roadway projects within the GSATS/MPO area (as of summer 2010) can be found below.

Proposed roads of national and regional significance –

The Interstate Highway 73/74 Corridors

The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) designated the I-73/74 North-South Corridor as a "High Priority Corridor" that has been defined to run from Charleston, SC through Winston-Salem, NC and to continue north through the states of Virginia and West Virginia before splitting entirely at Portsmouth, OH with I-74 turning west to its current end in Cincinnati, OH and I-73 continuing north to its planned termination in Saint Sault Marie, MI.

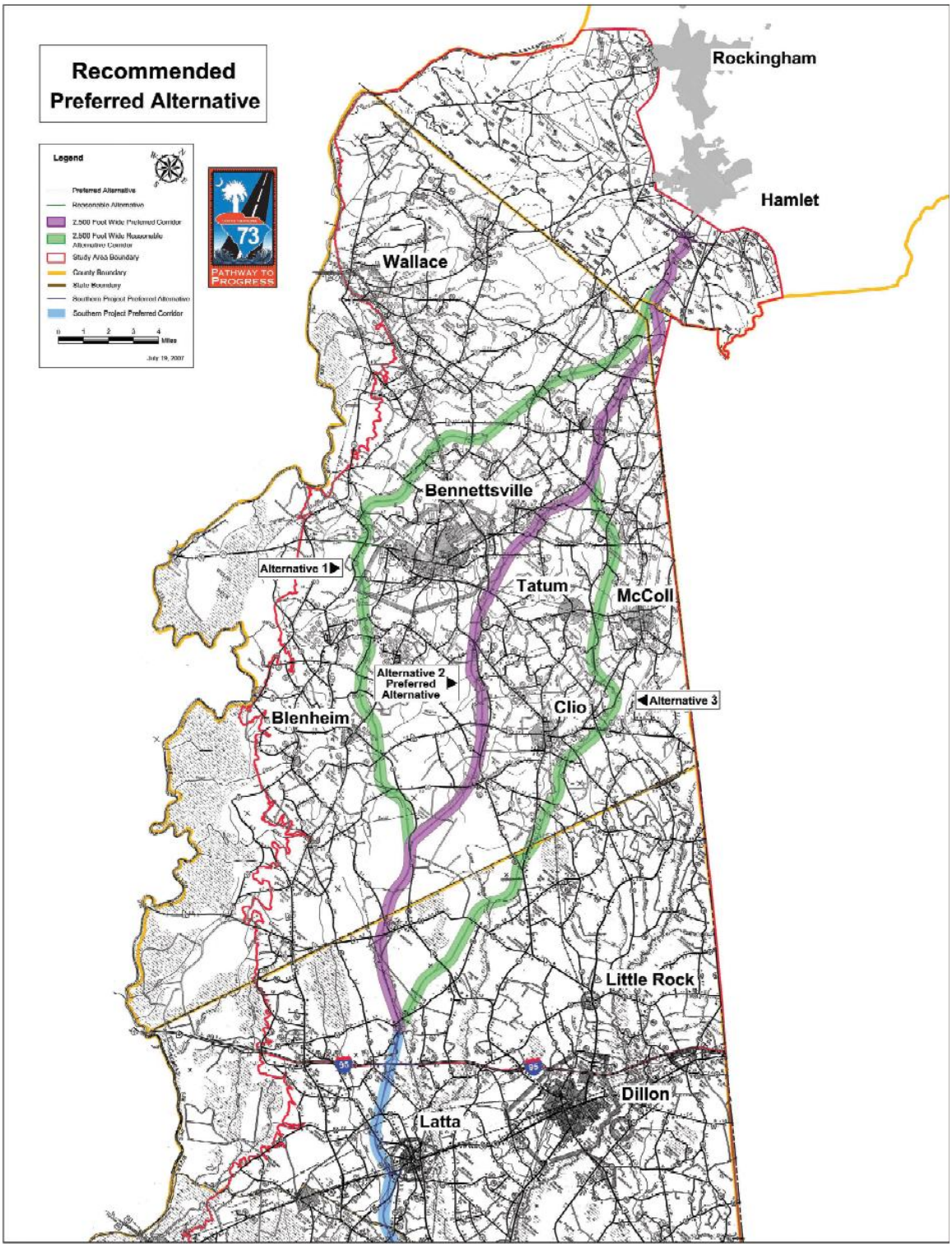
With some stretches of roadway already built and open in North Carolina, the North and South Carolina Departments of Transportation on February 11, 2005 came to an agreement over where I-73 and I-74 would cross the border between the two states. Hence, it was decided that I-73 would traverse the stateline along SC/NC 38 near Hamlet, NC. Furthermore, at a public meeting in Bennettsville, SC on September 7th, 2006 the SCDOT announced that I-73 would roughly follow the SC 38 corridor between the stateline and Latta, SC where it would intersect with I-95 (middle preferred alternative). East of I-95, the new Interstate Highway would run between Marion, SC and Mullins, SC with major interchanges to U.S. 501 and U.S. 76. Lastly, I-73 would enter Horry County from the west where the current S.C. 917 crossing is located. From there it would pass through the rural parts of Horry County, eventually intersecting with S.C. 22 at a new interchange. It will ultimately terminate in the area of Briarcliffe Acres, where it would intersect with U.S. 17.

On the other hand, Interstate Highway 74 is proposed to cross the NC/SC border along the S.C. 57 corridor northwest of Little River. At that location it would become part of the Carolina Bays Parkway (S.C. 31), which is proposed to be extended to the stateline. Yet, as of

summer 2010, the North Carolina Department of Transportation is still studying a multitude of feasible route alternatives (see map below). Future I-74 which is proposed to run from southern Ohio through West Virginia, Virginia, North and South Carolina, has been originally planned to go all the way to Charleston, SC. But, with limited highway funding, its terminus in conjunction with S.C. 31 between Myrtle Beach and Georgetown, SC is more likely.

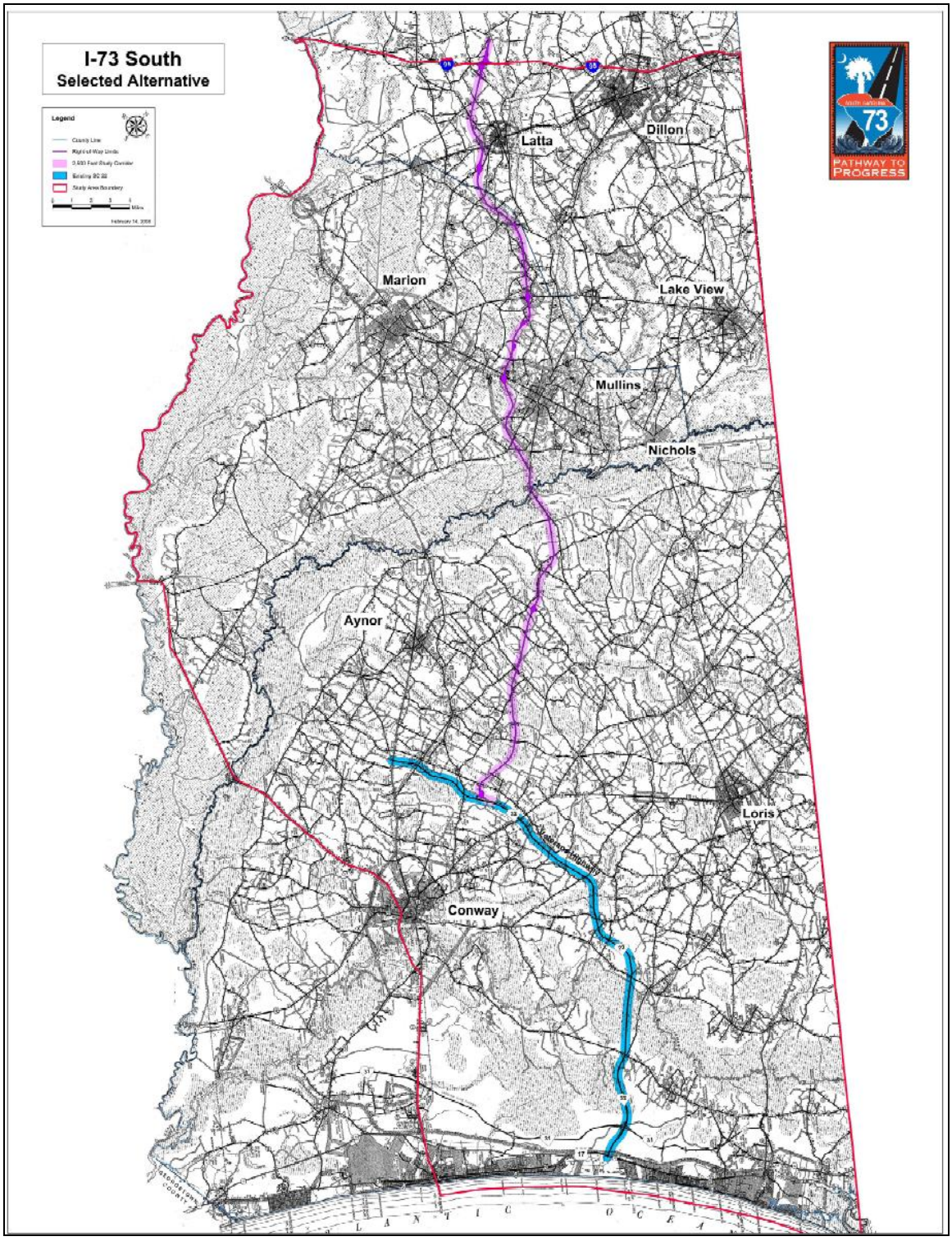
Yet, both new Interstate Highways will be essential for establishing better national connectivity to the Grand Strand, thus providing not only long-term stability to its tourism economy, but also providing a vital prerequisite for achieving necessary economic diversification and job creation within this labor market. These interstate highways will also alleviate traffic on currently congested highways throughout the region.

Map 16: Selected I-73 route in South Carolina (northern section; with alternatives)



Source: SCDOT, 2006

Map 17: Selected I-73 route alternative in South Carolina (southern section)



Source: SCDOT, 2006

Proposed roads of regional significance –

The Southern Evacuation Lifeline (SELL)

With increasing numbers of summer tourists and year-round residents, the provision of a more convenient evacuation route between U.S. 17 and U.S. 501 from the South Strand to areas further inland has become a necessity.

A special task force has been created to study and recommend an evacuation and better access route specifically for the southern portion of the Grand Strand, also referred to as the South Strand. The Task Force provides input on community needs, helps resolve points of conflict and assists in building community-wide understanding for this project.

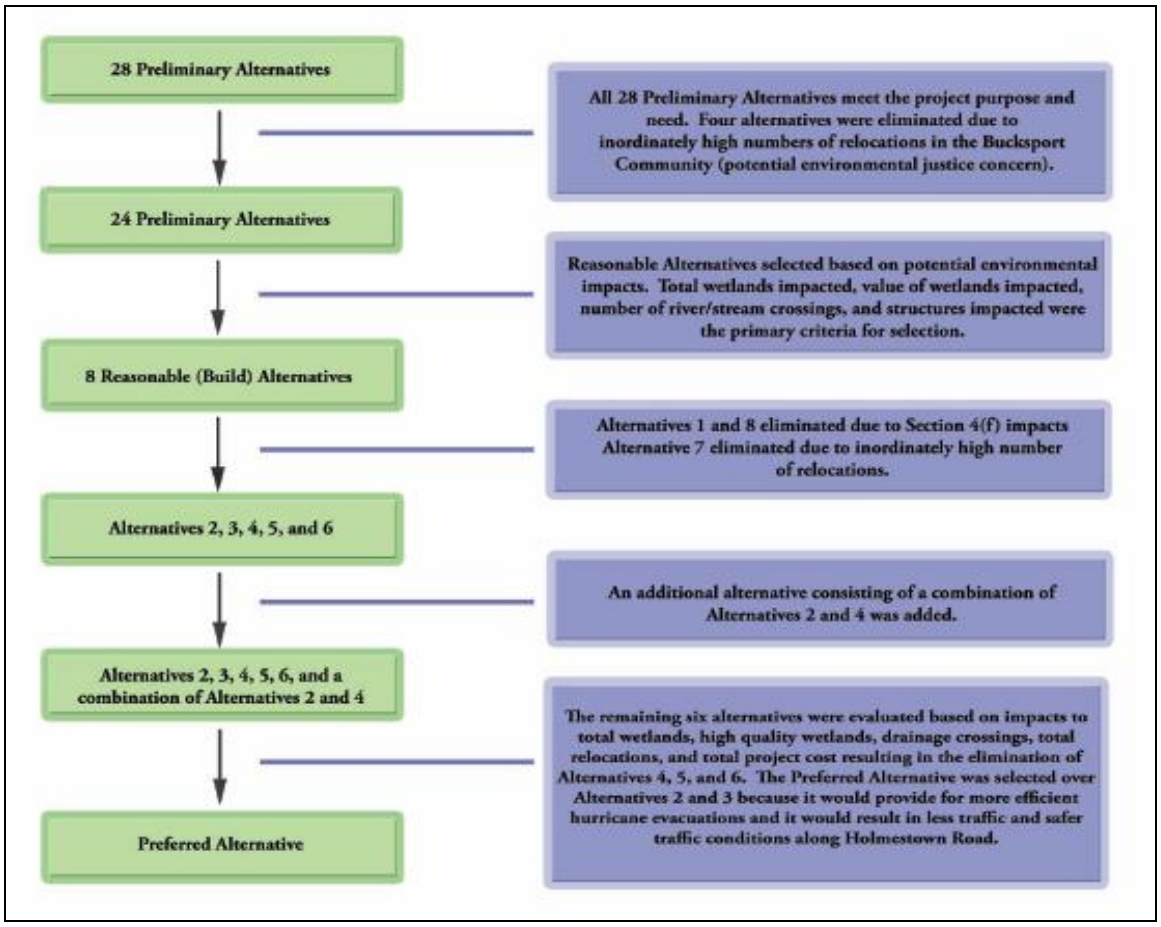
Figure 7: Official logo of the SELL project

Source: SCDOT, 2005

On January 19, 2006 the South Carolina Department of Transportation (SCDOT) Commission allocated the $1 million of state funds required to match at least twenty percent (20%) of the $4 million of federal transportation funds that were made available to this project in the latest Federal Transportation Bill as an earmark. The SELL task force was formed to promote the development of an Environmental Impact Statement to evaluate alternatives for providing an additional evacuation route across the Waccamaw River.

The South Carolina Department of Transportation (SCDOT) held five (5) public meetings in early 2007 and four public hearings in late August and September of 2008 within the study area, which geographically spans between U.S. 501 in the east, to the Pee Dee River in the west, and from Aynor in the north to the southern portion of the Grand Strand. Based on earlier road transportation studies under the scope of the "Southern Conway Bypass Route", eight (8) alternatives had been studied for their environmental impact and economic feasibility. The final Environmental Impact Statement will show which of these studied alternatives will be least obtrusive to the sensitive natural environment along the Waccamaw River. The current alternatives are highlighted in the preliminary study map below. As with the release of the Draft Environmental Impact Statement (D.E.I.S.) in August 2008, the preferred route alternative of the Southeastern Lifeline project has been presented to the public. Through a series of comparisons of benefits and impacts, especially to wetlands, historic structures, wildlife management areas, farmlands and communities, a Preferred Alternative route has been chosen from an initial amount of twenty-eight (28) alternatives (see flow chart below).

Figure 8: S.E.L.L. Alternatives Selection Flow Chart



Source: SCDOT, Draft Environmental Impact Statement (D.E.I.S.), 2008

In consideration of previous concerns and comments from the Agency Coordination Team (ACT) and the public, the Federal Highway Administration (FHWA) and SCDOT determined that the Preferred Alternative, being a combination between Alternative 2 west of the Waccamaw River and Alternative 4 east of the river, to have the least impact to the human and natural environment.

Thus, the Preferred Alternative:

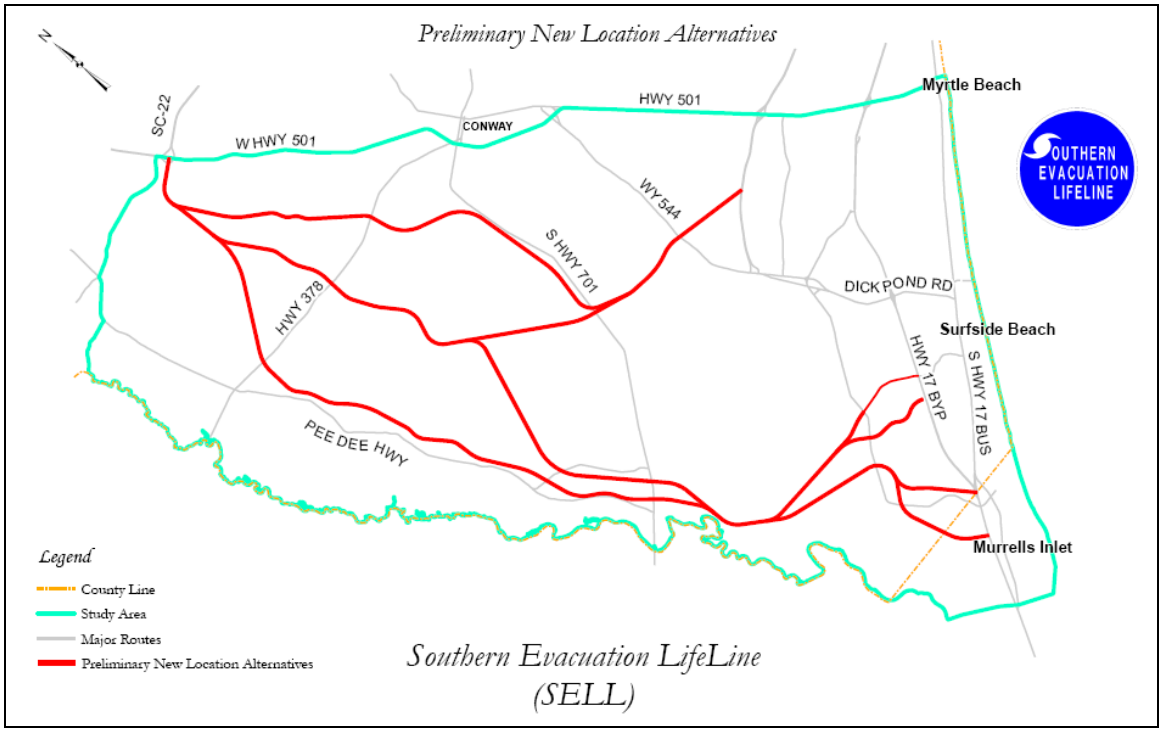
- Reduces hurricane evacuation time in the year 2030 by 28 percent for Horry County and by 25 percent for Georgetown County;
- Reduces the vehicle hours traveled (VHT), thereby reducing congestion;
- Reduces the vehicle miles traveled (VMT), thereby improving the efficiency of the road network;
- Reduces the distance between crossings of the Waccamaw River as measured south of Conway from 42 miles to 18 miles along highways east of the river;
- Has the fourth lowest impact on high quality wetlands, only 15 percent more than the lowest;

- Does not cross through property currently managed as part of the Waccamaw National Wildlife Refuge;
- Does not present any potential environmental justice issues;
- Impacts the lowest number of communities (*SCDOT, Draft Environmental Impact Statement, Executive Summary, page 6).*

It is anticipated that the studied impacts will be further reduced through the Final Environmental Impact Study and Statement (F.E.I.S.) due to additional analysis, adjustments in alignment, refinement of the design, and establishment of right-of-way and construction limits that are less than 400 feet wide.

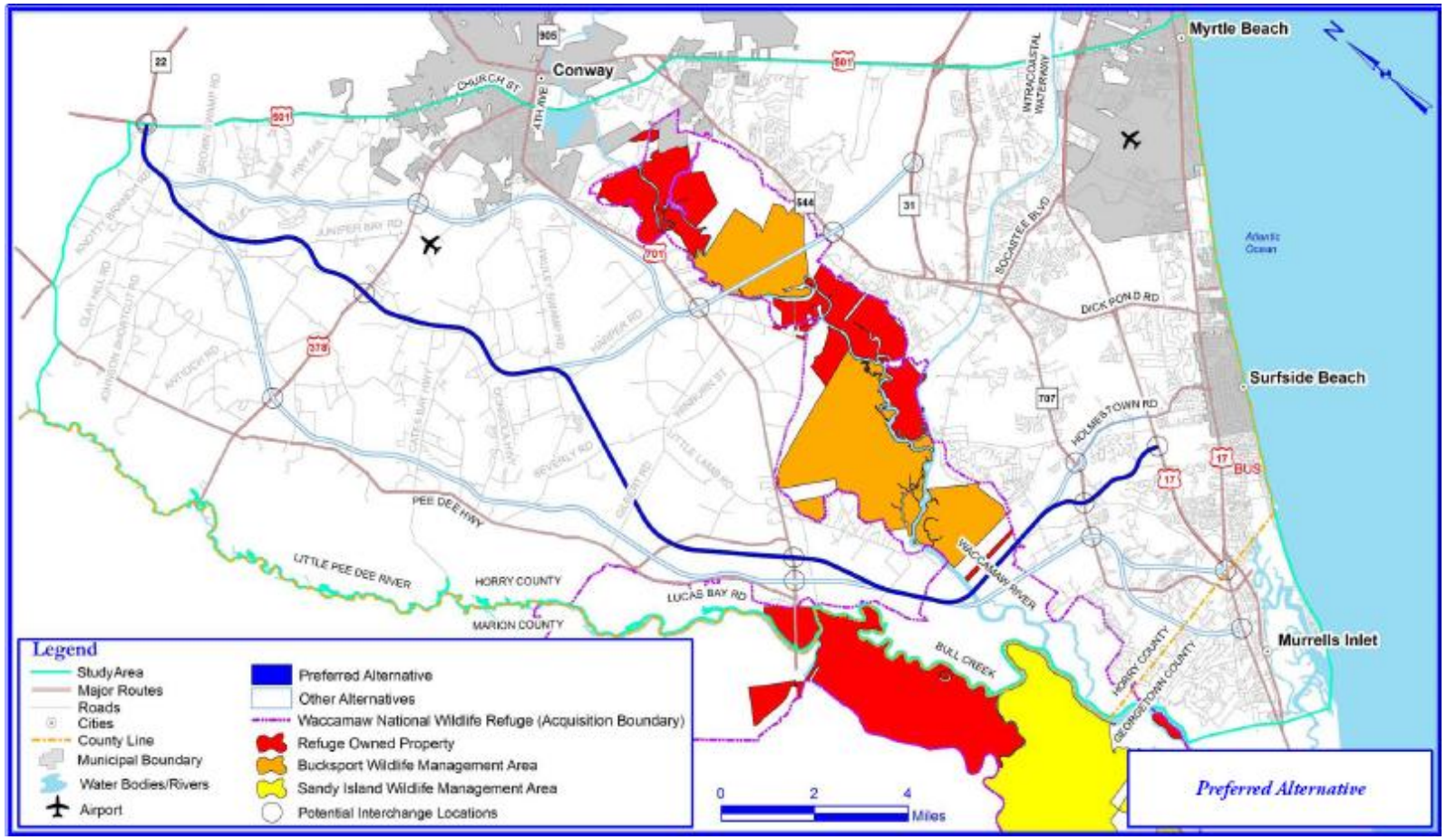
Last but not least, only after compilation of the Final Environmental Impact Statement (F.E.I.S.) and mandatory presentation and input from the public, a final summary and recommendation, commonly referred to as a Record of Decision (ROD), can be issued.

Map 18: Previously studied S.E.L.L. route alternatives (before D.E.I.S.)



Source: SCDOT, 2006

Map 19: Preferred S.E.L.L. Route Alternative (as chosen by the D.E.I.S.)



Source: SCDOT, Draft Environmental Impact Statement (D.E.I.S.), 2008

Proposed roads of regional and area significance – Highlighting the most Considered Projects from the 2030 Long Range Transportation Plan (GSATS)

As a result of very successful transportation planning efforts and funding initiatives under the scope of RIDE I and RIDE II programs, Horry County has completed many major improvement projects. Yet, with further growth in housing and rapid economic development projected for the years to come, the existing transportation network within Horry County will see further increasing demands. While many of the committed road improvement projects have positively contributed to existing roadway network, they will not be adequate to meet the greatly increased travel demands projected by 2030. Hence, to improve future travel conditions, over hundred (100) road improvement projects were considered for implementation within the 2030 Long Range Transportation Plan (LRTP). Yet, with the recent completion of the remaining RIDE I road improvement projects, such as the Fantasy Harbour Bridge from George Bishop Parkway to U.S. Hwy. 17 and Harrelson Boulevard in Myrtle Beach and the Robert Edge Parkway from Main Street to the Carolina Bays Parkway (S.C. Hwy. 31) and S.C. Hwy. 90 in North Myrtle Beach, some of the previously recommended future improvement projects were reprioritized under (re-)consideration of the following sources:

- RIDE II ("Riding on a Penny") Committee Recommendations and Report (May 2004);
- Southern Evacuation Life-Line Environmental Impact Statement (August 2008);
- US 17 Corridor Studies and other reports (to be discussed individually further below);
- Public review and input;
- City and County agencies; and
- GSATS Study Team.

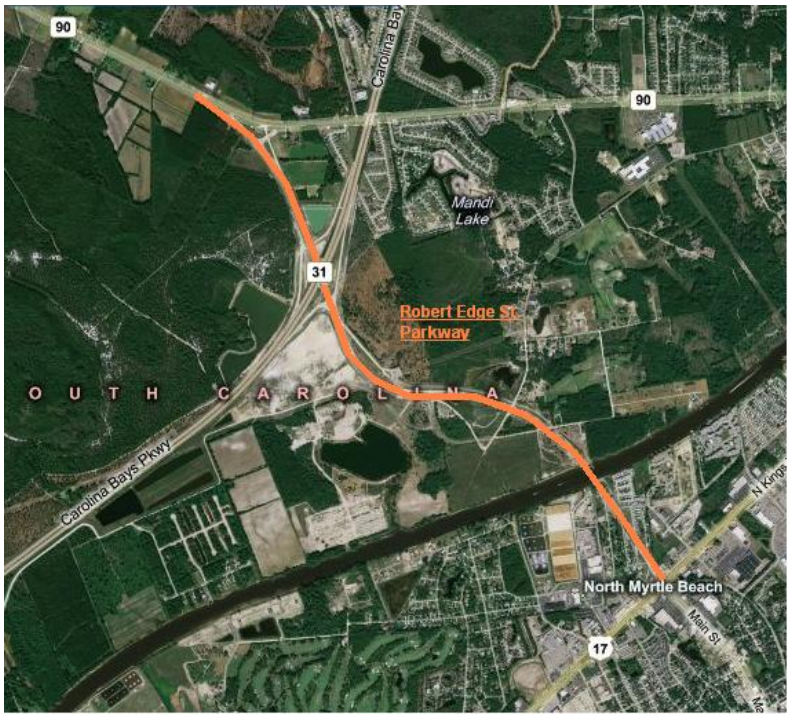
The following list of road and intersection improvements represents the latest and most important recommendations from the 2010-2015 Transportation Improvement Program (TIP) regarding roads of regional and area significance. The 2010-2015 TIP for the GSATS area is a five-year program of transportation capital projects together with a three-year estimate of transit capital and maintenance requirements. While the TIP is usually approved biennially, the document may be amended throughout the year. SAFETEA-LU, as well as the Metropolitan Planning Regulations, mandates that a TIP comprise the following:

1. Identify transportation improvement projects recommended for advancement during the program years. The projects required are those located within the study area and receiving and Federal Highway Administration (FHWA) or Federal Transit Administration (FTA) funds;
2. Identify the criteria and process for prioritization for inclusion of projects in the TIP and any changes from past TIPs;
3. Group improvements of similar urgency and anticipated staging into appropriate staging periods;

4. Include realistic estimates of total costs and revenue for the program period;
5. Include a discussion of how improvements recommended from the Long Range Transportation Plan were merged into the TIP;
6. List major projects from previous TIPs that were implemented any identify and major delays in planned implementation;
The TIP may also include regional highway projects that are being implemented by the State, City and County for which federal funding is requested.

Priority 1: Carolina Bays Parkway / Robert Edge Parkway (North Myrtle Beach)
Length: 2.8 miles or 4.8 kilometers;
Description: New limited-access highway connecting S.C. Hwy. 90 with Carolina Bays Parkway (new full interchange) and continuing over the Intracoastal Waterway to terminate at the intersection with U.S. Hwy. 17 and Main Street in North Myrtle Beach. The new connector, named Robert Edge Parkway, opened to public in summer 2009.
Program Type: Phase 2 of the RIDE I Program / State Infrastructure Bank (SIB);
Funding: SIB;
Total project cost: $85,000,000;

Map 20: Main Street Connector (Robert Edge Parkway – North Myrtle Beach)



Source: Microsoft BING maps; edited by Horry County Planning Dept., 2009

Priority 2: Carolina Bays Parkway Extension – S.C. Hwy. 9 to S.C. Hwy. 57 (North Carolina Stateline)

Length: 4.9 miles or 8.3 kilometers;

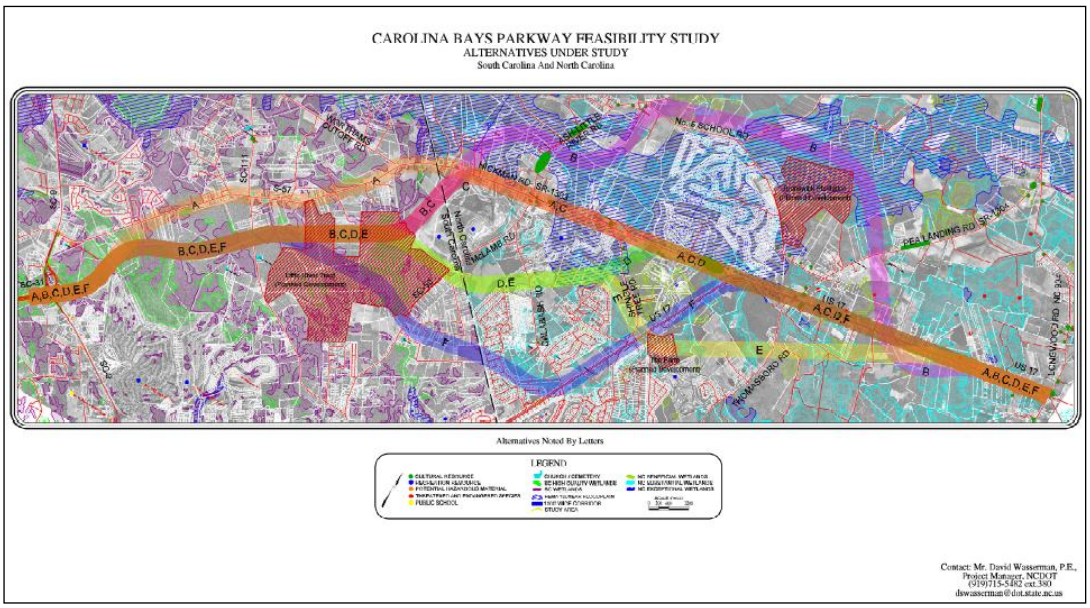
Description: Extension of Carolina Bays Parkway (S.C. Hwy. 31) from its current terminus at S.C. Hwy. 9 to the North Carolina Stateline. Further study to continue the parkway and to merge it with U.S. Hwy. 17 near Calabash, NC is covered by NCDOT.

Program Type: System & Intermodal Connectivity;

Funding: Surface Transportation Program (STP) / National Highway System (NHS);

Total assigned project cost (2007 and beyond): not apportioned;

Map 21: Route Alternatives for the Carolina Bays Parkway Extension (northern terminus)



Source: NCDOT, Strategic Highway Corridors,

URL: http://www.ncdot.org/doh/preconstruct/tpb/shc/studies/cbp/; 2008

Priority 3: Carolina Bays Parkway Extension – S.C. Hwy. 544 to S.C. Hwy. 707

Length: 4 miles or 6.4 kilometers;

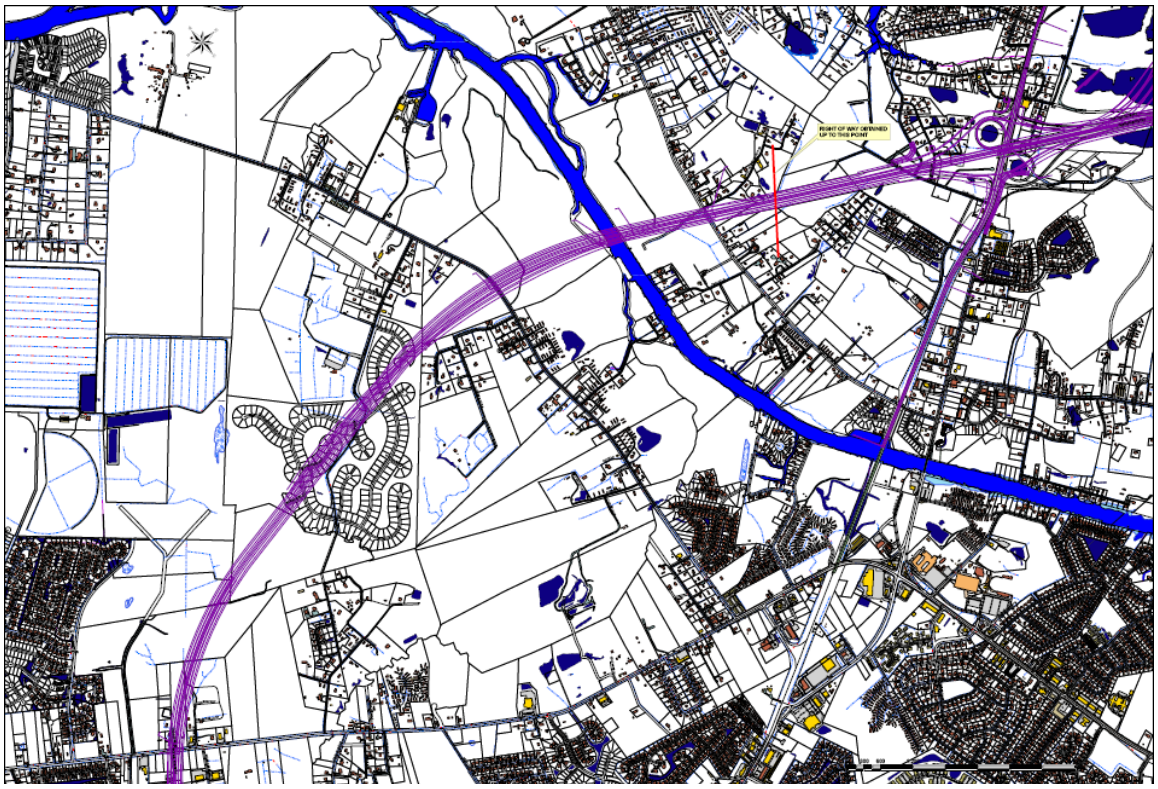
Description: Southward extension of Carolina Bays Parkway (S.C. Hwy. 31) from current southern terminus at the interchange with S.C. Hwy. 544 to S.C. Hwy. 707.

Program Type: State Infrastructure Bank (SIB);

Funding: RIDE / SIB / NHS / STP / American Reinvestment and Recovery Act (ARRA);

Total assigned project cost (2007 and beyond): $235,000,000

Map 22: Proposed extension of Carolina Bays Parkway



Source: Horry County Planning & Zoning, 2008

Priority 4: Fantasy Harbor Bridge

Length: 1.2 miles or 2 kilometers;

Description: The Fantasy Harbor Bridge is a multi-lane bridge over the Atlantic Intracoastal Waterway, connecting Harrelson Boulevard, U.S. Hwy. 17 Bypass and George Bishop Parkway. This bridge serves as an alternative to U.S. Hwy. 501 for reaching Myrtle Beach from the West. The new Fantasy Harbor Bridge opened in summer 2009.

Program Type: State Infrastructure Bank (SIB);

Funding: SIB;

Total project cost: $46,000,000.

Priority 5: U.S. Hwy. 17 Bypass & Glenns Bay Road (Priority 9 within RIDE II Committee Report)

Length: 1.7 miles or 2.8 kilometers;

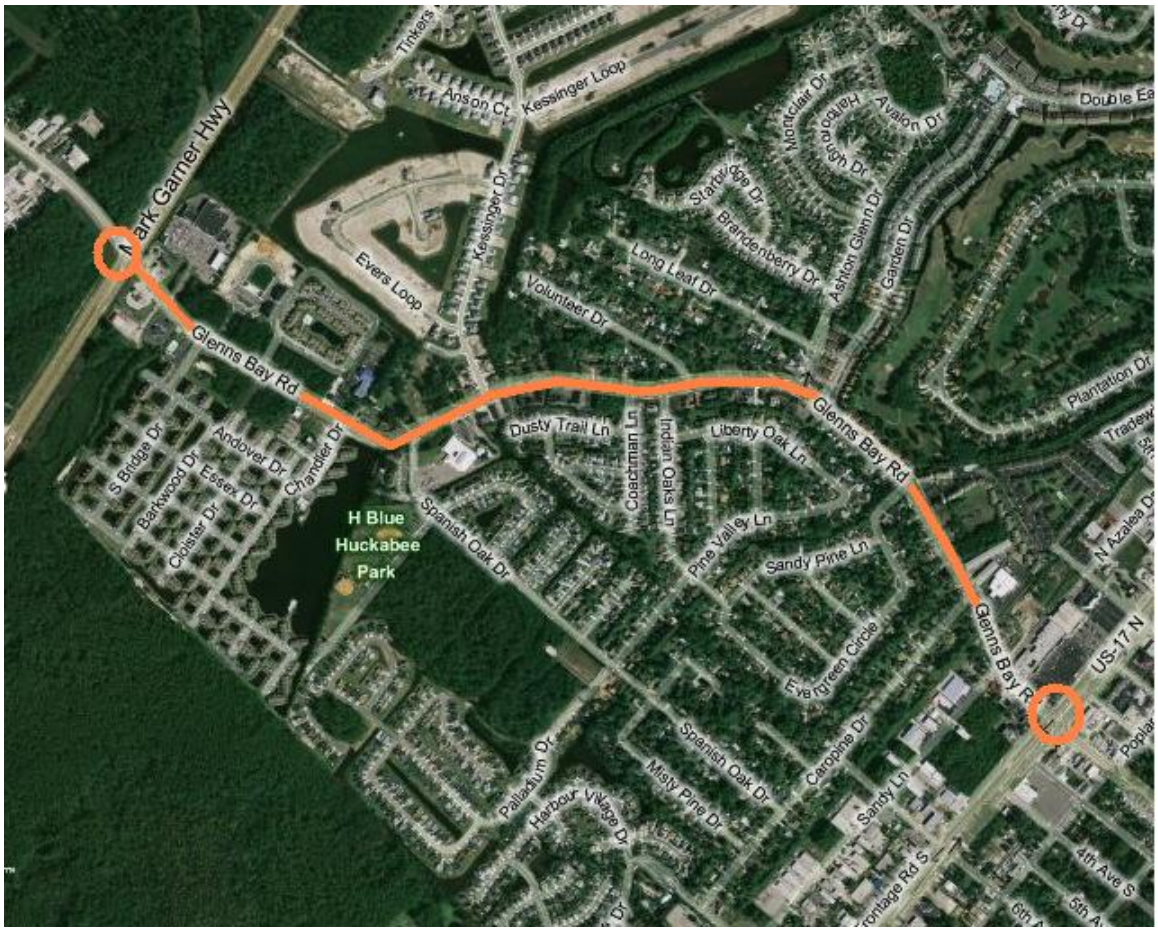
Description: Widening of Glenns Bay Road between U.S. Hwy. 17 Bypass and Kings Hwy. to 3 lanes (adding of continuous center lane) with sidewalk. Additional construction of interchange at U.S. Hwy. 17 Bypass and Holmestown Road.

Program Type: System Upgrade;

Funding: Ride II / ARRA / STP;

Total assigned project cost (2007 and beyond): $76,000,000;

Map 23: U.S. Hwy. 17 – Glenns Bay Road



Source: Microsoft BING maps; edited by Horry County Planning Dept., 2009

Project 6: S.C. Hwy. 707 Widening (Priority 4 within RIDE II Committee Report)

Length: 9.1 miles or 14.7 kilometers;

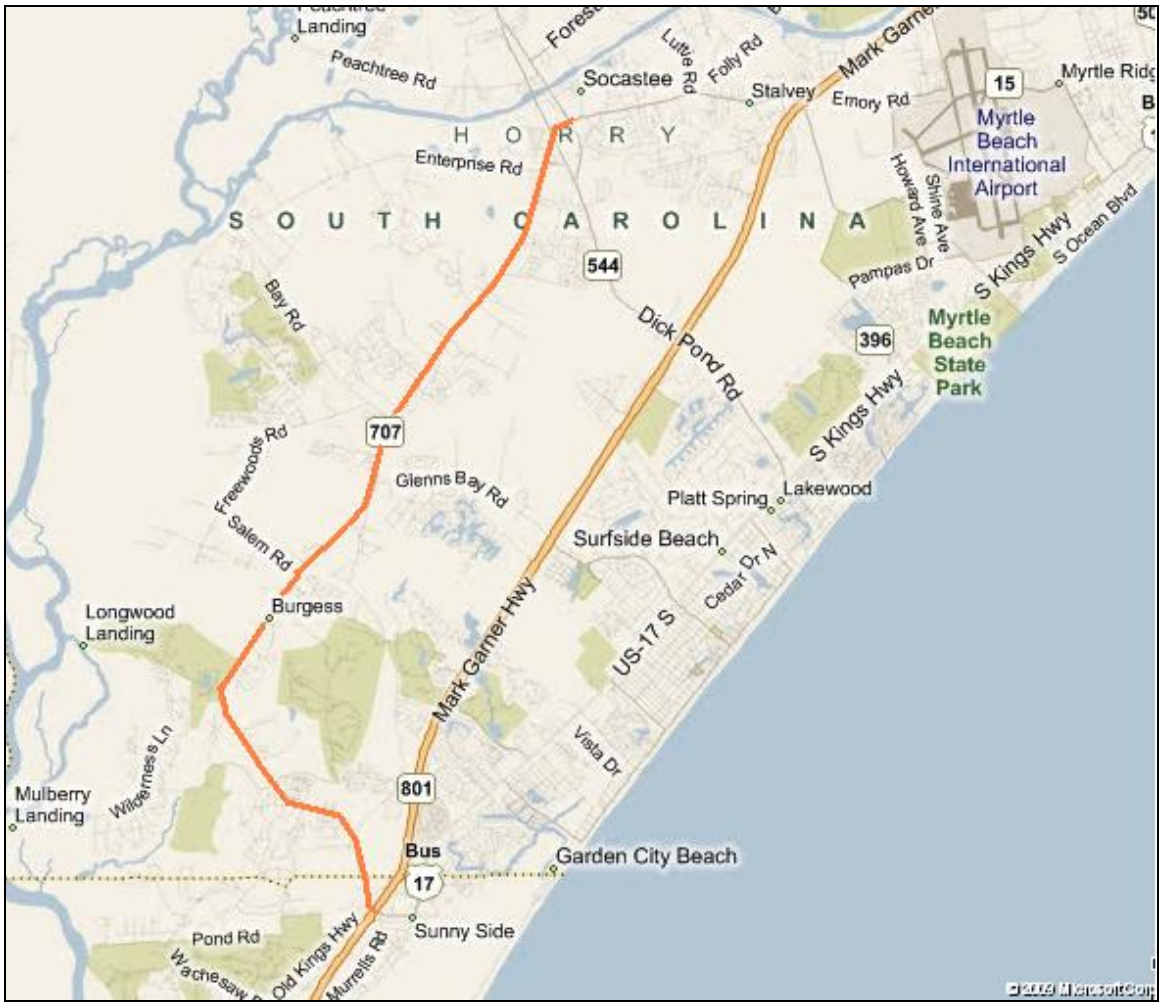
Description: Widening of existing two-lane highway to five (5) lanes with sidewalk between Enterprise Road and Georgetown-Horry County line. Additional intersection improvements included at S.C. Hwy. 544 and S.C. Hwy. 707.

Program Type: System Upgrade;

Funding: RIDE II / ARRA / SIB / STP;

Total assigned project cost (2007 and beyond): $116,000,000;

Map 24: S.C. Hwy. 707 Widening



Source: Microsoft BING maps; edited by Horry County Planning Dept., 2009

Priority 7: Third Avenue South (S-84) – Myrtle Beach

Length: 1.2 miles or 1.9 kilometers;

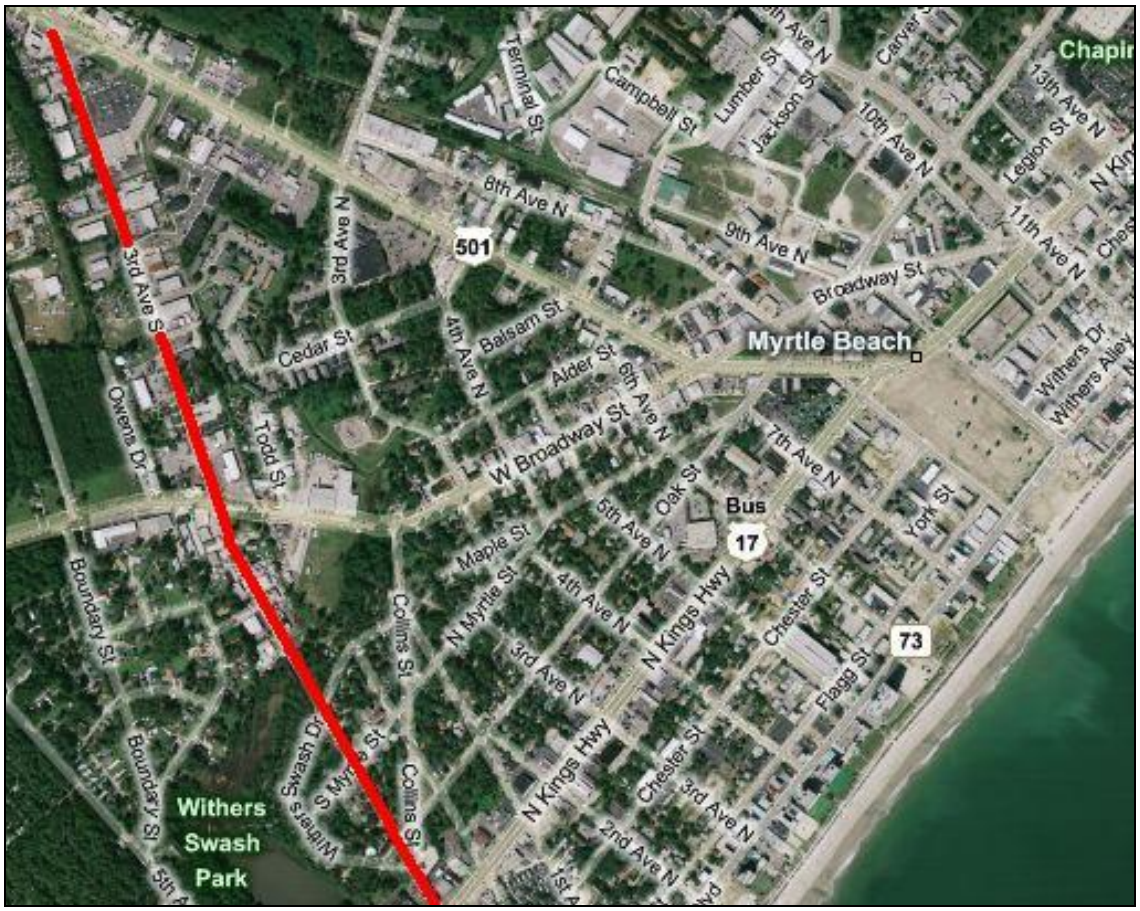
Description: Widening of Third Avenue South (S-84) in Myrtle Beach between U.S. Hwy. 501 and Kings Hwy. (U.S. Hwy. 17 Business) to three (3) lanes with sidewalk.

Program Type: System Upgrade;

Funding: Surface Transportation Program (STP);

Total assigned project cost (2007 and beyond): $4,650,000;

Map 25: Third Ave. South (S-84) in Myrtle Beach



Source: Horry County Planning & Zoning Dept.; Microsoft Live Search, 2008

Priority 8: Backgate Interchange – U.S. Hwy. 17 Bypass / S.C. Hwy. 707 / Farrow Parkway (Priority 3 within RIDE II Committee Report)

Description: Construction of two-level interchange at U.S. Hwy. 17 Bypass and S.C. Hwy. 707 / Farrow Parkway.

Program Type: System Upgrade;

Funding: Surface Transportation Program (STP);

Total assigned project cost (2007 and beyond): $1,000,000 for design; funding for right-of-way acquisition and construction to be covered by RIDE II Program (overall cost: $95 to $105 million);

(See Figure 2 on page 20 for detailed rendering of proposed backgate interchange)

Priority 33: U.S. Hwy. 17 Widening – North Myrtle Beach

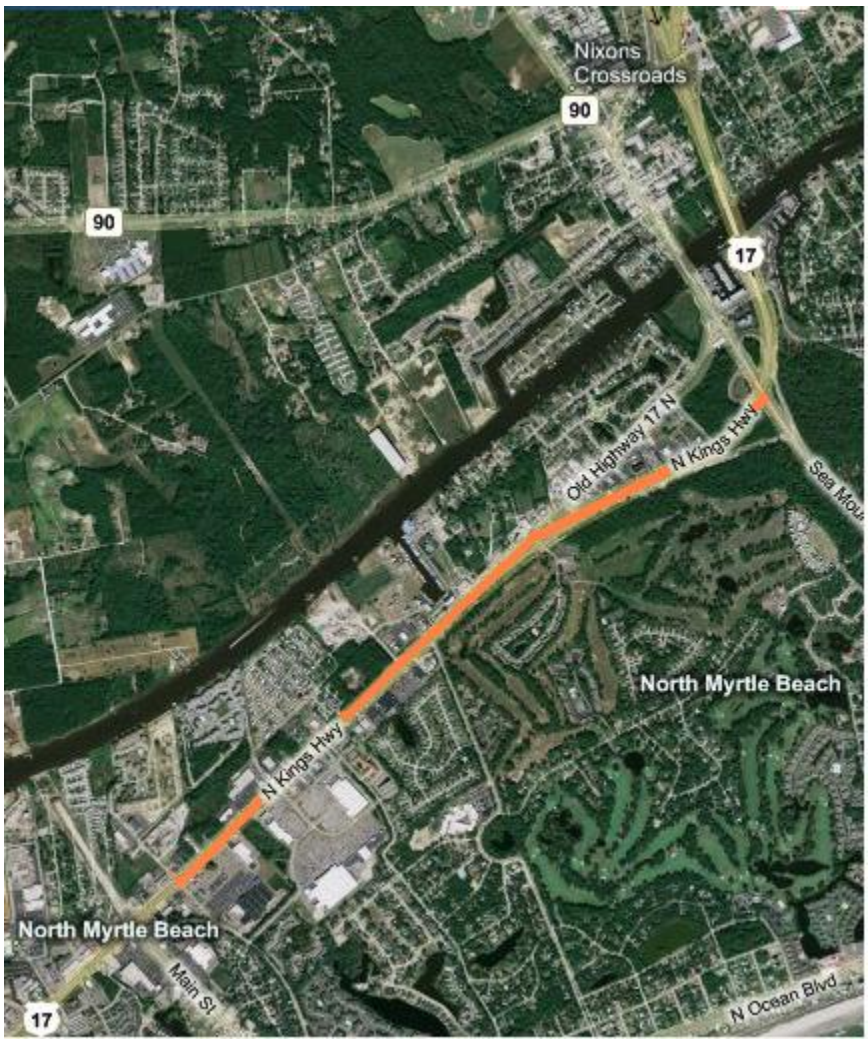
Length: 2.9 miles or 4.7 kilometers;

Description: Widening of U.S. Hwy. 17 southbound between Sea Mountain Hwy. (S.C. Hwy. 9) and Second Avenue North from two (2) to three (3) lanes.

Program Type: System Upgrade;

Funding: Surface Transportation Program (STP) / ARRA;
Total assigned project cost (2007 and beyond): $4,571,000;

Map 26: U.S. Hwy. 17 – North Myrtle Beach

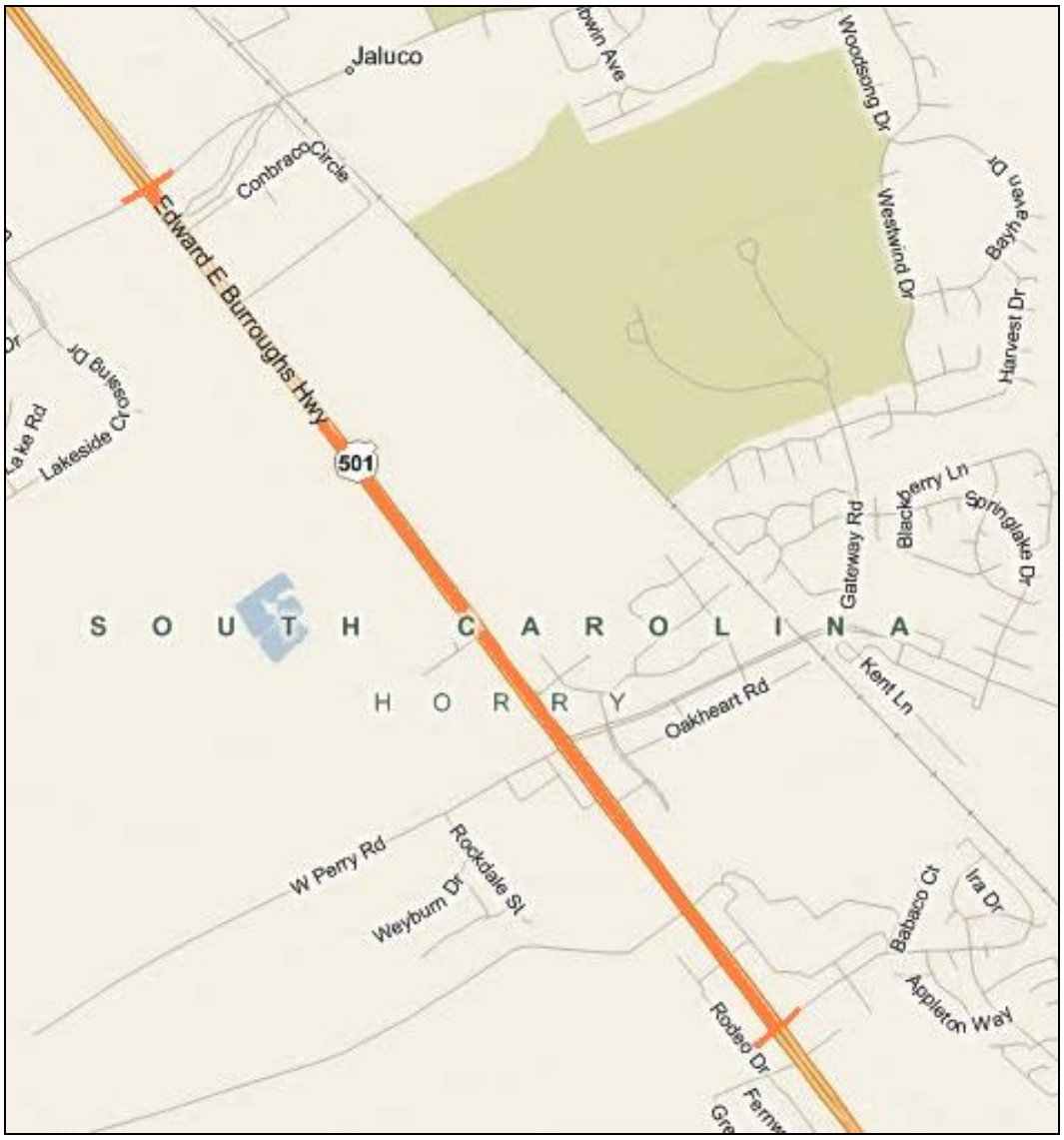


Source: Microsoft BING maps; edited by Horry County Planning Dept., 2009

Priority 36: U.S. Hwy. 501 North Widening – Factory Stores to Gardner Lacy Road

Length: 2.3 miles or 3.7 kilometers;
Description: Adding of a third travel lane between Waccamaw Pines and Gardner Lacy Roads northbound.
Program Type: System Upgrade;
Funding: Surface Transportation Program (STP), included in new Transportation Improvement Program (TIP);
Total assigned project cost (2007 and beyond): $2,000,000;

Map 27: U.S. Hwy. 501 North Widening



Source: Microsoft BING maps; edited by Horry County Planning Dept., 2009

As discussed within the Existing Transportation Network section of this Element, U.S. Highway 501 represents the most congested highway in Horry County. It is the only stretch of road with a Level-of-Service classification of "F".

In large part, major congestion on U.S. Highway 501 between Conway and S.C. Highway 31 (Carolina Bays Parkway) is attributable to the number of traffic signals. Although not included within the current RIDE II "Riding on a Penny" program, the RIDE II Committee had recommended elimination of four (4) of these signals through construction of interchanges at:

- Factory Outlet Blvd. (Factory Outlet Stores);

- Carolina Forest Blvd.;
- Gardner Lacy Rd.; and
- Singleton Ridge Rd.;

The most needed new interchange according to SCDOT studies is the one located at U.S. 501 and Carolina Forest Blvd. (see figure below). As of 2008, improvements to that intersection have been made by extending the Carolina Forest bound turn lanes from U.S. 501 southbound. Funding for this intersection improvement has been reserved within the GSATS Transportation Improvement Program (TIP) for FY 2008 at a total cost of $200,000.

Map 28: Location of proposed new interchange at U.S. 501 and Carolina Forest Boulevard

Source: Horry County Planning & Zoning Dept.; Microsoft, 2008

Next to the 2030 Long Range Transportation Plan, GSATS also has included several corridor studies within its Transportation Improvement Program approach. Highway U.S. 17 represents one of the main focus corridors along the Grand Strand, as it serves as the main access and arterial road for short, mid, and long distance trips by visitors and locals alike. U.S. 17 is split between U.S. 17 Business and U.S. 17 Bypass between the north end of Myrtle Beach and Murrells Inlet. The following corridor studies have been undertaken for U.S. 17 Business from the South Strand to North Myrtle Beach.

The South Strand U.S. 17 Business Corridor Study (1999)

U.S. Highways 17 Business and U.S. 17 Bypass are the most important *Principal Arterials* along the course of the Grand Strand. Whereas, U.S. 17 Bypass is intended to serve longer trip lengths, U.S. 17 Business mainly serves a local access and collector function, serving primarily short to medium trip lengths.

With all the growth and development as well as rising visitor numbers to the Grand Strand in recent years, both of the above mentioned highways and others, have experienced tremendous traffic volume increases resulting in more congestion and concerns about travel safety and corridor function.

These circumstances have led the Grand Strand Area Transportation Study (GSATS) together with local governments, residents and businesses to examine the functionality of U.S. 17 Business from the South Strand all the way to North Myrtle Beach, where U.S. 17 Business and Bypass function as one.

The South Strand U.S. 17 Business Corridor Study was the first study to be issued in 1999, its counterparts in Myrtle Beach and North Myrtle Beach followed in the years 2003 and 2008.

While the South Strand U.S. 17 Business Corridor Study was geographically separated into the four (4) study areas of the Murrells Inlet area, the Garden City Beach study area, as well as the Surfside Beach and South Myrtle Beach areas, including the roadway segment that connects U.S. 17 Business with S.C. 544, the overall project goal of this highway study was to develop a phased transportation plan to improve the mobility and safety of vehicular traffic using the U.S. 17 Business Corridor. Also, the plan incorporates recommendations for the implementation of alternative transportation modes (transit, bicycle, and pedestrian) that will be highlighted in the following chapter.

Since the main sections of the study areas of Garden City Beach, Surfside Beach and South Myrtle Beach are similar in character (all have a minimum of four through lanes with commercial development along the length), the following design deficiencies and ideas were further analyzed: removal of confusing frontage roads alignments, consolidation of driveways, enhancement of back business access, addition of main travel lanes to accommodate acceleration and deceleration functions along the corridor that will ease vehicle friction and promote more efficient traffic flow, as well as the coordination of intersection signals. In detail the following design elements and improvement measures have been analyzed and recommended for implementation within the overall study area:

- *Access management/design standards*: Implementation of standards for driveway spacing, traffic signals, inter-parcel access, and bicycle/multi-use facilities is key to providing a uniform corridor in terms of appearance to the motorist, functional operation, and level of service. Access management and design standards are recommended throughout the corridor.

- *Intersection improvements*: Intersections are typically the points of congestion on an arterial roadway. Treatment of intersections to free up turning movements and U-turns is recommended throughout the corridor.
- *Signal coordination*: An additional element of intersection improvement is the issue of signal coordination. A well-coordinated signal system can typically perform with as much as 20 percent fewer stops and delay than non-coordinated arterial. Also, signal coordination throughout the entire length of the corridor is recommended as it provides for better fuel-economy.
- *Provide for long trip lengths on U.S. 17 Bypass*: An evaluation of the needs for access versus mobility along the U.S. 17 Business Corridor shows that the access function, as well as servicing short to medium length trips, is the primary purpose of the corridor. Citizens and stakeholders expressed an interest in encouraging longer length trips to use U.S. 17 Bypass. Therefore, the improvement recommendations do not focus on major capacity increases along the corridor, but rather on improving the traffic flow characteristics. In addition, enhancing east/west connectivity between the U.S. 17 Business and Bypass routes is recommended. Improvement of the Garden City Connector and Glenn's Bay Road are examples of this type of improvement.
- *Aesthetics*: Improvements to the physical surroundings are important to maintaining the U.S. 17 Business Corridor as an attractive location for area businesses. It is also important for increasing the attractiveness of alternative modes of transportation, which typically include pedestrian activities along the corridor, near the arterial roadway. The aesthetic improvements are designed to be somewhat unique for each study area, but yet have elements that tie the corridor together, e.g. light fixtures, street furniture, paving materials, wayfinding signage, as well as landscaping.

The implementation of the recommended measures within this corridor study involves developing consensus among local government agencies, then programming and funding the projects. Based on the short, mid, and long range recommended improvements and planning level cost estimates, the local jurisdictions should develop a prioritized list of projects for input into the GSATS Long Range Transportation Plan (LRTP) and, additionally, program projects in the Transportation Improvement Program (TIP).

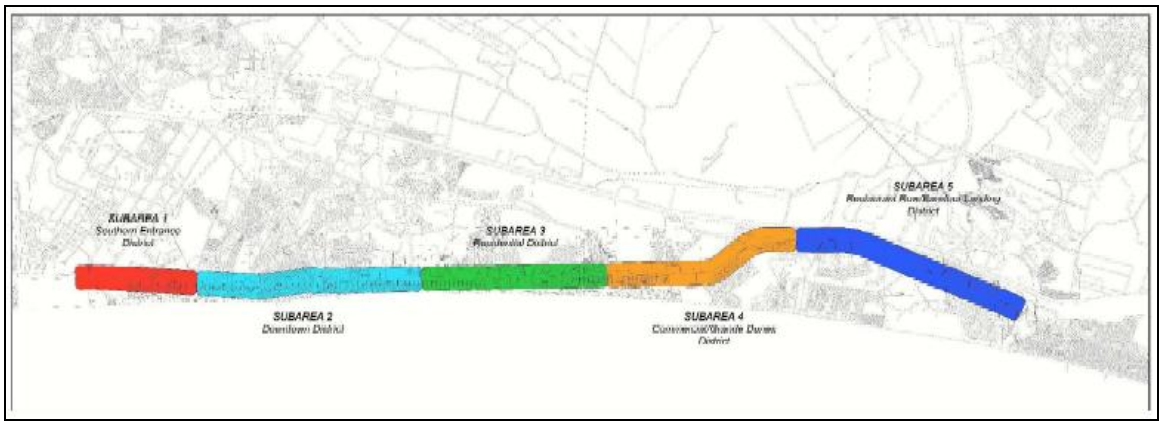
The Kings Highway (U.S. 17 Business) Corridor Study (2008)

The latest accomplished corridor study is the *Kings Highway Corridor Study*, which begins there where the *South Strand U.S. 17 Business Corridor Study* leaves off. For the purposes of better analyzing small-scale differences in the built environment that directly affect the nature of Kings Highway, the study has been geographically divided into the following five (5) districts:

1. Southern Entrance District (Farrow Parkway to 17h Ave. S.)

2. Downtown District (17th Ave. S. to 31st Ave. N.)
3. Residential District (31st Ave. N. to 67th Ave. N.)
4. Commercial/Grand Dunes District (67th Ave. N. to Cove Drive), and
5. Restaurant Row/Barefoot Landing District (Cove Dr. to 48th Ave. S.).

Figure 9: Five districts of the Kings Highway Corridor Study



Source: Kings Highway Study, Executive Summary, City of Myrtle Beach/GSATS, 2008

The purpose of this corridor study is to develop a long-term plan of transportation and land use improvements for Kings Highway that enhances the aesthetics, introduces viable transportation options, and provides functional facilities that are safe for all users.

The Kings Highway Corridor is unique in its identity as both a local roadway that some identify as a kind of Main Street of the region and a route that once served as the only connection between points north and south of Myrtle Beach.

Yet, over the years, several north-south transportation alternatives including Robert Grissom Parkway, U.S. 17 Bypass and S.C. 31 have been created. Although many returning tourists avoid or are unaware of those alternatives the challenge identified within this study is to bring back Kings Highway as a roadway that fits better into the local scale and character of the area again.

Challenges identified by the Corridor Study team include such characteristics as substandard sidewalks, missing bikeways, unsigned and unsheltered transit stops, unsecure atmosphere, unaesthetic looks, etc.

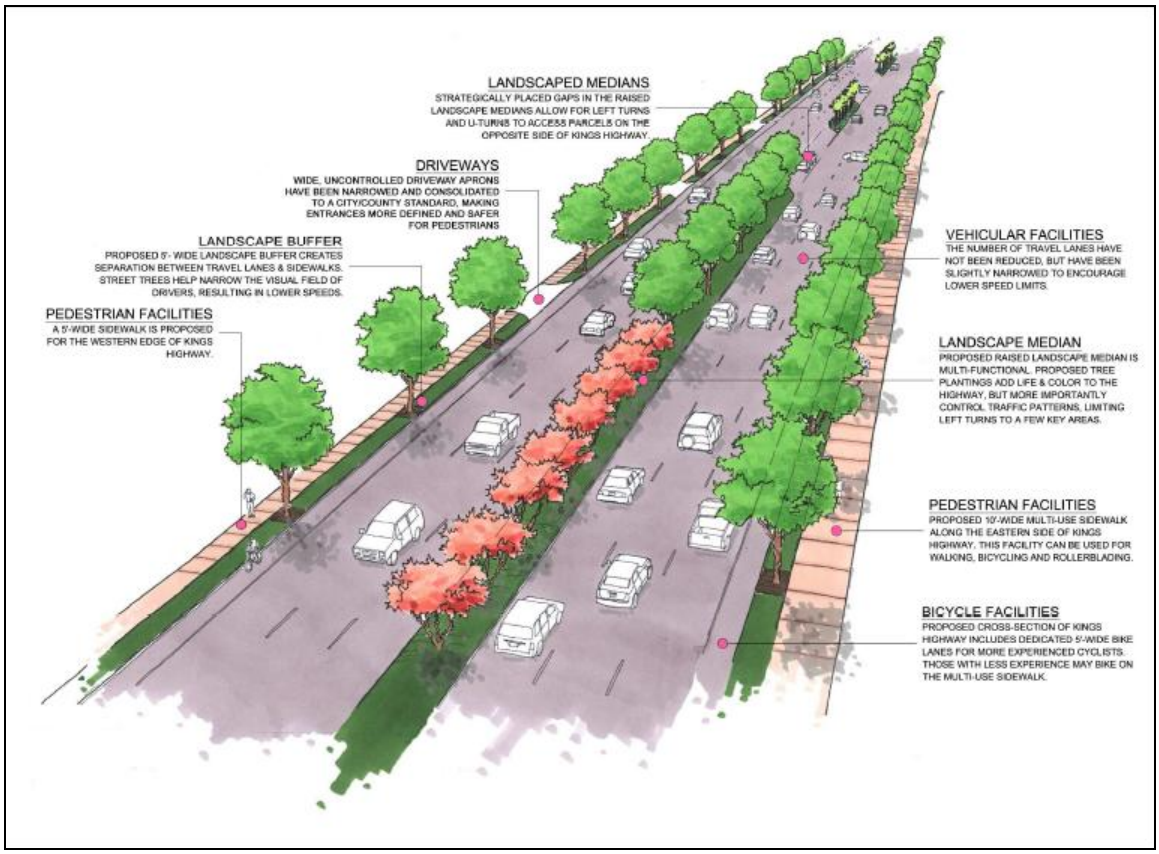
The Kings Highway Corridor Study team therefore recommends the redesign of Kings Highway as a so-called Complete Street, which makes the corridor not only appealing for vehicular use, but also safely accommodates pedestrians, cyclists, as well as public transit users and other non-motorized traffic participants. Moreover, the study team recommends

better access management and design standards to incorporate the roadway better into the locally built environment. With most of Kings Highway being only 5 to 10 minutes walking distance away from the most densely populated areas of Myrtle Beach, this roadway has a huge potential to connecting those living near Kings Highway to other areas of the Grand Strand without the use of a personal automobile.

Although the recommendations have been ordered into the three (3) levels of short-term (0 – 5 years), mid-term (5 – 15 years), and long-term (15 – 30 years) improvements, the following provide a good overview of recommendations valid throughout the Kings Highway corridor:

- Improving and unifying directional and wayfinding signage along Kings Highway by collaboration between City of Myrtle Beach and SCDOT (constructional);
- Facilitate improvements that are focused on creating a safe and desirable environment for pedestrians to travel along and cross the corridor (pedestrian);
- Add multi-use sidewalks and dedicate bike lanes to entice usage of Kings Highway to a broad range of cyclists (bicycle);
- Dedicate bus stop locations in key areas of Kings Highway that will benefit a large number of users; bus stops should be placed 10 minutes walking distance from one another (transit);
- Create a Special Uses Overlay District that would focus on pursuit of the following issues (land use): sidewalk configuration, curb cut consolidation, streetscape lighting and landscaping, maximum setbacks (rather than minimum);
- Create opportunities to manage access to side streets and limit vehicle to vehicle conflicts and vehicle to pedestrian conflicts (roadway design);
- Bury overhead utility lines to improve safety and aesthetics (utilities).

Figure 10: Overview of proposed improvements along Kings Highway



Source: Kings Highway Corridor Study, City of Myrtle Beach/GSATS, 2008

The U.S. Highway 17 Corridor Study for North Myrtle Beach

Together with the previous highlighted U.S. 17 Corridor Studies along the South Strand and Myrtle Beach, the Waccamaw Regional Council of Governments (WROG), Grand Strand Area Transportation Study (GSATS) as well as SCDOT and the City of North Myrtle Beach have come together in 2002-03 to sponsor the compilation of the U.S. 17 Corridor Study. The main purpose of this study was to analyze ways in alleviating congestion along that stretch of U.S. 17 in North Myrtle Beach that can see up to 77,000 daily trips in peak season. Furthermore, the study has taken a closer look not only at the safety and the efficiency of vehicular traffic flow, but also has looked at the needs for transit, pedestrian and bicycle travel as well as access issues, aesthetics, and geometric design considerations.

The study corridor extends along U.S. 17 within the City of North Myrtle Beach from 48th Ave. South in the south through Sea Mountain Highway in the north.

Through public participation, field observation as well as analysis of traffic data and with the Steering Committee members and other stakeholders, following corridor challenges were determined:

- Providing a balance between through capacity and local access based on corridor subarea needs;
- Reducing conflict points along the corridor;
- Providing for safe pedestrian and bicycle crossings;
- Developing pedestrian activity areas;
- Providing intersection geometry to maximize efficiency of the signal systems;
- Connecting local bike routes to provide for long trips and connectivity;
- Increasing the use of alternative travel modes including transit;
- Providing aesthetic enhancements along the corridor to identify activity areas and increase attractiveness of the city as a destination;
- Integrating directional signage with aesthetic improvements;

(*U.S. Highway 17 Corridor Study North Myrtle Beach, Executive Summary, 2003, page iii*)

Overall, a total of seven (7) strategies were recommended to achieve these aforementioned challenges along the U.S. 17 Corridor in North Myrtle Beach. As summarized below, these strategies and recommendations are very similar to the ones highlighted previously within the South Strand and Myrtle Beach corridor studies for U.S. 17 Business:

Strategy 1: Reduce trip making through land use management

- Propagation of Mixed-use developments that can save unnecessary trips by inhabiting uses of living, working, shopping and playing;
- Promotion of mixed-use developments along the corridor that are accessible by different modes of transportation;
- Provide incentives for pedestrian and transit-oriented developments in defined activity centers (e.g. zoning, fees, tax exemptions, etc.);

Strategy 2: Utilize transit to satisfy unmet demand & to provide travel opportunities

- Offer linear transit services with connections to other popular places along the Grand Strand;
- Provide transportation between beach and remote parking lots (parks and ride; bus shuttle);

Strategy 3: Optimize transportation system for maximum efficiency and safety

- Provide geometric improvements at key intersections;
- Improve access to Little River Neck Road from U.S. 17 and Sea Mountain Highway;
- Review and adjust signal timing regularly;

- Provide remote traffic monitoring of congested roadway and beachfront parking areas (SCDOT and City of North Myrtle Beach);
- Manage Roadway Access Movements, e.g. curb cut management, shared driveways, inter-parcel access, backside roadway access;

Strategy 4: Increase roadway capacity where feasible

- Provide additional street capacity, connectivity and enhance circulation;
- Widen U.S. 17 to six (6) lanes;
- Construct (several) connections to Carolina Bays Parkway (Main Street Connector as currently under construction);

Strategy 5: Provide pedestrian and bicycle travel opportunities

- Install wide sidewalks, streetscape elements, and pedestrian oriented signage along U.S. 17;
- Provide pedestrian promenade along Ocean Boulevard;
- Provide select bike facilities and coordinate with East Coast Greenway;
- Provide accessible pedestrian routes to transit;
- Enable pedestrian crossings of roadways;

Strategy 6: Implement Transportation Demand Management

- Coordinate carpool matching with regional efforts;
- Conduct information/marketing program to encourage use of transit, walking, and biking as an integral part of enjoying North Myrtle Beach;

Strategy 7: Improve Transportation System Aesthetics

- Enhance pedestrian scale elements in pedestrian activity areas, e.g. landscaping, street furniture, wayfinding signage, lighting;

(*U.S. Highway 17 Corridor Study North Myrtle Beach, Executive Summary, 2003, page iv – xiii*).

The North East Transportation Plan

The North East Transportation Plan is a joint project between Horry County and the City of North Myrtle Beach. The study area extends from U.S. Highway 17 in the City of North Myrtle Beach, SC, to S.C. Highways 57 and 90; from S.C. Route 22 to Route 9 in the unincorporated areas of Horry County, as well as incorporated portions of the City of North Myrtle Beach including Little River Neck Road.

STUDY PURPOSE

The purpose of the North East Transportation Plan is to inventory and assess the existing transportation system and develop a multi-modal plan, standards and policies that will

provide accommodations for automobiles, transit, pedestrians and bicycles as well as guide future transportation decisions in the North Myrtle Beach/Horry County study area. The plan looks beyond the roadway to determine the effects of growth on the built environment and acknowledges the importance of balancing the land use and transportation equation. This project approach features tools aimed at creating a successful merger between smart growth and the demands of the roadway users.

VISION AND OBJECTIVES

The vision for the North Myrtle Beach Transportation Plan was developed in collaboration with local staff, the Advisory Committee, and stakeholders and was validated through extensive public outreach. The Vision, which is intended to be a guide for the planning process, is as follows:

"North Myrtle Beach and the surrounding areas of Horry County desire a healthy, vibrant community that supports accessibility and mobility for residents and visitors. Our transportation needs should be linked to land use decisions, be environmentally accountable, and provide true choice to all users all the while enhancing the quality of life we cherish."

Following the establishment of the plan's vision, a set of objectives were developed. The final plan attempts to balance the vision and objectives expressed by Advisory Committee and community leaders with the comments received at the first public workshop. The objectives of the North East Transportation Plan include:

- Enhance Quality of Life — The plan must find ways to coordinate social and community initiatives with the timing, design, and placement of transportation infrastructure; the plan also must seek ways to minimize adverse impacts to the natural and built environment.
- Create a System of Interconnected Streets — by incorporating a system of interconnected streets and considering each roadway's intended purpose and function, the plan can improve mobility and distribute traffic efficiently.
- Improve Travel Safety — travel safety should be improved for motorists, bicyclists, and pedestrians through cost-effective applications, best management practices, and local access and land use policies.
- Address Congestion — existing and expected future traffic congestion must be considered, and congestion should be better managed through the implementation of creative strategies.
- Mode Integration — the plan must provide seamless connections among the various modes, especially those associated with cyclists and pedestrians. Connections and gaps with the bicycle and pedestrian networks should be improved.
- Land Use/Transportation Integration — land use and transportation should be integrated to ensure the transportation system supports local initiatives and is

complementary to existing and future land use objectives. Transportation design should be sensitive to local context, but also should be responsive to overarching mobility and access management goals.

- Develop a Compatible Plan — the plan must recognize the benefits of corridor-based planning that balances the transportation facilities with the function and land uses that the corridor is trying to serve.
- Support Regional Tourism and Other Economic Development Opportunities — regional tourism and economic development (business and industry) must be considered when formulating recommendations. The plan must anticipate the needs of visitors, as well as industry, to ensure the economic vitality of the region.
- Promote Pedestrian- and Bicycle-Friendly Environments — connections and gaps within the sidewalk system should be improved, while bicycle and pedestrian needs can be prioritized by focusing on areas with high pedestrian attractions (e.g., schools, shopping and employment centers, and parks).
- Enhance Funding Opportunities — potential funding shortfalls must be identified as well as alternative funding sources which may help expedite implementation of the plan.
- Respect the Environment — the plan should seek innovative ways to respect and minimize impacts to the natural environment.
- Implementation — this plan's recommendations must be realistic, functional, and implementable.
- Documentation — the plan must be easy to read, informative, and suitable for use by a broad audience. It should focus on communicating visually through appropriate use of maps, figures, tables, and graphs.

STRATEGIC RECOMMENDATIONS

The North East Transportation Plan identifies two kinds of suggested improvements:

1. Systematic corridor recommendations
2. Systematic spot recommendations.

1) Among the corridors that were selected for detailed study, are highways S.C. 90 from S.C. 22 to S.C. 57; S.C. 90 from Main Street Connector to U.S. 17; and S.C. 9 from S.C. 57 to U.S. 17. These sections were selected as they exhibit typical conditions found within the study area: heavy traffic congestion particularly during peak hours, and commercial development adjacent to the roadway.

The strategic recommendations for these three (3) corridors are as follows:

- SC 90 from SC 22 to SC 57 – 5.4 miles – Ultimate cross section should be 4-lane divided principal arterial (additional right-of-way will be required);

- SC 90 from Main Street Connector to US 17 – 3.9 miles – Ultimate cross section should be 4-lane divided principal arterial (additional right-of-way will be required);
- SC 9 from SC 57 to US 17 –2.1 miles – Ultimate cross section should be 4-lane divided principal arterial (within existing right-of-way);

2) Like the corridor recommendations, the spot recommendations are based upon the analysis of existing conditions and anchored on the feedback received at the public meetings. The spot recommendations target critical congestion choke points and safety hazards in the study area. The following recommendations include intersection redesigns, interchange reconfiguration, and countermeasures aimed at improving the priority crash locations:

- SC 90 and SC 57 Intersection Redesign: align to accommodate proposed four-lane cross-section, signalize and improve visibility and safety;
- Construction of a roundabout at Little River Neck Road and Hill Street: recommended redesign of intersection to improve cross-access into surrounding neighborhoods;
- SC 9 and US 17 interchange reconfiguration: current interchange does not allow for connection from Sea Mountain Highway to westbound SC 9 and northbound US 17. Potential solution calls for addition of two flyover ramps;
- Sea Mountain Highway and US 17 interchange reconfiguration: current interchange inhibits confusing ramp system with limited weaving distance that creates safety issues. Potential solution includes realignment of existing and construction of new access ramps.

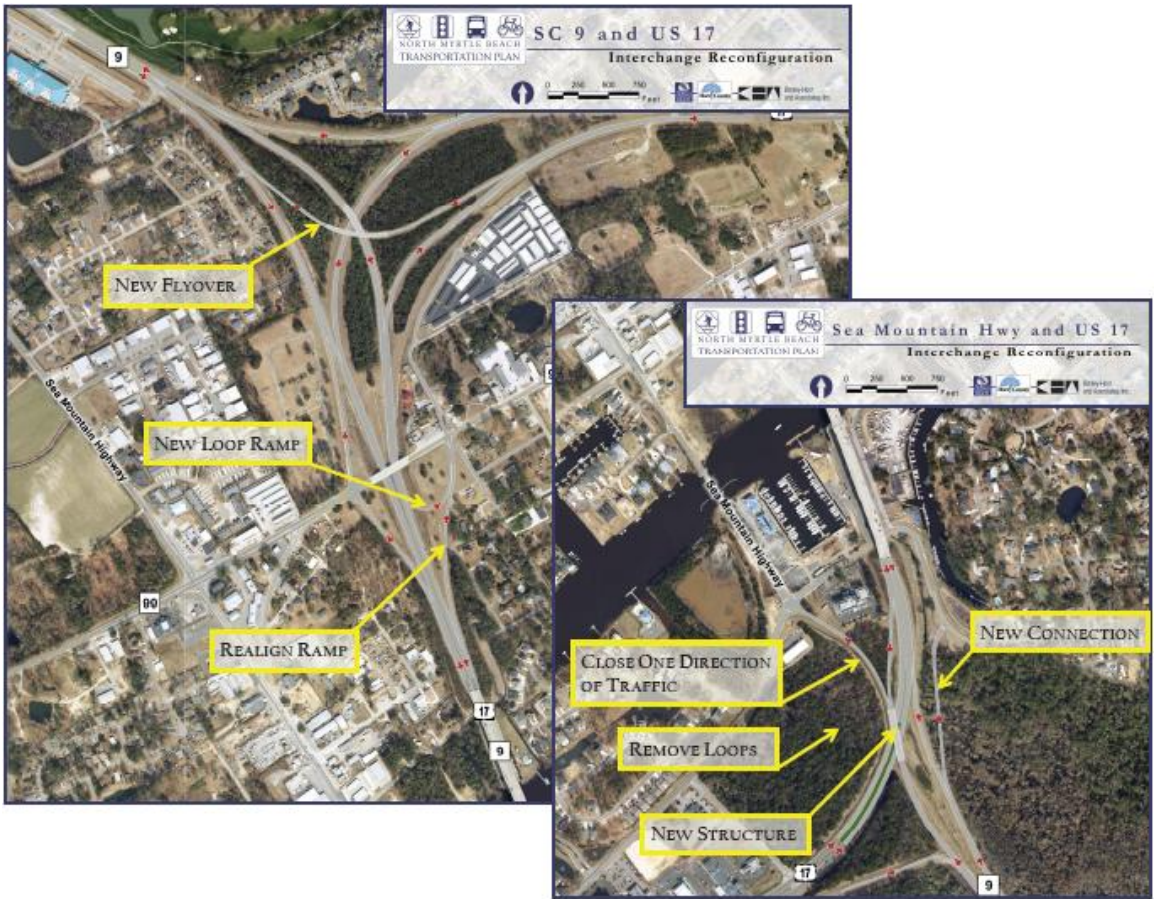
Map 29: Study Area of the North East Transportation Plan

Source: Kimley-Horn and Associates, 2008

Map 30: Recommended Corridor improvements

Source: Kimley-Horn and Associates, 2008

Figure 11: Graphic of recommended U.S. 17 interchange reconfigurations



Source: Kimley-Horn and Associates, 2008

Alternative Modes of Transportation

Within the course of this Transportation Element, it has been shown that transportation plays a vital role for the economy and welfare of Horry County. Over the past years many beneficial improvements have been made to the area's road network enhancing regional access and connectivity. Yet, the main focus traditionally has been on the automobile and on road building. Over the course of the last years, rising gasoline prices, and the concerns about global warming have awakened the awareness of the American public to their dependency on oil and the automobile.

Most corridor studies that have been accomplished in the most recent years stress the importance of creating transportation choices and accommodating public awareness and infrastructure funding for alternative means of transportation, e.g. bicycle paths, walkways, public transit, or combinations of several means, e.g. bike parking/rental at public transit stops, provision of showers and changing rooms in offices for bicycling commuters, etc.

With many places in Horry County being accessible only by car, the greatest challenge will be to put the necessary physical infrastructure in place that will enable the citizens and visitors of Horry County to comprehensively use alternative modes of transportation.

The Coast Regional Transit Authority is recognizing the need and planning to introduce the following new bus transit routes within Horry County between FY 2010 – 2014:

FY 2011:

- Route 3 – Bucksport to Conway
  The Coast RTA staff plans to reintroduce service to the Bucksport/Yauhannah communities that will allow them access to Conway and Myrtle Beach.
- Route 11 – VA Shuttle to Charleston
  There are plans to introduce service to the Veterans Administration Hospital in Charleston. This service would provide residents and visitors with and opportunity to visit the key destination in Charleston. Similarly, residents of Charleston would have access to Horry County using the VA Shuttle.

FY 2012:

- Route 5 – Aynor to Conway
  Plans have been drafted to re-introduce service to the Aynor community that will allow access to Conway and to Myrtle Beach. The Aynor to Conway service will be an express shuttle that will provide the residents of Aynor with connectivity to Conway and Myrtle Beach. This service stresses a park and ride opportunity that could relieve congestion of commuting traffic along U.S. Hwy 501.
- Route 18 – Socastee/Forestbrook

This proposed bus service route would allow residents from the Socastee and Forestbrook areas to have public transit access to many key locations in Myrtle Beach and the surrounding area.

FY 2013:

- Route 6 – Loris to North Myrtle Beach
  The proposed bus route 6 would re-introduce public transit service to the Loris area, providing residents of the Loris, Finkley, and Green Sea areas with public mobility choices and links to North Myrtle Beach, Myrtle Beach and Georgetown.
- Route 8 – North Myrtle Beach to Myrtle Beach
  This bus route was discontinued in 2007 amongst fiscal deficits, despite the fact of growing ridership. Both residents and visitors would profit from having public transportation access between both cities, and throughout Horry County.
- Route 12 – Airport Express
  There are plans to introduce service to and from Myrtle Beach International Airport. This service will prove beneficial as our airport continues to see an increase in boardings. This new bus service would provide visitors with a bus shuttle to major hotels along Myrtle Beach.

FY 2014:

- Route 13 – Carolina Forest
  This proposed new bus route would introduce transit service to the Carolina Forest area to allow those residents to have access to the many key locations in the Myrtle Beach and the surrounding area. With its character as being Myrtle Beach's bedroom community, ridership from commuters from Carolina Forest is anticipated to be big.
- Route 19 – Surfside to Conway
  With proposed re-introduction of bus service to Surfside Beach area, residents and visitors alike would profit from the availability in getting to Myrtle Beach, Conway and Georgetown via public transportation.

The East Coast Greenway

The East Coast Greenway (ECG) is an ambitious project establishing a 2,600 mile long multi-use trail system from Calais, Maine all along the Eastern Seaboard to the Florida Keys. One of the many goals is to boost local tourism revenues in communities along the ECG by users of the proposed greenways, bikeways, rail trails, canal towpaths, waterfront esplanades, etc.

Within the Coastal South Carolina region the East Coast Greenway will run through Horry and Georgetown Counties and will contain a total of 92 miles of multiuse trails.

In 2002 master planning consultant HadenStanziale in partnership with the local municipalities, counties, GSATS and the Waccamaw Regional Council of Governments (WRCOG) finalized the alignment of the main corridor as shown in the following maps. Within the course of the following fiscal years, missing segments of the proposed greenway will be closed step by step with most funding coming from the GSATS Transportation Improvement Program (TIP) reserved for Enhancement Projects. Overall, over $1.5M for seven (7) enhancement projects have been included within the GSATS FY2006 – 2009 TIP for closing missing segments of the East Coast Greenway network within Georgetown and Horry Counties alone (see table below).

Table 3: ECG Enhancement projects within the FY2006 – 2009 TIP (in $1,000)

#	Enhancement project	2004	2005	2006	2007	2008	2009	2010	**Total**
5	Windy Hill Ext. of ECG – North Myrtle Beach				40				40
8	Murrells Inlet Bike Bridge (ECG)					206			206
10	ECG – Kings Hwy. Myrtle Beach			276.6	206.8	206.8			690.2
11	ECG – Atlantic Ave., Garden City Beach						208.5		208.5
14	ECG – Kings River Rd. Bridge, Georgetown Co.							130.1	130.1
16	ECG – Reserved for FY2009						76.7		76.7
18	ECG – Waccamaw Dr., Garden City Beach							206.8	206.8
	Total			276.6	246.8	412.8	285.2	336.9	**1558.3**

Source: GSATS, 2008

The East Coast Greenway will create much needed interconnectivity for hikers, cyclists, skaters and other individual modes of transportation throughout the area as it passes through different environments, whether undeveloped and naturally preserved areas, or along regional highways through cities and neighborhoods. It will provide the potential of connecting residential areas with employment centers as well as recreational areas, e.g. beaches, marshes, forests, rivers, without the necessity of having to travel by car.

The City of Myrtle Beach is currently planning a specially featured stretch of the East Coast Greenway called "Perrin's Path' in memory of longtime resident Perrin Lawson, Jr. Planned between 48th and 62nd Avenues North, it will include such features as a sustainable trailhead and an amphitheater. The sustainable trailhead will further include such educative amenities as a shelter with photovoltaic panels, a bio-swale, a rain garden, the use of

permeable pavers, interpretative signage, bike racks and picnic tables (*City of Myrtle Beach, Planning Department*).

Figure 12: Trailhead at Perrin's Path in Myrtle Beach (proposed)

Source: City of Myrtle Beach with partners AIA Grand Strand, CSI, USGBC South Carolina

The completed and proposed sections of the ECG within Horry County will follow the alignment that is described within the three (3) greenway areas below.

Greenway Area 1

Beginning at the North Carolina/South Carolina state line, the greenway moves south along NC Highway 179 to U.S. Highway 17. A trailhead is proposed for Vereen Gardens, a county park. The trail follows U.S. Highway 17 along the eastern edge of the roadway towards Little River. Upon entering Little River, the trail moves off U.S. 17 and loops through the historic Little River waterfront area along Lakeside Dr., Riverview Dr., Mineola Ave., Waterfront Dr., Watson Ave., and Baldwin Ave. before returning to U.S. 17. The route exits U.S. 17 at the intersection with S.C. 90. After a short run along S.C> 90, the route moves through a small residential area along 6th St. and Morgan Ave. The trail then continues east along Sea Mountain Highway and across the Little River Swing Bridge over the Intracoastal Waterway. As Sea Mountain Hwy. continues, it passes through the North and South Sea Mountain Swamps, along Cherry Grove marsh and to Ocean Blvd. in North Myrtle Beach. A trailhead is proposed at Cherry Grove Boat Landing, which is linked to the main spine route through a local bike route.

An alternative route has been provided due to the possibility of the removal of the Little River Swing Bridge. The alternative route continues down S.C. 90, moves along Sandridge Rd., and then turns east along the future Main Street Connector over the Intracoastal Waterway along Main St. and eventually to Ocean Blvd. in North Myrtle Beach. This alternative is displayed as a Loop or Connector Route in the Master Plan.

The trail follows Ocean Blvd. in North Myrtle Beach to 28th Ave. S., where it turns west for its connection to the Town of Atlantic Beach along Second Ave. A trailhead is proposed at the Atlantic Beach Cultural Center. It winds through Atlantic Beach and returns to Ocean Blvd. At 45th Ave. S., or Windy Hill Road, the trail continues west and crosses U.S. 17 to Windy Hill Extension. At the intersection of Windy Hill Extension and Barefoot Resort Bridge Road, the trail crosses the Intracoastal Waterway via the swing bridge into Barefoot Resort.

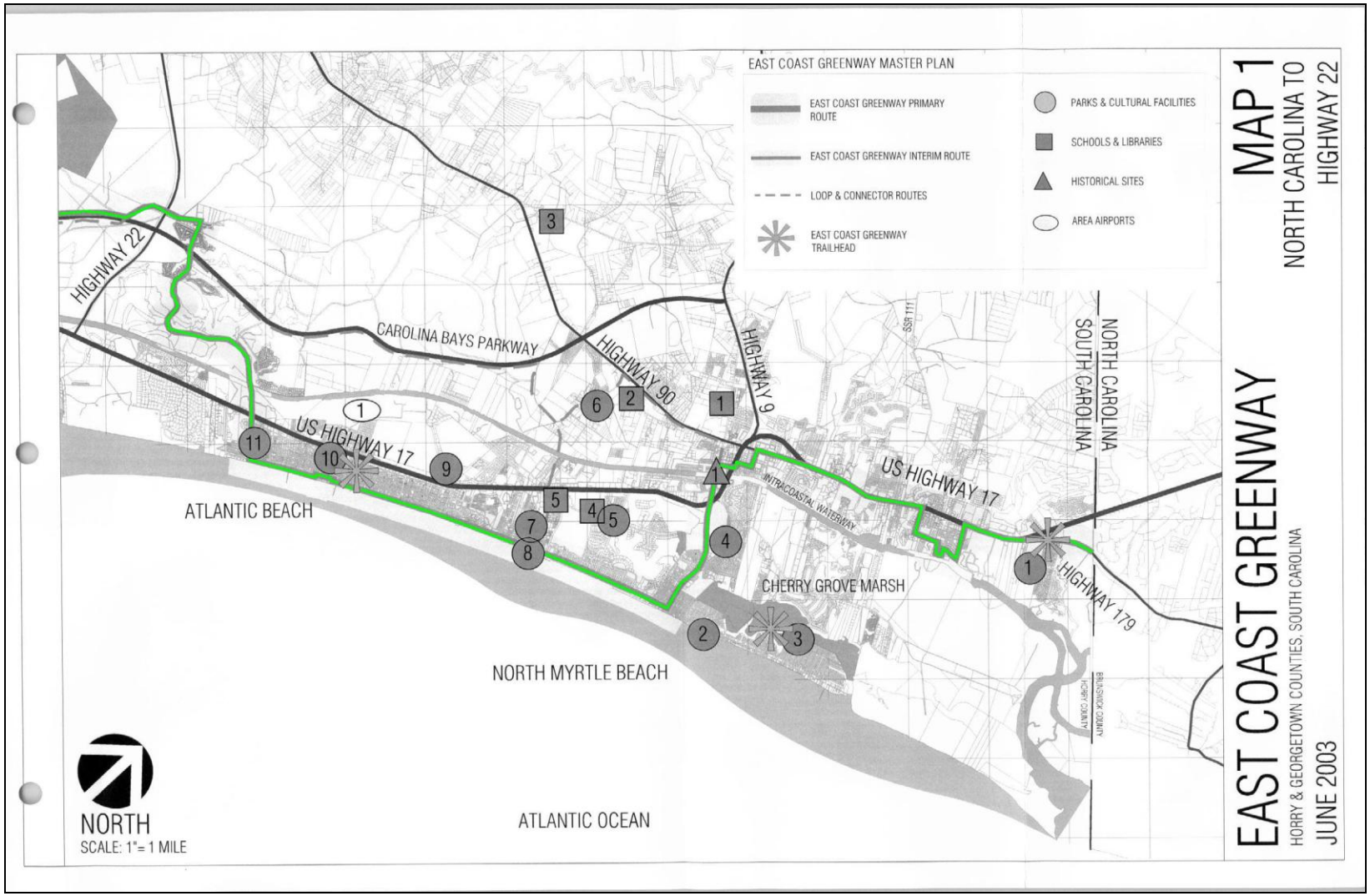
The corridor travels west along Barefoot Resort Bridge Road, then Club Course Dr. to Water Tower Rd. The trail follows Water Tower Rd. south, across S.C. 22 and merges with the western edge of the Carolina Bays Parkway (see East Coast Greenway Master Plan, page 8).

Greenway Area 2

The trails continues along the western edge of the Carolina Bays Parkway and progresses through the eastern boundary of the Lewis Ocean Bay Heritage Preserve, a 9,383 acre preserve that provides a safe habitat to a variety of plants and animal life. While this alignment provides for connection to more central parts of Horry County, the Carolina Bays Parkway prohibits those to the east of the roadway from having a direct connection to the main spine route. A loop/connector route has been planned to provide access for trail users on the eastern side of the Carolina Bays Parkway into Carolina Forest where secondary trails connect the Greenway spine route to the proposed Town Centre Commercial District and the proposed parks and existing schools and residential communities along International Drive. A trailhead is proposed at one of these future parks. The trail then loops back around to Grissom Parkway after passing underneath the Carolina Bays Parkway Bridge at River Oaks Drive. As the trail crosses the Intracoastal Waterway along Grissom Parkway, it then continues north and crosses U.S. 17 Bypass at 62nd Ave. N., a signalized intersection. A trailhead is proposed near this intersection.

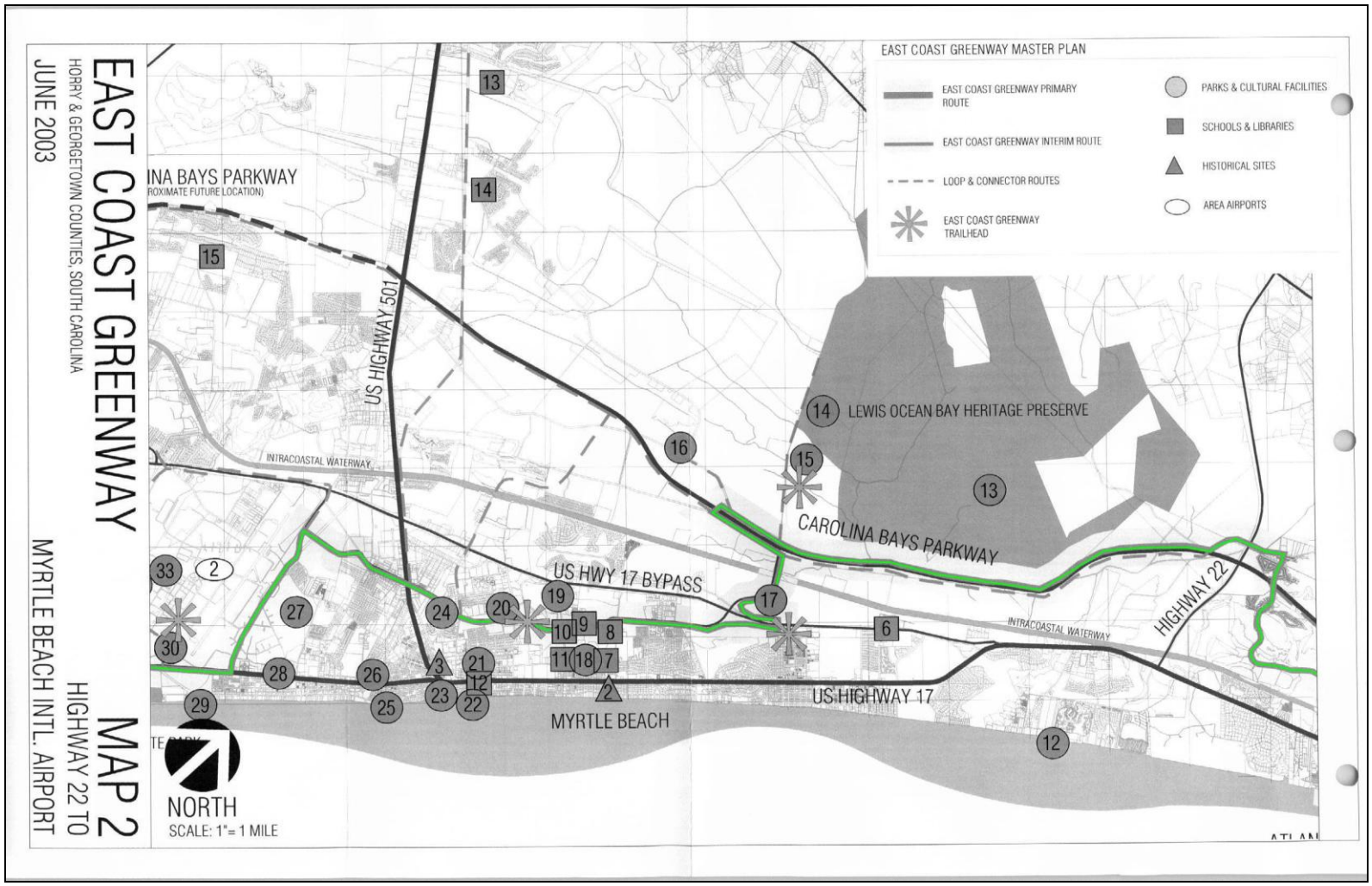
The trail moves south through Myrtle Beach along the existing East Coast Greenway Routes along Grissom Parkway and Harrelson Blvd. This area of trail provides access to a number of area schools, cultural facilities, hotels and tourist attractions. A trailhead is proposed at the proposed Children's Museum of South Carolina. The corridor then turns east along existing and future sections of Harrelson Blvd., passing through the Myrtle Beach International Airport complex, eventually intersecting with U.S. 17 (see East Coast Greenway Master Plan, page 9).

Map 31: ECG alignment within Greenway Area 1 (Little River, North Myrtle Beach)



Source: East Coast Greenway Masterplan for Horry & Georgetown Counties, HadenStanziale, 2003

Map 32: ECG alignment within Greenway Area 2 (North Myrtle Beach, Myrtle Beach)



Source: East Coast Greenway Masterplan for Horry & Georgetown Counties, HadenStanziale, 2003

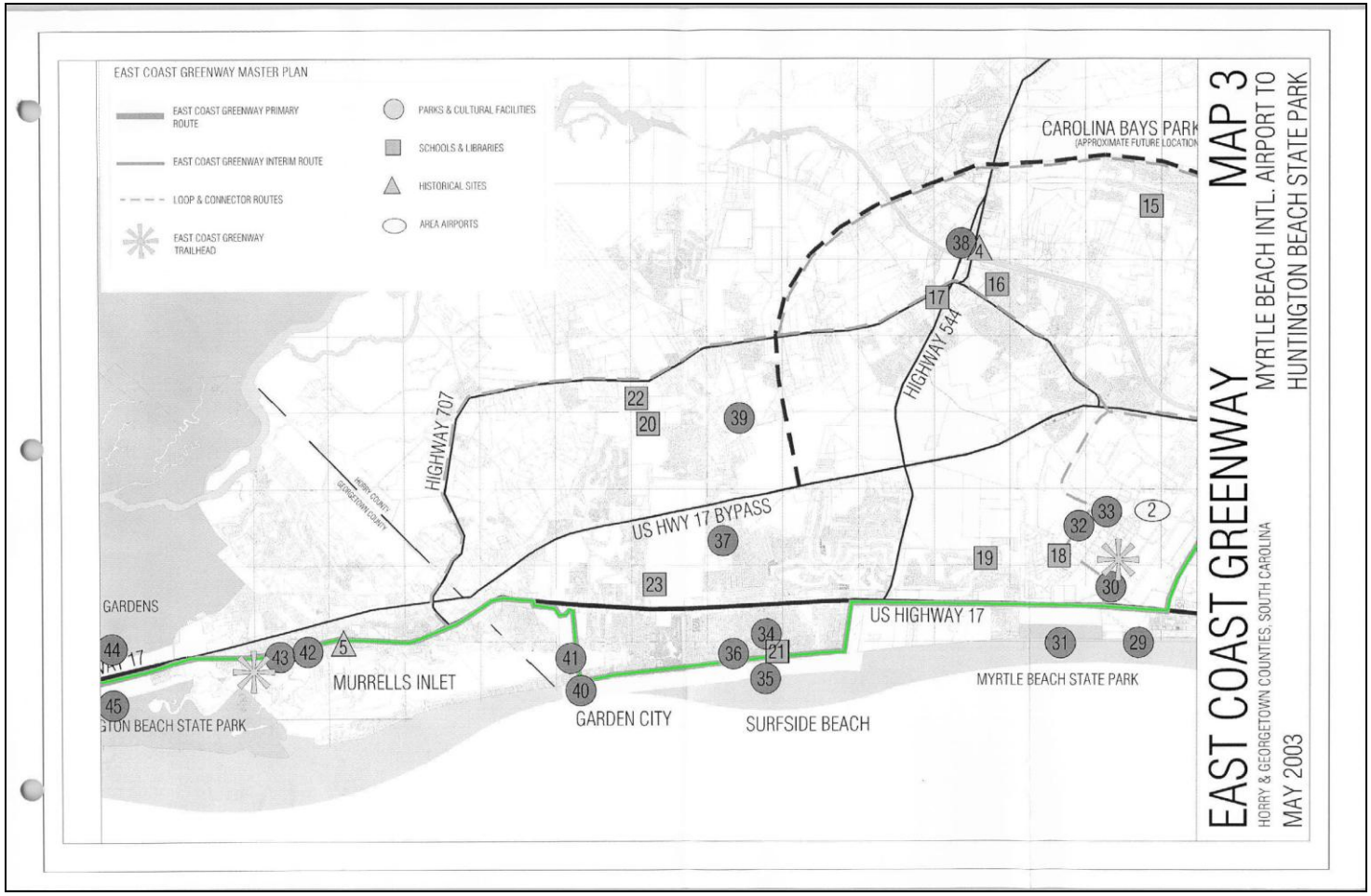
Greenway Area 3

From Harrelson Blvd. the trail moves along the western side of U.S. 17 then crosses the highway at Farrow Parkway. A trailhead is proposed at nearby Triangle Park (in the new Market Common District). Continuing south along the eastern side of U.S. 17, the trail passes Myrtle Beach State Park, one of the most visited state parks in South Carolina. The ECG continues along U.S. 17 past several popular area campgrounds and continues south towards Surfside Beach.

The trail turns east along 17th Ave. North in Surfside Beach, and then continues south along Ocean Blvd. The corridor continues south into Garden City along Waccamaw Drive. The Surfside Beach and Garden City area attracts many tourists every summer, who use the existing sidewalk system extensively. The greenway continues west along Atlantic Avenue and onto a newly constructed boardwalk across the marsh. Before meeting U.S. 17, the corridor moves south behind a small commercial area, the merges into U.S. 17 right-of-way along the eastern side of the highway into Georgetown County.

The trail enters the Waccamaw Neck area of Georgetown County and continues south on U.S. 17 through Murrells Inlet along existing bike lanes constructed by "Bike the Neck", a local trails group. Murrells Inlet is a very popular destination which includes seafood restaurants, fishing marinas, a historic district and a network of marshwalks. A trailhead is proposed at Morse Landing Park (see East Coast Greenway Master Plan, page 10).

Map 33: ECG alignment within Greenway Area 3 (Myrtle Beach, Surfside Beach, Garden City)



Source: East Coast Greenway Masterplan for Horry & Georgetown Counties, HadenStanziale, 2003

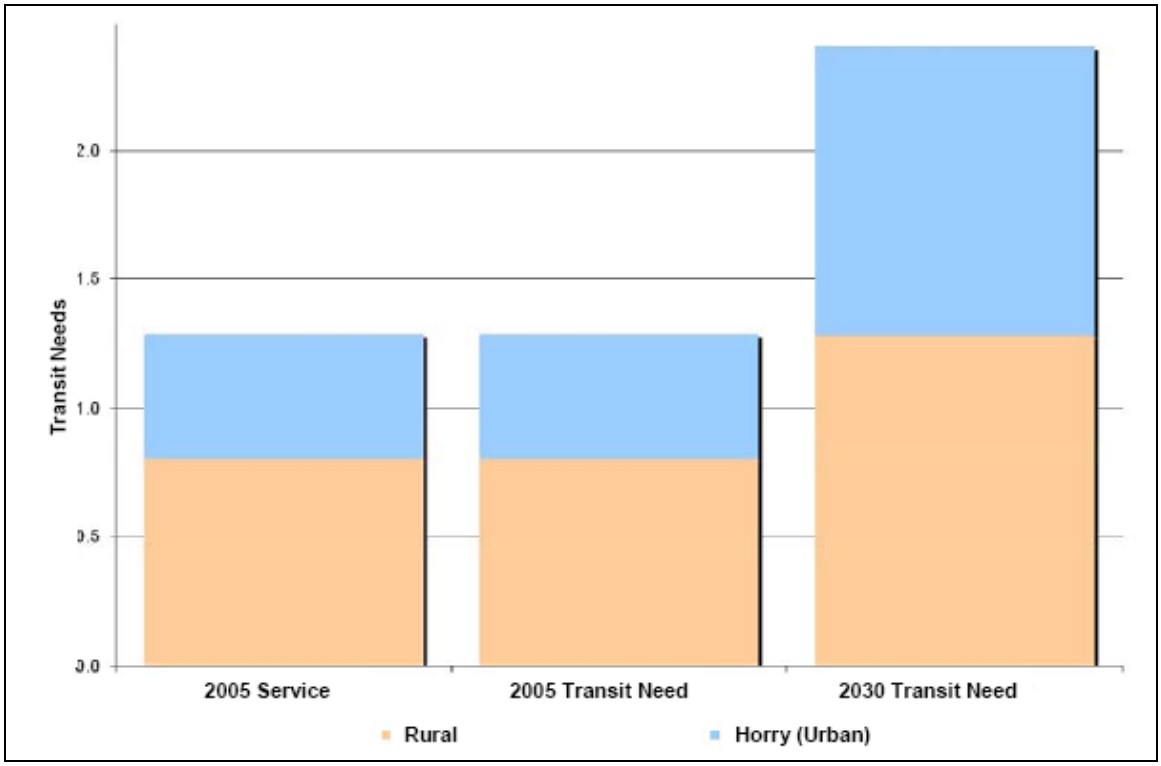
Public transit in the Waccamaw region

A portion of Horry County is served by the COAST Regional Transit Authority. In past years, Horry County has subsidized the transit service through the annual budget process. In November 2010, Horry County Council included an advisory referendum on the ballot to determine whether there is public support for a .6 millage to support mass transit. The majority of the electorate voted yes in support of public funding for mass transit. The Horry County Council will now consider the appropriate method of future funding during the 2011 budget cycle. Since 2008, COAST RTA has received approximately $400,000 annually in subsidies from revenue that Horry County collects from the Little River Casino Boat fees.

Yet, with some restored bus services, the projected demand for the year 2030 will require a public subsidy of $13.5 million ($4.5 million for the existing rural transit systems and $9 million for existing urban transit systems) (Waccamaw Regional Transit Plan, page 5).

Within the scope of the Waccamaw Regional Transit Plan, which represents regional transit recommendations within the SCDOT Statewide Transportation Plan, the Adjusted Needs forecast shows that the total transit demand in 2005 was estimated at 1.3 million one-way person trips. In the same year, 1.3 million trips were provided. The average percentage of demand met is 100 percent. To meet the current transit need, no additional trips are needed. This is shown in the figure below. The demand forecast shows that by 2030, the estimated transit demand will exceed 2.4 million trips. Among those trips, 1.3 million will be demand for the existing rural transit systems and 1.1 million will be demand for existing urban transit systems. Further, the following table shows the 2005 estimated and 2030 forecasted transit need for the rural and urban portions of the Waccamaw region (Georgetown, Horry and Williamsburg Counties). The existing service is based on data provided by SCDOT for FY 2005. The 2005 and 2030 transit needs are from the Adjusted Needs forecast (Waccamaw Regional Transit Plan, page 2-3).

Figure 13: Existing Service and Transit Needs in Waccamaw Region (in million trips)



Source: Waccamaw Regional Transit Plan, URS and TranSystems for SCDOT, 2008

Table 4: 2005 and 2030 Transit Needs

	2005 Service	2005 Transit Need	% of Need Met	2030 Transit Need
Georgetown County	220,152	220,152	100%	347,047
Horry County	409,041	409,041	100%	701,011
Williamsburg County	173,557	173,557	100%	235,184
Rural	802,750	802,750	100%	1,283,242
Horry (Urban)	484,353	484,353	100%	1,122,859
Total WCOG	1,287,103	1,287,103	100%	2,406,101

(In One-Way Annual Passenger Trips)

Source: Waccamaw Regional Transit Plan, URS and TranSystems for SCDOT, 2008

Regarding future potential transit technologies that have been analyzed within the Waccamaw Regional Transit Plan, five transit technologies were identified for evaluation as potential corridor application options. The technologies analyzed include:

1. Local Bus;
2. Express Bus;
3. Enhanced Bus / Intelligent Transportation Systems (ITS);
4. Bus Rapid Transit (BRT); and
5. Commuter Rail

Local Bus

Local bus service represents the most common and most flexible type of public transportation and is commonly referred to as fixed route as service operates along a defined route and on a predetermined schedule. Service can be provided with vans, small buses, traditional transit buses including low floor configuration, or articulated buses. Stops are typically placed as frequent as every one to two blocks, or every one-eighth mile. When operated within a smaller area, local service may be called circulator, feeder, neighborhood, trolley, or shuttle service. Complementary paratransit service for eligible persons with disabilities who cannot access or use the local service must be provided as required under the Americans with Disabilities Act of 1990.

Express Bus

Express bus service provides direct point-to-point service over longer service routes utilizing high-occupancy vehicles. Buses are usually equipped with high back seats, reading lamps, and other passenger amenities. Service typically operates between central business districts and suburban areas, primarily on weekdays, and during peak hours, however limited midday trips are not uncommon. Suburban terminals may include customer parking and covered waiting areas.

Enhanced Bus/ITS

Enhanced bus service uses low-floor, low or zero-emission buses with Intelligent Transportation Systems technology such as traffic signal priority and coordination along the entire alignment and on board customer information displays. Enhanced bus service typically operates in mixed-flow traffic along major arterial streets except in congested segments where peak period transit lanes or “queue jump” lanes may be provided. Queue jump lanes allow buses to bypass traffic queues at major intersections and advance more quickly through traffic signals. Bus pull off areas and bus stop passenger amenities may also be included.

Bus Rapid Transit

Bus Rapid Transit uses a number of features to reduce delays and improve customer convenience. BRT systems typically use dedicated bus ways or bus lanes, although they can also operate in HOV lanes, dedicated guide way facilities, or in mixed traffic on arterial streets with various ITS applications including traffic signal priority. Other features can include improved passenger waiting areas, high-capacity/low-floor buses; fare collection prior to boarding; and advanced customer information systems. BRT systems can improve passenger convenience by using the same vehicle for the collection/distribution portion of the trip and for the faster line-haul portion of the trip; reducing the number of required transfers is a major advantage of BRT systems.

Busways which provide a high level of service and allow high hourly passenger capacities are typically grade separated from cross streets, and have on- line stations with spacing comparable to light rail. Low volume bus ways often are characterized by at-grade intersections with cross streets. Buses may operate non-stop along the bus way/bus lanes or make selected stops based on passenger demand. Buses may also exit the specially designated bus way and operate along streets to provide local area circulation and distribution. BRT is considered a viable option for upgrading bus service performance.

Figure 14: Example for Bus Rapid Transit

Source: Waccamaw Regional Transit Plan, 2008

Commuter Rail

Commuter rail is a mode of passenger transportation using vehicles with steel wheels on steel rails using tracks that are part of a general rail network. The name "commuter rail" covers a multitude of rail system elements to carry passengers. Service typically operates between a central city terminal and outlying suburbs and trains can be diesel powered or use electric powered rail cars. Commuter rail services may share track with railroad freight trains, or have separate tracks. Some commuter lines are primarily used for peak hour work trips while others have extended off-peak and weekend services. Commuter trains can vary in length from one car to 14, but are generally limited to the length of the platforms at the stations. Some systems use locomotives for power and others have self propelled cars.

Figure 15: Example for Commuter Rail

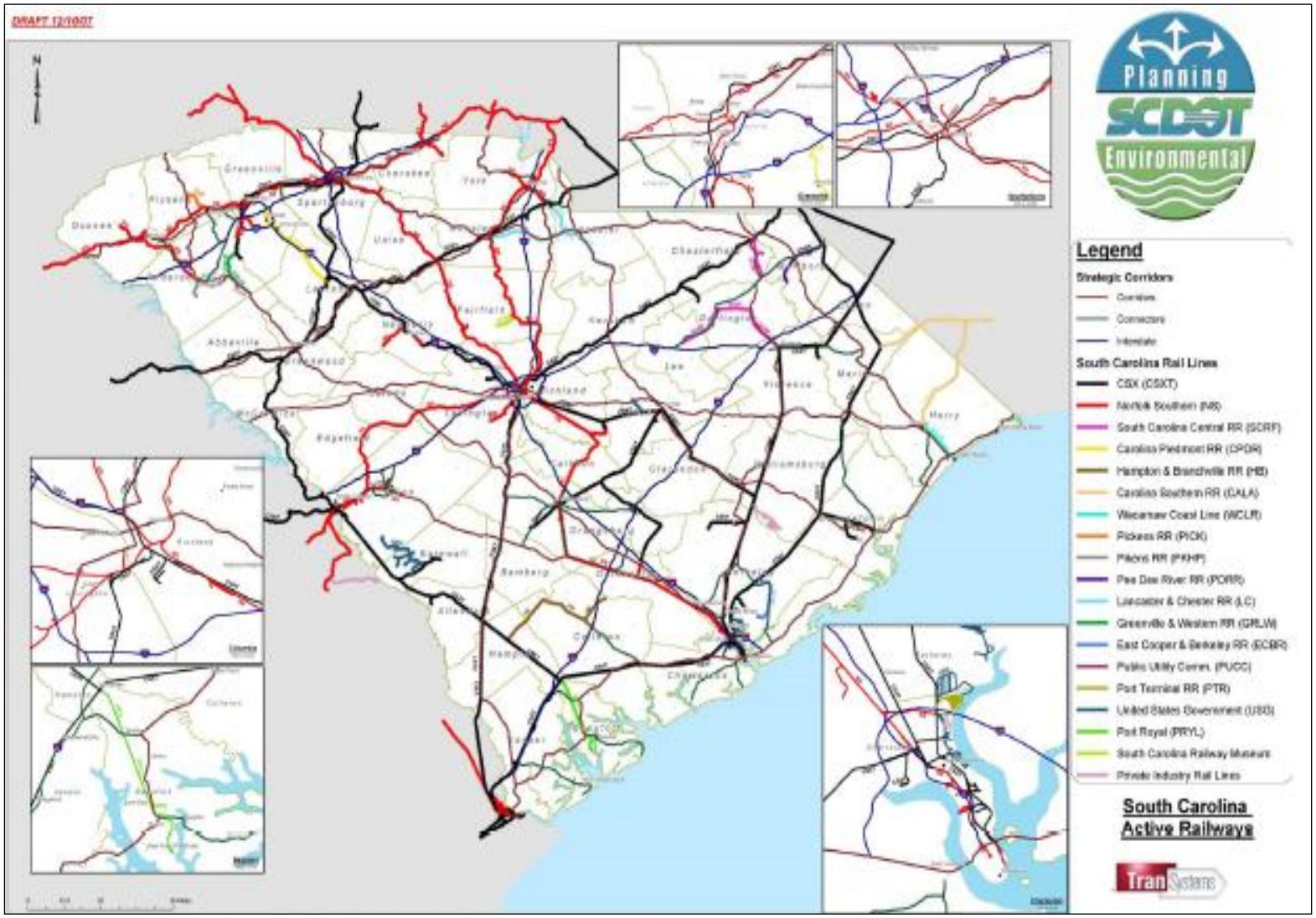
Source: Tri-County Metropolitan Transportation District of Oregon, Portland, OR

As part of the South Carolina Department of Transportation's Statewide Multimodal Transportation Plan an inventory of rail corridors throughout the State was conducted to both determine their status and potential of using still active lines for transit use.

Within this inventory the Waccamaw Coast Line was included as an analyzed line for potential transit use between the cities of Conway and Myrtle Beach. Currently operated by Carolina Southern Railroad, the right of way is owned by Horry County. This rail line, together with the still active freight rail line between Conway and Loris, and the abandoned rail line between Aynor and Conway, represent attractive alternatives for potentially (re)installing commuter rail service between these population centers in Horry County. Also, with the current rail right of way paralleling the populous and congested U.S. 501 corridor through South Conway, Carolina Forest, Pine Island/Forestbrook and western Myrtle Beach, additional train stops with bus links could present very viable transportation alternatives which together with transit-oriented and mixed land use concepts could alleviate road congestion and boost economic development in these areas.

With High Speed Rail (HSR) being studied for implementation between regions and States throughout the Southeast, the State of South Carolina should examine its role not only as a rail service operator, but also in providing connecting intercity bus links in areas where rail service will not be feasible, e.g. as intercity commute-oriented services that are already in place to jobs along the coast (*Waccamaw Regional Transit Plan, page 34*).

Map 34: Active Rail Lines in South Carolina (as of 12/2007)



Source: SCDOT

Map 35: Abandoned Rail Lines in South Carolina (as of 12/2007)

Source: SCDOT

The sole transit provider within the Georgetown and Horry Counties is Coast RTA, which is in the process of developing a Transit Development Plan for the years 2009 – 2013. This plan will provide a comprehensive, short-term program of transit improvements meeting the needs of both transit dependent and choice riders. Furthermore, the plan will include recommendations on the construction of a new Intermodal Transportation Center to alleviate limited capacities at the current hub in downtown Conway.

In detail the 2009 – 2013 Transit Development Plan will address the following issues:

- The increasing system operation costs (fuel, personnel, etc.) that require maximum efficiencies and growing capital costs, encouraging effective procurement strategies;
- Transit service equity issues that arise due to the Environmental Justice Executive Order;
- The increasing technology opportunities that may become more affordable and should be incorporated into operation and capital investments;
- The continued route efficiency monitoring and appropriate restructuring that may be necessary;
- The promotion of transit, marketing and improved community outreach;
- Transit service alternatives and associated vehicle replacement strategies;
- The residential and commercial growth that continues to occur throughout the region, requiring the transit service to respond to the expanding needs of the population, its geographic coverage, and its demographic characteristics;
- The need and estimated costs for a new Intermodal Transportation Center;
- The analysis of fares to assist revenue enhancement and service productivity.

Airport Expansion

As mentioned in the *Existing Transportation Network* section, Horry County's four (4) airports at Conway (HWY: Conway – Horry County), Loris (5J9: Loris-Twin Cities), North Myrtle Beach (CRE: Grand Strand) and Myrtle Beach (MYR: Myrtle Beach International Airport) contribute greatly to the economic wellbeing of this county.

To remain competitive, Horry County Airports must update technologies and expand capacities.

The Federal Aviation Administration has acknowledged the importance of Myrtle Beach International for the region and has awarded Horry County multiple grants of in 2008 and 2009, including Federal (ARRA) Stimulus Program grants. The Horry County Department of

Airport will use this money to fund the following nine proposed improvement projects at Myrtle Beach International (MYR) and the Grand Strand Airport (CRE):

- MYR – Full replacement of an outdated security system, making MYR the first mid-sized airports on the east coast to have a fully digital security system;
- MYR – Construction of Airfield grading and drainage improvements and the construction of Aircraft Rescue and Fire Fighting (ARFF) all-weather access roadways to the Airfield.
- MYR – The Construction of Taxiway "R", which is a new 1,000 foot long and 75 foot wide taxiway. This taxiway will improve the access between Runway 18-36 and the general aviation apron;
- MYR – The construction of new security fencing to replace old and previously installed temporary fencing;
- MYR Construction of new Airfield Re-Designation and Signage;
- MYR - Development of new Spill Prevention Containment and Control counter-measure Plan for all four airports.
- MYR - Reconstruction of Taxiway "G" which is currently closed due to a drainage pipe failure under the taxiway;
- MYR Construction of a new ARFF facility. The existing facility is insufficient to meet the needs of the airport;
- MYR - Construction of General Aviation (GA) Ramp rehabilitation elements for the GA ramp, which is in need of extensive slab and joint repair.
- MYR – Expansion of the South Commercial Ramp
- MYR – Rehabilitation of the Commercial Ramp
- CRE – Installation of entirely new Airfield Wiring.

Horry County Department of Airports (HCDA) is also finishing work on a new General Aviation Terminal that will accommodate over 45,000 people annually that arrive on private aircraft. This Terminal project consists of a one-level building containing a Passenger Lounge, a Snack Bar, public restrooms, as well as a private Pilot Lounge with restroom, shower and a Quiet Room. For this project, Horry County Council approved a budget of $4.5 M for this project, which consists of following funding sources:

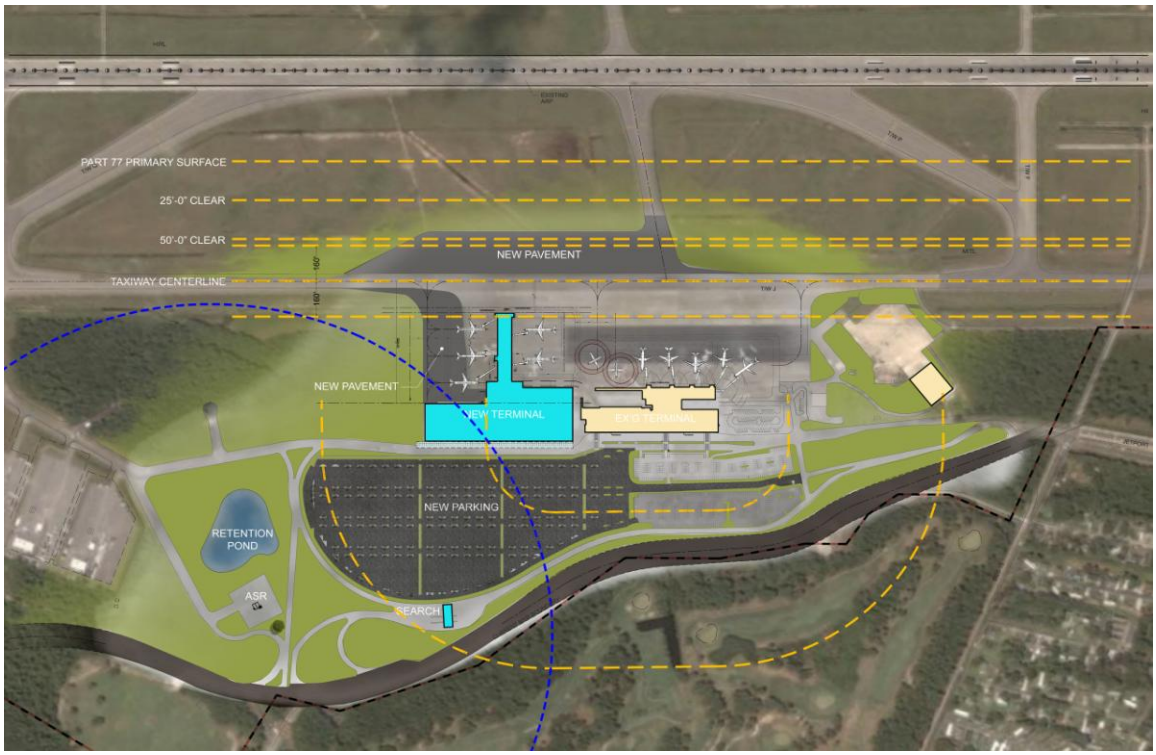
- $2M special appropriation from the State of South Carolina,
- $1M grant from South Carolina Division of Aeronautics,
- $800,000 grant from the Myrtle Beach Air Force Base Redevelopment Authority, and
- $700,000 from Airport Enterprise funds

Figure 16: A night-time rendering of the new General Aviation Terminal

Source: Horry County Department of Aviation; 2009

A new terminal building is currently under design for Myrtle Beach International Airport. This new terminal building will be approximately 166,000 square feet in size, and will include Landside and Airside improvements. It is estimated that this entire project will cost approximately $117.5 million (engineering and reduced cost of materials – April 20, 2010). MB Kahn is the Program Manager for the project. The project Architect is Giuliani and Associates and LS3P.

Figure 17: A rendering of the proposed new MYR Terminal (blue)



Source: Horry County Department of Aviation; 2009

Overall, Horry County's airports will receive substantial funding within the 5-year fiscal planning period between fiscal years 2009 and 2013 to update existing structures, equipment and aeronautical installations, as well as expanding. According to the Horry County Department of Aviation's individual Capital Improvement Programs (C.I.P.), the following financial commitments (in total amounts) have been planned through fiscal year 2013:

- Myrtle Beach International (MYR): approx. $160 million;
- Grand Strand Airport (CRE): approx. $6.1 million;
- Horry - Conway Airport (HWY): approx. $1.4 million;
- Loris – Twin Cities Airport (5J9): approx. $2.6 million;

(Horry County Department of Airports*, Airport Capital Improvement Plans,* 2008-13).

The Land Use – Transportation – Environmental Quality Connection

People who live in sprawling suburban areas make different transportation choices than those who live in more compact, pedestrian-friendly places. Research studies show that locating planned moderate-density development near transit is likely to result in higher use of transit, walking, and bicycling than would normally be the case under more typical suburban development patterns (so-called Transit-Oriented Developments).

Further empirical research shows that integrating the planning of transportation and land use results in a higher likelihood of residents utilizing alternative modes of transportation, such as transit, walking, and bicycling than would normally be the case under more typical suburban development patterns. These lessons can be applied to fast growing regions in the United States to produce development that is less dependent on the automobile.

Numerous strategies have been implemented in recent years to design or redesign communities to allow for greater accessibility and increase the number of travel choices through improvements to the transportation system and a more efficient arrangement and design of land uses.

Tools: Promotion of *compact growth* patterns through such land use concepts as:

- Transit-oriented development,
- Traditional neighborhood design,
- Mixed-use development,
- Cluster development, and
- Infill development.

Figure 18: Example for transit-oriented development

Source: The Central Puget Sound Regional Transit Authority; URL: http://www.soundtransit.org

These compact development patterns provide opportunities for people to live closer to their daily needs or a more efficient way to address multiple daily needs once arriving by car or transit to a compact, mixed-use area. In addition to the increased transportation efficiency, these community focal points can increase the economic and cultural vitality of a town with the ability to attract new business or tourists or simply provide a safe and vibrant gathering place for the community.

Street Connectivity - As much as the land use pattern affects the use and performance of the transportation system, the design of the transportation system affects how land is used and developed in proximity to transportation facilities. Minimizing travel distances and increasing travel mode options are essential to an efficient transportation system that will spur a sustainable pattern of land use. The central strategy for road design should be in increasing *street connectivity*. In a connected road network, construction of roads that serve only one development are discouraged.

Complete streets - Complete streets are designed to be used by cars, pedestrians, cyclists, and transit users. Design considerations should include narrow travel lanes to slow automobile travel speeds, sidewalks and bike lanes, on-street parking, and transit stop areas. These streets encourage public activity and allow for easy access to destinations and multiple travel options for users. Sidewalks, bike lanes, and greenway facilities can also be used to connect key focal points within a community or even to connect to adjacent communities.

Figure 19: Example of a "Complete Street" environment

Source: Living Streets.com (blog); URL: http://www.livingstreets.com

Transit planning - *Transit planning* requires creativity in rural areas because of the lack of density typically required for providing fixed-route transit services. While fixed-route services can be feasible with sufficient grant funding or other subsidies, other transit programs should be pursued in rural areas, including ride-sharing, demand-responsive

(dial-a-ride) transit, and car-sharing. Bike-on-bus programs can also extend the accessibility of transit services by allowing cyclists to board transit vehicles with their bicycles. Transit planning should be integrated with compact land use planning so as to concentrate appropriate land uses around transit stops or along transit corridors in order to create activity centers for meeting multiple daily needs.

Even with efficient land use design and a multimodal transportation network in place, attention must be placed on such elements as the design of buildings and the creation of safe and functional streets and civic spaces to help create a unique sense of place and make the community a more desirable place to live.

Tools: *Traffic-calming* and *street redesign* through:

- Road transfers, which will boost the redesign of main streets by placing through traffic volumes on alternate traffic routes in order to make a community center or downtown more appealing to foot-traffic and other means of community-scale traffic;
- Access management in order to minimize local vehicle conflicts by installing medians and regulating turn movements which altogether results in a safer and more attractive place for pedestrian activity.
- *Land development regulations or design guidelines* can be used to encourage private developers to develop in a more integrated and efficient pattern to support the transportation goals of a community, e.g. by requiring developers to provide for sidewalks or bus shelters at central locations close to transportation nodes.

As in many other parts of the U.S., major new development which has occurred in Horry County between the years 2000 and 2007, predominantly has been auto-oriented and located along or in proximity to the main highway corridors that connect the county's population nodes of Myrtle Beach, North Myrtle Beach, Conway, Loris and Aynor. New development and an expanded tourism season contribute significantly to increase the number of automobiles using Horry County roads. Market demand increased for new development as Horry County's population grew an estimated 34.2% between 2000 (196,660) and 2009 (263,868).

Automobiles used as primary transportation will always be present on Horry County roads. However, alternative modes of travel will increase through encouragement, demand, or necessity.

Statement of Needs and Goals

Roads

Need:
Ensure that all new roads in Horry County are built according to State and Federal and County highway safety standards and that these roads provide efficient capacity to handle all existing and projected traffic volumes.

Goals:

- *Prioritize improvements to the most congested roadways based on the availability of adequate funding*;
- *Ensure that all heavily used dirt roads are paved;*
- *Encourage construction or extension of alternative access roads to alleviate congestion on major corridors (e.g. U.S. 501) by separating local business traffic from through traffic;*
- *Plan, fund and implement road capacity improvements parallel to development project deadlines, so that enough road capacity exists when increased traffic volumes are expected;*
- *Improve traffic flow at congested intersections/corridors;*
- *Adequately maintain the County's road network;*
- *Collaborate with municipalities on traffic planning;*

Alternative Modes of Transportation

Need:
Improve and expand all major alternative modes of transportation to encourage walking, cycling, and the usage of public transit between all major population and commercial destinations within Horry County.

Goals:

- *Provide for more bike lanes and multi-use trails between major residential, commercial and employment centers to encourage use of non-motorized means of travel;*
- *Coordinate with SCDOT, GSATS, COAST RTA and other regional transportation planning agencies;*

- *Continue collaboration between Horry County and the main freight rail operator to prevent further physical degradation of the County's rail line;*
- *Encourage a reduction in vehicular trips;*
- *Develop a multi-modal transportation system;*
- *Balance local access needs with through travel needs along the County's major developed corridors;*

Freight

Need:

Encourage existing and future industrial businesses to take advantage of existing freight rail lines and services to alleviate congestion on Horry County roads.

Goals:

- *Promote location of new industry along existing rail lines;*
- *Work together with current freight rail operators to ensure that existing rail lines are well maintained;*
- *Facilitate with new right-of-way reservation for potential upgrade or expansion of rail network in Horry County;*
- *Encourage more competition between rail operators to decrease rail hauling costs and to entice new businesses to use freight rail operators.*

Airports

Need:

Provide safe and sufficient airport capacity for existing and expected aviation traffic from both commercial and general aviation at all four airports that are owned and maintained by Horry County.

Goals:

- *Encourage the Horry County Department of Airports in fostering good relations with both Horry County Council and the City of Myrtle Beach in ensuring efficient funding and political support to continue expansion of Myrtle Beach International Airport if increased traffic volumes make this necessary;*
- *Maintain safe and reliable air transportation facilities at all four County-owned airports;*

- *Foster air commerce and provide necessary economic stimulus by actively working with airlines, air service providers and flight schools to utilize Horry County's aviation facilities;*

- *Collaborate with Regional Economic Development stakeholders in planning new business parks in proximity to airports.*

Land Use – Transportation

Need:

Coordinate future land use and transportation planning to secure public health, safety and economic prosperity.

Goals:

- *Ensure that traffic from land use changes will not overburden existing roadways;*

- *Coordinate funding and construction of new transportation projects with new development;*

- *Encourage development within areas where adequate public infrastructure already exists;*

- *Promote interconnectivity between developments;*

- *Manage rate of development along new transportation corridors through controlled access and zoning;*

Implementation Strategies

It is recommended that Horry County implement the previously stated Needs and Goals by the following strategies within either a short term (1-5 years), an intermediate (5-10 years) or long term (10 and more years) time period.

Roads

Include roads from Horry County's Dirt Road Paving Program in any future Penny Sales Tax for Roads Program **(short term)**.

Extend alternative access road linkages (frontage roads) along major highway corridors **(short term to intermediate)**.

Create grade-separated interchanges at busy intersections **(intermediate)**.

Expand roadway capacities by linking existing rear access and/or dead-end streets to form a secondary access system **(intermediate)**.

Use access management to alleviate stop & go traffic jams by reducing curb cuts and requiring joint-access points where possible **(short term)**.

Encourage connectivity between adjacent commercial developments **(short term)**.

Encourage the Grand Strand's main campsites, vacation resorts and the Myrtle Beach Area Chamber of Commerce to coordinate check-in and check-out times to alleviate congestion on major thoroughfares (S.C. 544, U.S. 17, U.S. 501, S.C. 9) **(short term)**.

Implement off-site road improvements through requirements of the Land Development Regulations **(intermediate)**.

Include Access Management Standards and traffic planning within Area Plans/Studies **(short term)**.

Incorporate SCDOT's updated Access Management Standards into the Land Development Regulations **(short term to intermediate)**.

Develop a funding mechanism for life-cycle maintenance of the County's road network **(intermediate to long term)**.

Study and provide long-term engineering solutions to improve traffic flow **(short term)**.

Continue the County's involvement in the Grand Strand Area Transportation Study (GSATS) **(continuously)**.

Designate truck routes in congested areas **(short term)**.

Amend the Land Development Regulations to include traffic calming designs in new developments **(short term to intermediate)**.

Alternative Modes of Transportation

Connect new sidewalks and bike trails to existing facilities to create connectivity and non-motorized alternatives of transportation **(short term to intermediate)**.

Encourage additional bike racks throughout the County **(short term)**.

Develop a bikeway master plan **(short term)**.

Provide intermodal facilities **(short term to intermediate)**.

Identify economically feasible transit routes/stops as well as park-and-ride locations **(short term)**.

Coordinate COAST RTA's Comprehensive Transit Development Program with Horry County's growth management goals (see Land Use & Transportation Elements) **(short term to intermediate)**.

Work with COAST RTA to place transit stops within commercial, industrial and residential developments **(short term to intermediate)**.

Develop a sidewalk master plan **(short term)**.

(Re-)Establish a countywide transportation studies committee to identify and prioritize future transportation projects **(intermediate)**.

Encourage the use of alternative travel modes, including transit, pedestrian and bicycle in conjunction with educational institutions **(short term)**.

Explore telecommuting options in both the private and public sectors **(short term)**.

Airports

Continue to work with the Horry County Department of Airports and the cities of Loris, Conway, Myrtle Beach and North Myrtle Beach in developing land use policies that do not hinder operations in the vicinity of all County airports **(continuously)**.

Continue to work with the Horry County Department of Airports in developing and coordinating intermodal transportation needs **(short term)**.

Land Use – Transportation

Coordinate proposed land-use changes with transportation planning **(short term)**.

Create a properly functioning network of connected streets **(intermediate)**.

Prepare Area Plans/Studies during the design of new interchanges along major roadways **(short term to intermediate)**.

Establish zoning districts and/or incentives that facilitate infill development **(short term)**.

Amend Land Development Regulations to require more interconnectivity between adjacent developments **(short term to intermediate)**.

Resources

- 1000 Friends of Oregon: *LUTRAQ Reports*, Vol. 1 – 8, Portland, OR, 1991 – 1997;
- Handy, Susan: *Smart growth and the transportation – land use connection: What does the research tell us?*, Paper 670 (Postprints), University of California, Davis, 2005;
- Horry County Department of Airports, Myrtle Beach International Airport: Economic Benefit of Air Visitors and Air Service Development Plan (prepared by BACK Aviation Solutions), November 2006;
- Horry County Government: Riding on a Penny – the One-Cent Capital Projects Sales Tax for Roads, URL: http://www.ridingonapenny.com, 10-20-2008;
- Institute of Transportation Engineers: Trip Generation, 8th Edition, Volumes 1 – 3, Washington, D.C., 2008;
- Myrtle Beach International Airport: Airport Info (Airport Statistics, Expansion Program, Economic Impact), URL: http://www.flymyrtlebeach.com; 03-15-2009
- National Cooperative Highway Research Program: *Best Practices to Enhance the Transportation – Land Use Connection in the Rural United States*, Report 582, Washington, D.C., 2007;
- North Carolina Department of Transportation (NCDOT): Strategic Highway Corridors, URL: http://www.ncdot.org/doh/preconstruct/tpb/shc/studies/cbp/, 2008;
- Horry County Government, The City of North Myrtle Beach: The North Myrtle Beach Transportation Plan – Draft Report (prepared by Kimley-Horn), 2008;
- South Carolina Association of Counties: Technical Bulletin – 2007 Legislative Changes Related to Land Use and Planning, August 8, 2007;
- South Carolina Department of Commerce, Division of Aeronautics: The Economic Impact of Aviation, Final Report (prepared by Wilbur Smith Associates), May 2006;
- South Carolina Department of Transportation (SCDOT): Coastal Evacuation Directions, Route Maps and Reversal Plans, URL: http://www.scdot.org/getting/evacuation.shtml, 11-04-2008;
- South Carolina Department of Transportation (SCDOT): Draft Environmental Impact Statement (D.E.I.S.), 2008;
- South Carolina Department of Transportation (SCDOT): Interstate Highway 73 – Environmental Impact Study, URL: http://www.i73insc.com, 2008;
- South Carolina Department of Transportation (SCDOT): Southern Evacuation Lifeline (S.E.L.L.), URL: http://www.southernevacuationlifeline.com, 2005;
- The East Coast Greenway, URL: http://www.greenway.org, 01-09-2009;
- Transportation Research Board of the National Academies: Highway Capacity Manual, Washington, D.C., 2000;
- U.S. Census Bureau, American Fact Finder, URL: http://factfinder.census.gov, 10-15-2008;

- Waccamaw Regional Council of Governments – The Grand Strand Area Transportation Study (GSATS): 2030 Long Range Transportation Plan (prepared by Wilbur Smith Associates), March 2005;
- Waccamaw Regional Council of Governments – The East Coast Greenway Master Plan for Horry and Georgetown Counties (prepared by HadenStanziale, PA), September 2003;
- Waccamaw Regional Council of Governments – The Grand Strand Area Transportation Study (GSATS), The City of Myrtle Beach: The Kings Highway Corridor Study (prepared by the LPA Group; HadenStanziale; Thomas & Hutton), March 2008;
- Waccamaw Regional Transportation Authority – COAST RTA: Schedules and Fares, URL: http://www.ridecoastrta.com; 11-01-2008;