
TIGER Discretionary Grant Application

Highway Application for New Construction
Of a portion of
Congressional High Priority Corridor Number 5
SC 22 Expansion to Interstate Standards

In South Carolina Congressional District 7
I-73 connects rural counties of Marlboro, Dillon, Horry & Marion

For \$30,000,000

May 2013

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PROJECT DESCRIPTION

South Carolina Highway 22 is a twenty-four (24) mile segment of four-lane divided media highway which, when brought up to Federal Highway standards, will serve as the terminus of Interstate-73. It is designated as “Segment D” (Addendum 7) of the portion of I-73 that extends through the state of South Carolina. I-73 is a proposed interstate highway which initiates in Sault St. Marie Michigan. Segments of this important route have been completed along the route including “Segment D” of the South Carolina portion. The proposed upgrade, which will bring Highway 22 to interstate standards and allow it to be designated as I-73 , involves shoulder widening along the twenty-four (24) mile section of Highway 22 between its junction with the future I-73 and its terminus at U.S. Highway 17 near North Myrtle Beach, SC.

Construction of SC Highway 22 was completed in 2001. The cost of construction for what is proposed to be the final leg of I-73 (Segment D) was \$386 million. Of that, \$306.5 million was funded by local government and the remaining funds were funded by the SC Infrastructure Bank. Local and state government have provided more than 80% of the final cost of this road. Highway 22 is a controlled access freeway that only lacks shoulder widening/paving to bring it into compliance with Interstate standards. The high percentage of local funding associated with this project is indicative of the high level of community support behind the I-73 project. Grand Strand citizens recognize that this vital transportation artery will enhance economic development for the entire region and will greatly increase the opportunity for quick efficient evacuation of the coast in the event of a hurricane.

While this is only one relatively short segment of I-73, it should be recognized the eventual multi-state impact of this road will clearly contribute to the medium-to-long term economic competitiveness of the nation. It will improve the condition and efficiency of existing transportation facilities and systems by enhancing connectivity. It will improve the quality of civic and economic environments through livable communities. It will improve energy efficiency and reduce greenhouse gas emissions. It will improve safety and enhance the movement of freight and passenger vehicles. It will enhance coastal hurricane evacuation for the largest tourist destination in America currently not served by an interstate.

The Environmental Impact Statement for the entire South Carolina I-73 project (Segment D) has been approved and regulatory permit applications were made in January of 2011. Regulatory permit coordination between the SCDOT and the various state and federal is ongoing and the SCDOT is addressing all concerns expressed by the US Army Corps of Engineers. Right-of-way plans for the project from Highway 22 to I-95 are complete and approximately 50% of the right-of-way has been completed. In addition, final construction plans are complete for the 5.7 mile segment of the I-95 tie-in including the interchange. As such, the component of I-73 between the terminus of SC Highway 22 and I-95 are well underway as funding becomes available.

The estimate of probable cost for the shoulder widening project is \$30 million. Considering the fact that local funding of more than \$300 million has already been expensed for this twenty-four (24) mile segment, the proposed TIGER V grant would be less than 10% of that already expensed by the community.

BACKGROUND ON I-73 IN SOUTH CAROLINA

There is perhaps no project in the nation that better fits the TIGER selection criteria than I-73 in South Carolina. It is a cutting edge project that will promote mobility, a cleaner environment and more livable communities. It has strong support from state and local leaders. It meets the most rigorous economic justifications, and it is ideally suited for a merit-based selection process. The 4 South Carolina counties to be directly impacted by I-73 are among the nation's hardest hit by the recent economic downturn. The average unemployment rate in these 4 counties is currently 14.3%. The unemployment rate in Horry County, where the TIGER project is located, is currently 10.2%. The entire I-73 project area in South Carolina is economically distressed. The TIGER funds used in this project will generate a positive benefit-cost ratio by stimulating additional economic activity within the region.

Under the *Intermodal Surface Transportation Efficiency Act of 1991* (ISTEA), I-73 was designated as Congressional High Priority Corridor Number 5.¹ Congress designated high priority corridors as those that would provide the most efficient way of integrating regions, linking major population centers of the country, providing opportunities for increased economic growth, and serving the travel and commerce needs of the nation. Under Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), funding was provided for I-73 in South Carolina, under the Projects of National and Regional Significance Program and another from the National Corridor Infrastructure Improvement Program.

Interstate 73 was designated as the South Carolina Department of Transportation's "Top Priority for New Road Projects" in 2007, and records of decision on environment documents were obtained from the Federal Highway Administration in 2008, allowing the state to move forward with development of the project. Many sections of I-73 have already been built between South Carolina and Michigan. Congressional high priority funds, and state-source funds, are currently being used in SC for planning and right-of-way acquisition. When completed, I-73 will have a significant impact on the nation. The construction and operation of I-73 in South Carolina will have immediate and long-term economic benefits to the region and the economically distressed communities in its path.

The coastline of Horry County and northern Georgetown County is known as the Myrtle Beach Area and is a major tourist destination. It is the economic anchor of the I-73 project area in South Carolina. I-73 is being built as a "new location" project. It includes 11 new Interchanges.

PROJECT PARTIES

Horry County government is the applicant. The entire I-73 project has broad support locally, regionally, statewide, and nationally. South Carolina Department of Transportation (SCDOT) supports this project and is actively working on completion of I-73. The I-73 TIGER project is supported by various groups represented below (see attachments); letters of support and resolutions for this application are attached in Addendums 2a-j. Below is a list of some of the communities and organizations that have expressed support for I-73 in South Carolina.

- City of Conway
- Dillon County Chamber of Commerce
- Dillon County Council
- Grand Strand Alliance
- Grand Strand Business Association
- Horry County Council
- Horry County Legislative Delegation
- I-73/I-74 Corridor Association (national)
- Myrtle Beach Area Chamber of Commerce
- Myrtle Beach Area Convention & Visitors Bureau
- Myrtle Beach Area Hospitality Association
- Myrtle Beach City Council
- Myrtle Beach Area Golf Course Owners Association
- Myrtle Beach Golf Holiday
- Myrtle Beach NAACP
- Myrtle Beach Regional Economic Development Corp.
- Marion Chamber of Commerce
- Northeastern Strategic Alliance (NESA)
- North Myrtle Beach Chamber of Commerce
- North Myrtle Beach City Council
- South Carolina Department of Transportation
- South Carolina House of Representative Liston Barfield
- South Carolina House of Representative Liston Barfield
- South Carolina House of Representative Alan Clemmons
- South Carolina I-73 Association
- South Carolina Senator Luke Rankin
- South Carolina Senator Ray Cleary
- South Carolina Senator Kent Willaims
- Town of Surfside

LONG-TERM OUTCOMES

I-73 will improve the transportation system for long-term operations by providing linkage to facilitate the movement of people and goods to and from the state and the region via a modern, efficient interstate highway system. The current roadways in the project area are subject to frequent stop and go situations and heavy congestion associated with peak traffic conditions. The TIGER project will have the practical effect of finalizing the terminus for this phase of I-73 in South Carolina, by bringing SC 22 to interstate standards.

Failure to build the SC portion of I-73 would result in a negative long-term outcome. According to the U.S. Census Bureau, South Carolina is the 10th fastest growing state in the nation. The coastal zone is the state's fastest growing geographical area. A 1997 study by Rutgers University found that the state had a \$57 billion shortfall in infrastructure funding for the period 1995 to 2015.² Funding remains the greatest obstacle to meeting the state's infrastructure needs as it continues to grow.

By the year 2025, Horry County is expected to see a 58% increase in jobs³ and a 31% increase in resident population.⁴ The difference in these two numbers illustrates the importance of transportation to the regional economy over the next 15 years. Many of the new jobs will be filled by people commuting from outlying areas. This will necessitate better transportation infrastructure. This job growth will fuel economic growth in nearby counties, especially those communities located within the I-73 corridor.

According to D.K. Shifflet, a national tourism research, Horry County averages more than 203,000

visitors per day. (See Addendum 3.) On average, the visitor population of Horry County accounts for roughly 40% of the combined visitor/resident population (total population of 485,000) while visitors in the entire state of South Carolina account for only 5% of the population on any given day.⁵ This means that the infrastructure load attributable to visitors in Horry County is 6 times that of the rest of the state. According to visitor surveys conducted by the Myrtle Beach Area Chamber of Commerce, approximately 90% of those visitors arrive by car. This visitor population justifies state and federal infrastructure funding similar to the resident population.

Because the Myrtle Beach Area lists 15 million annual visitors but is home to only 270,000 residents, Horry County serves as an economic engine for the entire state and nation. The county's economic impact to the state and the nation is disproportionately high compared to the county's resident population base. A discretionary funding source, such as the TIGER Grant, is ideal for addressing the needs of this under-represented business hub and the surrounding counties. It is important that the federal government participate in making I-73 a reality, especially in the economically distressed TIGER project area where local funding is in short supply.

Significant congestion currently exists on a number of existing routes in the region. The construction of I-73 would greatly improve the existing transportation network. US 501, the primary arterial route for travelers coming to and from the Myrtle Beach area has existing volumes averaging 50,700 vehicles per day and peaking at 61,172 per day.⁶ It is not uncommon for traffic between Conway and Myrtle Beach to reach gridlock during the summer months. The construction of I-73 would ease congestion on US 501 and a number of local routes by offering motorists a controlled access interstate facility.

In 2004, the American Automobile Association (AAA) ranked Myrtle Beach 4th in the United States as a driving destination, behind Orlando, Florida; Anaheim, California; and Las Vegas, Nevada. I-73 would provide a missing link to facilitate the movement of people and goods. Improved access and mobility to the region would allow for the state's number one industry, tourism, to grow the economy and improve the region's high unemployment figures. The TIGER project is an essential step to enable that link.

According to the Economic Impact Technical Memorandum, *From I-95 to the Myrtle Beach Region*, using 2000 dollars the value of all goods and services produced as measured by the gross regional product (GRP), derived from I-73 in the section between I-95 and the Grand Strand in the year 2030 is forecasted to increase by \$194 million. In 2030, total employment is anticipated to increase by 2,240 full-time equivalent jobs and personal income to rise by \$36 million. As a result of I-73, the travel efficiency evaluation found that the accumulated economic benefit (GRP) over the 15-year period is forecasted to be about \$2 billion. The job growth will yield an increase in income of \$51.8 million annually.⁷

Residents, business travelers, travelers passing through the area of I-73 between I-95 and North Carolina will see improved travel efficiencies and freight transportation in Dillon and Marlboro Counties will benefit from the increase in highway capacity. SCDOT estimates that the travel time savings for freight transportation traveling through Marlboro County will be reduced more than 40%. The drive time from Charlotte, NC to Myrtle Beach will be reduced from 4 hours and 20 minutes to 3 hours and 32 minutes, a 48 minute savings. These efficiencies translate into a \$695 million increase in GRP and \$256 million in personal income between 2015 and 2030, in 2007 dollars.⁸

STATE OF GOOD REPAIR

I-73 will be part of a well-maintained interstate system. South Carolina has the 5th largest state maintained highway system in the nation with 41,500 centerline miles under state control. According to the 2008 Report on the Highway Performance of State Highway Systems authored by Dr. David Hartgen, South Carolina ranks 6th in the nation in overall performance and cost-effectiveness in maintaining its highway system.

ECONOMIC COMPETITIVENESS

The South Carolina portion of I-73 is located in a region that encompasses a broad area designated as an Economically Distressed Area (EDA) which has experienced economic turmoil for nearly 20 years. Average unemployment rates in I-73 counties have been nearly double the average unemployment rate of the state from 1990-2012.

A poll of visitors to the Myrtle Beach area in 2007 asked visitors for suggestions as to the improvements needed to enhance travel to the Myrtle Beach area. The most common response, offered by nearly half of all respondents, suggests adding interstate access. I-73 and the TIGER Project will enhance transportation and trade from Myrtle Beach to the Canadian border. This new corridor will improve the competitiveness of all of the businesses and industries that have access to it and will have a cumulative positive effect on the overall competitiveness of the United States.

According to data (2009-11) from the US Census Bureau, there are 79,292 people living below the poverty line along the I-73 corridor in South Carolina. The table below is a breakdown of the number and percentage of those living below the poverty level in the corridor counties. The construction of I-73 will provide both short and long term economic opportunities for these counties.

County	People Below Poverty Level	% of County Population
Dillon	11,093	34.6%
Horry	49,819	18.5%
Marion	9,092	27.5%
Marlboro	9,288	33.0%

From December 2007 to December 2008, South Carolina lost more than 21,000 construction jobs according to the South Carolina Employment Security Commission. Most of those jobs have not returned. Despite positive economic growth in tourism, the impact of the recession is still being felt throughout the region and many of those construction jobs have not yet been replaced, so the work force is present and can staff up quickly. Construction workers from all over the state will be needed to build the TIGER project.

Construction Economic Impact

According to a 2009 study by Coastal Carolina University Research Economist, Dr. Donald Schunk, the construction of I-73 in South Carolina is projected to create 4,683 construction jobs which will contribute \$170.7 million in new household income for the families of those workers. This will contribute to an overall annual impact of \$818.9 million on the regional economy. An additional 3,040 jobs and \$277.8 million in new household income are projected to be generated due to “ripple

effects” in the regional economy. This will create opportunities in an area that has had historically high percentage of persons below the poverty level.

Post-Construction Impact

According to a 2011 study by Chmura and Economic and Analytics, I-73 will have a huge positive impact on the regional economy in the four counties where the interstate will reside. Economic benefits cited include growth in tourism, increase in distribution centers and roadside services, and cost savings (i.e. productivity). The Chmura study estimates I-73 will create 22,347 jobs post-construction, delivering an annual economic impact of \$1.98 Billion. This would generate \$86 million annually in state tax revenues and \$43 million annually in local tax revenues.

Other benefits noted by the Chmura study but not factored into the economic impact calculations that could positively impact the I-73 region include improved market access, increased appeal for business relocations, faster population growth, safer travel and an improve quality of life for residents.

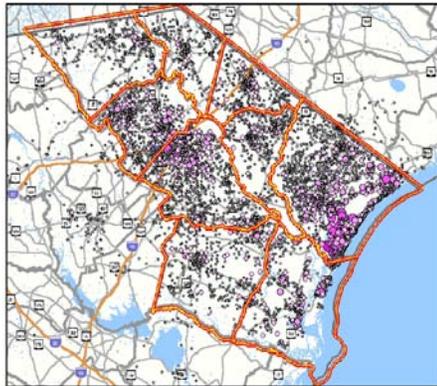
Additional Impact to the Region

I-73 will serve as a connecting route to increase the ability of the existing transportation network to accommodate new industries and the influx of new residents to the region. Along with the existing road infrastructure, I-73 will make it easier for workers and transit providers in economically distressed area to commute more efficiently, and for companies to move raw materials and finished products to and from suppliers and customers. I-73 will also improve access to ports in North and South Carolina which will make the region more competitive from a logistics perspective.

I-73 will improve the efficiency of moving tourists to and from the Myrtle Beach area and will also expand opportunities for industrial and commercial investment in other parts of the state and in the Charlotte Metropolitan Area. According to polls conducted by the Myrtle Beach Area Chamber of Commerce, the arterial roads leading to Myrtle Beach from I-95 in South Carolina have experienced heavy congestion that has negatively impacted the desire of people to travel to the area. In addition to providing new access to the Myrtle Beach area, which will alleviate congestion in towns such as Marion, Aynor, and Conway, the interstate will also improve the overall safety and efficiency of the existing transportation network by providing an alternative route for commercial traffic such as major trucking lines.

The North Eastern Strategic Alliance (NESA) is a 9-county organization of business and government entities committed to economic development in the northeastern corner of South Carolina. From a cost competitiveness perspective, I-73 will allow industries operating in the entire NESA region to reduce the cost of transporting goods to market. This will have an overall positive impact on the regional economy. The TIGER project will establish an important link between I-73 and I-95. It will also bring I-73 closer to US 74 in North Carolina, which will improve access between the Charlotte Metropolitan Area and the coastal areas of the Carolinas.

NESA Region Labor Sheds



NESA Region Commute Sheds



Source: US Census Bureau, LED Origin-Destination Database, 2006

As the labor and commute shed maps above indicate, employment opportunities in the region are mostly concentrated around the Florence and Myrtle Beach areas while the population is more evenly dispersed throughout the region. The development of I-73 will provide greater mobility for low-income citizens who may not be able to easily travel throughout the region. This should result in the creation of new employment clusters in distressed areas and provide improved access to healthcare facilities. By making the more distressed portions of the region economically competitive, the entire region becomes more economically competitive. This effect will have long term economic competitiveness benefits to the United States as a whole.

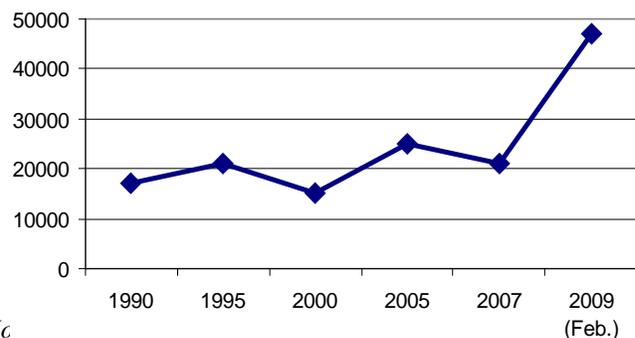
The I-73 project spans between the coast and the Pee Dee Region of the state. According to the Regional Long-Range Transportation Plan of the Pee Dee Regional Council of Governments, I-73 is critical to the economic development of communities that presently lack access to an interstate highway. Marlboro and Marion counties, both EDAs, presently lack interstate access and have experienced double digit unemployment rates and severe poverty in recent years. Creating jobs and a major transportation corridor benefits not only this region but also the nation as thousands of South Carolinians will be given a new opportunity to contribute to the nation's economy. Bringing Highway 22 to Interstate standards will be the catalyst for bringing the remainder of the project to fruition.

According to the economic impact study conducted by Coastal Carolina University's BB&T Center for Economic and Community Development (CCU Study), construction of I-73 and the connections it provides will have a significant economic impact for the state of South Carolina. During the construction phase alone, I-73 will generate a substantial number of jobs (See Addendum 4) at a time when the region and state are experiencing sharp job losses and rapidly rising unemployment. The chart below shows the unemployment trend in the NESA region has grown.

Despite these challenges, the NESA region has seen significant population growth in recent years, most of it in the Grand Strand area, which includes the coastal zone from Georgetown to the North Carolina line. According to the US Census Bureau, the population of the NESA region is currently (2009) estimated at 695,100 people. From 2005-2009, the NESA region grew 5.44%. From 2010-2035 the region is projected to grow 26.51% to nearly a million people. Horry

Prepared by Hc

NESA Region Unemployed



Source: SC Employment Security Commission

County, located at the terminus of I-73 will lead the way with projected growth of 31%.

This growth in population has presented two major challenges to the region, which have impacts nationally. First, in order for this region to sustain itself economically, more jobs must be created and more capital investment must be made. Second, the significant population increase seen in the region has contributed towards traffic congestion. Development of I-73 makes meaningful impacts in both of these areas.

According to the CCU Study, the jobs created during the construction of I-73 will serve as a significant bridge to a better economic future for the region. From creating development opportunities to improving commuting patterns between the Grand Strand job market and the outlying areas, I-73 will provide a significant boost to local economic development in a region that has seen decades of sub-par economic performance. These long-term benefits include positive impacts on business costs and productivity, business location, tourism, labor markets, and state and local tax revenues.

According to the CCU Study, 74% of Grand Strand visitors arrive from Interstate 95. Currently, tourists are required to take local and often two-lane roads from I-95 to the coast. The drive from I-95 to Myrtle Beach was named as one of the top 25 drives for vacation travel delays by the American Automobile Association (AAA). Knowing the impact that these significant travel volumes have on congestion, safety, and other factors, local and regional leaders have worked together to support the construction of I-73. This was the single largest reason for local investment in the \$386 million SC 22 project, which will become part of I-73.

Tourism is the largest segment of South Carolina's economy, with more than \$9 billion spent by tourists in the state each year. More than a third of that tourism spending occurs in Horry County. The reduced travel times provided by I-73 will lead to a significant increase in visitors. According to the Economic Impact Technical Memorandum, *From I-95 to the Myrtle Beach Region*, this would create an annual economic impact of more than \$1 billion, significantly impacting the economy of the entire region.

During the peak tourist season, the adjusted population, including residents and tourists, of the Grand Strand swells to nearly 1 million people. This high level of population also occurs as the East Coast faces the annual hurricane season. While South Carolina has made significant improvements in hurricane evacuation planning, including lane-reversal procedures, the current highway infrastructure cannot efficiently handle the traffic that would occur as the result of a major hurricane evacuation. According to the Environmental Impact Statement (EIS) for the portion of I-73 between I-95 and the Grand Strand, the construction of I-73 will reduce hurricane evacuation times by 11 to 15 hours on the most used evacuation corridors. This would have a significant impact in saving lives of local residents and tourists visiting the region. It would also mean a positive economic impact by allowing for time-appropriate evacuations decisions.

LIVABILITY & INTERMODAL CONNECTIVITY

According to the U.S. Census Bureau, the permanent population of year-round residents in South Carolina grew 11.8% from 2000-2008. The nation's population grew 7.3% in that same time period, making South Carolina one of the fastest growing states in the nation with much of that growth occurring in the NESR region. For example, the population of the Myrtle Beach Metropolitan Statistical Area grew 30.9% during 2000-2008, more than 4 times the national average. Of the 343,343 people living along the proposed I-73 corridor 99,150 are minorities. According to census projections, the region's population is expected to grow 26.51% from 2010-2035.

As noted earlier, the visitor population and influx of vehicles nearly triples traffic congestion in the Grand Strand area. Most visitors drive to/from Myrtle Beach, SC via US 501. Naturally, this creates traffic bottlenecks and leads to congestion. Reducing congestion and providing access to new markets via I-73 will improve livability and attract transportation and logistics related companies to the region. By reducing congestion on existing highways, permanent residents, visitors, transit providers, and trucking companies will all benefit immediately from the construction of I-73.

According to the Regional Long-Range Transportation Plan of the Pee Dee Regional Council of Governments, I-73, when completed in South Carolina, will lessen congestion on key road corridors in the region by providing an alternate route. The SCDOT I-73 Traffic Study confirms this. With millions of people visiting the Grand Strand each year, having interstate access to the area will make it a more convenient destination for work and recreation and may allow tourists to make shorter "weekend get-aways" to the coast, which will have a positive impact on the local economy as seasonal workers may be retained for longer periods of time to service a regionally-based influx of tourists. Shortened commutes will improve the quality of life for workers driving to work or using public transportation. Additionally, I-73 will serve as a major evacuation route which will save time and perhaps save lives in the event of a natural disaster.

A 2007 analysis performed by the National I-73/I-74 Corridor Association revealed a substantial amount of commerce exists within the 6-state corridor, despite the lack of a single Interstate highway connecting all six states. The analysis confirmed:

- \$109.6 Billion in Commerce Generated Within the Corridor
- 205.2 Million Tons Shipped Annually Within the Corridor
- 28.9 Million Visitors Travel Within the Corridor

The project will enhance connectivity to the Intracoastal Waterway, Port of Wilmington (NC), Port of Georgetown (SC), and Port of Charleston (SC). The ports of Wilmington and Charleston are now pursuing expansions in anticipation of improvements to the Panama Canal which will increase cargo volumes at ports along the East Coast.

Intermodal planning, including land/air connectivity, has been a central theme of federal transportation policy for the last two decades. ISTEA specified that the "purpose of the National Highway System is to provide an interconnected system of principal arterial routes which will serve major population centers, international border crossings, ports, airports, public transportation facilities, and other major travel destinations; meet defense requirements and serve interstate and inter-regional travel." Building national truck-freight models and integrating these with rail, air, waterway, and marine freight models is actively being pursued by USDOT through the Multi-Modal Freight Analysis Framework program. The I-73 project is clearly consistent with this policy initiative.

From a land/air intermodal perspective, I-73 will facilitate the expansion of cargo services in the area. The Myrtle Beach International Airport and the Florence Airport are the commercial airports in the region. There are also 19 general aviation airports. Construction of the interstate will likely increase air cargo capacity by providing an efficient intermodal link between commercial hubs and air freight services.

There are more than 350 miles of CSX rail in the region. Modern intermodal transportation requires a combination of interstate and rail access. Being located halfway between Miami and New York puts this region of South Carolina in a prime position to utilize its existing rail infrastructure in conjunction with I-73 to become a major distribution and logistics hub for the United States.

The South Carolina portion of I-73 is being designed to accommodate a future rail corridor. The future I-73/I-74 connection will provide direct interstate access to the Myrtle Beach International Airport. The TIGER project area would be a likely location for a major freight-distribution center. Developers have been exploring the possibility of establishing an intermodal distribution center in Marion County near the I-73 corridor. The TIGER project would improve interstate access to such a site.

There are several transit providers in the NESAs region which serve economically disadvantaged populations, non-drivers, senior citizens, and the disabled. Many of these riders work in the Grand Strand area. The construction of I-73 will provide a convenient corridor for transporting these and other workers to jobs. Having faster and better access to the Myrtle Beach area via I-73 will make recreational activities, employment opportunities, commodities and services more accessible to the region and will have a positive economic impact on the local economy. The Pee Dee Regional Transit Authority, which transports workers from the TIGER project area to the Grand Strand, will be able to shorten drive times and save fuel as a result of the project.

JOB CREATION & ECONOMIC STIMULUS

As noted in the project description, the I-73 Corridor was identified as a High Priority Corridor by the U.S. Congress in the *Intermodal Surface Transportation Efficiency Act of 1991* (ISTEA). The corridors that Congress designated are to be included in the National Highway System. Congress has directed the FHWA, along with the states, to develop long-range plans and feasibility studies for these corridors, and focus federal funds towards these areas for road construction. The TIGER project is a portion of the South Carolina segment of the I-73/I-74 High Priority Corridor, which is listed as number five on the National Highway System High Priority Corridors list.

The counties of Dillon, Marlboro, Marion, and Horry in South Carolina, and Richmond and a portion of Scotland Counties in North Carolina comprise the SCDOT I-73 project area. Based on the 2010 US Census data, five of the six counties are experiencing high unemployment rates, high rates of poverty, and low median incomes when compared to their respective states and the United States. This project can improve opportunities for economic development by bringing needed jobs and income to these counties.

Having an interstate provides a tool that will help these counties recruit new businesses and industries by virtue of linkage with the interstate system. An interstate is one of the key factors that industries and businesses look for when citing a facility. The TIGER project will be an added

advantage to local and state officials in their efforts to pursue companies that may be looking to locate in the area.

The high unemployment rate, lower median incomes, and increased poverty are attributed to a variety of factors in the project area. For example, Marlboro County has experienced high levels of unemployment and poverty due to plant closures and the agricultural transition from tobacco to cotton as a main cash crop. The slow transition from tobacco to cotton after the federal government tobacco buyout has been a contributing factor to the recent increase in the percentage of people living below the poverty level. There also have been numerous layoffs in the I-73 region in recent years.

The trends for each county in the I-73 project area are generally the same, with the exception of Horry County (due to tourism). Tourism is the largest employer and the 4th largest generator of gross state product in South Carolina, respectively.⁹ In 2012, tourists spent \$16.5 billion in South Carolina, approximately one-third of it in Horry County, located at the terminus of I-73.¹⁰

The project absolutely creates job opportunities for low income workers. Regional economic development efforts to attract new industries and higher paying jobs are led by the North Eastern Strategic Alliance (NESAs), a multi-county, collaborative effort between public and private entities to spur economic development throughout the region. Each county within the region also employs its own economic development agency to compete for jobs that would benefit each specific county. Since January 2012, 2053 new jobs in the region have been announced, which demonstrates the region is poised to capitalize upon a new interstate highway to create even more jobs.

The TIGER project will provide numerous job opportunities for low income workers across the region. Upon completion, I-73 will create jobs in the distribution, manufacturing, and hospitality industries and will pay higher wages than many of the jobs presently available to the citizens of this region. Given the region's double digit unemployment, these jobs will be highly welcomed and will greatly benefit the region, the state, and the nation by providing employment opportunities and a higher quality of life for the citizens of this region.

Not only will the project create new economic opportunities for small businesses and disadvantaged business enterprises, it will also create opportunities for new types of businesses in the region. Initial opportunities in the construction and hospitality industries will lend themselves to other opportunities in these areas as the interstate is constructed.

Upon completion, I-73 will play a key role in attracting additional tourists to the Grand Strand and attracting additional industry throughout the I-73 corridor. The investment in I-73 will be returned in the form of lower business costs, greater productivity, reduced congestion and shortened travel times. These direct benefits of I-73 will work to benefit existing businesses throughout the region, make the region more attractive to new industry, enable the region to attract new visitors to the area, and increase the size of the region's labor and product markets. Once in place, I-73 will benefit the region and state by supporting additional jobs and household income.

Similarly, the portion of I-73 construction to be financed by this TIGER grant application will also generate great economic benefits. Specifically, the \$30 million worth of construction funded by this grant will generate 77 positions. This total includes jobs tied directly to construction as well as indirect and induced positions. The jobs will provide a substantial boost for a state and region that

could experience very sluggish job growth during the coming economic recovery due to the ongoing large job losses within the area's manufacturing sectors.

PUBLIC INVOLVEMENT IN PROJECT DEVELOPMENT

As part of developing the Environmental Impact Statement (EIS) for I-73 in South Carolina, the project team met individually with the planning staff of each of the 4 I-73 counties. Future land use was discussed and considered by the project team as potential routes were evaluated. Each of the affected counties expressed strong support for I-73, and they all consider it to be an integral stimulus for future growth.

The public has been engaged in an unprecedented manner from the very start of development of the I-73 project in South Carolina. A scoping meeting was held prior to any corridor alternatives being generated to receive feedback on important issues that the project team should consider in the development of potential alternatives.

Public informational meetings and public hearings were held to share project information with the public, receive input, and make adjustments as the project was developed. To date, more than 4,000 people have attended these public meetings. Also, 46 community briefings were conducted to update various stakeholders on the status of I-73. Also, a project website, www.i73insc.com is being maintained to share information. To date, more than 200,000 hits have been received at the website.

SAFETY

Congestion and inefficient traffic flow negatively affect productivity through lost hours and wasted fuel and can harm air quality, slow commerce and increase energy costs. Likewise, congestion can lead to accidents and deaths on our roadways. This project will reduce congestion and improve traffic flow, thus reducing the environmental impact of vehicular traffic in the area. Completion of I-73 will contribute to a safer more sustainable and healthy environment for residents and visitors. Safety is a concern on roadways with high congestion, "at grade" intersections, and frequent stop and go conditions. Highways in the project area are used by tourists and commercial travelers that are sometimes not familiar with the roads. Added to that is the local traffic, some of which is farm machinery or slow moving vehicles. Existing routes have uncontrolled access. This results in increased stopping of traffic for vehicles turning off and onto these roads, along with a number of traffic signals and signage.

In South Carolina the interstate fatality rate is 0.82%, which is roughly a third of the fatality rate of 2.27% on other roads. This demonstrates the safety benefit of I-73 better than any other statistic. The TIGER project and the entire I-73 project, will improve safety on the current roads by reducing the volume of traffic on them and it will provide a route with more consistent speed and capacity for local, out-of-state, and commercial traffic into and throughout the project area. There are two key features of this project that will enhance safety:

- 1) Interstates are designed with controlled access at specific locations (interchanges) and opposing lanes are normally separated by a barrier (i.e. concrete wall, guardrail) or median for improved safety. In addition, there are restrictions on what vehicles can use the interstate. Most interstates are limited to use by automobiles and large trucks and not by bicyclists or farm tractors. The existing roads in the project area are not restricted, which means cars and large trucks driving at a higher speed may have to slow down when behind a bicyclist or a farm tractor until they can safely pass. In addition, cars and trucks traveling through the project area currently have to slow or stop when waiting for

vehicles to turn on or off the main roads into driveways or onto secondary roads. The speed limits of roads in the project area vary from 25 to 60 miles per hour depending on location, whereas an interstate would have a consistent speed, normally of 65 or 70 miles per hour.¹¹

- 2) The new interstate would have a vehicle capacity of 58,600 cars per day.¹² The capacity on SC 9 and SC 38, combined, is currently 35,600 cars per day. With the construction of I-73, the volume of traffic would be reduced on state highways, which would improve efficiency on the local traffic network. According to traffic modeling done for the I-73 project, in the year 2030, it would significantly reduce average annual daily traffic (AADT) volumes on the existing roads. Between North Carolina and I-95 at SC 38, traffic volumes would decrease from 14,500 to 3,300 AADT, SC 9 from 4,700 to 3,400 AADT, and US 1 from 16,900 to 6,700 AADT. I-73 also would reduce the traffic volumes on US 501 and SC 9 between I-95 and SC 22. These are two routes that are roughly parallel to I-73. For the heaviest traveled segments of US 501 located in the project area, the volume would decrease from 28,500 to 18,900 and from 30,000 to 20,400. On SC 9, the high traffic segment would go from 15,100 to 7,900.

Vehicle crash data compiled by the South Carolina Department of Public Safety (SCDPS) from 1996 to 2005 were evaluated for the main routes through the part of the project area linking I-74 near Hamlet, NC to I-95.¹³ Those main roads are SC 38, US 1, SC 9, and US 501. There were 794 accidents on SC-38 between the North Carolina border and I-95 resulting in 14 deaths and 635 injuries. About 57% of these accidents were due to conditions that would be improved by a controlled access facility including: failure to yield the right-of-way, too fast for conditions, excessive speeding, disregarding traffic sign or signal, improper turn, and improper passing/lane change. Since it is a major connecting travel route, SCDPS data from US-1 from the North Carolina border to Wallace were combined with data from SC-9 from Wallace to I-95. A total of 1,277 accidents occurred from 1996 to 2005 on these routes, resulting in 19 deaths and 556 injuries. More than 50% of the accidents that occurred (similar to the aforementioned list) were of the type that would be less prevalent on a controlled-access facility.

Accident data was also compiled by SCDPS from 2006 to 2008 were evaluated for the main routes through the southern part of the project area linking Interstate 95 to SC 22 in the Myrtle Beach area. These routes include SC 9 from I-95 to Dillon, for SC 34 from I-95 to Dillon, for SC 38 from I-95 to US 501, US 301 from Dillon to the Latta, and US 501 from Latta to SC 22. US 501 is the main road used by travelers between I-95 and Myrtle Beach. SC 9, SC 34, SC 38 and US 301 also are used by travelers to get to US 501 from I-95. SCDPS data from US 501 and the connecting travel routes from I-95 to SC 22 were combined into one data set. There were 897 accidents in three years resulting in 12 deaths and 578 injuries. Almost 71% of these accidents were due to reasons that will be addressed by a controlled access facility including: failure to yield the right-of-way, too fast for conditions/excessive speeding, disregarding traffic sign or signal, improper turn, and improper passing/ lane change.

Hurricane Evacuation Analysis

Coastal population, both permanent and tourism, has increased dramatically over the past decade. Because of this, considerably more vehicles must be taken into consideration when planning evacuation of the more populated area due to an approaching tropical storm. The area served by Highway 22 has seen a 222% increase between the years 2000 and 2010. There has been no increase in east-west evacuation traffic capacity, except for Highway 22 since Highway 501 was widened to four (4) lanes over the period between 1956 and 1988.

In 2011 FEMA revised their predictions of areas which would be flooded under various hurricane events ranging from a Category 1 through and including a Category 5 storm. Because of better topographical data, the revised mapping indicates a considerably larger area which must be evacuated. More people coupled with a considerably larger area combine to increase the time required to evacuate to a dangerous level. Raising the level of Highway 22 to Interstate standards by adding paved shoulders will decrease evacuation time because the speed limit will be increased from 60mph to 70mph and, the shoulders will provide an area for emergency vehicles as well an area to get immobile vehicles out of the way in the event of a breakdown or a collision.

In 2012, a study evaluating I-73 and hurricane evacuations in South Carolina was conducted by Atkins, N.A. Atkins N.A. has accomplished numerous hurricane evacuation studies for various regions of the United States, and performed a detailed analysis based upon the most recent Federal Emergency Management Agency (FEMA)/U.S. Army Corps of Engineers (USACE) hurricane evacuation studies. The study data and evacuation time calculations are used by state and local emergency management officials for planning and decision-making.

Currently, Horry County (where Myrtle Beach, SC and several other oceanfront communities lie) has a hurricane evacuation clearance time just below 30 hours for a Category 4/5 storm during peak occupancy. This assumes the state's law enforcement agency is able to fully staff and implement lane reversals. With no reversals and estimated population growth, hurricane evacuation times will exceed 50 hours (2+ days).

According to the Atkins study, I-73 will provide major relief to the inland U.S. 501 corridor and other roadways, such as S.C. Highway 9. The Atkins study notes that I-73 will provide interstate-quality traffic flow in the direction that 75% of evacuees wish to travel. The study estimates that I-73 will save 5-18 hours of clearance time, giving roughly 40,000 people the time to escape who otherwise would be trapped in the area under certain scenarios.

Reduced Congestion

Another key issue for I-73 is reducing congestion on the local transportation network. During the summer, US 501 experiences recurring congestion from a combination of local traffic and recreational/tourist traffic. US 501 was ranked 23rd in a list of the 25 most congested routes experiencing congestion during the summer vacation season.¹⁴ Based on information contained in that report, the US 501 corridor to Myrtle Beach has the sixth highest Seasonal Vehicle-Miles of Travel (approximately 114.5 million vehicle-miles of travel) and Number of Summer Trips (approximately 5.7 million) of the 39 separate routes that lead to 27 different destinations throughout the United States. I-73 would relieve this congestion.

According to the *Traffic Technical Memoranda* for I-73 South¹⁵, the construction of I-73 will allow traffic between Myrtle Beach and I-95 to make the trip faster. Without I-73 traffic will be able to reach I-95 from the junction of US 17 and SC 22 in approximately 80 minutes. With I-73, that time will be reduced by 20 minutes. For the I-73 North project the traffic will be able to reach I-95 from the junction of NC 38 and I-74 in approximately 50 minutes without I-73. With I-73, the amount of time necessary for traffic to reach I-95 will be about 35 minutes.¹⁶ This translates into a minimum time savings of 35 minutes from I-74 to the coast. The time savings could be as much as 48 minutes.¹⁷ This time savings accruing to the public will certainly be significant.

An additional benefit provided by I-73 will be the diversion of traffic from the existing local roadway networks, especially from US 501, SC 38, and US 52. This diversion of traffic will reduce traffic volumes on the existing network, and thus free up capacity that could be used by local residents and businesses for shorter distance trips.¹⁸ The reduction in travel times and moving vehicles off the existing transportation network will result in travel efficiency benefits for the entire regional network.

EVALUATIONS OF EXPECTED PROJECT COSTS, BENEFITS, & PERFORMANCE

Inefficient traffic flow drains productivity through lost hours and wasted fuel and can harm air quality, slow commerce and increase energy costs. Likewise, highway design can contribute to accidents and deaths on our roadways. Completion of I-73 will contribute to a safer more sustainable and healthy environment in the region, both for residents and visitors, by reducing congestion, improving traffic flow throughout the region and enhancing the safety of our regional transportation system.

The travel time savings resulting from I-73 for the peak season, June 1 through August 31, will be substantial, as traffic build-up during peak season is considerable.

BENEFIT-COST ANALYSIS

Dr. Donald Schunk performed an economic analysis for the Coastal Carolina University's BB&T Center for Economic and Community Development related to I-73. This TIGER project was included in that analysis (addendum 10), which analyzed the entire construction project. The construction impact for the I-73 project is estimated to generate 7700 annual jobs for a 5-year construction period and the total economic impact on the region would be \$4.1 Billion.

This TIGER grant pertains to an essential portion of the I-73 project. Using a consistent analysis, this TIGER grant is expected to generate \$4.2 million direct economic impact due to construction and an additional \$5.9 million in induced/indirect economic impact, for a total economic impact within the region of \$10.1 million. This TIGER grant will create 96 jobs, largely in Horry County.

For the purpose of this TIGER grant application, the benefit-cost analysis focuses on a comparison of actual project costs and expected economic benefits, including both the direct and multiplier effects. Benefit-cost analyses do not always include economic multiplier effects. This is due to a common assumption in similar analyses that the project will be undertaken against a backdrop of full employment. In that case, the economic multiplier effects do not necessarily represent a net economic gain, but rather a shift of economic activity.

It is also critical to recognize that this TIGER project will serve as a necessary step in the completion of the full I-73 project in South Carolina. It is the ultimate completion of the entire project and the associated longer-term benefits that ultimately hold the greatest promise for transforming the regional economy. These long-term benefits will represent a permanently higher level of economic activity for the region that will continue to add to the benefits associated with the TIGER project. As these longer-term impacts develop the discounted net present value of benefits for the project continues to grow. While inherently difficult to quantify, recent studies conducted by Wilbur Smith & Associates continue to estimate long-term economic benefits of the completed I-73 in SC.

EQUAL EMPLOYMENT OPPORTUNITY

The contractor(s) selected to build the TIGER project will be required to comply with federal equal employment opportunity requirements, on the job training, and other federal labor standards. All agencies and entities who are interested in assisting the South Carolina Department of Transportation with publicizing employment opportunities and assembling qualified labor pools for this project are welcome to do so. The State of South Carolina has a strong track record of working with community based organizations and governmental agencies to connect disadvantaged workers with economic opportunities. SCDOT anticipates a similar level of collaboration with community based organizations with regards to this project.

The entities performing the project must verify sound labor practices and compliance with safety and fairness requirements, but will be required to have a safety manager on their construction team, who is solely responsible for compliance with applicable safety regulations, as well as enter non-discrimination agreements and potential pre-employment training and on-the-job training (OJT) requirements throughout the project.

The project agreement will prohibit discrimination against any employee, applicant for employment or business on the grounds of race, religion, color, sex, age, handicap, national origin, or political affiliation in the selection and retention of subcontractors, including procurements of materials and leases of equipment, in compliance with Title VI, 42 U.S.C. § 2000d *et seq.* ; 28 C.F.R. § 42.101 *et seq.* It is the policy of the State of South Carolina that minority business enterprises be afforded the opportunity to fully participate in the overall procurement process of the State.

QUICK START TO ACTIVITIES

It is anticipated that the project will move forward as soon as the TIGER grant is awarded. The Environmental Impact Statement (EIS) for this project has already been completed and the Record of Decision has been secured. The Design-Build aspect of the project will allow for an expedited schedule. There will be no land cost and absolutely no environmental impact. As such regulatory permitting will be exceedingly simple and fast. It is anticipated that design, permitting and construction can be completed in less than eighteen (18) months.

PROJECT SCHEDULE

The nature of this project allows for swift initiation and completion of the project. As the surveying, right-of-way designation and regulatory permitting was already completed for Segment D and the road has been completed for more than a decade, design and construction of the shoulder widening project will proceed very quickly. The design will entail no field work. There will be no adverse environmental impact and, as such there will be no adversity to the project. It is anticipated that the project will be advertised as a design/build project and awarded within several months after award of the grant. Construction should take less than 12 months to complete.

ENVIRONMENTAL SUSTAINABILITY

Development of the I-73 corridor has been undertaken in accordance with the National Environmental Policy Act (NEPA). Extraordinary efforts have been made to select a corridor that is both environmentally friendly and conducive to a sustainable future. As a result of these efforts, Records of Decision have been issued for the project area in South Carolina, including the entire TIGER project area.

In determining the alignment with the least impact to human and natural resources, a process was developed with the resource and regulatory agencies to avoid and minimize adverse impacts. Throughout the development process the impact to wetlands was refined and reduced. The reasonable project alternatives for I-73 had the potential to impact between 664.7 acres and 498.4 acres of wetlands. The selected Alternatives for both I-73 North and I-73 South totaled 370.2 acres of wetland impact. The total impact to wetlands in the Section 404 permit application is 336+ acres.

This demonstrates the SCDOT commitment to reducing wetland impacts, a commitment that has continued throughout the project development process. Through the agency coordination process, the use of the US Army Corps of Engineers Standard Operating Procedures for quantifying potential impacts and determining the appropriate amount of compensatory mitigation was recognized as the standard for determining the amount of mitigation. This standard was applied to the 336+ acres of impact to quantify the mitigation required to offset the unavoidable impacts from the project.

The project has no impacts to federally protected threatened and endangered species. This was due, in part, to the development process that identified and avoided known locations within the potential alternative routes. It continued through the field evaluation of the Preferred Alternatives where it was determined if any protected species were within the proposed construction limits for the project.

A significant change was made in the I-73 South Selected Alternative to avoid segmentation of very high quality habitat along the Little Pee Dee River in Marion County.¹⁹ This shift also resulted in lowering wetland impacts by 40 acres and reducing bridge costs. However, it moved the alignment into a state Heritage Trust property that qualified as a Section 4(f) impact. SCDOT felt that it was in the best interest of the state and the environment to construct I-73 parallel to an existing roadway (SC 917) and impact the Heritage Trust property, rather than constructing I-73 on a new alignment and fragmenting the high quality habitat found along the Little Pee Dee River. The TIGER I-73 project itself is not near the river and will have minimal wetlands impact.

As stated above, the TIGER I-73 project is part of the larger I-73 project in South Carolina. The NEPA requirements for I-73 have been completed. An Environmental Impact Statement was prepared for I-73 in South Carolina as two projects, I-73 South, from I-95 to Myrtle Beach, South Carolina, and I-73 North, from I-95 to I-74 near Rockingham North Carolina. (See Addendum 6)

- The final EIS for I-73 South was approved by the FHWA on November 29, 2007 and the Record of Decision was issued on February 8, 2008 (<http://www.i73insc.com/download/RecordofDecision.pdf>).
- The Final EIS for I-73 North was approved on August 6, 2008 and the ROD was signed on October 22, 2008 (<http://www.i73insc.com/download/RecordofDecision.pdf>).

Because Segment D (Highway 22) of the South Carolina portion of Highway 22 has already undergone the scrutiny of an Environmental Impact statement and full permitting by all of the various state and federal agencies, there will be no environmental impacts. Any and all wetland fills for Segment D were completed under the permits of original construction. As such the only permit necessary for the shoulder widening project will be through the South Carolina Department of Health and Environmental Control (SCDHEC). The permit will be for land disturbance only.

LEGISLATIVE APPROVALS

The project is authorized under Title 57 of the South Carolina Code of Laws and Title 23 of the U.S. Code. Additionally, the South Carolina General Assembly passed a resolution in 2007 in support of the TIGER project (Addendum 7).

STATE & LOCAL PLANNING

I-73 is included in the 2007-2012 SCDOT Statewide Transportation Improvement Program (STIP), which is located at <http://www.scdot.org/inside/pdfs/STIP.pdf> (pp. 32, 60, 66, 72, 73). It is ready to proceed rapidly upon award of the TIGER Grant.

TECHNICAL FEASIBILITY

The project has been conceptually designed for its entire length to ensure that it can be built as portrayed in the NEPA document. Value engineering was completed for the I-73 South segment. Right-of-way plans have been prepared for the entire southern portion of I-73 from I-95 to SC 22, which includes all of Section 1 for the TIGER project. The northern portion of the design will be done as part of the design/build contract for the project. The incorporation of the 24 mile segment of SC 22 into I-73 was evaluated and found to be suitable, with the widening and paving of the road shoulders to be done at minimal expense and no environmental impact. There are no technical barriers to the completion of the project and the necessary elements for the prompt completion of the project are in place. As indicated in the project schedule, the work elements are planned and essentially can be accomplished within the time frames that are recommended.

FINANCIAL FEASIBILITY

Funding for entire I-73 project in South Carolina will require a combination of State and local funding, toll revenues, and federal funding. This three-pronged approach will result in the project being capitalized with an asset management plan that optimizes long-term finances for construction, operation, maintenance and debt service. Up to now, I-73 has been funded with state General Fund Dollars, state Highway Fund dollars, local accommodations taxes (the SC 22 portion), and Congressional earmarks. The total amount of expended and appropriated funding exceeds \$450 million.

Federal Interstate Construction Program funds, or Highways of National Significance funds, will be needed as part of the funding needed to build this congressionally-designated facility. Existing and future earmarks will be used for right-of-way acquisition and wetlands mitigation. Failure to secure federal dollars, as part of this three-pronged financial approach, will require state and local authorities to seek other solutions.

The TIGER Project itself is estimated to cost \$30 million. The Horry County government will serve as project administrator. SCDOT will oversee construction of the project.

INNOVATION

With the total cost of I-73 in South Carolina estimated at \$2.4 billion, it is clear that innovative financing methods must be maximized to complete the project. Since the project is one of the first new Interstate projects constructed in years, it offers a perfect opportunity to use various innovative financing concepts.

Funding: The search for funding for I-73 represents an ambitious application of several funding streams. This is one of the few new construction interstates to be considered for tolling. Public money, committed by the federal and state government, is being used to complete as much of the project as possible. Two Environmental Impact Statements, for I-73 North and I-73 South, have been completed, right-of-way plans for the portion from I-95 to Myrtle Beach (I-73 South) have been completed, and the purchase of right-of-way has already begun. The remaining funds are to be spent on the acquisition of right-of-way for the TIGER project and if necessary, be applied to the wetlands mitigation and construction of this segment.

Tolling: Long-term financing for the entire I-73 Corridor in South Carolina, either by way of public-private partnership, or in the form of public turnpike bonds to be retired by tolling, will be used to make up for the shortfall in available money from federal, state, and local sources. The state legislature has passed legislation allowing for tolls on I-73 in South Carolina. FHWA has designated the entire I-73 corridor from Michigan to South Carolina as a pilot project for interstate tolling for construction.

In 2006, the South Carolina General Assembly passed legislation allowing I-73 to be tolled. This legislation allows a public toll project or a public-private partnership with a long-term lease/concession. Electronic Toll Collection (ETC) technology is anticipated to be used. ETC allows vehicles to move through the toll facility faster than stop and pay facilities. This will decrease fuel usage because less time will be spent waiting to pay and less deceleration/acceleration will occur. It also will result in lower toll collection costs and will achieve greater public satisfaction through less time spent waiting. Mobile source air emissions are kept lower by less time waiting in line and less deceleration/acceleration. The TIGER I-73 project itself will not be initially tolled, but the entire I-73 segment in South Carolina will likely be tolled when completed.

Construction: The segments are to be constructed using the design-build model, which should lead to decreased construction times, thus bringing the project to completion sooner than the design-bid-build approach. Construction oversight and contract administration will be provided by SCDOT.

Intermodal Connectivity: I-73 will be designed to accommodate two rail lines within the right-of-way. In planning for the future, as different transportation alternatives may evolve, a rail corridor between Hamlet, North Carolina and Myrtle Beach would connect the economically distressed areas of Marlboro, Dillon, and Marion Counties with Myrtle Beach and the Charlotte and the Raleigh/Durham areas.

Public-Private Partnership: SCDOT views I-73 as being a logical candidate for a public-private partnership (PPP). The South Carolina General Assembly has passed legislation enabling such a partnership to be created. SCDOT is currently in discussions with a number of experts on how to best develop a partnership that will play a major role in construction of the corridor. The completion of the TIGER project will facilitate construction of other parts of the I-73 project and enhance the likelihood of a PPP.

State Infrastructure Bank (SIB): South Carolina has made good use of its bonding capability through its SIB. In fact, the first portion of I-73 built in South Carolina in 2001 (currently designated SC 22) was financed through its SIB, using a combination of state and local funds to service the bonded indebtedness. Additionally, the SIB and SCDOT are currently working on a plan that will provide \$10 million in funding commitment to development of I-73 for work at the interchange with I-95. While the SIB cannot be seen as the source for funding for the entire project in the long-term, it certainly can play a role, especially when working with local jurisdictions.

PARTNERSHIPS

A summit meeting was held between South Carolina and North Carolina transportation leadership at the outset of the project. This resulted in an agreement between the two departments of transportation for the development and linkage of I-73 and I-74 across state lines. This collaboration between the two states was the first of many efforts to build a consensus regarding I-73. (See Addendum 2d.)

JURISDICTIONAL & STAKEHOLDER COLLABORATION

Fifteen federal and state agencies with oversight or responsibility for resources in the project area participated over a 3 year period to develop the purpose and need, approve the methodology for analysis, develop alternatives, refine alternatives, designate a preferred alternative, and develop wetland mitigation. This new process was developed for this project and was intended to merge the NEPA and Section 404 review to help streamline the process. It provided the agencies with unprecedented involvement during the development of the project. In fact, this project won the FHWA Administrator's Award in 2008 for the Agency Coordination Team.

Two stakeholder working groups were formed at the beginning of the EIS process for each section of I-73 to make sure that the concerns of a broad range of viewpoints were heard. Over 100 individuals were included as stakeholders, representing businesses, economic development, elected and public officials, environmental organizations, minority organizations, planning organizations and citizens. Each group was assembled with leaders from the project areas (north and south) so that the entire region was represented. Their role was to relay information between the Project Team and their constituents.

DISCIPLINARY INTEGRATION

A 2008 study, conducted by well-known pollster Zogby International included a statewide poll, with margin of error +/- 5%, revealed that 82% of South Carolina registered voters supported construction of I-73 and felt it was "important" to the state. When the need for an additional evacuation route was mentioned 88% of registered voters expressed support for I-73. This overwhelming public support for the project has facilitated collaboration and partnership between several public, private, and non-profit entities. Examples of the collaborative efforts with regards to this project include:

- The National I-73/74 Association has held numerous meetings throughout the corridor, including two recent 'road rallies' in Washington, D.C. This association, in partnership with the South Carolina I-73 Association, has hosted meetings and forums in South Carolina that have attracted more than 200 members of state legislatures, 36 members of the U.S. House of Representatives, 14 U.S. Senators and former U.S. Secretary of Transportation Mary Peters.

SUMMARY

The I-73 TIGER project will stimulate the economy, serve the needs of the public and create opportunities. It serves numerous federal policy goals. It needs and deserves funding.

FEDERAL WAGE RATE REQUIREMENT

The applicant's signature, affixed to this application, serves as certification that the South Carolina Department of Transportation will comply with the requirements of Subchapter IV of Chapter 31 of Title 40, United States Code (federal wage rate requirements), as required by the Recovery Act.

Steve Gosnell
Assistant County Administrator
Horry County

Date

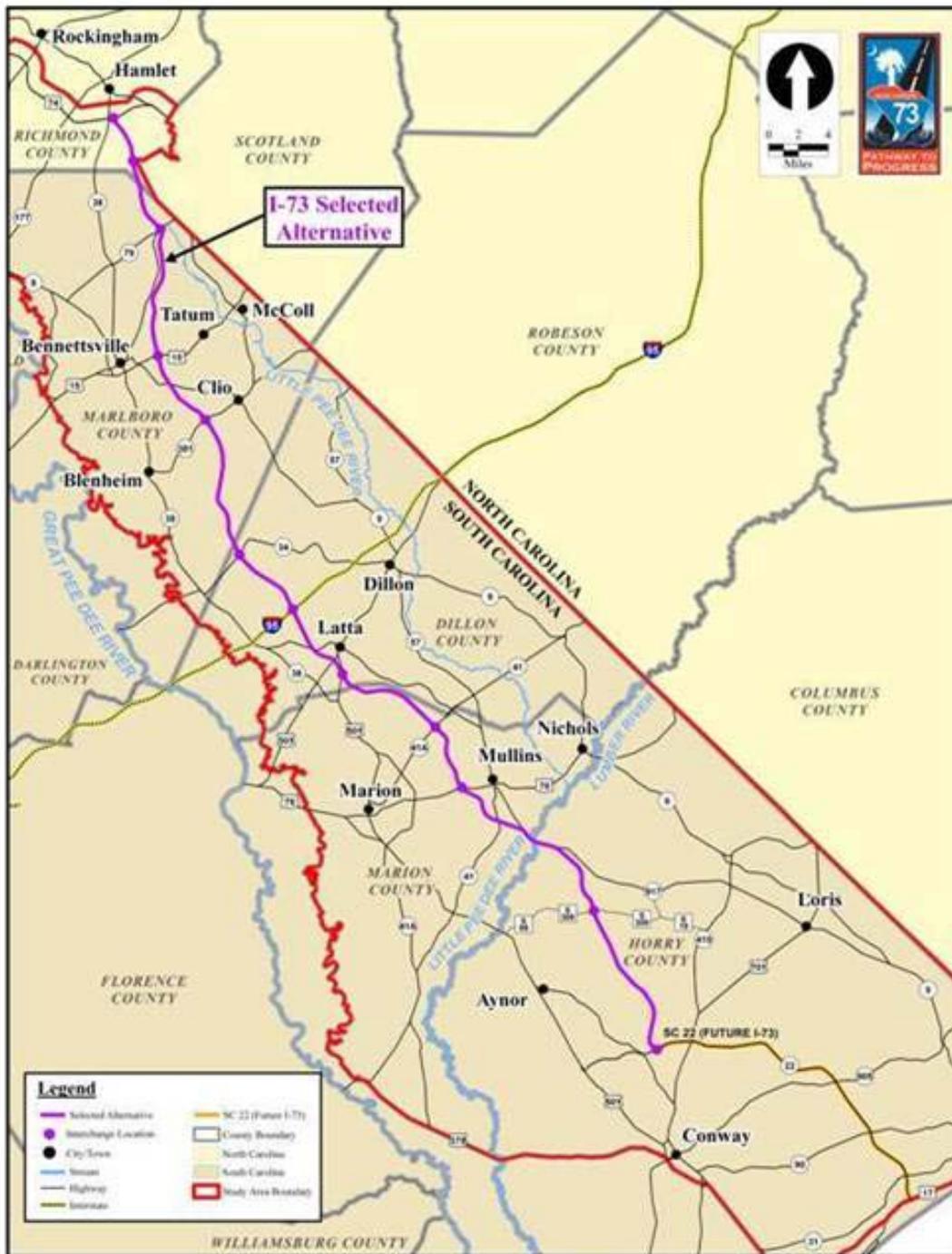
APPENDICES

WEB INDEXING

- South Carolina I-73 Association
 - <http://i-73sc.com/>
- Environmental Impact Study
 - <http://www.i73insc.com/>
- National I-73 Association
 - <http://i73.com/>
- South Carolina Infrastructure Study
 - <http://www.ors.state.sc.us/philweb/exsum.pdf>
- South Carolina State transportation Improvement Program (STIP)
 - <http://www.scdot.org/inside/pdfs/STIP.pdf> (pp. 32, 60, 66, 72, 73)
- Record of Decision
 - <http://www.i73insc.com/download/RecordofDecision.pdf>
- The I-73 Northern and Southern Traffic Technical Memoranda
 - <http://www.i73insc.com/links.shtml>.



ADDENDUM 1 - South Carolina I-73 Corridor Map



ADDENDUM 2A – Letter of Support

Mayor
Alys C. Lawson

Mayor Pro Tem
Toby T. Koon



COUNCIL MEMBERS
Thomas J. "Tom" Anderson II
Barton Blair-Oles
William H. Goldfinch IV
Jean M. Truhler
Lucy A. White

May 22, 2013

U.S. Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

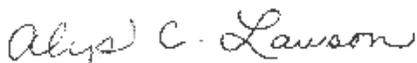
TO WHOM IT MAY CONCERN:

As Mayor for the City of Conway, I am writing to urge your support for the awarding of a \$30 million grant to fund an infrastructure project widening the shoulders of South Carolina Highway 22 which would bring it up to interstate highway standards.

South Carolina has one of the nation's highest unemployment rates; however, infrastructure funding for projects such as this will create much needed jobs. Furthermore, this project will prepare Highway 22 for future development within a region that currently reflects some of the lowest per capita income in our state.

Thank you for your efforts to make infrastructure investments a priority and any consideration you can give to funding this important infrastructure project.

Sincerely,


Alys C. Lawson, Mayor
City of Conway

ACL:vj.

221 Main Street • Post Office Box 1075
Conway, South Carolina 29528-1075
Telephone (813) 248-1760 • Fax (813) 248-1769
www.cityofconway.com

ADDENDUM 2B- Letter of Support



House of Representatives

State of South Carolina

Liston D. Barfield
District No. 58 – Horry County
P.O. Box 1734
Conway, SC 29528

503-A Bluff Building
Columbia, SC 29211

Tel. (803) 734-2968
Res. (803) 365-2045

Committees:
Invitations & Memorial Resolutions—Chairman
Ways and Means

May 21, 2013

U.S. Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

To Whom it May Concern:

Representative Liston D. Barfield joins in urging your support for the awarding of a \$30 million grant for infrastructure funding to widen the shoulders along Hwy. 22 which will bring it up to Interstate standards.

South Carolina has one of the nation's highest unemployment rates, however infrastructure funding for projects such as this will create much needed jobs. Furthermore, it will prepare Hwy. 22 for future development within a region that currently reflects some of the lowest per capita income in our state.

We thank you for your efforts in making infrastructure investments a priority and sincerely hope you will consider our request for funding of this important Infrastructure project.

Sincerely,

A handwritten signature in cursive script that reads "Liston D. Barfield".

Liston D. Barfield

ADDENDUM 2C- Letter of Support

HORRY COUNTY LEGISLATIVE DELEGATION
POST OFFICE BOX 1236
CONWAY, SOUTH CAROLINA 29528
PHONE (843) 915-5130
FAX (843) 915-6130

May 22, 2013

U.S. Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

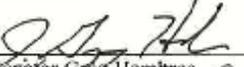
Members of the Horry County Legislative Delegation joins in urging your support for the awarding of a \$30 million grant for infrastructure funding to widen the shoulders along Hwy. 22 which will bring it up to Interstate standards.

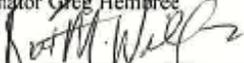
South Carolina has one of the nation's highest unemployment rates, however infrastructure funding for projects such as this will create much needed jobs. Furthermore, it will prepare Hwy. 22 for future development within a region that currently reflects some of the lowest per capita income in our state.

We thank you for your efforts in making infrastructure investments a priority and sincerely hope you will consider our request for funding of this important infrastructure project.

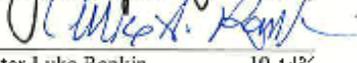
Sincerely,
HORRY COUNTY LEGISLATIVE DELEGATION

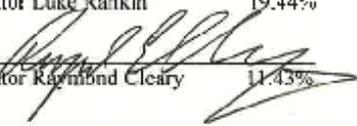

Representative Nelson Hardwick 6.79%
Chairman

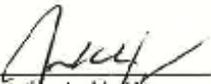

Senator Greg Hembree 17.85%


Senator Kent Williams 0.45%


Senator Vancey McGill 0.85%

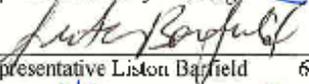

Senator Luke Rankin 19.44%

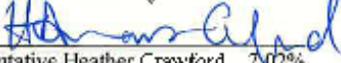

Senator Raymond Cleary 11.43%

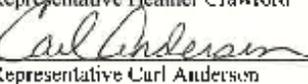

Representative Jackie Hayes 0.54%


Representative Mike Byhal 7.06%


Representative Wayne George 0.56%

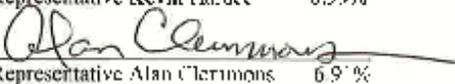

Representative Liston Barfield 6.76%


Representative Heather Crawford 7.02%


Representative Carl Anderson 0.52%


Representative Tracy Edge 6.85%


Representative Kevin Hardee 6.99%


Representative Alan Clemmons 6.9%

ADDENDUM 2D- Letter of Support

LUKE A. RANKIN
Governor

1000 North Main Street
Columbia, SC 29201
803.732.4000



1000 North Main Street
Columbia, SC 29201
803.732.4000

May 21, 2013

U.S. Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

The Myrtle Beach Area Chamber of Commerce (SC) representing more than 50,000 employees, joins in urging your support for the awarding of a \$30 million grant for infrastructure funding to widen the shoulders along Hwy. 22 which will bring it up to Interstate standards.

South Carolina has one of the nation's highest unemployment rates, however infrastructure funding for projects such as this will create much needed jobs. Furthermore, it will prepare Hwy. 22 for future development within a region that currently reflects some of the lowest per capita income in our state.

We thank you for your efforts in making infrastructure investments a priority and sincerely hope you will consider our request for funding of this important Infrastructure project.

Sincerely,

A handwritten signature in black ink that reads "Luke A. Rankin".

Luke A. Rankin

ADDENDUM 2E-Letter of Support

KENT M. WILLIAMS
SERVING MARION, DILLON, FLORENCE,
VARDOLAKIS AND HORRY COUNTIES
SENATORIAL DISTRICT 30

COMMITTEES:
AGRICULTURE AND NATURAL RESOURCES
CORRECTIONS AND PENOLOGY
FINANCE
GOLF AND FORESTRY
LABOR, DEVELOPMENT AND VETERANS



COLUMBIA ADDRESS:
806 CRESSITT LEGISLATIVE BLDG
POST OFFICE BOX 142
COLUMBIA, SC 29202
TEL: (803) 212-4000
FAX: (803) 212-6200
EMAIL: KEN.WILLIAMS@SCOFFICERS.COM

HOME ADDRESS:
POST OFFICE BOX 4814
MARION, SC 29571
TELEPHONE: (843) 423-8254

May 20, 2013

U.S. Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

To Whom It May Concern:

I urge you to support the awarding of a \$50 million grant for infrastructure funding to widen the shoulders along Highway 22 in Horry County. This grant will bring this highway up to Interstate standards. A heavily traveled route for tourists heading to enjoy the beaches, shopping and entertainment in Horry County. This funding will allow for continued development along Highway 22 and provide additional safer route for residents and visitors to our state.

South Carolina has one of the nation's highest unemployment rates, funding for infrastructure projects will create much needed jobs in Horry County and the surrounding counties I represent in South Carolina State Senate District 30. Furthermore, it will prepare Highway 22 for future development within a region that currently reflects some of the lowest per capita income in our state.

Thank you for your efforts in making infrastructure investments a priority. Your strong consideration for funding of this important Infrastructure project would be much appreciated.

Sincerely,

A handwritten signature in black ink, appearing to read "Kent Williams".

Kent Williams
SC Senate District 30
Serving Marion, Dillon, Florence,
Vardolakis and Horry Counties

ADDENDUM 2F- Letter of Support



May 20, 2013

U.S. Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

The Myrtle Beach Area Convention and Visitors Bureau (SC) hosting more than 14,000,000 tourists annually, joins in urging your support for the awarding of a \$30 million grant for infrastructure funding to widen the shoulders along Hwy. 22 which will bring it up to Interstate standards.

Meeting the transportation and infrastructure needs on the local level provides our community with the opportunity to achieve a sustainable economy and a higher quality of life. South Carolina has one of the nation's highest unemployment rates, however infrastructure funding for projects such as this will create much needed jobs. Furthermore, it will prepare Hwy. 22 for future development within a region that currently reflects some of the lowest per capita income in our state.

We thank you for your efforts in making infrastructure investments a priority and sincerely hope you will consider our request for funding of this important Infrastructure project.

Sincerely,

A handwritten signature in black ink that reads "Danna Lilly".

Danna Lilly
Director Myrtle Beach CVB

ADDENDUM 2G- Letter of Support

North Eastern Strategic Alliance
Post Office Box 100547 Florence, S.C.
843-661-4669 843-661-1293
info@nesasc.org
www.nesasc.org



May 22, 2013

U.S. Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

The North Eastern Strategic Alliance (NESASOUTH CAROLINA'S BUSINESS CORNER) urges your support of a \$30 million grant for infrastructure funding to widen the shoulders along Highway 22 which will bring it up to Interstate standards.

South Carolina has one of the nation's highest unemployment rates; however, infrastructure funding for projects such as this will create much needed jobs. Furthermore, it will prepare Highway 22 for future development within a region that currently reflects some of the lowest per capita income in our state.

We thank you for your efforts in making infrastructure investments a priority and sincerely hope you will consider the request for funding of this important infrastructure project.

Sincerely,

A handwritten signature in black ink that reads "J. Yancey McGill".

J. Yancey McGill
Chair, NESASOUTH CAROLINA'S BUSINESS CORNER Board
South Carolina State Senator

JYMcG/mal

ADDENDUM 2H- Letter of Support



NORTH MYRTLE BEACH CHAMBER OF COMMERCE Convention & Visitors Bureau

May 28, 2023

U.S. Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

The North Myrtle Beach Chamber of Commerce (SC) representing more than 1,000 members and thousands of employees joins other chambers, community organizations and local governments in urging your support for the awarding of a \$30 million grant for infrastructure funding to widen the shoulders along Highway 22, bringing it up to interstate standards.

Meeting the transportation and infrastructure needs at the local level provides a community the opportunity to achieve a diverse and sustainable economy and a strong quality of life.

This project would also aid in providing much needed jobs to the State of SC which has one of the nation's highest unemployment rates as well as serve as an investment for future development along this important corridor.

We support the U.S. Department of Transportation's efforts in making infrastructure investments a priority and sincerely hope you will approve our request for funding of this important infrastructure project.

Sincerely,

R. Marc Jordan, CCE, IOM
President & CEO

phone: 843-281-2662 fax: 843-280-2930 toll free: 877-332-2662 NorthMyrtleBeachChamber.com
1521 Highway 17 South • North Myrtle Beach, SC 29582

ADDENDUM 2I- Letter of Support

Raymond E. Cleary III
South Carolina Senate District 37
Georgetown, Charleston, and
Horry Counties
Committees:
Finance
Education
Medical Affairs
Transportation
Infrastructure
General



Senate Office Address:
Suite 610A Grassette Office Building
Post Office Box 142
Columbia, South Carolina 29202
Telephone: (803) 212-6040
Fax: (803) 212-6238
Email: raycleary@uscstate.gov

Home Office Address:
2677 Marcus Lane
Murrells Inlet, South Carolina 29576
Telephone: (843) 867-2331
Fax: (843) 853-0669

May 23, 2013

U.S. Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

To Whom It May Concern:

It is my pleasure to submit this letter of support for the awarding of a \$30 million grant for infrastructure funding to widen the shoulders along Highway 22, which will bring it up to interstate standards. Here in South Carolina we have one of the nation's highest unemployment rates, and infrastructure funding for projects such as this will create much needed jobs. It will, also, prepare Highway 22 for future development within a region that currently reflects some of the lowest per capita income in our state.

It is my hope that you will consider our request for this much needed project. Please feel free to give me a call if I may be of further assistance.

With kind regards, I am

Sincerely,

A handwritten signature in cursive script, appearing to read "Raymond E. Cleary III".

Senator Raymond E. Cleary, III

REC/dc

ADDENDUM 2J- Letter of Support



May 20, 2013

U.S. Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

The Myrtle Beach Area Chamber of Commerce (SC) representing more than 50,000 employees, joins in urging your support for the awarding of a \$30 million grant for infrastructure funding to widen the shoulders along Hwy. 22 which will bring it up to Interstate standards.

South Carolina has one of the nation's highest unemployment rates, however infrastructure funding for projects such as this will create much needed jobs. Furthermore, it will prepare Hwy. 22 for future development within a region that currently reflects some of the lowest per capita income in our state.

We thank you for your efforts in making infrastructure investments a priority and sincerely hope you will consider our request for funding of this important Infrastructure project.

Sincerely,

A handwritten signature in black ink that reads "Brad Dean".

Brad Dean
President/CEO

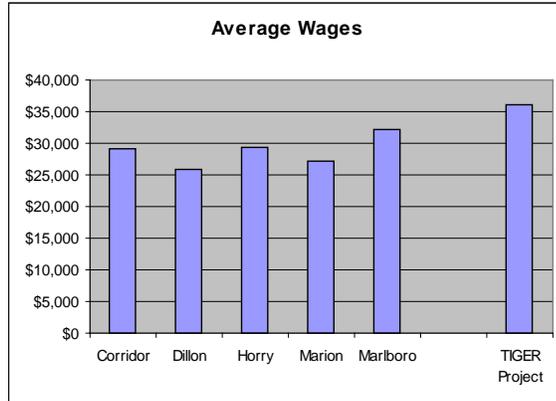
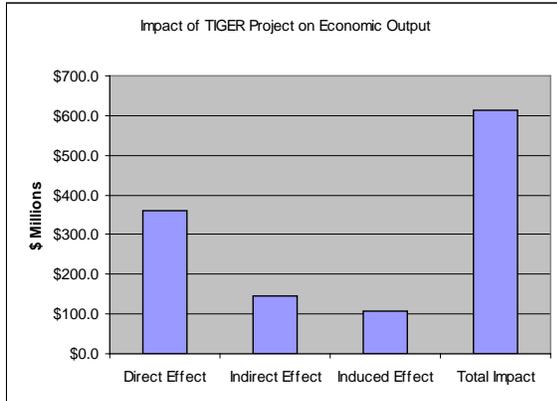
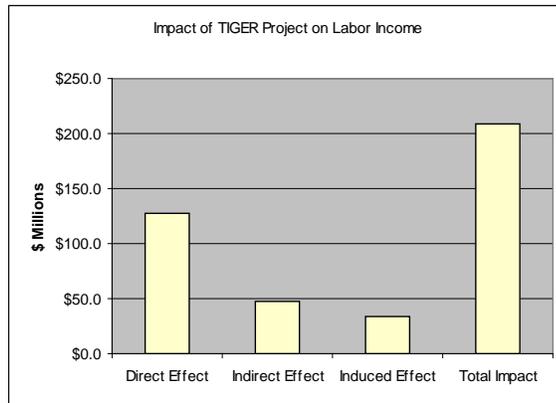
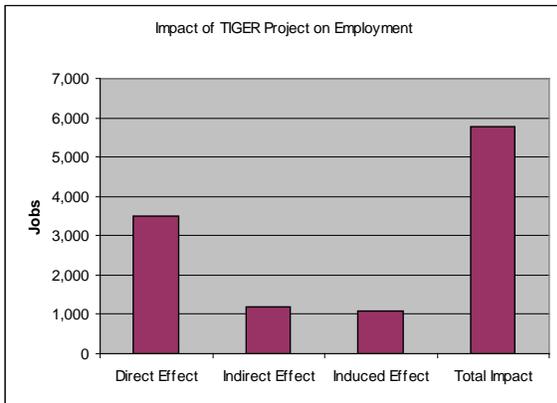
ADDENDUM 3- Population & Visitors Per Day

ADDENDUM 3 - Population & Visitors Per Day				
2010	Resident Population	# Vis Days/Year	Avg# Visitors/Year	Virtual Population
Abbeville	25,421	68,128	187	25,608
Aiken	160,106	979,849	2,685	162,791
Allendale	9,988	30,164	83	10,071
Anderson	189,355	1,272,466	3,486	192,841
Bamberg	15,763	13,714	38	15,801
Barnwell	22,621	32,348	89	22,710
Beaufort	162,233	14,185,654	38,865	201,098
Berkeley	177,845	617,122	1,691	179,536
Calhoun	15,181	1,366	4	15,185
Charleston	350,208	15,720,837	43,071	393,279
Cherokee	55,342	338,693	928	56,270
Chester	33,140	112,676	309	33,449
Chesterfield	46,738	323,101	899	47,637
Clarendon	34,971	193,390	530	35,501
Colleton	38,892	396,698	1,087	39,979
Darlington	68,683	464,984	1,274	69,957
Dillon	32,062	581,284	1,593	33,655
Dorchester	136,555	214,391	587	137,142
Edgefield	26,978	464,831	1,274	28,252
Fairfield	23,956	44,319	121	24,077
Florence	136,879	1,108,720	3,038	139,971
Georgetown	60,158	1,266,928	3,471	63,629
Greenville	451,219	5,319,872	14,575	465,794
Greenwood	69,661	411,000	1,126	70,787
Hampton	21,090	79,931	219	21,309
Horry	269,291	67,000,000	183,561	452,852
Jasper	24,777	65,164	179	24,956
Kershaw	61,695	260,721	714	62,709
Lancaster	76,652	183,965	504	77,156
Laurens	66,539	556,266	1,524	68,063
Lee	19,222	20,375	56	19,278
Lexington	262,388	648,098	1,776	264,164
McCormick	10,233	22,206	61	10,294
Marion	33,062	585,197	1,603	34,665
Marlboro	28,933	118,625	325	29,258
Newberry	37,508	115,900	318	37,826
Oconee	74,275	548,892	1,504	75,779
Orangeburg	92,494	1,534,388	4,204	96,698
Pickens	119,226	253,951	696	119,922
Richland	384,507	6,940,351	19,015	403,522
Saluda	19,875	20,273	56	19,931
Spartanburg	284,307	1,447,123	3,965	288,272
Sumter	107,456	684,495	1,875	109,331
Union	28,961	21,142	58	29,019
Williamsburg	34,423	17,212	47	34,470
York	226,073	967,592	2,651	228,724
		126,254,402		

Source: 2010 US Census for Population, D K Shifflet & Assoc for Horry County Data, and Myrtle Beach Area Chamber of Commerce for remaining counties.

ADDENDUM 4 – Impact Charts

The following Impact Charts were prepared from information contained in the Coastal Carolina University’s BB&T Center for Economic and Community Development Study.



ADDENDUM 5 Environmentally Related Actions

As part of the EIS process for this project it was found to be in compliance with the following federal regulations:

- The *Clean Air Act* – All the counties within the I-73 project area are in attainment. This is documented in each EIS.
 - I-73 South is in Ch. 3, pages 3-116 through 3-125, I-73 South EIS, (http://www.i73insc.com/download/impactstudy_southern/Ch.3-Part-5.pdf).
 - I-73 North is in Chapter 3, pages 3-124 through 3-137, (<http://www.i73insc.com/download/finalimpactstatement-north/Ch.3-North-part-4.pdf>)
- *Section 4(f) of the Department of Transportation Act* - The approved Section 4(f) evaluation for:
 - I-73 South is in Appendix E, *Final Section 4(f) Evaluation*, I-73 South EIS, (http://www.i73insc.com/download/impactstudy_southern/Appendix-E-Part-1.pdf).
 - I-73 North is in the *Record of Decision* as Attachment A, (<http://www.i73insc.com/download/RecordofDecision.pdf>)
- *Section 106 of the Historic Preservation Act* - The approval for the project under Section 106 is:
 - In a letter from the South Carolina Department of Archives and History, dated September 24, 2007, and contained as page 5 of Part 1 of Appendix A of the I-73 South EIS (http://www.i73insc.com/download/impactstudy_southern/Agency-Letters-Appendix-Part-1.pdf).
 - Provided by a letter from the Advisory Council on Historic Preservation, dated July 31, 2008, and contained as page 1 of Part 1 of Appendix A of the I-73 North EIS (<http://www.i73insc.com/download/finalimpactstatement-north/Appendix-A-North-part-1.pdf>).
- *Section 7 of the Endangered Species Act* – Surveys and coordination were performed and Biological Assessments for each project were approved:
 - I-73 South was approved in a letter from the U.S. Fish and Wildlife Service (USFWS) dated October 16, 2007, found on page 2 in Appendix A of the I-73 South EIS (http://www.i73insc.com/download/impactstudy_southern/Agency-Letters-Appendix-Part-1.pdf). Coordination with the National Marine Fisheries Service (NMFS) was addressed via the Recovery Plan for the Shortnose Sturgeon and an agreement between SCDOT and the NMFS on the timing of construction activities (refer to page 3-197 of the I-73 South FEIS, http://www.i73insc.com/download/impactstudy_southern/Chapter-3-Part-9.pdf).
 - I-73 North was approved in a letter from the USFWS, dated August 6, 2008, found in Attachment D of the Record of Decision for I-73 North (<http://www.i73insc.com/download/RecordofDecision.pdf>), and a letter from the NMFS, dated September 11, 2007, pages 3 and 4 of Appendix A, Part 2 (<http://www.i73insc.com/download/finalimpactstatement-north/Appendix-A-North-part-2.pdf>).
- The *Fishery Conservation and Management Act* – This was addressed for both projects:
 - I-73 South - it was addressed in Chapter 3, pages 3-201 and 3-202 (http://www.i73insc.com/download/impactstudy_southern/Chapter-3-Part-9.pdf)http://www.i73insc.com/download/impactstudy_southern/Chapter-3-Part-9.pdf).

- I-73 North - it was addressed in Chapter 3, pages 3-226 and 3-227
(<http://www.i73insc.com/download/finalimpactstatement-north/Chapter-3-North-part-6.pdf>).
- The *Bald and Golden Eagle Protection Act* – This was addressed for both projects:
 - I-73 South -it was addressed in Chapter 3, pages 3-197 and 3-198
(http://www.i73insc.com/download/impactstudy_southern/Chapter-3-Part-9.pdf).
 - I-73 North it was addressed in Chapter 3, pages 3-222 and 3-223
(<http://www.i73insc.com/download/finalimpactstatement-north/Chapter-3-North-part-6.pdf>).
- The *Migratory Bird Treaty Act*- This was addressed for both projects:
 - I-73 South - it was addressed in Chapter 3, pages 3-198 through 3-201
(http://www.i73insc.com/download/impactstudy_southern/Chapter-3-Part-9.pdf).
 - I-73 North - it was addressed in Chapter 3, pages 3-223 through 3-226(<http://www.i73insc.com/download/finalimpactstatement-north/Chapter-3-North-part-6.pdf>).

ADDENDUM 6 - Resolution from SC General Assembly

South Carolina General Assembly
118th Session, 2009-2010

Download This Bill in Microsoft Word format

~~Indicates Matter Stricken~~

Indicates New Matter

H. 4058

STATUS INFORMATION

Concurrent Resolution

Sponsors: Rep. Clemmons

Document Path: I:\council\bill\swb\5923cm09.docx

Introduced in the House on May 14, 2009

Introduced in the Senate on May 19, 2009

Adopted by the General Assembly on May 20, 2009

Summary: Department of Transportation

HISTORY OF LEGISLATIVE ACTIONS

Date	Body	Action Description with journal page number
5/14/2009	House	Introduced HJ-58
5/14/2009	House	Referred to Committee on Invitations and Memorial Resolutions HJ-58
5/14/2009	House	Committee report: Favorable Invitations and Memorial Resolutions HJ-92
5/19/2009	House	Adopted, sent to Senate HJ-48
5/19/2009	Senate	Introduced, placed on calendar without reference SJ-11
5/20/2009	Senate	Adopted, returned to House with concurrence SJ-79

View the latest legislative information at the LPITS web site

VERSIONS OF THIS BILL

5/14/2009
5/14/2009-A
5/19/2009

(Text matches printed bills. Document has been reformatted to meet World Wide Web specifications.)

INTRODUCED

May 19, 2009

H. 4058

Introduced by Rep. Clemmons

S. Printed 5/19/09--S.

Read the first time May 19, 2009.

A CONCURRENT RESOLUTION

TO MEMORIALIZE THE SECRETARY OF THE UNITED STATES DEPARTMENT OF TRANSPORTATION, THE HONORABLE RAY H. LAHOOD, TO SET ASIDE THE FUNDS NECESSARY TO ACQUIRE THE RIGHT OF WAY AND BUILD THE APPROXIMATELY SIX-MILE PORTION OF INTERSTATE 73 FROM "THE INTERSECTION OF HOPE" AT ITS INTERSECTION WITH INTERSTATE 95 TO ITS INTERSECTION WITH UNITED STATES HIGHWAY 501 WHICH CONSTITUTES THE FIRST PHASE OF CONSTRUCTION OF INTERSTATE 73 IN SOUTH CAROLINA, AND SET ASIDE ADDITIONAL FUNDS TO COMPLETE THE REMAINING PORTION OF THIS INTERSTATE HIGHWAY AS THESE FUNDS BECOME AVAILABLE.

Whereas, Interstate 73 would provide great economic benefits within the North Eastern Strategic Alliance (NESAs) region and the State of South Carolina; and

Whereas, in 1991, as part of the Intermodal Surface Transportation Efficiency Act (ISTEA), the United States Congress recognized the Interstate 73 corridor as a Corridor of National and Regional Significance and the fifth highest national priority project; and

Whereas, Interstate 73 would provide an additional evacuation route, ultimately saving lives; and

Whereas, Interstate 73 would stimulate tourism from the eastern portion of the United States; and

Whereas, Interstate 73 would stimulate economic development throughout the NESAs region; and

Whereas, the annual construction impact on the regional economy is estimated at \$818.9 million. The project will also have an additional annual impact of \$277.8 million on household income; and

Whereas, Interstate 73 will provide opportunities for the creation of thousands of jobs and improve the overall quality of life of the citizens of the NESAs region; and

Whereas, the NESAs region includes counties with some of the highest unemployment rates in the nation; and

Whereas, Interstate 73 would benefit both urban centers of population and the regions bordering its corridor by creating a direct route for transshipping American and foreign made goods from the warm water ports of Charleston, Georgetown, Wilmington, and Savannah to the Cleveland and Detroit region and beyond to Canada. Now, therefore,

Be it resolved by the House of Representatives, the Senate concurring:

That the members of the General Assembly of South Carolina, by this resolution, memorialize the United States Secretary of Transportation, The Honorable Ray H. LaHood, to set aside the funds necessary for the State of South Carolina to acquire the right of way and build the approximately six-mile portion of Interstate 73 beginning with, and including the "Intersection of Hope" at Interstate 95 to its intersection with United States Highway 501, and set aside additional funds to complete the remaining portion of this interstate highway as these funds become available.

Be it further resolved that copies of this resolution be forwarded to the United States Secretary of Transportation, The Honorable Ray H. LaHood, and each member of the South Carolina Congressional delegation.

---XX---

This web page was last updated on May 21, 2009 at 9:41 AM

ADDENDUM 7 – Map 1

Map 1 - Location Map showing the selected alternative for I-73 from I-95 to the Myrtle Beach Area – existing SC 22 is shown in blue at the bottom of the map.



SECTION A
The final environmental Impact Statement (EIS) for the northern segment was signed by SCDOT & FHWA in August 2008; the record of decision was issued by the USDOT shortly thereafter. This segment is approximately 27 miles and connects Highway 34 to I-73/74 in North Carolina. NCDOT cooperated with this study and has built various portions of I-73 already.



SECTION B
This section includes the interchange on I-95, approximately 11 miles of connecting interstate. Connections extend southward (to U.S. Highway 501, near Latta, SC) and northward (to SC 34). Approved by SCDOT April 2011.



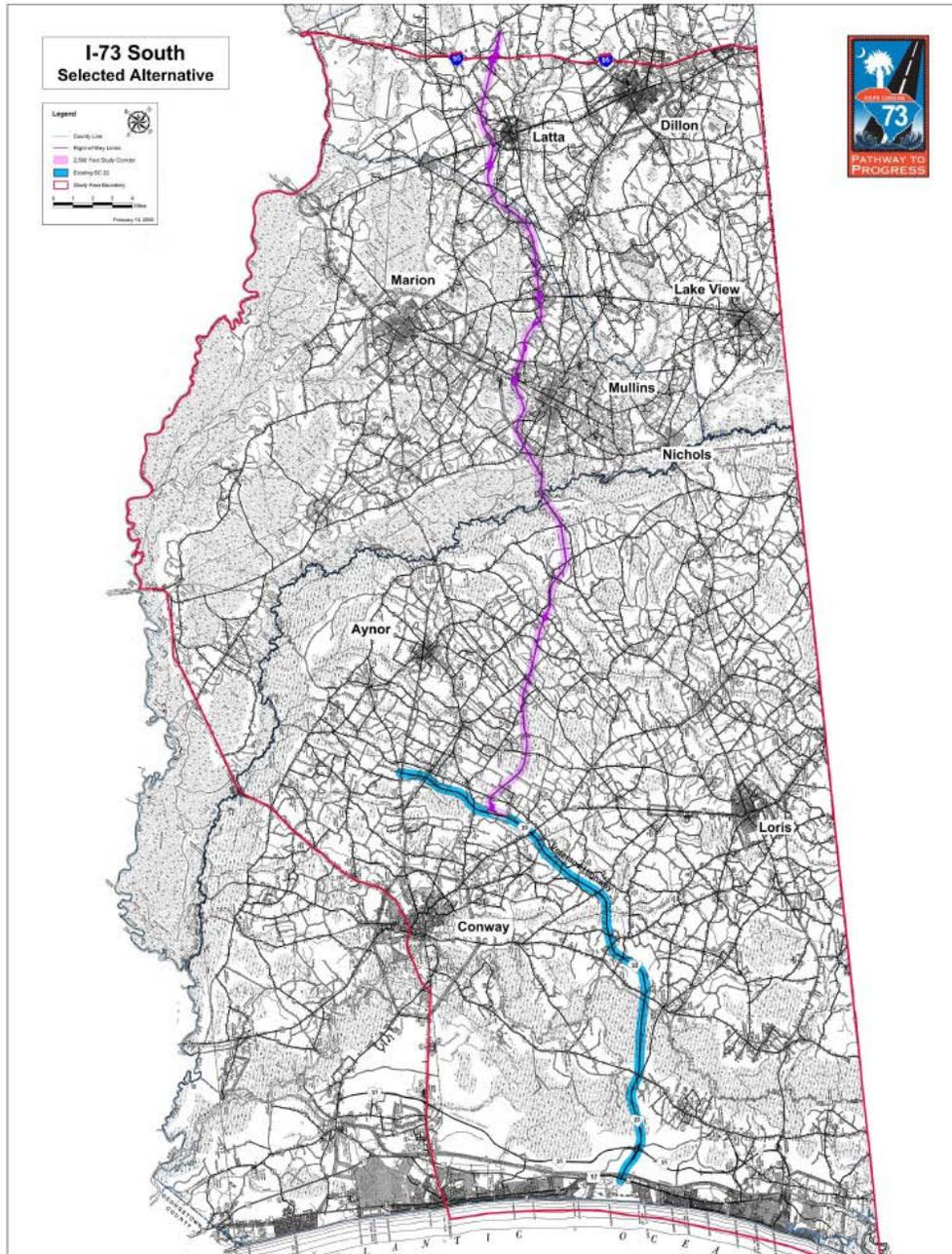
SECTION C
The final environmental Impact Statement (EIS) for the southern segment was signed by SCDOT & FHWA in November 2007 and the record of decision was issued by the USDOT in February 2008. This segment is approximately 31.5 miles and connects US Highway 501 to Highway 22 (aka Veteran's Highway) near Conway, SC.



SECTION D
Completed. This segment is approximately 19 miles and was built in 2001 as part of the RIDE I program, using local tax revenues and the State Infrastructure Bank.

ADDENDUM 8 – Map 2

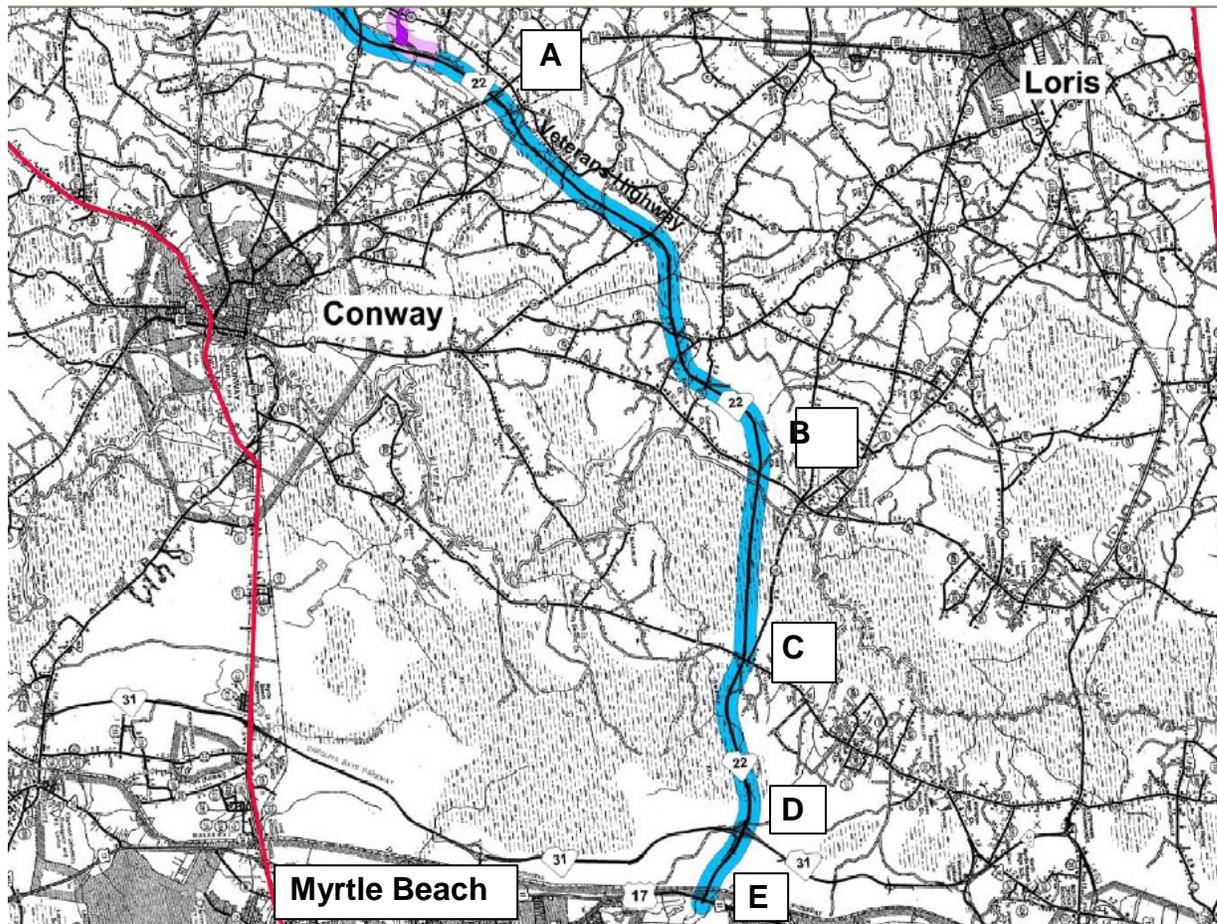
Map 2 - Overall Location Map showing the selected alternative for I-73 from I-95 to the Myrtle Beach Area – existing SC 22 is shown in blue at the bottom of the map.



*TIGER II Grant Application – SC Hwy 22 Shoulder Widening
Horry County, South Carolina*

ADDENDUM 9 – Map 3

Map 3 – Close-up map showing existing SC 22 (in blue) between US 17 and the proposed I-73 alignment (in pink)



Existing Interchanges along SC 22 (future I-73) as shown on Map 2:

- A) US Highway 701
- B) SC Highway 905
- C) SC Highway 90
- D) SC Highway 31 (Carolina Bays Parkway – 6 Lane, Limited Access Facility)
- E) US Highway 17

*TIGER II Grant Application – SC Hwy 22 Shoulder Widening
Horry County, South Carolina*

**The Economic Impacts of I-73 Construction:
A Focus on Job Creation**

January 2009

Dr. Donald J. Schunk
Research Economist
BB&T Center for Economic and Community Development
Coastal Carolina University

dschank@ccastal.edu

**The Economic Impacts of I-73 Construction:
A Focus on Job Creation**

January 2009

Dr. Donald L. Schunk, Research Economist
BB&T Center for Economic and Community Development, Coastal Carolina University

Interstate 73 in South Carolina has the potential to ultimately play a critical role in economic development for the Myrtle Beach area, the Pee Dee Region, and for the entire state. Upon completion, I-73 will play a key role in attracting additional tourists to the Grand Strand and attracting additional industry throughout the I-73 corridor. The investment in I-73 will be returned in the form of lower business costs, greater productivity, reduced congestion and shortened travel times. These direct benefits of I-73 will work to benefit existing businesses throughout the region, make the region more attractive to new industry, enable the region to attract new visitors to the area, and increase the size of the region's labor and product markets.

Once in place, I-73 will benefit the region and state by supporting additional jobs and household income. The completed I-73 will not solve all of the region's economic challenges by itself; rather, I-73 will be one important piece of the economic development puzzle.

However, in the near term, the actual construction of I-73 will certainly provide a much needed boost to the regional and state economies. Specifically, I-73 construction will generate a substantial number of jobs at a time when the region and state are experiencing sharp job losses and rapidly rising unemployment.

The primary purpose of this report is to identify the immediate stimulative effects of I-73 construction. Yet, it is important to recognize throughout this study that the short-term stimulus effects are only the first wave of benefits that can accrue to the region. The return to investment in I-73 will continue to grow as the completed I-73 plays an important role in enhancing economic development and tourism in South Carolina.

In terms of providing an immediate economic stimulus, the construction of I-73 in South Carolina can be expected to generate the following economic benefits for the Myrtle Beach area, the Pee Dee Region, and for South Carolina:

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- The direct support of a total of 23,400 positions in the construction sector. These positions are spread across the entire length of the construction phase. *If we assume a five-year construction schedule, then at any single point in time, I-73 construction will be supporting 4,680 new construction sector jobs.*
- The direct construction spending will generate \$170.7 million in new household income annually for workers in the construction sector.
- Beyond the 4,680 new construction jobs, an additional 3,040 jobs will be generated throughout the regional economy due to economic ripple effects.
- Taken together, a total of 7,720 jobs will be created and will last throughout the I-73 construction phase.
- For context, during November 2008, the South Carolina I-73 corridor counties of Dillon, Marion, Marlboro and Horry had a combined unemployment rate of 10.6 percent, with 17,915 residents currently unemployed and many additional residents either underemployed or out of the labor force. *The construction of I-73 would boost employment for the region, lower the area's unemployment rate, reduce the strain on the state's unemployment insurance fund, and generate additional tax revenues for state and local governments.*

Understanding Economic Impacts

The construction phase of the South Carolina portion of Interstate 73 will entail substantial economic benefits for the regional and state economy. During the construction phase, in addition to the increased activity within the construction sector itself, additional economic benefits will ripple throughout the regional economy due to economic linkages and multiplier effects. In this case, firms in the construction sector will purchase goods and services as inputs from other local businesses. Additionally, workers in the construction sector will see a boost to incomes that can then be spent at area businesses, setting off additional ripple effects.

In standard economic impact analyses, three types of economic impacts can be identified: *direct, indirect and induced* effects. The direct effect of an activity represents the initial change in economic activity. In this case, the direct effects are the initial changes in the final demand for the output of the construction sector.

The indirect effects refer to all of the additional economic impacts that arise from inter-industry linkages between local firms. For example, as the construction sector purchases inputs from other local businesses – and these suppliers in turn purchase inputs from additional businesses – the input-output relationships between different firms and

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industries generates indirect effects on businesses in virtually every sector of the local economy.

The induced effects represent all of the additional economic benefits that are driven by the local spending of household income. The increased activity in the construction sector will boost incomes for construction workers. Some of this income will be spent locally on, for example, retail trade, health care, entertainment, housing, and so on. As firms in these industries see a boost to their sales, the employees of these firms will also see additional income that can be spent locally.

The successive rounds of indirect and induced impacts do not go on forever. For example, a portion of an increase in household income will be saved, used to pay taxes, or spent outside the local economy. Money that leaks out of the local area in this way cannot be used to support additional local activity. Therefore, the indirect and induced impacts become smaller and smaller over time until eventually the additional activity in each round goes to zero. Because of these leakages, it is useful to consider the notion of an economic multiplier.

An economic multiplier can be used to determine what the total impact (direct plus indirect plus induced) will be given a certain value for the direct impact. For example, if \$100 of direct spending within a particular sector ultimately results in a total spending impact of \$150, it can be said that the output multiplier is 1.5 – the \$100 in direct spending times the multiplier of 1.5 equals \$150 in total spending or total output. The value of this multiplier varies from sector to sector, and is determined largely by the size of the local supplier network.

The above discussion implies that economic impact analysis essentially involves: 1) determining the appropriate levels of direct business activity, and 2) determining and applying the correct values for economic multipliers to estimate the total impact on output, employment, and labor income.

The direct effects of the construction phase of I-73 include total expenditures of \$2.4 billion. To estimate the employment and income associated with this direct construction spending, as well as the indirect and induced effects, a detailed structural model of the South Carolina and regional economies was utilized. This model is known as an input-output model. An input-output model contains specific information on economic linkages between different industries. Therefore, the input-output model for the four-county region that includes Dillon, Horry, Marion and Marlboro Counties is equipped to quantify, for example, the pattern of local input purchases by the local construction sector. This model can be used to estimate the full range of indirect and induced impacts described previously. This report utilizes the input-output modeling software *IMPLAN*.

This model can be used in conjunction with the direct construction spending data to estimate the economic impacts in terms of three distinct measures: economic output,

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employment and labor income. Economic output can be thought of as an aggregate measure of total spending resulting from the initial direct expenditure. It includes all spending by consumers and businesses on both goods and services. It is therefore a broad, all-inclusive measure of the impact on total economic activity. Employment measures the impact on jobs in terms of the total number of positions. Labor income represents total employee compensation, including wages, salaries and benefits.

Current Labor Market Conditions Along the I-73 Corridor

The I-73 corridor in South Carolina consists of four counties: Dillon, Marion, Marlboro and Horry. Despite their geographical proximity to each other, these counties differ greatly in terms of economic structure and overall economic conditions. Horry County is home to Myrtle Beach, and sees its economy largely dominated by tourism related industry and various service sector activities. Meanwhile, the more rural counties of Dillon, Marlboro, and Marion continue to be largely dominated by manufacturing even after years of job losses. These differing economic structures are accompanied by sharp differences in terms of average wages, per capita income, tax bases, and more.

However, for the purpose of this report and its focus on short-term job creation, these four counties are similar in that they are each sharply experiencing the effects of the current recession. The current cyclical downturn has caused the four-county region's unemployment rate to rise rapidly since the middle of 2008, as shown in Figure 1. However, it is also important to note that the region's unemployment rate is consistently higher than the national average, even during times of economic expansion. In this sense, this region suffers not only from rising unemployment due to the current recession, but also from larger and longer lasting problems with structural unemployment.

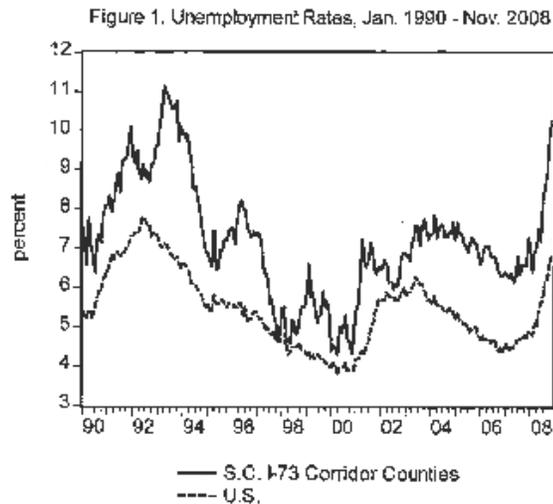


Table 1 provides a snapshot of recent labor market conditions in the four S.C. I-73 counties. Included in this table are the unemployment rates for the four counties, South Carolina, and the United States as of November 2008. At the time, unemployment rates across the region ranged from 9.5 percent in Horry County to a high of 17.1 percent in Marion County. In total, there were 17,915 unemployed residents in the four counties. This represented a 58 percent increase in the number unemployed over the last twelve months.

	Dillon	Horry	Marion	Marlboro	S.C.	U.S.
Unemployment Rate, Nov 2008	12.0%	9.5%	17.1%	14.2%	8.4%	7.2%
Labor Force Participation Rate, 2007	57.3%	64.9%	49.0%	52.4%	63.4%	66.0%

However, even these unemployment statistics do not reveal the full depth of the labor market problems across the region. Table 1 also provides 2007 labor force participation rates for these areas. These figures represent the fraction of the population aged 16 years and older that is either working or actively looking for work. Horry County maintains a

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relatively high labor force participation rate. However, the remaining I-73 corridor counties have considerably lower rates of labor force attachment. In Marion County, for example, only 49 percent of the population aged 16 and older is working or actively looking for work. And of course, of those that are in the labor force, more than 17 percent are currently unemployed.

These labor market indicators for the South Carolina I-73 corridor counties speak dramatically to the need for job creation throughout the region, both in the short-term to counteract the cyclical rise in joblessness, but also for the longer-term to reverse years of persistently high rates of structural unemployment.

Estimated Impacts of I-73 Construction

For the purpose of this study, the total estimated cost of construction for South Carolina's section of the proposed I-73 is \$2.4 billion. Of course, with a project of this magnitude, this construction cost will be spread over a period of several years. In order to provide context for the economic impacts of this construction, it is useful to consider the average annual impacts over the course of the construction phase. For this purpose, we will assume that I-73 will take a total of five years to construct, and that the total cost will be spread evenly over those five years.

In this case, spending on I-73 construction is assumed to total \$480 million annually over five years. This expenditure represents a direct boost to the output of the regional construction industry and will support jobs and income for workers in the construction sector. As shown in Table 2, the annual construction expenditure can be expected to support a total of 4,680 jobs each year during the five-year construction phase. The labor income associated with these jobs is estimated to be \$170.7 million annually.

Table 2. Annual Direct Impacts of I-73 Construction

Economic Output	\$480 million
Employment	4,680 jobs
Income	\$170.7 million

The \$480 million annually in direct spending will lead to additional ripple effects throughout the regional and state economies. Again, these ripple effects occur as the construction sector purchases inputs from other local industries (indirect effects) and as the construction workers themselves spend their newly generated income at local businesses (induced effects). To estimate the additional jobs created via these ripple effects, we first need to estimate the magnitude in dollars of the indirect and induced

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expenditure flows. Given estimates of the indirect and induced spending, we can estimate the number of jobs that this spending would support.

Table 3 provides estimates of the direct, indirect and induced spending associated with I-73 construction. These represent the estimated impacts on regional economic output. The \$480 million annually in direct construction activity will generate an additional \$195.9 million in indirect activity and \$143.0 million in induced activity. It is important to recognize that these ripple effects spread far beyond the construction sector. For example, the effects include the increased activity for manufacturing, retail trade, financial services, a wide variety of service sector businesses, and others as construction sector firms and workers spend their increased income on input purchases and household expenditures.

Direct	\$480.0 million
Indirect	\$195.9 million
Induced	\$143.0 million
Total	\$818.9 million

In the context of a deepening recession in early 2009 with widespread job losses and rising unemployment, the employment impacts of I-73 construction are critical. These estimated employment effects are summarized in Table 4. Specifically, I-73 construction is expected to directly generate 4,683 jobs that will last throughout the construction phase of the project. The indirect economic activity is expected to generate another 1,569 jobs, while the induced employment effect is estimated at 1,466. In total, the construction of I-73 can be expected to generate 7,718 jobs that will be spread across the region and will also be spread across all sectors of the local economy.

Direct	4,683 jobs
Indirect	1,569 jobs
Induced	1,466 jobs
Total	7,718 jobs

The jobs supported by the construction of I-73 will also generate a substantial amount of household income for the region. On an annual basis, the direct construction effects will generate \$170.7 million in new household income. Another \$62.7 million in income is

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expected via indirect effects and \$44.4 million due to the induced effects. In total, the annual boost to regional household income is projected to be \$277.8 million. These income effects are summarized in Table 5.

Table 5. Annual I-73 Construction Impacts on Household Income

Direct	\$170.7 million
Indirect	\$62.7 million
Induced	\$44.4 million
Total	\$277.8 million

Over the entire construction phase, the \$2.4 billion I-73 project is expected to have a total economic impact of \$4.1 billion on the regional economy. A total of 38,590 positions will be supported with total household income of \$1.4 billion.¹

I-73 Construction Job Creation Impacts in Context

The construction of I-73 in South Carolina is expected to create 7,718 jobs directly in the construction sectors and also indirectly throughout all sectors of the regional economy. While it is impossible to accurately predict where these workers would come from, it is likely that the majority of these positions could be filled with local workers. As of November 2008, there were nearly 18,000 unemployed individuals in the four-county area. In addition to these, there are a substantial number of underemployed workers as well as qualified workers currently not in the labor force.

The creation of 7,718 new jobs would amount to a 4.6 percent increase in total regional employment.² Given the current economic downturn and the large number of available workers already in the region, there is the potential for a significant portion of these positions to be filled by local residents. If all of the new jobs were filled from the ranks of those currently unemployed, this would mark a 43 percent decrease in the number of unemployed individuals in the four-county region. If this were the case, the region's unemployment rate would fall from 10.6 percent to 6.1 percent based on the November 2008 labor force estimates.

¹ Here, the concept of a position can be thought of as a year's worth of employment. If the entire I-73 was constructed in one single year, the total employment impact would be 38,590 jobs. However, because it will be constructed over a period of five years, several of these 38,590 year-long 'positions' could be held by the same individual. In this sense, the 38,590 positions over the course of five years amount to 7,718 unique jobs that will last throughout the entire construction phase.

² This is based on the November 2008 regional employment estimate of 168,301 from the U.S. Bureau of Labor Statistics.

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The jobs that could potentially be created by the construction of I-73 would provide a strong boost to the local and state economies and would help offset the effects of the national recession, a recession that is taking a particularly sharp toll on the consumer-driven areas near Myrtle Beach as well as the manufacturing-intensive regions along the rural portions of the South Carolina I-73 corridor.

The Long-Term Benefits of Interstate 73

The construction of I-73 will generate a significant number of new jobs for the region. These jobs tied to the construction phase are especially valuable against the backdrop of the current recession. It is this near-term stimulus that underscores the urgency to begin I-73 construction. However, infrastructure spending should not be undertaken for the sole purpose of generating jobs in the short-term. Indeed, the most important benefits of infrastructure investments are the long-term payoffs that accrue once the project is complete.

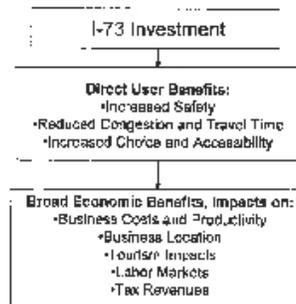
In the case of I-73 in South Carolina, the 7,718 jobs that stand to be created during the construction phase will serve as a bridge for the region's economy until the finished project itself begins to generate the long-lasting benefits that are the basis for its construction. That is, I-73 has the potential to generate significant and long-lasting benefits for the Grand Strand, the Pee Dee region, and South Carolina. It is this longer-term payoff of I-73 that has the potential to transform the region's economy.

While the primary focus of this research has been on the short-term stimulative effects of I-73 construction, the remainder of this report will provide a general overview of the potential long-term benefits of I-73 in South Carolina.⁵

In general, I-73 will provide important benefits directly to its end-users, including both households and businesses. For example, the completed I-73 will provide increased safety, reduced congestion, travel times, and costs, as well as greater transportation accessibility. These direct benefits for the users of I-73 will in turn support a variety of identifiable broad economic benefits. These broad, longer-term economic benefits include positive impacts on business costs and productivity, business location, tourism, labor markets, and state and local tax revenues. Figure 2 illustrates the general relationship between investment in I-73, the direct end-user benefits, and these broader economic benefits.

⁵ Quantifying these long-term benefits is beyond the scope of the current study. Future research into the specific long-term impacts of I-73 is expected to produce estimates of potential job and income creation, as well as the possible impacts on other factors such as business formation, consumer spending, and tax revenues.

Figure 2. Long-Term Impacts of I-73



The reduced congestion and travel time accompanying I-73 will work to lower the costs of business in the region and boost business productivity. This will have the effect of benefiting existing business in the region as well as making the region more attractive to new industry. Long-term business growth in a region is affected by many factors, including the size of the region's product and labor markets, the relative cost of doing business in the region, and the region's proximity or access to raw materials and other inputs. Investing in I-73 can have a positive impact on all of these factors. In addition, the presence of Interstate 73 may expand opportunities for multi-modal connections, including road/rail/sea/air connections for either passenger travel or freight shipments that can further complement economic development.

Though difficult to quantify, it is generally agreed that providing adequate transportation infrastructure is among the most critical aspects of an economic development strategy. Given the persistent problems across the region in terms of long-term structural unemployment, this potential boost to regional economic development would be critical to reversing decades of sub-par economic performance.

I-73 will be an asset to industrial location throughout the region. In the more rural areas along the I-73 corridor, these economic development effects will be critical in that they will bring jobs to areas that suffer from persistently high unemployment as well as very low rates of labor force participation. Meanwhile, closer to Myrtle Beach, these economic development effects will have the primary benefit of diversifying the Grand Strand's economy. That is, while the immediate Myrtle Beach area does not experience the same structural unemployment and labor force problems as the rural areas along the I-73 corridor, the Myrtle Beach area would benefit from a more diverse economy. Greater

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economic diversity around Myrtle Beach would help insulate the economy from future economic downturns, and would also have the potential to contribute to higher average wages and increased per capita income.

The reduction in congestion and travel times will also have a positive impact on tourism in the Myrtle Beach area. Reduced travel times will help Myrtle Beach draw more visitors from its existing origination markets, and will also help the area reach further into additional and previously untapped markets for new visitors. I-73 will help meet the needs of both current and future tourism levels along the Grand Strand. Tourism is the largest industry in South Carolina, and the Myrtle Beach area is the heart of the state's tourism sector. The industry is a critical piece of the state's economy in terms of generating jobs and income as well as state and local tax revenues.

In general, transportation investments allow individuals to benefit from increased employment options as their range of feasible commuting is expanded. Meanwhile, the supply of labor to area employers increases as more potential employees fall within their commuting range. As a result, I-73 will help expand the size of the regional labor market in northeastern South Carolina. There already exists a pattern of commuting between the Grand Strand and Pee Dee regions. I-73 will help make this commuting more efficient benefiting both workers and businesses.

Finally, the full range of economic development, tourism, and labor market enhancements arising from the completed I-73 will work to boost state and local tax collections. I-73 will provide a boost to state and local tax bases via gains in employment, income, spending, as well as positive impacts on property values along the interstate corridor.

Summary

The construction of I-73 in South Carolina will provide a substantial boost to the economies of the Grand Strand and Pee Dee regions, and for all of South Carolina. There are important immediate benefits associated with the construction of I-73. Specifically, during the construction phase, it is expected that a total of 7,718 jobs will be created across the four-county I-73 South Carolina corridor. These jobs will boost the region's economy at a time of rapidly rising unemployment and job losses.

While this immediate stimulative impact has been the focus of this report, it is important to recognize that in a sense, these short-term effects are but a critical byproduct of the project. Indeed, it is the potential longer-term effects on economic development and tourism that underscore the importance of I-73 for South Carolina.

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2. Executive Summary

The United States Congress designated Interstate 73/74 (I-73/74) as a corridor of national significance, connecting the Great Lakes region with the Carolinas' coast. In South Carolina, I-73 traverses the northeastern part of the state through Dillon, Marion, Marlboro, and Horry counties. Those four counties constitute the I-73 Corridor in South Carolina. This study, produced by Chumura Economics & Analytics,² evaluates the economic impact of the proposed I-73 in South Carolina, with the understanding that the majority of the economic impact will stay in the I-73 Corridor.

The I-73 Corridor of South Carolina is made up of four counties.

In this study, the I-73 Corridor region of South Carolina is defined as the following counties: Dillon, Marion, Marlboro, and Horry. The economy of the I-73 Corridor in South Carolina is impacted by two separate regions. Dillon, Marion, Marlboro, and the western part of Horry County are largely rural. In the eastern part of Horry County is Myrtle Beach, a major tourism destination in South Carolina.

Economic literature indicates that highway networks are beneficial to regional economies.

Economic literature on the relationship between highway and economic development generally concludes that the following economic benefits are associated with a highway network:

Travel efficiency. The construction of a highway can reduce travel time for business and residential areas. Trade, tourism, manufacturing, and construction sectors will benefit more from a new highway than other sectors such as health care or education.

Attraction of service businesses. Businesses such as hotels, gas stations, retail stores, and restaurants often cluster around interstate interchanges.

Strategic economic development. I-73 can potentially attract businesses such as distribution centers in rural parts of the I-73 Corridor. In addition, the proposed I-73 would likely accelerate the development of the proposed South Atlantic International Logistic Center (SAILC) in Western Marion County. The 3,000-acre site will be located eleven miles from I-95, and less than seven miles from the proposed I-73. When fully built, the SAILC will contain 15.0 million square feet of industrial, commercial, and manufacturing space, and will directly create 15,000 jobs in northeast South Carolina.³

Boost to tourism business. Several case studies have found that improved access to tourist attractions (in this case, Myrtle Beach) can provide significant increases in visitor volume and associated spending in the area.

² Chumura Economics & Analytics, headquartered in Richmond, Virginia, is an economic consulting firm specializing in applied economics. Since 1999, the firm's economic impact studies have centered on many different topics including highways, airports, tourism, and mixed use developments. Further details are available at www.chumuraecon.com.

³ Source: Summary of the Master Plan for the South Atlantic International Logistic Center (SAILC). Prepared for Marion County Economic Development Commission, by CH2MHILL, August 2009.



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CHMURA ECONOMICS & ANALYTICS

In the past four decades, the economy in the I-73 Corridor performed better than the state average in population and employment, largely due to rapid growth in Horry County. The other three counties lagged behind the state average.

From 1970 to 2009, the population in the I-73 Corridor region increased 2.1% per year, compared with statewide growth of 1.5%. The population in Horry County grew at 3.5% per year, while Dillon, Marion, and Marlboro counties experienced stagnant population growth.

From 1970 to 2008, the I-73 Corridor experienced 2.7% annual average employment growth, compared to 2.0% for the state. Employment in Horry County expanded 4.1% per year, while employment in the other three I-73 Corridor counties experienced limited growth or even decline.

In 2008, per capita income in all localities of the I-73 Corridor region was lower than the statewide average. However, per capita income growth in the past four decades has been keeping pace with the state average.

I-73 can provide \$120.8 million in annual cost savings for current businesses as a result of improved travel efficiency.

A new highway can reduce travel time for regional businesses, thus producing cost savings and improved productivity. On average, I-73 can provide a 28% time-savings for businesses and motorists using the road. The total cost savings for the region is estimated to reach \$120.8 million in 2030.

In 2030,⁴ I-73 can support 126 service businesses in the I-73 Corridor. Those service businesses can subsequently maintain 3,205 jobs in South Carolina with a total annual economic impact of \$401.9 million per year starting in 2030.

In 2030, it is estimated that I-73 can support approximately 126 businesses. This includes 42 motels/hotels, 36 gas stations, 26 fast food restaurants, and 20 full-service restaurants around the interchanges along I-73. The direct output of these businesses is estimated to be \$259.1 million in 2030 and each year thereafter with ripple effects of \$142.6 million. In terms of job creation, service businesses will directly employ 2,231 workers in the I-73 Corridor, with a ripple effect of an additional 974 jobs per year in South Carolina. Many of those ripple economic impacts will also occur in the I-73 Corridor.

The newly built I-73 may attract retail distribution centers, each adding 286 jobs and averaging \$31 million in economic impact in 2030.

I-73 may attract retail distribution centers. An average distribution center employs about 200 workers and would directly generate about \$19 million in direct economic output in 2030. Adding ripple effects, the total economic impact of a distribution center can reach \$31 million in output and 286 jobs in 2030.

⁴ The year 2030 is used in this report because it coincides with the year the traffic study forecast was performed.



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CHMURAECONOMICS&ANALYTICS

I-73 will greatly improve the access to the Myrtle Beach area, which can boost tourism by 7.1%. That translates into an additional \$909.9 million direct tourism spending in the Myrtle Beach area.

The \$908.9 million incremental tourism spending can generate ripple effects of \$518.7 million in South Carolina, reaching total impacts of \$1.4 billion per year in 2030. In addition, incremental tourism spending can support 18,856 jobs in South Carolina, with the majority of them located in the Myrtle Beach area.

After I-73 is completed, it is estimated that the state of South Carolina can receive \$86.1 million in annual tax revenue while fiscal benefits for local governments generate \$43.2 million per year.

The state is expected to collect sales, gasoline, corporate, and personal income taxes from service businesses, potential distribution centers, and incremental tourism spending. State tax revenues are estimated to be \$86.1 million per year in 2030. For local governments, I-73 is projected to contribute \$43.2 million in revenue per year in 2030, in the form of local-option sales tax, hospitality, accommodation, and admission taxes.

Other benefits of I-73 are better market access, increased appeal for business relocations, faster population growth, safer travel, and an improved quality of life for residents. Rural areas also benefit from thousands of jobs created each year during the construction phase

I-73 will benefit manufacturers in the I-73 Corridor region by providing easier access to markets. The presence of an interstate highway can increase the appeal of the region to expanding and relocating firms, especially those in the mining, manufacturing, and distribution sectors. I-73 will also have a positive effect on population growth in the region. Other benefits include fewer accidents and improved safety on the roads.

As the site of most of the construction activities, the rural areas of the I-73 Corridor (Marion, Dillon, Marlboro, and western Horry) will also benefit from the construction impact. The construction activities can add 7,720 new jobs per year in the region, for five years.⁵

There are both upside and downside risks for economic projections made in this study.

The analysis of the economic impact of I-73 attempts to project the regional economy more than twenty years from now based on a certain set of assumptions. The projection is subject to forecasting risks, as actual events may change those assumptions. Unpredictable events create the potential for either larger (upside) or smaller (downside) effects than indicated here. For example, an oil crisis and subsequent rise in gas prices could reduce the traffic on the proposed I-73 and reduce the economic impact. Imposing tolls on I-73 could also reduce the use of the road and the resulting economic benefits. However, the expansion of a large manufacturing firm to the area that benefits from the new interstate would cause the projections in this report to err on the low side.

⁵ Schunk, Donald. 2009. *The Economic Impacts of I-73 Construction: A Focus on Job Creation*. BR&T Center for Economic and Community Development, Coastal Carolina University



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The economic impact of I-73 is summarized in Table 2.1.

Table 2.1: Annual Economic Impact Summary of I-73 on South Carolina in 2030					
	Total Economic Impact (\$MM)	Total Employment Compensation (\$MM)	Total Job Creation	State Tax Revenues (\$MM)	Local Tax Revenues (\$MM)
Cost Saving (Productivity)	\$120.8				
Roadside Services	\$401.8	\$138.5	3,205	\$23.1	\$11.4
One Distribution Center	\$31.1	\$14.5	286	\$1.7	\$0.0
Tourism	\$1,428.6	\$384.1	18,856	\$61.3	\$31.8
Total 2030	\$1,982.4	\$537.2	22,347	\$86.1	\$43.2

Source: Chumura Economics & Analytics



Proposed I-73 and SELL Corridors Hurricane Evacuation Analysis

Technical Memorandum

Study Report

July 2012

Plan Design Enable



Proposed I-73 and SELL Corridors Hurricane Evacuation Analysis

Technical Memorandum

Prepared by

ATKINS

Prepared for

Myrtle Beach Area Chamber of Commerce

Study Report

July 2012

ADDENDUM 12 – Atkins Hurricane Evacuation Study



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I. Introduction

Recognizing the recently completed Federal Emergency Management Agency (FEMA)/U.S. Army Corps of Engineers (USACE) Hurricane Evacuation Study work for Horry County and the northern conglomerate counties of South Carolina, the Myrtle Beach Area Chamber of Commerce decided to have an analysis performed which would quantify the level of clearance time impacts if the I-73 corridor and/or Southern Evacuation Lifeline (SELL) project corridor was constructed. Wishing to be totally consistent with professionally accepted/historical South Carolina hurricane evacuation studies, analysis inputs, methodologies, and South Carolina Department of Transportation (SCDOT)/nationally recognized consultant expertise, the Chamber retained Atkins North America (formerly known as PBS&J) to perform a basic analysis to show clearance time impacts of either or both corridors coming to fruition.

Atkins North America has accomplished fourteen different hurricane evacuation related studies in the area since the mid 1980's including all three regional FEMA/USACE transportation clearance time studies, several post storm evacuation assessments (Hugo, Bertha, Fran, and Floyd), contraflow studies for various route segments, and a variety of corridor alignment studies. The firm's lead hurricane evacuation expert, Mr. Donald Lewis, recently developed a presentation for the 2012 National Hurricane Conference in which he ranked the Myrtle Beach area in the top ten most difficult evacuation areas in the country for a major hurricane with a peak tourist occupancy. Mr. Lewis is a past winner of the conference's Neil Frank Award which is their highest annual award for recognizing national contributions to emergency management planning and has done the clearance time studies for nearly every hurricane vulnerable county in the coastal United States.

Related studies in which Atkins has been directly involved include:

- South Carolina Hurricane Evacuation Study—Transportation Analysis (1986)
- Hurricane Hugo Post Storm Evacuation Analysis (1989)
- Hurricanes Bertha/Fran Post Storm Study (1996)
- Hurricane Floyd Post Storm Evacuation Analysis (1999)
- NC Hurricane Evacuation Restudy—Transportation Analysis (1999)
- South Carolina Hurricane Evacuation Restudy—Transportation Analysis (2000)
- US 17/US 521 Contraflow Analysis—Georgetown County (2001)
- South Carolina 2000 Census Update of Abbreviated Traffic Model (2002)

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- Brunswick County Progress Energy Nuclear Power Plant Evacuation Analysis (2002)
- Horry County Southern Connector Evacuation Route Analysis (2003)
- North Carolina Department of Transportation (NCDOT) Statewide Hurricane Evacuation Model (2005)
- I-73 Hurricane Evacuation Alternative Alignments Analysis (2005)
- Southern Evacuation Lifeline (SELL) Hurricane Evacuation Analysis (2007)
- Hurricane Evacuation Route Clearance Time Analysis for US 21, US 278, and SC 544 Contra-flow Operations (2007)
- Northern Conglomerate Transportation Analysis—South Carolina Hurricane Evacuation Study Analysis (2012)

State and local emergency management officials have used the study data and evacuation time calculations from these studies to further develop their decision making tools/protocols and route planning. Previous storms have proven the validity of the study data and the study products are relied upon by emergency management officials. The post storm evacuation assessments which Atkins has been involved in for the study area have provided many opportunities to learn from actual events. Traffic counts collected during evacuations in South Carolina and the behavioral data collected immediately after actual evacuations in the state greatly helped subsequent analyses including this effort. The post storm analysis for the Floyd event highlighted the need for viable reverse lane plans for key evacuation routes.

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II. Analysis Tasks

New demographic data, hazard/evacuation areas, behavioral assumptions, roadway geometrics, and the latest state/local traffic control plans were used to analyze an assumed final/preferred alignment alternative for both I-73 and the SELL project. The analysis used information from the recently completed FEMA/USACE hurricane evacuation study transportation analysis which Atkins performed and delivered to Horry County Emergency Management.

The analysis included the following components:

- 1) Using key components of the newly completed FEMA/USACE hurricane evacuation study transportation analysis for the area, analyze the no build alternative for the current base year and future year planning horizon (2030).
- 2) Analyze one assumed final/preferred alignment for I-73 and SELL individually and in concert with each other for the future year scenario.
- 3) Develop a table that compares clearance times and controlling roadway bottlenecks for the current base year and future year scenario with and without the projects being constructed.
- 4) Incorporate the latest contraflow plans developed by state and local emergency management and law enforcement
- 5) Incorporate county growth factors into the demographic/dwelling unit data contained in the new hurricane study transportation analysis to create a future year analysis data set
- 6) Develop a brief technical memorandum to summarize the findings of the analysis and to report the possible benefits to evacuation if projects are implemented.

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III. Study Limitations

The analysis is a generalized system level planning study and is not intended to be used for environmental or state regulatory documentation regarding specific project approvals. The hurricane evacuation analysis is intended to provide general system level impacts of I-73 and SELL implemented alone or in combination and is not intended for EIS level documentation and analysis. The analysis makes no assertion as to the environmental feasibility or community impacts and acceptability of either corridor.

IV. System Level Modeling

The model developed by Atkins to analyze the area's hurricane evacuation situation for a base and future year is set up to quickly analyze socioeconomic, behavioral, route usage, and roadway alternatives. With appropriate detail built into the model and updating of key inputs (based on the FEMA/USACE recent study for the northern conglomerate and new tourism data), Atkins was able to use the tool to analyze the clearance time impacts of the existing situation, a future no build alternative, and assumed route alignments for the I-73 and SELL project.

The modeling process includes several basic steps:

- Development of socioeconomic data by evacuation area for each analysis year;
- Development of behavioral assumptions by evacuation area;
- Generation of evacuating people and vehicles by evacuation area;
- Development of route utilization assumption by evacuation area; and
- Assignment of evacuating vehicles to the critical roadway segments and calculation of clearance times.

Major inputs to the model include:

- Evacuation Zones
- Socioeconomic/Land Use Data
- Evacuation Behavioral Assumptions
- Roadway Characteristics

Latest issues and model adjustments related to each of these model inputs are briefly described below:

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Evacuation Zones

Figures 1 and 2 show the new evacuation zones for Horry and Georgetown Counties respectively which the state and counties agreed to in the latest full hurricane study effort led by the USACE, Charleston District. These zones are based on the National Oceanic and Atmospheric Administration's (NOAA) latest storm surge model for the area and are the primary areas that will be asked to fully evacuate due to storm surge flooding potential from various intensities of hurricanes. In addition to these areas, mobile home residents in the non-colored zones will also be asked to relocate. These areas form the modeling zones which feed the road network to varying degrees depending on the intensity of the storm threat. Of particular importance to this effort, is the recognition that the zones encompass more evacuation areas in the Southern Grand Strand and Georgetown County than included in previous studies.

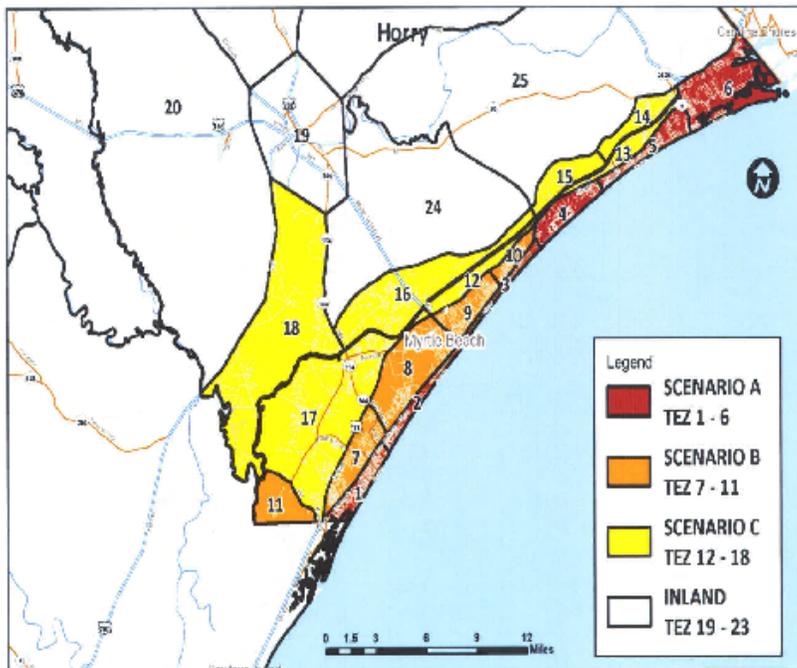


Figure 1: Traffic Evacuation Zones – Horry County

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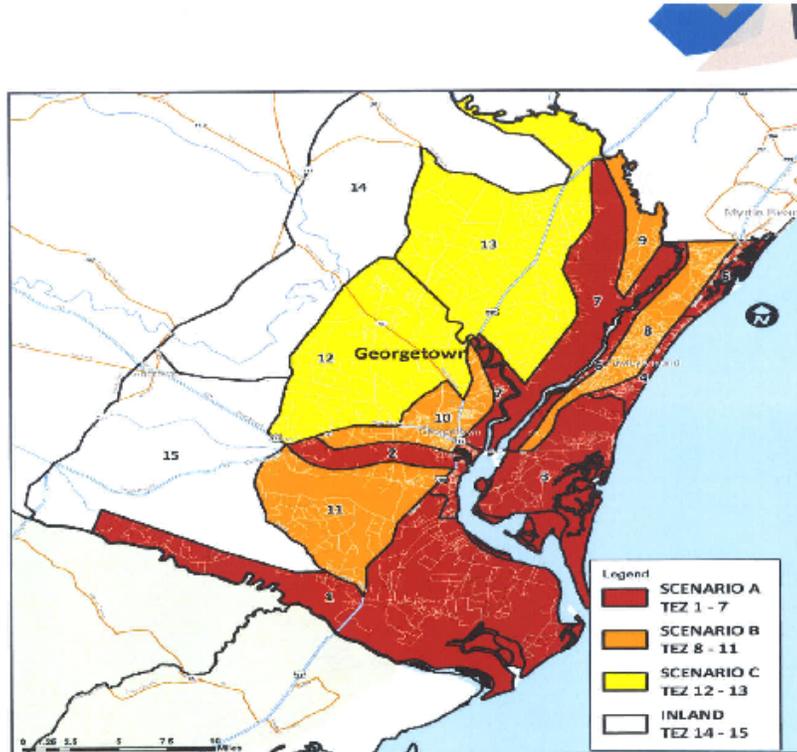


Figure 2: Traffic Evacuation Zones – Georgetown County

Socioeconomic / Land Use Data

Previous hurricane study efforts for the area have primarily used the 2000 U.S. Census for information regarding permanent and seasonal dwelling units, numbers of people and vehicles per household, and mobile home data. This effort utilized the 2010 U.S. Census and detailed seasonal unit count research done as a part of the FEMA/USACE recent hurricane evacuation study update. In addition, the latest 2030 population projections by the South Carolina Budget and Control Board, Office of Research and Statistics and recent tourist characteristic data compiled by the Chamber for 2011 were used to refine this effort.

Earlier study efforts had assumed a current permanent population of approximately 200,000 people for Horry County. New data incorporated into the base year model for this effort was updated to reflect a current population of approximately 269,260 people

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for Horry County and 60,190 people for Georgetown County. The future year 2030 model runs for Horry County and Georgetown County reflect a permanent population of 371,700 people for Horry and 65,100 people for Georgetown County and these are based on the state projections.

In a tourist area like the Grand Strand, seasonal population and occupancy levels of units are critical in calculating evacuation clearance time. For this analysis, Horry County was assumed to have approximately 80,000 seasonal units (includes hotel motels, condos, campground sites) with approximately 10,000 for Georgetown County. For the future year 2030, a conservative growth rate of 15% in tourism was assumed over and above the existing base year. Based on the latest occupancy data for 2011, a high occupancy of 85% was used and corresponds to the average July occupancy during hurricane season.

Evacuation Behavioral Assumptions

To calculate reliable estimates of evacuation clearance times, Atkins made assumptions in regards to what the evacuating population will do. Assumptions regarding participation rates, destination percentages, and vehicle usage were made for permanent residents and tourists. To keep this analysis consistent with assumptions currently being used by state and county emergency management, Atkins used the latest FEMA/USACE study behavioral parameters by zone for each storm scenario and tourist occupancy tested. Also new tourist home origin data for the 2011 season were considered in understanding the percentage of evacuees who desire to travel in various directions. The new data indicates roughly 75% of the evacuees desire to travel north and northwest versus 25% who desire to travel west and southwest from the Grand Strand area.

Behavioral assumptions were incorporated for participation rates (i.e. what percent of the population in a given zone will evacuate for each scenario), and the percent of evacuees assumed to go out of county. So that clearance times calculated in the study give everyone who is vulnerable the opportunity to evacuate whether they choose to or not, 100% of surge areas were assumed to evacuate. The percent going out of county was varied between approximately 40% and 70% for the permanent population (depending upon storm intensity) and near 100% for the seasonal population.

Vehicle usage percentages refer to the percent of vehicles owned at the household that will be used in the evacuation. For the permanent population this percentage was varied between 70% and 80% (higher for beachfront zones) and is consistent with historical behavioral research for actual evacuations nationwide. For the seasonal population, vehicle usage was set at 100%.

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Route Assumptions

The existing road network with planned and funded improvements formed the existing plus committed network used to test the “no build” alternative for the future. In addition to these physical improvements, special traffic control that would be in place for hurricane evacuations were also taken into account. This included the reverse laning of US 501 from Aynor/Conway Bypass to Marion and US 501 from SC 544 to Conway in the State Hurricane Plan.

While the future I-73 alignment is generally understood, the SELL project alignment is not as far along in the planning stage. Atkins assumed that the southern terminus of SELL would line up with Holmstown Road and the northern terminus with SC 22 (the western end of the Conway Bypass). It was also assumed that SELL would have an interchange with US 701 and US 378.

V. Study Findings

Currently, Horry County has a hurricane evacuation clearance time just below 30 hours for a Category 4/5 hurricane with July type tourist occupancy. This assumes the state's law enforcement (working in concert with SCDOT and local officials) is able to fully staff and implement the current planned reversals on US 501 between Aynor and Marion and US 501 between SC 544 and Conway. Currently the planned reversal between SC 544 and Conway forces the reverse lane traffic onto US 378 which even in improved sections continues to be only two lanes with one westbound evacuation travel lane. It is not clear given visitors' home origins, direction evacuees want to travel, and their local route knowledge that evacuees will be willing to use US 378 to the degree that the planned reversals assume.

In the future year 2030 planning horizon, with no reversals and no building of the I-73 or SELL projects, hurricane evacuation clearance times will balloon to well over 50 hours for a major hurricane with a July tourist occupancy. While the US 501 reversal from the Conway Bypass/Aynor to Marion would be essential to address this large time requirement, it is doubtful given the expected permanent population and tourist growth in the region, that the other US 501 reversal would be workable by the year 2030 as almost 40 hours of evacuation traffic would be forced onto US 378 under the current scheme.

Georgetown County currently has a 22 hour worst-case hurricane evacuation time that will grow to just below 28 hours if no improvement projects are implemented in the future.

Table 1 provides the Clearance Time Comparison data for each previously described alternative.

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Table 1: Clearance Time Comparison Generalized Evacuation Clearance Times Category 4 / 5 High Tourist Occupancy (all times are in hours)

Critical Evacuation Bottleneck Controlling Timing	Planning Year and Roadway Alternative					
	2011 Base Year (w/ current SLED & SCDDOT reversals)	2030 No Build (w/ current SLED & SCDDOT reversals)	2030 No Build-Realistic (w/ only 501 Aynor to Marion reversal)	2030 I-73 Only (w/ no reversals)	2030 SELL Only (w/ only 501 Aynor to Marion reversal)	2030 I-73 & SELL (w/ no reversals)
US 521 w/ out of Georgetown Co	22.2	27.6	24.6	27.6	27.0	19.4
US 501 at Carolina Forest/Outlet Mall Area	25.7	30.6	30.6	30.6	20.8	17.1
US 501 from SC 544 to Conway	25.2*	44.7	30.6*	44.7	39.4	20.8
US 501 from Conway Bypass to Marion	22.7*	57.8	27.3*	33.9*	18.2	18.8
Conway Bypass	12.1	13.9	13.9	13.9	23.7	19.1
US 378 w/ 2 lane section	28.3**	15.4	35.5**	15.4	15.4	16.5
SC 9 from Green Sea to Nichols	21.6	26.2	26.2	26.2	16.1	16.1
I-73 Processed Corridor	NA	NA	NA	NA	30.7	32.4
SELL Corridor from Holmestown Rd tie in	NA	NA	NA	NA	NA	20.1

*Times indicate the assumed reverse lane is in place. **Times indicate forced use of evacuation route due to traffic control.
Key: Indicates controlling time for evacuation under that scenario.

Important Notes:

- 1) Current SLED/SCDDOT reversal plan includes US 501 from Aynor/Conway Bypass to Marion. It also includes reversing US 501 between SC 544 and Conway, forcing evacuees on the reversed side to use US 378 as their evacuation route.
- 2) Times are the total duration for all evacuee movements, not the time any one household will spend on the road network and are reported in hours.
- 3) Recent tourist home origin data implies that roughly 75% of evacuees will desire to travel northwest and north with the remaining 25% needing to travel west/southwest from the Grand Strand area.
- 4) Population totals used in the study based on census and state data center projections include 269,300 and 60,200 base year permanent residents for Horry and Georgetown Counties respectively. Future year estimates include 371,600 for Horry and 65,000 for Georgetown Counties. Conservative assumption of 15% tourist growth used.
- 5) Times reflect new evacuation zones from USACE/FEMA study effort.

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Proposed I-73 Corridor Evacuation Time Impacts

- 1) The I-73 facility (without SELL) provides major relief to the inland US 501 corridor and some lesser relief to the problematic US 501 section between SC 544 and Conway.
- 2) SC 31 and the Conway Bypass are used much more substantially as a relief evacuation corridor.
- 3) Provides major relief to US 501 near Carolina Forest/outlet mall bottleneck area.
- 4) Provides major evacuation congestion relief to SC 9.
- 5) Provides interstate quality traffic flow in the direction that approximately 75% of evacuees wish to travel.
- 6) Compared to the realistic no build future year alternative with reverse lane on US 501 from Aynor to Marion, if I-73 is built (without the SELL project), provides 5 hours of clearance time saving giving roughly 40,000 people the time to escape who otherwise would be trapped in the area under certain scenarios. (Assuming no reverse lane implementation in the future no build alternative, in comparison I-73 saves up to 18 hours of clearance time.)
- 7) I-73 provides a very slight improvement to Georgetown County times.
- 8) Alleviates the need for the state to expend resources needed to staff and implement reverse laning of US 501 from Aynor to Marion.

Proposed SELL Corridor Evacuation Time Impacts

- 1) The SELL facility (without I-73) provides major relief to the critical evacuation bottleneck US 501 corridor between SC 544 and Conway.
- 2) Serves as a more efficient way to get southern Grand Strand and northern Waccamaw Neck evacuees to US 378 westbound and US 501 northbound at the junction of the Conway Bypass.
- 3) Provides major evacuation congestion relief to US 521 in and west of Georgetown.
- 4) Compared to the realistic no build future year alternative with reverse lane on US 501 from Aynor to Marion, if SELL is built (without the I-73 project), provides 7 hours of clearance time saving giving roughly 50,000 people the time to escape who otherwise would be trapped in the area under certain scenarios.

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- 5) SELL provides a major improvement to Georgetown County future evacuation times (saving 8 hours) and keeps the times within the National Hurricane Center's 24 hour warning window.
- 6) Provides moderate relief to the US 501 near Carolina Forest/outlet mall area.

Proposed I-73 and SELL Joint Corridor Evacuation Time Impacts

- 1) IF the I-73 facility and SELL projects are both built, they will provide major relief to the two most critical bottlenecks in the region: the US 501 corridor between Aynor and Marion and the problematic US 501 section between SC 544 and Conway.
- 2) Provides interstate quality traffic flow in the direction that approximately 75% of evacuees wish to travel.
- 3) SC 31 and the Conway Bypass would be used much more substantially has a relief evacuation corridor to area roadways.
- 4) Provides tremendous relief to US 501 near Carolina Forest/outlet mall bottleneck area.
- 5) Provides major evacuation congestion relief to SC 9.
- 6) Provides interstate quality traffic flow in the direction that approximately 75% of evacuees wish to travel.
- 7) Compared to the realistic no build future year alternative if I-73 and SELL are built, provides 12 plus hours of clearance time saving giving roughly 90,000 people the time to escape who otherwise would be trapped in the area under certain scenarios. I-73 provides a very slight improvement to Georgetown County times.
- 8) Alleviates the need for the state to expend resources needed to staff and implement reverse laning of US 501 from Aynor to Marion and US 501 from SC 544 to Conway
- 9) Provides major evacuation congestion relief to US 521 in and west of Georgetown.
- 10) I-73 and SELL provides a major improvement to Georgetown County future evacuation times (savings of 8 hours) and keeps the times within the National Hurricane Center's 24 hour warning window.

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- 11) Serves as a more efficient way to get southern Grand Strand and northern Waccamaw Neck evacuees to US 378 westbound and I-73 northbound at the junction of the Conway Bypass.

The hurricane evacuation analysis is intended to provide general system level impacts of I-73 and SELL implemented alone or in combination and is not intended for environmental impact study (EIS) level documentation and analysis. The analysis makes no assertion as to the environmental feasibility or community impacts and acceptability of either corridor.

ENDNOTES

- ¹ 23 USC Section 1105(c) (1991, as amended through Public Law 109-59).
- ² Rutgers University Study, 1997, <http://www.ors.state.sc.us/philweb/exsum.pdf>, “Infrastructure Need” page 4.
- ³ Horry County Comprehensive Plan “Envision 2025,” Page 14; and, US Census Bureau “County Quick Facts” 2008 found at <http://quickfacts.census.gov/qfd/states/45/45051.html>
- ⁴ Horry County Comprehensive Plan “Envision 2025,” Page 104, Table 32, Prepared by Woods & Poole Economic, Inc. Washington, DC 2005.
- ⁵ Ibid; and US Census Bureau “Quick Facts 2008.”
- ⁶ SCDOT Road Data Services, 2008.
- ⁷ Coastal Carolina University BB&T Center for Economic & Community Development, Economic Impact Study, Executive Summary.
- ⁸ *Ibid.*
- ⁹ SC Budget and Control Board, *South Carolina Statistical Abstract 2005*.
- ¹⁰ SC Parks, Recreation, and Tourism, *The Economic Benefit of Domestic Travel Expenditures of South Carolina Counties in 2005* (August 2006).
- ¹¹ The LPA Group and Wilbur Smith Associates, *Existing Road Inventory and Data Collection*, Marlboro County, (April 2005).
- ¹² Rob Dubnicka, Director of Traffic Engineering, The LPA Group, Personal Communication.
- ¹³ SC Department of Public Safety, Office of highway Safety, Traffic Data 1996-2005 for SC 38 to NC line to I-95, US 1 from NC to Wallace, SC and SC 9 from Wallace to I-95.
- ¹⁴ American Highway Users Alliance document, *A Report on Summer Traffic Bottlenecks and Steps Needed to Ensure that Our Favorite Vacation Destinations Remain Accessible* (http://www.highways.org/pdfs/travel_study2005.pdf).
- ¹⁵ The LPA Group Incorporated, *Traffic Technical Memoranda, From I-95 to the Myrtle Beach Region*, 2006.
- ¹⁶ The LPA Group Incorporated, *Traffic Technical Memorandum, From I-95 to Future Interstate 74 in North Carolina*, 2007.
- ¹⁷ Yahoo maps, comparing current routes with a similar Interstate section.
- ¹⁸ *Ibid.*
- ¹⁹ Website: http://www.i73insc.com/download/impactstudy_southern/Appendix-E-Part-1.pdf.