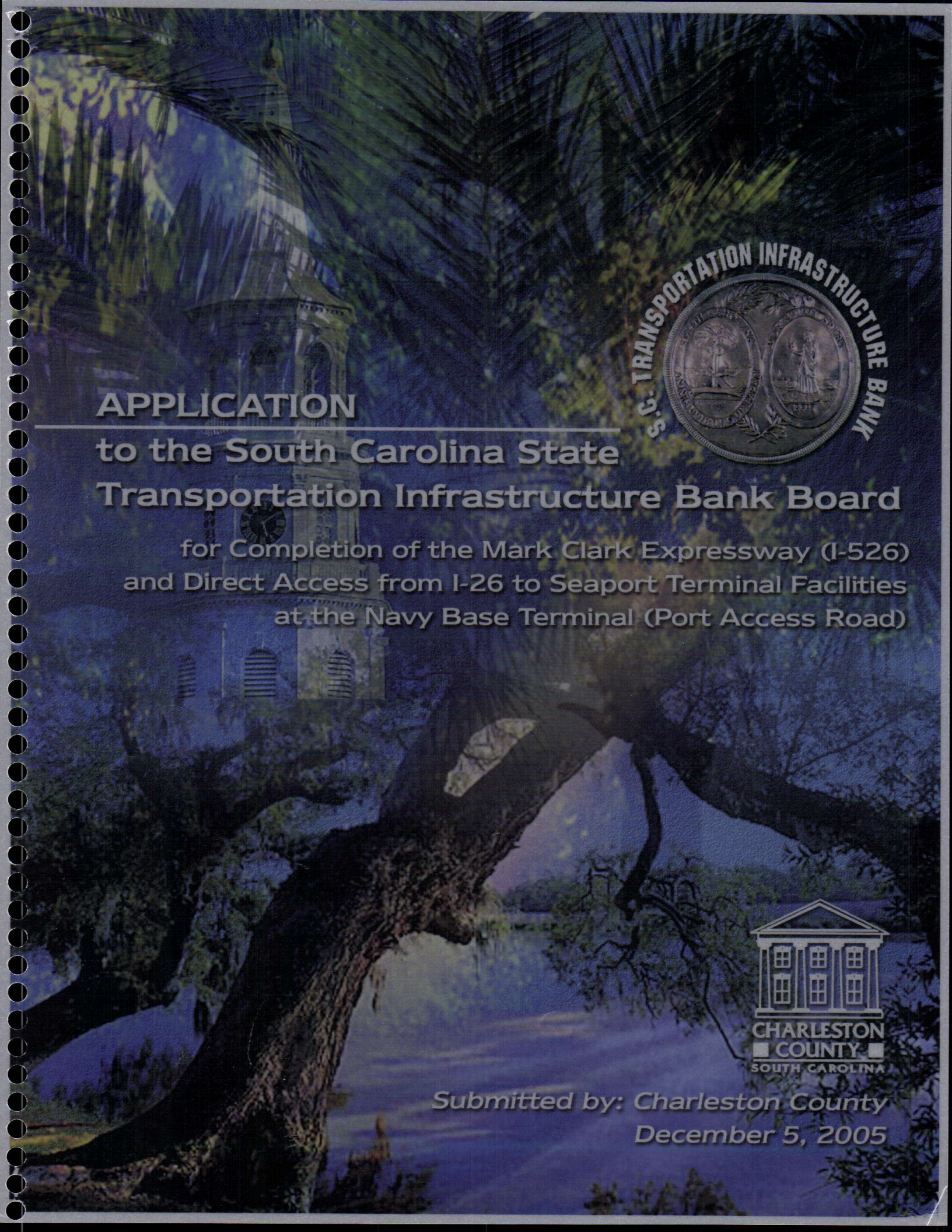


# APPLICATION

## to the South Carolina State Transportation Infrastructure Bank Board

for Completion of the Mark Clark Expressway (I-526)
and Direct Access from I-26 to Seaport Terminal Facilities
at the Navy Base Terminal (Port Access Road)

CHARLESTON COUNTY
SOUTH CAROLINA

*Submitted by: Charleston County*
*December 5, 2005*

**Roland H. Windham, Jr.**
County Administrator

CHARLESTON COUNTY
SOUTH CAROLINA

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December 5, 2005

Mr. Don Leonard, Chairman
State Infrastructure Bank
c/o Ms. Debra R. Rountree
Director of SCTIB Operations
P. O. Box 191
Columbia, SC 29202-0191

Dear Mr. Leonard:

On behalf of the citizens of Charleston County, we are pleased to submit this application to the South Carolina State Transportation Infrastructure Bank Board for funding assistance in completing a **$1.074 billion transportation improvement program for the County**. This program includes the **extension of the Mark Clark Expressway (I-526),** design and **construction of a Direct Access Facility from I-26 to the Seaport Terminal Facilities at the Navy Base Terminal**, and the **completion of $354 million in locally funded projects on the Federal and State Highway System in Charleston County**.

The application is formatted as requested in the instructions to applicants and addresses each of the following items:

1. Public Benefits of the Projects
2. Financial Plan
3. Project Approach

Supporting documentation is included in the appendices and specific reference materials are so indicated throughout the application.

We believe that these projects are vital to improving mobility, safety, and economic development in Charleston County. Although the South Carolina coast was spared from a major storm in 2005, earlier this year we were made aware of the disastrous effects that a hurricane can have on a coastal region when Hurricane Katrina struck New Orleans. By extending the Mark Clark Expressway, residents and tourists on Seabrook, Kiawah, Johns, and James Islands will have an additional hurricane evacuation route available when a storm approaches our coastline.

Economic benefits, not only for Charleston communities, but also for the entire state will be realized with the development of the Port of Charleston. With the Port nearing capacity, expansion to the Navy Base is a logical step to take in maintaining Charleston's high ranking as an internationally recognized port. However, direct access to the Port is critical for the success of this expansion.

The citizens of Charleston County expressed their commitment to improving transportation by passing the One-Half Cent Sales Tax Referendum in November 2004. It is our intention to use approximately **$351 million** of these funds to improve selected state roads. Included in this total are **$50 million** ($2 million per year for 25 years) designated for resurfacing on state roads, **$48 million** for improvements to state roads that were approved by referendum for bond expenditures, and **$254 million** for project improvements on the state highway system in Charleston County selected from the comprehensive transportation plan currently being developed. Other local contributions include **$3 million** in federal earmarks which was secured for Charleston County. Thus Charleston County's contribution amounts to **$354 million in local funding or 33% of total program costs** to support this application.

Charleston County is ready to improve our roadways for the safety, security, and economic benefit of our citizens. In so doing, the county is significantly reducing South Carolina Department of Transportation (SCDOT) liability for these improvements and maintenance liabilities on these improved state roads.

We ask that while the SIB Board considers our application for funding, that they consider the economic benefit of the two major facilities which will be constructed with SIB assistance as well as the commitment that our County has to improving the State Highway System and assisting SCDOT in financing needed improvements in Charleston County.

We would welcome the opportunity to present our application to the Board and answer any questions you may have.

Sincerely,

Roland H. Windham, Jr.
County Administrator

RHW/bac

CHARLESTON COUNTY SOUTH CAROLINA

## EXECUTIVE SUMMARY

Charleston County Council is pleased to submit this application to the South Carolina State Transportation Infrastructure Bank Board for funding assistance in completing a $1.074 billion transportation improvement program. This program includes the extension and completion of the Mark Clark Expressway (I-526), design and construction of a Direct Access Facility from I-26 to the Seaport Terminal Facilities at the Navy Base Terminal, and the completion of $354 million in locally funded projects on the State Highway System in Charleston County.

These projects will benefit not only over 300,000 residents of Charleston County, but also over 4.5 million tourists that visit the Charleston area each year, and the expected increase in trucking operations that will support the proposed expansion of the Navy Base Terminal complex.

### Completion of the Mark Clark Expressway (I-526)

The proposed extension of the existing I-526 Mark Clark Expressway includes the development of approximately 7.1 miles of new roadways and bridges. The project will be a 4-lane, divided, limited access interstate facility with a minimum median width of 48 feet. It begins from its present terminus at SC 7/US 17, connecting to SC 700 (Maybank Highway), SC 171 (Folly Road), and SC 30 (James Island Expressway). The proposed project crosses the Stono River at two locations. The Stono River at the Northern crossing is designated as the Intracoastal Waterway.

The alignment of the Mark Clark Expressway Extension Project will be similar to the alignment documented in the "Draft Supplemental Environmental Impact Statement", dated August 1995, by SCDOT and Federal Highway Administration. The final alignment will be defined in a Supplemental EIS, which will be required to update information contained in the 1995 EIS.

Although Charleston County expects to realize numerous benefits from the completion of the Mark Clark Expressway, the most significant benefit will be the increase in mobility and safety for the Charleston area, particularly the islands and peninsula areas.

To determine whether highway investment is economically feasible, the costs of building and operating the highway improvements are compared with the economic benefits estimated to be attributable to the highway improvements. A benefit-cost economic analysis was performed for the extension of Mark Clark Expressway using the methodologies outlined in the AASHTO's guidelines - *A Manual on User Benefit Analysis of Highway and Bus-Transit Improvements – 1977 edition). Additionally the MicroBENCOST* software (developed by Texas Transportation Institute for NCHRP) was utilized to assess the economic feasibility of the project. This analysis found that the entire project will be a very attractive and economically feasible undertaking with over $1,135 Million in discounted benefits, against a discounted cost of $366 Million, which results in a Gross Benefit/Cost ratio of 3.347 with over $797 Million of Net Present Value.

CHARLESTON COUNTY SOUTH CAROLINA

**Direct Access From Interstate 26 (I-26) To Seaport Terminal Facilities At The Navy Base Terminal (Port Access Road) and Three Rail Overpasses (Rivers Ave near Harley St; North Rhett Ave near I-526; and Rivers Ave near Durant Ave)**

This direct access roadway connects the proposed Marine Container Terminal at the Charleston Navy Complex to I-26 in North Charleston, South Carolina. Both the Terminal and the Roadway are currently undergoing a joint environmental analysis sponsored by the U.S. Army Corps of Engineers (Charleston District), with the Federal Highway Administration listed as a cooperating agency. On October 25, 2002, the City of North Charleston and the South Carolina State Ports Authority signed the "Memorandum of Understanding and Agreement…RE: Charleston Naval Complex," through which the City and SCSPA agreed to jointly approach the South Carolina General Assembly regarding highway and rail infrastructure needed to access the complex. In general, the MOU discussed such issues as land ownership, leases, buffer zones, waterfront access, public safety, etc. Of importance to this application is the recognition of the critical nature of access to Interstate 26 and rail overpasses in the areas of Rivers Avenue and Harley Street, Rivers Avenue and Durant Road, and North Rhett Avenue and I-526.

As in the case of the Completion of the Mark Clark Expressway, Charleston County and the State of South Carolina can expect to derive numerous benefits from the design and construction of the proposed Marine Container Terminal and its associated infrastructure improvements. However, the most prevalent benefit will be the resulting economic development. According to SCSPA's Statement of Need, updated container cargo projections forecast an increase in TEU from 1.65 million in 2004 to 4.0 million in 2025. Representing a 4.28 percent compound annual growth, this increase in container activity cannot be supported by existing facilities. In fact, the Port of Charleston is expected to exceed capacity by 2014 and must expand in order to stay competitive. At this time, Charleston is the fourth busiest port in the United States and, according to a study completed by the Center for Economic Forecasting at Charleston Southern University, the Charleston Port ranks among the best in the world in efficiency.

Once the proposed port facility is constructed, peak hour traffic is expected to reach almost **11,000 daily trips** (number of daily trips includes entering and exiting terminal gates) at build-out in 2025. Under average conditions, truck traffic accounts for over 5,000 daily trips during this same time period. Therefore, the construction of an access road to the port becomes a critical factor for mobility and safety in the expanded port area.

**State Highway System Locally Funded Projects**

The third component of the $1.074 billion program is the local funding of $354 million of roads on the State Highway System. Charleston County proposes to use local sales tax funds to complete these projects.

CHARLESTON COUNTY SOUTH CAROLINA

# FINANCIAL PLAN

## Total Cost of the Projects

The total cost for design and construction of all projects in the program is $1.074 billion. This program includes the Extension of the Mark Clark Expressway, estimated at $420 million, the design and construction of the Port Access Road, estimated at $300 million, and a $354 million local contribution in the form of locally financed roads for the State Highway System.

The cost estimates for the Completion of the Mark Clark Expressway were determined using the alignment determined in 1995 Draft Environmental Impact Statement for the Mark Clark Expressway Extension. The engineer's estimates were developed using recent bridge, interchange, and roadway projects. The costs for these recent projects were updated to reflect price changes for items such as steel, concrete, asphalt, etc.

The cost estimates for the Port Access Road were determined using the proposed alignment determined in October 2005 Draft Environmental Impact Statement for the Proposed Marine Container Terminal at the Charleston Naval Complex. The engineer's estimates were developed using recent bridge, interchange, and roadway projects. The costs for these recent projects were updated to reflect price changes for items such as steel, concrete, asphalt, etc. **It should be recognized that the detailed cost estimates developed by the consultant for the Corps of Engineers are currently not available. It is possible that these estimates will differ from those included in this application.**

## Local Contribution

Charleston County's local contribution of **$354 million**, as described below, is the combined contribution for the Completion of the Mark Clark Expressway and for the proposed Port Access Road.

### Source of Local Contribution

**$48 million** in projects approved by referendum for bond expenditure, including:

- **$25 million**: US 17 Johnnie Dodds Boulevard
- **$ 7 million**: Glenn McConnell Parkway/ Bees Ferry Road Improvements
- **$10 million**: Road Improvements on James Island
- **$ 6 million**: US Highway 17 Access Ramp to SC 61 Connector

**$50 million** designated for resurfacing on state roads (Half-Cent Transportation Sales Tax funds equaling an average of $2 million per year for 25 years).

**$3 million** consisting of federal earmark funds designated in the 2005 SAFETEA-LU Reauthorization Bill, which was secured for Charleston County.

**$253 million** designated for state road projects selected by Charleston County Council and funded by the Half-Cent Transportation Sales Tax.

## Other Proposed Sources of Funds

The Extension of the Mark Clark Expressway in Charleston County is a designated high priority project in the "Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users" or "SAFETEA-LU" passed by Congress in 2005. Congress has authorized $3 million to assist in the completion of the Expressway; the funds are to be available for fiscal years 2005 through 2009. We suggest using these funds to complete the Supplement EIS and for additional design and contract preparation that will be required for the project.

The Port Access Road has been approved for **$10 million in federal earmark funds** under the ***Transportation Equity Act: A Legacy for Users (TEA-LU)***. These funds have been designated for various studies related to the road, including permitting, design, and preliminary engineering. These funds are necessary for preliminary planning/investigations to move the project forward and are not included in the $300 million funding request. In addition, the South Carolina State Ports Authority funded a $1.3 million preliminary alternatives analysis.

## Amount of Assistance Requested

Charleston County respectfully requests $420 million for the Completion of the Mark Clark Expressway and $300 million for the design and construction of the Port Access Road for a total funding request of $720 million. The local contribution of $354 million will comprise 33 percent of the total $1.074 billion program.

CHARLESTON
COUNTY
SOUTH CAROLINA

# APPLICATION
# to the
# SOUTH CAROLINA
# STATE TRANSPORTATION INFRASTRUCTURE BANK

**for**

## COMPLETION OF MARK CLARK EXPRESSWAY (I-526)

**and**

## DIRECT ACCESS FROM I-26 TO SEAPORT TERMINAL FACILITIES AT THE NAVY BASE TERMINAL

**Submitted by CHARLESTON COUNTY**
**December 5, 2005**

CHARLESTON COUNTY SOUTH CAROLINA

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CHARLESTON COUNTY SOUTH CAROLINA

## APPENDICES

# Project Descriptions and Public Benefits

## INTRODUCTION

On behalf of the citizens of Charleston County, Charleston County Council is pleased to submit this application to the South Carolina State Transportation Infrastructure Bank Board for consideration of funding assistance in completing a $1.074 billion transportation improvement program. This program includes the extension of the Mark Clark Expressway (I-526), design and construction of a Direct Access Facility from I-26 to the Seaport Terminal Facilities at the Navy Base Terminal, and construction of three Railroad overpasses, and the completion of $354 million in locally funded projects on the **State Highway System** in Charleston County.

These projects, as described below, will benefit not only over 300,000 residents of Charleston County, but also over 4.5 million tourists that visit the Charleston area each year and the expected increase in trucking operations that will support the proposed expansion of the Navy Base Terminal complex. In support of these important projects, Charleston County Council passed a resolution on October 18, 2005, to seek funding from the State Infrastructure Bank. This resolution, among other supporting resolutions, is included in **Appendix A** of the Application.

The two major projects for which SIB assistance is requested are discussed in detail below and, as requested in the application format instructions, maps of the projects, traffic volumes, and population data to further describe the urgent need for the construction of these two important highways are also included.

Following the descriptions of the projects, the Application addresses, in order:

1. Public Benefits
2. Financial Plan
3. Project Approach

This Application and its supporting documentation are submitted with the expectation that the State Infrastructure Bank Board will favorably review the plan devised by Charleston County to enhance safety, increase mobility, and open the road to economic development in one of South Carolina's most historic and beautiful regions.

## PROJECT DESCRIPTIONS

### A. Extension of the Mark Clark Expressway (I-526)

The proposed extension of the existing I-526 Mark Clark Expressway includes the development of approximately 7.1 miles of new roadways and bridges. The project will be a 4-lane, divided, limited access interstate facility with a minimum median width of 48 feet. It begins from its present terminus at SC 7/US 17, connecting to SC 700 (Maybank Highway), SC 171 (Folly Road), and SC 30 (James Island Expressway). The proposed project crosses the Stono River at two locations. The Stono River at the Northern crossing is designated as the Intracoastal Waterway.

The alignment of the Mark Clark Expressway Extension Project will be similar to the alignment documented in the "Draft Supplemental Environmental Impact Statement", dated August 1995, by SCDOT and Federal Highway Administration. The final alignment will be defined in a Supplemental EIS, which will be required to update information contained in the 1995 EIS. The general location of the proposed project is shown in **Figure 1**. The conceptual drawings illustrating project features are included in **Appendix B**.

**FIGURE 1**
**Project Location Map: Extension of the Mark Clark Expressway**

The Project will begin with the completion of the partially constructed interchange at SC 7 / US 17. This work includes the construction of a new bridge, which will parallel the existing bridge crossing, and associated ramps to service southbound traffic.

From US 17, approximately 2,700 feet of new roadway on fill will be constructed in upland areas. Along this new roadway, a new bridge will be built to span existing freshwater wetlands. Approaching the Stono River, existing saltwater marsh begins and the roadway will ascend to achieve navigational clearance at the crossing. The next mile of roadway will be elevated bridge structure.

At the lower end of the approaches on the south side of the Stono, the elevated roadway will change to low-level construction. The facility will remain elevated through the saltwater marsh until it intersects SC 700 - Maybank Highway.

Approximately 400 feet of mainline bridge to the north of SC 700 will be completed. This new mainline structure ties into a grade separation bridge over Route 700. New mainline roadway continues for this new interchange for approximately 3,700 feet as it approaches the second crossing of the Stono River.

Thereafter, the low-level approach will extend approximately 1,600 feet on the west side of the Stono River where the second high-level approach begins. The low-level bridge construction starts again on the east side of the Stono River and proceeds for about 3,000 feet. The roadway continues from the end of the elevated section to the interchange at Folly Road.

At the SC 171 - Folly Road interchange, a new grade separation bridge will be constructed to tie to the existing partial interchange. A new loop will be constructed on the west side of Folly Road to service traffic from the James Island Expressway directly onto Folly Road, thus eliminating the need for the current signalization. In addition, new ramps will be constructed connecting Folly Road to the I-525 mainline for both eastbound and westbound traffic.

## A.1 PUBLIC BENEFITS

Although Charleston County expects to realize numerous benefits from the extension of the Mark Clark Expressway, the ***most significant benefit*** will be the ***increase in mobility and safety for the Charleston area, particularly the islands and peninsula areas***. In addition to enhanced mobility and safety, the extension of the Mark Clark Expressway is expected to improve the quality of life and general welfare of the public, as well as enhance economic development. As requested, the public benefits that are expected from the extension of the Mark Clark Expressway are ranked in order of significance as follows:

1. Enhancement of Mobility and Safety
2. Increase in the Quality of Life and General Welfare of the Public
3. Promotion of Economic Development

**Existing View**

**Proposed Extension of Mark Clark Expressway (I-526)**

The following discussion focuses on population and traffic increases in the Berkeley-Charleston-Dorchester (BCD) region and gives the State Infrastructure Bank Board members the opportunity to become familiar with the background data required to analyze the need for the Mark Clark Expressway extension.

## ENHANCEMENT OF MOBILITY AND SAFETY

**Table 1** shows the increase in population and in total vehicle miles traveled (VMT) per day on publicly maintained roads in the Berkeley-Charleston-Dorchester (BCD) region from 1990 to 2000. VMT includes trips made by residents, commercial vehicles, and visitors, as well as travelers just passing through the region. As shown in **Table 1**, there is a noticeable difference in the population and VMT growth rates. While the ***total population for the region increased around 8%*** from 1990 to 2000, ***the VMT during the same time period increased 27%.*** In each of the three counties, the VMT growth rate was at least double that of the population growth rate.

**Table 1: VMT and Population by County**

| County | 1990 | | 2000 | | VMT Change | Population Change |
|---|---|---|---|---|---|---|
| | VMT | Population | VMT | Population | | |
| Berkeley | 2,313,128 | 128,776 | 3,649,134 | 142,651 | 58% | 11% |
| Charleston | 7,319,577 | 295,039 | 8,445,289 | 309,969 | 15% | 5% |
| Dorchester | 1,971,686 | 83,060 | 2,670,361 | 96,413 | 35% | 16% |
| Region | 11,604,391 | 506,875 | 15,764,784 | 549,033 | 27% | 8% |

Source: SCDOT, US Census

As illustrated in **Table 2**, three-quarters of all VMT were on interstates, freeway, and arterials, which are the region's major highways.

**Table 2: Daily VMT by Functional Class, BCD Region**

| | 1990 | | 2000 | | 1990-2000 Percent Change |
|---|---|---|---|---|---|
| | VMT | Percent | VMT | Percent | |
| Interstate/ Freeway | 2,913,058 | 25% | 4,446,494 | 30% | 53% |
| Arterial | 5,847,946 | 50% | 6,982,879 | 47% | 19% |
| Collector | 2,231,296 | 19% | 2,276,396 | 15% | 2% |
| Local | 612,091 | 5% | 1,059,015 | 7% | 73% |
| Total | 11,604,391 | 100% | 14,764,784 | 100% | 27% |

Source: SCDOT

Major roads bear a disproportionate amount of the region's traffic. ***Although interstates/ freeways account for only 4% of total lane miles, they carry about 30% of total VMT.***

**Table 3** shows average travel time to work for these areas, as well as several other MSA's. Travel time in Charleston-North Charleston, on average, is higher than that of Columbia, Greenville, and the State of South Carolina in general. This is not surprising, since this region is not only one of the state's largest metropolitan areas, but its coastal location does not allow for development in an even, symmetrical pattern about the urban core, as is possible for inland communities. This eliminates the possibility of a significant percentage of development within a small radius of the region's center, as compared to an area like Columbia.

| Table 3: Average Travel Time to Work in Minutes | |
|---|---|
| Augusta-Aiken MSA | 21.9 |
| **Charleston-North Charleston MSA** | **23.1** |
| Columbia MSA | 21.8 |
| Greenville-Spartanburg-Anderson MSA | 20.7 |
| **SOUTH CAROLINA** | 21.9 |
| Atlanta, GA, MSA | 29.6 |
| Charlotte-Mecklenburg, NC | 22.9 |
| Miami, FL, PMSA | 28.5 |
| New York City, NY, PMSA | 38.1 |
| Raleigh-Durham, NC, MSA | 23.3 |
| Washington, DC | 28.5 |
| **UNITED STATES** | 24.3 |

Source: Census 2000 Supplementary Survey

## INCREASE IN THE QUALITY OF LIFE AND GENERAL WELFARE OF THE PUBLIC

### A. Reduction in Pollution

Cars and trucks emit pollutants while idling in congested areas. Reducing congestion, and thus the time that people spend while their automobiles engines are idling as a result of accidents and other traffic problems, can achieve significant environmental benefits. By reducing these occurrences through increased capacity and increased functionality, pollution is reduced to levels less than would otherwise exist given the growing traffic volumes.

### B. Homeland Security

Charleston is home to the US Naval Weapons Station, and US Air Force Base 437th Airlift Wing and 317 Airlift Wing (Reserve).

Charleston AFB has more than 7,800 active duty and Air Reserve Component military and civilian personnel. They include approximately 3,700 active duty, 2,700 reservists, and 1,300 civilians. About 16,700 military retirees make their home in the Charleston area. Charleston is home to 54, C-17 Globemaster III aircraft. A C-17 crew consists of pilot, co-pilot, and loadmaster.

Naval Weapons Station (Charleston) is the largest single employer in the Charleston area. The Station encompasses more than 17,000 acres of land with 10,000 acres of forest and wetlands, 16-plus miles of waterfront, four (4) deep-water piers, and 35 miles of railroad. With its integrated railhead, surge mobilization capability, and the only unencumbered explosives arcs in the continental U.S., Naval Weapons Station (Charleston) is truly a unique national defense asset.

During these new times in our country since the tragedy of 9/11, our military branches will need to be more mobile than ever. The Extension of Mark Clark Expressway allows the military's logistical network to utilize this improved roadway for personnel and equipment and improves their overall readiness and their ability to respond in the event of an emergency.

## C. User Benefits

***Benefit Cost Analysis***

A benefit-cost economic analysis was performed for the extension of Mark Clark Expressway using the methodologies outlined in the AASHTO's guidelines - *A Manual on User Benefit Analysis of Highway and Bus-Transit Improvements – 1977 edition).* Additionally, the *MicroBENCOST* software (developed by Texas Transportation Institute for NCHRP) was utilized to assess the economic feasibility of the project.

### 1) Vehicle Operating Costs (VOC)

Extension of the existing Mark Clark Expressway to James Island Expressway will result in major savings in the cost of operating a vehicle traveling to and from the eastern Charleston County area. These savings would come from reduced consumption of:

- motor fuels and oil; and,
- reduced wear and tear on the vehicle itself.

This is intuitively understandable for those vehicles, which divert from the stop-and-go conditions on the exiting lanes going through several traffic signals to the higher, constant speeds provided on the Mark Clark Expressway. The existing routes currently operate with the following stop-and-go conditions:

| Route Segment | # of Traffic Signals |
|---|---|
| US 17 (from I-526 to SC 171) | 15 |
| SC 171 (from US 17 to SC 700) | 2 |
| SC 700 (from SC 171 to James Island Expressway) | 5 |
| SC 171 (from SC 700 to James Island Expressway) | 9 |

VOC benefits would also accrue to those motorists who do not divert to the new facility, since they would enjoy some reduction in congestion on the area routes as a result of other traffic diverting to Mark Clark Extension.

2) **Travel Time Savings**
Travel time savings benefits have been calculated by determining how much time motorists might save as a result of constructing the Mark Clark Extension.

The value of time corresponding to each class of automobile vehicle (small passenger, medium/large passenger, pickup/van and bus), and truck vehicle (2-axle/3-axle single unit truck, and various types of semi-tractor trailers) are traditionally considered. The passenger and truck vehicle value of times were based on the study performed by *"Texas Transportation Institute Study Buffington and McFarland, 1975"* (referred to as *"Buffington and McFarland 1975 Values")* with appropriate inflation multipliers using Consumer Price Index (CPI) tables through November 2005.

3) **Accident Savings**
The costs of "**Fatal Injury**" accidents are chiefly reported in the future earnings lost for victims, while the costs of "**Personal Injury**" cover the costs of pain and suffering in temporary/partial disability accidents and of medical care, automobile repairs and servicing. For this analysis, the values promulgated by the 1983 Technical Report prepared by *"McFarland and Rollins, Cost-Effectiveness Techniques for Highway Safety, Volume III, Accident Cost, Texas Transportation Institute, 1983"* are used with appropriate inflation multipliers using Consumer Price Index (CPI) tables through November 2005.

## D. Economic Feasibility Analysis

To determine whether highway investment is economically feasible, the costs of building and operating the highway improvements are compared with the economic benefits estimated to be attributable to the highway improvements. This cost and benefit comparison yields three indicators of "economic feasibility."

1) **Net Present Value** - Costs and benefits in future years are discounted back to the base year using the adopted discount rate. The future stream of discounted costs is subtracted from the future stream of discounted benefits. If the sum of the discounted benefits is greater than the sum of the discounted costs, the "net present value" is positive and the highway improvement is deemed to be "economically feasible."

2) **Discounted Benefit/Cost (B/C) Ratio** - After the future streams of costs and benefits are discounted, the sum of the discounted benefits is divided by the sum of the discounted costs. If the result is 1.0 or greater, the highway improvement is "economically feasible."

Two values for B/C ratios are given:

**a) Gross B/C Ratio:** For this ratio, the benefits captured in the numerator represent savings in user costs between the existing and the improved alternatives; costs in the denominator represent project investment costs minus the salvage values plus the increase in the M&O costs.

**b) Netted B/C Ratio:** For this ratio, the benefits captured in the numerator not only represent savings in user costs, but also the salvage value minus the increase in the M&O costs; the costs in the denominator represent only project investment costs.

**Internal Rate of Return** - This calculation determines that discount rate at which the net present value difference between costs and benefits is zero. If the rate of return, expressed as a percentage, is equal to or greater than the adopted discount rate then the highway improvement is deemed to be "economically feasible."

3) **Method of Analysis:**

The analysis for the extension to the Mark Clark Expressway assumes that:

**a)** **without** the extensions, automobile and truck traffic would utilize the existing routes via US 17, SC 171, and SC 700;

**b)** **with** the project complete, the forecasted traffic would utilize the improved facility and would travel to its destination using a "freeway" facility with full controlled access by using grade-separated bridges to avoid any signalized intersections.

The analysis results in superior performance and significant returns for the motoring public, saving users over $1.1 Billion during the first 30 years of operation beginning in 2011.

## TABLE 4: Summary of Discounted Benefits
## Extension of the Mark Clark Expressway

| | Summary of Discounted Benefits ($000) | | | |
|---|---|---|---|---|
| Year | Delay Savings | Reduced Veh. Operating Cost | Reduced Accident Cost | Total Benefits |
| 2006 | $0 | $0 | $0 | $0 |
| 2007 | $0 | $0 | $0 | $0 |
| 2008 | $0 | $0 | $0 | $0 |
| 2009 | $0 | $0 | $0 | $0 |
| 2010 | $0 | $0 | $0 | $0 |
| 2011 | $36,313 | $20,379 | $7,420 | $64,111 |
| 2012 | $34,561 | $19,319 | $7,041 | $60,921 |
| 2013 | $32,874 | $18,329 | $6,659 | $57,862 |
| 2014 | $31,327 | $17,423 | $6,300 | $55,050 |
| 2015 | $29,910 | $16,593 | $5,964 | $52,467 |
| 2016 | $28,616 | $15,826 | $5,650 | $50,092 |
| 2017 | $27,420 | $15,116 | $5,355 | $47,892 |
| 2018 | $26,305 | $14,456 | $5,080 | $45,841 |
| 2019 | $25,268 | $13,841 | $4,820 | $43,930 |
| 2020 | $24,324 | $13,300 | $4,577 | $42,201 |
| 2021 | $23,456 | $12,771 | $4,348 | $40,575 |
| 2022 | $22,648 | $12,306 | $4,132 | $39,086 |
| 2023 | $21,903 | $11,843 | $3,928 | $37,674 |
| 2024 | $21,200 | $11,424 | $3,736 | $36,360 |
| 2025 | $20,548 | $11,020 | $3,563 | $35,131 |
| 2026 | $19,937 | $10,770 | $3,391 | $34,097 |
| 2027 | $19,374 | $10,401 | $3,227 | $33,002 |
| 2028 | $18,845 | $10,068 | $3,072 | $31,985 |
| 2029 | $18,354 | $9,837 | $688 | $28,879 |
| 2030 | $17,911 | $9,490 | $2,782 | $30,183 |
| 2031 | $17,532 | $9,227 | $2,650 | $29,409 |
| 2032 | $17,190 | $8,964 | $2,524 | $28,679 |
| 2033 | $16,862 | $8,789 | $2,405 | $28,055 |
| 2034 | $16,550 | $8,546 | $2,291 | $27,387 |
| 2035 | $16,284 | $8,333 | $2,183 | $26,800 |
| 2036 | $16,033 | $8,159 | $2,080 | $26,272 |
| 2037 | $15,811 | $7,975 | $1,982 | $25,769 |
| 2038 | $15,600 | $7,827 | $1,889 | $25,316 |
| 2039 | $15,438 | $7,686 | $1,800 | $24,924 |
| 2040 | $15,280 | $7,555 | $1,694 | $24,528 |
| **Total** | **$663,675** | **$357,573** | **$113,229** | **$1,134,478** |

The entire project **will be a very attractive and economically feasible undertaking** with over $1,135 Million in discounted benefits, against a discounted cost of $366 Million. This results in a **Gross Benefit / Cost ratio of 3.347 with over $797 Million of Net Present Value**.

**TABLE 5: Summary of Probable Benefits, Costs, and Economic Measures**
**Extension of the Mark Clark Expressway**

| Summary Probable Benefits, Costs, and Economic Measures | |
|---|---|
| Total Discounted User Benefits (in millions) | $1,135 |
| Discounted Construction Cost (in millions): | $366 |
| Discounted Salvage Value (in millions | $32 |
| Discounted Increase in Maintenance and Rehabilitation (in millions) | $5 |
| Net Present Value (in millions) | $797 |
| | |
| Gross Benefit-Cost Ratio: | 3.347 |
| Netted Benefit-Cost Ratio: | 3.177 |
| Internal Rate of Return (percent): | 16.37% |

## PROMOTION OF ECONOMIC DEVELOPMENT

The US Department of Transportation (USDOT) study calculates that every $1 billion dollars of highway spending by the federal government will lead to what USDOT analysts describe as "employment benefits" totaling 47,576 person-years. Using these figures, the investment of $420 million on the Extension of the Mark Clark Expressway will have the following effects:

- First-round effects total 8,224 person-years, comprised of 5,230 jobs in the highway construction sector and 2,995 jobs in industries supplying equipment and materials (e.g., stone, concrete, rebars, and fuel).
- Second-round effects total 2,914 person-years of indirect employment caused by additional production demands in industries that supply highway construction materials (e.g., iron and steel, financing, insurance, repair, and chemicals).
- Third-round effects of 8,841 person-years result from spending by the workers employed in the first two rounds on consumer goods (e.g., DVDs, Big Macs, baseball caps, hockey tickets, bourbon, socks, magazines, and home repair).
- As the $420 million dollars of highway spending works its way through the economy, this input/output (I/O) analysis contends that the money will produce the equivalent of 19,982 jobs for one year.

We also anticipate that the improvements will help enhance tourism opportunities by reducing frustrating delays and accidents. Tourists visit the Charleston area for many reasons: cultural performances, the Atlantic Ocean, beaches, golf, fishing, and other sport recreations. Access via the Mark Clark Expressway will give travelers additional options for reaching these sites in a safe and efficient manner. It is also anticipated that by making the road safer and reducing congestion, commerce along the corridor will be more efficient, thus resulting in

significant savings to the motorists. The cumulative impact of congestion in this corridor costs the region billions of dollars a year.

### A.1.1 Traffic Studies

*A.1.1.1 Current Traffic Volumes*

**TABLE 6: Current Traffic Volumes (Mark Clark Expressway)**

| Roadway | 2004 Daily Traffic Count Data |
|---|---|
| **US 17** | |
| - Station 111 (between Davison Rd. & McCleod St.) | 29,900 |
| - Station 113 (between McCleod St. & Dobbin Rd.) | 33,100 |
| - Station 115 (between Dobbin Rd. & Savage Rd.) | 37,700 |
| - Station 117 (between Savage Rd. & W. Oak Forest Rd.) | 40,300 |
| - Station 119 (between W. Oak Forest Rd. & Folly Rd.) | 42,000 |
| **Main Rd.** | |
| - Station 345 (between Bees Ferry Rd. & River Rd.) | 20,900 |
| - Station 347 (between River Rd. & Maybank Hwy) | 14,000 |
| **US 52** | |
| - Station 147 (between US 52 spur & I-26) | 11,800 |
| - Station 149 (between I-26 & US 78) | 2,900 |
| **Riverland Dr.** | |
| - Station 367 (between Maybank Hwy & Central Park Rd). | 8,000 |
| - Station 369 (between Central Park Rd. & Camp Rd.) | 7,900 |
| **River Rd.** | |
| - Station 355 (between Main Rd. & Maybank Hwy) | 4,800 |
| **Bees Ferry Rd.** | |
| - Station 479 (between Ashley River Rd. & US 17) | 16,500 |
| **Ashley River Rd.** | |
| - Station 203 (between Dorchester Co. line & Parsonage Rd.) | 14,400 |
| - Station 211 (between Folly Rd. & Sycamore Ave.) | 49,200 |
| - Station 213 (between Sycamore Ave. & US 17) | 46,500 |
| **Central Park Rd.** | |
| - Station 379 (between Folly Rd. & Riverland Dr.) | 5,500 |
| **Folly Rd.** | |
| - Station 245 (between McHenry Ave. & Maybank Hwy) | 33,400 |
| - Station 247 (between Maybank Hwy & St. Andrews Blvd.) | 37,000 |
| **Maybank Hwy** | |
| - Station 267 (between Main Rd. & River Rd.) | 12,900 |
| - Station 269 (between River Rd. & Wappoo Dr.) | 20,300 |
| - Station 271 (between Wappoo Dr. & Folly Rd.) | 24,800 |
| **Harborview Rd.** | |
| - Station 386 (between Theresa Dr. & Folly Rd.) | 13,800 |
| **Brownswood Rd.** | |
| - Station 509 (between Main Rd. & River Rd.) | 1,700 |

### *A.1.1.2 Projected Traffic Volumes*

The results presented below were obtained through analysis of the CHATS traffic model, with adjustments to the data that reflect changes anticipated through implementation of the Charleston County Comprehensive Transportation Plan. The base data of the CHATS model were derived from SCDOT traffic counts.

If constructed, the extension of the Mark Clark Expressway, (I-526), is projected to carry approximately 60,000 vehicles daily from US 17 (Savannah Highway) to Maybank Highway and 35,000 vehicles daily from Maybank Highway to the James Island Expressway in 2030.

The construction of the Mark Clark Expressway extension would reduce daily traffic on various roadways in the James Island and Johns Islands areas by providing drivers an additional, more direct route to the existing roadway network. For example, constructing the Mark Clark Extension would reduce the projected 2030 daily traffic volumes along US 17 (Savannah Highway) to about their current level despite the anticipated increases in population that are expected in the area and throughout Charleston County.

Roadways projected to experience a reduction in 2030 daily traffic volumes (compared to volumes if the Mark Clark were not constructed) after completion of the Mark Clark Expressway extension include:

**Savannah Highway (US 17)** directly west of the Mark Clark Expressway (from approximately 49,000 to approximately 43,000 vehicles per day) and directly east of the Mark Clark Expressway (from approximately 43,000 to approximately 36,000 vehicles per day);

**James Island Expressway** from the proposed SC 61 Connector to Harborview Road: (from approximately 76,000 to 59,000 vehicles per day);

**Maybank Highway** between the proposed MARK CLARK EXPRESSWAY extension and Riverland Drive (from approximately 40,000 to approximately 21,000 vehicles per day);

**Bees Ferry Road** (from approximately 33,000 to approximately 24,000 vehicles per day west of Glenn McConnell Parkway and from approximately 21,000 to approximately 15,000 vehicles per day east of Glenn McConnell Parkway);

**Main Road** directly south of Savannah Highway (US 17) (from approximately 27,000 to approximately 12,000 vehicles per day);

**River Road** between Main Road and Brownswood Road (from approximately 9,600 to approximately 2,600 vehicles per day).

Other roadways expected to see a reduction in traffic with the extension of the Mark Clark Expressway include:

**Maybank Highway** east of the proposed Mark Clark Expressway extension;

**Folly Road** north of Harborview Road;

**Harborview Road** east of James Island Expressway;

**James Island Expressway** south of SC 61 Connector;

**Main Road** from Savannah Highway (US 17) to Bohicket Road;

**River Road** between Main Road and Murraywood Road; and,

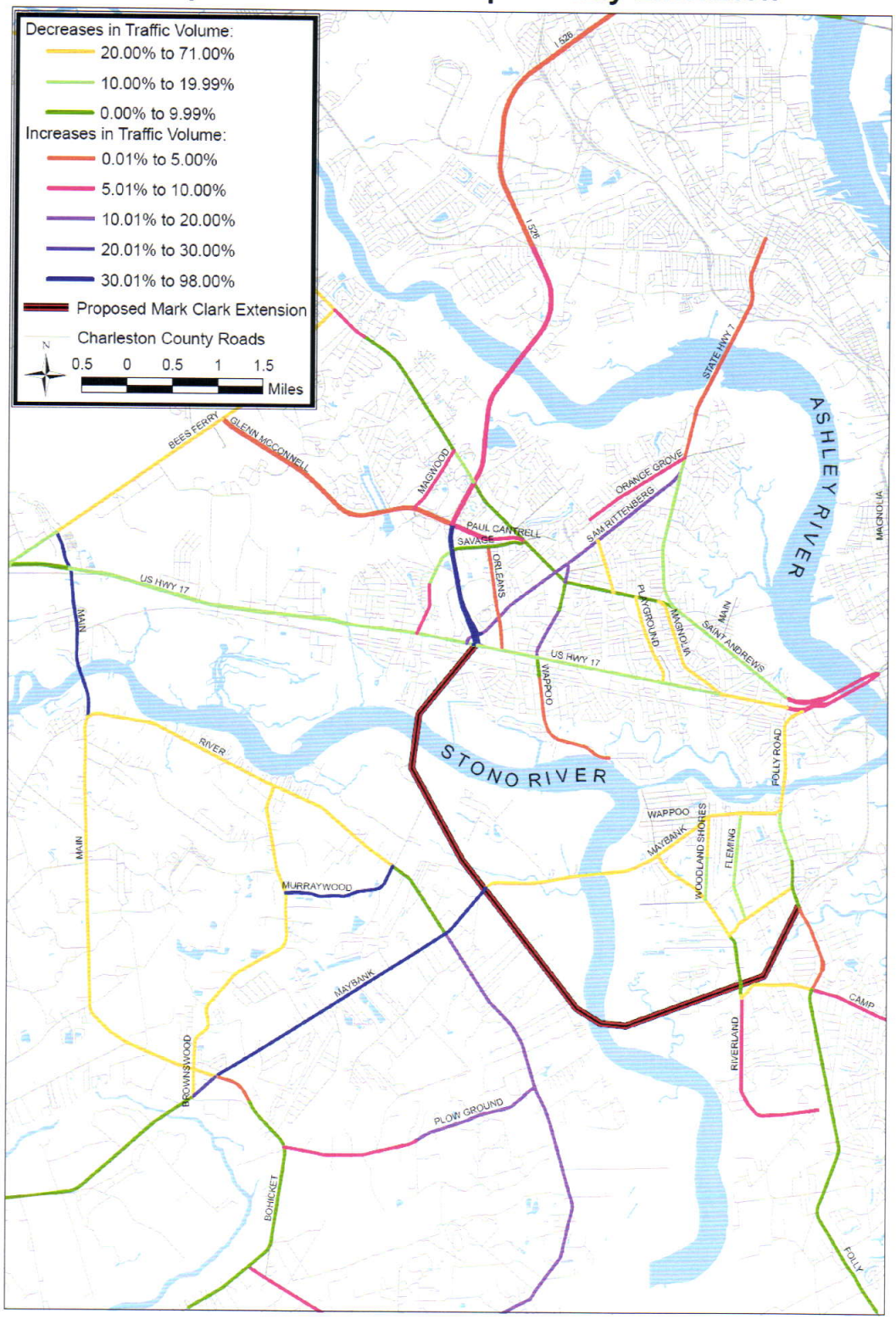
**Brownswood Road** from River Road to Main Road.

The extension of the Mark Clark Expressway may also increase traffic on a few roads in the area. The roadway section most impacted by the extension of the Mark Clark Expressway is Maybank Highway west of the proposed extension to the intersection with Bohicket Road. This section of Maybank Highway would receive more traffic as a result of the Mark Clark Expressway being constructed between US 17 and Folly Road. Traffic on Maybank Highway between the proposed extension and River Road is projected to increase from approximately 38,000 to approximately 59,000 vehicles per day. Traffic also increases between 8,000 to 14,000 vehicles per day along Maybank Highway between River Road and Main Road/Bohicket Road. These increases in traffic reflect the redistribution of traffic along the more direct route made up by the extension and Maybank Highway instead of the more circuitous routes taken along Savannah Highway, Main Road, River Road, Bees Ferry Road, and other roads in the area, which would result in a reduction in vehicle miles traveled for the same trips.

**Figure 2** illustrates the estimated increase/decrease in traffic resulting from the construction of the Mark Clark Expressway Extension. With its completion, traffic will naturally begin using the new portion of the Expressway, which will lessen the ever-increasing pressure to widen local and arterial roads, thus lessening the socio-economic and environmental impacts that these improvements might have on the local communities.

**FIGURE 2: Estimated Increase/Decrease in Traffic**

## Proposed Mark Clark Expressway Extension



A.1.1.3Accident Data

| Accident Data - Proposed Extension to the Mark Clark Expressway (I-526) Years 2000 - 2004 | Total Fatalities | Total Injuries | Propery Damage Only | Totals |
|---|---|---|---|---|
| Main Rd. (SC 10-20) from US 17 (SC 10-17) to Brownswood Rd. (SC 10-1442) | 4 | 157 | 160 | 321 |
| Brownswood Rd. (SC 10-1442) from River Rd. (SC 10-54) to Main Rd. (SC 10-20) | 0 | 2 | 6 | 8 |
| River Rd. (SC 10-54) from Main Rd. (SC 10-20) to Maybank Hwy (SC 10-700) | 2 | 25 | 16 | 43 |
| Bees Ferry Rd. (SC 10-57) from US 17 (SC 10-17) to Ashley River Rd. (SC 10-61) | 1 | 46 | 26 | 73 |
| US 17 (SC 10-17) from Main Rd. (SC 10-20) to Folly Rd. (SC 10-71) | 18 | 2434 | 3294 | 5746 |
| Maybank Hwy (SC 10-700) from Riverland Dr. (SC 10-53) to Folly Rd. (SC 10-71) | 3 | 87 | 67 | 157 |
| Folly Rd. (SC 10-71) from US 17/SC 61 (SC 10-61) to Harborview Rd. (SC 10-1028) | 0 | 94 | 149 | 243 |
| Harborview Rd. (SC 10-1028) from Folly Rd. (SC 10-71) to James Island Expressway (SC 10-30) | 0 | 48 | 82 | 130 |
| Ashley River Rd. (SC 10-61) from Dorchester County line to Bees Ferry Rd. (SC 10-57) | 0 | 32 | 34 | 66 |
| St. Andrews Blvd. (SC 10-61/ SC 10-171) from Ashley River Rd. (SC 10-61) to US 17 (SC 10-17) | 0 | 122 | 133 | 255 |
| Riverland Dr. (SC 10-53) from Maybank Hwy (SC 10-700) to Camp Rd. SC 10-28) | 0 | 15 | 20 | 35 |
| Central Park Rd. (SC 10-67) from Riverland Dr. (SC 10-53) to Folly Rd. (SC 10-71) | 0 | 5 | 1 | 6 |
| **TOTALS** | **28** | **3067** | **3988** | **7083** |

## A.1.2 Urgency of the Project

Since the 1980's, the Mark Clark Expressway has been a project of significance for Charleston County. It has been included in the CHATS program for decades, but lack of funding has hampered efforts to complete the highway. With continued development, traffic pressures are increasing and gridlock is not far behind.

While the South Carolina coastal region, unlike the Gulf coast, was spared the disastrous effects of a major hurricane in 2005, it is inevitable that a major storm will impact the Charleston area sometime in the future. The completion of the Mark Clark Expressway will add capacity to evacuation routes from Seabrook, Kiawah, Johns, and James Islands. Evacuation due to a hurricane is never a quick process, but completing the Mark Clark Expressway will relieve some of the gridlock on U.S. Highway 17 and will allow faster flow to I-26 and other alternative routes away from the coast.

With the recent rise in the Consumer Price Index and resulting increase in inflation, it becomes even more important for this project to be funded as soon as possible. In 1995, the year the Draft Environmental Impact Statement was completed for the Mark Clark Expressway, the average monthly rate of inflation was 2.61 percent. For the first nine months of 2005, the average monthly rate of inflation was 3.27 percent. The increase in oil prices because of Hurricane Katrina caused a sharp hike in the CPI, with the resulting rate of inflation for September 2005 at 4.69 percent. There is conflicting opinion about what direction the CPI and inflation will take next; however, generally speaking, sharp rises in prices due to a certain event are followed by slower declines in prices. Regardless of

these factors, it is evident that the cost to design and construct the Mark Clark Expressway will only increase over time.

Using the U.S. Government's Inflation Calculator (www.bls.gov), it was noted that $1.00 spent in 1995 has the same buying power as $1.30 spent in 2005. Therefore, in order to realize as much buying power as possible, it is critical that this project be funded as soon as possible. In addition, it might very well be possible to realize cost savings through economies of scale during the implementation of the RoadWise Program in Charleston County.

### A.1.3 Resolution from Charleston County

Charleston County Council passed a resolution on October 18, 2005, to seek funding for the completion of the Mark Clark Expressway. This resolution is included in **Appendix A**.

### A.1.4 Current and Five-Year History of Unemployment Data for Charleston County

According to the U.S. Bureau of Labor Statistics, the latest data available for Charleston County was August 2005 and the unemployment rate was 5.4 percent. **Table 7** shows the current and five-year unemployment data for the County.

**TABLE 7**
**Unemployment Data for Charleston County**

| Year | Unemployment Rate |
|---|---|
| Current (August 2005) | 5.4% |
| 2004 | 4.4% |
| 2003 | 4.2% |
| 2002 | 3.8% |
| 2001 | 3.2% |
| 2000 | 3.0% |

Source: Charleston County Budget Office and the U.S. Bureau of Labor Statistics

### A.1.5 Local Support of the Project

As with any large transportation development project, there are proponents as well as opponents to the project. CHATS has demonstrated its support of the Completion of the Mark Clark Expressway by including this project in its long-range plan for many years. The residents of Charleston County recognized the importance of highway improvements when their votes approved the ***Half-Cent Transportation Sales Tax*** in November 2004.

With this application to the State Infrastructure Bank, Charleston County Council, elected by the citizens of the County, and the elected representatives of the Town of Mount Pleasant, the City of Charleston, the Town of North Charleston, and various Chambers of Commerce, are lending their voices as representatives of the people to support this application.

*A.1.5.1 Public Meetings for Charleston County's Comprehensive Transportation Plan*

Charleston County's RoadWise Program recently held five public meetings to receive input on the Comprehensive Transportation Plan. Comments received as a result of these meetings have been mixed on support of the Mark Clark Expressway extension. Those opposed to the project seemed to focus on the fear of overdevelopment and environmental impacts on James and Johns Islands and favored widening existing roadways and creating walking and biking paths. Those in favor of the project pointed to the already congested U.S. Highway 17, Folly Road, Maybank Highway, and the Ashley Bridge District and asked for relief from the traffic, thus improving their quality of life.

### A.1.6 County, Municipal, and Chamber of Commerce Resolutions

The following entities have passed resolutions and, in some cases, provided additional information in support of Charleston County's application to the State Infrastructure Bank for funding to complete the Mark Clark Expressway.

- Charleston County Council
- Charleston Area Transportation Study (CHATS)
- Charleston County Legislative Delegation
- SC Coordinating Council for Economic Development
- The City of Charleston
- The Charleston Chamber of Commerce
- The Town of Seabrook Island

The resolutions are included in **Appendix A**.

### A.1.7 Regional and Statewide Significance of the Road

Construction of the Mark Clark Expressway extension will complete an important interstate highway link that has been discussed for decades. This connection is important to the region as a commuter highway, a hurricane evacuation route, and a tourist route for access to/from James, Johns, Kiawah, and Seabrook Islands. The Project will add significant capacity during the normal tourist seasons, facilitate the daily commute of residents, and add much needed capacity in the event of disasters and emergencies.

Significant benefits to the affected communities, the region, and to the state itself include:

- Promoting hurricane evacuation from James Island and Johns Island;
- Reducing congestion along SC 700 (Maybank Highway) and US 17;
- Improvement to the transportation system as a whole by offering more options to commuters and freight carriers;
- Facilitation for the movement of military personnel and equipment; and,
- Improved regional air quality, which offers environmental benefits.

Although the entire State of South Carolina and the South Carolina Department of Transportation will benefit greatly by having a more effective and efficient transportation and highway system, the primary benefactors of this project are the commuters in the greater Charleston area.

**BENEFITS TO THE STATE'S ECONOMIC CONDITION**

An efficient, safe, congestion free transportation system is key to maintaining and enhancing a region's economic vitality. A sub-standard highway system results in an area becoming less attractive for economic development. The improvements of this portion of the Mark Clark Expressway will support the continued economic vitality of communities throughout the corridor and increase accessibility for those who use it for work, shopping, or visiting tourist attractions. The Project will also have spin-off benefits for the entire region. Not only will the actual construction create thousands of new jobs for the entire construction period, but the widening itself, by addressing safety and congestion issues, will make the region more attractive to new and expanding businesses.

## PROJECT DESCRIPTION

**B. Direct Access From Interstate 26 (I-26) To Seaport Terminal Facilities At The Navy Base Terminal (PORT ACCESS ROAD) [1] and Three Rail Overpasses (Rivers Ave near Harley St; North Rhett Ave near I-526; and Rivers Ave near Durant Ave)**

This direct access roadway connects the proposed Marine Container Terminal at the Charleston Navy Complex to I-26 in North Charleston, South Carolina. Both the Terminal and the Roadway are currently undergoing a joint environmental analysis sponsored by the U.S. Army Corps of Engineers (Charleston District), with the Federal Highway Administration listed as a cooperating agency. On October 25, 2002, the City of North Charleston and the South Carolina State Ports Authority signed the "Memorandum of Understanding and Agreement…RE: Charleston Naval Complex," through which the City and SCSPA agreed to jointly approach the South Carolina

[1] Draft Environmental Impact Statement, Proposed Marine Container Terminal at the Charleston Naval Complex, North Charleston, SC, and accompanying Appendices. US Army Corps of Engineers, October 2005.

General Assembly regarding highway and rail infrastructure needed to access the complex. In general, the MOU discussed such issues as land ownership, leases, buffer zones, waterfront access, public safety, etc. Of importance to this application is the recognition of the critical nature of access to Interstate 26 and rail overpasses "in the areas of Rivers Avenue and Harley Street, Rivers Avenue and Durant Road, and North Rhett and I-526 Streets."[2] These rail overpasses are described below:

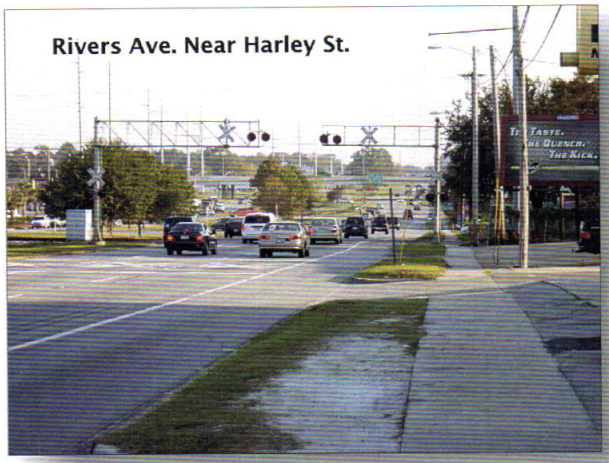
**Rivers Ave. near Harley St.**
This overpass would be constructed across the existing Norfolk-Southern Rail Line near Harley Street and would alleviate traffic congestion along Rivers Avenue. Norfolk-Southern utilizes this track a minimum of 10 times a day and this new overpass would improve traffic flow for approximately 30,000 vehicles affected on a daily basis.

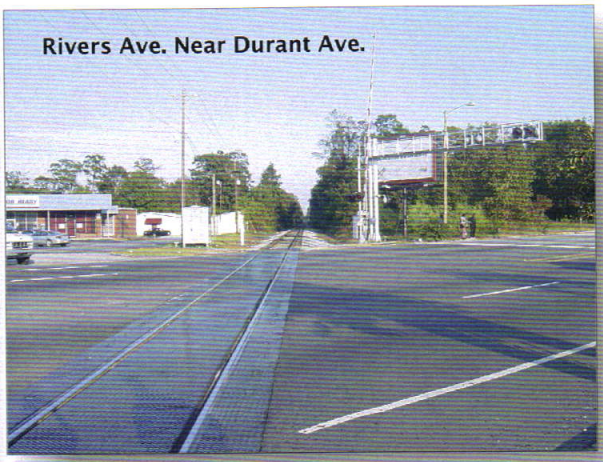
**North Rhett Ave. near I-526**
This overpass would be constructed across the existing Norfolk-Southern Rail Line and would alleviate traffic along North Rhett Avenue. Norfolk-Southern utilized this track a minimum of 10 times a day and this new overpass would improve traffic flow for approximately 30,000 vehicles affected on a daily basis.

**Rivers Ave. near Durant Ave.**
This overpass would be constructed across the existing CSX rail and would alleviate traffic flow on Rivers Avenue. CSX utilizes this track for extended amounts of time on its approach to Bennett Yard and stops on Rivers Avenue. This new overpass would improve traffic flow on a daily basis.

The existing track configurations are depicted in the following photographs.

[2] Draft Environmental Impact Statement, Proposed Marine Container Terminal at the Charleston Naval Complex, North Charleston, SC, Appendix B, pages 6-7. US Army Corps of Engineers, October 2005.





The Draft Environmental Impact Statement (EIS) for the Port became public in October 2005, and the public hearing and comment period will continue through December 2005, with the publication of the Final EIS in June 2006 and the Record of Decision (ROD) expected in August 2006.[3] The entire Draft EIS is available at ***www.porteis.com***. For purposes of this application, Charleston County is including *Technical Memorandum No. 2* in **Appendix C** and selected drawings and information extracted from the EIS document in the body of this Application. Such extractions are properly noted for easy reference.

Eleven alternatives were selected for initial study of the Access Roadway. Five of the eleven were considered "Southern" alternatives. One was omitted from further study

[3] www.porteis.com; Project Information; Schedule; Last updated January 20, 2005. US Army Corps of Engineers, Charleston District.

because of its impact on the surrounding community. Of the remaining four, all have been designated as urban freeways with speeds of 60 mph and each requires a new interchange with I-26.

Five of the six "Northern" alternatives were considered for further study. They all "begin with a 1.2-mile connection from the marine terminal entry to Spruill Avenue on a new, at-grade alignment urban arterial with a design speed of 60 mph (i.e., posted speed of 50 mph)."[4] After reaching a certain point, the alternatives vary in their configuration, but all eventually connect with existing interchanges on I-26.

After further examination, the alternatives selected for detailed study were ranked according to specified screening criteria (see **Figure 3**). As indicated in Figure 3, all of the "Northern" alignments were eliminated and the "Southern" alignments were retained for further study. Because of their similarity, two of the remaining alignments will be studied "as a single Feasible Alternative with two variations. This combination will simplify the impact evaluation process."[5] The five feasible alternatives are illustrated in **Figure 4**. [6] A conceptual drawing of the Port Access Road and the interchange with I-26 is included in **Appendix B.**

As the environmental process advances, detailed data will be collected for each corridor; conceptual and preliminary roadway plans and interchange designs will be developed. A third Technical Memorandum is expected to be issued prior to the publication of the Final EIS.

[4] Draft Environmental Impact Statement, Proposed Marine Container Terminal at the Charleston Naval Complex, North Charleston, SC, Appendix S, Access Roadway Feasibility Study: Technical Memorandum #2; page 5. US Army Corps of Engineers, October 2005.
[5] Ibid; page 20.
[6] Draft Environmental Impact Statement, Proposed Marine Container Terminal at the Charleston Naval Complex, North Charleston, SC, and accompanying Appendices. US Army Corps of Engineers, October 2005; page ES-24.

CHARLESTON COUNTY SOUTH CAROLINA

# FIGURE 3
## Alternatives Screening Criteria

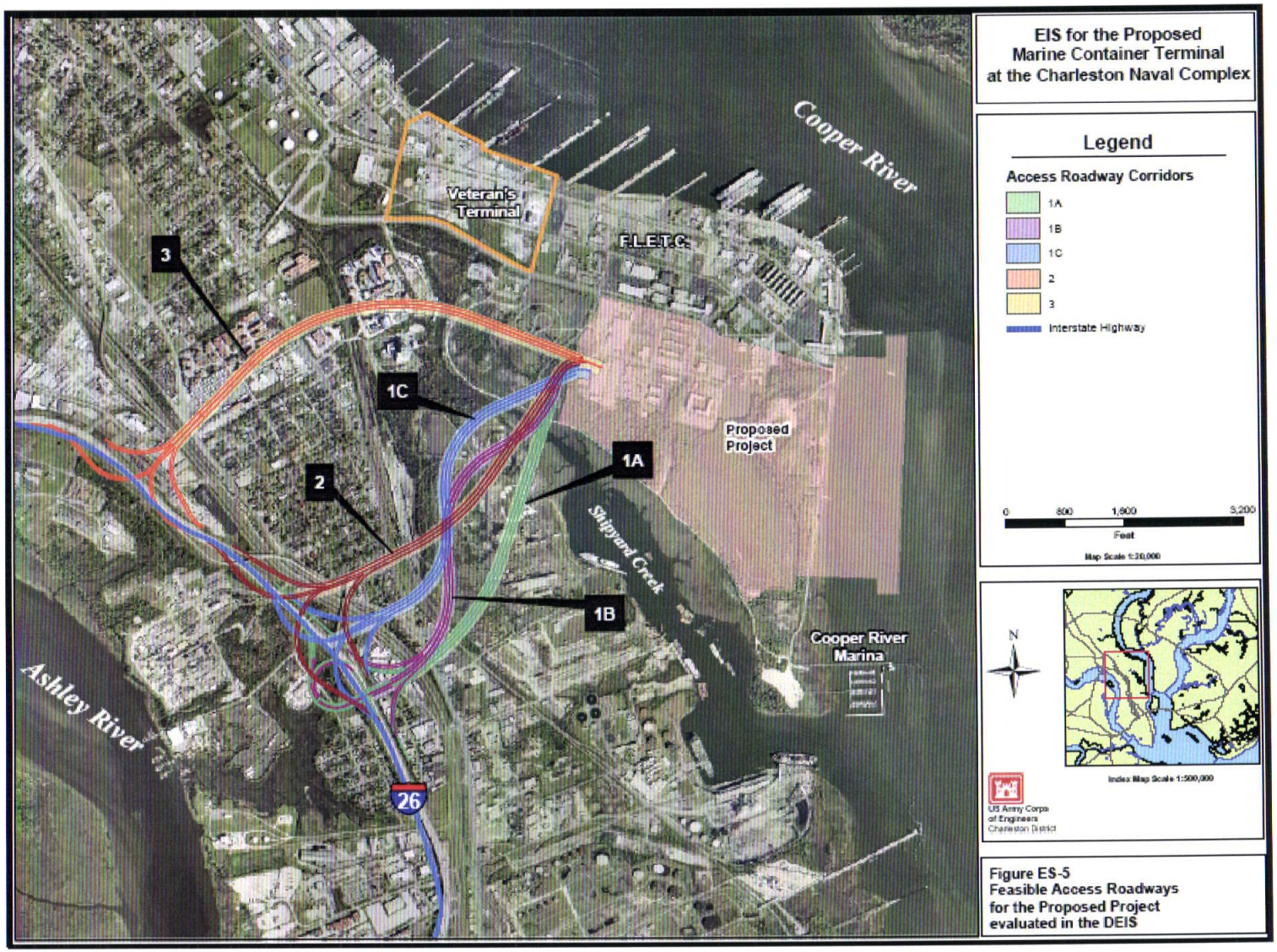
### Summary of Alternatives Screening

| SCREENING CRITERIA | ALTERNATIVE RANKING | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | A | B | C | E | F--1 | F-2 | G | I-1 | I-2 |
| Ability to improve physical access between the container terminal site and potential destinations | H | H | H | H | L | M | L | L | L |
| Ability to provide direct access to the Interstate System | H | H | H | H | L | L | L | L | L |
| Ability to maintain adequate service along the local road system | M | M | H | H | L | M | M | L | L |
| Ability to safely integrate terminal traffic with existing traffic | H | H | H | M | L | M | L | L | L |
| Use of a design that supports local and regional plumbing policies and strategies | H | H | H | H | M | M | L | L | L |
| Use of a design that minimizes impacts to the surrounding natural environment | L | M | M | H | H | H | H | M | M |
| Use of a design that minimizes impacts to local communities | M | M | M | M | L | L | L | L | L |
| Use of a design that minimizes disturbance of know contaminated sites | M | M | M | L | L | L | L | L | L |
| DETERMINATION | R | R | R | E | E | E | E | E | E |

Key
L=low potential for meeting criteria
M=moderate potential for meeting criteria
H=high potential for meeting criteria

R=Retain
E=Eliminate

**FIGURE 4**
**Port Access Road Feasible Alternatives**



## B.1 PUBLIC BENEFITS

### Port Access Roadway

As is the case of the Completion of the Mark Clark Expressway, Charleston County and the State of South Carolina can expect to derive numerous benefits from the design and construction of the proposed Marine Container Terminal and its associated infrastructure improvements. However, the most prevalent benefit will be the resulting economic development. The Port of Charleston is expected to exceed capacity by 2014 and must expand in order to stay competitive. At this time, Charleston is the fourth busiest port in the United States and, according to a study completed by the Center for Economic Forecasting at Charleston Southern University, the Charleston Port ranks among the best in the world in efficiency.[7]

The significant benefits that will be realized by the development of the new port facility, its access road, and the proposed rail overpasses are, in order of importance:

1. Promotion of Economic Development
2. Enhancement of Mobility and Safety
3. Increase in the Quality of Life and General Welfare of the Public

The following discussion will focus on the economic development that is expected to occur once the port project is complete.

### PROMOTION OF ECONOMIC DEVELOPMENT

In applying for a permit from the US Army Corps of Engineers for construction of a proposed 280-plus acre marine container terminal at the Charleston Naval Complex, the South Carolina State Ports Authority was required to submit a Statement of Purpose and Need. A copy of the SCSPA Statement of Need is included as **Appendix D**.

According to the Statement of Need, updated container cargo projections forecast an increase in TEU[8] from 1.65 million in 2004 to 4.0 million in 2025. Representing a 4.28 percent compound annual growth, this increase in container activity cannot be supported by existing facilities. Therefore, the South Carolina State Ports Authority, recognizing the need to remain competitive, has committed its resources to the development of a new marine container port facility located at the Navy Base Terminal in Charleston.

The Center for Economic Development at Charleston Southern University studied the impact of South Carolina's ports on the state's economy, using year-end 2002 statistics and forecasting impacts to year 2035. This independent study was completed as a service to the citizens of South Carolina and did not receive

[7] *The Economic Impact of the South Carolina State Ports Authority; 2002.* The Center for Economic Forecasting at Charleston Southern University; www.port-of-charleston.com.

[8] The definition of TEU is "twenty-foot equivalent units," which is a standard industry measurement of one standard twenty-foot ocean shipping container.

funding from the Ports Authority or any other entity. The highlights from this study are included in this application and the entire presentation is available at www.port-of-charleston.com

Using the REMI model, a 53-sector dynamic econometric model, which replicates the economy of South Carolina over a 35-year time period, the Center for Economic Forecasting was able to measure the economic impacts of the ports on a statewide and regional basis. The study used the change in the state's employment level, the change in the state's personal income, the change in state and local tax revenues, and the change in the state's gross regional product to measure the economic impacts.

According to the 2002 study, TEU's for years 1994 through 2000 showed an annual growth rate of 6.71 percent. Because of national and international economic slowing and, more importantly, capacity constraints at the Port of Charleston, the growth rate in TEU's from 2000 through 2002 was constant. However, expansion of the Port of Charleston at the Charleston Naval Complex will allow the Port added capacity to service increased growth in TEU's and the expected increase in the size of container ships. (The increase in the size of container ships has become an issue with international shipping waterways such as the Panama Canal.)

In addition to the industries that are directly dependent on the ports, there are many port users and businesses that rely on port operations, such as manufacturing, construction, transportation, retail and wholesale trade. These industries and businesses are located statewide and the impacts of the port were measured by regions. For example, the Piedmont region of South Carolina, which includes Greenville, Spartanburg, Laurens, Pickens, Oconee, Union, and York counties, among others, showed the highest economic impacts. In fact, the impacts to the Piedmont region outweighed the impacts to the Tri-County region of Berkeley, Charleston, and Dorchester counties. Therefore, it is clear that the expansion of the Port of Charleston is an important project for the State of South Carolina, not just Charleston County.

Additional information on the regional and statewide significance of the Port Expansion and the Port Access Road is included in Section 1.8 of this application.

**ENHANCEMENT OF MOBILITY AND SAFETY**

Once the proposed port facility is constructed, peak hour traffic is expected to reach almost **11,000 daily trips** (number of daily trips includes entering and exiting terminal gates) at build-out in 2025. Under average conditions, trucking traffic accounts for over 5,000 daily trips during this same time period. "However, it must be stressed that increases in traffic, due to ongoing

development within the area, even without the project, would cause traffic congestion problems during the projected 20-year period."[9]

In addition to relief from traffic congestion and related safety issues, the construction of the proposed Port Access Road would provide three rail overpasses that would enhance not only safety, but also mobility. These overpasses are planned for Rivers Avenue and Harley Street, Rivers Avenue and Durant Road, and North Rhett and I-526 Streets.

Therefore, it is critical that Charleston County advance the construction of this important access road and the railroad overpasses in order to ensure that the projected increases in roadway and rail traffic due to increased port activity do not adversely impact an already worsening condition.

Traffic and accident data are presented and discussed in Section B.1.1, Traffic Studies.

**INCREASE IN THE QUALITY OF LIFE AND THE GENERAL WELFARE OF THE PUBLIC**

"Quality of Life" can be defined as an overall sense of well being for an individual and a supportive environment for a community. Factors that contribute to an individual's sense of wellbeing may include financial security, good health, and spiritual and emotional health, among others. Factors that may increase the quality of life in a specific community may include safety, environmental, aesthetic, cultural, and social factors, to name a few.

The proposed port facility and its supporting infrastructure may increase the quality of life and the general welfare of the citizens of Charleston County by providing new jobs, thus providing an increase in financial security, available health care plans, etc. However, without the construction of the Port Access Road and the railway overpasses, the community may suffer increased pollution from trucks and cars idling in traffic. Traffic safety may become an issue on community streets because of this increase in traffic. Other environmental factors, such as traffic noise, may also be adversely impacted.

Once the Environmental Impact Statement is completed, a full analysis of impacts will be available. Until that time, the following sections will provide an overview of information that will be helpful to the State Infrastructure Bank Board in making their decision on the importance of this funding request.

[9] Draft Environmental Impact Statement, Proposed Marine Container Terminal at the Charleston Naval Complex, North Charleston, SC, Appendix S, Access Roadway Feasibility Study: Technical Memorandum #2; US Army Corps of Engineers, October 2005. page

### B.1.1 Traffic Studies

*B.1.1.1 Current and Projected Traffic Volumes*

**TABLE 8**
**Current Traffic Volumes (Proposed Port Access Road)**

| | 2004 Traffic Count Data |
|---|---|
| **Carner Ave.** | |
| - Station 513 (between Meeting St. & Cody St.) | 850 |
| **Spruill Ave.** | |
| - Station 471 (between Montague Ave. & McMillian Ave.) | 10,100 |
| - Station 473 (between McMillian Ave. & US 52) | 9,900 |
| **Burton Ln.** | |
| - Station 551 (between Clements Ave. & Spruill Ave.) | 1,950 |

Direct access to the Interstate System will be necessary if a container terminal built on the Charleston Naval Complex site in Charleston County is to function at maximum efficiency by the build-out year of 2025. A traffic analysis performed February 2005 shows that a majority of the roadways in the North Charleston area already operate at a Level of Service (LOS) D. Heavy trucks in the area contribute to this LOS and make up nearly 20 percent of the volume along segments of 1-26 and nearly 25 percent along segments of I-526.

Currently, there are no Charleston Area Transportation Study (CHATS) Transportation Improvement Program (TIP) projects planned within the study area, but the recently passed half-cent sales tax referendum could allow for transportation projects in and/or near the proposed port area.

Using the South Carolina State Ports Authority's (SCSPA) "Statement of Need for the Proposed Project" as a guide, Parsons Brinckerhoff, the consultant for the Access Roadway Feasibility Study, created a list of five goals addressing federal, state, and local transportation needs. The following three goals relate most to the need of a port access road to the terminal:

**Goal 1:** "Provide direct access between the proposed marine container terminal location and the Interstate System, while maintaining adequate service for local, commuter, and commercial traffic."
**Goal 2:** "Safely integrate container terminal traffic with existing traffic."

### B.1.3 Resolution from Charleston County

Charleston County Council passed a resolution on October 18, 2005, to seek funding for the proposed Port Access Road. This resolution is included in **Appendix A**.

### B.1.4 Current and Five-Year History of Unemployment Data for Charleston County

According to the U.S. Bureau of Labor Statistics, the latest data available for Charleston County was August 2005 and the unemployment rate was 5.4 percent. **Table 7** shows the current and five-year unemployment data for the County.

### B.1.5 Local Support of the Project

As with any large transportation development project, there are proponents as well as opponents to the project. CHATS has demonstrated its support of the proposed Port Access road by including this project in its long-range plan for innovative funding. The residents of Charleston County recognized the importance of highway improvements when their votes approved the ***Half-Cent Transportation Sales Tax*** in November 2004. With this application to the State Infrastructure Bank, Charleston County Council, elected by the citizens of the County, and the elected representatives of the Town of Mount Pleasant, the City of Charleston, and other entities, are lending their voices as representatives of the people to support this application.

### B.1.6 County, Municipal, and Chamber of Commerce Resolutions

The following entities have passed resolutions and, in some cases, provided additional information in support of Charleston County's application to the State Infrastructure Bank for funding to construct the Port Access Road.

- Charleston County Council
- Charleston Area Transportation Study (CHATS)
- Charleston County Legislative Delegation
- SC Coordinating Council for Economic Development
- The City of Charleston
- The Charleston Chamber of Commerce
- The Town of Seabrook Island

The resolutions are included in **Appendix A**.

### B.1.7 Regional and Statewide Significance of the Road

The proposed Port Access Road and the railway overpasses alone cannot be considered stimuli to South Carolina's economy; however, without the construction of this important roadway and the overpasses, adverse impacts of the port expansion could be expected in increased costs to the trucking industry (measured in time and fuel expenses) and adverse

impacts to the surrounding communities (measured in increased truck traffic, noise, and pollution generated by truck emissions through residential and business areas).

As discussed earlier, the Center for Economic Development at Charleston Southern University studied the impact of South Carolina's ports on the state's economy. This study was completed in 2002 and reached the conclusion that South Carolina's ports are vital contributors to the financial well being of the state.

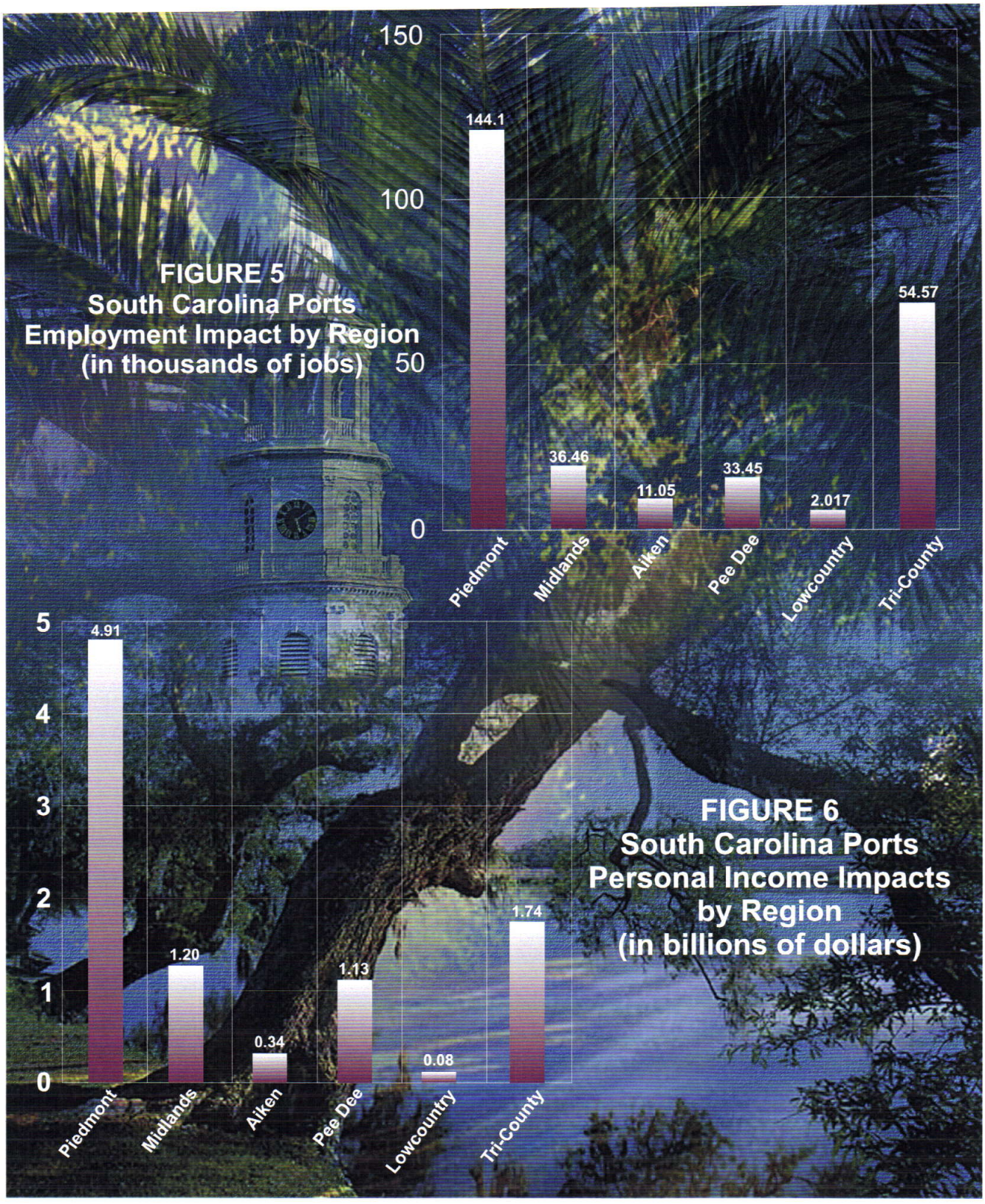
The total economic impacts are summarized below and regional impacts are illustrated in **Figures 5** through **8**.[10]

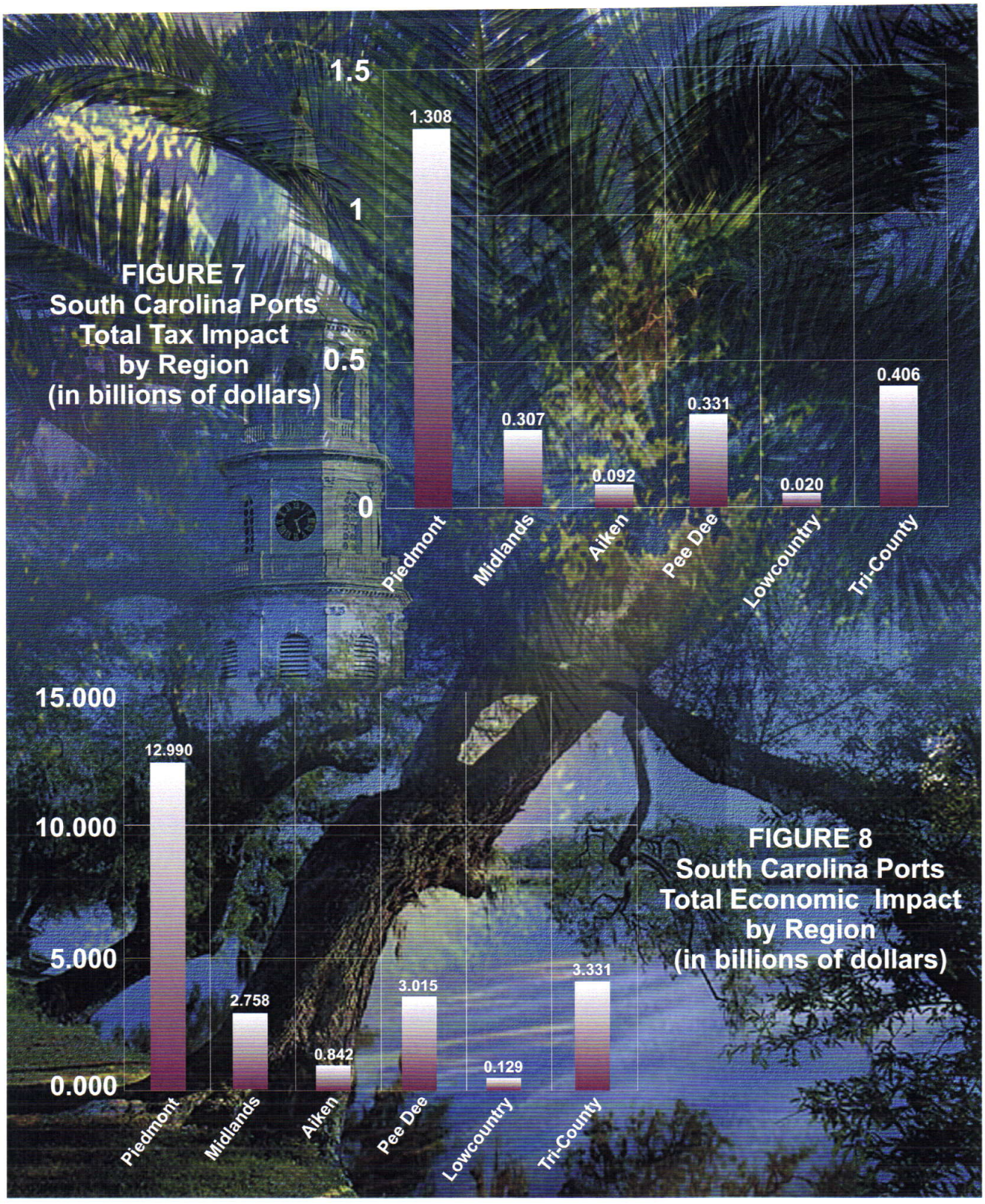
| | |
|---|---|
| **Total Employment Created** | **281,660 jobs** |
| **Total Personal Income Created** | **$9.4 billion** |
| **Total Tax Revenues Generated** | **$2.5 billion** |
| **Total Economic Impact (GRP)** | **$23 billion** |

### C. Locally Financed Projects

The third component of the $1.074 billion program is the local funding of $354 million of roads on the **State Highway System**. Charleston County proposes to use **local** sales tax funds to complete these projects. A more detailed discussion of the projects, which will be included in this component, is included in Section 2.2 below.

[10] *The Economic Impact of the South Carolina State Ports Authority; 2002.* The Center for Economic Forecasting at Charleston Southern University; www.port-of-charleston.com.


150
100
50
0
144.1
36.46
11.05
33.45
2.017
54.57
Piedmont
Midlands
Aiken
Pee Dee
Lowcountry
Tri-County
FIGURE 5
South Carolina Ports
Employment Impact by Region
(in thousands of jobs)
5
4
3
2
1
0
4.91
1.20
0.34
1.13
0.08
1.74
Piedmont
Midlands
Aiken
Pee Dee
Lowcountry
Tri-County
FIGURE 6
South Carolina Ports
Personal Income Impacts
by Region
(in billions of dollars)


1.5
1
0.5
0
1.308
0.307
0.092
0.331
0.020
0.406
Piedmont
Midlands
Aiken
Pee Dee
Lowcountry
Tri-County
FIGURE 7
South Carolina Ports
Total Tax Impact
by Region
(in billions of dollars)
15.000
10.000
5.000
0.000
12.990
2.758
0.842
3.015
0.129
3.331
Piedmont
Midlands
Aiken
Pee Dee
Lowcountry
Tri-County
FIGURE 8
South Carolina Ports
Total Economic Impact
by Region
(in billions of dollars)

# Financial Plan

# 2.0 FINANCIAL PLAN

## 2.1 Total Cost of the Projects

The total cost for design and construction of all projects in the program is $1.074 billion. This program includes the Extension of the Mark Clark Expressway, the design and construction of the Port Access Road, and a local contribution in the form of **locally financed roads for the Federal and State Highway System**.

| Project | Estimated Cost of Project | Funding Provided | |
|---|---|---|---|
| | | SIB | County |
| Extension of Mark Clark Expressway | $420 million | ✓ | |
| Port Access Road and RR overpasses | $300 million | ✓ | |
| Locally Financed U.S. and **State Roads** | $354 million | | ✓ |
| **Total** | **$1,074 million** | **Local Match** | **33%** |

Line item cost estimates for both the Mark Clark Expressway and the Port Access Road are shown in **Tables 9** and **10**, respectively.

### 2.1.1 *Source of Cost Estimates*

The cost estimates for the Completion of the Mark Clark Expressway were determined using the alignment determined in 1995 Draft Environmental Impact Statement for the Mark Clark Expressway Extension. The estimates were developed using recent bridge, interchange, and roadway projects and the costs were updated to reflect price escalations for various work items.

The cost estimates for the Port Access Road were determined using the proposed alignment determined in October 2005 Draft Environmental Impact Statement for the Proposed Marine Container Terminal at the Charleston Naval Complex. The estimates were developed using recent bridge, interchange, and roadway projects and the costs were updated to reflect price escalations for various work items.

### 2.1.2 *Confirmation Letter from SCDOT*

During the development of this funding application, SCDOT was provided the documentation for the cost estimates, schedules, and the anticipated draw schedules. SCDOT has confirmed its approval and a formal letter will be forwarded to SIB in the near future.

CHARLESTON COUNTY SOUTH CAROLINA

## TABLE 9

**Mark Clark Extension - Cost Estimate**
**US 17 to Folly Road**

| | | | Length (ft) | Width (ft) | Unit Cost | Sub (Millions) | Total (Millions) |
|---|---|---|---|---|---|---|---|
| **US 17 Interchange** | | | | | | | **$ 12** |
| | Ramps | LS | | | | $ 8 | |
| | Bridge | SQFT | 800 | 50 | $110 | $ 4 | |
| **North Approach Roadway** | | | | | | | **$ 7** |
| | Roadway | FT | 2750 | | $ 1,900 | $ 5 | |
| | Bridge | SQFT | 200 | 100 | $100 | $ 2 | |
| **River Crossing** | | | | | | | **$ 154** |
| | North Approach | SQFT | 2200 | 100 | $125 | $ 28 | |
| | High Level | SQFT | 2750 | 100 | $150 | $ 41 | |
| | South Approach | SQFT | 6850 | 100 | $125 | $ 86 | |
| **SC Route 700 Interchange** | | | | | | | **$ 14** |
| | Ramps | LS | | | | $ 6 | |
| | Bridges | SQFT | 800 | 100 | $100 | $ 8 | |
| **West Approach Roadway** | | | | | | | **$ 7** |
| | Roadway | LF | 3700 | | $1,900 | $ 7 | |
| **River Crossing** | | | | | | | **$ 88** |
| | West Approach | SQFT | 1600 | 100 | $125 | $ 20 | |
| | High Level | SQFT | 2000 | 100 | $150 | $ 30 | |
| | East Approach | SQFT | 3000 | 100 | $125 | $ 38 | |
| **East Approach Roadway** | | | | | | | **$ 27** |
| | Roadway | LF | 7350 | | $1,900 | $ 14 | |
| | Bridges | SQFT | 1300 | 100 | $100 | $ 13 | |
| **Folly Road Interchange** | | | | | | | **$ 12** |
| | Ramps | LS | | | | $ 10 | |
| | Bridges | SQFT | 200 | 100 | $80 | $ 2 | |
| | | | | | **Sub Total Construction** | | **$ 321** |
| **Misc. (Allowances)** | | | | | | | **$ 47** |
| | Utility Relocation | LS | | | | $ 16 | |
| | Right of Way | LS | | | | $ 31 | |
| **Others Fees** | | | | | | | **$ 52** |
| | EIS / ROD / Permit | LS | | | | $ 6 | |
| | Prel. Design | LS | | | | $ 16 | |
| | Final Design | LS | | | | $ 10 | |
| | R/W Acquisition | LS | | | | $ 5 | |
| | CEI/Testing | LS | | | | $ 16 | |
| | | | | | | **Total** | **$ 420** |

CHARLESTON COUNTY
SOUTH CAROLINA

## TABLE 10

### Port Access Road Cost Estimate
### N. Charleston, SC

| | Length (ft) | Width (ft) | Area (SF) | Unit Cost | Sub (Millions) | Total (Millions) |
|---|---|---|---|---|---|---|
| **GC / Mobilization** | | | | | **$ 10** | **$ 10** |
| | | | | | | |
| **Site Preparation** | | | | | | **$ 6** |
| Grading / Earthwork | | | | | $ 5 | |
| Drainage | | | | | $ 1 | |
| | | | | | | |
| **Pavement** | | | | | | **$ 18** |
| Ramps on grade | | | | | $ 9 | |
| CD Roads | | | | | $ 6 | |
| Misc. pavement | | | | | $ 3 | |
| | | | | | | |
| **Specialty Items** | | | | | | **$ 3** |
| Guardrail / Barrier | | | | | $ 1 | |
| Signalization | | | | | $ 1 | |
| Lighting / Landsacping | | | | | $ 1 | |
| | | | | | | |
| **Traffic Control / Signage / ITS** | | | | | | **$ 6** |
| | | | | | | |
| **Structures** | | | | | | **$ 124** |
| Port Access Road (mainline - Elevated) | 4500 | 76 | 342000 | $124 | $ 42 | |
| Port Access Road to I-26E | 2300 | 40 | 92000 | $169 | $ 16 | |
| Port Access Road to I-26W | 2550 | 40 | 102000 | $169 | $ 17 | |
| I-26E to Port | 2950 | 40 | 118000 | $124 | $ 15 | |
| I-26W to Port | 1250 | 40 | 50000 | $124 | $ 6 | |
| Ramp - Flyover to Meeting St.(Exit 217) | 1280 | 40 | 51200 | $112 | $ 6 | |
| Ramp - Meeting St. to West I-26 (Exit 217) | 1010 | 40 | 40400 | $112 | $ 5 | |
| Ramp - Flyover from Spruill to I-26E (Exit 218) | 1200 | 40 | 48000 | $112 | $ 5 | |
| Ramp - West I-26 to Spruill (Exit 218) | 550 | 40 | 22000 | $112 | $ 2 | |
| MSE Walls | | | | | $ 2 | |
| Barrier Walls | | | | | $ 8 | |
| | | | | | **Total Construction** | **$ 166** |
| | | | | | | **$ 106** |
| N. Charleston Railroad Crossings Eliminations | | 3 | each | $27 M | $ 81 | |
| Utility Relocation | | 1 | LS | | $ 6 | |
| Right of Way | | 1 | LS | | $ 20 | |
| | | | | | | **$ 27** |
| Permitting | | | | | $ 1 | |
| Prel. Design | | | | | $ 3 | |
| Final Design | | | | | $ 6 | |
| R/W Acquisition | | | | | $ 3 | |
| Wetland Mitigation | | | | | $ 1 | |
| Hazardous Site Cleanup | | | | | $ 3 | |
| CEI/Testing | | | | | $ 10 | |
| | | | | | **Total** | **$ 300** |

## 2.2 Local Contribution

*2.2.1 Amount of Local Contribution and Percentage of Total Project Cost*

Charleston County's local contribution of **$354 million**, as described below, is the combined contribution for the Completion of the Mark Clark Expressway and for the proposed Port Access Road and railroad overpasses.

## 2.3 Source of Local Contribution

**a) $48 million** in projects approved by referendum for bond expenditure, including:

- **$25 million**: US 17 Johnnie Dodds Boulevard
- **$ 7 million**: Glenn McConnell Parkway/ Bees Ferry Road Improvements
- **$10 million**: Road Improvements on James Island
- **$ 6 million**: US Highway 17 Access Ramp to SC 61 Connector

**b) $50 million** designated for resurfacing on **state roads** (Half-Cent Transportation Sales Tax funds equaling an average of $2 million per year for 25 years).

**c) $3 million** consisting of federal earmark funds designated in the 2005 SAFETEA-LU Reauthorization Bill for the Mark Clark Expressway Project.

**d) $253 million** designated for federal and **state road** projects selected by Charleston County Council and funded by the Half-Cent Transportation Sales Tax.

## 2.4 Amount of Assistance Requested

Charleston County respectfully requests $420 million for the Completion of the Mark Clark Expressway and $300 million for the design and construction of the Port Access Road and railroad overpasses for a total funding request of $720 million. The local contribution of $354 million will comprise 33 percent of the total $1.074 billion program. This request is supported by our engineer's estimate. As noted earlier we have requested a letter of confirmation from SCDOT. (See **Appendix E**.)

## 2.5 Form of Assistance Requested

Charleston County Council respectfully requests that this $720 million be provided in the form of a grant to the County.

## 2.6 Other Proposed Sources of Funds

**a)** The Extension of the Mark Clark Expressway in Charleston County is a designated high priority project in the "Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users" or "SAFETEA-LU" passed by

Congress in 2005. Congress has authorized $3 million to assist in the completion of the Expressway; the funds are to be available for fiscal years 2005 through 2009. We suggest using these funds to complete the Supplement EIS and for additional design and contract preparation that will be required for the project.

**b)** The Port Access Road has been approved for **$10 million in federal earmark funds** under the ***Transportation Equity Act: A Legacy for Users (TEA-LU)***. These funds have been designated for various studies related to the road, including permitting, design, and preliminary engineering. These funds are necessary for preliminary planning/investigations to move the project forward and are not included in the $300 million funding request. In addition, the South Carolina State Ports Authority funded a $1.3 million preliminary alternatives analysis.

## 2.7 Anticipated Disbursement Schedule

### *2.7.1 Cash Flow Diagram*

Anticipated disbursement schedules for the Extension of the Mark Clark Expressway and the proposed Port Access Road and railroad overpasses are included in **Tables 11** and **12**, respectively.

### *2.7.2 Confirmation Letter from SCDOT*

Charleston County's request for confirmation is included in **Appendix E**.