

Appendix K
SCSPA Statement of Need

The South Carolina State Ports Authority's Statement of Need for the Proposed Project

1.0 The South Carolina State Ports Authority

The South Carolina State Ports Authority is an instrumentality of the State of South Carolina created in 1942 by Act No. 626 of the South Carolina General Assembly for the immediate preparation of the Ports of South Carolina for the use in prosecution of the war (World War II) and their ultimate development for peacetime commercial progress.

The current mission of the South Carolina State Ports Authority is to contribute to the economic development of the State of South Carolina by fostering and stimulating waterborne commerce and the shipment of freight. In pursuit of this mission the Authority will develop, operate and maintain competitive, cost-efficient, highly productive cargo handling facilities in a fiscally responsible manner. The Authority will pursue economic opportunities that support and enhance its core business.

The most recent economic analysis done for the Authority by the Center for Economic Forecasting at Charleston Southern University measured the impact of the Authority on the State economy. It stated that the South Carolina State Ports Authority creates 281,660 jobs, \$9.4 billion in annual personal income, \$2.5 billion in annual tax revenues, and \$23 billion in annual total economic impact.

On September 1, 1999, the South Carolina State Ports Authority applied to the U.S. Army Corps of Engineers and the South Carolina Department of Health and Environmental Control for a permit to construct a marine cargo terminal on its property on Daniel Island in Charleston, South Carolina. A draft environmental impact statement had been prepared and a public hearing was held on November 17, 1999. Due to public opposition to the project, the Authority withdrew its permit request. On March 2, 2001 a Public Notice was issued by the U.S. Army Corps of Engineers stating the South Carolina State Ports Authority had withdrawn their permit application P/N # 99-1T-345-P-C-W to construct a marine cargo terminal and related appurtenant activities in and adjacent to the Wando and Cooper River.

Recognizing the need for the Authority to expand its facilities in support of its mission, the South Carolina General Assembly approved a Joint Resolution on May 20, 2002, requiring the Authority to begin environmental impact studies and other required actions to obtain a permit for a new terminal facility on the West Bank of the Cooper River. Further, in a Budget Proviso Codification Act, Section 15, the General Assembly authorized the Charleston Naval Complex Redevelopment Authority (RDA) to convey portions of the former Charleston Naval Base to the State Ports Authority for the construction and operation of marine terminal facilities. Furthermore, on March 26, 2003, the General

Assembly unanimously adopted a concurrent resolution to commend the South Carolina State Ports Authority Board for its diligent efforts in working with the City of North Charleston and the Charleston Naval Base Redevelopment Authority to secure a location for a new marine cargo terminal on the former Charleston Naval Base and to encourage the expeditious issuance of the necessary permits for that facility.

In pursuit of its mission and in response to Legislative directive, the South Carolina State Ports Authority applied to the U.S. Army Corps of Engineers and the South Carolina Department of Health and Environmental Control on January 24, 2003, for a permit to construct a marine cargo terminal on property it will be conveyed on the former Charleston Naval Base.

2.1 Historical Container Cargo Volumes

The following table lists container cargo volumes through the Port of Charleston for the fiscal years (July 1 – June 30) 1998 through 2003. Volumes are in twenty foot equivalent units (TEU). TEU is a standard industry measurement (one standard twenty foot ocean shipping container). Ocean shipping containers come in 20, 40, 45, lengths. Over the period listed Charleston container cargo averaged 1.74 TEU per physical container. Container volumes have grown at 5.97% compound annual growth rate over this period. Container volumes were down in 2002, mainly attributed to the events of September 11, 2001.

	Fiscal Year					
	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>
<u>TEU</u>	1,259,259	1,347,618	1,574,467	1,619,577	1,509,381	1,681,721
<u>Pier Containers</u>	737,632	780,428	906,339	933,214	866,640	958,310
<u>TEU/Container</u>	1.71	1.73	1.74	1.74	1.74	1.75

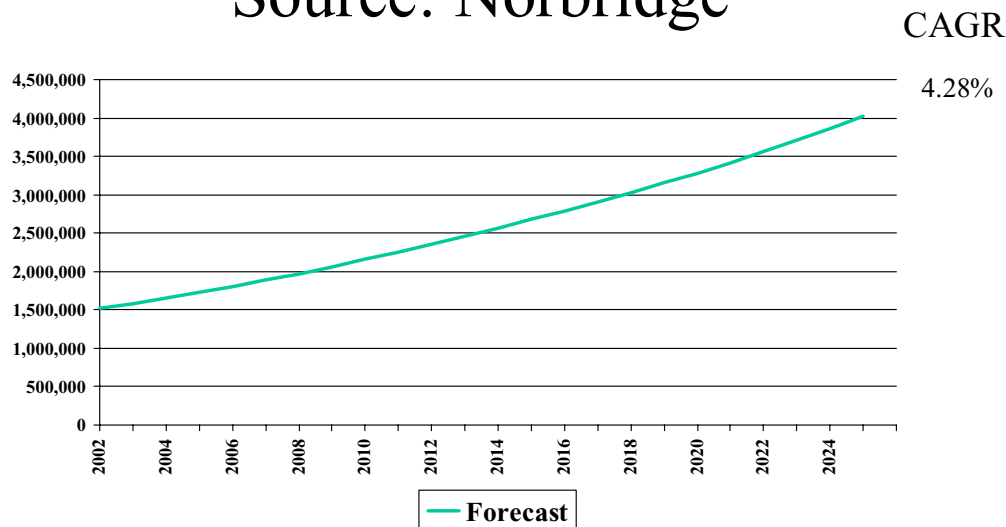
2.2 Projected Container Cargo Volumes

Container cargo projections were updated in September 2002. The forecasting model has been corroborated by the South Carolina State Ports Authority Market Research department, and has been adjusted over the years based on actual experience. The basis for the projections was basically the same as that used in earlier projections done by Mercer Management and Norbridge Inc. Those models considered customer trade lane data compiled by the Port Import Export Reporting Service (PIERS), macroeconomic growth drivers and annual growth rates by trade lane projected by the Wharton Econometric Forecasting Associates (WEFA), and customer specific information provided by the South Carolina State Ports Authority.

Container cargo volume through the Port of Charleston is projected to grow from 1,650,000 TEU in 2004 to 4,000,000 TEU in 2025. This represents a compound annual growth rate of 4.28%.

Port of Charleston TEU Forecast

Source: Norbridge



While the graph indicates a smooth growth curve it should be understood actual growth will contain steps on the growth curve. Growth rates will vary by trade lane and world economic conditions. Additions of trade lanes or modifications of trade routes by individual steamship carriers will result in step changes in cargo volumes. However, the growth curve is expected to fairly represent growth over the planning period.

2.3 Projected Maximum Throughput of Existing Facilities

TEU throughput per container yard acre varies greatly around the world. Typically, Ports in the Far East realize a greater facility throughput sometimes reaching 8000 to 10,000 TEU per acre per year. For those ports, a dense, high stacked grounded operation is more economical than constructing additional acres of container storage areas because of scarcity of land. Also, ports that have a high percentage of transshipped cargo (in by ship/out by ship) or more frequent ship calls usually enjoy greater throughput per acre.

High infrastructure costs drive better facility utilization. Better utilization of a container terminal facility requires denser stacking of containers which increases operating costs. The balance between infrastructure cost and operating cost

drives land use and operating styles. To be successful, Ports within a given range must be competitive in cost and style of operation. Even if a high throughput yard were more economical in itself, the departure from a familiar operating style might not be economical or preferable to the Port customer.

Terminal operations vary by steamship line, import/export balance, 20/40 mix, partnering arrangements, vessel call frequency, operating style, and other factors. Steamship line contracts are increasingly tailored to encourage good terminal space utilization. The actual terms of these contracts are competitively driven and the final agreement will be an acceptable compromise on the part of both parties.

In the Port of Charleston throughput per acre is calculated based on the container yard area provided. A contract will typically specify a number of slots or number of acres and a utilization standard. Licensed operators must operate within the assigned area and achieve the utilization standard.

Areas that are not licensed are used by the Authority to accommodate “common users”. A common user is a Steamship Line that has elected to hire the Authority to manage its yard operations. This unlicensed area is used to calculate throughput in the SPA managed areas. Since a less dense yard arrangement is less expensive to manage and operate, the Authority manages the unlicensed area to minimize costs rather than to maximize the throughput per acre.

Available capacity is calculated based on a projected maximum throughput per container slot. The actual capacity realized will vary depending upon factors previously mentioned. Operating styles, frequency of vessel calls, transshipments, empty storage, and grounding density are the main drivers. Columbus Street Terminal’s maximum throughput is estimated at 55 containers per slot per year based on its heavily grounded configuration. Wando-Welch Terminal is estimated at 65 containers per slot per year. The throughput is estimated higher than Columbus Street because structurally Wando-Welch’s pavement will support more load. Therefore, stacks can potentially be higher. North Charleston’s capacity is estimated less because much of the area at North Charleston is not suitable for grounding due to subsurface conditions.

The following table summarizes the container operations by terminal and projects maximum terminal operating capacity. The table is based on the movement of containers per slot. The actual number of slots per acre will vary based on terminal configuration and whether the slots are 20’ or 40’ slots.

The terminals are currently not capable of the capacities indicated. However, the capital program in place anticipates improvements to systems and facilities to increase the capacities of the respective terminals to the levels indicated in the following chart. The implementation of throughput improvements is highly

dependent upon the service and operating characteristics of individual steamship line customers.

Existing terminals will also be expanded to produce additional capacity. The impacts of the expansion on the maximum throughput of each terminal is noted in the table below. These expansions represent total buildout of all existing container terminals. No adjacent lands are available for container yard development.

FACILITY UTILIZATION BY TERMINAL
(Measurement unit is Containers)

Existing Container Terminals

Columbus Street Terminal (CST)

<u>Operator</u>	<u>Storage Slots</u>	<u>2003 T-put</u>	<u>T-put/Slot</u>	<u>Max/Slot</u>	<u>Max T-put</u>
Steamship Lines	3,218	133,925	41.6	55.0	176,990
State Ports	337	3,495	10.4	55.0	18,535
Combined	3,555	137,420	38.7	55.0	195,525

North Charleston Terminal (NCT)

<u>Operator</u>	<u>Storage Slots</u>	<u>2003 T-put</u>	<u>T-put/Slot</u>	<u>Max/Slot</u>	<u>Max T-put</u>
Steamship Lines	3,784	128,972	34.1	55.0	208,120
State Ports	3,087	106,841	34.6	55.0	169,785
Combined	6,871	235,813	34.3	55.0	377,905

Wando-Welch Terminal (WWT)

<u>Operator</u>	<u>Storage Slots</u>	<u>2003 T-put</u>	<u>T-put/Slot</u>	<u>Max/Slot</u>	<u>MaxT-put</u>
Steamship Lines	5,522	283,352	51.3	65.0	358,930
State Ports	5,293	301,720	57.0	65.0	344,045
Combined	10,815	585,072	54.1	65.0	702,975

All Terminals & All Operators Combined

<u>Operator</u>	<u>Storage Slots</u>	<u>2003 T-put</u>	<u>T-put/Slot</u>	<u>Max/Slot</u>	<u>MaxT-put</u>
All	21,241	958,310	45.1	60.1	1,276,405

Expansion of Existing Container Terminals

B

<u>Terminal</u>	<u>New Container Acres</u>	<u>Storage Slots</u>	<u>Max/Slot</u>	<u>Max T-put</u>
CST	3.8	98	55.0	5,390
NCT	10.5	576	55.0	31,680
WWT	49.0	3,188	65.0	207,220
Combined	63.3	3,862	63.3	244,290

Total Existing Terminal Throughput 1,520,695 Containers or 2,646,010 TEU

The Port of Charleston currently has a total of 21,241 container slots located on 449.4 acres in its three container terminals (47.3 slots/acre). Currently, the annual throughput is 2,128 containers or 3,702 TEU per acre per year. Through increased operational efficiencies and new technologies a projected maximum throughput of 2,966 containers or 5,161 TEU per acre is expected.

2.4 The Need for Additional Capacity

The South Carolina State Ports Authority has an attainable capacity of approximately 2.6 million TEU annual throughput. Based on the projected container growth rate this capacity will be needed on line by 2014.

The new facility is projected to provide approximately 200 acres of active container marshalling area producing approximately 11,300 slots. Considering that enhanced stacking equipment and systems will be effectively employed the throughput per slot is estimated at 70 containers per slot per year. Thus, the 11,300 slots would provide throughput capacity of 791,000 containers or 1.4 million TEU. This would meet the projected port needs for new terminal capacity until 2025.

2.5 The Need for a Cost Competitive Charleston Location

The Port of Charleston is recognized world wide as a significant and capable container cargo port. It is important that future growth is provided in Charleston. From a port management standpoint, Management, Maintenance, Engineering, Information Technology, and Security can be more effectively and economically provided from a central location to nearby facilities. As facility locations become more remote there would be inefficiencies in delivering the needed services and a possibly even a need to duplicate those services in the remote locations.

From the customer's standpoint, the Port of Charleston is a recognized name and location for those seeking to ship cargo internationally. Its value as a sales tool cannot be measured.

Port customers look for a port that is capable of meeting their shipping needs. The Port of Charleston has such a reputation. Customers would view a remote port facility as just that-removed from the center of operations and not having the synergies that currently exist in the Charleston port community.

Port customers also look for accessibility. The Port of Charleston has very adequate and competitive navigation channels with terminals within short sailing time of the ocean. The Port is served by two major railroads with good services to Atlanta and Charlotte. It is served by many motor carriers and has good highway access via I-26 to I-95, I-77, and I-85. It has a strong productive labor

force, and a full compliment of competitive providers of services to both the vessel and cargo. These are all strong selling points in the competitive port industry.

All of these services, including Port services, are provided at competitive rates. The rates are competitive because of competition and because of the cooperative working relationships that have been developed in the Port of Charleston.

For these reasons, it is essential that any new facility be located on a site within Charleston Harbor that has good access to existing Federal shipping channels, the two major rail carriers, and the interstate highway system. Furthermore, it must be a site that can support the timely construction of marine terminal facilities.