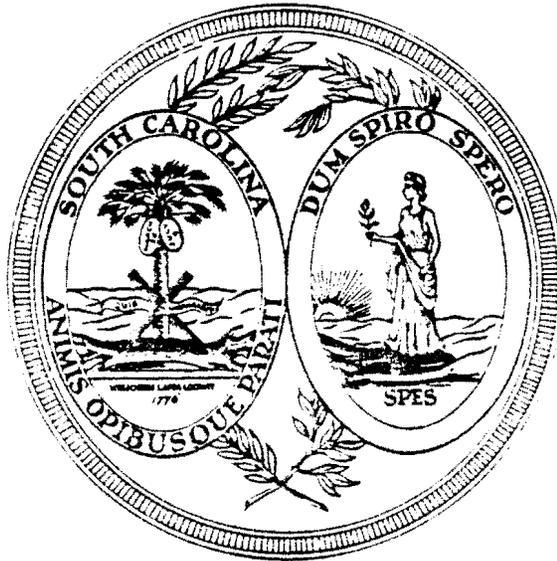
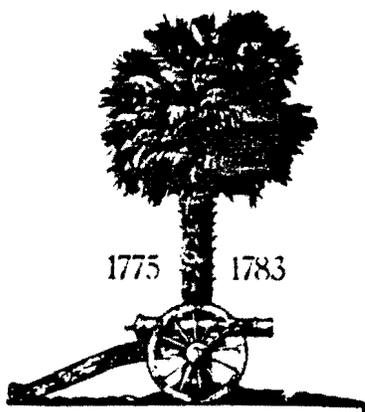


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# South Carolina General Assembly



## Legislative Audit Council



South Carolina General Assembly  
Legislative Audit Council Review  
of the Economic Benefits of the  
Wando Terminal As Set Forth in the  
Report Entitled Impact of the State  
Ports Authority Upon the Economy of  
South Carolina.

November 1, 1978

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LEGISLATIVE DOCUMENTS

TABLE OF CONTENTS

	<u>Page</u>
INTRODUCTION .....	1
 <u>SECTION I - EVALUATION OF THE IMPACT STUDY</u>	
Calculations and Mechanical Aspects .....	2
Methodology .....	3
Timeliness of Data .....	3
Comprehensiveness .....	4
Transportation Systems .....	4
Access Channel Costs .....	5
Utilization of Existing Facilities .....	5
 <u>SECTION II - ADDITIONAL AREAS RELATED TO COSTS AND BENEFITS</u>	
Use of Ports Authority Revenues .....	7
Ongoing Litigation .....	7
 CONCLUSION .....	 9
 BIBLIOGRAPHY .....	 10
 AGENCY COMMENTS .....	 13

## INTRODUCTION

Section 23 of Act 646 of 1978 (R.789, H.4189) states, "that the bonds provided for in Phase I, Wando Terminal, shall not be issued until the Legislative Audit Council has accomplished an impartial evaluation of the economic benefits as set forth in the Impact of the State Ports Authority upon the Economy of South Carolina; Division of Research Bureau of Business and Economic Research College of Business Administration, the University of South Carolina, October 1974, and subsequent updates of that study and such evaluation is considered by the Budget and Control Board." The Impact study was performed under a grant from the South Carolina State Ports Authority to the University of South Carolina.

During this evaluation, the Council examined the report in question, materials upon which the report was based and related documents. In addition, the Council analyzed material presented by opponents of the proposed Wando Terminal. Interviews were conducted with persons involved in various aspects of the project.

The conclusions in this report are based on analysis of the information gathered from these sources. Time and personnel constraints were such that the Council was unable to develop sources of information independent of the parties involved. In many cases, expert authorities disagreed upon the interpretation of the available data.

SECTION I  
EVALUATION OF THE IMPACT STUDY

The Legislative Audit Council evaluated four major facets of the Impact study.

- (1) Calculations and other mechanical aspects such as transposition of information from text to tables and vice versa.
- (2) Methodology, research design and analysis.
- (3) Timeliness of data.
- (4) Comprehensiveness.

The remainder of this section presents the Council's findings concerning the value of the Impact study for projecting the economic benefits of the Wando Terminal project.

Calculations and Mechanical Aspects

The Council performed sample checks on about 50% of the calculations contained in the Impact study and found no significant errors. The discrepancies found were rounding or transposition errors and did not affect the conclusions of the report.

For example, gross revenues for port related firms were listed differently in the text on page 78 of the report than in Table 33 on page 79. Also, port induced taxes for port dependent firms were listed differently in Table 34 (p. 81) and Table 40 (p. 102). These errors were brought to the attention of the authors of the Impact study. Corrections were made and recorded by the Council.

## Methodology

The Council researched and reviewed the various methodologies used in the Impact study. Included among them were the use of specific multipliers to estimate expanded economic benefits to the larger, indirectly benefiting population outside the ports area and to project port complex employment as a function of tonnage increases. Also questioned was the method for using information gathered from firms responding to a survey to generalize responses for firms that did not respond.

The Council concluded that the methods used were reasonable and did not seriously bias the results. However, it would have been more accurate to state the projected economic benefits as ranges rather than as single amounts because the methodologies involved are not exact. Variations in any of a large number of variables could result in changes in the results.

The authors of the Impact study stated, in a subsequent document, "Since any study of economic impact requires a considerable degree of professional judgment, we can understand how another researcher might obtain somewhat different results." The benefits contained in the Impact study were apparently included in ranges developed during the study but not used in the document.

## Timeliness of Data

Much of the data used for economic projections were developed around the time the project was proposed and is now four or more years old. The Impact study was published in October 1974; the Arthur D. Little study in September 1974; and the last update of the Kaiser Engineers study in October 1973 (See bibliography for details). During the intervening period, significant economic

changes have occurred. For example, inflation has been high and the value of the dollar has fluctuated in overseas markets. These factors would have an effect on the impact of port development.

At the present time some actual data are available for comparison with projections. For example, analysis of Ports Authority tonnage data for FY 76-77 and FY 77-78 indicates that projections contained in the Impact study are slightly conservative. This indicates that economic benefits could be slightly higher than expected if the trend continues.

#### Comprehensiveness

During its analysis of the Impact study, the Council examined a number of areas related to the cost of port expansion and the economic benefits that could be expected. These areas were not analyzed in the Impact study because they were either not issues at the time or were outside the scope of the study. Among these areas are port-related transportation systems, the cost of an access channel from the harbor to the Wando site and port facilities utilization levels.

##### (1) Transportation Systems

The Cooper River Bridges provide a major access highway to and from the Wando Terminal. The Charleston Ports Access Study published in 1974 by Wilbur Smith and Associates at a cost of about \$70,500 stated that "the Cooper River Bridges will approach capacity by the latter part of the decade (1970's). Plans for substantial residential developments in Mount Pleasant and on the Isle of Palms tend to reinforce this conclusion. It is very likely that the bridges will

experience extensive periods of congestion until the Inner Belt Freeway is completed."

On October 30, 1978, Wilbur Smith and Associates informed the Legislative Audit Council "that the computations and projections contained in our report for the Ports Authority were very much on the conservative side and that the bridges will be capable of serving traffic growth, at reasonable service levels, until the mid 1980's or beyond."

(2) Access Channel Costs

The Ports Authority proposal does not provide for funding for a harbor channel connecting the existing channels with the Wando site. Federal funds in the amount of about \$4.5 million to construct this 40-foot deep two-mile extension channel were contained in Section 495 of HR 8309. However, this authorization was killed during the recently adjourned session of the 95th Congress.

If Federal funds will not be available, the channel must be constructed using State funds or Ports Authority revenues. The Ports Authority has indicated that they will utilize \$2.5 million of Ports Authority funds for construction of a 35-foot deep channel. This additional cost should be included in the cost of the project and in all cost/benefit analyses.

(3) Utilization of Existing Facilities

The economic impact of any port is directly related to the amount of cargo it handles. This capacity is governed by several factors:

- a. The availability of docking facilities,
- b. Efficiency of unloading and loading,
- c. Storage space, and
- d. Transportation system.

The overall efficiency of the port will be limited to the capacity of the weakest of these links. For example, if docking facilities are available but no storage space exists the port will be unable to service ships.

Legitimate questions have arisen concerning which of the above factors is the real weak link in Charleston Harbor. The Arthur D. Little study points out that "careful analysis of existing conditions indicates clearly that the bottleneck has been caused by lack of back-up space and support structures, and not (in most instances) by berth availability." Since that time (1974) the Ports Authority has spent about \$12 million on improvements of these facilities. However, physical examination of storage facilities indicates that back-up space remains a problem. Ports Authority attempts to acquire additional storage space for facilities on the west bank of the Cooper River support this conclusion.

During FY 77-78, 773 general cargo and 427 container ships were served at eight Ports Authority berths in Charleston Harbor (3 at Columbus Street, 3 at North Charleston and 2 at Union Pier). Allowing two days to service general cargo ships and one day for container ships, total berth time is 1,973 days. This is an average of 247 days of utilization per year at each of these eight berths.

## SECTION II

### ADDITIONAL AREAS RELATED TO COSTS AND BENEFITS

This section contains discussions of several factors which are related to the overall question of the economic benefits of the Wando project. It is the opinion of the Council that the Budget and Control Board should not make its final determination on this project without first considering these issues.

#### Use of Ports Authority Revenue for Retiring General Obligation Bonds

The Ports Authority operates under a bond resolution which pledges the Authority's net revenues for the payment of principle and interest on Series 1967 Revenue Bonds. At present it is uncertain whether additional revenues would be available for retiring the General Obligation Bonds now being considered for issuance. Currently, Ports Authority earnings reserves and future revenue bonds are committed to construction of Phase II of the Wando project and to meeting future capital needs.

However, Ports Authority's revenue and expenditure levels will change during the 15 to 20 year life of the bonds. If growth projections prove to be accurate, increased earnings should result. It is the Council's opinion that Ports Authority net income beyond existing obligations should be used to retire the General Obligation Bonds issued for the Wando project.

#### Ongoing Litigation

The National Wildlife Federation, South Carolina Wildlife Federation, Save the Wando Association and the Town of Sullivan's Island are currently bringing suit against the Army Corps of

Engineers, Department of the Interior and Environmental Protection Agency in the Federal District Court in Charleston. The State Ports Authority is an intervenor in that suit. Among the major allegations are that permits for the Wando project were issued in violation of the National Environmental Policy Act and that the Environmental Impact Study for the project is inadequate.

It is unclear exactly what effect this will have on the sale of bonds. It appears that the litigation will not materially affect the State's ability to pay off the bonds. Thus the certificate necessary for sale may be issued. However, litigation can delay or stop the project. In this case no public purpose for the bonds would exist.

## CONCLUSION

The Legislative Audit Council concludes that the Impact study provides a basis for a general prediction of economic benefits of the Wando Terminal project given the situation and conditions that existed at the time of its publication. The authors of the Impact study have stated that "they believe that their results still represent a reasonable estimate of the economic impact of the proposed Wando Terminal, given the scenario that was reasonable at the time." The Council would tend to agree with this opinion as far as the methodology and mechanical aspects of the report are concerned.

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October 31, 1978

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Gentlemen:

Thank you for the opportunity to comment on the Legislative Audit Council's review of the study entitled "Impact of the State Ports Authority Upon the Economy of South Carolina," published in 1974 by the Division of Research of the Bureau of Business and Economic Research of the University of South Carolina. We agree with your conclusion that "the impact study provides a basis for a general prediction of economic benefits that existed at the time of its publication." Information available to us also supports your view that given a continuation of present business trends, the economic benefits might be slightly higher than those predicted.

The Council's review also considered briefly a number of issues that were outside the scope of the impact study. Comprehensive and current data on these and other issues related to the Wando port development are available in a number of studies developed during the past five years of review and analysis on the terminal project, and in the financial and operational reports of the Authority. We also note that your quotation about back-up space, taken out of context, does not fairly represent the evaluation by either the Ports Authority or Arthur D. Little, Inc.

The Council's study also suggests the possibility that the development of the Wando terminal would improve the Authority's revenue picture in future years to the extent that the Authority would be in a position to sustain all or part of the carrying costs of the General Obligation Bonds, in addition to meeting its own capital and internal operating requirements. Figures available to us now do not enable us to project these revenues that far into the future with confidence. Should such a situation develop in 15 or 20 years, I believe the members of the Ports Authority Board and the state leadership at that time would act prudently in the best interest of South Carolina. Also, we cannot agree with your statement that the funds from the General Obligation

Legislative Audit Council

Page 2

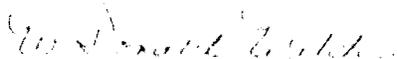
October 31, 1978



Bond issue would not be for a public purpose if the terminal construction were halted by litigation. These funds would still be available for a public project if they were not expended for the terminal development. In any event, the funds would and could not be expended for other than a public purpose.

We appreciate your including these comments as part of the Legislative Audit Council's review.

Sincerely,



W. Donald Welch  
Executive Director

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STATE DOCUMENTS