INTERIM REPORT OF THE

VIRGINIA PORTS AND PORT AUTHORITY STUDY COMMISSION

TO

THE GOVERNOR

AND

THE GENERAL ASSEMBLY OF VIRGINIA

SENATE DOCUMENT NO. 26

COMMONWEALTH OF VIRGINIA
DIVISION OF PURCHASES AND SUPPLY
RICHMOND
1979

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Interim Report of the

Virginia Ports and Port Authority Study Commission

To

The Governor and the General Assembly of Virginia

Richmond, Virginia

February, 1979

To: Honorable John N. Dalton, Governor of Virginia

and

The General Assembly of Virginia

I. Recommendations.

Based on it first year of study and a first-phase report of its consultants (Booz, Allen and Hamilton), the Commission recommends:

1. That the work of the Commission proceed for an additional year (as originally

2. That the Commission obtain the services of consultants to assist in this second phase;

3. That the Virginia Port Authority and Portsmouth Terminals, Inc. enter into negotiations for the renewal of the lease of port facilities at Portsmouth, Virginia, giving consideration to, but not being bound by the "Alternative Lease Concepts" contained in the report to the Commission of its Portsmouth Lease Subcommittee [see Appendix I];

4. That participation of the federal Maritime Administration in the conduct of the present study, on the terms offered by the Maritime Administration at this time, be rejected;

5. That an allocation of an additional fifty thousand dollars be made by the General Assembly to the Commission to offset the Maritime Administration's financial nonparticipation in the second phase of the present study [See Appendix II]; and

6. That the General Assembly, in preparing the budget for the next biennium, give consideration to alternative methods of financing of the Virginia Port Authority as discussed in the first-phase report of the Commission's consultants [see Appendix III].

II. Background.

The ports of Virginia, particularly Hampton Roads, constitute one of the Commonwealth's most valuable assets. Virginia's ports - Hampton Roads, Richmond, Alexandria, Yorktown, and Hopewell - are within 500 miles of nearly one-half of the nation's population. These ports are among the most versatile in the nation and have the capabilities of handling almost every category of cargo in large volume. One out of every six employed persons in Virginia holds a job that is either directly or indirectly related to the activities associated with the Commonwealth's ports and harbors. Recent figures show that the total impact of Virginia's ports on employment in both direct and supporting occupations was 356,264 jobs which generated more than three billion dollars in wages. The

Commonwealth receives approximately one hundred fifty million dollars annually in taxes generated from port activities.

Virginia's Hampton Roads, located midway along the Atlantic seaboard, is one of the finest natural harbors in the world. The port complex covers an area of twenty-five square miles and is only eighteen miles from the open sea. Hampton Roads handles more coal tonnage than any other United States port. In 1976 more than 31 million tons were exported through the Hampton Roads coal terminals.

Although blessed with many natural and economic advantages, the growth of ports of Virginia in recent years has been slowed by several situations including, among others: Lack of short and long term financing to support the operation and expansion of the ports; inability of the Virginia Port Authority to organize a viable agency to properly develop and administer the ports; wasteful competition among the individual ports for export and import cargoes; disorganized and ineffective trade development efforts being conducted without benefit of an in-depth marketing study; and lack of regional planning approaches to environmental and coastal zone management programs. In addition to the aforementioned situations, competition from neighboring Atlantic and Gulf Coast ports has intensified in the past few years. The ports of Charleston and Baltimore, in particular, have siphoned off substantial quantities of the highly desirable general cargo which previously had moved through the Virginia ports. Coal exports, too, are down considerably from 1974 tonnages.

BEING AWARE OF THE TREMENDOUS IMPORTANCE OF THE PORTS OF VIRGINIA TO THE COMMONWEALTH'S ECONOMY AND EXPERIENCING DEEP CONCERN FOR THEIR FUTURE DEVELOPMENT PROMPTED THE 1977 SESSION OF THE GENERAL ASSEMBLY OF VIRGINIA TO ADOPT SENATE JOINT RESOLUTION NO. 129, DIRECTING THE VIRGINIA ADVISORY LEGISLATIVE COUNCIL (VALC) TO UNDERTAKE A COMPREHENSIVE STUDY OF THE VIRGINIA PORT AUTHORITY (VPA) AND RELATED MATTERS. The resolution provided in part that:

> "...Such study shall include, but not necessarily be limited to, the Port Authority's sources of and disbursement of financial revenues, its internal organization, decision-making procedures, policies and programs and financial ability to support the issuance of bonds..."

Senator Peter K. Babalas, of Norfolk, Virginia, a member of the VALC, was selected to chair the Committee. A large Committee was approved with was divided into five Subcommittees as follows: Port Funding, Port Unification, Port Terminal Operations, VPA Organization, and Port Costs and Port Competition. The Subcommittees functioned independently with coordination being provided by the Committee's staff. Public hearings were held at which testimony was received from, among others: representatives of the VPA; local governments; civic groups; commercial organizations; and several from Virginia's port and maritime community. The Findings and Recommendations of the Committee were extensive and are presented in Senate Document No. 13 of 1978.

The 1977 VALC Committee found its task truly enormous. Its studies merely exposed the many existing port associated problem areas. Following the 1977 VALC Committee study, and in accordance with its general recommendations, the 1978 Session of the General Assembly adopted Senate Joint Resolution No. 6, which created the present independent Virginia Ports and Port Authority Study Commission (Commission).

This Commission, under terms of that Resolution, is charged with conducting:

> "...a comprehensive investigation of all matters relating to the Ports of Virginia, the Virginia Port Authority and, in particular, the many questions raised about the relationship of the ports to the Port Authority by the Virginia Advisory Legislative Council in its recent report to the Governor and General Assembly on the Virginia Port Authority...."

Fifteen members were appointed to the Commission: Senator Peter K. Babalas of Norfolk (Chairman), Delegate A. L. Philpott of Bassett (Vice Chairman), Senator Hunter B. Andrews of Hampton, Delegate Alan A. Diamonstein of Newport News, Mr. E. R. English of Altavista, Delegate Evelyn M. Hailey of Norfolk, Mr. W. Wright Harrison of Norfolk, Delegate George H. Heilig, Jr. of Norfolk, Senator William B. Hopkins of Roanoke, Delegate L. Cleaves Manning of Portsmouth, elegate Donald A. McGlothlin, Sr. of Grundy, Senator Willard J. Moody of Portsmouth, Mr. Robert Spilman of Bassett, Delegate J. Warren White, Jr. of Norfolk, and Senator Edward E. Willey of

Richmond. To assist the Commission an Advisory Committee of seven members was appointed by the Commission's Chairman: Mr. Edwin J. Adams of Norfolk, Delegate L. Ray Ashworth of Wakefield, Mr. Myles E. Billups, Sr. of Norfolk, Delegate Archibald A. Campbell of Wytheville, Mr. Gene Dixon, Jr. of Dillwyn, Delegate C. Hardaway Marks of Hopewell, and Delegate William T. Parker of Chesapeake.

III. Selection of Consultants.

Senate Joint Resolution No. 6 provided for the submission of an interim report to the 1979 Session of the General Assembly of Virginia. In view of this time limitation, the Commission moved forward with a first phase of its study, concentrating primarily on the financing of Virginia's ports. Accordingly, twenty-two well known consulting firms were requested to submit their proposals for Phase I and to include therein the studies to be performed and their recommendations for resolving the following issues:

Short and long-term plans for financing the operation and development of Virginia's ports based on current system and present operations of the terminals and VPA's capital outlay and growth projections;

Methods of financing the operations of the VPA based on its projected requirements; and

Sources of funds, including continuing revenues, if required, to support port development and the VPA organization.

In carrying out Phase I of the study, the Invitation for Proposals (IFP) prepared by the Commission's Executive Director provided that the consultants, at a minimum, would:

Analyze present methods of financing port operations and port development in Virginia and compare with financing programs of states with competing ports;

Examine current method of financing the VPA and compare with methods of financing port authorities of other states;

Examine present lease and unification agreements, and any other contractual arrangements between the VPA and the terminal operators and identify and tabulate the outstanding indebtedness related to each terminal;

Analyze tonnages handled and revenues generated at each of the State-owned terminals and compare totals with those of terminals at competing ports and with accepted norms;

Identify and tabulate the total investment and present value of the State-owned terminals;

Analyze and compare levels of charges assessed at the State-owned terminals with charges for similar services at terminals of competing ports:

Analyze funds invested by the Commonwealth in port facilities and compare with funds invested by states in facilities of competing ports;

Review operations of the State-owned terminals and assess from standpoint of their ability to generate profits and operate on a self-supporting basis; and

Explore and identify present sources of funding of port operations in Virginia and delineate possible sources of future funding, including a source of continuing revenue predicated on some form of tax base, if required.

Nine proposals were submitted by consultants in response to the IFP. Representatives from eight of these firms gave oral presentations to the Commission members at a meeting held in Norfolk, Virginia on July 28, 1978. After reviewing the proposals and weighing many factors, the Commission selected the firm of Booz, Allen and Hamilton, Inc. of Bethesda, Maryland, to conduct Phase I at a cost of $55,000.00. A contract was executed and the study undertaken. [A copy of the complete Phase I report by the consultants is attached as Appendix III.]

IV. Lease of Portsmouth Facilities.

In the course of the Commission's first year's work, it came to the Chairman's attention that the lease to Virginia Port Authority facilities' property at Portsmouth would expire at the end of 1979. The present lease to those properties is presently held by Portsmouth Terminals, Inc. It was the concern both of the Authority and of the Commission that any renegotiation of that lease not interfere with any possible changes which the Commission might recommend in the Authority or legislation governing its operations. It was also the desire of the Commission that the pendency of its recommendations to the 1980 General Assembly not unduly hamper the possible renegotiation of a lease.

Accordingly, the Chairman appointed a subcommittee of the Commission and its Advisory Committee, in cooperation with the Commission's staff and consultants, to work with the Authority and the present Portsmouth leaseholders in the matter. The subcommittee, chaired by Senator William B. Hopkins, included also Delegate L. Ray Ashworth, Mr. W. Wright Harrison, Senator Willard J. Moody, and Senator Edward E. Willey. The subcommittee formulated "Alternative Lease Concepts" which it recommended be considered by the Authority and the present leaseholder which, the subcommittee felt, would neither tie the hands of the Commission or General Assembly, nor preempt the rights of Portsmouth Terminals, Inc. [The full report of the subcommittee is attached to this interim report as Appendix I.]

V. Maritime Administration Participation.

When the General Assembly created the Virginia Ports and Port Authority Study Commission, it was anticipated that the federal Maritime Administration would participate in the second year of the study. It was similarly anticipated that the Maritime Administration would contribute approximately fifty thousand dollars to the financing of this second year. As of the Commission's meeting of January 9, 1979, however, preconditions for its participation posed by the Maritime Administration proved unacceptable to the Commission at the present time. To compensate for the financial nonparticipation by the Maritime Administration, the Commission has requested an allocation from the General Assembly of an additional fifty thousand dollars to meet a portion of the costs of the second year of the Commission's study. [See Appendix II.]

VI. Phase II Issues.

A good deal of the Commission's first year's work involved organization, setting of study goals, and formulation of proposals on the basis of which to select consultants. Phase II, the second year of the Commission's study, will build upon work already done or underway, and should enable the Commission to focus on:

Short and long-term financing programs which will support the operation and any required expansion of the ports of the Commonwealth and their terminal facilities including sources of funds for these programs;

The most desirable method of operating State-owned terminal facilities, i.e. as public or private entities;

The role of the VPA in Virginia's overall port program and a delineation of its organizational structure, budgetary requirements and methods of financing its operation;

Methods of increasing Virginia's port commerce with identification of areas of concentration for development of new business;

Realistic requirements for new facilities and equipment for the State's marine terminals through the year 2000;

Possible unification of the system of port operations and port development to be pursued by the Commonwealth, including, possibly, methods of implementing a unification program;

Adjustments in levels of rates and charges assessed by the operators of the marine terminals;

and

Modifications to existing leases and unification agreements executed by the VPA to eliminate any inequities involving, among other items, terminal rates, charges and operating practices and procedures.

The Commission will employ professional port consultants who will conduct the necessary detailed studies relating to these issues and who will present their recommended solutions to the problems. More specifically, in Phase II consultants will:

Identify the major strengths and weaknesses of the present system of operating the Virginia ports, including the river ports, and compare with systems in use at competing ports;

Inventory and tabulate present and proposed terminal facilities of the Commonwealth including, among other items, the total investment, present value, outstanding debt and revenues generated;

Conduct a through-put analysis of each of the State-owned terminal facilities to include such elements as labor productivity, berth occupancies, through-put capacities and compare results with those at competing ports and with accepted norms;

Analyze lease and unification agreements, operating procedures and levels of user charges of the State-owned terminals;

Explore and delineate the various sources of funding of the Virginia port programs including recommended sources of continuing revenues, if required;

Examine the role of the VPA in the overall port program of the Commonwealth including its management, personnel, operating procedures, financial structure, and relative importance vis-a-vis port authorities of competing states;

Conduct a marketing and economic study designed to increase Virginia's port commerce to include new techniques for developing trade, areas of concentration, commodities, and methods of measuring effectiveness of commerce development efforts;

Identify and detail the relative advantages and disadvantages of private versus public operation of the State-owned facilities of the Commonwealth;

Examine and delineate the advantages and disadvantages of operating the ports of Virginia, including its river ports, under a unified system;

Explore the establishment by VPA of a centralized computer operation for use in such areas as trade data accumulation, trade forecasting, terminal reporting and control and traffic analysis;

Develop information needed to properly assess present and potential port associated environmental impacts; and

Develop necessary data to insure coordination of Virginia's port development with coastal zone management programs.

The Commission plans to lay its final report, including any legislative recommendations, before the Governor and General Assembly by the end of 1979.

Respectfully submitted,

Peter K. Babalas (Chairman)

A. L. Philpott (Vice Chairman)

Hunter B. Andrews

Alan A. Diamonstein

E. R. English

Evelyn M. Hailey

W. Wright Harrison

George H. Heilig, Jr.

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Willard J. Moody

Robert H. Spilman

J. Warren White, Jr.

Edward E. Willey

APPENDIX I.

REPORT OF THE PORTSMOUTH LEASE SUBCOMMITTEE

TO THE VIRGINIA PORTS AND PORT AUTHORITY STUDY COMMISSION

ON THE SUBJECT OF THE PORTSMOUTH TERMINAL LEASE

At the meeting held on July 11, 1978, Senator Peter K. Babalas, Chairman of the Virginia Ports and Port Authority Study Commission (Commission), appointed a subcommittee to review the present lease between the Virginia Port Authority (VPA) and the current operator of the terminal, Portsmouth Terminals, Inc. (PTI). Appointed to the Portsmouth Lease Subcommittee (Subcommittee) were Senator William B. Hopkins, Chairman, Senator Edward E. Willey, Senator Willard J. Moody, Delegate L. Ray Ashworth, and W. Wright Harrison.

In response to a request to the Commission by the Chairman of the VPA Board of Commissioners, Mr. E. R. English, the Subcommittee's task is to provide guidance in matters relating to (a) the renewal or termination of the present lease between the VPA and PTI which is due to expire on December 31, 1979, and (b) suggestions for any changes in or additions to the current lease which should be given consideration in the drafting of any new lease for execution by the parties.

On July 18, 1978 the Subcommittee members were briefed on the PTI operation by its President, Mr. Charles B. Keown. Subsequent meetings of the Subcommittee were held on September 18 and November 21, 1978 at which time representatives of interested maritime, civic and other organizations appeared and presented statements on the subject. Appearances at the latter two meetings included, among others, representatives from the VPA, PTI, Hampton Roads Maritime Association, City of Portsmouth, Lavino Shipping Company, and Nacirema Operating Company, Inc.

The Subcommittee has analyzed the current lease and has received the opinions of counsel for VPA and PTI and other interested parties on the matter. The consulting firm, Booz-Allen & Hamilton, Inc. has submitted suggestions concerning the new lease to be drafted.

I. Section 2.1 of Article II of the present lease provides, in part, as follows:

> "The term of this lease shall be for a period of ten (10) years, commencing at midnight, January 1, 1970, and ending at midnight, December 31, 1979."
>
> "In the event that the Company shall during the demised term well and faithfully complete all the covenants and conditions contained in this lease, Company shall have the option of first refusal to enter into negotiations with the Commission for an extension of the said lease for an additional ten year term. The rental, terms and conditions of said extension lease shall, however, be subject to negotiations between the parties which shall be conducted in good faith...."

Aside from an apparent moral obligation, the language of Section 2.1, in the opinion of the Subcommittee members, imposes a legal obligation on the VPA to negotiate a new lease with PTI and the Subcommittee recommends such negotiations be pursued.

II. In working with Booz-Allen & Hamilton, Inc., it was found that the consultants have experience as to how rental and conditions have been determined at other ports. The consultants have made suggestions that the parties should consider in their negotiations. Those suggestions are incorporated herein under the title "Alternative Lease Concepts." The Subcommittee wants to make it clear that neither party should consider that the "concepts" have to or must be adopted or that it is mandatory that such "concepts" be included as a part of the language of the lease, with the exception that the Subcommittee recommends that the termination and renewal thereof coincide with the lease at Newport News.

ALTERNATIVE LEASE CONCEPTS

There are two basic approaches available to the VPA relative to the Portsmouth lease. These alternatives are outlined below:

Alternative 1 is a relatively long term lease of ten (10) or more years and provides for the VPA to set berth terms and certain rates e.g. dockage and wharfage. The VPA would negotiate berth terms and charges directly with the carriers and would bill the steamship lines directly for wharfage, dockage, demurrage, and crane rental. Ultimately, the VPA would exercise control over all activities on and immediately behind the dock. Terminal operator will be responsible for traditional terminal services such as receiving, handling, etc. and will control all the labor functions in the terminal (excluding stevedoring). VPA revenues would include all dockage, wharfage, and crane rental (billed directly to carrier) and a modest fixed rental from the terminal operator.

Alternative 2 entails a perpetuation of the existing lease situation with the following key modifications and features:

–Term would be relatively short and could coincide with the span of the Newport News lease.

–Responsibility of the VPA in the area of rates and charges could take either of the following forms:

..VPA's responsibility could be similar to that provided in the Newport News lease, Section 3.03, and the terminal operator would pay VPA a guaranteed minimum with an incentive provisions for tonnages over a certain amount.

Example: Say the guaranteed minimum is $800,000 per annum and for tonnages in excess of 800,000 tons payment schedule could be as follows: $.50 per ton for volumes between 800,000-1,000,000 tons. $.25 per ton for volumes over 1 million tons.

..The VPA could exercise more control over the entire tariff (more than dockage, wharfage, and rentals) but would then be obligated to accept more of a variable than a fixed revenue flow. The logic being that if VPA participated in the rate decision on labor related and other items then it should share the risk associated with differing business levels.

–The lease should also specify certain performance standards such as:

–Mix of business e.g. containers, breakbulk, etc.

Turnover ratios such as minimum tonnages per dollar of investment

–Utilization levels for container berth and crane

The first alternative provides the VPA with a greater degree of control over terminal utilization and places it in direct contact (contractural) with the ocean carrier sector. It is similar to the operating practices at Baltimore and at certain South Atlantic ports. Ultimately if all leases at Hampton Roads are contructed in this manner, VPA would be able to rationalize the use of terminals by type of carrier, ship type, cargo type and world area of operation. It is recognized, however, that this represents a significant departure from past practices at the Port of Hampton Roads.

The second alternative is perhaps easier to negotiate and also represents an improvement over the existing situation. Due to its relatively shorter term this approach provides the Commonwealth with an opportunity to convert to the first alternative at both Portsmouth and Newport News within the foreseeable future.

III. Conclusion. As stated initially the role of this Subcommittee is to provide guidance in the matter of the Portsmouth terminal lease. The above-described recommendations and suggestions, in our opinion, present workable principals which should be considered by the parties in the drafting of any new lease. Use of either of the suggested alternative approaches will also enable the VPA to move more in the direction of becoming a viable port authority rather than to retain its present posture as a weak landlord of Virginia's port terminal facilities.

Respectfully submitted,

William B. Hopkins, Chairman

Edward E. Willey

Willard J. Moody

L. Ray Ashworth

W. Wright Harrison

APPENDIX II.

SENATE JOINT RESOLUTION NO. ....

Allocating an additional fifty thousand dollars to cover costs of the Virginia Ports and Port Authority Study Commission.

WHEREAS, the Virginia Ports and Port Authority Study Commission was created in 1978 by the General Assembly to conduct a broad-based study of Virginia's ports and the Virginia Port Authority; and

WHEREAS, the 1978 General Assembly allocated to the Commission a sum sufficient not to exceed one hundred fifty thousand dollars to cover the Commission's expenses; and

WHEREAS, in so allocating funds to the Commission, the General Assembly anticipated considerable financial participation in the project on the part of the Federal Maritime Administration; and

WHEREAS, after much discussion with the Federal Maritime Administration, the Commission was unable to reach agreement on the Administration's participation in the study on terms acceptable to the Commission; and

WHEREAS, the tremendous potential economic benefits to be derived by the Commonwealth's ports and by Virginia's economy in general from the successful and full completion of the work of the Commission far outweigh its cost; and

WHEREAS, curtailment of the Commission's efforts because of the nonparticipation of the Federal Maritime Administration in its financing could jeopardize the success of the Commission's study; now, therefore, be it

RESOLVED by the Senate of Virginia, the House of Delegates concurring, That in addition to those funds allocated to the Virginia Ports and Port Authority Study Commission by the 1978 General Assembly, there is hereby allocated to the Virginia Ports and Port Authority Study Commission from the appropriation to the General Assembly the further sum of fifty thousand dollars.

APPENDIX III

December 21, 1978

STUDY TO INVESTIGATE FINANCIAL MATTERS RELATING TO THE VIRGINIA PORTS AND PORT AUTHORITY

PRELIMINARY REPORT

for

The Virginia Ports and Port Authority Study Commission

BOOZ · ALLEN & HAMILTON Inc.

Transportation Consulting Division

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BOOZ · ALLEN & HAMILTON Inc.

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December 21, 1978

Senator Peter K. Babalas
Chairman
Virginia Ports and
Port Authority Study Commission
Suite 1001
First and Merchants Bank Building
Norfolk, Virginia 23510

Attention: Mr. Blair Wakefield

Subject: Preliminary Report, Phase I, Study to Investigate Matters Relating to the Virginia Ports and Port Authority

Gentlemen:

Booz, Allen & Hamilton is pleased to submit our preliminary report of Phase I of our study of matters relating to the Virginia Ports and the Virginia Port Authority. Due to the pending General Assembly session, and the time constraints that were placed on the Ports and Port Authority Study Commission, Phase I has focused on financial issues to the exclusion of other, equally important issues.

The major findings and conclusions may be summarized as follows:

The Virginia Port System receives less state aid than the neighboring ports.

The port system has fallen behind other ports in capital investment in the past few years.

The Port Authority is burdened with a higher level of debt than the other ports.

The Port Authority receives less revenue from terminal operations than other ports.

The port system is, and will continue to be far from self-sufficient and barring any significant changes, total state fundings of over $80 million will be required during the next eight years.

A combination of funding schemes has the potential to improve the financial position of the port system.

These findings are preliminary, and will be reexamined during the course of the Phase II study.

At this time, this document is intended for the review of the Commission only. During the course of our investigation we solicited and received potentially sensitive information from some of the neighboring Port Authorities. While we do not believe that we have misused this information, we did not have the opportunity to enable them to review our use of their material. We expect that their review will be completed prior to the briefing on January 9, 1979.

We have enjoyed the opportunity to assist with Phase I and look forward to continuing our services during Phase II. In the meantime, Chuck Chabot and I will be pleased to answer any questions concerning this report.

Very truly yours,

BOOZ · ALLEN & HAMILTON Inc.

Leo J. Donovan
Principal

Approved by:

John F. Wing
Senior Vice President

T A B L E O F C O N T E N T S

I. INTRODUCTION AND SUMMARY

I. INTRODUCTION AND SUMMARY

The Virginia Ports and Port Authority Study Commission retained Booz, Allen & Hamilton in September 1978, to assist the Commission in the investigation of matters relating to the Virginia Port System and Port Authority. The scope of the overall investigation is broad and includes the major issues that confront the modern port, including:

Finance
Marketing
Operations
Tariffs and competition
Organization.

This particular report documents the findings and conclusions resulting from Phase I of the study. Phase I is concerned with the financial issues confronting the Virginia Ports and Port Authority.

1. OBJECTIVE OF PHASE I

The objective of Phase I is to evaluate the various alternatives available to the Commonwealth to finance future development and operations of the state's port system. The following specific questions were addressed:

How does the method of financing the development and operations of the Virginia Port System and Port Authority compare with that of competing ports?

How does the magnitude of funds invested in Virginia's ports compare with that at competing ports?

How do the tonnages handled, revenues generated and other measures of performance at the Virginia Port System compare with those at competing ports?

What is the existing financial situation in Virginia and specifically:

- What is the specific indebtedness associated with each terminal, and

- What is the total investment of the Commonwealth in the terminals

- How profitable are the terminals in Virginia and how able are they to operate on a self-sustaining basis?

- What sources of funds are available to finance the Virginia Port System and how does each compare with the existing situation?

In the balance of this chapter, a summary of our findings and conclusions is presented.

2. SUMMARY OF FINDINGS AND CONCLUSIONS

In this section, a summary of the findings and conclusions developed during the course of the Phase I investigation is presented.

(1) The Financial Situation in Virginia Was Compared With Five Neighboring and Competing Ports Which Have Differing Organizational and Operational Characteristics

Five neighboring ports were selected in order to develop a baseline with which to compare the Virginia situation. As shown in Table I-1, the ports have differing roles concerning the operation and development of their port systems.

TABLE I-1
Comparable Port Systems

Port	Reporting Responsibility	Operating Role
Virginia	Secretary of Transportation and Board of Commissioners	Landlord
Philadelphia	33-member Board of Directors	Landlord
Baltimore	Secretary of Transportation	Semi-operational
North Carolina	Secretary of Commerce & 9-member board	Operating Authority
South Carolina	Autonomous authority	Operating Authority
Georgia	Autonomous authority	Operating Authority

Basically, Virginia and the two ports to the north do not operate their facilities, while the three systems to the south operate the port facilities.

(2) The Virginia Port System Has Received Less Total Appropriations From State and Local Sources Than Four of the Five Comparable Port Organizations Since 1970

Since 1970, the ports of Hampton Roads have received $51.3 million in state appropriations. During the same period:

- Baltimore has received over $125 million
- Charleston has received $108 million
- Georgia has received $81 million
- Philadelphia has received $78 million.

Only the North Carolina State Ports Authority, which received less than $22 million during the period, has been appropriated less.

(3) Over The Past Five Years, Capital Investment in Virginia Has Lagged That of All The Ports Investigated

Since 1974, the Commonwealth has invested only $15.6 million in its port facilities. While certain capital accounts are funded from terminal revenues, for all practical purposes, the port system is totally dependent upon state appropriations for capital. During the same five year period:

Philadelphia has invested $21 million and has also been totally dependent upon city and state sources

Baltimore has invested over $70 million, but has been dependent upon the state of Maryland for only 70 percent of its capital needs

North Carolina has invested $18.7 million with 78 percent received from the state

South Carolina has invested over $50 million with 73 percent dependent upon state appropriations and G.O. bonds

Georgia has invested over $66 million, 79 percent of which was from other than Port Authority sources.

(4) The Virginia Port System Incurs Substantially Greater Operating Losses and Is Considerably More Leveraged Than Are the Other Ports

Summary income statements and balance sheets were developed to reflect the situation over the past five years. Two sets of statements were developed:

- One set of statements compared the VPA with the other two nonoperating North Atlantic ports
- Another set of statements included the terminal operations in Hampton Roads and were compared with the South Atlantic ports.

The results of an evaluation of these statements are summarized below.

1. The Port Authority and Port System Incur Greater Operating Deficits Than the Other Port Organizations and Systems

Over the past five years, the VPA has operated at an average annual loss of $2.5 million (exclusive of state appropriations), while the port system, as a whole, has incurred an average annual operating loss of nearly $1.3 million. No other port, except Philadelphia, incurred operating losses. The most important factor underlying these losses is the high level of interest charges borne by the VPA. None of the other port organizations are required to maintain a similar level of debt service.

2. The Virginia Port System Is More Leveraged Than All the Other Port Systems

In Virginia, approximately 35 percent of total assets are debt financed. The debt-to-asset ratio in the other ports are as follows:

- Philadelphia - 1 percent
- Baltimore - 2 percent
- North Carolina - 6 percent
- South Carolina - 8 percent
- Georgia - 28 percent.*

(5) A Comparison of Key Performance Measures Between Ports Indicates That While Virginia Does Not Compare Favorably to the Other Ports, the Reasons Are Probably the Results of Factors Other Than Finance

Table I-2 identifies five areas where the performance of the Virginia Port System was compared with that at other ports. The table also indicates whether the financial implications, identified above, had an influence on the Port's performance.

TABLE I-2
Evaluation of Performance Indicators

Area of Performance	Virginia Rank Compared to Other Ports	Probable Impact of Financial Situation on Performance
General cargo throughput compared to total investment	Comparable	High
Utilization of container facilities	Unfavorable	Low
VPA revenue per unit of cargo	Unfavorable	High
Container handling charges	Comparable	Low
Labor rates	Unfavorable	Low

The table indicates that the Virginia Ports compare unfavorably in three of the five areas evaluated.

* The high debt ratio in Georgia is offset by a $2 million rent payment to the GPA by the state.

In only one of these three areas, however, did finance appear to be a factor. This suggests that in addition to finance, other factors have a significant influence on port performance.

(6) Within Hampton Roads Only Two of the Four Major Terminal Operators Are Profitable and Make Contributions to Indirect Port Authority Expenses and Capital

Both Norfolk International Terminals and Portsmouth operate profitable terminals. Over the past five years, NIT has generated a net return on operations of approximately $13.8 million. Portsmouth has earned an average of $175,000 per year during the same period. These facilities have the ability to contribute to the administrative and trade development expenses of the Port Authority and to capital investment. Historically, the facilities at Lamberts Point, Sewells Point and Newport News have been unprofitable and have a negative effect on the resources of the Port Authority.

(7) The Port System as a Whole Is Not Capable of Sustaining Operations Without Substantial and Continuing Support From the Commonwealth

The Virginia Port System has been approximately at a break-even situation after considering directly allocatable Port Authority expenses. The system has been unable to generate net revenues to support the average of $1.4 million per year that the Port Authority spends on promotion and general administrations over the past five years. Additionally, it has not been able to provide the funds necessary to upgrade and expand the port. The port has not been, and in all probability, for the foreseeable future, will not be self-sufficient.

(8) The Virginia Port System Will Require External Financing Averaging Over $10 Million Per Year Over the Next Eight Years

Financial projections developed by the VPA were used to determine the overall financial requirements of the Virginia Port System until 1986. It is estimated that:

Expenditures for Port Authority administration, promotion, security, debt service and capital requirements will average over $17 million per year, or a total in excess of $135 million to 1986. Debt service and capital expenditures will account for over 70 percent of the total.

Income from terminal operators is estimated at approximately $6.4 million per year by the VPA.

This indicates that the system will experience a financial shortfall of $85 million to 1986 or an average in excess of $10 million per year.

(9) A Number of Financial Alternatives Appear to be as or More Favorable to The Existing Method of Financing The Port System

Eleven specific alternatives to the existing method of biennial appropriations were evaluated. The specific alternatives can be summarized into the following general categories:

Retirement or assumption of the Authority's existing long-term debt

The use of port user charges paid by terminal operators, ocean carriers and/or inland carriers

An allocation of statewide tax revenues tied to specific sources

An allocation of local tax revenues

An assessment on all commercial users of the Hampton Roads waterways

Federal grants.

Each of these methods is used in some form by other ports.

An evaluation of the alternatives resulted in the following conclusions:

- The existing method ranked reasonably well relative to the alternatives. The major disadvantage associated with this method is its unreliability as a continuing source of funds.

- Three alternatives to the existing method were considered to be at least as appropriate as the existing method.

  - The first alternative includes the retirement or assumption of debt by the state. It is estimated that the approximately $40 million in long-term debt could be retired immediately at a cost of $24 million. None of the other port authorities studied were burdened with a debt level similar to the VPA.

  - The second alternative includes the imposition of user charges on terminal operators and perhaps, inland carriers. It is believed that the revenue received by the VPA from terminal operators has been among the lowest in the United States.

  - The third alternative includes a nominal waterway user tax on all commercial users of Hampton Roads. While the legality of this alternative is subject to question, the advantages of this alternative appear to outweigh the disadvantages.

In addition to these alternatives, the Commonwealth and the Virginia Port Authority should examine the opportunities and requirements associated with federal grants from organizations, such as the Economic Development Administration.

In all likelihood, the most appropriate financing method entails a combination of more than one of the alternatives outlined above.

* * * * *

These conclusions are preliminary and are offered at this time in order to provide the Study Commission with planning information in advance of the next session of the

General Assembly. They will be finalized at the end of Phase II of the study, which is expected to begin early in 1979.

The details supporting these finding, and conclusion, are developed in the following chapter:

- Chapter II documents a comparison between the Virginia Port System and neighboring Ports
- Chapter III includes an evaluation of the facilities within Hampton Roads
- Chapter IV details and identification and evaluation of alternative financing methods for the Port System and Port Authority.

II. COMPARISON OF HAMPTON ROADS PORTS WITH NEIGHBORING PORTS

II. COMPARISON OF HAMPTON ROAD PORTS WITH NEIGHBORING PORTS

The most appropriate manner in which to evaluate the financial situation in a port or port system is to compare that situation with ports or port systems that operate under similar circumstances. The ports or port systems selected for comparative purposes include:

- Philadelphia
- Baltimore
- North Carolina State Ports
- Charleston, South Carolina
- Savannah, Georgia.

These ports were selected as they are neighboring ports and compete with the ports of Hampton Roads. Presumably, while the methods of financing and the financial condition of these ports may differ, the circumstances surrounding financial conditions and needs should be similar.

The comparisons documented in this chapter are divided into the following three sections:

- The first section compares the operating characteristics of the Hampton Roads Ports with the five comparable ports. This is essential as differences in operating procedures have a substantial impact on the financial characteristics of each port.

- The second section compares the financial methods and characteristics of each of the six ports and port systems.

- The third and final section in this chapter is an evaluation of certain performance indicators at each of the ports and port systems. The purpose of these evaluations is to determine the impact that different financing methods and environments has on port performance.

Each of these sections is developed in detail below.

1. THE SIX PORTS ARE NOT COMPARABLE FROM AN ORGANIZATIONAL AND OPERATIONAL PERSPECTIVE

A proper analysis of financial data should be preceeded by an understanding of the type of organization and operations of the six ports and port systems being compared. In this section a comparison of the ports from an organizational and operational perspective is presented.

(1) The Six Ports Differ Considerably in Terms of Organization Type, Number of Employees and Method of Operation

Table II-1 provides a summary of the six port organizations in terms of organization type, employment and type of operation. The table indicates that the ports vary considerably. For example:

- The organizational structure of the ports to the south of Virginia date to the end of World War II while the present organizational forms of the ports to the north are more recent.
- The reporting responsibilities of the ports vary significantly.
  - Three ports report to independent Boards that vary in size from 7 to 33.
  - One port is responsible to a state cabinet member only.
  - Two ports have responsibilities to both cabinet members and Boards of Commissioners or Directors.
- The staffs of the port organizations vary from a low of 34 at Philadelphia to a high of 675 at the Georgia Ports Authority.

The table also indicates that the role of each organization in operations also differs. This is treated in more detail below.

TABLE II-1
Comparison of Port Organization

Name of Port Authority	Date of Incorporation of Main Organizational Form[1]	Current Reporting Responsibility	Number of Employees	Characteristic of Port Authority Operation		
				Landlord	Operating	Control of Waterfront Operations
Philadelphia Port Corporation	1966	33-member board of directors	34	X		
Maryland Port Administration	1971	State Secretary of Transportation	507			X
Virginia Ports Authority	1952	State Secretary of Transportation & 11-member Board of Commissioners	131	X		
North Carolina State Ports Authority	1945	State Secretary of Commerce & 9 members of the Authority	114 salaried		X	
South Carolina State Ports Authority	1947	7-member Governing Board	150 salaried 452 hourly		X	
Georgia Ports Authority	1948	9 members of the Authority	101 salaried 574 hourly		X	

1 Changes may have occured in reporting responsibility or size of Authority membership since the date of incorporation, but the date signifies the time when the major organizational concept was developed.

(2) The Most Significant Difference Between the Ports Selected for Comparison is the Extent to Which They are Involved in Operations

The largest single area of difference between the ports is in the area of operations. It is necessary to develop a good understanding of the operating differences between the port organizations before a comparison of financial data is undertaken. Figure II-1 provides a graphical representation of a typical marine terminal that handles containerized and other general cargo. The representation is reproduced six times so that a side-by-side comparison of the operating profile of each of the port systems may be made. In each representation, the role of the Port Authority relative to that of an independent terminal operator and the ocean carrier segment is compared.

The operating routines of each port shown in Figure II-1 is summarized below.

- In Philadelphia, private terminal operators are responsible for virtually all operations and even perform most of the stevedoring functions on behalf of the carriers.

- In Baltimore and specifically at the Dundalk facility, the Maryland Port Administration (MPA) maintains a rather large terminal staff that is responsible for administration, maintenance, container crane operation and security. M.P.A. also administers berth terms to and collects full dockage and wharfage from ocean carriers. All other functions are performed by stevedores acting on behalf of ocean carriers. As shown in the exhibit Dundalk is basically an ocean carrier operated facility.

  In Wilmington, N.C. the Ports Authority operates the terminal. As such they are responsible for container receiving and delivery (gate operations) and operation of

1 A stevedore is an organization that performs on behalf of the ocean carrier and employs International Longshoremen Association (ILA) members. The responsibility of the stevedore is to handle cargo between the vessel and a "point of rest" on the wharf or dock.

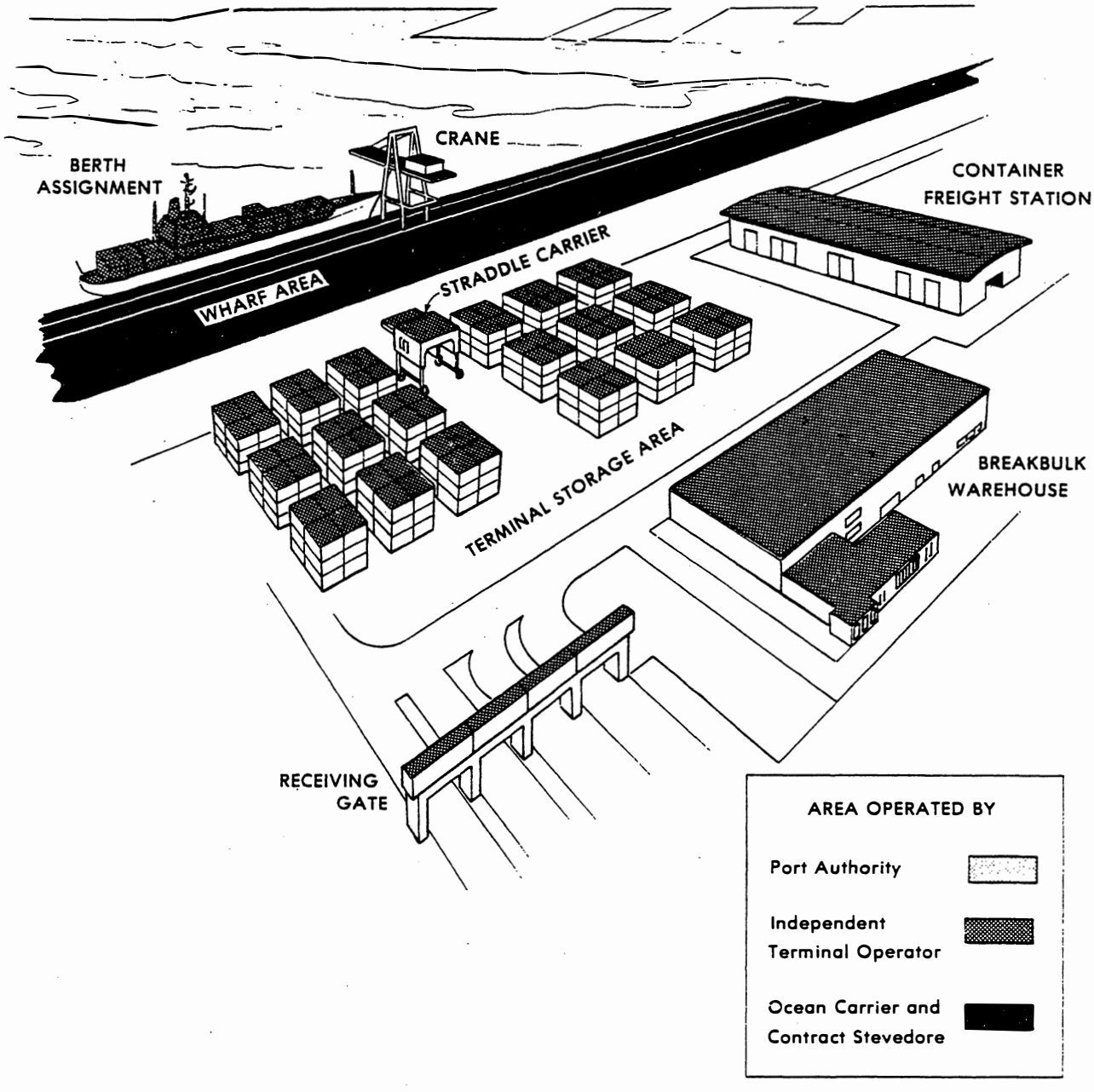

FIGURE II-1A
Facility Operating Situation
at Hampton Roads

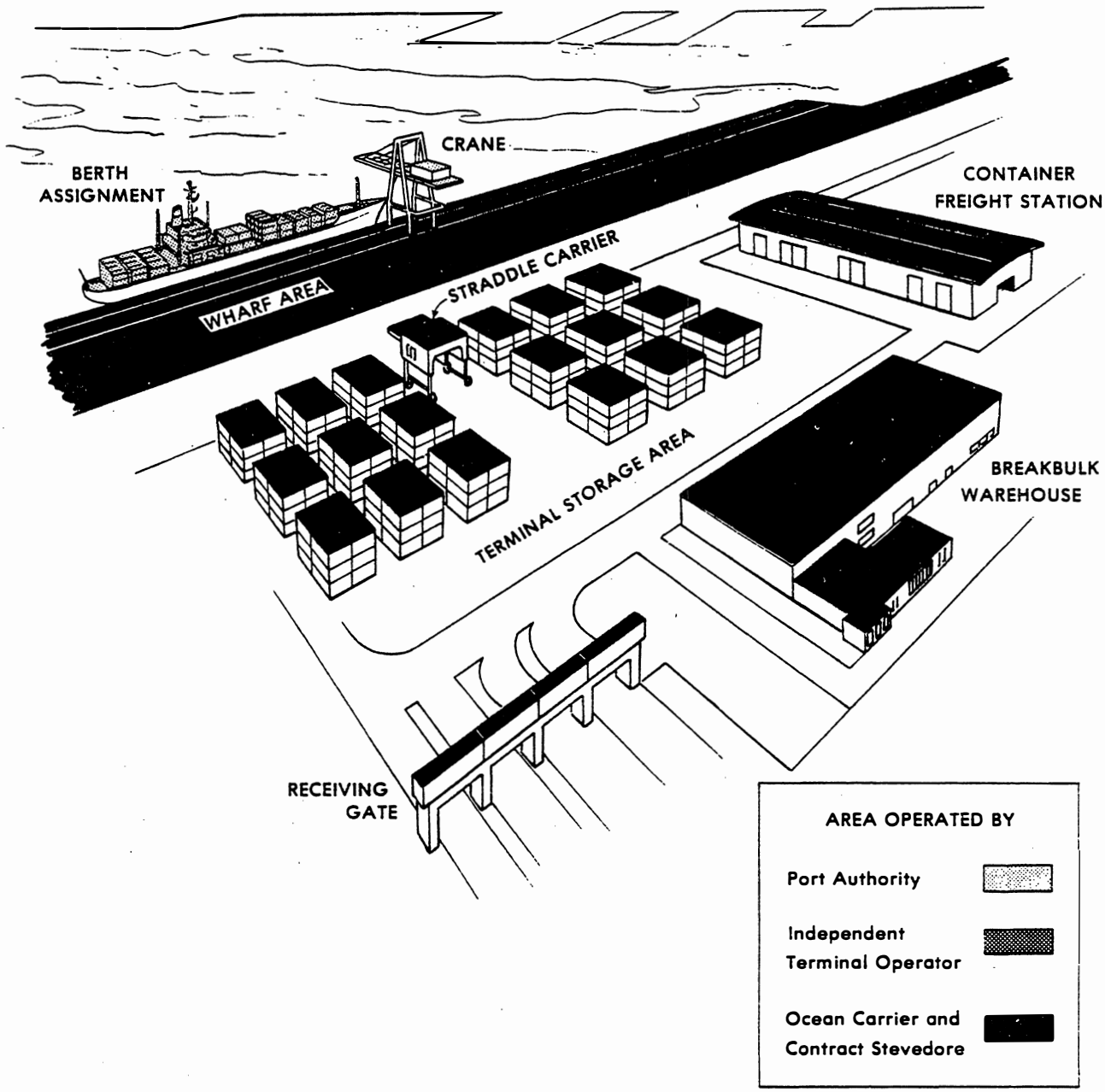

FIGURE II-1B
Facility Operating Situation
at Baltimore

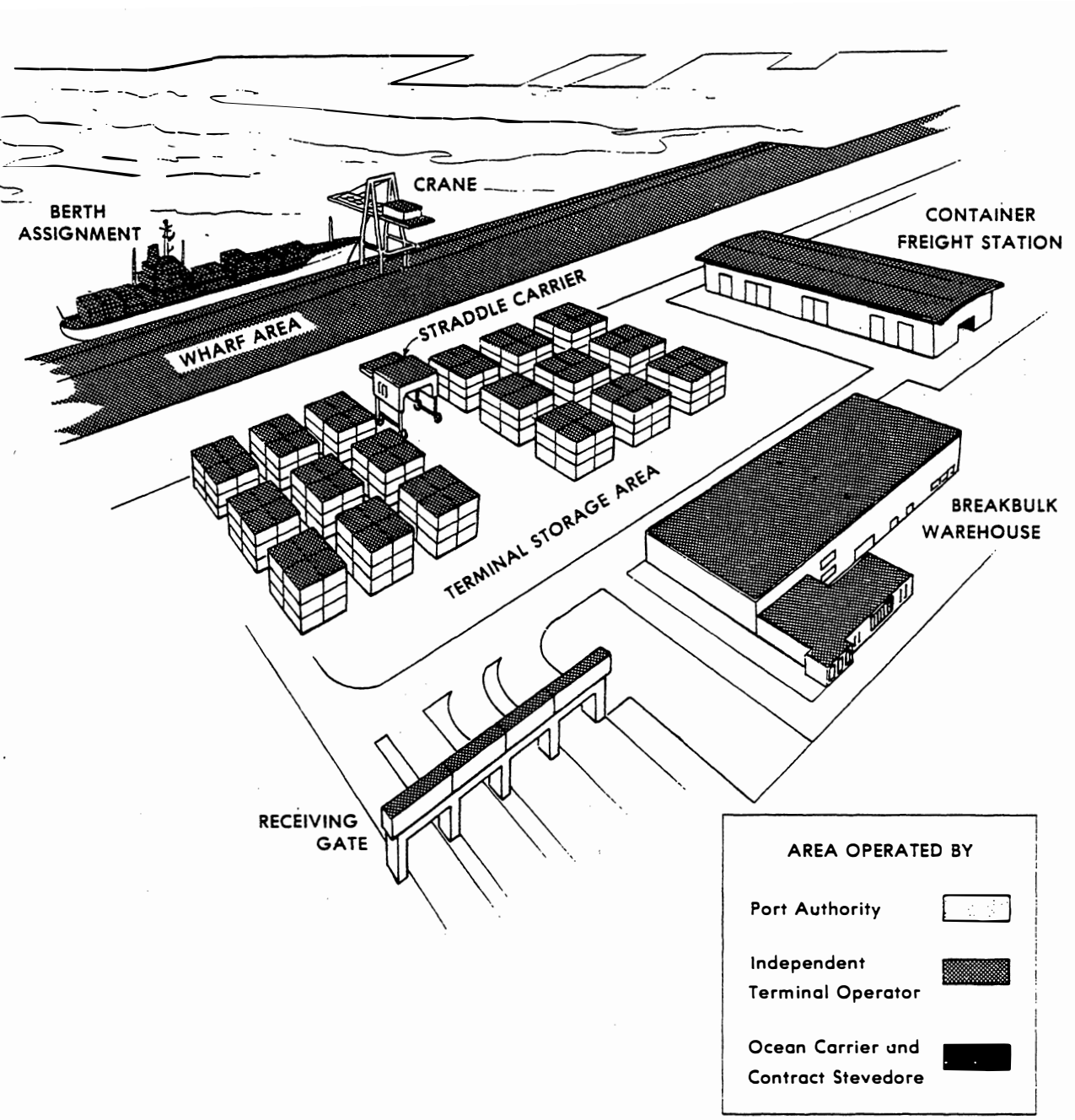

FIGURE II-1C
Facility Operating Situation
at Philadelphia

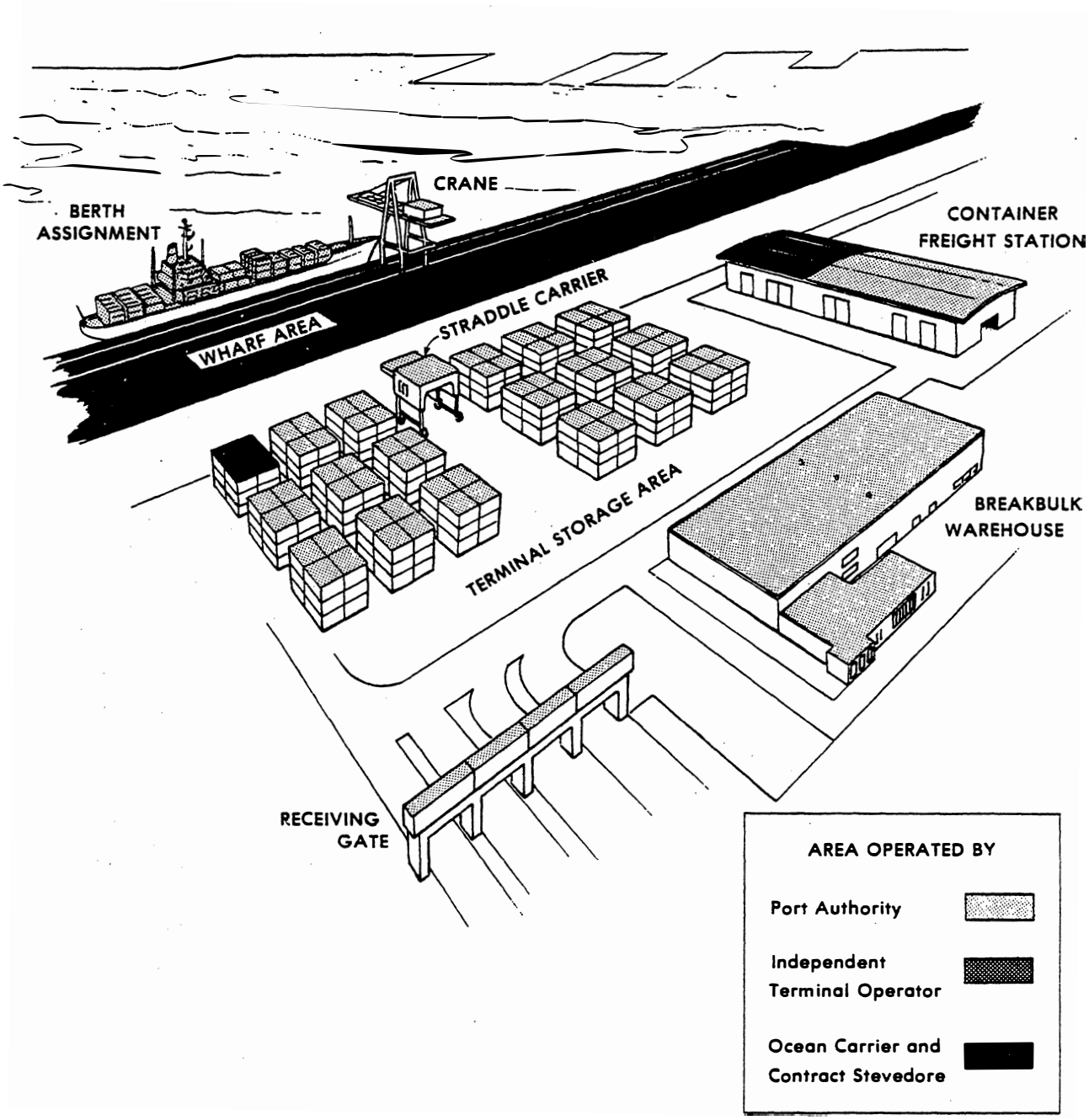

FIGURE II-1D
Facility Operating Situation
at Wilmington, N.C.

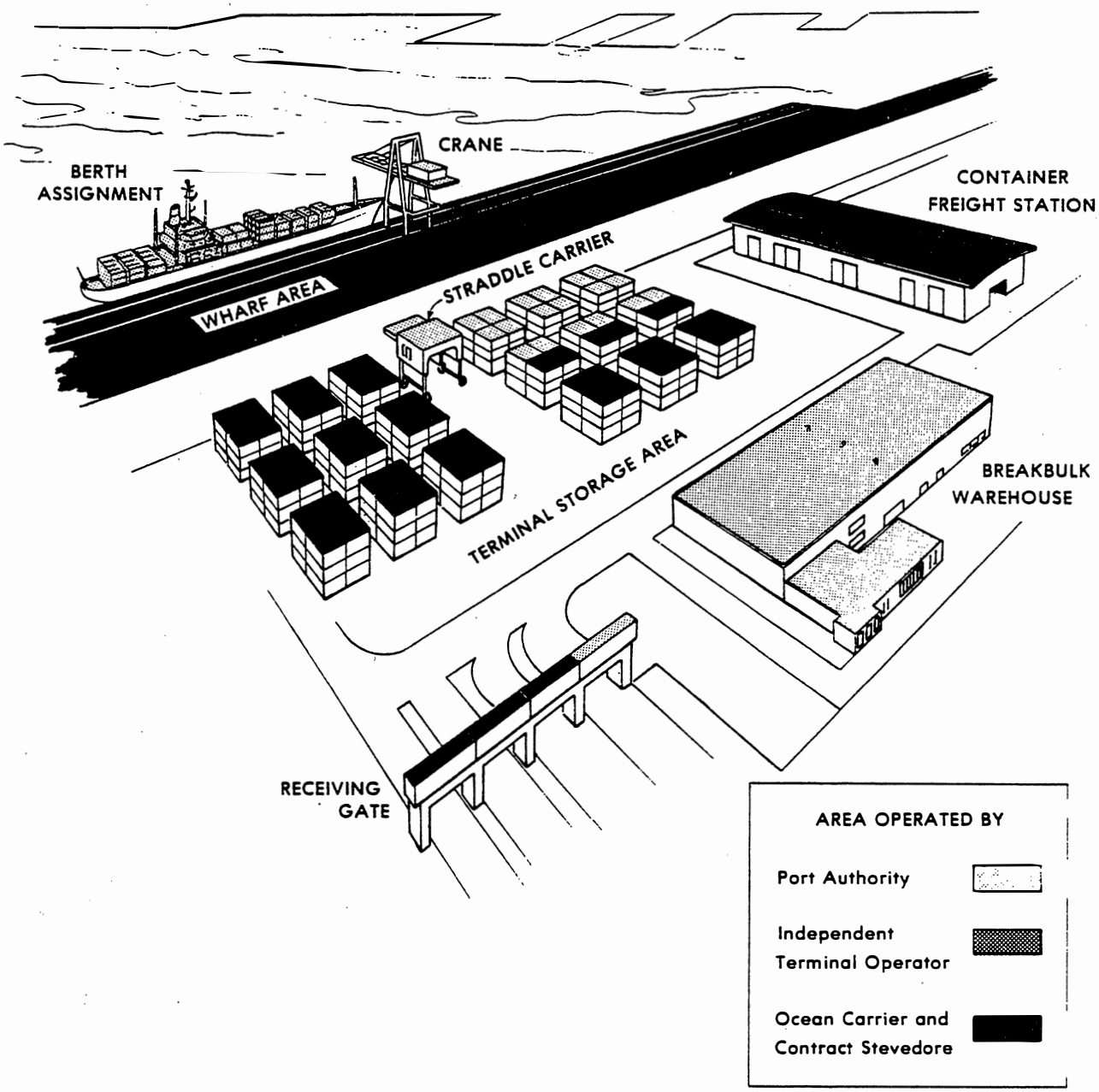

FIGURE II-1E
Facility Operating Situation
at Charleston, S.C.

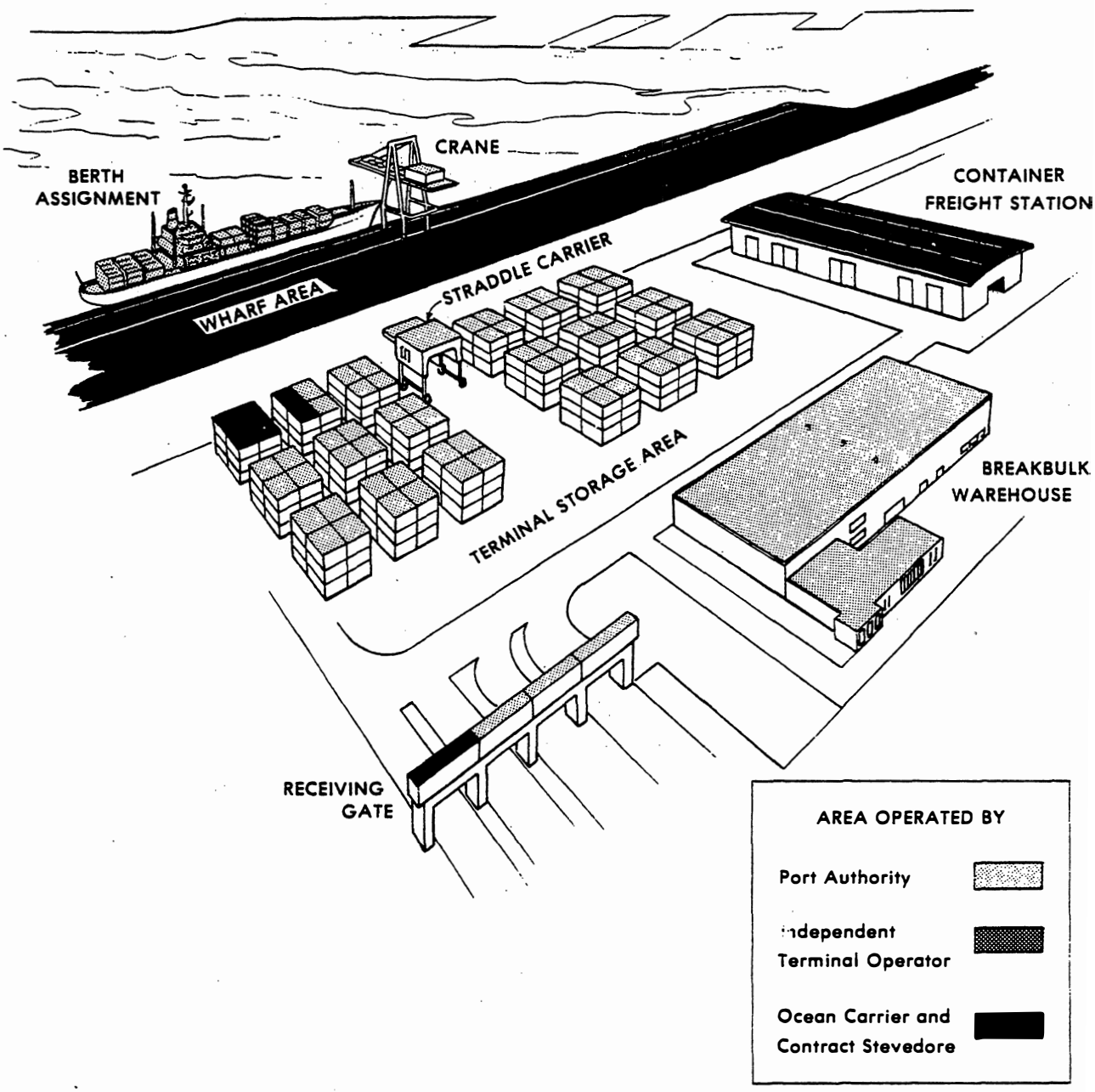

FIGURE II-1F
Facility Operating Situation
at Savannah

the breakbulk warehouse, the container freight station and the other storage areas. A small area of the facility (6.3 acres) is leased to Seatrain Lines.

In Wilmington both longshore and shortshore operations are performed by members of the ILA.[2]

Charleston, South Carolina is an operating Port Authority that employs non-union shortshore labor. To a very large extent, the container facilities are operated by ocean carriers that have leases with the South Carolina State Ports Authority. Port Authority personnel have little or no involvement with the terminal operations and stripping and stuffing of the containers for the six ocean carriers that hold these leases.[3]

The Georgia Ports Authority is also an operating Port Authority that employs non-union shortshore labor. At this time, the Port Authority is more involved with operations at their container facility than any other Port Authority. They lease only a small segment of the facility to one ocean carrier.

From an operating perspective the ports of Hampton Roads are more similar to the situation in Philadelphia than that of the other ports. Like Philadelphia, the principal facilities are operated by independent terminal operators. The public port organizations have little or no involvement with day-to-day terminal

2 For the purpose of this and subsequent Booz, Allen reports the term longshore applies to those employees that handle cargo on and off ships while shortshore applies to employees that work in the terminal and in the warehouses and transit sheds.

3 Stripping and Stuffing is the term used to represent work performed in the container freight station where export containers are loaded and import containers are unloaded. Containers that enter and leave the facility full of cargo do not receive this service.

operations at Philadelphia and Hampton Roads.[4] The major operating difference is that in Philadelphia the terminal operator performs nearly all of the stevedoring functions while in Hampton Roads the facilities are generally open to a number of contract stevedores.[5] It should be noted that the non-operating functions of the Philadelphia Port Corporation are significantly different from those of the Virginia Ports Authority.

From the above discussion, it is clear that there are major differences between the ports and port organizations subject to comparison. These differences are also represented in the financial data that will be shown later in this chapter and should be considered when evaluating the financial comparisons between these ports. In the next section a comparison of the financial environment of the six port systems is presented.

2. THE LONG TERM DEBT OBLIGATION BORNE BY THE VIRGINIA PORT SYSTEM IS SUBSTANTIALLY GREATER THAN THAT OF THE COMPARABLE PORTS. THIS RESULTS IN A SUBSTANTIAL CASH FLOW DEFICIT TO THE VIRGINIA PORT AUTHORITY AND PLACES A DUAL AND CONTINUING FINANCIAL BURDEN ON THE GENERAL ASSEMBLY

In this section the Virginia Port System and Port Authority are compared with the five other ports from a financial perspective. The financial comparisons include the following:

- Magnitude and frequency of state and local government appropriations since 1970.
- Sources of capital funds for the five year period between 1974 and 1978
- Operating statements for the Port Authorities and Port Systems.

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4 For the purposes of this comparison, Marine Terminals Inc. at N.I.T. is considered as separate from the Public Port Organization.

5 In Portsmouth one stevedore that is affiliated with the terminal operator performs most of the stevedoring.

These comparisons are presented in more detail below.

The Virginia Port System has Received less Funding From State and Local Appropriations Than Four of the Five Comparable Ports

Table II-2 is a comparison of the appropriations of state and local governments to their port system during the period between 1970 and 1978. In order to understand the information presented in the table, it is useful to present a brief summary of the methods of appropriation at the various ports.

- In Philadelphia the city has sold 5 general obligation bonds totalling $60 million since 1970. In addition, the city and state each appropriate $1 million per year to the Philadelphia Port Corporation. Rental payments received by the Port Corporation from terminal operators are not sufficient to cover debt service.

- In Maryland the M.P.A. receives annual appropriations from the State's Transportation Trust Fund. All port revenues are applied to the fund. In turn, all expenses including capital expenses are provided from the fund. As an example of the fund balances as it relates to the Port of Baltimore, it is estimated that in 1980, the M.P.A. will contribute $24 million from revenue to the fund. The M.P.A. will receive from the fund $17 million for operating expenses and $20 million for capital projects. This is equal to a deficit of $13 million during 1980.

- In North Carolina the staff of the Ports Authority develops a capital budget that is reviewed and approved by the Authority's Board of Directors. The Board, in turn, submits the request to a 12 member Advisory Budget Commission of the State of North Carolina. The 12 members are appointed from the state legislature in the following manner:

  - Four are appointed by the Governor
  - Four are appointed by the Chairman of the House Finance Committee

TABLE II-2
Comparison of Appropriations
By State and Local Governments
Between 1970 - 1978
(dollars in thousands)

Year	Hampton Roads	Baltimore	Philadelphia	N. Carolina	Charleston	Savannah
1970	0	NA	39,500	2,883	39,850	2,000
1971	7,864	NA	9,500	2,724	0	2,000
1972	0	6,146	2,000	1,078	0	2,000
1973	18,852	6,351	9,500	379	0	2,000
1974	0	9,843	2,000	1,861	68,000	2,000
1975	7,836	26,651	9,500	3,092	0	54,000
1976	0	21,350	2,000	2,827	0	2,000
1977	16,715	22,674	2,000	5,163	0	2,000
1978	0	19,638	2,000	1,645	0	13,129
Total	51,267	112,653	78,000	21,652	107,850	81,129

NA - Not available. The Baltimore total is based on seven, rather than nine years of data.

- Four are appointed by the Chairman of the Senate Finance Committee.

This Commission reviews and approves the capital budget for submittion to the General Assembly who will make bi-annual appropriations. The level of appropriations approved by the North Carolina General Assembly is constrained by the fact that the state cannot incur debt.

The South Carolina State Port Authority was organized with a donation of $6.7 million in funds and facilities during 1947. Between 1947 and 1959 the General Assembly allocated operating funds of $200,000 per year. The traditional source of capital funds had been through the proceeds of general obligation bonds issued by the state of South Carolina. Since 1959 over $132 million in G.O. bonds have been issued. Internally generated revenue plus revenue bonds have become a key source of funds since the middle 1960's. In South Carolina a significant degree of authority is vested in a five member State Budget and Control Board whose membership consists of:

The Governor
The State Treasurer
The Comptroller General
The Senate Finance Committee Chairman
The House Ways and Means Committee Chairman.

These are all elected officials in South Carolina and must approve all financial proposals.

The Georgia Ports Authority was created in 1948. From 1950 thru 1974, the G.P.A. issued $43.5 million in revenue bonds. Of this, $15.5 million is being repaid from the Authority's revenues and $28 million is being repaid through lease rentals from the State of Georgia. In addition to these bond issues the Authority has, over time, borrowed $11.3 million from banks for varied purposes and is maintaining debt service through internally generated revenues.

In 1975, the State Constitution was changed allowing the state to incur debt and thereby changing the state's primary method of funding from Revenue Bonds to General Obligation Bonds. In 1975, the State Legislature provided $52 million in General Obligation Bonds to the Authority for expansion of it's facilities. This construction is now approximately 50% complete. Although the Authority is not bound by law to repayment, it has made a verbal obligation to contribute to the repayment from it's profits. As of July 1, 1977, the Authority began payment of $500,000 per year to the state. As these facilities begin to reach their maximum profit potential (approximately fiscal year 1983) the Authority has agreed to escalate this contribution to $1 million per year.

The situation in Virginia is unique and not directly comparable to any of the other ports. In that it is dependent upon appropriations from the General Assembly it is perhaps most similar to the situation in North Carolina. The North Carolina State Ports Authority is dependent upon bi-annual appropriations from the State Legislature but on a scale considerably less than that of Hampton Roads.

Referring back to Table II-2 it is apparent that the Virginia Port System receives less funding via state and local appropriations than four of the five other ports studied. Specifically:

- The Port of Baltimore received a net appropriation of over $112 million during the seven year period between 1972 and 1978.[6]

- The Port of Charleston has received general obligation bond revenues of nearly $108 million since 1970.

- The Georgia Ports Authority has received appropriations in excess of $81 million since 1970.

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6 The net appropriation in Baltimore reflects appropriations less contributions from the Port's revenue base.

The City of Philadelphia has appropriated $78 million to the port since 1970.

North Carolina ports have received $21.6 million in appropriations from the State Legislature since 1970.

By comparison the Port of Hampton Roads has received a total of $51.3 million in state appropriations during the 1970's. This is significantly less than that appropriated for other ports of comparable size.

(2) During the Past Five Years, Capital Investments in the Virginia Port System has Lagged That of the Other Ports

A review was made of capital investments in each of the six ports during the period since 1974. The review was focused on determining both the level of investment and the source of capital funds.

1. Since 1974 the Commonwealth has Invested Only $15.6 Million in the Port System

Figure II-2 presents an illustration of capital investment in the six port systems during the five year period between 1974 and 1978. The Figure indicates that only $15.6 million was invested in Virginia. This is less than 1/3 of the investments made in Maryland, South Carolina and Georgia during the period and is also less than Port investment in Philadelphia and North Carolina.

2. For Practical Purposes, the Virginia Port System is Totally Dependent on State Appropriations as a Source of Investment Capital

Figure II-2 also displays the source of capital funds for each of the six ports. The figure indicates that while Virginia does fund capital projects with terminal revenues, for all practical purposes it is totally dependent on state appropriations to expand and develop port facilities. This is not generally the

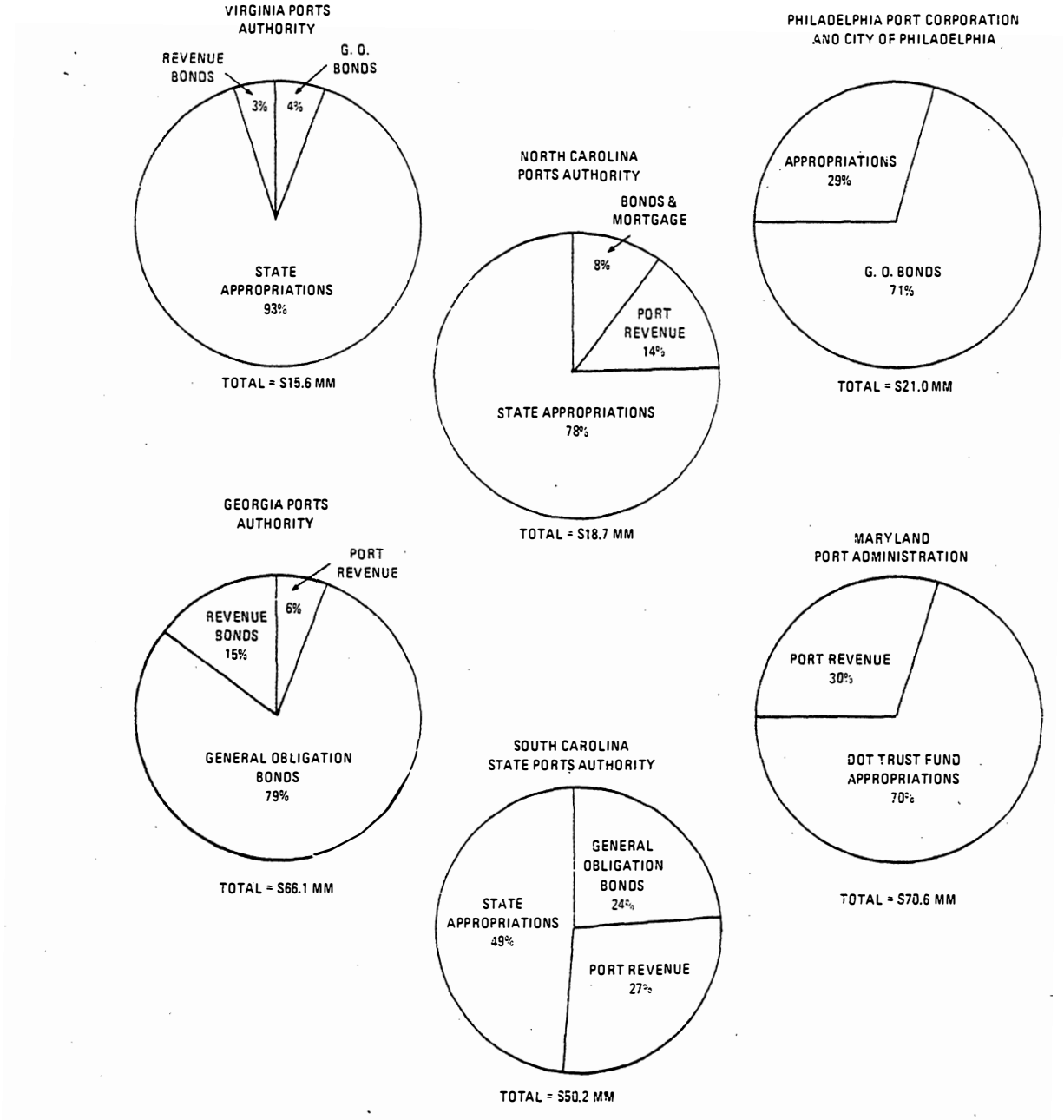

Figure II-5
Comparison of Capital Investment
at Six Ports Between 1974 - 1978

situation in the other ports. For example, during the last five years:

Philadelphia has also depended on appropriations for all of its capital investment.

The Georgia Ports Authority is dependent on the state for 79% of its capital.

North Carolina is dependent on state allocations for 78% of its capital investment.

South Carolina has received state support for 73% of total investment.

Maryland has been dependent upon state sources for approximately 70% of its investment.

From the above comparisons of appropriations and sources of capital funds it can be concluded that:

Virginia is similar to North Carolina concerning the way in which appropriations are made for port development and operation.

Virginia is similar to Philadelphia in that it is totally dependent upon its political parent organization for capital funds.

The financial situation is dissimilar to the more advanced and developed ports of Baltimore, Charleston and Savannah. In the next section of this report the operating performance and financial condition of the Virginia Ports Authority and Port System is compared with the other ports.

(3) The Virginia Port System Incurs Substantially Greater Operating Losses and is Considerably More Leveraged Than any of the Other Ports Examined

During the course of the Phase I investigation the operating statements and balance sheets of the Virginia Port System were reconstructed such that they could be compared with the different types of ports to the north and south. Two types of statements were developed in order to facilitate these comparisons.

- The first type compared the Virginia Port Authority's financials with those of the other Port Authorities. As such, the comparisons were most relevant to the non-operating ports of Philadelphia and Baltimore.

- The second type incorporated marine terminal financials with the VPA financials and thus facilitated a port system comparison primarily with the South Atlantic ports of North Carolina, South Carolina and Georgia.

The results of the analysis are summarized below:

1. The Virginia Port Authority and Port System Incur Greater Operating Deficits Than the Five Comparable Ports

Table II-3 is a summary income statement for the three non-operating ports of Hampton Roads, Philadelphia and Baltimore. The summary represents an average operating year for the five year period between 1974 and 1978. The revenue shown on the Table represents revenue to the port authorities from operations and excludes any continuing and one time revenue received from state and local governments or similar sources. It also excludes capital improvements turned over to the Port Authority by terminal operators. The table indicates that the average annual deficit (before state appropriations) of the VPA over the past five years is approximately $2.5 million or 60% of revenue from operating sources. The deficit (or net profit) is calculated after deducting interest expense where the Port Authority is

responsible for debt service and an estimated depreciation charge.[7] The deficit in Virginia is considerably higher than the other non-operating ports of Baltimore and Philadelphia.

TABLE II-3
Average Annual Income Statement
For Three Non-Operating Port Authorities
For The Five Year Period Between 1974 - 1978
(dollars in thousands)

	Hampton Roads		Philadelphia		Baltimore	
	$	%	$	%	$	%
Gross Revenue	4,273	100.0	4,886	100.0	15,675	100.8
Operating Expense	2,356	55.1	6,083[1]	124.5	11,384	72.6
Operating Margin	1,917	44.9	(1,197)	(24.5)	4,290	27.4
Interest	1,909	44.7	0		0	
Net After Interest	8	0.2	(1,197)	(24.5)	4,290	27.4
Depreciation	2,551	59.7	127	2.6	3,601	23.0
Net	(2,543)	(59.5)	(1,324)	(27.1)	690	4.4

1. Includes $5,154,000 annual facility rent.

Table II-4 compares an operating statement for VPA that includes the terminal operations at N.I.T., Portsmouth, Newport News and Lambert's Point Docks with that of the three South Atlantic Port Authorities.

7. For the public port facilities in Hampton Roads average annual depreciation is estimated at $2.5 million or 2.48% of the book value of depreciable assets. This percentage is similar to the average of the ports of Baltimore, North Carolina and South Carolina and Georgia. The VPA is currently developing depreciation estimates that are somewhat higher and perhaps more reasonable than the estimate used for this study. The 2.48% estimate is used here in order to facilitate comparison with the other ports.

TABLE II-4
Average Annual Income Statement
For Total Operations at Four Ports
For the Five Year Period Between 1974 - 1978
(dollars in thousands)

Hampton Roads		N. Carolina		Charleston[1]		Savannah	
$		$	%	$	%	$	%
25,400	100.0	6,304	100.0	14,949	100.0	17,500	100.0
22,228	87.5	5,171	82.0	11,002	73.6	12,936	74.1
3,172	12.5	1,133	18.0	3,947	26.4	4,564	26.1
	[illegible]	101	[illegible]	191	1.3	1,148	6.6
	5.0	1,032	16.4	3,756	25.1	3,416	19.5
2,552	10.0	1,234	19.6	2,216	14.8	2,227	12.7
(1,289)	(5.0)	(202)	(3.2)	1,540	10.3	1,189	6.8

[1] Charleston based on 4 year average.

The table indicates that the consolidated Virginia income statement shows an average deficit of 5% on revenues over the 5 year period compared to:

- A 3.2% deficit at North Carolina
- A 10.3% profit at Charleston
- A 6.8% profit at Savannah.

2. The Virginia Port System has a Greater Debt Liability Than the Other Ports Studied

The financial condition of the Virginia Port System was also compared with that of the other ports. The comparisons were similar to the operating statement comparisons. A Port Authority balance sheet was compared with the North Atlantic ports and a composite port system balance sheet that included the Hampton Roads Terminal operators balance sheets was compared with the South Atlantic ports.

Table II-5 compares a balance sheet summary of the VPA with that of the ports of Philadelphia and Baltimore. There was a considerable

TABLE II-5
Balance Sheet Summaries of
North Atlantic Ports
(1978)

	Hampton Roads	Philadelphia	Baltimore
ASSETS			
Current Assets	2,992	2,127	5,914
Fixed Assets			
Land	10,576	0	14,682
Improvements	109,600	5,977	158,068
Other	2,597	0	123
Total	122,773	5,977	172,873
Total Assets	125,765	8,104	178,788
LIABILITIES AND EQUITY			
Current Liabilities	1,558	570	2,980
Long-Term Liabilities	42,135	0	132
Total Liabilities	43,693	570	3,111
Equity	82,072	7,534	175,677
Total Liabilities and Equity	125,765	8,104	178,788
Total Liabilities ÷Total Assets	0.35	0.01	0.02

difference observed in debt equity ratios whereby the VPA had a .35 debt to equity ratio while Philadelphia and Baltimore had debt to equity ratios of .01 and .02, respectively.

Table II-6 compares a balance sheet summary of the Virginia Port System with that of the three South Atlantic port systems. The situation that was observed in the previous table reoccurred in the systemwide comparisons. The debt to equity ratios of the four systems were as follows:

- Virginia - .36
- North Carolina - .06
- South Carolina - .08
- Georgia - .28[8]

TABLE II-6
Balance Sheet Summaries of
Hampton Roads and South Atlantic Ports
(dollars in thousands)

	Hampton Roads	N. Carolina	Charleston	Savannah
Current Assets	11,573	3,768	8,498	
Fixed Assets				
Land	10,912	1,544	12,727	
Improvements	111,773	43,430	[illegible]	
Other	329	5,882	6,461	
Total	123,014	50,856	76,438	
Total Assets	134,587	54,624	84,937	141,719
LIABILITIES AND EQUITY				
Current Liabilities	5,464			
Long-Term Liabilities	42,929	2,396		
Total Liabilities	48,393	[illegible]		
		51,582		
Total Liabilities and Equity	134,587	54,624	84,937	141,719
Total Liabilities ÷ Total Assets	0.36		0.39	0.28

8. The Georgia revenue bond obligation has an offsetting revenue source of $2 million per year in the form of rentals paid to the GPA from the state.

It is apparent that the Virginia Port System has incurred a significantly greater long-term debt obligation than the five neighboring port systems. The reasons for this are identified below.

> Much of the debt obligation in Virginia is due to the "so-called" unification agreements with the cities of Norfolk, Portsmouth and Newport News.
>
> The other port systems have not been constrained by such agreements and in addition have benefited by either state or local government appropriations and general obligation bond issues that do not tie the port with debt service.

Consequently, there is little left for facility development because of the requirement for a significant share of bi-annual appropriations to be applied to debt service.

In the next and final section of this report key performance indicators of port operations at the six port systems are compared and evaluated. Additionally, judgements are formulated concerning the role that the financial situation described above has on overall port performance.

3. WHILE PORT PERFORMANCE AT HAMPTON ROADS DOES NOT COMPARE FAVORABLY WITH THAT OF MOST OF THE OTHER PORTS, PERFORMANCE DIFFERENCES DO NOT APPEAR TO BE THE RESULT OF THE DIFFERING FINANCIAL ENVIRONMENTS AT THE PORTS

In order to determine the impact that differences in the financial situations prevailing at the six ports could have on port operations a number of indices of operations were developed for each port and compared. Performance indices or measures were developed for the following operating characteristics:

> Relationship of public port investment to general cargo throughput
>
> Relationship of Port Authority revenues per ton of general cargo handled

- Utilization of special purpose container handling facilities
- Comparison of container charges
- Comparison of labor charges.

These comparisons and indices are developed in greater detail in the following sections.

(1) The Total Investment Necessary to Handle a Unit of General Cargo at Hampton Roads is Comparable to the Developed Ports

Table II-7 compares the book value of investment at five of the six comparable ports with the total general cargo supported by that investment during 1977.

The Table indicates that investment per ton, or investment turnover at Hampton Roads is comparable with that at the developed ports of Baltimore and Charleston and less than the developing ports of Wilmington, N.C. and Savannah. This indicates that the adverse financial situation described earlier has yet to have a negative effect on total investment and overall use of the ports of Hampton Roads.

TABLE II-7
Comparison of the Utilization of Investment at Five Atlantic Coast Ports During 1977

	1977 General Cargo Tonnage (in thousands of tons)	Total Investment Net of Depreciation (in millions of dollars)	Total Investment Per Ton Of Cargo Handled During 1977
HAMPTON ROADS	3,298	$126[3]	$37.67
Baltimore	4,688	$179	$38.18
Charleston, S.C.	2,355	$ 85	$36.09
North Carolina Ports	900[2]	$ 55	$61.11
Savannah, Georgia	2,964	$142	$47.91

1. Philadelphia was not included because total net investment was not available during Phase I.
2. North Carolina cargo excludes bulk and coastwise cargo handled at the general cargo facility.
3. Hampton Roads investment is gross, as no accumulated depreciation is available.

(2) Utilization of the Special Purpose Container Facilities at Hampton Roads has Lagged That of the Other Developed Container Ports

An analysis was also made of the special purpose container handling facilities at the six ports. For the purposes of this analysis the special purpose container handling facilities at Hampton Roads included:

2.5 berths and 4 container cranes at N.I.T.
2 berths and 2 container cranes at Portsmouth
1 berth and 1 container crane at Newport News

The analysis compared the productivity of the container berths and container cranes at Hampton Roads with that of the 5 comparable ports for the period between 1974 and 1978. The analysis is presented in Table II-8. The Table compares total containers and total container tonnage handled per berth and per crane during each of the years.

The following Table II-9 is taken from Table II-8 and compares the average annual container tonnage per berth and per crane over the five year period.

TABLE II-9
Comparison of Container Tonnage
Handled per Container Berth and Container Crane
at Six Ports
(Tonnage represents an annual average estimate for each of the past five years and is in thousands of tons)

Port	Tonnage Handled Per Berth	Tonnage Handled Per Crane
HAMPTON ROADS	311	244
Baltimore	447	357
Charleston, S.C.	458	421
Philadelphia	361	395
Savannah	215	210
Wilmington	162	282

TABLE II-8
Comparison of Container Facility Utilization at Six Ports

Port	Year	No. of Container Berths	No. of Container Cranes	Container Handled	Container Tonnage (in thousands of short tons)	Containers Per Berth	Containers Per Crane	Tonnage Per Berth (in thousands of short tons)	Tonnage Per Crane (in thousands of short tons)
Virginia[1]	1974	5.0	6	211,189	2,096	42,238	35,198	427	349
	1975	5.5	7	160,723	1,596	29,222	22,960.	299	228
	1976	5.5	7	157,970	1,575	28,722	22,567	294	225
	1977	5.5	7	152,110	1,421	27,656	21,730	262	203
	1978 (est)	5.5	7	160,000	1,500	29,091	22,857	273	214
Baltimore[2]	1974	5.5	7	174,011	2,228	31,638	24,859	405	318
	1975	5.5	7	196,326	2,275	35,696	28,047	414	325
	1976	5.0	6	200,151	2,366	40,030	33,358	473	394
	1977	5.5	7	188,408	2,291	34,256	26,915	416	327
	1978 (est)	5.5	7	248,973	2,900	45,268	35,568	527	414
Charleston[3]	1974	2.0	2	75,928	1,063	37,964	37,964	532	532
	1975	2.0	2	69,571	974	34,786	34,786	487	487
	1976	3.0	3	90,735	1,244	30,245	30,245	415	415
	1977	3.5	4	95,894	1,400	27,398	23,974	400	350
	1978 (est)	3.5	5	114,000	1,600	32,571	22,800	457	320
Savannah[4]	1974	2.0	2	41,000	451	20,500	20,500	226	226
	1975	3. 0	2	41,748	460	13,916	20,874	153	230
	1976	3.0	3	56,246	610	18,749	18,749	203	203
	1977	3.0	3.5	60,78.3	665	20,261	17,367	222	190
	1978 (est)	3. 0	4	73,640	810	24,547	18,410	270	202
Wilmington, N.C.	1974	1.0	0	6,000	124	6,000		124	
	1975	1.0	0	8,600	119	8,600		119	
	1976	1.0	0	10,300	188	10,300		188	
	1977	1.0	0 5	14,200	183	14,200	28,400	183	366
	1978	1.0	1	14,800	197	14,800	14, 800	197	197
Philadelphia[5]	1974	4.0	4	80,000	1,550	20,000	20,000	388	388
	1975	4.0	4	91,317	1,370	22,829	22,829	342	342
	1976	4.0	4	106,940	1,604	26,735	26,735	401	401
	1977	5.0	4	112, 000	1,685	22,400	28,000	337	421
	1978 (est)	5.0	4	115,000	1,700	23,000	28,750	340	425

[1] Virginia facilities include N.I.T., Portsmouth and Newport News.

[2] The Baltimore statistics are based on performance at Dundalk Marine Terminal.

[3] The Charleston data are based on statistics for the North Charleston and Columbus Street Terminals.

[4] The Savannah statistics are based on the port's dedicated container facility.

[5] Philadelphia data are based on Parker Avenue and Tioga Marine Terminal statistics.

Both Tables II-8 and II-9 indicate that container handling productivity is significantly below that of the developed container ports and is being approached by the developing ports. This situation does not appear to be the result of the financial environment of the ports of Hampton Roads, but rather is probably caused by non-financial factors such as the market situation or the role of the terminal operators. This situation will be explored in further detail during Phase II.

(3) The Revenue Received by the Virginia Port Authority per Unit of General Cargo Does Not Compare Favorably With the Situation at Other Ports

Table II-10 compares the gross revenue and operating margin per unit of general cargo handled at the six port systems during 1977.

TABLE II-10
Comparison of Port Revenue Per Ton of General Cargo for Six Atlantic Coast Ports (1977)

Port	Gross Revenue[1] (in millions of dollars)	Operating Margin[2] (in millions of dollars)	General Cargo Tonnage (in millions of short tons)	Gross Revenue Per Ton	Operating Per Ton
Hampton Roads					
Port Authority	$ 4.4	$1.6	3.2	$1.34	$0.50
Total port[3]	$28.9	$2.9	3.2	$9.03	$0.91
Baltimore	$16.6	$4.1	4.7	$3.53	$0.87
Philadelphia	$ 5.1	($1.0)	5.1	$1.00	($0.20)
North Carolina[4]	$ 7.2	$1.5	0.9	$8.00	$1.67
Charleston, S.C.	$16.5	$5.0	2.4	$6.88	$2.08
Savannah	$22.4	$7.3	3.0	$7.47	$2.43

Notes: 1 Gross revenues represent the total revenues received by the Port Authority (except for Note 3).

2 Operating margin represents the amount remaining after operating expenses, but prior to interest expense and depreciation.

3 Total port for Hampton Roads includes the revenues of the terminal operators plus that of the Port Authority.

4 Tonnage for North Carolina excludes bulk tonnage at Wilmington handled across the general cargo docks.

In the case of Hampton Roads a revenue estimate is developed for both the Port Authority and the port system. The following conclusions can be drawn from an inspection of Table II-10.

The Virginia Port Authority gross revenue and operating margin is considerably less than that of Baltimore.

- The VPA realizes gross revenue of $1.34 per ton of cargo while the MPA receives $3.53 per ton.

- The operating margin of the VPA (after allocated expenses but before interest and depreciation expense) was $.50 per ton compared to $.87 per ton at Baltimore.

- The VPA's revenue characteristics compare favorably to Philadelphia but the situation in Philadelphia is unusual and not suitable to the situation in Virginia.

- The total revenue to the Virginia Port System (including terminal revenues) was $9.03 per ton in 1977. This is considerably greater than the revenues received by the three operating Port Authorities to the South.

  The operating margin of the total Port of Virginia was only $.91 per ton compared to:

  $1.67 per ton at North Carolina
  $2.08 per ton at Charleston
  $2.43 per ton at Savannah.

It is apparent that the revenue received by the VPA is less than the other Port Authorities while the entire port, and particularly the terminal operators, realize more gross revenues but net less than the comparable operating Port Authorities.

There is a direct relationship between this situation and the financial environment in the Virginia Port System.

(4) The Charges for Container Handling Services at Hampton Roads are Comparable to That at the Other Ports

Table II-11 compares the charges for key container services at Hampton Roads with those at the ports of Savannah, Charleston and Baltimore.

TABLE II-11
Comparison of Container Charges at
Four Container Facilities
($ per container unless otherwise specified)

	Hampton Roads		Savannah	Charleston	Baltimore
	MTI	Ports-mouth			
Container wharfage[1]	$ .85	$ .85	$ .85	$ .85	$ 1.10
Receiving or delivery					
Wheeled operation	$ 28.50	$ 24.00	$ 18.00	$ 17.50	$ 11.20
Stacking operation	$ 28.50	$ 31.50	$ 29.00	$ 29.50	$ 11.20
Rehandling	$ 12.50	$ 12.00	$ 15.00	$ 12.00	$ 10.90
Container crane rental					
Straight time	$300.00	$300.00	$300.00	$300.00	$310.00
Overtime	$340.00	$340.00	$300.00	$325.00	$310.00
Transtainer rental					
Straight time	$ 62.00	$ 62.00	$ 64.00	$ 75.00	
Overtime	$ 67.00	$ 79.00	$ 64.00	$ 85.00	

1 Wharfage assessed per ton of cargo.

The table indicates that with the exception of the receiving charges for a wheeled operation (container remains on chassis inside the terminal) the charges at the Port of Hampton Roads compares favorably with those at the other ports. An initial conclusion is that the financial situation should impact the level of charges for such services but in that the restrictive financial situation is evidently not passed on to the terminal operators (see Table II-10). The rates established are not impacted by the financial situation at Hampton Roads.

(5) Labor Charges Compare Favorably With North Atlantic Ports and Unfavorably With South Atlantic Ports

The cost of longshoremen is roughly the same along the Atlantic and Gulf Coasts. The same situation does not exist with the shortshoremen, the labor most frequently employed by a Port Authority and terminal. Table II-12 compares the cost of terminal and warehouse operations at Hampton Roads, Baltimore, Charleston and Savannah.

TABLE II-12
Terminal and Warehouse
Hourly Labor Costs
(dollars per hour)

	Port			
Labor Category	Hampton Roads	Baltimore	Savannah	Charleston S.C.
Terminal Clerks	$16.04	$17.50	$10.31	$ 6.47
Freight Handlers	$15.17	$17.50	$ 8.09	$ 6.27
Crane Operators	$16.92	$17.60	$11.36	$10.33
Lift Truck Operators	$16.04	$17.60	$ 9.51	$ 7.02
Mechanics	$16.04	$17.50	$ 9.83	$ 8.30
Carpenters	$16.04	$17.64	$10.05	$ 7.84

The Table indicates that Hampton Roads compares favorably with Baltimore. Both are I.L.A. ports and the differences are the result of local work rules and insurance. Hampton Roads does not compare favorably with Savannah and Charleston which are non-union ports.

This situation is the result of other factors, that while not related to the financial situation in Hampton Roads, are key factors in the overall success of the port and will be studied in Phase II.

In summary, five operating characteristics were analyzed and evaluated in order to determine the role that the financial situation in Hampton Roads has on the ports operating performance. Table II-13 provides a recapitulation of these five characteristics.

TABLE II-13
Summary of Operating Characteristics

Operating Characteristics	Relative Position of Hampton Roads to the Other Ports			Degree That the Financial Situation Influences the Relative Position
	Favorable	Comparable	Unfavorable	
Investment per ton of General Cargo		X		LOW
Container Facility Utilization			X	LOW
Port Authority Revenue per ton			X	HIGH
Level of Container Charges		X		LOW
Hourly Labor Costs			X	LOW

The Table indicates that in three of the five operating characteristics the ports of Hampton Roads compared unfavorably to it's neighboring ports. In only one of these three cases did the financial environment appear to cause or be the effect of the unfavorable situation. This suggests that factors other than the financial situation may be more important to the future of the port. These factors will be studied during Phase II.

* * * * *

In the next chapter the financial aspects of each major public terminal in Hampton Roads is explored.

III. EVALUATION OF PORT FACILITIES WITHIN HAMPTON ROADS

III. EVALUATION OF PORT FACILITIES WITHIN HAMPTON ROADS

In the previous chapter, the overall financial situation of the Virginia Port System was compared with five other Atlantic coast ports.

In this chapter, the financial characteristics of the four operators in Hampton Roads, and their relationship to the Virginia Port Authority are presented. The presentation is organized in the following manner.

> In the first section of this chapter the legal relationship between the private terminal operators and the Virginia Port Authority is summarized.
>
> In the second section the operations (profit and loss) of the four terminal operations are characterized
>
> In the final section the implications of terminal operations on the Virginia Port Authority and the Port System are presented.

1. THE VIRGINIA PORT AUTHORITY LEASES TERMINAL FACILITIES TO FOUR OPERATORS UNDER NON-UNIFORM TERMS

As a result of the unification agreement with the cities of Norfolk, Portsmouth and Newport News and agreements with the N & W Railroad, the Virginia Port Authority acquired the following terminal facilities:

> Norfolk International Terminals
> Portsmouth Marine Terminal
> Lambert's Point Docks
> Sewell's Point Docks
> Newport News Terminal.

These facilities are leased to four companies that operate them as public terminals. Table III-1 summarizes the terms and conditions of each lease agreement. A more detailed description of each is presented below.

TABLE III-1
Hampton Roads Lease Summary

Facility .Lessee .Operator	Expiration Date	Stated Annual Rent	5-year Average Actual Payments	Renewal Option	Purchase Option	Profit Sharing	VPA Rate Authority
Norfolk International Terminals . Maritime Terminals, Inc. . Maritime Terminals, Inc.	1992	All profits after certain funds	$1,960	No	No	Yes	Approval
Portsmouth Marine Terminal . Portsmouth Terminals, Inc. . Portsmouth Terminals, Inc.		Percentage of various terminal charges	$1,255	Yes	No	No	Approval
Lamberts Point Docks Sewells Point Docks . Norfolk & Western Railroad . Lamberts Point Docks, Inc.	1991	$1,515	$ 758	Yes	Yes	Yes	None
Newport News Terminal . Nacirema Operating Co., Inc. . Peninsula Terminals, Ltd.	1985	$776 first 2 yrs; $1,346 thereafter, plus percentage of various charges	N/A[2]	Yes	No	No	VPA sets wharfage, dockage & demurrage; PTL sets other charges

1 Portsmouth lease is currently being renegotiated.
2 The lease with Nacirema began in 1978.

(1) Norfolk International Terminals is Operated by Marine Terminals, Inc., a Non-Profit Corporation

Marine Terminals, Inc. (MTI), a not-for-profit-corporation, was formed in 1972 to operate Norfolk International Terminals. Five of the nine member Board of Directors are appointed by the Port Authority while the remaining four are appointed by the City of Norfolk. The 20-year lease, which expires in December, 1992, calls for all profits after the establishment of certain funds, to be turned over to the Port Authority. MTI has no specific rights of renewal under the terms of the lease.

(2) Portsmouth Marine Terminal Is Operated by A For-Profit Corporation, Portsmouth Terminals, Inc.

Portsmouth Terminals, Inc., a corporation owned by local individuals and maritime interests, leases and operates Portsmouth Marine Terminal. The lease expires in December, 1979, and an extension is currently being negotiated. The original lease was signed with the city of Portsmouth, and calls for payment of a portion of dockage, wharfage and rental of VPA-owned equipment. No minimum rental is required.

(3) Lambert's Point and Sewell's Point are Leased to the Norfolk and Western Railroad

The Norfolk and Western Railroad, the former owner of Lambert's Point Docks and Sewell's Point Docks, currently leases the facilities from the VPA. Both terminals are operated by Lambert's Point Docks, Inc., a wholly-owned subsidiary of the railroad. The lease, which runs until 1991, calls for a fixed annual rental payment of $1,515,000 regardless of revenue or throughput. A separate provision of the lease requires that the VPA petition the state General Assembly to appropriate funds to pay one half of the annual rental. The General Assembly has complied with that request each year. The railroad has the right to renew the lease agreement for two additional 30-year periods, or to purchase the facilities in 1991.

(4) The Newport News Terminal has Recently Been Leased to a Major Stevedore and Terminal Operating Company

The Port Authority acquired the Newport News Terminal from the Chesapeake and Ohio Railroad in October of 1971. From that time until early this year, the railroad leased and operated the terminal as a public port facility. Annual rent was a fixed amount of $1,542,000 with the state paying one half each year.

In April, 1978, Nacirema Operating Company, a subsidiary of Lavino Shipping Company, leased the Newport News Terminal for a period of seven years. The annual rent is $776,000 for the first two years and $1,346,000 for the next five. In addition, the leasee will pay the VPA a percentage of dockage, wharfage and equipment rental beyond the minimum. Nacirema has the right to negotiate for an additional five-year lease.

2. THE FOUR OPERATORS VARY CONSIDERABLY IN TERMS OF FINANCIAL OPERATING PERFORMANCE

Each of the four operators has exhibited different financial characteristics in terms of operating income and payments to the Virginia Port Authority.

(1) Two Operators Have Consistently Generated a Profit From Operations While Two Others Have Incurred Net Losses

Detailed financial statements are available for five years only from Maritime Terminals, Inc., Portsmouth Terminals, Inc., and Lambert's Point Docks, Inc. Statements relating to the Chesapeake and Ohio Railroad operations of Newport News Terminals are available only for calendar year 1977 and a three month period in 1978. The results of an analysis of these statements are presented below.

1. Marine Terminals, Inc., the Operator of Norfolk International Terminals has Reported an Average Annual Profit of $2.75 Million Over the Past Five Years While Portsmouth Marine Terminals has Generated an Average Profit of $175,000 per Year Over the Same Period

Although Maritime Terminals, Inc. is a not-for-profit corporation, it has generated a net return from operations of $13.8 million over the past five years. These profits, after satisfying balance requirements in several funds, are returned to the Port Authority.

Portsmouth Terminals, Inc., on the other hand, was created to be a profit-making venture for its owners. Over the past five years, the terminal operations of the company have consistently generated a profit. Exclusive of extraordinary gains or losses, this profit has averaged $175,000 before income tax over the past five years.

2. Lambert's Point Dock has Consistently Operated at a Deficit During the Period While the Chesapeake and Ohio Railroad Lost Nearly $500,000 at Newport News During 1977

Operation of Lambert's Point and Sewell's Point Docks has been a financial burden for the N&W. The average loss from the operations has been over $750,000 per year over the past five years.

Financial statements are not available on the operations of the Newport News Terminal for calendar years 1973 through 1976. During 1977, however, the operator reported a net loss, before income tax of $491,000. This was followed by a loss of $201,000 through May of 1978, when Nacirema assumed the operations.

(2) Only the Two Profitable Operators Generate Sufficient Cash Flow to the Virginia Port Authority to Cover Debt Service and Other Port Authority Expenses Related to the Specific Terminals

The Port Authority receives rent from each of the facilities, either through distribution of profits, sharing of revenue or fixed annual payments. Table III-2 compares the average annual revenues received by the Port Authority with the Commonwealth's investment, Port Authority expenses associated with the specific terminals and the debt service related to the terminals for the five year period ending in fiscal 1978.[9]

The following conclusions may be drawn from an inspection of Table III-2.

- The revenue received by the Port Authority from each terminal is not related to the level of Port Authority investment in the terminals.
- Two facilities, Norfolk International Terminals and Portsmouth Marine Terminals, make payments sufficient to cover the Authorities allocable operating expenses and debt service associated with the terminals.[10]
- The payments made by the N&W and the C&O Railroads were insufficient to cover the debt service associated with those facilities.

The potential self-sufficiency of the port system is examined in the next and final section of this chapter.

3. THE VIRGINIA PORT SYSTEM IS NOT SELF-SUSTAINING AND WILL CONTINUE TO REQUIRE STATE SUPPORT DURING THE NEAR TERM

In the previous section and table the payments made by terminal operators to the Virginia Port Authority was compared with total investment and other related Port Authority

9 The data for Newport News is only for one year. In addition, the fiscal years vary for each terminal.

10 The debt service includes amounts that are appropriated by the General Assembly.

TABLE III-2
Comparison of Average Annual Port Authority Receipts With
Investment and Other Facility-Related Expenses
at Four Facilities Over the Past Five Years
(dollars in thousands)

	PORT			
	Norfolk International	Portsmouth	Lamberts Point	Newport News
Investment	$36,562	$18,845	$27,783	$33,291
Gross Port Authority Receipts	1,960	1,255	773	781
Percent of Investment	5.4%	6.7%	2.8%	2.3%
Less: Security and Administrative	362	526	0	24
Net	$ 1,598	$ 729	$ 773	$ 777
Percent of Investment	4.4%	3.8%	2.8%	2.3%
Less: Debt Service[1]	519	495	1,515	1,712
Net	$ 1,079	$ 234	($ 742)	($ 935)
Percent of Investment	2.9%	1.2%	(2.7%)	(2.8%)

1. Includes amount appropriated by General Assembly.

expenses to determine the adequacy of current payments in terms of investment and total allocated expenses.

In this section a broader view of terminal revenues and the expenses of both the terminals and the Port Authority in connection with the individual terminals is presented. Table III-3 presents a five-year average of gross revenues at the four Hampton Roads facilities and compares it with:

- The terminals' operating expenses excluding direct payments to the VPA
- Interest and depreciation expenses of the terminals
- VPA expenses related to the terminals including:
  - Administration and security
  - Interest
  - Depreciation.

The conclusions resulting from an analysis of Table III-3 are summarized below

(1) <u>N.I.T. and Portsmouth Could Operate Without State Support but They Would be Unable to Contribute to the Trade Development and General Administrative Functions of the Port Authority or to Generate New Capital</u>

As indicated in Table III-3 the facilities at N.I.T. and Portsmouth generate sufficient income to pay their operating costs (their direct payments to the Port Authority are excluded from Table III-3). In addition, net revenue from these two facilities are sufficient to cover the directly related costs incurred by the Port Authority such as security and interest expense and an estimate for depreciation.

In addition, they are able to substantially cover the administrative and trade development expenses of the Port Authority but would be unable to generate new capital.

The operations at Lambert's Point and Newport News have in the past been unable to generate the income necessary to cover the expenses incurred by the Port Authority in support of those terminals.

TABLE III-3
Comparison of Five-Year Average of Gross Revenues at Four Facilities With Facility Operating and Port Authority Expenses (dollars in thousands) 1974 - 1978

	Norfolk International		Portsmouth		Lamberts Point		Newport News[1]		Total	
	$	%	$	%	$	%	$	%	$	%
Facility Gross Revenue	13,608	100	6,226	100	4,794	100	1,873	100	26,501	100
Facility Operating Cost (excluding lease rental)	10,611	78	4,602	74	4,640	97	1,578	84	21,431	81
Gross Margin	2,997	22	1,624	26	155	3	295	16	5,070	19
Facility Interest	22	0	51	1	0	0	0	0	73	0
Facility Depreciation	214	2	76	1	31	1	14	1	335	1
	2,761	20	1,497	24	124	3	281	15	4,662	18
VPA Expense										
Administration and Security	412	3	516	8	0	0	115	6	1,043	4
Interest	270	2	234	4	651	14	561	30	1,716	6
Depreciation	735	5	394	6	655	14	777	41	2,561	10
Total	1,417	10	1,144	18	1,306		1,453		5,320	20
Net	1,344	10	353	6	(1,182)	(25)	(1,172)	(63)	(658)	0
Return on Total Investment	3.6%		1.9%		(4.2%)		(3.5%)		(2.4%)	

1. Newport News figures based on calendar year 1977 only.

(2) The Port System as a Whole is not Capable of Sustaining Operations Without Substantial and/or Continuing Support From the Commonwealth

The extreme right hand column in Table III-3 provides a consolidated average annual revenue and contribution statement of the entire port system over the past five years. The system has been approximately at a break-even situation after considering directly allocatable Port Authority expenses.[11] The system has been unable to generate net revenues to support the $1.4 million per year that the Port Authority spends on promotion and general administration. Additionally, it has not been able to provide the funds necessary to upgrade and expand the port.

The port has not been and in all probability, for the foreseeable future, will not be self-sufficient. In the next and final chapter of this report, some alternatives are presented for the Port and Port Authority Study Commission to consider during the next session of the General Assembly.

11 It should be recalled that rental payments to the Port Authority are excluded from Table III-3 and this analysis in order to gain insight to the System's ability to make a contribution.

IV. EVALUATION OF FINANCIAL ALTERNATIVES

IV. FINANCIAL ALTERNATIVES

The previous chapter shows that the Virginia Port System has not been able to generate sufficient income to meet current obligations and maintain its physical plant, let alone generate capital for the necessary investment in improved and expanded terminal facilities. State funding has been required to maintain a competitive port system.

This chapter identifies the expected future needs of the port system, and evaluates methods of funding those needs. It is organized into three sections:

- Projection of the port system's funding needs through 1986
- Identification and evaluation of sources of funds
- Conclusions concerning port financing alternatives that appear to be appropriate for the Commonwealth of Virginia.

It should be considered that the projections in this report do not represent the judgements of Booz, Allen but are taken from Port Authority sources. The early delivery requirement of the Phase I report did not allow sufficient time to confirm these estimates or develop new projections.

1. THE VIRGINIA PORT SYSTEM WILL REQUIRE EXTERNAL FINANCING AVERAGING OVER $10 MILLION PER YEAR OVER THE NEXT EIGHT YEARS

The Virginia Port Authority has projected receipts from terminal operators, Port Authority expenses, debt service and investment needs through 1984. Booz, Allen has slightly modified their projections to reflect retirement of the obligation to the Maritime Administration, and projected the flow of funds through 1986. These projections are summarized in Table IV-1. This table indicates that the port system will require appropriation from the General Assembly of almost $85 million over the next eight years.

(1) Expenditures of the VPA Will Total Over $135 Million During the Next Eight Years

Projected expenditures for Port Authority administration, port promotion, facility security, debt service and capital will average over $17 million during the next eight years. Table IV-1 shows that debt service and capital expenditures will account for over 70 percent of total expenditures. Operations (administrative and promotion) and facility management, will account for the remainder.

(2) Lease Income From Terminal Operators Will Generate Only Slightly Over $50 Million During the Next Eight Years

Projections of revenue to the VPA from terminal operators indicate that total revenues will average about the current level of $6.4 million per year over the next eight years. This represents approximately 38 percent of projected total expenditures.

(3) Appropriations From the State General Fund Will Be Required to Make Up the Anticipated Deficits

As indicated in previous chapters, the Virginia General Assembly has a history of consistently appropriating funds to pay for the operating expenses of the Virginia Port Authority, and to pay a portion of the debt service on Port Authority obligations. It has also periodically appropriated funds for capital improvement, and for a portion of the terminal-related security expenses of the Port Authority. Table IV-2 shows that significant state appropriations will be required in each area.

TABLE IV-2
Projected State Appropriation Requirements
for the Virginia Port System to 1986

Category	$(1000)	%
VPA operations	20,561	24.3
Facility operations	12,761	15.0
Debt service	30,402	35.8
Capital investment	21,116	24.9
Total	84,840	100.0

Source: Virginia Port Authority

TABLE IV-1
Virginia Port Authority
Eight Year Financial
Projections

Expense Category Source of Funds	1979	1980	1981	1982	1983	1984	1985	1986	TOTAL	AVERAGE
VPA Operations										
State	2,077	2,202	2,334	2,474	2,623	2,780	2,947	3,124	20,561	2,570
Facility Operations										
Terminal	704	639	677	1,067	809	804	851	903	6,454	807
State	1,289	1,367	1,449	1,536	1,628	1,725	1,829	1,938	12,761	1,595
Total	1,993	2,006	2,126	2,602	2,436	2,529	2,680	2,841	19,215	2,402
Debt Service										
Terminal	2,076	2,053	1,528	1,529	1,528	1,529	1,528	1,529	13,300	1,663
State	3,726	6,603 3,209[1]	3,380	3,362	3,323	3,357	3,350	3,300	30,401	3,800
Total	5,802	8,656	4,908	4,890	4,851	4	4,878	4,829	43,701	5,463
Capital Investment										
Terminal	3,598	2,902	3,706	3,535	4,066	4,357	4,609	4,869	31,641	3,955
State	590	0	3,904	2,165	4,714	2,903	3,420	3,420	21,116	2,640
Total	4,188	2,902	7,610	5,700	8,780	7,260	8,029	8,289	52,757	6,595
TOTAL	14,060	15,766	16,978	15,668	18,691	17,455	18,534	19,083	136,235	17,029
Terminal	6,337	5,594	5,911	6,131	6,403	6,690	6,988	7,301	51,395	6,425
State	7,683	10,172	11,067	9,537	12,288	10,765	11,546	11,782	84,840	10,605

1. Obligation to the Maritime Administration

Source: Virginia Port Authority

This table also shows that debt service will continue to be the most important use of state-provided funds.

2. A NUMBER OF FINANCING METHODS ARE AVAILABLE TO SUPPORT THE PORT SYSTEM AND PORT AUTHORITY

The state support of the Port Authority has been in the form of biennial appropriations, with all funds tied to a specific expenditure. A major purpose of this project was to explore alternatives to the historical funding process that would make the port system more viable, while reducing the burden on Virginia's tax payers. Six primary alternatives have been identified:

Retirement or assumption of Port Authority debt

Imposition of a port user charge

Permanent allocation of tax revenue from a state wide nonrelated source

Allocation of local tax revenue

Waterway use tax on all waterborne shipping

Receipt of Federal assistance.

Each of these alternatives is described below.

(1) Paying Off or Absorbing the Debt Obligation of The VPA Would Save the Authority an Average of Over $5 Million Per Year

The Virginia Port Authroity is burdened by significantly more debt than any of its competing ports. Table IV-3 shows the total long-term debt of the VPA, and identifies each major obligation.

The principal and interest payments on these obligations will total over $40 million over the next eight years. Paying off or assuming the obligations would eliminate that debt service as an obligation of the Port Authority. A review of Table IV-1 showed that this would reduce Port Authority debt service by an average of $5.4 million per year. It would enable the Authority to use terminal revenue now allocated to debt service to pay for terminal security or capital improvements.

TABLE IV-3
Long-Term Debt Obligation of
the Virginia Port Authority
(as of January 1, 1979)[1]

Terminal	Obligations	Current Principal Amount
Norfolk International	Revenue bond	$ 9.8 million
Portsmouth	City notes payable	$ 3.0 million
	City lease	$ 1.2 million
Lamberts Point	Bond	$15.2 million
Newport News	City notes payable	$ 3.8 million
	Bond "B"	$ 4.4 million
	Bond "C"	$ 2.2 million
Total		$39.6 million

1 Excludes obligation to the Maritime Administration, which will be repaid within one year.

Although one of the obligations, the note to the city of Newport News, has no prepayment clause, the state should be able to negotiate early payment of all of the obligations on fairly favorable terms. The actual cost of redeeming each debt will depend upon several factors, including legal constraints, the terms of the covenant, market activity (if any) in the issue and the situation of the holders. The most important single factor, however, will be the prevailing interest rate at the time of repurchase.

Interest rates have risen since most of the obligations were issued, so the redemption cost should be below the level of the outstanding principal. If, for example, the 7.5 percent rate used to discount the obligation to the Maritime Administration was applied to each of the other debt obligations, the approximate value in 1979 would be $24 million instead of the $40 million face value.

(2) Specific Additional Charges to Port Users Could Generate Funds to Cover a Portion of the Port Authority's Projected Deficit

The existence of the Hampton Roads ports creates an important direct economic benefit to those sectors of the economy that use the facilities. These users represent a potential source of funds that would not involve a burden on the general tax payers of Virginia. Potential bearers of this charge include:

- Terminal Operators
- Ocean Carriers
- Inland Carriers.

The impact of a user charge on each is discussed below.

Terminal Operators—Under the current lease arrangements at Hampton Roads, a state designated user charge assessed against the terminal operator would generate additional revenue from only three of the operators. The largest operator, Maritime Terminals, Inc., passes its profits through to the Port Authority. Any revenue collected from it through a tonnage tax would be offset by a reduction in profits.

An alternative to a tonnage fee assessed against the operator, would be a state surtax which could be passed through to carriers or shippers.

Ocean Carriers—Imposition of a port user tax on ocean carriers would be an unprecedented step and could result in a loss of some carrier service. To the extent that cargo is not diverted because of such a tax, the Port Authority could receive substantial revenue, and possibly establish the state of Virginia as a port pricing leader.

Inland Carriers—A user charge assessed against the truck line and railroads delivering cargo to the port could be absorbed by the carrier, or passed onto the shipper.

A user fee of $1 per ton assessed directly on the terminal operators would generate net revenues of about $2 million. If the same level of fee were added as a surtax, or assessed against the water or inland carriers, it would generate approximately $3 million annually for the Port Authority.

Since the state cannot tax cargo moving in international trade, these user charges would have to be carefully defined, and may be subject to court challenge.

(3) Permanently Allocating Tax Revenue From Non-Related Sources, to the Port Authority, Could Generate Significant Revenue, but Would Require a Constitutional Change

Several states currently allocate certain tax revenues to their ports on a permanent basis. Maryland, for example, allocates a corporate income tax of 0.75 percent to the Department of Transportation trust fund. This allocation was assigned directly to the Maryland Port Authority prior to its inclusion in the Department of Transportation. The state of Louisiana allocates a portion of the gasoline tax to the port system.

These general taxes have the advantage that a very low rate can generate a significant level of revenue. To generate $10 million per year, for example, the following allocations or taxes could be implemented:

- Allocation of 0.5 to 0.6 percent of total state tax receipts
- Allocation of approximately 13 percent of fuel tax receipts
- Allocation of approximately 8 percent of corporate income tax receipts
- Imposition of a coal production tax of about $.30 per ton.

A permanent allocation of any of these revenue streams to the Port Authority would require a constitutional amendment.

(4) Local Political Districts Would Probably Be Able to Generate Less Than $1 Million Per Year in Financial Support

Most of the direct economic benefits of the port system exists in terms of employment related to moving the cargo through the terminals. This benefit accrues, primarily, to the localities in which the facilities are located. In many ports, localities allocate a portion of their tax receipts to the Authority In Hampton Roads total revenue under such a scheme would probably be quite low. For example:

> If 1 percent of total real estate taxes in Norfolk, Portsmouth and Newport News were allocated to the Port Authority, the revenue would total only about $600,000 per year
>
> Designating 1 percent of each municipality's personal property tax receipts to the Authority would raise only about $150,000 per year.

In view of the fact that the cities provide a number of services to the ports, without receiving any direct tax revenue from them, it is unlikely that they would be willing to provide further financial support, even if it were directed solely to the facilities within their own boundaries.

(5) A Very Low Waterway Use Tax on All Hampton Roads Cargo Could Generate a High Level of Revenue For The Port Authority

Total waterborne trade at Hampton Roads should remain above 50 million tons per year during the next eight years. A tax of $0.20 per ton could generate over $10 million per year for the Port Authority. Table IV-4 shows how this burden would fall, based on 1976 statistics. The table indicates that three product groups, coal, petroleum and grain, would generate over 85 percent of the total revenue.

Since a state is prohibited from taxing foreign commerce, a user tax would be of questionable legality.

TABLE IV-4
Impact of $0.20 Per Ton Waterway User Tax by Commodity

Commodity Type	Impact ($ Million)
Coal and coke	5.0
Grain	1.3
Petroleum products	2.3
Other	1.4
Total	10.0

(6) Federal Grants or Loans, Particularly From the Economic Development Administration, represent a Potential One-Time Source of Capital for the Virginia Port System

Through the Economic Development Administration (EDA), the federal government will make interest free loans, or outright grants for port development projects in eligible areas. Between 1972 and 1976, for example, the EDA made 72 such grants averaging over $1.3 million each.

Funds are made available to high unemployment areas for specific projects. The Port Authority currently has a number of specific projects planned, and it could attempt to obtain EDA assistance on any that might be eligible.

3. THREE FINANCIAL ALTERNATIVES, OR A COMBINATION THEREOF, APPEAR TO BE AS GOOD AS, OR BETTER THAN THE EXISTING PORT FINANCING SITUATION

Each of the financing alternatives discussed above was evaluated in view of the unique needs of the Virginia Port System, and the situation in the state of Virginia. Our conclusions are based upon that evaluation.

(1) Each Alternative Was Evaluated in Terms of Seven Criteria

Seven factors were used to evaluate the current financing situation and each potential financial alternative:

The level of funding provided

The reliability or continuity of funding

The independence that the funds would have from a specific port or political subdivision

The impetus it provides towards port system self-sufficiency

The degree to which it tends to reduce the burden on the taxpayers of the Commenwealth

The direct impact on cargo flows and terminal operators

The feasibility of implementation.

Each factor is described below.

1. The Level of Funding

Each alternative was evaluated in terms of the average impact that it would have on the Port Authority's need for state funding over the next eight years. An annual impact of over $3 million was considered high; an impact between $1 million and $3 million was considered medium, and an impact of less than $1 million was considered low.

2. Reliability of Funding

The reliability of a funding source is important to the port system because of its impact on the planning process. Alternatives which involve a one-time funding were considered to be of low reliability. Alternatives with sources of funds that were likely to continue, but whose amount was unpredictable were considered to be of medium reliability. Predictable revenue flows that were commited to the Port Authority were ranked high in terms of reliability.

3. Independence of the Funds From Requirements to Be Used in a Specific Facility

Under the Unification Agreements, revenue derived from specific terminals may only be used to support operations or development of that facility. Financial alternatives that are free of such committments were ranked high in this category. Those carrying a similar requirement were ranked low.

4. Impetus Towards Self-Sufficiency

Financial alternatives that place the responsibility within the public sector port community, e.g. terminals, stevedores, carriers using public sectors etc. were ranked high. Alternatives that increased the burden on the state were ranked low. Middle of the road alternatives such as receiving support from port related but perhaps not public sector users were ranked as medium.

5. Benefits to Virginia Taxpayers

Financing sources that remove a burden from, or impose no burden on the general tax base, were ranked high. Those that imposed a total burden of less than $25 million over the eight-year period were ranked medium. All others were considered to be low in benefits.

6. Impact on Cargo Flows and Terminal Operators

The private terminal operators are an integral part of the Virginia Port System. Financial alternatives that provide more revenue or cargo flow to the operators are considered positive. Alternatives that reduce the profitability of the operators, either through increased cost or reduced cargo are ranked negative.

7. Feasibility of Implementation

Judgements were made concerning the institutional barriers to implementation of each alternative. Examples of such barriers include:

TABLE IV-5
Evaluation of Alternative

	Evaluation Criteria						
	Funding Level	Reliability as a Continuous Source	Independent of Terminal Ties	Move Toward Self-Sufficiency	Taxpayer Favorability	Cargo & Terminal Impact	Feasibility of Implementation
Retirement of Debt	High	Low	Low		Medium	Neutral	
Port User Charges							
Terminal Operator	Medium	High	High	Medium	High	Negative	Low
Ocean Carrier	High	Low	High	Low	High	Negative	Low
Inland Carrier	High	Medium	High	Medium	Medium	Negative	Low
Allocation of State Tax Revenue							
Total Tax Revenue	High	High	High	Low	Low	Neutral	Low
Fuel Tax	High	High	High	Low	Low	Neutral	Low
Corporate Income Tax	High	High	High	Low	Low	Neutral	Medium
New Coal Tax	High	High	High	Low	Low	Neutral	Low
Allocation of Local Tax Revenue	Low	High	Low	Low		Neutral	Low
Waterway Use Tax	High	High	High	Medium	High		Low
Federal Grant	Low	Low	Low	Low		Neutral	High
Current Situation	High	Medium	Medium	Low	Low	Neutral	High

- Legal restrictions
- Legislative requirements
- Opposition by port and maritime interests or taxpayers.

Each alternative was ranked high, medium or low in terms of feasibility of implementation.

Table IV-5 shows the results of ranking each financial alternative in terms of the seven evaluation criteria. The simple qualitative judgements of high, low, etc. are used in Table IV-5.

(2) A Methodology was Developed to Enable a Quantification of the Qualitative Judgements and to Establish a Priority to Each of the Seven Criteria

The development of a two-step methodology was necessary in order to:

- Provide a quantitative replacement for the highs, mediums and lows shown in Table IV-5 and to
- Rank the seven evaluation criteria in terms of their relative importance.

The first step required the assignment of simple weights to each of our evaluations in Table IV-5. The simple weights are shown in Table IV-6 below.

TABLE IV-6
Value Assigned to Each Qualitative Judgement of the Financial Alternative

Qualitative Judgement	Value
High or Positive	
Medium or Neutral	2
Low or Negative	1

The second step is to rank the seven evaluation criteria in priority terms and assign a weight. This is shown in Table IV-7.

TABLE IV-7
Rank and Weight
Evaluation Criteria

Rank	Criteria	
1	Benefits to taxpayers	5
2	Feasibility of implementation	5
3	Impetus toward self-sufficiency	
4	Level of funding	3
5	Reliability of funding	2
6	Independence from terminal ties	2
7	Impact on cargo flows and terminals	1

Having developed the quantitative value judgements in Table IV-6 and the criteria weights in Table IV-7, it is possible to develop a unique quantitative value for each financial alternative and evaluation criteria as shown in the example below.

EXAMPLE:

If the first financial alternative (retirement of debt) was ranked high in terms of funding level in Table IV-5 then the quantitative judgement for this particular alternative/ criteria intercept is 3.

The next step is to recall what priority weight the funding level criteria was assigned. An inspection of Table IV-7 indicates that a weight of 3 was assigned.

Finally, the weighted quantitative judgement of the alternative and the criteria is the product of the two variables or 9.

Table IV-8 develops this process for each alternative and criteria and yields an overall score for each of eleven alternatives and the existing method of funding.

(3) Three Alternatives Appear to be Comparable to or an Improvement Over the Existing Situation

Table IV-8 indicates that the existing method ranked reasonably well as a source of funding the port system and Port Authority. Additionally, three alternatives were considered to be equal to or more appropriate than the existing method. These included:

- The retirement or assumption of all or most of the long-term debt of the Virginia Port Authority. As shown in Chapter II, this restriction contributed more than any single factor to the poor financial comparison between the Virginia ports and its neighboring ports.

- The establishment of user charges to be paid by the users of the public facilities and particularly terminal operators and inland carriers. Analysis of data from other ports indicates that users make more significant payments to the public port organizations.

- The establishment of a nominal user tax for all waterborne commerce at the port of Hampton Roads. This would provide the Port Authority with a substantial resource at little expense to the organizations making the payments due to the tax base. As stated previously this is a controversial measure that should be studied in more detail.

In all probability the most appropriate scheme is a combination of the above alternatives including the existing method. As a minimum the combination should include some element of debt retirement.

* * * * *

The findings and conclusions developed in this report should be considered as preliminary and subject to re-evaluation at the conclusion of Phase II.

TABLE IV-8
Evaluation of Alternative

Alternative	Evaluation Criteria: Funding Level	Reliability as a Continuous Source	Independent of Terminal Ties	Move Toward Self-Sufficiency	Taxpayer Favorability	Cargo & Terminal Impact	Feasibility of Implementation	Total
Retirement of Debt	9	2	2	12	10	2	10	47
Port User Charges								
Terminal Operator	6	6	6	8	15	1	5	47
Ocean Carrier	9	2	6	4	15	1	5	42
Inland Carrier	9	4	6	8	10	2	5	44
Allocation of State Tax Revenue								
Total Tax Revenue	9	6	6	4	5	2	5	37
Fuel Tax	9	6	6	4	5	2	5	37
Corporate Income Tax	9	6	6	4	5	2	10	42
New Coal Tax	9	6	6	4	5	2	5	37
Allocation of Local Tax Revenue	3	6	2	4	10	2	5	32
Waterway Use Tax	9	6	6	8	15	1	5	50
Federal Grant	3	2	2	4	15	2	15	43
Current Situation	9	4	4	4	5	2	15	43