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THE PUBLIC ROLE IN PORT DEVELOPMENT

NATIONAL TRANSPORTATION POLICY STUDY COMMISSION

WORKING PAPER NO. 3

August 1979

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16. Abstracts Analyzes state participation in port development, covering both past and potential trends, and draws implications for Federal port policy. The report features the results of a comprehensive survey of state ports administered by John Hazard, involving 34 states and 261 ports. The survey includes data on types of ports, state agency organization and functional responsibility, public finance policies, and port performance related to traffic growth. Discussion of policy options draws on a second survey, also administered by the author, canvassing the opinion of port industry professionals on major Federal port issues. The study advocates increased, but moderate, Federal participation in port policy, and concludes by drawing up a model redistribution of Federal port functions.			
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Preface

The National Transportation Policy Study Commission (NTPSC) was created by Congress under the Federal-Aid Highway Act of 1976, to investigate U. S. transportation needs and institutions, and to recommend new transport policies for the country. The NTPSC is composed of nineteen members--six appointed from the U.S. Senate, six from the House of Representatives, and seven appointed by the President. Representative Bud Shuster is Chairman of the Commission and John E. Wild is Executive Director.

As part of its research process, the staff prepared working papers for the use of Commission members. Research for those papers was performed under the supervision of Dr. John W. Fuller, Deputy Executive Director of the NTPSC. Following publication of the NTPSC's final report, these papers will be distributed as an "NTPSC Working Paper Series."

This paper, prepared for the Commission by Professor John L. Hazard of Michigan State University, examines the current and future roles of Federal and state governments in port development. Much of the information is derived from a survey conducted by the author. This paper was edited by John W. Fuller with Eileen Bartscher.

The conclusions are those of the author and do not necessarily reflect the views of the Commission or its individual members.

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THE PUBLIC ROLE IN PORT DEVELOPMENT

Introduction

The states play a far more crucial role in the development of transportation in the United States than do districts, provinces, and comparable units of government in Western Europe.^{1/} It is conceivable that states could assume a dominant role in port development in the U. S., as they already have in the development of highways and other transportation infrastructure.^{2/} Because such responsibility could substantially alter the role of Federal participation in this area, it is important to understand the present and future activity of states in port development before defining a Federal program.

State Questions

Historically, the state's role in port development has varied extensively. It began in earnest when the State of New York began digging the Erie Canal in the 1820s, setting off the race of the eastern ports to the Mid-continent. Afterwards, state port activity had several peaks: in the midst of the canal building era of 1835 to 1850; after the successful establishment of the Port Authority of New York-New Jersey in 1921; and again after release of facilities following World War II. Although there have been several studies of Federal port policy, the states have been curiously neglected. Therefore, a special survey of states was conducted^{3/} that posed the following questions:

- (1) What are the present roles of the state in port development?
- (2) How are the roles changing and what developments can be anticipated in the future?
- (3) Who is primarily responsible for each of the basic port functions?
- (4) What levels and types of public funds are available for future port development?
- (5) What are the alternative forms of state organization, and the advantages and disadvantages of each?

State Port Information

Only 38 of the 50 states have what might be regarded as commercial or industrial ports. These are the states bordering the Great Lakes, along the major inland waterways, on the Atlantic, Gulf, and Pacific coasts, and the offshore states. The remaining 12 are landlocked in the arid West and in New England. All states have highways, airports, and (with the exception of Hawaii) common carrier railroads, making it less of a problem to develop transportation constituencies and to allocate Federal assistance. Useful information on port involvement was received from 34 of the 38 states surveyed, primarily from state departments of transportation (DOTs).

Types of Ports

The 34 states responding to the questionnaire had a total of 261 ports that could be classified as commercial. Table 1 lists the number of ports in each state and the tonnage accommodated in 1975. Ports vary in number from a maximum of 26 for Michigan to a minimum of 1 each for Delaware and New Hampshire, with an average of about 8 per state. They range from cosmopolitan trade centers, such as New York and New Orleans, to a series of barge exchange terminals scattered along the Mississippi River. The total tonnage moving through the responding states' ports totalled 1,234,938,125 short tons, or about 78 percent of the national waterborne total. The larger states generally have the higher port tonnages, with Texas, New York, Illinois, California, and Michigan ranking in that order. However, the level of tonnage has little to do with state involvement in port functions. Texas, California, Michigan, and Florida have little state involvement, while New York, New Jersey, and Maryland have full-function state port authorities. In general, coastal states with little state-level involvement make up for the lack by having strong local port authorities. This is the case for Texas, California, Florida, and Washington. Michigan and some of the river states are the only exceptions to this rule and have little state or local community involvement in port management.

State Agencies

Various state agencies are responsible for port liaison and development. Twelve states have set up port authorities, and an equal number rely on a state department of transportation for liaison with ports. The remaining 10 states that responded to the questionnaire have either designated other organizations, or charge no specific agency with port responsibilities. Selection of state port organization seems to have more to do with geography and custom than with tonnage or commerce. Virtually all of the East Coast states plus Puerto Rico have autonomous state port authorities, while West Coast states have little in the way of state port organization, preferring to rely on local authorities. Great Lakes and inland waterway states either rely on state DOTs or have no organization charged with port responsibility at the state level. Several states have established organizational forms that may set a new precedent. California has relinquished its involvement in the Port of San Francisco and has turned over its remaining port functions to a Coastal Zone Commission that allocates all waterfront space; Washington finances port development, but screens projects through local, regional, and state port associations; and Texas has established a Coastal and Marine Council whose major coordinating services remain to be fully determined.

TABLE 1

STATE PORT QUESTIONNAIRE SUMMARY
1975

State	No. of Comm. Ports	1975 Tonnage	State Agency
Alabama	15 (1 ocean)	20,000,000	Ala. State Docks Dept.
Alaska	23 ports	15,000,000	State DOT
Arkansas	1 port	3,238,000	Ark. Waterway Comm.
California	12 ports	90,121,268	None
Connecticut	7 priv., 1 state	26,600,000	State DOT
Delaware	1 port	1,572,857	None
Florida	24 ports	79,200,000	State DOT
Georgia	5 ports	2,900,000	Geo. port authority
Hawaii	8 ports	16,577,000	State DOT
Illinois	13 ports	n.a.	State DOT
Iowa	11 ports	8,800,000	State DOT
Kansas	5 ports	300,000	None
Kentucky	3 ports	12,000,000	Ken. Port & River Dev. Ag.
Maine	2 ports	29,000,000	State DOT
Maryland	2 ports	41,700,000	State DOT, MD port adm.
Michigan	26 ports	87,000,000	State DOT
Minnesota	3 river, 4 lake	47,518,000	State DOT
Mississippi	8 ports	27,000,000	Miss. A & I Board
Missouri	3 ports	23,500,000	None
Nebraska	2 ports	900,000	None
New Hampshire	1 port	2,940,000	State port authority
New Jersey	3 ports	42,400,000	Bi-state authority
New York	5 ocean, 3 lake	217,000,000	P.A.-NY/NJ, NYS-DOT
North Carolina	2 ports	2,800,000	State port authority
Ohio	8 ports	n.a.	None
Oklahoma	5 ports	900,000	State DOT
Puerto Rico	3 ports	11,381,000	P.R. ports authority
Rhode Island	3 ports	7,838,000	R.I.-PA., local, & priv.
South Carolina	3 ports	3,000,000	State port authority
Tennessee	4 ports/150 term	25,000,000	State DOT, Bur. Waterways
Texas	10 ports	237,000,000	Coastal & Marine Council
Virginia	6 general cargo	3,052,000	VA port authority
	7 bulk	51,300,000	
Washington	19 ports	70,600,000	None
Wisconsin	14 ports	26,800,000	None
TOTAL	261 ports	1,234,938,125	12 ports authorities 12 state DOTs 8 no state organizations

SOURCE: 1977 State Port Questionnaire administered by John L. Hazard
(responses by 34 states).

Distribution of Functions

What port functions do the states perform? How do they anticipate changing their role in the near future? Not all of the states responded to this section of the questionnaire. The information received, however, revealed some interesting trends in state participation in port development, as illustrated in Table 2.

TABLE 2

STATE PARTICIPATION IN PORT DEVELOPMENT (No. performing each function)

Functions	Present Number	In Future	Trends
Planning	17	19	increasing
Disposal of dredge spoil	15	18	increasing
Promotion	15	16	slight increase
Approval of plans	10	14	major increase
Financing infrastructure	10	9	decreasing
Operating subsidies	9	11	increasing
Legal support	9	9	stable
Protecting rate structures	9	9	stable
Regulating port rates	6	4	decreasing

SOURCE: 1977 State Port Questionnaire administered by John L. Hazard (responses by 34 states).

The survey suggests that overall state participation in ports may increase modestly. While 19 states expected the total of their functions to stabilize, 12 others anticipated increases and only 1 (Kentucky) foresaw a decline. States having no port functions are expected to decrease from 7 to 2.

In the distribution of port functions, states have been most active in planning, arranging disposal of dredged material, promotion, and financing infrastructure. However, the distribution of state port functions is expected to change somewhat. Planning will be emphasized in the future, and promotion slightly increased. Financing of infrastructure capital may decline as states shift to operating subsidies. Legal support and intervention in rate cases to protect port overland rate structures will remain stable, while regulation of port rates may become a declining state function. Overall, there is little evidence that the states will substantially expand their port development functions.

Major Functional Responsibilities

Port development in the U. S. is inevitably a joint venture between various levels of government and the private sector. Seldom, however, have any two states or ports divided the five major management functions (i.e., planning, financing, promotion, operation, and control) in exactly the same way. The distribution of major functions between state and local governments and private enterprise is illustrated in Table 3. As shown below, states are most likely to be involved in port planning or approval of plans.

TABLE 3

SUMMARY DISTRIBUTION OF MAJOR PORT FUNCTIONS

Major Functions	State	Local	Private
Planning	25	20	3
Financing	14	20	20
Promotion	16	20	14
Operations	10	18	31
Controls	14	20	12

SOURCE: 1977 State Port Questionnaire administered by John L. Hazard (responses by 34 states).

Local government divides port financing with private enterprise and is a major factor in promotion and control functions. Private enterprise is the dominant force in port operations (cargo-handling activities) and shares financing with local government and the states.

Functions can be broken down into sub-functions that are performed jointly. For example, plans are initiated at the local level and then move up to the state level for approval and financing. Financing may involve private provision of specialized terminals, local provision of access roads and public terminals, and state guarantees of bonds. Likewise, promotion may entail institutional advertising by the states, direct promotion by local authorities, and sales solicitation by the private lines and terminals. Control of a private project may include support from a local public authority and approval by a board appointed by the governor.

Individual Ports

In the same state there may be specialized private ports, municipal ports, and state port authorities--each with a different role in state and national commerce and a different organization for accomplishing its functions. In tiny Rhode Island, for example, there are three ports. One port is

private (Tiverton), one is municipal (Providence), and the third (Quonsett) is being developed by the Rhode Island Port Authority. In the first two ports, the state merely approves plans and assists with dredge spoil disposition; in Quonsett, however, the state port authority will perform all functions. It is the author's belief that each state should classify its ports by some commercial criteria before determining the degree and type of state involvement warranted.

For that matter, each port is a unique joint venture combining various elements and functions in somewhat different patterns. The survey data summarized in Table 3 indicate that Coos Bay (Oregon) is predominantly a private lumber port with much local support. Galveston (Texas) and Oakland (California) are almost exclusively local municipal ports with varying contributions from private enterprise. Baltimore (Maryland), Charleston (South Carolina), and the Hampton Roads (Virginia) ports are almost exclusively state ports with modest local and private participation.

State Financing

State and local government expenditures for transportation are more than double the level of Federal expenditures and their share is expected to increase.⁴ States are in a crucial position to fund port development and to influence the allocation of Federal funds to local communities. How much can ports rely on the states for future funding? What sources of funds and techniques of financing will the states employ? How successful have state financing efforts been?

Most of the 34 states responding to the questionnaire are directly or indirectly involved in port financing. The 12 states with port authorities are involved in reinvestment of port revenues, issuance of bonds for capital expansion, or approval of operating subsidies. Most of the state DOTs are providing capital support to ports and some are providing operating subsidies. Ten states are neither directly, nor indirectly, involved in port financing, but instead rely primarily on local and private financing of their ports.

Level of Monetary Support

The level of state financial support to port development was determined from earlier surveys conducted by the Maritime Administration and the U.S. Department of Transportation. While the findings of the surveys are not completely homogeneous, they tend to confirm the prospect that public financial support funneling through the states will not be adequate to future port needs. Public support to ports will first stabilize, then decline, if the estimates shown in Table 4 hold:

TABLE 4

AVERAGE ANNUAL PUBLIC EXPENDITURES FOR U. S. PORTS

Period	Annual Expenditures
Estimated (1972-1980)	= \$416 million per year
Estimated (1980-1990)	= \$233 million per year

SOURCE: U.S. Department of Transportation, 1974 National Transportation Report, Washington, D.C.: Government Printing Office, 1975.

Ports comprise the only segment of transportation in which public investment is expected to decline. This is a potentially serious problem, because private investment is not expected to make up the shortage, port construction costs are escalating, and the trade and offshore responsibilities of ports are growing. The outlook is for gravely underfinanced ports.

Sources of Funds

Where will the funds for port development come from? Most states indicated that re-invested port revenues will be the most important source of future port capital, with general obligation bonds and private investment ranking second and third. Other sources of port capital are shown in Table 5.

TABLE 5

SOURCES OF PORT CAPITAL 1975-76

(No. of states ranking the sources as 1 through 7)

<u>Source</u>	<u>No. states</u>	<u>Rank</u>
Reinvested Port Revenues	13 states	first
General Obligation Bonds	12 states	second
Private Investment	9 states	third
Other Public Sources	8 states	fourth
Revenue Bond Issues	6 states	fifth
Special Mileage Assessments	2 states	sixth
General Transportation Funds	1 state	seventh

SOURCE: 1977 State Port Questionnaire administered by John L. Hazard (responses by 34 states).

Private investment, which is ranked as the third priority source of capital by the states, was not included in the earlier Federal surveys summarized in Table 4. Some states have worked ports into general revenue appropriations and general transportation funds as a regular-line item; others have relied more on revenue bond issues and special local millage assessments.

State Port Allocations

Only about 2 percent of the total public transportation funds channeled through the states in 1971 was spent for ports. That proportion is expected to drop to 1.9 percent over the next 8 years and to a little over 1 percent over the next 18 years. The range between states is great. Some states (e.g., Alabama, Delaware, Louisiana, and Washington) will put over 8 percent of their public transportation funds into port development, while others (e.g., Michigan, Ohio, Missouri, and Tennessee) do not intend to invest in this area. The difference in state commitments apparently has little to do with port tonnage or mode of state organization; it seems instead to depend primarily on geography and location, as illustrated in the following regional breakdown.

TABLE 6
PROPORTION OF TRANSPORTATION BUDGETS
ALLOCATED TO PORTS
(Estimated 1972 to 1978 program)

Region	Percent for ports
North Atlantic states	3.8%
Pacific Coast and offshore	3.8%
South Atlantic states	3.2%
Gulf Coast states	1.3%
Great Lakes states	0.2%
Inland River states	0.1%
National average	1.9%

SOURCE: 1977 State Port Questionnaire administered by John L. Hazard (responses by 34 states).

The North Atlantic, Pacific Coast, and South Atlantic states' allocations to ports are above the national average, while the Great Lakes, Gulf, and Inland River states' allocations fall below the average. A partial explanation is that the Gulf, River, and Great Lakes ports handle a greater

proportion of specialized bulk cargoes that attract private investment. However, this fact does not fully explain the current differences in allocations, as it does not take into account either the Lake ports' quest for general cargo via the Seaway or the River ports' increasingly diversified services via integrated bargeship operations.

Capital Commitments by States

The 10 states with the highest future public capital commitments for port development are listed in Table 7, which also includes the types of state support available and the proportion of total public transport capital allocated to ports.

The top 8 states in prospective port capital investment are also among the top 11 in tonnage accommodated. The only high-tonnage states missing from the list are Michigan, Ohio, Illinois, and the Lake states that have been reluctant to commit public funds to port development. They have been replaced on the top-10 investor list by the South Atlantic ports of North Carolina and South Carolina, which are 30th and 27th, respectively, on the port tonnage list.

TABLE 7

SELECTED FUTURE STATE COMMITMENTS TO PORT DEVELOPMENT (Annual average 1972 to 1980)

Ten Highest	Type of State Support ^{a/}	Marine Terminal Public Capital	Percent of Total Transp. Budget
California	0	\$45,464,000	3.2%
Maryland	1 rev., 2 cap., 3 op.	39,831,000	6.4
New York	1 rev., 2 cap., 3 op.	36,488,000	2.6
Washington	2 cap.	31,945,000	7.1
New Jersey	1 rev., 2 cap., 3 op.	23,117,000	3.4
Texas	0	22,855,000	0.6
Virginia	1 rev., 2 cap., 3 op.	22,387,000	3.6
Florida	0	14,970,000	2.4
N. Carolina	1 rev., 2 cap., 3 op.	12,735,000	3.8
S. Carolina	1 rev., 2 cap.	11,400,000	7.1

SOURCE: 1977 State Port Questionnaire administered by John L. Hazard (responses by 34 states).

^{a/} 1 rev. = reinvested port revenues, 2 cap. = public capital investment, 3 op. = operating support.

Most of the top 10 public port investments derive abundant funds from the states through re-invested port revenues, capital investment, and operating support. However, three states with the most expansive coastal waterfronts, i.e., California, Texas, and Florida, provide no funds for port development either directly or indirectly. They rely, instead, on local communities and private industry to provide port capital. It is noteworthy that in these 3 states ports receive a lower proportion of total public transportation funds than in the other leading 10 states. If local community support should falter in California, Texas, and Florida, as might happen in the wake of the property tax revolt, their ports may have to turn to the state for financing.

Port Performance

How have the ports performed under different state regimes and financial arrangements? This is difficult to judge. Gains in traffic and returns on investment are performance indicators, but only the former data are available in the U. S.

Perhaps the best available way to rate the performance of ports is by traffic growth within a competitive regional context, although it must be recognized that a multitude of economic and geographic factors not controlled by ports can affect changes in traffic. There have been major differences in the rate of tonnage growth in each coastal district, as illustrated in Table 8. The major growth areas in the past decade have been the South Atlantic and Gulf coasts. Tonnage through the North Atlantic and Pacific coastal ports has increased at a slower rate, while Great Lakes port tonnage has declined slightly due to the shrinkage of interlake trade.

TABLE 8

RELATIVE GROWTH OF PORT TONNAGE

(By coastal district and key states, 1965 to 1975^{a/})
(in 1,000 of tons and percentages)

Coastal District	N. Atlantic	S. Atlantic	Gulf	Pacific	Great Lakes
Tonnage 1965	420,270	123,820	356,130	169,400	374,300
Tonnage 1975	494,738	187,881	517,500	200,298	335,700
Change 75/65	74,468	64,061	161,400	30,858	-38,600
Percent Change	17.7%	51.7%	45.3%	18.2%	-10.3%
Highest Growth	N. Jersey	N. Carolina	Miss.	Oregon	Minnesota
Lowest Growth	Penn.	Virginia	Texas	Calif.	Wisconsin

SOURCE: 1977 State Port Questionnaire administered by John L. Hazard (responses by 34 states).

^{a/} From the larger port states in each coastal district. Also, trend statistics were available for most river port states.

Without reading too much into the figures, it is probably significant that the tonnage records of ports with strong state backing have generally been better than for others in the same region. For example, tonnage increases through New Jersey ports, which have the backing of the powerful Port Authority of New York-New Jersey, were much higher than in Pennsylvania, where local port commissions persevere. Both North Carolina and Virginia have state port authorities, so the fact that they were the high and low states in the growing South Atlantic coast is of little organizational significance. (It is noteworthy, however, that the Virginia State Port Authority was devoid of financial resources during this period.) Mississippi and Louisiana, with vigorous port authorities in the Gulf, substantially exceeded the relative growth of Texas, which had halted port activity at the state level. This experience was repeated on the Pacific coast, where Oregon and Washington tonnages advanced far more rapidly than California, which had discontinued state port involvement and had turned the remaining functions over to a Coastal Zone Commission. The principle also holds in the Great Lakes region, i.e., port traffic in Minnesota, Ohio, and Pennsylvania has held up better --with a modicum of state involvement--than in Wisconsin and Michigan, which have no state and very little local involvement.

Clearly, those states with active state port development programs have experienced a more rapid growth of port traffic within their regional context than have those states without port responsibilities or with minimal programs.

State Program Outlook

The states are caught in an anomalous middle position in port development, resulting from an absence of Federal port policy and a decline in local and private initiative at the waterfront. Will the states fill the growing void in port development? What is the outlook for state port development programs? Generally, the results of the survey of state transportation officials are not at all reassuring.

- (1) States expect to increase their port-related functions slightly, but more for planning and approval aspects than on the promotional and financial side of port development.
- (2) Overall public expenditures for ports are expected to decrease from 1980 to 1990, despite construction cost inflation, increasing trade, and growing offshore responsibilities.
- (3) Only about 2 percent of the total public transportation funds channeled through the states was spent for port terminals in 1971, and that figure is expected to decline to 1 percent over the course of the next 18 years.

- (4) States still rely primarily on conventional sources of port financing (reinvested revenues, bonds, private investment, and property taxes) but very few have incorporated these sources into the mainstream of transportation fund financing.

The survey also indicates that, in coastal regions, traffic growth is linked to the vigor of state port development programs. Under present circumstances, however, it does not appear that the states are prepared to move ahead in this area. Even if they are willing, it is doubtful that many possess either the financial or the human resources necessary to fill the growing need.^{5/}

Alternative Federal Roles

How can the Federal government strengthen port development in the United States? How can it implement its programs for expanding trade and commerce with the least damage to the present mainsprings of port development?

There are three basic alternatives that the Federal government should consider in defining its role in port development:

- (1) Status quo--do nothing different than at present;
- (2) Moderate change--assume a limited set of functions; and
- (3) Major change--assume a comprehensive set of functions.

Each of the alternatives has its own assumptions, arguments, and internal logic. Status quo advocates maintain that ports are already overexpanded^{6/} and any further Federal participation would exacerbate the present misallocation of resources. In their view, ports would pursue Federal dollars in the same limitless acquisitive fashion as communities pursue inland navigation projects. A selective approach, in their opinion, is unconstitutional because discriminatory Federal actions are forbidden by Section 9 of Article 1 of the Constitution:

"No preference shall be given by any regulation of commerce or revenue to the ports of one state over those of another; nor shall vessels bound to, or from, one state be obliged to enter, clear, or pay duties in another."

However, there are powerful counter arguments to a status quo Federal port policy. Studies by the National Academy of Sciences' Future Port Requirements Panel have concluded that ports have not overexpanded; in fact, some excess capacity is believed desirable if ports are to remain competitive and handle recurring peak-load requirements efficiently.^{7/} Also, whereas this country may have too many ports, it cannot be said that there are enough of the proper type or enough in the right

place (deepwater ports being a case in point). Nor can one argue that the projected levels of public investments in ports (slightly more than half the present level) will be adequate to serve growing commerce and offshore responsibilities. Gratuitous expenditures for port purposes are best avoided by careful allocation formulas for Federal funds, in accordance with comprehensive plans and investment studies at the local level. User charges on direct beneficiaries, already under consideration, may also be helpful.

Actually, Section 9 of Article 1 of the Constitution was designed to assure the colonies that their major source of revenue (customs duties), shipping, and trade would not be impinged upon by any arbitrary action of other states or the Federal government. It was meant to reinforce, rather than deny, the paramount powers of the Federal government in foreign and interstate commerce. Federal agencies have been applying a selective approach to port dredging and navigation aids for years and now, because of budget ceilings, they will have to become even more selective. The most compelling arguments against maintaining the Federal status quo on ports are the adverse results that the present fragmented policies have produced, and the high probability that problems will become more severe.

Despite the strength of the pro-Federal position, there are few advocates of a new U.S. port policy in which the Federal government assumes comprehensive port development functions. This may be because of lessons learned from the public port policies of the United Kingdom and Western Europe, or even nearby Canada, which plans to embark on a comprehensive national port program in 1979 or 1980. An attempt by the U.S. Army Corps of Engineers to engage in regional port planning was soundly thwarted by the American ports in 1970. Senior port officials viewed the planning effort as an invitation to further Federal intervention. Later they acknowledged an interest in Federal funds without ties or controls.^{8/}

Clearly, moderate change appears to be the only prudent and acceptable position for the Federal government at present. And that position must be closely attuned to the varying opinion of the industry on major port issues.

Port Industry Opinion on Federal Initiatives

In order to tap industry opinion on major Federal port issues, a questionnaire was designed and administered to 75 young port professionals and about 50 transportation and distribution personnel. The opinions of the two groups correlated closely and are reflected in the Federal port policy options matrix below.

FIGURE 1

FEDERAL PORT POLICY OPTIONS MATRIX^{a/}
(Rank order of choices)

<u>Functional Issues</u>	<u>Status Quo</u>	<u>Moderate Change</u>	<u>Major Change</u>
1. Federal planning?	none <u>2nd</u>	bottom up <u>1st</u>	top down <u>3rd</u>
2. Federal financing?	as is <u>2nd</u>	capital only <u>1st</u>	cap./oper. ass. <u>3rd</u>
3. Operation of off-shore ports?	private <u>2nd</u>	state/local <u>1st</u>	Federal <u>3rd</u>
4. More control?	local/ state <u>1st</u>	regional <u>2nd</u>	Federal <u>3rd</u>
5. Federal govt. org.?	as is <u>2nd</u>	in DOT <u>1st</u>	other dept. <u>3rd</u>
6. Waterway user charges?	none <u>2nd</u>	fuel tax <u>1st</u>	segment chrg. <u>3rd</u>

SOURCE: Questionnaire administered by John L. Hazard to port and executive seminars, 1976 to 1978.

^{a/} Arrows reflect the preferred option on each issue and the others are ranked second and third.

Perhaps in contrast to former port officials, the younger professionals who were surveyed preferred to see moderate Federal government involvement in most of the functional areas affecting ports. Each response on issues carried a distinct message. Planning should be from the bottom up, i.e., initiated at local and state levels, rather than from the Federal level down. Federal financing of port infrastructure should consist of capital financing alone, without operating assistance. Offshore ports should be operated by state and local authorities rather than by private industry consortium, as is now under consideration. The Federal port function should not remain divided among the Departments of Transportation and Commerce and the Army Corps of Engineers; rather, it should be placed with DOT or assigned to a new super-department, such as the once-proposed Community or Economic Development Departments. A surprise was that young port professionals were favorable to moderate fuel taxes, as opposed to continuing the battle for free waterways, or the alternative of imposing segmental charges on inland waterways.

What do the responses of those surveyed indicate as the proper role for the Federal government in port development? The respondents acknowledge, first of all, the need for some caution in altering delicate and complex relationships developed over the years. The Federal role would be shifted gradually in the direction of a moderate, facilitating presence rather than a wholesale takeover of port functions. This shift would involve more than simply putting up the money and stepping quietly aside. Incremental facilitating changes would require the measures listed below.

- (1) An acknowledgement in national transportation policy guidelines that ports (and all intermodal terminals) are important elements in the national transportation system, for achieving balanced intermodal transportation services, and not simply an adjunct to the U.S. Merchant Marine (as implied in the Merchant Marine Act of 1920).
- (2) The provision of port R & D and planning funds to states so that port needs may be systematically incorporated into the national transportation planning and forecast process, in much the same way as airport, highway, and transit projects are today. The planning should evolve upwards from the local, state, and regional levels, rather than from the top down.
- (3) The opening of categorical Federal funds presently spent for channels, ships, and navigation aids (over \$1.2 billion a year) to more flexible improvements in ports as part of the through system, e.g., moving the port out of the heart of the city toward deepwater, instead of dredging in to the city where elaborate safety and navigation aides are needed.
- (4) The assurance that an equitable share of Federal funds is available for port development, to be allocated on a regional or coastal basis, and requiring matching funds by state and local authorities in the same proportions as other federally-aided transportation projects. Within regions and coastal districts, funds are to be allocated by investment and cost benefit analysis.
- (5) The immediate formation of a small Port and Intermodal Terminal Agency within DOT, followed by improved coordination of the waterborne programs of the Maritime Administration, Corps of Engineers, and DOT, leading to eventual formation of a full waterborne administration in DOT.
- (6) The establishment of a competitive regulatory milieu for ports and supporting carriers, based on costs of access and accommodation rather than arbitrary agreements. Subsidies should be reviewed and eventually eliminated. A uniform and dependable system of administering regulations must be established, with coordination between the FMC and ICC.
- (7) The use of Federal pre-emption whenever local government standards and regulations constitute an undue burden on the nation's interstate and foreign commerce.

- (8) The use of Federal anti-trust and intervention processes whenever monopolistic restraints, arbitrary work rules, or labor-management impasses at the waterfront unduly burden or jeopardize the nation's interstate and foreign commerce.

Perspective on Change

These measures and policies should assist ports in achieving their basic goals and missions. Ports, like all modes of transportation, are means to other goals rather than ends in themselves. Those of paramount Federal interest serve the nation's foreign commerce. If they serve foreign commerce well and efficiently, the cost of conducting trade will be reduced, trade between nations will expand, and the gains from regional specialization and trade can be distributed among exporters, importers, and consumers at large. All nations gain as trade expands and, theoretically, they become more economically interdependent and less susceptible to political division and warfare.

Ports, however, even with Federal aid, cannot alone perform the job of expanding trade and U.S. exports. They are an important and often overlooked element in the United States' total international trade and transport system. Complementary and reinforcing changes will be required in other elements of the international system.

The Port Development Process

How would Federal functions be assimilated in the present port structure? Would the changes provide a more systematic and assured port development process? Actually, there would be few shifts in the present distribution of essential port functions. Table 9 illustrates some of the shifts that would occur at a model port of primary Federal interest. (In this respect, it is noteworthy that few major U.S. ports conform to the model distribution of functions.)

Major changes would be in the dynamics of a systematic port development process. Long-range planning would continue to initiate at the local level. Port project approval would move up from local and state levels to state and regional levels, in most instances. The selection of major ports would still be left primarily to the marketplace, where ports distinguish themselves by competitive performance and pricing of services.

TABLE 9

REDISTRIBUTION OF MODEL U.S. PORT FUNCTIONS

PORT FUNCTIONS	PRESENT	FUTURE
<u>Planning</u>		
Development of plans	L	L
Approval of projects	L&S	S&R
Selection of major ports	O&S	S&F
<u>Financing</u>		
Channels and approaches	F	F
Terminals and equipment	LSP	FLSP
(Absorption of losses and surpluses)	L&S	L&S
<u>Operating</u>		
Traffic and navigation systems	F	F
Ownership of terminals and equipment	L&P	LSP
Operation of terminals	P	P
<u>Marketing</u>		
Promotion and advertising	L	LSR
Solicitation of traffic	P	P
Regulatory intervention	L&P	LSRP
<u>Controlling</u>		
Board appointments	L&S	L&S
Selection of port director	L&S	L&S
Allocation of waterfront space	L&S	L&S

Key: F = Federal, S = State, L = Local, P = Private,
R = Regional, O = None.

SOURCE: 1977 State Port Questionnaire administered by John L. Hazard (responses by 34 states).

Plans would move up to the state, regional, and Federal levels for funding purposes, much as highway, airport, and transit projects do at present. Ports of paramount national and international interest, with the best potential-to-costs ratios would have priority for Federal funds. A modest 3 to 4 percent of Federal transportation funds would be allocated among the states and coastal regions by formula based (in part) on tonnage and value of commerce. State and local authorities would put up matching funds in the same proportion (20 to 80 percent) as for other federally-financed transportation projects, to avoid distortion of priorities. Ports would be expected to move toward a system of user charges that would eventually cover the full local and Federal costs. The Federal government would continue to provide channel access (Corps of Engineers), aids to navigation (Coast Guard), and support to

shipping (Maritime Administration), but hopefully in a flexible and coordinated package that is more open and amenable to port and trade development purposes. Subsidies should be clearly identified and negotiated downward with a view toward ultimate elimination. Economic regulations should be designed to accord ports and supporting carriers competitive access to traffic based on costs and performance, rather than arbitrary agreements.

The current, fragmented administration of waterways is not equipped to provide the R & D, planning, and technical assistance to water ports that the Federal Aviation Administration provides to airports. Those management services would be performed initially by a small port or terminal division in the Department of Transportation that might eventually expand into a full Waterborne Administration. The other functions of port administration would remain much as they are today. States that have not already done so would have to create multimodal transportation agencies, and weave ports into their planning and funding programs. They may also assume more vigorous roles in port development, particularly states along the Pacific Coast, the Great Lakes, and inland waterways. Regional associations of ports would likely play a larger role in screening and approval of port projects, coastwide promotion, and intervention in regulatory proceedings to protect regional rate structures.

Unanswered Questions

A modest but positive Federal role in port development will not solve all port problems in the United States for all time. New and somewhat different problems will emerge. Aside from the difficulties of initiating a new port program in the midst of conflicting points of view and rival agencies in Washington, D.C., the following problems will probably emerge more fully.

- (1) How might the other elements in port joint ventures need to alter or augment their functions?
- (2) What should be the new roles of state governments and multistate regions in port development in the U.S.?
- (3) How can ports achieve agreement on the principle of cost-based competitive pricing, so as to avoid subsidies and unwarranted expansion?
- (4) How can ports achieve more voice in rail and ocean rate structures so as to preserve equitable inland access, and avoid being used as pawns by ocean carriers and railroads in rate and service agreements?
- (5) How can the U.S. ports move toward the financial self-sufficiency that is necessary to conduct a vigorous entrepreneurial function?

- (6) What is the optimum role for private enterprise and labor as partners in the joint enterprise of port development?
- (7) How can ports augment urban development, facilitate expansion of exports and world trade, and promote international amity?

These are difficult questions that will take a good deal of time, effort, and experience to answer. Policymakers will be assisted in the process by drawing on the growing body of professional knowledge available in Western Europe, the states, and the great ports of the world.

NOTES AND REFERENCES

1 So do the provinces of Canada, states of Australia, and districts in the U.S.S.R., indicating that the responsibilities of intermediate levels of government are partly a function of size and regional differentiation in nations.

2 State and local governments provide over two-thirds of the public transportation expenditures and have an important influence on the purposes served by Federal pass-through funds.

3 The author conducted this survey during June, July, and August 1977. Questionnaires were mailed to officials in the 38 states with ports, and the results tabulated in September. Later that month and in June of 1978, this unpublished report was presented to seminars sponsored by the American Association of Port Authorities.

4 State and local government expenditures for transportation more than doubled between 1960 and 1970 and moved up from 64.5 percent to 70.2 percent of national public expenditures. See U.S. Department of Transportation, 1972 National Transportation Report, Washington, D.C: Government Printing Office, 1972, p. 25.

5 Tiny Delaware is considering a \$500 million bond and Texas a \$1,200 million bond for single offshore ports that will cost more than the total national public expenditures for ports in the average year, i.e., between \$146 and \$371 million. Further, it would be dubious national policy to let the port policies of the coastal states determine the access of interior states to foreign commerce. (However, the Federal Deepwater Ports Act may already have condoned this kind of denial of inland state access to foreign petroleum by allowing governors of northeastern states to veto offshore ports. This forced the offshore ports to locate in the Gulf where overland transportation costs to the northeastern and midwestern states consume all the potential savings of using deepwater tankers.)

6 Including Stewart Barland and Martha Oliver, Port Expansion in the Puget Sound Region, 1970-2000, Seattle: Division of Marine Resources, University of Washington, 1972; Ernst Frankel, Studies on the Future of Atlantic Ports: A Review of the Status and Analysis of Characteristics, Cambridge: Massachusetts Institute of Technology, 1973; and U.S. Department of Transportation, Federal Port Policy in the United States, Report No. DOT TST-70-41, Washington, D.C: 1977. (Distributed through the National Technical Information Service.)

7 National Academy of Sciences, National Research Council, Panel on Future Port Requirements, Port Development in the United States, Washington, D.C: 1976.

8 The National Academy of Sciences' Panel on Future Port Requirements recommended Federal grants of \$200 to \$250 million a year for ports without Federal plans or controls. Ibid., pp. 145-148.